RESIDENTIAL FLAT DESIGN CODE

SEPP 65 – Residential Flat Design Code		
	Required	Comment
PART 1.0 LO	CAL CONTEXT	
Residential Flat Building Type	Suitable for site context	Residential Flat Building (tower apartment)
Amalgamation and Subdivision	Encouraged	The subject site consists of four lots, it is recommended consolidation be required as a condition of consent if DA is supported.
Building Envelopes Height	Test height against FSR to ensure good fit.	Proposed building height is within the maximum permitted in the zone.
Building Envelopes – Building Depth	In general, an apartment building depth of 10-18 metres is appropriate. Developments that propose wider than 18 metres must demonstrate how satisfactory daylighting and natural ventilation are to be achieved.	The building in part has a depth of 22.5m this therefore is outside of the typical maximum. However the maximum depth of each apartment 11.2m which results in all apartments having good access to natural light. The proposal considered acceptable.
Building Envelopes – Building Separation	 Up to four storeys/12 metres 12 metres between habitable rooms/balconies 9 metres between habitable/balconies and non- habitable rooms 6 metres between non-habitable rooms 6 metres between non-habitable rooms Five to eight storeys: 18m between habitable rooms/balconies 13m between habitable rooms 9m between non-habitable rooms 9m between non-habitable rooms Nine storeys plus 24m between habitable rooms/balconies 18m between habitable rooms/balconies 18m between habitable rooms/balconies 18m between habitable rooms/balconies 18m between habitable rooms/balconies and non-habitable rooms 12m between non-habitable rooms 	The adjoining building to the west is 5m from the boundary as indicated in the survey plans for this application the building at the point where residential adjoins residential being level two is located 8.6m from the boundary. The distance separation is therefore 13.6m Levels 3-15 The floors above the 3 floor of this building are not subject to building separation as the adjoining development are not greater then 3 stories in height and as such building separation is not applicable. The building complies with the setbacks contained with WDCP 2009 and as such if the properties located to the north and west were to redevelop then building separation can be achieved.
Street Setbacks	Identify the desired streetscape character, the common setback of buildings in the street, the accommodation of street tree	The building complies with the 3m front setback identified with the WDCP2009.

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	planting and the height of buildings and daylight access controls.	The proposal complies.
	Relate setbacks to the area's street hierarchy.	
	Identify the quality, type and use of gardens and landscaped areas facing the street.	
Side + Rear Setbacks	Test side and rear setback with building separation, open space and deep soil zone requirements.	The setbacks are generally reasonable.
	Test side and rear setbacks for overshadowing of other parts of the development and/or adjoining properties, and of private open space	
Floor Space Ratio	Test the desired built form outcome against FSR to ensure consistency with other building envelope controls	The maximum permitted FSR within WLEP 2009 is 2.58:1 the proposed development provides for an FSR of 2.58:1 The proposal complies.
PART 2.0 SIT	E DESIGN	
Deep Soil Zones	A minimum of 25% of the open space area of the site should be a deep soil zone; more is desirable.	Deep soil zones within the commercial core/mixed use are not required. Podium planting is required instead.
Fences and Walls	Compatible with existing street character. Delineate public and private domain. Select durable materials. Enhance open spaces by incorporating planter boxes, seats, BBQs etc.	The subject site is located within the commercial core. The ground floor is to be used entirely for commercial/retail activities and car parking. At this level there is no delineation of public and private domains required. The proposal complies.
Landscape Design	Improve amenity of open space. Contribute to streetscape character and public domain.	Landscape plan has been provided, and reviewed by Council's Landscape Officer. It is satisfactory and provides for dense planting within podium.
	Improve energy efficiency & solar efficiency of dwellings and private open spaces.	
	Landscape to contribute to site's characteristics.	
	Contribute to water and stormwater	

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	efficiency. Provide sufficient depth of soil above slabs to enable growth of mature trees. Minimise maintenance.	
Open Space	The area of communal open space (includes landscaping) should generally be at least between 25 and 30% of the site area. Larger sites and brownfield sites may have potential for more than 30%. Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space. The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as a podium or car park, is 25m ² ; the minimum preferred dimension in one direction is 4 metres	 Communal open space: The site is located within the commercial core and as such 25% of the site cannot be provided The development generates the need to provide 205sq.m. The development has provided 351sq.m on the northern side of the building The proposed area of communal open space is 351sq.m and is provided along the northern boundary on levels 2 and 5 of the building. This area includes the provision of outdoor seating. Private open space: Two of the apartments benefit from a large courtyard on the terrace level. The courtyards are greater than 25sq.m. The remaining units have allocated balconies also achieve a minimum of 4m dimension in one direction.
Orientation	 Plan the site to optimise solar access by: positioning and orienting buildings to maximise north facing walls where possible providing adequate separation within the development and to adjacent buildings Select building types or layouts which respond to the streetscape while optimising solar access. Where streets are to be edged and defined by buildings, design solutions include: align buildings to the street on eastwest streets use courtyards, L-shaped configurations and increased setbacks to northern (side) boundaries on north-south streets. Optimise solar access to living 	The subject site is orientated on a east- west axis. A minimum umber of units has single aspects. Building is aligned in accordance with the RFDC. The proposal complies.

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	 spaces and associated private open spaces by orienting them to the north. Detail building elements to modify environmental conditions, as required, to maximise sun access in winter and sun shading in summer. 	
Planting on Structures	Recommended plant sizes are provided for varying situations.	Podium planting proposed in planter beds. Council's Landscape Officer has reviewed the landscape plan and has no objection in relation to this aspect of the landscaping works. The proposal complies.
Stormwater Management	Reduce impact of stormwater disposal on infrastructure by retaining it on the site.	Stormwater plan provides for on-site detention and rainwater collection and reuse. Stormwater plan appears to be consistent with the landscape plan. The proposal complies.
Safety	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings	The proposal has been reviewed by Council's SCAT and conditions have been provided. The proposal is considered satisfactory
Visual Privacy	Refer to Building Separation and setback standards Building layouts to reduce opportunities for direct overlooking	Building layout has been designed to minimise opportunities for direct overlooking. Balconies are sited such that overlooking between balconies is not possible. Considered satisfactory.
Building Entry	Provide as direct a physical and visual connection as possible between street and building entry.	Proposed building entry is located on the ground level. Entry is reasonably well defined by planter bed location, entry awning etc. Entry is safe. It is assumed that key
	Provide safe and secure access Provide equal access	control will be required. Access is level. Access from adaptable parking spaces within the basement will be via the lift. Conditions will be required to be imposed in relation to compliance with AS 4299.
	Provide separate entries for vehicles and	Ramp to basement is separate to

