

CHAPTER B4 – DEVELOPMENT IN BUSINESS ZONES

Chapter B4 is not considered in detail as the proposal is located within the Wollongong City Centre and the relevant controls for commercial and mixed use developments in the city centre are provided for in Chapter D13 – Wollongong City Centre which is considered in detail below.

CHAPTER C5 – CHILD CARE CENTRES

The development fails to comply with the provisions within Chapter C5 Child Care Centres in the following respects:-

- a. Clause 7.4.3 as the indoor play areas for the 0-2 year old and 3-5 year old cohorts are less than that specified (noting that the indoor space areas cited on the plans are inaccurate; this assessment is based on measurements).
- b. Clause 7.4.5 as the sleeping rooms do not have capacity for a sufficient number of cots to accommodate the proposed number of 0-2 year old children. The sleeping rooms illustrated on the plans do not comply with the requirements of Clause 7.4.5 which specifies separate cot room(s) with a maximum number of 6 cots per room.
- c. Clause 7.5 Outdoor Areas in that the outdoor space areas for the 0-2 year age group is less than that specified (note that the indoor space areas cited on the plans are inaccurate; this assessment is based on measurements).
- d. Clause 7.5 as the landscape plan indicates the provision of sandpits only for the 0-2 and combined 3-6 year age groups. As per Clause 7.5.2(4)(n), where a service offers more than 49 places, the playground should be separated into three age groups – 0-2 years, 2-3 years and 3-5 years. The landscape plan provides separate play areas only for the 0-2 and combined 3-6 year age groups which is non-compliant with this clause, and Clause 7.5.3 requires that outdoor
- e. Clause 7.5 as the plans provide insufficient impermeable roof structure to the outdoor areas to allow its use during inclement weather.
- f. Clause 7.6 – Car Parking, Access and Pedestrian Safety – in that an inadequate number of pram parking spaces has been provided to service the child care centre;
- g. Clause 7.13 – Visual and Acoustic Privacy – in that there has been no acoustic report provided to demonstrate that noise from the child care centre’s operations will not adversely impact on residents.

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. A detailed assessment table of Chapter D13 is provided in the table below. It is also noted that where there is an inconsistency between the DCP and ADG, the ADG prevails.

The development fails to achieve compliance with numerous provisions within Chapter D13 Wollongong City Centre, specifically in relation to:-

- a. Clause 2.4 of Chapter D13 - in relation to building depth and bulk to that part of the tower above 12m high. The maximum building depth measured across the shortest axis of the tower is in the order of 23.95m (measured at the broadest element of the towers). Many of the units have depths exceeding the maximum depth guide in 4D-2 of the ADG and several open plan units feature habitable room depths more than 8m from a window. The environmental performance apartments is reduced as a consequence. Further, the visual bulk of the towers is excessive.

- b. Clause 2.5 of Chapter D13 - in relation to side building setbacks to that part of the western tower above 45m in height where a 14m setback is required.
- c. Clause 2.6 of Chapter D13 (Mixed used buildings) – in relation to ceiling heights within the loading dock [2.6.3(d)]; due to the lack of clearly demarcated residential entries which are hidden from view by built elements and landscaping which will reduce visibility and reduce safety for users [2.6.3(d)]; and concerns regarding the safety and amenity of users within the walkway/ loggia, again which is screened from view from the public domain [2.6.3(g)];
- d. Clause 2.8 of Chapter D13 (Landscape design) - in relation to the feasibility of planned retention of existing trees given the proximity of construction works including the installation of wind mitigation measures;
- e. Clause 2.9 of Chapter D13 (Green roofs, green walls and planting on structures) with regard to soil depths on the podium level communal open space. While the plans suggest sufficient soil volumes can be achieved on the podium, the insufficient structural slab depth over the loading zone / loading zone heights may have knock-on effects, resulting in the loss or reduction of soil depth from proposed planted areas on the podium;
- f. Clauses 3.1, 3.3 and 3.4 of Chapter D13 (Pedestrian Amenity) – in relation to the likely poor amenity of the walkway/ loggia. The configuration of the ground floor level is problematic in that street activation will be compromised by the elevated nature of the retail spaces, the configuration and width of the ramps and pedestrian colonnade, the wind amelioration measures required along the frontage of the building (at ground level) and the landscaping treatment of the frontages. Access is highly constrained and non-compliant with access standards and the frontage of the development to all street edges is dominated by stairs, pedestrian ramps, densely planted landscape beds and wind baffles. This will result in the pedestrian walkway/ loggia, residential lobbies and retail facades being physically and visually disconnected from the public domain which gives rise to concerns that the space may be unsafe. The viability of the retail spaces may also be compromised.
- g. Clause 3.4 of Chapter D13 (Safety and security) – as the frontage features a number of places of concealment and potential entrapment places which increases safety and security concerns. Further, multiple residential lobbies are hidden behind planting, retaining walls and wind screens making them hard to identify.
- h. Clause 3.8 of Chapter D13 (Building exteriors) – for the following reasons:-
- as the towers are excessively bulky;
 - the undulating covered walkway, including entries and retail, are plagued by many physical and visual barriers which will compromise the design quality of the development, its functionality and amenity, the viability of the retail spaces and safety for users;
 - the residential entries are not readily identifiable and in places are hidden from view of the street by planting, retaining walls and wind screens;
 - the columns are poorly integrated at ground and first floor levels. The columns along walkways require rationalisation, reduction in number and relocation;
 - the curved steps at the south-west corner of the site incorporate a planter with large tree which is awkward;
 - the retail space between the western residential lobbies creates a very small retail tenancy and highly constrained access to the north eastern lobby;

