

Attachment 6: WDCP 2009 Compliance Table

CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The proposal does not seek to maintain or preserve existing vegetation on the site with all the trees (261) to be removed within the building footprint. The proposed landscaping surrounding and within the proposed building is poor and considered unlikely to comply with Planning for Bushfire Protection 2019 requirements with the proposed green roofs.

The proposal will also remove a significant natural catchment including natural surface and subsurface flows from the vegetated areas downstream of the development and the potential environmental/ecological impacts that have not been considered.

The proposal has not demonstrated it will improve the biodiversity values, with the conservation of biodiversity and ecological integrity as a fundamental consideration in the design of the proposal. The development will result in unacceptable impacts on biodiversity. Further, the precautionary principle should be applied in the context of uncertainties concerning the extent of indirect impacts of the development on the ISR and Koala habitat as discussed in section 2.1 and 3.1 in this report.

The proposal is considered to be inconsistent with the principles of Ecologically Sustainable Development.

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

This Chapter applies to all residentially zoned land in the LGA. Section 4 provides general residential controls which apply to all dwelling houses, dual occupancies, secondary dwellings, ancillary structures and semi-detached dwellings. Section 5 provides controls that must also be taken into consideration for development for the purposes of Multi-Dwelling Housing.

The objectives of Chapter B1 are as follows:

- (a) To ensure a high standard of residential development within the City of Wollongong LGA.*
- (b) To encourage new residential development that is sympathetic to the existing streetscape and neighbourhood character of a particular locality.*
- (c) To encourage residential development that reflects the desired future character of individual suburbs within the Wollongong City LGA.*
- (d) To manage residential development in order to maximise the retention of significant remnant trees and other natural features in particular localities.*
- (e) To encourage innovative housing design and energy efficient housing which embraces the highest possible architectural, environmental and amenity standards.*
- (f) To promote residential development that achieves the principles of ecologically sustainable development.*
- (g) To encourage a mix of housing forms within the city to assist in achieving urban consolidation initiatives particularly in localities close to business centres and railway stations and to assist in providing housing affordability.*
- (h) To ensure that Crime Prevention through Environmental Design (CPTED) principles are holistically embraced in the design of any residential development.*

It is considered the proposal has failed to demonstrate that it adequately addresses the objectives of Chapter B1 Residential Development as discussed within the controls below and throughout the report.

4.0 General Residential controls

Controls/objectives	Comment	Compliance
<p><u>4.12 Site servicing</u></p> <ul style="list-style-type: none"> letterboxes in an accessible location air-con, satellite dishes and other ancillary structures to be located away from street frontage, not in a place where they are a skyline feature and adequately setback all dwellings must be provided with open air clothes drying facilities, accessible, screened and high degree of solar access 	<p>The Australia Post Management Plan indicates a primary delivery point adjacent to the Utility Building. Secondary building post delivery points are nominated to the north of each building. No infrastructure associated with the secondary building post delivery locations is shown on plan. It is unclear how deliveries that are made to a mailbox at the front of the Site at the primary delivery point will be removed from their individual mailbox and moved to the secondary building post delivery points. The ability of the Site to be appropriately serviced by Australia Post is not demonstrated.</p> <p>Concern is raised to the location of future satellite dishes on the proposed buildings and potential visual impact due to the prominent location of the site.</p> <p>Details of open air clothes facilities for the residents do not appear to have been provided to assess their suitability.</p>	No
<p><u>4.13 Fire Brigade Servicing</u></p> <ul style="list-style-type: none"> All dwellings located within 60m of a fire hydrant Provision for adequate access in accordance with Fire & Rescue NSW 	<p>The applicant has provided that all proposed dwellings to have access to a fire hydrant as required by AS2419.1.</p> <p>Concern for the ability of the development to provide reticulated water in accordance with the provisions of AS2419.1 – 2005 due to the density and location of the proposal. It is considered this concern relates to the ability of required water pressure to be provided due to the distance and steepness of the dwellings within the site.</p> <p>A fire brigade vehicle will be required to access the site. The proposed grades of the SW access (one way) driveway up to 26.8%. It is understood that Fire & Rescue NSW requires the grade not to exceed 16.6%. The internal grades within the development also exceed this limit.</p> <p>The access road also has some tight corners which have not been tested with swept paths for emergency vehicles such as the 'general' and 'specialist' fire appliances detailed on page 8 of the NSW Fire Safety Guidelines. Swept paths of a Category 1 Vehicle (8.2 metres long) have been shown, whereas it is noted that general appliances have an overall length of 10 metres and specialist appliances are 12.5 metres long. Specialist appliances</p>	No

