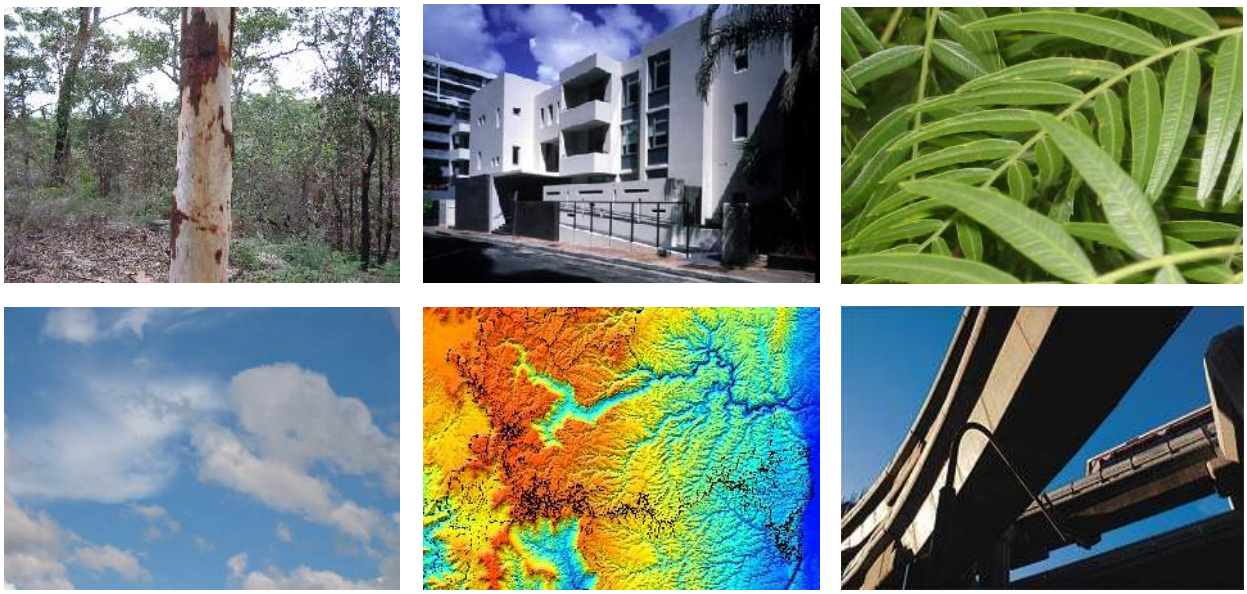

cityscapeplanning+projects

NEPEAN HEALTH PRECINCT

MIXED USE DEVELOPMENT

ENVIRONMENTAL ASSESSMENT REPORT

SUBMITTED TO: DEPARTMENT OF PLANNING ON BEHALF OF AESTHETE NO. 3

NOVEMBER

PREPARED BY:

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DOCUMENT CONTROL

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Final Draft	11 October 2010	Vince Hardy	
Final	26 November	Vince Hardy	

CPP
CERTIFIED PRACTISING PLANNER

DISCLAIMER

This report is provided to accompany a Development Application to be lodged on the subject land and is to be used for that purpose solely and for the client exclusively. No liability is extended for any other use or to any other party. Whilst the report is derived in part from our knowledge and expertise, it is based on the conditions prevailing at the time of the Report and upon the information provided by the client.

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Q: Building Code of Australia Report – Blackett Maguire
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STATEMENT OF VALIDITY

Submission of Environmental Assessment prepared under Part 3A of the *Environmental Planning and Assessment Act, 1979.*

Environmental Assessment prepared by

Name:	Vince Hardy
Qualifications:	Bachelor of Town Planning (1997) Certified Practising Planner
Address:	Cityscape Planning + Projects 16 Alexandra Cres Glenbrook NSW 2773

Applicant and Land Details

Applicant:	Aesthete No.3 Pty Ltd
Subject Site:	Crn of Parker St and the Great Western Highway, Kingswood
Lot and DP:	

The site is comprised of various land parcels with the following real property description:

Lot 1	DP 1093052
Lot 4-6	DP 29524
Lot 100	DP 701623

Project Summary

The development seeks to provide three separate built forms providing retail, commercial and diverse residential type accommodation land uses, that will form a significant, complementary element of the emerging health precinct that currently comprises the adjacent Nepean Hospital Campus, Penrith Private Hospital and numerous specialist health care services.

Environmental Assessment

An Environmental Assessment is attached

Declaration

I certify that I have prepared the contents of the Environmental Assessment in accordance with the requirements of the *Environmental Planning and Assessment Act, 1979* and that, to my best knowledge, the information contained in this report is not false or misleading.

Signature

Name: Vince Hardy
Date: 8 October 2010

EXECUTIVE SUMMARY

PURPOSE OF THIS REPORT

This submission to the Department of Planning comprises an Environmental Assessment for a Concept Plan and Project Plan under Part 3A of the *Environmental Planning and Assessment Act, 1979.*

The subject site is located at the corner of Barber Ave, Parker St and Great Western Highway Kingswood.

This submission is in accordance with the Department's guidelines for Part 3A applications, and addresses the issues raised in the Director General's Requirements.

OVERVIEW OF PROJECT

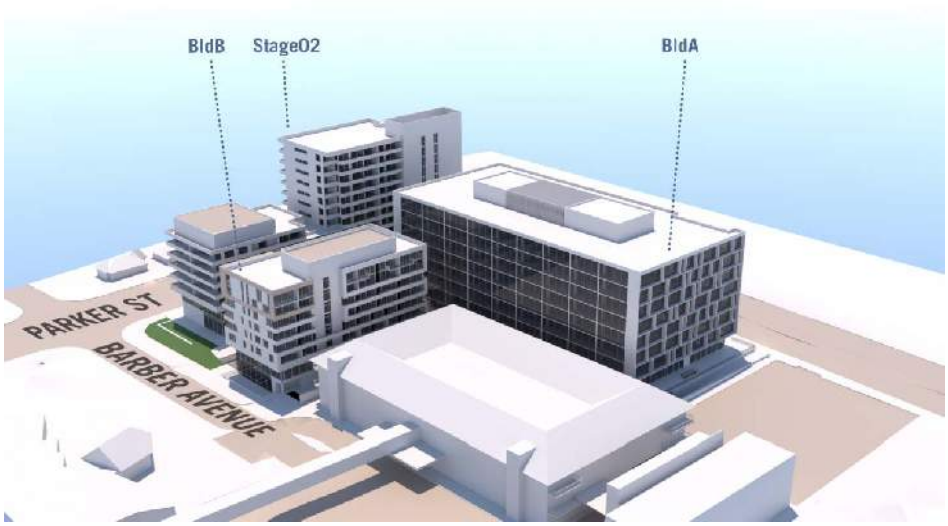
The development represents a major urban renewal initiative that will form a significant, complementary element of the emerging health precinct that currently comprises the adjacent Nepean Hospital Campus, Penrith Private Hospital and numerous specialist health care services.

Proposed land uses include:

- Medical related commercial and non-medical floor
- Residential accommodation, including market apartments, hotel and serviced apartments;
- Complementary retail services providing amenity to the site, and facilities to hospital visitors and patrons; and
- 711 underground car parking spaces provided in three basement levels.

These land uses would be provided in three separate built forms that have a height of 8 and 12 storeys respectively. The development provides a total Gross Floor Area (GFA) of 42,295m^2.

It is expected that development will ultimately be delivered in two stages, in accordance with an initial concept plan approval. This development also comprises a Project Application for Stage 1 of the development.



STRATEGIC PLANNING CONTEXT

Penrith City Council has nominated Kingswood as a Specialised Centre. Specialised Centres contain uses that perform vital economic and employment roles for the city and some other examples of Specialised Centres include Macquarie Park, Olympic Park and Westmead.

This hierarchical categorisation of Kingswood by Penrith City Council is rightfully justified on the basis of the presence of both the Nepean hospital precinct, and the Kingswood Campus of the University of Western Sydney.

The development takes advantage of the site's excellent proximity to regional transport linkages and regional institutional facilities inclusive of Nepean District Hospital, The University of Western Sydney, and Kingswood TAFE which all play a key role in the local community.

It is therefore considered that the proposed development is complementary to this aspiration of Penrith Council to see Kingswood emerge into a specialised Health Precinct, and its mixed use nature will deliver the services and amenity that might otherwise take considerably longer to achieve.