- there is excessive unscreened glazing to the towers; the resultant performance glazing is liable to be very dark;
 - new vertical blades are only added to tower ends; it may be better to integrate more vertical elements to enhance language and better recognize the residential – rather than commercial - nature of the proposal;
 - the limited perspective views provided with the development application indicate that the building will be very dark at podium and upper levels which appears excessive;
 - the glazed faceted balustrade at the top of the towers, which are very large, appears very weak; either the balustrade should be setback so as not to be visible or replaced with a solid spandrel to match lower levels;
 - insufficient detail has been provided in relation to the roofs of the two towers. The roof plan for the eastern tower indicates that the roof is used for services and appears to have the lift overrun missing which would suggest that the height of the building may not comply with the maximum building height pursuant to Clause 4.3 of Wollongong LEP 2009. No roof plan has been provided for the western tower.
- i. Clause 4.2 (Pedestrian access and mobility) in that the main building entry points are not clearly visible from the street frontages and ramps do not comply with access standards.
 - j. Clause 4.5 of Chapter D13 (Site facilities and services) - in relation to lack of appropriate access or waste collection arrangements for the western residential tower.
 - k. Clause 4.5 of Chapter D13 (Site facilities and services) - in relation to concerns regarding insufficient vertical clearance within the loading dock to accommodate large rigid vehicles. Having regard to the nature of the uses within the proposal and the scale of the development, it is necessary to ensure that a larger vehicle can be accommodated for the movement of goods to and from the development and for waste collection.
 - l. Clause 5.2 of Chapter D13 (Energy efficiency and conservation) – in that the development incorporates few passive environmental design features and solar access to the apartment appears to be non-compliant.
 - m. Clause 5.3 of Chapter D13 (Water conservation) – in that development has not made provision for rainwater harvesting or reuse.
 - n. Clause 5.6 of Chapter D13 (Waste and recycling) – in relation to the unsuitable arrangements made for waste servicing of the western tower and the lack of detail in relation to the method of ventilating the waste rooms.
 - o. Clause 6.2 of Chapter D13 (Housing choice and mix) – due to the small number of larger apartments, the lack of flexibility in the design of the apartments and shortcomings in the design of the adaptable apartments.

2 Building form

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>2.1 General</u>		
<u>2.2 Building to street alignment and street setbacks</u>		
<ul style="list-style-type: none"> • Build to the street alignment or specified setback (0m) with 4m minimum further setback above street frontage height. 	The building, columns and walkway are all setback from the street edge varying depths. The	No

Objectives/controls	Comment	Compliance
<ul style="list-style-type: none"> No defined building line to Ellen Street prescribed by the DCP 0m setback required to both Kenny and Atchison Streets. 	<p>primary façade is setback further from this - approximately 7.4m to the façade of the retail tenancy fronting Atchison Street, min 9.8m to Ellen Street and ~7m to Kenny Street.</p> <p>The podium is 2 storeys in height, with the towers above extending closer to the street edges in places. The building thus does not feature a stepped building form as is envisaged by the controls. The setbacks and curvilinear awning have been designed to provide for the retention of the street trees on the Ellen Street frontage and to accommodate the walkway around the base of the building.</p> <p><u>Ellen Street</u> Western tower– setback min 7m for the full height of the tower Eastern tower – setback min 9.3m for the full height of the tower</p> <p><u>Kenny Street</u> Eastern tower – setback generally 3.5m to L2 and awning; setback min 4m for the full height of the tower. Awning below extends in part to min 3.5m from boundary</p> <p><u>Atchison Street</u> Western tower - setback to tower is 4m for the full height of the tower (above level 2). Setback to Level 2 is min ~3.7m.</p>	<p>Adopted building lines were satisfactory to the DRP. The provision of a raised walkway at ground level with awning above provides for an appropriate resolution of levels between the public footpath and the ground floor of the building which needs to be elevated due to flooding. A similar arrangement was approved in the earlier DA for the site.</p>
		No