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	pedestrians	pedestrian entry.
	Appropriate design and location of mail boxes	Mail boxes are appropriately located adjacent to the main pedestrian entry and close to the frontage.
		The proposal complies.
Parking	Preference to underground parking Parking numbers in accordance with relevant DCPs	All parking is provided at the rear of the site or below ground within the 2 basement levels.
	Provide bicycle parking	A total of 101 parking spaces have been provided. The parking complies with the WDCP 2009.
Pedestrian Access	Identify the access requirements from the street or car parking area to the apartment entrance.	Pedestrian access available from the street. Pedestrian access between car parking
	Follow the accessibility standard set out in AS1428 (part 1 and 2), as a minimum	level and the rest of the building is via the fire stairs or lift.
	Provide barrier free access to at least 20% of dwellings in the development	Barrier free access appears to be available to all units via the access ramp from Harbour Street. 4 units are nominated as adaptable units.
		The proposal complies.
Vehicle Access	Generally limit the width of driveways to a maximum of 6 metres Locate vehicle entries away from main pedestrian entries and on secondary street frontages	Proposed driveway width 7m. Whilst this is greater then the suggested 6m the larger driveway is required to cater for the larger vehicles accessing the loading dock and garbage collection Vehicular access separate from pedestrian
		access points.
		Council's Traffic section has reviewed the application and considered it acceptable in this case.
PART 3.0 BU	ILDING DESIGN	
Apartment Layout	Single aspect apartments should be limited in depth to 8 metres from a window	The single aspect units have a maximum depth of 9m. Whilst this is greater then the suggested 8m the furthest wall is the linen cupboard and laundry. This is
	The back of a kitchen should be no more than 8 metres from a window	considered satisfactory. 4 kitchens (units 3, 9, 15 & 21) are located

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory daylighting and natural ventilation should be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation)	 9.8m and therefore greater then the specified 8m. These 4 kitchens will be mechanically ventilated. Given that the BAXIS certificates has been issued with this inclusion it is considered acceptable Units all have a width greater than 4m. It is considered that all units have satisfactory daylight access and natural ventilation. The proposal is considered satisfactory.
Apartment Mix	 Provide a variety of apartment types between studio-, one-two-, three- and three plus-bedroom apartments, particularly in large apartment buildings. Variety may not be possible in small apartment buildings, for example, up to six units. Refine the appropriate apartment mix for a location by: Considering population trends in the future as well as present market demands Noting the apartments' location in relation to public transport, public facilities, employment areas, schools and universities Locate a mix of one- and three bedroom apartments on the ground level where accessibility is more easily achieved for disabled, elderly people or families with children. Optimise the number of accessible and adaptable apartments and cater for a wide range of occupants. 	 The proposed apartment mix: Total 41 units 4 x 1 bedroom units 19 x 2 bedroom units 18 x 3 bedroom units Mix is considered to be appropriate All apartments accessible via lift. 4 units identified as adaptable. No units are nominated as being specifically 'affordable housing'.
	 Australian Standards are only a minimum. Investigate the possibility of flexible apartment configurations, which support change in the future (see Flexibility). 	The proposal is considered satisfactory
Balconies	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context - noise, wind - cannot be	All units satisfy this requirement

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	satisfactorily mitigated with design solutions.	
	Require scale plans of balcony with furniture layout to confirm adequate, usable space when an alternate balcony depth is proposed.	
Ceiling Heights	The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired. -in mixed use buildings: 3.3m minimum for ground floor retail or commercial and for first floor residential, retail or commercial to promote future flexibility of use -in residential flat buildings in mixed use areas: 3.3m minimum for ground floor to promote future flexibility of use -in residential flat buildings or other residential flat buildings or other residential floors in mixed use buildings: - in general, 2.7m minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non- habitable rooms, however 2.25m is permitted. -for two storey units 2.4m minimum for second storey if 50 percent or more of the apartment has 2.7m minimum ceiling heights -for two-storey units with a two-storey void space, 2.4 metre minimum ceiling heights -attic spaces, 1.5 metre minimum wall height at edge of room with a 30 degree minimum ceiling slope. Developments which seek to vary the	Ceiling heights are 3m or more to all rooms. Satisfactory
	recommended ceiling heights must demonstrate that apartments will receive satisfactory daylight (eg. shallow apartments with large amount of window	

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	area).	
Flexibility	Provide robust configurations which use multiple entries and circulation cores, especially in buildings with 15m+ length Provide apartment layouts which accommodate changing use of rooms Use structural systems which support a degree of future change in building use	Single entry and single lift core is considered to be appropriate having regard to the size of the development. All units are physically accessed via lifts. Minimal flexibility built into design. This is considered to be appropriate having regard to the zoning of the site and the character of the neighbourhood. 4 adaptable units are proposed and all
Ground Floor Apartments	Promote accessibility and adaptability. Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography	units should be accessible. No ground floor units are proposed as the site is located with the commercial core and as such it is not encouraged to place residential on the ground floor as active street frontages are required.
	of the site. Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	Complies
Internal Circulation	 In general, where units are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to eight. Exceptions may be allowed: For adaptive re-use buildings Where developments can demonstrate the achievement of the desired streetscape character and entry response Where developments can developments can demonstrate the achievement of the desired streetscape character and entry response 	Lift services maximum 6 units on each floor. Satisfactory
	demonstrate a high level of amenity for common lobbies, corridors and units (cross over, dual aspect apartments)	
Mixed Use	Complementary uses Consider building depth and form in relation to each uses requirements for servicing and amenity	The commercial use is separate to the residential uses. The operation of the commercial component should not interfere with the residential.

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	Design legible circulation systems which ensure safety	Satisfactory
	Ensure building positively contributes to public domain	
	Address acoustic requirements	
	Recognise ownership/lease patterns and separate requirements for BCA assessment	
Storage	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates: studio apartments 6m ³	All units have been provided with a storage area within the basement car park. Each of the storage areas has sufficient capacity.
	 one-bedroom apartments 6m³ two-bedroom apartments 8m³ three-plus bedroom apartments 10m³ 	Satisfactory
Acoustic Privacy	Use site and building layout to maximise potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings.	Suitable separation distances provided
	Arrange apartments within a development to minimise noise transition between flats. Design internal apartment layout to	Like areas within units generally abut. Most units appear to be reasonably well designed with regard to acoustic privacy.
	separate noisier spaces from quieter spaces. Resolve conflicts between noise, outlook	As above.
	and views.	
	Reduce noise transmission from common corridors or outside the building by providing seals at entry doors.	Details of entry seals are not provided. This could be dealt with by a condition of consent is the proposal is approved.
		Satisfactory
Daylight Access	Living Rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9.00am and 3.00pm in mid winter. In dense urban areas a minimum of two hours may be acceptable	North facing – 17 East Facing – 20 West facing – 1 South facing 3 = 92.7%
	Limit the number of single aspect apartments with a southerly aspect (SW-	

