

# REVISED PREFERRED PROJECT REPORT MP08\_0207 and MP10\_0219 1, 1A and 5 Avon Road, 4 and 8 Beechworth Road, Pymble

May 2013



### URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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## Statement of Validity

#### Submission of Revised Preferred Project Report:

Prepared in accordance with Schedule 6A of the Environmental Planning and Assessment Act 1979.

Revised Preferred Project Report prepared by:

Names:	Ian Cady (Associate Director) and Sarah Houston (Consultant)
Address:	Urbis Pty Ltd Tower 2, Level 23, Darling Park 201 Sussex Street Sydney NSW 2000
In respect of:	Concept Plan (MP08_0207) & Project Application (MP10_0219)
	1, 1A and 5 Avon Road and 4 Beechworth Road and 8 Beechworth Road, Pymble
Applicant and Land Details	
Applicant:	Brett Stephen Lord and Marcus William Ayres as Joint and Several Receivers and Managers of the Site
Applicant Address:	Level 46, MLC Centre, 19 Martin Place, Sydney NSW 2000
Land to be Redeveloped:	1, 1A and 5 Avon Road and 4 Beechworth Road and 8 Beechworth Road, Pymble
Lot and DP	Lot 1 and Lot 2 in DP 583803, Lot 2 in DP 205504, Lot 1 in DP 403072 and Lot 3 in DP 403072.
Project	Concept Plan (MP08_0207) & Project Application (MP10_0219) – Residential development at Avon, Beechworth and Arilla Roads, Pymble.

**Declaration:** 

I certify that the contents of the Environmental Assessment to the best of my knowledge, has been prepared as follows:

- In accordance with the requirements of the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000; and
- The information contained in this report is true in all material particulars and is not misleading.

NAME:	IAN CADY, ASSOCIATE DIRECTOR	SARAH HOUSTON, CONSULTANT
Signature:	/ las	5.Houston
Date:	May 2013	May 2013

## 1 Introduction

## 1.1 OVERVIEW

This report comprises the Revised Preferred Project Report (Revised PPR) prepared on behalf of Brett Stephen Lord and Marcus William Ayres (Joint and Several Receivers and Managers) in respect of the Concept Plan (MP08\_0207) and Project Application (MP10\_0219) under Part 3A of the *Environmental Planning and Assessment Act 1979* for residential development at Avon and Beechworth Roads, Pymble.

The Preferred Project Report for MP08\_0207 and MP10\_0219 was lodged with the DPI in December 2013 and was publically exhibited.

The report responds to Revised Preferred Project Requirements issues by the DPI on 21 March 2013, which requested the preparation of a revised PPR and specified key issues identified by the DPI through their assessment of the proposal.

In accordance with the Revised Preferred Project Requirements, this revised PPR includes:

- A response to the Revised Preferred Project Requirements and further assessment as required.
- Details of associated design amendments to the Preferred Project.
- Provision of additional information.
- Response to authority and public submissions.
- Revised Statement of Commitments for both MP08\_0207 and MP10\_0219.

## 1.2 EXHIBITION

The Preferred Project Report for MP08\_0207 and MP10\_0219 was publically exhibited from 23 January 2013 to 1 March 2013.

The following submissions were received:

- Eight agency submissions.
- A submission from Ku-ring-gai Council.
- 498 resident submissions.

All submissions have been considered in the design amendment process and a response to each issue raised is provided in Section 6 of this report and **Appendix K**.

## 1.3 PURPOSE OF THIS REPORT

This report outlines the Revised Preferred Project having regard to all issues raised in the Revised Preferred Project Requirements from DPI dated 21 March 2013.

The revised PPR is supported by the attached appendices as listed in Table 1.

TABLE 1 – REVISED PREFERRED PROJECT REPORT SUPPORTING DOCUMENTS

	PREPARED BY DPI Higgins Surveyors	REFERENCE       Appendix A
DPI's Revised Preferred Project Requirements		Appendix A
	Higgins Surveyors	
Amended Survey Drawings		Appendix B
Amended Architectural Plans for Concept Plan including perspectives, shadow diagrams and building separation plans	Marchese & Partners	Appendix C
Amended Architectural Plans for Project Application	Marchese & Partners	Appendix D
Amended Landscape Plans	Site Image	Appendix E
Addendum to the Traffic Report	Varga Traffic Planning	Appendix F
Addendum to the Flora and Fauna Report	Anne Clements & Associates	Appendix G
Addendum to Heritage Report	OCP Architects	Appendix H
Addendum to Stormwater Management Report	NPC	Appendix I
Consolidated Statement of Commitments MP08_0207 (Concept Plan)	Urbis	Appendix J
Consolidated Statement of Commitments MP10_0219 (Project Application)	Urbis	Appendix K
Analysis of Resident Submissions	Urbis	Appendix L

## 2 Background

## 2.1 BACKGROUND TO MP08\_0207 AND MP10\_0219

The following provides a summary of the planning history of Concept Plan (MP08\_0207) and Project Application (MP10\_0219) to date:

- The Environmental Assessment for MP08\_0207 and MP10\_0219 was lodged with the DPI in December 2010.
- Preferred Project Requirements were issued by DPI on 19 April 2011 which detailed specify key
  issues identified through their initial assessment including:
  - Issues raised by the general public and relevant agencies during the public exhibition of the Environmental Assessment.
  - Key issues identified by DPI.
  - Required design amendments.
  - Additional information to be provided.

DPI's correspondence requested the preparation of a Preferred Project Report.

- In response to the DPI's correspondence of 19 April 2011 the receivers engaged various consultants to further investigate the environmental constraints affecting the project. In response to these findings and the issues raised by DPI, a revised scheme (the Preferred Project) was designed by Marchese and Partners Architects and a new landscape concept for the site was jointly developed by Site Image landscape architects, Anne Clements & Associates environmental and botanical consultants, NPC drainage engineers and ABPP bushfire planners. A PPR was prepared and submitted in December 2012.
- The PPR was placed on public exhibition from 23 January 2013 to 1 March 2013.
- Revised Preferred Project Requirements were issued by the DPI on 21 March 2013 and this revised PPR presents a response to these requirements.

## 2.2 REVISED PREFERRED PROJECT REQUIREMENTS

Revised Preferred Project Requirements were issued by the DPI for the project on 21 March 2013. A copy of these requirements is provided in **Appendix A**.

## 2.2.1 CONCEPT PLAN MP08\_0207

A summary of the requirements relating to the concept plan and a reference to where each has been addressed within this report or supporting documentation is provided in **Table 2**.

#### TABLE 2 – REVISED PREFERRED PROJECT REQUIREMENTS – CONCEPT PLAN

TABLE 2 – REVISED PREFERRED PROJECT REQUIREMENTS – CONCEPT PLAN	
REQUIREMENT	REFERENCE
RELATIONSHIP TO ADJOINING DEVELOPMENT	
Apparent proximity of the proposed development to the dwellings on the adjoining sites a potential amenity impacts to these dwellings. Accordingly, the Department requests furth make a detailed assessment of the impact of the proposed development in this regard.	
<ul> <li>Confirmation of the physical separation between existing dwellings on adjoining properties and the proposed development (including basement footprints). The Department notes a number of anomalies between the information presented on the survey drawings and the Architectural and Landscape Plans – e.g. No.1 Arilla Road and No.14 Avon Road</li> </ul>	Section 4.1.1. Building separation plans provided in <b>Appendix C</b> .
Further analysis about how the adjoining dwellings at Nos. 3, 7, 11 and 15 Avon Road, No.1 Arilla Road, Nos. 6, 10A and 10B Beechworth Road present to the subject site. In this regard, details of the elevations in these adjoining dwellings, together with information about the nature of the internal spaces and the adjoining private outdoor spaces which interface with the subject site should be provided together with an assessment of the likely impacts on the privacy and amenity of these properties; and	Section 4.1.1. Building separation plans provided in <b>Appendix C</b> .
<ul> <li>Elevation shadow diagrams which illustrate the movements of shadows cast by the proposed development across the façade of the adjoining dwellings in mid-winter and at the equinoxes.</li> </ul>	Section 4.1.1. Shadow analysis provided in <b>Appendix C.</b>
<ul> <li>Should the result of these investigations reveal an adverse impact to the affected dwellings, further consideration of the siting and design of the proposed building envelopes may be required.</li> </ul>	Section 4.1.1
TRAFFIC GENERATION, ROAD CAPACITY AND CAR PARKING	
Agency submissions have noted the potential of the proposal to impact upon the local rorrespect to the Pacific Highway and Beechworth Road intersection, and the Pacific Highway intersection.	
The Department requests that the additional information sought by the RMS in its	Section 4.1.2
letter dated 8 March 2013 be provided.	Addendum to the Traffic Report provided in <b>Appendix F.</b>
The revised on-site parking provision for the Concept Plan and Stage 1 Project Application is generally consistent with Council's current requirements for residential flat buildings and the broader objectives of Metropolitan Plan 2036. However, given the prevailing on-street parking demand in this locality (associated with the PLC School and commuter parking), in combination with the 'No Stopping' restrictions in the section of Avon Road immediately adjacent to the site, the Department requests that consideration be given to some reallocation of spaces designated for residential use to that of visitors.	Section 4.1.2 and 4.2.2.

