

Wollongong Local Planning Panel Assessment Report | 20 October 2020

WLPP No.	Item 1
DA No.	DA-2020/241
Proposal	Residential - demolition of existing structures and construction of a seven (7) storey residential flat building comprising of 40 units and one (1) level basement car parking
Property	93 - 99 Kembla Street, WOLLONGONG
Applicant	ADM Architects
Responsible Team	Development Assessment and Certification - City Centre Team (NL)

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Local Planning Panel- Determination

The proposal has been referred to Local Planning Panel for determination pursuant to clause 2.19(1)(a) of the Environmental Planning and Assessment Act 1979. Under Schedule 2, 4 (b) of the Local Planning Panels Direction of 30 June 2020, the proposal is development to which SEPP 65 applies.

Proposal

The proposal is for demolition of four dwellings and construction of a seven storey residential flat building with one level of basement car parking. The building will contain 40 units, comprising 12 one bedroom, 21 two bedroom and 7 three bedroom units, five of which will be adaptable.

Permissibility

The site is zoned R1 General Residential pursuant to Wollongong Local Environmental Plan 2009. The proposal is categorised as a residential flat building and is permissible in the zone with development consent.

Consultation

The proposal was notified in accordance with Council's Notification Policy and received three (3) submissions which are discussed at section 1.5 of the assessment report. Internal and external referrals are satisfactory.

The Design Review Panel assessed the application on the 28 April 2002 and their comments are discussed at section 1.4.2.

Main Issues

The Design Review Panel recommended a range of changes be made to the scheme, only some of which have been incorporated into the plans now presented for determination. This is discussed further at section 1.4.2 of this report.

RECOMMENDATION

It is recommended that the proposal be approved subject to the conditions contained at **Attachment 8**.

1 APPLICATION OVERVIEW

1.1 PLANNING CONTROLS

State Environmental Planning Policies:

- SEPP No. 55 – Remediation of Land
- SEPP (Koala Habitat Protection) 2019
- SEPP 65 Design Quality of Residential Apartment Buildings
- SEPP (Infrastructure) 2007
- SEPP (Building Sustainability Index: BASIX) 2004

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan 2009

Other policies

- Wollongong City Wide Development Contributions Plan 2019
- Wollongong Community Participation Plan 2019

1.2 DETAILED DESCRIPTION OF PROPOSAL

The proposal comprises the following:

- Demolition of four dwellings and associated outbuildings.
- Excavation for one level of basement car parking for
- Construction of a 7 storey residential flat building with 12 x 1-bedroom units, 21 x 2-bedroom units and 7 x 3-bedroom units with 8 visitor spaces and 40 resident spaces, including 5 accessible spaces and three motorbike spaces.

1.3 BACKGROUND

There is no development history relevant to the proposal.

1.4 SITE DESCRIPTION

The site is located at 93-99 Kembla Street, Wollongong (title references Lot 52, 53, 54 and Lot 55 of DP 5127).

The site is regular in shape and relatively flat with an area of 2,175.2m².

Adjoining development is as follows:

- North: single storey dwellings
- East: 7 storey residential flat building
- South: single storey dwellings
- West: 7 storey residential flat building and older single storey dwellings

The locality is undergoing a transition from low density dwelling houses on single lots, to consolidated lots with high density residential development.

Concern	Comment
<p>It breaches concerns in the areas of traffic and access, floods, environmental protection, community and amenities, geo-technical feasibility and, its unreasonable impact on local residents- not only during construction but also post completion.</p>	<p>The proposal provides compliant car parking. In respect of traffic generation, Council's Traffic Engineer has advised that the peak traffic generation from the development would not compromise the function of the surrounding street network.</p> <p>Access into the development is satisfactory.</p> <p>The site does not contain any significant vegetation and the type of development is not considered to have unreasonable environmental impacts.</p> <p>The developer will have to pay contributions to help fund public infrastructure that is required as a direct or indirect result of development.</p> <p>Council's Geotechnical Officer has reviewed the proposal regarding the excavation for the basement. It has been recommended that detailed geotechnical advice be required to determine an earthworks plan to ensure adjoining properties are not adversely impacted by the development. The earthworks would then need to be under geotechnical supervision to ensure the encountered conditions are as expected and enough support is provided during and after construction. It is also noted that the basement has been set back from the boundaries to a minimum of 1500mm. This should also assist with mitigating impacts associated with excavation.</p> <p>Some impacts to the locality during construction are unavoidable however conditions of consent are recommended with respect to hours of work and the like.</p> <p>Impacts to neighbour's post completion are considered to be acceptable regarding the applicable controls. The building complies with the built form controls which take into account amenity of adjoining residents.</p> <p>Regarding flooding and stormwater, the proposal has been accompanied by engineering drawings prepared by a suitably qualified consultant. These have been reviewed by Council's Stormwater Officer who is satisfied the design is in conformity with Council requirements.</p>

Concern	Comment
<p>The proposal will be adversely impacted by flooding as is evident with the recently completed nearby residential flat building at 126 - 130 Kembla Street.</p>	<p>The objector does not specify the particulars of the issue raised. The proposed development has been designed in accordance with Council requirements as they apply to flooding and stormwater management.</p>
<p>The proposal does not comply with crossover widths</p> <p>The failure to provide floor plans make it impossible to assess the impact of these variations</p>	<p>The proposed crossover width is 6m. Council controls seek to keep crossover widths to a maximum needed to facilitate safe entry and egress from the site taking into consideration likely traffic volumes and any site constraints. The proposed width is not considered unreasonable and is satisfactory regarding the controls.</p> <p>All plans were available during the notification period.</p>
<p>The driveway setback does not comply.</p>	<p>The driveway is setback approximately 2m at the front boundary reducing to approximately 1.7m into the site. This setback is sufficient to accommodate boundary landscape screening and a suitable setback from the property boundary, taking into consideration potential future development on adjoining land.</p>
<p>The proposal will overshadow adjoining property.</p>	<p>Shadow diagrams have been submitted with the proposal that indicate adjoining development will be overshadowed by the proposal.</p> <p>The affected properties are dwelling houses located in an area undergoing transition to higher density development. In this context, it is more difficult to preserve solar access to those properties.</p> <p>The proposal itself has generous setbacks and the tower form is not excessively bulky.</p>
<p>Kembla Street is currently a very busy street and has the problem of street parking spots.</p>	<p>The proposal provides the number of visitor spaces required under the DCP.</p>
<p>The traffic is so considerable that the council had to change a roundabout to a traffic light two blocks away. The proposal indicates developing 40 units instead of the current 4 houses, which implies that the traffic around could become 10 folds when the building is built and occupied. We believe that the street doesn't have the potential of such a crowd.</p>	<p>Council's Traffic Engineer has advised that the peak traffic generation from the development would not compromise the function of the surrounding street network.</p> <p>There would be approximately 26 peak hour trips, in and out – about 1 vehicle every 2.5 minutes in the one hour peak.</p>
<p>One of the reasons we bought our property about 1.5 years ago was that there wasn't any crowded</p>	<p>The controls that permit development of a scale and intensity proposed in this DA have</p>

Concern	Comment
<p>building around, nor any development plans, and we counted on the quietness of the street. This development will increase noise and air pollution and is so against our expectations.</p>	<p>been in place for a considerable amount of time. In this respect, expecting the low density residential character to persist in perpetuity is inconsistent with the planning controls. It is also noted that the building within which this objector is located is of the same character and scale as the one currently proposed.</p>
<p>The proposed building will block the direct sunlight to our place, especially the winter morning sunlight. This issue is not only very disappointing, but it would increase our electricity and gas payments as we then need to warm up our place more. We cannot accept the extra burden on our bills payment. It also blocks our sky view which makes it very gloomy and negatively affects our mental / psychological health.</p>	<p>The building within which the objector is located (130 Kembla) is on the opposite side of Kembla Street. Whilst there will be some overshadowing of this building early in the morning, the subject building will not significantly overshadow that building between the key period of 9am to 3pm.</p>

1.6 CONSULTATION

1.6.1 INTERNAL CONSULTATION

Council's Geotechnical Engineer, Landscape Officer, Traffic Engineer and Stormwater Engineer have reviewed the application and has provided satisfactory referrals. Conditions of consent were recommended and are included in the consent.

1.6.2 EXTERNAL CONSULTATION

Endeavour Energy

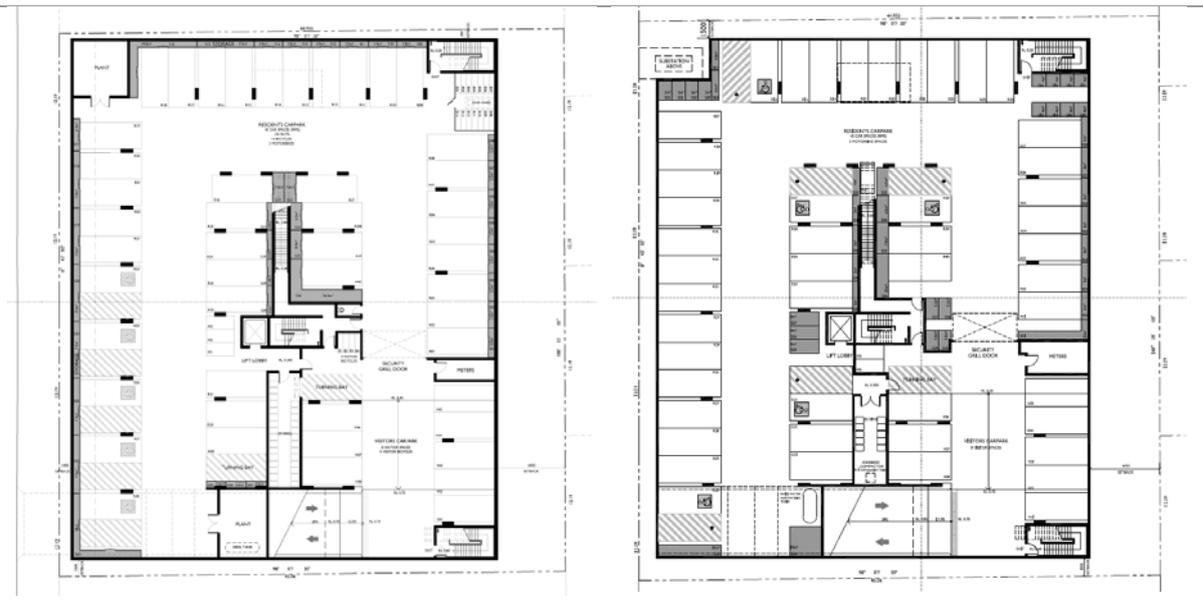
In accordance with clause 45 of SEPP Infrastructure, Endeavour Energy were consulted who provided conditions.

Design Review Panel

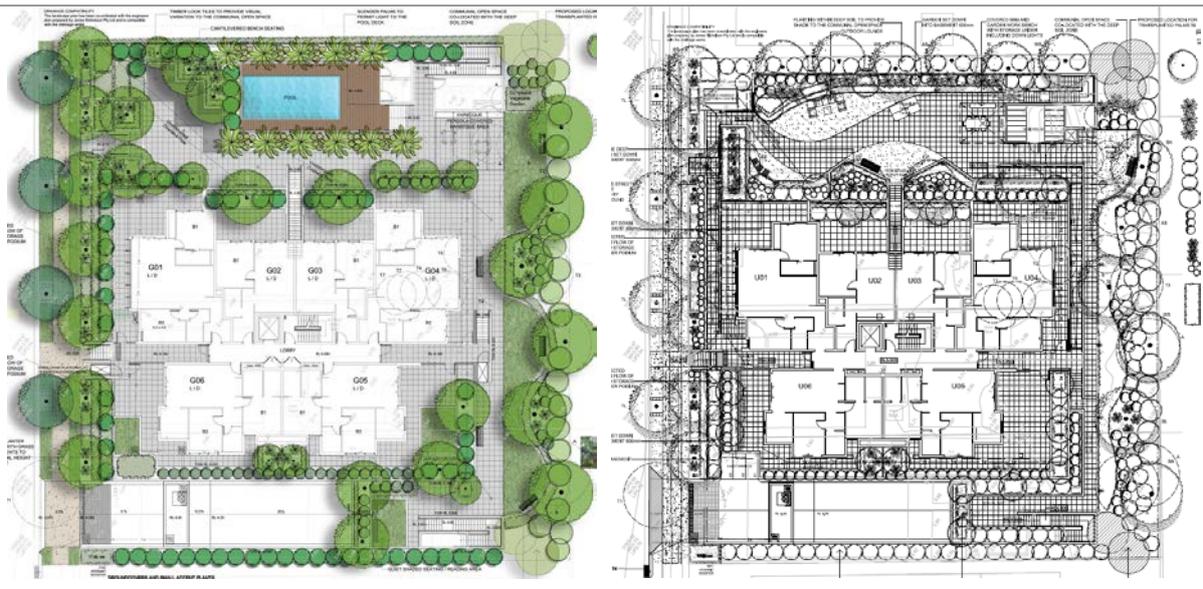
The application was reviewed by the Design Review Panel on 28 April 2020. The Panel recommended several changes to the building, some of which have not been incorporated into the plans now presented for determination. This is discussed in further detail below.

Notwithstanding the outstanding recommendations of the Panel, the proposal is considered to be satisfactory regarding the design excellence provisions and the ADG as discussed elsewhere in this report.

Basement



Landscape



Ground floor



DRP commentary

The subject site is in an area that is undergoing a transformation in character from single residential dwellings (1-2 storeys) to Residential Flat Buildings (RFBs). Recently proposed apartment buildings in the area (in construction and/or completed) provide the opportunity to evaluate urban design outcomes of this transformation. While recent developments confirm that the scale and density prescribed in the LEP are generally feasible, it is demonstrably clear that certain outcomes - exposed ramps, large side setbacks (in excess of ADG requirements) and the ground level interface between raised levels due to flooding issues – fall short of design excellence.

Response

Exposed vehicle ramps are not necessarily considered to compromise the built form if appropriately softened with landscaping. The proposal meets the landscaping requirements and the driveway provides for generous separation and transition between the tower and lower density development to the south.

Large side setbacks in this instance are not considered to adversely impact the proposed development nor future development or the streetscape in this location. Greater building separation is considered to provide benefits in the way of preserving view corridors and minimising overshadowing to the public domain.

Level changes between natural ground and the finished floor levels are unavoidable. The transition has been improved through the removal of wheelchair platform lifts. Greater setback to the northern side setback has been provided to accommodate additional landscaping that will screen the podium. The podium is also set back from the street with landscaped beds which will provide a suitable interface with the public domain.

The massing finishes and access arrangement across the street are not considered to be contributory to the improvement of the evolving character. The proposal on the subject site should take the opportunity to evaluate lessons learned and propose a fresh approach to set itself apart as an appropriate and exemplary precedent. It is the Panel's opinion that a proposal has the opportunity to challenge previous conventions and propose new approaches to vehicular access and flood storage, especially given the generous dimensions of the site. The Panel is concerned with the extent of basement coverage, constrained areas of deep soil along the setbacks and the landscape plan for the entire site, which proposes substantial hardscaped areas and complicated level changes.

It is acknowledged that there are shortcomings with the finishing of the building located opposite the site. These are however considered largely a product of the certification process rather than the general layout of the scheme (e.g. landscaping and flood storage has not been implemented as approved).

As noted above, the access arrangement proposed is considered satisfactory regarding the controls. There are also numerous examples of the same layout (tower with driveway beside within the setback) in the adjoining street which were reviewed through the design review panel process and determination by the Wollongong Local Planning Panel as demonstrating design excellence.

The proposed means of achieving flood storage are consistent with Council policy. There are not considered to be superior alternative approaches.

The basement has been contracted in size to allow for greater boundary landscaping. This includes increasing the setback from the northern boundary from approximately 400-800mm to approximately 1500-1845mm. The southern setback is increased from approximately 1300-1500mm to 1500mm-1910mm. The front setback is increased from approximately 1050 to 1500mm.

The proposal incorporates a compliant 6m wide unencumbered deep soil zone along the rear boundary as well as sufficient boundary setbacks to accommodate landscape screening. The planter beds on the podium are of a suitable depth and width. Street trees are proposed along the frontage. The landscaping is satisfactory regarding the applicable controls and has been reviewed by Council's Landscape Officer who has recommended suitable conditions of consent.

Level changes remain between the street, podium and communal open space however the ground floor level has been reduced from RL 5.2 to RL5.0. Balcony levels have correspondingly been reduced from RL5.1 to RL4.9. The communal open space is set at approximately RL3.6. There is a level change of 1.4m between the communal open space and internal floor level. Whilst this does result in some challenges in resolving transitions, this is reasonably dealt with in this instance. The communal open space could be potentially elevated to be closer to the same level as the internal floor level however would also need to incorporate flood storage which would result in a communal open space area that was elevated

DRP commentary	Response
	<p data-bbox="762 197 1402 280">adjacent to the side boundary and add significant additional cost.</p> <p data-bbox="762 280 1402 448">Graded transitions have been provided instead of fixed wheelchair platform lifts to ensure equitable and independent access to the site and communal open space.</p>

DRP commentary

Response

While the scale and presentation to the street reflect planning controls for the precinct, the ample site area could allow for alternative built form configurations that accommodate the vehicular ramp into the building footprint. The footprint's siting and the way that communal open spaces above the plinth relate to the rest of the open spaces and natural ground, need to be better integrated to avoid the disconnection and spatial isolation seen in recent adjacent developments.

There is no particular control requiring incorporation of the vehicle ramp under the building and the design approach is not considered to result in non-compliances or a compromised outcome.

The wheelchair platform lifts have been removed and replaced with ramps that allow for independent travel for those who might be mobility impaired.

While there is an example opposite the site of poor execution of the communal open space and public domain elements, there are also other examples on Beatson Street (see below) where such compromised outcomes have not resulted from similar design.

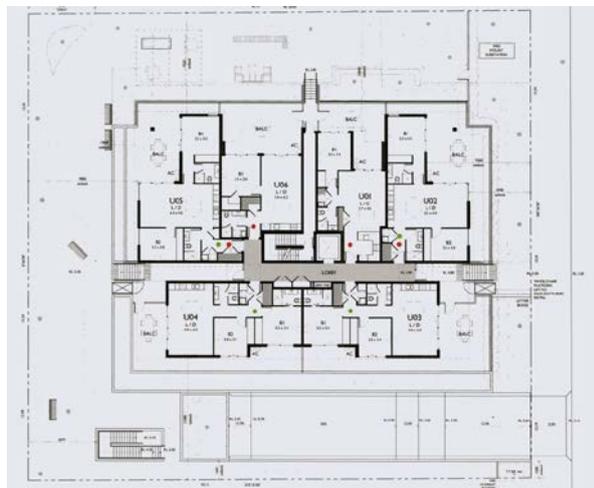


Figure 2: DA-2018/803 (14 Beatson St)

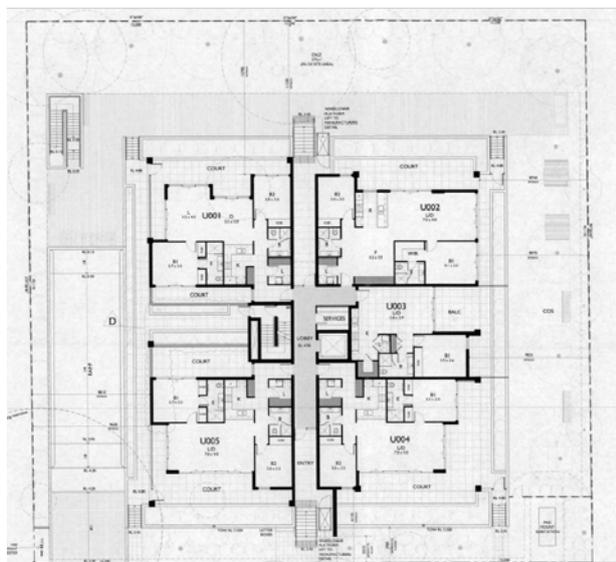


Figure 3: DA-2016/1414 (6 Beatson St)

DRP commentary	Response
<p>Given the shape and proportions of the site, (wider frontage than depth), it is counter-intuitive to propose a building that is deeper than it is wide. Not only does this reduce engagement with the street as referred to above, it also orients most apartments to face the side setbacks and locates the pool in a setting which will eventually be overshadowed by an adjoining building of similar scale. A longer building would provide a better streetscape, allow more units to face the street and increase the rear setback, which is a better pool location: more private, less overshadowed and adjacent to deep soil landscapes. An overall reconsideration of the position of the building would also result in a better placement of the ramp within the building footprint, thus liberating a substantial portion of the site in favour of greater landscape areas.</p>	<p>Engagement with the street is not considered to be compromised by the orientation of the building and passive surveillance is provided to the street.</p> <p>Orientation of units is considered to better take advantage of northerly sun and the setbacks either comply or exceed those required.</p> <p>The pool has now been removed, noting that this was not entirely necessary in order to address overshadowing concerns.</p> <p>Having a larger number of units facing the street is not a requirement of the planning controls.</p> <p>The aesthetic of the building is not considered to be compromised by having the wider proportion running east-west.</p> <p>The rear setback includes the deep soil planting area which aligns with the deep soil area of the development immediately to the east. This combined area ensures a generous separation between the two developments.</p> <p>The development satisfies the landscaping requirements of the DCP and ADG.</p>
<p>As noted above, recent developments illustrate that side setbacks accommodating exposed ramps – rising and falling to meet flood levels – create large areas of extensive hard stand that are devoid of vegetation or purpose and highly detrimental to the physical and visual amenity of the subject sites and adjoining properties. Because these setbacks are generally greater than prescribed ADG minimums, the streetscape, too, suffers adverse visual and physical impacts, with large expanses of hardstand extending across street frontages. This is clearly demonstrated by recently built outcomes, including the site opposite the subject site. Therefore, on such a large site with flooding constraints, the current proposal to provide an exposed ramp within a very wide setback cannot be supported.</p>	<p>Whilst the development opposite the subject site has been poorly executed, there are numerous other examples of ramps beside residential towers in the locality which are not considered to compromise the design outcome. Placing the ramp in the building footprint creates other challenges in that due to the need for the ramp to come up to a lip for flooding reasons, it would mean the ramp could not go under the building as such but would result in a unit being removed from the ground floor elevation. It also results in less efficient manoeuvring in the basement.</p> <p>As to the physical and visual amenity impacts, the driveway design and location is not considered to be unsupportable and has in fact been similar proposals supported through the design review panel process and determination by the Wollongong Local Planning Panel as demonstrating design excellence.</p>

DRP commentary	Response
<p>While the Panel understands that the ground floor must be raised to meet flooding requirements, this has resulted in nearby developments having large expanses of hard paving, with highly constrained engagement with the natural ground. Alongside setbacks, a pattern is emerging of deep trenches extending the depth of the site with little purpose or character. With little coordination between adjoining properties, these largely inaccessible spaces are liable to become a major issue in terms of aesthetics, ecology, land use and management. It is unacceptable that the side boundaries are left with no provision of deep soil and dominated by high walls protruding from the basement. There is a poor relationship between the planting on the ground level and the open space areas above the basement plinth.</p>	<p>The level change between natural ground and the finished floor level is dictated by the flood levels, as is the requirement for flood storage under the building footprint. Ensuring a suitable transition between levels is however important. In this instance, wheelchair platform lifts have been replaced with ramps that can be independently navigated. The podium is screened with landscaped areas and set back from the boundaries. The side boundary setback of 1500mm is sufficient to accommodate suitable landscape screening and is unencumbered by basement below. The communal open space is generally level with natural ground which means that the boundary landscaping adjacent to it can provide meaningful connection and visual amenity to the space whilst remaining accessible for maintenance.</p>
<p>Excessive hard surfaces, dislocation from soft landscape and poorly resolved side setbacks are exacerbated on the subject site by a proposed basement that covers most of the site. This is predicated on car numbers in excess of Council's requirements, excessive storage and inefficiently designed accessible spaces. To address these issues, the basement must be significantly reduced in size with excessive spaces, storage and inefficiencies removed. This will increase deep soil potential, which should be provided along the northern boundary. More stepping between raised and natural levels is required to better integrate soft and hard surfaces, and better use of the deep soil should be demonstrated - for large trees, absorption and specific uses.</p>	<p>As noted above, the basement has been setback from the boundaries to accommodate deep soil landscaping which is in compliance with the controls.</p> <p>There are opportunities for efficiencies within the basement (surplus car parking remains and there are duplicate shared spaces) however this is not considered to be driving an adverse outcome in this instance.</p>
<p>Any provision of additional car parking should count against the overall GFA. The Panel is aware that carparking is proposed above that required by the controls, which increases the extent of basement. The applicant should reconsider the need for expansive basement areas which reduce deep soil along the side and front boundaries.</p>	<p>Surplus car parking is included as GFA and landscaped areas have been increased.</p>

DRP commentary	Response
<p>Little information has been provided at this point with regards to sustainable measures and systems. It is strongly encouraged that all suitable sustainability measures be included in any future proposal.</p>	<p>The applicant points to meeting BASIX commitments as sufficient to address sustainability.</p> <p>The proposal provides a suitable land use with a variety of unit sizes.</p> <p>The layout of the units ensures above minimum amenity targets are achieved for solar access and ventilation. Passive design elements will reduce reliance on mechanical ventilation.</p>
<p>In view of the Panel's recommendations with regard to the extent of the basement footprint and the built form, it is expected that any amended scheme will require a new landscape concept plan. The Panel is well aware that the flood management constraints which apply to the site give rise to the need for levels that are very tricky to resolve, particularly in the landscape design. The comments provided here are intended to provide guidance in the development of a revised landscape concept plan, based on addressing concerns about the approach taken in the current proposal.</p>	<p>An amended landscape plan has been provided</p>
<p>The following concerns should be addressed in any future landscape design:</p> <p>a) As noted above, the Panel is of the opinion that the landscape scheme provides for inadequate deep soil along the site's northern, western and southern boundaries. This results largely from the excessively large basement footprint, the large, exposed external ramp servicing the basement, the flood constraints that lead to level changes along the boundaries and the locations of the fire egress stairways.</p>	<p>Increased deep soil planting is provided along the side boundaries.</p> <p>Ramps are considered to be well integrated into the design.</p> <p>The entry is considered to be legible and accessible.</p> <p>Letterbox location is shown as adjacent to the front boundary.</p> <p>Suitable separation is provided between units and communal open space through planter beds and the change in levels.</p> <p>The pool has been removed and circulation throughout the communal open space simplified.</p> <p>Fire egress must meet the applicable standards.</p> <p>Fire stairs to the north eastern corner are screened by the bicycle enclosure and toilet. The bike enclosure and toilet do not unreasonably encroach upon or compromise the function of the COS area.</p>

Communal Private Open Space (COS)

In addition to the problems outlined above with regard to access, circulation and the siting of utilities and facilities, the following concerns are raised by the Panel:

a) The northern setback will likely be largely over-shadowed by any future development of the properties to the north. Shadow impacts on landscape areas should be identified and used to inform the siting of COS spaces and functions. It is likely that the optimal location for the community garden be in the northwestern (or south-western) corner of the site and that of the pool area in the eastern setback.

b) Way-finding, access to and circulation within the COS should be clear and easy. Direct access from the plinth to the main activity spaces of the COS from the building is desirable, minimising the use of other spaces as circulation corridors.

c) A communal room (or rooms) should be provided to service the COS. It should include kitchen and ablution facilities. Facilities to support the communal garden (such as workbenches, storage of equipment, and a water supply) should also be provided.

d) The hydrant pump room should be relocated to minimise its intrusion into the COS. (If possible, it should be located within the building).

e) Fire stairs should be more sensitively located with regard to the functionality and amenity of the COS.

f) Visual surveillance of the swimming pool from the barbecue area and other spaces where parents may choose to sit is compromised by the proposed plantings that will enclose the pool.

g) The Panel does not take issue with the proposed provision of a space to the south of the building but considers its spatial amenity and functionality to be too adversely affected by the fire stairs to make it inviting or usable in practice. It should be more generous and not contain the fire stairs.

h) The role of the COS' north-western corner is unclear.

