Preferred Project Report
120-128 Herring Road, Macquarie Park

Application Numbers
Concept Plan MP 09–0195
Project Application (Staged Subdivision) MP 09–0217
Project Application (Building A) MP 09–0218

September 2010

PREFERRED PROJECT REPORT

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Executive Summary

This report has been prepared in response to the letter from the Department of Planning (DOP) dated 27 July 2010 requesting a Preferred Project Report to be prepared. The letter requested the PPR respond to specific issues raised by the Department of Planning and other stakeholders during the assessment and consultation process of the Environmental Assessment of the Concept Plan and Project Applications for the development of the land at 120 – 128 Herring Road, Macquarie Park.

The report includes a response and additional information in relation to each of the issues raised by the above stakeholders. Since submission of the Environmental Assessment Report in May 2010, further consultation has been had with, in particular, officers at the DOP, officers at Ryde City Council and various government agencies.

The Preferred Project includes the following key amendments to the original proposal:

- Amend the consistent 12 storey building heights to a new modulated building height plane across the development site to provide a range of building heights ie: 9, 12 and 15 storeys.
- Reduce the overall basement parking by 101 spaces to 667 car parking spaces to achieve a minimalist approach to car parking, as well as incorporate small car, bicycle and motorbike parking spaces in Building A.
- Setback and re-orientate Building D to be positioned out of the University Creek riparian corridor vegetation buffer to avoid any disturbance of this land. The re-orientation of the building will ensure that it better addresses the riparian corridor.
- Re-design the bio-swale so that it is located outside the riparian corridor to avoid disturbance of the vegetation within the corridor.
- Re-direct the public pedestrian/cycleway link out from the environmentally sensitive riparian corridor to between Buildings B and C to the boundary with Macquarie University to enable the connection to continue through the University lands.
- Increase the building separation between all buildings by re-orientating building footprints to enhance the privacy levels between buildings.
- Inclusion of 3 dedicated car-share spaces along the new local road to ensure that there are convenient alternatives to car ownership for residents.
- Commit to a range of building performance measures to achieve a 4 Star Green Star rating for Building A and for the remainder of the development so that the project demonstrates industry best practice.
- Commit to an offset planting strategy on-site to enhance the sites' biodiversity value as well as achieve a net increase in trees and shrubs as a consequence of the development.

As outlined in the body of this report, the amendments to the proposal and additional information provided is considered an appropriate response to the issues raised during the consultation and assessment process for the Concept Plan and Project Applications.

We believe the preferred scheme provides an optimum balance between providing residential accommodation to service the local market needs and contribute to strategic planning targets, as well the respecting the sites environment and local context qualities. The revised proposal delivers a built form which will have minimal impact on surrounding land uses and will deliver a range of public benefits.

The overall public benefit of providing housing within the Macquarie Park Corridor within 250 metres of the newly completed Macquarie Park train station, and surrounded by lands which are principally developed for retail, commercial or educational uses, cannot be understated given the limitation for other residential opportunity sites in close proximity to such services. This proposal therefore presents a

key opportunity to deliver housing consistent with the Sydney Metropolitan Strategy's objective to increase opportunities for 'walk-to-work' communities.

The other key public benefits which the amended proposal will deliver include:

- Delivery of a Type 3 road which will connect into the existing local road network and contribute to the implementation of a finer grain road access in the precinct.
- Achieving a 4-star Green Star Rating, being 'best practice' for residential developments that will deliver substantial environmental performance efficiencies.
- Restoration and revegetation of the riparian corridor along University Creek, enhancing its biodiversity value.
- Providing public pathway access to the edge of the riparian zone.
- Improve the site's biodiversity value by offset planting throughout the site.
- Providing a pedestrian / bicycle link from the new local road to the north-eastern University land between Buildings B and C, thereby improving permeability through the northern portion of the Macquarie Park Corridor and contributing to the finer grain network.
- Commitment to a minimalist car parking approach together with a range of measures (small car parking, care share spaces, bicycle racks and motorbike parking) that will encourage other means of transport to and from the site.

In conclusion, it is considered that the proposed Preferred Project has adequately addressed all matters raised in the submissions. The site location and context is highly suitable for residential development. The proposal is appropriate for the site and its surrounding context and will ultimately positively contribute to achieving the aims and objectives for the Macquarie Park Corridor and the Inner North Draft Subregional Strategy as the locality continues to evolve as a "Specialised Centre".

The report has been written by Urbis, with input from a number of other expert consultants, on behalf of Lipman Properties Pty Ltd. The accuracy of the information contained herein is to the best of our knowledge not false or misleading. The comments have been based on information and facts that were correct at the time of writing the report.

1 Introduction

1.1 Overview

This report has been prepared to outlines the Preferred Project for the Concept Plan and two Project Applications (Building A and Subdivision) submitted in accordance with Part 3A of the *Environmental Planning and Assessment Act 1979* for the land at 120 – 128 Herring Road, Macquarie Park.

This Preferred Project Report (PPR) has been prepared in response to the issues raised by the Department of Planning (DOP), Ryde City Council, other authorities and stakeholders to the Concept Plan and Project Applications during the Part 3A assessment and consultation process.

The key planning issues were outlined in the formal written response from DOP dated 28 July 2010 to the Environmental Assessment documentation, which are:

Schedule 1:

- Building height, separation and future residential amenity.
- Environmental constraints and developable area.
- Parking and traffic generation.

Schedule 2:

- Additional planning assessment and architectural plan/calculation details.

This report is accompanied by revised architectural plans, specialist plans and specialist reports which address the issues raised during the consultation process, and includes additional information requested for the final assessment and determination of the proposal.

In accordance with Section 75H(6) of the *Environmental Planning and Assessment Act 1979*, this PPR has been prepared to outline the changes to the proposal in response to the assessment consultation process to minimise the environmental impacts of the proposal.

The report has been structured to:

- Summarise the key overall amendments to the Concept Plan and Project Applications.
- Address the key primary issues raised by DOP, and outlining the amendments adopted by the PPR in response to these issues.
- Provide a detailed and updated description of the PPR Concept Plan, Subdivision Project Application and Building A Project Application.
- Outline the proposal's response to the secondary issues raised by the Agencies and other stakeholders.
- Provide a revised Statement of Commitments which reflects the PPR and key stakeholder issues.

1.2 Summary of Amendments

In response to the issues raised through submissions and consultation with the Department of Planning, Ryde City Council, various government agencies and the public, a number of amendments have been made to the scheme as originally proposed.

The proposed changes to the Concept Plan design incorporated in this PPR are as follows:

- Amend the consistent 12 storey building heights to a new modulated building height plane across the development site to provide a range of building heights ie: 9, 12 and 15 storeys.

- Reduce the overall basement parking by 101 spaces to 667 car parking spaces to achieve a minimalist approach to car parking, as well as incorporate small car, bicycle and motorbike parking spaces in Building A.
- Inclusion of 3 dedicated car-share spaces along the new local road to ensure that there are convenient alternatives to car ownership for residents.
- Setback and re-orientate Building D to be positioned out of the University Creek riparian corridor vegetation buffer to avoid any disturbance of this land. The re-orientation of the building will ensure that it better addresses the riparian corridor.
- Re-design the bio-swale so that it is located outside the riparian corridor to avoid disturbance of the vegetation within the corridor.
- Re-direct the public pedestrian/cycleway link out from the environmentally sensitive riparian corridor to between Buildings B and C to the boundary with Macquarie University to enable the connection to continue through the University lands.
- Increase the building separation between all buildings by re-orientating building footprints to enhance the privacy levels between buildings.
- Commit to a range of building performance measures to achieve a 4 Star Green Star rating for Building A and for the remainder of the development so that the project demonstrates industry best practice.
- Commit to an offset planting strategy on-site to enhance the sites' biodiversity value as well as achieve a net increase in trees and shrubs as a consequence of the development.

The following table provides an overview of the key numerical changes between the original Environmental Assessment Proposal and the Preferred Project proposal outlined in this report.

Table 1 – Numeric Overview of Proposal

120 – 128 Herring Road	Environmental Assessment Proposal	Preferred Project Proposal
Site Area	1.717ha	1.725ha
Gross Floor Area	45,718 sqm	45,718 sqm
FSR	2.662:1	2.662:1
Residential Flat Buildings	5	5
Apartments	557	561
Parking Spaces	768	667
Deep Soil (%)	37%	41% (comprising: 27% on ground14% in podium)
Building Height	12 storeys plus basement car park	9 – 15 storeys plus basement car park
Setback from Herring Road	10 metres	8.5 metres in part, majority 10 metres

2 Summary of Key Issues from Submissions & Departmental Responses

The letter provided from the DOP requesting a PPR be prepared outlined the following three key issues to be considered in the preparation of the preferred project. This PPR provides a response to each of the issues raised.

2.1 Building Height, Separation and Future Residential Amenity

2.1.1 Greater Height Modulation

In response to the concerns raised to the uniform building heights proposed across the 5 residential flat buildings, the built form has been modified to provide diversity of building heights across the site. A range of building heights are proposed across the site, from 9 storeys to 12 storeys to 15 storeys. The two buildings fronting Herring Road (Buildings A and E) and Building C will retain their originally proposed 12-residential-storey height, while Buildings B and D which are interspersed with the other buildings will have staggered heights, of 15-residential-storeys and 9-residential-storeys respectively.

The variation in height across the 5 buildings will result in the following building heights across the site:

- Building's A & E (at street front) 12 residential storeys + 3 basement parking
- Building B (near street front) 15 residential storeys + 3 basement parking
- Building C (centre of site) 12 residential storeys + 3 basement parking
- Building D (at rear of site) 9 residential storeys + 3 basement parking

The revised Concept Plan is summarised in the **PPR Volume of Plans – Part 2 (i) Concept Plan**, by Tuner and Associates.

The amendments to the proposed building heights will deliver the following positive outcomes:

1. **Achieve the intent of Ryde Council's Height control**

- Tapering built form down towards the rear of the site consistent with the objectives and intent of the Ryde LEP 2010 Height Control Map, which stipulates a building height variation of 6 storeys between buildings towards the front of the site (Buildings A & B) and buildings at the rear (Building D).
- The proposal will now have a 12 and 15 storey building height at the front (street) portion of the site. This building height will step down to 9 storeys for Building D at the rear. The 6 storey difference in building heights is consistent with the height difference from the front to the rear of the site as sought by Ryde's LEP 2010 height control.
- The lower 9-storey building height proposed for Building D will provide a more appropriate built form scale that responds to Council's DCP 2010 control objective for the Macquarie University Station Precinct "to ensure new development adjacent to University Creek addresses the creek corridor". The reduced building height coupled with the re-orientation of Building D positively responds to this objective.
- The amended height plan will achieve the stepping-down appearance of the built form along the proposed Type 3 Road, as envisaged by the Council controls.
- In terms of the street height, as shown on the perspective views and sections by Turner and Associates (refer to plans: A146-A149) the height of the development when viewed from the street will present as an appropriately scaled development having regard to the LEP height line and the outline of the approved building envelopes at Macquarie University. The additional 3 storeys of Building A will provide a positive transition from the larger footprint bulkier buildings to the north-east. Herring Road streetscape will be strongly defined and dominated by the taller buildings of the University, especially as one moves toward the railway station. The proposed Concept Plan

presents buildings that will not alter this future street character and will still provide for a transition to lower higher buildings heading toward the Epping Road intersection. Given width of Herring Road and the fall of the land for properties on the opposite side of the road, the additional building height above Council's controls will not have any discernable impact.