REQUIREMENT	REFERENCE
CONTRIBUTIONS, WORKS-IN-KIND OFFSETS AND PROVISION OF INFRASTRUCT	URE
<ul> <li>Council has indicated that a pedestrian refuse is an acceptable alternative to the marked pedestrian crossing at the curve of Avon Road as described in the PPR.</li> <li>Further advice as to the feasibility of providing a refuse in this location to facilitate the safe movement of pedestrians across Avon Road should be provided.</li> </ul>	Section 4.1.3.
<ul> <li>Further clarification / confirmation regarding the staging of the various infrastructure works is required. The PPR and supporting documentation has not clearly identified the extent of infrastructure works that are to be provided at each stage of the development. This should be specified in the Statement of Commitments.</li> </ul>	Section 4.1.3.

## 2.2.2 STAGE 1 PROJECT APPLICATION MP10\_0219

A summary of the requirements relating to the project application and a reference to where each has been addressed within this report or supporting documentation is provided in **Table 3**.

#### TABLE 3 – REVISED PREFERRED PROJECT REQUIREMENTS – PROJECT APPLICATION

REQUIREMENT	REFERENCE
DEEP SOIL / ENCROACHMENT OF THE BASEMENT INTO THE AVON ROAD SETB	ACK
The basement of the Stage 1 building significantly encroaches into the Avon Road setback / deep soil zone. The Department concurs with Ku-ring-gai Council's concern in this regard and it is requested that the basement be reconfigured to provide a more generous dimension between the basement and the Avon Road boundary to increase the area of deep soil and contribute to the garden setting which is characteristic of this locality.	Section 4.2.1 Amended Landscape Plans provided in <b>Appendix E</b> .
ALLOCATION OF PARKING	
<ul> <li>Whilst the provision of 55 spaces for the Stage 1 building satisfies Council's numerical requirements (as set out in DCP 55), the proportion of resident to visitor spaces requires revision to address concerns about the existing demand for on-street parking in the locality (refer previous comment).</li> </ul>	Section 4.1.2 and 4.2.2 Project Application plans provided in <b>Appendix D</b> .

## 3 The Revised Preferred Project

## 3.1 REVISED PREFERRED PROJECT CONCEPT PLAN MP08\_0207

The revised Preferred Project Concept Plan is hereby amended as follows.

### 3.1.1 SUMMARY

Key numeric descriptors of the previous and current Preferred Project Concept Plan MP08\_0207 are included at Table 4.

PROPOSAL ELEMENT	PPR	REVISED PPR	AMENDMENT
GFA	22,442sqm	22,442sqm	No change
Units	273	273	No change
Car Parking	<ol> <li>space per studio, one-bedroom or two-bedroom apartment;</li> <li>spaces per three-bedroom apartment; and</li> <li>space per 10 dwellings for visitor use.</li> </ol>	<ol> <li>space per studio, one-bedroom or two-bedroom apartment;</li> <li>spaces per three-bedroom apartment; and</li> <li>space per 10 dwellings for visitor use, with 5 additional visitor parking spaces in Stage 1.</li> </ol>	+ 5 visitor spaces
FSR	0.941	0.94:1	No change
Site Coverage	19.6%	19.6%	No change
Conservation Area	8,430sqm	8,430sqm	No change
General Landscaping area	3,410sqm	3184.01sqm	-226
Buffer area	4,550sqm	4,245sqm	-305
Total landscape (deep soil) area	16,390sqm	15,259sqm (correction of calculation)	-1,131
Solar Access and Cross Ventilation	<ul><li>67% of units achieve cross flow ventilation.</li><li>80% achieve 3 hours solar access on the winter solstice.</li></ul>	<ul><li>70% of units achieve cross flow ventilation.</li><li>81% achieve 3 hours solar access on the winter solstice.</li></ul>	+3% +1%

TABLE 4 – KEY CONCEPT PLAN AMENDMENTS

## 3.1.2 DETAILED BUILDING AMENDMENTS

The envelopes of Buildings 3 and Building 5 are amended as shown in red below.



FIGURE 1 – REORIENTATION OF BUILDING 5 AND BUILDING 3

The eastern facing elevation of Building 3 has been realigned to face north-east to avoid direct overlooking of the rear of adjacent Avon Road properties. The amendments to Building 3 and the addition of skylights (a statement of commitment), means that this building now achieves 70% solar access and 70% natural ventilation as shown in **Appendix C**.

Similarly, the southern end of Building 5 has been deleted, with slight increases to the eastern and western corners of the building, to increase the setback to 10A and 10B Beechworth Road, and to reduce the profile presented to 6 Beechworth Road.

The DPI requested that the revised PPR remove design detail from the concept plan, such that the only information provided for approval is building envelopes, heights and setbacks. Concept Plan Drawing Nos. MP02.01-MP02.08 and MP07.01-07.02 submitted with the PPR are therefore replaced by Drawing No. MP 08.17 (revision A) prepared by Marchese and Partners International (**Appendix C**). The remainder of drawings included at **Appendix C**, including the indicative apartment layouts provided in Architectural Drawing MP 08.18 (Revision A), are provided for illustrative or assessment purposes only.

Fixed opaque louvers have been provided to avoid overlooking on identified apartments within:

- Building 1 to avoid overlooking of 3 Avon Road.
- Building 4 to avoid overlooking of 3 Avon Road.
- Building 5 to avoid overlooking of 10A Beechworth Road.

The location of these louvres are shown on the Building Separation Section drawings provided in **Appendix C**.

The removal of internal detail from the Concept Plan drawings has removed detail of the proposed winter gardens (apartment balconies), which is now only provided in the indicative apartment layout plans. The following explanation of the winter garden concept is therefore provided for clarity.

While the proposed balconies will be enclosable by a line of glazing or a combination or glazing and solid spandrels on the outside edge, and will form a seamless extension of the living rooms to which they connect, they will be separable from living rooms by operable doors. This design will allow the balconies to act as indoor/outdoor winter gardens that can be opened up in fine weather as outdoor spaces, or enclosed from the elements in inclement weather. Given the proximity of many of the proposed balconies to large blue gum trees, this will also help prevent the accumulation of gum tree leaf litter on the balconies. The opaque spandrels at the balcony edge will assist with mitigation of overlooking of adjoining properties.

While the definition of gross floor area is somewhat unclear in how it relates to such spaces, the winter garden balconies are principally proposed as private open space balconies and have therefore not been included in the calculation of the gross floor area of the project, and are specifically proposed as space additional to the stated gross floor area figures.

## 3.1.3 LANDSCAPING

Landscaping is proposed to be amended in accordance with the Landscape Plans prepared by Site Image and provided in **Appendix E.** 

## 3.2 REVISED PREFERRED PROJECT APPLICATION MP10\_0219

The revised PPR amends Project Application MP10\_0219 as shown in the table below.

PROPOSAL ELEMENT	PPR	REVISED PPR	AMENDMENT
Approximate site area	3640sqm	3640sqm	-
Height	four to six storey	four to six storey	-
Units	44	44	-
Unit Types	<ul><li>16 one-bedroom apartments;</li><li>21 two-bedroom apartments;</li><li>7 three-bedroom apartments</li></ul>	<ul><li>16 one-bedroom apartments;</li><li>21 two-bedroom apartments;</li><li>7 three-bedroom apartments</li></ul>	-
Basement levels	1	2	+1
Car Parking	51 resident 4 visitor Total: 55	51 resident 10 visitor Total: 61	- +6 +6

TABLE 5 – KEY PROJECT PLAN AMENDMENTS

The setback of Building 1 to Avon Road has also been increased to 10m to meet Rural Fire Service requirements.

