

Attachment 4 – WLEP 2009 clause 4.6 justification statement

Clause 4.6 Exceptions to Development Standards – Building Separation

1. The Relevant Development Standard and Objectives

Clause 8.6 of Wollongong Local Environmental Plan 2009 prescribes distances that buildings should be separated that are located within the B3 Commercial Core zone. The clause in its entirety states:

“Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use

- (1) The objective of this clause is to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access.*
- (2) Buildings on land within Zone B3 Commercial Core or B4 Mixed Use must be erected so that:*
 - (a) there is no separation between neighbouring buildings up to the street frontage height of the relevant building or up to 24 metres above ground level whichever is the lesser, and*
 - (b) there is a distance of at least 12 metres from any other building above the street frontage height and less than 45 metres above ground level, and*
 - (c) there is a distance of at least 28 metres from any other building at 45 metres or higher above ground level.*
- (3) Despite subclause (2), if a building contains a dwelling, all habitable parts of the dwelling including any balcony must not be less than:*
 - (a) 20 metres from any habitable part of a dwelling contained in any other building, and*
 - (b) 16 metres from any other part of any other building.*
- (4) For the purposes of this clause, a separate tower or other raised part of the same building is taken to be a separate building.*
- (5) In this clause:*

street frontage height means the height of that part of a building that is built to the street alignment.”

The proposed development varies the standard under Clause (2)(a) and (3)(b). The proposal includes a separation of 3.0m and 6.0m from the side boundary up to street frontage height to the west and north respectively versus the required nil. The proposal also includes a setback of 6.0m up to street frontage height and 15.0m above street frontage height which are both less than the 16.0m required for any habitable room or balcony to the wall of the building adjacent that sits on the common boundary to the north (up to RL 59 AHD or Level 7 of the proposed development).

The objectives of the Building Separation development standard is:

“...to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access.”

Further to this general objective, the development standards have two very different objectives:

- The requirement for a nil setback up to street frontage height is intended to encourage a continuous street wall at the lower levels and present a consistent and strong urban form up to this height.
- The requirement for habitable balconies to be setback from other residential dwellings and other buildings is intended to provide separation to adequately ensure access to direct sunlight and protect against loss of privacy.

Each standard is assessed separately in terms of these two differing objectives.

2. Proposed Variation to the FSR Development Standard

Clause 8.6 (2)(a) – the proposal includes a separation of 3.0m and 6.0m to the western and northern side boundary respectively whereas the development standard requires nil.

Clause 8.6 (3)(b) – the proposal includes a separation of 6.0m and 6.0m from a habitable room/balcony to buildings to the north and west respectively, a variation of 10m to the prescribed 16m. In addition, the tower is located 15.0m away from the building to the north up to Level 7 (RL 59 AHD), a variation of 1m from the prescribed 16m.

3. Assessment Criteria

Clause 4.6 of Wollongong Local Environmental Plan 2009 outlines provisions that are aimed at providing flexibility in applying development standards and includes provisions against which any variation needs to be assessed. Subclause (3) states that:

- (3) *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
 - a. *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
 - b. *that there are sufficient environmental planning grounds to justify contravening the development standard.*

In addition, the Subclause (4) goes on to state that:

- (4) *Development consent must not be granted for development that contravenes a development standard unless:*
 - a. *the consent authority is satisfied that:*
 - i. *the applicants written request has adequately addressed matters required to be demonstrated by subclause (3), and*

- ii. *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

b. *the concurrence of the Director-General has been obtained.*

The objectives of the development standard are outlined above and the objectives of the Local Centre Zone within which the site sits includes:

“• To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community.

• To encourage appropriate employment opportunities in accessible locations.

• To maximise public transport patronage and encourage walking and cycling.

• To strengthen the role of the Wollongong city centre as the regional business, retail and cultural centre of the Illawarra region.

• To provide for high density residential development within a mixed use development if it:

(a) is in a location that is accessible to public transport, employment, retail, commercial and service facilities, and

(b) contributes to the vitality of the Wollongong city centre.”

4. Justification for the Variation

Unreasonable or Unnecessary to Comply with the Development Standard

The setback provided to each adjoining side boundary up to street level height (four storeys in this instance) includes a setback and this setback is considered to respond to the prevailing streetscape character. Unlike the existing retail core of the CBD that presents as a consistent street wall, the site and its immediately surrounding area features a variety of uses and building forms. The immediately surrounding area has large commercial buildings and residential buildings that will not be redeveloped for the foreseeable future and neither building form has the continuous streetwall that is contemplated by the controls. To construct a building with a continuous street wall would be inconsistent with the prevailing character. It is therefore unnecessary to apply this standard in the circumstances.

It is evident that Council's DCP includes a control that requires a "minimum" of nil setback to the side setback up to street frontage height. Council's own DCP is inconsistent with its LEP and it is unreasonable to expect compliance with the LEP where the proposal would comply with the DCP - the 3.0m and 6.0m setback complies (a "minimum of nil" as opposed to a strict "nil").

It is also unreasonable to strictly apply the standard where non-compliance with this standard is regularly sought and supported by Council. It would be exceptional, and unreasonable, for Council to request strict compliance in this instance, where it is not required in other instances.

In relation to the setback from habitable rooms/balconies, the balconies at street frontage height are located within these side setbacks to take advantage of the aspect and improve the amenity of

the apartments. No adverse amenity impact would result from apartments (two facing west and four facing north), due to the adjacent properties accommodating commercial development not residential and therefore it is considered unnecessary to comply in this instance. To minimise localised privacy impact, screens have been proposed.

The setback of the tower balconies is 1.0m less than that prescribed and this is only the result of the adjacent commercial building being located on the boundary up to 7 levels (a situation that does not comply with the prescribed envelope and would not happen if and when the site is redeveloped). It is considered unreasonable to restrict the development of the site where the adjacent building is an anomaly that would be removed upon redevelopment in the future.

The setback of the tower would comply with the requirements of the newly introduced Apartment Design Guide being greater than 12.0m from the side boundary and where the proposal complies with this guideline that has the same objectives as the Council standard it is considered unnecessary to enforce compliance of the Council standard.

Moreover, the 1.0m variation does not result in any impact upon the amenity of the proposed development or the adjoining development and therefore it is also unnecessary to require compliance in this regard.

It is also considered to be unnecessary to require strict compliance with the building separation standard as the proposal is considered to be consistent with the objectives of the development standard and the Commercial Core Zone and therefore is considered to be in the public interest, as addressed below.

Sufficient Planning Grounds

In addition to the satisfaction of the development standard and zone objectives, including amenity impact and appropriate urban form, there is sufficient planning grounds to support a variation in this instance. These include:

- the design is a well resolved and attractive design that has been tailored to the very prominent site and as a result is worthy of the location.
- The site analysis supports the fact that this part of the city will not cater for a built form that is strictly consistent with the typical built form (continuous street wall) of the heart of the retail core and therefore it is warranted that well resolved design should prevail over the automatic application of the typical built form standards.

Public Interest and Consistency with the Objectives of the Development Standard and the Zone

Design excellence is in the public interest

The key driver to the successful design of the site is not the form of the adjacent buildings in this instance as the immediately surrounding area has a disparate character that is not set to change in the short to medium term. Appropriate resolution of the design on the site and maximising the amenity available to occupants at the same time as protecting that of adjoining residents is of utmost importance and in the public interest in this instance.

In summary, the proposed variation to the building setbacks is not considered to detract from the development's ability to meet with the relevant development standard and zone objectives.

Summary

In summary, the proposed variation is considered to meet the assessment criteria in Clause 4.6 of the Wollongong Local Environmental Plan 2009 and exception to strict compliance of the Building Separation development standard is considered appropriate in this circumstances. In this instance:

- The strict application of the development standard is considered unreasonable where the standard is not consistent with other guidelines with similar objectives (Council's DCP and the ADG).
- The strict application of the development standard is considered unreasonable where the standard has not been consistently applied by Council.
- The strict application of the development standard is considered unnecessary where the objectives of the standard and the zone are met and development is therefore in the public interest.
- There is sufficient planning grounds to support the variation where the variation would assist in:
 - o Achieving the objectives of the development standard and the zone.
 - o The design is well resolved and in the public interest

In the above circumstances it is considered that exception should be made to the strict application of the Building Separation development standard.

Attachment 5 – Design Review Panel comment

Wollongong Design Review Meeting

DA meeting for proposed mixed use development at 10-18 Regent Street, Wollongong

Held at Wollongong City Council on 4th March 2016

Present:

Anne Starr	Wollongong City Council
Tony Quinn	Panel member
Brendan Randles	Panel member
Iain Stewart	Panel member

Comments:

The meeting was held to discuss amendments made to the scheme since 2015. The DRP provided comment on 21 September 2015 and 10 December 2015, prior to lodgement of the development application.

Project description

The proposed mixed use development is located on a prominent 3648sqm corner site within Wollongong City centre. The proposal consists of a 17 storey residential tower located on a 4 storey base/podium. The ground floor level contains retail spaces fronting Regent Street and Rawson Street and a child care centre is located on the northwest corner of the site. The development is serviced by a basement level carpark.

1. Context

As raised in the previous panel meeting the street level public domain interface has no detail. It still reads as a 'sea' of hard paving with little landscape shown. No landscape plan was submitted. This needs to be addressed in the development application.

2. Scale & Built Form

The scale of the podium and tower are appropriate for this site.

3. Density

The proposal complies with both the LEP and DCP.

4. Sustainability

Issues raised in previous panel meeting still could not be assessed, they were:

- Water collection and reuse

- Solar panels
- Screening solutions for west facing glazing

5. Landscape

There is still no deep soil zone indicated on the plans in accordance with the ADG. Additionally no landscape plans were provided.

A landscape plan by a qualified landscape architect is required. This plan shall include:

- Provision of deep soil
- Accessibility and discrete uses of courtyard
- Shade giving trees and other planting
- Street trees

A deep soil zone was suggested to the northwest corner of the landscaped area where the parking level below can easily be adjusted to suit.

6. Amenity

Units and circulation are generally well resolved. There were concerns expressed by the panel regarding ADG compliance and privacy between units 19 and 20 on level 1, 37 and 30 on level 2, 53 and 54 on level 3.

The potential overlooking of the childcare centre outdoor space needs resolution.

7. Safety

The panel still had concerns for the safety of children as the child care centre shares service access with retail shops 3, 4 and 5.

8. Housing Diversity

Acceptable.

9. Aesthetics

Acceptable.

10. Social Dimension

No further information was provided.

Attachment 6: Compliance Table

SEPP 65 Apartment Design Guide

Standards/controls	Comment	Compliance
<p>Part 1 – Identifying the context</p> <p><u>1A Apartment building types</u></p> <p>Generic apartment building types can be used to:</p> <ul style="list-style-type: none"> - Determine the appropriate scale of future built form - Communicate the desired character of an area - Assist when testing envelope and development controls to achieve high amenity and environmental performance. <p>Building types include:</p> <ul style="list-style-type: none"> - Narrow infill apartments - Row apartments - Shop top apartments - Courtyard apartments - Perimeter block apartments - Tower apartments - Hybrid developments 	<p>The building is a tower form atop an elongated, 'L-shaped' podium. This type results in a slender building which does not dominate escarpment views.</p>	<p>Yes</p>
<p><u>1B Local character and context</u></p> <p>This guideline outlines how to define the setting and scale of a development, and involves consideration of the desired future character, common settings and the range of scales.</p>	<p>A comprehensive context analysis was undertaken by the applicant and is shown in Attachment 3. It models likely development on nearby sites and tests the proposed building form for compatibility in the neighbourhood.</p> <p>The analysis demonstrates the proposed footprint and building form is suitable. This has also been supported by the Design Review Panel.</p>	<p>Yes</p>
<p><u>1C Precincts and individual sites</u></p>		

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p>Individual sites:</p> <p>New development on individual sites within an established area should carefully respond to neighbouring development, and also address the desired future character at the neighbourhood and street scales. Planning and design considerations for managing this include:</p> <ul style="list-style-type: none"> - Site amalgamation where appropriate - Corner site and sites with multiple frontages can be more efficient than sites with single frontages - Ensure the development potential for adjacent sites is retained - Avoid isolated sites that are unable to realise the development potential. 		