2. **Reduce the visual impact of the development**

- The proposed height articulation across the site will improve the visual impact of the built form when viewed from Herring Road and across the Morling College site by removing the uniform building height and creating a varied skyline.
- The topography of the site is one that slopes by approximately 6 metres down from Herring Road to the creek at the rear. This has the effect of giving the buildings a varying roof scape as they step their way down the creek. While this visual effect would have been discernable in the original proposal with the consistent building height, the amended design will enhance the visual effect of variation of building form and scale. By doing so it will achieve the visual effect sought by Ryde Council's controls when viewed from Herring Road.
- Furthermore, the variation of the buildings heights when viewed along the new local road will remove the sense of being enclosed or overwhelmed by 5 buildings of the same height by providing a richer and more diverse streetscape presentation to the proposed local road. The height variation together with the increase building separation (of 15 to 23.5 metres) will remove any sense of the buildings being overbearing as there will be increased visual connections through buildings and more varied roof scapes that will provide enhanced vistas.

3. **Enhance the amenity outcomes of the development**

- The varied building height will improve solar penetration to open spaces within the site, particularly towards the rear along University Creek which will enhance the experience of residents.
- The varied building height will also increase the duration of solar penetration to more of the public spaces (road and pathway) which will benefit users of this space.

2.1.2 Increased Building Separation

The Concept Plan has been amended to increase the building separation which inturn responds to concerns about potential privacy impacts and solar access. The revised building separation is summarised in the **PPR Volume of Plans – Part 2 (i) Concept Plan**, **Plan A108** Rev A by Tuner and Associates.

The original and amended building separations are summarised below:

Separation	**Original EA (metres)**	**PPR**	**Separation Increase**
Building A to B	13.5m	Minimum 15m, increasing to 16m and to 20m.	1.5m to 6.5m
Building B to C	12m	Minimum 15m increasing to 16m and to 17m.	3m to 5m
Building C to D	12m	Minimum 19m to 23.5m	7m to 11.5m

Greater separation between buildings has been achieved by:

- Reducing and re-orientating the footprint of Building D run parallel with University Creek.
- Modifying the building floor-plates of Buildings B and C.
- Bringing the lower podium base of Building A 1.5 metres toward to Herring Road.

- Relocating the pedestrian/cycle link to run between Buildings B and C.

The amendments to the proposed building separation will deliver the following positive outcomes:

1. **Improve privacy levels between buildings**

- The increased physical separation between buildings will reduce the potential for direct overlooking between apartments of buildings and thereby enhance the privacy levels.
- Habitable rooms and primary outlooks have been orientated in opposite directions between Buildings B & C, and Buildings C & D which enables the development to satisfy the intent of the SEPP 65 control and ensure adequate levels of privacy can be maintained.
- The Building A is largely orientated away from Building B. There are two units that look into the slender end of Building B at a distance of 15m and 20m. Both of these apartments have oblique distant views due to the slenderness of the opposite façade. Furthermore, the views are of secondary windows to the opposing façade. Since the design has eliminated the prospect of direct overlooking from windows/balconies between principle living areas, in our opinion the building separation concern has been adequately addressed.

2. **Enhance solar access**

- An illustration of the solar access is summarised in the **PPR Volume of Plans – Part 2 (i) Concept Plan**, **Plan A109 Rev A** by Tuner and Associates. The design amendments have increased the percentage of private open spaces and living rooms receiving greater than 2 hours of sunlight in winter from 55% to 62%.
- The amended design is considered acceptable for the following reasons:
  - Although this just falls short of the 'rule of thumb' 70% requirement under SEPP 65 the amendments will achieve an improved level of sunlight access for a greater number of apartments than previously proposed.
  - Over 50% of the living rooms for the development will receive greater than 4 hours of sunlight and over 33% of balconies will receive 6 hours of sunlight. This is a relevant consideration because a recent NSW Land and Environment Court Judgement [*The Benevolent Society v Waverly Council*] established a new "Solar Access" Planning Principle that stated; *the amount of sunlight lost should be taken into account, as well as the amount of sunlight retained*.
  - The design of all buildings incorporates glazing and openable windows at both ends of the corridors. This will enable both natural sunlight and natural cross ventilation to penetrate into all corridors, providing for high quality amenity for residents that exceeds SEPP 65 requirements. 72% of apartments in Building A are cross ventilated, well exceeding the 60% SEPP 65 target. With a similar floor plate layout for the remaining buildings, the overall Concept Plan will exceed the cross ventilation targets for apartments.
  - As a result of the increased building separation, a greater part of the communal open space around the buildings will receive sunlight during winter, thereby improving the amenity for residents.
  - The orientation of the site is a significant factor that inevitably creates a number of south-east and south-west facing apartments and in turn impacts on the ability to satisfy the rule of thumb target. These apartments however will be afforded scenic views towards the city and therefore offer a different and undoubtedly desirable perspective. These units also importantly give definition and character and safety (through surveillance) to the new local street.
  - All residents are able and access and enjoy the north facing communal courtyard which includes facilities such as swimming pool, gym and BBQ area.
  - Finally, the Concept Plan has a higher than 'typical' proportion of 1 bedroom apartments based on extensive market research owning to its proximity to the University and the needs of the local market. This inturn has impacted on the solar access calculations, as different building layouts containing additional 2 bedroom units would increase the rate. The numeric solar

access guidelines could be met in the future staged development of the project should the market demand a greater proportion of 2 bedroom apartments.

3. **Enhance amenity of public domain and communal open spaces**

- The increased building separation together with the building setback out of the riparian corridor will enhance the openness of the proposed local road and riparian corridor, by providing breaks in the street-wall at higher levels.
- It will also enhance the functionality and quality of communal open space between buildings through increasing privacy and solar penetration into these spaces.

4. **Better aligns pedestrian/cycleway connections with needs of Macquarie University and NSW Office of Water**

- The amended scheme removes the proposed pedestrian/cycle way out of the riparian zone and re-positions it between Buildings B and C. This change is a direct response to the environmental impact concerns from NSW Office and Water and the Macquarie University. The proposed point of connection with the University has been based on recent discussions between the proponent and the University in order to ensure the connection can be continued in a legible way through the University in accordance with its Concept Plan.

2.2 Environmental Constraints and Developable Area

2.2.1 Relocation of Building D, footpath and bio-swale out of riparian corridor

The built forms comprising Buildings C and D have essentially been swapped. In addition, Building D has also been re-orientated so that it runs parallel to University Creek. These modifications have resulted in the built form of Building D (including the basement car park), now positioned outside of the 20m riparian corridor.

The bio-swale has also been redesigned to run from the end of the new road to the edge of the riparian corridor boundary along the south-western side of Building D. Within the riparian corridor, the treated stormwater will be piped and fed into University Creek. The bio-swale will still operate as the first-flush for the majority of stormwater captured across the development site, which will go through Gross Pollutant Traps prior to entering the bio-swale. The bio-swale will be contained outside the flood zone, eliminating the likelihood of flood-waters mixing with water from the bio-swale until the first-flush treatment is complete.

Additionally, the proposed pedestrian / cycle link has been relocated to run between Buildings B and C, and therefore will no longer encroach into the riparian corridor.

The key environmental impact improvements of these amendments are:

- All built form has been setback out of the riparian corridor, enabling the riparian corridor regeneration works to be enhanced consistent with the Department of Water and Energy (DWE) *Guidelines for Controlled Activities – In Stream Works (February 2008)*.
- Avoidance of the environmental impacts of the development on the riparian zone by providing a development-free area within the 20m riparian corridor.
- Ability to further enhance the environmental and biodiversity value of the riparian corridor as it will be less disturbed by people compared with the previous scheme.
- The bio-swale redesign outside of the flood affected area will ensure unfiltered water does not mix with creek-water, addressing the water quality impact concerns of the NSW Office and Water.\
- Portions of the offset planting areas have been located to link with the riparian zone further enhancing the regeneration and biodiversity.

2.2.2 Sydney Turpentine Ironbark Forest

In response the concerns from DECCW, further assessment of the Sydney Turpentine Ironbark Forest (STIF) has been undertaken by Anne Clements and Associates.

The report prepared by Anne Clements and Associates (included in **Appendix E**) supplements the biodiversity information provided by Total Earth Care and Treescan, submitted as part of the EA documentation.

On the question as to whether the endangered ecological community (EEC) Sydney Turpentine-Ironbark Forest occurs on or adjacent to the forest, the report concludes that it this EEC is not present. This conclusion has been drawn from additional site searches, soil sampling, review of recent ecological reports and research of historic photos.

The reasons are summarised as follows:

- The soils on and adjoining the site to the north-east are not those described in the Final Determination for STIF. The soils were found to be Shale/Sandstone Transition soils and not wholly derived from Wianamata Shale, based on the data from Douglas Partners and a site specific soil survey by Anne Clements and Associates.
- All of the sampling locations have less than 10% of the characteristic species of a STIF recorded, except the landscape area. Despite some of the species being present, they are likely to have been planted in the 1960s.
- The site is located in an LGA not listed in the Final Determination as to where STIF occurs or has occurred.
- From historical photographs the site and adjoining lands were extensively cleared for agriculture.
- The structure of the community is not forest or woodland. Furthermore the understorey on the site was neither grassy and herbaceous nor of a shrubby nature as it consists predominately of exotic grasses that are regularly mown.

For these reasons, the STIF does not occur on or adjacent to the site. Since the assessment concluded that there was in fact no EEC present on the site, an assessment of significance (as requested by DECCW) is not required for either the STIF or Shale/Sandstone Transition Forest under the NSW Threatened Species Act, 1995.

Despite this finding, the report recommended an offset strategy to compensate for the trees to be removed. Accordingly, Total Earth Care has updated their Vegetation Management Plan which previously only addressed revegetation of the riparian zone, to include a range of biodiversity offset measures (refer to **Appendix F**) that will ensure that there is a net increase in trees and shrubs on the site in various locations outside the riparian corridor to enhance the biodiversity value of on-site vegetation.

2.2.3 Assessment of two threatened flora species

In accordance with DECCWs submission, further assessment has been undertaken with respect to the potential impacts of the proposal to remove the two threatened flora species, Syzygium paniculatum and Eucalyptus scorparia.

Tree No.25 appears to have been misidentified by Total Earth Care and Treescan in their original Reports as the said tree has been confirmed (by the Botanical Gardens) as an Angophora costata and not an Eucalyptus scorparia. Accordingly no assessment is required with respect to this tree.

In terms of the other tree Syzygium paniculatum, the assessment concluded that the tree is an isolated individual tree that ‘undoubtedly’ had been planted in the lawn in the last 5 years. There are no known viable local populations or habitat of this species reported in the Ryde LGA. As such, the removal of a single planted individual tree located outside its natural range and not part of a viable population was concluded not to have an adverse affect to the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

The report concluded that the appropriate mitigating impacts such as the revegetation of the riparian corridor and offset planting as sufficient compensatory commitments.

2.3 Parking and Traffic Generation

In response to concern about the quantum of car parking proposed on the site, the amended design has reduced proposed parking rates, adopting a minimalist rate to a level below that required in the Ryde DCP 2010. The PPR therefore has adopted the following parking rates:

- 1 space per one or two bedroom apartment.
- 1.6 spaces per apartment with three or four bedrooms.
- 1 space per six apartments for visitors.
- 1 space per 25sqm of retail space.

Applying these rates across the site Concept Plan, the number of on-site parking spaces has been reduced by 101, from the original proposal of 768 spaces to 667 spaces within the basement car parks across the five buildings.

The table below illustrates the reduction in parking across the site.

Building	Residential Parking		Visitor Parking		Total	
	EA	PPR	EA	PPR	EA	PPR
Building A	143	131	31	21	174	152
Building B	101	117	23	19	124	136
Building C	101	127	23	21	124	148
Building D	140	66	31	12	171	78
Building E	143	131	32	22	175	153
Total	**628**	**572**	**140**	**95**	**768**	**667**

A response to parking and traffic generation matters has been provided by Colston Budd Hunt and Kafes in **Appendix D**.

