

Preferred Project Report Major Project MP08_0244



23-37 Lindfield Avenue and 11 Havilah Lane Mixed Use Development

Submitted to Department of Planning On Behalf of Anka (Civic Centre) Pty Ltd

Reproduction of this document or any part thereof is not permitted without prior written permission of JBA Urban Planning Consultants Pty Ltd.

JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Claire Wright

Signature Date 21/04/11

This report has been reviewed by: Gordon Kirkby

Signature Godon Khly Date 21/04/11

Contents

1.0	Introduction	1			
2.0	Preferred Project	2			
	2.1 Description of Preferred Project	2			
	2.2 Key Changes	2			
	2.3 Assessment	7			
3.0	Issues Raised by the Department of Planning	16			
	3.1 Setbacks, Building Form and Design	16			
	3.2 Building Separation	18			
	3.3 Streetscape Presentation	19			
	3.4 Open Space	19			
	3.5 Isolated Sites3.6 Additional Information Required	20 20			
	7 dattorial information rioquirod				
4.0	Key Issues Raised in Submissions	22			
	4.1 Issues raised by Ku-ring-gai Council	22			
	4.2 Issued raised by the Public	22			
5.0	Conclusion	24			
Figu	ures				
1	Projected traffic generation potential	8			
2	View of residential development on eastern side of Havilah Lane from the				
	loading dock within the existing building and Council owned car park				
Tab	les				
1	Changes to numeric overview	3			
2	Changes to the level by level description	4			
3	Contributions rate calculations - Ku-ring-gai Contributions Plan 2010 7				
4	Consistency with relevant EPIs and DCPs 7				
5	Existing and predicted intersection performance analysis				
6	Minimum and Maximum Parking Requirements under the Town Centres DCP 9				
7	Parking Requirements for residential component	9			
8	Parking Provision	10			
9	Compliance with key planning controls within the Town Centres LEP	17			
10	Response to additional information requirements				

Contents

Appendices

A Architectural Drawings

PTI Architects

B Design Amendments Statement

PTI Architects

C Landscape Plan

Peter Glass Associates

D Statement of Commitments

JBA Planning

E SEPP 65 Design Verification Statement

PTI Architects

- F BASIX Certification
- G Traffic and Parking Report

Varga Traffic Planning Pty Ltd

H Solar Access Analysis

Windtech Consultants Pty Ltd

Natural Ventilation Statement

Windtech Consultants Pty Ltd

J Vibration Statement

GHD

K Statement of Heritage Impact

Graham Brooks and Associates

L Access Assessment Report

PSE Access Consulting

M Stormwater Management Report and Plans

GHD

N Geotechnical and Hydrogeological Assessment

Jeffery and Katauskas Pty Ltd

O Waste Management Plan

JD Macdonald

P Response to Ku-ring-gai Council's Submission

JBA Planning

1.0 Introduction

An Environmental Assessment Report (EAR) for a Project Application for a mixed use development at 23-27 Lindfield Avenue and 11 Havilah Lane was publicly exhibited for a period of four weeks between 24 November 2010 and 24 December 2010.

The site was sold to Anka (Civic Centre) Pty Ltd (Anka) in November 2010 who are now the proponents for the Project Application. The Department of Planning provided Anka with copies of the 26 submissions which were received in response to the public exhibition of the Project Application. In a letter dated 25 February 2011, the Department of Planning requested that Anka address a number of key issues arising from the submissions and the Department's assessment.

Anka and its specialist consultant team have reviewed and considered the Department's comments and the public submissions. In accordance with clause 75H(6) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), this report describes the proposed revisions to the proposal, Anka's response to the issues raised provides a revised Statement of Commitments.

This PPR is structured as follows:

Section 1: Introduction

Section 2: Preferred Project

Section 3: Response to issues raised by the Department of Planning

Section 4: Response to issues raised by submissions

This report should be read in conjunction with the Environmental Assessment Report (EAR) dated November 2010 and the documents included within the appendices (refer to table of contents). This report and associated appendices form part of the Project Application.

2.0 Preferred Project

In accordance with its commitment to address the concerns of the Department of Planning, Ku-ring-gai Council and the public, Anka has modified the proposed design for the mixed use development at 23-37 Lindfield Avenue and 11 Havilah Lane. The modified design herein referred to as the 'preferred project' is explained in the proceeding sections. Revised Architectural Drawings prepared by PTI Architects are included at **Appendix A**.

2.1 Description of Preferred Project

The preferred project seeks approval for:

- the demolition of existing structures on the site;
- excavation of the site an approximate level of RL 86.2m AHD; and
- construction of a mixed use development totalling 11,899m² GFA, comprising:
 - 4,231m² retail floorspace;
 - 91 residential apartments within two residential towers;
 - basement parking for 206 car spaces within three basement levels; and
 - associated landscaping, servicing and infrastructure.

2.2 Key Changes

The key changes to the Project Application described in the EAR are discussed in detail below. In general the changes comprise:

- provision of a third basement level for car parking;
- removal of residential units at Level 1;
- relocation of open space from Level 1 to Level 2;
- increase in retail GFA by 1,243m²;
- decrease in residential GFA by 830m²;
- increase overall GFA by 470m²;
- increase in retail FSR by 0.4:1;
- increase in total FSR by 0.1:1;
- removal of 11residential units within the development and amendments to dwelling mix;
- increase in private communal open space area by 126m²;
- increase in overall building height (of both Buildings A and B) by 1m;
- increase in height of elevations by 1m; and
- increase in overall car parking spaces by 56.

2.2.1 Numeric Overview

Table 1 provides the key development statistics for the preferred project in comparison to the exhibited project.