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	SE) to a maximum of 10 percent of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).	
Natural Ventilation	 Building depths, which support natural ventilation typically range from 10 to 18 metres. 60% of residential units should be naturally cross-ventilated. 25% percent of kitchens within a development should have access to natural ventilation. Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily be achieved, particularly in relation to habitable rooms. 	Building depth measured from front to rear exceeds 18m. east-west depth variable – up to 22.5m which is does not meet the 18m however the maximum depth of the unit is 11.2m and therefore achieves the natural; ventilation requirements. Corner units – 34 Single Aspect Units – 7 = 83% natural cross ventilated 90% of kitchens have access to natural ventilation. All units will receive sufficient solar access and are all naturally ventilated. The proposal complies.
Awnings and Signage	<i>Objectives:</i> Provide shelter for public streets Ensure signage is in keeping with desired streetscape character and with scale, detail and design of the development.	Awnings are not proposed over the footpath and are not required by WDCP 2009 No signage is proposed at this stage.
Facades	Consider the relationship between the whole building form and the façade and/or building elements. Compose facades with appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character.	Design is of a reasonably high standard. External finishes appear to be of a high standard. All elevations are reasonably well treated with regard to modulation, articulation and fenestration. This assists in reducing the perception of bulk. Appropriate materials will be used. The proposal is considered satisfactory.
Roof Design	Relate roof design to the desired built form.	Most of the proposed roof is flat, and complies with the maximum height limits. This is considered to be appropriate with

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	Design the roof to relate to the size and scale of the building, the building elevations and three dimensional building form. Design roofs to respond to the orientation of the site, eg. by using eaves and skillion roofs to respond to sun access. Minimise visual intrusiveness of service elements by integrating them into the design of the roof. Support use of roofs for quality open space in denser urban areas.	regard to the design of other buildings within with City Centre precinct. Service elements are not incorporated into the roof design. The proposal complies.
Energy Efficiency	 Incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer. Improve the control of mechanical space heating and cooling. Provide or plan for future installation of photovoltaic panels. Improve efficiency of hot water systems. Reduce reliance on artificial lighting. Maximise efficiency of household appliances. 	 BASIX certificate submitted in relation to the units. Units are designed with dual aspect, or minimum depth and so have solar access and cross ventilation. This will assist in reducing energy usage through mechanical heating and cooling. BASIX certificate requires use of efficient appliances. The proposal complies.
Maintenance	Design windows to enable cleaning from inside the building, where possible. Select manually operated systems, such as blinds, sunshades, pergolas and curtains in preference to mechanical systems. Incorporate and integrate building maintenance systems into the design of the building form, roof, and façade. Select appropriate landscape elements and vegetation and provide appropriate irrigation systems. For developments with communal open space, provide a garden maintenance and storage area, which is efficient and	Some of the windows will be accessible from either inside the building or from balconies. Council's Landscape Officer is satisfied generally with planting, subject to some changes being made. Conditions have been recommended and within the draft consent in this regard. No details have been provided in relation to maintenance of the podium planting. If properly planted, these will not require significant maintenance works.

SEPP 65 – Residential Flat Design Code		
	Required	Comment
	convenient to use and is connected to water and drainage.	The proposal considered acceptable.
Waste Management	Supply waste management plans as part of the development application submission as per the NSW Waste Board	Waste storage area is provided at ground floor level. On site collection is proposed of the bulk bins The proposal complies.
Water Conservation	Rainwater is not to be collected from roofs coated with lead or bitumen based paints, or from asbestos-cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	Roofing materials – metal deck roof sheeting. BASIX certificate makes provision for rainwater collection and reuse on site. The proposal complies.

WOLLONGONG DEVELOPMENT CONTROL PLAN

CHAPTER B1 – Residential Development

11 General Requirements For All Residential Development

Controls/objectives	Comment	Compliance
11.1 Waste Management		
	Discussed within the Chapter E7 in the report and City Centre Precinct chapter table of compliance and SEPP 65 RFDC table of compliance.	Yes
11.2 Stormwater Drainage		
	Discussed with Chapter E14	Yes
11.3 Floodplain Management		
	Site is not located within a flood prone area.	N/A
<u>1.4 Land Re-Shaping Works (Cut and Fill</u> <u>Earthworks)</u>		
	The application involves the establishment of a basement.	Yes
	Council's stormwater engineers has reviewed the application and provided conditions in regards to stormwater redirection.	
	Council's Geotechnical engineer assessed the application and raised no objection. Conditions have been provided.	
	Conditions have been placed on the draft consent controlling the construction phase sp that no nuisance is caused by any works.	
11.5 Soil Erosion and Sediment Control		
	Considered as part of Chapter E22 contained within the report.	Yes
11.6 Development near the Coastline		
	The development is not considered to be near the coastline	N/A
<u>11.7 Sunlight Access</u>		
	Sunlight access available to all surrounding properties and the proposed units. It is not expected that the development will create an adverse impact on the property to south	Yes
<u>11.8 View Sharing</u>		

Controls/objectives	Comment	Compliance
 New development and alterations and additions to existing development must be designed to maximise view sharing opportunities from neighbouring dwellings and to minimise potential view loss. A range of view sharing measures shall be considered for incorporation into the design of a building 	No properties are likely to suffer any loss of views.	Yes
11.9 Services		
	It will be conditioned that the application require clearance certificates from the relevant utility authorities prior to the release of a Construction Certificate.	Yes
11.10 Fire Brigade Servicing		
	Covered by the BCA	Yes
<u>11.11 Site Facilities</u>		
 Provide letterboxes for all residential dwellings in an accessible location; grouped in one location adjacent to the main entrance to the development. Locate satellite dish telecommunication antennae, air conditioning units and any ancillary structures: Away from the street frontage; In a position where such facilities will not become a skyline feature at the top of any building; and Adequately setback from the perimeter wall or roof edge of buildings. All dwellings must be provided with open air clothes drying facilities that are easily accessible; screened from the public domain and communal open spaces. Air conditioning units shall be located so that they are not visible from the street or other public places. 	Discuss with the city centre precinct chapter below	Yes
11.12 Storage Facilities		
 Storage requirements - three or more bedrooms 10m³ and 5m² In residential flat buildings a secure 	Storage areas are available for each units within the basement car park.	Yes
space shall be set aside exclusively for storage as part of the basement and/or garage area		

