4.0 Relevant Environmental Planning Instruments & Acts

4.1 State Environmental Planning Policy No.53 - Metropolitan Residential Development (SEPP 53)

SEPP 53 is the environmental planning instrument that previously applied to the subject site, although it has recently been repealed with the gazettal of the Ku-ring-provisions of SEPP 53 are addressed in **Table 3** below. The reason for addressing the SEPP 53 controls is that the Council's Development Control Plan 2010 specifically requires compliance with the design principles and control drawings for Site 2 and the general controls and guidelines in the Development controls and design guidelines—six SEPP 53 sites in Ku-ring-gai dated January 2003.

REFERENCE	PROVISION	PROPOSAL	COMPLIES
PART 1: Preliminary Clause 3 Aims	 (1) This Policy aims to encourage the provision of housing in metropolitan areas that will: (a) broaden the choice of building types and locations available in the housing market, and (b) make more efficient use of existing infrastructure and services, and (c) reduce the consumption of land for housing and associated urban development on the urban fringe, and (d) be of good design. 	By introducing a residential flat housing development on a site currently occupied by 5 dwelling houses, the proposal is consistent with Aim (a) as it increases the stock of units in a locality dominated by dwelling houses. The site is within 500m walk from Pymble Railway Station, thus making more efficient use of this infrastructure. The increase in population on the site will assist in reducing demand for land and new housing on the urban fringe. As is demonstrated generally in the body of this report, the development is considered to be of good design.	Yes
PART 4: Targeted Sites for Residential flat Housing Clause 22 Aims & Objectives of Part 4	 (1) The objective of this Part is to provide an opportunity to stimulate redevelopment of specific sites and localities that are suitable for residential flat housing combined with development for any other purpose) in order: (a) to increase housing supply and choices, and (b) to promote social and economic development, by allowing development of sites and localities close to transport, employment opportunities and other relevant services, Where local environmental planning controls do not satisfactorily deal with redevelopment of that kind. 	The redevelopment of the subject site, as proposed, is consistent with these objectives as it will increase housing supply and choices by adding additional apartments in a locality dominated by single dwelling houses. As previously stated, given that the site is located within walking distance from Pymble Station, the additional population that will result from the subject proposal will be within easy reach to employment opportunities, shops and services via this public transport link.	Yes
Clause 24 Altering of ocal planning controls	(1) This Part alters the local planning controls applying to land described in Schedule 4 in the manner set out in that Schedule.	Noted, the proposal is permissible by virtue of these provisions, as detailed below in this table.	Noted

Table 3: SEPP 53 Compliance Table

Clause 26 Development standards	Development standards in Schedule 4 apply despite any development standards in the local environmental planning instrument altered by that Schedule.	Noted, the development standards within Schedule 4 of this Policy override any conflicting provisions in the Ku-ring-gai Planning Scheme Ordinance (KPSO).	Noted
PART 5: Design Requirement Clause 27 Objective	The objective of this Part is to establish a process and criteria that encourage good design in residential development that may be used in the design and assessment of development allowed by this Policy.	Noted	Noted
Clause 31 Site Analysis	(1) Consent must not be granted for development to which this Part applies unless the consent authority has taken into account a site analysis prepared in accordance with this clause.	The Site Analysis is contained in Section 2 of this report and the Site Analysis Plan is contained in Appendix 4.	Yes
	(2) A site analysis must: (a)contain information, where appropriate, about the site and its surrounds as described in Schedule 5 (Site analysis), and	It is confirmed that all of the required information is contained within the Site Analysis consisting of both the written Site Analysis, the Site Analysis Plan as well as the Survey Plan in Appendix 2.	Yes
	(b)be accompanied by a written statement explaining how the design of the proposed development has regard to the site analysis.	Refer to Section 2.5 for the appropriate written statement.	Yes, refer to Section 2.5.
Clause 32 Design of Residential Development	Consent must not be granted for development to which this Part applies unless the consent authority is satisfied that the proposed development demonstrates that adequate regard has been given to the following principles: (a) Streetscape The proposed development should:	The number of buildings on the site has been deliberately limited in order to maximise the retention of significant trees and landscaped setting, which are critical elements in the local streetscape character and residential amenity.	
	i) contribute to an attractive residential environment with clear character and identity, and		Yes
	where possible, retain, complement and sensitively harmonise with any heritage conservation areas in the vicinity and any relevant heritage items that are identified in a local environmental plan.		
	 (b) Visual and Acoustic Privacy The proposed development should, where practicable, consider the visual and acoustic privacy of neighbours in the vicinity and residents by: appropriate site planning, the location and design of windows and balconies, the use of screening devices and landscaping, and ensuring acceptable noise levels in internal living and sleeping areas of new dwellings. Note: Australian Standards AS 2107-1987 (Acoustics) and AS 3671 (Road Traffic Noise Intrusion) should be referred to in establishing noise levels.	In the design of the proposal, great care has been taken to locate the buildings primarily toward the northern section of the site and away from the majority of neighbouring properties to the south. The vegetation in the riparian corridor provides an effective screen for privacy for most neighbours to the west of the development. In other areas, privacy to neighbours has been ensured by using an absolute minimum side/rear setback of 5m, in accordance with the Building	Yes
	(c) Solar Access and Design for Climate The proposed development should, where possible: i) ensure adequate daylight to the main	Envelope Control Drawings in the Ku-ring-gai Sites Report and orienting windows/balconies away from adjoining dwellings. In this regard and with particular reference to train noise, refer to the	Yes

 living areas of neighbours in the vicinity and residents and adequate sunlight to substantial areas of private open space, and involve site planning, dwelling design and landscaping that reduces energy use and makes the best practicable use of natural ventilation solar heating and lighting. Note: AMCORD A National Resource Document for Residential Development, 1995, may be referred to in establishing adequate solar access and dwelling orientation appropriate to the climatic conditions. 	Acoustic Report. The shadow diagrams attached in Appendix 19 and 20, indicate that, where it is possible, the main living areas and substantial areas of private open space of neighbouring properties receive at least 3 hrs of direct sunlight for the vast majority of the year. As detailed in the Design Statement in Appendix 7, the proposal has been designed appropriately to maximise natural lighting, solar heating and ventilation.	
 (d) Stormwater The proposed development should, where possible: control and minimise the disturbance and impacts of stormwater runoff on adjoining properties and receiving waters, and include, where practical, on-site stormwater detention or re-use for second quality water uses, and be designed with regard to the scope for on-site infiltration of water. 	By minimising the number of buildings proposed on the site to 5 buildings, deep soil and on-site filtration of water has been maximised. The Stormwater Report attached as Appendix 13 concludes that with on-site detention, stormwater leaving the site will be retained at pre- development conditions and velocity and water depth will be improved. It was also found that water quality downstream would not be adversely affected, provided the recommendations of the report are implemented.	Yes
 (e) Crime Prevention The proposed development should, where possible, provide personal property security for residents and visitors and encourage crime prevention by: i) site planning that allows, from inside each dwelling, general observations of the street, the site and approaches to the dwelling's entry, and ii) providing shared entries that serve a small number of dwellings and are able to be locked, and iii) providing dwellings designed to allow residents to see who approaches their dwellings without the need to open the front door. 	The Stage 1 building fronting Avon Road incorporates balconies off living areas oriented to the street and also overlooking entry points where possible. Each floor contains a small number of dwellings. Access to each floor can be controlled via access cards for the lift and stairs. The ground floor shared entries provided serve as main entries to all dwellings for each building. This is considered safer as they are more frequently used than an entry serving only a few dwellings. As a result, better passive surveillance of the entry area is achieved. An intercom system will be provided for each building allowing residents to control and monitor the entry of visitors. An intercom system is to be installed that will allow residents to identify visitors and control their access.	Yes