The reduction of 101 parking spaces will provide the following benefits:

- Reduction in traffic to be generated from the development as traffic impacts are more directly related to the number of parking spaces proposed rather than the number of apartments. Therefore the reduction of 101 spaces will have a material positive effect of reducing traffic to and from the site.
- The parking rates in the DCP acknowledged the proximity of the site to public transport and set rates accordingly. The PPR now provides an overall parking rate that is less than the Council DCP requirement. This satisfies the on-site car parking objectives for Macquarie Park Corridor by minimising car dependency and promoting alternate means of car parking.
- It better aligns the Concept Plan to State strategic policies which aim to reduce parking where appropriate, which applies to the subject site which is:
  - Within 250 metres of the Macquarie University Train Station.
  - Within 400 metres of the Macquarie Park bus interchange
  - Directly adjacent to the Macquarie University campus which will have a high inter-relationship with the development site.

  - Within the Macquarie Park Corridor which forms part of the Global Economic Corridor, which is targeted to accommodate 55,000 jobs by 2031 in the Metro Strategy.

- In addition to reducing the car parking, the proposal has incorporated the following measures that will support the use of alternate transport means to and from the site for Building A that are contributory elements to achieve the targeted 4 star green star building rating:
  - 8 spaces for motorcycles
  - 16 small car spaces
  - Allocation of a bike cage for every apartment
  - 31 visitor bike parking spaces at ground level.
- It is envisaged that similar measures will be incorporated into the design of the remaining buildings on-site. This will be documented in future applications.
- Furthermore, the proposal also incorporates the provision for 3 car share spaces on the new local road to meet the needs of residents without vehicles.

3 Preferred Project Proposal

The Concept Plan design has been amended in response to the submissions received during the assessment of the Application and the key issues identified by DOP. For clarity and completeness, this section provides a detailed description of the PPR, updating the original description of the proposal as outlined in the EA report.

3.1 Proposal Overview

3.1.1 The Vision

The development vision is to create a contemporary estate of residential apartments that responds to the needs of the identified target market as well as capitalise on the site's proximity to rail and bus services, regional shopping centre services, educational and employment opportunities, and the Lane Cove National Park.

The project will establish a medium density apartment development comprising 5 contemporary buildings in an urban setting. The orientation of two buildings facing onto Herring Road will create a strong and active street presence along this key transport corridor.

The buildings will have a contemporary aesthetic theme with modulated building façades sympathetic to the pedestrian and human scale through façade relief, articulation and selection of materials. The building forms will project robustness and permanency and promote low maintenance outcomes, while delivering a development that achieves ESD best practice.

Whilst each building will have its own identity, the development will have a recognisable interrelationship and synergy which will be legible throughout the estate. The central street boulevard lined with high quality landscaping will promote a sense of community for residents and a connection to the greater community and facilities surrounding the estate.

3.1.2 Overview of Project

This Major Development application seeks approval for three project components:

- **Concept Plan** for the height, bulk and configuration of 5 residential apartment buildings and associated components such as a new local access road, landscaping and car parking.
- **Project Application for the staged Subdivision** of the Development Site which will result in 7 allotments at completion of the Concept Plan development, having each of the 5 residential apartment buildings on separate allotments, and 2 allotments for the new local access road.
- **Project Application for the construction of a Mixed Use Building** referred to as "Building A**"**. It will comprise a 12-storey apartment building with a small ground floor retail space and basement car park, together with the construction of the eastern portion of the new local access road along the southern frontage of Building A.

Each of these components of the Major Development Application is discussed in detail in the following subsections.

3.2 Concept Plan

A complete set of the Concept Plan drawings are included in the separate **PPR Volume of Plans – Part 2 (i) Concept Plans.** The key components of the Concept Plan proposal are summarised below.

3.2.1 Land Use and Built Form

Morling College will retain the existing campus use of the part of the existing college land not included in the Development Site, while the Development Site will be redeveloped for medium density residential buildings and associated services.

The Concept Plan approval seeks approval for the following attributes for development of the site.

Building Form

The overall Concept Plan built form comprises 5 residential apartment buildings situated on individual allotments, as illustrated in the subdivision description in **Section 3.3**.

The residential apartment buildings will range in height from 9-storeys (Building D) to 15-storeys (Building B), with the other Buildings being 12-storeys. Each building will include three levels of basement car parking.

The total built form will accommodate the following:

- Approximately 45,718sqm of total GFA.
- Approximately 561 apartments.
- Ground floor retail space (in Building A only).
- Approximately 667 parking spaces within the basement levels.

The composition of the land use and built form across the Development Site is summarised in **Table 2** below:

Table 2 – Summary of Proposed Concept Plan Built Form (Based on Plan A161 Rev.D)

Building	Gross Floor Area* (sqm)	Storeys	Height	Dwellings (indicative)	Parking Spaces (indicative)
Building A	10,367	12 Residential 3 Basement / parking	RL 65.3 ground RL 103.0 parapet RL 104.9 plant	123	152
Building B	9,133	15 Residential 3 Basement / parking	RL 65.6 ground RL 112.1 parapet RL 114.9 plant	114	136
Building C	10,241	12 Residential 3 Basement / parking	RL 63.3 ground RL 100.8 parapet RL 103.6 plant	125	148
Building D	5,511	9 Residential 3 Basement / parking	RL 60.1 ground RL 88.6 parapet RL 91.4 plant	70	78
Building E	10,467	12 Residential 3 Basement / parking	RL 65.6 ground RL 106.1 parapet RL 108.9 plant	129	153
Total	**45,718**		**-**	**561**	**667**

** Calculations are based on the following definition:*

gross floor area *means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:*

(a) the area of a mezzanine, and

(b) habitable rooms in a basement or an attic, and

(c) any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

(d) any area for common vertical circulation, such as lifts and stairs, and

(e) any basement:

(i) storage, and

(ii) vehicular access, loading areas, garbage and services, and

(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and

(g) car parking to meet any requirements of the consent authority (including access to that car parking), and

(h) any space used for the loading or unloading of goods (including access to it), and

(i) terraces and balconies with outer walls less than 1.4 metres high, and

(j) voids above a floor at the level of a storey or storey above.

Building Orientation

Building A has been designed and orientated to address the Herring Road streetscape with its primary pedestrian access directly from Herring Road. This building will have a secondary street frontage to the new boulevard, which will be utilised for vehicle access to the basement car parking and vehicles servicing the building.

Building E has also been designed and orientated to address Herring Road, with its pedestrian access and car park access from the Boulevard.

Buildings B and C run parallel to the new local road which helps to frame the streetscape and street wall. Building D has been re-orientated to run perpendicular to the new road and parallel to University Creek, creating a termination to the new road and punctuation of the cul-de-sac.

The buildings have been orientated to maximise solar access to the maximum number of dwellings, while avoiding areas of environmental sensitivity, such as the University Creek riparian corridor.

Land Use and Apartment Mix

The five residential apartment buildings will comprise a mix of studios, one, two, three and four bedroom dwellings, with the final mix of units being determined by market demand.

At the ground floor of Building A, 95.6sqm retail space is proposed, which has been designed to cater for a café, restaurant, local convenience store, and / or building management office.

The design for additional non-residential ground floor uses in the remaining buildings (Buildings B, C, D and E) will be considered as part of future Project Applications and will be responsive to market demand, however any further retail space will be a minor and ancillary component to the residential development.

For the Concept Plan stage to determine the quantum of parking to be provided, the apartment composition summarised in **Table 3** has been generated:

Table 3 – Concept Plan Apartment Composition

Building	Studios	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom	Total
Building A	0	68	47	7	1	123
Building B	0	66	44	3	1	114
Building C	3	68	46	7	1	125
Building D	6	37	23	4	0	70
Building E	3	72	46	7	1	129
Total	12	311	206	28	4	561

3.2.2 Landscape and Open Space

There are three key components of the landscaping strategy:

Riparian Corridor

The Concept Plan proposal does not include any development or structures within the riparian corridor which is measured for a distance of 20 metres from top-of-bank of University Creek.

The Concept Plan includes the regeneration of the riparian corridor of University Creek at the rear of the Development Site. These works will include planting of native and locally endemic plants, and preserving existing vegetation where possible and appropriate for the long-term vegetation management of the wider riparian corridor. The regeneration works have been designed for adjoining properties to connect to this corridor and create a linear open space network along the creek.

Public Open Space

A landscape strategy for the proposed public domain has been prepared concurrently with a landscaped strategy for the private open space.

The public open space includes street planting along the Development Site's Herring Road frontage, which incorporates existing trees were appropriate, and a tree-planting scheme which will intensify the landscaped contribution of the site to the Herring Road streetscape.

Street trees are proposed within the verge of the new local access road, to be planted at 6 metre intervals. Additionally, ornamental trees will be incorporated within the verge to punctuate key locations, such as pedestrian entries to buildings. The balance of the verge will accommodate a footpath and groundcover planting.

A pedestrian / cycleway connection is proposed to run from the new road to the north-eastern boundary of the Development Site between Buildings B and C. This link will improve pedestrian permeability within the Development Site and introduce new linkages between Herring Road and the University lands.

Private Open Space

Landscaping within each of the proposed allotments will combine existing vegetation where possible with new local planting. Private open space is proposed for each dwelling on ground floor, and all dwellings will have access to common landscaped open space at ground level. These common open space areas will include both landscaped areas and recreational amenities including swimming pools, change rooms and amenities, gym and barbeque facilities. These facilities are anticipated to be shared between Building A and B, and Buildings C and D.

3.2.3 Access, road infrastructure and parking

The Concept Plan proposes new site access, a new local access road and three levels of basement car parking in each of the proposed residential apartment buildings. Details of these key elements of the Concept Plan are discussed below.

Access

The Concept Plan includes new access arrangements to the Development Site from Herring Road. The key features include:

- Creation of a single access point centrally along the Development Site's Herring Road frontage, and removal of existing driveway to the property at 128 Herring Road.
- A left-in, left-out intersection with Herring Road.
- Any residential traffic will access their car park off the proposed new Boulevard.

Road Infrastructure

The public road reserve has been designed to service the single access point to the site. The road reserve will have the following features:

- A 16.1 metre wide road reserve, comprising:
  - Two 3 metre wide travelling lanes,
  - A single 2.5 metre wide parking lane on the northern side of the road, which includes 4 car-share parking.
  - A 3.8 metre wide verge with footpath and landscaping on each side of the road,
- A turning head at the north-western end is proposed to facilitate vehicle turning and to create a possible connection point for a future road extension.
- The new local access road will provide the street address for Buildings B, C and D, and secondary street address for Buildings A and E, which have been orientated to address Herring Road as their principle street frontage.
- Direct vehicle access to the basement car parks of each of the residential buildings will be provided via the new boulevard.
- Street tree planting and a co-ordinated landscaping strategy within the road reserve will create a public domain precinct responsive to the pedestrian and vehicle scale of the local context.
- The new access road will be constructed in two stages and located on two allotments which will be dedicated to Council as public road at completion of the project.

Pedestrian and Bicycle Network

The new local access road reserve will include a 3.8 metre wide verge on each side of the carriageway which will connect to the existing footpath on Herring Road. The new footpath within the verge will service both pedestrian and bicycle movements within the Development Site.

The new footpath will:

- Connect with the existing footpath in Herring Road and run along each side of the new road to the turning head.
- Extend beyond the road terminus running between Buildings B and C which will link the new road to the University lands to the north-east is proposed to expand the pedestrian network within the Macquarie Park Corridor.

Parking

Parking for each building is provided in three levels of basement parking situated under each of the apartment buildings accessed via the new road. Parking has been provided at less than the maximum parking rates under the Ryde DCP 2006. It is proposed that a minimalist approach to parking be applied to the development, given the Development Sites proximity to public transport, and therefore the following parking rates are proposed:

- 1 space per one or two bedroom apartment.
- 1.6 spaces per apartment with three or four bedrooms.
- 1 space per six apartments for visitors.

Parking will be provided in accordance with these rates, with the final number of spaces being determined by the final mix of apartments in each building. The Concept Plan indicates the development will provide approximately 667 parking spaces within the basement car parks.