The community garden component has been removed.

Circulation within the COS area is clear.

A more direct link to the COS area could potentially have been achieved were the corridor oriented north/south however the current design is not considered to compromise the function or accessibility of this space. There are clear sight lines to the external areas from the lift foyer area.

The location of fire stairs is not considered to compromise the amenity or function of the COS area.

A room is not provided however there is a pergola with BBQ area as well as a toilet.

Hydrant pump room has been removed.

COS in the south eastern corner has been removed.

Areas within the COS are considered to have reasonably well defined functions.

DRP commentary	Response
<p>i) The functionality (and possibly amenity) of the semi-circular spaces on deep soil is unclear.</p>	
<p>Private Outdoor Space</p> <p>The terraces of the ground floor units are spatially complex and include narrow corridors that add little in terms of functionality or amenity but a lot in terms of maintenance. It is questionable as to whether or not the proposed turf areas will be useful or troublesome. While the Panel supports direct access from the ground floor units' terraces to the common outdoor areas, it is concerned about the impacts on way-finding, circulation conflicts and amenity of the proposed approach to entrances.</p>	<p>The terraces on the ground floor units have an area that meets the minimum dimensions as far accommodation of outdoor dining. Whilst there are narrow terrace areas that wrap around, these are tiled and not considered to result in any significant maintenance burden.</p> <p>Access is provided from the terrace of the rear two units to the rear deep soil area however this is not considered to be confusing or to result in adverse impacts.</p>
<p>The bin collection area is being proposed along the edge of the street. However, there is no indication where the permanent storage for the bins is. This needs to be clarified.</p> <p>External circulation needs to be simplified, made clearer and incorporate stepping between levels to better integrate raised surfaces and natural ground.</p> <p>The location of the letterboxes needs to be determined before finalising the landscape concept plan.</p>	<p>Bins are generally stored in the basement bin enclosure prior to collection.</p> <p>External circulation is now through ramp transitions that provide independent means of access.</p> <p>Letterboxes are located adjacent to the front boundary at the entrance.</p>
<p>The ground plane is dominated by the vehicle entry and an excessively large side setback. This reduces street address and passive surveillance, already constrained by the elevated nature of the plinth. These outcomes reduce legibility and natural surveillance and the panel strongly recommends the architect to explore a different approach to the ramp, and the provision of a more legible entry lobby.</p> <p>Surveillance of the swimming pool from adjoining COS is poor due to proposed plantings.</p>	<p>Vehicle entry is discussed above.</p> <p>Swimming pool has been removed.</p>

DRP commentary	Response
<p>The panel hopes to see robust materials and a variety of textures and coloration as an integral part of the design and that measures are taken for these choices not to be valued-engineered in later parts of the process. The Panel is making an emphasis on architectural expression as it is an integral component of design excellence.</p>	<p>A materials and colour schedule have been submitted which indicates a mixed palette of finishes.</p>
<p>As discussed above, the proposal should be amended to further refine the interface with the ground plane to both the street and lower ground gardens. Integration of the vehicular ramp should assist in providing greater areas of vegetation and green open spaces along the side boundaries. The quality of the future landscape along property boundaries is not of a sufficiently high standard.</p>	<p>See discussion above.</p>
<p>One of the most relevant issues with the development is its frontage width and the response to the ground floor interface. This is exacerbated in part by the provision of an external vehicular ramp.</p> <p>The generally hardscape nature of the communal spaces on the ground plane and their spatial integration with the areas of deep soil is a concern for the panel. The role of the paving is for circulation rather than to contribute to particular (as yet unknown) activities of the turfed semi-circular spaces among trees.</p>	<p>See discussion above.</p>
<p>This is not applicable to the site. However, it is noted that the current location of the pool would be subject to future overshadowing should the sites to the north redevelop.</p>	<p>The pool has been removed.</p>
<p>The position of the tower and its current orientation should be tested in favour of a north south tower that will create better communal areas to the rear of the site.</p>	<p>No north / south oriented tower scheme has been provided. Whilst there may be merit in investigating an alternate layout/orientation, the proposal is not considered to be compromised as a result of the chosen east/west orientation of the tower. This does capitalise on northerly aspect as well as preserve view corridors between the buildings and provide generous side setbacks.</p>

2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

2.1.1 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

2.1.2 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

Council records do not contain any previous approvals or historic uses of the land that would indicate potential contamination and the site with dwelling houses having existed on all lots as early as 1961. Council records do not identify the site as potentially contaminated and further investigation is not considered warranted under the circumstances. No concerns are raised regarding contamination as relates to the intended use of the land and the requirements of clause 7.

2.1.3 STATE ENVIRONMENTAL PLANNING POLICY (KOALA HABITAT PROTECTION) 2019

The City of Wollongong is identified within Schedule 1 as land to which this Policy applies. Wollongong is located within the South Coast Koala Management Area.

The land is not identified as being within the site investigation area or Koala development application maps under this policy.

2.1.4 STATE ENVIRONMENTAL PLANNING POLICY NO 65—DESIGN QUALITY OF RESIDENTIAL APARTMENT DEVELOPMENT

SEPP 65 aims to deliver a better living environment for the residents within residential apartment developments and enhance the streetscapes and neighbourhoods in which these buildings are located.

The development meets the definition of a ‘residential flat building’ as it is more than 3 storeys and comprises more than 4 dwellings. As such, the provisions of SEPP 65 apply. The proposal has been considered by Council’s DRP in accordance with Clause 28 and Schedule 1, as reflected above.

A statement has been prepared by a Registered Architect addressing the requirements of SEPP 65 and was submitted with the application at lodgement accordance with Clauses 50(1A) & 50(1AB) of the Environmental Planning and Environment Regulation 2000. A revised statement was not submitted with the amended plans.

Schedule 1 of SEPP 65 sets out the design quality principles for residential apartment development. These must be considered in the assessment of the proposal pursuant to clause 30(2)(a) of the Policy and are discussed below

Principle 1: Context and neighbourhood character

The proposal continues a transition to higher density residential form that is evident on adjoining and nearby land and will positively contribute to the streetscape.

Principle 2: Built form and scale

The proposal is of a bulk and scale that is consistent with the applicable planning controls.

The form is well articulated and uses a mixed palette of materials.

The frontage will be upgraded with new footpath and street trees and the podium is screened with suitable landscaping.

Principle 3: Density

The units achieve high levels of amenity for residents as far as outlook, solar access and ventilation.

The density is compliant with the maximum FSR permitted under the LEP.

The site is located in close proximity to the city centre and associated amenities and services.

Principle 4: Sustainability

The proposal is satisfactory regarding sustainability through the implementation of the following:

- Maximising the number of apartments with a northerly orientation and the layout of apartments with none having a southerly aspect. The ADG compliance table of the proposal confirms the design exceeds minimum requirements under the ADG for solar access with the 70% target exceeded by 10% - that is achieving 80% of units with a minimum of 2 hours solar amenity mid-winter.
- Maximising the number of apartments which incorporate natural ventilation by responding to the local climate and reducing the need for mechanical ventilation and air conditioning. To achieve adequate natural ventilation, apartment design aims to orientate and configure the apartment layouts to promote and maximise natural cross ventilation. In this case, the design exceeds minimum targets by 10%, achieving cross ventilation to 70% of apartments.
- Provide appropriate housing density to maximise use of public transport infrastructure due to the site's proximity to public transport.
- Use of construction materials that is conducive to thermal mass such concrete slabs and insulated Hebel power panel wall panels.
- Selective use of sun screening devices across east and west facades as required to minimise use of high energy consumption cooling systems.
- Waste minimisation and recycling including the provision of an on-site compactus unit.
- Promote the use of low energy light fittings and energy saving appliances, noting the energy targets are exceeded under BASIX.
- Landscape design promotes environmentally sustainable and enhances environmental performance by incorporating a diverse and appropriate range of planting, larger canopy shading trees, various green spaces including a resident's vegetables gardens. Importantly the area for landscaping exceeds the minimum areas for deep soil and landscaping under the ADG.

Principle 5: Landscape

The landscaping provided is meaningful and integrated well into the design. Residential amenity is improved, and the development will positively contribute to the streetscape.

Principle 6: Amenity

The units are well designed with respect to occupant amenity such as room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access.

The setbacks to adjoining development comply or exceed the minimums required and the built form is acceptable regarding visual and acoustic privacy and overshadowing.

Principle 7: Safety

The proposal incorporates quality public and private spaces that are clearly defined and fit for the intended purpose.

Passive surveillance of public and communal areas is provided.

Access points are clearly defined, secure and well lit.

Principle 8: Housing diversity and social interaction

A mix of apartment sizes is provided.

The communal space is accessible and provides opportunities for social interaction among residents.

Principle 9: Aesthetics

The built form is well proportioned with a balanced composition of elements that reflect the internal layout and structure.

A variety of materials, colours and textures are incorporated into the façade.

Apartment Design Guide (ADG)

An assessment of the application against the Apartment Design Guide (ADG) is contained at **Attachment 5**.

2.1.5 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

In accordance with clause 45 of this policy, Endeavour Energy were consulted with regard to any potential impacts to the energy network. Recommended conditions were provided.

2.1.6 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The proposal is BASIX affected development to which this policy applies. In accordance with Schedule 1, Part 1, 2A of the Environmental Planning and Assessment Regulation 2000, a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

The BASIX certificate was issued no earlier than 3 months before the date on which the development application was lodged.

2.1.7 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Clause 1.4 Definitions

residential flat building means a building containing 3 or more dwellings but does not include an attached dwelling or multi dwelling housing.

Part 2 Permitted or prohibited development

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned R1 General Residential.

Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposal is satisfactory regarding the above objectives.

The land use table permits the following uses in the zone.

*Attached dwellings; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dual occupancies; Dwelling houses; Environmental facilities; Exhibition homes; Group homes; Hostels; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; **Residential flat buildings**; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Signage; Tank-based aquaculture*

The proposal is categorised as a *residential flat building* as defined above and is permissible in the zone with development consent.

Part 4 Principal development standards

Clause 4.3 Height of buildings

The proposed building height does not exceed the maximum of 24m permitted for the site.

Clause 4.4 Floor space ratio

The table below is taken from the applicant submission.

Table 4: Gross Floor Area and Floor Space Ratio Calculations	
Floor Area (m ²)	Floor Area (m ²)
Apartments	
Basement (4 x surplus parking)	51.8
Ground Level	456.3
Level 1	473.9
Levels 2	473.9
Levels 3	473.9
Level 4	473.9
Level 5	473.9
Level 6	384.1
Total GFA	3261.7
Site Area	2175.2
Permissible FSR	1.5:1
Proposed FSR	1.49:1

A surplus of four spaces is identified and included as gross floor area in accordance with Council controls. The development complies with the maximum FSR of 1.5:1.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

A padmount substation is proposed in the north west corner of the site.

Clause 7.3 Flood planning area

The site is on land at or below the flood planning level. All habitable floor levels of the development will be above the flood planning level. Flood storage is provided underneath the building footprint in accordance with Council requirements. The development will not significantly alter flow distributions and velocities to the detriment of other properties or the environment of the floodplain. Councils Stormwater Engineer has provided a satisfactory referral subject to conditions.

Clause 7.5 Acid Sulfate Soils

The site is identified as potentially containing class 5 acid sulphate soils. An acid sulphate soils management plan is not required as the proposal does not involve works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

Clause 7.14 Minimum site width

The site has a width of approximately 48m which exceeds the minimum requirement of 24m for residential flat buildings.

Clause 7.18 Design excellence in Wollongong city centre and at key sites

The proposal is considered to be consistent with the provisions for design excellence as follows:

(4) *In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:*

(a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*

Satisfactory

(b) *whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*

The footpath for the frontage will be replaced in accordance with Council's public domain technical manual and street trees will be provided. Suitable landscaping is provided within the setbacks and on structure and the external appearance of the building will positively contribute to the streetscape.

(c) whether the proposed development detrimentally impacts on view corridors,

The site is not located along a key view corridor nor will it impact on significant views from adjoining land.

(d) whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,

N/A

(e) how the proposed development addresses the following matters:

(i) the suitability of the land for development,

The proposal is suitable regarding the particular site characteristics and constraints.

(ii) existing and proposed uses and use mix,

The use is consistent with that envisaged by the planning controls.

(iii) heritage issues and streetscape constraints,

There are no heritage issues or particular streetscape constraints.

(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,

The tower is appropriately setback from boundaries and adjoining development.

(v) bulk, massing and modulation of buildings,

The proposal is of a bulk that aligns with the applicable controls and there is suitable articulation of the facades.

(vi) street frontage heights,

N/A

(vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,

Sustainable design elements include excess of minimum requirements for solar access and cross ventilation, compliance with BASIX requirements and generous landscaped areas including deep soil. Overshadowing impacts are acceptable given the permitted height and bulk under the applicable controls. The building is not of a scale that is considered to result in significant wind impacts. The development does not include significant glazed areas and a substantial amount of glazing is setback beneath balconies.

(viii) the achievement of the principles of ecologically sustainable development,

The proposal provides a suitable land use in an accessible location.

BASIX targets are achieved, and the design of the units incorporates measures for passive energy saving such as recessed balconies, screened western elevations and good cross ventilation and natural light.

The proposal does not result in loss of any significant vegetation.

The proposal is satisfactory with respect to the applicable planning controls and is considered acceptable with respect to intergenerational equity.

(ix) pedestrian, cycle, vehicular and service access, circulation and requirements,

The pedestrian entry is visible and is accessible independently for those who may have a disability. The vehicle entry is appropriately located and provides for suitable sight lines. Access and manoeuvring for vehicles within the basement complies with Australian Standards. Circulation throughout the building and to the common open space for residents is satisfactory.

(x) impact on, and any proposed improvements to, the public domain.

The proposal includes upgrading the footpath and planting of trees along the frontage. The podium is suitably screened, and on-structure planter beds will provide visual amenity to the building. The façade form is considered to positively contribute to the streetscape.

Part 8 Local provisions—Wollongong city centre

Clause 8.1 Objectives for development in Wollongong city centre

The proposal is satisfactory regarding this clause.

2.2 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT

None applicable.

2.3 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN

2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The proposal involves a variation to the applicable development controls in the DCP s discussed below. A full compliance table is contained at **Attachment 6**.

CHAPTER A1 – INTRODUCTION

8 Variations to development controls in the DCP

Front setback

(a) The control being varied;

Chapter D13, section 2.2 Building to street alignment and street setbacks: A 4m front setback is recommended.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

An accessible ramp and terrace encroach into the 4m setback, as well as the basement below. The basement is setback 1.5m. The ramp extends from the property boundary up to the ground level. The terrace encroaches by approximately 1.5m. The ramp is required in order to provide equitable independent access into the building. The basement provides a suitable setback to achieve front boundary landscaping. The terrace is for one unit and is minor encroachment that is a small proportion of the frontage, the remainder of which complies.

(c) Demonstrate how the objectives are met with the proposed variations; and

The variation is satisfactory regarding the objectives of the control which are as follows:

a) To provide a hierarchy of street edges from commercial core with no street setbacks to residential locations with landscaped setbacks.

A suitable landscaped setback is required. With the bulk of the building complying or exceeding this requirement.

- b) *To establish the desired spatial proportions of the street and define the street edge.*
Satisfactory.
- c) *To increase a clear transition between public and private space.*
Satisfactory.
- d) *To locate active uses, such as shopfronts, closer to pedestrian activity areas.*
N/A
- e) *To assist in achieving visual privacy to apartments from the street.*
The terrace is elevated due to flood level requirements and there is landscape screening within the setback.
- f) *To create good quality entry spaces to lobbies, foyers or individual dwelling entrances.*
Satisfactory
- g) *To allow an outlook to, and surveillance of, the street.*
Satisfactory
- h) *To allow for street landscape character, where appropriate.*
Satisfactory
- i) *To maintain shared views to the ocean.*
N/A
- j) *To maintain sun access to the public domain*
N/A

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

This is demonstrated above.

2.3.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN 2019

A 1% levy is applicable to the proposal under this plan.

2.4 SECTION 4.15(1)(A) (IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development.

2.5 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

Conditions of consent are recommended regarding demolition.

2.6 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

The proposal is satisfactory regarding the applicable planning controls as detailed in the body of this report. Internal and external referrals are satisfactory subject to appropriate conditions of consent.

The proposal is considered acceptable regarding the likely impacts.

2.7 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT

Does the proposal fit in the locality?

The proposal is considered appropriate regarding the zoning of the site and the character which is consistent with that anticipated by the applicable planning controls.

Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

2.8 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS

Submissions received following notification are discussed at section 1.5.

2.9 SECTION 4.15(1)(E) THE PUBLIC INTEREST

The character and form of the proposal is consistent with that envisaged under the zoning and applicable planning controls. Submissions raised following notification are considered to be addressed at section 1.3 of this report. Internal and external referrals are satisfactory subject to appropriate conditions of consent. The proposal is considered to be in the public interest.

3 CONCLUSION

This application has been assessed as having regard to the Heads of Consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979.

The proposed development is permissible with consent and has regard to the objectives of the zone and is consistent with the applicable provisions of the relevant planning instruments including Wollongong LEP 2009 and SEPP 65, ADG, Council DCPs, Codes and Policies.

Whilst the changes recommended by the DRP have not been fully implemented, the design is still considered to demonstrate design excellence and is supportable in its current form. Internal and external referrals are satisfactory, and submissions are considered to have been addressed. A minor variation to the front setback under WDCP2009 is supported in this instance.

It is considered that the proposed development has been designed appropriately given the nature and characteristics of the site and is unlikely to result in significant adverse impacts on the character or amenity of the surrounding area.

4 RECOMMENDATION

It is recommended that the development application be approved subject to the conditions contained at **Attachment 8**.

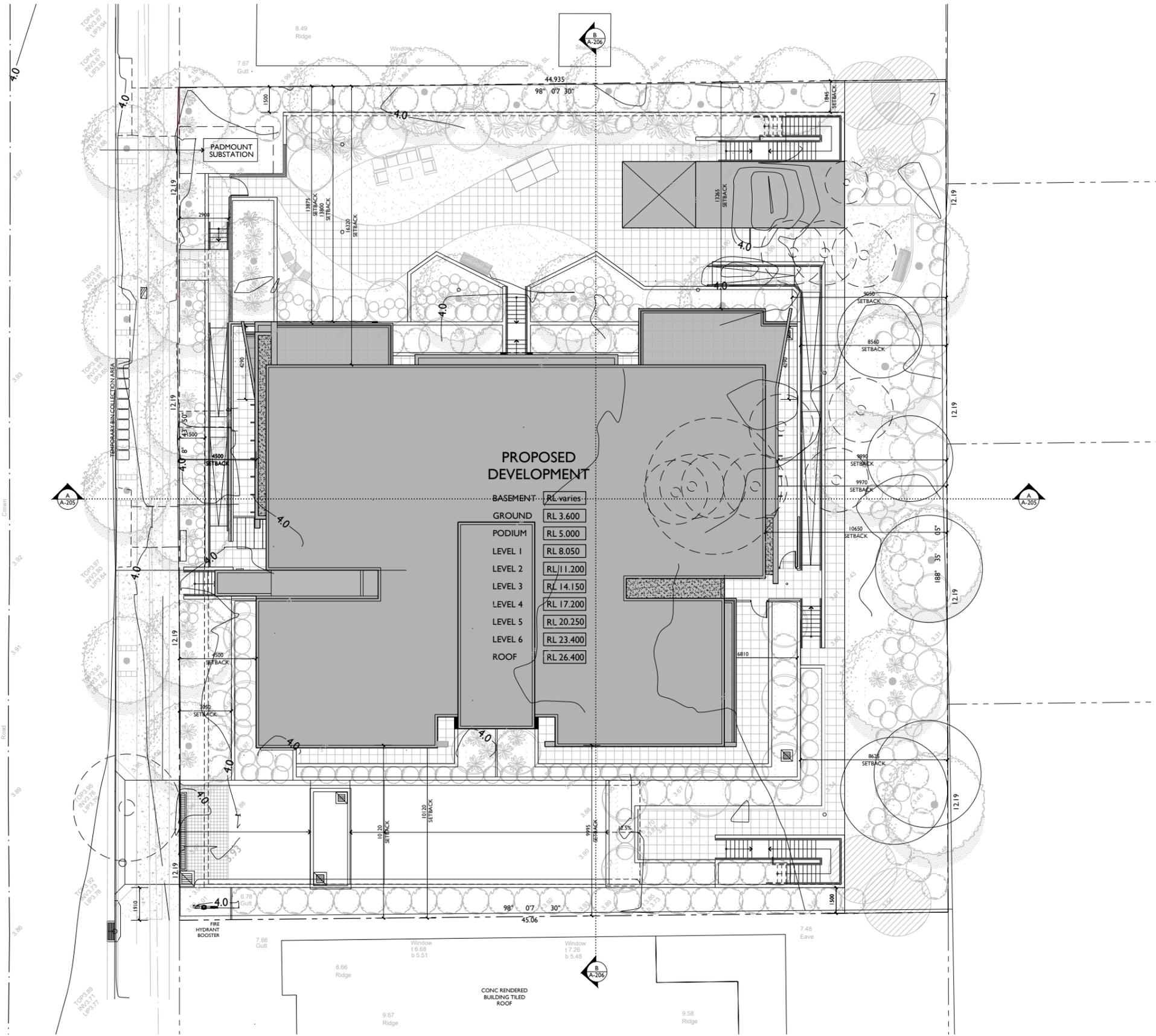
5 ATTACHMENTS

- 1 Aerial photograph
- 2 WLEP zoning map
- 3 Plans
- 4 Design Review Panel notes
- 5 Applicant response to DRP commentary
- 6 ADG compliance table
- 7 WDCP 2009 compliance tables
- 8 Draft conditions of consent

Attachment 1 – Aerial photograph



KEMBLA STREET



PROPOSED DEVELOPMENT

BASEMENT	RL varies
GROUND	RL 3.600
PODIUM	RL 5.000
LEVEL 1	RL 8.050
LEVEL 2	RL 11.200
LEVEL 3	RL 14.150
LEVEL 4	RL 17.200
LEVEL 5	RL 20.250
LEVEL 6	RL 23.400
ROOF	RL 26.400



SITE AND ROOF PLAN

NOTE: REFER TO CIVIL ENGINEER'S DOCUMENTATION FOR STORMWATER COLLECTION & ALL EXTERNAL SURFACE LEVELS. REFER TO LANDSCAPE ARCHITECTS DOCUMENTATION FOR ALL PAVING & PLANTING DETAILS.