Table 1 - Changes to numeric overview

Component	Exhibited Project	Preferred Project
Site Area	3,099m ²	3,099m ²
GFA ¹		
 Retail 	2,988m ²	4,231m ²
 Residential 	8,485m ²	7,655m²
Total	11,429m ²	11,899m²
FSR		
 Retail 	0.96:1	1.37:1
Total	3.7:1	3.8:1
No. of Units		
Total	102	91
Studio	-	1
■ 1 Bed	53	45
2 Bed	44	38
• 3 Bed	5	7
Private Communal Open space	494m ² (16% of site area)	620m ² (20% of site area)
Building Height ²		
 Building A 	22.34m	23.34m
Building B	25.36m	26.36m
Facade Height ³		
Lindfield Avenue frontage (south-west elevation)	24.4m	25.4m
Kochia Lane frontage	24.2m	25.2m
(south-east elevation)		20.2
Havilah Lane frontage	22.2m	23.2m
(north-east elevation)		
North-west elevation	22.2m (Building A)	23.2m (Building A)
	26.0m (Building B)	27.0m (Building B)
Storey Height		
Building A	6 storeys	6 storeys
Building B	7/8 storeys	7/8 storeys
Parking	175	231
 Basement Total 	150	206
 Residential 	102	97
Retail	73	118
Visitor	-	16

¹ The GFA figures included within the EAR were not accurately measured in accordance with the standard definition for GFA. The GFA figures for the Exhibited Project have been amended accordingly to provide an accurate comparison.

² building height (or height of building) means the vertical distance between ground level (existing) at any point to the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

³ The facade heights are measured in the same manner as the building height.

2.2.2 Level by Level Description

Table 2 provides the level by level description for the preferred project and provides a comparison with the exhibited project.

Table 2 - Changes to the level by level description

Level	Exhibited Project	Preferred Project
Basement 3	n/a this level was not proposed within the original Project	 69 residential car spaces (including 5 accessible spaces); 17 visitor spaces (including 1 accessible space); residential storage space; generator fuel tank.
Basement 2	 89 car spaces (including 7 car share spaces); storage space for the residential units; bicycle parking; storage space; 4 lifts and 3 stairwells. 	 27 residential car spaces; 47 retail spaces; residential storage space; supply air plant; retail entry ramp; bicycle parking; and 5 lifts and 4 stairwells.
Lower Ground Floor/ Basement 1	 61 car spaces (including 2 accessible spaces); bicycle parking; plant room space; and residential garbage rooms. 	 46 retail car spaces (including 3 accessible spaces); bicycle parking; plant rooms; 4 x residential garbage rooms; and retail entry ramp.
Upper Ground Floor/ Ground Floor	 1 large retail premises for a super market; travelators from Kochia Lane and retail forecourt; 1 smaller retail premises fronting Lindfield Avenue; storage and plant room space at rear of site; loading area; and residential lobby. 	 6 x retail premises; 1 x retail premises for a green grocer; retail concourse; retail entry from Lindfield Avenue to retail concourse; travelators from Kochia Lane to retail concourse at Ground Floor and Level 1; ramp between Ground Floor and Level 1 retail spaces; residential lobby entrance from Kochia Lane public amenities; loading dock on Havilah Lane frontage; retail garbage area; vehicular entrance from Havilah Lane and ramp down to basement levels; and plant rooms.
Level 1	 3 retail premises and pedestrian circulation space in the Building B; 10 residential units in Building A; storage space; and landscaped courtyard (494m²) between Buildings A and B 	 1x large retail premises for supermarket; 4 x retail premises; 1 x medical/ office premises; ramp between Ground Floor and Level 1; travelator to Ground Floor retail concourse and Kochia Lane entrance; and retail concourse.
Level 2	 10 residential units in Building A; and 10 residential units in Building B. 	 landscaped courtyard (620m²) between Buildings A and B; 10 residential units in Building A; and 11 residential units in Building B.
Level 3	10 residential units in Building A and10 residential units in Building B;	10 residential units in Building A; and10 residential units in Building B.

Level	Exhibited Project	Preferred Project
Level 4	10 residential units in Building A and	10 residential units in Building A; and
	10 residential units in Building B;	10 residential units in Building B.
Level 5	4 residential units in Building A; and	4 residential units in Building A; and
	 10 residential units in Building B 	9 residential units in Building B.
Level 6	10 residential units in Building B.	9 residential units in Building B.
Level 7	8 residential units in Building B.	8 residential units in Building B.
Roof	Plant room space.	Plant room space.

2.2.3 Built Form

The key amendments to the design of the preferred project are illustrated in the photomontages at **Appendix A** and described within the Design Amendments Statement at **Appendix B**. The key design amendments include:

- increased setbacks at ground floor and Level 5 to provide a larger pavement area at ground floor and increased separation between the upper storeys of the development and 1-21 Lindfield Avenue;
- articulation of the Kochia Lane facade of Building B at Levels 2,3 and 4 to provide additional visual interest to the facade;
- amendments to the external material and finishes to provide the impression that that upper levels of Building B visually recedes behind the lower residential levels and improves the interpretation of the parapet levels of the adjacent heritage item at 1-21 Lindfield Avenue.
- removal of the solid massing at the Lindfield Avenue/ Kochia Lane corner and inclusion of additional glazing to provide more sympathetic response to the 1-21 Lindfield Avenue;
- a redesign of the retail spaces at Ground Floor and Level 1 to provide greater separation between the retail and residential uses and afford the opportunity for future connections to the future town square;
- a redesign of the retail entries on Lindfield Avenue and Kochia Lane, and relocation of the residential entry to Kochia Lane, to provide clearer separation between the retail and residential access points and improve linkages to the future town square area;
- additional basement car parking to increase the number of off-street car spaces and reconfiguration of the spaces to reduce the number of stacked car spaces and enable separation of the retail and residential car spaces;
- amendment to the vehicular access and loading dock arrangements to preserve the existing right-of-way from Havilah Lane to the rear of 39 and 41 Lindfield Avenue;
- increase in retail garbage storage area;
- increase in the building separation distance between Buildings A and B to provide greater compliance with the Residential Flat Design Code; and
- addition of shade screens to all residential balconies to improve visual privacy.

2.2.4 Vehicular and Pedestrian Access

Vehicular Access

Access into and from the basement parking and to the loading dock continues to be via Havilah Lane. The entrance into the site has been reconfigured to preserve the right-of-way at ground floor level to the rear of 39 and 41 Lindfield Avenue from Havilah Lane.