The development also provides a significant contribution to housing and employment targets identified for the Penrith Regional City in the Metropolitan and sub-regional strategies.

The development is also consistent with all relevant State Environmental Planning Instruments and is generally consistent with the relevant local planning instrument, although exceeds the height controls provided by that local plan.

ENVIRONMENTAL IMPACTS

The environmental impacts of the development are considered in Section 7.0. The site possesses no environmental features or values.

The assessment includes an examination of the urban and strategic context of the site which combines to create a legitimate expectation for significant scale urban renewal of the site. The scale of the subject proposal and the design response, particularly the proposed 12 storey element, has been developed in tandem with Council's Planning and Urban Design team and seeks to respond to what Council have termed a 'bookend' design with iconic scaled/designed buildings at the eastern and western gateway of the Kingswood Business District. No

significantly adverse impacts including overshadowing or view loss are caused by the scale of the development

Private vehicle access to the site is proposed to be managed as part of transport and accessibility management plan which seeks to take advantage of the site excellent proximity to regional and local transport services.

The intersection of Parker St and the Great Western Highway currently experiences a relatively poor level of services for certain traffic movements only, however the development will not significantly exacerbate this performance. Indeed, minor adjustments to the road geometry of that intersection, proposed as part of this development, will actually improve the efficiency and performance of that intersection.

The capacity of urban services and infrastructure are also examined and reveal that the development is within the carrying capacity of those services and infrastructure with only limited augmentation required.

A detailed economic analysis has also been undertaken and demonstrates that the development meets a real and legitimate demand for both retail and commercial floor space and will deliver significant new employment growth for the local and regional areas.

Given the environmental planning merits described above, and significant public benefits proposed, it is requested that the Minister approve both the Concept Plan and Project Plan under the relevant provisions of the *Environmental Planning & Assessment Act, 1979.*

1.0 INTRODUCTION

This Environmental Assessment Report is submitted to the Department of Planning pursuant to Part 3A of the Environmental Planning and Assessment Act, 1979 (EP& A Act). The reports seeks to fulfil the Environmental Assessment Requirements issued by the Director General for the relevant development which was declared a major project by the Director General of the Department of Planning in November 2009.

The Environmental Assessment has been prepared on behalf of the client, Aesthete No.3 Pty Ltd, by *Cityscape Planning + Projects* and is based on information provided by the client including technical documents provided by the project design team.

The report provides the following information:

- Identification of the site
- description of the project
- Strategic planning context
- Statutory planning context
- Consultation undertaken
- Environmental assessment of impacts of the development
- Draft Statement of Commitments
- Justification for the project

1.1 OVERVIEW OF APPROVAL SOUGHT

The development seeks to form a significant, complementary element of the emerging health precinct that currently comprises the adjacent Nepean Hospital Campus, Penrith Private Hospital and numerous specialist health care services.

Proposed land uses include:

- Medical related commercial and non-medical floor space that will offer opportunities for health consulting services that are complementary to the existing suite of services offered on the hospital sites;
- Residential accommodation, including market apartments, seniors living, hotel and serviced apartments;
- Complementary retail services providing amenity to the site, and facilities to hospital visitors and patrons; and
- 711 underground car parking spaces provided in three basement levels.

These land uses would be provided in three separate built forms that have a height of 8 and 12 storeys respectively. The development provides a total Gross Floor Area (GFA) of 42,295m^2.

It is expected that development will ultimately be delivered in stages, in accordance with an initial concept plan approval. Details of the concept plan and staging is described in subsequent sections.

1.2 STATUTORY SITUATION

State Environmental Planning Policy (Major Development) 2005 identifies development to which Part 3A of the EP & A Act applies, and for which the Minister is the consent authority.

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 (Classes of Development), Schedule 2 (Specified Sites) or Schedule 3 (State significant development) of the SEPP, is declared to be a project to which Part 3A applies.

Clause 13 of Schedule 1 of the Major Development SEPP identifies the following developments as being Part 3A Major Projects:

> ***Group 5- Residential, commercial or retail projects***
>
> ***13 Residential, commercial or retail projects***
>
> ***(1) Development for the purpose of residential, commercial or retail projects with a capital investment of more than $100 million.***

The proposed development clearly sits within this group categorisation and the project's estimated Capital Investment Value is in the order of $110 million, as detailed in the Cost Estimate prepared by Southern Cross Projects (Appendix C), and is well in excess of the $100 million threshold.

Therefore, in accordance with Section 75B of the EP & A Act, and Clause 6 of the Major Development SEPP, *Cityscape Planning + Projects,* on behalf of the client, requested on 8 October 2009 that the

Minister declare the proposed development to be a Major Project subject to Part 3A of the EP&A Act.

The project was subsequently declared a Major Project on 26 November 2009. A copy of this declaration is provided at Appendix D.

Subsequent to that a preliminary Environmental Assessment was prepared and forwarded to the Department of Planning (DOP) together with a request for the preparation of the Director General Environmental Assessment Requirements.

On the 1st March 2010 the Director General issued those requirements for the Environmental Assessment of the project. These requirements are provided at Appendix E.

1.3 PROJECT TEAM

An expert project design team was assembled to assist in the preparation of the development proposal. Members of this team are outlined below:

Proponent:	Aesthete No.3 Pty Ltd
Urban planning:	Cityscape Planning + Projects
Architecture:	Turner + Associates
Quantity surveyors:	Southern Cross Projects
Traffic + transport:	Traffix
Landscape architecture:	Turf Design
Geotechnical + contamination:	Jeffrey and Katauskas
Surveyor:	Freeburn Surveyors
Economic impact:	Hill PDA
ESD:	Hyder Consulting

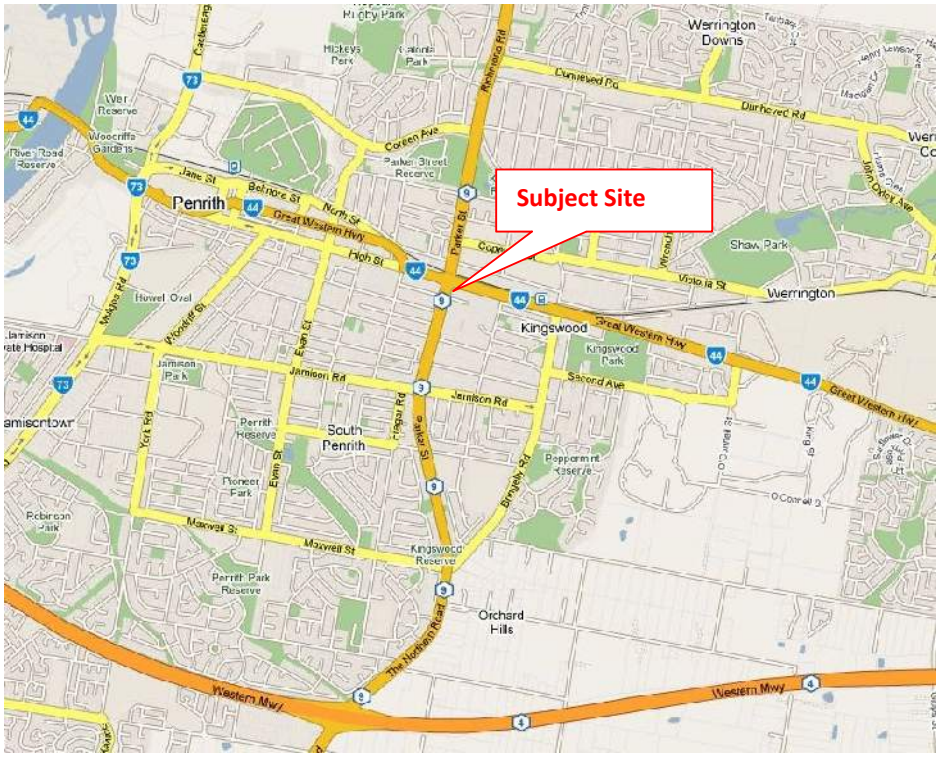
Stormwater + Utilities Report	Hyder Consulting
Acoustic + Vibration Assessment:	Acoustic Logic
Contamination Assessment:	Environmental Investigation Services
Waste Management Plan:	McGregor Environmental Services
BCA:	Blackett Maguire
Accessibility:	Morris Goding

2.0 SITE ANALYSIS

2.1 LOCATION + CONTEXT

The subject site is an 'L' shaped parcel that forms part of the Nepean Health Precinct, being located adjacent to both the Nepean Hospital and Nepean Private Hospital. It has frontages to the Great Western Highway, Parker St and Barber Avenue and is some 9,571m^2 in area. The location of the site is demonstrated at Figure 1.

