WLPP No.	Item 1
DA No.	DA-2017/1676
Proposal	Residential - demolition of existing structures and the construction of an eight (8) storey residential flat building comprising of eighteen (18) apartments over two (2) levels of basement parking and the removal of six trees
Property	48-50 Gipps Street Wollongong Lots 1 and 2 DP 1099613 and Lot 1 DP 946305
Applicant	ADM Architects
Responsible Team	Development Assessment and Certification - City Centre Team (AS)

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Wollongong Local Planning Panel - Determination

The Development Application has been referred to WLPP for **determination** pursuant to 2.19(1)(a) of the Environmental Planning and Assessment Act 1979. Under Schedule 2 of the Local Planning Panels Direction of 1 March 2018, the development as the development is sensitive development being more than 4 storeys in height and SEPP 65- Design Quality of Apartment Buildings applies and has received more than 10 unique submissions objecting to the proposal.

Proposal

The application was lodged on 11 December 2017 and proposes the construction of an eight-level residential flat building containing 18 apartments and 22 car parking spaces over two basement levels.

Permissibility

The site is zoned R1 General Residential pursuant to Wollongong Local Environmental Plan 2009. Construction of a residential flat building is permissible with development consent.

Consultation

The proposal was notified in accordance with Council's Notification Policy and received twenty submissions which are discussed at section 1.5 of the assessment report.

Main Issues

The main issues arising from the development assessment process are:-

- Issues raised in the submissions
- Variations to WDCP2009 being retaining wall
- Impact of adaptable units.

RECOMMENDATION

It is recommended that the application is approved, subject to draft conditions contained in Attachment 6.

1. APPLICATION OVERVIEW

1.1. PLANNING CONTROLS

The following planning controls apply to the proposal:

State Environmental Planning Policies:

- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- SEPP 71 Coastal Protection (Applicable at time of lodgement, since repealed but did not apply to the city centre)
- SEPP Coastal Management 2016 (Draft at time of lodgement)

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan (WDCP) 2009

Other policies

- Wollongong Section 94A Development Contributions Plan
- Apartment Design Guide (ADG)

1.2. DETAILED DESCRIPTION OF PROPOSAL

The proposal comprises the demolition of existing structures and the construction of an eight (8) storey residential flat building comprising of eighteen (18) apartments over two (2) levels of basement parking for 22 cars and the removal of ten (10) trees. The proposal comprises 2 x 1 bedroom and 6x 2 bedroom and 10 x 3 bedroom apartments and 12 adaptable apartments.

Amended plans were submitted on 7 May 2018 in response to the Design Review Panel comments. Revised basement parking plans were submitted on 3 August 2018 in response to car parking required for adaptable units.

1.3. BACKGROUND

Development application DA-2012/690 for *'Residential - demolition of existing dwellings and construction of multi dwelling housing'* was approved on 20 September 2012.

Development application DA-2017/1251 for *'Residential flat building'* was rejected on 12 October 2017.

No pre-lodgement meeting has been held for the proposal.

Customer service actions

There are no outstanding customer service requests of relevance to the development.

1.4. SITE DESCRIPTION

The land is rectangular in shape and is located on the corner of Keira and Gipps Street, Wollongong known as 48-50 Gipps Street. Frontage lengths are 28.3m to Keira Street and 36.57m to Gipps Street. The site area is 1234.7m² and comprises three allotments: Lot 1 DP 946305 (474.2m^2), Lot 1 and 2 DP 1099613 (combined 760.5m^2). The land slopes down to the west (Keira Street) and south (Gipps Street).

Adjoining development includes apartments/terraces (31 Keira Street and 45 & 60 Gipps Street), single storey dwelling houses (46, 41 & 54-58 Gipps Street, 22 & 26 View Street, and 38 Keira Street), two-storey dwelling houses (20 and 24 View Street), and a high school to the south (40 Church Street).

Property constraints

Council's records list the following site constraint:

- Acid sulfate soils class 5

There are no restrictions on the title.

1.5. SUBMISSIONS

The application was notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising, between 5 January and 9 February 2018. This included a notice in The Advertiser. Twenty submissions have been received (one in support, 19 objections) and the issues identified are discussed below.

Concerns	***Response***
Geotechnical *Geotechnical impact and excavation technique. Use of rock anchors.* *Groundwater likely to be a problem at the excavation depth.*	The geotechnical report indicates that provided no services or other adjacent structural elements for other buildings exist, then temporary anchors are considered feasible provided they are considered redundant structural elements at completion of construction. Approval is required from adjoining land owners for placing anchors that encroach into adjacent properties and roads. At present no permission or owners consent has been obtained for the use of rock anchors. Conditions of consent are recommended prohibiting the use of rock anchors, pre-and post-dilapidation reports and geotechnical supervision during excavation and construction.
Traffic *Impact of traffic and trucks during construction*	These impacts are proposed to be managed via a construction environmental management plan. Proposed conditions can be found at attachment 6. This would involve notification to residents and traffic control measures.
Visual /privacy impacts *Visual dominance of corner block is in no way sympathetic to its surrounds.* *Balconies must be removed from east elevation or relocated to the south to stop privacy impacts* *Air conditioning units on northern balconies would have visual and acoustic impacts. Further details should be provided. Acoustic report should be provided once all condenser units are installed*	The proposed setbacks exceed ADG requirements. The northern existing development is terraced apartments, with minimises the number of apartments facing south to the proposal. The development involves demolition of two single storey dwelling houses, which typify the Gipps Street block. However, the LEP and DCP controls allow for RFB of the proposed scale. The ADG requires private open space for all apartments. Relocating these to the south would

	limit ventilation and solar access. Air conditioning units are typically located on balconies, adjoining a wall. For the majority of apartments, the likely location would be the northern balcony.
Overlooking *Balustrades of northern side should be obscure glass or solid to reduce overlooking / privacy impacts. Will see clothes drying on balconies. Solid will block noise.*	Northern balustrades are proposed clear glazing, which is acceptable under the ADG.
Light spill *Blue light from televisions at night can be seen.*	Most north facing rooms closest to the boundary are bedrooms, with living dining recessed. Living dining rooms are over 10m from the boundary.
Driveway *Structural impact of driveway construction Noise* *Driveway sections should be provided*	A geotechnical report has been submitted with the application. Council's geotechnical engineer notes the degree of excavation required and has recommended conditions of consent, including geotechnical supervision. The basement door is setback behind the building line and on the downslope. No significant noise is expected. Driveway sections have been provided.
Heritage *Loss of timber cottage, which adds to the heritage of the street*.	Neither dwelling is identified as a heritage item.
Setback *Keira Street setback should be increased to maintain streetscape.*	The setback complies with WDCP 2009.
Parking *Only one garage per unit, which will add to traffic problems in the street. More parking needed.* *Why is parking less than previous approval?* *The consent and strata plan should state maximum 18 car parking spaces so developer can't market large garages as two spaces*	The proposed development provides for the required amount of resident and visitor parking and is considered satisfactory in regards to offsite parking impacts. The site and the surrounding area have been zoned for high density residential development for many years. The impact on and capacity of the area to cope with permitted development has been taken into account in the studies that have informed the planning instruments. The previous approval was of a much lower scale and density. The draft consent conditions clarify the number of approved spaces.
Waste collection *Street collection of bins is already a problem*	WDCP 2009 allows for on-street collection depending on street frontage and number of bins. In this case, the applicant proposes a waste

for collectors, with parked cars. Collection should be on-site.	storage room within basement level 1, with waste collection from the street. Council has assessed the applicant's proposal for street pick up of waste and considers that bins would not occupy more than 50% of the length of the site's street frontage, thus achieving compliance with the control permitting on-street bin collection (Chapter E7 of Wollongong DCP 2009).
Safety *The development is opposite a school and safety arrangements need to be in place during construction***.**	A construction environmental plan will be required, which will include traffic control measures.
Road intersection *Keira and Bourke is already hazardous and the additional traffic generated by the development will further constrain the intersection capacity.*	Road improvements should be considered separate to the application. Any changes to the intersection treatment would need to be considered and approved by Wollongong City Traffic Committee.
Overshadowing *Height will overshadow all properties on the street below. Where existing windows face south, those units will be cold and require heating as in shadow.*	The shadow diagram shows impacts of overshadowing. These meet the requirements for solace access of the ADG and WDCP 2009.
Height *Building on a high point of hill has greater impact. Several high rise nearby. Loss of space and sky.* *Should a lesser height and FSR apply because of proximity to the high school?*	The subject site is located within the nominated distant panoramic view corridor identified in Figure 3.12 (Clause 3.10 of Chapter D13 of WDCP 2009) however as it is within the allowable building height and density for the site and generally provides for compliant building setbacks, the impacts on the available view corridor are not considered to be unreasonable. The building height in this precinct is 32m, which drops to 16m on the approach to Flinders Street. The height and FSR are in accordance with WLEP 2009.
IHAP *Request the application be referred to IHAP*.	The application is required to be referred to the Local Planning Panel (formerly IHAP) for determination.
Contributions *What will be the developer contribution? How will the money be spent? Would some money be spent on a local neighbourhood park?*	A condition of consent is recommended requiring payment of the statutory fee as per Council's Contributions Plan 2018. Use of the fee will be in accordance with the Plan.
Landscaping *Details of landscaping seem to be flawed*. *Substation is shown in landscaped area* *Adjoining trees not discussed in Arborist*	The landscape plan has been reviewed, and conditions of consent are recommended regarding planting detail, species etc. The plans make provision for a pad mounted substation at the street frontage surrounded by

report.	adequate landscaping. The report refers to adjoining trees as well as those on the site.
Site analysis *The site analysis plan doesn't show location of existing POS. Privacy impact of glass balustrades.*	Noted. Glass balustrades are not excluded by the ADG or WDCP 2009. Some screening is proposed.
Hydrant *Location of fire hydrant is unknown and poses fire risk.*	A condition of consent is recommended requiring a fire hydrant to be installed within the standard 60m distance.
Survey *No survey plan available in application documents. Relationship with neighbouring properties unclear.*	The survey plan is transposed on the site plan. In addition survey levels are also shown on level plans, stormwater plans, cross sections and landscape plans.
Spoil *The destination of excavated material is unknown. Heavy excavation equipment will be required.*	Council's geotechnical engineer has reviewed the Geotechnical report and recommended conditions relating to excavation equipment, hours and supervision. Spoil will need to be transported to an approved receiving facility.
Retaining walls *Retaining wall height is excessive. Dimensions might not support batter surcharge load.*	The retaining walls are integrated into the landscape and basement design. Handrails are shown on the landscape plan. A condition of consent is recommended requiring structural engineer certification for the retaining walls. See further discussion at section 2.3
Setbacks inadequate.	Setbacks comply with WDCP 2009 Chapter D13 and the ADG.
Earlier townhouse approval would be better.	Noted.
Access *Level access should be provided on Keira Street. Balcony threshold construction does not ADG universal design requirements*.	A condition of consent is recommended regarding compliance with Australian standards for adaptable apartments.

1.6. CONSULTATION

INTERNAL CONSULTATION

Council's Geotechnical, stormwater and traffic engineers have reviewed the application and recommended conditions of consent which are included in Attachment 6.

Environment Officer

Council's Environment officer reviewed the application including the Preliminary Site Assessment by SMEC. They note that the SMEC report states a number of asbestos fragments were found on the site. The officer recommended conditions of consent which are included in Attachment 6.

Landscape Officer

Council's Landscape officer reviewed the application including the revised landscape plan dated April 2018. They note the proposed tree removal and as discussed in the Allied Tree Consultancy arborist report. The officer recommended conditions of consent which are included in Attachment 6.

Design Review Panel

Council's Design Review Panel considered the application on 30 January 2018. Their comment forms attachment 3.

Matters raised by the Panel have been satisfactorily addressed in the revised plans. Improvements include:

- Additional contextual analysis
- Base further articulated by sandstone frame on Level 2
- Enlarged COS on Level 1 extending further to the northern boundary
- Enlarged ground level POS
- Stronger stepping down the hill form
- Roof terrace added
- Enlarged POS of one-bedroom apartments

On balance, the amended plans are considered to appropriately respond to the recommendations and suggestions of the DRP. Therefore, the consent authority can be satisfied that appropriate consideration has been given to the DRP matters.

EXTERNAL CONSULTATION

Nil

2. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 – 4.15 EVALUATION

2.1. SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

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

The subject site is zoned for residential and is currently being used to accommodate dwelling houses. A search of the site's history indicates that the sites have been used for residential purposes. There is no previous history of other uses that could be considered to be potentially contaminating. A preliminary site assessment has been conducted by SMEC dated 8 December 2017 and submitted with the application which concluded that the site is unlikely to pose a significant contamination risk and is considered suitable for the proposed residential development subject to a number of recommendations relating to asbestos.

The site is considered to be suitable for the proposed development with regard to clause 7 of this policy, subject to conditions of consent.

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

The development meets the definition of a 'residential flat building' because it is more than 3 storeys and comprises more than 4 dwellings. Therefore, the provisions of SEPP 65, including the Apartment Design Guide, apply. Where there is an inconsistency with Wollongong Development Control Plan 2009 controls, the provisions of the ADG prevail.

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. The applicant has provided a design statement responding to the design principles.

Principle 1: Context and neighbourhood character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

The neighbourhood character is changing as some sites are redeveloped. The existing character of development in the locality comprises a variety of building types including one and two storey dwellings and some medium density housing development including walk-up flats and recently developed RFBs. The current proposal is of similar scale to those recently approved and constructed and is consistent with the desired future character of the area as identified in the development standards and controls applicable to the land.

Principle 2: Built form and scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Whilst the development is larger than the adjoining development, the bulk and scale of the development is consistent with the applicable planning controls for the area. The scale of the development is likely to give rise to some impacts on neighbouring properties. The shadow diagrams submitted with the application indicate overshadowing of the properties to the south. These shadow impacts affect the fronts of these properties in the morning hours and the front of the school yard in the afternoon however the solar access provisions are met in terms of adjoining properties. In terms of privacy impacts, the building setbacks are compliant and provide for reasonable and compliant separation between the proposed building and that neighbouring buildings. Boundary setbacks assist in minimising opportunities for overlooking towards the neighbouring dwellings. The boundary planting proposed will also provide some screening. The design of the development is considered to positively contribute to the public domain and provide high level of amenity for the occupants by way of landscaped areas, communal open space and private open space. Further, the DRP advised that the built form and scale is acceptable subject to the balconies being screened.

Principle 3: Density

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

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

The density of the development complies with the maximum floor space ratio permitted for the land. The development is not of a scale that is expected to place unreasonable strain on local

infrastructure. Contributions applicable to the development will be directed to local infrastructure and facilities. The site is well situated with regard to existing public open space and services.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes.

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

The proposal is considered acceptable with regard to sustainable design as follows:

- BASIX Certificates provided indicating minimum requirements are met.
- A Site Waste Management and Minimisation Plan have been provided indicating recycling of materials from the demolished dwellings.
- Screens have been provided to the western elevation to shield from the units from harsh western sun.
- The proposal does not impact on any heritage items or environmentally sensitive areas
- The proposal is an efficient use of land in a location that is close to services and public open space.

Principle 5: Landscape

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

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.

Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.

The proposal provides landscaped areas and communal open space that will improve the amenity of the occupants and soften the appearance of the development from adjoining properties and the public domain. Deep soil planting and a common lawn planting area have been incorporated into the site design.

The development involves tree removal and deep soil planting. Council's landscape officer supports the tree removal and recommends compensatory planting and street tree planting.

Principle 6: Amenity

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

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

Amenity for the units and the adjoining neighbours has been addressed in response to concerns raised during the DRP meetings. The proposal meets the minimum requirements for solar access, private and communal open space, storage, ventilation, visual and acoustic privacy and access.

Principle 7: Safety

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

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

The proposal is satisfactory with regard to safety and security. Roller door /coded access are provided to the basement and residential areas.

Principle 8: Housing diversity and social interaction

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

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.

Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

The proposal provides a mix of unit sizes and layouts appropriate to the locality. A high proportion (12) of apartments is adaptable.

Principle 9: Aesthetics

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

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

The proposal is considered to be of a high quality with regard to its appearance. A mixture of materials and finishes is provided and the bulk of the development is adequately articulated. The revised plans have adjusted the building form in response to the DRP, providing a stronger stepping down the slope and enlarging communal open space and landscaped areas.

An assessment of the application against the Apartment Design Guide is contained in Attachment 4.

2.1.3.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 dated 26 September 2017 has been submitted. Development application-stage commitments are satisfactory.

2.1.4.WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

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 with regard to the above objectives as the proposed residential flat building will provide for housing needs of the community.

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; Places of public worship; Recreation areas;* ***Residential flat buildings****; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Signage*

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

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.*
> *Note.*
> *Note: Residential flat buildings are a type of residential accommodation— see the definition of that term in this Dictionary.*

Clause 2.7 Demolition requires development consent

The proposed development includes demolition of the existing dwellings and associated structures and is consistent with the requirement of clause 2.7.

Part 4 Principal development standards

Clause 4.3 Height of buildings

The proposed building height of 27.3m does not exceed the maximum of 32m permitted for the site.

Clause 4.4 Floor space ratio

The maximum permitted FSR is 1.5:1. The proposal complies, being 1852.5m^2 on a 1234.7m^2 site (1.5:1 FSR).

Part 5 Miscellaneous provisions

Clause 5.5 development within the coastal zone

Clause 5.5 was repealed at the commencement of SEPP (Coastal Management) 2018 however prior to this, consideration was given to matters prescribed by Clause 5.5. No concerns are raised in relation to impacts of the proposed development on the coastal zone values. The site is some distance from the foreshore and is not identified as being impacted by coastal hazards. There are not expected to be any adverse impacts on the coastal environment or public access to the foreshore as a result of the application. The consent authority can be satisfied that the development will not impede or diminish access to the coastal foreshore; will be serviced by reticulated water and sewerage services; will appropriately manage stormwater and will not be significantly affected by coastal hazards, or either have a significant impact on coastal hazards, or increase the risk of coastal hazards in relation to any other land.

Clause 5.10 Heritage conservation

The nearest listed items of environmental heritage include Item No. 6515 a row of canary island date palms in View Street. There are not likely to be any heritage impacts upon these items.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

The development is already serviced by electricity, water and sewage services. A condition is proposed requiring approval from the relevant authorities for the connection of electricity, water and sewage to service the site.

Clause 7.5 Acid Sulfate Soils

The proposal is identified as being affected by class 5 acid sulfate soils. Council's Environment Officer has reviewed the application, including the SMEC geotechnical investigation. Conditions of consent have been recommended in this regard.

Clause 7.6 Earthworks

The proposal comprises two levels of basement. The earthworks are not expected to have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features surrounding land. The proposal has been reviewed by Council Geotechnical and Stormwater officers in relation to site stability and drainage. Draft Conditions are recommended.

Clause 7.14 Minimum site width

The site has street frontages exceeding 24m, which is the minimum for a residential flat building.

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

The proposal is within the Wollongong city centre and clause 7.18 applies.

(3) Development consent must not be granted to development to which this clause applies unless, in the opinion of the consent authority, the proposed development exhibits design excellence.

It is considered that the proposal exhibits design excellence as discussed in further detail below:

(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,

The development provides for a high standard of design, materials and detailing appropriate for the building type and its location.

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

IThe form and appearance of the development will improve the quality of the public domain in place of the existing two dwellings.

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

The subject site is located just within the nominated distant panoramic view corridor identified in Figure 3.12 (Clause 3.10 of Chapter D13 of WDCP 2009) however as it is within the allowable building height and density for the site and generally provides for compliant building setbacks, the impacts on the available view corridor are not considered to be unreasonable.

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

The development will not overshadow any key site on the Map.

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

(i) the suitability of the land for development,

(ii) existing and proposed uses and use mix,

(iii) heritage issues and 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,

(v) bulk, massing and modulation of buildings,

(vi) street frontage heights,

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

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

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

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

The site is considered to be suitable for the development. The height, form and design are considered to appropriately relate to the future desired character. The building is consistent with newer residential flat buildings within the Wollongong City Centre. There are no heritage issues or streetscape constraints. The development achieves compliance with relevant planning controls with regard to setbacks, parking and ESD principles. Amenity has been improved to address privacy concerns. Overshadowing impact to neighbouring properties is minimal due to the proposed location on the northern side of Gipps Road. The landscape plan provided with the application makes provision for public domain improvements including street tree planting

Part 8 Local provisions—Wollongong city centre

Clause 8.1 Objectives for development in Wollongong city centre

- *(a) to promote the economic revitalisation of the Wollongong city centre,*
- *(b) to strengthen the regional position of the Wollongong city centre as a multifunctional and innovative centre that encourages employment and economic growth,*
- *(c) to protect and enhance the vitality, identity and diversity of the Wollongong city centre,*
- *(d) to promote employment, residential, recreational and tourism opportunities within the Wollongong city centre,*
- *(e) to facilitate the development of building design excellence appropriate to a regional city,*
- *(f) to promote housing choice and housing affordability,*
- *(g) to encourage responsible management, development and conservation of natural and man-made resources and to ensure that the Wollongong city centre achieves sustainable social, economic and environmental outcomes,*
- *(h) to protect and enhance the environmentally sensitive areas and natural and cultural heritage of the Wollongong city centre for the benefit of present and future generations.*

The proposal would contribute to a residential unit mix through the provision of additional housing and employment opportunities during construction. The vitality of the city centre is enhanced through living within the centre where residential flat buildings are consistent with the centre identity and diversity. It is considered that the development provides for a standard of design, materials and detailing appropriate for the building type and its location and zoning. The proposal provides a mixture of 1, 2 and 3 bedroom units of which 12 are adaptable. This is expected to contribute towards housing choice and affordability in Wollongong.

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

Draft State Environmental Planning Policy (Coastal Management) 2016

Draft State Environmental Planning Policy (Coastal Management) 2016 and associated maps had been exhibited at the time of lodgement of the application and the policy (dated 2018) has now been gazetted.

Maps published with the SEPP indicate the land is located in a Coastal Environment area.

Division 3 clause 13 applies to coastal environment areas. Consent must not be granted unless the consent authority has considered matters set out in subclause 1 and 2. These matters include impacts on vegetation, marine life and water quality, vegetation, Aboriginal heritage and community access. The development is designed, sited and will be managed to avoid an adverse impact referred to in subclause 1. All matters detailed in subclause 1 and 2 are considered satisfactory.

Division 5 includes general provisions for development in the coastal zone. Clause 16 applies to development in the coastal zone generally and states that development consent must not be granted to development on land within the coastal zone unless the consent authority is satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land. As detailed elsewhere within this report, due to its location, the proposal is not expected to increase the risk of coastal hazards on the subject land or any other land.

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

2.3.1. WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

All relevant WDCP 2009 chapters are discussed in Attachment 5.

CHAPTER A1 – INTRODUCTION

The development has been assessed against the relevant chapters of WDCP2009 and found to be satisfactory. A full compliance table can be found at Attachment 5 to this report; only the variation is discussed below:

8. Variations to development controls in the DCP

The applicant has submitted a variation request in relation to retaining wall height.

Chapter B1 Residential Development, Clause 4.17 retaining walls

The objectives of the clause are:

- *(a) To ensure that retaining walls are structurally sound and are located to minimise any adverse stormwater drainage, visual, amenity or overlooking impacts upon adjoining properties.*
- *(b) To guide the design and construction of low height aesthetically pleasing retaining walls.*
- *(c) To ensure any retaining wall is well designed, in order to achieve long term structural integrity of the wall.*
- *(d) To ensure slope stabilisation techniques are implemented to preserve and enhance the natural features and characteristics of the site and to maintain the long term structural integrity of any retaining wall.*

The maximum retaining wall height is set by clause 4.17 Chapter B1 Residential Development. The maximum is 600mm height for 900mm length.

Applicant's submission

The subject site slopes from the north eastern corner of the site to the south western corner. The location and height of retaining walls is shown on the Landscape Plan prepared by Ochre.

The height and siting of the proposed retaining walls is considered to be acceptable for the following reasons:

- The sites have a moderate slope from the north eastern rear corner of No.48 Gipps Street at RL36.05 to the south-western corner of the site (corner Keira and Gipps) at RL29.05m, which equates to a fall of 7m over the combined sites.
- The building has been sited to minimise the extent of protrusion of the basement above ground level in the south-western corner of the site, which has resulted in the need for additional retaining wall height at the eastern and northern extent of the site.
- Such retaining walls are sited internal to the development site to minimise visual impact. Tiering of retaining walls has been provided, with 1:3 battering between terracing. Retaining walls on the boundary have a maximum height of 700mm.
- Retaining walls which exceed the required 1m are provided with significant setbacks to property boundaries and will be effectively landscaped both at the base and above the retaining wall.
- The retaining walls and associated landscaping will provide an effective backdrop to the communal open space area and will ensure that overlooking from this space into adjacent properties does not occur.
- Details of the proposed retaining walls will be provided at the Construction Certificate stage, thereby addressing the objectives of this control.

Comment

The revised landscape plan prepared April 2018 reduces the proposed retaining wall height compared to plans submitted with lodgement of the application. Walls are proposed on the northern and eastern boundaries and adjoining the building podium. The wall height varies in relation to the slope of the land, and in part, the wall height is 3.65m.

The proposed walls are considered an appropriate response to the slope and dimensions of the site. The basement has been excavated at a depth to reduce visibility above ground, walls heights are maximum 600mm on the boundary, with additional tiered walls located further into the site at the building podium. Retaining walls are integrated with landscape design to reduce visibility to neighbouring development. It is considered that the objectives of this Clause have been met and the proposed variations have been reasonably justified.