CHAPTER B3 - Mixed Use

Controls/ objectives	Comment	Compliance
4.1 Minimum Site Width		
A minimum site width of 24 metres is required for mixed use developments. The site width must be measured for the full length of the building envelope and perpendicular to the side boundary.	The site has a frontage of 45m	Yes
Within business centres, mixed use development must not result in the creation of an isolated allotment.	No isolated lot will be created as a result of this application	
4.2 Maximum Floor Space Ratio / Density		
The maximum floor space ratio (FSR) for a mixed used development upon a particular parcel of land will be determined by the relevant LEP and the relevant Floor Space Ratio Map applying to the subject site.	The WLEP 2009 allows for a maximum FSR of 3.5:1 for a commercial development and 2.5:1 for a residential development. When a mixed use development is proposed the maximum permissible FSR is 2.58:1 the development proposes an FSR of 2.581	Yes
4.3 Building Height		
The maximum permissible building height for a mixed use development upon a particular parcel of land is shown on the relevant Heights Map applying to the subject site as contained in the relevant LEP.	The WLEP 2009 has a maximum height of 48m in the subject locality the building is a maximum of 47.62m	Yes
<u>4.4 Front Setbacks</u>		
	Discussed within the City Centre Precinct	N/A
<u>4.5 Side and Rear Setbacks / Building</u> <u>Separation</u>		
	Discussed within City Centre Precinct	N/A
4.6 Built Form		
A mixed use or shop top housing development involving three (3) or more storeys and four (4) or more dwellings must be designed in accordance with State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development.	The application has been considered against the requirements of SEPP 65 and is considered satisfactory.	Yes
The appearance of new development must be in harmony with the buildings around it and the streetscape character of the locality. New development must contain or respond to the essential elements that make up the character of the surrounding urban environment. This character is created by elements such as building height, setbacks, architectural style, window	The surrounding area is in transition. There is a mixture of vacant land with a proposed future use as a mixed use development as well as older style 3 storey walk up apartment buildings	

Controls/objectives	Comment	Compliance
treatment and placement, materials and landscaping. The siting, form, height and external appearance of any new building should be sympathetic with adjoining buildings in the surrounding retail and business precinct in addition to any abutting or nearby residential dwellings. Any mixed use or shop top housing building should feature highly articulated facades, particularly any facades facing road frontages and any abutting residential area, in order to add visual interest to the building. Any mixed use or shop top housing building must be designed to provide active street frontages on the ground floor level of the building to all street frontages and in some cases, Council may require appropriate pedestrian thoroughfare links.	It is considered that the building is articulated adding visual interest t the building Commercial/retail space is located on the ground floor	
4.7 Active Street Frontages		
 All new retail, business or mixed use buildings are required to provide ground level active street frontages. Buildings should contain no more than 5 metres of ground floor wall without a door or window. Windows should make up at least 50% of the ground floor front wall. Buildings with frontages to retail streets are to contribute to the liveliness and vitality of those streets by: (a) Providing product retailing and / or food and drink premises within all enclosed shop fronts; (b) Minimising the extent and visual impact of building entrances, office lobbies, foyers, vehicle entrances and other entries not associated with retail, service areas and fire escapes; (c) Locating activities that may involve queuing (e.g. automatic teller machines) behind building frontages so that footpaths remain free for pedestrian movement; and (d) Providing a high standard of finish to retail shopfronts. All street frontage windows at ground level are to have clear glazing. 	Discussed within the City Centre Precinct chapter	Yes

Controls/objectives	Comment	Compliance
with a maximum window sill height of 0.7 metres above finished ground level.		
4.8 Awnings		
Provide continuous street front awnings, where required to provide a continuation of existing awnings.	Discussed within the City Centre Precinct chapter	Yes
Awning designs should match building frontages.		
Wrap awnings around corners where a building is sited on a street corner. Corner awnings must be wrapped for a minimum distance of 6m.		
Awnings must have a minimum width of 2.5m.		
Cantilever awnings from buildings should be a maximum eave height of 3.3m.		
Awnings should be setback from the kerb a minimum of 600 mm.		
Awnings should be complimentary to other existing awnings.		
Provide under awning lighting to facilitate night use and to improve public safety.		
4.9 Car Parking		
Parking for cars, motorcycles and bicycles shall be provided in accordance with the requirements contained in the Traffic, Parking, Access and Servicing chapter in Part E of this DCP.	Discussed in chapter E3 101 parking spaces have been provided which complies with control.	Yes
Car parking spaces must comply with the minimum size requirements:		
4.10 Basement Car Parking		
The scale and siting of the basement carpark must not impact upon the ability of the development to satisfy minimum landscaping requirements.	Discussed within the City Centre Precinct chapter	Yes
<u>4.11 Driveways</u>		
Provide driveways to parking areas from lanes and secondary streets rather than the primary street, wherever practical.	Discussed with City Centre precinct Chapter.	Yes
Locate driveways taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees.		
Crossover and driveway widths relating to the erection of one or more dwellings must comply		

Controls/objectives	Comment	Compliance
with the following: 21 to 50 6 –8m combined 6m >50 3-4m each, separated Minimum 3m each or 6m when combined		
4.12 Landscaping		
Landscaping within mixed use developments must be provided on terraces or balconies where required for screening purposes, to minimise overlooking between commercial and residential functions. Landscaping, including deep soil planting, must be provided where mixed use developments are located adjacent residential zones.	Discussed within the City Centre Precinct chapter	Yes
Landscaping on podiums must provide sufficient soil depth and area to allow for plant establishment and growth.		
Where a mixed use development is sited on the boundary of a business area and / or is adjacent residential buildings, the residential component of the development must adopt the respective landscape requirements of a residential apartment building.		
4.13 Communal Open Space		
Mixed use developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at the rate of 5m2 per dwelling. Any area to be included in the open space calculations must have a minimum width of 5 metres. Variation to this requirement will only be considered where it can be demonstrated that the development has access to a range of recreational opportunities in the immediate vicinity.	Discussed within the City Centre Precinct chapter	Yes
Within mixed use developments the communal open space area may be provided as either an internal or external space. Roof top terraces will not be accepted as communal open space.		
The communal open space must be easily accessible and be integrated with landscaping.		
<u>4.14 Private Open Space</u>		
Private open space must be provided for each residential dwelling within the development in the form of a balcony, courtyard, terrace and/or roof garden.	Discussed within the City Centre Precinct chapter	Yes
Private open space for each dwelling within a residential apartment building must comply with		

Controls/objectives	Comment	Compliance
the following: The balcony must have a minimum area of 12m2 open space and a minimum width of 2.4 metres.		
The primary balcony of at least 70% of the residential dwellings within a mixed use housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.		
4.15 Solar Access		
Living rooms and private courtyards of adjacent residential buildings must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21. In determining access to sunlight, overshadowing by fences, roof overhangs and changes in level must be taken into consideration. Overshadowing by vegetation should also be considered, where dense vegetation appears as a solid fence. Mixed use developments must aim to maximise the number of dwellings having a northern aspect. Where a northern aspect is available, the living spaces and balconies of such apartments must typically be orientated towards the north.	Discussed within the City Centre Precinct chapter	Yes
The development must maximise the number of apartments with a dual orientation. Single aspect, single storey apartments should preferably have a northerly or easterly aspect and a reduced depth to allow for access of natural light to all habitable spaces.		
The living rooms and private open space of at least 70% of apartments within the subject development must receive a minimum of three (3) hours direct sunlight between 9.00am and 3.00pm on 21 June.		
4.16 Visual privacy		
New buildings should be sited and oriented to maximise visual privacy between buildings through compliance with minimum front, side and rear setback / building separation requirements.	Discussed within the City Centre Precinct chapter	Yes
The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards, wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living		