 (f) Accessibility The proposed development should, where appropriate: have convenient, obvious and safe pedestrian and bicycle links from the street that provide access to public transport services and local facilities, and provide attractive, yet safe, environments for pedestrians, cyclists and motorists with convenient access and parking for residents and visitors, and where feasible, involve site layout and design that enables people with a disability to access, on one continuous accessible path of travel, the street frontage, car parking, and all buildings, facilities and open spaces within the site. Note: Australian Standards AS 4299-1995 (Adaptable Housing) and AS 1428-1992, 1993 (Design for Access and Mobility) should be referred to for design in considering people with a disability.	Bicycle parking areas are provided in the basement parking levels with easy access via the access ramps to Avon Road, Arilla Road or Beechworth Road, as relevant. Bus and rail services are in close proximity centred around Pymble Station. Achieved, refer to architectural plans in Appendix 8 and 9. This has been achieved where it has been feasible.	Yes
(g) Waste Management The proposed development should, where possible, be provided with waste facilities that maximise recycling by the provision of appropriate facilities.	As demonstrated in the detailed plans for Stage 1 of the development in Appendix 9. A garbage room and recycling collection area is provided in the basement parking levels.	Yes
 (h) Visual Bulk The proposed development should, where practicable, maintain reasonable neighbour amenity and appropriate residential character by: i) providing building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing, and ii) using building form and siting that relates to the site's land form, and iii) adopting building heights at the street frontage that are compatible in scale with adjacent development, and iv) considering, where buildings are located on the boundary, the Impact of the boundary walls on neighbours.	This is achieved by locating the taller buildings proposed to an area adjacent to the railway and the centre of the site and furthest away from adjoining properties. We believe that the proposal responds better to the landform of the site than the Ku-ring-gai Reference Plan building footprints. Refer to architectural plans in Appendix 8 and 9 . Heights of proposed buildings gradually fall across the site towards the lowpoint of the site in the southern corner. It is not practicable to try to make a flat building the same scale as a dwelling house. What has been done along the Avon Road frontage with the Stage 1 building is to restrict the height to 4 storeys and provide transition from higher buildings deeper back in the site (adjacent to the railway) to the dwellings are located on any boundaries.	Yes

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Schedule 4 Amendments Allowing Residential flat Housing	(1) Part 4 of this Policy applies to each of the following sites in the local government area of Ku-ring-gai so as to allow developments for the purposes of multi unit housing to be carried out on those sites:	Noted, these clauses allow residential flat housing on the subject site.	Noted
Clause 1 Ku-ring-gai sites	(b) Site 2 - the land comprising No's 1A, 1, 3, 5 and 7 Avon Road, and No.1 Arilla Road, No.12 Mayfield Avenue and No's 2-8 Beechworth Road.		
	 (2) Development for the purpose of multi unit housing may be carried out, with development consent, on a site specified in subclause (1), despite the provisions of any other environmental planning instrument applying to the site. (4) If a development application is made in 	Noted, the development is permissible.	Noted
	 respect of part of a site specified in subclause (1): (a) the consent authority must take into consideration the effect that the proposed development will, or is reasonably likely to, have on the ability to develop the remainder of the site in the manner described in the Ku-ring-gai Reference Plan or 	Refer to Section 4.1.1 for a detailed discussion on 'orphan sites'.	Yes, relevant information is provided
	 the Ku-ring-gai Sites Report, and the consent authority must not grant development consent to the development application if the consent authority is of the opinion that the granting of consent would, or would be reasonably likely to, have a significantly adverse affect on the ability to develop the remainder of the site in the manner described in the Ku-ring-gai Reference Plan or the Ku-ring-gai Sites Report. 	Refer to Section 4.1.1 for a detailed discussion on 'orphan sites'.	Yes, on merit.
	(5) Consent must not be granted to a development application for consent to carry out development for residential flat housing for a site specified in subclause (1) unless the consent authority has considered the Ku-ring-gai Sites Report.	The Ku-ring-gai Sites Report is considered within this report in detail in Section 4.1.2 below.	Yes, the Ku-ring-gai Sites Report has been
	(6) Consent must not be granted to a development application for consent to carry out development for residential flat housing for a site specified in subclause (1) unless the consent authority is satisfied that the proposed development generally conforms to the deemed development standards set out in the sheets of the Ku-ring-gai Reference Plan that relate to the site, subject to subclause (7).	The proposed development varies from the building footprints and envelopes set out in the Ku-ring- gai Reference Plan.	considered in the design of the proposal. No
	(7) If it is necessary in order to conserve an item of the environmental heritage or threatened species population or ecological community, consent may be granted to a development application for residential flat housing in relation to a site specified in subclause (1) if the consent authority is satisfied that the proposed	The site is identified as containing some remnant Blue Gum High Forest (BGHF). This is listed as a critically endangered ecological community. The subject proposal	

	 development will implement the relevant design principles set out in the Ku-ring-gal Sites Report. (9) State Environmental Planning Policy No.1 - Development Standards applies to and in respect of a deemed development standard in the same way as it applies to and in respect of a development standard, except that clause 7 of that Policy does not apply so as to require concurrence of the Director-General to the granting of consent to a development application where an objection has been made under clause 6 of that Policy in respect of a deemed development standard. 	will fund the rehabilitation of the BGHF on the site, which is currently infested with weeds and in decline. The subject proposal will also ensure ongoing management and maintenance of the BGHF on the site and ensure its continued survival on the site.	Variation to Ku-ring-gai Reference Plan permitted under this clause.
	(10) deemed development standard means a standard (such as a standard relating to a setback, building envelope or building height) adopted in the Ku-ring- gai Reference Plan that, it were included as a provision in a local environmental plan, would be a development standard.	Noted	Noted
221 21 N	development for residential flat housing means development for the purpose of residential flat housing combined with development for any other purpose, and includes, in relation to Site 4 specified in subclause (1)(d), development for the purpose of residential flat housing and development for retail or commercial purpose.	Noted	Noted
	Ku-ring-gai Reference Plan means the map comprising 14 sheets marked "State Environmental Planning Policy No 53 - Amendment No.7" prepared by the Dept of Planning and deposited in the Sydney office of the Department.	Noted	Noted
	Ku-ring-gai Sites Report means the report entitled Draft development controls and design guidelines - six SEPP 53 sites in Ku-ring-gai dated October 2002 and prepared by the Department of Planning, as modified by the report entitled Development controls and design guidelines - six SEPP 53 sites in Ku-ring-gai dated January 2003.	Noted	Noted

4.1.1 Ability to Develop the 'Orphan Sites'

Clause 1(4)(b) of Schedule 4 of SEPP 53 states the following:

"(b) the consent authority must not grant development consent to the development application if the consent authority is of the opinion that the granting of consent would, or would be reasonably likely to, have a **significantly adverse affect** on the ability to develop the remainder of the site **in the manner described** in the Ku-ring-gai Reference Plan or the Kuring-gai Sites Report." (our emphasis) Our reading of this clause is that its intent is to encourage development that allows all of the properties identified as being within the land described as "Site 2" in Clause 1(1)(b) of Schedule 4 to be developed in the manner described in the Ku-ring-gal Reference Plan. It is important to note the use of the words "in the manner described" rather than words commonly used in LEP's such as "in accordance with". This suggests some leeway in terms of the manner of developing this land provided it has the same basic character (ie based on the Ku-ring-gai Sites Report, that of a residential flat development comprising of a number of residential flat buildings of between 3 and 7 storeys).

Whilst in an ideal world, it is preferable to develop properties in a contiguous group that have been identified as being suitable for residential flat development together to achieve greater economies of scale in construction and design, not all landowners are prepared to allow their land to be developed at the same time, or even at all. The applicant has been able to acquire a number of properties forming almost all of the site identified in SEPP 53 as "Site 2". The properties that are included in the description of Site 2 but that have not been able to be acquired by the applicant (ie "orphan sites") are the following:

- 7 Avon Road;
- 12 Mayfield Avenue;
- 2 Beechworth Road;
- 6 Beechworth Road.

It is clear that the intent of the above clause is to <u>facilitate</u> the ultimate development of all identified properties for the purpose of residential flat residential development - <u>not to obstruct it</u>. If a property owner does not wish to sell their land for redevelopment then their rights must be respected. They may well change their mind at a later date. Our interpretation of this clause is that it is almed at encouraging development that does not include the entire site identified by SEPP 53 to be designed so that the future development of the orphan sites for the purposes of residential flat housing is still possible, notwithstanding the possibility that all of the sites may not be developed at the same time.

Taking into account the above and with particular reference to No.7 Avon Road, it is noted that the Building Envelopes Control Drawings in the Ku-ring-gai Sites Report show the following within the site boundaries of 7 Avon Road: a new street, the building footprint for a 3 storey residential flat building approximately the same size as the footprint to the dwelling at 11 Avon Road and, a small part of another larger residential flat building to the rear. The subject proposal incorporates a driveway adjacent to the common boundary between the site and No.7 Avon Road. SEPP 53 does not set any minimum lot size for the development of residential flat housing nor does it set any minimum site width. The development of 7 Avon Road for residential flat housing comprising a 3 storey residential flat building would be permissible with consent. There would be no need for the new road across 7 Avon Road indicated on the Building Envelope Control Drawings, given the driveway on the subject site, which also has the potential to be used by future development at 7 Avon Road although this would not be essential to make the redevelopment of 7 Avon Road work.