Table 3 indicates the approximate number of parking spaces proposed for each building:

Table 4 – Indicative parking spaces per buildings

Building	Residential Parking (Accessible)	Visitor Parking (Accessible)	Total
Building A	131(13) (inclusive of 3 spaces for retail)	21 (1)	152 (15)
Building B	117(12)	19 (1)	136 (13)
Building C	127 (13)	21 (1)	148 (13)
Building D	66 (7)	12 (1)	78 (8)
Building E	131 (13)	22 (1)	153 (14)
Total	**572 (58)**	**95 (5)**	**667 (63)**

It is proposed that three on-street parking spaces will be marked and allocated to for car-share vehicles.

3.2.4 Drainage and Stormwater Management

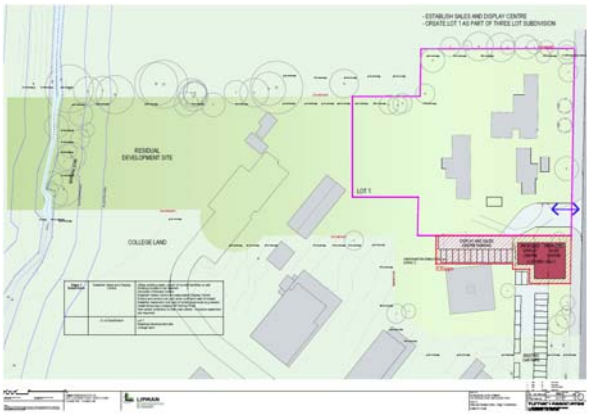
A Drainage and Stormwater Strategy has been designed for the whole Development Site. For Building A the stormwater runoff will be collected and drained into the existing Herring Road stormwater system. For Buildings B, C and D, stormwater runoff will be collected and gravity fed through gross pollutant tanks and a drainage pipe in the access road reserve and then discharged via a pipe into University Creek. A bio-swale will provide first flush filtration for stormwater runoff.

A copy of the drainage and stormwater plans prepared by TTW are included in the PPR Volume of Plans Part 4.

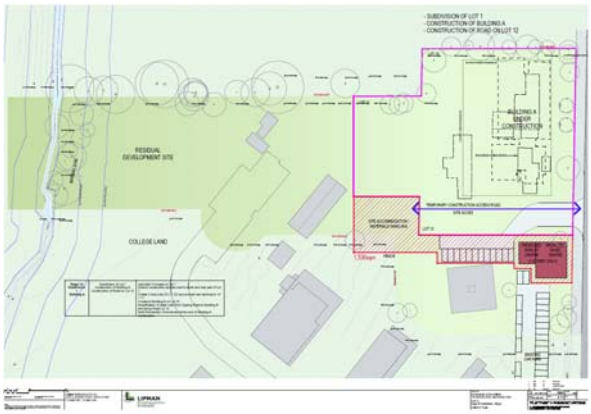
3.2.5 Project Construction

The Concept Plan incorporating Buildings A, B, C, D and E, local access road and associated works are proposed to be constructed in a number of stages as illustrated in the plans prepared by *Turner + Associates* numbered A171-A177 which are illustrated in **Figure 1** below:

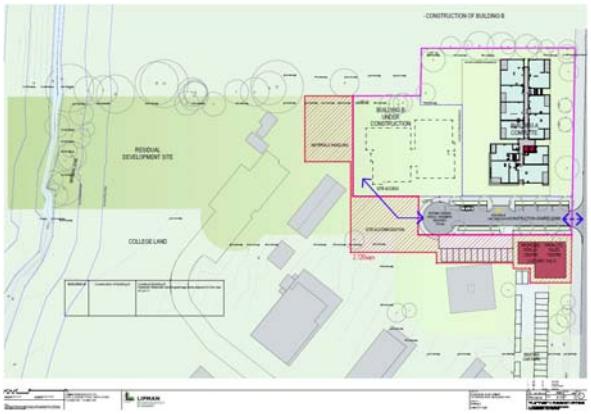
Figure 1 – Indicative Project Construction Staging



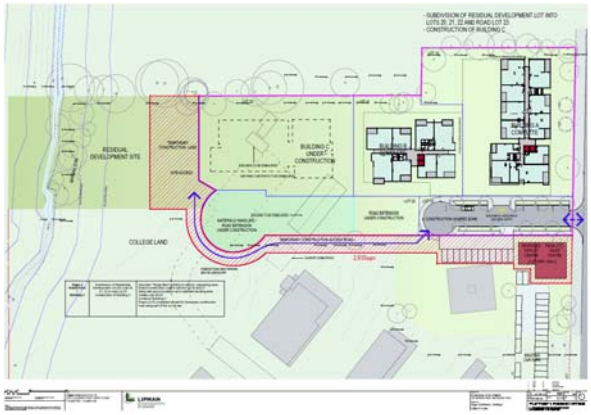
Picture 1 Stage 1 subdivision – Establish sales and Display centre ad create Lot 1 as part of 3 lot subdivision



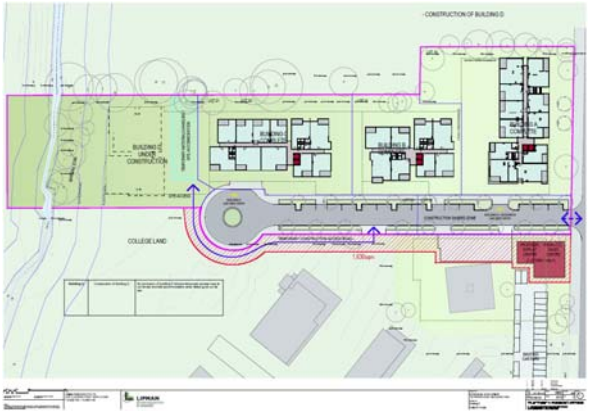
Picture 2 –Stage 1A Subdivision - Construction of Building A on Lot 1 and road construction on Lot 12.



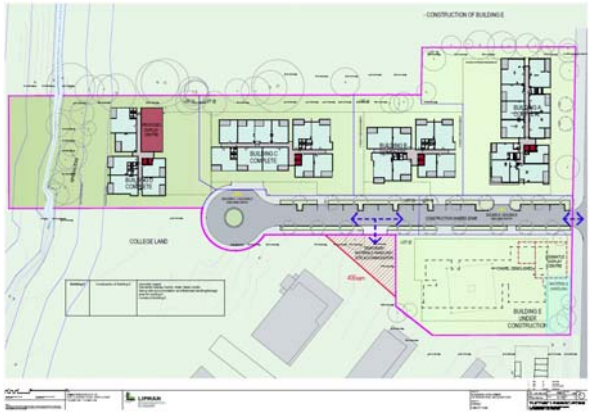
Picture 3 – Construction of Building B.



Picture 4 –Subdivision of residual development lot into Lots 20, 21, 22 and road lot 23. Construction of Building C..



Picture 5 – Construction of Building D.



Picture 6 – Construction of Building E

Picture 7 –Construction completion including decommissioning construction zone.

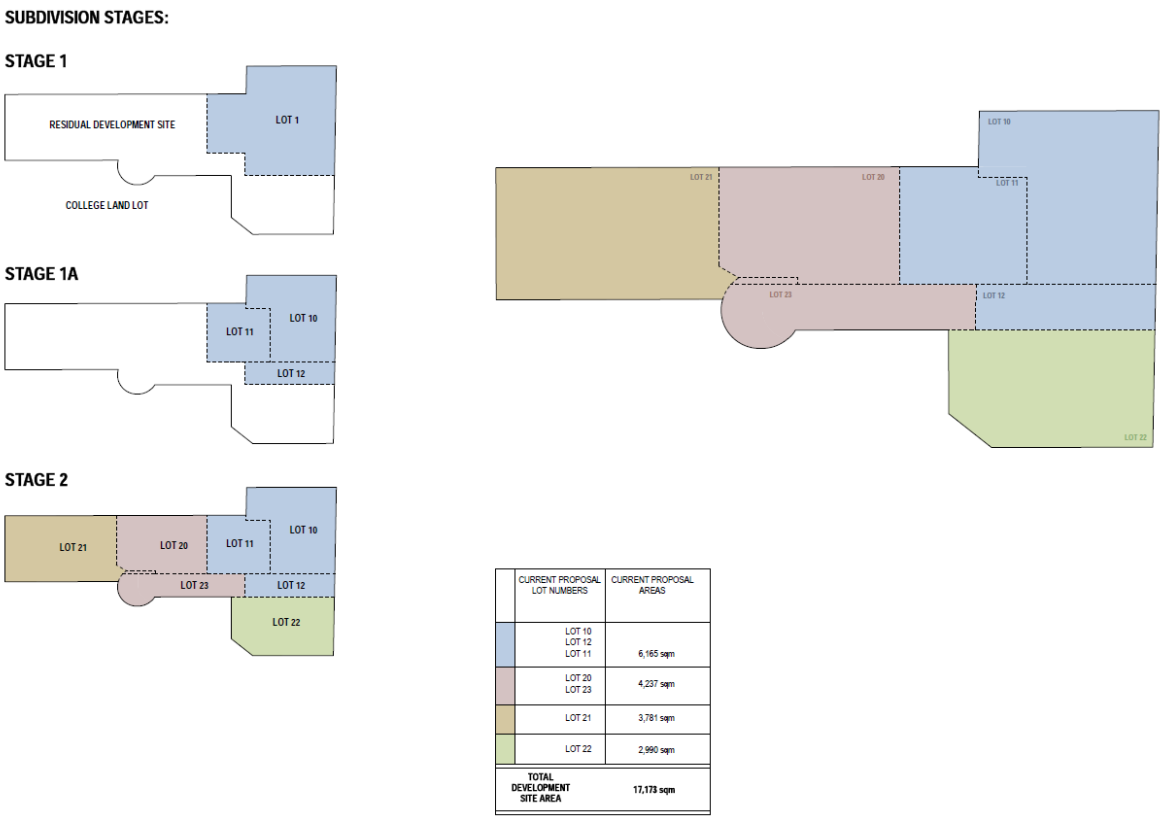
3.3 Project Application – Subdivision

Project Application approval is sought for the complete staged-subdivision of the Development Site.

A complete set of the plans are included in the separate **PPR Volume of Plans – Part 2 (ii) Project Application – Staged Subdivision.**

An extract of the subdivision staging plan prepared by *Turner + Associates* is shown below in **Figure 2**.

Figure 2 – Project Application – Subdivision Staging



The staging of the subdivision is to occur to support each subsequent construction stage. The completed staged subdivision will result in the Development Site comprising 7 allotments, with each of the five proposed residential apartment buildings being located on a separate allotment, and the access road being across two allotments to be dedicated to Council as public road.

The staged subdivision is anticipated to comprise the following stages.

3.3.1 Stage 1 – Subdivision of the Development Site from Morling College (Initial 3-Lot Subdivision)

The initial subdivision stage is to subdivide the Development Site from the larger Morling College land. The Development Site will comprise the entirety of Lot B in DP 368446 and the north-east of Lot 1 in DP 876482. The initial stage of subdivision will result in a Development Site area of 17,253sqm, and a total Morling College land holding of 30,480sqm.

The Stage 1 subdivision proposes a 3 lot subdivision of the Morling College Land which will result in the creation of three allotments:

- "Lot 1" being an allotment of 6,165sqm supporting the Stage 1 development works fronting Herring Road.
- "Residual Development Site" being an allotment of 11,088sqm being the balance of the Development Site allotment.
- The remaining Morling College Land Lot of 30,480sqm (Note: A separate non-affected lot of 43sqm exists which forms part of the Morling College Lands).

3.3.2 Stage 1A – Subdivision of Stage 1 allotment into three allotments

The following stage of subdivision is for the Stage 1 allotment. Lot 1 will support the Stage 1A (Building A) construction works proposed in the Project Application for the construction of Building A, including the construction work zone.

Lot 1, to be further subdivided into three allotments. These allotments will comprise the following:

- "Lot 10" being an allotment of 3,288sqm which will be occupied by Building A which will be constructed in accordance with Building A Project Application.
- "Lot 11" being an allotment of 1,847sqm which will be occupied by Building B to be constructed after Building A has been commenced.
- "Lot 12" being an allotment of 1,030sqm which will be accommodate the first portion of roadworks which will have been constructed in accordance with the Building A Project Application.