Objectives/controls	Comment	Compliance
<p><u>2.3 Street frontage heights in commercial core</u></p> <ul style="list-style-type: none"> Street frontage height of between 12-24m required. Controls setting street front heights apply within the commercial core where buildings are to be built to the street alignment. 	<p>As mentioned above, the facade of the building is setback from each of the street frontages to enable the provision of the raised walkway around the street frontages of the site within the site. The setbacks also provide for the retention of the existing street trees on the three frontages of the site.</p> <p>The two towers are setback from the street frontages with the towers providing in part an undercroft below. As such, there is no distinct podium/ base defined by setbacks to the towers.</p> <p>The podium has been designed in such a manner so as to be distinct from the tower above with different finishing materials and colours.</p>	<p>No</p> <p>However the form of the building in this sense is not dissimilar to that approved previously for this site</p>
<p><u>2.4 Building depth and bulk</u></p> <ul style="list-style-type: none"> Max floor plate size 900sqm above 12m building height; max depth 18m 	<p>The maximum building depth measured across the shortest axis of the western tower is 23.95m which is at the broadest element of the development. The eastern tower has a maximum depth of approximately 24.2m measured above 12m building height.</p> <p>The visual bulk of the building is excessive. The Design Review Panel commented that the design has not been appropriately designed with regard to bulk, massing and modulation; see Attachment 5.</p>	<p>No</p>

2.5 Side and rear building setbacks and building separation

Building condition	Minimum	Minimum
	side setback	rear setback
Up to street frontage heights	0m	0m
Residential uses (habitable rooms) between street frontage height and 45m	12m	12m
All uses (including non-habitable residential) between street frontage height and 45m	6m	6m
All uses above 45m	14m	14m

Northern boundary – levels Ground through to the roof of L1 are proposed to be built to the northern boundary. This will enable a continuous street wall to be achieved to the Kenny and Atchison Street frontages of the site as required in the B3 zone. The Ground and L1 floors will accommodate solely commercial activities and carparking. Solid blank walls are proposed where the building abuts the boundary. No separation to blank walls is accepted by ADG.

Setback to communal open space on L2 is ~1-1.2m. The landscape plan makes provision for planting to the boundaries of the COS along with 1.8m high walls which will offer some protection from direct overlooking at that level.

Western tower - above SFH the northern boundary setback is a minimum of 12m, **including above 45m (approx. L14, 15, 16 and 17) in height where a 14m setback is required**

Eastern tower - above SFH the minimum setback is 15.5m from the northern boundary

Western boundary – levels Ground through to the roof of L1 are proposed to be built to the western boundary. Solid blank walls are proposed where the building abuts the boundary. No separation to blank walls is accepted by ADG.

Setback to communal open space on L2 is ~1-1.2m. The

No, area of non-compliance is identified in bold text

Objectives/controls	Comment	Compliance
	<p>landscape plan makes provision for planting to the boundaries of the COS along with 1.8m high walls which will offer protection from direct overlooking at that level.</p> <p><u>Eastern tower</u> - above SFH the minimum setback is approx. 26m from the western boundary.</p> <p>Separation between towers – 28m which is compliant.</p>	
<p><u>2.6 Mixed used buildings</u></p> <ul style="list-style-type: none"> • Provide flexible building layouts which allow variable tenancies or uses on the first 2 floors of a building above the ground floor. • Minimum floor to ceiling heights 3.3m for commercial office and 3.6m for active public uses, such as retail and restaurants in the B3 Commercial Core zone. • Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook. <ul style="list-style-type: none"> • Locate clearly demarcated residential entries directly from the public street. • Clearly separate and distinguish commercial and residential entries and vertical circulation. • Provide security access controls to all entrances into private areas, including car parks and internal courtyards. • Provide safe pedestrian routes through the site. • Front buildings onto major streets with active uses. • Avoid the use of blank building walls at the ground level. 	<p>Ground floor retail tenancies have 4.7m floor-to-floor heights with 3.1m floor to floor heights within the L2 child care centre. Ceiling heights not identified.</p> <p>2 vehicle entries are proposed, with one accessed via Atchison Street and the other accessed via Kenny Street. All domestic vehicles will enter via Atchison Street with all service vehicles to access from the Kenny Street frontage. Commercial car parking will be separated from the residential car parking.</p> <p>Separate entries are proposed for the residential and commercial components of the development and separate lift lobbies. Residential lobbies are hidden from view by landscaping, retaining walls, wind screens and other built elements including columns</p> <p>Access controls will need to be implemented.</p> <p>Active street frontage; no blank walls at the street edge.</p>	<p>No</p>