	<p>must be able to access the site where buildings are 9 metres in height</p> <p>Therefore, it is considered the proposal has not adequately demonstrated that all dwellings can be serviced by fire fighting vehicles in accordance with this control.</p>	
<p><u>4.14 Services</u></p> <ul style="list-style-type: none"> • Encourage early consideration of servicing requirements • Consideration of siting of any proposed substation to minimise its visual impact on the streetscape 	<p>The site is not currently serviced by electricity, water and the disposal and management of sewage. Advice received from Sydney Water indicates that water servicing should be available however amplifications may be required and wastewater services although extensions will be required to be undertaken to service the development where full details would be provided at the Section 73 application stage.</p> <p>As mentioned previously, concern for the ability of the development to provide reticulated water in accordance with the provisions of AS2419.1 – 2005 due to the density and location of the proposal. It is considered this concern relates to the ability of required water pressure to be provided due to the distance and steepness of the dwellings within the site.</p> <p>Advice from Endeavour Energy received indicates an adequate supply of electricity can be made to service the development with the proposed new padmount substation on site.</p> <p>A substation is proposed within the 6m front setback of the site and concerns are raised over the potential visual impact on the streetscape and impacts on the adjoining property, No. 12 Cosgrove Avenue. The landscape perspectives submitted provide a view of the development/site from the Cosgrove Avenue frontage, do not show the proposed substation.</p> <p>In reviewing the Endeavour Energy requirements that need to be met including landscaping measures and clearances from the substation. It is considered that the current design does not appear to meet their design requirements as insufficient detail has been provided in relation to the proposed substation to ensure there will not be adverse visual impacts on the streetscape or the adjoining property.</p>	No
<p><u>4.16 View sharing</u></p> <ul style="list-style-type: none"> • To protect and enhance view sharing, significant view corridors 	<p>The Visual Impact Assessment (VIA) provided has a number of deficiencies. However, as a result of its scale and the prominent, elevated nature of the Site and the extensive landform</p>	No

<ul style="list-style-type: none"> A range of view sharing measures to be considered for building design 	<p>modification and tree removal works proposed to establish the dwelling sites and ancillary elements of the development including the driveway, retaining walls and APZ areas, will be highly visible. The proposal has been sited right across the crest of the site and will have adverse impact when viewed from the public domain views from adjoining and nearby properties to the Illawarra Escarpment/Mount Keira.</p>	
<p><u>4.17 Retaining walls</u></p> <ul style="list-style-type: none"> To ensure well designed retaining walls that are structurally sound To minimise any adverse stormwater drainage, visual, amenity or overlooking impacts upon adjoining properties. To guide the design and construction of low height aesthetically pleasing retaining walls. 	<p>This control allows the maximum height of a retaining wall of 1m and setback greater than 900mm from a side or rear boundary. A variation to retaining walls greater than 1m may be considered on steeply sloping sites.</p> <p>The proposal in addition to the seeking a variation of the height of the retaining wall, the terracing controls of 1:1.</p> <p>The design of proposal results in extensive bulk earthworks significantly altering the landform and existing drainage for the site, requiring the provision of extensive retaining walls that will be visually dominant and physically over-bearing up to 8m high that represent an overdevelopment of the site. It is also considered the proposed landscaping to screen these walls will provide limited visual relief.</p> <p>Therefore, it is considered the proposal is inconsistent with the objectives of the control as it does not preserve and enhance the natural features and characteristics of the site, result in adverse impacts on stormwater drainage and visual amenity for the site.</p>	<p>No – variation sought but not supported.</p>
<p><u>4.18 Swimming Pool and Spas</u></p>	<p>No swimming pool or spas are proposed.</p>	<p>N/A</p>
<p><u>4.19 Development near a railway corridors and major road</u></p>	<p>The site is not located near a railway corridor or major road.</p>	<p>N/A</p>

5.0 Attached dwellings and multi -dwelling housing

<i>Controls/objectives</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>5.1 Minimum Site Width Requirement</u></p> <p>Minimum 18m</p>	<p>The minimum site width for a multi dwelling housing development required to be at least 18 metres. A portion of the site, along the length at the access handle towards the frontage of site has a minimum width of 16.88m when measured perpendicular the site boundaries.</p> <p>Section 3.2.6 of this report, Clause 4.6 WLEP 2009 variation request to discusses this matter</p>	<p>No – variation sought but not supported.</p>

	and it is considered the proposal does not meet the objectives of this control.	
<u>5.2 Number of Storeys</u>		
R2 zone – 2 storeys	The maximum number of storeys for the site is 2 storeys. The proposal will appear 3 storeys in Buildings 1-3.	No
<u>5.3 Front Setbacks</u>		
6m min required to facade	The proposed dwellings are setback within the site and exceeds the 6m requirement.	Yes
<u>5.4 Side and Rear Setbacks</u>		
R2 low density residential zone requires a minimum side/rear setback of 0.8 x ceiling height	The proposed side and rear setbacks well exceed the required control.	Yes
Where balconies or windows of living areas face the rear boundary at first floor level or above, a minimum 1.0m x ceiling height is required	The applicant considered that section 5.4.2.2 applies and has addressed the controls for basement parking areas for residential flat buildings in Section 6 of Chapter B1. However, it is considered this section does not apply to the proposal as it is not categorised as an attached dwelling.	
<u>5.5 Building Character and Form</u>		
	<p>The design of the buildings and dwellings do not provide an identifiable and desirable street address or allow for outlook and surveillance towards the internal driveway or common areas of the development.</p> <p>The design of the buildings is insular with the majority of the entrances to the dwellings all internally facing into a long narrow podium area with the majority of the dwellings set above the driveway isolating the building from the street. Therefore, the entrances to the dwellings are not visible from the internal road/driveway.</p> <p>The placement and design of the entrances to the dwellings accessed via a podium area appear to be tucked in slightly from the building façade and with limited ability for casual surveillance as the door entrance is situated on the side rather facing the podium. The only window that overlooks the podium level with the entrance is for a bedroom that is to be screened for privacy. In addition, a number of southern units in buildings 1-4 only have a door entrance at the podium level.</p> <p>It is also considered that dwellings and location of the entrances will have difficulty accommodating the movement of furniture.</p>	No
<u>5.6 Access / Driveway Requirements</u>	Diagrams have been provided which demonstrate that adequate manoeuvring can be achieved to and from all car parking spaces with all vehicles able to leave the site in a forward direction.	No