Pedestrian Access

The retail premises and concourse at the Ground Floor Level will be primarily be accessed via an at-grade entrance from Lindfield Avenue, travelators from Kochia Lane and ramps and lifts from Basement Levels 1 and 2. The retail premises at Level 2 will be accessed via a ramp and travelator from the Ground Floor and a lift from the basement levels.

The preferred project relocates the residential lobby entrance to Kochia Lane. From street level, residents will enter the development and access Level 2 via a lift (Lift 5). From Level 2, fours lifts, accessible from the central courtyard are provided (two lifts within each Building). These provide access to the upper residential floors and the residential basement parking.

2.2.5 Open Space and Public Domain

The separation of the retail uses and residential uses within the preferred project results in the private communal area of open space being situated at Level 2 (previously Level 1). This relocation enables a larger landscaped area to be provided. Overall, the landscaped area has increased from 494m^2 to 620m^2 (an increase of 126m^2), which equates to approximately 20% of the site area.

The preferred project landscape plan, prepared by Peter Glass and Associates (**Appendix C**) provides a similar design to the previous scheme. The scheme includes elevated planted boxes around the perimeter of the communal open space, incorporating a range of small trees, shrubs and ground cover, seating and paving. The landscape design also includes provision for a glazed roof above the Level 1 retail floor, enabling natural light into the Level 1 area.

The preferred project provides the following public domain improvements to Lindfield Avenue and Kochia Lane:

- simplification of the Lindfield Avenue entrance to provide at grade retail access from the street;
- relocation of the residential lobby entrance to the ground floor level at Kochia Lane, to provide greater opportunity for activation of Kochia Lane and linkages to the future Town Square;
- provision of space for outdoor dining/ along Lindfield Avenue and Kochia Lane due to a retraction in the retail building lines;
- increased setback, widening of the retail entrance and additional glazing at Kochia Lane, provide increased public domain area, improves the streetscape presentation and emphases it as a primary entry point.

2.2.6 Developer Contributions

Within the exhibited EAR, the proponent included a statement of commitment to pay development contributions for the residential component of the development in accordance with the applicable rates contained within the *Ku-ring-gai Section 94 Contributions Plan 2003-2009 - Amendment 2* and *Ku-ring-gai Town Centres Development Contributions Plan 2008*. These two documents have now been superseded by the *Ku-ring-gai Contributions Plan 2010*.

Developer contributions will be paid to Council in accordance with the rates contained within the 2010 Plan. **Table 3** provides the applicable rates and the developer contribution rate calculation which will be paid to Council prior to the Occupation Certificate being issued, as included in the Statement of Commitments at **Appendix D**.

Table 3 - Contributions rate calculations - Ku-ring-gai Contributions Plan 2010

No of bedrooms	Contributions Plan 2010 Rate	Number of Units	Total Contributions Amount
Studio	\$12,259.05	1	\$12,259.05
1 Bed	\$14,427.16	49	\$706,930.84
2 Bed	\$20,202.07	38	\$767.678.66
3 Bed	\$25,070.23	5	\$125,351.15
TOTAL			\$1,612,219.60

2.3 Assessment

The preferred project includes a number of amendments to the development described and assessed within the EAR. It is considered that the preferred project does not give rise to any additional impacts than those which were previously addressed, however it is considered that the amendments warrant further assessment of a number of issues.

2.3.1 Consistency with Relevant Strategic and Statutory Plans and Policies

The projects compliance with the relevant planning controls is addressed within the EAR. **Table 4** provides further detail in regard to the preferred project. Overall, the preferred project remains to generally be consistent with the relevant planning controls.

Table 4 - Consistency with relevant EPIs and DCPs

Relevant EPI/ DCP	Comment
SEPP 65 and RFDC	The residential component of the preferred project is consistent with the ten design principles in SEPP 65. This is confirmed in the SEPP 65 Design Verification Statement, prepared by PTI Architects (Appendix E).
SEPP BASIX	A BASIX Certificate, dwelling schedules and BASIX plans for the preferred project are included at Appendix F . They confirm that the residential component of the proposed development complies with the water and energy saving targets in SEPP BASIX.
Ku-ring-gai Town Centres Public Domain Plan	 The preferred project complies with the objectives and strategies for Lindfield Town Centre within the Public Domain Plan in that: it strengthens the role of Lindfield Avenue as the 'main street' retail area by providing retail units at ground floor to activate the streetscape and a primary entrance into retail concourse; it activates improves the streetscape character of Kochia Lane; it provides the required setbacks to Kochia Lane and Havilah Lane to enable the creation of a pedestrian priority street; and the articulation to the Lindfield Avenue/ Kochia Lane elevations seeks to be sympathetic to 1-21 Lindfield Avenue and better protect views to and from of this heritage building.

2.3.2 Built Form

The preferred project provides a more sophisticated built form which is sympathetic to the heritage buildings at 1-21 Lindfield Avenue and continues to provide a high level of residential amenity. Furthermore, as discussed at Section 3.1, the proposal demonstrates design excellence and incorporates a very high standard of architectural design, materials and detailing. It is noted however that the preferred project is 1m higher than the previous proposal, this increase in height is assessed below.

Height

The EAR provides a detailed assessment of the proposed height of the development against both the Ku-ring-gai Town Centres LEP and SEPP 53. The inclusion of additional retail floorspace, necessitates an increase in the floor to floor heights at Ground Floor and Level 1, resulting in an increase in overall building height and the elevation height by 1m respectively. The increase in height is very minor in nature and the amended design does not result in adverse overshadowing impacts (discussed at Section 2.3.5). Furthermore, the inclusion of additional retail floorspace provides a better design outcome for future residents and visitors, therefore the minor increase in height is considered to be acceptable, inconsequential, and will not result in any adverse environmental impacts.

2.3.3 Traffic and Parking

The traffic and parking characteristics of the preferred project have been assessed by Varga Traffic Planning Pty Ltd (**Appendix G**). Their findings are summarised below.

Traffic Generation and Intersection Performance

The existing two way traffic flows on the road network in the vicinity of the site during the morning and afternoon peak periods are as follows:

- Pacific Highway 3,300 3,800 vehicles per hour (vph);
- Havilah Street 500-700 vph;
- Lindfield Avenue 750 12,00 vph;
- Tryon Avenue 400 vph; and
- Kochia Lane 70-100 vph (afternoon peak only).