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B	01.09.20	ISSUED FOR DA
C	17.09.20	ISSUED FOR DA

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Project
PROPOSED RESIDENTIAL APARTMENT BUILDING CONSISTING OF 40 UNITS OVER BASEMENT PARKING

At
93 - 99 KEMBLA STREET WOLLONGONG

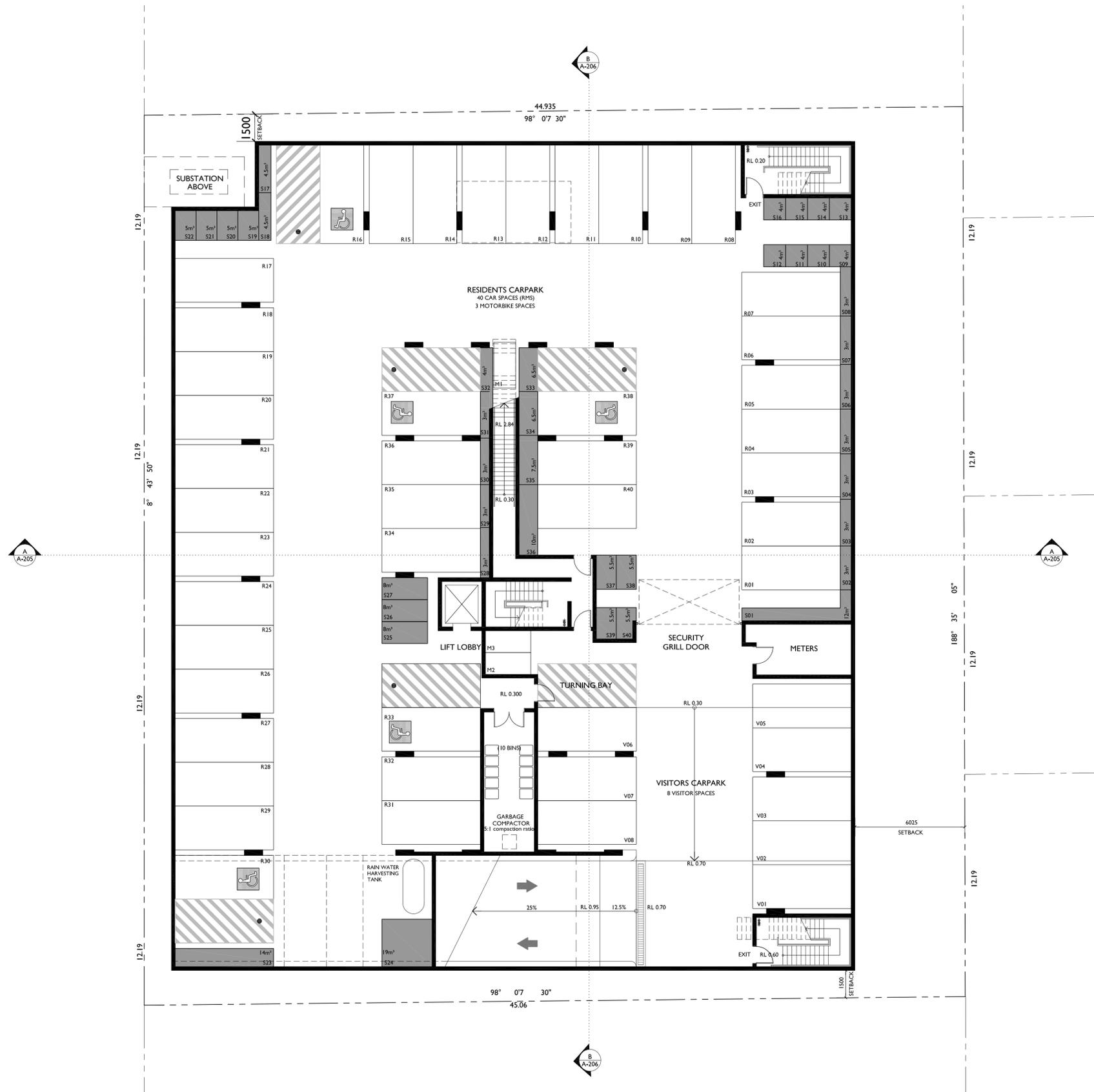
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Title DEVELOPMENT APPLICATION SITE AND ROOF PLAN	
Scale 1:125 @ A1 1:250 @ A3	Date FEBRUARY 2020
Drawn RAC SJ SI	Checked ADM
Project No. 2019 - 09	Drawing No. A-100
	Issue C

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BASEMENT PLAN
 BASEMENT RL 0.300



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Title
DEVELOPMENT APPLICATION BASEMENT FLOOR PLAN

Scale 1:125 @ A1 1:250 @ A3	Date FEBRUARY 2020
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Drawn RAC SJ SI	Checked ADM
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Project No. 2019 - 09	Drawing No. A-101	Issue D
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LEVEL I FLOOR PLAN

LEVEL I RL 8.050

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NOT FOR CONSTRUCTION LEGEND

- SUNLIGHT ACCESS
- CROSS VENTILATION
- ✱ LIVABLE HOUSING

NOTE

UNITS 1, 7, 10, 13, 16, 19, 22, 25, 28, 31 AND 34 MEET LIVABLE HOUSING GUIDELINES SILVER LEVEL.

SEE DRAWING A-103J04 AND PAGES 13-14 OF ACCESS REPORT FOR DETAILS ON COMPLIANCE.



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Title
DEVELOPMENT APPLICATION LEVEL I FLOOR PLAN

Scale 1:125 @ A1 1:250 @ A3	Date FEBRUARY 2020
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Drawn RAC SJ SI	Checked ADM
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Project No. 2019 - 09	Drawing No. A-103	Issue B
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NOTE

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SEE DRAWING A-103J04 AND PAGES 13-14 OF ACCESS REPORT FOR DETAILS ON COMPLIANCE.



LEVEL 2 - 5 FLOOR PLAN

LEVEL 2	RL 11.100
LEVEL 3	RL 14.150
LEVEL 4	RL 17.200
LEVEL 5	RL 20.250



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 OVER BASEMENT PARKING

At

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For

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Title

DEVELOPMENT APPLICATION
 LEVEL 2 - 5 FLOOR PLAN

Scale	Date	
1:125 @ A1 1:250 @ A3	FEBRUARY 2020	
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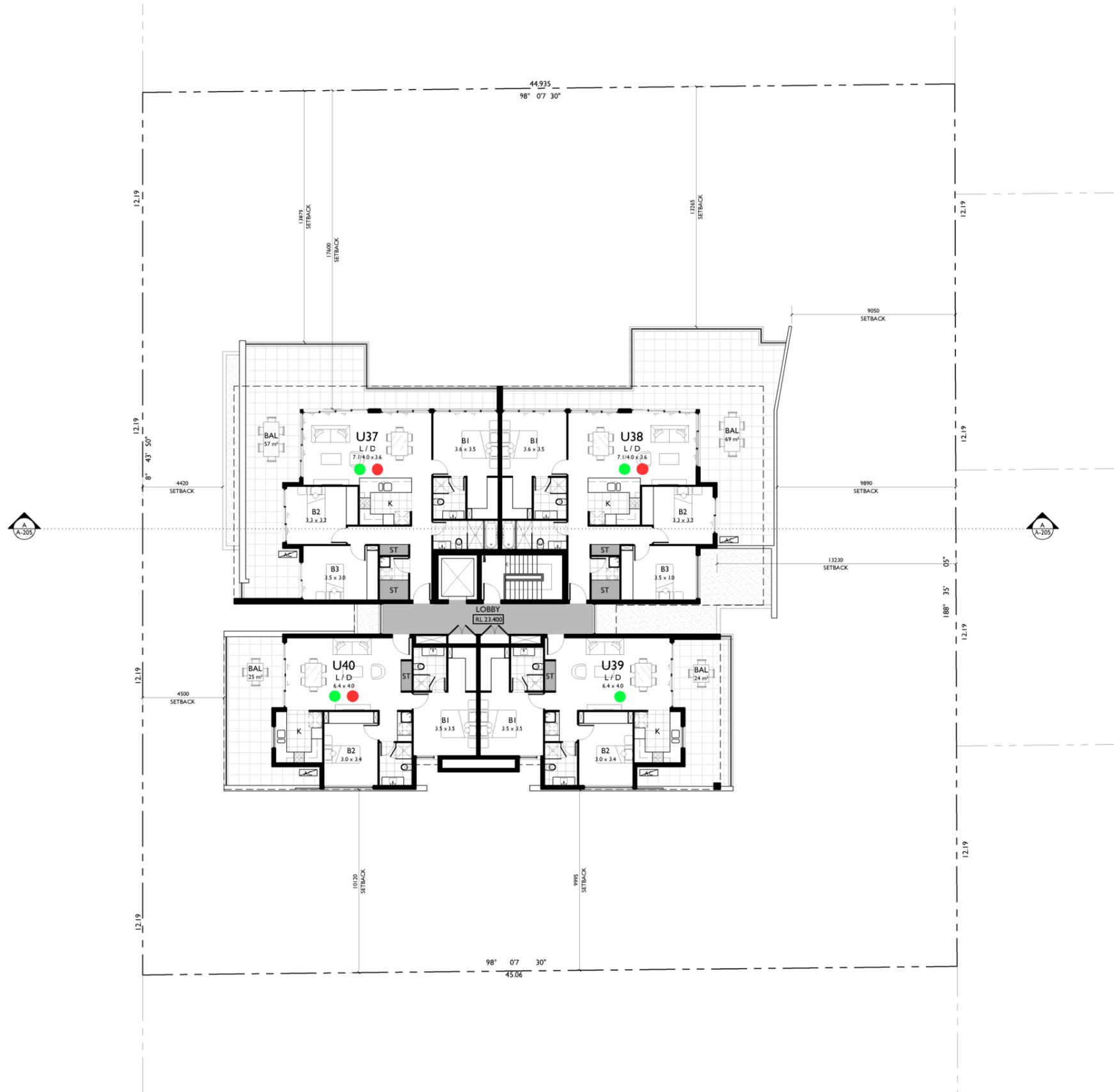
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LEGEND

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- CROSS VENTILATION



LEVEL 6 FLOOR PLAN

LEVEL 6 RL 23.400



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 OVER BASEMENT PARKING**

At
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For
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 LEVEL 6 FLOOR PLAN**

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EAST ELEVATION



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 OVER BASEMENT PARKING

At
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 WOLLONGONG

For
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Title
 DEVELOPMENT APPLICATION
 EAST ELEVATION

Scale	Date	
1:100 @ A1 1:200 @ A3	FEBRUARY 2020	
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NORTH ELEVATION



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Project
 PROPOSED RESIDENTIAL
 APARTMENT BUILDING
 CONSISTING OF 40 UNITS
 OVER BASEMENT PARKING

At
 93 - 99 KEMBLA STREET
 WOLLONGONG

For
 SOUTH KEMBLA PROPERTY
 PTY LTD

Title
 DEVELOPMENT APPLICATION
 NORTH ELEVATION

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WEST ELEVATION
KEMBLA STREET ASPECT



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 PROPOSED RESIDENTIAL
 APARTMENT BUILDING
 CONSISTING OF 40 UNITS
 OVER BASEMENT PARKING

At
 93 - 99 KEMBLA STREET
 WOLLONGONG

For
 SOUTH KEMBLA PROPERTY
 PTY LTD

Title
 DEVELOPMENT APPLICATION
 WEST ELEVATION

Scale 1:100 @ A1 1:200 @ A3	Date FEBRUARY 2020
Drawn RAC SJ	Checked ADM
Project No. 2019 - 09	Drawing No. A-203
	Issue B

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 NOMINATED ARCHITECT- The nominated Architect for ADM Projects (Australia) Pty Ltd T/AS ADM Architects is Angelo Di Martino ARB No.7608

ISSUE	DATE	DESCRIPTION
A	28.02.20	ISSUED FOR DA
B	01.09.20	ISSUED FOR DA

NOT FOR CONSTRUCTION



SOUTH ELEVATION



94 Kembla St, Wollongong NSW 2500 PO Box 3061 Wollongong
 ph: 02 4228 6400 fax: 02 4221 6455 www.admarchitects.com.au

Project
 PROPOSED RESIDENTIAL
 APARTMENT BUILDING
 CONSISTING OF 40 UNITS
 OVER BASEMENT PARKING

At
 93 - 99 KEMBLA STREET
 WOLLONGONG

For
 SOUTH KEMBLA PROPERTY
 PTY LTD

Title
 DEVELOPMENT APPLICATION
 SOUTH ELEVATION

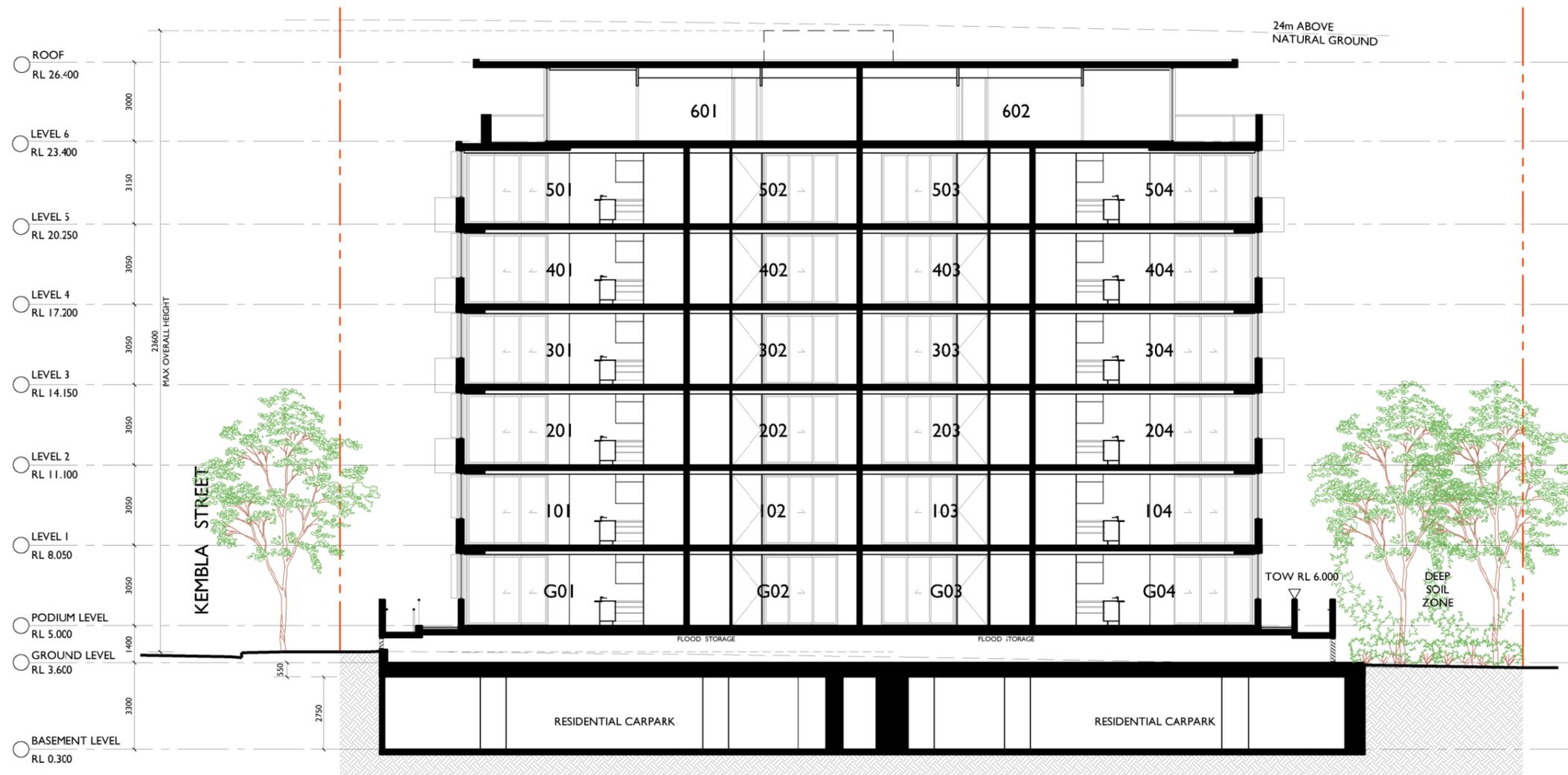
Scale 1:100 @ A1 1:200 @ A3	Date FEBRUARY 2020
Drawn RAC SJ	Checked ADM
Project No. 2019 - 09	Drawing No. A-204
	Issue B

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ISSUE	DATE	DESCRIPTION
A	28.02.20	ISSUED FOR DA
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SECTION AA



94 Kembla St, Wollongong NSW 2500 PO Box 3061 Wollongong
 ph: 02 4228 6400 fax: 02 4221 6455 www.admarchitects.com.au

Project
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 OVER BASEMENT PARKING

At
 93 - 99 KEMBLA STREET
 WOLLONGONG

For
 SOUTH KEMBLA PROPERTY
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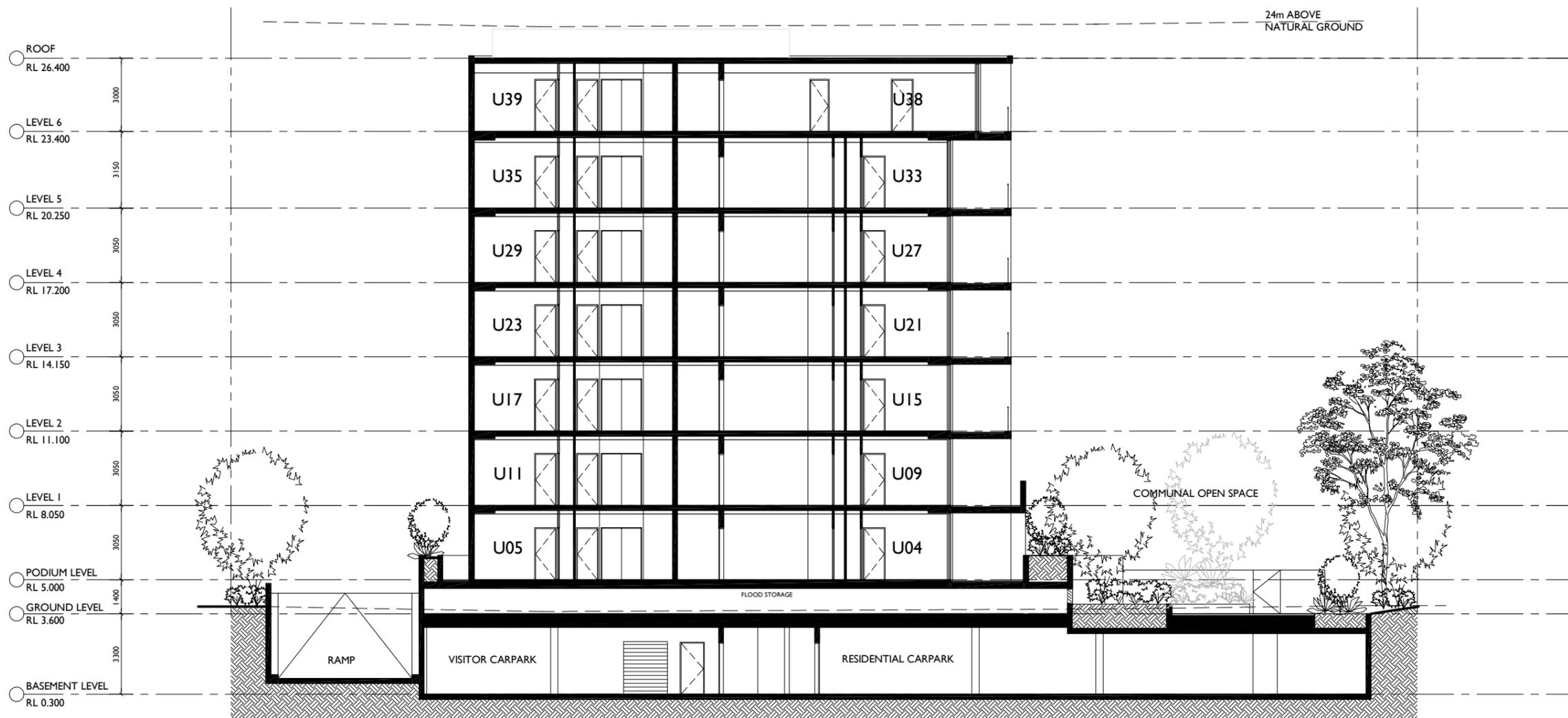
Title
 DEVELOPMENT APPLICATION
 SECTION AA

Scale 1:100 @ A1 1:200 @ A3	Date FEBRUARY 2020
Drawn RAC SJ	Checked ADM
Project No. 2019 - 09	Drawing No. A-205
	Issue B

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ISSUE	DATE	DESCRIPTION
A	15.09.20	ISSUED FOR DA

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SECTION BB



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 ph: 02 4228 6400 fax: 02 4228 6455 www.admarchitects.com.au

Project
 PROPOSED RESIDENTIAL
 APARTMENT BUILDING
 CONSISTING OF 40 UNITS
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At
 93 - 99 KEMBLA STREET
 WOLLONGONG

For
 SOUTH KEMBLA PROPERTY
 PTY LTD

Title
 DEVELOPMENT APPLICATION
 SECTION BB

Scale 1:100 @ A1 1:200 @ A3	Date FEBRUARY 2020
Drawn SI	Checked ADM
Project No. 2019 - 09	Drawing No. A-206
	Issue A

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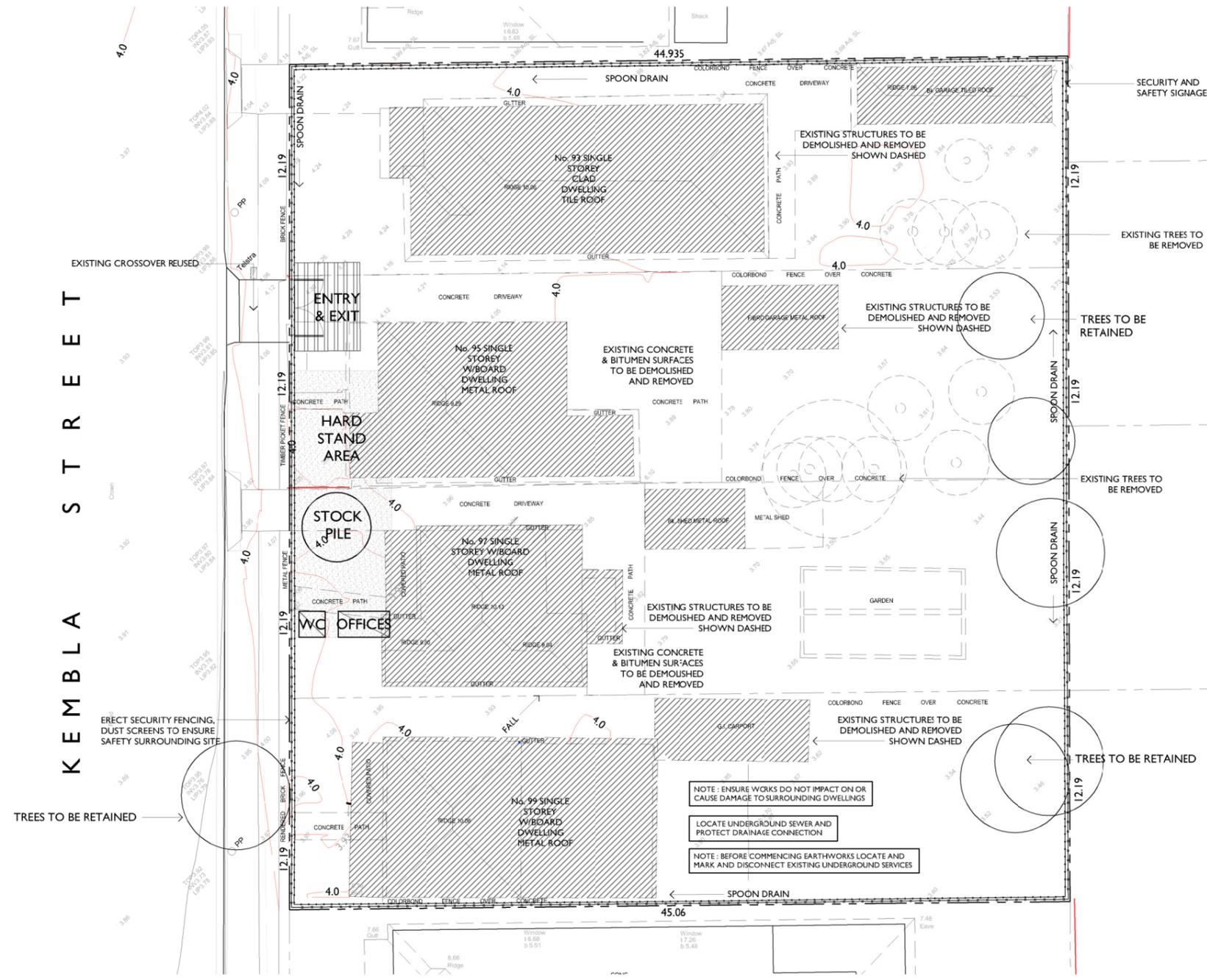
a FIGURED DIMENSIONS- These drawings are not to be scaled. Figured dimensions shall be used in all cases.

a NOMINATED ARCHITECT- The nominated Architect for ADM Projects (Australia) Pty Ltd T/AS ADM Architects is Angelo Di Martino ARB No.7608

ISSUE	DATE	DESCRIPTION
A	28.02.20	ISSUED FOR DA

NOT FOR CONSTRUCTION

KEMBLA STREET



GENERAL NOTES

1. Trade waste to be separated to recycle products, timber, glass and paper.
2. Builder to relocate site shed, amenities, storage facilities, etc. as required during the construction process.
3. Additional carparking to be provided on site following construction of basement carparking area.
4. All vehicles to leave the site in a forward direction.
5. No vehicles to be parked on the footpath reserve.