Controls/objectives	Comment	Compliance
room areas.		
4.17 Acoustic privacy		
Residential apartments and / or serviced apartments should be arranged in a mixed use building, to minimise noise transition between apartments by locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);	Discussed within the City Centre Precinct chapter	Yes
4.18 Adaptable Housing		
Within a mixed use development incorporating more than six (6) dwellings, 10% of all dwellings (or a minimum of 1 dwelling) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "pre-adaptation" design details to ensure that visitability is achieved. Lift access to all adaptable dwellings must be provided. The lift must provide access from the basement to allow access for people with disabilities. Disabled access to the commercial component of the development must also be provided from the footpath level. Any Development Application for mixed use development must be accompanied by certification from a suitably qualified and experienced Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).	Discussed within the City Centre Precinct chapter. 4 adaptable units are proposed as adaptable	Yes
4.19 Residential Component - Apartment Mix		1
and Layout		
Provide a mix of apartment sizes and layouts within larger mixed use developments of ten (10) or more dwellings. This could include both variation in the gross floor areas of apartments, variety in the internal design, together with single or two level apartments to accommodate various resident requirements. The selection of the number of bedrooms within developments shall be determined having regard to the site context, geographic location and demographic characteristics. For mixed use developments having ten (10) or more dwellings, a minimum of 10% of the apartments must be one bedroom and/or studio apartments, to provide affordable housing	The application proposes 4 x 1 bedroom apartments, 19 x 2 bedroom apartments and 18 x 3 bedroom apartments. It is considered that this apartment mix is appropriate.	Yes

Controls/objectives	Comment	Compliance
opportunities.		
Mixed use buildings shall be designed to permit adaptation of residential floors for commercial uses, if appropriate at a future time.		
 Provide apartments with the following minimum dimensions; (a) Studio and 1 bedroom apartment 50m2 (b) 2 bedroom apartment 70m2 (c) 3 bedroom apartment 95m2 Unless it can be demonstrated that efficient design and room configuration will provide an appropriate level of residential amenity. 	The application complies with the size of the apartments.	
Ceiling heights of apartments must be selected to encourage the penetration of natural sunlight into all areas of the dwelling.		
4.20 Natural Ventilation		
A minimum of sixty percent (60%) of all residential apartments must be naturally cross ventilated.	Discussed within the City Centre Precinct chapter and SEPP 65 RFDC table	Yes
Twenty five (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8m from a window.		
Single aspect apartments must be limited in depth to 8 metres from a window.		
The minimum width for residential apartments should be at least 6 metres in order to avoid relatively narrow apartments and to improve natural ventilation and daylight opportunities. However, Council may in some cases, allow a minimum 4 metre width for cross-over or cross through apartments which are below 12 metres in depth,		
4.21 Adaptive Re-use		
Consideration could also be given to the provision of apartment layouts which will allow for future reconfiguration of rooms to allow for home based work opportunities. Where residential dwelling units are proposed at ground level within a business zone a report must be provided with the development application demonstrating how future commercial uses can be accommodated within the ground level design. The report must	Home employment is exempt development and as such Council's development consent is not required. It is considered that units could be used for home based work opportunities. No dwellings are proposed on the ground floor	Yes

Controls/objectives	Comment	Compliance
(a) Access requirements including access for persons with a disability.(b) Any upgrading works necessary for compliance with the Building Code of Australia.		
<u>4.22 Crime Prevention Through Environmental</u> <u>Design (Safety and Security)</u>		
Ensure that the building design allows for casual surveillance of accessways, entries and driveways.	Council's Safe Community Action Team reviewed the application and provided conditions.	Yes
Avoid creating blind corners in pathways, stairwells, hallways and car parks.		
Provide entrances which are in prominent positions and which are easily identifiable, with visible numbering.		
Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption. <u>5 GENERAL REQUIREMENTS FOR ALL</u>		
<u>MIXED USE DEVELOPMENT</u> 5.1 Floodplain Management		
The submission of a flood study is required where the land is suspected to be affected by flooding or the proposed development could impact on flood behaviour. All development must comply with Floodplain Management chapter contained in Part E of this DCP, with appropriate freeboards for residential development.	The site is not located within a flood prone area Discussed with Chapter E13 contained within the report.	Yes
<u>5.2 Land Re-Shaping Works (Cut and Fill</u> <u>Earthworks)</u>		
All land re-shaping (cut and fill earthworks) shall be minimised.	The application involves the establishment of a basement.	Yes
A maximum of 600mm of cut and/or 600mm of fill will generally be permitted. Excavations in excess of 600mm within the confines of the building may be permitted to allow for basement garages, non-habitable rooms or similar construction.	Council's stormwater engineers has reviewed the application and provided conditions in regards to stormwater redirection. Council's Geotechnical engineer assessed	
Where walls are designed as retaining walls, waterproofing and drainage details, to direct water away from the building, must be submitted to Council.	the application and raised no objection. Conditions have been provided. Conditions have been placed on the draft consent controlling the construction phase sp that no nuisance is caused by any works.	
Proposed cut or fill must not compromise structures on the subject land or adjacent land or the overall stability of the land.		

Controls/objectives	Comment	Compliance
Adequate measures must be made to ensure public safety, especially where excavation is located close to a public place or where it exceeds one metre in depth.		
Stormwater must not be redirected or concentrated onto adjoining properties so as to cause a nuisance.		
5.3 Retaining Walls		
Schedule 2 of Wollongong LEP 2009 identifies retaining walls that do not require Council approval subject to the requirements of clause 3.1 of the LEP	The proposed development involves excavation of a basement. Retaining walls to the extent of this clause are not proposed.	Yes
Applications for retaining walls which exceed 1.0 metre in height must be accompanied by certification provided by a suitably qualified practising structural engineer and/or the manufacturer's specification of the design of the wall.		
To limit the overall height impact, terracing of retaining walls is required, to limit the maximum vertical rise of a retaining wall to 1.0m, with a minimum horizontal setback of 1.0m.		
Ballustrading will be required in accordance with the <i>Building Code of Australia</i> , to ensure the safety of the public, where the retaining wall adjoins a public place and where a person could fall more than one metre.		
5.4 Soil Erosion and Sediment Control		
All soil erosion and sediment control measures shall comply with Soil Erosion and Sediment Control chapter in Part E of the DCP.	Considered as part of Chapter E22 contained within the report.	Yes
<u>5.5 Fences</u>		
All fences are to be constructed to allow the natural flow of stormwater drainage or runoff. Fences must not significantly obstruct the free flow of floodwaters and must be constructed so as to remain safe during floods and not obstruct moving debris. Fences must not be constructed of second hand materials without the consent of Council.	No fencing is required along the front setback. Conditioned for replacement dividing fences	N/A
Fences within the front and secondary building lines should be predominantly constructed in transparent fence materials, allowing visual connection between the dwelling and the street.		
Fences within the front setback area from the primary road frontage are to be a maximum		