	<p>A 6.5m wide crossover and driveway is proposed. The driveway is setback greater than 1.5m from the side boundaries.</p> <p>However, part of the proposed driveway grades are not in accordance with AS2890.1 and exceed the maximum 25% along the south west portion of the loop road that is one way. Several long sections of the driveway have grades at 26.8%.</p>	
<p><u>5.7 Car Parking Requirements</u></p>	<p>Car parking is provided in the basement of the buildings and at grade and is not visible from the streetscape.</p> <p>The proposed development has not been designed to be accessible for pedestrians and cyclists. Pedestrian access through the site consist of steep narrow paths/stairs that are obscured from view and not clear or identifiable wayfinding and circulation for the development is very poor.</p> <p>The proposed car parking has not been integrated to the design to minimise visual impacts, with the basement car parking visible on a number of the buildings and the upper ground level situated on a podium level above the parking and 'ground floor level'.</p> <p>Visitor car parking is scattered throughout the site. With some at grade spaces located at the northern end of the buildings Refer to Chapter E3 of WDCP 2009 for further discussion on parking provisions and other associated matters.</p>	No
<p><u>5.8 Landscaping Requirements</u></p> <p>Min. 30% of site area must be provided as landscaped area</p> <p>Min. 1.5m wide landscaping beds alongside & rear boundaries</p>	<p>Due to the size of the site and area available the proposal is generally able to meet the numerical controls with required minimum landscape area and landscaping alongside the boundaries of the site.</p> <p>Despite the numerical compliance it is considered the proposal is inconsistent with the objectives of the control.</p> <p>As discussed previously the proposal as not been designed preserve and retain existing native trees and vegetation with the removal of all trees with the development footprint, totalling 261 trees that are in reasonable health. Insufficient landscaping has been proposed to address the significant number of trees to be removed.</p> <p>The landscape design for the site appears to have been developed in response to the proposed architectural plans. The proposed built form of the dwellings on podiums with buildings in close vicinity to each other prevents the ability for substantial planting to be integrated within the development. The planting</p>	No

	<p>along the southern boundary alongside the driveway from the frontage does not appear to be 1.5m wide.</p> <p>It is also considered that landscaping proposed may not be able achieved due to compliance required with Planning for Bushfire Protection.</p> <p>See further discussion at Chapter E6 below.</p>	
<p><u>5.9 Deep Soil Planting</u></p> <p>The deep soil may extend along the full length of the rear of the site, with a minimum width of 6m.</p> <p>No structures, basement carparks, driveways, hard paving, decks, balconies or drying areas are permitted within the deep soil zone.</p> <p>The deep soil zone shall be densely planted with trees and shrubs.</p>	<p>The proposal provides the required amount of deep soil zone required for the site area however, the siting for deep soil planting in the development has not been designed with appropriate site analysis and is situated in convenient/left over areas, being the areas that are not developable.</p> <p>Deep soil planting has not been provided within the site context or controls, being located to the rear (North western corner boundary) where the site abuts the foothills of Mount Keira and the Illawarra Escarpment. This would provide a linkage of adjacent deep soil zones on development sites and to provide habitat for native indigenous plants and birdlife in line with the objectives of the control. Other options that could be considered is centrally within the site of the development, so dwellings overlook the deep soil area rather than dwellings overlooking each other which introduces amenity impacts.</p>	No
<p><u>5.10 Communal Open Space</u></p> <p>Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m² per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5 metres.</p> <p>Where a minimum of 15% of the site is provided as a deep soil zone, combined use of part of the deep soil zone as communal open space may occur.</p> <p>Areas of the communal open space should contain paving, children's playground equipment, barbeques, shade structures, swimming pools or the like, however these cannot be located within the deep soil zone.</p> <p>At least 50% of the communal open space area must receive at least 3 hours of direct sunlight</p>	<p>The proposal is for a 42 multi-dwelling housing development and as such COS with a minimum area of (42 x 5sqm) 210sqm is required. The application has nominated communal open space is Eagle Nest Park located at the rear of the site south of Building 5 and the southern section of each podium and a central COS to the south of building 3.</p> <p>The location is not considered easily accessible and is not within a reasonable distance from each dwelling.</p> <p>In addition, the area located on the southern side of Building 3 would not receive the required 50% of the area for 3 hours of solar access on June 21.</p>	No

between 9.00am and 3.00pm on June 21.

5.11 Private Open Space (POS)

Ground level POS with 4m x 5m minimum dimensions

70% of dwellings must receive minimum 3 hours direct sunlight to POS between 9am-3pm on June 21

Design private open spaces so that they act as direct extensions of the living areas of the dwellings they serve.

Clearly define private open space through use of planting, fencing or landscaping features.

Screen private open space where appropriate to ensure privacy.

The terrace areas that are directly connected to the living areas of the dwelling have been considered the POS.

All units have POS with a minimum area of 4m x 5m. They are located a significant distance (greater than 1.5m) from the site boundaries.

It is considered that living area terraces (main POS for the dwellings) on the upper ground level and the bedroom terraces on the ground floor located on the eastern side of building 4 will result in overlooking along the entire western façade of the western dwellings in building 3, that include bedrooms and the associated terraces situated on the level 1 and upper ground level and other windows and vice versa. It is identified that the same potential issue is likely to occur with one or 2 of the eastern dwellings in building 3 overlooking dwellings in building 2.

Screening measures have been proposed to try and ameliorate amenity impacts between these dwellings as mentioned above, refer to plan DA/600 at **Attachment 3**. It is considered that landscaping measures cannot be relied upon as a permanent provision of privacy and despite the provision of privacy screens and opaque balustrades, it is considered overlooking can still occur and the main POS area for the dwellings will cause acoustic privacy impacts on bedroom areas of adjacent dwellings.