The northbound traffic flow in Havilah Lane during the afternoon peak was also found to be in the order of 60 vph.

Based upon the Roads and Traffic Authority's (RTA) "Guide to Traffic Generating Development" nominated traffic generation rates for shopping centres and high density residential flat buildings, the preferred project is anticipated to yield the following traffic volumes:

Figure 1 - Projected traffic generation potential

	Thursday Morning (vph)	Thursday Afternoon (vph)
Supermarket	56	250
Retail	20	79
Medical	6	6
Residential (91 apartments)	26	26
TOTAL	108	361

Source: Varga Traffic Planning

Varga consider that the proposed future level of traffic generation should be offset by the volume of traffic which is reasonably expected to be generate by the existing uses on the site. As explained in the EAR and based on the RTAs traffic generation rates, the existing uses yield a traffic generation potential of 94 vph during the morning peak and 220 vph during the afternoon peak.

Accordingly, it is anticipated that the preferred project will increase the traffic generation of the site by 14 vph during the morning peak and 141vph during the afternoon peak. This represents a reduction of 1 vph during the morning peak but an increase of 15 vph during the afternoon peak when compared to the previous proposal.

The implications of the increase in traffic generation has the potential to impact upon the operational performance of the nearby road networks. The results of the INTANAL analysis of surrounding intersections are set out in **Table 5**.

Table 5 - Existing and predicted intersection performance analysis

Intersection	_	Level of vice		d level of vice
	am	pm	am	pm
Pacific Highway & Havilah Street/ Balfour Street	F	С	F	С
Lindfield Avenue & Tryon Avenue	В	А	В	Α

Overall, it is concluded that the preferred project will not have any unacceptable traffic implications in terms of road network capacity and will not require any upgrades to nearby roads and intersections.

Car Parking

Off street parking requirements for the site are specified within the Ku-ring-gai Development Control Plan (Town Centres) 2010, Section 3A.27 – Mixed use Development; Car parking provision. The DCP sets out the following minimum and maximum parking requirements for the mixed use development:

Table 6 - Minimum and Maximum Parking Requirements under the Town Centres DCP

	Minimum	Maximum
Shops	1 space per 36m ²	1 space per 26m ²
Studio Apartments	O spaces per dwelling	0.5 spaces per dwelling
1 Bed Apartments	0.6 spaces per dwelling	1 space per dwelling
2 Bed Apartments	1 space per dwelling	1.25 spaces per dwelling
3 Bed Apartments	1 space per dwelling	1.5 spaces per dwelling
Residential Visitors	1/ 6 apartments	-

Tables 7 and **8** illustrate the Council's off-street parking requirements and the proposed provision.

Table 7 - Parking Requirements

	Proposed GFA/ No	Minimum	Maximum
Retail	3,938m²	119.3	151.5
Medical	293m²	6.5	8.9
Residential	91	72	103.5
Residential Visitor	-	15	15
TOTAL		212.8	278.9

Table 8 - Parking Provision

Proposed Use	Parking Provision
Retail	118
Residential	97
Residential Visitor	16
TOTAL	231

As demonstrated in **Tables 7** and **8** the preferred project provides in excess of the minimum requirement for the residential and residential visitor car spaces but a shortfall of approximately 8 spaces for the retail uses (i.e. retail and medical). The shortfall in the retail parking provision is considered acceptable as it is considered that the actual parking demand generated is expected to be less than the DCP provides for, given its highly accessible location by public transport and therefore it is anticipated that a high proportion of retail customers are expected to be railway or bus commuters that will not require parking. Overall, the proposed provision of 231 car spaces will be sufficient to not cause any adverse on-street parking impacts.

2.3.4 Residential Amenity

The key elements that warrant further consideration in regard to residential amenity are set out below.

Solar Access

Within the Residential Design Flat Code (RDFC), the 'rule of thumb' for solar access seeks that at least 70% of living rooms and private open spaces receive a minimum of three hours direct sunlight access between 9am and 3pm in mid winter and in dense urban areas a minimum of two hours may be acceptable. Furthermore, the 'rule of thumb' seeks the number of south-facing single-aspect units to be limited to 10% of the total number of units. Accordingly, the overall solar access to living areas and private open spaces within the proposed development between 9am and 3pm on June 21 (winter solstice) has been assessed by Windtech Consultants Pty Ltd (Appendix H).

The results of the assessment confirm that:

- none of the units will have south facing single-aspects;
- 70% of all Living Areas achieve 2 hours direct solar access, however only 47% achieve 3 hours;
- 73% of all Private Open Spaces achieve 3 hours direct solar access.

The RFDC states that it "sets broad parameters within which good design of residential flat buildings can occur", by virtue that the RDFC includes 'rules of thumb', we consider that it is to be used as a general guideline for the assessment of residential flat development and not mandatory rules. It is our view therefore that given the site's location within an urban area (i.e. Lindfield town centre) and that the units can only be orientated as proposed due to the site configuration, the provision of 70% of Living Areas with 2 hours direct solar access is an acceptable outcome and meets the intent the 'rule of thumb'.

The shadow diagrams prepared by PTI Architects (**Appendix A**) also illustrate that the private open space area between Buildings A and B will generally be overshadowed in the mornings throughout the year, however solar access will predominantly be maintained during the afternoons.

Natural Ventilation

The RDFC 'rule of thumb' for natural ventilation seeks that 60% of units to be naturally cross ventilated. The natural ventilation characteristics of the proposed residential units has been assessed by Windtech Consulting Pty Ltd (**Appendix I**). The results of the assessment confirm that at least 60% of the units achieve effective natural ventilation, therefore the development is considered to be consistent with the RDFC in regard to natural ventilation.

Communal Open Space

The preferred project provides a larger communal open space than previously proposed. Whilst the development provides an area equating to 20% of the total site area, and the RDFC requires a minimum 25%, the area proposed is considered acceptable and meets the intent of the 'rule of thumb' in that it will still provide residents with passive and active recreational opportunities and a pleasant outlook. Furthermore, the provision of open space for residents is supplemented by private balconies, which have been designed to be a minimum width of 2m and minimum length of 4m in accordance with the RDFC.