FIGURE 1: LOCATION OF SITE



2.2 REAL PROPERTY DESCRIPTION

The real property description of the site is:

Lot 1	DP 1093052
Lot 4-6	DP 29524
Lot 100	DP 701623

2.3 REGIONAL CONTEXT

The site and broader Nepean Health Precinct enjoy excellent access to regional scaled transport linkages and the services and facilities provided by the Penrith CBD. Figure 2 demonstrates the local context and transport linkage in the vicinity of the site.

2.4 EXISTING DEVELOPMENT

Existing development on site is represented by:

- 3 x single storey cottages located at the southern and north eastern corner of the site
- Single storey church building located centrally to the site
- Car park in central sections of site
- Western sections vacant and undeveloped

Figure 3 provides an aerial photo of the site and demonstrates the spatial arrangement of facilites and built forms on site.

Figure 4 provides photos of the built forms on site.

FIGURE 2: LOCAL CONTEXT

FIGURE 3: AERIAL PHOTO OF SITE

FIGURE 4: EXISTING BUILT FORMS ON SITE

2.5 LANDFORM + VEGETATION

The site falls approximately 6m from the northern boundary to the south western corner. A survey plan showing the existing site levels and contours is included at Appendix F. A review of geotechnical conditions (Appendix G) has not identified any matters that would constrain development of the site.

The site has been largely cleared of vegetation and now only contains relatively isolated and scattered trees, inclusive of exotic or garden type tree species located around the curtilage of the built forms. The location of these trees is also shown on the survey plan.

2.6 TRANSPORT + ACCESS

The site benefits from good access to the public transport system with buses travelling along the Great Western Highway and Parker Street immediately adjacent to the site; as well as along Derby Street which lies only 350 metres to the south of the site. In addition, Kingswood Railway Station lies 700 metres to the east of the site. Pedestrian access to the site will be provided via the existing footpath and crossing facilities that exist along the Great Western Highway.

With regard to private vehicle access, the site is currently serviced by five separate accesses, four of which are situated on the Barber Avenue frontage with the remaining one situated on The Great Western Highway frontage.

Both Parker St and The Great Western Highway are regional roads in the metropolitan road hierarchy. Figure 2 provides a plan which demonstrates the site context in relation to the transport network.

3.0 PROJECT DESCRIPTION

The development seeks to form a significant, complementary element of the emerging health precinct that currently comprises the adjacent Nepean Hospital Campus, Penrith Private Hospital and numerous specialist health care services.

It is expected that development will ultimately be delivered in stages, in accordance with an initial concept plan approval. Details of the concept plan and subsequent staging is described in subsequent sections.

3.1 CONCEPT PLAN

3.1.1 DEMOLITION

It is proposed to demolish all structures onsite including the church, cottage and car parking.

3.1.2 LAND USE + GFA

The Concept Plan seeks approval for three building across two stages of development. In total all proposed built forms will provide an overall GFA of 42,295m^2.

The Retail area contains a small grocery supermarket of 965m^2 shop floor area and other convenience services that will provide amenity for the health precinct as well as the new resident and workforce population of the development itself. The commercial area of 20191m^2 will help accommodate the local demand for professional suites and health related businesses in the precinct.

Stage 1 also provides serviced apartments comprised of 72 x Studio/1 Bed and 12 x 2 Bed and will provide accommodation for visiting or short term health professionals, business or product representatives, friends and relations of patients and visitors generally to the area.

Stage 2 of the development accommodates retail at Ground and Level 1, 106 residential apartments above and associated off-street parking. The retail in stage 2 will benefit from the small amount already established in Stage 1 and provide expanded conveniences services for local residents and workers apartments. The residential component provides a mix of 32 x 1 bed and 74 x 2 bed single level units in a range of layouts.

The breakdown of this GFA across the various land uses components and the respective built forms is represented at Table 1.

TABLE 1: GFA SCHEDULE

Area Schedule_STAGE01		
Zone Category	Zone Name	Area (GFA)
COMMERCIAL		
	BldA_COMMERCIAL	19,222
	BldA_COMMERCIAL - FOYER	400
	BldB_COMMERCIAL	567
		20,189 m2
RESIDENTIAL		
	BldB_LOBBY	80
	SERVICED APARTMENTS	4,511
		4,592 m2
RETAIL		
	BldA_RETAIL	1,509
	BldA_RETAIL - COURT	719
	BldB_RETAIL	461
	SUPERMARKET	961
	SUPERMARKET_ANCILLARY	570
		4,220 m2
TOTAL GFA (STAGE 01)		29,001 m2
SITE AREA (Stage 01)		5853 m²
FSR (Stage 01)		4.96:1

Area Schedule_STAGE02		
Zone Category	Zone Name	Area (GFA)
RESIDENTIAL		
	Stage 02_RESIDENTIAL	10,154
		10,156 m2
RETAIL		
	Stage 02_RETAIL	3,139
		3,138 m2
		13,294 m2
TOTAL GFA (STAGE 01 & 02)		42,295 m²
TOTAL SITE AREA (STAGE 01 & 02)		9,571 m²
FSR		4.42:1

* per definition of floors area provided as part of Penrith Urban Land LEP 1998

3.1.3 BUILDING ENVELOPE + FOOTPRINT

The development provides three built forms arranged across the site in manner that responds to the site configuration. This is represented at Figure 5.

The maximum building heights and building setbacks at ground of each building to relevant site boundaries is represented at Table 1.

Architectural Plans of the Concept Plan are provided at Appendix A.

3.1.4 VEHICULAR ACCESS + PARKING

Vehicle access and egress is proposed to be provided via Barber Ave, with an additional egress provided via the Great Western Highway.

Parking for the development is provided in 3 basement levels and provides a total of 711 car parking spaces.

For stage 1 of the development the total car parking provision includes 16 accessible parking spaces and 10% spaces for small cars or car share services.

Additional Stage 1 parking for motorbikes and bicycles is provided as follows:

- 139 Bicycle parking Spaces
- 60 Motorbike parking Spaces

The different vehicle and pedestrian access paths for lower ground and ground floor elements of the development are represented at Figure 6.

TABLE 2: BUILDING HEIGHT +SETBACKS

Building	Stage 1- A	Stage 1- B	Stage 2
Height (RL)	89.200	82.000	97.000
Storeys	8	8	7-12
Setbacks			
-North	6.5m	-	6.5m
-South	7.5m	4.0m	13.0m
-West	-	-	-
-East	10.m	7.5m	3.5m