Standards/controls	Comment	Compliance
<p><i>Overshadowing of neighbouring properties is minimised during mid-winter</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Overshadowing should be minimised to the south or downhill by increased upper level setbacks - Refer sections 3D & 4A below for solar access requirements - A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings <p><u>3C Public domain interface</u></p> <p>Key components to consider when designing the interface include entries, private terraces or balconies, fences and walls, changes in level, services locations and planting.</p> <p>The design of these elements can influence the real or perceived safety and security of residents, opportunities for social interaction and the identity of the development when viewed from the public domain</p> <p><u>Objective 3C-1:</u></p> <p><i>Transition between private and public domain is achieved without compromising safety and security</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Terraces, balconies and courtyards should have direct street entry, where appropriate - Changes in level between private terraces etc. above street level provide surveillance and improved visual privacy for ground level dwellings. - Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m. - Opportunities should be provided casual interaction between 	<p>The podium includes full retail exposure at lower ground and ground levels and residential apartments at upper levels. All podium apartments have private open space and other openings facing the street.</p> <p>Podium planting is proposed.</p> <p>Garbage store is located within the car park.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p>residents and the public domain e.g. seating at building entries, near letterboxes etc.</p> <p><u>Objective 3C-2:</u></p> <p><i>Amenity of the public domain is retained and enhanced</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Planting softens the edges of any raised terraces to the street (e.g. basement podium) - Mailboxes should be located in lobbies perpendicular to street alignment or integrated into front fences. - Garbage storage areas, substations, pump rooms and other service requirements should be located in basement car parks. - Durable, graffiti resistant materials should be used - Where development adjoins public parks or open space the design should address this interface. <p><u>3D Communal and public open space</u></p> <p><u>Objective 3D-1</u></p> <p><i>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping</i></p> <p><u>Design Criteria</u></p> <ol style="list-style-type: none"> 1. Communal open space has a minimum area of 25% of the site area 2. 50% direct sunlight provided to principal usable part of communal open space for a minimum of 2 hours between 9am and 3pm on 21 June <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Communal open space should be consolidated into a well designed, usable area. 	<p>Minimum 912m² of communal open space is required. Total 1109m² is provided (724m² ground level uncovered, + 285m² Level 3 + 100m² gymnasium ground level).</p> <p>Outdoor spaces exceed 2hrs solar access.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<ul style="list-style-type: none"> - Minimum dimension of 3m - Should be co-located with deep soil areas - Direct & equitable access required - Where not possible at ground floor it should be located at podium or roof level. - Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: <ul style="list-style-type: none"> · provide communal spaces elsewhere such as a landscaped roof top terrace or a common room · provide larger balconies or increased private open space for apartments · demonstrate good proximity to public open space and facilities and/or provide contributions to public open space <p><u>Objective3D-2</u></p> <p><i>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Facilities to be provided in communal open spaces for a range of age groups, and may incorporate seating, barbeque areas, play equipment, swimming pools <p><u>Objective 3D-3</u></p> <p><i>Communal open space is designed to maximise safety</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Communal open space should be visible from habitable rooms and POS areas and should be well lit. <p><u>Objective 3D-4</u></p> <p><i>Public open space, where provided, is responsive to the existing</i></p>		

Standards/controls	Comment	Compliance												
<p><i>pattern and uses of the neighbourhood</i></p> <p>3E Deep soil zones</p> <p><u>Objective 3E-1</u></p> <p><i>3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.</i></p> <p><u>Design Criteria:</u></p> <p>1. Deep soil zones are to meet the following minimum requirements:</p> <table border="1"> <thead> <tr> <th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr> </thead> <tbody> <tr> <td>less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr> <tr> <td>650m² - 1,500m²</td><td>3m</td></tr> <tr> <td>greater than 1,500m²</td><td>6m</td></tr> <tr> <td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr> </tbody> </table> <p><u>Design guidance:</u></p> <ul style="list-style-type: none"> - Deep soil zones should be located to retain existing significant trees. <p>3F Visual privacy</p> <p><u>Objective 3F-1</u></p> <p><i>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual amenity.</i></p> <p><u>Design Criteria:</u></p>	Site area	Minimum dimensions	Deep soil zone (% of site area)	less than 650m ²	-	7%	650m ² - 1,500m ²	3m	greater than 1,500m ²	6m	greater than 1,500m ² with significant existing tree cover	6m	<p>Minimum dimension of 6.0m required, with minimum area of 255.36m² (7%)</p> <p>The deep soil zone plantings occur above the basement. This is reasonable in a business core/CBD zone. The deep soil zone plan (A407) shows deep soil as the entire landscaped area on ground level 1299.67m²/36.7%.</p> <p>This includes general lawn and the child care centre outdoor space. It is questionable whether all these areas will support deep soil vegetation. Notwithstanding, the area of communal open space in which deep soil plantings might be sustained exceeds the minimum requirements.</p> <p>Separation complies with the exception of the Level 1 western residential balcony. This has been discussed in relation to WLEP 2009 cl. 4.6. Objectives satisfied.</p> <p>Communal open space is located the rear of the building on ground level and on Level 3. Apartment 56 on Level 3 is adequately</p>	<p>Yes</p> <p>Yes</p>
Site area	Minimum dimensions	Deep soil zone (% of site area)												
less than 650m ²	-	7%												
650m ² - 1,500m ²	3m													
greater than 1,500m ²	6m													
greater than 1,500m ² with significant existing tree cover	6m													

Standards/controls	Comment	Compliance												
<p>1. Minimum required separation distances from buildings to the side and rear boundaries are as follows:</p> <table border="1"> <thead> <tr> <th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr> </thead> <tbody> <tr> <td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr> <tr> <td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr> <tr> <td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr> </tbody> </table> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Apartment buildings should have an increased separation distance of 3m (in addition to the above requirements) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale. - Direct lines of sight should be avoided - No separation is required between blank walls <p><u>Objective 3F-2:</u></p> <p><i>Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Communal open space, common areas and access paths should be separated from private open space and windows to apartments. Design solutions include: <ul style="list-style-type: none"> • Setbacks, • Solid or partly solid balustrades to balconies • Fencing or vegetation to separate spaces • Screening devices 	Building height	Habitable rooms and balconies	Non-habitable rooms	up to 12m (4 storeys)	6m	3m	up to 25m (5-8 storeys)	9m	4.5m	over 25m (9+ storeys)	12m	6m	<p>protected.</p> <p>Balcony screens/louvres are proposed on the northern elevation balconies at Levels 1-3.</p>	
Building height	Habitable rooms and balconies	Non-habitable rooms												
up to 12m (4 storeys)	6m	3m												
up to 25m (5-8 storeys)	9m	4.5m												
over 25m (9+ storeys)	12m	6m												

Standards/controls	Comment	Compliance
<ul style="list-style-type: none"> • Raising apartments/private open space above the public domain • Planter boxes incorporated into walls and balustrades to increase visual separation • Pergolas or shading devices to limit overlooking • Only on constrained sites where it's demonstrated that building layout opportunities are limited – fixed louvres or screen panels - Windows should be offset from the windows of adjoining buildings <p><u>3G Pedestrian access and entries</u></p> <p><u>Objective 3G-1</u></p> <p><i>Building entries and pedestrian access connects to and addresses the public domain</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Multiple entries should be provided to activate the street edge. - Buildings entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries. <p><u>Objective 3G-2</u></p> <p><i>Access, entries and pathways are accessible and easy to identify</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Building access areas should be clearly visible from the public domain and communal spaces - Steps and ramps should be integrated into the overall building and landscape design. <p><u>Objective 3G-3</u></p> <p><i>Large sites provide pedestrian links for access to streets and</i></p>	<p>Multiple building entries are proposed. Both Rawson and Regent Streets have entries.</p> <p>Access points are legible and in convenient locations.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p><i>connection to destinations</i></p> <p><u>3H Vehicle access</u></p> <p><u>Objective 3H-1</u></p> <p><i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Car park entries should be located behind the building line - Access point locations should avoid headlight glare to habitable rooms - Garbage collection, loading and service areas should be screened - Vehicle and pedestrian access should be clearly separated to improve safety. - Where possible, vehicle access points should not dominate the streetscape and be limited to the minimum width possible. <p><u>3J Bicycle and car parking</u></p> <p><u>Objective 3J-1</u></p> <p><i>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i></p> <p><u>Design Criteria</u></p> <ol style="list-style-type: none"> 1. On land zoned B3 or B4 and located within 400m of land zoned B3 and B4, the minimum car parking requirement for residents and visitors is set out in the Guide for Traffic Generating Development, or Council's car parking requirement, <u>whichever is less</u>. <p>The car parking needs for a development must be provided off</p>	<p>One driveway is proposed in the lowest part of the site (Regent Street).</p> <p>All waste servicing and deliveries would occur within the car parking area on lower ground level.</p> <p>Security and safety measures are shown on basement plans.</p> <p>Parking is provided in basement and lower ground levels (all on-site).</p> <p>Objective satisfied.</p> <p>RTA traffic guide sets the lower rate (i.e. WDCP 2009 requires greater number of parking spaces). Parking for the project has been provided at WDCP 2009 rate, not RTA rate.</p> <p>WLEP 2009 stipulates that parking in excess of Council's requirements is gross floor area. The applicant satisfactorily addressed the objectives of the control.</p>	<p>Yes</p> <p>Yes</p>

Standards/controls	Comment	Compliance
<p>street.</p> <p><u>Objective 3J-2</u></p> <p><i>Parking and facilities are provided for other modes of transport</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters - Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas. <p><u>Objective 3J-3</u></p> <p><i>Car park design and access is safe and secure</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Supporting facilities within car parks (garbage rooms, storage areas, car wash bays) can be accessed without crossing parking spaces - A clearly defined and visible lobby or waiting area should be provided to lifts and stairs. - Permeable roller doors allow for natural ventilation and improve the safety of car parking areas by enabling passive surveillance. <p><u>Objective 3J-4</u></p> <p><i>Visual and environmental impact of underground car parking are minimised</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Excavation should be minimised through efficient carpark layouts and ramp design. - Protrusion of carparks should not exceed 1.0m above ground level. - Natural ventilation should be provided to basement and sub- 	<p>Satisfactory motorbike and bicycle parking is provided.</p> <p>Lifts are accessible with parking levels.</p> <p>Residential and non-residential uses have separate parking areas. The child care centre spaces are located close to the relevant lift.</p> <p>Ramp design is satisfactory.</p>	