2.3.5 Impacts on Adjacent Properties

Privacy

The preferred project is designed to minimise the potential for adverse visual and acoustic privacy impacts on the two residential developments situated to the east of the site at 8 Havilah Lane. The proposed apartments within the preferred project which face Havilah Lane will not directly overlook the principle living areas within the adjacent development. As illustrated in **Figure 1** the windows that face the lane are to the stairwells, internal corridors and bedrooms. Furthermore, there is significant separation (16.9m) between the proposed development and the adjacent residential buildings, to not cause adverse privacy impacts. In addition all balconies within the development will be fitted with shade screens to improve visual privacy for the residents of the proposed development.

Overshadowing

The marginal increase in height of the buildings has the potential to impact upon surrounding residential development and the future town square area, as well as the communal open space at Level 2. In order to assess the extent of the shadows, shadow diagrams for the preferred project at mid winter, the equinox and summer solstice, prepared by PTI Architects are included at **Appendix A**.

The preferred project will result in partial shadowing on the town square in the afternoon of the winter solstice and September equinox. At all other times the proposed development will have no significant overshadowing impact on the town square. Furthermore, the preferred project will generally not have any adverse shadow impact on the residential flat buildings to the east, the existing retail units fronting Lindfield Avenue to the north-west or the communal open area.





Figure 2 – View of residential development on eastern side of Havilah Lane from the loading dock within the existing building and Council owned car park

Vibration Impacts

An addendum to the Vibration Statement has been prepared by GHD (**Appendix J**). They advise that due to the additional basement levels, the excavation contractor is likely to encounter higher strength sandstone, which will require hydraulic rock breakers. In order to monitor and ameliorate any adverse impacts and adjacent properties, the following measures will be implemented:

- prior to any works commencing on site, dilapidation reports on adjoining buildings will be undertaken;
- within 1-21 Lindfield Avenue, the peak particle velocity will be limited to a threshold of 3mm/s for 10Hz to 30Hz and 3-5 for 30Hz to 60Hz;
- within 1-21 Lindfield Avenue, a real time alarm will be fitted (if allowed) and vibration logging will be undertaken; and
- full time qualitative monitoring will be undertaken, to confirm vibrations on adjoining structures are within tolerable limits.

These measures have been included within the Statement of Commitments.

2.3.6 Heritage

A revised Statement of Heritage Impact, prepared by Graham Books & Associates is included at **Appendix K**. The statement provides an assessment of the overall heritage impact of the preferred project on the established significance of the local heritage items at 1-21 Lindfield Avenue and St Albans Anglican Church are 1-5 Tryon Road.

The key findings of the assessment are as follows:

- the heritage listed shops at 1-21 Lindfield Avenue are separated from the site by Kochia Lane. The separation provided by Kochia Lane and the other roadways which bound the block (Lindfield Avenue, Chapman Lane and Tryon Road) allow appreciation of the building's architectural presentation and features from all sides;
- the corner location and landscape setting of St Alban's Anglican Church at 1-5 Tryon Road provide a picturesque setting that contributes to its significance, however, the Church is separated from the subject site by Tryon Road and 1-21 Lindfield Avenue which provide a physical and visual barrier between the site and the Church;
- the proposed development will limit some views to the northern facade of the upper floor of 1-21 Lindfield Avenue, and it will be visible in the background of some views of the heritage item. The architectural presentation of the 1-21 Lindfield Avenue, however will not be affected in any way, therefore the minor impact on views to the building will not have an adverse impact on its established heritage significance;
- views to the north from the upper floor of 21 Lindfield Avenue may be restricted by the proposed development, however this is acceptable as this view of not considered to make an internal contribution to the significance of the heritage item;
- the increased setback of Level 5 on and amendments to the external materials and selected finishes within the preferred project reflect those of 1-21 Lindfield Avenue and improve the proposals relationship with the adjacent heritage item; and
- the building at 1-21 Lindfield Avenue has sufficient bulk and scale in its own right to ensure that it will not be visually dominated by the proposed development.

Overall, the Statement of Heritage Significance concludes that the proposed development will have no adverse impact on the established significance of the adjacent heritage items and make only one recommendation in relation to archival photographic recording of 1-21 Avenue in its context documenting the streetscape. This has been included in the Statement of Commitments at **Appendix D**.

2.3.7 Access and Mobility

PSE Access Consulting have assessed the preferred project against the relevant provisions of the Building Code of Australia (BCA), Australian Standards, Ku-ring-gai Council DCP No 31Access (Access DCP) and the *Disability Discrimination Act 1992* (DDA). Their report is included at **Appendix L**.

The report specifically assesses:

- basement car parking;
- residential/ adaptable housing;
- common features; and
- security and accessibility separation.

Overall, PSE confirm that that all areas of compliance requirements have been catered for and the requirements of the Access DCP have been implemented in the design. Furthermore, it is considered that equitable access to and within the adaptable units will be provided in accordance with AS 1328.1, AS4299, the DDA and BCA Part D3.

2.3.8 Stormwater, Flooding and Water Quality Management

GHD have prepared a revised Stormwater Management Report, Sediment and Erosion Control Plan and Stormwater Drainage Layout Plan for the preferred project (**Appendix M**).

The preferred project has been designed to include a combined on-site retention (OSR). on-site detention (OSD) tank between Basement Car Park Level 1 and the Ground Floor level, which will have a minimum volume capacity of $168m^2$. As previously proposed, stormwater will discharge from the site via a pipe to the kerb on Havilah Lane and emergency overflows from the OSD tank (in the event of a blockage of the outlet pipe or extreme storm events) will be via a grated surcharge pit on Lindfield Avenue.

Water Sensitive Urban Design (WSUD) solutions for the preferred project continue to comprise the collection of and re-use of rainwater. 100m³ of rainwater will be stored within the OSR/OSD tank to supply water for toilet flushing in the residential units. This solution will reduce the volume of stormwater discharged from the site and reduce demand for potable water.