FIGURE 5: BUILDING FOOTPRINTS

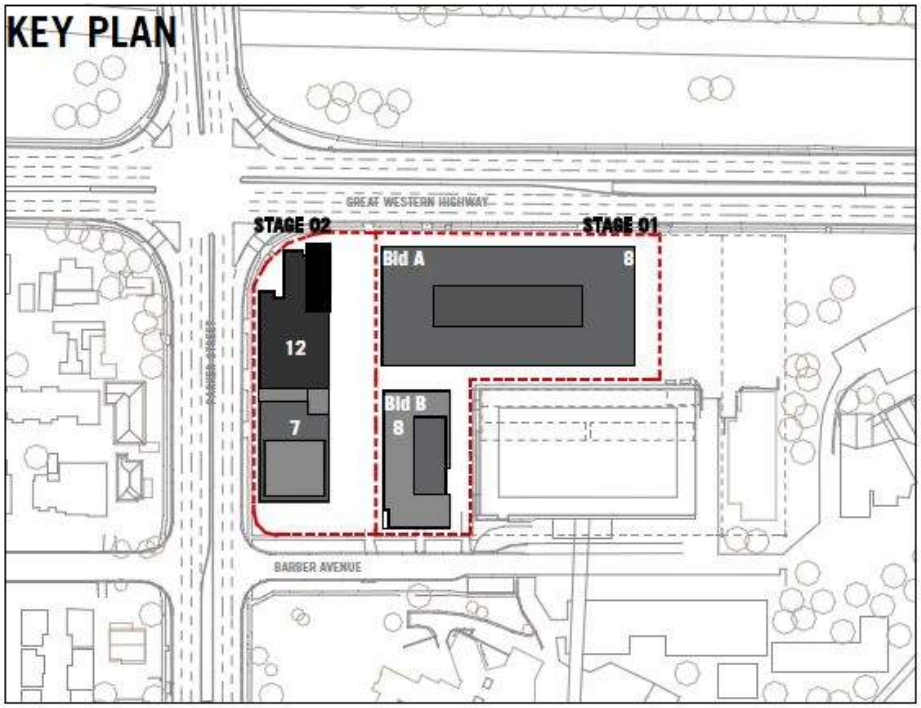
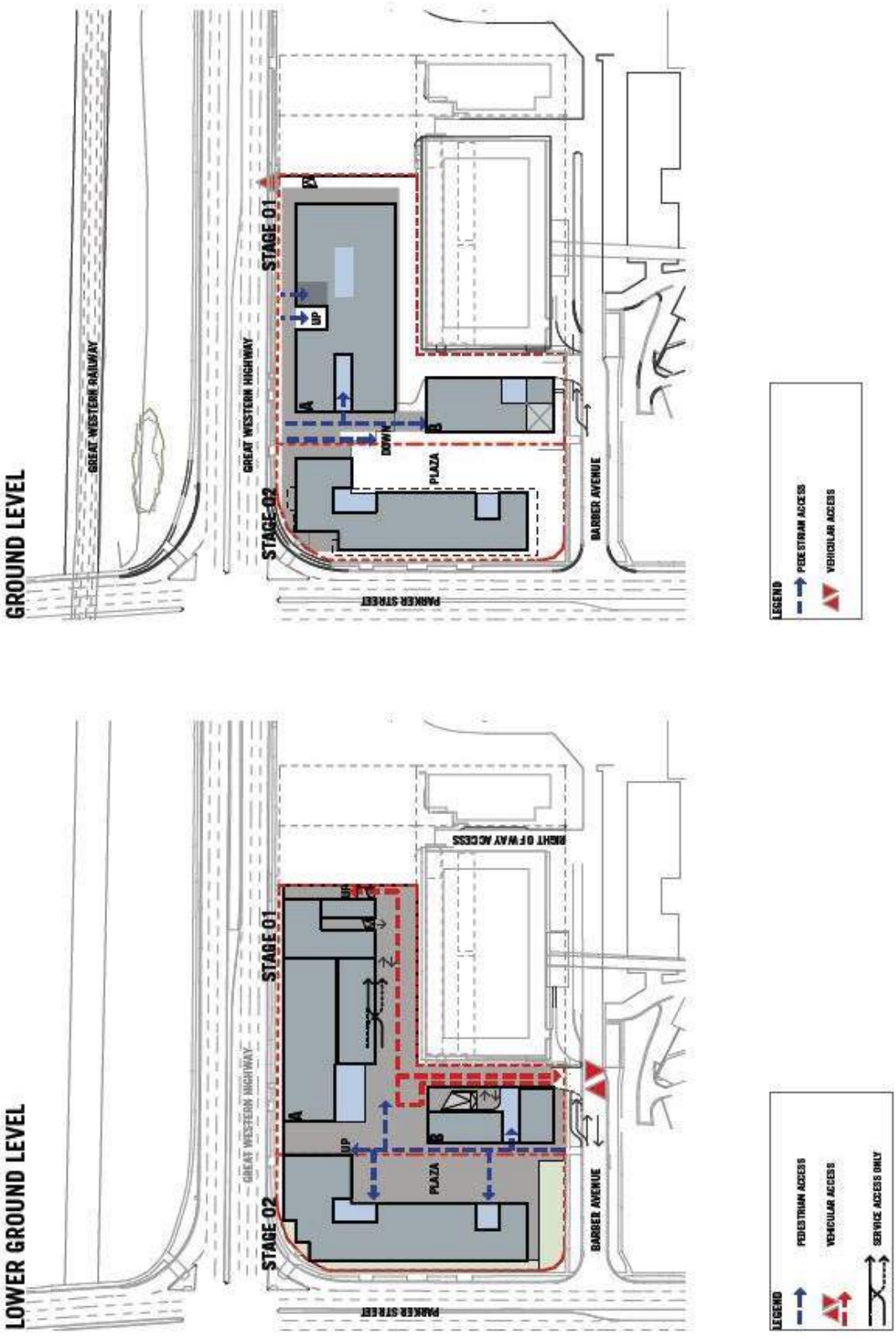


FIGURE 6: PEDESTRIAN + VEHICLE ACCESS BUILDING



3.1.5 BICYCLE + PEDESTRIAN ACCESS

Pedestrian and bicycle linkages will be provided within the site. This includes an internal footpath network that includes the through-site plaza that runs from the Great Western Highway through to Barber Ave and widened footpath along the Highway.

In addition, shower facilities are provided in the basement area and adjacent to the bike storage areas.

3.1.6 LANDSCAPING + PUBLIC DOMAIN

A Landscape Plan illustrating the landscape and public domain is located at Appendix H. This plan seeks to provide a vegetated and landscaped setback to all street frontages as well as the thru-site pedestrian link. Perspective image are provided at Figure 7.

Landscaping in these areas is represented as mature tree plantings, a mix of shrubs, lawn and groundcovers in planters, and timber decks together with paving treatments.

The thru site link separates stage 1 and 2 of the development and provides a high quality pedestrian plaza that continues the same landscaping design theme provided at the street frontages as well as providing a small water feature as an entry statement at the Great Western Highway pedestrian entry area.

3.1.7 STORMWATER, INFRASTRUCTURE + UTILITIES

A stormwater Concept Plan has been prepared for the proposed development and is located at Appendix L. It is proposed that the roof areas of Stage 1 will be collected in two onsite detention storage tanks located within the building structure that will discharge separately from the East and West catchments.

FIGURE 7: LANDSCAPE PERSPECTIVES

View from Barber Ave

View from within

Drainage from the podium level areas is to be captured by separate pit and pipe systems and conveyed to the identified outlets for the East and West catchments. This system shall be sized to drain all storms up to and including the peak 20 year ARI event.

Podium drainage from the West catchment is to be captured and conveyed to the existing drainage system within Barber Avenue. Podium drainage from the East catchment is to be conveyed to the south eastern corner of the site where legal connection to the existing Hospital drainage system within the car park shall be made via an easement for drainage.

3.2 STAGED PROJECT APPLICATION

The development includes a separate but concurrent Project Application Stage 1) of the development as identified in the plans provided at Appendix B. This Project Application has been developed from the Concept Plan and present architectural detail inclusive of elevation details and finer grain detail including internal configuration and land uses.

A separate and subsequent Project Application would be advanced for Stage 2 of the development.

3.3 DEVELOPER CONTRIBUTIONS

In order to provide certainty of the outcomes and costs to both the Council and the Proponent it is proposed that a separate Voluntary Planning Agreement (VPA) be executed between the Proponent and Penrith City Council and the RTA. The VPA's would outline the process for and timing of, the payment of developer contribution and works. The contributions are outlined in detail at section 7.12 of this report.

4.0 CONSULTATION

As part of the site design process, consultations have already been held with several relevant stakeholders. This consultation is summarised in the table below:

TABLE 3: CONSULTATION OUTCOMES

ORGANISATION	COMMENTS PROVIDED
Penrith City Council	- Meeting with General Manager and Planning Staff - Several meeting with planning and other technical and design staff - General support for proposal subject to achievement of strategic and technical matters
NSW Department of Health	- Supportive of provision complementary land uses that will provide amenity to hospital patrons and staff. - Development can deliver strategic outcomes for hospital - Plans are consistent with hospital master plans
Nepean Private Hospital	- Strong demand for commercial medical suites - Supportive of provision complementary land

	uses that will provide amenity to hospital patrons and staff.
David Bradbury MP Federal Member for Lindsay	- Welcomes the development and strengthening of the role of the hospital precinct in Penrith and Western Sydney.
Penrith Business Alliance	- The *Penrith Business Alliance* was reconstituted by Penrith City Council in December 2008, following the previous economic entity that existed from 2003. - The alliances primary objective is achieving the City's job target of 40,000 additional jobs in the local economy by 2031. The PBA recognises that achieving this objective will require continual restructuring and strengthening of the City's industry and labour market and are of the view that the project can greatly assist in realising this objective.
Penrith Health & Education Precinct Taskforce	- Taskforce has been established by NSW Premier to develop a strategic vision for the Precinct. The developer has presented the project to the Taskforce who are of the view that the project will assist in the delivery of the strategic objectives of the vision for the Precinct.
Roads and Traffic Authority	- The RTA have reviewed initial traffic modelling and provided inputs to improve the detail and outcomes of that modelling. These inputs are now reflected in the accompanying traffic assessment. - The RTA have also proposed some minor road geometry changes that should also be modelled as part of the assessment.
NSW Transport & Infrastructure	- Support a minimalist approach to car parking provision - Request the preparation of a Travel Access Guide for workers and visitors of the site. - Request that walking and cycling transport modes be considered as part of the

	development. - Facilities for public transport users are conveniently located with the development - Safe bus, pedestrian and cycle access be maintained throughout the construction and operation phases.
RailCorp	- Request the development provide measure to improve pedestrian access to Kingswood Station - Car parking rates should be reduced to encourage sustainable travel methods. - Potential noise and vibration impacts form rails corridor be considered as part of the Environmental Assessment. - Electrolysis risk is assessed prior to construction
Sydney Water	- Existing water and sewer mains have sufficient capacity to cater for the proposed development.
Integral Energy	- A new dedicated feeder from Kingswood Zone Substation will be required.
Jemna Gas Authority	- Gas supply is available for the site
Telstra	- Telstra advise that they are obliged to provide base telephony services to the development via their existing infrastructure.