These allotments will be subdivided during construction of Building A and the first portion of the roadworks, and prior to construction of Building B commencing.

3.3.3 Stage 2 – Subdivision of the Residual Development Site into four allotments

Stage 2 of the subdivision is to divide the Residual Development Site into four allotments to support the further three residential apartment buildings on individual allotments and the construction of the final section of road.

The Stage 2 subdivision will comprise the following:

- "Lot 20" being an allotment of 2,564sqm which will accommodate Building C.
- "Lot 21" being an allotment of 3,777sqm at the rear of the Development Site which will accommodate Building D and the riparian corridor area.
- "Lot 22" being an allotment of 2,990sqm which will accommodate building E on the southern side of the two road allotments with a frontage to Herring Road.

- "Lot 23" being an allotment of 1,757sqm which will accommodate the final portion of the new local access road construction.

The Stage 2 allotments will be created concurrently to support the construction of Buildings C, D and E (anticipated to be delivered in sequential order).

It should be noted that the subdivision layout has been designed for each residential apartment building to be on separate strata plans. The two road allotments are intended to be dedicated to Council to be incorporated in the public road network as part of the Concept Plan proposal.

3.4 Project Application – Building A

A complete set of the Building A architectural drawings are included in the separate **PPR Volume of Plans – Part 2 (iii) Project Application – Building A.**

Project Application approval is sought for the construction works for Building A. Each of the elements of the Building A Project Application works are detailed below.

3.4.1 Subdivision

The Project Application (Building A) works include the subdivision of the Morling College land into three allotments:

- Morling College allotment to be retained by Morling College ("College Land Lot").
- "Lot 1" which will comprise the north-east corner of the Development Site fronting Herring Road.
- The "Residual Development Site" allotment which will be further subdivided to support each subsequent stage of the Concept Plan development and to be retained by Morling College in the interim.

The Project Application (Building A) works will be confined to Lot 1. The allotment will support the development of the first portion of the new local access road, Building A, the basement parking associated with Building A and the extension of the basement parking podium to connect to the subsequent Building B basement car park.

Further subdivision of "Lot 1" is proposed to occur in the form of 3 sub-lots created in Stage 1A to support Building A (on Lot 10), Building B (on Lot 11) and the first component of the new local access road (on Lot 12) on separate individual allotments. The subsequent subdivision stages form part of the Project Application for Staged Subdivision for the entire Development Site as outlined in **Section 3.3** above.

3.4.2 Demolition

The proposed development of Building A on Lot 1 will require the demolition of three existing one-storey single dwellings with two associated garages and one carport, and the single storey childcare centre adjacent to the chapel. The associated driveways connecting the existing buildings will also be removed.

Separate demolition approval will be sought to remove the remaining structures on each of the allotments for subsequent stages of development on an 'as needs' basis.

3.4.3 Construction of Building A on Lot 10 (within Lot 1)

Building A will be situated in the north-eastern corner of the Development Site fronting Herring Road.

Building A is proposed to be the first of five residential apartment buildings. Building A will comprise 12 residential storeys and 3 levels of basement car parking. Building A will be a contemporary building form comprising a dual tower form with a modulated façade providing articulation, façade relief and employing a range of materials and finishes.

The orientation of Building A will run lengthwise along Herring Road, with the building's primary address to Herring Road. Pedestrian access to the lift lobby will be directly from the Herring Road frontage, while vehicle access to the basement car park will be from the new boulevard.

At ground level the building will comprise a mix of 1 and 2 bedroom apartments, main lobby, retail space of approximately 96sqm and service areas including mailboxes, waste storage area, pump room, gas room, fire control room and fire hydrants.

The apartment composition of Building A is summarised below in **Table 4**.

Table 5 – Building A - Apartment Composition

	Number of Apartments				
Building floor	**1 Bedroom**	**2 Bedroom**	**3 Bedroom**	**4 Bedroom**	**Total**
Ground	1	5	-	-	6
First	11	2	-	-	13
Second	11	2	-	-	13
Third	9	3	-	-	12
Fourth	6	5	-	-	11
Fifth	6	5	-	-	11
Sixth	6	5	-	-	11
Seventh	6	5	-	-	11
Eighth	6	5	-	-	11
Ninth	6	5	-	-	11
Tenth	-	4	3	-	7
Eleventh	-	1	4	1	6
Total	**68**	**47**	**7**	**1**	**123**

The building proposes 3 metre floor to floor levels, which will provide a minimum of 2.7 metre floor to ceiling clearances, except within the proposed retail space which will have a floor-to-ceiling clearance of 3 metres.

The basement levels include the following:

- 152 car parking spaces, comprising:
  - 128 resident parking spaces, including 13 accessible resident parking spaces.
  - 21 visitor parking spaces, including 1 accessible visitor parking space.
  - 3 retail parking spaces, including 1 accessible parking space.
  - 8 motorbike spaces
- A carwash bay.
- Utility Services rooms.
- Exhaust plant.
- Storage areas.
- Bicycle storage areas for each apartment

The built form is a modulated architectural form comprising two tower elements connected by a central lift core. The building façade is broken down vertically into a base middle and top using different façade panels, materials, and incorporating articulated balcony spaces. The façade is further articulated

horizontally with the use of 'slots' including a glazed air-lock which runs the height of the building providing visual interest to the building form as well as increasing cross-ventilation for apartments. Further details of the Building A design are contained within the Architectural Design Statement prepared by Turner + Associates attached in **Appendix A**.

3.4.4 Construction of Sales and Display Centre

As part of the works for the Project Application for Building A, a temporary sales and marketing office will be constructed. The office will be located at the south-eastern corner of the site. A copy of the plan is included in the **PPR Volume of Plans – Part 2 (iii) Building A Plans (Drawing No.A281**.)

As shown on the plan, the building will be single level structure with a building height of 3.6 metres. The building will have a reception and meeting room area, office space and a two bedroom display suite. Once disabled access toilet will be provided within the building. Car parking will be provided alongside the building and separated from the construction traffic.

Finally, external signage will be mounted to the wall to signal the location of the display suite to guide prospective purchasers.

3.4.5 Vehicle Access

The Project Application (Building A) proposal includes construction of the access from Herring Road and first part of the new 'Type 3' local access road which is to run along the southern boundary of proposed "Lot 1" connecting with Herring Road. The new road will service the vehicle entry to the three-level basement car park proposed for Building A, as well as service the future stages of the subsequent residential development.

The new local access road is proposed to be designed in accordance with Council's DCP controls for a Type 3 road, with appropriate width, on-street parking, and verge creating a tree-lined boulevard running east-west through the site.

The road has been designed to a scale appropriate to support the subsequent stages of development of the Concept Plan, as well as vehicle, bicycle and pedestrian movements associated with the estate.

3.4.6 Physical Infrastructure

Preliminary infrastructure investigations have revealed that the Morling College site is currently serviced by electricity, gas, sewer, water and telecommunications.

The Project Application (Building A) works include securing the necessary service provisions to support Building A. This will include connection and minor extension to the existing servicing infrastructure for electricity, gas, sewer, water and telecommunications to support the proposed development.

The following service works are proposed as part of the Project Application (Building A) works:

Stormwater Management

The Project Application (Building A) stormwater management works are illustrated on the Stormwater Concept Plans prepared by Taylor Thomson Whitting included in the separate **PPR Volume of Plans – Part 4 – Road and Stormwater Civil Plans**. It includes construction of a stormwater management system for Building A comprising:

- A design strategy to drain the site in a staged manner through the construction of stormwater pipe within the new access road reserve to connect through the site to the University Creek and allow low-flow / first flush stormwater to be filtered through the bio-swale before being discharged into the creek. Detention and reuse tanks for water reuse irrigation for landscaping.
- Stormwater management system for Building A including detention and reuse tanks for landscaping irrigation.
- Stormwater drainage of Building A and the first 30 metres of the new boulevard to the existing stormwater system within Herring Road.

Utility Infrastructure

- Electricity and Telecommunications – Electricity and telecommunication servicing will be installed in three stages as illustrated on the utility servicing plans accompanying the original Concept Plan application. Key elements include:
  - Requirement for Z(1000GVA) kiosk type substation for the entire site.
  - The initial stage will be installed during construction of Building A and will include implemented during installation of a substation to service Building A. The same kiosk substation will service Buildings B and E in the future. Conduits with in the new road reserve will service Buildings C and D.
  - The next stage will be installed during construction of Building C and will include extending the conduits within the new Boulevard reserve to a second substation to service Buildings C and D.
  - The final stage will be installed during construction of Building E and will include the extension of the telecommunication conduits from Herring Road to Building E.
- Natural Gas –Gas services will be provided in accordance with the Natural Gas Main Infrastructure Staging Plan prepared by Harris Page and Associates, dated February 2010 (refer to original Concept plan documentation).
- Water and Sewer – Greg Houston Plumbing has undertaken preliminary investigations of the adequacy of the existing water and sewer infrastructure. The investigations identified possible amplification of water servicing infrastructure from Epping Road to 1 metre past the northern side of the new boulevard to service Building A. All subsequent buildings will be serviced from infrastructure within the new road (refer to original Concept plan documentation).

4 Other Issues Raised in Submissions

During the EA assessment process, the application was referred to a number of governmental bodies, agencies and notified to the public. Submissions and comments were received from the following stakeholders:

- Department of Planning (Schedule 2 Issues)
- Department of Environment, Climate Change and Water
- Office of Water
- Roads and Traffic Authority
- Ryde City Council
- Macquarie University
- 6 local residents.

Table 5 outlines the issues raised, and the PPR response to these issues:

Table 6 – Other Issues Raised in Submissions

Comment / Submission	Response
DEPARTMENT OF PLANNING – Schedule 2	
Compliance Table ▪ Compliance table needs to address *Ryde Local Environmental Plan 2010* and the *Ryde Development Control Plan 2010*.	▪ A revised compliance table addressing the newly adopted *Ryde Local Environmental Plan 2010* and the *Ryde Development Control Plan 2010* and other matters of relevance is included in **Appendix B**.
Further details of the public benefits ▪ Justification for floorspace	The key public benefits the proposal delivers include: ▪ Construction and dedication to Council a new Type 3 local access suitable to be extended to connect land to the south in order to provide a finer grain local access road and pedestrian system. ▪ Construction of a new pedestrian/bicycle pathway along the new local road and travelling between Buildings B and C to connect into the Macquarie University pedestrian network. This will improve permeability through the development site and between Herring Road and the University, and strengthen the development of a finer grain network in the Macquarie Park Corridor. ▪ The revegetation plan for the riparian corridor along University Creek will significantly improve the biodiversity value of this land and improve habitat for fauna species. ▪ The proposal will result in a net increase of trees and shrubs outside the riparian zone, (as part of an offset strategy) which will further enhance the biodiversity value of the site. These commitments are over and beyond what is required in accordance with the applicable DECCW Guidelines. ▪ The proposal exceeds the minimal SEPP 65 deep soil planning area requirements which will contribute to creating significant opportunities for landscaping that will enhance the amenity for residents as well as act to soften and screen the urban from the street. ▪ A significant financial commitment by the proponent to achieve best practice ESD outcomes by including strategies that extend the