Chapter D13 Wollongong City Centre, cl 4.4 on site car parking, cl 6.2 Housing Choice and Mix

Whist not strictly a departure, the development provides for a greater number of adaptable units than would otherwise be required. Clause 6.2 of Chapter D13 provides that 10% of all dwellings (at least one dwelling) to be capable of adaptation for disabled or elderly residents. Where possible, adaptable units should be located on the ground floor.

The proposal provides for 12 adaptable units where only 2 are required. The adaptable units are spread throughout the building from levels two to eight and the building is provided with a lift, and at grade access to the entry lobby is provided at the Gipps Street frontage.

The provision of adaptable units requires corresponding car parking which accounts for circulation space and shared zones, this causes the basement to be much larger than would otherwise be required.

In terms of required car parking spaces, WDCP 2009 rates have been used as specified by Section 3J of the ADG. Two of the adaptable units (U4, U7 each 58m²) require one space each (0.75 car space per dwelling (<70m²). The remaining ten adaptable units (U9, U11, U13, U15, U17, each 106m² and U10, U12, U14, U16, U18.each 108m²) would also require one space each (1 car space per dwelling (70-110m²).

The adaptable car parking spaces were initially designed in a way which permitted two car parking spaces and built in storage cupboard per adaptable unit. This would have resulted in the

development exceeding the minimum parking requirement necessitating the excess spaces to be included in GFA.

Basement 1 and 2 plans were recently revised (Issue D) and now show larger built in storage cupboards which effectively prevents the parking of a second vehicle whilst still allowing sufficient space for circulation. The adaptable units will require further modification to comply with AS4299 (1995).

A condition is recommended in relation to restriction as to user (88b) that each adaptable unit retains an adaptable car parking space.

2.3.2.WOLLONGONG DEVELOPMENT CONTRIBUTIONS PLAN 2018

Contributions are payable for development exceeding $100,000.

The estimated cost of works is $5,980,000 and a levy of 1% is applicable under this plan. A condition of consent is in Attachment 6.

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 affects 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?

The application involves demolition and as such the provisions of AS 2601-2001: The Demolition of Structures applies. Draft conditions are recommended in this regard.

93 Fire safety and other considerations

Not applicable

94 Consent authority may require buildings to be upgraded

Not applicable

2.6. SECTION 4.15(A)(V) ANY COASTAL ZONE MANAGEMENT PLAN (WITHIN THE MEANING OF THE COASTAL PROTECTION ACT

On 30 October 2017, Council endorsed the final draft of the Wollongong Coastal Zone Management Plan for resubmission to the NSW Minister for Environment for certification under the Coastal Protection Act (1979). The draft Plan was certified on 20 December 2017. For the Plan to take effect, the Act requires that the certified draft Plan be adopted by Council and published in the NSW Gazette. The Plan was published in the NSW Government Gazette on 23 March 2018. The proposal does not raise any issues having regard to this plan. The site is not located in close proximity to the coast or other watercourses or public areas leading to the coast. Minimal to nil adverse impact on the coastal environment is anticipated as a result of the proposed development.

2.7. SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

Context and Setting:

Having regard to submissions, it is evident that some neighbours consider the proposed building height of 27.30m is excessive with the loss of detached housing stock detrimental to local character.

However, the development meets the floor space ratio, building height and setback controls for the site. The land is located in the R1 General Residential zone which allows buildings up to 32m in height. Views to the escarpment from single storey dwellings are very difficult to maintain, and it is likely that even a two-storey dwelling house on the site would erode escarpment views. In that regard, preservation of existing views is considered unreasonable.

Overshadowing is within limits set by the Apartment Design Guide and WDCP 2009

The local area is characterised by a mixture of low to high density residential developments. It is likely that more high density developments will occur in future given the height and floor space ratio controls for the zone.

There are not expected to be significant adverse environmental impacts on either the natural or built environments. There are also not expected to be significant adverse social or economic impacts in the locality.

Access, Transport and Traffic:

One vehicle entry is proposed and leads to two basement levels of parking and ancillary servicing. No at-grade spaces are provided. All required car parking, motorcycle and bicycle parking is proposed

Public Domain:

Public domain improvements are proposed as a condition of consent - refer Attachment 6.

Utilities:

The development is not envisaged to place an unreasonable demand on utilities supply. Existing utilities are adequate to service the building.

Heritage:

No heritage items will be impacted by the proposal.

Other land resources:

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon any valuable land resources.

Water:

The site is presently serviced by Sydney Water, which can be readily extended to meet the requirements of the proposed development. The proposal is not envisaged to have unreasonable water consumption.

Soils:

The land contains acid sulfate soils, which is required to be managed during construction. Conditions are recommended in this regard.

Air and Microclimate:

The proposal is not expected to have any negative impact on air or microclimate.

Flora and Fauna:

Tree removal has been supported by Council's landscape officer. No threatened or endangered species are known to inhabit the site.

Waste:

A condition is proposed that an appropriate receptacle be in place for any waste generated during the construction.

Energy:

The proposal is not envisaged to have unreasonable energy consumption. A BASIX certificate has been provided.

Noise and vibration:

A condition will be attached to any consent granted that nuisance be minimised during any construction, demolition, or works.

Natural hazards:

There are no natural hazards affecting the site that would prevent the proposal.

Technological hazards:

There are no technological hazards affecting the site that would prevent the proposal.

Safety, Security and Crime Prevention:

This application does not result in any opportunities for criminal or antisocial behaviour. Adequate access control methods are proposed.

Social Impact:

The proposal is not expected to result in adverse social impact.

Economic Impact:

The proposal is not expected to result in adverse economic impact.

Site Design and Internal Design:

The application does not result in any departures from development standards. The applicant proposes variation to Wollongong Development Control Plan, 2009, as discussed above. A condition is recommended that all works are to be in compliance with the Building Code of Australia.

Construction:

Conditions of consent are recommended in relation to construction impacts such as hours of work, erosion and sedimentation controls, works in the road reserve, excavation, demolition and use of any crane, hoist, plant or scaffolding.

Cumulative Impacts:

The proposal is not expected to have any negative cumulative impacts.

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

Does the proposal fit in the locality?

The proposed residential flat building is permissible in the zone and meets design excellence requirements of WLEP 2009. The proposal is considered appropriate with regard to the zoning of the site and is not expected to have any negative impacts on the amenity of the locality or adjoining developments.

Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

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

Refer to discussion in Section 1.5 of this report.

2.10. SECTION 4.15(1)(E) THE PUBLIC INTEREST

The application is not expected to result in unreasonable impacts on the environment or the amenity of the locality. Matters raised in submissions have been considered. The development is appropriate with regard to the zoning and the character of the area and complies with State Environmental Planning Policy No. 65 Apartment Design Guide. Approval is therefore consistent with the public interest.

3. CONCLUSION

This application has been assessed as satisfactory 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.

The design of the development is appropriate with regard to the controls outlined in these instruments. The proposal involves minor variations to retaining wall heights under WDCP2009. Variation request statements and justification have been provided for the non-compliances in accordance with Chapter A1 of WDCP2009. The variations have been considered and are supported in this instance. Internal referrals are satisfactory and submissions have been considered in the assessment. The additional adaptable units and car parking have also been assessed as satisfactory. It is considered that the proposed development has otherwise 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.

Recommendations of the Design Review Panel have been incorporated into revised plans submitted May 2018.

4. RECOMMENDATION

It is recommended that development application DA-2017/1676 be approved subject to the draft conditions contained in Attachment 6.

5. ATTACHMENTS

1 Aerial photograph and zoning mapA

2 Proposed plans

3 Design Review Panel notes 30 January 2018

4 SEPP65 Apartment Design Guide assessment

5 Wollongong Development Control Plan 2009 assessment

6 Draft conditions of consent

ATTACHMENT 1: Aerial View and WLEP 2009 zoning map

DA-2017/1676 48-50 Gipps Street Wollongong

Aerial view (WCC 2018 image)

WLEP 2009 zoning map

Project :	48-50 Gipps Street, Wollongong
Project No:	2017-15

	Controls
Site Area (m²)	1236.0m²
Wollongong LEP 2009	
Land use	Residential Development
FSR	1.5:1
Height (m)	27.30m

Level	Residential GFA	1Bdrm	2Bdrm	3Bdrm	Unit Totals
Level 1	191.6m²	0	2	0	2
Level 2	253.9m²	1	2	0	3
Level 3	253.9m²	1	2	0	3
Level 4	229.1m²	0	0	2	2
Level 5	229.1m²	0	0	2	2
Level 6	229.1m²	0	0	2	2
Level 7	229.1m²	0	0	2	2
Level 8	229.1m²	0	0	2	2
ROOF	7.6m²				
Total	1852.5m²	2	6	10	18
Unit Mix		11%	33%	56%	100%
Total Units	18				
Total GFA	1852.5m²				
Maximum Permissible GFA	1854.0m²				

Car Parking Requirements	Min. Rate	Required	Provided
<70m²	0.75/unit	1.5	2
70-110m²	1/unit	16	16
>110m²	1.25/unit	0	0
Visitor	0.2/unit	3.6	4
Total		21.1	22

Accessible Parking Requirements	No. Accessible Units	Required	Provided
Accessible Units @ 10% of Residential	12	1.8	12
Total		1.8	12

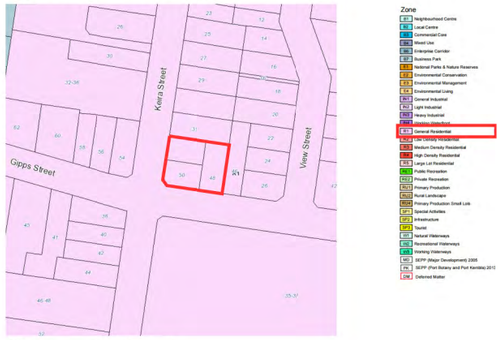
Note: Accessible spaces are provided as part of overall total.

Bicycle Requirements	Min. Rate	Required	Provided
Residential	1 / 3 units	6	6
Visitor	1 / 12 units	1.5	2
Total		7.5	8

Motorcycle Requirements	Min. Rate	Required	Provided
Residential	1 / 15 units	1.2	2
Total		1.2	2

Waste Management	General	Green	Recylcing
Rate	80L/unit/week		80L/unit/fortnight
Total per Collection	1440L		1440L
Total Bins Required @ 240L	6	1	6
Total Bins Provided @ 240L	6	1	6
Overall Total Bins Provided		13	

Figure A: Land Zoning Map



R1 General Residential

Figure B: Floor Space Ratio Map

Figure C: Height of Building Map

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION

adm ARCHITECTS
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 DEVELOPMENT CONSISTING OF 18 RESIDENTIAL APARTMENTS ABOVE BASEMENT PARKING

At
48-50 GIPPS STREET
WOLLONGONG
NSW

For
C&D KOSTOVSKI & G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
SITE/DEVELOPMENT SUMMARY

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-001	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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CONTEXTUAL STREETSCAPE 1

Looking South towards Gipps Street from Keira Street

LEGEND

POSSIBLE FUTURE ENVELOPE

PROPOSED DEVELOPMENT

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Scale	Date
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Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-003	B

CONTEXTUAL STREETSCAPE 2

Looking West towards Keira Street from Gipps Street

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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LEGEND

POSSIBLE FUTURE ENVELOPE

PROPOSED DEVELOPMENT

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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
CONTEXTUAL STREETSCAPE 2

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-004	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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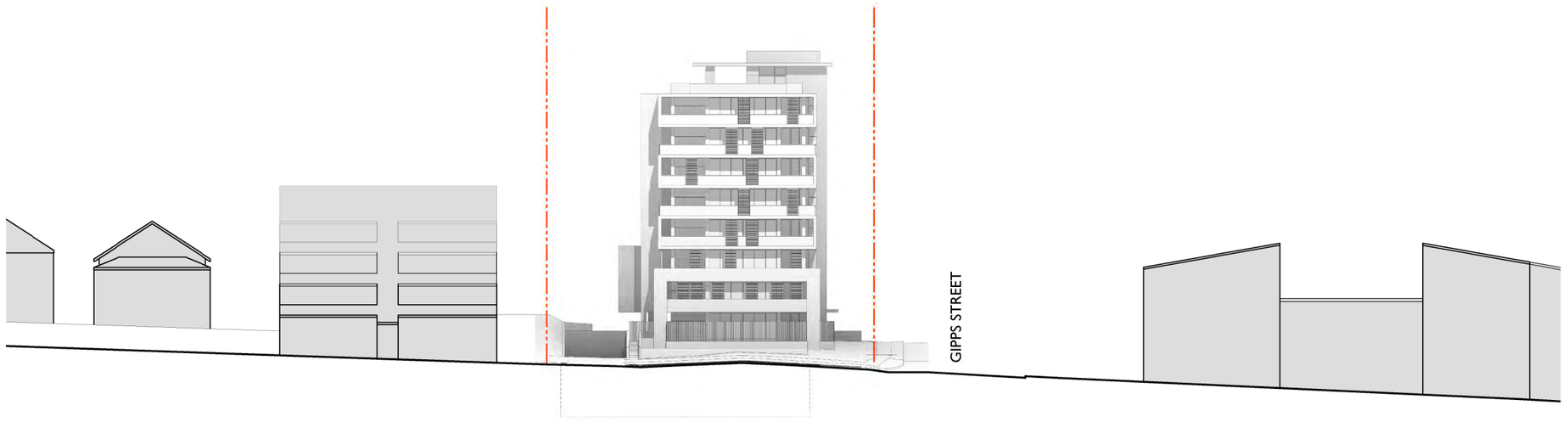
GIPPS STREET STREETSCAPE
FACING NORTH



KEIRA STREET STREETSCAPE
FACING EAST

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

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& G&S BLAZEVSKI

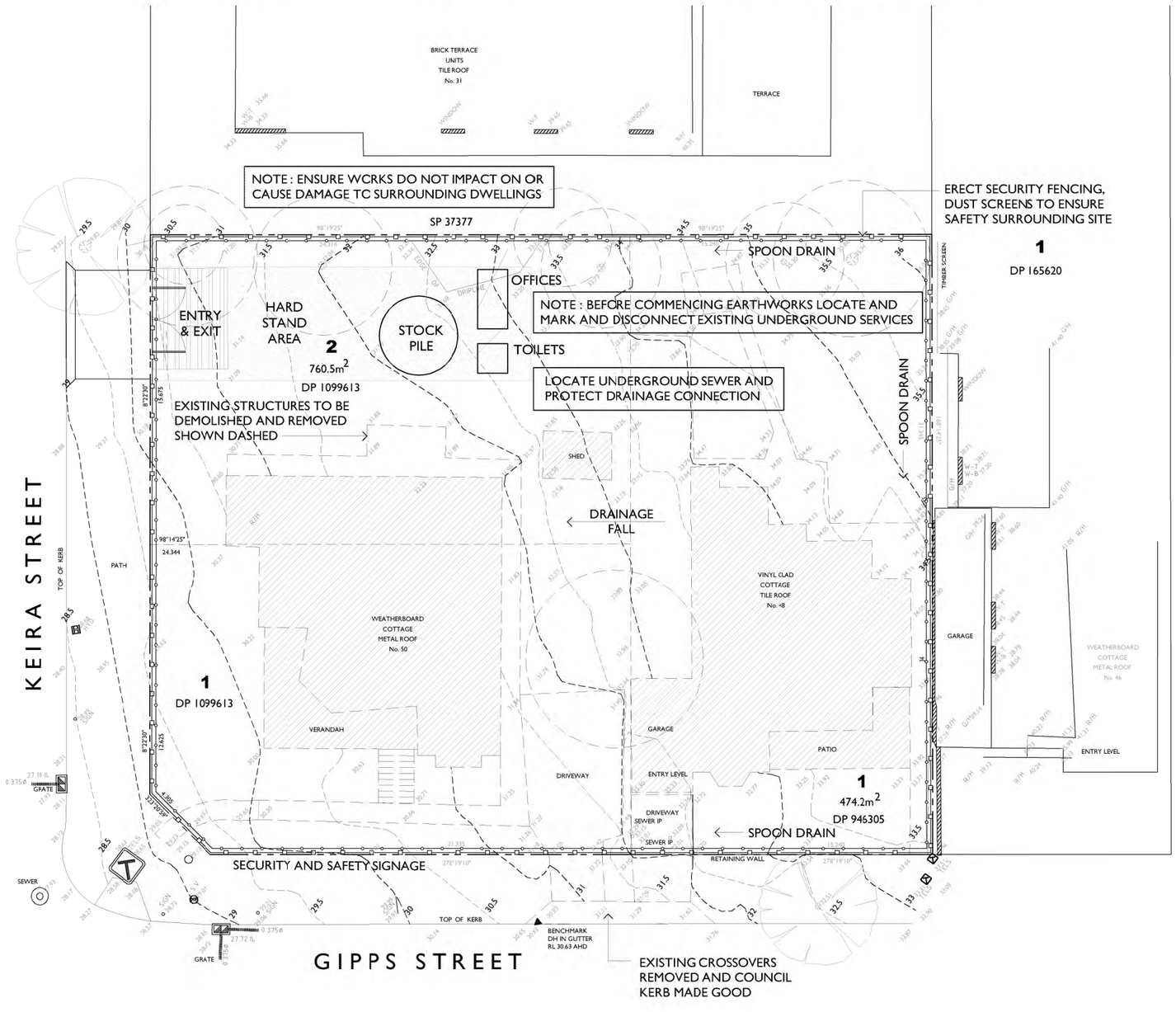
Title
DEVELOPMENT APPLICATION
CONTEXTUAL STREETSCAPE ELEVATIONS

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	**Checked**
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-005	B

48 Gipps Street, Wollongong - to be demolished

50 Gipps Street, Wollongong - to be demolished



DEMOLITION AND SITE MANAGEMENT PLAN

48-50 Gipps Street, Wollongong

LEGEND

- SEDIMENT FENCE
- SAFETY SECURITY FENCE CONTRACTORS COMPOUND
- HARD STAND AREA
- TO BE DEMOLISHED & REMOVED
- TREE TO BE REMOVED

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 necessary 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 planing 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 renovations to 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 material s in an 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).

The Contractor shall be responsible for maintaining security fencing around the perimeter of the site and any additional precautionary measures taken as may be necessary to prevent unauthorised entry to the site at all times during the demolition period. Safe access to and egress from adjoining properties shall be maintained at all times for the duration of the demolition work. In the event that the site is found to be contaminated the Contractor is to follow the direction and recommendations of a site contamination consultant to ensure that the site is un-contaminated prior to any building works taking place on site.

CONSTRUCTION MANAGEMENT POINTS

1. Note that all proposed works will be undertaken whilst the building and site is vacant;
2. All silt 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 corkwood circuit frontage during all phases of the project. All to confirm 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 are 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 dilapidation 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
AS1289 - Methods of testing soils for engineering purposes
AS1725 - Galvanised railess chainwire security fencing
Exit/Entrance - Access Point
The exit/entrance to the site will be constructed of a bed of 5075mm aggregate, 200mm deep, for the vehicular exit/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 Disposal
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 barries are to be wholly with 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 undercover 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 equipments will be cleaned away form 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 be made 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 wet) 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 used 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 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 receptacles for concrete and mortar slurries, paints acid washings, lightweight waste materials and litter. Receptors for concrete and mortar slurries, paints, acid washings, light-weight 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:
c) ensure drains operate freely, and initiate repair or maintenance as required;
d) 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;
e) construct additional erosion and/or sediment works as necessary to ensure the desired protection is given to downslope lands and waterways i.e. make ongoing changes to the plan;
f) pme maintain erosion and sediment control measures in a unctioning conditioning condition until all earthwork activities are completed and the site rehabilitated; and
g) Remove temporary soil conservation structures as a last activity in the rehabilitation programme.

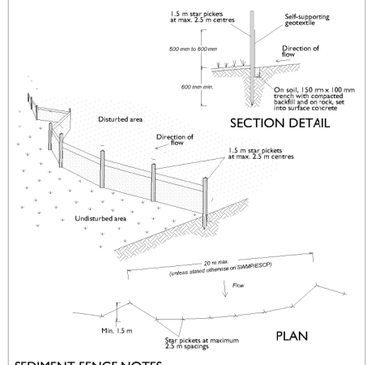
The contractor shall keep a log book, making entries at least weekly, and after rainfall and/or site closure record:
h) the volume of any rainfall events (check water bureau);
i) the conditions of any soil and water management works;
j) remedial work
The book shall be kept on site and made available 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. Tie sediment fencing material to security fencing. Sediment control fabric shall be an approved material (e.g. humes propex silt stop) standing 500mm above ground and extending 150 below ground. Silt barriers, silt traps, saltation 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 stated. Grass verges shall be maintained as much as practical to provide a buffer zone to the construction site. Construction entry/exits shall be located as per dwg.

The Contractor shall ensure all droppable soil and sediment s removed prior to construction traffic exiting the site. Builder shall ensure all construction traffic entering and leaving the site do so in a foward direction as much as possible. Site security fencing to consist of 1800mm high galvanised chain mesh panels fixed to galvanised 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 at 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 entrenched.
3. Drive 1.3 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.

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA

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C&D KOSTOVSKI & G&S BLAZEVSKI

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DEVELOPMENT APPLICATION
DEMOLITION & SITE MANAGEMENT PLAN

Scale	Date
NTS	DECEMBER 2017
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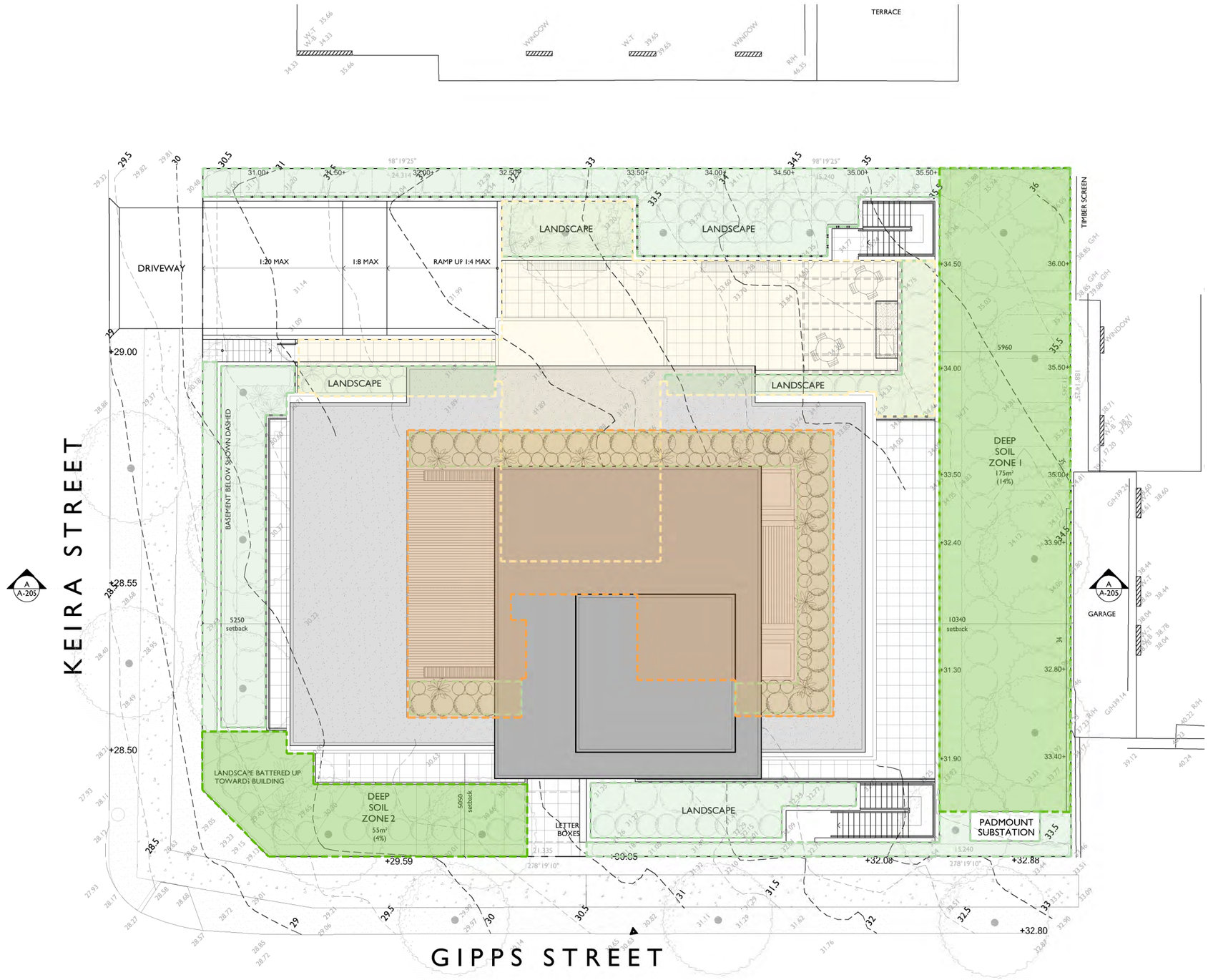
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-100	A

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



LEGEND

- COS (218m²) 17%
- ROOF COS (216m²) 17%
- DSZ 1 (175m²) 14%
- DSZ 2 (55m²) 4%
- LANSCAPING 30%

FLOOR LEVELS

BASEMENT 2	RL 24.700
BASEMENT 1	RL 27.700
LEVEL 1	RL 31.000
LEVEL 2	RL 34.050
LEVEL 3	RL 37.100
LEVEL 4	RL 40.350
LEVEL 5	RL 43.400
LEVEL 6	RL 47.450
LEVEL 7	RL 49.500
LEVEL 8	RL 52.550
ROOF	RL VARIES

SITE & ROOF PLAN

NOTE:
REFER TO CIVIL ENGINEER'S DOCUMENTATION FOR STORMWATER CO.LECTION & ALL EXTERNAL SURFACE LEVELS.