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> For mixed use buildings that include food and drink premises uses, the location of kitchen ventilation systems shall be indicated on plans and situated to avoid amenity impacts to residents. 	<p>No kitchen ventilation systems are indicated on the plans.</p> <p>It is recommended that conditions be imposed to ensure that noise and vibration from plant and mechanical exhaust are appropriately managed to prevent adverse amenity impacts.</p>	
<u>2.7 Deep soil zone (DSZ)</u>	DSZ and planting on structure provided.	Yes
<u>2.8 Landscape design</u>	Landscape plan generally acceptable to the landscape officers however some concerns were raised by the DRP and there are some areas of inconsistency between the landscape and architectural plans and the recommendations of the wind attenuation report.	Yes and no
<u>2.9 Green roofs, green walls and planting on structures</u>	Planting on structure proposed on the podium rooftop. Planting on rooftop terrace areas and on podium. Some details are provided on the landscape plan, though most details can be conditioned if consent is granted.	Yes with conditions
<u>2.10 Sun access planes</u>	The proposal will not cast shadows on any areas subject to the sun access planes	Yes
<u>2.11 Development on classified roads</u>	N/A	N/A

3 Pedestrian amenity

Objectives/controls	Comment	Compliance
<p><u>3.1 General</u></p>		
<p><u>3.2 Permeability</u></p>	<p>No identified site links affect the site</p>	<p>N/A</p>
<p><u>3.3 Active street frontages</u></p>		
<ul style="list-style-type: none"> • Active frontage uses are defined as one or a combination of the following at street level: Entrance to retail. Shop front. Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage. Café or restaurant if accompanied by an entry from the street. Active office uses, such as reception, if visible from the street. • In commercial and mixed use development, active street fronts are encouraged in the form of non-residential uses on ground level. • Active street fronts are required along streets for all buildings in the Commercial Core • Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street. 	<p>‘Active street frontages’ proposed in the form of retail spaces as required. Separate entries provided for the residential and commercial components of the development.</p> <p>Non-residential uses are provided on the ground floor.</p> <p>Ground floor level is elevated due to flooding. Treatment of the street frontage is not well resolved and remains unsatisfactory to the DRP and Council officers.</p>	<p>No</p>
<p><u>3.4 Safety and security</u></p>		
<ul style="list-style-type: none"> • Ensure that the building design allows for casual surveillance of accessways, entries and driveways. • Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks. • 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 clear lines of sight and well-lit routes throughout the development. 	<p>Natural surveillance of the public domain and street edge walkway (within the site) will in part be available from the ground floor retail spaces. However as noted in the body of the report, the ground floor walkway, retail facades and residential lobbies will be largely concealed from view of the public domain by the combination of 2-3m high wind baffles /screens, landscape planting (including higher wind mitigation planting required), columns and solid landscape elements – retaining walls, ramps etc. This will create concealment opportunities and increased</p>	<p>No</p>

- Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway.
- For large scale retail and commercial development with a GFA of over 5,000m², provide a 'safety by design' assessment in accordance with the CPTED principles.
- Provide security access controls where appropriate.
- Ensure building entrance(s) including pathways, lanes and arcades for larger scale retail and commercial developments are directed to signalised intersections rather than mid-block in the Commercial zone.

opportunities for criminal and antisocial behaviour. Without clear visual sightlines, this space and the arcade spaces along the building edge are liable to be unsafe.

Natural surveillance of the principal communal open space will be available from upper level units which overlook these spaces.

A Crime Risk Assessment and Security Report was provided with the original application, however this related to the proposal as initially lodged which is quite different to the current scheme.

The design does not respond in full to CPTED principles; refer to Chapter E2 assessment below.

3.5 Awnings

An awning is proposed to be provided to the elevated walkway contained within the site which wraps around the street frontages of the building. This will provide shadowing and weather protection of the walkway but it is not proposed to extend over the footpath. Clause 3.5 requires awnings to the Atchison and Kenny Street frontages of the site but not to the Ellen Street frontage. It is noted that the earlier approved development for this site featured a similar arrangement.