It appears at least 70% of the dwellings are required a minimum of three hours of sunlight on June 21 to 50% of the POS.

No

5.12 Solar Access Requirements

Windows to living rooms of adjoining dwellings must receive 3 hours of sunlight between 9.00am and 3.00pm on 21 June.

At least 50% of the private open areas of adjoining residential properties must receive at least 3 hours of sunlight between 9.00am and 3.00pm on June 21.

The primary balcony of at least 70% of the dwellings within a multi dwelling housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.

Windows to north facing living rooms for each of the subject

It appears that at least the POS of 70% of the dwellings and north facing living room windows receive the minimum of three hours of sunlight between 9am and 3pm on 21 June.

It is also considered insufficient information has been provided to demonstrate windows to living rooms of adjoining dwellings (those affected on Cedar Grove) will receive 3 hours of sunlight and at least 50% of the private open areas of adjoining residential properties must receive at least 3 hours of sunlight between 9.00am and 3.00pm on June 21.

Further detail and clarification was requested with an inset of the shadow diagrams plans to be provided of the adjoining properties and property address marked. This included showing the existing dwellings along Cedar

No

<p>dwellings in the development must receive at least 3 hours of sunlight between 9.00am and 3.00pm on 21 June.</p> <p>At least 50% of the private open space area for each of the subject dwellings in the development must receive at least 3 hours of sunlight between 9.00am and 3.00pm on 21 June.</p>	<p>Grove on the diagrams and identify living room windows of dwellings potentially affected.</p> <p>Therefore, it is unclear if the proposal meets the requirements of this control.</p>	
<p><u>5.13 Additional Control for Multi Dwelling Housing - Dwelling Mix and Layout</u></p> <p>Required for greater than ten (10) dwellings</p> <p>Provide a mix of dwelling sizes and layouts within larger multi-dwelling developments having ten (10) or more dwellings. This could include both variation in the number of bedrooms and gross floor areas of apartments, variety in the internal design or incorporating one, two and three bedroom dwellings to accommodate various resident requirements.</p>	<p>The proposed development includes a mix of 3- and 4-bedroom dwellings.</p> <p>There is also a mix of dwelling types in the development, with each dwelling varying in size and design.</p>	Yes.
<p><u>5.14 Additional Control for Multi Dwelling Housing - Adaptable Housing</u></p> <p>If more than 6 dwellings at least 10% of all dwellings (at least one) must be adaptable</p>	<p>A minimum of 10% of the dwellings are required to be adaptable which equates to 5 dwelling. 5 adaptable dwellings are proposed in Units 9, 23, 36, 41 and 42 Post adaptation details have been provided.</p> <p>An Access Report prepared by an experienced and qualified Access Consultant also accompanies the DA which confirms that the dwellings are capable of complying with AS 4299-1995.</p>	Yes
<p><u>5.15 Additional Control for Multi Dwelling Housing – Crime Prevention through Environmental Design</u></p>	<p>The design of the proposal is considered to be unsatisfactory in regard to safety and crime prevention controls. Refer to discussion in Chapter E2.</p>	No

CHAPTER B2 – RESIDENTIAL SUBDIVISION

The application seeks strata subdivision of the proposed dwellings. A draft strata subdivision plan has not been submitted with the application that has been reviewed by Council's Subdivision Officer and conditional satisfactory referral advice has been provided.

CHAPTER B6: DEVELOPMENT IN THE ILLAWARRA ESCARPMENT

Whilst there is no built form in the E2 zoned land for the site, there are works proposed associated with the VMP. The site contains lands within the Illawarra Escarpment between RL 50-150m and zoned E2 therefore it is considered this chapter applies. The site is located within the Mount Keira precinct.

<i>Controls/objectives</i>	<i>Comment</i>	<i>Compliance</i>
<u>5 Visual impact assessment (VIA)</u>	<p>The Site contains land mapped within the Illawarra Escarpment Area and is located entirely above the RL 50 metre contour. The Site is located within the Mount Keira precinct as defined within Part 4 this Chapter. As the site forms part of the Illawarra Escarpment and the proposed built form will sit in the foreground of the escarpment, a visual impact assessment report is required for the application.</p> <p>A VIA was provided, however responds to the proposed development rather than informing the definition of a development opportunity envelope as required by Part 5.2 of this Chapter.</p> <p>The submitted VIA is inadequate as it utilises images taken with a wide-angle lens which does not accurately replicate the perspective when viewed from a human eye. It also appears that the perspectives presented within the assessment also rely on the vegetation surrounding the units being mature. The perspectives provided do not account for the vegetation removal required outside of the building footprint to establish the required APZ and the planting depicted is unlikely to comply with Planning for PBP 2019.</p> <p>In regard to the night view perspectives provided, it is unclear at what time of night the views are taken from (it appears to be dusk where the lighting would not be as dominate) and whether it is an accurate representation of the visual impact, as it appears not all units are shown with their lights on, lighting of the communal areas and balconies of the development appear to have not been represented and all lights appear to shown as warm, low level lighting.</p> <p>The proposal, as a result of its scale and the prominent, elevated nature of the Site and the extensive landform modification and tree removal works proposed to establish the dwelling sites and ancillary elements of the development including the driveway, retaining walls and APZ areas, will be highly visible.</p> <p>The control requires that the footprint of any development be restricted to existing legally cleared areas only. The proposal is reliant on significant vegetation removal to provide for the development footprint. The landscaping proposed is insufficient to soften the built form, due to the scale of the development proposed.</p>	No
<u>6 Aboriginal heritage</u>	<p>Mount Keira containing high cultural landscape significance. This is confirmed from a submission received by the Illawarra Local Aboriginal Land Council during the assessment of the application. Clarification has not been provided if the proposed development overlaps with the mapped extent of site 52-2-3198 as shown in the AHIMS site card. As per the Aboriginal Cultural Heritage Assessment Report recommends a Aboriginal Heritage Interpretation strategy to be prepared</p>	No

for the site. No such Strategy or draft has been provided. The proposal results in unacceptable visual impacts that it will have on Djeera (Mount Keira- a place of immense significance to the Aboriginal community) its cultural values, visual amenity and the landscape to which she is central.