REFER TO LANDSCAPE ARCHITECTS DOCUMENTATION FOR ALL PAVING & PLANTING DETAILS.

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Project
PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 18 RESIDENTIAL APARTMENTS ABOVE BASEMENT PARKING

At
48-50 GIPPS STREET
WOLLONGONG
NSW

For
C&D KOSTOVSKI & G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
SITE & ROOF PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn: LGD SP	Checked: ADM

Project No.	Drawing No.	Issue
2017-15	A-101	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA
C	03.08.2018	RE-ISSUED FOR DA
D	03.08.2018	RE-ISSUED FOR DA

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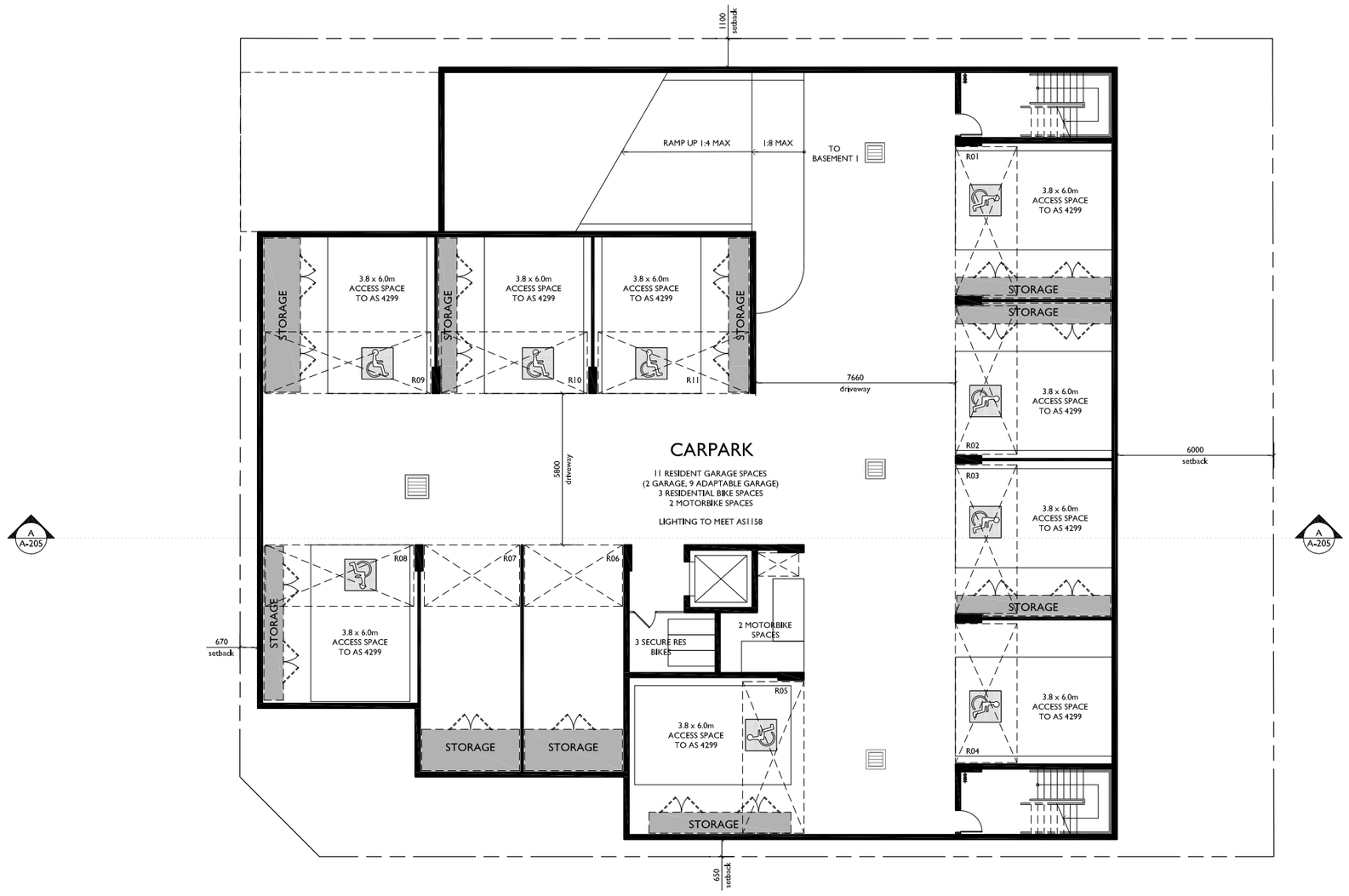

BASEMENT 2 FLOOR PLAN

RL 23.700

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WOLLONGONG
NSW

For
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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
BASEMENT 2 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	AUGUST 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-102	D

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA
C	03.08.2018	RE-ISSUED FOR DA
D	03.08.2018	RE-ISSUED FOR DA

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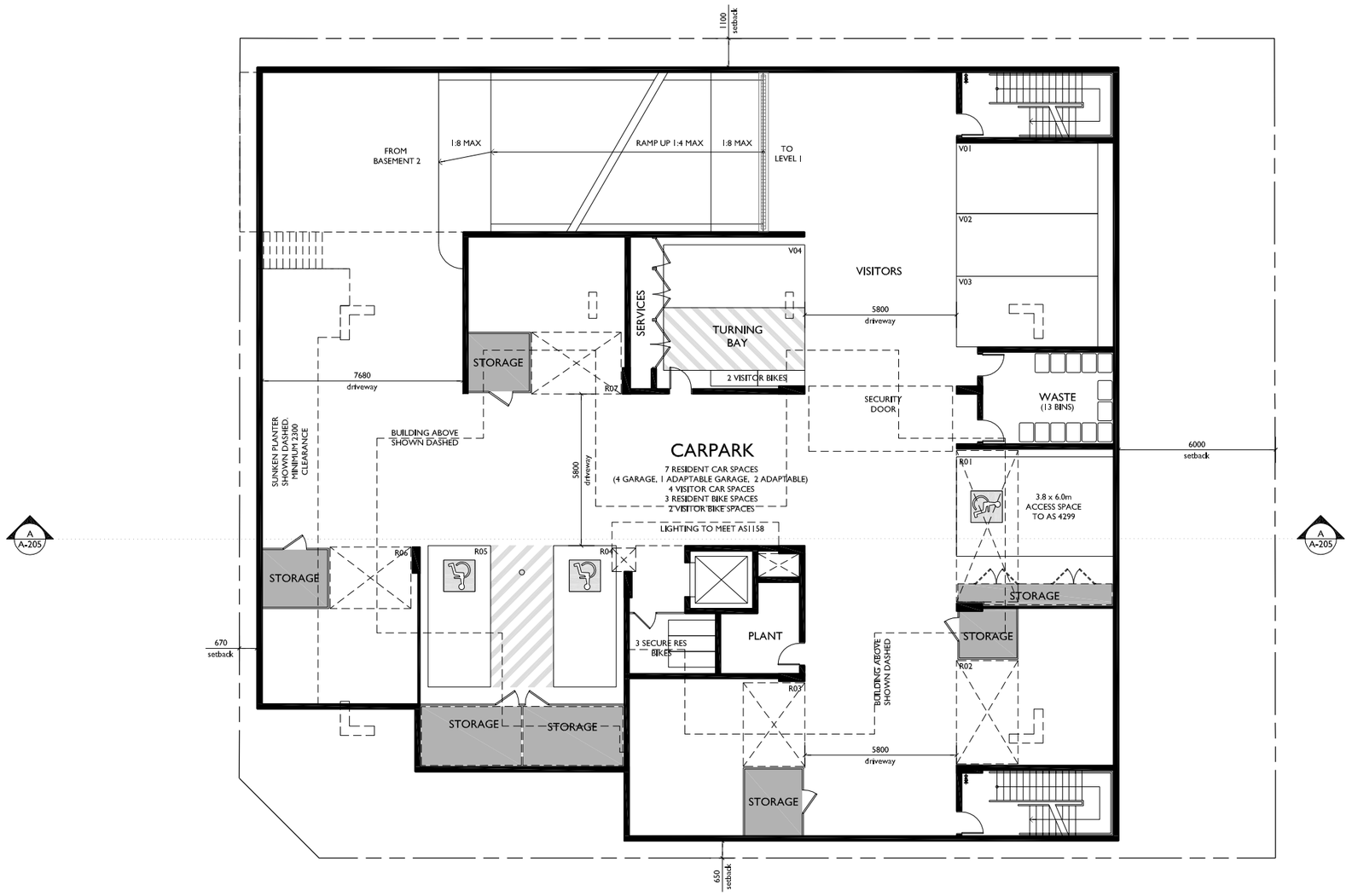

BASEMENT 1 FLOOR PLAN

RL 26.700

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NSW

For
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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
BASEMENT 1 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	AUGUST 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-103	D

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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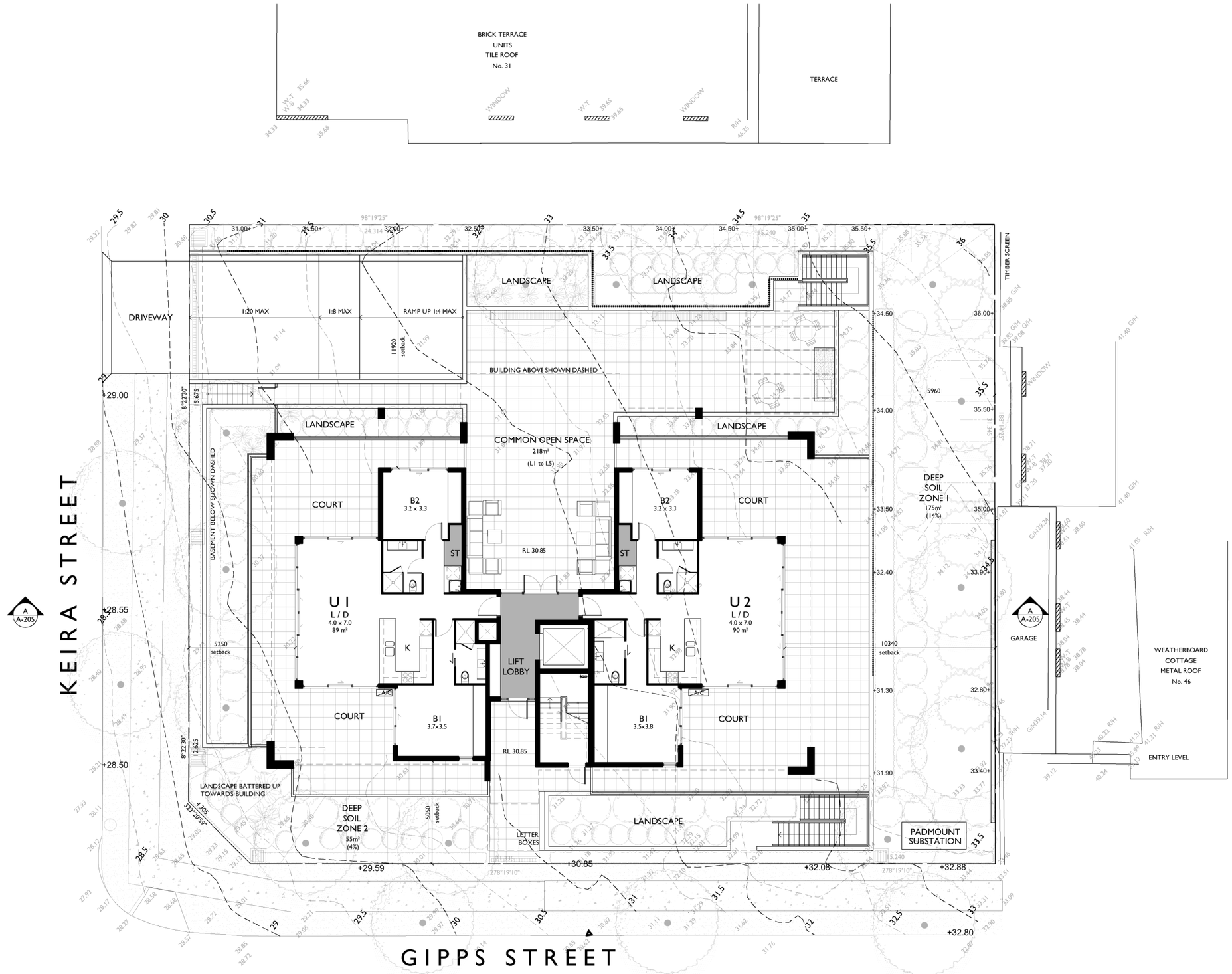

LEVEL 1 FLOOR PLAN

RL 31.000

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NSW

For
C&D KOSTOVSKI & G&S BLAZEVSKI

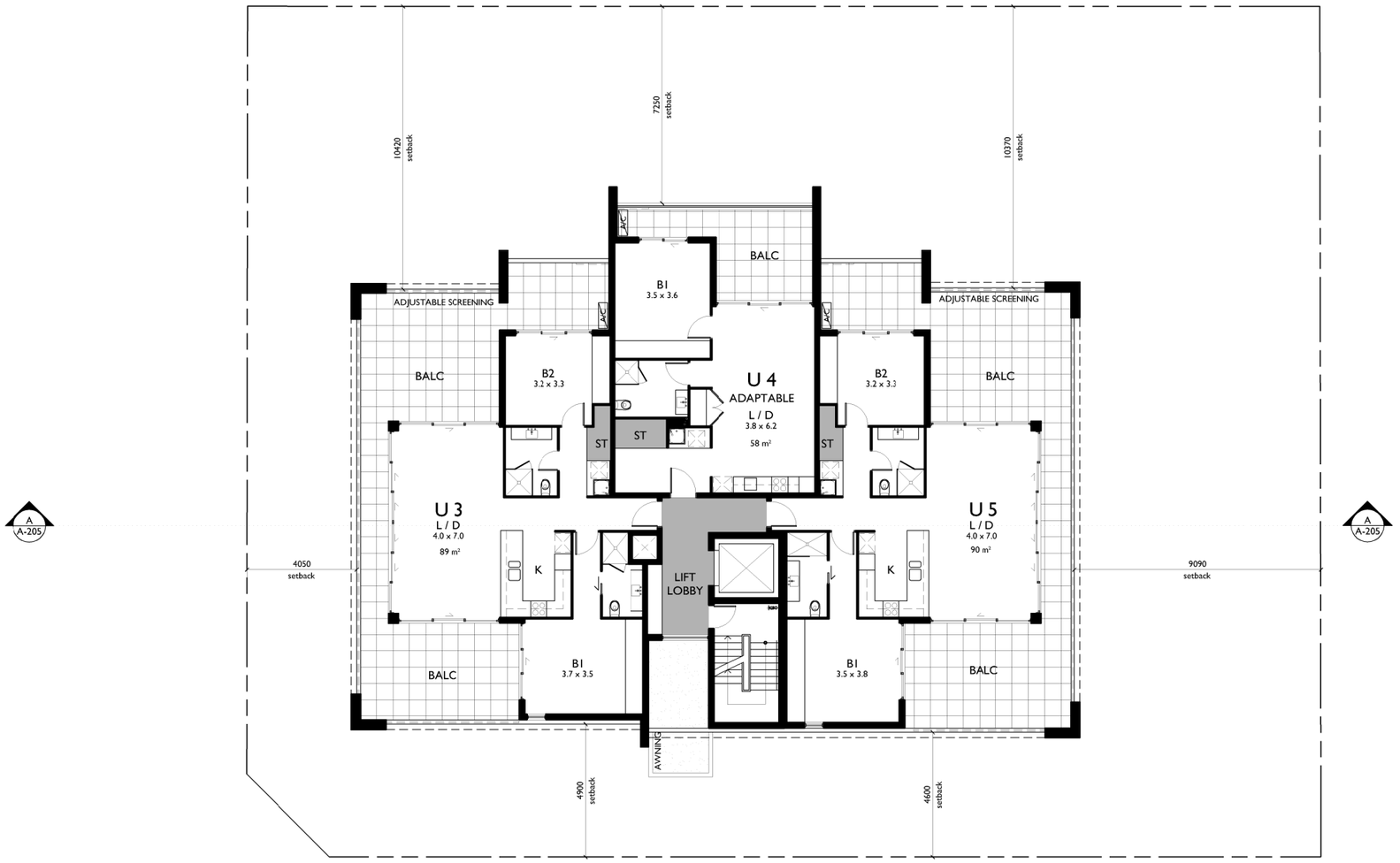
Title
DEVELOPMENT APPLICATION
LEVEL 1 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	**Checked**
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-104	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



LEVEL 2 FLOOR PLAN

RL 34.050

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& G&S BLAZEVSKI

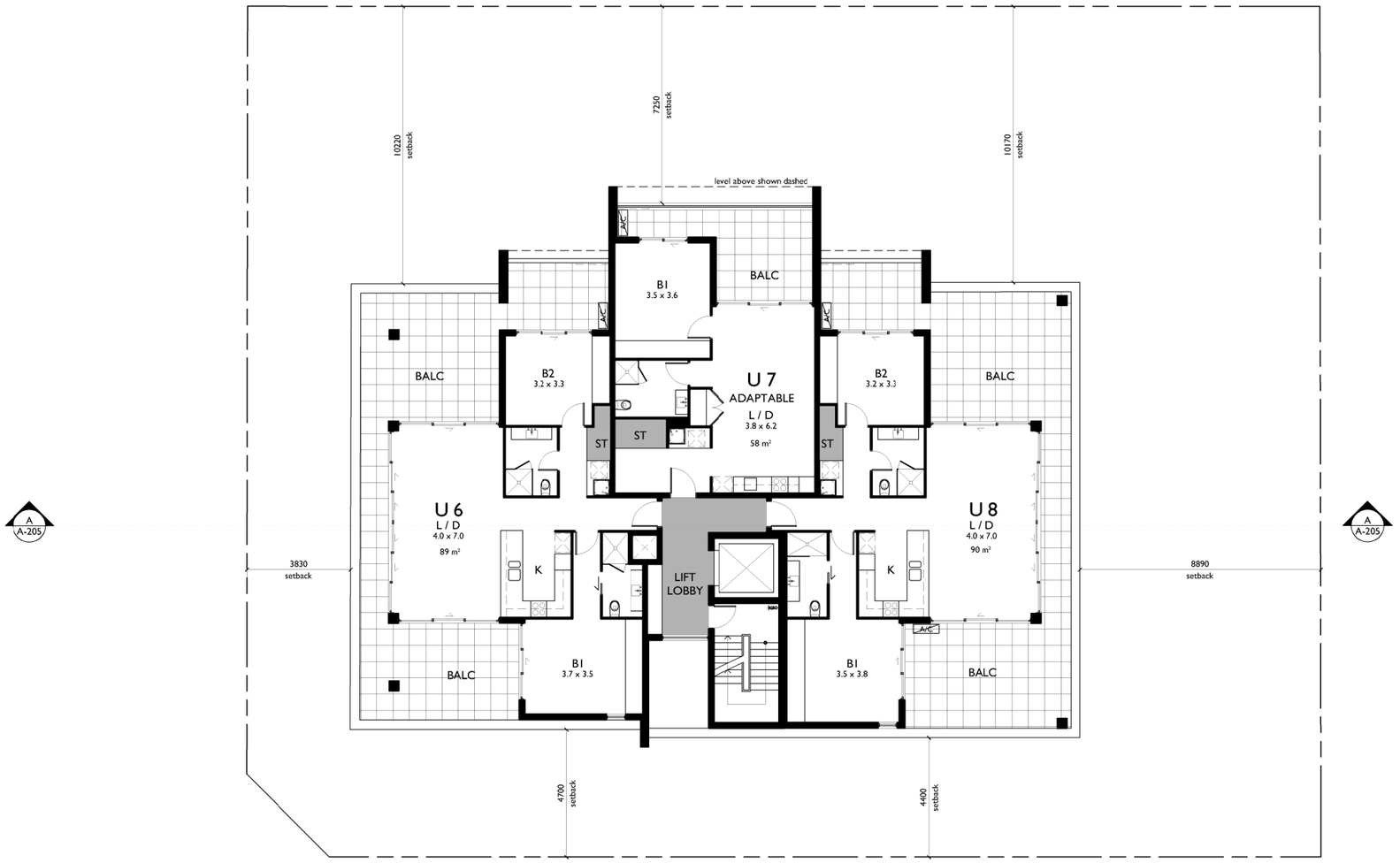
Title
DEVELOPMENT APPLICATION
LEVEL 2 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-105	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



LEVEL 3 FLOOR PLAN

RL 37.100

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NSW

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& G&S BLAZEVSKI

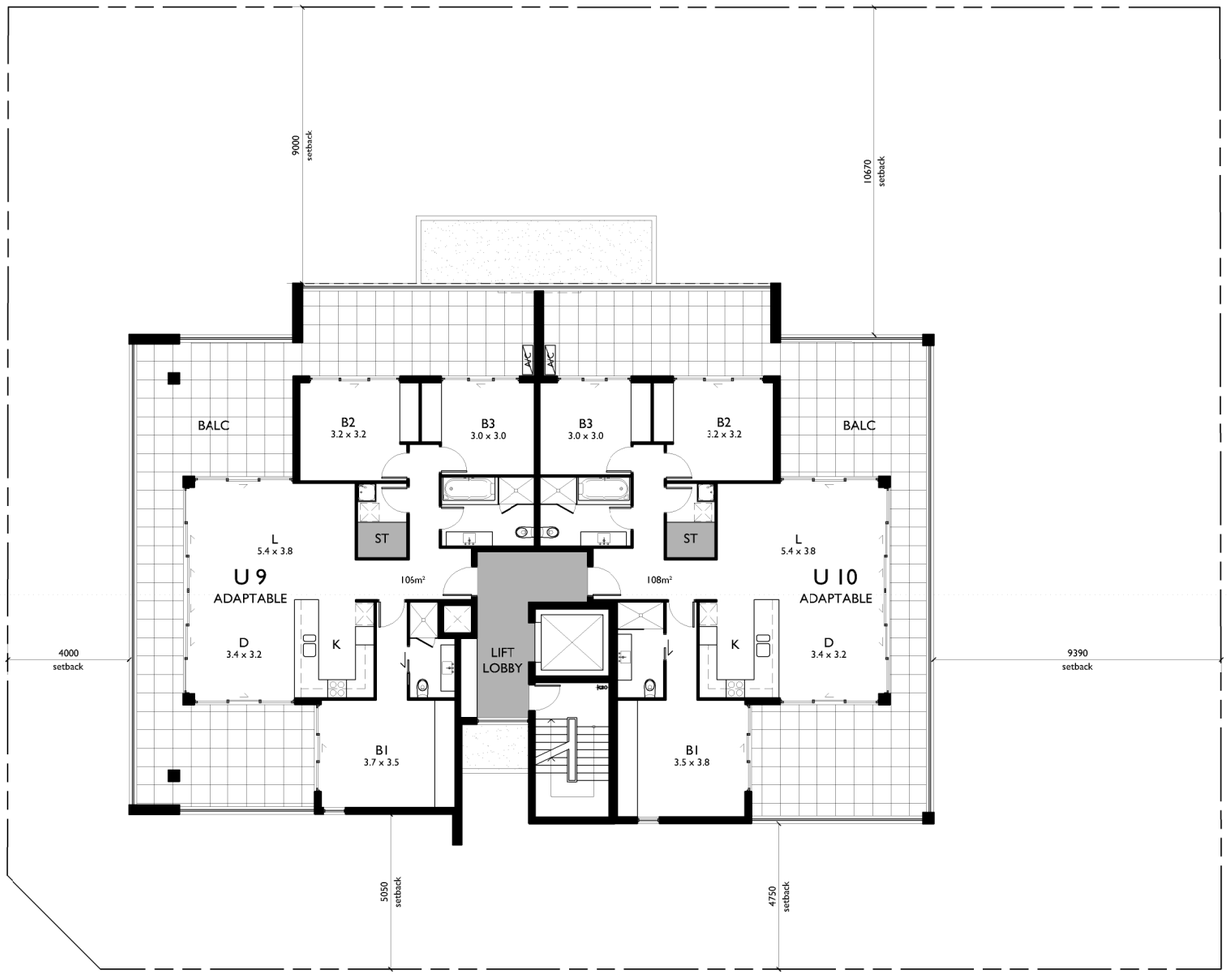
Title
DEVELOPMENT APPLICATION
LEVEL 3 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-106	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