Standards/controls	Comment	Compliance
<p>basement car parking areas.</p> <ul style="list-style-type: none"> - Ventilation grills or screening devices should be integrated into the façade and landscape design. <p><u>Objective 3J-5</u></p> <p><i>Visual and environmental impacts of on-grade car parking are minimised</i></p> <ul style="list-style-type: none"> - On grade car parking should be avoided - Design guidelines provided where it's unavoidable <p><u>Objective 3J-6</u></p> <p><i>Visual and environmental impacts of ground enclosed car parking are minimised</i></p> <ul style="list-style-type: none"> - Exposed parking should not be located along primary street frontages - Positive street address and active street frontages should be provided at ground level. 		
<p>Part 4 – Designing the building - Amenity</p> <p><u>4A Solar and daylight access</u></p> <p><u>Objective 4A-1</u></p> <p><i>To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</i></p> <p><u>Design Criteria</u></p> <ol style="list-style-type: none"> 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of two (2) hours direct sunlight between 9am and 3pm in mid-winter in Wollongong LGA. 2. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid-winter 	<p>Required solar access is provided to 85% of units in midwinter. 2% receive no sunlight in midwinter.</p> <p>All habitable rooms can see a window.</p> <p>Deep spandrels are proposed on the western elevation to reduce exposure.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - The design maximises north aspect and the number of single aspect south facing apartments is minimised - To optimise the direct sunlight to habitable rooms and balconies, the following design features are used: Dual aspect, Shallow apartment layouts Bay windows - To maximise the benefit to residents, a minimum of 1m² of direct sunlight measured at 1m above floor level, is achieved for at least 15 minutes. <p><u>Objective 4A-2</u></p> <p><i>Daylight access is maximised where sunlight is limited</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Courtyards, skylights and high level windows (sill heights of 1500mm or greater) are used only as secondary light sources in habitable rooms <p><u>Objective 4A-3</u></p> <p><i>Design incorporates shading and glare control, particularly for warmer months</i></p> <p><u>Design Guidance</u></p> <p>Design features can include:</p> <ul style="list-style-type: none"> - Balconies - Shading devices or planting - Operable shading - High performance glass that minimises external glare 		

Standards/controls	Comment	Compliance
<p>4B natural ventilation</p> <p><u>Objective 4B-1</u></p> <p><i>All habitable rooms are naturally ventilated.</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - A building's orientation should maximise the prevailing winds for natural ventilation in habitable rooms - The area of unobstructed window openings should be equal to at least 5% of the floor area served. - Doors and openable windows should have large openable areas to maximise ventilation. <p><u>Objective 4B-2</u></p> <p><i>The layout and design of single aspect apartments maximises natural ventilation</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Single aspect apartments should use design solutions to maximise natural ventilation. <p><u>Objective 4B-3</u></p> <p><i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i></p> <p><u>Design Criteria:</u></p> <ol style="list-style-type: none"> 1. 60% of apartments are naturally cross ventilated in the first nine storeys 2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line. <p>4C Ceiling heights</p> <p><u>Objective 4C-1</u></p>	<p>The north-south orientation maximises prevailing winds.</p> <p>73% of apartments are cross ventilated.</p> <p>All openings exceed 5% floor area.</p> <p>All units are naturally ventilated.</p> <p>All apartments have 2.7m ceilings.</p>	<p>Yes</p> <p>Yes</p>

[illegible]

Standards/controls	Comment	Compliance
<p>bathrooms increase the minimum internal areas by 5m² each.</p> <p>2. Every habitable room must have a window in an external wall with a total minimum glass area of at least 10% of the floor area of the room</p> <p><u>Design Guidance:</u></p> <ul style="list-style-type: none"> - Where minimum areas are not met, need to demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. <p><u>Objective 4D-2</u></p> <p><i>Environmental performance of the apartment is maximised</i></p> <p><u>Design Criteria:</u></p> <p>1. Habitable room depths are limited to a maximum of 2.5 x ceiling height</p> <p>2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</p> <p><u>Design Guidance:</u></p> <ul style="list-style-type: none"> - Greater than the minimum ceiling heights can allow proportionate increases in room depths. - Where possible, bathrooms and laundries should have an external openable window. - Main living spaces should be oriented towards the primary outlook. <p><u>Objective 4D-3</u></p> <p><i>Apartment layouts are designed to accommodate a variety of household activities and needs</i></p> <p><u>Design Criteria:</u></p> <p>1. Master bedrooms have a minimum area of 10m² and other</p>		

Standards/controls	Comment	Compliance
<p>bedrooms 9m² (excluding wardrobe space)</p> <p>2. Bedrooms have minimum dimension of 3m (excluding wardrobe)</p> <p>3. Living rooms have minimum width of:</p> <ul style="list-style-type: none"> - 3.6m for studio and 1 bed apartments and - 4m for 2+ beds. <p>4. The width of the crossover or cross through apartments are at least 4m internally to avoid deep narrow apartment layouts.</p> <p><u>Design Guidance:</u></p> <ul style="list-style-type: none"> - Access to bedrooms, bathrooms and laundries is separated from living areas - Minimum 1.5m length for bedroom wardrobes - Main bedroom apartment: minimum 1.8m long x 0.6m deep x 2.1m high wardrobe - Apartment layouts allow for flexibility over time, including furniture removal, spaces for a range of activities and privacy levels within the apartments. <p><u>4E Private open space and balconies</u></p> <p><u>Objective 4E-1</u></p> <p><i>Apartments provide appropriately sized private open space and balconies to enhance residential amenity</i></p> <p>1. Minimum balcony depths are:</p> <p style="padding-left: 40px;">The minimum balcony depth to be counted as contributing to the balcony area is 1m</p> <p>2. Ground level apartment POS must have minimum area of 15m² and min. depth of 3m</p> <p><u>Objective 4E-2</u></p> <p><i>Primary private open space and balconies are appropriately located</i></p>	<p>All balconies have minimum size and depth.</p>	<p>Yes</p>

*Standards/controls**Comment**Compliance**to enhance liveability for residents*

Dwelling type	Minimum area	Minimum depth
Studio apartments	4m ²	-
1 bedroom apartments	8m ²	2m
2 bedroom apartments	10m ²	2m
3+ bedroom apartments	12m ²	2.4m

Design Guidance

- Primary private open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space.
- POS & Balconies should be oriented with the longer side facing outwards to optimise daylight access into adjacent rooms.

Objective 4E-3

Primary private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building

Design Guidance

- A combination of solid and transparent materials balances the need for privacy with surveillance of the public domain
- Full width glass balustrades alone are not desirable
- Operable screens etc. are used to control sunlight and wind, and provide increased privacy for occupancy while allowing for storage and external clothes drying.

Objective 4E-4

Private open space and balcony design maximises safety

Standards/controls	Comment	Compliance
<p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Changes in ground levels or landscaping are minimised. <p><u>4F Common circulation and spaces</u></p> <p><u>Objective 4F-1</u></p> <p><i>Common circulation spaces achieve good amenity and properly service the number of apartments.</i></p> <p><u>Design Criteria</u></p> <ol style="list-style-type: none"> 1. The maximum number of apartments off a circulation core on a single level is eight 2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40. <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Long corridors greater than 12m in length should be articulated through the use of windows or seating. - Primary living rooms or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces should be controlled. <p><u>Objective 4F-2</u></p> <p><i>Common circulation spaces promote safety and provide for social interaction between residents</i></p> <p><u>Design Guidance:</u></p> <ul style="list-style-type: none"> - Incidental spaces can be used to provide seating opportunities for residents, and promotes opportunities for social interaction. <p><u>4G Storage</u></p> <p><u>Objective 4G-1</u></p> <p><i>Adequate, well designed storage is provided in each apartment</i></p>	<p>Tower complies (maximum 7 apartments off a core).</p> <p>Podium has 9 apartments off a core. The objective is satisfied as all apartments within the podium have good access to the lift and the marginal increase is not significant.</p> <p>All units satisfy minimum requirements.</p>	<p>Yes</p> <p>Yes</p>

Standards/controls	Comment	Compliance										
<div>1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided</div> <div>At least 50% of the required storage is to be located within the apartment</div> <table><thead><tr><th>Dwelling type</th><th>Storage size volume</th></tr></thead><tbody><tr><td>Studio apartments</td><td>4m³</td></tr><tr><td>1 bedroom apartments</td><td>6m³</td></tr><tr><td>2 bedroom apartments</td><td>8m³</td></tr><tr><td>3+ bedroom apartments</td><td>10m³</td></tr></tbody></table> <div><u>Objective 4G-2</u></div> <div>Additional storage is conveniently located, accessible and nominated for individual apartments</div> <div><u>Design Guidance:</u></div> <div><ul style="list-style-type: none">- Storage not located within apartments should be allocated to specific apartments.</div> <div><u>4H Acoustic privacy</u></div> <div><u>Objective 4H-1</u></div> <div>Noise transfer is minimised through the siting of buildings and building layout</div> <div><u>Design Guidance</u></div> <div><ul style="list-style-type: none">- Adequate building separation is required (see section 2F above).- Noisy areas within buildings should be located next to or above each other and quieter areas next to or above quieter areas.- Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.</div>	Dwelling type	Storage size volume	Studio apartments	4m ³	1 bedroom apartments	6m ³	2 bedroom apartments	8m ³	3+ bedroom apartments	10m ³	<div></div> <div></div> <div>Adjoining commercial buildings are neither significant generators of noise nor sensitive receptors.</div> <div>Apartment layout groups noisy functions.</div> <div>The Acoustic Logic report nominates methods (acoustic seals, glazing types etc.) to minimise external noise.</div>	<div></div> <div></div> <div>Yes</div>
Dwelling type	Storage size volume											
Studio apartments	4m ³											
1 bedroom apartments	6m ³											
2 bedroom apartments	8m ³											
3+ bedroom apartments	10m ³											

Standards/controls	Comment	Compliance
<ul style="list-style-type: none"> Noise sources such as garage doors, plant rooms, active communal open spaces and circulation areas should be located at least 3m away from bedrooms. <p><u>Objective 4H-2</u></p> <p><i>Noise impacts are mitigated within apartments through layout and acoustic treatments</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> In addition to mindful siting and orientation of the building, acoustic seals and double or triple glazing are effective methods to further reduce noise transmission. <p><u>4J Noise and pollution</u></p> <p><u>Objective 4J-1</u></p> <p><i>In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> Minimise impacts through design solutions such as physical separation from the noise or pollution source, <p><u>Objective 4J-2</u></p> <p><i>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</i></p> <p><u>Design guidance:</u></p> <ul style="list-style-type: none"> Design solutions include limiting openings to noise sources & providing seals to prevent noise transfer. <p>Part 4 – Designing the building - Configuration</p> <p><u>4K Apartment mix</u></p>	<p>The primary external noise source is the road network.</p> <p>The Acoustic Logic report nominates methods (acoustic seals, glazing types etc.) to minimise external noise.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p><u>Objective 4K-1</u></p> <p><i>A range of apartment types and sizes is provided to cater for different household types now and into the future</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - A variety of apartment types is provided - The apartment mix is appropriate, taking into consideration the location of public transport, market demands, demand for affordable housing, different cultural/social groups - Flexible apartment configurations are provided to support diverse household types and stages of life 	<p>The development contains 1, 2 and 3 bedroom apartments.</p> <p>Sixteen apartments are designed to be adaptable.</p>	Yes
<p><u>Objective 4K-2</u></p> <p><i>The apartment mix is distributed to suitable locations within the building</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available 		
<p><u>4L Ground floor apartments</u></p> <p><u>Objective 4L-1</u></p> <p><i>Street frontage activity is maximised where ground floor apartments are located</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Direct street access should be provided to ground floor apartments - Activity is achieved through front gardens, terraces and the facade of the building. - Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into 	<p>Not applicable - there are no ground floor apartments (WLEP 2009 prohibits)</p>	N/a