No

3.6 Vehicular footpath crossings

- 1 vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) will be generally permitted
- Double lane crossing with a maximum width of 5.4 metres may be permitted
- Doors to vehicle access points are to be roller shutters or tilting doors fitted behind the building façade.
- Vehicle entries are to have high quality finishes to walls and ceilings as well as high

2 entry points only proposed to service the site, one from each of the Atchison and Kenny Street frontages of the site to provide for a separation of domestic and service vehicle entry and egress. Driveway crossing widths are acceptable. Shutter will be fitted behind the building façade and a condition is recommended in relation to the finish of the vehicle entries.

Yes

<p>standard detailing. No service ducts or pipes are to be visible from the street.</p>		
<p><u>3.7 Pedestrian overpasses, underpasses and encroachments</u></p>	<p>N/A</p>	<p>N/A</p>
<p><u>3.8 Building exteriors</u></p>		
<ul style="list-style-type: none"> • Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of appropriate alignment and street frontage heights; setbacks above street frontage heights; appropriate materials and finishes selection; façade proportions including horizontal or vertical emphasis; • Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged. ▪ Articulate facades so that they address the street and add visual interest. • External walls should be constructed of high quality and durable materials and finishes with ‘self-cleaning’ 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. ▪ To assist articulation and visual interest, avoid expanses of any single material. ▪ 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. • Highly reflective finishes and curtain wall glazing are not permitted above ground floor level • A materials sample board and schedule is required to be submitted with applications for development over \$1 million or for that 	<p>Insufficient site and contextual analysis has been undertaken to appropriately guide the design response to the site.</p> <p>Several concerns raised by the DRP remain unresolved</p> <p>Balconies are provided to all units; some overlooking/ surveillance of the street will be available.</p> <p>Some planting to podium roof top COS proposed.</p> <p>Facades are articulated and feature varied materials to add visual interest.</p> <p>A colour & material schedule has been provided. Generally durable materials and finishes are proposed.</p> <p>All materials / finishes should be clearly documented. The use of higher quality textured materials (such as brick and tile in preference to painted render) should be incorporated at street level, to contribute to a higher quality aesthetic, reduce maintenance and discourage graffiti.</p> <p>A condition is recommended limiting material reflectivity.</p> <p>Glazing is maximised to the retail frontages.</p>	<p>No</p>

<p>part of any development built to the street edge.</p> <ul style="list-style-type: none"> Minor projections up to 450mm from building walls in accordance with those permitted by the BCA may extend into the public space providing it does not fall within the definition of GFA and there is a public benefit. The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building. 	<p>Lack of roof detail provided and no roof plan provided for Tower 2.</p> <p>Unclear as to whether lift overruns will be concealed within the roof. If approved, a condition should be applied requiring integration of services into the overall building design.</p>	
<p><u>3.9 Advertising and signage</u></p>	<p>No signage identified</p>	<p>N/A</p>
<p><u>3.10 Views and view corridors</u></p> <ul style="list-style-type: none"> Existing views shown in Figure 3.12 are to be protected to an extent that is practical. Align buildings to maximise view corridors between buildings 	<p>The site is located outside of the nominated view corridors identified in Figure 3.12 of the DCP. There are not expected to be direct view loss impacts on existing neighbouring developments.</p>	<p>Yes</p>

4 Access, parking and servicing

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>4.1 General</u></p>		
<p><u>4.2 Pedestrian access and mobility</u></p> <ul style="list-style-type: none"> 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 design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard and the Disability Discrimination Act 1992. 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. 	<p>As noted elsewhere within this report, the ground floor of the building is elevated due to flooding. Pedestrian access is available from a number of entry points, via ramps and stairs to the elevated walkway around the frontages of the site, to the residential and commercial lobbies and to each of the retail spaces. The main entries to the building are not readily apparent; with the landscaping, retaining walls, ramps, wind baffles, columns and the like leading to visual clutter and physical obstructions to clear lines of sight, in particular to the residential lobbies.</p> <p>Disabled person's car parking and car parking to support the</p>	<p>Yes and no</p>

- Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain.
- Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1, AS/NZS 2890.1:2004 and the DDA.

adaptable units is provided within the basement car parking levels, with access throughout the building available via the lifts. An adequate number of car parking spaces has been provided.

The finish of pedestrian pathways and the like can be dealt with by consent conditions.

Building entries and walkways and all paths of travel will be required to comply with the BCA and associated standards. Pedestrian ramps do not currently comply with AS1428.

4.3 Vehicular driveways and manoeuvring areas

- Driveways should be:
 - Provided from lanes and secondary streets rather than the primary street, wherever practical.
 - Located taking into account any services within the road reserve, such as power poles, drainage pits and existing street trees.
 - Located a minimum of 6m from the nearest intersection
 - If adjacent to a residential development setback a minimum of 1.5m from the relevant side property boundary.
- Vehicle access is to be designed to:
 - Minimise the impact on the street, site layout and the building façade design; and
 - If located off a primary street frontage, integrated into the building design.
- All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn
- Driveway widths must comply with the relevant Australian Standards.
- Car space dimensions must comply with the relevant Australian Standards.
- Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standard
- Access ways to underground parking should not be located adjacent to doors or

Appropriate driveway location; does not appear to conflict with any services in the road reserve.