5.0 STRATEGIC PLANNING CONTEXT

The future development potential of the subject site is informed by both State Government and local planning policies and strategies. In this regard the Penrith LGA has been the focus of significant strategy development that is in turn informing an emerging land use planning framework. An overview of this strategic context planning is provided below.

5.1 NSW STATE PLAN

The State Plan is the NSW Government's long term plan to deliver the best possible services to the people of NSW. The plan identifies 8 key priorities and corresponding actions for delivery of better services to the state residents.

Priorities and actions most relevant to this development include those identified under the 'Better Transport and Liveable Cities' section and include:

- Increase the number of jobs closer to home
- Grow city centres as functional and attractive places to live work and visit

- Improve housing affordability

In this regard the development is entirely consistent with these actions as it provides:

- a significant mixed use urban renewal of a strategic centre in western Sydney that will:
- deliver significant new employment opportunities to western Sydney
- act as a catalyst for the growth of the emerging Nepean Health precinct
- landmark attractive built forms
- diverse and affordable housing product to meet the increasingly diverse housing needs of the local community
- manage the demand of private car usage and promote the use of local and regional public transport services as well as cycling and walking

5.2 METROPOLITAN STRATEGY

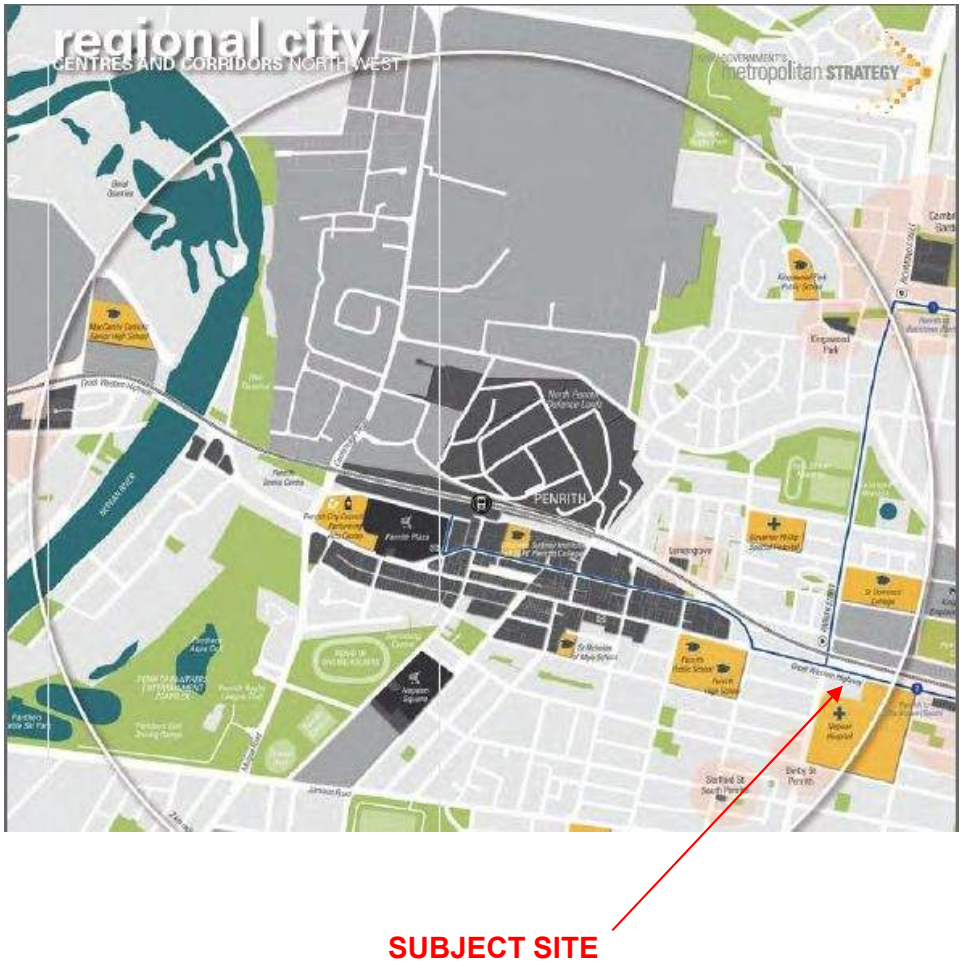
In late 2005, the NSW State Government released its metropolitan strategy called *City of Cities: A Plan for Sydney's Future.* The strategy is a detailed planning framework that seeks to deliver strong and sustainable growth for Sydney over the next 25 years.

One of the key elements of the strategy was to identify key regional cities within the metropolitan area to be the focus of that growth over the next 25 years.

Penrith was identified as one of only five regional cities under that element of the strategy, the others, being Liverpool, Parramatta, Sydney and North Sydney CBD.

The subject site sits within the eastern edge of the regional city as defined by the metro strategy and sub-regional strategy and as demonstrated by Figure 8.

FIGURE 8: PENRITH AS A REGIONAL CITY



The Metropolitan Strategy also provides targets for dwelling growth across the metropolitan region. In this regard the strategy located Penrith in a sub-region with Blacktown, Baulkham Hills, Blue Mountains and Hawkesbury Councils.

It then identifies a target of 77,000 new dwellings to be provided within the fabric of existing urban areas with additional targets for green field dwellings. With limited potential for delivery of new housing in the existing areas of Hawkesbury and Blue Mountains there is clearly an expectation for significant new housing opportunities within the Penrith urban area.

5.3 SUB-REGIONAL STRATEGY

Subregional planning is an intermediate step in translating the Metropolitan Strategy. Draft Sub-regional Strategies act as a broad framework for the long term development of the area, guiding Government investment and linking local and state planning issues. They also provide the detail required to guide the preparation of Principal Local Environment Plans (LEPs), which is the key legislation that links local councils and State Government in land use planning for each Local Government Area (LGA).

As part of the North Western Sydney Sub-Regional Plans, the Department of Planning has estimated that Penrith's population will grow to around 220,000 by 2031, an increase of over 40,000 people during that period.

To accommodate this, the strategy identifies growth targets for the Penrith LGA that include a further 25,000 dwellings in established areas and an additional 28,000 jobs.

5.4 PENRITH COUNCIL STRATEGY

Penrith City Council has undertaken significant strategic planning for the Local Government area which responds to the broader policy agenda of the metropolitan and sub-regional planning strategies. The most relevant of these strategies is identified below.

5.5 ACCOMMODATING POPULATION GROWTH AND CHANGE

This Council strategy seeks to accommodate population growth in both new land release areas as well as through housing redevelopment in existing areas. However, recognises that population and development pressures will impact on how the City's environment and character evolves.

Council's has identified the following list of responses to this challenge. The most relevant is provided in bold:

- Adequate and suitably serviced land is available
- **New and different types of housing will be needed as households change and diversify**
- **new developments are of high quality and environmentally sustainable**
- **new communities have ready access to recreational, educational, health and community facilities and services**
- **new housing is affordable**
- **new housing is provided with accessible public transport and pedestrian links**

5.6 INTERIM CENTRES HIERARCHY POLICY

The Metropolitan Strategy provides a centres hierarchy across the broader Sydney basin. The interim centres hierarchy policy seeks to interpret and apply the various centres in the Penrith LGA in manner consistent with the metropolitan strategy hierarchy.