7 Heritage (European)

Part of the site is identified as a Heritage Conservation Area shown on the Heritage Map and described under Part 2, Schedule 5 of WLEP 2009, being the C2 zoned portion of the land located within the Illawarra Escarpment Landscape Area.

No

In addition, the subject land is within the vicinity of the State general and landscape heritage item "Gleniffer Brae" and surrounding garden located at Wollongong Botanic Garden and locally listed Kemira Colliery.

It is considered the heritage assessment submitted is inadequate and the proposal has not demonstrated it will conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.

Refer to discussion under Clause 5.10 of WLEP 2009 in section 3.2.6 of the report and Chapter E11 below.

<u>8 Threatened species impact assessment</u>	The application was referred to Council's Environment Officer and unsatisfactory referral advice was provided. Refer to discussion in section 2.1 and 3.1 of the report on this matter.	No
<u>9 Geotechnical / land instability issues</u>	Concerns are raised that risk of slope instability during and after construction for the proposal may not be acceptable. Please refer to discussion in Chapter E12 below.	No
<u>10 Subdivision requirements</u>	The proposal seeks the strata subdivision of the proposed dwellings. It is considered the majority of the development controls are not relevant to the development as the built form works are not located within the C2 – Illawarra Escarpment. With the exception of the consideration of the subdivision on bushfire prone land where the proposal is unsatisfactory, refer to discussion in Chapter E16 below.	No
<u>11 Dwelling and outbuilding design requirements</u>	It is noted that proposed dwellings will not be located in the identified Illawarra Escarpment land corresponding with the C2 zoned land on the site. However, as discussed throughout the report concerns have been raised over the siting and orientation of the buildings on the site upon the prominent ridgeline and that the proposal has not been designed to suit the natural landform and other constraints of the site with the extensive removal of trees and vegetation.	N/A
<u>12 General Requirements</u>	<p>The proposed landscaping proposed is considered insufficient, refer to discussion in Chapter E6 below.</p> <p>The proposed concept stormwater design is not supported, refer to discussion in Chapter E14 below.</p> <p>Sydney Water have provided that water servicing is available with amplifications required however, concerns are raised with the provision of this servicing, refer to discussion in section 3.2.6 in Clause 7.1 of WLEP 2009.</p> <p>Concerns are raised with the waste management for the site discussed in Chapter E7.</p> <p>Riparian corridor management concerns have been raised by Council' Environment Officer, discussion in Chapter E23.</p>	No

CHAPTER D1 – CHARACTER STATEMENTS

Keiraville

Existing Character

Keiraville is set in a natural amphitheatre on the foothills of the Illawarra escarpment, below Mount Keira. Keiraville is home to the University of Wollongong, which is the main tertiary academic centre for the Illawarra Region. The suburb is in relative close proximity to Wollongong City Centre and is serviced by major road network links such as the Southern Freeway and Mount Ousley Road. It is also serviced by regular bus services to and from the city centre. Keiraville has a natural leafy setting and is characterised by a mix of housing types, including detached dwelling-houses on varied residential lot sizes as well as boarding-houses, villas, townhouses and walk up residential flat buildings. The detached dwelling-houses are predominantly single storey to two storey in height and are of a face brick or weatherboard construction with tiled hipped roof forms. The Wollongong Botanic Gardens and 'Glennifer Brae' historic house and gardens are also located within Keiraville. The Keiraville retail and business centre is a vibrant village centre which provides for the daily convenience needs of the surrounding residential population and university workforce.

Desired Future Character

Keiraville will remain a leafy suburb with a mix of housing types ranging from detached dwelling-houses, boarding-houses, villas, townhouses and some residential flat buildings. In this regard, additional medium density developments are likely to occur within reasonable walking distance to the University of Wollongong, especially in residential precincts directly to the east and south of the Wollongong Botanic Gardens. The Keiraville retail and business centre will remain a village centre and will continue to provide for the daily retailing and business service needs of the surrounding residential population and workforce. Higher order retailing and business services will continue to be obtained from Wollongong City Centre and the Fairy Meadow and Figtree town centres.

Council comment:

The proposed development is considered to be inconsistent with the existing character of Keiraville, being in terms of density as a multi-dwelling development of 42 dwelling and the built form presented in 5 buildings that are predominantly bulky in form and on a podium at a sensitive location.