Driveway widths are acceptable and manoeuvring areas appear to comply with applicable controls. Adequate manoeuvring is available for larger service vehicles within the loading dock.

Vehicles can turn on site and leave in a forward direction.

Car spaces, driveway grades and the like appear to generally comply with relevant standards. The vertical height within the loading dock is however unlikely to be sufficient to accommodate the proposed design vehicle, being a large rigid vehicle.

Yes and no

windows of the habitable rooms of any residential development.

4.4 On-site parking

- On-site parking must meet the relevant Australian Standard
- Council may require the provision of a supporting geotechnical report prepared by an appropriately qualified professional as information to accompany a development application to Council.
- On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP.
- To accommodate people with disabilities, minimum of 1% of the required parking spaces to be provided as disabled persons' car parking.

4.5 Site facilities and services

Mail boxes – provide in an accessible location adjacent to the main entrance; integrated into a wall where possible and be constructed of materials consistent with the appearance of the building.

Letterboxes to be secure and of sufficient size

Communication structures, air conditioners and service vents - locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures in an appropriate manner.

Waste storage and collection

Service docks and loading/unloading areas

- Provide adequate space within any new development for the loading and unloading of service/delivery vehicles.
- Preferably locate service access off rear lanes, side streets or rights of way.

Car parking will be required to comply with relevant standards; conditions can be applied in this regard if consent is granted.

A geotechnical report was provided in conjunction with the DA verifying that the excavation proposed to facilitate the construction of the four levels of basement car parking is feasible.

Basement parking provided. Sufficient car parking, motorcycle and bicycle parking is provided for along with disabled persons' car parking.

The building is serviced by the major utilities and some augmentation of existing services is expected to be required to facilitate the development.

Banks of letter boxes are provided inside the residential lobbies. Conditions can be imposed to ensure these meet the requirements of the DCP.

No rooftop ancillary structures or services shown on the plans. No roof plan provided for Tower 2.

Provision has been made for waste storage rooms for the CCC, retail spaces and eastern residential tower within the ground floor, adjacent to the loading dock for on-site collection. The waste storage areas for the western tower (servicing 138 units) is located within basement Level 1 and has no direct path of travel to a collection area nor is collection available within that level. The development does not comply with Clause 5.4.2

Yes

Yes and no

- Screen all service doors and loading docks from street frontages and from active overlooking from existing developments.
- Design circulation and access in accordance with AS2890.1.

(1) of Chapter E7 in this regard. There is a significantly convoluted path of travel from the western waste storage room to the waste pick up point/loading dock. The transfer of waste would require the use of the residential lifts, the fire isolated passage, and delivery and service access areas which would be relied upon for the retail premises. This is an extremely undesirable arrangement which would result in passageway conflict/congestion and significant amenity impacts internal to the building.

On-site collection is proposed which is acceptable.

A loading dock has been provided to service the retail and commercial components of the development; this will enable all loading, deliveries and waste management to occur within the site. As noted elsewhere within this report, concerns are raised that the required vertical clearance within the loading dock will not be achieved due to the structural slab depth required to span the loading dock. If this cannot be achieved, the loading dock will not be able to accommodate the design vehicle, being a large rigid vehicle.

5 Environmental management

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>5.2 Energy efficiency and conservation</u>	BASIX certificates submitted indicate the BASIX targets are satisfied by the residential units. It is noted however that the environmental performance reported in the BASIX certificates may be affected by the inaccurate and misleading NatHERS score reported on the NatHERS certificate. This brings into doubt compliance with the BASIX targets	No

	<p>in respect of energy efficiency and thermal comfort.</p> <p>The DRP raised concerns in relation to the performance of the buildings given the large expanse of west facing glazing with no shading or glare control.</p> <p>Solar access compliance is also questioned – refer to discussion with regard to Objective 4A of the ADG.</p>	
<u>5.3 Water conservation</u>	<p>BASIX certificates submitted indicate the BASIX targets are satisfied by the residential units. Provision has not however been made for rainwater collection.</p>	Yes / no
<u>5.4 Reflectivity</u>	<p>No concerns are raised in regards to material reflectivity. Limit material reflectivity by consent condition.</p>	Yes with conditions
<u>5.5 Wind mitigation</u>	<p>A wind impact report has been provided demonstrating compliance with the applicable criteria subject to implementation of recommendations. The wind mitigation measures proposed will however compromise the design quality of the building.</p>	Yes with conditions
<u>5.6 Waste and recycling</u>	<p>Waste management arrangements are satisfactory for the retail, child care centre and eastern residential tower however waste management for the western tower (138 units) is unresolved; see discussion above.</p>	No

6 Residential development standards

Refer to SEPP 65 and ADG assessment.