DEMOLITION, SITE CLEARING & CONTAMINATION

The Contractor is to carry out the demolition and on-site clearance in accordance with AS 2601 Demolition of Structures on the subject site. This is applicable to demolition of existing buildings, structures and services including planning and execution of the work, protection and support of adjacent structures and removal of demolished material. Demolished materials, hazardous materials (particularly if found in the removal of the existing structures) and asbestos shall be removed from site prior to any new construction work taking place on site.

If hazardous materials are encountered, appropriate and qualified personnel shall be employed to remove from site and dispose of such materials in approved manner in accordance with the provisions of all applicable legislation and with any relevant recommendations published by the National Occupational Health and Safety Commission (Worksafe Australia). If hazardous materials are encountered underground, appropriate and qualified personnel shall be employed to remove from site and dispose of such materials in approved manner in accordance with the provisions of all applicable legislation and with any relevant recommendations published by the National Occupational Health and Safety Commission (Worksafe Australia).

CONSTRUCTION MANAGEMENT POINTS

1. Note that all proposed works will be undertaken whilst the building and site is vacant.
2. All site fencing and sediment control used during demolition phase shall be retained for the construction phase and shall be extended as detailed on drawings.
3. A new hard stand area and shaker grid shall be constructed on cutwork circuit footage during all phases of the project. All to conform with the requirements of the local council and RTA.
4. During construction phase as area is set aside on site for use of mobile crane or concrete pump.
5. All construction materials to be stored on site. A designated area has been allowed.
6. All site accommodation and amenities as required will be located within the site. Some site sheds may be relocated on the podium level in the final phase of construction; and
7. A circulation survey will be carried out by the contractor before the commencement of any work on site.

Applicable Australian Standards

- AS2601 - Demolition of structures
- AS2436 - Guide to noise control... demolition sites
- AS3798 - Guide to earthworks... residential developments
- AS1288 - Methods of testing soils for engineering purposes
- AS1725 - Galvanised alloy chainwire security fencing

Access Point

The entrance to the site will be constructed of a bed of 50-75mm aggregate, 200mm deep, for the vehicular entrance width and to a length of 5.0 metres from the street kerb, so as to ensure soil and excavated materials are not transported off-site.

Storage Areas

Storage areas will be front yard open space. Rubbish/Debris: Trade waste will be contained on site until removal.

Silt Barrier

Sediment will be prevented from washing off-site by geotextile fabric with metal support and/or continuous straw bales, placed in 100mm deep trench and fixed with stakes. All silt barriers are to be wholly within the site area.

Existing Paving and Vegetation

Existing pavement and vegetation will be retained as much as possible to minimise the amount of exposed soil.

Material Stockpiles

Stockpiles of loose materials (gravel, sand, etc.) will be contained under cover and water courses and within a suitable barrier. Footpaths and road surfaces will not be used for material stockpiles.

Cleaning of Tools and Equipment

Tools and equipment will be cleaned away from drainage lines, road and pavement.

SOIL & WATER MANAGEMENT

This plan shall be read in conjunction with the engineering plans, and any other plans or written instructions that may be issued relating to the future development at the subject site. The contractor shall ensure that all soil and water management works are located as indicated on this drawing. All sub-contractors shall make aware of their responsibilities in minimising the potential for soil erosion and pollution to down-slope lands and water ways. Where practical, the soil erosion hazard on the site shall be kept as low as possible to this end. Works should be undertaken in the following sequence:

- a) install any necessary security/boundary fences for this site;
- b) construct silt fencing as detailed along boundaries and contours.

During windy weather, large unprotected areas shall be kept moist (not red) by sprinkling with water to keep the dust under control. Final site landscaping shall be undertaken as soon as possible, and within 20 working days from completion of construction activities. Any sand saved in the concrete curing process (spread over the surface) shall be removed as soon as possible, and within 10 working days from placement. Water shall be prevented from entering the permanent drainage system, unless it is sediment free; i.e. the catchment area has been permanently landscaped and/or any likely sediment has been filtered through an approved structure.

Temporary soil and water management structures shall be removed only after the lands they protected are rehabilitated. The contractors shall provide acceptable remedies for concrete and mortar splurges, paints, acid washings, lightweight waste materials and litter. Receptors for concrete and mortar splurges, paints, acid washings, lightweight waste materials and litter are to be emptied as necessary. Disposal of waste shall be in a manner approved by the site superintendent.

At least weekly the contractor shall inspect the site, providing particular attention to the following matters:

- a) ensure drains operate freely, and in-line repair or maintenance as required;
- b) remove spilled sand (or other materials) from hazard areas, including lands closer than 2 metres from likely areas of concentrated or high-velocity flows such as waterways, gutters, paved areas and driveways;
- c) conduct additional erosion and/or sediment works as necessary to ensure the desired protection is given to down-slope lands and waterways i.e. make ongoing changes to the plan;
- d) manage erosion and sediment control measures in a functioning condition until all earthwork activities are complete and the site rehabilitated; and
- e) Remove temporary soil conservation structures as a last activity in the rehabilitation programme.

The contractor shall keep a log book, making entries at least weekly, and after rainfall and/or site closure record:

- i) the volume of any rainfall events (check water bureaus);
- ii) the operations of any soil and water management works;
- iii) remedial work.

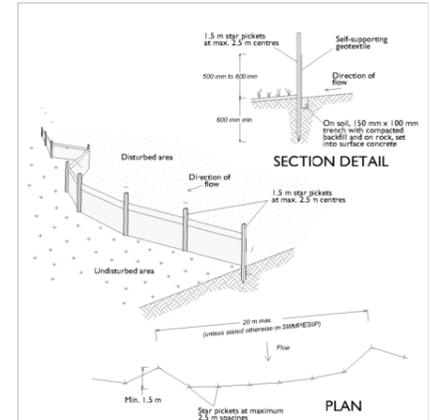
The logbook shall be kept on site and made available to any authorised person on request.

EROSION AND SEDIMENTATION CONTROL NOTES

The Contractor shall provide sediment fencing material during construction to be installed inside site fencing on low sides of site to contain all site water run off and prevent erosion. The sediment fencing material to security fencing. Sediment control fabric shall be an approved material (e.g. Humes proper silt stop) standing 500mm above ground and extending 150 below ground. Silt barriers, silt traps, siltation screens and the like shall be constructed with geotextile sediment fabric attached to steel star pickets or security fencing, or with Hessian bags. All to conform with the requirements of the local council and RTA.

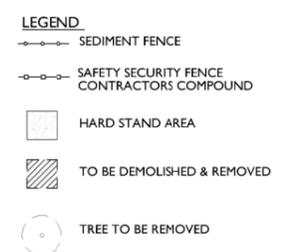
Existing drains located within the site shall be isolated by sediment control. No parking or stock piling of material is permitted in the public domain unless sited. Grass verges shall be maintained as much as practical to provide a buffer zone to the construction site. Construction entry/exit shall be located as per dwg.

The Contractor shall ensure all droppable soil and sediment is removed prior to construction traffic exiting the site. Builder shall ensure all construction traffic entering and leaving the site do so in a forward direction as much as possible. Site security fencing to consist of 1800 mm high galvanneal chain mesh panels fixed to galvanneal pipe frame and supported on concrete feet.



SEDIMENT FENCE NOTES

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated to a one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be stretched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.



NO. 93 SINGLE STOREY CLAD DWELLING TO BE DEMOLISHED
NO. 95 SINGLE STOREY W/BOARD DWELLING TO BE DEMOLISHED



NO. 97 SINGLE STOREY W/BOARD DWELLING TO BE DEMOLISHED
NO. 99 SINGLE STOREY W/BOARD DWELLING TO BE DEMOLISHED

DEMOLITION & SITE MANAGEMENT PLAN

94 KemplA St, Wollongong NSW 2500 PO Box 3061 Wollongong
ph: 02 +228 6400 fax: 02 4221 6455 www.admarchitects.com.au

Project
PROPOSED RESIDENTIAL APARTMENT BUILDING CONSISTING OF 40 UNITS OVER BASEMENT PARKING

At
93 - 99 KEMBLA STREET WOLLONGONG

For
SOUTH KEMBLA PROPERTY PTY LTD

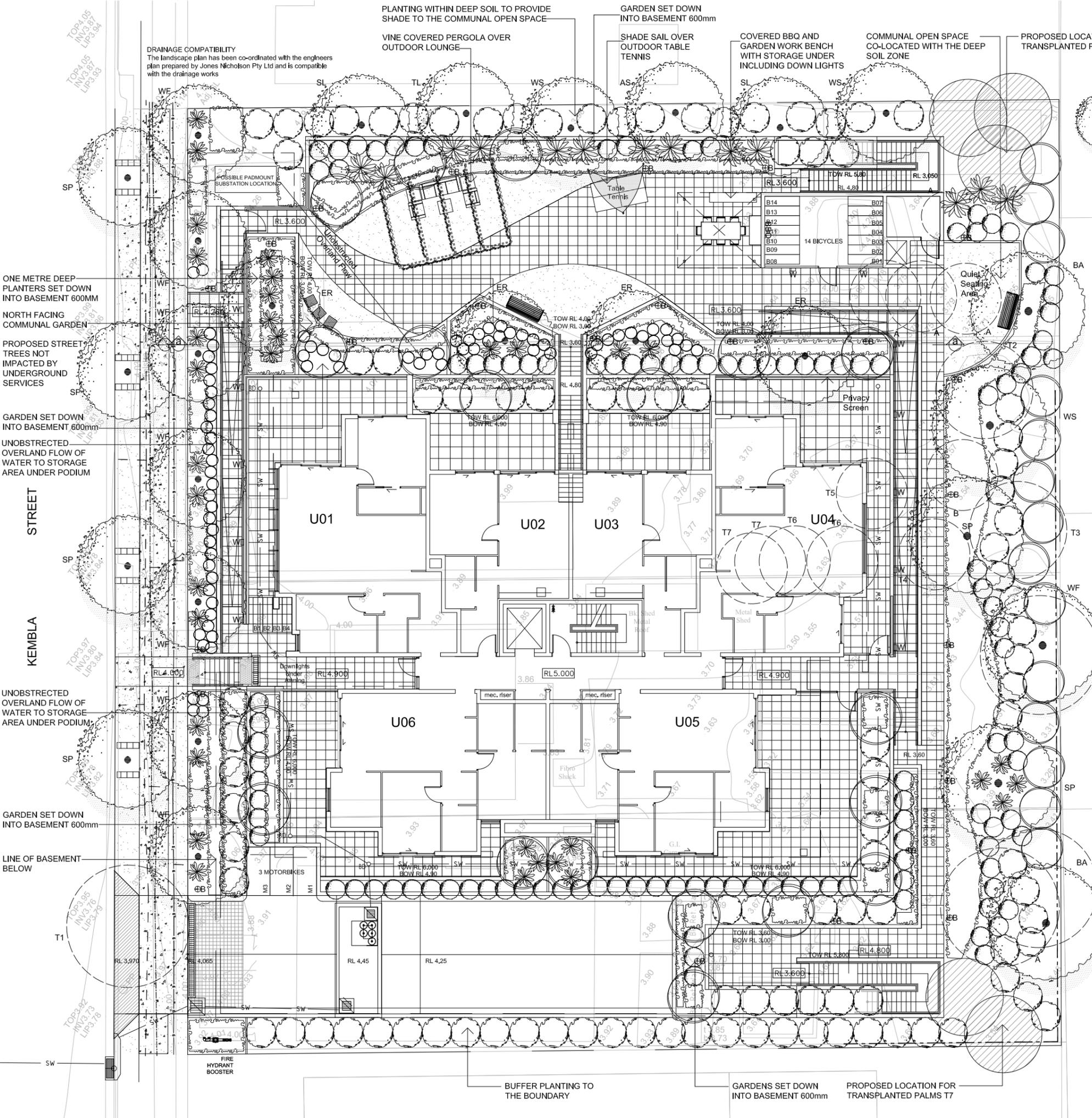
Title
DEVELOPMENT APPLICATION DEMOLITION & SITE MANAGEMENT PLAN

Scale	Date
NTS	FEBRUARY 2020

Drawn	Checked
RAC SJ	ADM

Project No.	Drawing No.	Issue
2019 - 09	A-601	A

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PLANTING WITHIN DEEP SOIL TO PROVIDE SHADE TO THE COMMUNAL OPEN SPACE

GARDEN SET DOWN INTO BASEMENT 600mm

VINE COVERED PERGOLA OVER OUTDOOR LOUNGE

SHADE SAIL OVER OUTDOOR TABLE TENNIS

COVERED BBQ AND GARDEN WORK BENCH WITH STORAGE UNDER INCLUDING DOWN LIGHTS

COMMUNAL OPEN SPACE CO-LOCATED WITH THE DEEP SOIL ZONE

PROPOSED LOCATION FOR TRANSPLANTED PALMS T6

ONE METRE DEEP PLANTERS SET DOWN INTO BASEMENT 600mm

NORTH FACING COMMUNAL GARDEN

PROPOSED STREET TREES NOT IMPACTED BY UNDERGROUND SERVICES

GARDEN SET DOWN INTO BASEMENT 600mm

UNOBSTRUCTED OVERLAND FLOW OF WATER TO STORAGE AREA UNDER PODIUM

UNOBSTRUCTED OVERLAND FLOW OF WATER TO STORAGE AREA UNDER PODIUM

GARDEN SET DOWN INTO BASEMENT 600mm

LINE OF BASEMENT BELOW

GARDEN SET DOWN INTO BASEMENT 600mm

UNOBSTRUCTED OVERLAND FLOW OF WATER TO STORAGE AREA UNDER PODIUM

DRAINAGE COMPATIBILITY
The landscape plan has been co-ordinated with the engineers plan prepared by Jones Nicholson Pty Ltd and is compatible with the drainage works

POSSIBLE PADMOUNT SUBSTATION LOCATION

14 BICYCLES

Quiet Seating Area

Privacy Screen

Metal Shed

Fibre Shack

3 MOTORBIKES

FIRE HYDRANT BOOSTER

TOP 1: 0.95 INV 3.97 LIP 3.94
TOP 2: 0.95 INV 3.97 LIP 3.94
TOP 3: 0.97 INV 3.99 LIP 3.94
TOP 4: 0.95 INV 3.97 LIP 3.94
TOP 5: 0.95 INV 3.97 LIP 3.94
TOP 6: 0.95 INV 3.97 LIP 3.94
TOP 7: 0.95 INV 3.97 LIP 3.94
TOP 8: 0.95 INV 3.97 LIP 3.94
TOP 9: 0.95 INV 3.97 LIP 3.94
TOP 10: 0.95 INV 3.97 LIP 3.94
TOP 11: 0.95 INV 3.97 LIP 3.94
TOP 12: 0.95 INV 3.97 LIP 3.94
TOP 13: 0.95 INV 3.97 LIP 3.94
TOP 14: 0.95 INV 3.97 LIP 3.94
TOP 15: 0.95 INV 3.97 LIP 3.94
TOP 16: 0.95 INV 3.97 LIP 3.94
TOP 17: 0.95 INV 3.97 LIP 3.94
TOP 18: 0.95 INV 3.97 LIP 3.94
TOP 19: 0.95 INV 3.97 LIP 3.94
TOP 20: 0.95 INV 3.97 LIP 3.94

RECOMMENDED PLANT SPECIES

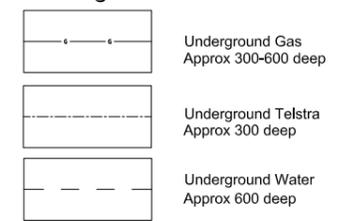
CODE	BOTANIC NAME	COMMON NAME	HTxW
TREES			
AS	Acmena smithii	Lily Pilly	Up to 10x6m
ER	Elaeocarpus reticulatus	Blueberry Ash	Up to 8x4m
BA	Brachycton acerifolius	Illawarra Flame	Up to 15x6m
MTB	Magnolia 'Teddy Bear'	Dwarf Magnolia	Up to 5x2m
SL	Syzygium leuhmannii	Brush Cherry	Up to 10x6m
SA	Syzygium australe	Brush Cherry	Up to 10x6m
SP	Syzygium paniculatum	Magenta Lily Pilly	Up to 12x8m
TL	Tristanopsis laurina	Water Gum	Up to 10x6m
WF	Waterhousia floribunda	Waterhousia	Up to 15x8m
WS	Waterhousia 'Green Avenue'	Waterhousia	Up to 12x8m
TALL ACCENTS			
	Archontophoenix cunninghamiana	Bangalo Palm	
	Cycas revoluta	Japanese Sago	
	Doryanthes excelsa	Gynea Lily	
	Echium fastuosum	Pride of Madiera	
	Howea forsteriana	Kentia Palm	
	Raphis excelsa	Lady Palm	
	Thysanoloena maxima	Tiger Grass	
LARGE SHRUBS			
	Backhousia citriodora	Lemon myrtle	
	Ceratopetalum 'Albreys Red'	NSW Xmas Bush	
	Ixora chinensis	Ixora	
	Lagerstroemia 'Dwarf Pink'	Dwarf Crepe Myrtle	
	Metrosideros 'Spring Fire'	Dwarf NZ Xmas Bush	
	Callistemon 'Great Balls of Fire'	Bottlebrush	
	Photinia glabra 'Fraseri'	Photinia	
	Syzygium 'Cascade'	Weeping Lilly Pilly	
	Syzygium 'Resilience'	Dwarf Brush Cherry	
	Acmena 'Cherry Surprise'	Dwarf Lilly Pilly	
	Viburnum 'Eve Prince'	Sweet Viburnum	
	Xylosma senticosum	Green Envy Bush	
MEDIUM TO LOW SHRUBS			
	Callistemon 'White Anzac'	Dwarf Bottlebrush	
	Acmena 'Hedgmaster'	Dwarf Lilly Pilly	
	Metrosideros 'Fiji Fire'	NZ Xmas Bush	
	Raphiolepis 'Dalese'	White wax flower	
SMALL ACCENT PLANTS			
	Blechnum 'Silver Lady'	Silver Lady	
	Bromeliad cvs	Bromeliad	
	Dianella 'Tas Red'	Paroo Lily	
	Strelitzia juncea	Fine Bird of Paradise	
	Liriope 'Just Right'	Turf Lily	
	Zamia furfuracea	Cardboard Plant	
GROUND COVERS & GRASSES			
	Ajuga 'Catlins Giant'	Buggle Plant	
	Alternanthera 'Little Ruby'	Alternanthera	
	Dianella 'Little Rev'	Paroo Lily	
	Dianella 'Streetscape'	Paroo Lily	
	Ficinia nodosa	Nodding Club Rush	
	Philodendron 'Xanadu'	Philodendron	
	Scaevola 'Purple Fanfare'	Fan Flower	
	Myoporum parvifolium	Creeping Boobialla	
	Trachelospermum jasminoides	Star Jasmine	

EXISTING TREE SCHEDULE

No	Botanical Name	Action
T1	Tristanopsis laurina	Remove
T2	Mitellaea alternifolia	Remove
T3	Platysporum undulatum	Remove
T4	Elaeocarpus reticulatus	Remove
T5	Jacaranda mimosifolia	Remove
T6	Archontophoenix cunninghamiana	Transplant
T7	Archontophoenix cunninghamiana	Transplant

NOTE: The above tree schedule has been extracted from the arborist's report prepared by Allied Tree Consultancy dated February 2020 Refer to the arborist's report for further details on the existing trees.