Standards/controls	Comment	Compliance
<p>commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion</p> <p><u>Objective 4L-2</u></p> <p><i>Design of ground floor apartments delivers amenity and safety for residents</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - The design of courtyards should balance the need for privacy of ground floor apartments with surveillance of public spaces. Design solutions include: <ul style="list-style-type: none"> • elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4) • landscaping and private courtyards • window sill heights that minimise sight lines into apartments • integrating balustrades, safety bars or screens with the exterior design - Solar access should be maximised through: <ul style="list-style-type: none"> • high ceilings and tall windows • trees and shrubs that allow solar access in winter and shade in summer 		
<p><u>4M Facades</u></p> <p><u>Objective 4M-1</u></p> <p><i>Building facades provide visual interest along the street while respecting the character of the local area</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - To ensure that building elements are integrated into the overall building form and façade design - The front building facades should include a composition of varied 	<p>A schedule of external finishes has been provided.</p> <p>Façade detail is shown on plan A440.</p> <p>Façade treatment at ground/podium level is of human scale. Setbacks to Rawson and Regent Streets allow active use of the property boundary, united by the 3m deep continuous awning.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p>building elements, textures, materials, detail and colour and a defined base, middle and top of building.</p> <ul style="list-style-type: none"> - Building services should be integrated within the overall facade - Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. - To ensure that new developments have facades which define and enhance the public domain and desired street character. <p><u>Objective 4M-2</u></p> <p><i>Building functions are expressed by the facade</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Building entries should be clearly defined <p><u>4N Roof design</u></p> <p><u>Objective 4N-1</u></p> <p><i>Roof treatments are integrated into the building design and positively respond to the street</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Roof design should use materials and a pitched form complementary to the building and adjacent buildings. <p><u>Objective 4N-2</u></p> <p><i>Opportunities to use roof space for residential accommodation and open space are maximised</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Habitable roof space should be provided with good levels of amenity. - Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security 	<p>A roof plan is provided.</p> <p>The roof functions as private open space/terrace for residential penthouses.</p> <p>Solar roof panels are proposed.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
<p>considerations</p> <p><u>Objective 4N-3</u></p> <p><i>Roof design incorporates sustainability features</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Roof design maximises solar access to apartments during winter and provides shade during summer <p><u>4O Landscape design</u></p> <p><u>Objective 4O-1</u></p> <p><i>Landscape design is viable and sustainable</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Landscape design should be environmentally sustainable and can enhance environmental performance - Ongoing maintenance plans should be prepared <p><u>Objective 4O-2</u></p> <p><i>Landscape design contributes to the streetscape and amenity</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Landscape design responds to the existing site conditions including: <ul style="list-style-type: none"> • changes of levels • views • significant landscape features <p><u>4P Planting on Structures</u></p> <p><u>Objective 4P-1</u></p> <p><i>Appropriate soil profiles are provided</i></p>	<p>A landscape concept has been provided and is satisfactory.</p> <p>There is no vegetation on the site.</p> <p>The basement extends full width of the site and therefore opportunities for true deep soil zone plantings not possible. The deep soil zone plan shows areas of planting on structure, which are</p>	<p>Yes</p> <p>Yes</p>

Standards/controls	Comment	Compliance
<u>Design guidance</u> <ul style="list-style-type: none"> - Structures are reinforced for additional saturated soil weight - Minimum soil standards for plant sizes should be provided in accordance with Table 5 <u>Objective 4P-2</u> <i>Plant growth is optimised with appropriate selection and maintenance</i> <u>Design guidance</u> <ul style="list-style-type: none"> - Plants are suited to site conditions <u>Objective 4P-3</u> <i>Planting on structures contributes to the quality and amenity of communal and public open spaces</i> <u>Design guidance</u> <ul style="list-style-type: none"> - Building design incorporates opportunities for planting on structures. Design solutions may include: <ul style="list-style-type: none"> • green walls with specialised lighting for indoor green walls • wall design that incorporates planting • green roofs, particularly where roofs are visible from the public domain • planter boxes 	satisfactory.	
<u>4Q Universal design</u> <u>Objective 4Q-1</u> <i>Universal design features are included in apartment design to promote flexible housing for all community members</i> <u>Design guidance</u> <ul style="list-style-type: none"> - A universally designed apartment provides design features such 	Sixteen apartments are designed to be adaptable.	Yes

Standards/controls	Comment	Compliance
<p>as wider circulation spaces, reinforced bathroom walls and easy to reach and operate fixtures</p> <p><u>Objective 4Q-2</u></p> <p><i>A variety of apartments with adaptable designs are provided</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Adaptable housing should be provided in accordance with the relevant council policy <p><u>Objective 4Q-3</u></p> <p><i>Apartment layouts are flexible and accommodate a range of lifestyle needs</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Apartment design incorporates flexible design solutions <p><u>4R Adaptive reuse</u></p> <p><u>Objective 4R-1</u></p> <p><i>New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i></p> <p><u>Design Guidance</u></p> <ul style="list-style-type: none"> - Contemporary infill can create an interesting dialogue between old and new, adding to the character of a place <p><u>Objective 4R-2</u></p> <p><i>Adapted buildings provide residential amenity while not precluding future adaptive reuse</i></p> <p><u>4S Mixed use</u></p> <p><u>Objective 4S-1</u></p> <p><i>Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian</i></p>	<p>Not applicable</p> <p>The 'mixed use' development is located within an established city core and within close proximity to Wollongong rail station and public bus networks.</p>	<p>N/a</p> <p>Yes</p>

Standards/controls	Comment	Compliance
<p><i>movement</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Mixed use development should be concentrated around public transport and centres - Mixed use developments positively contribute to the public domain. <p><u>Objective 4S-2</u></p> <p><i>Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Residential circulation areas should be clearly defined. - Landscaped communal open space should be provided at podium or roof levels <p><u>4T Awnings and signage</u></p> <p><u>Objective 4T-1</u></p> <p><i>Awnings are well located and complement and integrate with the building design</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Awnings should be located along streets with high pedestrian activity and active frontages <p><u>Objective 4T-2</u></p> <p><i>Signage responds to the context and desired streetscape character</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development 	<p>No signage is proposed.</p> <p>A 3m deep awning is proposed over Rawson and Regent Street public footpath area. Rawson Street in particular might serve as a connection between the site and Wollongong train station and/or Crown Lane.</p>	<p>Yes</p>

Standards/controls	Comment	Compliance
Part 4 – Designing the building - Configuration		
<u>4U Energy efficiency</u>		
<u>Objective 4U-1</u>	Natural light and ventilation to apartments is satisfactory.	Yes
<i>Development incorporates passive environmental design</i>		
<u>Design guidance</u>		
- Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)		
<u>Objective 4U-2</u>		
<i>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i>		
<u>Design Guidance</u>		
- Provision of consolidated heating and cooling infrastructure should be located in a centralised location		
<u>Objective 4U-3</u>		
<i>Adequate natural ventilation minimises the need for mechanical ventilation</i>		
<u>4V Water management and conservation</u>		
<u>Objective 4V-1</u>	A waster sensitive urban design strategy has been developed	Yes
<i>Potable water use is minimised</i>		
<u>Objective 4V-2</u>		
<i>Urban stormwater is treated on site before being discharged to receiving waters</i>		
<u>Design guidance</u>		
- Water sensitive urban design systems are designed by a suitably qualified professional		

Standards/controls	Comment	Compliance
<p><u>Objective 4V-3</u></p> <p><i>Flood management systems are integrated into site design</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Detention tanks should be located under paved areas, driveways or in basement car parks <p><u>4W Waste management</u></p> <p><u>Objective 4W-1</u></p> <p><i>Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Common waste and recycling areas should be screened from view and well ventilated <p><u>Objective 4W-2</u></p> <p><i>Domestic waste is minimised by providing safe and convenient source separation and recycling</i></p> <p><u>Design guidance</u></p> <ul style="list-style-type: none"> - Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core - For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses - Alternative waste disposal, such as composting, can be incorporated into the design of communal open space areas <p><u>4X Building maintenance</u></p> <p><u>Objective 4X-1</u></p> <p><i>Building design detail provides protection from weathering</i></p>	<p>All waste collection would occur in the loading dock on the lower ground floor.</p> <p>Separate residential and non-residential waste rooms are proposed.</p> <p>The schedule of finishes shows durable materials.</p>	<p>Yes</p> <p>Yes</p>

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Design guidance</u> - Design solutions such as roof overhangs to protect walls and hoods over windows and doors to protect openings can be used. <u>Objective 4X-2</u> <i>Systems and access enable ease of maintenance</i> <u>Design guidance</u> - Window design enables cleaning from the inside of the Building <u>Objective 4X-3</u> <i>Material selection reduces ongoing maintenance costs easily cleaned surfaces that are graffiti resistant</i>		

Wollongong Development Control Plan 2009

2. WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

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. Relevant provisions are addressed in Table 2 below.

Table 2: WDCP 2009

2 Building form

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>2.1 General</u></p> <p>Building form and character refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. Wollongong City Centre LEP includes provisions for land use, building heights and sun access planes, floor space ratio and design excellence. The building form provisions are intended to encourage high quality design for new buildings, balancing character of Wollongong with innovation and creativity.</p> <p>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.</p>	<p>The proposed design incorporates building separation to the northern and western boundary not in accordance with WLEP 2009.</p> <p>Council's Design Review Panel has viewed successive versions of the development and in their final comments, recommended further changes needed in order for the development to satisfy design excellence requirements of WLEP 2009.</p> <p>The final revised proposal satisfactorily resolves these concerns.</p>	<p>No, but satisfactory *</p>
<p><u>2.2 Building to street alignment and street setbacks</u></p> <p>B3 zone: Nil setback at ground level.</p> <p>4m minimum setback above street frontage height</p>	<p>No street frontage height proposed.</p> <p>Lower ground and ground have setback 3.5m. This was arrived at during the Design Review Process, where the greater activation with the street gained by opening the shops forecourt was desirable.</p>	<p>No, but satisfactory</p>

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>2.3 Street frontage heights in commercial core</u> Street frontage heights of 12-24m are required.	No street frontage height proposed. As discussed in the report in relation to WLEP 2009, the setbacks were determined for ground levels accordingly upper levels were not pulled forward to the street alignment.	No, but satisfactory
<u>2.4 Building depth and bulk</u> Maximum 1200m ² floor plate size for non-residential is above 24m Maximum 900m ² floor plate size for residential above 24m Maximum 25m building depth for non-residential Maximum 18m building depth residential	The proposed building incorporates a wider footprint on the lower levels, with smaller upper levels of the tower. Maximum building depth is approximately 18.5-19m for some parts of the podium and 19m for a minor part of the tower. The proposed footprint is considered acceptable as satisfactory light and ventilation is provided to the building.	No, but satisfactory
<u>2.5 Side and rear building setbacks and building separation</u> <i>Up to street frontage heights: Nil side and rear setback</i> <i>Residential uses (habitable rooms) between street frontage height and 45m: 12m side and rear setback</i> <i>All uses (including non-habitable residential) between street frontage height and 45m: 6m side and rear setback</i> <i>All uses above 45m: 14m side and rear setback</i>	The building footprint and consequential setbacks vary in response to angled allotment boundaries and the building design (screens, terraces etc.). Up to street frontage heights: Nil side and rear setbacks. Residential uses (habitable rooms) between street frontage height and 45m: Non complying Rawson and Regent Street side setbacks (in part). This is discussed in the report in relation to WLEP 2009 and SEPP 65. All uses (including non-habitable residential) between street frontage height and 45m (i.e. Levels 8-14): complies All uses above 45m (i.e. Levels 15-24): complies	No, but satisfactory
<u>2.6 Mixed used buildings</u> Minimum 3.3m ceiling heights for commercial space Separate commercial service areas from residential access Locate clearly demarcated residential entries from the public street	Commercial ceiling heights are 3.3m. Waste loading area allows for separate collection days/times to be organised by waste contractor. Separate storage rooms are provided. The residential entry is clearly identified from Regent Street.	Satisfactory

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>2.7 Deep soil zone</u> Minimum 15% of site area shall be deep soil zone For a residential component of mixed use buildings, required deep soil zone may be reduced.	SEPP 65 ADG requires 7%. 15% of 3648.31m ² = 547.24m ² The deep soil zone plan (A407) shows deep soil as the entire landscaped area on ground level 1299.67m ² /36.7%. Council's landscape officer has no objection.	No, but satisfactory
<u>2.8 Landscape design</u> A landscape plan must be provided.	A landscape concept plan has been provided. Council's landscape officer has no objection	Satisfactory
<u>2.9 Planting on structures</u> Provide soil depth appropriate for plant type and structure	All plantings are on structure. Council's landscape officer has no objection	Satisfactory