LEVEL 4 FLOOR PLAN

RL 40.350

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Project
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Title
DEVELOPMENT APPLICATION
LEVEL 4 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-107	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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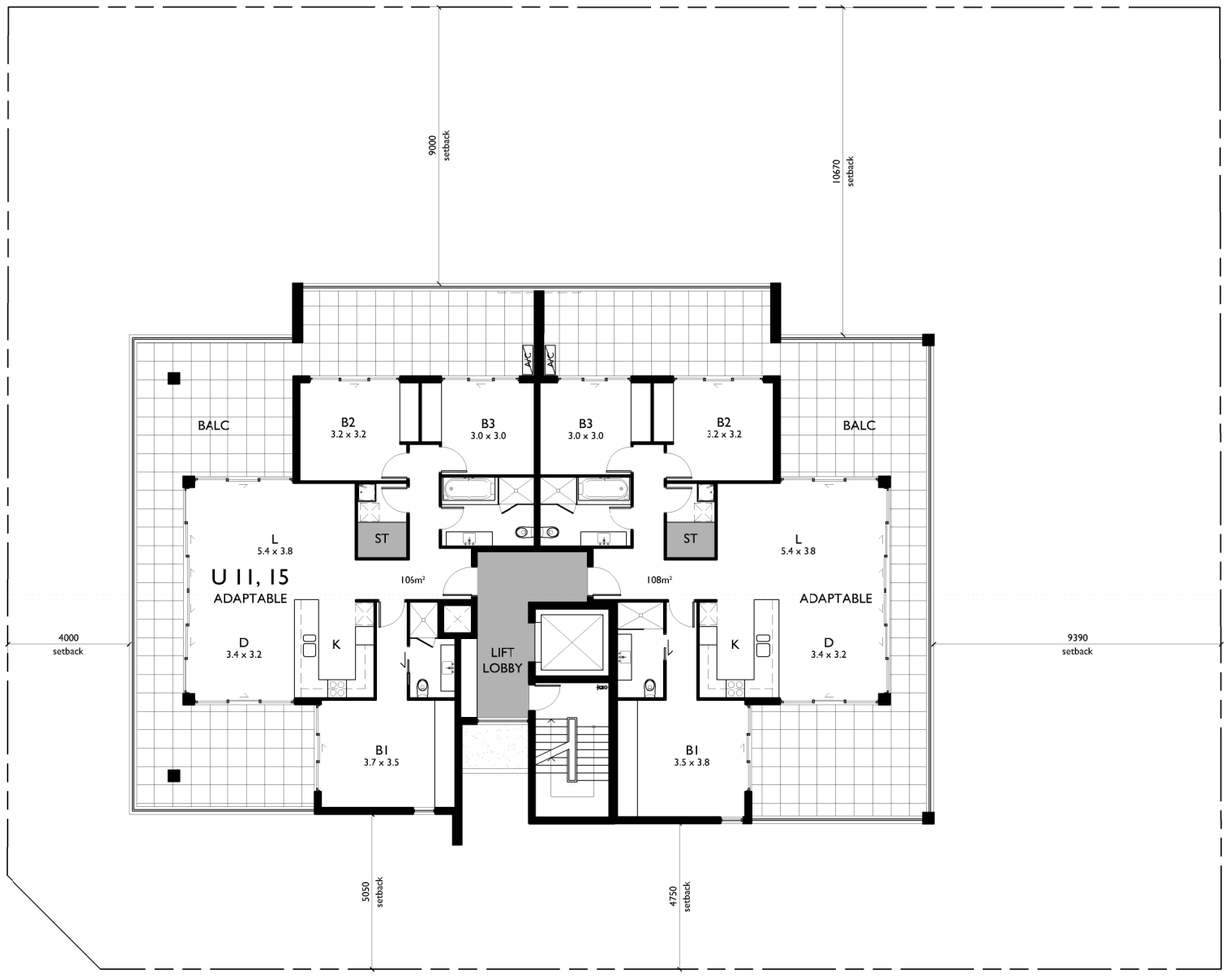

LEVEL 5 & 7 FLOOR PLAN

LEVEL 5 RL 43.400

LEVEL 7 RL 49.500

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Project
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Title
DEVELOPMENT APPLICATION
LEVEL 5 & 7 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-108	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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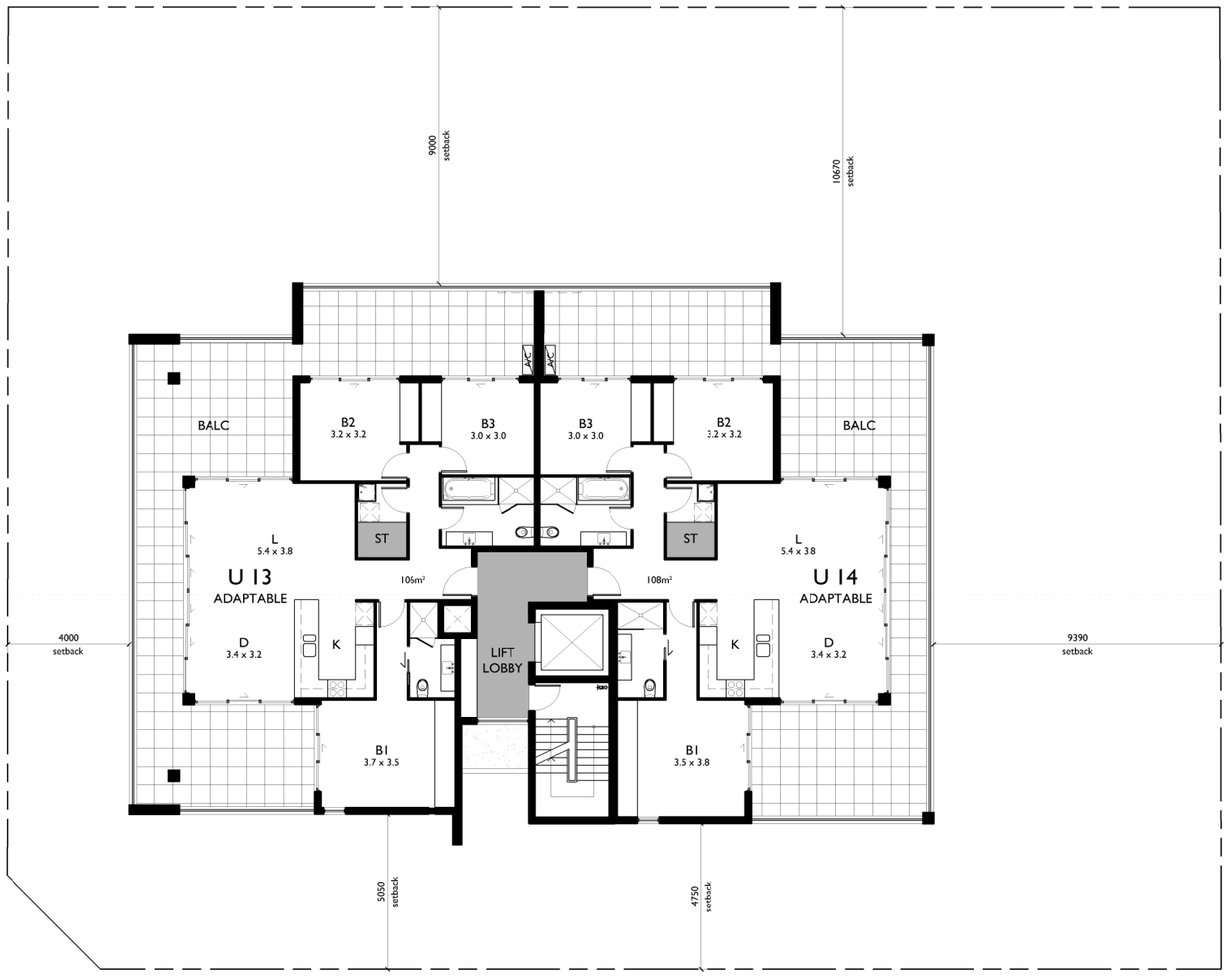

A A-205

A A-205

LEVEL 6 FLOOR PLAN

RL 46.450

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Title
DEVELOPMENT APPLICATION
LEVEL 6 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-109	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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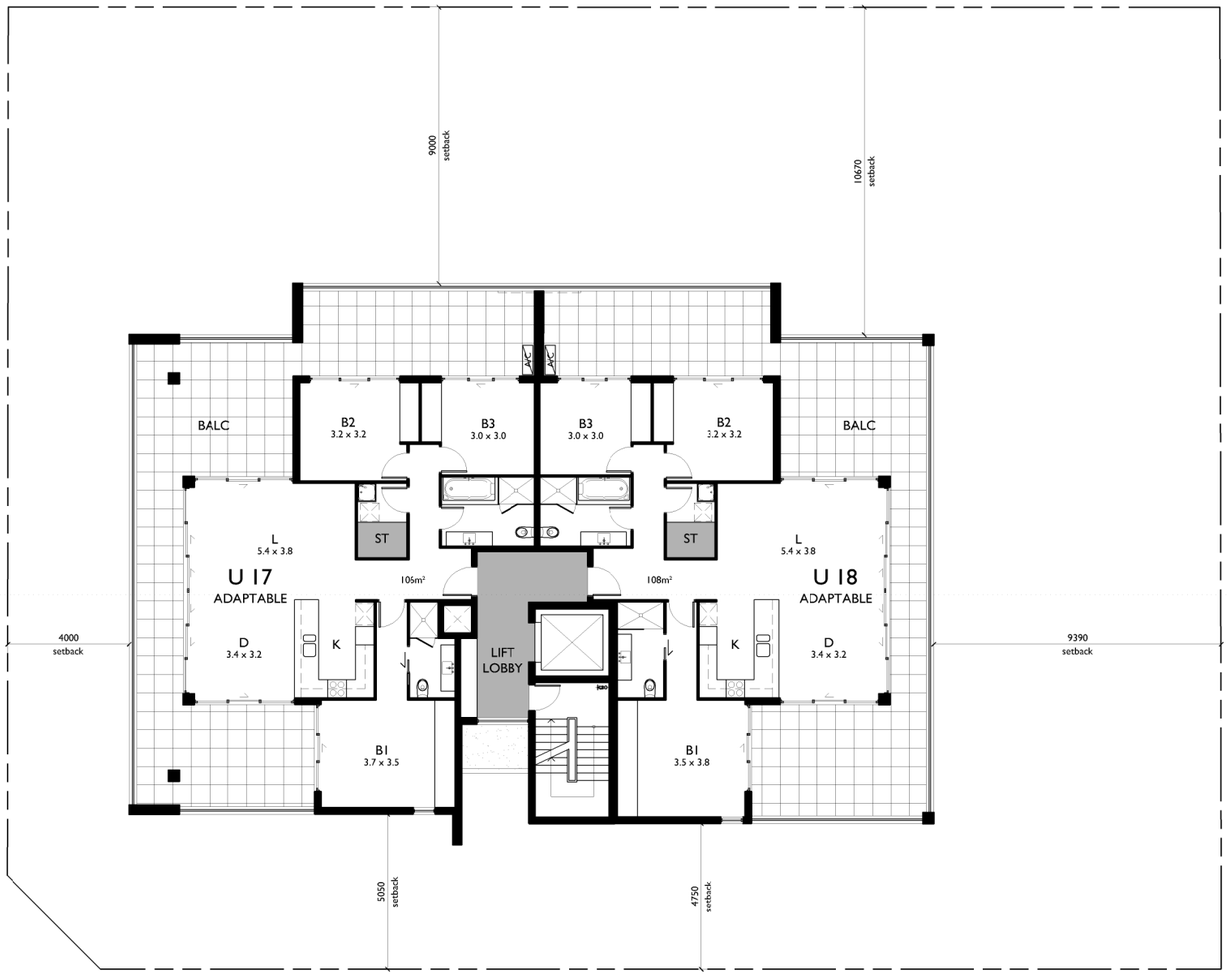

LEVEL 8 FLOOR PLAN

RL 52.550

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Title
DEVELOPMENT APPLICATION
LEVEL 8 FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-110	B

ISSUE	DATE	DESCRIPTION
A	12.04.2018	ISSUED FOR DA

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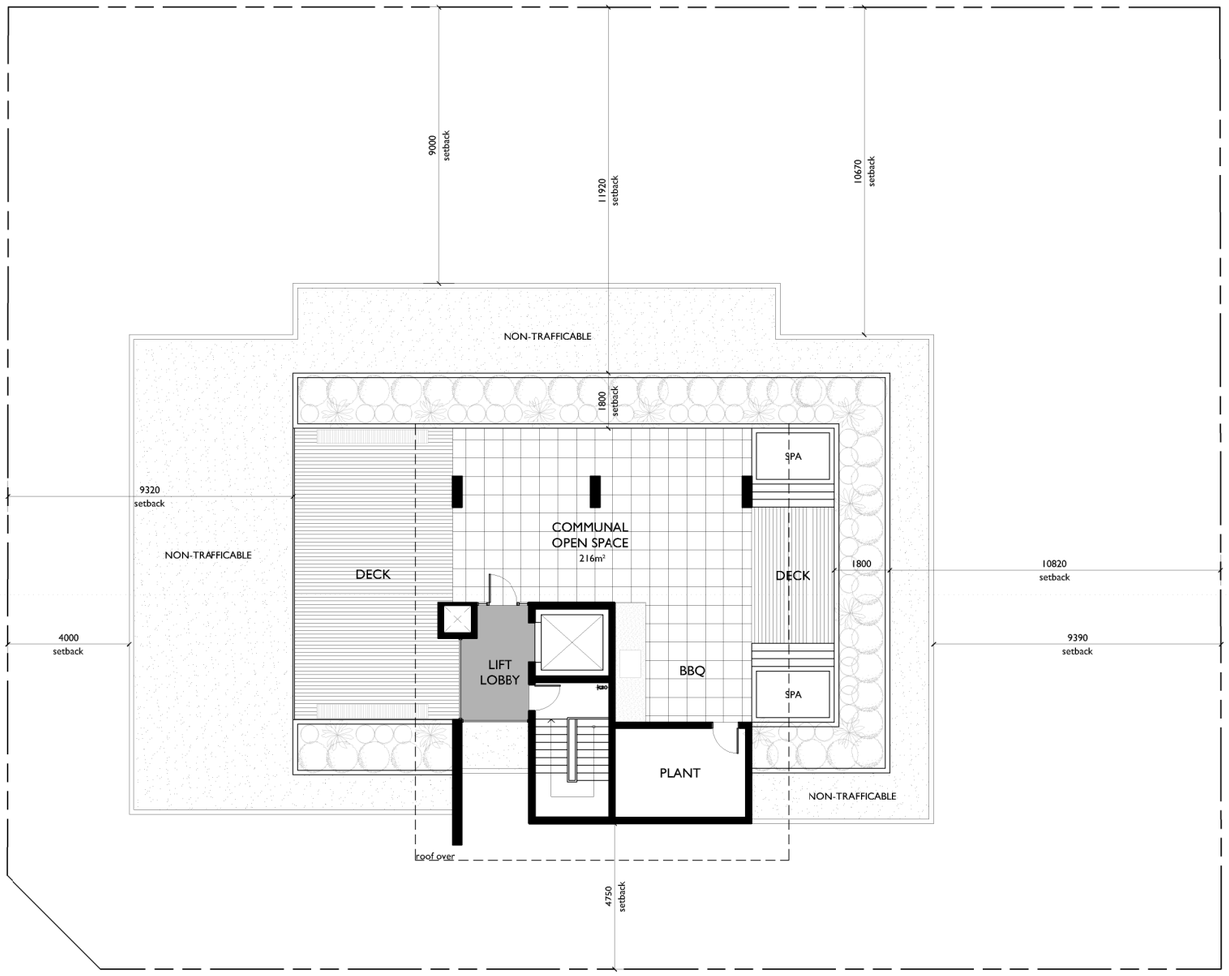

A A-205

A A-205

ROOF FLOOR PLAN

RL 55.550

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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
ROOF FLOOR PLAN

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-111	A

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
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SOUTH ELEVATION

GIPPS STREET ASPECT

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ABOVE BASEMENT PARKING

At
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WOLLONGONG
NSW

For
C&D KOSTOVSKI
& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
SOUTH ELEVATION

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	**Checked**
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-201	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
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EAST ELEVATION

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ABOVE BASEMENT PARKING

At
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NSW

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Title
DEVELOPMENT APPLICATION
EAST ELEVATION

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-202	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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NORTH ELEVATION

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ABOVE BASEMENT PARKING

At
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NSW

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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
NORTH ELEVATION

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	**Checked**
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-203	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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WEST ELEVATION

KEIRA STREET ASPECT

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ABOVE BASEMENT PARKING

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Title
DEVELOPMENT APPLICATION
WEST ELEVATION

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-204	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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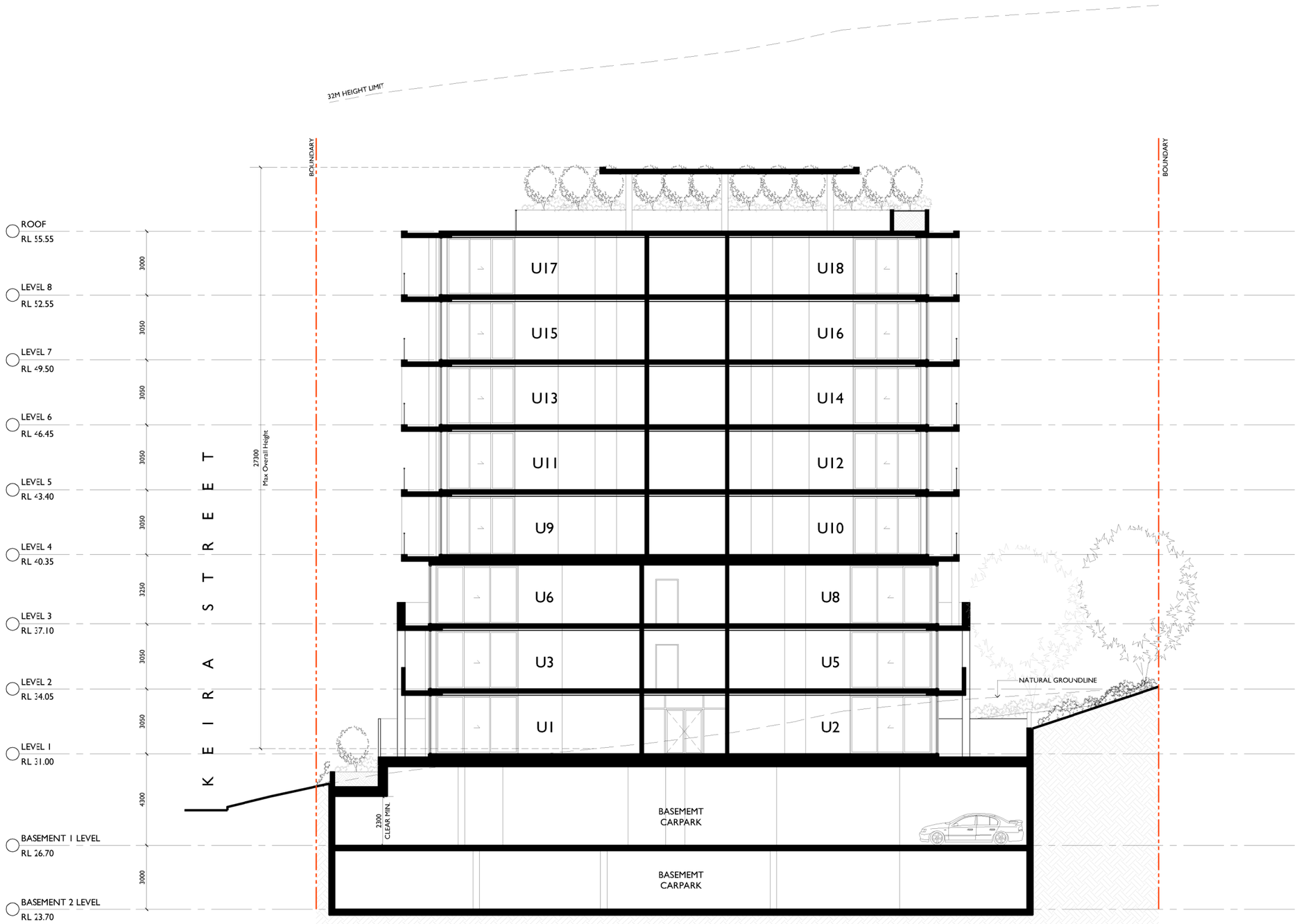

SECTION AA

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Project
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At
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NSW

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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
SECTION A-A

Scale	Date
1:100 @ A1 1:200 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-205	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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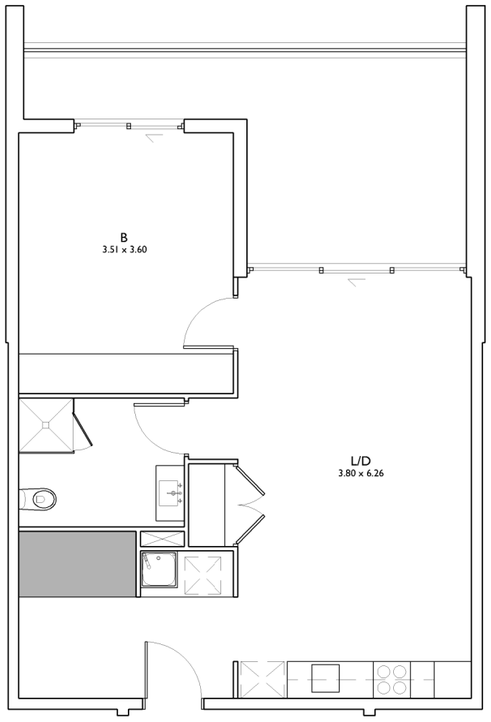

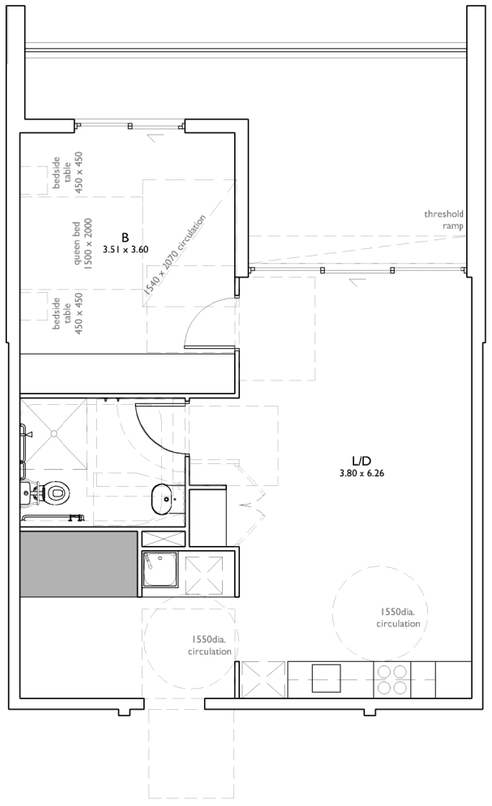

PRE- ADAPTATION PLAN

UNITS 4 & 7

CLASS C ADAPTABLE UNIT TO AS 4299

POST- ADAPTATION PLAN

UNITS 4 & 7

REFER TO ACCESS CONSULTANTS REPORT

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Project
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NSW

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Title
DEVELOPMENT APPLICATION
PRE AND POST ADAPTATION PLAN

