

TURNER

TALLAWONG STATION PRECINCT SOUTH

MIXED USE DEVELOPMENT
1-15 & 2-12 Conferta Avenue
Rouse Hill NSW 2155

ARCHITECTURAL STATEMENT

Development Application Submission

**Incorporating:
SEPP 65 and the Apartment
Design Guide**

May 2020_Rev C

PART 1 : PROJECT SUMMARY



Aerial view from above Tallawong Station

Project Overview

This design report and SEPP65 Design verification response is prepared by Turner on behalf Deicorp in support of a Development Application at 1-15 & 2-12 Conferta Avenue Rouse Hill, known as Tallawong Station Precinct South.

The proposal comprises two sites with 17 buildings, providing 987 residential dwellings and 9,000sqm of combined retail and commercial GFA. The proposal also provides a new publicly accessible park, multiple plazas and a series of movement corridors that will activate Tallawong Station South Precinct.

The proposal has been developed in collaboration with a comprehensive consultant team to address both strategic and detailed issues associated with the site and overall context.

The project has been the subject of a formal Design Review process, with four presentations throughout the design development, to ensure design excellence principles and objectives are realised. These presentation packages are included as appendices at the conclusion of this report.

Blacktown City Council was consulted during the development of the design to discuss a number of technical and maintenance items, in addition to the design review process.

This report is intended to be read in conjunction with architectural drawings prepared by Turner, landscape drawings prepared by Turf and the Statement of Environmental Effects with appendices prepared by Sutherland & Associates Planning.



View from Tallawong Station at Themeda Avenue

SEPP65 Design Verification

We confirm that Jason Goggi has directed the DA design and documentation of the project.

The design has been prepared in accordance with the design quality principles set out in Part 2 of State Environmental Planning Policy No 65 - Design Quality of Residential Flat Development.

Jason Goggi is a registered architect under the NSW Architects Act 2003, registration number 8709.

Design Quality Principle 1**CONTEXT AND NEIGHBORHOOD 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 future vision for Tallawong Town Centre anticipates an intensification of residential development around the Tallawong Station to create a walkable village centre with a Metro, that will make a positive contribution to the Central City District. Tallawong Town Centre will provide a variety and mix of housing choice, a publicly accessible park and a mix of retail/commercial uses within 300 metres of the metro station, to create a vibrant, activated village centre, connecting the existing and future communities in the surrounding neighbourhoods.

Tallawong Town Centre is structured around a diverse network of new open spaces, streets, lanes and paths, creating a highly permeable precinct that connects people to community, places and transport. Placemaking activities defined a network of key spaces – the park, plazas and childrens play area which are connected by a pedestrian boulevard and series of movement corridors.

Located to the north of the precinct, the park is a place for the community to come together, whilst providing a green arrival from the metro station it provides a large open space area capable of hosting community events, along with daily recreation and respite. To the east of the Park and directly south of Tallawong Station, the market plaza anchors the precincts retail offer. The market plaza and western plaza serve to activate the park to create a dynamic village centre.

Design Quality Principle 2
BUILT FORM & SCALE

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 public domain-led approach for Tallawong Town Centre provides a localised environmental response that connects it to its existing and future context and provides for a site-specific public domain to support the needs of the existing and future communities. Urban and built form elements are shaped by the open space and public domain configuration to promote a diversity of typologies.

Building heights across Tallawong Town Centre are structured to define the street edge at the pedestrian scale, whilst providing legibility and orientation. Their position and orientation respond to many considerations including: location adjacent to open space or along major movement corridors; solar access to adjacent areas; separation to other buildings; street setbacks and buffering; floorplate sizes and block lengths; key views and vistas; relationship to topography, and; transition to existing and future context.

Low-rise buildings up to 4 storeys define the pedestrian movement paths, defining the fine grain network of streets, laneways, links and public domain spaces. These buildings provide the interface to the pedestrian experience when combined with awnings, active frontages, and landscaping within the public domain.

Taller buildings ranging from 6 to 8 storeys provide height diversity, and opportunities for dwellings at higher levels to benefit from local district view. They also act as geographic markers and landmarks and are located at gateways to Tallawong Town Centre or are located adjacent to the key public domain spaces, providing legibility and orientation to the village centre and Tallawong Station.

Design Quality Principle 3**DENSITY**

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Tallowong Town Centre will contribute significantly in achieving the government's objectives to deliver more housing in new mixed-use communities close to public transport. As part of the North West Priority Growth Area, Tallowong Town Centre is well positioned to provide new homes, jobs, services and amenities, being strategically located along Sydney Metro North West line with excellent access to employment.

The catalyst for renewal is the new Tallowong Station, a key part of delivering the increased connectivity that will make Tallowong part of the 30-minute city, connecting to opportunities for jobs, services, education and recreation. As part of the North West Priority Growth Area, Tallowong Town Centre is set within a context that is shifting from greenfield sites to new residential communities, which will continue to grow and evolve into the future. Therefore, the quantum and types of housing, services and amenities provided should be diverse and flexible, allowing evolution over time to meet the needs of the growing and changing population.

Tallowong Town Centre will allow new housing to be provided within a new public domain, with increased services, employment and recreational opportunities to support the needs of a growing community. The development will provide a vibrant community village that serves the precinct and wider locale.

Tallowong Town Centre will provide 987 new residential dwellings, a publicly accessible park in excess of 3,000 sqm and 9,000 sqm of non-residential uses to create a true mixed-use village centre immediate adjacent to the Metro station.

Design Quality Principle 4
SUSTAINABILITY

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Tallawong Town Centre is designed with sustainable initiatives to contribute positively to the environmental, social and economic aspects of the area as a green neighbourhood with great amenity. Arup have led the sustainable focus within the design team, identifying a series of Ecologically Sustainable Design (ESD) principles throughout the design process, with a range of initiatives identified. Refer to Arups report for further detail.