3 Pedestrian amenity

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>3.3 Active street frontages</u> 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	The main entry on Regent Street is legible. Levels 1-3 of the podium contain residential apartments on the building exterior.	Satisfactory
<u>3.4 Safety and security</u> Ensure adequate lighting, surveillance and good lines of sight. Provide security access where required.	Crime prevention is addressed in the Statement of Environmental Effects. Adequate access controls, and separation of land uses are proposed.	Satisfactory
<u>3.5 Awnings</u> Continuous street awnings are required for both Rawson and Regent Street frontages	A full awning 3m deep is provided on Rawson Street and Regent Street. The concourse from Rawson Street leading into the rear of the shops is covered.	Satisfactory*

<p><u>3.6 Vehicular footpath crossings</u></p> <p>One vehicle access point only will generally be permitted.</p>	<p>One combined entry/exit is located on Regent Street.</p>	<p>Satisfactory</p>
<p><u>3.8 Building exteriors</u></p> <p>Adjoining buildings should be considered. Balconies should be provided. External walls should be articulated. External materials should be of high quality and durable.</p>	<p>A schedule of external finishes has been provided and is satisfactory</p>	<p>Satisfactory</p>
<p><u>3.10 Views and view corridors</u></p> <p>Maintain and enhance views to the foreshore and escarpment, where practical.</p>	<p>The site is located within the distant panoramic view corridor identified in figure 3.12. The proposed height of 67m complies with the maximum permitted in WLEP 2009.</p> <p>The centre recessed component of the east and west elevations reduce the perceived building bulk.</p>	<p>Satisfactory *</p>
<p>4 Access, parking and servicing</p> <p><i>Objectives/controls</i> <i>Comment</i> <i>Compliance</i></p>		
<p><u>4.2 Pedestrian access and mobility</u></p> <p>Main building entry should be clearly visible.</p> <p>Development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.</p> <p>Development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.</p> <p>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.</p>	<p>The land slopes down from Rawson Street towards the north.</p> <p>Several building entry points are proposed. Barrier free access is provided.</p>	<p>Satisfactory *</p>
<p><u>4.3 Vehicular driveways and manoeuvring areas</u></p> <p>All vehicles must enter and exit in forward direction with maximum 3-point turn.</p>	<p>Council's traffic engineer has no objection to the proposed driveway and ramp from Regent Street.</p>	<p>Satisfactory</p>

<p>Driveway widths and dimensions and car space widths and dimensions must comply with Australian Standards.</p> <p>Semi-pervious materials on driveway to provide for stormwater filtration.</p>		
<p><u>4.4 On-site parking</u></p>		
<p>Parking must be on-site and meet AS2890.1 2004 (as amended).</p>	<p>Parking is discussed in the report in relation to Chapter E3.</p>	<p>Satisfactory</p>
<p><u>4.5 Site facilities and services</u></p>		
<p>Provide mailboxes in one accessible location.</p> <p>Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures:</p> <p>i) Away from the street frontage, and</p> <p>ii) Integrated into the roof scape design</p> <p>All development is to adequately accommodate waste handling and storage on-site.</p> <p>The development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage.</p>	<p>Waste storage is proposed on lower ground level. Servicing is required to be effected by a medium or hard rigid vehicle.</p> <p>Utility connection may be finalised at construction phase.</p>	<p>Satisfactory</p>
<p>5 Environmental management</p>		
<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>5.2 Energy efficiency and conservation</u></p>		
<p>New dwellings are to comply with SEPP (BASIX)</p>	<p>A BASIX certificate has been provided</p>	<p>Satisfactory</p>
<p><u>5.3 Water conservation</u></p>		
<p>New dwellings are to comply with SEPP (BASIX)</p>	<p>A BASIX certificate has been provided</p>	<p>Satisfactory</p>

<u>5.4 Reflectivity</u>		
Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%.	The schedule of materials shows proposed use of materials that are not highly reflective.	Satisfactory
<u>5.5 Wind mitigation</u>		
For buildings over 32m, a wind effects report is required.	A wind effects report has been provided. The propose building is satisfactory in relation to wind conditions.	Satisfactory
<u>5.6 Waste and recycling</u>		
A site waste minimisation and management plan is required.	A site waste minimisation and management plan has been provided.	Satisfactory
6 Residential development standards		
<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>6.1 SEPP 65 and residential flat design code</u>		
SEPP 65 controls are adopted	Refer SEPP 65 and ADG discussion	Refer SEPP 65
<u>6.2 Housing choice and mix</u>		
Minimum 10% of all units are to be capable of adaptation	Sixteen (10.59%) units are adaptable	Satisfactory
<u>6.6 Basement Carparks</u>		
The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1.2m above natural or finished ground level, when measured at any point on the outside walls of the building. Where height of basement podium is less than 1.2m above ground level, the basement may be located on the boundary. Any portion which exceeds 1.2m must be set back from boundaries by a ratio of 1:1, with a minimum setback of 1.5m. Ventilation structures and air conditioning ducts must be located away from windows of habitable rooms and private open space areas. Basements must be protected from inundation by 100-year ARI flood levels.	The basement levels are integrated into the base of the tower. Services are shown on each basement level. Detailed specifications of ventilation structures has not been provided, however residential apartments are sensibly located and are not expected to experience ventilation noise or odour. The land is not identified as flood affected.	Satisfactory

<i>Objectives/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>6.7 Communal open space</u></p> <p>Minimum 5m² of communal open space is required for each apartment in developments containing more than 10 apartments</p>	<p>151 apartments are proposed i.e. 755m² required. The communal space on ground level and Level 3 exceeds this amount. A gymnasium on ground provides additional communal open space. The roof exceeds this amount.</p> <p>Also, each apartment provides private open space in excess of the minimum required. Subject to commercial arrangement, hotel recreation facilities may be available to residents.</p>	Satisfactory
<p><u>6.8 Private open space</u></p> <p>Private open space in the form of balcony or terrace is required for each apartment</p>	All residential apartments are provided with private open space in the form of balconies.	Satisfactory
<p><u>6.9 Overshadowing</u></p> <p>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.</p> <p>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.</p> <p>In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must be considered, in addition to the impacts on existing development.</p>	<p>Shadow diagrams have been provided. These show shadowing would extend south to Crown Street East and west shadows move relatively quickly across adjoining properties. . Detailed analysis of the existing solar access to all residential properties within this range has not been provided. However, the high density urban location has been taken into account.</p> <p>The shadow diagrams show the shadowing from approved development on the site (DA-2014/1319) and surrounding buildings.</p>	Satisfactory
<p><u>6.10 Solar access</u></p> <p>Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation.</p> <p>The living rooms and private open space of at least 70% of</p>	<p>Shading devices are proposed.</p> <p>SEPP 65 and the ADG requires 2hr periods of</p>	Satisfactory

Attachment 7: Draft conditions of consent

Approved Plans and Specifications

1. The development shall be implemented substantially in accordance with the details and specifications set out on:
[to be finalised by Council]
and any details on the application form, and with any supporting information received, except as amended by the conditions specified and imposed hereunder.

General Matters

2. **Building Work - Compliance with the Building Code of Australia**
All building work must be carried out in compliance with the provisions of the Building Code of Australia.
3. **Construction Certificate**
A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.
A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.
Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.
4. **Geotechnical**
 - a A detailed geotechnical investigation is required for the design of site preparation earthworks, drainage, footings and retaining walls.
 - b An earthworks plan is then to be developed by the geotechnical consultant prior to start of earthworks.
 - c All recommendations of the geotechnical consultant are to be accommodated in the earthworks plan.
 - d The earthworks plan may require modification in light of any subsequent geotechnical reports commissioned to address unforeseen geotechnical conditions encountered during the site preparation earthworks.
 - e Due to the sensitivity of the site to changing geotechnical conditions and close proximity to adjoining structures, all earthworks including drainage, retaining wall and footing construction must be undertaken with Level 1 geotechnical supervision as defined in Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Developments.
 - f There is to be no unsupported excavations with all cuts to be immediately supported by retaining wall construction.
 - g. Hard bedrock where encountered will be difficult to excavate. Alternative excavation methods should be considered to minimise noise and vibration.

5. Occupation Certificate

A final Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of Section 109H of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

Prior to the Issue of the Construction Certificate

6. Noise Attenuation Building Design

Prior to issue of the Construction Certificate, details are to be provided to the Principal Certifying Authority demonstrating that the building would achieve internal noise levels not exceeding those prescribed in State Environmental Planning Policy (Infrastructure) 2007.

The relevant LAeq levels are:

- in any bedroom in the building—35 dB(A) at any time between 10.00 pm and 7.00 am,
- anywhere else in the residential areas of the building (excluding a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

7. Dilapidation Report Prior to Construction

A Dilapidation Report detailing the current structural condition of adjoining buildings, infrastructure and roads shall be prepared and endorsed by a qualified structural engineer. The report shall be submitted to the satisfaction of the certifying authority prior to issue of the Construction Certificate.

A copy of the report is to be forwarded to Council and the owners of adjoining properties prior to the issue of a Construction Certificate.

8. Detailed Drainage Design

A detailed drainage design shall be submitted with the Construction Certificate documentation for the proposed development. This detailed drainage design shall be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, conditions listed under this consent, and generally in accordance with the concept drainage plan by Sparks and Partners Consulting Civil engineers, Job No. 15218, issue 2, Sheets DA4.01 to DA4.05 and DA4.11, dated 10 Dec 2015.

9. Protection of Building from Surface Runoff

The development shall be designed such that adequate protection is provided to the building against the ingress of upslope surface run-off in any rainfall event. This design shall also ensure there are no adverse effects to adjoining properties or upon the subject land as a result of flood or surface run-off. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.

10. Excavation and Retaining Structures Adjacent to a Public Road

The design of all permanent and temporary retaining structures within the zone of influence of any Council assets including the road pavement, stormwater pipes and pits, must be provided to Wollongong City Council and the Principal Certifying Authority prior to the issue of the Construction Certificate. The design must be prepared by a suitably qualified civil engineer with experience in structural design and NPER 3 accreditation, in accordance with the RMS Technical direction GTD 2012/001. The design must clearly show that all components of the retaining structure and associated drainage is wholly located within the development site. The following additional documentation must accompany the design:

- a) A geotechnical report prepared by a suitably qualified and practising engineer in accordance with RMS Technical direction GTD 2012/001. The report must also certify

that the structural design is in accordance with the recommendations of the geotechnical report;

- b) A dilapidation survey of the existing Council infrastructure, including CCTV footage of any existing stormwater drainage infrastructure fronting the subject site to the next downstream pit;
- c) Details of the proposed monitoring program for the excavation and retaining structures, and relevant threshold actions prepared in accordance with RMS Technical direction GTD 2012/001.

11. On Site Stormwater Detention - Design Criteria

The on-site stormwater detention facility must incorporate a minimum 900mm square lockable grate for access and maintenance purposes, provision for step irons where required, provision for safety, debris control screen and a suitably graded invert to prevent ponding (i.e., no sump). Also, details of the orifice plate including diameter of orifice and method of fixing shall be provided. These requirements shall be reflected on the Construction Certificate plans.

12. On Site Stormwater Detention – Identification

Details shall be provided of a corrosion resistant identification plaque for location on or close to the on-site detention (OSD) facility. The plaque shall include the following information:

The structure is an OSD facility, being part of the stormwater drainage network, and is not to be tampered with.

identification number [DA2015/1655]

any specialist maintenance requirements.

13 Orifice Plate Design and Installation

The orifice plate shall be designed and installed such that the orifice invert matches the invert level of the On Site Detention (OSD) control pit. This requirement shall be reflected on the Construction Certificate plans and associated documentation and submitted to the Principal Certifying Authority for assessment prior to the release of the Construction Certificate.