The additional amendments relate to an extra basement level and associated amendments to the car parking rates, principally to reduce basement encroachment into the front setback and to increase visitor parking.

Revised Project Application Drawing Nos: DA00.01A, DA01.01A, DA02.00A, DA02.01D, DA02.02C, DA02.03C, DA02.04C, DA02.05D, DA02.06C, DA02.07C, DA0301C, DA03.02C, DA03.03C, DA03.04C, DA04.01B, DA06.01A, DA06.02a are included in **Appendix D**.

## 3.2.1 LANDSCAPING

In addition to the above changes, the deep soil zones along Avon Road have been increased. Landscaping is proposed to be amended in accordance with the Landscape Plans prepared by Site Image and provided in **Appendix E**.

The proposed landscaping areas are summarised as follows:

- Deep Soil: 1155sqm
- Communal Open Space: 175sqm

## 4 Consideration of Revised Preferred Project Requirements

This section specifically addresses the requirements of the DPI identified in their letter dated 21 March 2013. Each specific requirement identified in the DPI's letter is provided in shaded text boxes, after which the proponent's response is provided.

## 4.1 CONCEPT PLAN

### 4.1.1 RELATIONSHIP TO ADJOINING DEVELOPMENT

The Department notes the apparent proximity of the proposed development to the dwellings on the adjoining sites and raises a concern with potential amenity impacts to these dwellings. Accordingly, the Department requests further information in order to make a detailed assessment of the impact of the proposed development in this regard.

Further analysis of the separation between the proposed buildings and the dwellings adjoining the site has been undertaken in response to DPI's Revised Preferred Project Requirements. The following work has been undertaken:

- All dwellings adjoining the site have been surveyed by Higgins Surveyors with the exception of 10A and 10B Beechworth Road and 1 Arilla Road, where access to the property was not granted by the residents. The survey determined:
  - Topography of the land adjoining the site and the relevant RLs.
  - The location of principal living areas and private open space.
  - The location of walls of buildings facing the site, including the location of windows.
- Detailed building sections have been prepared showing the separation between the proposed buildings and the nearest dwellings being 3, 7, 11 and 15 Avon Road, 6, 10A and 10B Beechworth Road and 1 Arilla Road. These sections include the following information:
  - Setback dimensions to the site boundary.
  - Accurate topography of the site including RLs.
  - Identification of principal views from apartments in the proposed buildings.
  - Identification of principal living areas including the rooms and spaces of the dwellings adjoining the site.
  - Identification of existing and proposed landscaping.
- Shadow analysis study from 9am to 3pm on June 21 identifying where shadows as a result of the proposal fall on principal living areas and private outdoor spaces for all surrounding dwellings.

The additional analysis undertaken has been presented in the plans prepared by Marchese and Partners and provided in **Appendix C**. A summary of the findings of the relationship to adjoining development is summarised in response to DPI comments in relation to the relevant Revised Preferred Project Requirements below.

Confirmation of the physical separation between existing dwellings on adjoining properties and the proposed development (including basement footprints). The Department notes a number of anomalies between the information presented on the survey drawings and the Architectural and Landscape Plans – e.g. No.1 Arilla Road and No.15 Avon Road

The previous survey was prepared without entering adjoining properties. Since the receipt of the Revised Preferred Project Requirements, Higgins Surveyors obtained land owner's consent through the DPI to enter these properties to carry out further surveys and confirm the physical separation to existing dwellings on adjoining properties.

The survey clarified that:

- 1 Arilla Road is located closer to the site boundary than previously shown on the Concept Architectural Plans.
- 15 Avon Road is located further from the site boundary that previously shown on the Concept Architectural Plans.

The Architectural Plans have since been updated with the correct location of these adjoining dwellings and this is also reflected in the building section plans (which now include basement footprints) and shadow analysis plans.

The Landscape Plans prepared by Site Image have also been revised in accordance with the survey details to ensure that all information presenting the physical separation of the adjoining properties and the associated analysis in this revised PPR is now accurate and consistent.

Further analysis about how the adjoining dwellings at Nos. 3, 7, 11 and 15 Avon Road, No.1 Arilla Road, Nos. 6, 10A and 10B Beechworth Road present to the subject site. In this regard, details of the elevations in these adjoining dwellings, together with information about the nature of the internal spaces and the adjoining private outdoor spaces which interface with the subject site should be provided together with an assessment of the likely impacts on the privacy and amenity of these properties.

As discussed above, further analysis has been undertaken with regard to the proximity to adjacent dwellings. Detailed building separation plans have been prepared by Marchese & Partners and are presented in **Appendix C**.

The building separation plans identify the relevant elevations of these dwellings including identification of primary living areas and private outdoor spaces. The potential for overlooking and privacy and amenity impacts as a result of the proposal are discussed with relevance to the properties identified in the revised PPRs below.

### 3 Avon Road

The proposed buildings are adjacent to 3 Avon Road as follows:

- Building 1 is adjacent to 3 Avon Road to the south.
- Building 4 is adjacent to 3 Avon Road to the west.

An assessment of the impact from both of the proposed buildings is now provided.

Figure 2 provides a section between **Building 1** and 3 Avon Road.

FIGURE 2 - BUILDING SEPARATION BETWEEN BUILDING 1 AND 3 AVON ROAD



- The south facing living room of Building 1 is setback 13m from the site boundary to the north and proposed Building 1 and 3 Avon Road are separated by a total distance of 23m.
- The Residential Flat Design Code (RFDC) advocates a minimum separation of 18m between habitable rooms/balconies applying to buildings between 5 – 8 storeys to ensure adequate amenity and privacy. Building 1 is a maximum of 6 storeys high and therefore the separation from 3 Avon Road complies with the RFDC and amenity and privacy impacts are therefore considered to be reasonable.
- Due to the steep topography of the site, Levels 0, 1 and 2 of Building 1 do not have views of 3 Avon Road as they are set below RL144, the ground level of 3 Avon Road:
- While Levels 3, 4 and 5 of Building 1 will have views to 3 Avon Road, the existing landscaping along the site boundary to 3 Avon Road consists of large trees and shrubs which are proposed to be retained and reinforced with new planting within the site. This existing and proposed planting will significantly mitigate the potential privacy intrusion from the three levels of Building 1 with views to 3 Avon Road.

Notwithstanding the above, to further mitigate potential overlooking, fixed opaque louvers are proposed along the windows of the apartment to the north east as shown in Figure 3 below. This will direct the outlook from apartments adjacent to No 3 Avon Road away from the primary living areas of the dwelling house at 3 Avon Road.

FIGURE 3 – PRIMARY VIEWS AND LOCATION OF PROPOSED LOUVRES



Figure 4 provides a section between **Building 4** and 3 Avon Road.

FIGURE 4 – BUILDING SEPARATION BETWEEN BUILDING 4 AND 3 AVON ROAD



 Building 4 is setback 20m from the site boundary to the west and the separation between Building 4 and 3 Avon Road is 36m.

- The separation complies with the RFDC guideline of 18m separation between habitable rooms/balconies for buildings of 5-8 storeys. On the elevation facing 3 Avon Road, Building 4 is a maximum of 6 storeys and the proposed separation from 3 Avon Road easily exceeds the RFDC guideline.
- The orientation of building 4 means that apartments do not directly face 3 Avon Road to the east but rather face north-east.



FIGURE 5 – PRIMARY VIEWS AND LOCATION OF PROPOSED LOUVRES

 The view east will also be screened by existing and proposed boundary planting between 3 Avon Road and Building 4 (see Picture 1).

PICTURE 1 – VIEW TO 3 AVON ROAD FROM NORTH (NOTE: TURPENTINE TREE IN CENTRE TO BE RETAINED)



Furthermore there are only two living rooms within the north-eastern elevation of Building 4. Vertical
opaque louvres to these elevations will ensure that outlook is directed in the field between north-east

and north-west, with views directly east to into the private outdoor space of 3 Avon Road shown in Picture 2 being screened.

PICTURE 2 – VIEW TO 3 AVON ROAD



 The large separation between Building 4 and 3 Avon Road and the placement of louvres over the living rooms within Building 4 will restrict the opportunities for overlooking and minimise and amenity impact to residents at 3 Avon Road.

#### 7 Avon Road

Building 1 is adjacent to, and immediately north of 7 Avon Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 6 provides a section between Building 1 and 7 Avon Road.