The interim policy identifies the Kingswood Business Centre as a ***Specialised Centre.*** The metro strategy identifies such centres as places that perform vital economic and employment roles across the metropolitan area such as major airports, ports, hospitals, universities etc and identifies the following locations as examples of such centres:

> St Leonards, Port Botany, Macquarie Park, Olympic Park, Rhodes, Westmead, Sydney Airport

Having regard to this policy position, Penrith Council have identified Kingswood as a Specialised Centre given its spatial relationship with the University of Western Sydney and Nepean Hospital.

5.7 INTEGRATED TRANSPORT + LANDUSE STRATEGY

The Penrith Integrated Transport and Land Use Strategy (PITLUS) was prepared between 2007-2008. It is a joint initiative of Penrith City Council and the NSW Department of Planning.

The broad reaching goals of the Strategy are:

Increase public transport use per capita:

- Increase opportunity for people to travel by public transport to major destinations;
- Increase public transport use by upgrading the viability of public transport as a convenient and safe alternative to the private car;

Decrease motorised private vehicle use per capita:

- Decrease the use of motorised private vehicles by providing more non-car based opportunities for travel;
- Reduce Car Dependency;
- Reduce Car Use;

Decrease the number and length of trips per capita including those on public transport:

- Reduce the need to travel;
- Reduce the number and length of trips including those on public transport;

Improve access to jobs and other economic activities:

- Improve the freight network; and
- Improve Road Network Efficiency.

5.8 PROJECTS RESPONSE TO STRATEGIC PLANNING CONTEXT

In determining the hierarchy of its centres, Penrith City Council has nominated Kingswood as a Specialised Centre. Specialised Centres contain uses that perform vital economic and employment roles for the city and some other examples of Specialised Centres include Macquarie Park, Olympic Park and Westmead.

This hierarchical categorisation of Kingswood by Penrith City Council is therefore rightfully justified on the basis of the presence of both the Nepean hospital precinct, and the Kingswood Campus of the University of Western Sydney.

The development takes advantage of the site's excellent proximity to regional transport linkages and regional institutional facilities inclusive of Nepean District Hospital, The University of Western Sydney, and Kingswood TAFE which all play a key role in the local community.

It is therefore considered that the proposed development is complementary to this aspiration of Penrith Council to see Kingswood emerge into a specialised Health Precinct, and its mixed use nature will deliver the services and amenity that might otherwise take considerably longer to achieve.

The development also provides a significant contribution to housing and employment targets identified for the Penrith Regional City in the Metropolitan and sub-regional strategies.

The development is therefore considered to be entirely consistent with both regional and local strategic planning initiatives.

6.0 STATUTORY PLANNING CONTEXT

6.1 OBJECTS OF EP& A ACT

The following objects of the EP&A Act are relevant to the proposal:

> *(ii) the promotion and co-ordination of the orderly and economic use and development of land,*
>
> *(iv) the provision of land for public purposes, and*
>
> *(vii) ecologically sustainable development.*

The proposed development is consistent with the objects of the EP&A Act as it will:

-- promote the orderly and economic use of land by locating a mixed use development within a vacant and underutilised area of a regional health precinct and near regional transport infrastructure.

-- provide a new pedestrian plaza and through-site link as part of the public domain; and

-- achieve a high level of ESD outcomes as part of the development

6.2 SEPP (MAJOR DEVELOPMENT) 2005

Clause 75B of the EP & A Act requires the carrying out of development declared as a Part 3A project to be detailed in a State Environmental Planning Policy.

Clause 6 of the Major Development (MD) SEPP details that a Part 3A project is identified as such if, in the opinion of the Minister, the development is a kind that is described in one of the Schedules of the SEPP.

Schedule 1 of the SEPP contains various classes of development that classify as a Part 3A project.

The Director General has previously formed the opinion that the development is a kind described in Schedule 1, Group 5 Clause 13 of the MD SEPP and is a project to which Part 3A of the EP & A Act applies. A copy of this written advice is provided at Appendix C.

6.3 SEPP (INFRASTRUCTURE) 2007

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State. The Policy also includes a requirement for traffic generating development to be referred to the RTA for consideration and review with regard to its impact upon the regional road network. The proposed development is classified as a Schedule 3 development pursuant to the SEPP and as such will be referred to the RTA.

Nevertheless, consultation with the RTA has already occurred as part of the development of the Concept and Project Plans.

6.4 SEPP 2004 - BASIX

BASIX seeks to ensure that new residential dwelling design meets the NSW Government's targets of up to 40% reduction in water consumption and a 25% reduction in greenhouse gas emissions, compared with the average home. The aim of this Policy is to ensure consistency in the implementation of the BASIX scheme throughout the State.

Stage 2 of the development is the only element that provides residential outcomes and so is the only section of the development that would be subject to the provision of this environmental planning instrument.

Stage 2 of the development is only a Concept Application so no detail has been prepared with regard to the achievement of the water and energy efficiency targets. Nevertheless, this stage of the development will be required to achieve all required efficiency targets.

6.5 SEPP 65 - DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT

This Policy aims to improve the design quality of residential flat development in New South Wales by identifying design quality principles as a means of evaluating the merit of residential elements of the proposed development.

Stage 2 of the development is the only element that provides residential outcomes and so is the only section of the development that would be subject to the provision of this environmental planning instrument.

Stage 2 of the development is only a Concept Application so no detail has been prepared with regard to the achievement of the design quality principles. Nevertheless, this stage of the development will satisfy all relevant design quality principles of that SEPP.

6.6 SEPP 55 - REMEDIATION OF LAND

The object of the State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55) is "to provide for a Statewide planning approach to the remediation of contaminated land".

Further objects of SEPP 55 are identified in clause 2(2), reproduced below.

> *(2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment:*
>
> *(a) by specifying when consent is required, and when it is not required, for a remediation work, and*
>
> *(b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and*
>
> *(c) by requiring that a remediation work meet certain standards and notification requirements.*

The Phase 1 Environmental Site Assessment prepared for the site (see Appendix M) demonstrates the site is suitable for the proposed development subject to the undertaking of various recommendations.

6.7 PENRITH LEP 1998 – URBAN LANDS

The site is currently zoned Residential 2(d) under LEP 1998, which amongst other things, permits residential flat buildings. However, the site is also subject to clause 33 of LEP 1998. This clause operates to allow a medical centre to be developed on site.

The development provides both residential and medical related commercial uses and is therefore generally consistent with the land use requirements of the LEP. The retail uses proposed by the development are largely ancillary and complementary to both that proposed medical uses and existing medical uses in the broader health precinct.

Clause 12 of the LEP provides building envelope and height controls which typically restricts development to a scale of 4-5 storeys. The development is therefore inconsistent with this LEP development control. However, clause 12(6) of LEP 1998 allows Council to consent to a building that is not wholly within the relevant building envelope if the application demonstrates that a variation to those controls is necessary to improve the design, external appearance, or utility of the building.

Realisation of the vision of a health precinct on the broader site will only occur if significantly scaled development is provided on the limited lands available. The development proposes building of such a scale and this is considered necessary to improve the 'utility' of the building.

The development is therefore generally consistent with the relevant LEP provisions.

6.8 PENRITH DCP 2006

Penrith Development Control Plan 2006 applies to the site. The purpose of this plan is:

> *a. To consolidate Council's existing, adopted development control plans and its key codes and policies that apply to development in the City of Penrith;*
>
> *b. To give detailed guidance to people wishing to carry out development within the City of Penrith;*
>
> *c. To ensure relevant, high quality information is submitted with development applications; and*
>
> *d. To ensure the quality of development in the City of Penrith is of a high standard.*

The DCP provides a suite of planning controls and guidelines for development within the City. However, the DCP does not really contemplate development types proposed by the subject project and therefore has limited relevance or applicability to this project.

7.0 ENVIRONMENTAL ASSESSMENT

7.1 URBAN STRUCTURE + DESIGN

The strategic context of the subject site, including both its location with the Kingswood Specialised Centre and the Penrith Regional City Centre creates a legitimate expectation for significant scale urban renewal. This future planning context has been recognised by the recent approval of a 9 storey development in the Kingswood Business District.

It is expected that the subject development will result in a Gross Floor Area (GFA) of 42,295m^2. The development would be accommodated in several building footprints ranging from seven storeys up to an iconic building element of twelve storeys at the corner of Parker St and The Great Western Highway.