14. Proposed Levels

Proposed levels to Australian Height Datum (AHD), including floor, ground, grate, pipe inverts and pavement levels shall be shown on the detailed drainage design. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

- 15. Roofwater Drainage** – All roof gutters/sumps and downpipes shall be designed to cater for a 1 in 100 year ARI storm event in accordance with AS 3500.3 (2003) – Plumbing and Drainage (Stormwater Drainage). Details of gutter/downpipe sizes and downpipe locations shall be reflected on the Construction Certificate plans.

16. Regent Street and Rawson Street – Detailed Civil Engineering Design

A detailed civil engineering design shall be provided for the proposed works within the Regent Street road reserve. The detailed civil engineering design shall be prepared by a suitably qualified practicing civil engineer in accordance with the relevant Council engineering standards. The design plans shall include:

- a) Levels and details of existing and proposed infrastructure such as kerb and gutter, public utility, pits, poles, fencing, stormwater drainage, adjacent road carriageway and footpath levels, and shall extend a minimum of 10 metres beyond the limit of works.

- b) Footpath longitudinal sections, and cross-sections at regular intervals including building entrance points demonstrating compliance with the latest versions of AS 1428.1, AS/NZS 2890.1, the Disability Discrimination Act and the AUSTROAD road design standards.
- c) Cross sections of the design must be from the crown of the road and continue past the property boundary with a maximum chainage of 10m per cross section.
- d) Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.
- e) All design and construction must be in accordance with the requirements of Wollongong City Council's stormwater management policy and the Wollongong City Council Public Domain Technical Manual. Evidence that this requirement has been met must be detailed on the engineering drawings.

The detailed civil engineering design and supporting documentation shall be submitted to and approved by Wollongong City Council's Development Engineering Manager for approval prior to the issue of the construction certificate.

- 17. **Footpath Levels** – Footpath levels must be obtained from Council's Development Assessment and Certification Division prior to the issue of the Construction Certificate. The approved footpath levels shall be reflected on the Construction Certificate plans. All such structures and internal driveways shall be constructed to these approved levels.

18. **Road Reserve – Footpath Levels/Gradients**

Entry point floor levels of the development shall be designed to match Council's footpath levels at the property boundary. Footpath crossfalls from the back of the kerb to the property boundary shall be maintained at 2.5% for the full frontage of the development to Council's road reserve. This requirement shall be reflected on the construction certificate plans and associated documentation and submitted to Council's Development Engineering Manager prior to the issue of the construction certificate.

- 19. **Permit to Enter and Exit Construction Site** – Any use of the footpath or road reserve for construction purposes requires Council approval under the Roads Act 1993. Where it is proposed to carry out activities such as construction vehicles entering and leaving the site from a public road reserve and/or installation of a fence or hoarding, a permit must be obtained from Council's Development Assessment and Certification Division prior to the issue of the Construction Certificate.

- 20. The developer must provide on-site detention storage for stormwater runoff from the development. The Site Storage Requirement (SSR) and Permissible Site Discharge (PSD) values for the site must be designed in accordance with Chapter E14 of the Wollongong DCP2009. Details of the detention facility and SSR/PSD values must be submitted with the Construction Certificate application.

21. **On-Site Detention – Structural Design**

The on-site detention facility must be designed to withstand loadings occurring from any combination of hydrostatic, earth, traffic and buoyancy forces. Details must be provided demonstrating these requirements have been achieved prior to the issue of the Construction Certificate.

22. **On-Site Detention - Maintenance Schedule**

A maintenance schedule for the on-site stormwater detention system must be submitted with the Construction Certificate plans for the proposed development. The maintenance schedule must be in accordance with Chapter E14 of the Wollongong DCP2009.

23. **Ground Anchors**

Permanent ground anchors are not permitted within the road reserve. Temporary ground anchors can only be used where the Roads Authority has provided written confirmation to the

applicant for their use. Temporary anchors must be designed in accordance with RMS Technical Direction GTD 2012/001.

24. **Street Trees**

The developer must address the street frontage by installing street tree planting. The number and species for this development are eleven *Livistona australis*, to be installed with 3m clear stem height. Tree pit detailing is to be in accordance with the Wollongong City Council Public Domain Technical Manual. Dial Before You Dig must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Location of street tree plantings to be sited to ensure no conflict occurs with street light poles.

Tree pits must be installed to the satisfaction of WCC Manager of Works.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

25. **Footpath Paving**

The developer is responsible for the construction of footpath paving for the entire frontage of the development for the full width of the verge. The type of paving for this development, in accordance with the Wollongong City Council Public Domain Technical Manual is as follows:

Main Body of Pavement: Basalt Dark by Wilmid Pty Ltd or approved equivalent 600 x 300 x 40mm dark grey basalt with an exfoliated finish.

Driveway crossings: Basalt Dark by Wilmid Pty Ltd or approved equivalent 300 x 300 x 60mm dark grey basalt with an exfoliated finish. Extend thickened sub-base concrete slab and unit pavers for full width of ramp.

Pram Ramps: Broom finished concrete in accordance with the latest version of the Australian Standards AS1428

Vehicle Ramp: Broom finished concrete in accordance with the latest version of the Australian Standards AS2890.

Samples of paving units are to be submitted to Wollongong City Council Project Delivery Division for approval prior to purchase.

A nominal two percent (2%) minimum one percent (1%), maximum two and a half percent (2.5%) cross fall to be provided from property line to back of kerb.

Driveway entry threshold finish from property boundary line to face of kerb: To match footpath and be designed to withstand predicted traffic loadings.

Driveway threshold finish within property boundary line: To contrast with driveway entry.

Footpath must be installed to the satisfaction of WCC Manager of Works.

A Landscape Plan is to be submitted to Council prior to the issue of the Construction Certificate showing proposed paving and location of all services.

26. **Street Furniture**

Any street furniture installed must comply with the City Centre Public Domain Technical Manual for Core and Civic Streets. Details of street furniture are to be included in a Landscape Plan is to be submitted to Council prior to the issue of the Construction Certificate showing proposed paving and location of all services.

27. **Podium Planting**

All podium planting areas to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding to be installed to protect membrane from damage. All podium planting areas to be provided with an adequate drainage system connected to

stormwater drainage system. Planter box to be backfilled with free draining planter box soil mix. If selected mulch is decorative pebbles/gravel, the maximum gravel pebble size is 10mm diameter.

This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.

28. Planting to Child care centre

The developer shall ensure that proposed planting is child friendly and must **not** include any of the types of plants listed below:

- i) plants known to produce toxins;
- ii) plant with high allergen properties;
- iii) plants with profuse scented flowers or known to attract high numbers of bees, spiders, and insects;
- iv) species which produce small nuts or fruits;
- v) plants with thorns or spiky foliage and branches; and
- vi) any weed or potential weed species.
- vii) Avoid planting plants such as Asthma weed (*Parietaria judaica*), Rhus (*Toxicodendron succedaneum*), Yellow oleander (*Thevetia peruviana*), Cactus, chillies, Dumb cane (*Diffenbachia*), Mushrooms, Angels Trumpet (*Brumansia*), Cycads, Grevilleas, Oleander (*Nerium oleander*), Poinsettia, Rhubarb, White cedar (*Melia azederach*), Yesterday Today Tomorrow (*Brunfelsia*), Agapanthus, Amaryllis, Arum Lily, Azaleas and Rhododendrons, Daffodils, Foxgloves, Lily of the Valley and any other species that have the characteristics listed above which could place children at risk. The developer shall consult and undertake further research to ensure the most up to date information is available to determine plant suitability.

The completion of the landscaping works as per the final approved Landscape Plan is required prior to the issue of Occupation Certificate.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

29. Present Plans to Sydney Water

Approved plans must be submitted online using Sydney Water Tap in™, available through www.sydneywater.com.au to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Certifying Authority must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit www.sydneywater.com.au or telephone 13 20 92 for further information.

30. Car Parking and Access

The development shall make provision for the following car parking, motorcycle and bicycle parking spaces.

Total: cars 209, motorbikes 13 and bicycles 82.

Residential

175 residential car parking spaces (includes visitor and resident, and accessible spaces as shown on the approved plans)

63 secure residential bicycle spaces

11 motorcycle spaces

Retail

18 car parking spaces (includes staff and visitor)

1 secure bicycle space

1 motorcycle space

Child care

16 car parking spaces (includes staff, parent and emergency vehicle)

1 secure bicycle space

1 motorcycle space

This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 96 modification to the development. The approved parking spaces shall be maintained to the satisfaction of Council, at all times.

31. The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.
32. Each disabled person's parking space must comply with the current relevant Australian Standard AS2890.6 – Off-street parking for people with disabilities. This requirement shall be reflected on the Construction Certificate plans.
33. The designated loading/unloading facility shall be kept clear for that purpose at all times. The designated loading/unloading facility shall be shown on the Construction Certificate plans.
34. The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details shall be reflected on the Construction Certificate plans.
35. A change in driveway paving is required at the entrance threshold to clearly show motorists they are crossing a pedestrian area. The developer must construct the paving in accordance with the conditions, technical specifications and levels to be obtained from Council's Manager Works. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.
36. Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS2890.1 to provide for adequate sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.
37. Overflow paths must be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the development, as well as from any detention storage in the development. All overflow paths shall be shown on the detailed drainage design plans. Blocked pipe situations with 1 in 100 year ARI events must be incorporated in the design. Overflow paths must also be provided in low points and depressions. This requirement shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.
38. The depth and location of all services (ie gas, water, sewer, electricity, telephone, stormwater etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.
39. Details of the proposed pit and the connecting pipeline to Council's existing drainage system shall be provided in conjunction with the detailed drainage design for the site. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

40. **Structure over Road**

The submission of an application is required for the proposed awning structure within or over the road reserve for Council's approval pursuant to the provisions of the Roads Act 1993 prior to the issue of the Construction Certificate.

If approved, the Roads Act 1993 approval will, in part, require the owner and successive owners to maintain the structure in a satisfactory state of repair and shall indemnify Council against all claims arising from the structure.

The developer must hold public liability insurance for a minimum \$10million and a copy of the insurance is to be provided to Council upon request. The approval will also include a provision that Council reserves the right to terminate the approval under the Roads Act 1993 at any time and for any reason.

41. **Landscaping**

The submission of a final Landscape Plan in accordance with the requirements of Wollongong City Council Landscape DCP 2009 Chapter E6 Landscape and in accordance with the approved Landscape Plan (ie as part of this consent) for the approval by the Principal Certifying Authority, prior to the release of the Construction Certificate.

42. The submission of a final Landscape Plan to the Principal Certifying Authority, prior to the release of the Construction Certificate. The final Landscape Plan shall address the following requirements:

- a. planting of indigenous plant species native to the Illawarra Region such as : *Syzygium smithii* (syn *Acmena smithii*) Lilly pilly, *Archontophoenix cunninghamiana* Bangalow palm, *Backhousia myrtifolia* Grey myrtle, *Elaeocarpus reticulatus* Blueberry ash, *Glochidion ferdinandii* Cheese tree, *Livistona australis* Cabbage palm tree, *Syzygium paniculatum* Brush cherry.

A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping;

- b. a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes;
- c. the location of all proposed and existing overhead and underground service lines. The location of such service lines shall be clear of the dripline of existing and proposed trees; and
- d. any proposed hard surface under the canopy of existing trees shall be permeable and must be laid such that the finished surface levels match the existing level. Permeable paving is to be installed in accordance with the manufacturer's recommendations.

The completion of the landscaping works as per the final approved Landscape Plan is required, prior to the issue of Occupation Certificate.

43. The provision of common tap(s) and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be indicated on the Landscape Plan for the Construction Certificate, as detailed in the Wollongong City Council Landscape Technical Policy No 98/4. This requirement shall be reflected on the Landscape Plan prior to the release of the Construction Certificate.

44. The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

45. The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.

46. Bicycle parking facilities must have adequate weather protection and provide the appropriate level of security as required by the current relevant Australian Standard AS2890.3 - Bicycle Parking Facilities and Austroads Guide to Traffic Management Part 11: Parking (Commentary 9: C9.2). This requirement shall be reflected on the Construction Certificate plans.