Scale	Date
1:50 @ A1 1:100 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-301	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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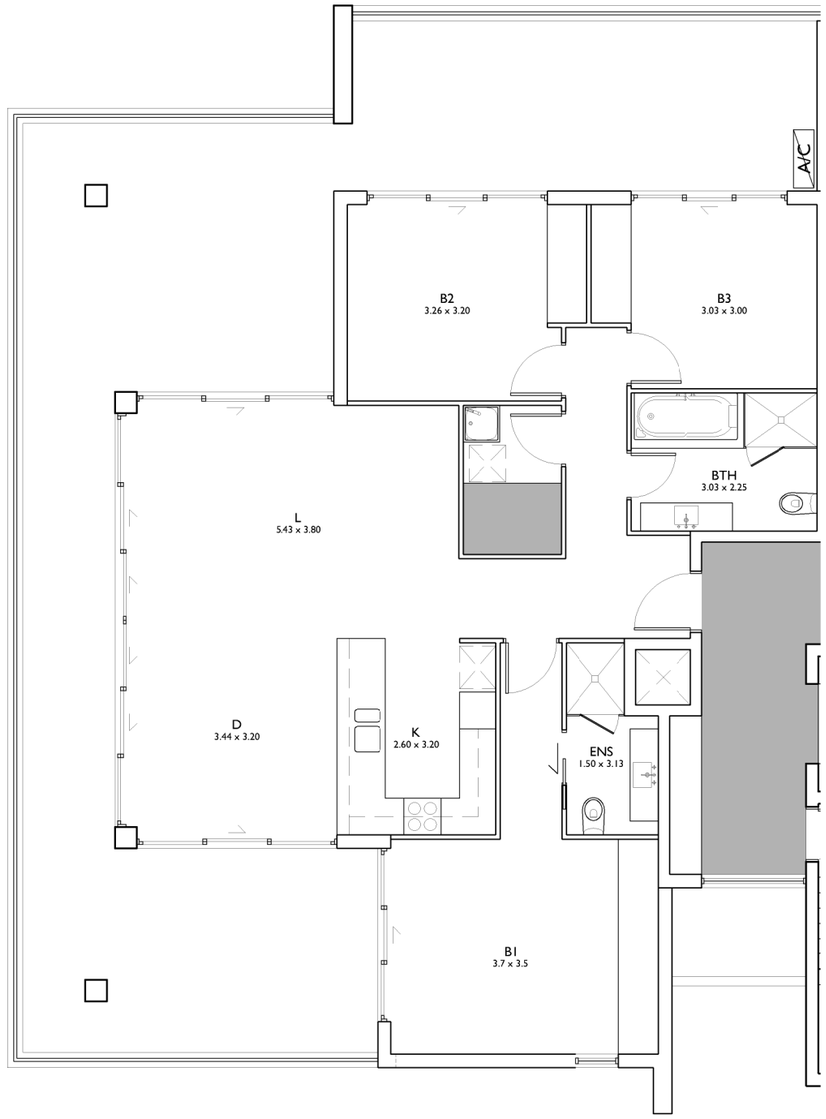
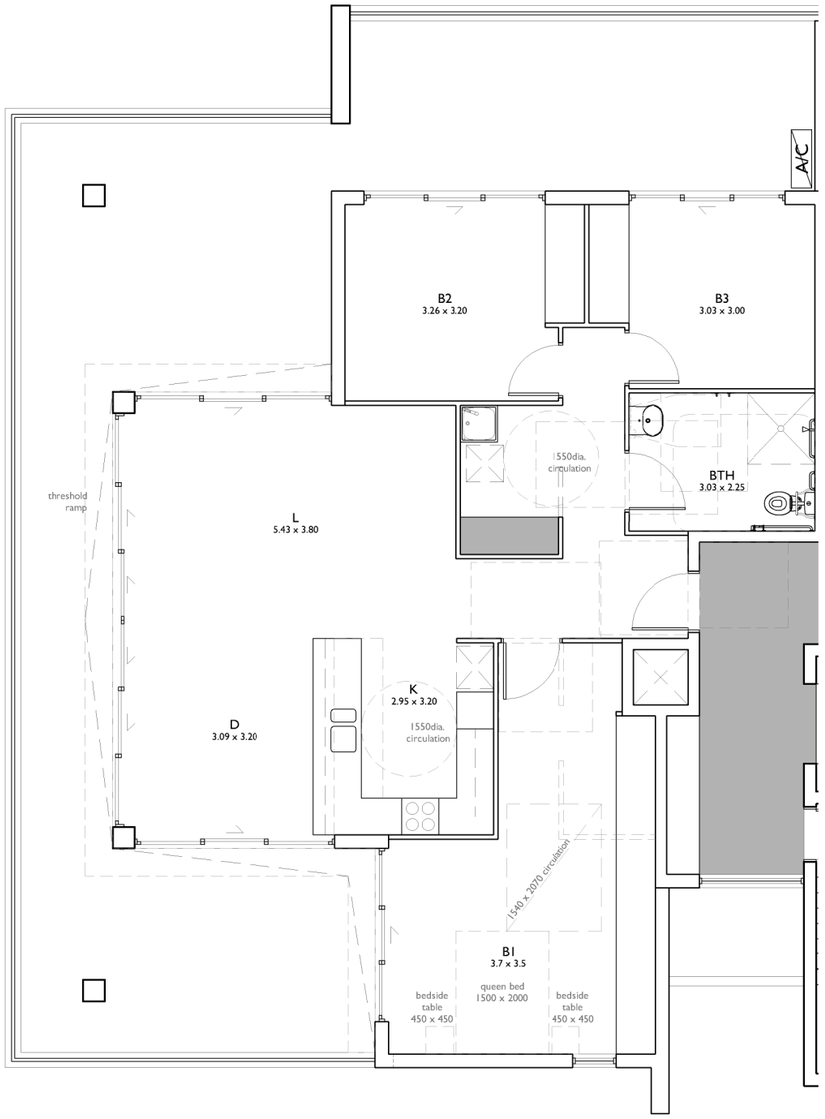


PRE- ADAPTATION PLAN

UNITS 9, 11, 13, 15 & 17 AS SHOWN
UNITS 10, 12, 14, 16 & 18 MIRRORED
CLASS C ADAPTABLE UNIT TO AS 4299



POST- ADAPTATION PLAN

UNITS 9, 11, 13, 15 & 17 AS SHOWN
UNITS 10, 12, 14, 16 & 18 MIRRORED
REFER TO ACCESS CONSULTANTS REPORT

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Project
PROPOSED RESIDENTIAL
DEVELOPMENT CONSISTING OF
18 RESIDENTIAL APARTMENTS
ABOVE BASEMENT PARKING

At
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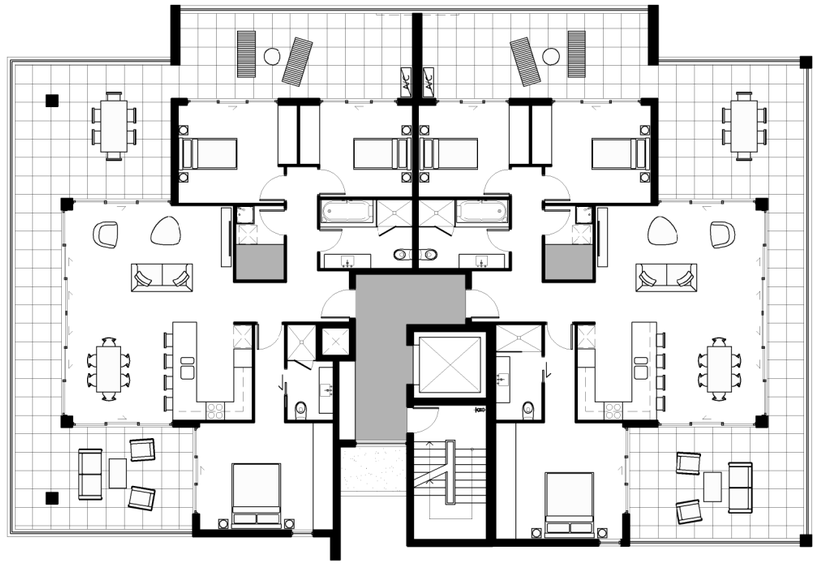
WOLLONGONG
NSW

For
C&D KOSTOVSKI
& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
PRE AND POST ADAPTATION PLAN 02

Scale	Date
1:50 @ A1 1:100 @ A3	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-302	B



TYPICAL LEVEL 4 - 8
FURNITURE PLAN

TYPICAL LEVEL 1 - 3
FURNITURE PLAN

ISSUE A. 29.03.2018

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Project
PROPOSED RESIDENTIAL DEVELOPMENT
CONSISTING OF 18 RESIDENTIAL APARTMENTS
ABOVE BASEMENT CARPARK

FIGURED DIMENSIONS- These drawings are not to be scaled. Figured dimensions shall be used in all cases.
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	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

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COLOUR & MATERIALS SCHEDULE - GIPPS STREET ELEVATION

1 DULUX TIMELESS GREY
PAINTED HEBEL WALLING

2

3 DULUX VIVID WHITE
PAINTED HEBEL WALLING, CONCRETE UPTURNS AND SLAB EDGES

4 POWDERCOAT SILVER PEARL
DOOR AND WINDOW FRAMES, LOUVRES AND HANDRAIL

5 CLEAR GLAZING
GLAZING ELEMENTS AND BALUSTRADES

6 SANDSTONE
CLADDED BASE WALLING

7 MERBAU "LOOK" PANELLING
PRIVACY FENCES

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

Project
PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 18 RESIDENTIAL APARTMENTS ABOVE BASEMENT PARKING

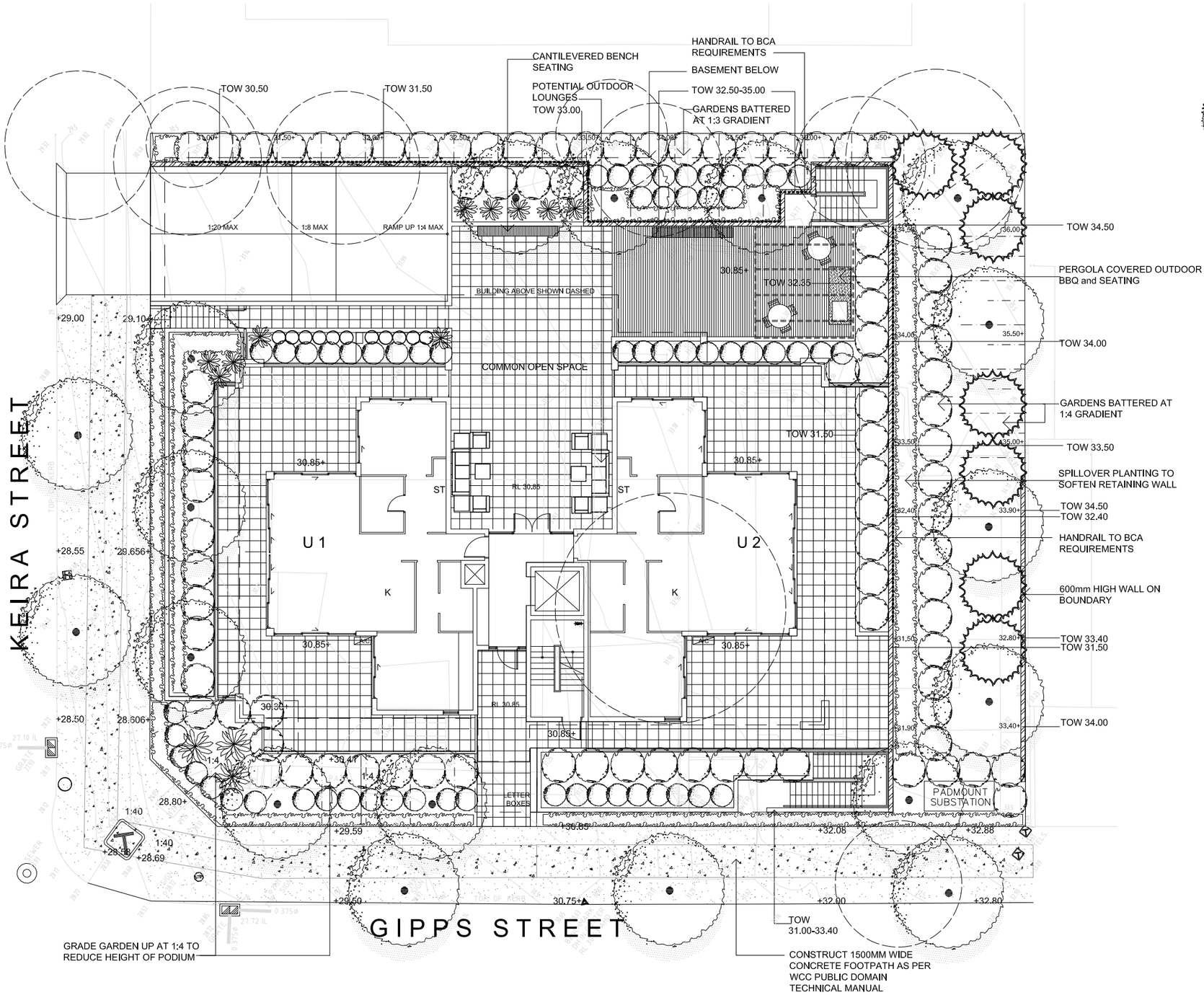
At
48-50 GIPPS STREET
WOLLONGONG
NSW

For
C&D KOSTOVSKI
& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
COLOUR & MATERIALS SCHEDULE

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-502	B



RECOMMENDED PLANT SPECIES

BOTANIC NAME	COMMON NAME
TREES	
Acmena smithii	Lilly pily
Acmena smithii var. Minor	Dwarf Lilly pily
Elaeocarpus eumondii	Quandong
Lagerstroemia Natchez 'Indian Summer'	Crepe Myrtle (white)
Magnolia 'Little Gem'	Dwarf Magnolia
Syzigium leuhmannii	Brush Cherry
Tristaniopsis laurina 'Luscious'	Water Gum
Waterhousia floribunda 'Sweeper'	Waterhousia
ACCENT PLANTS	
Arthripodium 'Matapouri Bay'	Rock Lily
Astartia stellata	Silver Spear
Dianella 'Kling Alfred'	Paroo Lily
Cordyline stricta	Stream Lily
Cycas revoluta	Japanese Sago
Lepidozamia peroffskyana	Pineapple Palm
Strelitzia reginae	Bird of Paradise
Zammia furfuacea	Cardboard Plant
LARGE SHRUBS	
Backhousia citriodora	Lemon myrtle
Metrosideros 'Springfire'	Dwarf NZ Xmas Bush
Viburnum 'Eve Prince'	Sweet viburnum
Syzigium oleosum	Blue Lily Pily
Murraya panlculata	Mexican Orange Blossum
Photinia glabra 'Fraseri'	Photinia
Syzigium 'Elite'	Brush Cherry
MEDIUM TO LOW SHRUBS	
Echium fastuosum	Pride of Madeira
Hebe 'Wirri' Cvs	Veronica
Ixora chlnensis	Ixora
Metrosideros 'Fiji Fire'	NZ Xmas Bush
Raphiolepis 'Springtime'	Indian Hawthorn
GROUND COVERS/ORNAMENTAL GRASSES	
Dianella 'Breeze'	Dwarf Paroo Lily
Liriope muscari	Lilyturf
Lomandra 'Tanika'	Fine leaved lomadnra
Philodendron 'Xanadu'	Philodendron
Scaevola 'Purple Fanfare'	Fan Flower
Trachelospermum asiaticum	Star Jasmine
Viola hederacea	Native Violet

LEGEND

- Existing levels and contours
- Proposed spot levels (30.00)
- Existing trees to be retained (T1)
- Existing trees to be removed (T1)
- Proposed tree planting
- Proposed mass shrub planting
- Proposed turf with timber edging
- Proposed select tile paving
- Proposed charcoal coloured concrete driveway
- Proposed stenciled concrete driveway Colour: Charcoal
- Proposed timber deck or timber plank tiles
- Proposed retaining walls to engineers detail
- Handrail to BCA requirements

0 1 2 3 4 m 6 8 10

ISSUE: Amended Development Consent 06.04.18, 17.04.18
ISSUE: Development Consent 14.09.17, 31.10.17
ISSUE: For Co-ordination 01.09.17, 06.09.17
REV.

ochre landscape architects
PO Box 395 Wollongong NSW 2520
Level 1, 126 Crown Street
Wollongong NSW 2500
Tel. 02 4227 6427 Fax. 02 4227 6876
Email: design@ochre.net.au

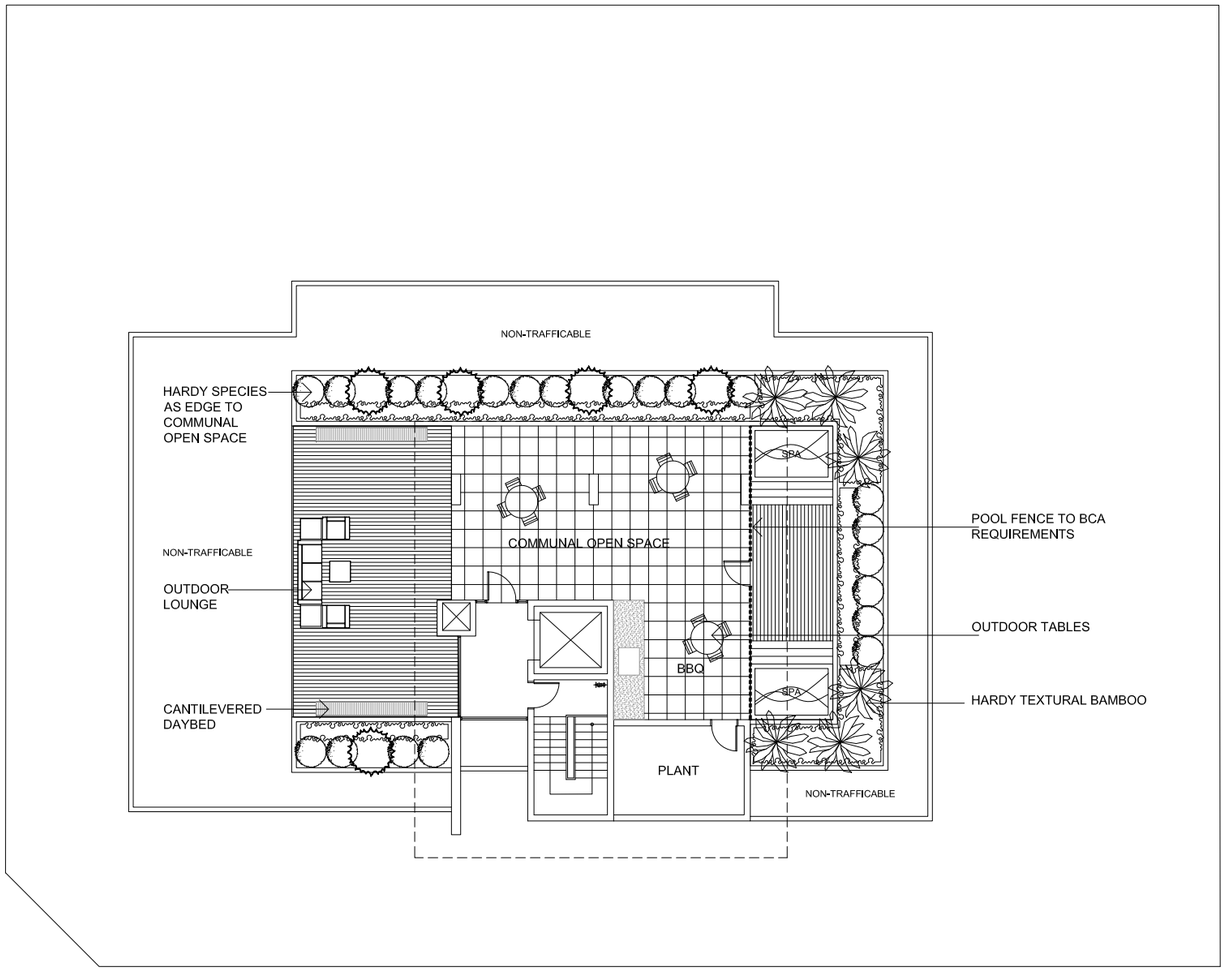
PROJECT
Proposed Residential Development
48-50 Gipps Street
WOLLONGONG

DRAWING TITLE
LEVEL ONE
Landscape Concept Plan

CLIENT
C&D Ksstovski and G&S Blazevski

DRAWING NO.
1806-LD01A

SCALE: 1:100 @ A1, 1:200 @ A3
CHECKED: TW
DATE. 01.09.17



LEGEND

- Proposed mass shrub planting
- Proposed tile paving
- Proposed timber deck
- Proposed pool fence to BCA requirements
- Proposed polished concrete or rendered bench

RECOMMENDED PLANT SPECIES

BOTANIC NAME	COMMON NAME
BAMBOO/ACCENTS	
Bambusa multiplex cv Goldstripe	Goldstripe Bamboo
Thysanolaena maxima	Tiger Grass
SHRUBS	
Metrosideros 'Dalese'	Dwarf NZ Xmas Bush
Raphiolepis 'Oriental Pearl'	Dwarf Hawthorn
Westringia fruticosa	Coastal Rosemary
GROUND COVERS	
Gazania tomentosum	Gazania
Westringia 'Bulli Creeper'	Dwarf Coastal Rosemary
Dianella 'Littel Rev'	Dwarf paroo Lily

0 1 2 3 4 m 6 8 10

ISSUE: Development Consent 17.04.18

REV.

ochre landscape architects

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Level 1, 126 Crown Street
Wollongong NSW 2500
Tel. 02 4227 6427 Fax. 02 4227 6876
Email: design@ochre.net.au

PROJECT

Proposed Residential Development
48-50 Gipps Street
WOLLONGONG

DRAWING TITLE

ROOF TERRACE
Landscape Concept Plan

CLIENT

C&D Ksstovski and G&S Blazevski

DRAWING NO.

1806-LD02

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

CHECKED: TW

DATE. 01.09.17

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION

ARTIST IMPRESSION

LOOKING NORTH EAST TOWARDS SITE FROM CORNER OF KEIRA AND GIPPS STREET

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& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
ARTIST IMPRESSION

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-501	B

9AM

12PM

3PM

SHADOW ANALYSIS
21ST OF JUNE

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION

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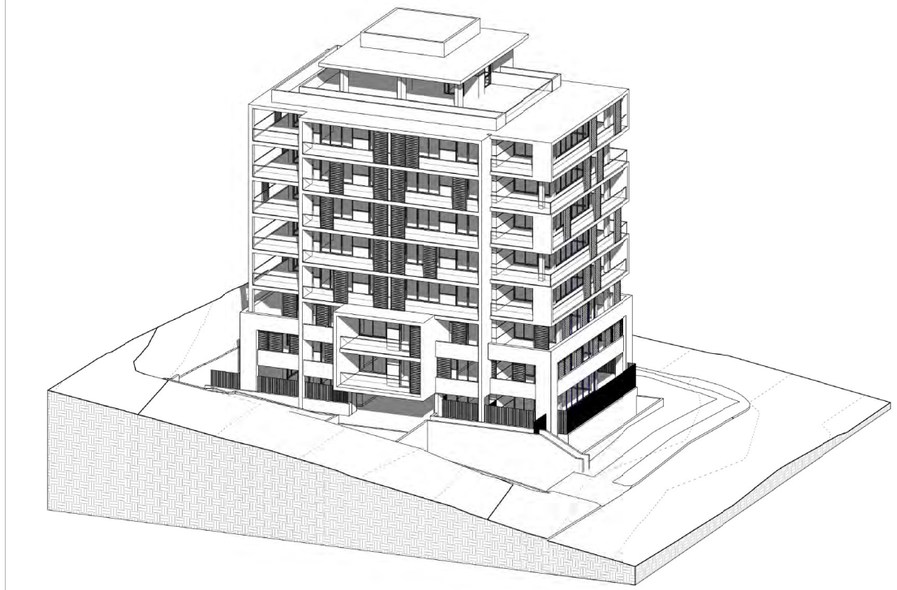
Title
DEVELOPMENT APPLICATION
SHADOW ANALYSIS

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-401	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



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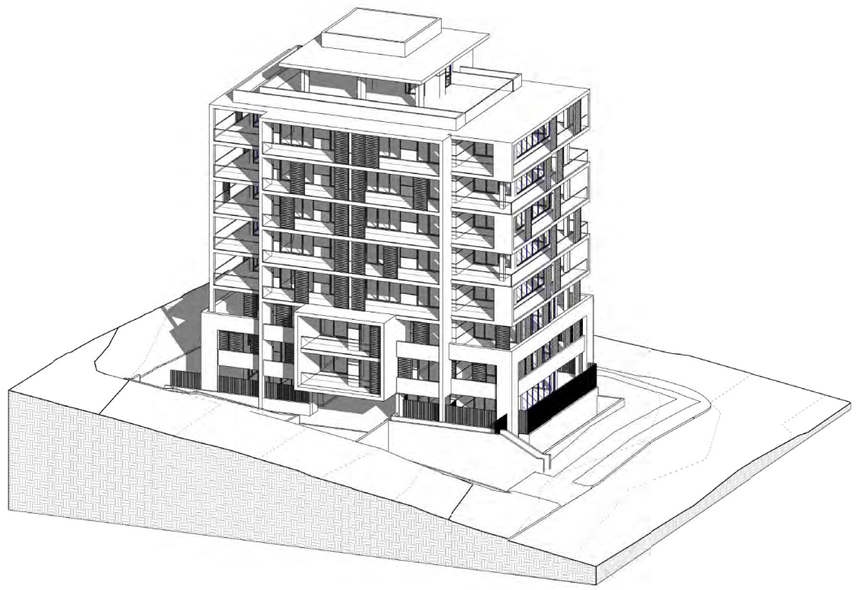

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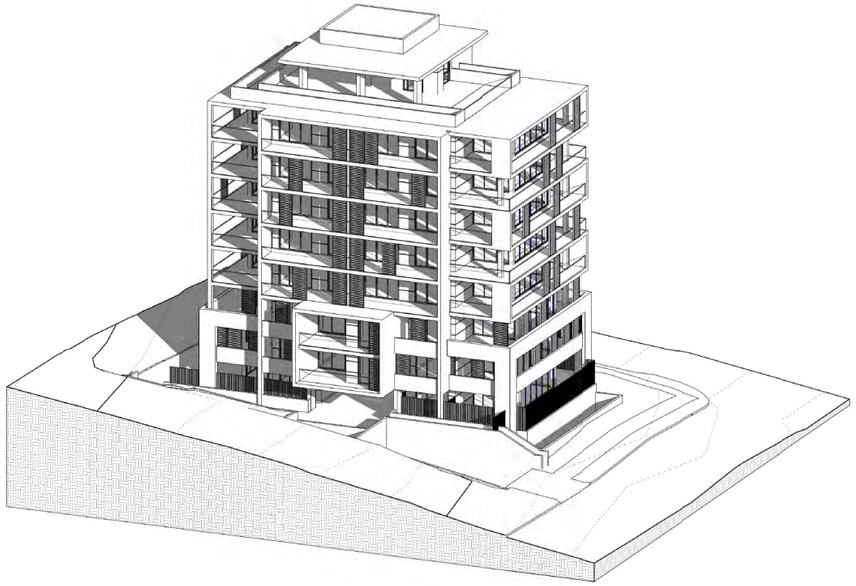

3pm

DETAILED SHADOW ANALYSIS
21ST OF JUNE

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94 Kembla St, Wollongong NSW 2500 PO Box 3061 Wollongong
ph: 02 4228 6400 fax: 02 4226 6455 www.admarchitects.com.au