Sustainable Transport and Movement

The proposed movement network adds new streets, laneways and links to the existing network, connecting Tallawong Town Centre to the surrounding context. Pedestrians and cyclists are prioritised with the establishment of a finer grain network of links and lanes, drawing people to the main open spaces and to the metro station. Streets are designed to encourage walking and cycling with new pedestrian crossings, tree canopies, widened footpaths, cycling infrastructure and pedestrian friendly urban design encouraging active transport modes for healthy and active living.

Reduce the Heat Island Effect

The provision of public infrastructure that increases the public domain through new open spaces, streets, lanes and landscape setbacks provides for green photosynthetic infrastructure such as street trees and parks. The canopy cover will provide respite from the heat of the summer sun and will shade the streets to reduce the effects of the urban heat island effect. The types and diversity of species provided support flora and fauna. The proposal achieves the deep soil and open space recommendations of the ADG and in doing so will provide a variety of open space and landscaped areas to enhance the overall amenity for the residents and assist in mitigating the heat island effect.

Stormwater

Incorporation of water sensitive urban design (WSUD) features will contribute to a green and resilient urban environment. Bio-retention tree pits have been incorporated to assist with treating runoff through filtration and reduce stormwater runoff volumes along pedestrian pathways in rainfall events.

Reduce Resource Consumption

Passive design principles to mitigate climate extremes have been employed with the building forms, massing and orientation organised to optimise natural daylighting and solar access to primary internal and external areas. Energy efficient appliances and water efficient devices will be specified to comply with BASIX requirements to minimise water consumption and resources. On-site energy generation will also contribute to reduce resource consumption.

Design Quality Principle 5
LANDSCAPE

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

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

Tallowong Town Centre is structured around a series of interconnected new open spaces as an extension of the broader Green Grid. A diverse network of complimentary open spaces, streets and pedestrian corridors make a more connected place.

A high performing public domain and the incorporation of water sensitive urban design (WSUD) provides amenity and comfort for all users. The public domain strategy utilises and leverages the topography of the site to create a site-specific response that delivers a large publicly accessible park, a series of plazas and a child's play area.

The network of open spaces is supported by streets that improve the pedestrian and cycling experience. The street network creates a permeable pedestrian and cycle friendly environment that encourages active transport options. The Pedestrian Boulevard is the primary pedestrianised, landscaped 'green spine' that connects the community to the Tallowong Station, activated by open space and retail.

Private open space typologies provide increased greenery and amenity, connecting people to nature. Rooftop gardens on buildings increase communal access to open space and provide additional typologies to the open space network. Enhanced amenity is provided due to their location, including improved solar access and district views.

Refer to Landscape Design Report by Turf for further detail.

Design Quality Principle 6
AMENITY

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

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

The proposal has been designed in line with the objectives and principles of the Apartment Design Guide (ADG) and the requirements of the National Construction Code (NCC), and the approved Concept DA Design guidelines, among others.

The NSW Government Architect's 'Better Placed' document has informed the development of a number of strategies to ensure that the future natural and built environment will be healthy, responsive, integrated, equitable and resilient. Health and well-being are prioritised by providing open space access to both residents and the community. The urban forest strategy creates a highly landscaped environment that connects people to nature and at a broader scale connects to the regional Green Grid.

The hierarchy of open spaces range from the publicly accessible park at the arrival to the precinct to the communal rooftop gardens. Landscape setbacks are provided to street tree planting, landscape and amenity. The high performing and activation ready public domain and non-residential uses supports the everyday experience through active frontages, a pedestrian scale, lot diversity and finer grain of the urban and built form.

The diversity of housing typologies and layouts, including two-storey terrace, adaptable and livable apartments, provides housing choice and equitable access to services and amenities. The proposed built form and dwellings satisfies SEPP65 and the Apartment Design Guide's objectives for building separation, apartment sizes, floor to ceiling heights, solar access, natural ventilation, and communal open space, among others.

Design Quality Principle 7

SAFETY

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

Tallawong Town Centre is designed to be a welcoming and safe place for people to live and visit. Direct, legible and safe movement for all users is provided with a focus on pedestrian priority across the precinct. Loading and service areas are designed to be consolidated and discrete, minimising the potential for conflict between users.

A physically well-connected neighbourhood

As a pedestrian priority environment, the network of fine-grained streets, laneways and pedestrian links increase ground level permeability. Safe movement, good connections and access are provided through public places that provide well defined routes and clear sightlines (day and night) so residents and visitors can see and be seen.

Well defined public and private spaces

Urban and built form elements, shaped by the open space and public domain configuration, promote a diversity of built form responses and clear definition of the public domain. Buildings define the public domain, reinforcing sightlines and strengthening views to and from key spaces, streets and laneways, allowing good passive surveillance.

Improved surveillance of public spaces.

Visibility and surveillance of the public environment is maximised by providing public places that are overlooked from adjoining buildings, for 'eyes on the street' or 'natural surveillance'. Ground level courtyards and living areas within the neighbourhood streets provide for good activation and connectivity – both physically and visually – with the street network and public domain.

Creating a sense of ownership

Clearly defined private and public space improve public safety and will encourage residents to take responsibility and pride in places they use and inhabit.

Management and maintenance

Attractive public places will encourage use of the spaces, a sense of ownership and improve people's perception of how safe a place is. This in-turn supports their desire to continue to occupy and use those places.

Design Quality Principle 8
HOUSING DIVERSITY & SOCIAL INTERACTION

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

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

Tallawong Town Centre provides a diversity of housing typologies and uses that includes 987 dwellings and approximately 9,000 square metres Gross Floor Area of non-residential uses.

Retail, employment and service opportunities are provided next to the metro station and new park defining identity and legibility as the new village centre.