47. **Design and Construction of Food Premises**

Where food premises are proposed within the retail areas, documentary evidence must be submitted to the Principal Certifying Authority confirming that the proposed food premises complies with AS4674-2004: Design, construction and fit out of food premises and the following conditions prior to the issue of the Construction Certificate:

Floor Construction

The floor must be finished to a smooth, even non-slip surface, graded and drained to the floor waste (AS4674-2004-Section 3).

Floor Waste

The floor waste(s) in the food premises must be fitted with a sump removable basket and grate and constructed in all stainless steel finish (AS4674-2004-Section 4.1.8).

Coving

Recessed coving must be provided at all intersections of the floor with the walls. All coving must have a minimum concave radius of 25mm and be installed so as to be integral to the surface finish of both floor and wall in such a manner as to form a continuous, uninterrupted surface. "Feather edge skirting" and non-rebated coving are not permitted (AS4674-2004 – Section 3.1.5).

Penetrations

All service pipes and electrical conduit must be contained in the floor, walls and plinths or ceiling or fixed on brackets so as to provide at least 25mm clearance between the pipe and adjacent vertical surfaces and 100mm between the pipe or conduit and any adjacent horizontal surface (AS4674-2004-Section 3.2.9)..

Wall Requirements

All walls must be of solid construction and be finished to provide a smooth impervious surface capable of being easily and effectively cleaned, in accordance with Table 3.2 of AS4674-2004. Cavity walls are not permitted (AS4674-2004 – Section 3.2).

Ceiling Construction

All ceilings must be constructed with a rigid, non-absorbent, smooth faced material free from open joints, cracks and crevices and be painted with a light-coloured washable paint. The intersection of the walls and ceiling must be right-joined, sealed and dustproof. Drop-in panel style ceilings are not permitted (AS4674-2004 - Section 3.2).

Light Fittings

All fluorescent light fittings must be fitted with a smooth faced diffuser. The light fittings must be either:

- a. Recessed so that the diffuser is flush with the ceiling; or
- b. Designed to ensure that no horizontal surface exists that would allow dust and grease to accumulate (AS4674-2004 – Section 2.6.2).

Hand Basin(s) and Hand Towels

A suitable number of hand basins must be provided in accessible and convenient locations within all food handling areas and in or adjacent to toilet facilities used by food handlers. The basins must be freestanding, serviced with hot and cold water through a single outlet and able to be mixed at a temperature of at least 40°C (AS4674-2004 – Section 4.4).

Hand basins within food handling areas must be located no further than 5m from any place where food handlers are handling open food.

A disposable paper hand towel dispenser must be installed adjacent to each hand basin. Air dryers installed as the sole means of drying hands are not permitted (AS4674-2004 - Section 4.4).

Double Bowl Sinks

A double bowl wash sink of adequate size and capacity must be provided for washing food handling equipment and utensils (AS4674-2004 - Section 4.1).

Water Service

Any equipment washing or preparation sink must be serviced with hot and cold water through a single outlet (AS4674-2004-Section 4.1).

Cleaner's Sink

Where floor wastes are not installed as a means of disposing of wastewater, a cleaner's sink serviced with hot and cold water through taps fitted with hose connectors must be provided and located outside or areas where open food is handled (AS4674-2004-Section 4.1.8).

Tap Fittings

Where floor wastes are installed as a means of disposing of wastewater, hot and cold wall mounted taps fitted with hose connectors and positioned at least 600mm above the floor must be installed in a convenient and accessible location outside of areas where open food is handled (AS4674-2004 – Section 4.1.8).

Fittings

All fixtures, fittings and equipment must be installed in accordance with Section 4 of AS4674-2004.

Food Preparation Benches

All food preparation benches must be constructed in stainless steel (AS4674-2004-Section 4.2).

Benches

The top and exposed edges of all benches and counters must be finished in a smooth and non-absorbent material, and free of cracks, gaps, crevices or exposed joints (AS4674-2004-Section 4.2).

Storage Cabinets

Storage cabinets, both internally and externally, must be finished in a smooth and non-absorbent material, and be free of cracks, gaps, crevices or exposed joints (AS4674-2004-Section 4.2).

False Bottoms

False bottoms and cavities under fittings are not permitted (AS4674-2004-Section 4.2 and 4.3).

Installation of fittings and fixtures

All fittings and fixtures must be built into the wall and floor so to be free from joint, gaps and cavities to enable easy cleaning or alternatively, supported on one of the following:

a. Plinths – Plinths must be an integral part of the floor, constructed of solid materials, at least 75mm in height and coved at the intersection with the floor. All plinths must have a smooth and impervious finish. All fittings and fixtures must be properly sealed to the plinth.

Wheels or Castors – The wheels and castors must be capable of supporting and easily moving a full loaded fitting and be provided with a restraining device.

Legs – Fittings and fixtures may be supported on legs but must be constructed of non-corrosive, smooth metal or moulded plastic. All legs must be free from cracks and services. All legs must have a clearance space between the floor and the underside of the fitting of at least 150mm.

Shelving

All shelving must be located at least 25mm off the wall. Alternatively, the intersection of the shelf and the wall is to be completely sealed to the satisfaction of Council (AS4674-2004-Section 4.2).

Display Units

All food display units must be enclosed to prevent the possibility of contamination by customer's breath, handling, or from flies, dust, etc (Food Regulation 2004, AS 4674-2004-Section 4.2).

Cool Room – Floor

The cool room floor must be finished to a smooth even surface and graded to drain to the door. A sanitary floor waste must be located outside the cool room and adjacent to the door.

Cool Room – Metal Work

All metal work in the cool room must be protected to resist corrosion.

Cool Room – Access

The cool room must be provided with a door which can at all times be opened from inside without a key and an approved alarm device located outside the cool room, but controllable only from inside.

Condensation Collection

Condensation from the refrigeration units/cool room motors must be directed to a tundish, installed in accordance with Sydney Water requirements.

Mechanical Exhaust

Mechanical exhaust ventilation must be provided to the cooking appliances. Mechanical exhaust/ventilation must comply with AS-1668.2/2012: The use of ventilation and air-conditioning in buildings, Part 2: Mechanical ventilation in buildings (AS4674-2004-Section 2.5, AS1668.2-2012).

Doors

Doors to the internal toilet and air lock must be fitted with a self-closing device. Toilet and air lock doors must not be able to be held in an open position (AS4674-2004 – Section 5.2).

Meter Box

An approved non-absorbent, smooth faced cover must be provided over the meter box. The cover is to be splayed at an angle of 45 degrees to the wall at the top and made tight fitting to the wall surfaces.

Hot Water Service

A hot water service of adequate capacity must be provided. The hot water service must be positioned at least 75mm clear of the adjacent wall surfaces, and mounted a minimum 150mm above floor level on a stand of non-corrosive metal construction (AS4674-2004-Section 4.3).

Toilet Facilities

Adequate toilet facilities must be provided on the premises for staff. A hand basin must be located within or directly adjacent to toilets (AS4674-2004 – Section 5.2).

Storerooms

Storerooms must be constructed in accordance with Section 3.2 of AS4674-2004. Shelving or storage racks must be impervious and constructed to enable easy cleaning.

Self-Service Appliances

Self-service food appliances must be constructed so as to comply with Food Regulation 2015 and the NSW Self-Service Food Industry Code of Practice. Details of the appliances must be submitted to Council and approved prior to installation.

Food Storage

Any appliance used for the storage of hot or cold food must be provided with a numerically scaled indicating thermometer or recording thermometer accurate to the nearest degree Celsius or an alarm system for continuous monitoring of the temperature of the appliance (Food Regulation 2015).

Fly Protection

Tight-fitting, washable fly screens or other approved means of excluding flies must be provided to all window and door openings (AS4674-2004-Section 2.1.5).

Storage Facilities

Sufficient facilities must be provided for the storage of cleaning materials, office materials, employees' clothing and personal belongings (AS4674-2004 – Section 5.1).

Waste Management Plan

Garbage containers, containers for recyclable materials and compacters must be stored in an external area or in a room specifically for that purpose (AS4674-2004 – Section 2.4).

Registration

The food business is required to be registered with Council. The Food Business Notification Form must be submitted prior to business operations commencing. The appropriate form can be found on Councils' web page by visiting:

<http://www.wollongong.nsw.gov.au/customerserviceonline/factsheet/Factsheets/Food%20Business%20Notification.pdf>

Alternatively, contact Council's Regulation and Enforcement Division on (02) 4221 7737 to obtain a registration form.

Eating Areas

Any enclosed eating area must be smoke free. "No Smoking" signs must be displayed within the eating areas to ensure all patrons comply with this requirement (Smoke Free Environment Act 2000).

Section 94A Levy Contribution

48. The following Section 94A Levy Contribution is required towards the provision of public amenities and services in accordance with the Wollongong City Council Section 94A Development Contributions Plan.

Pursuant to Section 80A(1) of the Environmental Planning and Assessment Act 1979, and the Wollongong City Council Section 94A Development Contributions Plan, a contribution of 1% of the cost of development (Contribution may be increased to 2% within the City Centre in accordance with Clause 1 of the Plan) amounting to \$679,781.24 shall be paid to Council prior to the release of any associated Construction Certificate. This amount is the reduced project cost reflecting demolition and excavation works undertaken and section 94A contributions paid in relation to DA-2009/750/A.

The amount to be paid will be adjusted at the time of actual payment, in accordance with the provisions of the Wollongong City Council Section 94A Development Contributions Plan. The Consumer Price Index All Group Index Number for Sydney at the time of the development application determination is 108.9. The following formula for indexing contributions is to be used:

Contribution at time of payment = $\$C \times (CP2/CP1)$

Where

\$C is the original contribution as set out in the Consent

CP1 is the Consumer Price Index (all groups index for Sydney) used in the proceeding indexation calculation

CP2 is the Consumer Price Index (all groups index for Sydney) at the time of indexation

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website Catalog No. 6401.0 - Consumer Price Index, Australia.

METHOD	HOW	PAYMENT TYPE
Online	http://www.wollongong.nsw.gov.au/applicationpayments Your Payment Reference: 632895	· Credit Card
In Person	Wollongong City Council Administration Building Customer Service Centre	· Cash · Credit Card · Bank

	Ground Floor 41 Burelli Street WOLLONGONG	Cheque
PLEASE MAKE CHEQUES PAYABLE TO: Wollongong City Council (Personal Cheques not accepted)		

A copy of the Wollongong City Council Section 94A Development Contributions Plan and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au

The reason for Section 94A is to provide high quality and diverse public amenities and services to meet the expectations of the existing and new residents of Wollongong City Council.

Prior to the Commencement of Works

49. Sign – Supervisor Contact Details

Before commencement of any work, a sign must be erected in a prominent, visible position:

- a. stating that unauthorised entry to the work site is not permitted;
- b. showing the name, address and telephone number of the Principal Certifying Authority for the work; and
- c. showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

50. Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a. a standard flushing toilet; and
- b. connected to either:
 - i) the Sydney Water Corporation Ltd sewerage system or
 - ii) an accredited sewage management facility or
 - iii) an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

51. Enclosure of the Site

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

52. Supervision of Works within Road Reserve – The works within Council's road reserve shall be supervised by a suitably qualified and experienced Civil Engineer or Civil Engineering Foreman. The supervisor's name, address and contact details (including telephone number), together with a written construction program and anticipated duration of the construction works shall be submitted to Council's Development Engineering Manager prior to the commencement of works within the road reserve.