The scale of the subject proposal and the design response, particularly the proposed 12 storey element, has been developed in tandem with Council's Planning and Urban Design team and seeks to respond to what Council have termed a 'bookend' design with iconic scaled/designed buildings at the eastern and western gateway of the Kingswood Business District. The recently approved 9-storey development represents the iconic building at the eastern gateway and the subject development proposal would represent the western entry 'bookend'.

The proposed design also responds to a number of local urban context considerations. The site itself is located at one of the most significant intersections in the Penrith LGA, being located at the corner of the Great Western Highway and Parker St which are both major arterial roads in the metropolitan road network. This intersection is currently poorly defined as a consequence of the following local conditions also represented at Figure 9.

- No urban development opportunities on northern side of intersection because of parallel alignment of GWH and Western railway
- The transport corridor (both GWH and rail line) provides a total width of over 90m which is a very large built form void for such a key urban corridor
- Development to the north presents only the rear elevation of industrial buildings.

Accordingly, development of the subject site represents perhaps the only opportunity to provide a landmark or iconic address to this key intersection and as such a 12 storey built form is proposed to realise that limited opportunity.

Further, it is also important to note that the adjacent Nepean Hospital provides some of the largest built forms in terms of not only building height but total building volume in the broader LGA, inclusive of the Penrith CBD. This is partly demonstrated at Figure 10. Further, Hospital Master Planning proposes additional and significant new development of their campus. Given the sites sits within the boundaries of that Hospital Precinct, the proposed 7-12 storey buildings will read as a legitimate element of that adjacent Hospital Precinct.

FIGURE 9: URBAN STRUCTURE ANALYSIS

FIGURE 10: BUILT FORM FUTURE CONTEXT

7.2 BUILT FORM

7.2.1 DESIGN CONCEPT

The subject site currently is largely vacant and therefore a significantly underutilised parcel of land within the Nepean Health Precinct. The development proposal represents a significant urban renewal of this area and will revitalise and rejuvenate not just the site, but its broader environs.

The overall concept is to organise the different uses and building forms to take advantage of the sites natural attributes and create a high-quality public domain and level of amenity for the Nepean Health precinct. The approach considers the built form of the development at both the urban scale and at the human scale of the occupant or person in the public domain.

7.2.2 SITING + LAYOUT

The buildings are organised on the site in the most appropriate locations for their scale and use. The retail is located at lower ground and ground levels to provide activation of the public domain and to conceal their large footprints and servicing requirements. The Commercial building is located above the retail along the Great Western Highway where it provides continuity of the eventual redevelopment of the shopping and commercial strip further east at Kingswood Station. The 8 storey form is consistent with the 8 and 9 storey developments proposed at Kingswood Station and the large floorplate provides opportunities for both larger single tenant floors or smaller strata suites that may develop into ‘specialist floors’.

The horizontal expression of its elevations reflect the long, continuous nature of the highway where buildings are experienced in quick glances whilst driving by, whilst at ground level the retail uses and multiple building entries provide activation at the human pedestrian scale.

The Serviced Apartments are located on Barber Ave where they are screened from the Great Western Highway and address the plaza formed by the development of Stage 2. Its smaller form and lower height is similar in scale to the lower part of the Stage 2 apartment building and forms a transition from the commercial building through to the hospital buildings. Its semi-residential character and finer grain of built form imparts a finer scale to the plaza space which is continued by the residential apartments opposite in Stage 2. Its elevations, whilst more articulated, are composed in an abstracted way to suggest both its residential and commercial nature.

The Stage 2 apartments, represents the taller building and becomes the marker for both the major intersection of the Great Western Highway and Parker Street and for the development and hospital precinct. It also forms the termination of the Kingswood retail and commercial strip at its western end before the residential area starts. As such its residential use within the multi-storey form presents an appropriate transition between the multi-storey commercial use to the east and the medium density housing to the west. Its lower 7 storey portion defines the public plaza and presents an active ground plane of retail and commercial uses with the similarly fine grain of residential apartments above.

All parking is provided in basement areas, to limit their presence in the built environment and ensure limited pedestrian and vehicle conflict.

7.2.3 HEIGHT, SCALE AND MASSING

The proposed building heights respond to the sites strategically important location as well as both the proposed adjacent built form heights and the location and topography of the site.

Along Great Western Highway 9 storey mixed use developments have been approved adjacent to Kingswood Station. This scale of development is an appropriate built form along the 6 lane (23m wide carriageway) highway. The proposed 8 storey commercial building is consistent with these heights.

The 8 storey commercial building has a similar organisation to the adjacent Nepean Private Hospital building being a large rectangular floorplate with a central courtyard (or atrium in the commercial building). The overall dimensions are also similar with the commercial building being slightly longer but narrower than the hospital building.

The 8 storey serviced apartment building relates to the height of the commercial building but is lower overall due to the lower site level where it's located and the lower residential floor heights. Its built form is of a smaller scale than the commercial building and relates to the scale of the public space to the west and the similar built form of the Stage 2 apartment building opposite.

The Stage 2 apartment building is part 12 and 7 storeys. The 12 storey part (which is actually only 8m higher than the commercial building) marks the major intersection of the highway and Parker Street and provides the termination point for the retail and commercial buildings that would potentially develop from Kingswood Station. Its more slender vertical expression and more articulated form contrasts that of the commercial buildings and provides a relationship to the residential housing on the opposite side of Parker Street. The 12

storey height is appropriate to the scale of the Parker Street and Great Western Highway intersection and steps down to 7 and 8 storey (commercial building) beyond this point.

The Stage 2 apartment building steps down to 7 storeys along Parker Street and relates to the scale of the public plaza and the built form of the serviced apartment building to the east. It provides clear definition to both Parker Street and the plaza and is an appropriate urban scale that marks the entry into the hospital precinct.

7.2.4 ELEVATIONS, MATERIALS + FINISHES

The proposed materials complement the design approach with the use of a family of materials across all buildings giving them a familial relationship whilst the individual detail, colour and textural treatments express their unique uses and identities. The location and application of materials also emphasises the conceptual approach to the buildings which is to respond to both the larger urban scale and the finer human scale. At the upper levels precast concrete and pre-finished cladding in larger formats relates to the larger urban form whilst smaller format more textural materials like stone, tiles and timber at the lower levels relates to the more human scale. In addition to this, louvred screens and panels in warm colours provide another layer of animation, colour, shadow and texture.

7.2.5 SOLAR ACCESS

The site enjoys a broad northern aspect that provides excellent solar access to the majority of the development inclusive of the entire lengthy elevation to Great Western Highway for Building A. Building A has a central atrium with a glass roof which will provide excellent solar access and amenity to building occupants as well as reducing required artificial lighting levels.

The only residential element of the development is provided at Stage 2. This section of the development is provided with both a northern and western elevation and as such will readily achieve a 2 hour solar access standard for the majority of apartments as required under SEPP 65.

Means of mitigating adverse solar impacts to the western elevation will be explored and resolved as part of the Stage 2 Project Application.

The development itself presents relatively limited overshadowing impacts upon the adjacent land uses primarily because of the lack of adjacent sensitive land uses to the south and east of the development.

The existing residential development to the west of the site will experience limited overshadowing during early morning periods. However, these impacts cease in the late morning and no further impacts is cause through out the rest of the day. As such the impacts are considered to be acceptable.

These limited impacts are demonstrated as part of the shadow diagrams provided as part of the accompanying plans at Appendix A.

7.2.6 SEPP 65 – DESIGN QUALITY PRINCIPLES

Even though the provisions to this planning instrument only relate to the residential elements of Stage 2, the design quality principles of the SEPP represents a good basis for consideration of the proposed mixed use development.

An assessment of the development against these design quality principles is provided in the Architectural Statement provided at Appendix P.

7.3 PUBLIC DOMAIN

The development provides a large, functional and attractive public domain space represented as a thru-site-link that runs centrally through the site and provides direct pedestrian linkages at ground level from the Great Western Highway to Barber Ave.

The presence of the link will ensure that the development is a permeable urban space and its location will encourage direct pedestrian linkages from the adjacent hospitals.

The public domain area will be flanked by retail development on both sides and as such will serve as the developments retail court. This will assist in activating the space through extended trading periods and as such will provide a high level of passive surveillance and security.

The pedestrian link provides mature trees as well as a mix of shrubs, lawn and groundcovers in planters, and timber decks together with paving treatments.

These finishes are both attractive and functional and will provide pleasant passive open space areas for occupants and visitors to the site. The Great Western Highway pedestrian entrance is also provided with a small water feature that will assist in providing a welcoming entry treatment for the development.