Existing Services



LEGEND

- Existing levels and contours
- Proposed spot levels
- Existing trees to be retained
- Existing trees to be removed
- Proposed location for transplanted palms
- Proposed tree planting
- Proposed mass shrub planting
- Proposed turf with timber edging
- Proposed tiled paving
- Proposed black oxide concrete exposed aggregate paving
- Proposed plain cove finish concrete cross over
- Proposed stenciled concrete driveway. Colour: Charcoal
- Proposed timber deck
- Proposed paving headers as per WCC public domain manual
- Proposed seating
- Bollard Light
- Wall Light
- To electrical engineers specification
- Vine covered pergola

Refer to 1907-LD02 for Cross Section

ISSUE: Amended Development Application 01.10.20, 06.10.20
 ISSUE: For Co-ordination 29.09.20
 ISSUE: Amended Development Application 07.08.20, 13.08.20
 ISSUE: For Co-ordination 05.08.20
 ISSUE: Development Application 05.30.20
 ISSUE: For Co-ordination 19.02.20, 26.02.20
 REV.C: Add street tree species 06.10.20
 REV.B: Amend species, lakes, add pergola, communal garden
 REV.A: Amend building, landscape 04.08.20

ochre landscape architects
 PO Box 395 Wollongong NSW 2520
 Tel. 0452 576427
 Email: design@ochre.net.au

PROJECT
 Proposed Residential Development
 93-99 Kembla Street
 WOLLONGONG

DRAWING TITLE
 Landscape Concept Plan

CLIENT
 South Kembla Property Pty Ltd

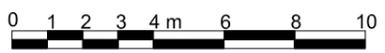
DRAWING NO.
 1907-LD01C

SCALE: 1:100 @ A1, 1:200 @ A3

CHECKED: TW

DATE: 18.02.20

SITE AREA 2193.97m2
 LANDSCAPE AREA REQUIRED 658.19m2 30%
 LANDSCAPE AREA PROVIDED 757.11m2 34.50%
 DEEP SOIL AREA REQUIRED 7% 153.58m2, 15% 329.09m2
 DEEP SOIL AREA PROVIDED 474.95m2 21.60%



**Wollongong Design Review Panel (Via MS Teams)
Meeting minutes and recommendations**

Date	28 April 2020
Meeting location	Wollongong City Council Administration Offices
Panel members	Karla Castellanos Brendan Randles Sue Hobley
Apologies	Nil
Council staff	Pier Panozzo – City Centre & Major Development Manager Nigel Lamb – Senior Development Project Officer
Guests/ representatives of the applicant – via teams meeting link	Angelo Di Martino – Architect Tracey Whiteman – Landscape Architect
Declarations of Interest	Nil
Item number	2
DA number	DA-2020/241
Reason for consideration by DRP	SEPP65 and Clause 7.18 Design Excellence WLEP2009.
Determination pathway	Wollongong Local Planning Panel
Property address	93-99 Kembla Street, Wollongong 2500
Proposal	Demolition of existing structures and construction of a seven (7) storey residential flat building comprising of forty (40) units and one (1) level basement car parking
Applicant or applicant's representative address to the design review panel	This meeting was conducted by video link between the panel (Council's offices) and the applicant's team (remote). The applicant summarised the proposal
Background	The site was Inspected by the Panel on 28 April 2020
Design quality principals SEPP 65	
Context and Neighbourhood Character	<p>The subject site is in an area that is undergoing a transformation in character from single residential dwellings (1-2 storeys) to Residential Flat Buildings (RFBs). Recently proposed apartment buildings in the area (in construction and/or completed) provide the opportunity to evaluate urban design outcomes of this transformation. While recent developments confirm that the scale and density prescribed in the LEP are generally feasible, it is demonstrably clear that certain outcomes - exposed ramps, large side setbacks (in excess of ADG requirements) and the ground level interface between raised levels due to flooding issues - fall short of design excellence.</p> <p>The massing finishes and access arrangement across the street are not considered to be contributory to the improvement of the evolving character. The proposal on the subject site should take the opportunity to evaluate lessons learned and propose a fresh approach to set itself apart as an appropriate and exemplary precedent. It is the Panel's opinion that a proposal has the opportunity to challenge previous conventions and propose new approaches to vehicular access and flood storage, especially given the generous dimensions of the site. The Panel is concerned with the extent of basement coverage, constrained areas of deep soil along the setbacks and the landscape plan for the entire site, which proposes substantial hardscaped areas and complicated level changes.</p> <p>While the scale and presentation to the street reflect planning controls for the precinct, the ample site area could allow for alternative built form configurations that accommodate the vehicular ramp into the building footprint. The footprint's siting and</p>

	<p>the way that communal open spaces above the plinth relate to the rest of the open spaces and natural ground, need to be better integrated to avoid the disconnection and spatial isolation seen in recent adjacent developments.</p>
<p>Built Form and Scale</p>	<p>Given the shape and proportions of the site, (wider frontage than depth), it is counter-intuitive to propose a building that is deeper than it is wide. Not only does this reduce engagement with the street as referred to above, it also orients most apartments to face the side setbacks and locates the pool in a setting which will eventually be over-shadowed by an adjoining building of similar scale. A longer building would provide a better streetscape, allow more units to face the street and increase the rear setback, which is a better pool location: more private, less overshadowed and adjacent to deep soil landscapes. An overall reconsideration of the position of the building would also result in a better placement of the ramp within the building footprint, thus liberating a substantial portion of the site in favour of greater landscape areas.</p> <p>As noted above, recent developments illustrate that side setbacks accommodating exposed ramps – rising and falling to meet flood levels – create large areas of extensive hard stand that are devoid of vegetation or purpose and highly detrimental to the physical and visual amenity of the subject sites and adjoining properties. Because these setbacks are generally greater than prescribed ADG minimums, the streetscape, too, suffers adverse visual and physical impacts, with large expanses of hardstand extending across street frontages. This is clearly demonstrated by recently built outcomes, including the site opposite the subject site. Therefore, on such a large site with flooding constraints, the current proposal to provide an exposed ramp within a very wide setback cannot be supported.</p> <p>While the Panel understands that the ground floor must be raised to meet flooding requirements, this has resulted in nearby developments having large expanses of hard paving, with highly constrained engagement with the natural ground. Alongside setbacks, a pattern is emerging of deep trenches extending the depth of the site with little purpose or character. With little coordination between adjoining properties, these largely inaccessible spaces are liable to become a major issue in terms of aesthetics, ecology, land use and management. It is unacceptable that the side boundaries are left with no provision of deep soil and dominated by high walls protruding from the basement. There is a poor relationship between the planting on the ground level and the open space areas above the basement plinth.</p> <p>Excessive hard surfaces, dislocation from soft landscape and poorly resolved side setbacks are exacerbated on the subject site by a proposed basement that covers most of the site. This is predicated on car numbers in excess of Council's requirements, excessive storage and inefficiently designed accessible spaces. To address these issues, the basement must be significantly reduced in size with excessive spaces, storage and inefficiencies removed. This will increase deep soil potential, which should be provided along the northern boundary. More stepping between raised and natural levels is required to better integrate soft and hard surfaces, and better use of the deep soil should be demonstrated - for large trees, absorption and specific uses.</p>

<p>Density</p>	<p>Any provision of additional car parking should count against the overall GFA. The Panel is aware that carparking is proposed above that required by the controls, which increases the extent of basement.</p> <p>The applicant should reconsider the need for expansive basement areas which reduce deep soil along the side and front boundaries.</p>
<p>Sustainability</p>	<p>Little information has been provided at this point with regards to sustainable measures and systems.</p> <p>It is strongly encouraged that all suitable sustainability measures be included in any future proposal.</p>
<p>Landscape</p>	<p>In view of the Panel's recommendations with regard to the extent of the basement footprint and the built form, it is expected that any amended scheme will require a new landscape concept plan. The Panel is well aware that the flood management constraints which apply to the site give rise to the need for levels that are very tricky to resolve, particularly in the landscape design. The comments provided here are intended to provide guidance in the development of a revised landscape concept plan, based on addressing concerns about the approach taken in the current proposal.</p> <p>The following concerns should be addressed in any future landscape design:</p> <p><u>General</u></p> <p>a) As noted above, the Panel is of the opinion that the landscape scheme provides for inadequate deep soil along the site's northern, western and southern boundaries. This results largely from the excessively large basement footprint, the large, exposed external ramp servicing the basement, the flood constraints that lead to level changes along the boundaries and the locations of the fire egress stairways. The following approach is recommended:</p> <ul style="list-style-type: none"> • the landscape architect/designer should work with the architect in the early stages of an amended design development to resolve the level changes, siting of the building, ramps, entry and egress paths, and stairways to reduce, as much as possible, their impacts on the design potential of the landscape, and to maximise opportunities for deep soil and other amenity plantings; • the interface with the public domain should not include a visually prominent driveway and open ramp; • a less formal approach to the on-site plantings along the western boundary may allow for a more natural, and therefore softer, effect and also facilitate better surveillance of the streetscape from the ground floor units; and • the rear and side boundary landscape areas should be more carefully considered, particularly in how they could settle the building into the ground plane and provide deep soil to support a vegetation buffer along the site edges and gardening activities by the residents. <p>b) Access and circulation is sub-optimal, including:</p> <ul style="list-style-type: none"> • the entry from the street is 'crowded', with gates onto private terraces immediately adjacent to the arrival point from ground level. This will further be exacerbated if letterboxes are to be provided at this point;

- the arrival sequence is via a relatively narrow, single-width, long corridor through the building that could be much more inviting with more generous dimensions of the terrace entry point, the internal lobby and the access to the rear. Furthermore, sightlines through to the rear landscape plantings could be better exploited for visual amenity;
 - access (at the rear) to the Communal Open Space (COS) could be improved to reduce its 'crowdedness', provide a more generous terrace space at the access to the lower level (COS) and maintain privacy to the private terraces;
 - access from the building to the outdoor pool is through the barbecue area, limiting the functionality of the latter;
 - there is no disabled access to the swimming pool and, whilst the Panel accepts that this is not a legal requirement, it is of the opinion that in a development of this nature, it should be provided.
 - way-finding for egress from the fire stairs is poor; and
 - fire stairs and housing of utilities and ablution facilities could be much more sensitively sited to reduce their impacts on the spatial and visual amenity of the COS;
- c) There should be a clear delineation between the private open spaces of the units and the COS. Privacy and noise impacts should be well addressed and maintenance responsibilities should be clear.
- d) Access to all landscape plantings for maintenance should be safe and easy. Lawn-mowing should not be a problematic issue.

Communal Private Open Space (COS)

In addition to the problems outlined above with regard to access, circulation and the siting of utilities and facilities, the following concerns are raised by the Panel:

- a) The northern setback will likely be largely over-shadowed by any future development of the properties to the north. Shadow impacts on landscape areas should be identified and used to inform the siting of COS spaces and functions. It is likely that the optimal location for the community garden be in the north-western (or south-western) corner of the site and that of the pool area in the eastern setback.
- b) Way-finding, access to and circulation within the COS should be clear and easy. Direct access from the plinth to the main activity spaces of the COS from the building is desirable, minimising the use of other spaces as circulation corridors.
- c) A communal room (or rooms) should be provided to service the COS. It should include kitchen and ablution facilities. Facilities to support the communal garden (such as workbenches, storage of equipment, and a water supply) should also be provided.
- d) The hydrant pump room should be relocated to minimise its intrusion into the COS. (If possible, it should be located within the building).
- e) Fire stairs should be more sensitively located with regard to the functionality and amenity of the COS.
- f) Visual surveillance of the swimming pool from the barbecue area and other spaces where parents may choose to sit is compromised by the proposed plantings that will enclose the pool.

	<p>g) The Panel does not take issue with the proposed provision of a space to the south of the building but considers its spatial amenity and functionality to be too adversely affected by the fire stairs to make it inviting or usable in practice. It should be more generous and not contain the fire stairs.</p> <p>h) The role of the COS' north-western corner is unclear.</p> <p>i) The functionality (and possibly amenity) of the semi-circular spaces on deep soil is unclear.</p> <p><u>Private Outdoor Space</u></p> <p>The terraces of the ground floor units are spatially complex and include narrow corridors that add little in terms of functionality or amenity but a lot in terms of maintenance. It is questionable as to whether or not the proposed turf areas will be useful or troublesome. While the Panel supports direct access from the ground floor units' terraces to the common outdoor areas, it is concerned about the impacts on way-finding, circulation conflicts and amenity of the proposed approach to entrances.</p>
Amenity	<p>See comments above in Context and Scale and Built Form regarding :</p> <ul style="list-style-type: none"> • adverse physical and visual impacts of proposed driveway • extent of hard paving • separation of raised levels and natural ground • excessive size of basement • requirement for deep soil along northern boundary • location of pool (privacy, overshadowing in future context and remoteness from deep soil landscapes) • dominance of side facing units • adverse impacts of large side setbacks on streetscape • landscape concept plan <p>In addition :</p> <ul style="list-style-type: none"> • The bin collection area is being proposed along the edge of the street. However, there is no indication where the permanent storage for the bins is. This needs to be clarified. • External circulation needs to be simplified, made clearer and incorporate stepping between levels to better integrate raised surfaces and natural ground. • The location of the letterboxes needs to be determined before finalising the landscape concept plan.
Safety	<p>The ground plane is dominated by the vehicle entry and an excessively large side setback. This reduces street address and passive surveillance, already constrained by the elevated nature of the plinth. These outcomes reduce legibility and natural surveillance and the panel strongly recommends the architect to explore a different approach to the ramp, and the provision of a more legible entry lobby.</p> <p>Surveillance of the swimming pool from adjoining COS is poor due to proposed plantings.</p>
Housing Diversity and Social Interaction	<p>This development presents a good balance of 1, 2 and 3 bedroom units across all levels. The proposal contributes to a balanced housing choice and affordability in the area.</p>
Aesthetics	<p>The panel hopes to see robust materials and a variety of textures and coloration as an integral part of the design and that measures are taken for these choices not to be valued-engineered in later parts of the process. The Panel is making an emphasis on</p>

	architectural expression as it is an integral component of design excellence.
Design Excellence WLEP2009	
Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	<p>As discussed above, the proposal should be amended to further refine the interface with the ground plane to both the street and lower ground gardens. Integration of the vehicular ramp should assist in providing greater areas of vegetation and green open spaces along the side boundaries.</p> <p>The quality of the future landscape along property boundaries is not of a sufficiently high standard.</p>
Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	<p>One of the most relevant issues with the development is its frontage width and the response to the ground floor interface. This is exacerbated in part by the provision of an external vehicular ramp.</p> <p>The generally hardscape nature of the communal spaces on the ground plane and their spatial integration with the areas of deep soil is a concern for the panel. The role of the paving is for circulation rather than to contribute to particular (as yet unknown) activities of the turfed semi-circular spaces among trees.</p>
Whether the proposed development detrimentally impacts on view corridors,	No view loss issues are evident.
Whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,	This is not applicable to the site. However, it is noted that the current location of the pool would be subject to future overshadowing should the sites to the north redevelop.
How the development addresses the following:	
the suitability of the land for development,	The proposed uses are permissible on the site.
existing and proposed uses and use mix	The proposal is compliant with the allowable uses on site.
heritage issues and streetscape constraints,	There are no heritage items on the site.
the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,	The position of the tower and its current orientation should be tested in favour of a north south tower that will create better communal areas to the rear of the site.
bulk, massing and modulation of buildings	See comments above with regards to the orientation of the tower.
street frontage heights	A different approach should be considered to the access ramp and how it can better integrate with the tower elevation.

<p>environmental impacts such as sustainable design, overshadowing, wind and reflectivity</p>	<p>No details have been provided at this point on the proposed sustainability measures with regards to water recycling, natural ventilation, etc.</p>
<p>the achievement of the principles of ecologically sustainable development</p>	<p>Not enough information has been provided to accurately assess this point.</p>
<p>pedestrian, cycle, vehicular and service access, circulation and requirements</p>	<p>The pedestrian entry lacks a defined lobby and its legibility from the public domain is further reduced due to its narrowness and the elevated position of the plinth. The location of the front stairs and chair lift are not integrated in an imaginative way along the front elevation. An alternative layout should be explored.</p>
<p>impact on, and any proposed improvements to, the public domain</p>	<p>Changes to the basement configuration can ensure greater areas of deep soil to the edge and the front footpath. No details have been provided regarding other improvements to the public domain.</p>
<p>Key issues, further Comments & Recommendations</p>	<p>The Panel makes the following recommendations:</p> <ul style="list-style-type: none"> • Reconsider the relationship with the ground plane to achieve an improved response to the ground level gardens and areas of deep soil, especially to the rear landscaped areas. • Improve the street levels pedestrian entry and reconfiguration of the carpark entry. • Reconsider the tower location and orientation on site. • Consider the extent of basement and site coverage to achieve greater landscape and vegetated areas. • Prepare a comprehensive landscape plan for the site with a focus on equal accessibility for persons on wheelchairs.



Unit 5, 174 – 182 Gipps Road
P O Box 7163
Gwynneville 2500

T 02 4228 7833
F 02 4228 7844
reception@tcgplanning.com.au

Wollongong City Council
41 Burelli Street
Wollongong NSW 2500

CS_Planning_Applications@wollongong.nsw.gov.au
records@wollongong.nsw.gov.au
nlamb@wollongong.nsw.gov.au

1 September 2020

Attention: Nigel Lamb

Dear Sir/Madam,

**Response to Additional Information Request for DA-2020/241
Residential – Demolition of existing structures and construction of a seven (7) storey
residential flat building comprising forty (40) units and one (1) level basement car parking
at 93-99 Kembla Street, Wollongong (Lot 52-55 DP 5127)**

This correspondence is prepared on behalf of the applicant, ADM Architects, and responds to Council's correspondence of 22 April 2020, which requests the submission of additional information in respect to DA-2020/241 for the proposed development of a residential flat building at 93-99 Kembla Street, Wollongong. Specifically, this correspondence responds to select matters contained in Council's correspondence, which relate to planning. This correspondence also responds to items raised by the Design Review Panel at its meeting of 28 April 2020.

We note that a response to other more technical matters identified in Council's correspondence—which relate to stormwater and landscaping—are provided by other subconsultants, under a separate cover, as listed below and referenced in the responses.

Accompanying Documents

This correspondence is accompanied by and references revised plans and subconsultants reports as listed below:

- Revised Architectural plans prepared by ADM Architects (Project No. 2019-09), including Basement Floor Plan (A-101) and Ground Floor Plan (A-102), in addition to marked up Ground Floor Plans summarising calculation of proposed Landscape and DSZ areas (Issue Bp2 dated 22.07.2020), and calculation of proposed COS area (Issue Bp2 dated 21.07.2020) and 3D modelling of overshadowing;
- Correspondence prepared by Jones Nicholson ref CLTR – 19020102.02A dated 6.8.20;

- Civil Engineering Plans prepared by Jones Nicholson (Project Ref. 19020102) including General Notes and Legend (C001), Stormwater Concept Plans (C002-C004), Vehicle Manoeuvring Plan (C005), PMF Storage Plan (C010), AEP Storage Plan (C011), Pre Development Catchment Plan (C012), Post Development Catchment Plan (C013), Longsection Plan (C020) and HRV Manoeuvring Plan (SK01);
- WSUD Treatment Report prepared by Jones Nicholson (CRPT-19020102.01B, Rev. B, dated 5 August 2020);
- Response to Additional Information cover letter prepared by Jones Nicholson (Ref. CLTR-19020102.02B, dated 13.8.20);
- Landscape Plans prepared by Ochre Landscape Architects including Concept Plan (1907-LD01A), Sections (1907-LD02) dated 13.8.20;
- Response to Additional Information cover letter prepared by Ochre Landscape Architects dated 10.8.20;
- Detail flyer of a WastePac 240L Bin Press.

Changes to Submitted Plans

We note that the comments provided by the Design Review Panel are extensive and would necessitate a significant redesign of the proposal, most notably relocation of the driveway ramp to a position below the building footprint and reorientation of the building in a north/south direction. Whilst the changes which have been incorporated within the revised design address a number of design issues raised by the DRP and also issues raised in Council's correspondence, we confirm that the building retains its east/west positioning and driveway location. Council and the DRP is requested to support this position as it is considered that the design, as proposed, provides a suitable built form outcome and provides compliance with the design criteria of the Apartment Design Guide (ADG) and the controls/objectives of Wollongong DCP 2009.

Further, we note that the proposed development provides extensive areas of landscaping and open space, when viewed from the street frontage, primarily due to the positioning of a large area of communal open space to the north of the building. It is considered that reorientation of the building would result in an unnecessary reduction in the expanse of this landscaped open area and its relocation to a less desirable position at the rear of the site. Further, reorientation of the building, whilst providing a greater street presence, would not reflect the context and character of existing development in this southern Wollongong locality.

Whilst the general positioning of the building has been retained, a number of other changes have been made to the design to achieve the desired outcomes expressed in Council's correspondence. Specifically, the above plans incorporate the following changes which have been made in response to the issues raised in Council's correspondence of 22 April 2020 and by the Design Review Panel at its meeting of 28 April 2020:

- A reduction in the size of the basement to provide 1500 to 1845mm setbacks to the northern boundary; 1500mm to 1910mm setbacks to the southern boundary; and a 1500mm setback to the western (front) boundary, thereby allowing for additional landscaping adjacent to the side and front boundaries, of at least 1500mm in width.
- The removal of wheelchair lifts from the entry and rear of the building and their replacement with pedestrian ramps to provide access to the building and communal open space area.

- The deletion of the pool from the communal open space area and the relocation of the barbecue area at a greater distance from unit 4, together with provision of increased landscaping to the balcony northern edge.
- Removal of the southern area of communal open space, which was not supported by the DRP.
- An increase in the number of trees provided within the communal open space (increased from 6 to 10). Further, the provision of additional trees within the front setback and within the deep soil zone.
- Lowering of the ground floor level from RL 5.2 to RL 5.0, which has assisted in reducing the overall height of the building podium and the length of the ramp. The balcony levels have also been reduced RL 4.9.
- Relocation of the bike storage to within the communal open space area to assist in reducing the size of the basement.
- Removal of over bonnet storage areas in the basement and provision of designated storage areas for each unit.
- Modification to the adaptable unit layout around the entry/laundry area.
- Identification of liveable housing on revised architectural plans.
- Identification of a potential location for a pad mount substation is shown in the north east corner of the site.

1. Stormwater Matters in Council Correspondence of 22 April 2020

Response: Refer to the attached Response to Additional Information letter and revised plans and report prepared by Jones Nicholson referenced above.

2. Landscape Matters in Council Correspondence of 22 April 2020

Response: Refer to the attached Response to Additional Information letter and revised plans prepared by Ochre Landscape Architects referenced above. Further comment on selected matters relevant to planning are provided below.

Landscape Width:

"Landscape planting areas must be 1.5m wide not including edging or retaining walls. A number of areas do not meet this requirement and therefore the landscaping percentage is not met"

Response: Ochre Landscape Architects have reviewed the areas included in the calculation of site landscaping and these have been clearly identified on the accompanying Ground Floor DSZ ID Plan prepared by ADM Architects. The pool has been removed and the podium/basement footprint has been reduced to ensure a contiguous landscape strip (in deep soil) of at least 1.5m in width is provided around the western, southern and northern boundaries of the site. Ochre Landscape Architects confirm that landscaped areas greater than 1.5m width amount to 757.11m² of landscaping across the site, representing 34.50% site coverage. This exceeds the required 30% landscape area.

BBQ Area:

"The location of the BBQ area close to unit 4 may have acoustic/privacy impacts to the adjoining unit."

Response: The pergola/BBQ area is separated from the private open space of Unit 4 by approximately 3.5m; from the Bed 1 window by approx. 10m; and from the dining room window by approx. 14m. Visual separation and privacy is also provided by the 2.5m wide planter which is located between the COS and POS of Unit 4. Such setbacks distances are considered to be adequate and exceed that which would

typically be provided in a residential flat development, due to the benefits provided by three amalgamated sites, which allow for greater separation distances between private and communal spaces.

Access to Communal Open Space:

"Accessibility to the COS area is not considered ideal. Residents have to go out the back and then around the building to get to it. A platform lift and stairs are also impediments to ease of access."

Response: The development now incorporates a pedestrian ramp/walkway which extends along the eastern façade of the building to the communal open space. Provision of a ramp centrally within the building, to provide more direct access to the communal open space, is not considered to be logical given the east/west central circulation spine defining the location of the apartments on each level.

COS Area:

"Small COS area on the southern side of the building not ideal – what is the function? Poor passive surveillance."

Response: The Ground Floor COS ID Plan prepared by ADM Architects confirms that a total of 550m² of communal open space is provided in one consolidated area to the north of the building. This equates to 25% of the site, in compliance with the requirements of the Apartment Design Guide. The area to the south of the building, which was referenced as a small COS area, has now been deleted and will act as a walkway only, with adjacent additional planting. Inclusion of this area is not required to meet the 25% landscaped area requirements of the ADG.

Solar Access:

"Solar access to the COS area is satisfactory currently however consideration should be given to the impact of a future building on the adjoining site to the north."

Response: The communal open space is located on the northern side of the building, which is the optimal location when considering solar access.

Objective 3D-1 of the ADG requires the following in relation to sunlight access to communal open space:

"Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on June 21 (mid winter)."

3D modelling has been prepared by ADM Architects which models a building of a typical scale and height to those which have recently been constructed in the locality (refer Drawing A – 405). This modelled building contains a driveway on the southern side of the site and 9 m setbacks to the wall of the building from the southern boundary.

The diagrams confirm that the principal usable area of communal open space (shown hatched red) will achieve 2 hours of sunlight to more than 50% of this space between 1pm and 3pm on June 21, in compliance with Criteria 3D-1 of the ADG.

3. Other Matters in Council Correspondence of 22 April 2020

Pool Location:

"Consideration as to whether pool location is optimal with regard to potential overshadowing from future Development to the north."

Response: The pool has been removed from the design.

Wheelchair Lift:

"A wheelchair platform lift is proposed both at the entry and to access the communal open space. The site is of a generous size and it should be investigated whether ramps can be provided (as illustrated in the attached suggestion for the front entry)."

Response: The entry wheelchair platform is removed from the street entry and replaced with a ramp, as requested. Similarly, the previously proposed chairlift which provided access to the COS has now been replaced with a ramp which extends along the rear wall of the building.

Waste Collection:

"Waste collection is proposed from the kerb. Whilst it is noted the site has a large frontage, this is not considered desirable due to high demand for on-street parking in the locality and the visual impact of this number of bins being located on the kerb".

Response: The proposed on-street waste collection for the development is in accordance with Clause 5.5.2 (13) of Chapter E7: Waste Management of WDCP 2009, which specifies the following:

"Where the number of bins proposed can be accommodated within 50% of the development's frontage on collection day, bins may be collected from a kerbside location. In instances where kerbside bin collection cannot be accommodated or is not appropriate due to safety or functional constraints, bins must be collected onsite."

The subject site comprises 4 allotments, with a combined frontage of 48.76m to Kembla Street, significantly greater than the minimum 24m lot width required to accommodate a standard residential flat building. Jones Nicholson confirm that *"the waste room proposes the use of a waste compactor (5:1 compaction ratio) to reduce the number of bins required to service the development to 10 bins. This significantly reduces the frontage required for bin collection reducing the visual impact of the bins for collection and increases the available area for on-street parking. Of the available 39m of kerb side frontage to Kembla Street, the compactus arrangement and reduced bin numbers will require approximately 6m of Kembla Street kerb frontage. This is the equivalent of 1 car space."* Kembla Street in this location is a straight road, which provides a good sight distance to allow for movement of waste collection vehicles. Further, the on-street collection which is proposed accords with the DCP requirements and has been widely and historically accepted by Council for residential flat buildings throughout the city.

In addition to the wide frontage, the development will also result in the removal of 3 driveway crossings, as the existing 4 driveways will be reduced to 1. This will provide additional bin storage area whilst still accommodating a similar level of on street parking to that which currently exists. Further, the site, being located to the south of Bank Street, is located on the periphery of the city core in a location where unmetered parking is provided, reflecting a lesser demand for parking than that of the core areas. Early morning waste collection from the kerbside can therefore be accommodated at a time when parking demand is likely to be reduced. Hence, there are no functional constraints associated with on street collection.