Given the above, we do not consider that the subject proposal would adversely affect the ability to develop No.7 Avon Road for residential flat housing in the manner suggested by the Ku-ring-gai Reference Plan and Ku-ring-gai Sites Report at some point in the future.

With reference to No.12 Mayfield Avenue, it will be noted from the proposed Site Plan incorporated in the architectural drawings for the Concept Plan in Appendix 8 that the entire of the subject site on the south-western side of the riparian zone has been left undeveloped in the proposal. This leaves the possibility for the owner of 12 Mayfield Avenue to purchase additional land from the subject site if need be, in order to increase the size of 12 Mayfield Avenue and develop their property for residential flat housing. The Building Envelopes Control Drawings in the Ku-ring-gai Sites Report shows part of a long building footprint for a 3-5 storey residential flat building over 12 Mayfield Avenue. Given the proximity of this building to a number of low density single dwelling sites to the northwest and south-west, we do not consider this to be an ideal location for such a building, due to amenity impact concerns. Instead, the subject proposal incorporates less buildings that are higher and further away from the majority of adjoining neighbours. This is considered to be a better design solution but there is nothing to stop the owner of 12 Mayfield Avenue from proposing the development of this site with a small, 3 storey flat building with a building footprint similar to the building footprint located across this property on the Building Envelope Control Drawings and even to purchase additional land in order to develop the entire building indicated on these drawings.

Given the above, we do not consider that the subject proposal would adversely affect the ability to develop No.12 Mayfield Avenue for residential flat housing in the manner suggested by the Ku-ring-gai Reference Plan and Ku-ring-gai Sites Report at some point in the future.

With reference to No. 6 Beechworth Road, the Building Envelopes Control Drawings in the Ku-ring-gai Sites Report includes the majority of a 3-5 storey residential flat building within this property. The design of the current proposal has left curtilage area within the development site that is immediately adjacent to this property and could potentially be amalgamated with this property to allow for a potential residential flat housing development of a similar nature to that indicated in the Building Envelopes Control Drawings in the future. Part of the subject site falls between No's 6 and 2 Beechworth Road and is proposed to be used as driveway area. There is alternative driveway access to the subject site to Beechworth Road via another access handle on the southern side of 6 Beechworth Road. With a reconfiguration of the driveway to the subject development, there is potential for No's 2 and 6 Beechworth Road to be amalgamated with curtilage area within the subject site and be developed in concert for residential flat housing. The Building Envelopes Control Drawings show 2 Beechworth Road as being primarily occupied by a new road connecting Beechworth Road with Avon Road. This connecting road is not considered to be appropriate, nor is it necessary from a traffic circulation point of view. In addition, Ku-ring-gai Council have advised that it does not want the new connecting road to be constructed. Thus, although 2 Beechworth Road is no longer required to be developed as a new public road, it is certainly possible for this property to be incorporated in a future residential flat housing development. Finally, it should also be noted that the proposed building adjacent to No's 2 and 6 Beechworth Road has deliberately been made the final stage of the development in case at some stage during the life of the project the owners of 2 and 6 Beechworth Road decide to approach the applicant to have these properties incorporated within the development.

As is evident from the above considerations, the future development potential of No's 2 and 6 Beechworth Road is not unreasonably inhibited by the subject proposal. The owners of these properties have a number of options before them should they wish to redevelop their properties generally in the manner described in the Ku-ring-gai Sites

Report. There may also be potential for 2 and 6 Beechworth Road to be developed together with a reconfiguration of the driveway to the Stage 5 apartment building in the subject site.

This matter is dealt with in greater detail in Section 8.4 of the EA.

4.1.2 Development Controls & Design Guidelines - Six SEPP 53 Sites in Ku-ring-gai, 2003 (Ku-ring-gai Sites Report)

Council's recently prepared DCP 2010 requires compliance with the Development Controls and Guidelines for the subject site under SEPP 53. The relevant provisions of the Ku-ring-gai Sites Report are therefore addressed in **Table 4** below. Where noncompliances have been identified or where further discussion is required, this is provided in separately headed sections underneath the table. The Ku-ring-gai Sites Report "Building Envelope Control Drawings" (BECD's) is reproduced in **Figure 4** below.



Figure 4: Building Envelope Control Drawings (BECD's) from the Ku-ring-gai Sites Report

Table 4: Ku-ring-gai Sites	Report Compliance Table
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PROVISION	PROPOSAL	COMPLIES
Design Principles for Residential Development Same as Clause 32 of SEPP 53, described in Table 3 above	Refer to relevant section in Table 3 above.	Yes
Site Specific Design Principles Locate development to protect the existing watercourse and significant vegetation. Consolidate open space to form useful landscaped spaces for residents and visitors.	The BECD's require 2 road bridges over the watercourse and riparian zone, a number of public roads and 9 building footprints. This results in the need to remove a greater number of significant trees, it will require greater disturbance of the banks of the watercourse to construct the bridges and roads, it will also interrupt the continuity of the remnant Blue Gum High Forest (BGHF) riparian vegetation. In proposing only 5 buildings rather than 9, and fewer, smaller driveways within the site, the subject proposal allows for a greater amount of deep soil planting and contiguous and useable open space on the site for use by residents and visitors.	Yes
Extend existing street along rail corridor to create new public street linking Avon Road and Beechworth Avenue to improve access and to provide address for higher- density development.	A street linking Avon Rd and Beechworth Rd adjacent to the rail corridor crosses over the catchment area for the watercourse and riparian vegetation corridor. It is contrary to the first design principle above. It also is a waste of the portion of the site located furthest away from single dwellings to the south, where higher buildings will have less impact on neighbours. Ku-ring-gai Council have advised that this road is not required and do not want it due to maintenance issues. The proposed internal driveway system is perfectly functional in terms of accessibility. Refer to the Traffic Report in Appendix 26 for further detail on why this internal road system is not necessary from a traffic circulation perspective. A presence and sense of address to Avon Road is achieved in the subject proposal with the Stage 1 building located at the Avon Road frontage.	No, a connecting public road is not wanted by the Council and has more detrimental impacts than positive benefits, particularly ecological impacts. The proposal is a better design solution.
Introduce other new streets to create address for new development located deeper in the site.	Again, it is not considered that creating 'address' is as important as minimising site disturbance and maximising the natural landscaped setting of the site. Internal roads/driveways are therefore functional and secondary to landscaping. Every effort has been made to retain as many significant trees as possible. This is particularly important as the site is identified as containing remnant BGHF refer to Flora and Fauna Report in Appendix 24 for further detail.	No, this design principle does not respond to presence of BGHF and need for landscaping to take priority over roads on the site. The proposal presents a better design solution.
Use transitional scale development to link higher-density development with existing dwellings.	The building heights adopted within the proposal have been developed from the need to provide this transition in height from the high density apartment buildings in Clydesdale Place to the north to the lower scale single dwelling development to the south, west and east of the site. The highest building is the Stage 4 building, which is at the northern edge of the site, adjacent to the rail corridor. The buildings to the west, east and south of the Stage 4 building become progressively lower in acknowledgement of the need to provide this transition in scale.	Yes
Reinforce character of Avon and Beechworth Roads with setbacks, new street trees and landscape.	An appropriate setback to Avon Road has been adopted in the subject proposal. No building is proposed at the Beechworth Road frontage due to inadequate building area. Appropriate landscaping, and street tree planting, where	Yes