FIGURE 6 – BUILDING SEPARATION BETWEEN BUILDING 1 AND 7 AVON ROAD



- There is substantial separation between the two buildings. Building 1 is setback 15m from the site boundary to the south and the total separation between Building 1 and the principal private open space of 7 Avon Road (see Picture 2) is 29m.
- The separation significantly exceeds Residential Flat Design Code guideline for a minimum 12m between the habitable rooms/balconies of buildings up to 4 storeys high.

- A large fig tree is located between the living areas within the southern elevation of Building 1 and the principal private open space of 7 Avon Road.
- Due to the orientation of the dwelling at 7 Avon Road, the living areas of apartments in Building 1 directly face the private open space areas while views of the main living areas are oblique as shown in Picture 3.

Amenity and privacy impacts are therefore considered reasonable.



PICTURE 3 – VIEW TO 7 AVON ROAD

### 15 Avon Road

Building 3 is adjacent to and immediately east of 15 Avon Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 7 provides a section between Building 3 and 15 Avon Road.



- The nearest balcony/living room window of Building 3 is setback 5m from the common property boundary to the dwelling at 15 Avon Road and the separation between this balcony and the dwelling at 15 Avon Road is 15m.
- While the separation does not comply with the 18 metre guideline of the Residential Flat Design Code, the apartments in Building 3 are orientated north-east, away from the principal private open space and living area of the dwelling at 15 Avon Road. The installation of opaque vertical louvres will prevent oblique views into this private open space and significant existing and proposed trees will mitigate visual bulk impacts.

FIGURE 8 – OUTLOOK FROM APARTMENTS WITHIN BUILDING 3



#### 1 Arilla Road

Building 3 is adjacent to, and immediately north of the dwelling house at 1 Arilla Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 9 provides a section between Building 3 and 1 Arilla Road.

FIGURE 9 - BUILDING SEPARATION BETWEEN BUILDING 3 AND 1 ARILLA ROAD



 The apartments in Building 3 that are adjacent to 1 Arilla Road are orientated away from the dwelling, which itself is oriented south, away from the proposed development.



FIGURE 10 – OUTLOOK FROM APARTMENTS IN BUILDING 3

- Building 3 is setback 15m from the site boundary and a total of 18m separation is provided between Building 3 and 1 Arilla Road.
- This separation complies with the Residential Flat Design Code guideline of 13m between habitable rooms/balconies and non-habitable rooms for buildings up to eight storeys.
- While no access was granted to this property to carry out a detailed survey, on the above basis it can be demonstrated that no unreasonable privacy or amenity impact should occur.

#### 6 Beechworth Road

Building 5 is adjacent, and immediately to the west of 6 Beechworth Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 11 provides a section between Building 5 and 6 Beechworth Road.





 The southern extent of Building 5 has been reduced as part of the revised PPR process to retain more trees within the outlook from the dwelling at 6 Beechworth Road, which is identified as a heritage item.



PICTURE 4 - VIEW TO 6 BEECHWORTH ROAD

- Building 5 is setback 22m from the site boundary to the west with the total separation between Building 5 and 6 Beechworth Road is 37m. The separation significantly exceeds the Residential Flat Design Code guideline of a minimum 18m separation between habitable rooms/balconies.
- Furthermore, the steep topography of the site results in Building 5 being set substantially lower than the ground level at 6 Beechworth Road.
- It is noted from Google Maps aerial photography that previously existing dense landscaping at the rear of 6 Beechworth Road, which previously screened the site has recently been removed.
- The landscaping on this boundary includes trees on elevated slope which are to be retained and protected. Substantial landscape planting that is proposed above the basement of Building 5 will provide visual screening of the lower levels of the building.

Given the proposed landscaping, large separation and revised building envelope of Building 5, no unreasonable amenity of view loss impacts will occur.

#### **10A Beechworth Road**

Building 5 is also adjacent, and immediately to the north of 10A Beechworth Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 12 provides a section between Building 5 and 10A Beechworth Road.



FIGURE 12 – BUILDING SEPARATION BETWEEN BUILDING 5 AND 10A BEECHWORTH

- Building 5 is setback 21m from the site boundary to the south with the total separation between Building 5 and10A Beechworth Road is 44m, which significantly exceeds the Residential Flat Design Code guideline of 18m between habitable rooms/balconies of buildings between 5 and 8 storeys high.
- Landscaping on the boundary to the south consists of existing native canopy which will be retained supported by additional tree planting. 10A Beechworth also provides trees and vegetation which will screen views as shown in Picture 5.

#### PICTURE 5 – VIEW TO 10A BEECHWORTH ROAD



- While no access was granted to this property to carry out a detailed survey, on the above basis it can be demonstrated that no unreasonable privacy or amenity impact should occur.
- Fixed opaque louvers are proposed along the windows of the apartment on the southernmost elevation to prevent direct overlooking into the private outdoor spaces and primary living areas.

Amenity impacts on 10A Beechworth Road are therefore not unreasonable.

#### **10B Beechworth Road**

Building 5 is also adjacent to, and immediately to the north of 10B Beechworth Road. An assessment of the privacy and amenity impact of the proposed building is provided below.

Figure 13 provides a section between Building 5 and 10B Beechworth Road.

FIGURE 13 - BUILDING SEPARATION BETWEEN BUILDING 5 AND 10B BEECHWORTH ROAD



- The proximity of Building 5 to 10B Beechworth was addressed through deletion of the southern end of Building 5 to increase the setback to 10A and 10B Beechworth Road.
- Building 5 is setback 18m from the site boundary to the south with the total separation between Building 5 and10B Beechworth Road being 26m, which significantly exceeds the Residential Flat Design Code guideline of 18m between habitable rooms/balconies of buildings between 5 and 8 storeys high.
- While no access was granted to this property to carry out a detailed survey, on the above basis it can be demonstrated that no unreasonable privacy or amenity impact should occur.
- Landscaping on the boundary to the south consists of existing native canopy which will be retained supported by additional tree planting. 10B Beechworth also provides trees and vegetation which will screen views.
- Fixed opaque louvres are proposed along the windows of the apartment facing south to avoid overlooking of 10B Beechworth Road.

Amenity impacts on 10B Beechworth Road are therefore not unreasonable.

Elevation shadow diagrams which illustrate the movements of shadows cast by the proposed development across the façade of the adjoining dwellings in mid-winter and at the equinoxes

To address the issues raised by DPI in relation to the impacts of overshadowing as a result of the proposal, the following approach has been undertaken:

- Plan form shadow diagrams have been produced to determine whether the principal private open space or the window to the principal living room of any adjoining dwelling will receive less than the minimum 3 hours direct sunlight between 9am and 3pm in mid-winter (June 21) specified by the Residential Flat Design Code.
- If dwellings achieve this solar access, no further shadowing analysis has been undertaken.
- If any dwelling has less than this, an elevational shadow diagram assessment would be undertaken to
  assess the detailed impact on the dwelling in relation to the location of specific windows, doors and
  balconies.

Plan shadow diagrams have been prepared by Marchese & Partners and provided in **Appendix D.** The following table provides a summary of the shadow analysis for adjoining properties.

HOUR	IMPACT ASSESSMENT
3 AVON ROAD	
9am – 12pm	Not impacted by overshadowing on internal living areas or private open space.
1pm	Building 4 partially overshadows the rear of the property. No internal or significant private open space is impacted.
2pm	Building 4 overshadows the south western half of the external private open space. No internal living areas are impacted by overshadowing with the exception of the kitchen area.
At 3pm	Building 4 overshadows the external private open space and internal living areas.
Summary	Maintains in excess of 3 hours of direct sunlight between 9am and 12pm in mid-winter.
7 AVON ROAD	
9am	Building 1 partially overshadows the western elevation, including the principal living room and private open space.
10am	Overshadowing caused by Building 1 has moved off the principal living room and private open space.
11am	There is no overshadowing of the principal living room or private open space.
12pm	There is no overshadowing of the principal living room or private open space.
1pm	Building 1 overshadows the majority of the principal living room or private open space
2pm	Building 1 partially overshadows the principal living room and private open space is overshadowed.
3pm	Shadows have moved entirely off the principal living room and private open space.
Summary	Maintains 3 hours of direct sunlight to principal living room and private open space between 9.30am and 12.30pm, and an additional half hour before 3 pm in mid-winter.
11 AVON ROAD	

TABLE 6 – SHADOW ANALYSIS FOR 3 AVON ROAD

The proposed buildings will not over shadow 11 Avon Road at any time.