Whilst the development type is supported as desired future character, the design of the development is not considered appropriate for the site and will result in extensive removal of trees and vegetation as discussed in other sections throughout the report.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Control/objective	Comment	Compliance
3.1 Lighting	Security and low-level bollard lighting will be provided throughout the development including at entry and exit points, along pedestrian routes and in communal open space areas, along driveways, in all parking areas and at entries to buildings.	Yes
3.2 Natural surveillance and sightlines	<p>The majority of the entrances to the dwellings all internally facing into a long narrow podium area and in some instances set above the adjacent driveway, isolating the building from the street. Therefore, the entrances to the dwellings are not visible from the internal road/driveway.</p> <p>The placement and design of the entrances and podium level have limited or no ability for casual surveillance.</p> <p>Pedestrian access through the site is not clearly defined and consists of steep narrow paths that are obscured from view.</p> <p>Casual surveillance of the hardstand visitor car parking spaces is limited.</p>	No
3.3 Signage	Due to the scale of the development it is considered wayfinding and indicative signage plans are required to be provided.	No
3.4 Building design	It is considered that the proposed development does satisfy CPTED principles in minimising areas of entrapment and concealment refer to discussion at 3.2 above.	No
3.5 Landscaping	It is generally considered the proposed landscaping could create areas of concealment and entrapment with the height of the retaining walls the inability to provide direct sightlines.	No
3.6 Public open space and parks.	There are no areas of public open space proposed or required.	N/A
3.7 Community facilities & Public Amenities	There are no community facilities located within the development as proposed.	N/A
3.8 Bus stops and taxi ranks	There are bus stops located within vicinity of the subject site.	Yes

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

A traffic impact assessment was submitted with the proposal found that the existing local roads on approach to the site will generally have adequate capacity to accommodate the proposed development-generated traffic. The relevant intersections have been modelled in SIDRA and will operate with good levels of service during these times.

There are several long sections of the southern access driveway which have grades of 26.8% which exceed the maximum 25% stated in AS2890.1. It is considered these grades are unlikely to be

acceptable to RFS and NSW Fire and Rescue who will need to service the site in a fire emergency. In addition, the proposal has not demonstrated swept paths for the access road that emergency vehicles such as the 'general' and 'specialist' fire appliances detailed on page 8 of the NSW Fire Safety Guidelines. The internal grades within the development also exceed the maximum grades for a fire appliance are 16.6% (page 14 of NSW Fire Safety Guidelines).

The proposal provides for the required car and bicycle parking provision for residents and visitors as provided below:

	<i>Rate</i>	<i>Calculation</i>	<i>Required</i>	<i>Provided</i>	<i>Compliance</i>
Multi-dwelling housing					
<i>Resident</i>	Units >110sqm, 2 spaces per dwelling	42 x 2	84	84	Yes
<i>Visitor</i>	0.2 spaces per dwelling	42 x 0.2	8.4	12	Yes
<i>Bicycle parking</i>	1 bicycle space per 3 dwellings (residents) and	42/3	14	10	No
	1 bicycle space per 12 dwellings (visitors)	42/12	3.5	4	Yes
<i>Motorbike parking</i>	1 motorcycle space per 15 dwellings	42/ 15	2.8	6	Yes

The proposed garage dimensions do not appear to comply with the minimum dimensions in of 6 metres x 6 metres for double garages. The proposed unenclosed bicycle rails do not comply with the security requirements of AS2890.3. Secure residential bicycle parking needs to be either provided in a secure compound with a self-closing door and combination keypad, or individually located within the residential garages; not encroaching on the vehicle envelopes as stated in AS2890.1 or impacting on internal circulation for users of the garages (blocking ingress/egress).

This area provides one (1) parking bay for service contractors. It is considered that location of this parking bay is considered impractical in the event the service contractors requires to access the buildings within the site as the it is located and traversing the driveway up to the buildings are a significant distance away and in reality contractors will drive to the required location within the site.

The SEE outlines that removalist vehicles are also use the service parking bay and a change to use a light vehicle vans is required to proceed further up the internal driveway to the buildings. To adequately accommodate this arrangement, it is considered more than one parking bay will be required to be provided in the utility area. Furthermore, the reality of managing a removalist truck then transitioning to a light van vehicle for the 42 dwellings at all times is considered to be difficult and potentially impractical for future residents.

CHAPTER E6: LANDSCAPING

Landscape plans and an arborist report was submitted. Council's Landscape Officer reviewed the application and has provided unsatisfactory referral advice.

Pedestrian access has not been provided to the entire internal road. The pedestrian stair access and boulevard footpath has been provided on fire egress road only and appears less than 1.5m wide. The number of dwellings and available landscape area due to the extent of internal roads, retaining walls, basements and podium planting along with limitation to comply with Planning for Bushfire Protection

restricts the location establishment and the amount of significant tree planting to soften the built form. The small landscaped areas which will be very difficult to access and maintain in the long term.

The opportunities for Landscaping, urban greening outcomes and compensatory planting on this site is limited by the Planning for Bush Fire Protection. In this regard the limitation and restriction for planting, the visual prominence of the site will result in the building forms dominating the landscape. The retaining wall within the water quality ponds make this area very difficult to access for maintenance and present issued from a Work health and safety.

The proposed maintenance of C2 zone and APZ is very difficult due to the nature of the existing steep terrain via the use of harnesses and lanyards of guardrails is a very difficult and present significant Work Health and safety concerns.

Despite the numerical compliance it is considered the proposal is inconsistent with the objectives of the control.

As discussed previously the proposal as not been designed preserve and retain existing native trees and vegetation with the removal of all trees with the development footprint, totalling 261 trees that are in reasonable health. Insufficient landscaping has been proposed to address the significant number of trees to be removed.

The landscape design for the site appears to have been developed in response to the proposed architectural plans. The proposed built form of the dwellings on podiums with buildings in close vicinity to each other prevents the ability for substantial planting to be integrated within the development.