	possible, is proposed to provide an attractive setting for the development and enhance the streetscape character of Avon Road and Beechworth Road.	
Building Envelope Control Drawings (BECD's) Description of Building Envelope Control Drawings shown in Figure 4 above: General Concept Description Site plan incorporating 1A, 1, 5 & 7 Avon Rd, 1 Arilla Rd, 12 Mayfield Ave & 2-8 Beechworth Rd showing 3 new internal roads connecting Avon Road in 2 locations and 1 connection to Beechworth Road, centrally located riparian area with 10m setback either side of creek bank stretching from mid point of railway frontage to middle of SW end of site. Generally, building depth Is restricted to 15m-18m. A total of 9 separate building footprints are incorporated in the BECD's including:	The proposed development site includes all of the nominated sites with the exception of 7 Avon Rd, 2 & 6 Beechworth Rd and 12 Mayfield Ave. By virtue of the existence of cl.1(4) of Schedule 4 of SEPP 53, the inability to obtain all of the nominated sites does not preclude development from proceeding although variations to the BECD's would obviously be necessary in such circumstances. The subject proposal includes 5 rather than 9 buildings although a comparison between the BECD's and the Concept Plan shows that the general locations of buildings on the site are similar. The Concept Plan includes internal driveways rather than roads with no connection between Avon/Beechworth Rds for reasons detailed above. Given the need to adapt the plan to the land available, the location of driveways is not vastly dissimilar to the BECD's with additional vehicular access points to Avon Rd, Arilla Rd and Beechworth Rd to share the distribution of vehicular trips to and from the site. The 10m wide setbacks for the riparian area in the Concept Plan comply with the BECD requirements. Maximum building depths are considered to be justifiably varied in the proposal as the well modulated building designs proposed with punched vold areas can meet the underlying objective of this control to ensure adequate internal solar access and ventilation to units. Strict compliance would result in a sub-optimal and inefficient building design.	Given the need to adapt the BECD's to the land available, the Concept Plan is not vastly dissimilar in internal driveway layout general location of buildings and the riparian area setbacks. Objectives of minimum building depths are met through better design.
	Due to the absence of 7 Avon Rd In the development site, the 2 separate buildings fronting Avon Rd have become a single building over 2 basement parking levels that are primarily located beneath the building footprint. This building is Stage 1 of the development. The Stage 1 building has a minimum 8m setback to Avon Rd with permitted balcony intrusions. Instead of 3 storeys in height, the Stage 1 building varies from 4 to 6 storeys in height. Although not consistent with the BECD's, the variable height proposed reflects more recent planning controls for the site found in the Ku-ring-gai (Town Centres) LEP, which set a max. height for the Avon Rd frontage of the site as 17.5m (5-6 storeys) and a max. height of 23.5m (7-8 storeys) within the remainder of the site The 6 storey component of the Stage 1 building is partially within the higher building zone within the middle of the site and provides a transition to the taller buildings deeper in the site. It has the same roof RL and is no higher than the 5 storey component of the Stage 1 building adjacent to it as it picks up a 6th floor underneath the building due to a fall in natural ground level below. Side setback to 3 Avon Rd ranges from 5m to 10.56m. The portion of the building at 5m setback is 4 storeys high and adjacent to the front setback area of 3 Avon Rd, which is not the primary outdoor open space for the dwelling. The variation in the setback allows for a step in the building to a 10.56m side setback to this property at the rear and adjacent to more private rear garden outdoor open space. Varying the 8m setback allows for a better modulated building and better privacy and setback to the rear garden of this neighbour. Side setback to 7 Avon Rd ranges from 12.75m to 22.8m. 15.5m is not required as this setback in BECD's was required to accommodate a new public street not now being proposed. The proposed setback is more than enough to achieve adequate separation and privacy.	Proposal does not strictly comply, a variation is necessary due to absence of 7 Avon Rd from site. Stage 1 building complies with 8m setback to Avon Rd and is generally consistent with height levels set by the Town Centres LEP and in generally same location as BECD building footprints. Side setback to 7Avon Rd complies whilst side setback requirement to 3 Avon Rd is averaged out to gain better separation to rear yard of this neighbour. Building separation complies.

Description of Stages 2 and 4 BECD Building Controls - A single, larger building located at NE end of site and adjacent to railway. 3-7 storeys in height with portion of building over 3 storeys at NW end away from 3 Avon Rd. 23m min setback to railway. 10m min setback to 3 Avon Road. 12m min separation to other buildings in development site.	Minimum building separation from other proposed buildings on the site is between 18m and 21m and easily complies with 8-12m minimum of BECD's. This building footprint in the BECD's roughly coincides with the location of the two separate Stage 2 and Stage 4 buildings. The portion of the site adjacent to the railway is located the furthest away from the majority of neighbouring single dwelling properties. It is therefore considered that more buildings should be located here than identified in the BECD's as this is the location where they will have the least impact on neighbours. Rail Corp have been consulted and have raised no objections to reduced setbacks to the railway generally of 10m with some minor projections that do not exceed the 6m setback of the Clyde Gardens development on the opposite side of the railway. The Ku-ring-gai (Town Centres) LEP sets a maximum height of 23.5m (7-8 storeys) for this section of the site. The Stage 2 building is well under this height limit being between 5-6 storeys in height. The same LEP 7-8 storey height limit applies to the more sensitive south western portion of the site, which is closer to single dwelling properties fronting Mayfield Ave, Arilla Rd and Avon Rd. Unlike the BECD's, the subject development does not propose a building in the SW corner of the site. In addition, the southern end of the proposed Stage 3 building has been kept to between 2-4 storeys in height where 7-8 storeys are permitted under the LEP. The floor space that could have been developed in the SW portion of the site has been effectively transferred to the less sensitive portion of the site adjacent to the railway. This is why we believe that the proposed Stage 4 building height of between 4 and 11 storeys is justified. When the permitted height under the Town Centres LEP is averaged out across the site, the development would be compliant. The Town Centres LEP is considered to be the most recent and more accurate reflection of the desired future character for the locality and, consequently, the he	The BECD design solution is sub-optimal, would result in greater amenity impacts to more neighbours, and is therefore varied in this instance. Heights are compliant with the Town Centres LEP when averaged across the site. No objections raised from Rail Corp to reduced setback to railway, which is still greater than similar development on opposite side of railway. Potential impacts of reduced setback to 3 Avon Rd
	requirements. Required BECD setback to 3 Avon Rd of 10m was reduced to 5m following consultation with Dept of Planning officers. Height at reduced setback restricted to 5 storeys. Even if a 10m setback were to be adopted, the rear yard of 3 Avon Rd would still be overlooked to some degree. This impact can be better addressed with conditions of consent requiring design features such as screen planting and fencing, non- transparent balcony balustrades, planter boxes and fixed angled louvres to prevent views downwards. Proposed minimum building separation to other proposed buildings is between 18m and 30.5m.	addressed with appropriate conditions of consent. Compliant building separation.
Description of Stage 3 BECD Building Controls - Large L shaped building footprint centrally located on site just to the east of riparian creek. Height between 3-6 storeys over 2 levels of basement parking. Minimum building separation is 12m. - 2 smaller building footprints located to rear of 15 Avon Road. Min 15m building	The 3 BECD building footprints described have been amalgamated into a single Stage 3 building. Amalgamating the 3 BECD buildings is a better design solution as it allows for less building and more landscaped open space in the more sensitive southern corner of site. Stage 3 building is also a more efficient design that is more economical to construct and with less impacts to neighbours. The relocation of the new street results in the Stage 3 building being closer to the riparian zone than the L shaped building in the BECD's but outside the required 10m riparian setback. This gives a better, more direct relationship between the apartments and riparian zone and better	Amalgamating footprints is better design solution and more efficient with less impacts to neighbours. Variation

Separation. 6m setback to rear boundary of 15 Avon Rd. Min 10m setback to rear boundaries of properties fronting Arilla Road. Height 3-4 storeys over 1 level of basement parking. Description of Stage 5 BECD Building Controls - Large L shaped building at NW end of site located between the railway and No.10B Beechworth Rd. Minimum building separation to closest flat building in the development is 10m. Height is between 3 and 7 storeys over 2 basement parking levels. Minimum setback to 10A and 10B Beechworth Rd is 5m. Minimum setback to railway is 23m.	 amenity and outlook. Height of Stage 3 building is between 2 and 9 storeys with lower portions of building where it is closest to boundaries with neighbours. 9 storey element is centrally located in site and adjacent to riparian zone. Ku-ring-gai (Town Centres) LEP sets a maximum height of 23.5m (7-8 storeys) for this section of the site. This building is considered to be compliant with height when averaged out across the site. The variable height allows the proposal to better respond to the need to protect the amenity of neighbours and scale the development gradually down across the site so that a transition to the lower scale dwelling house development is achieved. LEP heights are considered to have greater weight, as previously explained. Building separation to other proposed buildings is 18m - 26m and easily complies. Complies with BECD setback to Arilla Rd properties. Minimum setback to Avon Rd properties 5m at one point where development is 2 storeys but Avon Rd setback generally greater than this for remainder of building. This minor non-compliance with 6m setback requirement is not considered to affect amenity of neighbours due to 2 storey height of the development at this point The Stage 5 building has not used an L shaped footprint but has continued to employ a similar design as the remainder of the development as the modular design of these buildings makes them more efficient to construct and provides a higher level of articulation and design than encouraged by the BECD's. The setback to the railway is an innimum of approximately 7.5m. Rail Corp have not objected to this setback when consulted and the proposed setback is greater than that employed in the Ciyde Gardens development on the opposed building is 24.5m. Setback to 10A & 10B Beechworth Rd ranges from 8.5m to 10m. Proposed height varies between 5 and 9 storeys. The 9 storey element is closer to the railway whilst the lower portions of the building are adjacent to 10A and 10B Beechworth Rd	considered justified. Heights are compliant with the Town Centres LEP when averaged across the site. Compliant with riparian setbacks and building separation. Compliant with Arilla Rd neighbours setback and minor non- compliance with Avon Rd neighbours setback at one pinch point where development is 2 storeys with bulk of building complying. Building footprint proposed does not match BECD's exactly but is a better design solution. Railway setback is unnecessarily excessive and prevents utilising area of site where RFB's have least impact. No objection from Rail Corp in relation to reduced railway setbacks to adjoining properties than BECD's. Heights are compliant with Town Centres LEP when averaged across the site.
	Section 4.1.1 of this report, a large amount of curtilage area within the site has been left vacant to provide the potential in	