8 Works in the public domain

Street trees will be retained. The provision of footpath paving and street tree planting is proposed in compliance with the requirements of the Public Domain Technical Manual. Conditions of consent are recommended in relation to these matters.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

The applicant submitted an access report with the DA, prepared by Ergon Consulting. The required number of adaptable units have been provided within the development. The access report confirms that these units achieve the adaptability requirements of AS4299. Accompanying disabled persons'

car parking spaces are provided within the residential car park to service the adaptable units. Lift access is available to all floors and to communal open space areas.

The building has generally been appropriately designed with regard to disabled persons' access and facilities however, while access to the pedestrian entries from each of the street frontages is obtained via stairs and ramps, it is noted that the pedestrian ramps along the frontage do not comply with AS1428.

If approved it is recommended the application also be conditioned to comply with the BCA and relevant Australian Standards in regards to access, facilities and car parking.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Concerns are raised that the development has not been appropriately designed with regard to CPTED principles and as such is expected to give rise to increased opportunities for criminal or antisocial behaviour. A CPTED report was provided with the application, however this related to the originally submitted plans and does not align with the current proposal.

<i>Control/objective</i>	<i>Comment</i>	<i>Compliance</i>
<u>3.1 Lighting</u>	It is expected that lighting will be provided at the main entrances to the building, under the awning / undercroft and within the car park. Conditions could be imposed to ensure that no adverse impacts arising from light spill will result.	Yes
<u>3.2 Natural surveillance and sightlines</u>	Opportunities for natural surveillance of the footpaths of the 3 street frontages of the site will be available from the commercial and retail spaces during business hours. However there is poor visual connection to the pedestrian walkway, retail facades and residential lobbies from the public domain. The DRP considered that there remains a distinct disconnect between the streetscape and retail façade. This, together with the height of planting (generally not indicated in drawings), and wind baffle devices (generally 2-3m in height and also not clear on design drawings), creates a visual disconnect that results in poor retail activation and raises a high CPTED risk.	No
<u>3.3 Signage</u>	No signage proposed	N/A
<u>3.4 Building design</u>	As above. The design makes provision for separate commercial/ residential entry to the building. It is assumed that access to the residential towers will be secured.	Yes

<u>3.5 Landscaping</u>	Landscaping treatment (inclusive of planting required for wind mitigation around the base of the building), coupled with other built form elements, will result in many concealment opportunities on the ground floor walkway, around residential lobbies and retail entries.	No
<u>3.6 Public open space and parks.</u>	N/A	N/A
<u>3.7 Community facilities and public amenities</u>	N/A	N/A
<u>3.8 Bus stops and taxi ranks</u>	N/A	N/A

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

Council's Traffic Engineer has considered the proposal and has advised that the proposal is generally satisfactory with the exception of the following two areas:

1. There is insufficient headroom/ vertical clearance available within the loading dock. A minimum vertical clearance of 4.5m is required in order to accommodate the design vehicle with is a large rigid vehicle.
2. The development does not comply with Clause 5.4.2 (1) of Chapter E7 of the WDCP as the western waste storage room is not directly accessible from the loading dock. Instead there is a significantly convoluted path of travel from the western waste storage room to the waste pick up point/loading dock. The transfer of waste would require the use of the residential lifts, the fire isolated passage, and delivery and service access areas which would be relied upon for the retail premises. This is an extremely undesirable arrangement which would result in passageway conflict/congestion and significant amenity impacts internal to the building.

Parking is to be provided within the 3 levels of basement parking and Level 1 car parking area. Access for domestic vehicles to be provided from the Atchison Street frontage while all larger service vehicles and the like will access the loading dock via the Kenny Street frontage.

The proposed car parking provision has been reviewed by Council's Traffic Engineer and is consistent with the requirements of the DCP and RTA Guide to Traffic Generating Development.