CHAPTER E7: WASTE MANAGEMENT

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

Waste servicing is reliant on bins being brought from each garage / ground floor level to the Utility Building for collection. Communal waste areas are designated for each building however, it is unclear how the waste will be transported to the waste collection point, given the distances and steep grades involved. A waste/recycling utility area is proposed located towards the front of the site at the end of the access handle. The proposal seeks Council's waste collection within the site.

The Plan of Management indicates that on garbage collection days, the loading area is unable to be used for any other purpose and residents will be responsible for making appropriate arrangements with retailers for the delivery of goods to the individual dwellings in appropriately sized vehicles, on the allowable days. It is unclear how this servicing arrangement will be able to reasonably or safely function for the number of proposed units, for the life of the development. It is impractical to require all removalist, furniture and larger deliveries to the 42 dwelling development will be transferred at the service parking bay to a light vehicle for transport into the Site.

CHAPTER E10 ABORIGINAL HERITAGE

An Aboriginal Cultural Heritage Assessment Report and Archaeological Report (ACHAR) was submitted with the application. However, it is acknowledged that Mount Keira containing high cultural landscape significance. This is confirmed from a submission received by the Illawarra Local Aboriginal Land Council during the assessment of the application. Clarification has not been provided if the proposed development overlaps with the mapped extent of site 52-2-3198 as shown in the AHIMS site card. As per the Aboriginal Cultural Heritage Assessment Report recommends an Aboriginal Heritage Interpretation strategy to be prepared for the site. No such Strategy or draft has been provided. The proposal results in unacceptable visual impacts that it will have on Djeera (Mount Keira- a place of immense significance to the Aboriginal community) its cultural values, visual amenity and the landscape to which she is central.

The application was referred to Heritage NSW for concurrence with regard to the whether the proposal requires an Aboriginal heritage impact permit (AHIP) under section 90 of the National Parks and Wildlife Act 1974 and General Terms of Approval (GTAs) to be issued. Correspondence received from Heritage NSW dated 18 August 2022 as indicated that the application does not require an AHIP or GTAs however, has provided a number of matters that should be considered with regard to Aboriginal cultural heritage assessment. Refer to section 1.6.2 of the report for further discussion on this matter.

The application was reviewed by Council's Heritage Officer and unsatisfactory referral advice was provided. The proposal does not meet the requirements of this chapter.

CHAPTER E11 HERITAGE CONSERVATION

Part of the site is identified as a Heritage Conservation Area shown on the Heritage Map and described under Part 2, Schedule 5 of WLEP 2009, being the C2 zoned portion of the land located within the Illawarra Escarpment Landscape Area, item no. 6480 is required for works within a heritage conservation area and subdividing of land. Vegetation management works are proposed within the C2 zoned land.

In addition, the subject land is within the vicinity of the State general and landscape heritage item no. 5904 "Gleniffer Brae" and surrounding garden located at Wollongong Botanic Garden, Keiraville on Lot 3 DP 252694 and locally listed Kemira Colliery at Mount Keira Road, on Part Lot 31, 32 DP 751299 and Lot 1 DP 852788.

A Heritage Impact Statement (HIS) was submitted with the application and reviewed in conjunction other documents by Council's Heritage Officer. It was considered that the proposal will have significant visual and cultural impacts on Gleniffer Brae and the Illawarra Escarpment State Heritage Conservation Area as well as on Mount Keira. There are a number of deficiencies in the submitted HIS however, it has not adequately assessed the potential heritage impacts with regard visual impact of the proposal on the Illawarra Escarpment and Gleniffer Brae.

The proposal sought is considered an overdevelopment of the site and will have significant visual and cultural impacts on Gleniffer Brae and the Illawarra Escarpment State Heritage Conservation Area as well as on Mount Keira. It is considered the heritage assessment submitted is inadequate and the proposal has not demonstrated it will conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.

CHAPTER E12 GEOTECHNICAL ASSESSMENT

Concerns are raised that the risk of slope instability during and after construction may not be acceptable. It is unclear in the Geotechnical Site Investigation Report submitted whether the risk assessments take into account a number of matters however primarily drainage design and management and the full extent of the proposed vegetation removal. Drainage design and management, both during construction and throughout the life of the development, is fundamental to the geotechnical stability of the Site. The importance of this aspect of the proposal is not adequately reflected in the Geotechnical Report. In addition, the method of establishing the extent of area assess as suitable for development is not provided in the geotechnical report. Elements of the proposed development will extend before the 'suitable' geotechnical extent of building area.

CHAPTER E13 FLOODPLAIN MANAGEMENT

The site is identified to be flood affected in uncategorised flood risk precinct. The application has been reviewed by Council's Stormwater Officer where it has been provided the flooding within the vicinity of the site is confined to the watercourses within valleys to the north and south of the development. The development itself is located wholly above the flood planning level and complies with provisions of this chapter.

CHAPTER E14 STORMWATER MANAGEMENT

The proposed concept stormwater management plan proposes to divert a significant additional catchment area (approximately 16,500m²) from the site to Council's existing stormwater drainage system in Andrew Avenue and Cedar Grove where this runoff currently does not drain. The catchment area diversions noted above are not inclusive of pit/pipe blockages.

The proposal is contrary to the requirements of this chapter, which requires that natural catchment boundaries are to remain unaltered, and in situations where proposed impervious areas straddle natural catchment boundaries, multiple separate OSD systems shall be provided.