HOUR	IMPACT ASSESSMENT
7 AVON ROAD	
9am – 12.00pm	Not impacted by overshadowing on principal living room or private open space.
12.00pm – 3pm	At midday Building 3 starts to overshadow the principal private open space and by 1pm has started to overshadow the principal living room and the entire private open space.
Summary	Maintains in excess of 3 hours of direct sunlight from 9am until after midday in mid-winte
ARILLA ROAD	Survey access was not granted so internal layout of the dwelling is not available.
9am -12pm	While Building3 overshadows part of 1 Arilla Road until midday, it does not appear to affect the principal private open space or living room after 10 am.
12 – 3pm	Not impacted by overshadowing on principal private open space or living room.
Summary	Maintains in excess of 3 hours of direct sunlight at 12pm- 3pm in mid-winter
6A BEECHWO	RTH
The proposed	buildings will not over shadow 6A Beechworth Road at any time.
10A BEECHW	ORTH ROAD Survey access was not granted so internal layout of the dwelling is not available.
9am -11am	Overshadowing affects the property, but not the principal private open space or living room.
11am – 3pm	Not effected by overshadowing.
- -	Not effected by overshadowing. Maintains well in in excess of 3 hours of direct sunlight between 11am- 3pm in mid-winter
Summary	
11am – 3pm Summary 10B BEECHWO 9am -11am	Maintains well in in excess of 3 hours of direct sunlight between 11am- 3pm in mid-winter
Summary	Maintains well in in excess of 3 hours of direct sunlight between 11am- 3pm in mid-winter ORTH ROAD Survey access was not granted so internal layout of the dwelling is not available. Overshadowing affects the property, but after 10.00am not the principal private open space or

In summary, all of the adjoining properties maintain 3 or more hours per day at least in principal living areas and for the most part, private open space. Solar impact to these properties improves during the rest of the year. Elevational shadow assessment was therefore not required.

Should the result of these investigations reveal an adverse impact to the affected dwellings, further consideration of the siting and design of the proposed building envelopes may be required.

Amendments to the siting of Building 5 and Building 3 (as described in Section 3.1 and explained further in section 5.2.1) have been undertaken in response to the analysis of issues raised in the DPI Revised Preferred Project Requirements.

The revised layout of Building 5 allows for:

 Improved views from 6 Beechworth Road to allow for a better southerly view of the valley particularly over the development site's Landscape Conservation Area.

- Reorientation of apartment layouts to minimise overlooking of 6 Beechworth Road.
- Amended landscaping between No 6 Beechworth Road and the development around Building 5.

This is discussed further in the Heritage Report provided in Appendix H.

The revised layout of Building 3 allowed for reduced opportunity for overlooking of 17 Avon Road. The apartment layouts have been amended to avoid the direct overlooking of principal living areas onto 17 Avon Road.

The shadow analysis has been based on these revised building layouts and as discussed above, maintains an acceptable level of solar access to the adjoining dwellings with regard to the RFDC requirements.

### 4.1.2 TRAFFIC GENERATION, ROAD CAPACITY AND CAR PARKING

Agency submissions have noted the potential of the proposal to impact upon the local road network, particularly in respect to the Pacific Highway and Beechworth Road intersection, and the Pacific Highway and Livingstone Road intersection.

Impacts on the local road network with particular focus on Pacific Highway and Beechworth Road intersection, and the Pacific Highway and Livingstone Road intersection has been remodelled in consultation with the RMS by Varga Traffic Planning. An addendum to their original Traffic Report is provided in **Appendix F.** On the basis of this remodelling, Varga Traffic Planning conclude that:

"The proposed development will have little, if any appreciable effect on the operational performance of nearby intersections, with increases of just 2 to 3 seconds/vehicle expected to occur at the Pacific Highway intersections as a consequence of the development proposal, and those increased delays are minimal and will clearly not warrant any road improvements or intersection upgrades to accommodate the projected additional traffic flows.

The Department requests that the additional information sought by the RMS in its letter dated 8 March 2013 be provided.

The addendum to the Traffic Report provides consideration of the RMS letter dates 8 March including:

- Additional traffic modelling requirements to include Pacific Highway/Beechworth Avenue/Bobbin Head Road, the modelling of cycle times at intersections and traffic generation rates.
- Potential for a road link between Avon Road and Beechworth Avenue.

The addendum to the Traffic Report is provided in Appendix F.

The revised on-site parking provision for the Concept Plan and Stage 1 Project Application is generally consistent with Council's current requirements for residential flat buildings and the broader objectives of Metropolitan Plan 2036. However, given the prevailing on-street parking demand in this locality (associated with the PLC School and commuter parking), in combination with the 'No Stopping' restrictions in the section of Avon Road immediately adjacent to the site, the Department requests that consideration be given to some reallocation of spaces designated for residential use to that of visitors.

Five (5) additional visitor parking spaces have been provided within the Stage 1 building car park.

### 4.1.3 CONTRIBUTIONS, WORKS-IN-KIND OFFSETS AND PROVISIONS OF INFRASTRUCTURE

Council has indicated that a pedestrian refuse is an acceptable alternative to the marked pedestrian crossing at the curve of Avon Road as described in the PPR. Further advice as to the feasibility of providing a refuse in this location to facilitate the safe movement of pedestrians across Avon Road should be provided.

The feasibility of a pedestrian refuge has been assessed in the Traffic Report provided in **Appendix F**. Varga Traffic Planning conclude:

"Consideration has also been given to Council's request to provide a pedestrian refuge island in Avon Road. However, the current dimensional requirements for refuge islands specified in the RMS technical directions (ie; a raised concrete island 2.0m wide and 15.0m long with a 3.0m gap in the middle) could not accommodate heavy vehicle movements such as buses and trucks negotiating the bend. It would also block right-turn movements in/out of the main access driveway, thus forcing traffic returning home to the site to travel around the block to access the site.

It is agreed with Council's observation that the RMS numerical warrants for a Marked Foot Crossing are unlikely to be met. It is therefore recommended that the current proposal to realign the footpaths on either side of Avon Road to facilitate a shorter, more direct pedestrian movement across Avon Road be adopted (albeit without the Marked Foot Crossing) as indicated on the current plan.

Realignment of the footpath on either side of Avon Road would improve the safety of the existing crossing facility by reducing the width of the road to be crossed, whilst maintaining the optimum location for a crossing in terms of driver/pedestrian visibility which is achieved on the apex of the bend".

Further clarification / confirmation regarding the staging of the various infrastructure works is required. The PPR and supporting documentation has not clearly identified the extent of infrastructure works that are to be provided at each stage of the development. This should be specified in the Statement of Commitments.

Construction sequencing has been further considered by Caverstock in relation to the various infrastructure works.

The proposed pedestrian upgrade to Pymble Station will be constructed prior to the occupation of the Stage 1 building. However, proposed upgrades to the existing drainage line, implementation of the Vegetation Management Plan and the provision of pedestrian walkways into and through the site cannot be safely and practically delivered until the completion of all site works. As buildings 3, 4 and 5 are currently intended to be constructed as a single stage of work, these infrastructure works will be implemented as part of this stage of the project, and completed prior to the issue of any occupation certificate for Building 3, 4 or 5.

The revised Statement of Commitments at Appendix J and K have been modified to reflect these arrangements.

Should final construction sequencing provide for the staged delivery of Buildings 3, 4 and 5 an application will be made to modify the Statement of Commitments accordingly.

## 4.2 STAGE 1 PROJECT APPLICATION

# 4.2.1 DEEP SOIL / ENCROACHMENT OF THE BASEMENT INTO THE AVON ROAD SETBACK

The basement of the Stage 1 building significantly encroaches into the Avon Road setback / deep soil zone. The Department concurs with Ku-ring-gai Council's concern in this regard and it is requested that the basement be reconfigured to provide a more generous dimension between the basement and the Avon Road boundary to increase the area of deep soil and contribute to the garden setting which is characteristic of this locality.

The basement level of Building 1 has been reduced to accommodate increased deep soil zones along Avon Road. The proposed deep soil zone areas are shown in Figure 14.
The area is proposed to be landscaped by mature trees such as the transplanted Gordonia tree and Cocus and Phoenix Palms will provide a high quality established streetscape landscape character



#### 4.2.2 ALLOCATION OF PARKING

Whilst the provision of 55 spaces for the Stage 1 building satisfies Council's numerical requirements (as set out in DCP 55), the proportion of resident to visitor spaces requires revision to address concerns about the existing demand for on-street parking in the locality (refer previous comment).