Dwellings accommodate a range of types and sizes (1 bed, 2 bed and 3 bed apartments), allowing a variety of options for different demographics and price points to support housing diversity and affordability. A range of housing types are proposed including two storey terrace apartments, adaptable and liveable apartments and market housing. All blocks contain a variety of built form and height that allow for different options to accommodate the mix of housing, as well as satisfy considerations for ground level activation, relationship to context, and solar access provisions to public, communal, and private open space.

Within the buildings, communal open spaces have been designed to engender community spirit for residents by offering a variety of open spaces including areas for groups to meet and socialise and also for more quiet individual activities. All common areas are designed for equitable access. Vertical neighbourhoods provide additional communal open spaces for residents to meet and interact.

The orientation of buildings and apartments have been designed to leverage outlook onto the new public domain as well as district views to connect residents to nature. A diversity of character and architectural language provides a rich and diverse character. All apartments meet or exceed the minimum apartment size recommendations of the ADG and are designed with regular shapes and open plan layouts for ease of furnishing. Apartment layouts have been developed to maximise the number of north facing units and units with street and district views.

Design Quality Principle 9

AESTHETICS

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

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

The locality is comprised of a mixture of existing residential buildings, low to medium residential and single dwellings, with the future vision of the area zoned to encourage an increased scale of higher density residential development adjacent to the new metro station. The proposal is designed with a number of different architectural strategies in order to achieve a well-balanced aesthetic and an appropriate presence across the site.

Visual interest is achieved through scale, built form variation and character. Urban and built form elements, shaped by the open space and public domain configuration, promote a diversity of built form responses. The low scale buildings serve to give definition to the public domain – especially the pedestrian boulevard – whilst taller buildings provide arrival markers, destination landmarks and height diversity.

Residential setbacks have been provided along key streets to provide space for landscape buffers that increase privacy for ground level residential dwellings as a transition between public and private domain. Upper level setbacks and changes in facade plane have been introduced along key streets to provide human scale to the street through reduced building heights and lengths at the interface between the public and private domain, as well as an appropriate transition in height and improved pedestrian experience through increased daylight access to the public domain.

The design methodology for the facades is to achieve an appropriate level of articulation and create expressive frontages to the public domain. Two languages, taking inspiration both from the residential character of the surrounding context and the future desired character for the area have been developed for the facades and applied to building forms to reduce the perceived bulk and scale of the buildings into smaller discrete and interconnected forms.

Form and materiality have been varied to assist in reducing bulk and scale. Facade articulation is achieved through the breakup of materials, variation in balcony forms and the introduction of a defined rhythm in the architectural elements.



View to the publicly accessible park looking east



View south from Conferta Avenue

PART 3 : ADG DESIGN GUIDE COMPLIANCE TABLE

Objective	Comment
PART 3 SITING THE DEVELOPMENT	
3A Site analysis	
<p>Objective 3A-1 <i>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • A site analysis plan is included in the architectural drawings. • The proposal builds upon the principles of the Concept DA.
3B Orientation	
<p>Objective 3B-1 <i>Building types and layouts respond to the streetscape and site while optimising solar access within the development</i></p>	<p>Complies with objectives.</p> <ul style="list-style-type: none"> • The proposal builds upon the strategies, objectives and massing of the Concept DA. • The proposal includes a number of building typologies of varying heights and scales across the site. • Lower scale buildings define the key pedestrian corridors, while taller buildings define the key arrival points and street edges. • Solar access to the primary public domain spaces is maximised through the location of low scale buildings along these interfaces, including the lowering of the buildings on the western edge of Site 2C to improve solar access to the plaza.
<p>Objective 3B-2 <i>Overshadowing of neighbouring properties is minimised during mid-winter:</i></p> <ul style="list-style-type: none"> • Living areas, private open space and communal open space should receive solar access in accordance with sections 3D and 4A 	<p>Complies</p> <ul style="list-style-type: none"> • The building forms are largely aligned with the Concept DA, with some modifications to improve the public domain interface. • The proposal maximises solar access to the existing dwellings to the south of Schofield Road, consistent with the Concept DA. • Refer to the shadow diagrams for further information.
3C Public Domain Interface	
<p>Objective 3C-1 <i>Transition between private and public domain is achieved without compromising safety and security</i></p> <ul style="list-style-type: none"> • Maximum 1m level change between private terraces, front gardens and dwelling entries above the street level • The height of solid fences or walls should be limited to 1m 	<p>Complies with objectives</p> <ul style="list-style-type: none"> • The northern site is activated with retail uses across the ground level, engaging the public domain and streets. • The southern 'neighbourhood' site incorporates private courtyards with direct street access off the public domain and street network. These are typically located 0.3 - 1.0m above the footpath level to provide privacy while affording passive surveillance. As the site falls along the pedestrian boulevard some courtyard heights differ, with the height of the fence at the interface to the public domain consistent at 1.8m height. • The design of private courtyard fences incorporates a combination of solid and open elements, responding to the internal functions of the dwelling while creating variation along the streetscape. • Residential access points are carefully located and appropriate for legibility for residents and visitors with lobbies secured to control access. • Apartment windows and balconies enjoy aspects over the public domain to encourage passive surveillance
<p>Objective 3C-2 <i>Amenity of the public domain is retained and enhanced</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The site has been cleared and offers no existing public domain nor landscape • The proposal builds upon the principles and objectives of the Concept DA to deliver an extensive, high quality new public domain to the precinct and broader community. • The public domain offer includes a large publicly accessible park, children's play area, a northern and southern plaza, pedestrian boulevards, and a pedestrian priority private road. • The design minimises the prominence of service areas and carpark entries by consolidating these areas and locating them away from the primary public domain and pedestrian routes. <p>Refer to the landscape design report for further information.</p>

Objective

Comment

3D Communal and Public Open Space

Objective 3D-1

An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

Design Criteria

Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)
 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)

Complies

- 27% of site area is provided as communal open space
- The proposal provides a diversity of communal outdoor spaces for the amenity of residents and visitors to the site - on ground, at podium levels and on the rooftops.
- The proposal achieves well in excess of 50% sunlight to the principal usable part of the communal open space for a minimum of 2 hours of mid-winter sun between 9am-3pm.