Controls/objectives	Comment	Compliance
1.2m in height. Front fences must be of a height and/or design to allow for passive surveillance of the street.		
Side fences on corner blocks shall be a maximum of 1.2m in height within the front setback area from the primary road frontage and shall be a maximum of 1.8m in height for the remainder of the secondary road frontage.		
Dividing fences between the front building line and the rear property boundary must be a maximum of 1.8m in height.		
5.6 Access for People with a Disability		
1. Refer to Access for People with a Disability Chapter in Part E of the DCP.	Discussed with city centre precinct chapter and chapter E1 contained within the report	Yes
5.7 Services		
Consideration shall be given to the siting of any proposed substation during the design stage, to minimise its visual impact on the streetscape. Any required substation must not be located in a	A location for a substation has been identified on the site on the plan.	Yes
prominent position at the front of the property.	It will be conditioned that the application require clearance certificates from the	
Water, sewerage, gas, underground electricity and telephone are to be provided to the proposed development by the developer in accordance with Council and servicing authority requirements.	relevant utility authorities prior to the release of a Construction Certificate.	
5.8 Swimming Pools		
	No swimming pool proposed	N/A
5.9 Fire Brigade Servicing		
All mixed use developments must be located within 60m of a fire hydrant, or the required distance as required by Australian Standard AS2419.1. Provision must be made so that NSW Fire Brigade vehicles can enter and leave the site in a forward direction where: (a) NSW Fire Brigade cannot park their vehicles within the road reserve due to the distance of hydrants from dwellings and/or restricted vehicular access to hydrants; and (b) The site has an access driveway longer than 15m.	Covered by the BCA	N/A
For developments where a fire brigade vehicle is required to access the site, vehicular access, egress and manoeuvring must be provided on the site in accordance with the NSW Fire Brigades Code of Practice – Building Construction - NSWFB		

Controls/objectives	Comment	Compliance
Vehicle Requirements.		
5.10 Site Facilities		
Provide letterboxes for all mixed use developments in a location, which are accessible.	Discussed within the City Centre Precinct chapter table of compliance and SEPP 65 RFDC table of compliance.	Yes
Locate satellite dish telecommunication antennae, air conditioning units and any ancillary structures: (a) Away from the street frontage; (b) In a position where such facilities will not become a skyline feature at the top of any building; and (c) Adequately setback from the perimeter wall or roof edge of buildings.		
All residential apartments within a mixed use development must be provided with open air clothes drying facilities that are easily accessible and which are screened from the public domain and communal open spaces. Clothes drying areas must have a high degree of solar access. Clothes drying areas must not be located between the building line and a public road or accessway, unless adequately screened.		
Air conditioning units shall be located so that they are not visible from the street or other public places.		
5.11 Storage Facilities		
For each dwelling within a mixed use building provide a secure space to be set aside exclusively for storage as part of the basement.	Discussed within the City Centre Precinct chapter table of compliance and SEPP 65 RFDC table of compliance.	Yes
5.12 Waste Management		
All mixed use developments shall address all of the requirements contained in Chapter E7:Waste Management in Part E of the DCP.	Discussed within the Chapter E7 in the report and City Centre Precinct chapter table of compliance and SEPP 65 RFDC table of compliance.	Yes
All mixed use developments shall provide suitable garbage and waste recycling facilities in accordance with the Chapter E7: Waste Management in the DCP.		
The garbage and recycling facilities shall be designed to be serviced by an appropriate waste contractor as per the design requirements contained in the Waste Management chapter.		

CHAPTER D13 – WOLLONGONG CITY CENTRE

The site is located within the Wollongong City Centre, as defined in WLEP 2009 and WDCP 2009. Chapter D13 applies to the development and prevails over other parts of the DCP where there is any inconsistency.

2 Building form

Objectives/controls	Comment	Compliance
2.1 General		
Building form and character refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. The Wollongong City Centre LEP includes provisions for land use, building heights and sun access planes, floor space ratio and design excellence. The development provisions in this section of the DCP on building form are intended to encourage high quality design for new buildings, balancing character of Wollongong with innovation and creativity. The resulting built form and character of new development should contribute to an attractive public domain in central Wollongong and produce a desirable setting for its intended uses.	It is considered that the development complies with the objectives of the zone and complies with the height and FSR requirements contained within the WLEP 2009. It is considered that the application provides for appropriate built for within this location	Yes
2.2 Building to street alignment and street setbacks		
Commercial Core Build to the street alignment or specified setback with 4m minimum further setback above street frontage height. Balconies may project up to 600 mm into front building setbacks, provided the cumulative width of all balconies at that particular level totals no more than 50% of the horizontal width of the building façade, measured at that level. Balconies are not permitted to encroach above the public road reserve. The Commercial Core, Mixed Use (city edge) and Enterprise Corridor zones are subject to requirement for corner properties to provide a 6m x 6m corner splay.	Mixed Use zone requires a 3m front setback. The proposed development provides for a 3m front setback The 6m x 6m splay has been provided	Yes
2.3 Street frontage heights in commercial core		
The street frontage height of buildings in the Commercial Core are not to be less than 12m or greater than 24m above mean ground level on the street front as shown in Figure 2.3.	Not located within the commercial core	N/A
2.4 Building depth and bulk		
The maximum floorplate sizes and depth of buildings are	No maximum depth is required for commercial outside of commercial	Vo – Variation

Objectives/ controls	Comment	Complianc
Residential and serviced apartment outside Commercial Core above 12m height is 18m and 900m2	core. Above the 12m height the building depth has two floors greater then 18m. A variation to this control has been sought and is discussed within the report	requested
2.5 Side and rear building setbacks and building separation		
building separation Commercial = 3m side & 9m rear Residential Up to 12m in height Habitable = 6m side and rear Non-habitable or without openings = 3m side and 4.5m rear Between 12m and 24m Habitable rooms = 9m to side and rear Non-habitable = 4.5m side and rear Between 24m and 45m Habitable = 12m Non-habitable = 6m Above 45m All uses = 14m	CommercialLevel 13m to northern boundary16m to western boundary16m to western boundaryResidentialLevels 2 & 3 = Required 6mLevel 2North – 6m to terrace balconyWest – 6m to terrace balconyCompliesLevel 3 –North – 8.5mWest – 8.6mCompliesLevel 4North – 9m to balcony & 10.8m tobuildingWest – 9m to balcony & 8.66m tobuilding with highlight windowsNumerical non-compliance tobuilding however high light windowis considered satisfactoryLevel 5North – 9m to balcony and 10.8m tobuildingWest - 10m to Communal openspace and 21m to buildingWest - 21.9m to buildingWest – 21.9m to balcony and 17.5mto buildingWest – 21.9m to balcony and 17.5mto building	No to Level 4 Discusses within report