The visitor parking spaces accommodated in Building 1 have been reconsidered in accordance with DPI's comments. The PPR submitted in December 2013 proposed four visitor spaces within Building 1. The revised PPR increases this to10 visitor spaces.

## 5 Additional Information

### 5.1 SUMMARY OF ADDITIONAL REQUIREMENTS

The DPIs letter of 21 March 2013 specifies additional information which is to be submitted in addition to the revised architectural plans and supporting documentation.

TABLE 7 – ADDITIONAL INFORMATION REQUIREMENTS

TABLE 7 - ADDITIONAL INFORMATION REQUIREMENTS		
REQUIREMENT	REFERENCE	
In addition to any revised architectural plans and supporting documentation reflecting the issues raised above, the following information is also required.		
Revision of the traffic modelling to address the points raised in the RMS's submission dated 8 March 2013. Electronic copies of the SIDRA modelling are required for detailed assessment and review by RMS	Revisions to the traffic modelling have been made in accordance with the RMS comments as detailed in Section 4.1.2. Electronic copies of the SIDRA modelling are provided alongside this report.	
Further assessment of the impacts of the proposed development (and specifically Building 5) on the existing heritage item at No. 6 Beechworth Road	An addendum to the Heritage Impact Statement has been prepared in accordance with DPI's comments and is provided in <b>Appendix H</b> .	
The Office of Environment and Heritage has requested further analysis of the potential indirect impacts of the development on native vegetation within the proposed conservation area	Additional information relating to the potential indirect impacts of the development on native vegetation within the proposed conservation area has been prepared by Anne Clements and Associates. This is discussed further in Section 5.2.1.	
Revised Statement of Commitments where appropriate, providing a response to the Department's key issues and those raised by other agencies	Revised Statements of Commitment for both the Concept Plan and Project Application which accommodate the proposed changes are provided in <b>Appendix J</b> and <b>Appendix K</b> .	
Perspective studies of the development when viewed from Arilla Road and along the section of Avon Road adjacent to the rail corridor would assist the Department in making assessment of the impact of the proposed development on the public domain.	Perspectives of the proposed development when viewed from Arilla Road and adjacent to the rail corridor on Avon Road have been prepared. Analysis of these perspectives is provided in Section 5.2.2.	
STAGE 1 PROJECT APPLICATION: The following additional/revised plans and documentation is require:		
Dimensions to illustrate basement clearance – to ensure that waste vehicles can access the garbage store	A section through the basement has been prepared and shows the required 2.6m clearance. This is provided in <b>Appendix D</b> .	
Amended basement plan should also be fully dimensioned	<ul><li>Basement Plans are now fully dimensions showing:</li><li>Width and length of car parking spaces</li></ul>	

REQUIREMENT	REFERENCE
	<ul> <li>Width of vehicular access ways through the car park.</li> </ul>
	<ul> <li>Overall width and length of basement areas.</li> </ul>
	The basement plans are provided in Appendix D.
Confirmation of the number of accessible dwellings in Building 1 – Access Report suggests 5 whereas the architectural drawings show 4	The number of accessible units in Building 1 is five in accordance with the Access Report. The Architectural Plans have been updated to reflect this and are provided in <b>Appendix D</b> .
Further detail to be provided in relation to planting palette for Building 1 – species, size etc. to demonstrate achievements of BASIX commitments	Further information regarding planting palette and including planting size and species for Building 1 is provided in the amended Landscape Plans in <b>Appendix E</b> .
WSUD report indicates rainwater tank and on-site detention tanks are to be provided in the basement however this is not reflected in the architectural drawings. This should be detailed in the amended basement design.	The location of the rainwater tanks and on-site detention is shown on the basement plans provided in <b>Appendix D</b> .
CLARIFICATION REQUIRED: Clarify / correct errors and inconsistencies in the submitted documentation including but not limited to:	
Correct identification of adjoining properties – for example No.10B Beechworth appears to have been mislabelled as No.10A	The identification of adjoining properties has been corrected on all supporting information including the labelling on 10A and 10B Beechworth Road.

The deep soil zones identified in the landscape plans are<br/>inconsistent with the basement plans included in the<br/>architectural drawings, in particular Building 1 in the Avon Road<br/>setbackThe deep soil zones show in the landscape plans<br/>are consistent with the reduced basement of<br/>Building 1 and is demonstrated in the landscape<br/>plans provided in **Appendix E**.

### 5.2 FURTHER DETAIL ON ADDITIONAL REQUIREMENTS

#### 5.2.1 INDIRECT IMPACTS ON NATIVE VEGETATION

To protect the Conservation Area from direct impact of the development, there is a managed buffer to the Conservation Area. The Vegetation Management Plan submitted with the PPR is designed to enhance / restore the natural ecosystem processes in the Conservation Area.

In accordance with the DPI request to consider the Office of Environment and Heritage submission, a further flora and fauna response has been prepared by Anne Clements and Associates which has provided further analysis of the potential indirect impacts of the development on native vegetation within the proposed conservation area. These include the indirect impact on:

- Fauna habitat from the removal of exotic species.
- Nutrient ecosystem cycling.

- PH increases from runoff from concrete surfaces.
- Shading by buildings.
- Weeds transported by cars and pedestrians.
- Introduction of pathogens.

The report concludes the following:

The flora and fauna works are planned to minimise direct and potential indirect impacts associated with the development on the Conservation Area, as well as reduce existing threats to the Blue Gum High Forest ecosystem onsite.

Accordingly, indirect impacts are considered to be appropriately managed and mitigated against through the flora and fauna works.

#### 5.2.2 PERSPECTIVE STUDIES

As requested by DPI, computer generated photomontage studies of the development have been prepared from the following locations:

- Two perspectives along Arilla Road.
- One perspective along the section of Avon Road adjacent to the rail corridor.

These photomontages are included at Figures 15, 17 and 19.

The three dimensional, computer generated 'wire frame' studies upon which the photomontages have been based are also included at Figures 16, 18 and 20 to illustrate the superposition of existing street front housing in front of the proposed buildings. The perspectives demonstrate that:

- The two photomontages show that with the exception of small glimpses between the dwelling houses, Building 3 (and the other proposed buildings) is not visible from Arilla Road.
- The top level of Building 1 and Building 4 can be seen between the vegetation on Avon Road.

The impact of the proposed development on the public domain is therefore minimal. While the development can be viewed from Avon Road adjacent to the railway line, the topography of the site means that the height of the buildings appear generally consistent with residential development in the area.

FIGURE 15 – PHOTOMONTAGE FROM ARILLA ROAD



FIGURE 16 - WIREFRAME SHOWING ANALYSIS OF BUILDING LOCATIONS



FIGURE 17 – PHOTOMONTAGE ALONG ARILLA ROAD



FIGURE 18 - WIREFRAME SHOWING ANALYSIS OF BUILDING LOCATIONS



FIGURE 19 – PHOTOMONTAGE LOOKING WEST ALONG AVON ROAD



FIGURE 20 - WIREFRAME SHOWING ANALYSIS OF BUILDING LOCATIONS



## 6 Response to Public Submissions

The Preferred Project Report was publically exhibited from 23 January 2013 to 1 March 2013.

Submissions were received from a number of government agencies, Ku-ring-gai Council and the community. A total of 507 submissions were received.

The submissions have been examined individually to understand the issues raised. The issues raised have been identified, collated and summarised with a response below.

#### 6.1 AGENCY SUBMISSIONS

A summary of the agency submissions and a response is provided in Table 8.