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ABOVE BASEMENT PARKING

At
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WOLLONGONG
NSW

For
C&D KOSTOVSKI
& G&S BLAZEVSKI

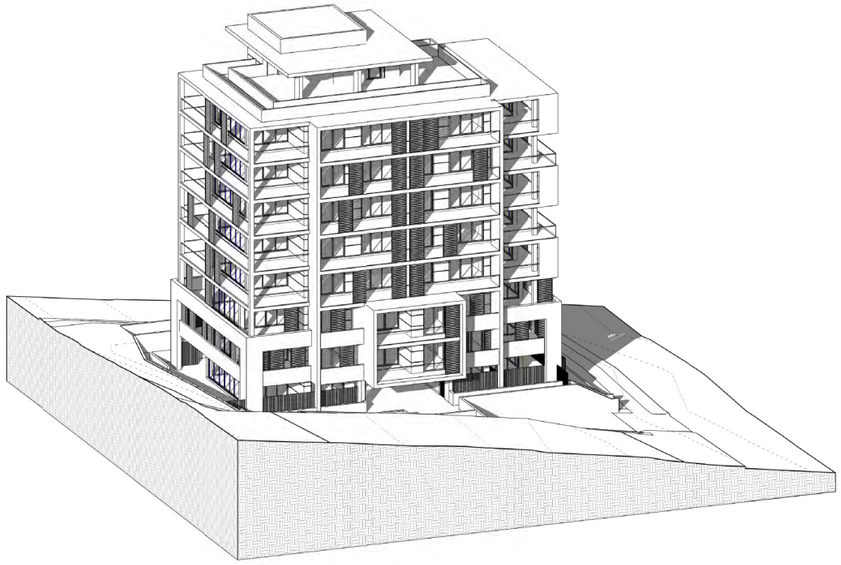
Title
DEVELOPMENT APPLICATION
DETAILED SHADOW ANALYSIS 02

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-403	B

ISSUE	DATE	DESCRIPTION
A	05.12.2017	ISSUED FOR DA
B	12.04.2018	RE-ISSUED FOR DA

NOT FOR CONSTRUCTION



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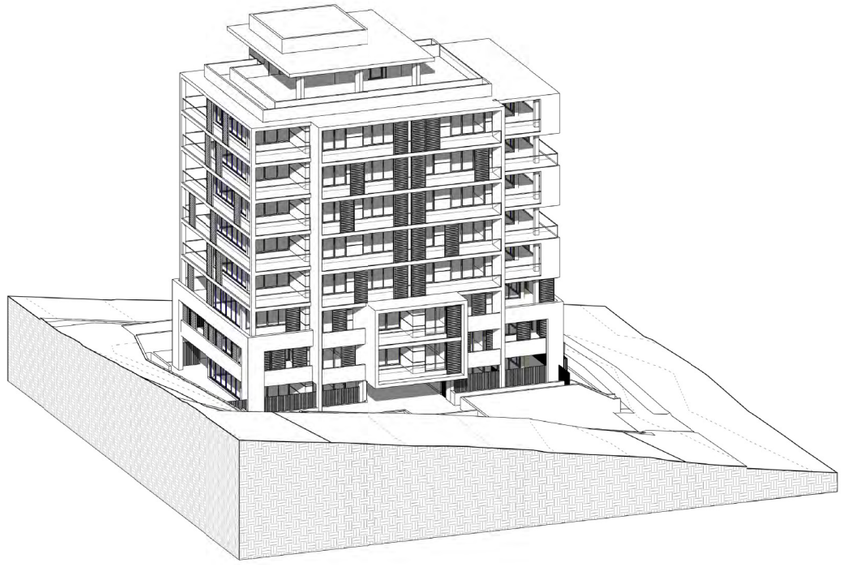

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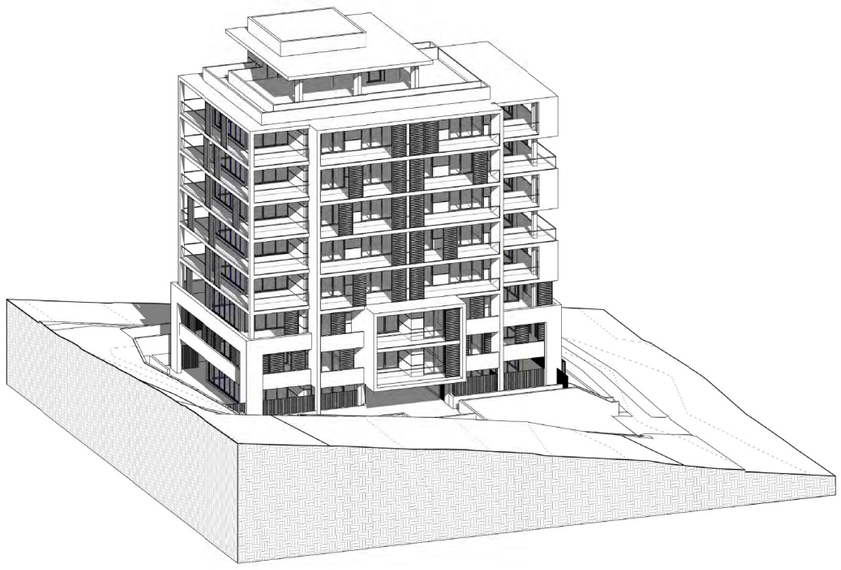
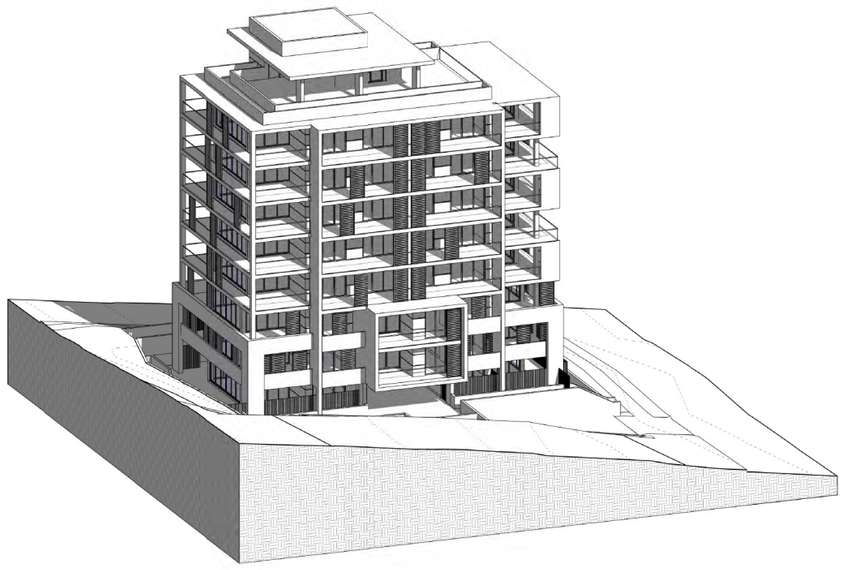


11am



12PM

DETAILED SHADOW ANALYSIS
21ST OF JUNE

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Project
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DEVELOPMENT CONSISTING OF
18 RESIDENTIAL APARTMENTS
ABOVE BASEMENT PARKING

At
48-50 GIPPS STREET
WOLLONGONG
NSW

For
C&D KOSTOVSKI
& G&S BLAZEVSKI

Title
DEVELOPMENT APPLICATION
DETAILED SHADOW ANALYSIS 01

Scale	Date
NTS	APRIL 2018
Drawn	Checked
LGD SP	ADM

Project No.	Drawing No.	Issue
2017-15	A-402	B

Wollongong Design Review Panel
Meeting minutes and recommendations DA-2017/1676

Time & date	30 January 2018
Meeting location	Wollongong City Council Administration offices
Panel members	Brendan Randles
	Iain Stewart
	Marc Deuschle
Apologies	Anne Starr – Senior Development project Officer
Council staff	Mark Riordan, Manager Development Assessment & Certification Pier Panozzo, Manager City Centre & Major Development
Guests/ representatives of the applicant	Angelo Di Martino – ADM Architects Goko Blazevski – Applicant Daniel Kostovski – Applicant
Declarations of Interest	Nil
Item number	3
DA number	DA-2017/1676
Reasons for consideration by DRP	Clause 28 SEPP65, Clause 7.18 WLEP2009
Determination pathway	WCC – Delegated Authority
Property address	48-50 Gipps Street Wollongong
Proposal	Residential - demolition of existing structures and the construction of an eight (8) storey residential flat building comprising of eighteen (18) apartments over two (2) levels of basement parking and the removal of ten (10) trees
Applicant or applicant's representative address to the design review panel	
Background	The site was inspected by the Panel 30 January 2018
Design quality principals SEPP65	
Context and Neighbourhood Character	The site is located in a residential zone on the corner of Keira Street and Gipps Street to the north of the Wollongong City Centre. There is a school to its south and stepping townhouses to its north. In an elevated position, the site falls significantly to the west and provides beautiful vistas to the escarpment and perhaps some glimpses to the ocean from upper levels. The site has a maximum height control of 30m and a maximum density control of 1.5: 1. The proponent knows the context well and has produced an informed site analysis. There is scant information provided on plans and section drawings however, which limits both insight into the project potential and its assessment.
Built Form and Scale	The proposal responds to the site's aspect, elevation and height and density controls with an eight storey rectangular prism containing three units/floor over two basement parking levels. Aligned with the two street setback controls, the built form achieves large side setbacks which mitigate impacts on adjoining properties. This is despite the excessively large balconies that dominate each corner of the building (a chief requirement of the brief we understand), which thwart the opportunity to create a slender tower. The built form would definitely benefit from their reduction in size. The built form would also be improved by the articulation of a strong base, either at the ground floor level – with sandstone walls

	defining a suspended garden - or at the level two balustrade height – with continuous sandstone wall below. The present use of sandstone is merely token and these few vertical piers should at the least be removed. While the layout is reasonably legible, the communal open space is marginalized by its scattered form, its dominance of undercroft and the basement entry ramp, which intrudes into the site and limits its length. It is recommended that the ramp is reviewed to allow the communal open space to stretch along the northern boundary; east facing gardens should be dedicated to private open space. In addition, the Panel believes that the built form would be improved if it were to step down the hill. This would be achieved if the east portion of the building were to extend up another floor to create accessible, covered space and facilities to a west facing communal roof terrace. Ideally, the core would flip to the building's upper portion with the lobby "slot" emphasizing its stepping.
Density	Complies
Sustainability	The apartments receive abundant solar access and outlook. , Natural ventilation would be 100% if the single unit was moved to a corner – this would also increase its market value. A raft of sustainability measures should accompany a proposal of this scale.
Landscape	Currently all COS is found on the ground level, some on structure and some on natural ground adjoining the deep soil zone. Given the sloping nature of the site some of this COS is accessed by stairs both from the street and from within. A large portion of the space is given over to generous thoroughfares which, although they can be counted as COS, provide little use or quality amenity for residents - The proposed vegetable garden sits central to a large portion of open space thereby creating a strange arrangement of paths as opposed to one larger usable space. Buffers should be provided between the POS of GF units and the COS. A rearrangement of the COS to consolidate it into one larger space would benefit the residents and improve the quality of the spaces. If the carpark ramp can be reconfigured to allow it, the panel recommends consolidating the COS in the NE corner of the site and stretching it further along the north boundary. Space currently shown as COS on the eastern edge of the site could be given over to GF units as POS. Any undercroft regarded as COS should be adjacent and strongly connected to outdoor space. The potential of a roof terrace was discussed to complement the GF COS. This would provide more opportunity and variety for residents and is supported by the panel if it is achievable. Consideration of shade, wind, views and program must be at the forefront of its design.
Amenity	See notes above regarding communal open space, adjacent private gardens and excessive under croft space. The new roof terrace should include well considered landscaping, covered space, seats, lighting, and a WC and BBQ area. The apartments are legible and reasonably amenable, however the sheer size of the balconies are excessive and liable to impinge on

	the interiors rather than assist them; they could appear as heavy and lifeless undercrofts – the addition of furniture to the drawings would go a long way to demonstrating their use. The one bedroom unit would be greatly improved if it were to be moved onto a corner. It is also the only unit with a balcony of minimum dimension and is thus out of kilter with the design principle embodied in the design for large balconies throughout.
Safety	Acceptable
Housing Diversity and Social Interaction	Acceptable; see notes above regarding communal open space.
Aesthetics	The building would be improved with a clearly defined stone base – perhaps containing entry level/garden up to ground level balustrade height. The framed nature of the expression is too open at present and could make the balconies too exposed; some more walls – perhaps in the manner of the architect's Crown Street expression – would improve building expression and internal amenity.
Design Excellence WLEP2009	
Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	Needs improvement – see notes above.
Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	Needs improvement – see notes above.
Whether the proposed development detrimentally impacts on view corridors,	N
Whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,	N/A
How the development addresses the following:	
the suitability of the land for development,	Y
existing and proposed uses and use mix	Y
heritage issues and streetscape constraints,	Needs improvement – see notes above.
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	Y

or on neighbouring sites in terms of separation, setbacks, amenity and urban form,	
bulk, massing and modulation of buildings	Needs improvement – see notes above.
street frontage heights	Needs improvement – see notes above.
environmental impacts such as sustainable design, overshadowing, wind and reflectivity	Y
the achievement of the principles of ecologically sustainable development	Needs improvement – see notes above.
pedestrian, cycle, vehicular and service access, circulation and requirements	Y
impact on, and any proposed improvements to, the public domain	Needs improvement – see notes above.
Recommendations	Incorporate the recommended changes and return to Council officers for discussion and assessment. No requirement to return to DRP.

ATTACHMENT 4: SEPP 65 Apartment Design Guide Assessment

DA-2017/1676 48-50 Gipps Street Wollongong

SEPP 65 Apartment Design Guide

Standards/controls	*Comment*	*Complies*
Part 1 – Identifying the context		
1A Apartment building types	The proposed tower apartment type is suitable for the location.	Yes
1B Local character and context This guideline outlines how to define the setting and scale of a development, and involves consideration of the desired future character, common settings and the range of scales.	The strategic local character and future desired character of the site is set by Wollongong LEP 2009 (R1 General Residential and Clause 8.1 Objectives for development in Wollongong City Centre), Wollongong DCP 2009 (Chapter D13 Wollongong City Centre) Both LEP and DCP clauses are assessed in detail in the assessment report.	Yes
1C Precincts and individual sites Individual sites: New development on individual sites within an established area should carefully respond to neighbouring development, and also address the desired future character at the neighbourhood and street scales. Planning and design considerations for managing this include:		Yes
- Site amalgamation where appropriate	The site comprises 3 allotments which are to be consolidated.	
- Corner site and sites with multiple frontages can be more efficient than sites with single frontages - Ensure the development potential for adjacent sites is retained - Avoid isolated sites that are unable to realise the development potential.	The site has two street frontages: Keira and Gipps Streets Adjoining sites will not be unreasonably constrained by the development. A strata titled apartment complex is located to the north and sites to the east contain dwelling houses. No adjoining sites would become isolated as a result of the development. The site is located within the City Centre precinct and within walking distance of bus and rail services.	
Part 2 – Developing the controls		
These guidelines include tools to support the strategic planning process when	Strategic planning tool intent noted.	N/A

Standards/controls	*Comment*	*Complies*
preparing planning controls, and aren't relevant to the development assessment of individual proposals. ***Part 3 Siting the development*** **<u>3A Site analysis</u>** 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: - Site location plan - Aerial photograph - Local context plan - Site context and survey plan - Streetscape elevations and sections - Analysis A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application.	Detailed site and contextual analysis was provided with the DA material.	Yes
<u>3B Orientation</u> Buildings must be oriented to maximise norther orientation, response to desired character, promote amenity for the occupant and adjoining properties, retain trees and open spaces and respond to contextual constraints such as overshadowing and noise. <u>*Objective 3B-1:*</u> *Building types and layouts respond to the streetscape and site while optimising solar access within the development* <u>Design Guidance</u> - Buildings should define the street by facing it and providing direct access.	The building faces both Gipps and Keira Streets. Apartments are oriented to the street offering opportunities for casual surveillance. All units have north facing living rooms and balconies. Access from both street frontages is provided, including barrier free access from Gipps Street. Entrances are legible. The scale of the building responds to the desired future character as detailed in the planning controls (floor space ratio, height, and building setbacks). The strategic local character and future desired character of the site is set by Wollongong LEP 2009 (R1 zone, Clause 8.1 Objectives for development in Wollongong City Centre) and Chapter D13 of Wollongong DCP 2009 (Wollongong City Centre). Both LEP and DCP clauses are assessed in detail in the assessment report. Council's landscape officer has assessed the application and provided a satisfactory referral subject to	Yes

Standards/controls	*Comment*	*Complies*
	conditions.	
Objective 3B-2 *Overshadowing of neighbouring properties is minimised during mid- winter* Design Guidance - Overshadowing should be minimised to the south or down hill by increased upper level setbacks - Refer sections 3D & 4A below for solar access requirements - A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	The shadow diagrams indicate overshadowing of neighbouring land. The 9am shadow extends across five properties in Keira Street, ceases by 12pm and then shadows the high school at 12pm. By 3pm, the high school and 46 Gipps are in shadow. All the affected residential properties would have minimum 3 hours of solar access.	Yes
3C Public domain interface Key components to consider when designing the interface include entries, private terraces or balconies, fences and walls, changes in level, services locations and planting. The design of these elements can influence the real or perceived safety and security of residents, opportunities for social interaction and the identity of the development when viewed from the public domain *Objective 3C-1:* *Transition between private and public domain is achieved without compromising safety and security* Design Guidance - Terraces, balconies and courtyards should have direct street entry, where appropriate - Changes in level between private terraces etc above street level provide surveillance and improved visual privacy for ground level dwellings. - Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m. - Opportunities should be provided casual interaction between residents and the public domain eg seating at building entries, near letterboxes etc	The street frontage treatment is consistent with the proposed residential use. Public domain to be treated with footpath paving and street tree planting in accordance with Council's City Centre Public Domain Technical Manual. Draft conditions of consent are contained in Attachment 6. Residential balconies and ground level courtyards face the street frontages, providing opportunities for natural surveillance and social interaction. Fencing proposed to ensure the privacy of the ground floor apartments.	Yes

Standards/controls	*Comment*	*Complies*
Objective 3C-2: *Amenity of the public domain is retained and enhanced* Design Guidance - Planting softens the edges of any raised terraces to the street (eg basement podium) - Mailboxes should be located in lobbies perpendicular to street alignment or integrated into front fences. - Garbage storage areas, substations, pump rooms and other service requirements should be located in basement car parks. - Durable, graffiti resistant materials should be used - Where development adjoins public parks or open space the design should address this interface.	The amenity of the public domain will be improved by the proposed development. Public domain works comprising paving and street tree planting are proposed. Garbage storage areas, mail boxes, fire services etc. would be accommodated within the building in a manner which will not detract from its design quality. Mailboxes located adjacent to the primary entry. Durable materials proposed.	
3D Communal and public open space *Objective 3D-1* *An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping* Design Criteria 1.Communal open space has a minimum area of 25% of the site area (i.e. 308.67m^2) 2. 50% direct sunlight provided to principal usable part of communal open space for a minimum of 2 hours between 9am and 3pm on 21 June Design Guidance - Communal open space should be consolidated into a well-designed, usable area. - Minimum dimension of 3m - Should be co-located with deep soil areas - Direct & equitable access required - Where not possible at ground floor it should be located at podium or roof level. *Objective3D-2* *Communal open space is designed to allow for a range of activities, respond to site*	The principal communal open space (COS) is located on Level 8 (216m^2). Additional COS is located on Level 1 (218m^2). The communal open space areas will receive between sufficient sunlight between 9am and 3pm as required. Some shade will be offered to sections of the COS via planting and structures. The communal open space area achieves the minimum area required for the site and satisfy the required dimension requirements. The design and treatment will provide for well designed, usable areas.	Yes

Standards/controls	*Comment*	*Complies*
conditions and be attractive and inviting Design guidance - Facilities to be provided in communal open spaces for a range of age groups, and may incorporate seating, barbeque areas, play equipment, swimming pools *Objective 3D-3* *Communal open space is designed to maximise safety* Design guidance - Communal open space should be visible from habitable rooms and POS areas and should be well lit. **3E Deep soil zones** *Objective 3E-1* *3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.* Design Criteria: 1. Deep soil zones are to meet the following minimum requirements:  Design guidance: - Deep soil zones should be located to retain existing significant trees. **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 amenity.* Design Criteria: 1. Minimum required separation distances from buildings to the side and rear boundaries are as follows:	Provision made for a casual seating and outdoor dining, and Level 8 spas within the COS areas. Level 1 COS would be visible from habitable rooms and POS. Rooftop (Level 8) COS would be unsupervised unless residents opted to install CCTV. 7% = 86.42m^2 Two deep soil zones are provided outside the basement footprint. The eastern predominant DSZ is 175m^2 and the south-eastern corner is 55m^2. Dimensions exceed 3m. **Levels 1, 2, 3 & 4 (up to 12m):** North 4m to COS, 10m to balconies, 11.92m to bedroom (Level 1), 7.25m balconies (Level 2 & 3), 9m balconies (Level 4) **- complies** East Level 2-4 due to slope: 9.09m to	Yes Yes

Site area	Minimum dimensions	Deep soil zone (% of site area)
less than 650m^2	-	7%
650m^2 - 1,500m^2	3m	
greater than 1,500m^2	6m	
greater than 1,500m^2 with significant existing tree cover	6m	

Standards/controls	*Comment*	*Complies*
<table><tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr><tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table> No separation is required between blank walls	balcony edge (level 2); 8.89m (level 3), 9.39m (level 4) - **complies** **<u>Levels 5-8 (12-25m high):</u>** <u>North</u> 9.0m to balconies (levels 5 -8) - **complies** <u>East</u> 9.39m to balconies (Levels 5-8) **- complies**	
<u>*Objective 3F-2:*</u> *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*		Yes
<u>Design Guidance</u> - Communal open space, common areas and access paths should be separated from private open space and windows to apartments. Design solutions include: · Setbacks, · Solid or partly solid balustrades to balconies · Fencing or vegetation to separate spaces · Screening devices · Raising apartments/private open space above the public domain · Planter boxes incorporated into walls and balustrades to increase visual separation · Pergolas or shading devices to limit overlooking · Only on constrained sites where it's demonstrated that building layout opportunities are limited – fixed louvres or screen panels - Windows should be offset from the windows of adjoining buildings	The landscape plan shows trees in the deep soil zones, on structure at perimeter of the podium and on Level 8 COS. These separate private living areas from COS and neighbouring sites.	
<u>3G Pedestrian access and entries</u> <u>*Objective 3G-1*</u> *Building entries and pedestrian access connects to and addresses the public domain*		Yes

Standards/controls	*Comment*	*Complies*
Design Guidance - Multiple entries should be provided to activate the street edge. - Buildings entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries.	Two entries proposed and are identifiable. Entries address the public domain.	
Objective 3G-2 *Access, entries and pathways are accessible and easy to identify* Design Guidance - Building access areas should be clearly visible from the public domain and communal spaces - Steps and ramps should be integrated into the overall building and landscape design.	Barrier free access is provided to the lobby on Gipps Street. Additional stair access is available on Keira Street. Lift and stair access is provided to all dwellings from the basement and ground floor level. Access points are clearly visible.	
Objective 3G-3 *Large sites provide pedestrian links for access to streets and connection to destinations*	No through-site link required.	
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* Design Guidance - Car park entries should be located behind the building line - Access point locations should avoid headlight glare to habitable rooms - Garbage collection, loading and service areas should be screened - Vehicle and pedestrian access should be clearly separated to improve safety. - Where possible, vehicle access points should not dominate the streetscape and be limited to the minimum width possible.	The proposed vehicle entry is on the northern side from Keira Street and the roller door sits behind the building line. Bin storage occurs in a waste room on Basement 1. Vehicle and pedestrian entries are separated. Headlight glare is not expected to be an issue as no residences are located in front or above the driveway. Driveway and vehicular entry width is acceptable.	Yes
3J Bicycle and car parking *Objective 3J-2* *Parking and facilities are provided for other modes of transport* Design Guidance	All parking is provided in the two basement levels, including 4 visitor spaces. Adequate vehicle, motor bike and bicycle parking provided meeting the requirements of WDCP 2009. RTA 'Guide to Traffic Generating	Yes

Standards/controls	*Comment*	*Complies*
- Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters - Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas.	Development' rates do not apply to the site. Each of the 12 adaptable apartments has a car space in accordance with AS 4299 (1995). Appropriate resident bicycle security arrangements are proposed.	
<u>*Objective 3J-3*</u> *Car park design and access is safe and secure* <u>Design Guidance</u> - Supporting facilities within car parks (garbage rooms, storage areas, car wash bays) can be accessed without crossing parking spaces - A clearly defined and visible lobby or waiting area should be provided to lifts and stairs. - Permeable roller doors allow for natural ventilation and improve the safety of car parking areas by enabling passive surveillance.	The waste room can be accessed either side of the roller door separating private from visitor spaces. Walking paths across the aisle from the lift is satisfactory. Basement layout is appropriate with regard to safety and security. Roller shutter proposed within the basement. Basement is mechanically ventilated with riser continuing up through the building.	
<u>*Objective 3J-4*</u> *Visual and environmental impact of underground car parking are minimised* <u>Design Guidance</u> - Excavation should be minimised through efficient carpark layouts and ramp design. - Protrusion of carparks should not exceed 1.0m above ground level. - Natural ventilation should be provided to basement and sub-basement car parking areas. - Ventilation grills or screening devices should be integrated into the façade and landscape design.	The basement levels are predominantly not visible above ground. Mechanical ventilation of the basement is proposed.	
<u>*Objective 3J-5*</u> *Visual and environmental impact of on-grade car parking are minimised* <u>Design Guidance</u> - On-grade car parking should be avoided; - Where unavoidable, the following design solutions should be used –	No on-grade parking proposed.	