Refer to the Communal Open Space Solar diagrams for further information.

Objective 3D-2

Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting

Complies

- A range of spaces are provided within the communal open spaces that range from shaded areas for seating, BBQ and dining and opportunities for planting to increase the amenity for residents.

Objective 3D-3

Communal open space is designed to maximise safety

Complies

- Communal open spaces are located on the rooftop terraces and internal courtyards to ensure there is secured access for residents.
- Podium and ground level communal areas enjoy passive surveillance from the surrounding apartments.

Objective 3D-4

Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood

Complies

- Public open space is provided across the precinct in line with the Concept DA.
- This public domain includes a large publicly accessible park, northern and southern plazas and a child's play area, all of which have direct connection to at least one street frontage.
- The public domain incorporates pedestrian networks and connections that link the Ponds to the South and the commuter carpark to the west to the publicly accessible park and Tallawong Station.

3E Deep Soil Zones

Objective 3E-1

Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

- On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:
- 10% of the site as deep soil on sites with an area of 650 - 1,500m²
- 15% of the site as deep soil on sites greater than 1,500m²

Complies

- Deep soil zones have been located across the precinct at a total of 12.5% of the site area in line with the Concept DA.
- Deep soil zones are provided in communal areas for the amenity of residents and, also within the public domain to ensure amenity for visitors and the broader community.
- Refer to the Deep Soil diagram as part of this lodgement.

Design Criteria

Deep soil zones are to meet the following minimum requirements:

Site Area	Min. Dimension	Deep Soil Zone (% Site Area)
< 650m ²	-	7%
650-1,500 m ²	3m	
> 1,500m ²	6m	
> 1,500m ² with significant existing tree cover	6m	

Objective

Comment

3F Visual Privacy

Objective 3F-1

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Direct lines of sight should be avoided for windows and balconies across corners

No separation is required between blank walls

Design Criteria		
Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:		
Building Height	Habitable Rooms + Balconies	Non-Habitable Rooms
Up to 12m (4 Storeys)	6m	3m
Up to 25m (5-8 Storeys)	9m	4.5m
Over 25m (9+ Storeys)	12m	6m
Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties		

Complies with objectives

- Building separation is in line with the Concept DA and objectives of the ADG.
- The proposed layouts have been designed to avoid direct lines of sight between opposing buildings
- Additional design elements have been proposed to ensure visual privacy is achieved, including angled window orientations and opaque glazing (when a secondary window to a habitable area).

Refer to architectural drawings for further information.

Objective 3F-2

Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space

Complies

- Outlook and privacy is managed by orientation, building articulation, and dividing walls.

3G Pedestrian Access and Entries

Objective 3G-1

Building entries and pedestrian access connects to and addresses the public domain

Complies

- Residential lobbies are legible, have a direct connection to the street network or public domain, and are separated from retail frontages

Objective 3G-2

Access, entries and pathways are accessible and easy to identify

Complies

- All entry lobbies have at grade thresholds and accessible paths of travel for inclusive access.

Objective 3G-3

Large sites provide pedestrian links for access to streets and connection to destinations

Complies

- The site proposes a number of pedestrian movement corridors through the precinct that link the key arrival points and active nodes.
- These include the pedestrian boulevard – running north-south from the Ponds to the Tallawong Station – and the east-west connection from the commuter carpark through the site to the park and retail area.

Objective	Comment
3H Vehicle Access	
<p>Objective 3H-1 <i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The car park entry points have been further consolidated within the locations nominated in the Concept DA. • These access points are located off Conferta Avenue for the larger sites and off the new neighbourhood road for the smaller lots. • Crossings and driveways are located to allow the smooth ingress of traffic and to avoid conflicts with pedestrian routes. • Servicing and carparking are separated to avoid internal traffic clashes • Clear sight lines are provided at the carpark entry/exit point and vehicle crossings. • Pedestrian and vehicle access points are kept separate. <p>Further information about the vehicle entry, exit and traffic management can be found in the traffic report submitted with this proposal.</p>
3J Bicycle and Car Parking	
<p>Objective 3J-1 <i>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i> <i>Where a car share scheme operates locally, provide car share parking spaces within the development.</i> <i>Car share spaces, when provided, should be on site</i></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Design Criteria</p> <p>For development in the following locations: On sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or On land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre</p> <p>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less</p> <p>The car parking needs for a development must be provided off street</p> </div>	<p>Complies</p> <ul style="list-style-type: none"> • Carparking is provided at the following rates: <ul style="list-style-type: none"> - 1 space per 1 or 2 bedroom dwellings - 2 spaces per 3 bedroom dwelling - 1 visitor space per 35 dwellings <p>Refer to the traffic report submitted with this proposal for further information.</p>
<p>Objective 3J-2 <i>Parking and facilities are provided for other modes of transport</i></p> <p>Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters.</p> <p>Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas</p> <p>Conveniently located charging stations are provided for electric vehicles, where desirable</p>	<p>All parking spaces are provided to be used either for cars or motorbikes and scooters.</p> <ul style="list-style-type: none"> • Bicycle parking is provided at the following rates: <ul style="list-style-type: none"> - 1 resident space per dwelling - 1 visitor space per 10 dwellings <p>Refer to the traffic report submitted with this proposal for further information.</p>