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Description of BECD Bullding Footprints Not Proposed - Large L shaped building fronting Beechworth Rd. 10m min separation. 3-5 storeys over 2 basement parking levels. Min setback to Beechworth Rd properties to SW is 5m. Building to be parallel to Beechworth Rd alignment with 6m min setback to Beechworth Rd. 23m min setback to Beechworth Rd. 23m min setback to railway (including new street). - medium sized rectangular building located in SW corner of site over 12 Mayfield Ave and 1A Avon Rd. 3-5 storeys in height over 2 levels of basement parking. Min setback to rear boundaries of Arilla Road properties is 10m. Min setback to 10 Mayfield Ave is 15m.	the future of No's 2 and 6 Beechworth being developed in the future with possible amalgamation of spare land from the development site. Theoretically, it would have been possible to relocate this building further to the north-east, notwithstanding the absence of 12 Mayfield Ave from the site. However, it was not considered appropriate to develop this portion of the site in any way. It will be left as additional deep soil area and an extension of the riparian zone. This also ensures that the numerous existing trees adjacent to the common property boundaries with 10 Mayfield Ave and 10A Beechworth Rd are all retained and provide screening between the remainder of the development and adjoining single dwelling properties to the north-west. Consequently, this building is <u>not proposed</u> and this is considered to be a better design solution than that illustrated in the BECD's.	Not appropriate to propose this building due to No's 2 and 6 Beechworth not being part of the development site. Not appropriate to propose this building due to absence of 12 Mayfield Ave from site and in order to increase deep soil zone plus retain existing trees for screening of remainder of development from neighbours.
DESIGN GUIDELINES LOCAL CONTEXT		
 Building Heights All heights shown on BECD's given in storeys above finished ground level. Mezzanines, habitable rooms in roof space, and basements or car parking protruding more than 1.2m from finished ground level are to be counted as storeys. 	Building height compliance is addressed in the previous section of this table above.	Refer to previous section of table.
 Building Footprints All development must be sited entirely within the building footprint area indicated in the BECD's. Exceptions: Underground car parking structures (no more than 1.2m above FGL) may encroach beyond a building footprint to the extent indicated in the BECD's where they will not compromise street character or a specific deep soil zone. Awnings associated with building entries and ground floor retail uses may project beyond building footprint. Balconies above ground floor may extend beyond a building footprint 	By virtue of the existence of cl.1(4) of Schedule 4 of SEPP 53, the inability to obtain all of the nominated sites does not preclude development from proceeding although variations to the BECD's would obviously be necessary. In such circumstances, these building footprint controls are unreasonably restrictive and do not necessarily result in the best development for the site. The design of the underground carparking levels for the proposal has been designed with greater emphasis on responding to the topography of the site and avoiding unnecessary excavation where possible rather than slavishly attempting to comply with the BECD's, which do not appear to take topography into account. It would appear that the primary objectives of the building footprint controls is to maximise deep soil planting on the site and ensure a quality streetscape character.	No, not possible to comply with the BECD as all of the properties not available for development at same time.
 to the extent indicated in the BECD's (generally a maximum of 2m). Bay windows may also extend beyond a building footprint but must cantilever from the primary structure and not continue to ground level. 	There is more than one way to achieve these objectives. Deep soil planting is maximised in the proposal by using only 5 buildings rather than 9. We regard this as a better solution allowing greater design flexibility that can respond to the site far better than the development indicated in the BECD's. Streetscape character is not compromised by having an alternative basement parking design that is more	The development is compliant where possible.

			efficient and easier to construct.	
•	no an wh	ew streets, view corridors, minated breaks in the building form, d through-site links are required here indicated in the building velope control drawings.	The view corridor down the length of the riparian zone is maintained, a 5 building proposal also allows for more generous breaks between buildings and more view corridors between buildings down the length of the site. The proposal does not preclude the possibility of maintaining the through- site pedestrian links nominated in the BECD's other than the pedestrian connection to Mayfield Ave, which is not possible as 12 Mayfield Ave is not part of the development site.	Noted
Bul	80% To am the cor app Foi spe of t Flo bui	ng Envelopes, Floor Space and % Rule ensure that the residential density, henity and the architectural quality of resulting development are mplimentary, an 80% rule is to be plied. r each building envelope, the floor ace may only occupy a max. of 80% the building envelope, the floor ace may only occupy a max. of 80% the building envelope shown. For space is defined as the area of a ilding expressed in sqm and cludes: external wall thicknesses; common vertical circulation areas; balconies & terraces; ground floor lobbies & building entries; common recreation areas to a maximum of 5% of total floor area; storage, garbage areas, plant rooms and car parks, all situated under ground; vold spaces with double height	Noted, however, it has been demonstrated in the body of this report that these objectives can be achieved by other means and that such a crude control does not necessarily ensure that the objectives are achieved. This figure cannot be calculated using the BECD footprints as the proposal differs too much from these for this exercise to be practical. The BECD's cannot be built as not all the required properties are under the ownership of the applicant. An envelope using the proposed building footprints and the Town Centres maximum heights has been assumed to calculate that the proposal occupies 81.98% of these envelopes. This is considered to be a very minor non- compliance, particularly when it is considered that only 5 buildings are proposed compared to the 9 buildings encouraged in the BECD's.	Minor non- compliance, based on alternative approach. Not practical to calculate 80% rule as BECD's differ too much from proposal.
	809	apartments. % rule allows for:	This is achieved in the proposal.	Yes
	0	detailed articulation of the building form; greater external wall thicknesses	This is achieved in the proposal.	Yes
	0	to encourage relief and depth in the facade:	Also applied in the suspend	
	0	generous balcony areas occurring within the building envelope;	Also, achieved in the proposal.	Yes
	0	multiple lifts & stairs to encourage additional entries & cores in buildings;	For reasons of efficiency of building materials and energy consumption as well as cost of construction, lift and stair cores have been provided as required rather than exceed need. Provided at ground level.	Yes, on merit. Yes
	0	other common spaces throughout the building.		100
	To p ven mus	g Depth and Length provide optimal daylight & cross tilation, residential development st comply with the building depths cated in the BECD's.	The proposed buildings do not strictly comply with stipulated building depths in the BECD's as the building designs and number of buildings are very different from those of the BECD's. However, in regard to the underlying objectives of optimising daylight and cross ventilation, the proposed buildings are sufficiently well modulated to achieve the required levels of solar access and ventilation under the BCA without the need to restrict building depth	No, but underlying objectives are still achieved through well modulated design.