Jones Nicholson also advise that *"The area needed for the ramp and the associated vertical height clearance would:*

- *Remove car parking spaces impacted by the proposed ramp and turning bay area which would require an additional basement level to recoup these lost spaces;*

- *Impact upon the flood void storage area for the management of floodwaters to negate impact on adjoining properties. This would result in a raised ground floor level and impact upon flood void drainage after a flood event;*
- *Affect landscaping treatments and access to the common open space area impacting upon the functional design and use of the building; and*
- *Introduce noise attenuation to neighbouring developments as the heavy vehicle travels along the ramp access.*

On this basis Council is requested to accept the proposed on-street collection which adheres to the DCP requirements and which can be practically and reasonably achieved for this consolidated development site, with a higher than average street frontage width.

Storage:

"Storage must comply with minimums for each unit and be clearly identified on the plans."

Response: Storage areas within units are clearly identified (by shading) on the floor plans prepared by ADM Architects. Within the basement, the previously proposed over bonnet storage areas have been removed due to a reduction in basement size. Individual storage areas for each unit and now provided throughout the basement, with these areas numbered and the capacity indicated on Drawing A – 101 prepared by ADM Architects.

Adaptable Units:

Adaptable units should not require significant structural changes to be converted. Post adaptation plans indicate a need to widen the kitchen and hallway of subject units long windy corridors would also not seem ideal.

Response: Plan A301 has been updated to minimise future work, as requested.

Livable Housing Guidelines:

"20% of all dwellings are to incorporate the Livable Housing Guideline's silver level universal design features. It is considered that these features should be provided on the plans rather than being incorporated at CC stage."

Response: The plans indicate units 13,19, 25 and 31 achieve silver standard and units 10, 16, 22, 28 and 34 are adaptable. This results in a total of more than 20% of units that incorporate the AS4299 standard.

Substation:

"It is noted that the proposal seeks to connect to the existing substation located across the road from the site at 130 Kembla Street. Council will need confirmation from Endeavour Energy of their support for this prior to determining the application."

Response: The revised plans (refer Drawing A-102) show the location of a possible pad mount substation in the north-western corner of the site adjacent the Kembla Street frontage. The pad mount substation equipment would only be required if the load is such that the substation across the road will not meet the demand. We understand that the proponent cannot submit a load requirement to Endeavour Energy until such time the DA is approved.

Northern Landscaping:

"Whilst the podium is generally well screened with landscaping, the landscaping to the northern elevation seems a bit optimistic given the close proximity of the basement to the boundary."

Response: Ochre Landscape Architects have confirmed that the raised planters on the podium proposed along the northern elevation are capable of achieving the 16m³ required per small tree. The garden along the northern elevation is set into the basement by 600mm with planters 1m high from the slab (top of the 600mm deep gardens is RL 3.60 AHD). Further, the setback to the basement from the northern boundary has been increased to between 1500 mm and 1845 mm to provide an increased width of ground-level landscaping.

Heat Gain:

Details should be provided of mitigation measures for heat gain to glazing for northeast corner unit on levels 2 – 5.

Response:

Additional vertical sunshades have been added to the glazing (similar to the west side) to reduce direct solar heat gain on to glazing.

4. Design Review Panel Comments of 28 April 2020

The DRP provided the following recommendations for the development:

- *Reconsider the relationship with the ground plane to achieve an improved response to the ground level gardens and areas of deep soil, especially to the rear landscaped areas.*
- *Improve the street levels pedestrian entry and reconfiguration of the carpark entry.*
- *Reconsider the tower location and orientation on site.*
- *Consider the extent of basement and site coverage to achieve greater landscape and vegetated areas.*
- *Prepare a comprehensive landscape plan for the site with a focus on equal accessibility for persons on wheelchairs.*

Response:

As noted above, the proponent has undertaken a number of design changes in response to the issues raised by the Design Review Panel, including (but not limited to) a reduction in the area of the basement podium, increased landscaped areas on the site and provision of ramps, however a complete redesign of the proposal has not been undertaken due to the development's compliance with the ADG and WDCP 2009. We note that the ADG and WDCP 2009 provide direction and guidance as to the fundamental principles which must be considered within building design and it is considered that the revised design adheres to such principles.

The manner in which the revised design responds to the comments of the ADG is contained in the following table:

Table 1: Summary of Changes in Response to ADG Comments of 28 April 2020

	Key Panel Comments	Response
Context and Neighbourhood Character	<p><i>"The Panel is concerned with the extent of basement coverage, constrained areas of deep soil along the setbacks and the landscape plan for the entire site, which proposes substantial hardscaped areas and complicated level changes.</i></p> <p><i>While the scale and presentation to the street reflect planning controls for the precinct, the ample site area could allow for alternative built form configurations that accommodate the vehicular ramp into the building footprint. The footprint's siting and the way that communal open spaces above the plinth relate to the rest of the open spaces and natural ground, need to be better integrated to avoid the disconnection and spatial isolation seen in recent adjacent developments."</i></p>	<p>The basement has been reduced in size to provide 1500 to 1845mm setbacks to the northern boundary; 1500mm to 1910mm setbacks to the southern boundary; and a 1500mm setback to the western (front) boundary, thereby allowing for additional landscaping, including increased tree planting, adjacent to the side and front boundaries of the site of at least 1500mm in width. Removal of the pool, provision of ramps and reconfiguration of open space areas provides for improved integration of spaces.</p>
Built Form and Scale	<p><i>A longer building would provide a better streetscape, allow more units to face the street and increase the rear setback, which is a better pool location: more private, less overshadowed and adjacent to deep soil landscapes. An overall reconsideration of the position of the building would also result in a better placement of the ramp within the building footprint, thus liberating a substantial portion of the site in favour of greater landscape areas.</i></p> <p><i>To address these issues, the basement must be significantly reduced in size with excessive spaces, storage and inefficiencies removed. This will increase deep soil potential, which should be provided along the northern boundary. More stepping between raised and natural levels is required to better integrate soft and hard surfaces, and better use of the deep soil should be demonstrated - for large trees, absorption and specific uses.</i></p>	<p>The positioning of the building, as proposed, provides for 4 units per floor which face the northern communal open space area. Removal of the pool reduces the potential for visual or acoustic conflicts.</p> <p>The size of the basement has been reduced, allowing for additional perimeter landscaping and the placement of a more substantial and reconfigured communal open space area on the northern boundary, as requested.</p> <p>The development meets the ADG requirement for 25% communal open space (in one combined area); the 7% DSZ requirement of the ADG; and the DCP requirement for 30% landscaped area (of over 1.5m in width).</p>
Density	<p><i>Any provision of additional car parking should count against the overall GFA. The Panel is aware that carparking is proposed above that required by the controls, which increases the extent of basement.</i></p> <p><i>The applicant should reconsider the need for expansive basement areas which reduce deep soil along the side and front boundaries.</i></p>	<p>We reconfirm that surplus carparking has been included in the GFA calculation as required, and the development remains compliant with the FSR requirements of WLEP 2009.</p> <p>Surplus parking has not been removed as the landscaped requirements of the ADG and WDCP 2009 are met, despite the increase parking numbers. The surplus spaces are allocated to</p>

	Key Panel Comments	Response
		the 3 bedroom units and the site is located in an area where on-street parking is already congested.
Sustainability	<i>Little information has been provided at this point with regards to sustainable measures and systems. It is strongly encouraged that all suitable sustainability measures be included in any future proposal.</i>	Meets and exceeds BASIX and NatHERS requirements.
Landscape	<p><i>a) the landscape scheme provides for inadequate deep soil along the site's northern, western and southern boundaries. This results largely from the excessively large basement footprint, the large, exposed external ramp servicing the basement, the flood constraints that lead to level changes along the boundaries and the locations of the fire egress stairways. The following approach is recommended:</i></p> <ul style="list-style-type: none"> ▪ <i>resolve the level changes, siting of the building, ramps, entry and egress paths, and stairways to reduce, ..to maximise opportunities for deep soil and other amenity plantings;</i> ▪ <i>the interface with the public domain should not include a visually prominent driveway and open ramp;</i> ▪ <i>a less formal approach to the on-site plantings along the western boundary may allow for a more natural effect and facilitate better surveillance;</i> ▪ <i>the rear and side boundary landscape areas should be more carefully considered;</i> <p><i>b) Access and circulation is sub-optimal, including:</i></p> <ul style="list-style-type: none"> ▪ <i>the entry from the street is 'crowded'.</i> ▪ <i>the arrival sequence is via a narrow corridor.</i> ▪ <i>Sightlines could be better exploited.</i> ▪ <i>access to the COS could be improved.</i> ▪ <i>access to the pool is limited.</i> ▪ <i>there is no disabled access to the pool.</i> ▪ <i>way-finding for egress from the fire stairs is poor.</i> <p><i>c) There should be a clear delineation between the private open spaces of the units and the COS.</i></p> <p><i>d) Access for maintenance should be safe and easy.</i></p> <p><i>Communal Private Open Space (COS)</i></p> <p><i>a) The northern setback will likely be largely overshadowed by any future development of the properties to the north.</i></p> <p><i>b) Way-finding, access to and circulation within the COS should be clear and easy.</i></p> <p><i>c) A communal room (or rooms) should be provided together with facilities to support the communal garden.</i></p> <p><i>d) The hydrant pump room should be relocated.</i></p> <p><i>e) Fire stairs should be more sensitively located..</i></p> <p><i>f) Visual surveillance of the pool is compromised.</i></p> <p><i>g) The space to the south of the building is adversely affected by the fire stairs.</i></p>	<p>The RL of the building has been reduced by 200mm; the basement size reduced; perimeter landscaping increased and open space areas reconfigured.</p> <p>Council is requested to support the current driveway positioning, as the proposed development provides significant landscaped areas when viewed from the street, irrespective of the driveway location.</p> <p>Refer to amended landscape plan for a less formal revised landscape design.</p> <p>Gates to the courtyards of Unit1 and 6 have been removed; a ramp has been provided to the communal open space; the pool has been deleted; the southern COS area has been deleted; greater separation has been provided between unit 4 and the barbecue area.</p> <p>The communal garden has been deleted. A communal room is considered unnecessary following the removal of the pool/pump room.</p> <p>The COS to the south of the building has been deleted.</p> <p>The COS in the northern portion of the site has been redesigned and reconfigured.</p>

	Key Panel Comments	Response
	<p>h) The role of the COS' north-western corner is unclear.</p> <p>i) The functionality (and possibly amenity) of the semi-circular spaces on deep soil is unclear.</p> <p>Private Outdoor Space</p> <p>The terraces of the ground floor units are spatially complex.</p>	<p>The landscape bed locations are simplified and all POS areas meet the minimum area requirement under the ADG.</p>
Amenity	<p>Confirm the permanent storage for the bins and letterbox location. Incorporate stepping between levels.</p>	<p>The bin storage area was previously shown in the basement and remains in the dedicated position.</p> <p>The letterbox location is shown on the site plan.</p>
	<p>The panel strongly recommends the architect to explore a different approach to the ramp, and the provision of a more legible entry lobby.</p> <p>Surveillance of the swimming pool from adjoining COS is poor.</p>	<p>The 5.5 m wide ramp extends for only 11.3% of the site width, whilst the northern COS and adjacent landscaping extends for a distance of 13.8 m. This suggests that this northern landscaped area will be a more dominant feature when viewed from the street.</p>
Safety	<p>This development presents a good balance of 1, 2 and 3 bedroom units across all levels.</p>	<p>Noted</p>
Housing Diversity/ Social Interaction	<p>The panel hopes to see robust materials and a variety of textures and coloration as an integral part of the design and that measures are taken for these choices not to be valued-engineered in later parts of the process.</p>	<p>Proposed materials are robust and low maintenance. All materials of non-combustible and code compliant.</p>
Design Excellence WLEP 2009	<p>Refine the interface with the ground plane to both the street and lower ground gardens.</p> <p>Integration of the vehicular ramp should assist in providing greater areas of vegetation and green open spaces along the side boundaries.</p> <p>The quality of the future landscape along property boundaries is not of a sufficiently high standard.</p>	<p>Refer to the revised landscaping plan which provides for reconfigured COS areas and additional landscaping. A reduction in the area of the basement provides for increased landscaping around the perimeter of the site.</p>
	<p>One of the most relevant issues with the development is its frontage width and the response to the ground floor interface. This is exacerbated in part by the provision of an external vehicular ramp.</p>	<p>Refer to above comment regarding ramp positioning.</p>
	<p>The current location of the pool would be subject to future overshadowing.</p>	<p>The pool has been deleted.</p>
	<p>The position of the tower and its current orientation should be tested in favour of a north south tower.</p> <p>A different approach should be considered to the access ramp.</p>	<p>ADM Architects have reconsidered the reorientation of the building and conclude that the submitted design provides for preferred outcomes with respect to orientation of units towards the north, whilst providing a high level of separation to adjacent residences on all sides.</p>

We trust that the above information addresses this matter and request Council progress the application. Please do not hesitate to contact the applicant in the first instance, or the undersigned if further clarification is sought.

Yours Faithfully,

A handwritten signature in black ink that reads "Elaine Treglown". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Elaine Treglown
Director
TCG Planning

Attachment 6 – Apartment Design Guide assessment

Standards/controls	Comment
<p>Part 3 Siting the development</p>	
<p><u>3A Site analysis</u></p>	
<p>Site analysis uses the following key elements to demonstrate that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context:</p>	
<ul style="list-style-type: none"> • Site location plan 	Y
<ul style="list-style-type: none"> • Aerial photograph 	Y
<ul style="list-style-type: none"> • Local context plan including: 	
<ul style="list-style-type: none"> – land use, height and typology of adjacent and opposite buildings in the street 	Y
<ul style="list-style-type: none"> – views to and from the site 	Y
<ul style="list-style-type: none"> – circulation patterns and access for pedestrians, vehicles and servicing 	Y
<ul style="list-style-type: none"> – location of heritage items and areas of environmental significance 	Y
<ul style="list-style-type: none"> – patterns of buildings, open spaces and vegetation 	Y
<ul style="list-style-type: none"> – significant noise sources on and near the site, particularly roads, rail, aircraft and industrial noise 	NA
<ul style="list-style-type: none"> – building envelopes and setbacks for future development 	NA
<ul style="list-style-type: none"> – a written statement of key issues. 	Y
<ul style="list-style-type: none"> • Site context and survey plan 	
<ul style="list-style-type: none"> – Site dimensions and north point 	Y
<ul style="list-style-type: none"> – Topography 	Y
<ul style="list-style-type: none"> – Trees 	Y
<ul style="list-style-type: none"> – Existing buildings 	Y
<ul style="list-style-type: none"> – Windows, walls, balconies fences etc of adjoining 	NA
<ul style="list-style-type: none"> – Access points 	Y
<ul style="list-style-type: none"> – Utilities 	Y
<ul style="list-style-type: none"> • Streetscape elevations and sections 	Y
<ul style="list-style-type: none"> • Analysis 	
<p>A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application.</p>	Satisfactory
<p><u>3B Orientation</u></p>	
<p>Objective 3B-1</p>	
<p>Building types and layouts respond to the streetscape and site while optimising solar access within the development</p>	Development addresses the street

Standards/controls	Comment
<p><i>Objective 3B-2</i></p> <p>Overshadowing of neighbouring properties is minimised during mid-winter</p>	<p>Shadow diagrams have been provided indicating overshadowing of adjoining properties is acceptable.</p>
<p><u>3C Public domain interface</u></p>	
<p><i>Objective 3C-1</i></p> <p>Transition between private and public domain is achieved without compromising safety and security</p>	<p>Satisfactory</p>
<p><i>Objective 3C-2</i></p> <p>Amenity of the public domain is retained and enhanced</p>	<p>Perimeter planting provided</p> <p>Mailboxes integrated and unobtrusive</p> <p>Car parking and associated ventilation well integrated into the design.</p>
<p><u>3D Communal and public open space</u></p>	
<p><i>Objective 3D-1</i></p> <p>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping</p> <ul style="list-style-type: none"> • Communal open space has a minimum area equal to 25% of the site. • Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter) 	<p>The $\sim 460\text{m}^2 / 2,175\text{m}^2 = \sim 21\%$</p> <p>Complies</p>
<p><i>Objective 3D-2</i></p> <p>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.</p>	<p>The communal open space provided is considered to be of a size and function that is acceptable with regard to the likely users.</p>
<p><i>Objective 3D-3</i></p> <p>Communal open space is designed to maximise safety</p>	<p>Satisfactory</p>
<p><i>Objective 3D-4</i></p> <p>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood</p>	<p>N/A</p>
<p><u>3E Deep soil zones</u></p>	
<p><i>Objective 3E-1</i></p> <p>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</p>	
<p>6m minimum dimension</p>	<p>Complies</p>
<p>15% of the site as deep soil on sites greater than 1,500m²</p>	<p>Complies</p>

Standards/controls

Comment

Retain existing significant trees

N/A

3F Visual privacy

Objective 3F-1

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

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

Up to 12m – complies
5-8 storeys – complies

Objective 3F-2

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

Satisfactory

3G Pedestrian access and entries

Objective 3G-1

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

Clear entry provided.

Objective 3G-2

Access, entries and pathways are accessible and easy to identify

As above.

Objective 3G-3

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

N/A

3H Vehicle access

Objective 3H-1

Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes

- integrated with the building's overall facade

The driveway is located adjacent to the building. It is noted the DRP recommended the driveway be located beneath the building footprint to better integrate it into the development and reduce the amount of exposed hard stand area. The proposed driveway arrangement is not considered to be contrary to the ADG and reflects an approach that has been accepted in numerous other recent examples around Wollongong that have been through the DRP process.

Standards/controls	Comment
	Further discussion on this is contained in the body of the assessment report.
<ul style="list-style-type: none"> • Entries located behind building line 	Y
<ul style="list-style-type: none"> • Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout. 	The site is flat.
<ul style="list-style-type: none"> • Car park entry and access should be located on secondary streets or lanes where available 	N/A
<ul style="list-style-type: none"> • Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided 	N/A
<ul style="list-style-type: none"> • Access point locations should avoid headlight glare to habitable rooms 	Satisfactory
<ul style="list-style-type: none"> • Adequate separation distances should be provided between vehicle entries and street intersections 	N/A
<ul style="list-style-type: none"> • The width and number of vehicle access points should be limited to the minimum 	Complies
<ul style="list-style-type: none"> • Visual impact of long driveways should be minimised through changing alignments and screen planting 	N/A
<ul style="list-style-type: none"> • The need for large vehicles to enter or turn around within the site should be avoided 	Satisfactory
<ul style="list-style-type: none"> • Garbage collection, loading and servicing areas are screened 	Complies
<ul style="list-style-type: none"> • Clear sight lines should be provided at pedestrian and vehicle crossings 	Complies
<ul style="list-style-type: none"> • Traffic calming devices such as changes in paving material or textures should be used where appropriate. 	Paving is provided at the driveway threshold.
<ul style="list-style-type: none"> • Pedestrian and vehicle access should be separated and distinguishable. 	Complies
<p><u>3J Bicycle and car parking</u></p>	
<p><i>Objective 3J-1</i></p>	
<p>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</p>	Compliant car parking and bicycle parking is provided.
<p><i>Objective 3J-2</i></p>	
<p>Parking and facilities are provided for other modes of transport</p>	Motorbike and bicycle spaces are provided.
<p><i>Objective 3J-3</i></p>	
<p>Car park design and access is safe and secure</p>	Satisfactory
<p><i>Objective 3J-4</i></p>	
<p>Visual and environmental impacts of underground car parking are minimised</p>	The podium is screened with landscaping and set back from boundaries.

Standards/controls	Comment
<i>Objective 3J-5</i>	
Visual and environmental impacts of on-grade car parking are minimised	N/A
<i>Objective 3J-6</i>	
Visual and environmental impacts of above ground enclosed car parking are minimised	N/A
Part 4 – Designing the building - Amenity	
<u>4A Solar and daylight access</u>	
<i>Objective 4A-1</i>	
To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	<p>Greater than 70% of the living rooms and private open spaces of the apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.</p> <p>No apartments receive no direct sunlight between 9 am and 3 pm at mid winter.</p>
<i>Objective 4A-2</i>	
Daylight access is maximised where sunlight is limited	N/A
<i>Objective 4A-3</i>	
Design incorporates shading and glare control, particularly for warmer months	Living areas are either recessed behind balconies or are provided with shading devices.
<u>4B natural ventilation</u>	
<i>Objective 4B-1</i>	
All habitable rooms are naturally ventilated	Complies
<i>Objective 4B-2</i>	
The layout and design of single aspect apartments maximises natural ventilation	N/A
<i>Objective 4B-3</i>	
The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	Great than 60% of the apartments are naturally cross-ventilated.
<u>4C Ceiling heights</u>	
<i>Objective 4C-1</i>	
Ceiling height achieves sufficient natural ventilation and daylight access	Floor to ceiling heights are at least 2.7m.
<i>Objective 4C-2</i>	
Ceiling height increases the sense of space in apartments and provides for well proportioned rooms	Satisfactory

<i>Standards/controls</i>	Comment
Objective 4C-3	
Ceiling heights contribute to the flexibility of building use over the life of the building	Satisfactory
<u>4D Apartment size and layout</u>	
Objective 4D-1	
The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	Apartment sizes exceed the recommended minimums.
	All habitable rooms have room must have a window in an external wall with a total minimum glass exceeding 10% of the floor area of the room. Kitchens do not form part of the main circulation space. Windows are visible from all points of habitable rooms.
<i>Objective 4D-2</i>	
Environmental performance of the apartment is maximised	Room depths do not exceed 2.5m x ceiling height.
	Maximum habitable room depth does not exceed 8m from a window. Living areas and bedrooms are all located on the external face of the building. Bathrooms have external openable windows.
	Living areas oriented towards views and solar access.
<i>Objective 4D-3</i>	
Apartment layouts are designed to accommodate a variety of household activities and needs	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
	Bedrooms have a minimum dimension of 3m.
	Living rooms exceed 4m in width.
	Bedroom access separated from living spaces.
	Suitable robes provided in bedrooms.
	Layout are suitable to accommodate furniture.

Standards/controls	Comment
<u>4E Private open space and balconies</u>	
<i>Objective 4E-1</i>	
Apartments provide appropriately sized private open space and balconies to enhance residential amenity	Primary balconies for all units satisfy the minimum of 12m ² and minimum dimension of 2.4m.
<i>Objective 4E-2</i>	
Primary private open space and balconies are appropriately located to enhance liveability for residents	POS areas are oriented to maximise solar access and are connected to the living spaces.
<i>Objective 4E-3</i>	
Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Satisfactory
<i>Objective 4E-4</i>	
Private open space and balcony design maximises safety	Satisfactory
<u>4F Common circulation and spaces</u>	
<i>Objective 4F-1</i>	
Common circulation spaces achieve good amenity and properly service the number of apartments	Only 6 units share circulation core per floor.
	Wider common corridors are provided to assist with furniture movement.
	Natural daylight is provided to common corridors.
	Corridors are located to minimise acoustic impacts and allow for optimal solar access for units.
<i>Objective 4F-2</i>	
Common circulation spaces promote safety and provide for social interaction between residents	Satisfactory
<u>4G Storage</u>	
<i>Objective 4G-1</i>	
Adequate, well designed storage is provided in each apartment	Satisfactory.
<i>Objective 4G-2</i>	
Additional storage is conveniently located, accessible and nominated for individual apartments	Complies.
<u>4H Acoustic privacy</u>	
<i>Objective 4H-1</i>	
Noise transfer is minimised through the siting of buildings and building layout	Satisfactory.
<i>Objective 4H-2</i>	
Noise impacts are mitigated within apartments through layout and acoustic treatments	Satisfactory.