Comment / Submission	Response
	development beyond BASIX compliance to achieve a 4 Star Green Star Rating under the Green Building Council, for Building A and as well as the other 4 buildings on the site. Key commitments for Building A include: – Improved thermal performance of the building façade to reduce heat loss and gain, thereby reducing energy use. – 10% of all car spaces for small car – 8 motorcycle spaces – Bicycle cages for all apartments and 31 visitor bike racks – A wide range of water and energy efficient measures – Provision for car share facilities ▪ Building A will incorporate a retail tenancy space at the entry corner of Herring Road and the new road. This facility will provide an additional convenient retail service for residents of the development as well as the surrounding community and students. Furthermore, the activation of the ground level of Building A will help reinforce the sense of public ownership of the new road and pedestrian footpath and avoid any notion of the privatisation of this space. ▪ Providing adequate housing supply has a direct impact on housing affordability. The Concept Plan will provide a dwelling mix and a price-point that is required to meet the market demand. The site represents the best opportunity for housing in walking distance to transport services and shops having regard to the surrounding land uses to the 3 train stations in Macquarie Park. ▪ In addition to constructing and dedicating a new public road, an approval of Building A will deliver a substantial amount of Section 94 contributions to Council to utilise for a wide range of capital works. In addition to the public benefits the proposed Concept Plan is justifiable on the grounds of its compatibility with the planning future urban context and the state government strategic planning directions to achieve dwelling growth in suitable locations. In summary of the reasons outlined in detail in Chapter 5.1 of the EA, the proposal is justified on the following grounds: ▪ Satisfies the objectives of local planning controls and objectives – Provides new housing in walkable distance to the rail station and shops and close proximity to the commercial area - with limited opportunities for Council to achieve this elsewhere in Macquarie Park. – Better achieves a stepping down of building height from Herring Road – Provides a new local road to provide the opportunity for a fine grain road network ▪ Entirely consistent with strategic planning policy – Satisfies Actions C1, C2, C5, B2 of the Subregional Strategy – as a highly suitable site and design response for housing in the LGA. ▪ Achieves a contextually appropriate design response to the future urban form – The context drawings by Turner and Associates A146-A149

Comment / Submission	Response
	illustrate how the proposed buildings will be read along the entire Herring Road streetscape. As shown the streetscape will have a high degree of height variability as the University buildings will step up and down along its Herring Road frontage. Given the building heights on the University site are up to 3 times higher than that proposed for Building A, coupled with the lower LEP 2010 height controls for lands south of the site to Epping Road, the proposed buildings represent an appropriate height in this context. Furthermore by being residential buildings, the footprints and building mass will be much less than the University buildings which will further reduce the perceived height and scale of the site in its local context.
Amended / Updated Plans ▪ Amended Illustrative Views showing adjacent building on the north-eastern University land to be 16 metres. ▪ Referencing height on the plans should reflect that of the Ryde LEP 2010, and no annotation of incentive heights. ▪ Deletion of gym between Buildings C and D	▪ Amended Illustrative Views have been prepared by Turner + Associates which reflect the adjacent building on the University land as 16 metres. This is contained within **PPR Volume of Plans– Part 2 (i) Concept Plans**. ▪ The plans have been amended to reflect the reference heights of the Ryde LEP 2010. ▪ The plans have been amended to accurately reflect the communal facilities, having the gym removed.
Solar Access ▪ Prepare a solar access schedule of all apartments in Building A.	▪ A solar access schedule for all apartments in Building A has been included in the **PPR Volume of Plans – Part 2 (iii) Building A Plans** and the revised Architectural Design Statement and SEPP 65 Assessment.
Open Space/Deep Soil ▪ Details and plans of deep soil planting, communal open space and public open space for Concept Plan and individual buildings once subdivision occurs.	▪ An open space and deep soil landscape plan (ref: A110) has been included in the **PPR Volume of Plans – Part 2 (i) Concept Plans**. This plan should be read in conjunction with the Landscape Plans prepared by Turf Design in the **PPR Volume of Plans - Part 3**.
Residential Privacy ▪ Demonstrate how residential privacy will be maintained adjacent to the pedestrian link.	▪ The pedestrian link has been relocated to run between Buildings B and C, which has a minimum building separation of 15 metres. ▪ Residential privacy to the units adjacent to the pedestrian link will be preserved by employing the following design techniques including: - The nearest residential dwelling in Building C will be separated by a modulated podium garden/recreation space. This provides added separation and privacy for the ground and 1st floor apartments. - There will be at a 3 metre level change between the pedestrian link and the ground floor apartments of Building B. As shown in Section C in the Landscape Drawings, pedestrians will be level to the basement car park. As such the privacy from residents in Building B will also be preserved in this design.
Consistency of Documentation ▪ Numerical consistency between all documentation.	▪ All PPR documentation has been revised to reflect the revised unit numbers, GFA and FSR calculation of the PPR proposal.
Apartment Composition & Size ▪ Provide a unit breakdown to calculate parking.	▪ Table 3 in this report provides a breakdown of the Concept Plan apartment composition which is reflected in the indicative Concept

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▪ Confirm unit sizes will comply with minimum apartment sizes under RFDC. ▪ Min unit sizes: – 1 bed – 50sqm – 2 bed – 70sqm – 3 bed – 95sqm	Plans and parking calculations. ▪ The Concept Plan proposes the following apartment sizes: – 1 bed – 50 -62sqm – 2 bed – 79 - 95sqm – 3 bed – 125 -130sqm – 4 bed – 142.8sqm ▪ These minimum apartment sizes satisfy the rules of thumb for 1, 2 and 3 bedroom dwellings in the RFDC. There are no requirements for 4 bedroom apartments.
Section 94 Contributions ▪ Require Statement of Commitments to adopt latest s.94 Contributions figures.	▪ The Statement of Commitments has adopted the City of Ryde Section 94 Development Contribution Plan 2007 rates, updated to the March 2010 CPI indexed rates as follows: - Studio / 1-Bedroom $12,274.86 - 2-Bedrooms $14,729.83 - 3-Bedrooms $18,821.44 - 3+ Bedrooms $23,731.38 Refer to Statement of Commitments for further details.
RYDE CITY COUNCIL	
Height ▪ Visual & View analysis, particularly along Herring Road and the proposed new road.	▪ A visual and view analysis has been prepared for the Concept Plan, having particular regard to the views of the development along Herring Road and the new road. For the reasons outlined in this PPR the proposed height is considered appropriate from an urban form perspective and justified for a public benefit and strategic planning perspective.
▪ Prepare an option which complies with Councils controls for comparison	▪ In accordance with the DOP request, alternate building height plans have been modelled. The PPR presents the most appropriate concept and accordingly a complying option has not been provided. The Council height control has been indicated on the revised plans and within the visual analysis for comparison.
▪ LEP incentive controls have not been adopted.	▪ Noted.
▪ Provide building heights for the plant rooms.	▪ The heights for the plant rooms have been included on the plans.
Floor Space Ratio ▪ Insufficient justification for the proposed FSR.	▪ Ryde LEP 2010 contains a FSR control for the Development site of 2:1. The PPR proposes as FSR of 2.65:1. While the proposal exceeds the numerical FSR control, the Preferred Project achieves the objectives of the FSR control and is justified for the following reasons: - Providing modulated height across the site, which breaks the bulk and of the built form when viewed from Herring Road and along the proposed new Boulevard. - The proposal achieves best practice ESD by planning to achieve 4 Star Green Building Council of Australia rating – setting the benchmark in the locality. By going beyond Council requirements, the range of positive outcomes both tangible and also from an environment footprint perspective provide grounds for additional floorspace. - Provides substantial public and communal open spaces including various landscaped areas and recreational amenities

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	including swimming pools, change rooms and amenities, gym and barbeque facilities. – Provides deep soil planting areas that exceed the SEPP 65 requirements that will ensure a high level of amenity is afforded to residents and the public. - Maximises the limited residential housing opportunities in Macquarie Park Corridor within a walkable distance from the train stations, promoting public transport usage. - Supports and strengthens the built form focal point and creates a strong sense of arrival along Herring Road to define the entry to the Macquarie University Station Precinct. - Provides a new local road which will enhance permeability in the northern part of the Macquarie Park Corridor and promotes passive surveillance for pedestrians and cyclists moving along these routes. - Finally, the additional FSR does not create any discernable additional impacts on the amenity of future dwellings or the public domain having regard to privacy, solar access and views. Therefore the site can accommodate that additional FSR with any appreciable negative impact on the surrounding environment.
Car Parking Numbers ▪ Car parking should be limited to 1 space per 80sqm.	▪ A minimalist approach to car parking has been applied to the development, and the revised PPR proposal has reduced the number of parking spaces by approximately 13.5% (101 spaces) to a total of 667 parking spaces. While the final mix of apartments will be finalised as a later date, the Concept Plan proposes to apply the following rates to the future Project Applications: – 1 space per one or two bedroom apartment. – 1.6 spaces per apartment with three or four bedrooms. – 1 space per six apartments for visitors. ▪ Please note, the suggested 1 per 80sqm parking maximum as per LEP 2010 Clause 4.5E only applies to commercial or industrial development and not residential. Therefore Council's request to satisfy this provision is not valid. ▪ The proposed reduced parking rate better accords with Council's controls and objectives to minimise parking in the precinct.
Permeability ▪ The road and pathway network and overall design should encourage people through the site. ▪ Delineation between public and private spaces	▪ Through increasing the separation between Buildings B and C, a 5 metre wide pedestrian and bicycle link has been introduced connecting the new road to the University land to the north-east. This link will improve pedestrian and bicycle connectivity between Herring Road and the University and activate the Boulevard Road as a public road and achieve the objectives of the finer grain network in the Macquarie Park Corridor. ▪ It is confirmed that the new road, incorporating a public pathway is proposed to be a dedicated to Council as a public road. This is included in the Statement of Commitments.
Public Domain ▪ Provide active street frontages to Herring Road for Buildings A & E	▪ Both Buildings A and E have their principle pedestrian access points along their Herring Road frontages, with vehicle access from the new road. Contrary to Council's submission, the ground level of building A has always been designated as a publicly accessible space, activated

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	by a retail tenancy. Similarly, as par of a future application, Building E may also incorporate an active ground level use.
Building Orientation ▪ Reconsider separation between Buildings B and C. ▪ Re-orientate Building D	▪ The distance between Buildings B and C has been increased by between 3 to 5 metres from the original proposal to now achieve a 15 to 17 metre building separation. It should be noted that the internal layout of these buildings has been designed so that the outlook from the principle living space complies with the setback requirement under SEPP 65. ▪ Furthermore, Building D has been re-orientated which addressed Council's concern about the original design that 'turned its back' to the creek. ▪ The suggested linking of Buildings B and C into 1 is inappropriate for a residential use as it would fail to satisfy the SEPP 65 design criteria. ▪ These matters are addressed in more detail in **Section 2.1** of this PPR.
Social Context ▪ Social Impact Assessment requested.	▪ The "local context" referred to in the EA report is simply the B4 Mixed Use zoned area surrounding the site. It includes the residential area bounded by Epping Road, Herring Road Waterloo Road and Shrimptions Creek. It also includes the area bounded by Epping Road, Balaclava Road, University Avenue and Herring Road. ▪ The request for a Social Impact Assessment based on the matters raised by Council is necessary and unwarranted. ▪ The main reason being that this residential proposal is a land use outcome intended by Council's controls. By zoning the land to permit residential uses, Council has contemplated increased residential densities in this area and therefore the Section 94 plan is in place to capture funds and redirect it into the required community infrastructure to support the additional demand generated by the new population. ▪ Furthermore, the EA report provided a CTPED Assessment that demonstrated subject to satisfying certain design or operational matters, the development would satisfy the key CTPED principles to maximise safety and security. ▪ The comments about excluding various market segments are not a relevant matter for Council consideration.
Staging and Lot Layout ▪ Boulevard limits opportunity for future fine grain connections.	▪ The new Type 3 road is consistent with the finer grain network indicated in the Ryde DCP. ▪ The new design includes the pedestrian / bicycle link between Buildings B and C which will improve permeability, however the extent to which this can be achieved within the northern Macquarie Park Corridor precinct is dependant on development on surrounding sites, which appears restricted based on the approved University Concept Plan. ▪ The new road will however provide for opportunities to the south to connect with this road and increase permeability. This is beyond the scope and control of this project.
Traffic ▪ Paramics modelling to be done	These matters have been addressed in the addendum traffic comments provided by Colston Budd Hunt & Kafes which accompanies this PPR in **Appendix D**. Council state that it is their 'preference' that Paramics modelling be undertaken. CBHK are of the opinion that the real counts (raw data) by CBHK provide a more accurate basis for forecasting the traffic generated from the development and the likely implications on the surrounding