Furthermore, during the construction works, as proposed within the EAR, sediment control measures will be put in place to reduce the potential for adverse impacts on the sites water quality. These measures include provision for:

- stormwater to be collected in a basin at the base of the excavation and after the sediment has settled out, pumping of the water to the kerb on Havilah Lane;
- shaker grids at the site exists for the removal of sediment from vehicle tyres before they leave the site; and
- adequate dust control measures.

These sediment control measures are included within the Statement of Commitments.

2.3.9 Geological and Hydrogeological

A revised Geotechnical and Hydrogeological Assessment, prepared by Jeffery and Katauskas Pty Ltd is included at **Appendix N**. The revised design necessitates the excavation for the basement to extend to approximately RL 86.2m, which, due to the slope of the site represents between 8-12m below the existing surface level.

The primary geotechnical issues relating to the revised development are considered to be the same as those expected for the previous design, and it is considered that the preferred project continues to be suitable for the site and will require relatively common construction techniques and methodologies.

Jeffery and Katauskas's report provides updated detailed recommendations in relation to the primary geotechnical issues, excavation conditions, excavation batter and retention, footing design, car park floor slabs and detailed subsurface investigations. The implementation of the recommendations within the Geotechnical and Hydrogeological Assessment, prepared by Jeffery and Katauskas Pty Ltd, dated 31 March 2011 is included within the Statement of Commitments at **Appendix D**.

Waste Management

A revised Waste Management Plan, prepared by JD Macdonald has been prepared for the operational stage of the development (**Appendix 0**). The plan outlines measures to:

- avoid the generation of unnecessary waste;
- minimise the quantities of wastes generated ending up as landfill; and
- recovering, reusing and recycling waste generated on site.

The revised WMP estimates that the preferred project will generate some 7,280 litres of general waste and 3,640 litres of recyclable waste per week by the residential component. This represents a reduction of 880 litres of general waste and 440 litres of recyclable waste generated per week, which would have been generated by the previous scheme.

Given the retail component of the development has significantly increased, the estimated waste volumes have also increased, as follows:

Proposed Use	General waste generation (litres/ week)	Recyclable waste generation (litres/week)
Retail	1,322	661
Green Grocer	749	374
Supermarket	3,290	3,290
Medical	29	57
TOTAL	5,390	4,382

The calculations have been made using waste generation rates devised from industry guidelines and using calculations listed within Ku-ring-gai Council's "Town Centre Development Control Plan" and "Better Practice Guide for Waste Management in Multi-Unit Dwellings 2007".

In accordance with the relevant Australian Standards, Building Code of Australia and Ku-ring-gai Council requirements, the WMP provides a number of recommendations and strategies to adequately manage the predicted volumes of waste. The recommendations and strategies comprise the following:

- handling of general and recyclable waste by residents and retail tenancies;
- external waste collection;
- employment of a waste caretaker to manage the garbage system;
- handling of organic waste matter;
- waste equipment; and
- garbage room design.

It is considered, that provided the recommendations of the WMP are implemented, there will be no adverse impact resulting from the storage and collection of garbage on site. The implementation of the recommendations within WMP, prepared by JB Macdonald, dated April 2011 is included within the Statement of Commitments at **Appendix D**.

3.0 Issues Raised by the Department of Planning

The following section provides a response to the issues raised by the Department of Planning in its letter dated 25 February 2011. For ease of interpretation, the same headings have been used as are found within the Department of Planning's letter.

3.1 Setbacks, Building Form and Design

Issue

"The Department considers that the Environmental Assessment does not provide sufficient justification for the variations to compliance with the Town Centers LEP envelope and setback requirements."

Response

We acknowledge that the objectives of clause 6.4 encourage the amalgamation of sites. As the Department of Planning is aware, Anka and the previous proponents have undertaken extensive negotiations with the owners of 2 Kochia Lane in regard to purchasing their building and amalgamating the site into the proposed development. A fair and reasonable agreement could not been reached on either occasion, despite discussions, meetings and the presentation of offers.

Notwithstanding this, as discussed in the EAR, it is considered that the proposal demonstrates design excellence in that:

- the site planning, building form and external appearance of the proposed development improves the quality and amenity of the public domain on and surrounding the site;
- a very high standard of architectural design, materials and detailing has been employed by PTI Architects, which is appropriate to the development and its location;
- the preferred project and EAR (including all supporting attachments) adequately demonstrate/ address:
 - the suitability of the site for development;
 - environmental impacts, such as sustainable design, overshadowing and residential amenity;
 - heritage issues;
 - bulk, massing and modulation of development;
 - the achievement of principles of ecologically sustainable development; and
 - pedestrian, vehicular and service requirements.

Overall, it is considered that the above assessment provides adequate justification for the preferred project to be considered within the context of a development which demonstrates design excellence, when being assessed against the key controls of the Town Centres LEP. **Table 7** provides a comparison of the preferred project with the Town Centers LEP key controls and the justification for the variations are discussed below.

Table 9 - Compliance with key planning controls within the Town Centres LEP

Control	Preferred Project
Maximum Height: 23.5m	The maximum building height (measured in accordance with the definition) of the development is 26.36m, which is a variation of 2.86m.
Maximum FSR: 3:1	The total FSR for the development is 3.8:1, which is a variation of 0.8:1 (2,602m² GFA).
Maximum Retail FSR: 1:1	The total retail FSR is 1.37:1, which is variation of 0.37: 1(1,132m² retail GFA).

The objectives of clause 4.3 (height of buildings) of the Town Centres LEP are as follows:

- a) to ensure that height of development is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai town centres;
- b) to establish an interface between the centres and the adjoining lower density residential and open space zones,
- c) to enable development with a built form that is compatible with the size of the land to be developed.

The objectives of clause 4.4(floor space ratio) are as follows:

- a) to ensure that development density is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai town centres,
- b) to enable development with a built form that is compatible with the size of the land to be developed,
- c) to provide an appropriate correlation between the extent of any residential development and the environmental constraints of a site, and
- d) to ensure that development density provides a balanced mix of uses in buildings in the business zone.