Objectives/ controls	Comment	Compliance
	Level 7-14 = required 12m North - 14.5m to balcony and 17m to building West – 21.9m to building	
	Level 15 = Required 14m North - 17m to balcony West - 23.8m to balcony	
2.6 Mixed used buildings		
Provide flexible building layouts which allow variable tenancies or uses on the first two floors of a building above the ground floor.	The proposed development complies with the ceiling height requirement.	Yes
Minimum floor to ceiling heights are 3.3 metres for commercial office and 3.6 metres for active public uses, such as retail and restaurants in the B3 Commercial Core zone. In the B4 Mixed Use zone, the ground floor and first levels of a building shall incorporate a minimum 3 metre floor to ceiling height clearance, to maximise the flexibility in the future use of the building.	Separate commercial loading dock has been provided Separate residential entry has been provided.	
Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook. Locate clearly demarcated residential entries		
directly from the public street.		
2.7 Deep soil zone		
All residential developments must include a deep soil zone (See Figure 2.14). The deep soil zone shall comprise no less than 15% of the total site area preferably provided in one continuous block and shall have a minimum dimension (width or length) of 6 metres.	Within the mixed use zone it is unlikely that a deep soil zone can be provided on the ground floor as the commercial can be building 3m from the boundaries. Landscaping is being provided on ground however as the basement is located directly below this cannot be	No variation sought
For residential components in mixed use developments in the Commercial Core, Mixed Use (city edge) and Enterprise zones, the amount of deep soil zone may be reduced commensurate with the extent of non- residential uses. Where non-residential components result in full site coverage and there is no capacity for water infiltration, the deep soil component must be provided on structure.	considered deep soil. As this is a mixed use development 92% of the required 15% is to be provided being 13.8% equating to 323.9sq.m however the applicant has indicated that they can only accommodate 11.1% of deep soil landscaping equating to 261sq.m. The 32% of the site is to be landscaped.	

Objectives/ controls	Comment	Compliance
Where deep soil zones are provided, they must accommodate existing mature trees as well as allowing for the planting of trees/shrubs that will grow to be mature trees.		
2.8 Landscape design		
	Council's landscape section has assessed the application and raise no objection to the proposal and has provided conditions	Yes
2.9 Planting on structures		
Provide sufficient soil depth and area to allow for plant establishment and growth.	Council's landscape section has assessed the application and raise no objection to the proposal and has provided conditions	Yes
2.10 Sun access planes		
Relevant height and setback controls for development adjacent to key public spaces apply.	The subject site is not located adjoining or within the vicinity of a sun access plane key site	N/A
2.11 Development on classified roads		
Consent must not be granted to the development of land that has a frontage to a classified road unless the consent authority is satisfied that:	Harbour and Burelli Streets are not a classified road	N/A
Where practicable, vehicular access to the land is provided by a road other than the classified road.		

3 Pedestrian amenity

Objectives/controls	Comment	Compliance
3.1 General		
Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve a high quality of urban design and pedestrian comfort in the public spaces of the city centre. The pedestrian environment provides people with their primary experience of and interface with the city. This environment needs to be safe, functional and accessible to all. It should provide a wide variety of opportunities for social and cultural activities. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to a regional	It is considered that the development contributes to high pedestrian amenity	Yes

<u>3.2 Permeability</u>		
Where possible, existing dead end lanes are to be extended through to the next street as redevelopment occurs.	The site is not identified as requiring permeability being by way of through links.	N/A
New through site links should be connected with existing and proposed through block lanes, shared zones, arcades and pedestrian ways and opposite other through site links.		
<u>3.3 Active street frontages</u>		
In commercial and mixed use development, active street fronts are encouraged in the form of non-residential uses on ground level. Active street fronts in the form of non- residential uses on ground level are required	The development proposes an active street frontage by way of commercial/retail located on the ground floor. A clearly delineated residential entry	Yes
along streets, lanes and through site links shown in Figure 3.4 for all buildings in the Commercial Core and Tourist zones, and for mixed use buildings in the Mixed Use (city edge) and Enterprise zones.	point is proposed.	
Residential developments are to provide a clear street address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets.		
3.4 Safety and security		
Ensure that the building design allows for casual surveillance of accessways, entries and driveways.	Council's Safe Community Action Team assessed the application and provided conditions to the	Yes
Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks.	application.	
Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering.		
Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance.		
Provide security access controls where appropriate		
<u>3.5 Awnings</u>		
Continuous street frontage awnings are to be		

attry is being proposed ge then the maximum is. been discussed further ort.	iation
then the maximum Var s. sou been discussed further	iation
nent is being proposed N/. or under pass is being	А

External walls should be constructed of high quality and durable materials and finishes with 'selfcleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. Limit opaque or blank walls for ground floor uses to 30% of the street frontage. Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass. The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.	good design and interest Building alignment and setbacks are appropriate Appropriate material and finishes selection The proportions are acceptable. Building is modulated and well articulated. Variety of materials are used r	
3.9 Advertising and signage		
Signs are to be designed and located to: i) Relate to the use of the building, ii) Be visually interesting and exhibit a high level of design quality, iii) Be integrated and achieve a high degree of compatibility with the architectural design of the supporting building having regard to its composition, fenestration, materials, finishes, and colours, and ensure that architectural features of the building are not obscured, iv) Have regard to the view of the sign and any supporting structure, cabling and conduit from all angles, including visibility from the street level and nearby higher buildings and against the skyline, and v) Have only a minimal projection from the building.	No advertising is proposed at this point in time	N/A
3.10 Views and view corridors		
Existing views shown in located with the view corridor are to be protected to the extent that is practical in the planning and design of	The subject site is not located within the established view corridor to the escarpment	Yes



4 Access, parking and servicing

Objectives/ controls	Comment	Compliance
4.1 General		
This section contains detailed objectives and controls on pedestrian access, vehicular access, on-site parking and site facilities, including refuse collection and removal. To satisfy the aims and zoning objectives of the Wollongong LEP 2009, controls in this section aim to: a) Facilitate the development of building design excellence appropriate to a regional city; b) Require parking and servicing provisions to be contained within development sites to an amount and rate adequate for the economic and sustainable growth of the city centre; c) Provide for safe and secure access; d) Minimise impacts on city amenity, the public domain and streetscape, and e) Ensure that access is provided for the disabled and mobility impaired.	It is considered that the application complies wit the requirements of this section of the DCP	Yes
4.2 Pedestrian access and mobility		
Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.	The building entry is clearly visible and unobstructed access is available	Yes
The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.		