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	intersections and road network. The Traffic assessment documentation supporting the Environmental Assessment and this PPR sufficiently demonstrate the proposed development can be supported by the existing surrounding intersections and road network, for the following reasons: ▪ The 2007 base data from the Paramics model suggests some 480 and 500 vehicles per hour two-way during the morning and afternoon peak hours respectively in zone 14 (surrounding the site). The 'actual' traffic counts, recorded 210 and 150 vehicles per hourly two way during the same period. Even by adding the traffic generation of the development of some 160 vehicles per hour two way, the traffic levels would still be under the assumed 2007 base case in the Paramics model. ▪ The Paramics model is not justified, as is based on simulated modelling of hypothetical traffic movements based on counts undertaken prior to the model being prepared in 2007, which was before the Chatswood to Epping Rail Line was completed and opened. ▪ The current level of investigation and analysis has been thorough and has provided sufficient accurate information to consider the impacts. The fundamental measure is whether the proposal requires any upgrades to intersections. The CBHK assessment has found that no upgrades are required. This fact is not disputed by either the RTA or Council.
Developer Contributions ▪ Condition that s.94 contributions be paid.	▪ This is addressed in Statement of Commitments for the Concept Plan and the Building A Project Application.
NSW DEPARTMENT OF TRANSPORT	
▪ Promote Public Transport. ▪ Implications of development on non-car travel. ▪ Demonstrate minimalist approach to car parking. ▪ Provide car share spaces. ▪ Consistency with RTA guidelines.	▪ These matters have been addressed in detail in the addendum traffic comments provided by Colston Budd Hunt & Kafes which accompanies this PPR in **Appendix D** and **Section 2.3** of this PPR above. ▪ In summary, the PPR has positively responded to these comments to have a minimalist approach to parking as well as provide additional measures to support alternate transport means than private car ownership.
NSW OFFICE OF WATER	
▪ Point from which the Riparian Area is to be measured.	▪ The PPR documentation has adopted the DWE guidelines requirement for measuring the riparian corridor being from the top of bank across the whole development. All documentation has been amended to reflect this.
▪ Width of Riparian Area	▪ A 20 metre riparian corridor setback from top of bank as been adopted across the development which includes a 10 metre wide CRZ and a 10 metre wide Vegetation Buffer.
▪ Building D setback	▪ In response to the concern, Building D has been re-orientated and setback outside of the 20 metre riparian corridor.
▪ Pedestrian / cycle path	▪ In response to the concern, the pedestrian / cycle path as been relocated between Buildings B and C connecting the Boulevard to the University lands to the north-east.
▪ Bio-retention Basin	▪ In response to the concern, the proposed bio-swale as been

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	redesigned to run along the south-western side of Building D. The swale runs between the end of the new road up to the edge of the riparian corridor boundary. The bio-swale will then be piped underground within the riparian corridor to drain into University Creek.
▪ Placement of Bollards	▪ In response to the concern, the bollards have been deleted from the plans. No structures are proposed within the riparian corridor.
Draft Statement of Commitments ▪ Flora and Fauna	▪ The Draft Statement of Commitments has been amended and now satisfies the concerns raised by NOW. Refer to Statement of Commitments in Section 5 of this report.
Groundwater issues ▪ Groundwater licence may be required	▪ Douglas Partners have provided supplementary advice at **Appendix G**. ▪ It is considered that the temporary or long-term collection and disposal of seepage associated with a drained basement should be possible on this site and should not have a significant impact on groundwater flows or licensed groundwater users surrounding the site. ▪ Douglas Partners consider that a Temporary Dewatering Licence under Part V of the Water Act 1912 is not necessarily applicable for this site and the proposed development, which will involve management of perched seepage flows. ▪ The report states that it will be necessary, to obtain approval from Council or the relevant consent authority prior to disposal of the collected seepage to the stormwater system or creek. ▪ If a Temporary Dewatering License is still deemed necessary by NOW then they suggested that the requirement for a tanked basement (i.e. specific conditions 1 and 2 of Attachment B) should be removed as this is essentially a commercial decision to be made by the developer when assessing management and maintenance requirements for the basement structure.
ROADS & TRAFFIC AUTHORITY	
▪ Access arrangement and proximity to Waterloo Road, resulting in likelihood for illegal U-turns.	▪ This matter has been addressed in the addendum traffic comments provided by Colston Budd Hunt & Kafes which accompanies this PPR in **Appendix D**.
DEPARTMENT OF ENVIRONMENT, CLIMATE CHANGE AND WATER	
Biodiversity ▪ Include the Sydney Turpentine Ironbark Forest (STIF) in the VMP ▪ Further assessment of the value of the STIF.	▪ While the further investigation undertaken by Anne Clements and Associates found that STIF does not exist on the site, the Vegetation Management Plan has nevertheless been revised and updated to include details of an offset strategy. Refer to the VMP prepared by Total Earth Care attached in **Appendix F**. ▪ Further investigations into the ecological significance of the STIF identified on the Development Site have been undertaken by Anne Clements, which supports the original TEC report conclusion that the site does not contain STIF. Further details of the assessment undertaken and the recommendations are contained within the Flora Report by Anne Clements in **Appendix E**.
Aboriginal Cultural Heritage ▪ Consultation with appropriate Aboriginal stakeholders.	▪ In response to the items raised by DECCW, Mary Dallas Consulting Archaeologists have provided additional correspondence which restates that eh consultation carried out is satisfactory and has been done so in accordance with DECCWs guidelines.

Comment / Submission	Response
	▪ A copy of the correspondence is included in **Appendix H**.
MACQUARIE UNIVERSITY	
Riparian Corridor ▪ Concern with regards to Building D being situated within the riparian corridor.	▪ The building footprint of Building D has been reduced and re-orientated to run across the Development Site, parallel to the creek. This has resulted in Building D being contained wholly outside the 20 metre riparian corridor.
Flooding ▪ Request consideration of impacts of the development on the University land downstream of the Development Site.	▪ The EA documentation included a Flood Assessment prepared by Taylor Thomas Whiting (TTW) which concluded that the Concept Plan proposal will not result in any additional flood effects downstream. There is no requirement for supplementary assessment of the flood impacts.
Threatened Species ▪ Existence of the STIF on the Development Site should be further investigated	▪ Further investigations into the ecological significance of the STIF identified on the Development Site have been undertaken by Anne Clements, which supports the original TEC Report conclusion that the site does not contain STIF. Further details of the assessment undertaken and the recommendations are contained within the Flora Report by Anne Clements in **Appendix E** and Section 2.2 of this report..
Pedestrian Access Link ▪ Not to cross the riparian corridor	▪ The PPR has removed all pedestrian paths in the corridor. As a result of the meeting with the University the planned alternative bridge crossing has been abandoned for a linkage between Buildings B and C as suggested by the University.
Traffic ▪ Macquarie University request inclusion in the development of any change to the traffic and access arrangements.	▪ Noted. The PPR does not change the vehicle access design from that proposed in the EA documentation.
RESIDENT SUBMISSIONS	
Building height and traffic ▪ Twelve stories is too high ▪ Traffic impacts from 557 units	▪ For the reasons outlined in this PPR, the proposed building height is justified. Furthermore, the building height will have no material impact on the objectors properties. ▪ The traffic impacts have been adequately assessed by CBHK and found to be acceptable having regard to the relevant RTA Guidelines.

5 Revised Statement of Commitments

5.1 Concept Plan

Subject	Commitments	Timing
1. Section 94 Contributions	Section 94 Contributions to be made for Building A will be in accordance with the separate Statement of Commitments accompanying the Project Application for Building A (MP_0218). The form of the Section 94 Contributions for each building within the development will be either a monetary contribution or 'works-in-kind' to be negotiated with the approval authority prior to the PA approval for each respective building. The same formula is to be applied for calculation of contribution rates for the remaining buildings as part of each subsequent Project Application. That is: **Type** — **Contribution rate** - Studio / 1-Bedroom — $12,274.86 - 2-Bedrooms — $14,729.83 - 3-Bedrooms — $18,821.44 - 3+ Bedrooms — $23,731.38 The above rates are per March 2010 CPI index as per the Section 94 Contributions Plan - December 2007. Final contributions rates are to be CPI indexed to the time of each Project Application approval, from the date the Concept Plan is approved.	The Section 94 contributions will be made prior to issue of the Occupation Certificate in respect of the Project Application for each building within the development.
2. Dedication of new access road	While the development scale does not necessitate the construction of a "Type 3" road, the proponent is willing to construct a Type 3 road for the proposed development so that it can be dedicated to Council as a local road in order to deliver additional public benefits to the community. This commitment is however contingent on achieving the scale of development proposed in the PPR.	To be dedicated to Council prior to the issue of the final Occupation Certificate for the final (fifth) building within the proposed 5 building development.
3. Road works	Subject to the outcome of item 2 above, the proponent agrees to design and construct a new local road with the Development Site and its intersection with Herring Road. The road works will be designed to satisfy the relevant Ryde Council's DCP standards for road construction for a Type 3 road dimensioned as set out below:	The road construction will occur in stages corresponding to the staged construction of the residential development, as illustrated in the staging plans prepared by Turner and

Subject	Commitments	Timing
	▪ 2 x 3 metre wide travelling lanes. ▪ 2.5 metre wide parking land on the northern side of the road. ▪ 3.8 metre wide verge with footpath and landscaping on each side of the road. ▪ A turning head at the western end of the road.	Associates.
4. Parking Provisions	Parking is to be provided in accordance with the following car parking rates: ▪ 1 space per one or two bedroom apartment. ▪ 1.6 spaces per apartment with three or four bedrooms. ▪ 1 space per six apartments for visitors. ▪ 1 space per 25sqm for the ground level retail space. In addition, it is proposed that 3 car spaces on-street to be designated for “care share” parking to ensure that there are convenient alternatives to car ownership for residents.	Car parking numbers will be determined at each Project Application stage depending on the final mix of dwellings within the respective building, based on these car parking rates.
5. Environmental Sustainability	The proponent agrees to design the residential apartment buildings in accordance with the requirements of *SEPP (BASIX)*.	BASIX Certificate to be issued prior to Construction Certificate for each building within the development.
6. Flora and Fauna	The proponent agrees to the following measures and actions recommended in the Flora and Fauna Assessment prepared by Total Earth Care dated March 2010 and Flora Report by Anne Clements (September 2010): ▪ Creating a riparian corridor along University Creek, including a 10 metre core riparian zone and a 10 metre vegetation buffer on the south-east side of the creek, free from development. ▪ Regeneration of core riparian zone and vegetation buffer, in accordance with the VMP. ▪ Allow for temporary tree protection measures during construction as outlined in the report. ▪ Hand trenching within safety exclusion zones with a 12 metre radius x truck diameter at breast height to specific areas of the site, as outlined in the Arborist report.	Where relevant, recommendations have been adopted in the Concept Plan Design. Precautionary measures to protect retained vegetation are be addressed prior to a relevant Construction Certificate.
7. Vegetation Management	In accordance with the Vegetation Management Plan (VMP) dated 10 September 2010, the proponent agrees to the following measures and actions: ▪ Preparation of a long-term management plan for the riparian corridor to be maintained in	Recommended actions within the VMP are to be have been carried out prior to the issue of the final Occupation Certificate for the final

Subject	Commitments	Timing
	perpetuity beyond the timeframe of the VMP. ▪ Install and maintain sediment and erosion control measures prior to commencing works on each respective building. ▪ Revegetation within the riparian corridor utilising locally indigenous species listed in Appendix C of the VMP. ▪ Implementation of a monitoring program for the weed removal and vegetation regeneration works that will commence at establishment of regeneration works and continue for the duration of the maintenance period. ▪ Implementing the biodiversity offset strategy in Addendum 1 to the Vegetation Management Plan by Total Earth Care, September 2010.	(fifth) building within the proposed 5 building development. Ongoing monitoring program to be initiated post completion of the entire development.
8. Crime Management and Safety	The proponent agrees to implement the following measures: ▪ All street entries to residential buildings will have appropriate levels of lighting to avoid poorly lit dark spaces. ▪ Lighting will be provided along the shared pedestrian/cycleway between Buildings B and C. ▪ Where required, the Australian Standard AS1158.3.1:1999 “Road Lighting. Part 3.1: Pedestrian area (Category P) lighting – performance and installation design requirements” will be complied with. ▪ The building entrances will be visible from the street and will not be obscured by landscaping. ▪ Construction fencing will be erected along the southern side of the new internal street to secure the site in accordance with workplace safety requirements. ▪ A boundary fence will be erected along the shared boundary with Macquarie University to ensure there is a clear delineation of space between the properties as well as to provide secure private domain areas for residents on-site. ▪ Access into the basement car parks will be controlled by installing physical barriers such as security access gate devices to control vehicles entering and exiting the car park. ▪ Pedestrian access to the building will be clearly defined by a direct pathway from the street. Access into each building will be controlled by electronic pass security devices and	The proposed lighting, landscaping, security, and management measures will be implemented on a staged basis in accordance with each subsequent Project Application.