The above objectives indicate that the height and FSR controls seek to determine an 'appropriate' scale in regard to the size of the site, an 'appropriate' mix of uses and compatibility with surrounding land uses. In this respect the preferred project is considered appropriate for the following reasons:

- The comparable height study (discussed at Section 6.5 in the EAR) noted that the majority of sites to the north will be able to be developed to approximately the same scale as the proposed development in line with the Town Centres LEP, and the Town Centres DCP proposes the existing building to the east of the proposed town square as a five to six storey development with commercial/ retail space at ground floor and level 1 and residential accommodation above. Given the residential developments to the east of the site are approximately the same height as Building A, the proposed height will provide a higher density development along Lindfield Avenue, reinforcing its role as the 'main street' (as required by the Public Domain Plan) which steps down towards the east, providing a suitable interface with the adjacent residential development.
- In accordance with the objectives of the B2 Zone, the proposed retail floorspace affords the opportunity to provide an extended range of retail uses within Lindfield Town centre.
- The additional retail floorspace at Level 1 provides a better designed development with clear differentiation between the retail and residential uses.

- The development is compatible with the size of the site and does not generate any adverse impacts on neighboring properties.
- The development is consistent with the aims, objectives and principles of SEPP 65 and generally meets the key rules of thumb within the Residential Flat Code.
- The preferred project will positively contribute to the area and will provide high visual quality and increased amenity to the streetscape.
- The preferred project is designed to be sympathetic to and will not adversely impact any heritage items in the local vicinity.

Issue

"Further analysis is required in respect to these variations, and it is considered that the form and setback of the western building envelope should be amended to achieve greater compliance and present a better relationship to the existing urban context, particularly the heritage items adjoining at 1-21 Lindfield Avenue."

"The composition and articulation of the Lindfield Avenue and Kochia Lane elevations requires amendment to achieve a more sympathetic relationship to the adjacent heritage items and streetscape generally."

Response

As set out in Sections 2.2.3 and 2.3.2, the form and setback of the Building B has been amended to present a better relationship to the heritage items at 1-21 Lindfield Avenue. A detailed statement of the proposed changes and how they relate to the urban context has been prepared by PTI Architects and is included at **Appendix B**.

3.2 Building Separation

Issue

"The separation distances between the eastern and western towers, and external separation to the residential flat building to the east in Havilah Lane require further consideration."

"An analysis of separation distances and options for achieving compliance with the Residential Flat Design Code requirements is required and should include consideration of the location of habitable rooms and balconies in the relevant elevations and identify potential measures to mitigate privacy and acoustic impacts."

Response

Buildings A and B are 16.6m apart (at the shortest distance), furthermore as set out in Section 2.3.5, the distance between Building A and the residential development to on the eastern side of Havilah Lane is 16.9m. These separation distances will enable visual and acoustic privacy to be achieved, general compliance with the solar access provisions within the Residential Flat Design Code and an appropriately sized area of communal open space for residents.

3.3 Streetscape Presentation

Issue

"The main building entrance in Lindfield Avenue is poorly resolved and should be redesigned to provide a clearer separation between retail and residential access points and a reduced setback to the street alignment to improve pedestrian presentation".

"The retail entrance on Kochia Lane requires reconsideration to improve streetscape presentation and emphasis."

Response

The main building entrance on Lindfield Avenue has been reconfigured to provide entry only into the retail component of the development. The residential entry has been repositioned to the Kochia Lane frontage, where a clear separation between the retail and residential entries are achieved.

The amendments to the Kochia Lane entrance improves the streetscape presentation and emphasis, as described in the Design Amendments Statement at **Appendix B**.

Issue

"It is considered that the full 4m setback to Kochia Lane should be provided in accordance with the Town Centre DCP and design options should be provided."

Response

The amendments to the design provide a 4m setback from the site boundary to the building line.

Issue

It is considered that montages and additional plans and elevations should be prepared to demonstrate different design options."

Response

It was agreed with the Officers from the Department of Planning that the provision of design options were not required. Revised plans and photomontages of the amended scheme are provided in **Appendix A**.

3.4 Open Space

Issue

"The area of communal open space and private open space do not comply with the Residential Flat Design Code and Councils LEP and DCP controls. The required review of the building separation between the eastern and western towers provides an opportunity to increase the proposed communal open space."

Response

The physical separation of the retail uses and residential uses has resulted in the private communal area of open space being situated at Level 2 (previously proposed at Level 1). Furthermore the landscaped area has increased from 494m² to 620m² (an increase of 126m²). Compliance with the RDFC 'rule of thumb' for communal open space is addressed at Section 2.3.4.

3.5 Isolated Sites

Issue

"Further assessment and analysis is to be submitted demonstrating that the adjoining site at 2 Kochia Lane will be capable of being developed in accordance with Ku-ring-gai LEP and DCP controls, as a separate development and should include provision of envelope layout plans and elevations".

Response

As illustrated on Plan DA 33 (**Appendix A**), PTI Architects demonstrate how 2 Kochia Lane can be redeveloped in the futures both as a separate development or integrated into the proposed development.

3.6 Additional Information Required

The Department of Planning also sought the additional information in regard to a number of issues. **Table 8** specifies the additional information requested by the Department of Planning and Anka's response.

Table 10 - Response to additional information requirements

No.	Information Required	Response
1.	A detailed analysis of the proposal in the context of the Ku-ring-gai Town Centers Public Domain Plan 2010.	The key provisions of the Ku-ring-gai Town Centres Public Domain Plan 2010 are addressed at Section 2.3.1.
2.	A revised Heritage Impact Statement (HIS) addressing the amended design and its impact on 1-21 Lindfield Avenue. The revised HIS should also address impacts on the heritage item at 1-5 Tryon Road and any other heritage concerns raised in submissions.	An addendum to the Heritage Impact Statement is included at Appendix K .
3.	Revised basement car parking plans addressing the following: All car parking spaces including accessible car spaces, and aisle width's should be designed in accordance with the relevant Australian Standards; Clarification and suitable separation of retail and residential car parking; Consideration should also be given to the provision of additional car parking spaces (achieved through a reduction in residential car parking spaces and minimisation of stacked car parking spaces); Removal of stacking of car share spaces.	Revised basement car parking plans addressing the Department of Planning's issues are included at Appendix A .
4.	Plans with swept path analysis showing a 19m semi-trailer can physically enter and exit the loading dock area in a forward direction and various intersections identified in the RTA's submission.	The revised plans at Appendix A , clearly indicate the swept path of a 19m semi trailer and that it can physically enter and exit the loading dock in a forward direction.