Standards/controls	*Comment*	*Complies*
parking is located on the side or rear of the lot away from the primary street frontage - Cars are screened from view of streets, buildings, communal and private open space areas - Safe and direct access to building entry points is provided - Parking is incorporated into the landscaping design of the site - Stormwater run-off is appropriately managed - Light coloured paving materials or permeable paving systems are used and shade trees are planted to reduce increased surface temperatures from large areas of paving		
Part 4 – Designing the building - Amenity		
4A Solar and daylight access *Objective 4A-1* *To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space* Design Criteria 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of two (2) hours direct sunlight between 9am and 3pm in mid-winter in Wollongong LGA. 1. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter Design Guidance - The design maximises north aspect and the number of single aspect south facing apartments is minimised - To optimise the direct sunlight to habitable rooms and balconies, the following design features are used: Dual aspect, Shallow apartment layouts Bay windows - To maximise the benefit to residents, a minimum of $1m^2$ of direct sunlight measured at 1m above floor level, is achieved for at least 15 minutes.	All apartments receive required solar access (living rooms and private open spaces receive a minimum of 2 hours sunlight between 9am-3pm mid-Winter.) There are no single aspect south-facing units; floor plates are designed with units positioned on the corners or directly facing north. Most units have a dual aspect.	Yes

Standards/controls	*Comment*	*Complies*
Objective 4A-2 *Daylight access is maximised where sunlight is limited* Design Guidance - Courtyards, skylights and high level windows (sill heights of 1500m or greater) are used only as secondary light sources in habitable rooms	Sunlight is not limited in the building.	
Objective 4A-3 *Design incorporates shading and glare control, particularly for warmer months* Design Guidance Design features can include: - Balconies - Shading devices or planting - Operable shading - High performance glass that minimises external glare	Glare control on the western elevation is provided in the form of deep balconies which provides shading of west-facing windows and louvre/screens to control glare.	
4B Natural ventilation		Yes
Objective 4B-1 *All habitable rooms are naturally ventilated.* Design Guidance - A building's orientation should maximise the prevailing winds for natural ventilation in habitable rooms - The area of unobstructed window openings should be equal to at least 5% of the floor area served. - Doors and openable windows should have large openable areas to maximise ventilation.	All apartments are naturally ventilated, including habitable rooms.	
Objective 4B-2 *The layout and design of single aspect apartments maximises natural ventilation* Design Guidance - Single aspect apartments should use design solutions to maximise natural ventilation.	Levels 2 and 3 contain 1 single aspect apartment. These apartments are adequately ventilated.	
Objective 4B-3 *The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents*	16 of the 18 apartments are cross	

Standards/controls	*Comment*	*Complies*
Design Criteria: 1. 60% of apartments are naturally cross ventilated in the first nine storeys 2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	ventilated (88%)	
4C Ceiling heights *Objective 4C-1* *Ceiling height achieves sufficient natural ventilation and daylight access* Design Criteria 1. Minimum 2.7m for habitable rooms and 2.4m for non-habitable rooms *Objective 4C-2* *Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms* *Objective 4C-3* *Ceiling height contribute to the flexibility of building use over the life of the building* Design Guidance - Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses.	Ceiling height of 2.7m proposed to all apartments.	Yes
4D Apartment size and layout *Objective 4D-1* *The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity* Design Criteria: 1. Minimum internal areas: 1 bed – 50m^2 2 bed – 70m^2 3 bed – 90m^2 The minimum internal areas include only 1 bathroom. Additional bathrooms increase the minimum internal areas by 5m^2 each. A fourth bedroom and further additional bedrooms increase the minimum internal by 12m^2. 2. Every habitable room must have a	Apartment sizes exceed the minimum. Apartment size and layout is functional and provides a reasonable standard of amenity for future residents. All apartments achieve compliance with the minimum internal areas specified. All habitable rooms have adequate windows.	Yes

Standards/controls	*Comment*	*Complies*
window in an external wall with a total minimum glass area of at least 10% of the floor area of the room		
<u>*Objective 4D-2*</u>		
Environmental performance of the apartment is maximised		
<u>Design Criteria:</u>		
1. Habitable room depths are limited to a maximum of 2.5 x ceiling height	Habitable room depths comply.	
2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	All kitchens less than 8m from window or balcony door. Living spaces are oriented towards the west, north and east to maximise solar access.	
<u>Design Guidance:</u>		
- Greater than the minimum ceiling heights can allow proportionate increases in room depths.		
- Where possible, bathrooms and laundries should have an external openable window.		
- Main living spaces should be oriented towards the primary outlook.		
<u>*Objective 4D-3*</u>		
Apartment layouts are designed to accommodate a variety of household activities and needs		
<u>Design Criteria:</u>		
1. Master bedrooms have a minimum area of $10m^2$ and other bedrooms $9m^2$ (excl wardrobe space)	Bedroom and living room dimensions comply.	
2. Bedrooms have minimum dimension of 3m (excl wardrobe)		
3. Living rooms have minimum width of: - 3.6m for studio and 1 bed apartments and - 4m for 2+ beds.		
4. The width of the crossover or cross through apartments are at least 4m internally to avoid deep narrow apartment layouts.		
<u>Design Guidance:</u>		
- Access to bedrooms, bathrooms and laundries is separated from living areas		
- Minimum 1.5m length for bedroom wardrobes		
- Main bedroom apartment: minimum 1.8m long x 0.6m deep x 2.1m high		

Standards/controls	*Comment*	*Complies*
wardrobe - Apartment layouts allow for flexibility over time, including furniture removal, spaces for a range of activities and privacy levels within the apartments.		
4E Private open space and balconies		Yes
Objective 4E-1		
Apartments provide appropriately sized private open space and balconies to enhance residential amenity	All balcony areas achieve the minimum area and depth requirements	
1. Minimum balcony depths are:  The minimum balcony depth to be counted as contributing to the balcony area is 1m.		
2. Ground level apartment POS must have minimum area of 15m^2 and min. depth of 3m	Both ground level apartments have generous POS areas, all achieving compliance with the required area and dimensions specified.	
Objective 4E-2		
Primary private open space and balconies are appropriately located to enhance liveability for residents		
Design Guidance		
- Primary private open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space.	POS of all apartments is located adjoining and accessible from living/dining areas.	
- POS & Balconies should be oriented with the longer side facing outwards to optimise daylight access into adjacent rooms.	Adequate solar access is available to POS areas.	
Objective 4E-3		
Primary private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Balconies articulate the façade, with screens/louvres, variety of materials including sandstone, glass and aluminium.	
Design Guidance		
- A combination of solid and transparent materials balances the need for privacy with surveillance of the public domain		
- Full width glass balustrades alone are		

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

Standards/controls	*Comment*	*Complies*
not desirable - Operable screens etc are used to control sunlight and wind, and provide increased privacy for occupancy while allowing for storage and external clothes drying.		
Objective 4E-4 *Private open space and balcony design maximises safety* Design Guidance - Changes in ground levels or landscaping are minimised.		
4F Common circulation and spaces		Yes
Objective 4F-1 *Common circulation spaces achieve good amenity and properly service the number of apartments.*	Maximum 3 apartments on each level; serviced by 1 lift.	
Design Criteria 1. The maximum number of apartments off a circulation core on a single level is eight	18 apartments share 1 lift	
2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	Corridors are short; there will be access to natural light available but no openable windows.	
Design Guidance - Long corridors greater than 12m in length should be articulated through the use of windows or seating.	Apartment entries are appropriately located with regard to circulation spaces.	
- Primary living rooms or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces should be controlled.	No living or bedroom window openings to common circulation spaces.	
Objective 4F-2 *Common circulation spaces promote safety and provide for social interaction between residents*		
Design Guidance: - Incidental spaces can be used to provide seating opportunities for residents, and promotes opportunities for social interaction.	The Level 1 north facing common area /lobby forecourt provides opportunities for seating and eating. The landscape plan provides details of furniture.	
4G Storage		
Objective 4G-1 *Adequate, well designed storage is*	Amended basement plans submitted August 2018 and amended floor plans submitted May 2018.	Yes

Standards/controls	*Comment*	*Complies*
provided in each apartment 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided 	Dwelling type	Storage size volume
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Studio apartments	4m³
1 bedroom apartments	6m³
2 bedroom apartments	8m³
3+ bedroom apartments	10m³ | At least 50% of the required storage is to be located within the apartment <u>*Objective 4G-2*</u> *Additional storage is conveniently located, accessible and nominated for individual apartments* <u>Design Guidance:</u> - Storage not located within apartments should be allocated to specific apartments.	<u>Storage Required</u>: 1 bed 2 x 6m^3 = 12m^3 2 bed 6 x 8m^3 = 48m^3 3 bed 10 x 10m^3 = 100m^3 Total required: 260m^3 Storage is provided in the basement and within linen cupboards in the units. All basement storage exceeds minimum requirements. Storage not shown in R04 basement 2, but there is room to provide it. Individual storage lockers are proposed within the basement level. Additional storage also provided within apartments.	
<u>4H Acoustic privacy</u> <u>*Objective 4H-1*</u> *Noise transfer is minimised through the siting of buildings and building layout* <u>Design Guidance</u> - Adequate building separation is required (see also section 3F above). - Noisy areas within buildings should be located next to or above each other and quieter areas next to or above quieter areas. - Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources. - Noise sources such as garage doors, plant rooms, active communal open spaces and circulation areas should be located at least 3m away from bedrooms. <u>*Objective 4H-2*</u> *Noise impacts are mitigated within apartments through layout and acoustic treatments* <u>Design Guidance</u>	The site is surrounded by residential uses, with the exception of Smith's Hill High School on the southern side of Gipps Street. No significant source of external noise is expected to impact on future residents of the development. Internally the building is designed to minimise noise transfer between units. Adequate building separation is provided between the proposed building and neighbouring sites. Internal layout provides for appropriate internal acoustic amenity within	Yes

Standards/controls	*Comment*	*Complies*
- In addition to mindful siting and orientation of the building, acoustic seals and double or triple glazing are effective methods to further reduce noise transmission.	individual units. The majority of each floor has matching room types to the rooms below / above and adjoining.	
4J Noise and pollution		Yes
Objective 4J-1 *In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings*	No significant external noise source is expected to affect the building.	
Design Guidance - Minimise impacts through design solutions such as physical separation from the noise or pollution source,		
Objective 4J-2 *Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission*		
Design guidance: - Design solutions include limiting openings to noise sources & providing seals to prevent noise transfer.		
Part 4 – Designing the building - Configuration		
4K Apartment mix		Yes
Objective 4K-1 *A range of apartment types and sizes is provided to cater for different household types now and into the future*		
Design guidance - A variety of apartment types is provided	The development of 18 apartments contains 2 x 1 bedrooms (11%), 6 x 2 bedrooms (33%) and 10 x 3 bedroom apartments (56%).	
- The apartment mix is appropriate, taking into consideration the location of public transport, market demands, demand for affordable housing, different cultural/social groups	12 of the 18 apartments (66%) are adaptable units. These include 1, 2 and 3 bedroom apartments.	
- Flexible apartment configurations are provided to support diverse household types and stages of life		
Objective 4K-2 *The apartment mix is distributed to suitable locations within the building*	Typical apartment size and layout is replicated on multiple floors.	
Design guidance - Larger apartment types are located on		

Standards/controls	*Comment*	*Complies*
the ground or roof level where there is potential for more open space and on corners where more building frontage is available		
4L Ground floor apartments		Yes
Objective 4L-1	Level 1 is the effective ground floor, and contains two apartments. These have access via the lobby, only.	
Street frontage activity is maximised where ground floor apartments are located	Fencing delineates the private domain from the public domain and provides ground floor apartments with privacy and amenity.	
Design guidance		
- Direct street access should be provided to ground floor apartments		
- Activity is achieved through front gardens, terraces and the facade of the building.		
- Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion		
Objective 4L-2		
Design of ground floor apartments delivers amenity and safety for residents		
Design guidance		
- The design of courtyards should balance the need for privacy of ground floor apartments with surveillance of public spaces. Design solutions include:	Courtyards of Apartments 1 and 2 on Level 1 are at street level. A combination of screening and landscaping proposed to provide necessary privacy to both external and internal ground floor living areas.	
• elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)		
• landscaping and private courtyards		
• window sill heights that minimise sight lines into apartments		
• integrating balustrades, safety bars or screens with the exterior design		
- Solar access should be maximised through:		
• high ceilings and tall windows		
• trees and shrubs that allow solar access in winter and shade in summer		
4M Facades		Yes
Objective 4M-1		
Building facades provide visual interest along the street while respecting the		

Standards/controls	*Comment*	*Complies*
character of the local area Design guidance - To ensure that building elements are integrated into the overall building form and façade design - The front building facades should include a composition of varied building elements, textures, materials, detail and colour and a defined base, middle and top of building. - Building services should be integrated within the overall facade - Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. - To ensure that new developments have facades which define and enhance the public domain and desired street character. *Objective 4M-2* *Building functions are expressed by the facade* Design guidance - Building entries should be clearly defined	The applicant has provided a colour and materials schedule. The schedule is considered acceptable. Front building façade features a combination of building elements and a mixture of materials; the building does not provide for a readily apparent base/ middle/ top however the functions of the building are expressed by the façade and the building is not of a type that is dissimilar to that around it in terms of form. Building services are integrated into the façade in a manner which will not reduce the design quality of the building. Primary pedestrian entry is well defined and access from both streets is provided. Barrier-free access is available only from Gipps Street. Building functions are expressed by façade. Refer to design review**.** The proposed building entry is well defined.	
4N Roof design *Objective 4N-1* *Roof treatments are integrated into the building design and positively respond to street* Design guidance - Roof design should use materials and a pitched form complementary to the building and adjacent buildings. *Objective 4N-2* *Opportunities to use roof space for residential accommodation and open space are maximised* Design guidance - Habitable roof space should be	The revised roof design dated April 2018 is satisfactory. No roof top services are indicated on the plans.	Yes

Standards/controls	*Comment*	*Complies*
provided with good levels of amenity. - Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations *Objective 4N-3* *Roof design incorporates sustainability features* Design guidance - Roof design maximises solar access to apartments during winter and provides shade during summer		
4O Landscape design *Objective 4O-1* *Landscape design is viable and sustainable* Design guidance - Landscape design should be environmentally sustainable and can enhance environmental performance - Ongoing maintenance plans should be prepared *Objective 4O-2* *Landscape design contributes to the streetscape and amenity* Design guidance - Landscape design responds to the existing site conditions including: • changes of levels • views • significant landscape features	The landscape plan was revised in April 2018. The landscape design is satisfactory. Conditions of consent have been recommended by Council's landscape designer and include planting, tree protection and compensatory planting matters.	Yes
4P Planting on Structures *Objective 4P-1* *Appropriate soil profiles are provided* Design guidance - Structures are reinforced for additional saturated soil weight - Minimum soil standards for plant sizes should be provided in accordance with Table 5 *Objective 4P-2* *Plant growth is optimised with appropriate selection and maintenance*	The landscape plain shows a deep soil zone free of the basement and additional planting/landscaped beds on the structure. Council's landscape officer has reviewed the plan and indicated it is satisfactory, subject to conditions in Attachment 6.	Yes

Standards/controls	*Comment*	*Complies*
Design guidance - Plants are suited to site conditions *Objective 4P-3* *Planting on structures contributes to the quality and amenity of communal and public open spaces* Design guidance - Building design incorporates opportunities for planting on structures. Design solutions may include: • green walls with specialised lighting for indoor green walls • wall design that incorporates planting • green roofs, particularly where roofs are visible from the public domain • planter boxes		
4Q Universal design *Objective 4Q-1* *Universal design features are included in apartment design to promote flexible housing for all community members* Design guidance - A universally designed apartment provides design features such as wider circulation spaces, reinforced bathroom walls and easy to reach and operate fixtures *Objective 4Q-2* *A variety of apartments with adaptable designs are provided* Design guidance - Adaptable housing should be provided in accordance with the relevant council policy *Objective 4Q-3* *Apartment layouts are flexible and accommodate a range of lifestyle needs* Design guidance - Apartment design incorporates flexible design solutions	12 of the 18 apartments (66%) are adaptable units. Applicant has provided an access consultant report verifying that the adaptable units can achieve compliance with the relevant standard.	Yes
4S Mixed use Not applicable	N/A; residential only	N/A
4T Awnings and signage	Not applicable - no awnings proposed	N/A

Standards/controls	*Comment*	*Complies*
Objective 4T-1 *Awnings are well located and complement and integrate with the building design* Design guidance - Awnings should be located along streets with high pedestrian activity and active frontages *Objective 4T-2* *Signage responds to the context and desired streetscape character* Design guidance - Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development		
Part 4 – Designing the building - Configuration		
4U Energy efficiency		Yes
Objective 4U-1 *Development incorporates passive environmental design* Design guidance - Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	The applicant has obtained a BASIX certificate which confirms that the proposed development will achieve the required energy efficiency and thermal comfort targets of the SEPP. Adequate natural light will be provided to all habitable rooms.	
Objective 4U-2 *Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer* Design Guidance - Provision of consolidated heating and cooling infrastructure should be located in a centralised location	Heat gain for west facing living rooms and balconies has been addressed through the use of some screening/ louvre systems and balcony depth. Plant room located within the basement.	
Objective 4U-3 *Adequate natural ventilation minimises the need for mechanical ventilation*	Refer to 4B in relation to natural ventilation.	
4V Water management and conservation		Yes
Objective 4V-1 *Potable water use is minimised*	The applicant has obtained a BASIX certificate which confirms that the proposed development will meet the	

Standards/controls	*Comment*	*Complies*
	NSW Government requirements for sustainability if built in accordance with the commitments set out in the certificate. This relates to both energy and water efficiency (4U and 4V).	
Objective 4V-2 *Urban stormwater is treated on site before being discharged to receiving waters* Design guidance - Water sensitive urban design systems are designed by a suitably qualified professional	Council's environmental officer has recommended conditions of consent regarding water sensitive urban design, in accordance with water quality objectives of WDCP 2009 Chapter E15.	
Objective 4V-3 *Flood management systems are integrated into site design* Design guidance - Detention tanks should be located under paved areas, driveways or in basement car parks	The stormwater design is satisfactory; no flood mitigation required as the site is not flood affected.	
4W Waste management		Yes
Objective 4W-1 *Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents* Design guidance - Common waste and recycling areas should be screened from view and well ventilated	Waste management is addressed in the SEE and Site Waste Minimisation and Management statement.	
Objective 4W-2 *Domestic waste is minimised by providing safe and convenient source separation and recycling* Design guidance - Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core - For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses - Alternative waste disposal, such as composting, can be incorporated into the design of communal open space areas	Waste will be transported to the garbage room manually by residents. A single waste storage room is proposed on Basement 1. Bins would be placed on the street frontage for collection.	
4X Building maintenance		Yes

Standards/controls	*Comment*	*Complies*
Objective 4X-1 *Building design detail provides protection from weathering* Design guidance - Design solutions such as roof overhangs to protect walls and hoods over windows and doors to protect openings can be used. *Objective 4X-2* *Systems and access enable ease of maintenance* Design guidance - Window design enables cleaning from the inside of the Building *Objective 4X-3* *Material selection reduces ongoing maintenance costs easily cleaned surfaces that are graffiti resistant*	The development incorporates durable and cleanable materials. Some windows would be unable to be accessed from balconies or terraces so other cleaning methods will be needed.	

Wollongong Development Control Plan (DCP) 2009

CHAPTER D13 – WOLLONGONG CITY CENTRE

The site is located within the Wollongong City Centre, as defined in WLEP 2009 and WDCP 2009. Chapter D13 applies to the development and prevails over other parts of the DCP where there is any inconsistency. A detailed assessment table of Chapter D13 is provided in the table below. It is also noted that where there is an inconsistency between the DCP and ADG, the ADG prevails.

2 Building form

Objectives/controls	*Comment*	*Compliance*
2.2 Building to street alignment and street setbacks · 4m front setback	5.25m to Keira Street and 5.05m to Gipps Street (Level 1). 4.05m Keira Street and 4.6m Gipps Street (Levels 2-8).	Yes
2.3 Street frontage heights in commercial core	N/A	N/A
2.4 Building depth and bulk · Max depth 18m above 12m high (L5 – L8)	The floor plate size or GFA above 12m in height (Levels 5-8) complies with the maximum 900m² requirement. The maximum building depth excluding balconies is approx. 15m north to south.	Yes

Objectives/controls	*Comment*	*Compliance*
2.5 Side and rear building setbacks and building separation *Up to 12m in height:-* - habitable rooms with openings and balconies – 6m - non-habitable rooms and habitable rooms without openings – 3m *Residential uses between 12m & 24m* - habitable rooms with openings and balconies – 9m - non-habitable rooms and habitable rooms without openings – 4.5m	**Levels ,1,2, 3 & 4 (up to 12m):** North Approx. 10m (Level 1); minimum 7.25m (Levels 2 & 3); 9m (Level 4) East 5.96m to courtyard & 10.3m to habitable room (Level 1); 9.09m (Level 2); 8.89m (Level 3); 9.39m (Level 4) **Levels 5-8 (>12m high):** North Minimum 9m all levels East 9.39m all levels	Yes
2.6 Mixed used buildings	N/A	N/A
2.7 Deep soil zone (DSZ) · deep soil zone shall comprise no less than 15% of the total site area preferably provided in one continuous block and shall have a minimum dimension (width or length) of 6 metres.	Total site area = 1234.7m² Total DSZ required: 15% = 185.20m^2 A 5.96m wide deep soil zone extends along the eastern boundary of the site, which has an area of 175m², (14%). An additional 55m2 (minimum dimension 3m) is provided in the south east corner. The 14% DSZ exceeds ADG requirements.	No, but complies with the ADG
2.8 Landscape design	Landscape plan is satisfactory and supported by Council's landscape officer.	Yes
2.9 Green roofs, green walls and planting on structures	Planting on structure proposed. Details provided on the landscape plan.	Yes
2.10 Sun access planes	The proposal will not cast shadows on any areas subject to the sun access planes	Yes
2.11 Development on classified roads	N/A	N/A

3 Pedestrian amenity

Objectives/controls	*Comment*	*Compliance*
3.2 Permeability	No identified site links affect the site.	N/A
3.3 Active street frontages		
· Active frontage uses are defined as one or a combination of the following at street level: o Entrance to retail. o Shop front. o Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage. o Café or restaurant if accompanied by an entry from the street. o Active office uses, such as reception, if visible from the street. · In commercial and mixed use developments, active street fronts are encouraged in the form of non-residential uses on ground level. · Active street fronts are required along streets for all buildings in the Commercial Core · Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street.	Two residential entrances are proposed, each activating its street. The main pedestrian access and lobby is centrally located on Gipps Street. This is barrier-free. A secondary pedestrian access is located adjacent to the driveway on Keira Street and provides direct access to the podium and COS area. Entry treatment and fencing provides a clear delineation between private and public space. Balconies and habitable room windows overlook Keira and Gipps Streets.	Yes
3.4 Safety and security		
· Ensure that the building design allows for casual surveillance of accessways, entries and driveways. · Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks. · Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering. · Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance. · Provide clear lines of sight and well-lit routes throughout the development. · Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway. · For large scale retail and commercial development with a GFA of over 5,000m², provide a 'safety by design' assessment in accordance with the CPTED principles. · Provide security access controls where appropriate. · Ensure building entrance(s) including	Natural surveillance will be available from ground and upper level balconies and residential living areas. Basements can be accessed by visitors from the lift, with roller door providing further access to residential spaces. Secure access to the building is possible.	Yes

pathways, lanes and arcades for larger scale retail and commercial developments are directed to signalised intersections rather than mid-block in the Commercial zone.		
3.5 Awnings	N/A	N/A
3.6 Vehicular footpath crossings		
· 1 vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) will be generally permitted · Double lane crossing with a maximum width of 5.4 metres may be permitted · Doors to vehicle access points are to be roller shutters or tilting doors fitted behind the building façade. · Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.	1 entry point only proposed, on Keira Street. Driveway crossing width is acceptable. Shutter will be fitted behind the building façade.	Yes
3.7 Pedestrian overpasses, underpasses and encroachments	N/A	N/A
3.8 Building exteriors		
· Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of appropriate alignment and street frontage heights; setbacks above street frontage heights; appropriate materials and finishes selection; façade proportions including horizontal or vertical emphasis; · Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged. § Articulate facades so that they address the street and add visual interest. · External walls should be constructed of high quality and durable materials and finishes with 'self-cleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. · Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. § To assist articulation and visual interest, avoid expanses of any single material. § Limit opaque or blank walls for ground floor	The development reflects the desired future character for the locality as outlined in the applicable planning controls. Balconies are provided to all apartments and some overlooking/ surveillance of the Keira and Gipps Streets will be available. Facades address the street and the building is generally considered to be well articulated and detailed. A colour & material schedule has been provided. High quality and durable materials and finishes are proposed. There are no encroachments into/ across the footpath.	Yes

uses to 30% of the street frontage. § Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass. · Highly reflective finishes and curtain wall glazing are not permitted above ground floor level · A materials sample board and schedule is required to be submitted with applications for development over $1 million or for that part of any development built to the street edge. · Minor projections up to 450mm from building walls in accordance with those permitted by the BCA may extend into the public space providing it does not fall within the definition of GFA and there is a public benefit. · The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.		
3.9 Advertising and signage	N/A	N/A
3.10 Views and view corridors · Existing views shown in Figure 3.12 are to be protected to an extent that is practical. · Align buildings to maximise view corridors between buildings	The site is located within the nominated distant panoramic view corridor identified in Figure 3.12 of the DCP. The scale and bulk of the building measured in terms of height, FSR and building setbacks is consistent with applicable controls. Homes to the east will lose escarpment views from some parts, however as these existing homes are single storey, it would be difficult to preserve views even if a two storey dwelling was proposed.	Yes