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•	To complement existing adjacent building forms, to allow views between buildings and to provide landscape between buildings, the length of new buildings must comply with the lengths indicated in the BECD's.	As the proposal includes less buildings that are generally larger in size, it does not strictly comply with the maximum building lengths in the BECD's. However, the reduction in building numbers actually provides for more uninterrupted views between buildings and greater opportunity for landscaping. The proposed buildings complement more recent apartment developments in the vicinity including the Avondale and Clyde Gardens developments on Clydesdale Place and the Ironbark development on the corner of Avon Road and Pymble Avenue.	No, but underlying objectives are still achieved through a carefully considered alternative design.
•	All building designs must demonstrate how optimum natural daylight, cross ventilation, building separation, solar access, landscaping, and aural and visual privacy are achieved.	Refer to the Design Statement for Stage 1 in Appendix 7. Where possible, buildings are oriented to maximise soalr access internally. Building separation proposed is significantly more than required in the BECD's to also assist with solar access and privacy. Deep balconies with shading	Yes
•	Building design and layout should optimise natural daylight and cross ventilation opportunities.	devices are used to control solar gain. Ventilated open circulation areas are proposed to optimise air flow in corridors and increase the potential for supplementary ventilation to apartments.	Yes
Bı	uilding Setbacks		
	All building setbacks are indicated in the BECD's.	Refer to the BECD's section above for detailed discussion of setbacks compliance.	Refer to BECD's section earlier in
0.000	All development must be setback from a designated street, property boundary, pedestrian path or building as indicated in the BECD's.	The development complies with nominated minimum setbacks to Avon Rd and Beechworth Rd.	this table. Yes
	 No part of a building may encroach into a prescribed setback. 	Setbacks are discussed in more detail in the BECD's section above.	Refer to BECD's section.
	Development must follow the alignment of streets as indicated in the BECD's.	This is not possible when all of the properties in the site have not been acquired. Nevertheless, as discussed above, cl. 1(4) of Schedule 4 of SEPP 53 indicates that development is permitted in such circumstances but, obviously, variations to the street layout are necessary. With exception of through-site road, which has not been included for reasons previously explained above, the road layout is generally consistent with the BECD's, given the need to adapt this plan to the land available.	Strict compliance not possible as entire BECD site not available. However, proposal is considered generally consistent with BECD layout.
•	To reduce the apparent scale of a building in relationship to adjacent existing and new development, upper floors of the development are to be set back from the lower floors of a building where indicated in the BECD's.	Rather than emulate the relatively simplistic and unimaginative upper floor plans in the BECD's, all of the buildings within the proposal are comprised of a number of modular elements of variable heights. In order to ensure an acceptable relationship with adjoining development, these modular elements are scaled back in height, for example, where they are in proximity to low scale single dwelling development. Higher elements are located in the middle of the site and closer to the railway where there is similar high rise apartment development on Clydesdale Place. This achieves a gradual transition in scale across the site that would not have been achieved if the development complied with the BECD's.	The basic objective of this control, to reduce apparent scale to better relate to adjoining development, has been achieved. Strict compliance was considered to be a sub-optimal design solution.
•	Additional setbacks may be required in some locations to retain existing significant trees. Existing significant trees are indicated on the relevant BECD's and must be retained as part of any new development. Buildings may need to be planned around existing significant trees.	Refer to the Landscape and Tree Retention plans for detailed information on trees to be retained. With a few minor exceptions, all of the trees identified as to be retained in the BECD's have been retained in the proposal. In addition, other significant trees that have not been preserved in the BECD's have been retained in the proposal.	Yes

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•	ilding Separation and Privacy Min. separation distances are	Separation distances between buildings in the proposal are	Yes
	appropriate visual and aural privacy, access to natural light, amenity and a high quality public domain.	far more generous than those required in the BECD's	
	New buildings must comply with the minimum separation distances		
	indicated in the relevant BECD's. Notwithstanding the above, the following min. external separation between buildings is required to ensure that adequate privacy, amenity	As above.	Yes
	and a high quality public domain are achieved in new buildings: o 6m between opposing non habitable rooms; o 9m between opposing non habitable and habitable rooms; o 12m between opposing habitable rooms.	The proposed development easily meets all of these requirements.	Yes
	To achieve adequate visual and aural privacy and amenity, external windows, doors, balconies of habitable rooms should not be located directly opposite one another.		
6	A finished ground floor level of up to 600mm above street level is encouraged to provide ground floor residential apartments with improved privacy.	The proposed buildings have been sited so as to not directly oppose each other and taking advantage of screening afforded by the vegetation in the riparian zone. Minimum separation distances are exceeded in all instances to ensure adequate aural and visual privacy.	Yes
		Given the 8m minimum setback of the Stage 1 building to Avon Road and proposed planting/fencing within the front setback, this is not considered necessary to ensure adequate privacy to the ground floor units of this building.	No, but objective achieved through other means.
ITI	EDESIGN		induno.
	Drainage and Stormwater Control The impact of development on existing stormwater, water supply and sewerage infrastructure is to be minimised through appropriate site planning, in particular to protect and maintain water courses, overland water flows, vegetated and landscaped areas.	The submitted Stormwater report attached as Appendix 13 concludes that, subject to compliance with recommended conditions and the installation of onsite stormwater detention, the development will not increase the stormwater flow rate leaving the site and will not detrimentally affect water quality. Recommendations are also made regarding the maintenance of overland flow paths.	Yes
	Soil and water management measures should minimise and control soil erosion and sediment transport during construction and occuptation.	These matters can be conditioned.	Yes
	Site planning and landscape design is to ensure maximum rainwater infiltration on site by minimising paved areas and providing stormwater drainage systems that promote natural infiltration.	This has been achieved.	Yes
	Where possible, mechanisms for the on site retention and re-use of stormwater should be implemented.	This is proposed.	Yes

\$0 •	Jar Access and Overshadowing Sites should be planned and buildings designed to optimise natural light and solar access to private open space, public or common open spaces, courtyards and habitable rooms,	As demonstrated in the shadow diagrams in Appendix 19 and 20, the proposed buildings have been located, spatially separated and oriented to optimise natural light and solar access to habitable rooms of new units, communal and private open space.	Yes
•	particularly during winter months. Sites should be planned and buildings designed to minimise overshadowing of adjacent buildings, private open spaces, public or common open spaces and courtyards, particularly	In this regard, moving some of the proposed buildings further north-east toward the railway has reduced the potential overshadowing impact of these building on adjoining properties.	Yes
•	during winter months. Commensurate with this, appropriate external sunshading is required on all building windows that receive direct summer solar access.	This is achievable.	Yes
	blic, Private and Communal Open		
Sp •	ace Useful communal open space is required in all residential development.	The proposal allows for an ample amount of useable communal open space on the site, particularly the mid-block riparian zone.	Yes
•	Communal open space is typically shown behind building envelopes, in mid-block locations, which are not immediately visible from public streets. These areas are for the use of residents and are communal in nature, not public.	This is achievable.	Yes
•	A clear demarcation between public, private and communal spaces is required.	Achieved.	Yes
•	A majority of the required communal open space is to be provided on areas identified as deep soil zones to allow the possibility of deep-rooted trees and storm water infiltration.	Due to the reduction of buildings from the 9 required by the BECD's to the 5 proposed, there is a very generous amount of deep soil zone, mostly located in the riparian zone and the western corner of the site adjacent to the riparian zone.	Yes
•	Communal open space may include the provision of shared facilities for the benefit of residents, these facilities may include a swimming pool, BBQ facilities and sports courts.	Communal facilities incorporated in the landscape plans include landscaped gardens with pathways and viewing platforms.	Yes
•	At least 70% of apartments' private open spaces must receive direct sunlight between 9am and 3pm in mid winter.	66% of units receive 3hrs or more of direct solar access to private open space or living areas in midwinter. This is a minor non-compliance and mainly a result of site constraints determining building orientation, particularly for Stage 1.	Minor non- compliance.
Lar	ndscape Design		
•	A landscape plan is required to accompany any formal building proposal. A landscape plan is to describe the landscape design proposed for the development and in particular how this design relates and responds to the building and the public demain howard the site	A comprehensive landscape plan and Vegetation Management Plan has been prepared by Urban and Rural Management Pty Ltd	
•	domain beyond the site. Existing trees are indicated on the relevant building envelope control drawings and should be retained where possible as part of any new development. Buildings may need to be plenged assured evicting trees	As previously discussed, appropriate trees have been retained.	Yes
•	be planned around existing trees. Where indicated in a BECD, a front setback to a public street is to include well designed landscaped areas that contribute to the continuity and amenity of the public domain as well as to the building. The area should be	See Landscape Plan for details	Yes