<i>Standards/controls</i>	Comment
<u>4J Noise and pollution</u>	
<i>Objective 4J-1</i>	
In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	The proposal is not situated close to noise sources.
<i>Objective 4J-2</i>	
Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	Satisfactory
<u>4K Apartment mix</u>	
<i>Objective 4K-1</i>	
A range of apartment types and sizes is provided to cater for different household types now and into the future	The proposal provides a suitable mix of one, two and three bedroom units.
<i>Objective 4K-2</i>	
The apartment mix is distributed to suitable locations within the building	Satisfactory
<u>4L Ground floor apartments</u>	
<i>Objective 4L-1</i>	
Street frontage activity is maximised where ground floor apartments are located	Satisfactory
<i>Objective 4L-2</i>	
Design of ground floor apartments delivers amenity and safety for residents	Satisfactory
<u>4M Facades</u>	
<i>Objective 4M-1</i>	
Building facades provide visual interest along the street while respecting the character of the local area	The proposal is considered to be of merit architecturally in respect of the materials palette and articulation however concerns remain over the scale.
<i>Objective 4M-2</i>	
Building functions are expressed by the façade	
<u>4N Roof design</u>	
<i>Objective 4N-1</i>	
Roof treatments are integrated into the building design and positively respond to the street	Y
<i>Objective 4N-2</i>	
Opportunities to use roof space for residential accommodation and open space are maximised	N/A

Standards/controls	Comment
<i>Objective 4N-3</i>	
Roof design incorporates sustainability features	The roof design maximises solar access to apartments during winter and provides shade during summer.
<u>4O Landscape design</u>	
<i>Objective 4O-1</i>	
Landscape design is viable and sustainable	Y
<i>Objective 4O-2</i>	
Landscape design contributes to the streetscape and amenity	Y
<u>4P Planting on structures</u>	
<i>Objective 4P-1</i>	
Appropriate soil profiles are provided	Satisfactory
<i>Objective 4P-2</i>	
Plant growth is optimised with appropriate selection and Maintenance	Satisfactory
<i>Objective 4P-3</i>	
Planting on structures contributes to the quality and amenity of communal and public open spaces	Satisfactory
<u>4Q Universal design</u>	
<i>Objective 4Q-1</i>	
Universal design features are included in apartment design to promote flexible housing for all community members	Since 5 of the units already comply with the Adaptable unit requirements, these units are also capable of satisfying the intent of Silver level of Livable Housing Guidelines.
<i>Objective 4Q-2</i>	
A variety of apartments with adaptable designs are provided	Satisfactory
<i>Objective 4Q-3</i>	
Apartment layouts are flexible and accommodate a range of lifestyle needs	Satisfactory
<u>4R Adaptive reuse</u>	
N/A	
<u>4S Mixed use</u>	
N/A	
<u>4T Awnings and signage</u>	
N/A	
<u>4U Energy efficiency</u>	
<i>Objective 4U-1</i>	
Development incorporates passive environmental design	Satisfactory

<i>Standards/controls</i>	Comment
<i>Objective 4U-2</i>	
Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	Satisfactory
<i>Objective 4U-3</i>	
Adequate natural ventilation minimises the need for mechanical ventilation	Satisfactory
<u>4V Water management and conservation</u>	
<i>Objective 4V-1</i>	
Potable water use is minimised	Satisfactory
<i>Objective 4V-2</i>	
Urban stormwater is treated on site before being discharged to receiving waters	Satisfactory
<i>Objective 4V-3</i>	
Flood management systems are integrated into site design	Satisfactory
<u>4W Waste management</u>	
<i>Objective 4W-1</i>	
Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.	Satisfactory
<i>Objective 4W-2</i>	
Domestic waste is minimised by providing safe and convenient source separation and recycling	Satisfactory
<u>4X Building maintenance</u>	
<i>Objective 4X-1</i>	
Building design detail provides protection from weathering	Satisfactory
<i>Objective 4X-2</i>	
Systems and access enable ease of maintenance	Satisfactory
<i>Objective 4X-3</i>	
Material selection reduces ongoing maintenance costs	Satisfactory

Attachment 7 – Wollongong Development control Plan 2009 compliance table

CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The proposal provides a suitable land use in an accessible location.

BASIX targets are achieved and the design of the units incorporates measures for passive energy saving such as recessed balconies, screened western elevations and good cross ventilation and natural light.

There proposal does not result in loss of any significant vegetation.

The proposal is satisfactory with respect to the applicable planning controls and is considered acceptable with respect to intergenerational equity.

CHAPTER B1

<i>Objectives/controls</i>	<i>Comment</i>
<p><u>4.12 Site Facilities</u></p> <p>Ensure that site facilities (such as clothes drying, mail boxes, recycling and garbage disposal units/areas, screens, lighting, storage areas, air conditioning units, rainwater tanks and communication structures) are effectively integrated into the development and are unobtrusive.</p>	Satisfactory
<p><u>4.13 Fire Brigade Servicing</u></p> <p>Ensure that all dwellings can be serviced by fire fighting vehicles.</p>	Fire hydrant booster is shown within the front setback.

CHAPTER D13 – WOLLONGONG CITY CENTRE

2 Building form

<i>Objectives/controls</i>	<i>Comment</i>
<p><u>2.2 Building to street alignment and street setbacks</u></p> <p>4m minimum street setback.</p>	The façade is setback 4.5m from the front boundary. An accessible ramp and the ground floor terrace encroach on the 4m however this is considered to be minor non-compliance that does not detract from the streetscape. This is further discussed at Chapter A1 in the body of the assessment report.
<p><u>2.3 Street frontage heights in commercial core</u></p> <p>N/A</p>	
<p><u>2.4 Building depth and bulk</u></p> <p>18m maximum building depth</p>	Complies
<p><u>2.5 Side and rear building setbacks and building separation</u></p> <p>Up to 12m in height</p> <ul style="list-style-type: none"> • habitable rooms with openings and balconies: 6m front / 6m rear • non-habitable rooms and habitable rooms without openings 3m front / 4.5m rear 	Complies (5.5m / 11.5m)

<i>Objectives/controls</i>	<i>Comment</i>
<p>Between 12m and 24m (lvl 4-7)</p> <ul style="list-style-type: none"> • habitable rooms with openings and balconies: 9m front / 9m rear • non-habitable rooms and habitable rooms without openings 4.5m front / 4.5m rear 	<p>Complies (5.5m / 11.5m)</p>
<p><u>2.6 Mixed used buildings</u></p>	
<p>N/A</p>	
<p><u>2.7 Deep soil zone</u></p>	
<p>15% of site area to be deep soil planting</p>	<p>Complies</p>
<p><u>2.8 Landscape design</u></p>	
<p>a) The following documents must be considered for site planning and landscape design:</p> <ol style="list-style-type: none"> i) Chapter E6 – Landscaping in the DCP. ii) Wollongong City Centre Public Domain Technical Manual. (Appendix 2 to this DCP). <p>b) Remnant vegetation must be maintained throughout the site wherever practicable, particularly significant trees.</p> <p>c) A long-term landscape management plan must be provided for all landscaped areas, in particular the deep soil landscape zone.</p> <p>d) The plan must outline how landscaped areas are to be maintained for the life of the development.</p> <p>e) Chapter E17 Preservation and Management of Trees and Other Vegetation in this DCP provides for the protection of all trees with a girth greater than 200mm or a height over three metres, or a spread over three metres.</p>	<p>Council's Landscape Officer has reviewed the proposal with respect to Chapter E6 and Council's Public Domain Technical Manual and has given a satisfactory referral subject to conditions.</p> <p>There is no significant vegetation on the site.</p> <p>Conditions of consent are recommended with respect to long term management of landscaped areas.</p>
<p><u>2.9 Green roofs, green walls and planting on structures</u></p>	
<p>a) Design for optimum conditions for plant growth by:</p> <ol style="list-style-type: none"> i) Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established, ii) Providing appropriate soil conditions and irrigation methods, and iii) Providing appropriate drainage. <p>b) Design planters to support the appropriate soil depth and plant selection by:</p> <ol style="list-style-type: none"> i) Ensuring planter proportions accommodate the largest volume of soil possible and soil depths to ensure tree growth, and ii) Providing square or rectangular planting areas rather than narrow linear areas. <p>c) Increase minimum soil depths in accordance with:</p>	<p>Council's Landscape Officer has reviewed the proposed landscaping on structure and has recommended conditions of consent.</p>

<i>Objectives/controls</i>	<i>Comment</i>
<u>2.10 Sun access planes</u> N/A	
<u>2.11 Development on classified roads</u> N/A	

3 Pedestrian amenity

<i>Objectives/controls</i>	<i>Comment</i>
<u>3.2 Permeability</u> N/A	
<u>3.3 Active street frontages</u> N/A	
<u>3.4 Safety and security</u> a) Ensure that the building design allows for casual surveillance of accessways, entries and driveways. b) Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks. c) Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering. d) Where private open space is located within the front building alignment any front fencing must be of a design and/or height which allows for passive surveillance of the street. e) Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance. f) Provide clear lines of sight and well-lit routes throughout the development. g) Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway. h) For large scale retail and commercial development with a GFA of over 5,000m ² , provide a 'safety by design' assessment in accordance with the CPTED principles. i) Provide security access controls where appropriate. j) Ensure building entrance(s) including pathways, lanes and arcades for larger scale retail and commercial developments are directed to signalised intersections rather than mid-block in the Commercial zone, Mixed Use (city edge) and Enterprise Corridor zones.	Casual surveillance of the street is provided. The design does not result in blind corners or dark alcoves. The entrance is visually prominent. Secure access control provided to the basement.
<u>3.5 Awnings</u> N/A	
<u>3.6 Vehicular footpath crossings</u> Location of Vehicle Access:	

<i>Objectives/controls</i>	<i>Comment</i>
<ul style="list-style-type: none"> • one vehicle access point only 	Complies
<ul style="list-style-type: none"> • Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with major pedestrian and cyclist activity. 	Complies
<ul style="list-style-type: none"> • Amalgamate vehicle access points where possible 	N/A
<p><u>3.7 Pedestrian overpasses, underpasses and encroachments</u></p> <p>N/A</p>	
<p><u>3.8 Building exteriors</u></p>	
<p>a) Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of:</p>	
<p>i) Appropriate alignment and street frontage heights.</p>	Setbacks are satisfactory
<p>ii) Setbacks above street frontage heights.</p>	N/A
<p>iii) Appropriate materials and finishes selection.</p>	The materials and finishes are considered appropriate.
<p>iv) Façade proportions including horizontal or vertical emphasis.</p>	Satisfactory
<p>v) The provision of enclosed corners at street intersections.</p>	N/A
<p>b) Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged.</p>	Satisfactory
<p>c) Articulate facades so that they address the street and add visual interest.</p>	Satisfactory
<p>d) External walls should be constructed of high quality and durable materials and finishes with 'self-cleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass.</p>	Satisfactory
<p>e) Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.</p>	Satisfactory
<p>f) To assist articulation and visual interest, avoid expanses of any single material.</p>	The facades are articulated and use a mixture of materials.
<p>g) Limit opaque or blank walls for ground floor uses to 30% of the street frontage.</p>	Satisfactory
<p>h) Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass.</p>	N/A
<p>i) Highly reflective finishes and curtain wall glazing are not permitted above ground floor level (see Section 5.3).</p>	Satisfactory
<p>j) A materials sample board and schedule is required to be submitted with applications for development</p>	Satisfactory

<i>Objectives/controls</i>	<i>Comment</i>
<p>over \$1 million or for that part of any development built to the street edge.</p> <p>k) Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space providing it does not fall within the definition of gross floor area and there is a public benefit, such as:</p> <ul style="list-style-type: none"> i) Expressed cornice lines that assist in enhancing the streetscape, ii) Projections such as entry canopies that add visual interest and amenity, and iii) Provided that the projections do not detract from significant views and vistas (see Figure 3.12). l) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building. 	<p>N/A</p>
<p><u>3.9 Advertising and signage</u></p>	
<p>N/A</p>	
<p><u>3.10 Views and view corridors</u></p>	
<ul style="list-style-type: none"> a) Existing views shown in Figure 3.12 are to be protected to the extent that is practical in the planning and design of development. b) The redevelopment of sites with potential to open a blocked view shown in Figure 3.12 must take into account the restoration of that view. c) Align buildings to maximise view corridors between buildings. d) Remove or avoid installation of built elements that obstruct significant views. e) Carefully consider tree selection to provide views along streets in Figure 3.12 and keep under storey planting low where possible. f) Site analysis must address views with the planning and design of building forms taking into account existing topography, vegetation and surrounding development. 	<p>The proposal is not located within a significant view corridor.</p>
<p>4 Access, parking and servicing</p>	
<i>Objectives/controls</i>	<i>Comment</i>
<p><u>4.2 Pedestrian access and mobility</u></p>	
<ul style="list-style-type: none"> a) Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity. 	<p>Yes</p>

<i>Objectives/controls</i>	<i>Comment</i>
b) The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, AS 2890 Pt 1, or as amended) and the Disability Discrimination Act 1992 (as amended).	The proposal is required to comply with the BCA. Accessible parking is provided as well as adaptable dwellings. Post adaptation plans illustrate no significant structural changes are required to comply.
c) The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.	Complies
d) The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.	Provided.
e) Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours in accordance with Council's Public Domain Technical Manual.	Satisfactory
f) 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.	Complies.
<u>4.3 Vehicular driveways and manoeuvring areas</u>	
a) Driveways should be:	
i) Provided from lanes and secondary streets rather than the primary street, wherever practical.	Yes
ii) Located taking into account any services within the road reserve, such as power poles, drainage pits and existing street trees.	Satisfactory
iii) Located a minimum of 6 metres from the perpendicular of any intersection of any two roads.	N/A
iv) If adjacent to a residential development setback a minimum of 1.5m from the relevant side property boundary.	Complies
b) Vehicle access is to be designed to:	
i) Minimise the impact on the street, site layout and the building façade design; and	Satisfactory
ii) If located off a primary street frontage, integrated into the building design.	Satisfactory
c) All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.	Complies
d) Design of driveway crossings must be in accordance with Council's standard Vehicle Entrance Designs, with any works within the footpath and road reserve subject to a s138 Roads Act approval.	Complies

<i>Objectives/controls</i>	<i>Comment</i>
e) Driveway widths must comply with the relevant Australian Standards.	Complies
f) Car space dimensions must comply with the relevant Australian Standards.	Complies
g) Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standard, (AS 2990.1).	Complies
h) Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%). Ramp widths and design must be in accordance with AS 2890.1.	Complies
i) Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.	Complies
j) For residential development in the General Residential zone, use semi-pervious materials for all uncovered parts of driveways/spaces to provide for some stormwater infiltration.	N/A
<u>4.4 On-site parking</u>	
a) On-site parking must meet the relevant Australian Standard (AS2890.1 2004 – Parking facilities, or as amended).	Complies
b) Council may require the provision of a supporting geotechnical report prepared by an appropriately qualified professional as information to accompany a development application to Council.	The proposal has been reviewed by Council's Geotechnical Officer as satisfactory subject to conditions with respect to the excavation for the basement. The basement car park is offset from the boundaries.
c) Car parking and associated internal manoeuvring areas which are surplus to Council's specified parking requirements will count towards the gross floor area, but not for the purpose of determining the necessary parking.	Four additional car spaces are provided which are accounted for in the proponents calculations of GFA and FSR.
d) Any car parking provided in a building above ground level is to have a minimum floor to ceiling height of 2.8m so it can be adapted to another use in the future.	N/A
e) On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP.	Complies
On-site parking is to be accommodated underground, or otherwise integrated into the design of the building.	Complies
<u>4.5 Site facilities and services</u>	
Mail boxes	
a) Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development.	Complies
b) They should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building.	

<i>Objectives/controls</i>	<i>Comment</i>
c) Letterboxes shall be secure and large enough to accommodate articles such as newspapers.	
Communication structures, air conditioners and service vents	Satisfactory
a) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures <ul style="list-style-type: none"> i) Away from the street frontage, ii) Integrated into the roof scape design and in a position where such facilities will not become a skyline feature at the top of any building, and iii) Adequately setback from the perimeter wall or roof edge of buildings. b) A master antennae must be provided for residential apartment buildings. This antenna shall be sited to minimise its visibility from surrounding public areas.	
<i>Waste (garbage) storage and collection</i>	
General (all development)	
a) All development is to adequately accommodate waste handling and storage on-site. The size, location and handling procedures for all waste, including recyclables, is to be determined in accordance with Council waste policies and advice from relevant waste handling contractors.	A suitable waste storage room is provided within the basement.
b) Access for waste collection and storage is preferred from rear lanes, side streets or rights of ways.	Waste collection is proposed from the kerb.
c) Waste storage areas are to be designed to: <ul style="list-style-type: none"> i) Ensure adequate driveway access and manoeuvrability for any required service vehicles, ii) Located so as not to create any adverse noise impacts on the existing developments or sensitive noise receptors such as habitable rooms of residential developments, and iii) Screened from the public way and adjacent development that may overlook the area. 	
d) The storage facility must be well lit, easily accessible on grade for movement of bins, free of obstructions that may restrict movement and servicing of bins or containers and designed to minimise noise impacts.	

<i>Objectives/controls</i>	<i>Comment</i>
<p>Location requirements for Waste Storage Areas and Access</p> <p>a) Where waste volumes require a common collection, storage and handling area, this is to be located:</p> <p>i) For residential flat buildings, enclosed within a basement or enclosed carpark,</p> <p>ii) For multi-housing, at ground behind the main building setback and façade, or within a basement or enclosed carpark,</p> <p>iii) For commercial, retail and other development, on-site in basements or at ground within discrete service areas not visible from main street frontages.</p> <p>b) Where above ground garbage collection is prohibitive or impractical due to limited street frontage, or would create an unsafe environment, an on-site basement storage area must be provided.</p> <p>c) Where a mobile compaction vehicle is required to enter the site, the access and circulation area shall be designed to accommodate a vehicle with the following dimensions:</p>	<p>The waste storage area in the basement is considered suitable to accommodate the bins for the dwellings.</p>
Service docks and loading/unloading areas	N/A
Fire service and emergency vehicles	Site is accessible from the street frontages.
Utility Services	Conditions of consent apply.

5 Environmental management

<i>Objectives/controls</i>	<i>Comment</i>
<p><u>5.2 Energy efficiency and conservation</u></p> <p>To comply with BASIX- Council encourages all applicants to go beyond minimum BASIX requirements incorporating passive solar design and energy efficiency measures for residential development.</p>	<p>The proposal meets the minimum target for water and thermal comfort while exceeding the target for energy efficiency (target being 25, proposal achieves 29).</p>
<p><u>5.3 Water conservation</u></p> <p>To comply with BASIX- Council encourages all residential development to go beyond the minimum BASIX requirements and enhance the water efficiency of the development.</p>	<p>Complies with BASIX</p>
<p><u>5.4 Reflectivity</u></p> <p>a) New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers.</p> <p>b) Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%.</p> <p>c) Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that</p>	<p>Satisfactory.</p>

<i>Objectives/controls</i>	<i>Comment</i>
<p>analyses potential solar glare from the proposed development on pedestrians or motorists may be required.</p> <p><u>5.5 Wind mitigation</u></p> <p>A Wind Effects Report is to be submitted with the DA for all buildings greater than 32m in height.</p> <p><u>5.6 Waste and recycling</u></p> <p>All development must comply with Council's Technical Policy for the Management of all Wastes Associated with Building Sites.</p> <p>Provision must be made for the following waste generation:</p> <p>a) In developments not exceeding six dwellings, individual waste storage facilities may be permitted.</p> <p>b) In development of more than six units or dwellings, or where the topography or distance to the street collection point makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is;</p> <p>i) Not visible from the street,</p> <p>ii) Easily accessible to dwelling occupants,</p> <p>iii) Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to the approved collection point),</p> <p>iv) Has water and drainage facilities for cleaning and maintenance, and</p> <p>v) Does not immediately adjoin private open space, windows or clothes drying areas.</p> <p>c) Subject to Council collection policy, common garbage storage areas must be sized to either accommodate the number of individual bins required or to accommodate sufficient larger bins with the following minimum dimensions:</p>	<p>The building is not of a height to necessitate a wind impacts assessment.</p> <p>Satisfactory</p> <p>A waste storage room is provided in the basement. Waste collection is proposed from the kerbside which is not considered ideal given the large number of bins. However, there is a large frontage within which to accommodate them.</p>

6 Residential development standards

<i>Objectives/controls</i>	<i>Comment</i>
<p><u>6.1 SEPP 65</u></p> <p>See assessment above.</p> <p><u>6.2 Housing choice and mix</u></p> <p>i) Studio and one bedroom units must not be less than 10% of the total mix of units within each development,</p> <p>ii) Three or more bedroom units must not be less than 10% of the total mix of units within each development, and</p>	<p>12 x 1 (30%)</p> <p>21 x 2 (52%)</p> <p>7 x 3 (18%)</p>

Objectives/controls	Comment
iii) For smaller developments (less than six dwellings) achieve a mix appropriate to locality.	
10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents	Complies
Where possible, adaptable dwellings shall be located on the ground floor, for ease of access.	Two livable units are located on the ground floor.
The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).	Satisfactory
Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces.	Complies
10% of all dwellings (or at least 1 dwelling) must be designed to achieve the Silver Standards of the Livable Housing Design Guideline (Livable Housing Australia 2015).	Complies
Ceiling heights of apartments must be selected to encourage the penetration of natural sunlight into all areas of the building. Provide the following minimum floor to ceiling heights, for residential zones, as required by the Residential Flat Design Code:	Complies
i) 2.7m minimum for all habitable rooms on all floors;	
<u>6.3 Dwelling houses</u>	
N/A	
<u>6.4 Multi dwelling housing</u>	
N/A	
<u>6.5 Dual occupancy</u>	
N/A	
<u>6.6 Basement Carparks</u>	
Not to compromise deep soil requirements	Satisfactory
Not to extend greater than 1.2m out of the ground	The basement extends approximately 1.6m above natural ground. This is to accommodate flood storage into the podium and is unavoidable.
To be screened with landscaping	The podium is well screened with landscaping.
Designed to minimise the bulk of the building	Satisfactory
Pedestrian entry readily identifiable	Satisfactory
Permitted to extend to property boundary where not >1.2m out of the ground	The podium does not extend to the boundary.
Ventilation structures to be located away from windows and integrated into the design.	Complies

Objectives/controls	Comment
<u>6.7 Communal open space</u>	
a) Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m ² per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5m.	40 dwellings x 5m ² = 200m ² - Complies
b) The communal open space must be easily accessible and within a reasonable distance from apartments, be integrated with site landscaping, allow for casual social interaction and be capable of accommodating recreational activities.	Access to the COS area is not considered ideal given you have to go out the back and then around the building to get to it. Platform lift again not ideal. Stairs down and then stairs back up to the pool area?
c) Where a minimum of 15% of the site is provided as a deep soil zone, combined use of part of the deep soil zone as communal open space may occur. The combined communal open space/deep soil area may be grassed but must not contain significant shade trees. A maximum of 1/3 of the required communal open space area may be combined with the deep soil zone.	Satisfactory
d) Areas of the communal open space which are to be paved or which will contain shade structures, swimming pools or the like cannot be located within the deep soil zone.	Satisfactory
e) The communal open space area must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.	Satisfactory currently however consideration should be given to the impact of a future building on the adjoining site to the north.
<u>6.8 Private open space</u>	
i) The courtyard/terrace for the ground level dwellings must have a minimum area of 25m ² and a width of 2 metres. This area must be separated from boundaries by at least 1.5m with a vegetated landscaping bed and must not encroach upon deep soil zone landscaping areas.	Complies
ii) The primary private open area of at least 70% of the dwellings within a residential apartment building must receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.	Complies
iii) Private open space areas (courtyards) must not extend forward to the front building setback by greater than 900mm.	Complies
iv) Private open space should be sited in a location which provides privacy, solar access, and pleasing outlook and has a limited impact on neighbours.	Complies
v) Design private open spaces so that they act as direct extensions of the living areas of the dwellings they serve.	Complies
vi) Clearly define private open space through use of planting, fencing or landscaping features.	Satisfactory
vii) Screen private open space where appropriate to ensure privacy.	Complies

Objectives/controls	Comment
viii) Provide balconies with operable screens or similar in locations where noise or high winds prohibit reasonable outdoor use (i.e. next to rail corridors, busy roads and tall towers).	N/A
c) Where private open space is provided in the form of a balcony, the following requirements must also be met:	
i) Avoid locating the primary balconies where they address side setbacks.	Complies
ii) The balcony must have a minimum area of 12m ² open space a minimum depth of 2.4 metres.	Complies
iii) The primary balcony of at least 70% of the dwellings within a multi dwelling housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.	Complies
iv) Balconies must be designed and positioned to ensure sufficient light can penetrate into the building at lower levels.	Complies
v) Individual balcony enclosures are not supported. Balcony enclosures must form part of an overall building façade design treatment and should not compromise the functionality of a balcony as a private open space area.	N/A
<u>6.9 Overshadowing</u>	
a) 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.	The proposal meets setback requirements and is of a height and bulk anticipated by the controls. Whilst the building will cast a large shadow to the south, it is considered acceptable with regard to the applicable controls and is not considered to compromise the ability of future development on the adjoining land from satisfying solar access requirements.
b) 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.	Shadow diagrams have been provided which demonstrate minimum solar access is maintained to adjoining development.
c) In determining access to sunlight, overshadowing by fences, roof overhangs and changes in level must be taken into consideration. Overshadowing by vegetation should also be considered, where dense vegetation appears as a solid fence. Refer to Land and Environment Court Planning Principles – Parsonage vs Ku-Rin-Gai Council (2004).	Complies
d) 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	Satisfactory

Objectives/controls	Comment
<u>6.10 Solar access</u>	
a) Residential apartment buildings must aim to maximise their level of northern exposure to optimise the number of dwellings having a northern aspect. Where a northern aspect is available, the living spaces and balconies of such apartments must typically be orientated towards the north.	The building locates four units per level on the northern side of the building with only two on the south.
b) The development must maximise the number of apartments with a dual orientation. Single aspect, single storey apartments should preferably have a northerly or easterly aspect and a reduced depth to allow for access of natural light to all habitable spaces.	8 single aspect units are proposed. These are located on the northern elevation. Natural ventilation requirements are met.
c) Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation.	Satisfactory
d) The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm.	Complies
e) The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% of the total number of apartments proposed.	N/A
f) Provide vertical shading to eastern and western windows. Shading can take the form of eaves, awnings, colonnades, balconies, pergolas, external louvres and planting	Satisfactory
<u>6.11 Natural ventilation</u>	
Depth <18m	Complies
A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated.	32/40 = 80%
Twenty five percent (25%) of kitchens within a development must have access to natural ventilation.	Complies
Single aspect apartments must be limited in depth to 8m from a window.	Complies
<u>6.12 Visual privacy</u>	
1. New buildings should be sited and oriented to maximise visual privacy between buildings through compliance with minimum front, side and rear setback / building separation requirements.	Complies
2. The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards, wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living room areas.	Complies
3. Buildings are to be designed to increase privacy without compromising access to sunlight and natural ventilation through the following measures:	Complies

Objectives/controls	Comment
<ul style="list-style-type: none"> (a) Off-setting of windows in new buildings from windows in existing adjoining building(s). (b) Recessed balconies and / or vertical fin elements between adjoining balconies to improve visual privacy. (c) Provision of solid, semi-solid or dark tinted glazed balustrading to balconies. (d) Provision of louvers or screen panels to windows and / or balconies. (e) Provision of perimeter landscaped screen / deep soil planting. (f) Incorporating planter boxes onto apartment balconies to improve visual separation between apartments within the development and adjoining buildings. (g) Provision of pergolas or shading devices to limit overlooking of lower apartments or private open space courtyards / balconies. 	
<p>6.13 Acoustic Privacy</p>	
<p>Locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);</p>	Satisfactory
<p>Using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas; and</p>	
<p>Minimising the amount of party (shared) walls with other apartments.</p>	
<p>To be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s).</p>	Complies or conditionable
<p>Noise transmission from common corridors or outside the building is to be minimised by providing seals at entry doors.</p>	Complies or conditionable
<p>6.14 Storage</p>	
<p>5m² area / 10m³ volume for 3 bedroom units</p>	Storage areas are provided within the basement for each unit.