The proposed easement and stormwater outlet pipe from the northern catchment does not extend to the watercourse. This proposal is inconsistent with the requirements of Section 9.3.3 of Chapter E14 of the Wollongong DCP2009, which requires that the watercourse to which it is proposed to discharge stormwater must be well defined, having defined bed and banks. Also, insufficient survey information

has been provided along the required easement alignment (incl. receiving watercourse defined bed and banks) to demonstrate that the disposal pipe, outlet, and scour/erosion protection measures will be contained wholly within the easement with the outlet oriented in the direction of flow of the receiving watercourse. The proposal does not satisfy the requirements of Section 9.3.6(a) of Chapter E14 of the Wollongong DCP2009, with respect to the drainage easement. The submission of documentary evidence has not been provided at the lodgement of the development application which confirms that the downstream property owners (incl. Lot 96 DP 30903 and Lot 100 DP 1257652) agree to the provision of a drainage easement through their property.

In addition, there are other deficiencies with the proposed stormwater management for the development that is inconsistent with the requirements of the chapter. The application has been reviewed by Council's Stormwater Officer and unsatisfactory referral advice has been provided where the proposal cannot be supported.

CHAPTER E15 WATER SENSITIVE URBAN DESIGN

The proposal involves more than 20 dwellings and requires the incorporation of appropriate water sensitive urban design measures for the development. A water cycle management study that proposes a bioretention basin for the development has been submitted. The application has been reviewed by Council's Environment Officer and it is considered the proposal is generally consistent with the WSUD principles.

CHAPTER E16 BUSH FIRE MANAGEMENT

A bushfire assessment report was submitted with the application. The proposal is Integrated Development for a Special Fire Protection Purpose under section 4.46 of the EP& A Act 1979 and section 100B of the Rural Fires Act 1997 as the development seeks subdivision on bushfire prone land requiring a Bush Fire Safety Authority from the NSW RFS. Details of the proposal were referred to the NSW RFS and no correspondence has been provided to date.

The proposal falls short of the acceptable solutions of section 5 (Access measures and APZs) of PBP 2019 and does not propose a performance-based solution which satisfies the performance criteria. The short run fire methodology used in support of the application is unsuitable for use in the context of the Site. The vegetation assessment has not been done in accordance with PBP 2019 Appendix 1, section A1.2. It does not accurately reflect actual and likely future vegetation types following regeneration. It treats privately owned adjoining land as managed lands, notwithstanding the absence of any formal approval of, or requirement for, active management of the vegetation on these lands. Proposed landscape planting (internal gardens, plants, screening trees and green roofs) not to comply with the requirements of PBP Appendix 4, Section 4.1.1. The proposal has not demonstrated compliance with Planning for Bushfire Protection 2019.

CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

The proposal seeks to remove all trees with the development footprint. That results in a significant number of trees to proposed to be removed at an approximate total of 261 trees including hollow bearing trees. It is considered the design of the proposal does not seek to maximise the protection of existing vegetation; protect and enhance native vegetation, habitat for native fauna and biodiversity or for its scenic values and to retain the unique visual identity of the landscape in accordance with its cultural heritage and landscape significance. Therefore, inconsistent with the objectives of this chapter.

CHAPTER E18 THREATENED SPECIES

The applicant submitted a BDAR and the application was reviewed by Council's Environment Officer where unsatisfactory referral advice was provided. Refer to discussion of this matter in section 2.1 and 3.1 of the report.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

A significant amount of bulk earthworks are proposed across the site to accommodate the proposal design with a maximum cut of up to 10m and fill up to 3.5m predominantly along the ridgeline of the property. This will result in the built form to be associated with significant podium areas, a series of high retaining walls and suspended parts of the driveway for the development.

The natural feature of the escarpment foothill will be significantly altered through extensive excavation and levelling with the site located on a prominent ridgeline that is highly visible from throughout the city. The works is considered to impact the visual amenity of from adjoining properties, surrounding area and the locality.

The earthworks with the associated built form will also result in the indirect impacts with the diversion of a significant catchment area (approximately 15,000sqm) to the existing drainage system in Andrew Avenue where this runoff currently does not drain. This will remove a significant portion of natural surface and subsurface flows from existing vegetated area within the site and within the natural valley and watercourses north and south of site. There has been limited to no consideration impacts of this diversion. The proposal will disrupt and have a detrimental effect on the existing drainage patterns in the locality and the potential for adverse impacts on a watercourse or environmentally sensitive area.

The application has been reviewed by Council's Stormwater and Environment Officers were concerns are raised with unsatisfactory referral advice. The proposal is inconsistent with a number of objectives of this chapter.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT

Council's Environment Officer has reviewed the proposal and provided a satisfactory referral response. See further discussion at SEPP (Resilience and Hazards) 2021 at section 3.2.1 of the report.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

A Soil and Water Management Plan has been submitted and reviewed by Council's Environment Officer no specific objections were raised.

CHAPTER E23: RIPARIAN LAND MANAGEMENT

There are two watercourses that run to the north and south-west of the site. These are both identified as Riparian land and Category 1 watercourses in Chapter E23 of WDCP 2009, requiring a 50m riparian corridor. A portion of the proposed APZ falls within a section of the corridor along the north of the site that will require vegetation removal.

In addition, it is noted that the design of the proposed easement and stormwater outlet pipe from the northern catchment does not extend to the watercourse situated within 2 Cosgrove Avenue. Therefore, the details of the design within the riparian land is unclear.

It is noted that no response has been received from the DPI - Water proposal as the application is nominated to be Integrated Development under the Water Management Act 2000 as discussed in section 1.6.2.

It is considered the proposal has not demonstrated that the development will not adversely impact upon riparian lands.