Objective	Comment
<p>Objective 3J-3 Car park design and access is safe and secure</p>	<p>Complies</p> <ul style="list-style-type: none"> Car park access is secured with separate entry points for residential and retail parking, leading to designated areas of the carpark, increasing legibility and safety.
<p>Objective 3J-4 Visual and environmental impacts of underground car parking are minimized Protrusion of car parks should not exceed 1m above ground level.</p>	<p>Complies</p> <ul style="list-style-type: none"> Car parking is located in basements and accessed off Conferta Avenue or the new loop road. The entries to the basement are minimised in width and are integrated into the façade expression.
<p>Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised</p>	<p>N/A</p>
<p>Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised</p>	<p>N/A</p>
<p>4A Solar and Daylight Access</p>	
<p>Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</p> <div data-bbox="223 1075 702 1456" style="border: 1px solid black; padding: 5px;"> <p>Design Criteria</p> <p>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas</p> <p>In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter</p> <p>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter</p> </div>	<p>Complies</p> <ul style="list-style-type: none"> The proposal achieves 70% solar access to apartment living areas and balconies between 9am-3pm in mid-winter 13% of apartments receive no-direct sunlight between 9am and 3pm mid winter across the precinct. The proposal orientates a small proportion of the apartments to the south on Site 2A to engage the street and afford passive surveillance and activation to the street. <p>Refer to the architectural drawings for further information.</p>
<p>Objective 4A-2 Daylight access is maximised where sunlight is limited</p> <p>Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms</p>	<p>Complies</p> <ul style="list-style-type: none"> Where sunlight is limited, glazing has been proportioned to ensure daylight access is maximised.
<p>Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months</p>	<p>Complies</p> <ul style="list-style-type: none"> Solar control shading is provided through the design of the façade articulation, slab projections and the proportion of glazing to the north, east and western facades

Objective	Comment
4B Natural Ventilation	
<p>Objective 4B-1 <i>All habitable rooms are naturally ventilated</i></p> <p>The area of unobstructed window openings should be equal to at least 5% of the floor area served</p> <p>Light wells are not the primary air source for habitable rooms</p>	<p>Complies</p> <ul style="list-style-type: none"> Habitable rooms are naturally ventilated Windows and doors are sized to allow the ADG and NCC requirements for natural ventilation
<p>Objective 4B-2 <i>The layout and design of single aspect apartments maximises natural ventilation</i></p> <p>Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)</p> <p>Natural ventilation to single aspect apartments is achieved with the following design solutions:</p> <p>Primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation)</p> <p>Courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells</p>	<p>Complies</p> <ul style="list-style-type: none"> Windows and doors are sized to allow the ADG and NCC requirements for natural ventilation <p>The overall building depth facilitates ventilation to habitable rooms.</p>
<p>Objective 4B-3 <i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i></p> <p>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</p> <p>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</p>	<p>Complies</p> <ul style="list-style-type: none"> 60% of apartments achieve natural cross ventilation. Cross through units are less than 18m depth <p>Refer to apartment amenity drawings for further detail.</p>

Objective

Comment

4C Ceiling Heights

Objective 4C-1

Ceiling height achieves sufficient natural ventilation and daylight access

Complies

- A minimum floor-to-floor height of 3.1m is used to allow the ADG recommendation of 2.7m ceiling height to be achieved in living, dining and bedroom areas.

Design Criteria	
Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	
Minimum Ceiling Height for Apartment and Mixed-use	
Habitable rooms	2.7m
Non-habitable	2.4m
For 2 storey apartments	2.7m for main living area 2.4m for second floor, where area does not exceed 50% of the apartment area
Attic spaces	1.8m at edge of room with a 30° minimum ceiling slope
If located in mixed use areas	3.3m for ground floor and first floor to promote future flexibility of use

Objective 4C-2

Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms

The two storey apartments along Conferta Avenue and the pedestrian boulevard have increased ceiling heights to the ground level living areas as they terrace down the site. This allows for increased solar access and a generous internal volume.

Objective 4C-3

Ceiling heights contribute to the flexibility of building use over the life of the building

The northern site (Site 1) provides a new town centre with 9,000sqm of retail and commercial space. The ceiling level at the ground level of this site allows for 4.0m ceiling heights to enable ongoing flexibility of tenants over time.

4D Apartment Size and Layout

Objective 4D-1

The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity

Complies

- Apartments satisfy the requirements of the ADG.
- Two bedroom apartments with two bathrooms include an additional 5m² as per the ADG criteria.
- A range of apartment typologies are provided including two storey "terrace" apartments, apartments with street access, adaptable and liveable apartments.
- Habitable rooms include windows

Design Criteria	
Apartments are required to have the following minimum internal areas:	
Apartment Type	Minimum Internal Area
Studio	35m ²
1 Bedroom	50m ²
2 Bedroom	70m ²
3 Bedroom	90m ²
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each	
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each	
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	

Objective

Comment

Objective 4D-2

Environmental performance of the apartment is maximised

<p>Design Criteria</p> <p>Habitable room depths are limited to a maximum of 2.5 x the ceiling height</p> <p>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p>
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Complies

- Apartment depths to the primary living area generally satisfy ADG requirements

Objective 4D-3

Apartment layouts are designed to accommodate a variety of household activities and needs

<p>Design Criteria</p> <p>Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)</p> <p>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</p> <p>Living rooms or combined living/dining rooms have a minimum width of:</p> <p>3.6m for studio and 1 bedroom apartments</p> <p>4m for 2 and 3 bedroom apartments</p> <p>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</p>

Complies

- Bedrooms in all apartments are design to allow a minimum of 10m² in master bedrooms and 9m² in other bedrooms.
- Living rooms to 1-bedroom apartments have a minimum width of 3.6m
- Living rooms to 2 bedroom apartments have a minimum width of 4m
- The width of cross-through apartments are a minimum of 4m wide.
- All bedrooms have built-in robes with a minimum lineal dimension of 1.5m.
- Main bedrooms are provided with built in robes with a minimum lineal dimension of 1.8m.