AGENCY	COMMENT	RESPONSE
Transport for NSW	No comment.	N/A
Environmental Protection Agency	An Environment Protection Licence is not required.	Noted
Office of Environment and Heritage	An adequate assessment of the potential indirect impacts of the revised development on native vegetation within the proposed conservation area does not appear to have been undertaken. OEH recommends the VMP be revised to include a detailed estimate of the resources necessary to undertake the listed actions	Additional information relating to the potential indirect impacts of the development on native vegetation within the proposed conservation area has been prepared by Anne Clements and Associates. This is discussed further in Section 5.2.1. Necessary detailed relating to the VMP will be provided during the concept plan progression.
	<ul> <li><u>Riparian Land</u></li> <li>Further details required on the capacity of the proposed structures and any other structures on the site to determine additional licensing requirements.</li> <li>Concerns with the ability of online weirs to perform the desired water quality function.</li> <li><u>Groundwater</u></li> <li>Impacts on the groundwater system beneath the site.</li> <li><u>Water Licensing</u></li> <li>Details on the combined capacity of the ponds/weirs and the estimated capacity of each pond needs to be provided.</li> </ul>	The comments from Office of Water have been specifically addressed in <b>Appendix I.</b>

AGENCY	COMMENT	RESPONSE
	<ul> <li>If the project intercepts ground water and/or dewatering the proponent is advised to seek the relevant approvals.</li> </ul>	
Railcorp	Railcorp requests that conditions be imposed for the concept plan and future development applications.	The Railcorp conditions have been reviewed and no objection is raised with regard to these.
Rural Fire Service	Asset protection zones         At the commencement of building works all buildings to be provided with a 10m inner protection area.         Building 1 or the building closest to Avon Rd, lot 2 DP 205504, shall be setback >10m from Avon Rd.         Water and Utilities         Water, electricity and gas are to comply with 'Planning for Bush Fire Protection 2006'.         Access         Internal roads are two-wheel drive, all weather roads.         Traffic management devices are constructed to facilitate access by emergency services vehicles.         Roads have a cross fall not exceeding 3 degrees.         All roads are through roads.         Curves of roads are minimum inner radius of 6m         Maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.         There is a minimum vertical clearance to a height of four metres above the road at all times.         The capacity of road surfaces and bridges is sufficient to carry fully loaded fire fighting vehicles. Bridges clearly indicate load rating.         Roads 6.5m wide are No Parking on one side with the services (hydrants) located on this side to ensure accessibility to reticulated water for fire suppression.	The RFS conditions have been reviewed and no objection is raised with regard to these. The setback of Building 1 to Avon Road has increased to provide the 10m setback. This has been achieved by setting back the southern half of Building 1. While this has marginally reduced the separation to Building 3, this separation easily exceeds the RFDC requirement. As the northern part of the building remains unchanged, the existing separation to Building 4 remains unchanged.

AGENCY	COMMENT	RESPONSE
	Roads 6.5m wide provide parking within parking bays and locate services outside of the parking bays to ensure accessibility to reticulated water for fire suppression.	
	Parking bays are a minimum of 2.6m wide from kerb edge to road pavement. General: No brushwood fencing shall be installed within the subject site.	
RMS	<ul> <li>Comments relating to:</li> <li>Revised modelling.</li> <li>New road link between Beechworth Road and Avon Road.</li> </ul>	The RMS submission has been considered by Varga and a response provided in <b>Appendix F</b> .
Sydney Water	No further comment.	Noted.

A submission from Ku-Ring-Gai Council was also received. The key issues raised by Council has been provided and responded to in Table 9 below.

TABLE 9 – RESPONSE TO COUNCIL SUBMISSION
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COMMENT	RESPONSE
Permissibility	The project is an existing Part 3A project which is saved by
Any assessment of this transitional project should give	transitional provisions provided in Schedule 6A of the Environmental Planning and Assessment Act 1973.
considerable weight to the KLEP.	The proposal is consistent with the visions of the Town
It is recommended that the proposal not be supported	Centres LEP and SEPP 53 under which it was lodged. The site is in close proximity to Pymble railway Station and
as it is inconsistent with the strategic planning for Ku- ring-gai and is prohibited by the applicable	Pymble town centre and is considered to be appropriate
environmental planning instruments and does not meet	location for the reduced residential scheme presented in as
the objectives for the applicable zones.	the preferred project.
Inadequate Information	
Inadequate Information	Many of the issues have now been responded to and have
In many instances, the information supplied is still	been provided as part of the revised PPR package.
inadequate including:	The PPR process addressed many of the inconsistencies
<ul> <li>Architectural and survey plans.</li> </ul>	presented in the original application in relation to the requested information.
<ul> <li>Diagrams and reports.</li> </ul>	Further detail relating to the Concept Plan can be provided
	at Development Application for the relevant stages of
<ul> <li>Riparian and water sensitive urban design.</li> </ul>	development.
<ul> <li>Draft Statement of Commitments.</li> </ul>	
<ul> <li>Proposed road linking Avon Road and Building 3.</li> </ul>	

COMMENT	RESPONSE
<ul> <li>Proposed public pathway, and upgrade to station.</li> </ul>	
<ul> <li>Landscape plans.</li> </ul>	
<ul> <li>Arborist Report.</li> </ul>	
<ul> <li>Geotechnical Report.</li> </ul>	
<ul> <li><u>Assessment of Design</u></li> <li>Context.</li> <li>Scale.</li> <li>Built form.</li> <li>Density.</li> <li>Resource, energy and water efficiency.</li> <li>Landscape.</li> <li>Amenity.</li> </ul>	<ul> <li>A response to site isolation has already been provided as part of the PPR.</li> <li>Proximity to low density dwellings has been addressed in Section 4.1.1.</li> <li>The comments relating to heritage context has been addressed in the attached HIS (Appendix D).</li> <li>Scale, built form and density of the development has previously been addressed and substantially reduced. View impacts and building separations are considered in Section 4.1.1 and Section 5.2.2 of this report. Built form</li> </ul>
<ul> <li>Safety and security.</li> <li><u>Staging of development</u></li> <li><u>Developer contributions</u></li> </ul>	<ul> <li>has also been modified as described in Section 3.1.</li> <li>Visitor car parking has been increased as discussed in Section 4.1.2. Traffic generation has previously been addressed in the Traffic Report and the addendum traffic statement provided in <b>Appendix F</b>.</li> </ul>
<ul> <li>Statement of Commitments.</li> <li>Allocation of Credits and Inflation.</li> <li>Calculation of contributions.</li> </ul>	<ul> <li>Adequate space must be provided in each basement for waste storage.</li> <li>The Office of Water comments on the riparian land has separately been addressed.</li> <li>Landscaping has been amended and details provided which comply with BASIX requirements (Appendix E) in accordance with the DPI's Preferred Project Requirements.</li> <li>The comments from the RFS have separately been addressed.</li> <li>Solar access has been fully assessed and discussed in Section 4.1.1 of this report.</li> <li>Natural ventilation is considered to be adequate and generally provided in accordance with the RDFC.</li> <li>Privacy has been addressed in Section 4.1.1 and opaque louvres have been added on apartments where there is potential for overlooking.</li> </ul>

COMMENT	RESPONSE
	<ul> <li>Safety and securing has been previously assessed in relation to access to the proposed buildings.</li> </ul>
	<ul> <li>Adequate provision of accessible apartments has been provided in the proposed buildings.</li> </ul>
	<ul> <li>The SEPP65 Design Verification Statement has provided previous details on the materials proposed for Building 1.</li> </ul>
	<ul> <li>Further details relating to staging of construction has been provided in Section 4.1.3.</li> </ul>
	<ul> <li>The developer contributions have been calculated for the Stage 1 Project Application in the PPR report. The applicant commits to paying contributions in accordance with Council's Contributions Plan prior to the release of the construction certificates for other stages of the development.</li> </ul>

It is noted that Council have requested that a minimum 5m setback be provided between Building 3 and the ponding system associated with the drainage line. Council submission states:

At the north end of building 3 (or C as identified in the stormwater and riparian report) the basement appears to be located too close to the proposed wetland/ current creek line. It is estimated that there is only about 1m between the edge of the proposed wetland and edge of the basement, and only 2m to the proposed building itself.

To ensure that sufficient space for planting (considering APZ requirements), access for site users and for maintenance of both the building and the wetland/watercourse is provided, this building should be located at least 5m away from the bank of the wetland/watercourse.

While a series of 'ponds' is proposed along the drainage line, and one of these ponds extends to within 1 metre of the basement of Building 3, at most times the pond will be empty and a curtilage easily exceeding 5 metres will be available all around Building 3 for planting, access and maintenance. It will only be during rain events that the 'ponds' will fill with rainwater to within 1 metre of the basement, and the ponded water will be neither deep, nor fast flowing.

Furthermore, the environmental attributes of the riparian corridor have been a key driver of the project design, and will be central to the marketing of a distinct Ku-ring-gai 'bushland' environment for residents. Rather than being out of sight and out of mind, the proximity of the drainage corridor and Blue Gum High Forest understorey to the buildings will encourage future residents to have a sense of responsibility for, and a motivation and willingness to actively maintain the natural attributes of the corridor. The proximity of Building 3 to the drainage pond is therefore central to the environmental management concept for the site.