No.	Information Required	Response
5.	A Loading Dock Management Plan shall be prepared detailing hours of operation and measures to control noise, light spill and traffic impacts and minimise impacts on nearby residential properties.	A Loading Dock Management Plan will be provided prior the Occupation Certificate. Given the end users of the development are still to be determined, it is considered to be premature to provide one at this early stage. A commitment to provide the management plan is included within the Statement of Commitments at Appendix D.
6.	Consolidated bicycle parking in a convenient and legible location close to the car park entries and lifts and additional bicycle parking at pedestrian entries.	The revised plans at Appendix A clearly show consolidated bicycle parking close to the lifts and car park entries.
7.	Clarification of the implications of restrictions/ covenants affecting the site, including the right-of-carriageway benefiting 39 and 41 Lindfield Avenue.	As illustrated on the survey plans (submitted as part of the EAR) a right of way exists between Havilah Lane to the rear of 39 and 41 Lindfield Avenue. The design of the vehicular entrance into the site from Havilah Lane has been reconfigured. A secured right of way through the development to 39 and 41 Lindfield Avenue is provided.
8.	Clarification on the capture and use of rainwater and/or grey water in the development.	As noted in the EAR, rainwater will be collected and stored in the OSR/OSD tank. This rainwater will be used to supply water for toilet flushing in the residential units.
9.	Further assessment of the waste storage requirements for the development.	A revised Waste Management Plan is included at Appendix O . Refer to Section 2.3.10.
10.	Revised landscaping plans identifying further opportunities for soft landscaping treatments and increased soft planting area in accordance with the Residential Flat Design Code and the Town Centres DCP.	A revised landscaping plan are included at Appendix C . Refer to Section 2.2.5.
11.	Revised stormwater plans including On Site Detention.	A revised Stormwater Concept Plan is included at Appendix M .
12.	The Response to Submissions should address all concerns raised by Council, in particular the additional information requested for Section 94 Contributions calculations and landowners consent for works at the party wall of No. 39 Lindfield Avenue.	The concerns raised by Council are addressed within Appendix P . The Section 94 Contributions calculations are included at Section 2.2.6 and no works are proposed to the party wall, therefore landowners consent from No 39 Lindfield Avenue is not required.

4.0 Key Issues Raised in Submissions

The following section provides a detailed response to the key issues raised by the general public within their submissions.

4.1 Issues raised by Ku-ring-gai Council

Appendix P includes a detailed list of Ku-ring-gai Council's key concerns and the proponents response.

4.2 Issued raised by the Public

Impact on 2 Kochia Lane

The preferred project will not give rise to any adverse environmental or social impacts upon the existing development at 2 Kochia Lane, as discussed in the EAR and Section 2 of this report. In fact, it is considered that the proposed development has the potential provide economic benefits to the existing businesses within the 2 Kochia Lane building, as there will be an increase retail offer which will likely increase footfall along Kochia Lane and shopper numbers to Lindfield.

Car Parking Provision

As discussed in Section 2.3.3 the preferred project provides in excess of the minimum requirement for the residential and residential visitor car space requirement under the Town Centres DCP. It however, provides a shortfall of 8 car spaces for the retail uses. It is not anticipated that this shortfall will cause any adverse on-street parking impacts, as it is anticipated that a high proportion of retail customers are expected to be railway or bus commuters who will generally use the retail facilities for the purposes of top up shopping and will not require parking. Overall, the proposed provision of 231 parking spaces is considered to be acceptable.

Impact to the Surrounding Road Network

As discussed at Section 2.3.3 and in the Traffic and Parking report at **Appendix G**, the preferred project will not have any unacceptable traffic implications in terms of road network capacity and will not require any upgrades to nearby roads and intersections

Compliance with Height and FSR Controls

Further justification for the variations to compliance with the height and FSR controls within the Town Centres LEP is provided at Section 3.1. Overall, it is considered that the preferred project is appropriate in terms of bulk and scale and is consistent with the objectives for height and FSR.

Heritage Impact

A revised Heritage Impact Statement prepared by Graham Books & Associates is included at **Appendix K**. This includes an assessment of the potential impacts on the heritage significance of both 1-21 Lindfield Avenue and St Alban's Anglican Church at 1-5 Tryon Road. As discussed at Section 2.3.6, the proposed development will have no adverse impact on the established significance of the 1-21 Lindfield Avenue and St Albans Church due to its physical and visual separation from the site.

Compliance with SEPP 65

The compliance with the development with SEPP 65 and the Residential Flat Design Code is addressed within the EAR and at section 2.3.4 within this report.

Right of Way

As illustrated on the survey plans (submitted as part of the EAR) a right of way exists between Havilah Lane to the rear of 39 and 41 Lindfield Avenue. The design of the vehicular entrance into the site from Havilah Lane has been reconfigured as shown in the Architectural Plans at **Appendix A**, to provide a secured right of way through the development to 39 and 41 Lindfield Avenue. The proposed driveway aligns with the designated easement also complies with the height requirement.

5.0 Conclusion

This Preferred Project Report and the associated appendices form part of the Project Application for a mixed used development at 23-37 Lindfield Avenue and 11 Havilah Lane.

In response to the issues raised by the Department of Planning, Ku-ring-gai Council and the public, Anka has modified the proposed design of the development to provide, amongst other things, additional car parking, additional retail floorspace, increased setbacks to Kochia Lane and a larger are of communal open space for future residents. The development also preserves the existing right of way from Havilah Lane to the shops at 39 and 41 Lindfield Avenue.

The amendments to the proposed development do not give rise to any additional impacts than those which were previously addressed, and will not give rise to any unacceptable impacts to the local road network, heritage items within the vicinity of the site, or amenity of neighbouring buildings.

The proposed development continues to provide a high quality architectural design which accommodates an appropriate mix of uses in a suitable location. It is therefore requested, that the Minister approve the Project Application as submitted.