Apartment layouts allow flexibility over time, design solutions may include:

All bedrooms allow a minimum length of 1.5m for robes

The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high

Dimensions that facilitate a range of activities and privacy levels

4E Private Open Spaces and Balconies

Objective 4E-1

<p>Design Criteria</p> <p>All apartments are required to have primary balconies as follows</p>		
Dwelling Type	Minimum Area	Minimum Depth
Studio	4m ²	-
1 Bedroom	8m ²	2m
2 Bedroom	10m ²	2m
3+ Bedroom	12m ²	2.4m
<p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p> <p>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m</p>		

Complies

- Apartments meet or exceed the ADG requirements for balcony and terrace areas.
- All balconies meet or exceed the ADG recommended widths of 2m for 1 and 2 bedroom apartments and 2.4m for 3 bedroom apartments.
- Balconies have been integrated into the facade and building design, responding to the context and the desired objectives of the ADG.
- The varied balcony forms across the precinct enhance the facade articulation.

Objective	Comment
<p>Objective 4E-2 <i>Primary private open space and balconies are appropriately located to enhance liveability for residents</i></p>	<p>Complies</p> <ul style="list-style-type: none"> All balconies connect directly to the primary living areas and generally located to maximise solar access and/or outlook Where possible, bedrooms also connect to the external space
<p>Objective 4E-3 <i>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</i></p>	<p>Complies</p> <ul style="list-style-type: none"> The proposal responds positively to this design criteria, with the balconies providing articulation, depth, shadow and activation across the facades
<p>Objective 4E-4 <i>Private open space and balcony design maximises safety</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Balcony design typically utilises a solid upturn to the lower portion of the balustrade to prevent any potential climbing whilst providing a level of privacy for residents

4F Common Circulation and Spaces

Objective 4F-1
Common circulation spaces achieve good amenity and properly service the number of apartments

Design Criteria
The maximum number of apartments off a circulation core on a single level is eight
For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40

Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level

Complies

- Circulation cores typically service 8 or less apartments per level. In some taller L-shaped buildings this is increased to 10 apartments to create an efficient and functional floor plate. In these instances the core is located at a corner junction – reducing the length of the corridor – with an additional lift ensuring appropriate travel times
- Each circulation core has access to natural light and ventilation.

Objective 4F-2
Common circulation spaces promote safety and provide for social interaction between residents

Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines

Complies

- Common circulation spaces are designed to provide safe, legible spaces to foster interaction and harmony between residents.
- Lobbies are located of the street and active public domain to maximised visibility and legibility.

4G Storage

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

Storage is accessible from either circulation or living areas. Left over space such as under stairs is used for storage

Design Criteria	
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	
Dwelling Type	Storage Size (Volume)
Studio	4m ³
1 Bedroom	6m ³
2 Bedroom	8m ³
3+ Bedroom	10m ³
At least 50% of the required storage is to be located within the apartment.	

Complies

- Apartments are provided with storage facilities that satisfy ADG recommendations.
- Apartments that do not accommodate the entire storage volume within the unit locate a minimum of 50% of the required storage within the apartment with the remainder located in secure and accessible locations within the basement.
- A variety of storage types are provided, accessed off living rooms and circulation corridors within the apartments.

Objective	Comment
<p>Objective 4G-2 <i>Additional storage is conveniently located, accessible and nominated for individual apartments</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Additional storage is typically located in basement areas within consolidated storage areas. These areas will be individually attributed and secured. Refer to the architectural drawings for further information.
4H Acoustic Privacy	
<p>Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout</p>	<p>Complies</p> <ul style="list-style-type: none"> Adequate building separation is provided within the development in line with the Concept DA. Refer to the acoustic report for further information.
<p>Objective 4H-2 <i>Noise impacts are mitigated within apartments through layout and acoustic treatments</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Internal apartment layout separates noisy spaces from quiet spaces, rooms with similar noise requirements have been grouped together. Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources The party walls (walls shared with other apartments) will be appropriately insulated in accordance with NCC requirements.
4J Noise and Pollution	
<p>Objective 4J-1 <i>In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</i></p> <p>Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:</p> <ul style="list-style-type: none"> Solar and daylight access Private open space and balconies Natural cross ventilation 	<p>Complies</p> <ul style="list-style-type: none"> Building location is in line with the Concept DA. Landscape zones along Schofields Road and Cudgegong Road provide a buffer between the street and buildings.
<p>Objective 4J-2 <i>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</i></p>	<ul style="list-style-type: none"> Refer to Acoustic Report.
4K Apartment Mix	
<p>Objective 4K-1 <i>A range of apartment types and sizes is provided to cater for different household types now and into the future</i></p> <p>Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households</p>	<p>Complies</p> <ul style="list-style-type: none"> A variety of apartment types are provided including two-storey terrace apartments, courtyard apartments, adaptable and liveable apartments. The sizing of apartments varies within each typology to allow multiple users including 1, 2 and 3 bedroom apartments, including those with study areas. The proposed apartment mix is appropriate, taking into consideration the distance to the Tallawong Station, retail, employment and education centres, as well as the current market demands and projected future demographic trends within the area.