predominantly planted with trees and shrubs. Paving should be minimised and limited to access paths, vehicular access points and areas immediately associated with the private outdoor space of ground floor apartments. • Where provided, rooftop gardens, terraces and common courtyards are	Substantial trees and shrubs are incorporated in the design- refer to Landscape Plan and Vegetation Management Plan	
 to incorporate substantial trees and shrub landscaping. Areas identified in the BECD's as riparian zones are to be regenerated using native ground cover, shrubs and trees as appropriate, which are associated with those of the Blue Gum High Forest endangered ecological community. 	for details. This is achieved. The drainage corridor running through the site will be weeded and landscaped with native riparian plant species -refer to VMP and Landscape Plan in Appendices 17 & 18.	Yes
 In areas identified in the BECD's as riparian zones, drainage detention structures are not permitted. 	This has been complied with- no drainage detention structures in the riparian zone.	Yes
 Deep Soil Zones Deep soil zones are areas of a site with relatively natural soil profiles that are protected to promote the healthy growth of significant trees that can mature to heights of 10-25m. Underground parking structures and major disturbances to existing soil profiles are not permitted in deep soil zones. 	Although the location of deep soil zones is changed in the proposal the amount of deep soil zone proposed is more than required and this principle is adopted. A larger area of deep soil zones is proposed in the subject development in different locations to those indicated in the BECD's allowing for greater protection of existing soil profiles in the site. In particular, the area on the western side of the riparian zone will remain largely undeveloped and deep soil zone.	Yes Yes, in principle
 Deep soil zones can also help protect areas of significant existing vegetation and allow infiltration of stormwater to the water table and reduce runoff. Where indicated in the BECD's, areas noted as deep soil zones are to be provided. Impervious paving should be minimised in deep soil zones and pervious materials preferred. 	Noted Refer to above, pervious paving will be used where possible in deep soil zones.	Noted Underlying objectives achieved more successfully in proposal than in BECD's.
Fence and Walls at Boundaries Fences and walls should clearly delineate public and private areas. Without compromising security, fencing and walls should provide privacy, views, outlook, light and air.	Refer to fencing detail in landscape plans	Yes
Fences and walls should be designed to avoid the use of continuous lengths of blank walls at street level. Fences visible from publicly accessible areas should generally be no taller that 1.2m.	Refer to architectural and landscape plans	Yes
/isual Privacy Appropriate levels of visual privacy should be provided for residents using both internal and external spaces at night and during the day.	The proposed buildings have been sited so as to not directly oppose each other and taking advantage of screening afforded by the vegetation in the riparian zone. Minimum separation distances are exceeded in all instances to ensure adequate aural and visual privacy.	Yes
Views and outlooks from the primary living spaces should be maximised without compromising visual privacy.	The orientation of Stage 3, 4 & 5 buildings has been designed to utilise the riparian zone to optimise visual outlook. Due to the falling topography, attractive outlooks	Yes

Achieved Achieved.	Yes
Achieved.	Yes
Achieved, refer to architectural plans.	Yes
Achieved	Yes
5	Yes
Taking into account the differences between the proposed scheme and the BECD's, the vehicular access points	Yes
Achieved where possible.	Yes
Main entries are designed to be suitably prominent and easily identified.	Yes
The proposal adds vehicular access to Arilla Rd - not indicated in BECD's. Thus reducing the number of vehicle trips on Avon Rd and Beechworth Rd.	Yes
Achieved, all on-site parking is located underground.	Yes
Achieved.	
This is achievable.	
The car park entry to the Stage 1 building is 6.1m in width to comply with the relevant Australian Standards. This minor non-compliance will not cause this entry to be unreasonably dominating of the character of the front of the development.	
This is provided in the basement carparks of each building.	Yes
	Taking into account the differences between the proposed scheme and the BECD's, the vehicular access points proposed are generally within the preferred locations. Achieved where possible. Main entries are designed to be suitably prominent and easily identified. The proposal adds vehicular access to Arilla Rd - not indicated in BECD's. Thus reducing the number of vehicle trips on Avon Rd and Beechworth Rd. Achieved, all on-site parking is located underground. Achieved. This is achievable. The car park entry to the Stage 1 building is 6.1m in width to comply with the relevant Australian Standards. This minor non-compliance will not cause this entry to be unreasonably dominating of the character of the front of the development.

Min/dwelling Max/dwelling	Onsite Car parking complies -Refer to Traffic Report in	Yes
Bed 0.5 spaces 1 space Beds 0.8 spaces 1.6 spaces Beds 1 space 2 spaces isitors 1 space/10units 1 space/5units	Appendix 26.	1.5 - 2.5
Bicycle Storage Requirements		
Min required tesidents 1 space/ 3 units fisitors 1 space / 10 units		
Building Entries Building entries should be designed to relate to and activate the street, they should not conflict with existing and proposed tree plantings or pedestrian networks.		Yes
Entries should be clearly identifiable element of the building for residents and visitors.		Yes
Multiple building entries are encouraged because they assist in creating a more identifiable, less institutional character for RFB's, activating streets and providing visual interest.		Yes
Ground floor apartments should, wherever possible, have an individual entry directly related to the street or communal open space.		Yes
Entries should be designed with direct access and clear sight lines between the street and internal circulation spaces in foyers and lobbies.		Yes
Consideration should be given to awnings or other means of rain protection, sun protection and night time lighting.		Yes
Where indicated, new streets are to be designed and detailed to provide a continuation of the existing public	One major internal access point to the site is a natural continuation of the existing dead end section of Avon Road.	No, it is not considered necessary to
domain into the site. New streets are required where indicated in the BECD's. Ideally, new streets should become dedicated public roads.	The submitted Traffic Report in Appendix 26 does not support the need for the connecting road between Avon Rd & Beechworth Rd. Given the constraints of the land available for this development, the proposed internal driveways are generally consistent with the BECD's. Ku- ring-gai Council has advised that it does not want the internal driveways to be public roads or the connecting road.	have public roads through the site and Ku- ring-gal Council do not want public roads.
On Site 2, New Street 01 linking Avon Road and Beechworth Avenue must	Not applicable	N/A
be a public road. Asphalt paving to match existing	Not applicable, no new public streets are proposed.	N/A
streets is required for new streets. Pathways and footpaths should be designed, and materials selected, with regard to the role and function of the street and the level of pedestrian	Refer to Landscape Plan in Appendix17 for details of pathways.	Yes
traffic anticipated. Kerb design is to conform with the standard kerb detail immediately	Lighting details to the internal driveways and pedestrian footpaths can be provided at CC stage.	Yes

adjacent to the site.		
Public Lighting		
Street lighting is required on new streets and should generally match the street lighting in adjacent streets.	Achievable, relevant detail to be provided with CC.	Yes
All public and communal open spaces should incorporate appropriate lighting to allow for safety and utility.	Achievable, relevant detail can be provided at CC stage.	Yes
ublic Artwork		
The use of artworks and water features in public and communal open spaces, which provide a focus for activity, is encouraged.	The riparian zone has a natural "water feature" in the small creek running through the site and this will become the focus of the landscaped communal area.	Yes

4.2 State Environmental Planning Policy (Major Development) 2005

The aims of this Policy are set out in Clause 3 as follows:

- (a) to identify development to which the development assessment and approval process under Part 3A of the Act applies,
- (b) to identify any such development that is a critical infrastructure project for the purposes of Part 3A of the Act,
- (c) to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State,

The subject development is consistent with these general aims.

The redevelopment of the subject site is identified as a Part 3A Project pursuant to Section 6(1)(a) of this SEPP. Clause 6(1)(a) of SEPP (Major Projects) states that in the opinion of the Minister development described in Schedule 1 is declared to be a project to which Part 3A of the Act applies. Item 13(1) of Schedule 1 states as follows:

Development for the purpose of residential, commercial or retail projects with a capital investment of more than \$100 million.

For the purpose of the above requirements, the proposed development has a capital investment value of \$ \$129,508,000.

Pursuant to clause 6(1)(a) of SEPP (Major Projects), the Minster has declared the development a Major Project.

4.3 State Environmental Planning Policy (Infrastructure) 2007

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State. The general aim under Clause 3 of this Policy that is relevant to the subject proposal is the following:

"(f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing."

Clauses 85, 86 and 87 of this Policy are likely to be relevant to the subject development as it may include metal finishes and cranes during the construction phase, excavation deeper than 2m will occur within 25m of the adjoining rail corridor and, the proposed buildings have a residential use and may be affected by rail noise and vibration. All of these clauses require the consent authority to refer the Project Application to the Chief Executive Officer of Rail Corp.

The applicant has already undertaken consultation with Rail Corp, as has the Department of Planning at the time of the formulation of the DGR's. The DGR's incorporate the comments made by Rail Corp and are addressed in full by this Project Application. In addition, the consultation with Rail Corp carried out independently by the applicant is detailed under **Section 7.3** of this Environmental Assessment report. This section also addresses matters raised by Rail Corp.

4.4 State Environmental Planning Policy No.55 - Remediation of Land

Clause 7 of SEPP 55 requires the consent authority to consider whether the land is contaminated and, if so, whether the land requires remediation in order to make it suitable for the proposed new use.