7 Planning controls for special areas

The site is not located in a special area.

8 Works in the public domain

Were the application to be supported, it would be a requirement that the footpath be upgraded for the frontage in accordance with Council policy.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposal is satisfactory with regard to the principles of CPTED.

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

6 Traffic impact assessment and public transport studies

6.1 Car Parking and Traffic Impact Assessment Study

A traffic impact assessment was not required for the development.

6.2 Preliminary Construction Traffic Management Plan

N/A

7 Parking demand and servicing requirements

Beds	RMS Sub regional		Required	Proposed
1	0.6	12 x 0.6	7.2	
2	0.9	21 x 0.9	18.9	
3	1.4	7 x 1.4	9.8	
Total resident			35.9 (36)	40
visitor	0.2	0.2 x 40	8	8
Total			44	48*

**Surplus spaces are to be included as gross floor area as discussed at clause 4.4A of WLEP 2009*

Bicycle and motorbike parking is also provided in accordance with Council requirements.

8 Vehicular access

Driveway grades and sight distances comply.

9 Loading / unloading facilities and service vehicle manoeuvring

The development complies with AS 2890.2.

Waste servicing will occur from the kerb.

10 Pedestrian access

The proposal is satisfactory with regard to pedestrian access into the site and along the frontage.

11 Safety & security (Crime Prevention through Environmental Design) measures for car parking areas

The proposal is satisfactory with regard to the principles of CPTED.

CHAPTER E6: LANDSCAPING

Suitable landscaped areas have been provided in accordance with this chapter.

CHAPTER E7: WASTE MANAGEMENT

A Site Waste Minimisation and Management Plan has been provided in accordance with this chapter.

The proposal involves demolition and a demolition plan has accordingly been provided.

Suitable waste storage and servicing arrangements have been provided.

CHAPTER E11 HERITAGE CONSERVATION

See commentary at clause 5.10 and 7.18 of WLEP 2009 and Heritage Officer comments at section 1.4.1

CHAPTER E12 GEOTECHNICAL ASSESSMENT

The application has been reviewed by Council's Geotechnical Engineer in relation to site stability and the suitability of the site for the development and no concerns were raised.

CHAPTER E14 STORMWATER MANAGEMENT

The proposed stormwater management and disposal is satisfactory with regard to this chapter as advised by Council's Stormwater Officer.

CHAPTER E15 - WATER SENSITIVE URBAN DESIGN

A Water Sensitive Urban Design Treatment Report has been provided which details the stormwater treatment devices to be installed.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

The proposed earthworks are considered satisfactory with regard to this chapter.

CHAPTER E21 DEMOLITION AND HAZARDOUS BUILDING MATERIALS MANAGEMENT

Conditions of consent would apply in regard to demolition.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

Conditions of consent would apply in regard to appropriate sediment and erosion control measures to be in place during works.

ATTACHMENT 8 – DRAFT CONDITIONS

Approved Plans and Specifications

- 1 The development shall be implemented substantially in accordance with the details and specifications set out on the following plans:

Site and Roof Plan A-100-C dated 17 September 2020 prepared by ADM Architects
Basement Floor Plan A-101-D dated 8 October 2020 prepared by ADM Architects
Ground Floor Plan A-102-C dated 17 September 2020 prepared by ADM Architects
Level 1 Floor Plan A-103-B dated 1 September 2020 prepared by ADM Architects
Level 2 - 5 Floor Plan A-104-B dated 1 September 2020 prepared by ADM Architects
Level 6 Floor Plan A-105-B dated 1 September 2020 prepared by ADM Architects
East Elevation Plan A-201-B dated 1 September 2020 prepared by ADM Architects
North Elevation Plan A-202-B dated 1 September 2020 prepared by ADM Architects
West Elevation Plan A-203-B dated 1 September 2020 prepared by ADM Architects
South Elevation Plan A-204-B dated 1 September 2020 prepared by ADM Architects
Section AA Plan A-205-B dated 1 September 2020 prepared by ADM Architects
Section BB Plan A-206-A dated 15 September 2020 prepared by ADM Architects
Demolition & Site Management Plan A-601-A dated 28 February 2020 prepared by ADM Architects

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 **Geotechnical**
 - a An earthworks plan is to be developed by a geotechnical consultant prior to start of earthworks.
 - b A dilapidation report is required for all structures located within the zone of influence of the proposed earthworks as determined by the geotechnical consultant.
 - c No disturbance of ground is to occur beyond site boundaries. A minimum buffer between site boundaries and the construction of retaining structures is to be recommended by the geotechnical consultant to ensure adjoining property is not adversely impacted upon by this development.
 - d Retaining wall design is not to include anchors extending on to adjoining property without the written consent of the adjoining property owner.
 - e All excavations need to be supported during and after construction particularly to protect adjoining property with nearby existing development.
 - f The earthworks plan may require modification considering any subsequent geotechnical reports commissioned to address unforeseen geotechnical conditions encountered during the earthworks.
 - g Due to the sensitivity of the site to changing geotechnical conditions, all work must be undertaken with geotechnical supervision.
 - h At the completion of the earthworks, the geotechnical consultant is to prepare a works-as-executed report detailing encountered geotechnical conditions and how the earthworks addressed these conditions so that the residual geotechnical constraints can be accommodated within the structural designs for the development. These structural designs are to be confirmed or amended by the structural engineer based on the works-as-executed geotechnical report.

- 3 **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.
- 4 **Construction Certificate**
A Construction Certificate must be obtained from Council or a Registered Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Clauses 139-147 of the Environmental Planning and Assessment Regulation 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The Certifier must cause notice of its determination to be given to the consent authority, and to the council, by forwarding to it, within two (2) days after the date of the determination, the plans and documentation referred to in clause 142 (2) of the Environmental Planning and Assessment Regulation 2000.
- 5 **Occupation Certificate**
An Occupation Certificate must be issued by the Principal Certifier prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifier must be satisfied that the requirements of section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.
- 6 **Tree Retention/Removal**
All tree protection measures are to be installed in accordance with Australian standard AS4970-2009 Protection of Trees on development Sites.

All recommendations in the Aboricultural Impact Assessment by Allied Tree Consultancy dated February 2020 page no. 8-12 are to be implemented including and not restricted to: remedial tree pruning, dead wood removal, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

The developer shall transplant tree numbered T6 and T7 to an appropriate location on site by an experienced and qualified contractor. The transplanting of the palms must be undertaken in one day on the first day of demolition works. The supervising arborist must certify in writing that the transplanting has been undertaken as conditioned, have been inspected and installed in accordance with the arborist's recommendations

This consent permits the removal of trees numbered T1, T2, T3, T4 and T5 as indicated on the Landscape Plan by Ochre Landscape Architects 1907-LD01B dated 18 February 2020 and Aboricultural Impact Assessment by Allied Tree Consultancy dated February 2020. No other trees shall be removed without prior written approval of Council.
- 7 **Street Tree Removal**
This consent authorises the removal of the street tree indicated on the Landscape Plan by Ochre Landscape Architects 1907-LD01B dated 18 February 2020 and Aboricultural Impact Assessment by Allied Tree Consultancy dated February 2020 consisting of tree(s) numbered T1.

Tree removal costs are to be borne by developer. The removal of trees, including stumps, is to be carried out by suitably qualified tree contractor. This contractor must be appropriately insured to indemnify Council against any loss or damage incurred during the above works. They must also have appropriate WH&S policies and procedures (including traffic control) to ensure that works are carried out in a safe manner and in accordance in Council's own WH&S policies.

The developer must apply for (and be granted) permission under section 138 of the roads act to work within the road reserve. Tree removal must be carried out to the satisfaction of WCC Manager of Works.

Prior to the Issue of the Construction Certificate

8 Stormwater Treatment Devices

The proposal is to incorporate the recommendations contained in the WSUD Treatment Report dated 5 August 2020 prepared by JN Responsive Engineering. Detail of the treatment devices is to be shown on the Construction Certificate.

9 Section 73 Compliance Certificate

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the “Builders and Developers” section of the web site www.sydneywater.com.au then search to “Find a Water Servicing Coordinator”. Alternatively, telephone 13 20 92 for assistance.

Following application, a “Notice of Requirements” will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

The Notice of Requirements must be submitted to the Principal Certifier prior to issue of the Construction Certificate.

10 Car Parking and Access

The development shall make provision for a total of 40 resident car parking spaces and 8 visitor car parking spaces, including 5 spaces capable of being converted to adaptable spaces. 3 motorbike spaces are required as well as 14 secure (Class B) residential bicycle spaces and 4 visitor bicycle spaces (Class C). 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 4.55 modification to the development. The approved car parking spaces shall be maintained to the satisfaction of Council, at all times.

11 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.

12 A final landscape plan is to be prepared and submitted to the Principal Certifier prior to the release of the Construction Certificate. The final landscape plan shall address the following requirements:

- a Street Trees are to be *Syzygium paniculatum*.
- b Equitable access from the street to the communal open space is to be provided in accordance with AS 1428.1 and 1428.2.

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

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

14 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 Certifier prior to release of the Construction Certificate.

15 Tree Protection and Management

The existing trees are to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

- a Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings. Details and location of

protective fencing must be indicated on the architectural and engineering plans to be submitted to the Principal Certifier prior to release of the Construction Certificate.

- b Installation of Tree Protection Fencing - A one (1) metre high exclusion fence must be installed around the extremity of the dripline of the tree/trees to be retained prior to any site works commencing. The minimum acceptable standard is a 3 strand wire fence with star pickets at 1.8 metre centres. This fence must be maintained throughout the period of construction to prevent any access within the tree protection area. Details of tree protection and its locations must be indicated on the architectural and engineering plans to be submitted to the Principal Certifier prior to release of the Construction Certificate.
- c Mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch.
- d Irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the arborist's recommendations.

16 **Acid Sulfate Soils Management Strategy**

An Acid Sulfate Soils Management strategy (prepared by a suitably qualified and experienced environmental/geotechnical consultant) shall be submitted to the Principal Certifier, prior to the issue of the Construction Certificate. This strategy is required to recommend specific procedures and mitigation measures and shall include a site analysis from a NATA registered laboratory. This strategy shall address the following aspects:

- a Specific mitigative measures to minimise the disturbance of acid sulfate soils as well as measures relating to acid generation and acid neutralisation of the soil;
- b Management of the excavated material;
- c Measures taken to neutralise the acidity; and
- d Run-off control measures.

The recommendations of the strategy shall be completed, prior to the commencement of building works.

- 17 Bicycle parking facilities must comply with Australian Standard AS2890.3 - Bicycle Parking Facilities including dimensions, adequate weather protection and security. This requirement shall be reflected on the Construction Certificate plans.

18 **Property Addressing Policy Compliance**

Prior to the issue of any construction certificate, the developer must ensure that any site addressing complies with Council's **Property Addressing Policy** (as amended). Where appropriate, the developer must also lodge a written request to Council's **Infrastructure Systems & Support – Property Addressing** (propertyaddressing@wollongong.nsw.gov.au), for the site addressing prior to the issue of the construction certificate. Please allow up to 3-5 business days for a reply. Enquiries regarding property addressing may be made by calling 4227 8660.

19 **Footpath Paving City Centre**

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 shall be in accordance with the Wollongong City Council Public Domain Technical Manual.

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. Any changes of level, ramps or stairs and associated tactile markers and handrails are to be contained within the property boundary.

The driveway entry threshold from the property boundary line to the face of kerb is to match the footpath material and be designed to withstand predicted traffic loadings.

The driveway threshold finish within property boundary line is to contrast with driveway entry.

The footpath and driveway entry on the council property must be installed to the satisfaction of WCC Manager of Works.

A Landscape Plan is to be submitted to Council for approval prior to the issue of the Construction Certificate showing proposed paving, footpath design levels, street tree details and location of all services.

20 **Street Trees City Centre**

The developer must address the street frontage by installing street tree planting. The number and species for this development are Four *Syzygium paniculatum* 75 litre container size in accordance with AS 2303:2018 Tree stock for landscape use. 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 adequately mulched, plants installed and tree guard/staking/tree grille/edging installed to the satisfaction of WCC Manager of Works.

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

21 **Council Footpath Reserve Works – Driveways and Crossings**

All redundant vehicular crossings and laybacks rendered unnecessary by this development must be reconstructed to normal kerb and gutter or existing edge of carriageway treatment to match the existing. The verge from the back of kerb to the boundary must be restored and the area appropriately graded, topsoiled and turfed in a manner that conforms with adjoining road reserve. The area forward of the front boundary must be kept smooth, even and free from any trip hazards. All alterations of public infrastructure where necessary are at the developer's expense.

All new driveway laybacks and driveway crossings must be designed in accordance with Wollongong City Council Standards. Details and locations are to be shown on the Construction Certificate Plans.

22 **Dilapidation Survey**

A dilapidation survey and report shall be submitted to the Principal Certifier.

The dilapidation survey and report shall accurately reflect the condition of existing public and private infrastructure in the adjacent street(s) fronting the lots.

The report shall outline measures for the protection of existing public and private infrastructure during the works.

Any damage to infrastructure items and relics which is caused by the developer shall be repaired to the satisfaction of the Principal Certifier prior to the issue of a Certificate of Practical Completion for Subdivision works.

23 **Development Contributions**

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the Wollongong City-Wide Development Contributions Plan, a monetary contribution of \$96,120.00 (subject to indexation) must be paid to Council towards the provision of public amenities and services, prior to the release of any associated Construction Certificate.

This amount has been calculated based on the estimated cost of development and the applicable percentage rate.

The contribution amount will be subject to indexation until the date of payment. The formula for indexing the contribution is:

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

Where:

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

CP1 is the Consumer Price Index; All Groups CPI; Sydney at the time the consent was issued

CP2 is the Consumer Price Index; All Groups CPI; Sydney at the time of payment

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

The following payment methods are available:

METHOD	HOW	PAYMENT TYPE
Online	http://www.wollongong.nsw.gov.au/applicationpayments Your Payment Reference: 1212297	<ul style="list-style-type: none"> • Credit Card
In Person	Wollongong City Council Administration Building - Customer Service Centre Ground Floor 41 Burelli Street, WOLLONGONG	<ul style="list-style-type: none"> • Cash • Credit Card • Bank Cheque
PLEASE MAKE BANK CHEQUE PAYABLE TO: Wollongong City Council (Personal or company cheques are not accepted)		

A copy of the Wollongong City-Wide 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

Prior to the Commencement of Works

24 Appointment of Principal Certifier

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

- a Appoint a Principal Certifier (PC) and notify Council in writing of the appointment irrespective of whether Council or a Registered Certifier is appointed; and
- b notify Council in writing of their intention to commence work (at least two days notice is required).

The Principal Certifier must determine when inspections and compliance certificates are required.

25 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 Certifier 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.

26 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.

27 **Enclosure of the Site**

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

28 **Demolition Works**

The demolition of the existing structures shall be carried out in accordance with Australian Standard AS2601 (2001): The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the SafeWork NSW.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifier. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

29 **Notification to SafeWork NSW**

The demolition licence holder who proposes demolition of a structure or part of a structure that is loadbearing or otherwise related to the physical integrity of the structure that is at least six metres in height, involving load shifting machinery on a suspended floor, or involving the use of explosives must notify SafeWork NSW in writing at least five (5) calendar days before the work commences.

30 **Demolition Notification to Surrounding Residents**

Demolition must not commence unless at least two (2) days written notice has been given to adjoining residents of the date on which demolition works will commence.

31 **Hazardous Material Survey**

At least one week prior to demolition, the applicant must prepare a hazardous materials survey of the site and submit to Council a report of the results of the survey. **Hazardous materials** includes, but are not limited to, asbestos materials, synthetic mineral fibre, roof dust, PCB materials and lead based paint. The report must include at least the following information:

- a the location of hazardous materials throughout the site;
- b a description of the hazardous material;
- c the form in which the hazardous material is found, eg AC sheeting, transformers, contaminated soil, roof dust;
- d an estimation (where possible) of the quantity of each particular hazardous material by volume, number, surface area or weight;
- e a brief description of the method for removal, handling, on-site storage and transportation of the hazardous materials, and where appropriate, reference to relevant legislation, standards and guidelines;
- f identification of the disposal sites to which the hazardous materials will be taken.

32 **Asbestos Hazard Management Strategy**

An appropriate hazard management strategy shall be prepared by a suitably qualified and experienced licensed asbestos assessor pertaining to the removal of contaminated soil, encapsulation or enclosure of any asbestos material. This strategy shall ensure any such proposed demolition works involving asbestos are carried out in accordance with SafeWork NSW requirements (< <http://www.safework.nsw.gov.au> >). The strategy shall be submitted to the Principal Certifier and Council (in the event that Council is not the Principal Certifier prior to the commencement of any works).

The approved strategy shall be implemented and a clearance report for the site shall be prepared by a licensed asbestos assessor and submitted to the Principal Certifier and Council (in the event that Council is not the Principal Certifier), prior to the issue of an Occupation Certificate or commencement of the development. The report shall confirm that the asbestos material has been removed or is appropriately encapsulated based on visual inspection plus sampling if required and/or air monitoring results and that the site is rendered suitable for the development.

33 **Consultation with SafeWork NSW – Prior to Asbestos Removal**
A licensed asbestos removalist must give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

34 **Contaminated Roof Dust**
Any existing accumulations of dust in ceiling voids and wall cavities must be removed prior to any demolition work commencing. Removal must take place by the use of an industrial vacuum fitted with a high efficiency particulate air (HEPA) filter.

35 **Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures**
Prior to the commencement of any demolition, excavation or construction works, the supervising arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the arborist’s recommendations and relevant conditions of this consent.

36 **Certification from Arborist - Adequate Protection of Trees to be Retained**
A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifier is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.

37 **Works in Road Reserve - Minor Works**
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.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council’s website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the roads act. It is advised that all applications are submitted and fees paid, five (5) days prior to the works within the road reserve are intended to commence. The Applicant is responsible for the restoration of all Council assets within the road reserve which are impacted by the works/occupation. Restoration must be in accordance with the following requirements:

- a All restorations are at the cost of the Applicant and must be undertaken in accordance with Council’s standard document, “Specification for work within Council’s Road reserve”.
- b Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

38 **Tree Protection**
Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970-2009).

Tree protection zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

During Demolition, Excavation or Construction

39 **Dust Suppression Measures**
Activities occurring during the construction phase of the development must be carried out in a manner that will minimise the generation of dust.

All sealed surfaces intended to carry vehicular traffic must be managed with the aim of preventing windblown dust emissions.

- 40 **Copy of Consent to be in Possession of Person carrying out Tree Removal**
Developer must ensure that any person carrying out tree removal is in possession of this development consent and the approved landscape plan, in respect to the trees which have been given approval to be removed in accordance with this consent.
- 41 **Restricted Hours of Construction 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 Saturday, without the prior written consent of the Principal Certifier 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 (length of duration);
 - b the reason for that variation (scope of works);
 - c the type of work and machinery to be used;
 - d method of neighbour notification;
 - e supervisor contact number;
 - f any proposed measures required to mitigate the impacts of the works.
- The construction works noise shall comply with the Australian Standard AS 2436-2010 “Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites” and any other requirements as specified by Council or the NSW Environment Protection Authority.
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.
- 42 **Asbestos – Removal, Handling and Disposal Measures/Requirements Asbestos Removal by a Licensed Asbestos Removalist**
The removal of any asbestos material must be carried out by a licensed asbestos removalist if over 10 square metres in area of non-friable asbestos, or if any type of friable asbestos in strict accordance with SafeWork NSW requirements (<http://www.safework.nsw.gov.au>).
- 43 **Asbestos Clearance Certificate**
The internal floor area affected or likely to be affected, by scattering of asbestos pieces, particles or fibres during demolition or cutting into the building, is to be cleaned by vacuuming by a contractor approved by SafeWork NSW. A Clearance Certificate to certify that the site area is free of asbestos is to be submitted to Council by a licensed asbestos assessor within fourteen (14) days of the completion of renovations (or prior to the Occupation Certificate being issued).
- 44 **Asbestos Waste Collection, Transportation and Disposal**
Asbestos waste must be prepared, contained, transported and disposed of in accordance with SafeWork NSW and NSW Environment Protection Authority requirements. Asbestos waste must only be disposed of at a landfill site that can lawfully receive this type of waste. A receipt must be retained and submitted to the Principal Certifier, and a copy submitted to Council (in the event that Council is not the Principal Certifier), prior to commencement of the construction works.
- 45 **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.
- 46 **BASIX**
All the commitments listed in each relevant BASIX Certificate for the development must be fulfilled in accordance with Clause 97A(2) of the Environmental Planning & Assessment Regulation 2000.
A relevant BASIX Certificate means:

- A BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 4.55 of the Environmental Planning & Assessment Act 1979, a BASIX Certificate that is applicable to the development when this development consent is modified); or
- if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.”

47 **Excess Excavated Material – Disposal**

Excess excavated material shall be classified according to the NSW Environment Protection Authority’s Waste Classification Guidelines – Part 1: Classifying Waste (2014) prior to being transported from the site and shall be disposed of only at a location that may lawfully receive that waste.

48 **Provision of Taps/Irrigation System**

The provision of common taps and irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and irrigation system must be implemented in accordance with the approved Landscape Plan.

49 **Podium Planting**

All podium planting areas are to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding is to be installed to protect membrane from damage.

All podium planting areas to be provided with an adequate drainage system connected to the stormwater drainage system. The planter box is 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.

Prior to the Issue of the Occupation Certificate

50 **BASIX**

An Occupation Certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifier 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.

51 **Completion of Landscape Works**

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

52 **Arborist Verification – Street Tree Installation**

Prior to the issue of Occupation Certificate, the developer must supply certification in the form of a report, including photographic evidence, from an AQF Level 5 Arborist to the Principal Certifier and Wollongong City Council to verify:

- The tree stock complies with AS 2203:2018 Tree Stock for Landscape Use.
- The tree pits have been constructed and the trees installed in accordance with the requirements of the Wollongong City Council City Centre Public Domain Technical Manual and arboricultural best practice.

Operational Phases of the Development/Use of the Site

53 **Street Tree Establishment Period – City Centre/Commercial Village Centre**

The Developer must comply with the terms of an approved landscape maintenance program for a minimum period of 12 months to ensure that all landscape works within Council’s road reserve or Council owned or controlled land becomes well established by regular maintenance. The Street Tree Establishment Period shall commence from the issue of the Occupation Certificate.

The program must include the following elements: watering, weeding, litter removal, mulching, fertilising, tree guard and grate maintenance, and pest and disease control.

Details of the proposed program must be submitted with the Landscape Plan to the Principal Certifier for approval prior to release of the Construction Certificate.