Objective	Comment
<p>Objective 4K-2 <i>The apartment mix is distributed to suitable locations within the building</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • Different apartment types have been located to provide diversity across the precinct while contributing to facade composition and optimising solar access. • Larger apartment types have been located on the top levels as well as on the corners of the building, where more building frontage is available, and at podium level, where there is opportunity for more open space.
4L Ground Floor Apartments	
<p>Objective 4L-1 <i>Street frontage activity is maximised where ground floor apartments are located</i></p> <p>Direct street access should be provided to ground floor apartments</p> <p>Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:</p> <p>Both street, foyer and other common internal circulation</p> <p>Entrances to ground floor apartments</p> <p>Private open space is next to the street</p> <p>Doors and windows face the street</p>	<p>Complies</p> <ul style="list-style-type: none"> • The ground level is designed to provide activity and vibrancy within the precinct. • The northern site is activated with retail uses across the ground level, engaging the public domain and streets. • The southern 'neighbourhood' site incorporates private courtyards with direct street access off the public domain and street network, along with residential lobby entries and access to communal open space. • The design of private courtyard fences incorporates a combination of solid and open elements, responding to the internal functions of the dwelling while creating variation along the streetscape.
<p>Objective 4L-2 <i>Design of ground floor apartments delivers amenity and safety for residents</i></p> <p>Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include:</p> <p>Elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)</p> <p>Landscaping and private courtyards</p> <p>Window sill heights that minimise sight lines into apartments</p> <p>Integrating balustrades, safety bars or screens with the exterior design</p>	<p>Complies</p> <ul style="list-style-type: none"> • Private courtyards with direct street access off the public domain and street network are provided. These are typically located 0.3 - 1.0m above the footpath level to provide privacy while affording passive surveillance. As the site falls along the pedestrian boulevard some courtyard heights differ, with the height of the fence at the interface to the public domain consistent at 1.8m height. • The design of private courtyard fences incorporates a combination of solid and open elements, responding to the internal functions of the dwelling while creating variation along the streetscape. • Landscaping is integrated into the courtyard, planters and setback zone, providing greenery and opportunities for passive screening
4M Facades	
<p>Objective 4M-1 <i>Building facades provide visual interest along the street while respecting the character of the local area</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The proposal utilises a number of façade typologies across the precinct, responds to the building typology, orientation, interface and surrounding context. • The design of the facades incorporates variation within a palette of familial materials, including changes in texture, colour, composition and detail.

Objective	Comment
<p>Objective 4M-2 <i>Building functions are expressed by the façade</i></p> <p>Building entries should be clearly defined Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height The apartment layout should be expressed externally through facade features such as party walls and floor slabs</p>	<p>Complies</p> <ul style="list-style-type: none"> • Building lobbies are legible and well located, separate from the retail activation areas. • The terrace apartments typologies are articulated through an expression of their primary structural grid, with each 'box' defining an apartment. <p>Refer to the architectural drawings and perspectives for further information.</p>
4N Roof Design	
<p>Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street</p>	<p>Complies</p> <ul style="list-style-type: none"> • Roof treatments have been integrated with the building design appearing as a continuation of the building with materials to compliment the architecture • The proposed communal spaces at ground and roof level, are proposed to provide active, vibrant communal open spaces. • Service elements have been integrated within the roof design • The proposed landscape will utilise predominantly native, sun-loving plants that tolerate low water to reduce water use and maintenance requirements (Refer landscape design)
<p>Objective 4N-2 <i>Opportunities to use roof space for residential accommodation and open space are maximised</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The proposal provides communal roof gardens for residents.
<p>Objective 4N-3 <i>Roof design incorporates sustainability features</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The proposal provides solar panels across the rooftops to facilitate on-site renewable energy generation. • Roof colours and treatments have been selected to minimise heat gain and sit sympathetically within the composition • A number of buildings have rooftop communal areas that incorporate planting and shade structures that mitigate urban heat island effect while providing ecological benefits. • These roof gardens include vegetable garden beds for planting by residents to encourage food production.
4O Landscape Design	
<p>Objective 4O-1 <i>Landscape design is viable and sustainable</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The design of the public domain and open space incorporates a diverse network of spaces that address the climatic conditions along with the selection of appropriate materials and finishes. • A selection of plants, trees and materiality has been carefully considered to ensure that they are suited to the site conditions. (Refer landscape design)
<p>Objective 4O-2 <i>Landscape design contributes to the streetscape and amenity</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The proposal represents a significant improvement to the public domain as previously detailed. This includes greening the existing and proposed streets to create canopy coverage, increased shading opportunities and reduce urban heat effect.

Objective	Comment																					
4P Planting on Structures																						
<p>Objective 4P–1 <i>Appropriate soil profiles are provided</i></p> <table border="1"> <thead> <tr> <th>Plant type</th> <th>Soil Depth</th> <th>Soil Area</th> </tr> </thead> <tbody> <tr> <td>Large Trees</td> <td>1,200mm</td> <td>10 x 10m or equivalent</td> </tr> <tr> <td>Medium Trees</td> <td>1,000mm</td> <td>6 x 6m or equivalent</td> </tr> <tr> <td>Small Trees</td> <td>800mm</td> <td>3.5 x 3.5m or equivalent</td> </tr> <tr> <td>Shrubs</td> <td>500-600mm</td> <td></td> </tr> <tr> <td>Ground Cover</td> <td>300-450mm</td> <td></td> </tr> <tr> <td>Turf</td> <td>200mm</td> <td></td> </tr> </tbody> </table>	Plant type	Soil Depth	Soil Area	Large Trees	1,200mm	10 x 10m or equivalent	Medium Trees	1,000mm	6 x 6m or equivalent	Small Trees	800mm	3.5 x 3.5m or equivalent	Shrubs	500-600mm		Ground Cover	300-450mm		Turf	200mm		<p>Complies</p> <ul style="list-style-type: none"> The proposed development includes planting and provides appropriate soil volume to facilitate plant growth. Refer to the landscape plan which accompanies this proposal
Plant type	Soil Depth	Soil Area																				
Large Trees	1,200mm	10 x 10m or equivalent																				
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Shrubs	500-600mm																					
Ground Cover	300-450mm																					
Turf	200mm																					
<p>Objective 4P–2 <i>Plant growth is optimised with appropriate selection and maintenance</i></p>	<p>Complies</p> <ul style="list-style-type: none"> The landscape plan which accompanies this proposal provides plants which have been selected to suit the site conditions 																					
<p>Objective 4P–3 Planting on structures contributes to the quality and amenity of communal and public open spaces</p>	<p>Complies</p> <ul style="list-style-type: none"> The proposed development incorporates planting on grade, roofs and podium structures which will contribute positively to the development. Refer to the landscape plan which accompanies this proposal 																					
4Q Universal Design																						
<p>Objective 4Q–1 <i>Universal design features are included in apartment design to promote flexible housing for all community members</i></p> <p>Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features</p>	<p>Complies</p> <ul style="list-style-type: none"> 20% of the apartments comply with the silver level universal design standard. <p>Further information is provided in the architectural documentation</p>																					
<p>Objective 4Q–2 <i>A variety of apartments with adaptable designs are provided</i></p> <p>Adaptable housing should be provided in accordance with the relevant council policy</p>	<p>Complies</p> <ul style="list-style-type: none"> Adaptable apartments will be provided at a rate of 10% in the development to meet DCP requirements. Several different apartment types are used as adaptable apartments <p>Further information is provided in the architectural documentation</p>																					
<p>Objective 4Q–3 <i>Apartment layouts are flexible and accommodate a range of lifestyle needs</i></p> <p>Apartment design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> Rooms with multiple functions Dual master bedroom apartments with separate bathrooms Larger apartments with various living space options Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	<p>Complies</p> <ul style="list-style-type: none"> The apartment layouts are provided to be flexible and suitable for a wide demographic range Simple room shapes and clean lines are favoured in order to better facilitate room planning and interior design. 																					