4 Access, parking and servicing

Objectives/controls	*Comment*	*Compliance*
4.2 Pedestrian access and mobility · Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity. · The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard and the Disability Discrimination Act 1992.	Pedestrian access is available from the street frontage via 2 entry points. Barrier free access is from Gipps Street. Car parking for the adaptable units is provided within the basement car parking levels, with access throughout the building available via the lifts.	Yes

· The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor. · The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access. · Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain. · Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1, AS/NZS 2890.1:2004 and the DDA.		
4.3 Vehicular driveways and manoeuvring areas		Yes
· Driveways should be: i) Provided from lanes and secondary streets rather than the primary street, wherever practical. ii) Located taking into account any services within the road reserve, such as power poles, drainage pits and existing street trees. iii) Located a minimum of 6m from the nearest intersection iv) If adjacent to a residential development setback a minimum of 1.5m from the relevant side property boundary. · Vehicle access is to be designed to: i) Minimise the impact on the street, site layout and the building façade design; and ii) If located off a primary street frontage, integrated into the building design. · All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn · Driveway widths must comply with the relevant Australian Standards. · Car space dimensions must comply with the relevant Australian Standards. · Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standard · Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.	The driveway location is appropriate and does not appear to conflict with any services in the road reserve. Car parking dimensions appear to comply with AS 4299 (1995) for adaptable spaces. Driveway width is acceptable and manoeuvring areas appear to comply with applicable controls. Vehicles can turn on site and leave in a forward direction.	
4.4 On-site parking		
§ On-site parking must meet the relevant Australian Standard · Council may require the provision of a	Basement parking provided. Sufficient car parking, motorcycle and bicycle parking is provided.	Yes

supporting geotechnical report prepared by an appropriately qualified professional as information to accompany a development application to Council. · 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. · 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. · On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP. · To accommodate people with disabilities, minimum of 1% of the required parking spaces to be provided as disabled persons' car parking.	Sufficient car parking to support the adaptable units is also proposed.	
<u>4.5 Site facilities and services</u>		
Mail boxes – provide in an accessible location adjacent to the main entrance; integrated into a wall where possible and be constructed of materials consistent with the appearance of the building. Letterboxes to be secure and of sufficient size *Communication structures, air conditioners and service vents* - locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures in an appropriate manner. *Waste storage and collection* *Service docks and loading/unloading areas* · Provide adequate space within any new development for the loading and unloading of service/delivery vehicles. · Preferably locate service access off rear lanes, side streets or rights of way. · Screen all service doors and loading docks from street frontages and from active overlooking from existing developments. · Design circulation and access in accordance with AS2890.1.	The land is currently serviced by the major utilities and some augmentation of existing services is expected to be required to facilitate the development. A substation is shown on the south-east corner of the site. A bank of letter boxes is provided adjacent to the lobby. No rooftop ancillary structures or services shown on the plans. Provision has been made for waste storage rooms within the basement. On-street collection is proposed, which meets DCP requirements. No loading dock is required	Yes

5 Environmental management

Objectives/controls	*Comment*	*Compliance*
<u>5.2 Energy efficiency and conservation</u>	BASIX certificates submitted indicate the BASIX targets are satisfied by the residential apartments.	Yes

5.3 Water conservation	BASIX certificates submitted indicate the BASIX targets are satisfied by the residential apartments.	Yes
5.4 Reflectivity	No concerns are raised in regards to material reflectivity.	Yes
5.5 Wind mitigation	A wind impact statement was not required.	N/A
5.6 Waste and recycling	Waste management arrangements are satisfactory	Yes

6 Residential development standards

Refer to SEPP 65 and ADG assessment.

8 Works in the public domain

Planting of street trees and provision of footpath paving is required in compliance with the requirements of the Public Domain Technical Manual. Conditions of consent are recommended in relation to these matters.

CHAPTER B1 RESIDENTIAL DEVELOPMENT

Relevant controls are detailed below. Some provisions are superseded by provisions in Chapter D13 Wollongong City Centre.

4.0 General Residential controls

Controls/objectives	*Comment*	*Complies*
4.7 Solar Access	Adjoining premises would receive 3 hrs sunlight to windows of living rooms and minimum 50% of POS.	Yes
4.13 Fire Brigade Servicing	No details of location of nearest fire hydrant.	Condition
4.16 View sharing	Setbacks exceed 3m.	Yes

4.17. Retaining walls	Retaining walls are proposed and detailed on the revised landscape plan. Walls exceed the maximum 600mm for 900mm length. Walls up to 3.65m height are proposed. Northern retaining wall proposed adjacent to driveway and extend for length of the podium. Northern gardens would be battered at 1:3 gradient. The eastern wall extends full length of the podium and approximately half of the eastern boundary.	Variation*
4.18 Swimming pools and spas	Two rooftop (Level 8) spas are proposed. Conditions are recommended regarding operation of the spas.	Yes

6 Residential flat buildings

Controls/objectives	Comment	Compliance
6.2 Minimum Site Width Requirement	Minimum required 24m is exceeded.	Yes
6.15 Adaptable Housing	12 out of 18 apartments are adaptable. This exceeds minimum required 10%.	Yes
6.16 Access for People with a Disability	Disabled access is provided into the building from Gipps Street, and on all levels of the building and basement.	Yes
6.17 Apartment Size and Layout Mix for Larger Residential Flat Building Developments	A mix of 1, 2 and 3 bedroom apartments is provided.	Yes

PRECINCT PLAN – WOLLONGONG CITY CENTRE

The proposal is considered to be consistent with the objectives of the R1 zone within the City Centre precinct.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

The building has been appropriately designed with regard to disabled persons' access and facilities. The applicant submitted an access report with the DA which addresses the relevant provisions of the BCA and applicable standards including AS 1428, AS4299 and the Liveable Housing Guidelines Silver level.

Twelve adaptable apartments are proposed, which is more than the minimum 10% (or 1.8) apartments required by WDCP 2009. Each adaptable apartment would have one adaptable sized car space. Allocation of spaces to adaptable apartment should be a condition of consent.

The access report confirms that these apartments achieve the adaptability requirements of AS4299. Lift access is available to all floors and to communal open space areas.

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

Level access to the lobby from Gipps Street is available.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The development is appropriately designed with regard to CPTED principles and is not expected to give rise to increased opportunities for criminal or antisocial behaviour.

Control/objective	*Comment*	*Complies*
3.1 Lighting	No lighting shown. It is likely that some lighting is likely to be provided at the main entrance to the building and within the basement car park. No light spill impacts are expected.	Yes
3.2 Natural surveillance and sightlines	Opportunities for natural surveillance of the Gipps and Keira Streets footpath will be available from the balconies and internal living areas of the apartments fronting the street.	Yes
3.3 Signage	No signage proposed	N/A
3.4 Building design	The design is considered to adequately respond to CPTED principles. There are no places of obvious concealment or entrapment evident on the plans.	Yes
3.5 Landscaping	Landscaping treatment will not result in any concealment opportunities in any unsecure places.	Yes
3.6 Public open space and parks.	N/A	N/A
3.7 Community facilities and public amenities	N/A	N/A
3.8 Bus stops and taxi ranks	N/A	N/A

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

Council's Traffic Engineer has considered the proposal and has provided a satisfactory referral subject to conditions.

Parking is required at the following rate:

- <70m^2 apartments: 0.75 spaces per apartment = 2 x 0.75 = 1.5 [2] spaces
- 70-110m^2 apartments: 1 space per apartment = 16 x 1 = 16 spaces
- Plus visitors: 0.2 spaces per apartment = 0.2 x 18 = 3.6 [4] spaces
- Total required 22 spaces.

All required (and no more) spaces are provided. Four visitor spaces are located on Basement Level 1 and 12 adaptable-sized spaces are provided. Bicycle and motorcycle parking is provided as required (6 resident bicycle, 2 visitor bicycle and 2 motorcycle).

Appropriate resident bicycle security arrangements are proposed.

Waste will be collected from the street frontage of the site, with waste to be stored within a designated room within the basement.

CHAPTER E6: LANDSCAPING

The proposal provides suitable landscaped areas, deep soil zones and communal open space that will improve the amenity of the occupants and soften the appearance of the development from adjoining properties and the public domain. The sloping site implements retaining walls which are integrated into the landscape design.

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

CHAPTER E7: WASTE MANAGEMENT

An acceptable Site Waste Minimisation and Management Plan has been provided. Provision has been made for appropriate on-site storage and collection of waste.

CHAPTER E9: HOARDINGS AND CRANES

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

CHAPTER E12: GEOTECHNICAL ASSESSMENT

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

CHAPTER E13: FLOODPLAIN MANAGEMENT

The land is not identified as being flood affected.

CHAPTER E14: STORMWATER MANAGEMENT

Council's Stormwater Engineer has assessed the proposed development with regard to Chapter E14 of the DCP and has provided a satisfactory referral and recommended conditions of consent.

CHAPTER E17: PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

The application has been considered by Council's Landscape Officer who provided a satisfactory referral subject to conditions including conditions relating to street trees.

CHAPTER E19: EARTHWORKS (LAND RESHAPING WORKS)

The proposal involves excavation to facilitate the construction of two levels of basement carparking. Council's Geotechnical Engineer has considered the application and has provided a satisfactory referral subject to conditions.

CHAPTER E20: CONTAMINATED LAND MANAGEMENT

Council records do not identify the site as contaminated and there is no suggestion within the site history that any previous land uses have occurred do the land that may have potentially given rise to contamination. The proposal is satisfactory with regard to Clause 7 of SEPP 55.

CHAPTER E21: DEMOLITION AND ASBESTOS MANAGEMENT

Demolition of two dwelling houses is proposed. Standard conditions of consent regarding asbestos removal are recommended.

CHAPTER E22: SOIL EROSION AND SEDIMENT CONTROL

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

ATTACHMENT 6: Draft conditions of consent

DA-2017/1676 48-50 Gipps Street Wollongong

Approved Plans and Specifications

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

Site & Roof Plan A-101-B dated 12 April 2018 prepared by ADM Architects

Basement 2 Floor Plan A-102-D dated 3 August 2018 prepared by ADM Architects

Basement 1 Floor Plan A-103-D dated 3 August 2018 prepared by ADM Architects

Level 1 Floor Plan A-104-B dated 12 April 2018 prepared by ADM Architects

Level 2 Floor Plan A-105-B dated 12 April 2018 prepared by ADM Architects

Level 3 Floor Plan A-106-B dated 12 April 2018 prepared by ADM Architects

Level 4 Floor Plan A-107-B dated 12 April 2018 prepared by ADM Architects

Levels 5 & 7 Floor Plan A-108-B dated 12 April 2018 prepared by ADM Architects

Level 6 Floor Plan A-109-B dated 12 April 2018 prepared by ADM Architects

Level 8 Floor Plan A-110-B dated 12 April 2018 prepared by ADM Architects

Roof Floor Plan A-111-A dated 12 April 2018 prepared by ADM Architects

South Elevation A-201-B dated 12 April 2018 prepared by ADM Architects

East Elevation A-202-B dated 12 April 2018 prepared by ADM Architects

North Elevation A-203-B dated 12 April 2018 prepared by ADM Architects

West Elevation A-204-B dated 12 April 2018 prepared by ADM Architects

Section A-A A-205-B dated 12 April 2018 prepared by ADM Architects

Colour & Materials Schedule Gipps Street Elevation A-502-B dated 12 April 2018 prepared by ADM Architects

Level 1 Landscape Concept Plan 1806-LD01A dated 17 April 2018 prepared by Ochre Landscape Architects

Roof Terrace Landscape Concept Plan 1806-LD02 dated 17 April 2018 prepared by Ochre Landscape 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 All work is to be in accordance with the geotechnical recommendations contained in the report dated 5 December 2017 by SMEC and any subsequent geotechnical report required to address unanticipated conditions encountered during construction.

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 Hard bedrock where encountered will be difficult to excavate. Alternative excavation methods should be considered to minimise noise and vibration.

d Retaining wall design is not to include anchors extending on to adjoining property without the written consent of the adjoining property owner.

e 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.

f An earthworks plan is to be developed by the geotechnical consultant prior to start of earthworks.

g All recommendations of the geotechnical consultant in their geotechnical report dated 5 December 2017 are to be accommodated in the earthworks plan.

h The earthworks plan may require modification in light of any subsequent geotechnical reports commissioned to address unforeseen geotechnical conditions encountered during the site preparation earthworks.

i All earthworks including drainage, retaining wall and footing construction is to be subject to Level 1 geotechnical supervision as defined in Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Developments. Where necessary amendments are to be made to the designs during construction based on supplementary geotechnical advice given during the supervision to ensure that the completed works accommodates all encountered geotechnical constraints.

j All excavations need to be supported during and after construction particularly to protect adjoining property with nearby existing development.

k At the completion of the site preparation works, the geotechnical consultant is to prepare a works-as-executed report detailing encountered geotechnical conditions and how the works 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.

l All excavations for foundations are to be inspected by the geotechnical consultant and certified that the ground has been suitably prepared for the placement of footings.

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 an Accredited Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.

5 **Maintenance of Access to Adjoining Properties**

Access to all properties not the subject of this approval must be maintained at all times and any alteration to access to such properties, temporary or permanent, must not be commenced until such time as written evidence is submitted to Council or the Principal Certifying Authority indicating agreement by the affected property owners.

6 **Occupation Certificate**

An Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of section 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.

7 **Tree Retention/Removal**

The developer shall retain the existing trees indicated on the Landscape Concept Plan by Ochre Landscape Architects dated 17 April 2018 and the Arborist's Report by Allied Tree Consultancy dated January 2018 consisting of trees numbered 7, 8, and 9.

Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373-2007.

All tree protection measures are to be installed in accordance with Australian standard AS4790-2009 Protection of Trees on development Sites.

All recommendations in Arborist's Report by Allied Tree Consultancy dated January 2018 to be implemented including and not restricted to: remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

This consent permits the removal of trees numbered 1 and 6 as indicated on the Landscape Concept Plan by Ochre Landscape Architects dated 17 April 2018 and the Arborist's Report by Allied Tree Consultancy dated January 2018. No other trees shall be removed without prior written approval of Council.

8 **Street Tree Removal**

The developer shall remove the existing street trees indicated on the Landscape Concept Plan by Ochre Landscape Architects dated 17 April 2018 and the Arborist's Report by Allied Tree Consultancy dated January 2018, numbered 1 and 4. 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 Development Engineering.

Prior to the Issue of the Construction Certificate

9 **Detailed Drainage Design**

A detailed drainage design for the proposed development shall be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong DCP 2009 and conditions listed under this consent. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

10 **Protection of Buildings from Ingress of Stormwater Runoff**

Detailed design of the development shall ensure that there will be no ingress of surface stormwater runoff into the proposed buildings. All building entrances shall be provided with a suitable freeboard above the adjacent local blocked pipe situation 100 year ARI water surface level. These requirements shall be reflected on the Construction Certificate plans and supporting documentation prior to the release of the Construction Certificate.

11 **Basement Waterproofing**

Full engineering details of the proposed wall around the basement car park must be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate. These must include construction details indicating that no ingress of stormwater is possible into the basement levels. This applies to any proposed opening such as doors or ventilation louvres.

12 **Existing / Proposed Levels**

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

13 **Basement Lighting**

Lighting in the basement levels must meet Australian Standard AS1158. Ceilings and walls shall be painted white to reflect light. Details of lighting compliance are to be shown on Construction Certificate plans.

14 **Dilapidation Report Prior to Construction**

A Dilapidation Report detailing the current structural condition of adjoining buildings,

infrastructure and roads shall be prepared and endorsed by a qualified structural engineer. The report shall be submitted to the satisfaction of the certifying authority prior to issue of the Construction Certificate.

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

15 **Structural Engineering Details**

The submission of structural engineering details by a suitably qualified and experienced structural engineer (with appropriate insurance coverage) to the Principal Certifying Authority, prior to the release of the Construction Certificate addressing the following matters:

a Footings;
b reinforced concrete slabs;
c retaining walls;
d structural steelwork;
e wall bracing and tie-down requirements;
f the structural engineer, in producing a design is to complement the Geotechnical Engineer's Stability Report to make a clear statement that "any structure designed and erected in accordance with the plans and specifications will achieve the performance requirements described in Clause 1.3 of 2870 (1996) and any other relevant codes and standards."

16 **Present Plans to Sydney Water**

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

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

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

17 **Endeavour Energy Requirements**

The submission of documentary evidence from Endeavour Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Endeavour Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Endeavour Energy PO Box 811 Seven Hills NSW 1730.

18 **Telecommunications**

The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

19 **Car Parking and Access**

The development shall make provision for the following:

- 22 car parking spaces including 12 adaptable (AS4299 1995) spaces
- 2 motorcycle parking spaces
- 6 secure (Class B) residential bicycle spaces
- 2 visitor (Class C) bicycle spaces.

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

All adaptable spaces must remain allocated to their respective adaptable apartment and the

allocation shown on Construction Certificate plans.

20 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.

21 The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details shall be reflected on the Construction Certificate plans.

22 A change in driveway paving is required at the entrance threshold within the property boundary to clearly show motorists they are crossing a pedestrian area. Between the property boundary and the kerb, the developer must construct the driveway pavement in accordance with the conditions, technical specifications and levels to be obtained from Council's Manager Works. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.

23 The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.

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

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

a the safety fence on top of the retaining walls at the base of the slope is to be either a black palisade fence or transparent material so that it remains visually unobtrusive.

b planting of indigenous plant species native to the Illawarra Region such as: *Syzygium smithii* (syn *Acmena smithii*) Lilly pilly, *Archontophoenix cunninghamiana* Bangalow palm, *Backhousia myrtifolia* Grey myrtle, *Elaeocarpus reticulatus* Blueberry ash, *Glochidion ferdinandii* Cheese tree, *Livistona australis* Cabbage palm tree, *Syzygium paniculatum* Brush cherry.
A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping;

c a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes.

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

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

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

28 **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 Certifying Authority prior to release of the Construction Certificate.

29 **Provision of a Fire Hydrant**

A fire hydrant shall be available no more than 60 metres from the site. The location of a fire hydrant shall be shown on Construction Certificate plans. The hydrant must be installed prior to issue of the Occupation Certificate.

30 **Engineering Plans and Specifications - Retaining Wall Structures**

The submission of engineering plans and supporting documentation of all proposed retaining walls to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

a A plan of the wall showing location and proximity to property boundaries;
b an elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
c details of fencing or handrails to be erected on top of the wall;
d sections of the wall showing wall and footing design, property boundaries and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall and footing structure must be contained wholly within the subject property;
e the proposed method of subsurface and surface drainage, including water disposal;
f reinforcing and joining details of any bends in the wall;
g the assumed traffic loading used by the engineer for the wall design.

31 **Bicycle Parking Facilities**

Bicycle parking facilities must have adequate weather protection and provide the appropriate level of security as required by the current relevant Australian Standard AS2890.3 - Bicycle Parking Facilities and Austroads Guide to Traffic Management Part 11: Parking (Commentary 9: C9.2). In the absence of internal bicycle storage areas in private residential garages, the proposed external bicycle spaces are to have adequate weather protection, passive surveillance, and be secured within a lockable enclosure with access via a combination lock or communal key. This requirement shall be reflected on the Construction Certificate plans.

32 **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. Enquiries regarding property addressing may be made by calling 4227 8660.

33 **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 with 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.

34 **Street Trees City Centre**

The developer must address the street frontage by installing street tree planting. The number and species for this development are five *Waterhousia floribunda* 'Sweeper' 200 litre container size in accordance with AS 2303:2015 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 Development Engineering.

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

35 **Development Contributions**

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the Wollongong City-Wide Development Contributions Plan (2018), a monetary contribution of $59,800.00 (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:

Contribution at time of payment = $C x (CP2/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: 935480	☐ Credit Card
In Person	Wollongong City Council Administration Building - Customer Service Centre Ground Floor 41 Burelli Street, WOLLONGONG	☐ 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 (2018) 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

36 **Construction Environmental Management Plan**
Prior to commencement of works, the developer is to submit to the Principal Certifying Authority a construction environmental management plan. The plan shall include as a minimum the vehicle traffic, odour and vapour, dust, plant and machinery noise, water and sediment management, surface water, subsurface seepage and accumulated excavation water, sediment from equipment and cleaning operations, site security, working hours, contact information, incident response and contingency management.

37 **Excavated Soil Material Disposal Plan**
Prior to commencement of works, the developer shall submit to the Principal Certifying Authority an excavated soil material disposal plan, with the batching, sampling and analysis procedures as per the DECCW (2009) *Waste Classification Guidelines*. The plan shall be prepared by a suitably qualified and experienced consultant. A copy of the plan shall be forwarded to Council.

38 **Sign – Supervisor Contact Details**
Before commencement of any work, a sign must be erected in a prominent, visible position:

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

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

39 **Demolition Works**
The demolition of the existing dwelling houses and 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 Certifying Authority. 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.

40 **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.

41 **Demolition Notification to Surrounding Residents**
Demolition must not commence unless at least 2 days written notice has been given to adjoining and adjacent property owners of the date on which demolition works will commence.

42 **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.

43 **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 Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority), 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 Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority), 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.

44 **Support for Neighbouring Buildings**

This consent requires the preservation and protection of neighbouring buildings from any damage and if necessary, requires the underpinning and support of any neighbouring building in an approved manner. The applicant or the contractor carrying out the work must at least seven days in advance of any excavation works below the level of the base of the footings of a building on an adjoining allotment, including a public road or place, give written notice of intention to carry out such works to the property owner of the affected adjoining building and furnish specific written details and supporting plans or other documentation of the proposed work.

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

45 **Sediment Control Measures**

The developer must ensure that sediment-laden runoff from the site is controlled at all times subsequent to commencement of construction works. Sediment control measures must be maintained at all times and checked for adequacy at the conclusion of each day's work.

46 **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.

47 **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 Certifying Authority 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.

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

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

49 **Erosion and Sediment Control Measures**
Erosion and sedimentation control measures are to be established in accordance with the requirements of the Erosion and Sediment Control Plan.

50 **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.

During Demolition, Excavation or Construction

51 **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.

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

53 **Water Sensitive Urban Design**
The developer is required to install an appropriate water quality improvement filtration system prior to discharge of stormwater into Council's drain.

54 **Pipe Connection**
All pipe connections to existing pits within the road reserve must be constructed flush with the pit wall in accordance with good engineering practice. The developer must ensure that the condition of the pit is not compromised and that the service life of the pit is not reduced as a result of the connection.

55 **Survey Report for Floor Levels**
A Survey Report must be submitted to the Principal Certifying Authority verifying that each floor level accords with the floor levels as per the approved plans under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective level of the building (if the building involves more than one level). All levels shall relate to Australian Height Datum.

56 **Supervision of Engineering Works**
All engineering works associated with the development are to be carried out under the supervision of a practicing engineer.

57 **Piping of Stormwater to Existing Stormwater Drainage System**
Stormwater for the land must be piped to Council's existing stormwater drainage system

58 **No Adverse Run-off Impacts on Adjoining Properties**
The design of the development shall ensure there are no adverse effects to adjoining properties as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

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

59 **Copy of Consent to be in Possession of Person carrying out Tree Removal**
The 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.

60 **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>).

61 **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).

62 **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 this type of waste. A receipt must be retained and submitted to the Principal Certifying Authority, and a copy submitted to Council (in the event that Council is not the Principal Certifying Authority), prior to commencement of the construction works.

63 **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.''

64 **Geotechnical Inspection Certification**
Any inspections recommended in the geotechnical report must be inspected and certified by the author or verifier of the geotechnical report.

65 **Support for Excavations Geotechnical**

There is to be no unsupported excavations with all cuts to be immediately supported by retaining wall construction.

66 **Provision of Taps/Irrigation System**
The provision of common taps and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be implemented in accordance with the approved Landscape Plan.

67 **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

68 **Dilapidation Report Following Construction**
A Dilapidation Report prepared by a qualified structural engineer must be submitted to the principal certifying authority, together with the initial Dilapidation Report prepared prior to construction of the approved development.

The report must ascertain whether any structural damage has occurred to adjoining buildings, infrastructure or roads following construction of the development. The report shall be submitted to the satisfaction of the Principal Certifying Authority and a copy must be provided to Council within one month of submission to the Principal Certifying Authority. This must be provided prior to the release of the Occupation Certificate.

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

70 **Adaptable Apartments 88b Restriction**
Prior to issue of the occupation certificate, an 88b restriction must be registered requiring all twelve (12) adaptable apartments to have an adaptable car parking space, meeting the requirements of AS4299 (1995).

71 A Section 73 Certificate must be submitted to the Principal Certifying Authority prior to issue of the occupation certificate.

72 **Retaining Wall Certification**
The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifying Authority is required, prior to the issue of the Occupation Certificate. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifying Authority.

73 The developer must make compensatory provision for the trees required to be removed as a result of the development. In this regard, six 100 litre container mature plant stock shall be placed along the eastern property boundary of the site. The suggested species are Illawarra escarpment species.

74 **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.