Subject	Commitments	Timing
	intercom for visitors. ▪ The private open space for residents will be secured from the public domain through a combination of landscape treatments and fencing that will create a clear sense of ownership and territorial reinforcement. ▪ A Strata management body will be formed for each building to ensure the buildings have a regular maintenance program. ▪ Hardwearing materials will be utilised where appropriate in all buildings to minimise opportunities for vandalism.	
9. Dilapidation Management	A Dilapidation Report will be prepared on surrounding buildings, roads, pavements and structures prior to the commencement of any excavation works, to document existing conditions, so that claims for damage due to vibrations or construction related activities can be accurately assessed.	The Dilapidation Report will be prepared prior to commencement of excavation the Stage 1 works on the site.
10. Drainage and Stormwater	The proponent agrees to install a stormwater management system in accordance with the plans prepared by Taylor Thomas Whitting that will include: ▪ Construction of a stormwater pipe infrastructure within the road reserve of the proposed new road, connecting with pits on Herring Road. ▪ Each apartment block will be serviced by separate detention and re-use tanks and pass through gross pollutant traps prior to entering the stormwater system. ▪ To suit the existing topography, the stormwater collection from the roof and podium of Building A will be discharged into the Herring Road stormwater system after passing through a gross pollution trap. ▪ All stormwater collected from the other building roofs and podiums of subsequent stages will be discharged into University Creek and will pass through a first flush bioswale treatment system to filter low-flow discharge before being discharged. ▪ A small amount of the new access road adjacent to Herring Road will be collected by kerb-side pits and will drain into two existing Council pits on Herring Road, while the residual road reserve area will drain into University Creek via the first flush bioswale treatment system upon completion of the road.	The proposed stormwater system will be constructed progressively with each stage of the project to suit the requirements of each building. Works to connect future buildings to the stormwater infrastructure will be carried at as part of subsequent Project Applications.

Subject	Commitments	Timing
11. Geotechnical and Groundwater Management	The proponent agrees to the following measures and actions recommended in the Geotechnical Investigation prepared by Douglas Partners dated December 2009: ▪ All excavated materials will be disposed of in accordance with current Waste Classification Guidelines (DECC, April 2008). ▪ Temporary and permanent batter slopes will be designed in accordance with those shown in Table 2 of the Geotechnical Investigation report. ▪ All footings will be inspected by a geotechnical engineer to confirm that foundations are suitable for the design parameters. ▪ During construction, groundwater seepage will be controlled by perimeter drains connected to a 'sump-and-pump' dewatering system.	The proposed measures will be implemented on a staged basis in accordance with each subsequent Project Application.
12. Construction Management	The proponent agrees to prepare a Construction Management Plan outlining the methods of construction, traffic management, crane height and location details and the like.	A Construction Management Plan shall be prepared prior to the issue of the Construction Certificate.

5.2 Project Application – Building A

Subject	Commitments	Timing
1. Section 94 Contributions	Section 94 Contributions are to be made in accordance with the following formula, derived from the Section 94 Plan – December 2007: **Type** — **Contribution rate** ▪ Studio / 1-Bedroom — $12,274.86 ▪ 2-Bedrooms — $14,729.83 ▪ 3-Bedrooms — $18,821.44 ▪ 3+ Bedrooms — $23,731.38 ▪ Retail space of 98.6ssqm @ $71.28 per/sqm = $7,028.21 Based on the proposed apartment mix for Building A (outlined below) and the retail space, the total contribution value would total $1,565,628.36. ▪ 68 x 1 bedroom apartments ▪ 47 x 2 bedroom apartments ▪ 7 x 3 bedroom apartments ▪ 1 x 3+ bedroom apartment	The Section 94 contribution will be made prior to issue of the final Occupation Certificate for Building A.
2. Road works	The proponent agrees to design and construct a new local road through the Development Site and intersecting with Herring Road, to the extent required to provide access to the Building A basement car park. The portion of the new road to be constructed as part of Stage 1A is indicated on the Project Application Building A plans prepared by Turner + Associates.	The Stage 1A road construction will be completed in accordance with the Stage 1A Building A plans prepared by Turner + Associates prior to issue of the final Occupation Certificate for Building A.
3. Parking Provisions	The proponent agrees to construct a three-level basement car park which will provide 174 parking spaces, comprising: ▪ 128 residential parking spaces (including 13 accessible parking spaces) ▪ 21 visitor parking spaces (including 1 accessible parking space).	The car park will be constructed as part of the Building A works.

Subject	Commitments	Timing
	▪ 16 small car spaces (part visitor, part resident) ▪ 3 retail parking spaces (including 1 accessible parking space). The car park layout and parking spaces will be in accordance with the Australian Standard requirements for on-site car parks. In addition, provisions are to be made for the following: ▪ 8 spaces for motorcycles ▪ Allocation of a bike cage for every apartment ▪ 31 visitor bike parking spaces at ground level.	
4. Acoustic	The proponent agrees to the following measures and actions recommended in the Acoustic Assessment for Building A prepared by Renzo Tonin & Associates dated 5 March 2010: ▪ Bedrooms and living areas to satisfy the required acoustic rating of glazing assembly to comply with the traffic noise intrusion recommendations. ▪ Acoustic grade seals are to be installed on windows and perimeter doors exposed to road traffic noise. ▪ Acoustic assessment of mechanical services equipment will need to be undertaken during the detailed design phase of the development to ensure it achieves compliance with DECCWs Industrial Noise Policy. ▪ A quantitative assessment of the construction noise for major construction works.	The acoustic mitigation measures are to be incorporated into the Construction Certificate documentation for Building A. The quantitative assessment of construction noise is to be prepared and recommendations adopted during the construction phase.
5. Environmental Sustainability	The proponent agrees to undertake construction of Building A in accordance with the requirements of *SEPP (BASIX)*.	A BASIX Certificate will be obtained and issued prior to issue of the Construction Certificate for Building A.
6. Drainage and Stormwater	The proponent agrees to install a stormwater management system in accordance with the Hydraulic Plans prepared for Building A by Taylor Thomas Whitting that will include: ▪ Construction of a stormwater pipe infrastructure within the road reserve of the proposed new road, connecting with pits on Herring Road.	▪ The main stormwater pipe will be connected prior to the completion of Stage 1A and the activation of the first portion of road works and will be completed discharging part

Subject	Commitments	Timing
	▪ Stormwater collected from Building A roof and podium will be fed into detention and reuse tanks, and gross pollution traps on the allotment before connecting to the stormwater system in Herring Road. ▪ A small amount of the new access road adjacent to Herring Road that falls toward Herring Road will be collected by kerb-side pits and will drain into two existing Council pits on Herring Road while the residual road reserve will drain into University Creek via a Gross Pollutant Trap upon completion and dedication of the road.	of the road area stormwater into University Creek, prior to the completion of the first portion of road. ▪ The remainder of the stormwater management system to support Building A and the first portion of road adjacent to the Herring Road intersection will be completed prior to the Occupation Certificate for Building A being issued.
7. Construction Management	The proponent agrees to prepare a Construction Management Plan outlining the methods of construction, traffic management, crane height and location details and the like during the Stage 1 and Stage 1A (Building A) construction phase	A Construction Management Plan shall be prepared prior to the issue of the Construction Certificate.
8. Waste Management	Waste management for the Building A Project Application will be undertaken in accordance with the Waste Management Plan prepared by Waste Audit and Consultancy Services Pty Ltd.	On-going

Subject	Commitments	Timing
9. Contamination	The proponent agrees to the following measures and actions recommended in the Phase 1 Contamination Assessment prepared by Douglas Partners dated December 2009: ▪ Undertake additional sampling and testing of soils to be retained on site, such that sample numbers comply with the NSW EPA Sampling Design Guidelines. ▪ Disposal of the soils in the earth mound at the south-eastern boundary of the site at a licensed landfill facility as Asbestos Waste. However, the actual volume of soil under this classification will be delineated by the findings of subsequent testing. ▪ Undertake more detailed investigations into soil contamination in the vicinity of the UST location, indicated on Drawing 1 of the Douglas Partners Phase 1 Contamination Assessment Report, will be undertaken to assess any soil contamination resulting from past leaks. ▪ Obtain validation of existing building footprints upon completion of demolition and removal from the site. This will entail a visual assessment of the ground surface for evidence of asbestos-containing materials complimented with appropriate sampling and testing. ▪ Validation of the UST pit once the UST is removed and disposed off site.	The additional sampling and testing of soils are to be undertaken prior to the issue of a Construction Certificate for Building A.

6 Summary and Conclusion

This PPR has been prepared in response to the DOPs letter dated 28 July 2010. The Preferred Project relates to Concept Plan, and concurrent Project Applications (Building A and Subdivision). This report provides a response to the key issues raised by the Department of Planning and other stakeholders by presenting a refined Concept Plan design. The PPR includes the following key design amendments:

- Amend the consistent 12 storey building heights to a new modulated building height plane across the development site to provide a range of building heights between 9 and 15 storeys.
- Reduce the basement parking by 101 spaces (or 13.6%) to 667 car parking spaces to achieve a minimalist approach to car parking.
- Re-orientate Building D to be setback out of the University Creek riparian corridor vegetation buffer to avoid any disturbance of this land.
- Re-direct the public pedestrian/cycleway link out from the environmentally sensitive riparian corridor to between Buildings B and C to the boundary with Macquarie University to enable the connection to continue through the University lands.
- Increase the building separation between all buildings by re-orientating building footprints to enhance the privacy levels between buildings.
- Inclusion of 3 dedicated car-share spaces along the new local road to ensure that there are convenient alternatives to car ownership for residents.
- Commit to a range of building performance measures to achieve a 4 Star Green Star rating for Building A and for the remainder of the development so that the project demonstrates industry best practice.
- Commit to an offset planting strategy on-site to enhance the sites' biodiversity value as well as achieve a net increase in trees and shrubs as a consequence of the development.

Through these amendments, the PPR presents an improved design scheme that better aligns with the key strategic and statutory policy directions. In addition, the PPR will deliver will a range of public benefits such as:

- Delivery of a Type 3 Road which will connect into the existing local road network, which will include a landscape strategy to provide a new boulevard.
- Achieving a 4-star Green Star Rating, being 'best practice' for residential developments which will deliver environmental performance efficiencies.
- Riparian corridor restoration for University Creek and revegetation of the adjacent vegetation buffer.
- Providing a pedestrian / bicycle link from the new road to the north-eastern University land between Buildings B and C, improving permeability through the northern portion of the Macquarie Park Corridor and contributing to the finer grain network.

In conclusion, it is considered that the proposed Preferred Project has adequately addressed all matters raised in the submissions. The site location and context is highly suitable for residential development. The proposal is appropriate for the site and its surrounding context and will ultimately positively contribute to achieving the aims and objectives for the Macquarie Park Corridor and the Inner North Draft Subregional Strategy as the locality continues to evolve as a "Specialised Centre".

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