Objective	Comment
4R Adaptive Re-Use	
<p>Objective 4R—1 <i>New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i></p>	N/A
<p>Objective 4R—2 <i>Adapted buildings provide residential amenity while not precluding future adaptive reuse</i></p>	N/A
4S Mixed Use	
<p>Objective 4S-1 <i>Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • The site is well serviced by the Metro Station. • The northern site is activated with retail to all frontages including streets, parks, plazas and the pedestrian boulevard. • Commercial floorspace is provided to Level 1 on Site 1A, with views over the park and lobby access off the pedestrian thru site link.
<p>Objective 4S-2 <i>Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • Secure residential lobbies and circulation routes are separated from the retail frontage and have direct street or public domain access – or both. • Commercial plates have dedicated lobbies accessed from the thru site link and plaza on Site 1A. • Carparking is split corresponding to users, with a single residential entry point and a single retail/commercial entry point, increasing legibility and reducing conflict.
4T Awnings and Signage	
<p>Objective 4T-1 <i>Awnings are well located and complement and integrate with the building design</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • Continuous awnings and covered areas are provided around the active retail perimeter. These are integrated into the overall architectural expression
<p>Objective 4T—2 <i>Signage responds to the context and desired streetscape character</i></p>	Signage will be subject to future DA Applications.
4U Energy Efficiency	
<p>Objective 4U—1 <i>Development incorporates passive environmental design</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • Tallawong has been designed with future climate conditions in mind. • Lighter building colours have been selected on external walls and rooftops to reduce thermal heat build up. • Rooftops feature significant soil and planting areas to reduce thermal gain. • Mechanical exhaust is located on rooftops, avoiding the output of warm air to habitable areas. • In accordance with the ADG, units achieve cross ventilation, providing fresh air and cooling breezes to residents
<p>Objective 4U—2 <i>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i></p>	<p>Complies</p> <ul style="list-style-type: none"> • To provide protection from the sun, canopy cover is provided along streets and throughout the central publicly accessible park. These vegetated areas provide refuge from the heat, and in the park allow outdoor activities on hotter days.

Objective	Comment
<p>Objective 4U—3 <i>Adequate natural ventilation minimises the need for mechanical ventilation</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Natural ventilation is provided to habitable rooms and to circulation spaces, typically.
4V Water Management	
<p>Objective 4V—1 <i>Potable water use is minimised</i></p>	<p>Complies</p> <ul style="list-style-type: none"> The development incorporates water efficient fittings, appliances and waste-water re-use. Plant selections are designed for the microclimate and are typically low-water use. Further details about the proposed planting and landscape concept is detailed in the landscape report submitted as part of the development application.
<p>Objective 4V—2 <i>Urban stormwater is treated on site before being discharged to receiving waters</i></p>	<p>Refer to the stormwater and flood management report by Aecom.</p>
<p>Objective 4V—3 <i>Flood management systems are integrated into site design</i></p>	<p>Refer to the stormwater and flood management report by Aecom.</p>
4W Waste Management	
<p>Objective 4W-1 <i>Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i></p>	<p>Complies</p> <ul style="list-style-type: none"> A bulk-waste area for residents is located in each basement. Garbage collection is located within the building, with the loading area access located away from the pedestrian focussed areas.
<p>Objective 4W-2 <i>Domestic waste is minimised by providing safe and convenient source separation and recycling</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Communal waste rooms – housing a garbage chute and recycling bins – are provided for residents in convenient and accessible locations related to each vertical core. Waste and recycling storage areas are ventilated and have durable and washable finishes All dwellings have sufficient internal space for the holding of waste and recycling.
4X Building Maintenance	
<p>Objective 4X-1 <i>Building design detail provides protection from weathering</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Building materials are selected to withstand the demands of the environment and to weather gracefully. Painted and applied finishes are minimised
<p>Objective 4X-2 <i>Systems and access enable ease of maintenance</i></p>	<p>Complies</p> <ul style="list-style-type: none"> Suitable access for cleaning is to be provided from the public domain or appropriately controlled roof access.
<p>Objective 4X-3 <i>Material selection reduces ongoing maintenance costs</i></p>	<p>Complies</p> <ul style="list-style-type: none"> The use of applied finishes is minimised in the development. Communal areas are readily accessible for maintenance.



View looking north up the pedestrian boulevard to the Tallawong Station



View looking east along new loop road

TURNER

TALLAWONG STATION PRECINCT SOUTH