In order to satisfy the provisions of SEPP NO 55, a Stage 1 Environmental Site Assessment has been undertaken by Environmental Investigation Services (EIS) in order to assess the potential risk of contamination of the site. A copy of this report is attached in **Appendix 27**. The report was prepared in accordance with the NSW EPA (now DECCW) Guidelines for Consultants Reporting on Contaminated Sites (1997) and State Environmental Planning Policy No 55 – Remediation of Land.

The EIS report concludes that:

"Based on the scope of the work undertaken for this assessment EIS consider that the site can be made suitable for the proposed development provided that:

- 1. An investigation is undertaken that includes sampling and analysis. Ideally this should be undertaken after the vegetation has been cleared from the site.
- A waste classification is assigned to any fill material that is excavated for offsite disposal.
- 3. In the event that any significant contamination is encountered a Remedial Action Plan (RAP) is prepared.
- 4. A hazardous building materials survey of the site buildings and structures is undertaken prior to demolition."

4.5 State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development

Refer to the Design Statements in **Appendix 7** for detailed discussion of this Policy. AS detailed the proposal complies with the provisions and design principles within SEPP 65.

4.6 REP (Sydney Harbour Catchment) 2005

A review of the maps for this Plan has revealed that the subject site is outside the catchment area for this Plan. Therefore, it is not considered to be relevant to the proposal.

4.7 Ku-ring-gai LEP (Town Centres) 2010

The Town Centres LEP which applies to the subject site was recently gazetted on 25 May 2010. The key applicable provisions in the Town Centres LEP are the following:

- R4 High Density residential zoning, permitting multi dwelling housing and residential flat buildings;
- Maximum FSR of 0.8:1;
- Maximum building height of 7-8 storeys (23.5m) mid-site and adjacent to Beechworth & Arilla Roads and 5-6 storeys (17.5m) fronting onto Avon Road;
- Removal of 1 & 5 Avon Road and 6 Beechworth Road as heritage items;
- Identification of area of blodiversity significance that stretches across the North Shore Railway reservation into the site and covering most of its area all the way down to the access handle from 1 Arilla Road that connects to Arilla Road;
- The identification of the intermittent creek bisecting the site as a Category 3 Riparian Zone.

The proposal to construct residential flat buildings on the site would therefore be permissible under the R4 zoning of the LEP.

The objectives of the R4 Zone are:

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

The proposed development, in providing for the housing needs of the community, with a variety of housing types, is consistent with the high density zoning objectives detailed above.

An FSR that is more consistent with the remainder of R4 zoned land under the LEP is being sought under the current proposal. A higher density and higher buildings are justified in **Section 8.2 and 8.3** of this report. The main reasons being the size of the

site, the lack of need for internal roads, good screening by significant vegetation on the site and the effective scaling down of buildings across the site so that higher buildings can be located where they cause least impact. The need to provide appropriately high densities near railway stations to utilise existing infrastructure cannot any longer be in dispute. The appropriate density for such sites is the density that does not cause undue impacts and is consistent with the zoning of similar site. Recently completed developments on Avon Road and Clydesdale Place, all in the vicinity of the site, are all at or in excess of 1.3:1. Consistent with these recent developments, the proposal provides an FSR of 1.38:1, as detailed in the FSR calculations prepared by the project architects in **Appendix 35**.

Stage	Minimum Height (m)	Maximum Height (m)
Stage 1	12	21
Stage 2	13	18
Stage 3	20	27
Stage 4	16	37
Stage 5	13	30

In terms of height the proposed buildings range in height as detailed below:

Whilst several of the buildings do not comply with the height limit under the LEP, the non -compliance is justified for a number of reasons:

- The low elevation and steepness of the centre of the site naturally lends itself to locating taller buildings on the site than the 23.5m storey (7-8 storey) maximum allowed for in the LEP. The existence of a number of mature trees on the site that are between 35m and 50m (ie equivalent to 12-16 storey buildings) in height provides an excellent natural screening opportunity for apartment buildings from neighbouring low density properties surrounding the site. Provided the buildings are not taller than this existing canopy, the general dominance of landscaping over built form which is characteristic of Pymble will be preserved.
- The provision of higher buildings on the site require less buildings to achieve the same density whilst also allowing for a greater percentage of the site being retained for deep soil planting and allowing for a greater retention of existing significant trees on the site than would have been otherwise possible.
- In order to achieve lower buildings at the southern end of the site where there are single dwelling properties adjoining, the proposal has been designed such that, when building heights are averaged out across the site against the LEP maximum controls, the development complies.
- Proposed building heights for the Stage 1 building are largely compliant with a very minor non-compliance towards the rear as shown on the submitted drawings.
- The Proposed buildings provide a transition in height between the recently completed high density residential flat development to the north of the railway line and the lower density residential area located to the south of the

site. Where the buildings adjoin the low density area, they comply with the height limits set by the LEP. It is the buildings adjacent to the railway line and in the centre of the site, which exceed the height limit. This exceedance is considered acceptable as they are well separated from the lower density residential areas and are significantly screened by the mature trees on the site, which are far higher than the proposed buildings.

 The non-compliance with the height limits set by the LEP would not result in detrimental impacts of scale, overshadowing, view impacts or privacy, as demonstrated in relevant sections elsewhere in this report.

The Biodiversity value of the site is discussed in more detail in the Flora and Fauna Assessment Report in **Appendix 24**.

The intermittent creek or drainage channel that bisects the site is not a riparian zone for the purposes of the Water Management Act and is not identified as a riparian zone by any other government department mapping. It has been given special status within the constraints of the applicable planning instruments that direct that development occur on this site with a 20m wide "riparian zone" that must also be managed for bush fire mitigation.

Notwithstanding that the proposal does not comply with several of the numeric controls within the Town Centres LEP, the proposal does comply with the objectives and intentions of the LEP, in providing for high density residential flat development.

4.8 Environmental Planning & Assessment Act, 1979

On 9 June 2005 the NSW Parliament passed the Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Bill. This contained key elements of the NSW Government's planning system reforms through major changes to both plan-making and major development assessment. The Act was assented to on 16 June 2005.

A key component of these amendments was the insertion of a new Part 3A (Major Projects of Part 3A is to facilitate major project and infrastructure delivery and encourage economic development, while strengthening environmental safeguards and community participation.

On 1 August 2005 the Part 3A and related provisions commenced. Part 3A applies to major State government infrastructure projects and development previously classified as State significant. The proposed development of the subject site for residential flat housing is consistent with the objectives of Part 3A which are to encourage major projects considered to be of State Significance.

The subject application will 'promote the orderly and economic use and development of land', which is consistent with the objects of the Environmental Planning and Assessment which are:

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,

(ii) the promotion and co-ordination of the orderly and economic use and development of land,

(iii) the protection, provision and co-ordination of communication and utility services,

(Iv) the provision of land for public purposes,

(v) the provision and co-ordination of community services and facilities, and

(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and

(vii) ecologically sustainable development, and

(viii) the provision and maintenance of affordable housing, and

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

This Project Application is submitted under the terms of Section 75E of the Environmental Planning and Assessment Act 1979, as amended (EPA Act).

4.9 Water Management Act, 2000

As the proposal is for a Project Application under Part 3A of the EP&A Act the requirements of the Water Management Act are not applicable.

Section 75U of the EP&A Act identifies that the following approvals are not required:

(a) the concurrence under Part 3 of the Coastal Protection Act 1979 of the Minister administering that Part of the Act,

(b) a permit under section 201, 205 or 219 of the Fisheries Management Act 1994,

(c) an approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977,

(d) a permit under section 87 or a consent under section 90 of the National Parks and Wildlife Act 1974,

(e) an authorisation referred to in section 12 of the Native Vegetation Act 2003 (or under any Act to be repealed by that Act) to clear native vegetation or State protected land,

(f) a permit under Part 3A of the Rivers and Foreshores Improvement Act 1948,

(g) a bush fire safety authority under section 100B of the Rural Fires Act 1997,

(h) a water use approval under section 89, a water management work approval under section 90 or an activity approval under section 91 of the Water Management Act 2000.

(2) Division 8 of Part 6 of the Heritage Act 1977 does not apply to prevent or interfere with the carrying out of an approved project.

(3) The following orders or notices cannot be made or given so as to prevent or interfere with the carrying out of an approved critical infrastructure project:

Notwithstanding, that the Water Management Act does not apply to the Project Application, the proposal is consistent with the objectives of this Act as the existing drainage channel will be weeded, stormwater quality improved and the area will be planted out with native riparian plants. In addition to protect and enhance the drainage line through the site, a 20 metre setback corridor is proposed, as outlined in the Vegetation Management Plan prepared by Urban and Rural Management in **Appendix 18**.