53. **Site Management, Pedestrian and Traffic Management (Where Works are Proposed in or from a Public Road Reserve)** – The submission, as part of an application for a permit under Section 138 of the Roads Act 1993, of a Site Management, Pedestrian and Traffic Management Plan to Council's Manager Development Engineering for approval is required, prior to works commencing on the site. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS1742 - Traffic Control Devices for Works on Roads and the RMS Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

- a) proposed ingress and egress points for vehicles to/from the construction site;
- b) proposed protection of pedestrians, adjacent to the construction site;
- c) proposed pedestrian management whilst vehicles are entering/exiting the construction site;
- d) proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
- e) proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- f) proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
- g) proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc. are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the NSW Roads and Maritime Services Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS1742. – "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- h) proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in Civil Engineering; and
- i) proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The approved plan shall be implemented, prior to the commencement of any works upon the construction site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

54. **Support for Neighbouring Buildings**

This consent requires the preservation and protection of neighbouring buildings from any damage and if necessary, requires the underpinning and support of any neighbouring building in an approved manner. The applicant or the contractor carrying out the work must at least seven days in advance of any excavation works below the level of the base of the footings of a building

on an adjoining allotment, including a public road or place, give written notice of intention to carry out such works to the property owner of the affected adjoining building and furnish specific written details and supporting plans or other documentation of the proposed work.

The adjoining property owner of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.

55. Application for Occupation, Use, Disturbance or Work on Footpath/Roadway

Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and/or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993. An application must be submitted and approved by Council prior to the works commencing where it is proposed to carry out activities such as, but not limited to, the following:

- (a) Digging or disruption to footpath/road reserve surface;
- (b) Loading or unloading machinery/equipment/deliveries;
- (c) Installation of a fence or hoarding;
- (d) Stand mobile crane/plant/concrete pump/materials/waste storage containers;
- (e) Pumping stormwater from the site to Council's stormwater drains;
- (f) Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
- (g) Construction of new vehicular crossings or footpaths;
- (h) Removal of street trees;
- (i) Carrying out demolition works.

During Demolition, Excavation or Construction

- 56. A Survey Report** must be submitted to the Principal Certifying Authority verifying that each ground floor level accords with the floor levels as approved under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective ground floor level of the building. All levels shall relate to Australian Height Datum.

57. Supervision of Engineering Works

All engineering works associated with the development are to be carried out under the supervision of a practicing engineer.

58. Piping of Stormwater to Existing Stormwater Drainage System

Stormwater for the land must be piped to Council's existing stormwater drainage system. Prior to undertaking the connection the developer shall obtain a permit from Council's Development Engineering Manager.

- 59. Stormwater Connections** – All stormwater connections to Council's existing stormwater drainage system shall be constructed in accordance with good engineering practice. The developer shall ensure that the condition of the existing stormwater drainage system is not compromised and that the service life of the existing stormwater drainage system is not reduced as a result of the connection.

- 60. Notification to Adjoining Property Owners Prior to Commencement of Works** – The contractor shall maintain access to existing properties fronting the works. Written notification shall be made to the affected properties prior to commencement of works. This is particularly the case if any disruption to access will be required as a consequence of the works.

61. Protection of Council Infrastructure

The developer shall provide adequate protection to all Council assets prior to work commencing and during construction. Council's Development Engineering Manager must be notified immediately in the event of any damage to Council's assets. Any damage to Council's assets shall be made good to the satisfaction of Council, with all associated costs borne by the developer.

62. No Adverse Run-off Impacts on Adjoining Properties

The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

63. Re-direction or Treatment of Stormwater Run-off

Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

64. Forty Eight Hours Notice – Prior to Works Commencing in any Road Reserve

The applicant shall consult with Wollongong City Council's Development Engineering Manager, giving 48 hours notice to arrange an on-site meeting, prior to any works commencing in any road reserve (footpath/carriageway). The purpose of the meeting will be to discuss any relevant issues such as a schedule of inspections, the need for a road opening permit and the provision of a traffic control plan as part of the works.

65. Prior approval from Council for any works in Road Reserve

Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development. A traffic control plan prepared and implemented by a suitably qualified person must be submitted for approval and the appropriate fees paid a minimum of five working days prior to the expected implementation. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742 – Traffic Control Devices for Works on Roads and the RMS Traffic Control at Worksites Manual.

Note: This includes temporary road closures for the delivery of materials, plant and equipment, concrete pours etc.

66. Dust suppression measures

Activities occurring during the construction phase of the development must be carried out in a manner that will minimise generation of dust. All sealed surfaces intended to carry vehicular traffic must be managed with the aim of preventing windblown dust emissions.

67. Restricted Hours of Work

The developer must not carry out any work other than emergency procedures to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Friday and 8.00 am to 4.00 pm Saturday, without the prior written consent of the Principal Certifying Authority and Council.

No work is permitted on public holidays or Sundays.

Any request to vary these hours shall be submitted to the Council in writing detailing:

- a the variation in hours required;
- b the reason for that variation;
- c the type of work and machinery to be used.

Note: The developer is advised that other legislation may control the activities for which Council has granted consent including but not limited to the Protection of the Environment Operations Act 1997. Developers must note that consistent with the Environment Protection Authority's Interim Construction Noise Guideline (July, 2009), the noise from construction (L_{Aeq} (15 min)) must

not exceed the background noise level (L_{A90} (15 min)) plus 10 dB(A), and a L_{Aeq} (15 min) of 75 dB(A) when measured at the residential property boundary that is most exposed to construction noise, and at a height of 1.5 metres above ground level. If the property boundary is more than 30 metres from the residence, the location for measuring noise levels is at the most noise-affected point within 30 metres of the residence.

68. The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land.

69. **Importation soils to site**

Prior to importing any soils to site for the purpose of back-filling also requires validation testing following the EPA (1995) Sampling Design Guidelines to confirm suitability for the proposed land use.

70. **Mechanical Exhaust**

Centralised mechanical exhaust ventilation must be provided to the building and all commercial kitchens such as cafes and restaurants cooking appliances installation as per AS4674-2004, AS1668.2-1991 and the grease filters to comply with AS1530.1.

71. **Outdoor Air Conditioning or refrigeration units**

The outdoor units for refrigeration system including air conditioners shall have suitable acoustic enclosure to comply with the noise guidelines.

72. **Duct system**

The ducting within the building must be mounted on vibration reducing pads to minimise vibration effect for residential and commercial spaces to comply with the vibration guidelines.

73. **Provision of Waste Receptacle**

The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

Prior to the Issue of the Occupation Certificate

74. **BASIX**

A final occupation certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifying Authority must not issue the final occupation certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate. NOTE: Clause 154B of the Environmental Planning and Assessment Regulation 2000 provides for independent verification of compliance in relation to certain BASIX commitments.

75. **Drainage WAE**

The developer shall obtain written verification from a suitably qualified civil engineer, stating that all stormwater drainage and related work has been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor shall be submitted. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels), and finished ground and pavement surface levels. This information shall be submitted to the Principal Certifying Authority prior to the issue of the final occupation certificate.

76. **Drainage within Council Land WAE** – The developer shall obtain written verification from a suitably qualified civil engineer, stating that the construction of the drainage infrastructure works within Council land has been undertaken in accordance with the approved construction plans. In

addition, a full works-as-executed plan, prepared and signed by a Registered Surveyor shall be submitted. This plan shall include the location and levels of the drainage lines, structures and finished surface levels. This information shall be approved by Wollongong City Council's Development Engineering Manager prior to the issue of the final Occupation Certificate.

77. Prior to issue of the Occupation Certificate, the Principal Certifying Authority is required to confirm that internal noise levels in residential parts of the building would not exceed levels prescribed in State Environmental Planning Policy (Infrastructure) 2007.

The relevant LAeq levels are:

- in any bedroom in the building—35 dB(A) at any time between 10.00 pm and 7.00 am,
- anywhere else in the residential areas of the building (excluding a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

78. **Dilapidation Report Post Construction**

A Dilapidation Report detailing the current structural condition of adjoining buildings, infrastructure and roads shall be prepared and endorsed by a qualified structural engineer. The report shall be submitted to the satisfaction of the certifying authority prior to issue of the Occupation Certificate.

A copy of the report is to be forwarded to Council and the owners of adjoining properties prior to the issue of an Occupation Certificate.

79. Consolidation of allotments is required. Prior to issue of the Occupation Certificate, details must be provided to the Principal Certifying Authority confirming all allotments have been consolidated.

80. Water quality improvement and treatment methods must be implemented to achieve stormwater quality removal targets specified in Wollongong Development Control Plan. These targets are: removal of Total Suspended Solids 80.7%, Total Phosphorous 57.9%, Total Nitrogen 40.7% and Gross Pollutants 100% prior to discharge into Council's drain. Evidence that this has occurred must be provided to the Principal Certifying Authority prior to issue of the Occupation Certificate.

81. **Completion Report for Excavation Adjacent to a Public Road**

A report, prepared by a suitably qualified Civil Engineer with experience in structural design and NPER 3 accreditation, must be provided to Wollongong City Council and Principal Certifying Authority, that:

- a) Certifies that all proposed retaining structures within the zone of influence of any Council assets including the road pavement, stormwater pipes and pits, was constructed in accordance with the approved plans prepared in accordance with RMS Technical direction GTD 2012/001.
- b) Certifies that monitoring of the site was carried out in accordance with the requirements of RMS Technical direction GTD 2012/001.
- c) Provides a post construction dilapidation survey, including CCTV footage of any existing stormwater drainage infrastructure fronting the subject site to the next downstream pit.

82. Completion of Engineering Works

The completion of all engineering works within Council's road reserve or other Council owned or controlled land shall be undertaken in accordance with the conditions of this consent and any necessary work to make the construction effective to the satisfaction of Council's Manager Development Engineering. The total cost of all engineering works shall be fully borne by the applicant/developer and any damage to Council's assets shall be restored in a satisfactory manner, prior to the issue of the Occupation Certificate.

83 Drainage

The developer must obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor must be submitted. These plans and certification must satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP2009. This information must be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

84. Works-as-Executed (WAE) Plans

On completion of any civil infrastructure works, the applicant must submit, to Council's Manager Development Engineering, the Works-As-Executed plans for any works within any road reserve or other Council owned or controlled land. A certificate shall also be submitted by a registered surveyor confirming that the survey is a true and accurate record. The WAE plans shall also be certified by an accredited engineer indicating that construction works have been built in accordance with the conditions of development consent.

85. Restriction on use – On-site Detention System

The applicant must create a restriction on use under the Conveyancing Act 1919 over the on-site detention system. The following terms must be included in an appropriate instrument created under the Conveyancing Act 1919 for approval of Council:

"The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site stormwater detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site stormwater detention system' shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures.

Name of the authority having the power to release, vary or modify the restriction referred to is Wollongong City Council."

The instrument, showing the restriction, must be submitted to the Principal Certifying Authority for endorsement prior to the issue of the final Occupation Certificate and the use of the development.

86. Positive Covenant – On-Site Detention Maintenance Schedule

A positive covenant shall be created under the Conveyancing Act 1919, requiring the property owner(s) to undertake maintenance in accordance with the Construction Certificate approved On-Site Stormwater Detention System and Maintenance Schedule (application number to be referenced).

The instrument, showing the positive covenant must be submitted to the Principal Certifying Authority for endorsement prior to the issue of the final Occupation Certificate and the use of the development.

87. On-Site Detention – Structural Certification

The submission of a certificate from a suitably qualified practising civil and/or structural engineer to the Principal Certifying Authority is required prior to the issue of the final Occupation

Certificate. This certification is required to verify the structural adequacy of the on-site detention facility and that the facility has been constructed in accordance with the approved Construction Certificate plans.

88. Dedication of land

Completion of the dedication of land shown to be dedicated to Council for road reserve is required prior to issue of the Occupation Certificate.

Operational Phases of the Development/Use of the Site

- 89. All site servicing and deliveries are to be undertaken outside of normal retail trading hours and the traffic network peak to ensure that service/delivery vehicles reversing within car parking areas do not impact on the safety of the general public.
- 90. Garbage and recycling collection shall occur within the building. On-street placement of bins is not permitted.