We are aware of countless examples of responsible buildings constructed in close proximity to water courses, ranging from the iconic 'Falling Water' residence by Frank Lloyd Wright to a recent commercial building within Norwest Business Park.

A Statement of Commitment has been included that the water quality benchmarks specified in the Stormwater Management Report prepared by NPC will be confirmed prior to occupation of Building 1 and maintained throughout the construction, and ongoing use of the rest of the project. Accordingly, no adverse water quality impacts will result from the siting of Building 3 relative to the riparian corridor.

#### FIGURE 21 – FRANK LLOYD WRIGHT FALLING WATER



FIGURE 22 – NORWEST WETLAND COMMERCIAL BUILDING



### 6.2 RESIDENT SUBMISSIONS

A total of 498 public submissions were also received. An analysis of the issues summarised by residents are provided in **Appendix L**. The issues have been grouped into categories where similar issues have been raised by individual submissions, and a single response provided.

The key issues raised in the public submissions and a response to each is provided in the following table.

TABLE $10 - SLIMMARY$	RESPONSE TO SUBMISSIONS

ISSUE	RESPONSE
Massing / scale	<ul> <li>The massing and scale of the project was revised as part of the design review and amendment process for the Preferred Project Report. The scale and massing of the Concept Plan was substantially reduced in the following ways:</li> <li>Gross floor area (GFA) has been reduced from 34,892sqm to 22,442sqm</li> <li>Building heights have been reduced from 5-11 storeys to 4-9 storeys</li> <li>Apartment numbers have been reduced from 355 to 273.</li> </ul>
Height / Too many storeys	As above, the building heights have been reduced from 5-11 storeys to 4-9 storeys as part of the design review for the Preferred Project.
Parking	<ul> <li>Parking has been reduced from approximately 500 to 324 spaces as part of the Preferred Project. The proposed rate of car parking provision represents the average of Council's and the RMS's car parking requirements, balancing Council's desire to satisfy parking demand on site with the State Government's desire to reduce car dependency in transit oriented locations.</li> <li>Visitor parking has been increased in accordance with the DPI's Revised Preferred Project Requirements described further in Section 4.1.2.</li> </ul>
FSR to great	All buildings were reduced in size, located out of sensitive parts of the site and redesigned to adopt a more site responsive typology. The FSR has accordingly been reduced from 1.4:1 to 0.94:1.
No photomontage / flawed	Photomontages were prepared and included as part of the PPR.
Safety of children / students	The impact of the proposed development on local traffic including Beechworth Road has been considered in the Traffic Report. Safety issues relating to emergency access, driveway access, excavation were considered in response to public submissions as part of the PPR.
Unacceptable impact to traffic	The required traffic modelling has been undertaken, and demonstrates that the Level of Service will not be reduced at any intersection as a result of the project, and only marginal increases in delay will occur.
Inaccurate traffic study	An accurate assessment of traffic impacts has been undertaken in accordance with DPI's Preferred Project Requirements and additional information provided as part of the revised PPR report (refer Section 4.1.2 and <b>Appendix F</b> of this report).

ISSUE	RESPONSE
Damage to natural / built environment	All building footprints have been located outside of the BGHF community as shown in the Landscape Plans in <b>Appendix E</b> . The management of the BGHF is provided in the Vegetation Management Plan. The Vegetation Management Plan provides management measures to be in place for the next 5 years. No damage to the built environment will occur as a result of this proposal.
Unacceptable impact to character of area	The design response to the character of the area was assessed as part of the PPR and DPI's Preferred Project Requirements.
Insufficient community consultation	Community consultation has been undertaken in accordance with Council's public exhibition policy. Resident and agency submissions have been considered and addressed in this report.
Unacceptable visual impact / overshadow	Visual impact and overshadowing have been considered in accordance with the DPI's Revised Preferred Project Requirements and discussed further in Section 4.1.1 and 5.2.2.
Privacy impact	Privacy and amenity assessments have been undertaken for the adjoining dwellings and summarised in Section 4.1.1.
Incompatible with LEP and other local controls	The proposal is consistent with the visions of the Town Centres LEP and SEPP 53 under which it was lodged. The site is in close proximity to Pymble railway Station and Pymble town centre and is considered to be appropriate location for the reduced residential scheme presented in this PPR.
Unacceptably close to Railway	The proposed buildings are an appropriate distance from the railway to provide transit orientated development without impacting on safety or amenity. A building separation plan showing the distance between the site and the railway is included in <b>Appendix C.</b>
Bushfire prone land	The Bushfire Report provided an assessment of the proposal in accordance with <i>Planning for Bush Fire Protection 2006.</i> A minimum 10m APZs have been incorporated into the design in accordance with the Bushfire Report.
Inadequate infrastructure	A pedestrian footpath will be provided along the full length of Avon Road, safety upgrades will be made to the Pacific Highway pedestrian underpass and publicly accessible walkways will be provided across and through the site, at the proponent's expense.

### 7 Revised Statement of Commitments

The Statement of Commitments details the measures that the Proponent will implement as part of the development to mitigate potential residual environmental impacts associated with the proposal.

A draft Statement of Commitments was included as part of the Environmental Assessment and modified as part of the Preferred Project Report.

To reflect the proposed amendments to the design for both the Concept plan and Project Application as part of the Revised Preferred Project Report, further revised and consolidated draft Statement of Commitments has been prepared.

The revised and consolidated draft Statements of Commitments for the Project Application and Concept Plan form two separate documents and are provided at **Appendix J** (MP08\_0207).and **Appendix K** (MP10\_0219)

### 8 Conclusion

This report comprises the Revised Preferred Project Report (revised PPR) prepared on behalf of Brett Stephen Lord and Marcus William Ayres (Joint and Several Receivers and Managers) in respect of the Concept Plan (MP08\_0207) and Project Application (MP10\_0219) under Part 3A of the *Environmental Planning and Assessment Act 1979* for residential development at Avon and Beechworth Roads, Pymble.

The report responds to Revised Preferred Project Requirements issues by the DPI on 21 March 2013, which requested the preparation of a revised PPR and specified key issues identified through their assessment of the proposal.

The revised Preferred Project responds to the Preferred Project Requirements as follows:

- Reconfigured building envelope and indicative apartment layouts for Building 3 and Building 5 to minimise overlooking to adjoining dwellings. The number of units has not been amended.
- Addition of louvres on apartment on specified apartments to restrict the opportunity for overlooking principal living areas and private open space of adjoining dwellings.
- 5 additional visitor car parking spaces are proposed within the Stage 1 Building.
- Landscaping has been revised to increase visual screening of the development and to retain privacy
  of the adjoining dwellings.
- The setback of the basement of Building 1 from Avon Road has been increased and an additional basement parking level added.
- The deep soil zones along Avon Road associated with Building 1 have been increased where the basement carpark has been reduced.

A revised and consolidated draft Statement of Commitments for both the Project Application and the Concept Plan has been prepared to reflect the revised design and the assessment included in this report.

With specific regard to the issues raised in the DPI's letter of 21 March 2013:

- The relationship to adjoining dwellings has been assessed in relation to building separation and overshadowing and amendments to the building have been made which reflect this.
- The impact of the proposal on the local road network and intersections has been further assessed and findings presented. Visitor parking has also been increased in accordance with the comments from the RMS.
- Further details on project staging have been provided and appropriate Statements of Commitment included.
- Building 1 has been revised in accordance with the requirements relating to increasing opportunities for deep soil planting and visitor parking.
- Further information on indirect impacts on native vegetation has been provided.
- Perspective studies have been prepared to demonstrate the visibility of the site from the surrounding streets.
- Additional information has been provided where required and the relevant clarifications have been made.

As detailed in this revised PPR, all of the issues raised in the DPI's correspondence of 21 March 2013 have now been suitably addressed and the project will not result in any unreasonable adverse environmental effects.

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DPI's Revised Preferred Project Requirements

# Appendix B Amended Survey Drawings

Appendix C

Amended Architectural Plans for Concept Plan

# Appendix D

Amended Architectural Plans for Project Application

# Appendix E Amended Landscape Plans

# Appendix F Addendum to the Traffic Report

Appendix G

Addendum to the Flora and Fauna Report

# Appendix H Addendum to Heritage Report

Appendix I

Addendum to Stormwater Management Report

# Appendix J

Consolidated Statement of Commitments MP08\_0207

Appendix K

Consolidated Statement of Commitments MP10\_0219

# Appendix L Analysis of Resident Submissions

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