Commercial/ Retail/ Business premises - 1 per 60 sqm

- 16 car parking spaces
- 1 motorbike parking space
- 5 secure (Class B) bicycle spaces for staff
- 2 visitor bicycle spaces

Child care centre

- 20 staff car parking spaces
- Parents 17 car parking spaces
- 2 pram spaces
- 1 accessible car space
- 2 childcare centre motorcycle parking spaces

- A minimum of 4 secure (Security Class B) childcare centre staff bicycle spaces

Residential

- 234 residential car parking spaces (including 29 accessible spaces)
- 55 visitor parking spaces
- 29 motorbike parking spaces
- A minimum of 91 secure (Security Class B) residential bicycle spaces
- A minimum of 23 residential visitor bicycle spaces (Security Class C)

All servicing will take place within the site, with separate larger vehicle access (ie trucks, delivery vans, garbage collection vehicles and the like) to be obtained from the Kenny Street frontage of the site. Provision has been made for large loading docks for larger vehicle deliveries and waste collection in the basement, separate to all domestic vehicles.

CHAPTER E6: LANDSCAPING

The submitted landscape plans generally proposes suitable landscaped areas and communal open space that will improve the amenity of the occupants and soften the appearance of the development from adjoining properties and the public domain. The DRP raised some concerns with regard to landscaping and consistency between the landscape and architectural plans and the recommendations of the wind mitigation report.

Council's Landscape Officer has considered the proposal as satisfactory subject to conditions of any consent, including the need for a final landscape plan prior to release of the construction certificate and the developer provision of footpath paving and street trees in accordance with the Wollongong City Centre Public Domain Technical Manual.

CHAPTER E7: WASTE MANAGEMENT

An acceptable Site Waste Minimisation and Management Plan has been provided. Waste management during demolition and construction can be managed by consent conditions.

Ongoing waste management arrangements for the retail components of the development, the child care centre and eastern tower appear to be satisfactory, with waste storage rooms being appropriately and conveniently located, and near the loading dock for on-site collection. The western tower however has been provided with waste storage room within Basement level 1 which do not have a direct path of travel to the loading zone or alternative collection area. Collection arrangements for the 138 apartments within the western tower are therefore unacceptable.

CHAPTER E9: HOARDINGS AND CRANES

If the development were to be approved, conditions should be imposed requiring approval for the use of any hoardings or cranes in conjunction with construction of the building.

CHAPTER E12: GEOTECHNICAL ASSESSMENT

The application has been reviewed by Council's Geotechnical Engineer in relation to site stability and the suitability of the site for the development. The development was considered to be satisfactory subject to consent conditions.

CHAPTER E13: FLOODPLAIN MANAGEMENT

The land is identified in Council's records as being located within a flood risk precinct. Council's Stormwater Engineer has assessed the proposed development with regard to Chapter E13 of the DCP and, following the receipt of amended plans and further information, has provided a satisfactory referral.

CHAPTER E14: STORMWATER MANAGEMENT

Council's Stormwater Engineer has assessed the proposed development with regard to Chapter E14 of the DCP and has provided a satisfactory referral following the receipt of amended plans and further information. The proposal is now satisfactory with conditions.

CHAPTER E17: PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

The application has been considered by Council's Landscape Officer who provided a satisfactory referral subject to conditions. The DRP advised that an updated arborist report should be provided outlining how the current development impacts all existing trees, including street trees and those on neighbouring sites. Without this information it cannot be determined whether the development will result in the successful retention of the trees indicated for retention.

CHAPTER E19: EARTHWORKS (LAND RESHAPING WORKS)

The proposal involves excavation to facilitate the construction of 3 levels of basement carparking. Council's Geotechnical Engineer has considered the application and has provided a satisfactory referral subject to conditions which includes the requirement to provide a detailed earthworks management plan developed by a geotechnical consultant and supervision of site preparation earthworks by a geotechnical consultant. The development will require careful management during construction to ensure adjoining properties are not adversely impacted upon.

CHAPTER E20: CONTAMINATED LAND MANAGEMENT

While Council records do not identify the site as contaminated, the applicant's preliminary site investigation (PSI) identifies some historical land uses which may have resulted in contamination. The application has been assessed with regard to the prescribed matters in Clause 7 of SEPP 55 and in response to the requirements of Chapter E20.

The PSI has been discussed within Section 2.1.1 of the report, along with the assessment of this information in respect of the prescribed matters in Clause 7 of SEPP 55.

CHAPTER E21: DEMOLITION AND ASBESTOS MANAGEMENT

There are a number of existing buildings on the site proposed to be demolished as part of the proposal.

If the development is approved, conditions of consent should be imposed in regard to demolition and waste management, including appropriate handling, storage and disposal of demolition wastes including any hazardous materials. This will include the requirement to comply with AS2601.

CHAPTER E22: SOIL EROSION AND SEDIMENT CONTROL

If the development were to be approved, conditions of consent should be imposed to ensure the implementation of appropriate sediment and erosion control measures during works.