The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access. Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act. 4.3 Vehicular driveways and manoeuvring		
areas		V
	One driveway 6.9m in width is proposed. Council's traffic section have assessed the application and have raised no objection to the location of the driveway	Yes
4.4 On-site parking		
On-site parking must meet the relevant Australian Standard (AS2890.1 2004 – Parking facilities, or as amended). On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP.	Discussed within the E3 chapter within the report. The proposed development provides for 101 parking spaces which comply with the minimum requirements.	Yes
To accommodate people with disabilities, provide a minimum of 1% of the required parking spaces, or minimum of 1 space per development, (whichever is the greater) as an appropriately designated and signed disabled parking space.		
4.5 Site facilities and services		
Mail boxes Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development.	Mailboxes have been provided for within an appropriate location	Yes
Communication structures, air conditioners and service vents a) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures: i) Away from the street frontage, ii) Integrated into the roof scape design and in a position where such facilities will not become a skyline feature at the top of any building, and	It will be conditioned for the these provisions are provided for in an appropriate location.	
A master antennae must be provided for residential apartment buildings. This antenna		

shall be sited to minimise its visibility from surrounding public areas. Waste (garbage) storage and collection <i>General (all development)</i> All development is to adequately accommodate waste handing and storage on- site. The size, location and handling procedures for all waste, including recyclables, is to be determined in accordance with Council waste policies and advice from relevant waste handling contractors.	The development provides for a garbage room of an appropriate size an location.	
Service docks and loading/unloading areas Provide adequate space within any new development for the loading and unloading of service/delivery vehicles.	Adequate service/loading dock has been provided within the development. Council's traffic section reviewed this aspect and raised no objections	
Fire service and emergency vehicles	Adequate provision. Also required to comply with the BCA	
Utility Services Development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage to the satisfaction of all relevant authorities.	It will conditioned that the adequate arrangement and clearance certificates obtained from relevant utility authorities prior to the release of a construction certificate.	

5 Environmental management

Objectives / controls	Comment	Compliance
5.1 General		
This section deals with energy efficiency requirements of buildings, water use and conservation, wind and solar impacts and waste management.	It is considered that the building achieves energy efficiency.	Yes
5.2 Energy efficiency and conservation		
Residential New dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).	BASIX Certificate has been submitted as part of this application	Yes
Non-Residential Comply with the Building Code of Australia energy efficiency provisions.	The plans indicate that proposed building complies with Section J of the BCA. A construction certificate cannot be issued without such compliance	

5.3 Water conservation		
Besidential New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). Non-residential Water saving measures are to be incorporated into non-residential building. 5.4 Reflectivity	A BASIX certificate has been issued for the application The plans indicate that proposed building complies with Section J of the BCA. A construction certificate cannot be issued wiout such compliance	Yes
New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%. Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required.	A schedule of finishing external materials and colours was submitted with the application. If approved, material reflectivity will be limited to 20% as required by the DCP	Yes
5.5 Wind mitigation		
	A wind mitigation report has been submitted with the application the proposed development is not expected to create an adverse impact on predestrians	Yes
5.6 Waste and recycling		
	Sufficient storage has been supplied within the building for garbage storage. Adequate arrangements for collection have been made that Council's Traffic section has raised no objection.	Yes

6 Residential development standards

Objectives/controls	Comment	Compliance
6.1 SEPP 65 and residential flat design code		
	RFDC discussed earlier in a table of compliance	Yes
6.2 Housing choice and mix		
To achieve a mix of living styles, sizes and layouts within each residential development,	The application proposes 4 x 1 bedroom apartments equating to	

Objectives/ controls	Comment	Compliance
 comply with the following mix and size: i) Studio and one bedroom units must not be less than 10% of the total mix of units within each development, ii) Three or more bedroom units must not be less than 10% of the total mix of units within each 	10%, 19 x 2 bedroom apartments equating to 47% and 18 x 3 bedroom apartments equating to 43%. It is considered that this apartment mix is appropriate.	
development, and iii) For smaller developments (less than six dwellings) achieve a mix appropriate to locality.		
For residential apartment buildings and multi- unit housing, 10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents.	Within the development 4 units are adaptable equating to 10%.	
6.3 Dwelling houses		
		N/A
6.4 Multi dwelling housing		
		N/A
6.5 Dual occupancy		
		N/A
<u>6.6 Basement Carparks</u>		
The scale and siting of the basement car park must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements.	As the development involves ground floor commercial that can be built much closer to the boundary then residential then the provision of a deep soil zone is almost impossible to comply with a mixed use zone.	Yes
6.7 Communal open space		
Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m2 per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5m.	The development generates the need to provide 205sq.m. The development has provided 351sq.m on the northern side of the building.	Yes
6.8 Private open space		
Private open space must be provided for each dwelling within a residential apartment building in the form of a balcony, courtyard, terrace and/or roof garden.	Each dwelling has been provided with a balcony, complying with the minimum size and depth.	Yes
Private open space for each dwelling within a residential apartment building must comply with the following:i) The balcony must have a minimum area of 12m2 open space a minimum depth of 2.4 metres.	70% of the balconies receive 3 or more hours of sunlight on the 21 June	

Objectives / controls	Comment	Compliance
The primary private open area of at least 70% of the dwellings within a residential apartment building must receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.		
6.9 Overshadowing		
The design of the development must have regard to the existing and proposed level of sunlight which is received by living areas and private open space areas of adjacent dwellings. Sensitive design must aim to retain the maximum amount of sunlight for adjacent residents. Council will place greatest emphasis on the retention of sunlight within the lower density residential areas.	It is not considered that the development will generate excessive overshadowing	Yes
Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.		
<u>6.10 Solar access</u>		
The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm.	93% of the dwellings will receive 3 or more hours of sunlight on the 21 June as only3 units face directly south.	Yes
The number of single aspect apartments with a southerly aspect (south-westerly to south- easterly) is limited to a maximum of 10% of the total number of apartments proposed.	17% of units are single aspect.	
6.11 Natural ventilation		
A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated.	83% of units a naturally cross ventilated.	Yes
Twenty five percent (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than	90% of kitchens have access to natural ventilation.	
8m from a window. Single aspect apartments must be limited in depth to 8m from a window.	Single aspect apartments are limited to a maximum depth have a greater depth then the 8m however this is to a linen cupboard and laudry and as such is considered acceptable	
6.12 Visual privacy		
The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards,	It is considered that the application is suitable in regards to visual privacy	Yes

Objectives/controls	Comment	Compliance
wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living room areas.		
<u>6.13 Acoustic Privacy</u>		
Residential apartments should be arranged in a mixed use building, to minimise noise transition between apartments by locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);.	Like uses have been arranged in similar areas It is not anticipated that the development will generate significant noise.	Yes
<u>6.14 Storage</u>		
For residential apartment buildings provide a secure space to be set aside exclusively for storage as part of the basement.	Storage has been provided for all units at the rear of the car spaces	Yes

7 Planning controls for special areas

Objectives / controls	Comment	Compliance
7.1 Special areas with heritage items		
		N/A
7.2 Special areas and Development Standards		
		N/A
7.3 Non-residential development in the		
enterprise corridor zone		
		N/A
7.4 Special area design guidelines		
		N/A
7.5 Design excellence		
	Discussed within the LEP	Yes

8 Works in the public domain

Any development requiring works to be carried out within the public domain in the Wollongong City Centre will be subject to compliance with the requirements of the Wollongong City Centre Public Domain Technical Manual at Appendix 2 to this DCP and any other specific Council requirements.

Council's landscape section has Yes assessed the application and provided conditions in regards to the public domain.