7.4 TRANSPORT + ACCESSIBILITY

Traffix (traffic and transport planners) have prepared a Transport Management Accessibility Plan (TMAP) for the development project. A copy of that TMAP is provided at Annexure I. The key findings of this TMAP are provided below:

7.4.1 EXISTING CONDITIONS

ROAD HIERARCHY AND DAILY TRAFFIC VOLUMES

The Great Western Highway is constructed with a 23 metre divided carriageway and generally carries three lanes of traffic in either direction. Directly to the northeast of the site it forms a priority controlled 'T-junction' with Somerset Street and to the northwest of site it forms the eastern and western approaches to a 4-way signalised intersection with Parker Street. The Great Western Highway carries approximately 28,000 vpd in the vicinity of the site.

Parker Street, also known as The Northern Road is constructed with a 22 metre wide divided carriageway and generally carries three lanes of traffic in either direction and forms the western site boundary. Parker Street generally runs from Camden Valley Way in the south to

Richmond Road in the north and carries some 40,000 vpd in the vicinity of the site.

Somerset Street is constructed with a 12 metre wide carriageway and carries a single lane of traffic in either direction. It forms a priority controlled 'T-junction' with The Great Western Highway to the northeast of site and forms the northern and southern approaches to a 4-way roundabout controlled intersection with Derby Street to the southeast of site. Right turns from Somerset Street onto The Great Western Highway are not permitted. Two accesses to the Nepean Hospital precinct are situated on Somerset Street and the speed zoning is 50 km/hr. This road carries approx 5,000 vpd in the vicinity of the site.

Derby Street is constructed with a 12 metre wide undivided carriageway and carries a single lane of traffic in either direction. Derby Street forms the eastern and western approaches both to a 4-way roundabout controlled intersection with Somerset Street to the southeast of site and to a 4-way signalised intersection with Parker Street to the southwest of site. Two accesses to the Nepean Hospital Precinct are situated on Derby Street.

Barber Avenue is constructed with an 8.8 metre wide undivided carriageway and carries a single lane of traffic in either direction. Directly to the west of site Barber Avenue forms the stem of a priority controlled 'T-junction' with Parker Street. Approximately 70 metres east of this intersection the road width tapers to 7.3 metres, 100 metres beyond which the road terminates.

The site is currently serviced by five separate accesses, four of which are situated on the Barber Street frontage with the remaining situated on The Great Western Highway frontage.

EXISTING INTERSECTION PERFORMANCES

For the purposes of the assessment of traffic impacts of this development, surveys were undertaken of the most critical intersections in the vicinity. The results of these surveys were analysed using the SIDRA computer program to determine their performance characteristics under existing traffic conditions.

A summary of the modelled results are provided below at Table 4.

TABLE 4: EXISTING INTERSECTION PERFORMANCE

Intersection Description	Period	Control Type	Degree of Saturation	Intersection Delay	Level of Service
Parker St. & The Great Western Highway	AM	signals	1.311	60.3	E
	PM		1.313	68.1	E
Parker St. & Barber Ave.	AM	priority	0.301	21.4	B
	PM		0.350	22.1	B
Parker St. & Derby St.	AM	signals	1.00	25.6	B
	PM		1.00	27.3	B
Somerset St. & The Great Western Highway	AM	priority	0.333	13.6	A
	PM		0.427	15.9	B

It can be seen from Table 4 that with the exception of the adjacent main intersection of Parker Street with the Great Western Highway these critical intersections operate satisfactorily under the existing 'base case' scenario, all with a levels of service A or B during both peak periods and with moderate delays. The intersection of the Parker Street and the Great Western Highway operates at level of service E during both peak periods and is therefore at capacity. The average delay is 60.3 seconds in the AM peak and 68.1 seconds in

the PM peak, with evidence of right turn bays currently overflowing on the northern, eastern and southern approaches. The through movement on the eastern approach (westbound) on the highway during the PM peak is at level of service F, with an average delay for that movement of 127.5 seconds.

Nevertheless, it is stressed that the most relevant use of this analysis is to compare the relative change in the performance parameters as a result of the proposed development. This is discussed further in later sections of this report.

ACCESSIBILITY

The site is conveniently located with respect to the arterial and local road systems serving the region. It is therefore able to effectively distribute traffic onto the wider road network, minimising traffic impacts. The major constraint to site accessibility is the concentration of traffic activity via Barber Avenue, which is restricted to left-in/left-out movements at Parker Street.

This underscores the importance of obtaining an exit onto the Great Western Highway (as currently available), especially in view of the high concentration of travel demand to/from the west.

PUBLIC TRANSPORT

The journey to work data available from Transport NSW for the subject locality (Travel Zone 1856) indicates that 64% of people drive into this zone to work (with a very small sample of only 375 persons travelling); while 79% of people drive to work outside the zone (with 2,235 persons travelling). This is a high level of car dependency and this presents a challenge for the subject site, with measures required

to reduce this situation and promote alternate travel modes as discussed further below.

It is evident that the site benefits from good access to the public transport system with buses travelling along the Great Western Highway and Parker Street immediately adjacent to the site; as well as along Derby Street which lies only 350 metres to the south of the site. In addition, Kingswood Railway Station lies 700 metres to the east of the site which is within the usual 800 metres walking distance for employees.

7.4.2 TRAVEL DEMAND INITIATIVES

It should be noted that the transport agencies consulted as part of the formulation of the Director Generals requirements all sought to manage demand for travel to the site by private vehicles through limiting on site parking supply. The basis of this approach was that the site enjoyed excellent access to regional public transport linkages.

The traffic and parking assessment undertaken for this development is therefore premised upon a reduction in traffic generation when compared with the RTA's "unconstrained" trip rates, which reflect relatively poor access to public transport for many of the land use components. To achieve this target the following initiatives are proposed.

PUBLIC TRANSPORT

Existing bus services are extensive within a 350 metre walking distance, which includes services along the Great Western Highway and Derby Street. At this time, no additional bus services are

considered necessary. Nevertheless, discussions should be held with bus operators as part of the later Stage 2 Project Application stage to identify the potential for improved services when the site is fully developed, as well as improved facilities including bus shelters.

At this stage, all weather shelters are considered essential along both sides of Parker Street and the Great Western Highway, although these would benefit the hospital precinct generally.

These bus services operate regularly and will provide an alternative travel mode choice for residents, employees and visitors associated with the proposed development. The use of these services should be encouraged by residential strata managers and employers where possible. This may include the provision of current service timetable and route information within reception, foyer and/or other communal areas within the site.

RAIL SERVICES

Rail services provide access to the wider transport network serving the greater metropolitan area. The site is only 700 metres from Kingswood Station which is clearly very attractive for all trip purposes. The station will be accessed via the existing footpath and crossing facilities that exist along the Great Western Highway.

PEDESTRIAN AND BICYCLE LINKAGES

Pedestrian and bicycle linkages will be provided within the site. This includes an internal footpath network represented as a through-site plaza and widened footpath along the Highway. Connectivity to all footpath systems in the locality on all public roads will also be

provided, with the ability to access bus and rail services. Safe crossing opportunities are available on all major desire-lines, including integrated crossings within the intersections of Parker Street with the Great Western Highway; and Parker Street with Derby Street. In addition, the hospital precincts to the immediate east and south are provided with extensive pedestrian linkages, including links through to Somerset Street and Derby Street.

It is expected that cyclists will rely on the external roads which provide shared on-road facilities, while Council's bicycle network is generally available more remote from the site.

In addition, bicycle storage and shower facilities will be available within basement car park to encourage use of that transport mode.

PEDESTRIAN SAFETY

The internal design and particularly vehicle access locations has taken due account of pedestrian safety. All driveways will be designed as standard laybacks so that pedestrians have priority. All driveways will also be in accordance with AS 2890.1 and AS 2890.2, which includes the provision of appropriate sight lines.

TAXI SERVICES

Taxi services will be able to access the site directly via the internal road system which is via Barber Avenue. It is recommended that consideration be given to the provision of a taxi rank in Barber Avenue and this is a matter that will also be finalised in consultation with Council's traffic committee. Taxis can also use the drop-off area adjacent to the retail plaza.

CAR SHARE AND CAR POOL ARRANGEMENTS

It is considered that car share arrangements will form an integral part of the development. This will be prepared having regard to relevant guidelines. In general, a parking system such as "GoGet" is contemplated which has potential application to all non-resident land uses and this will be effective in reducing retail and commercial tenant parking demands. In this regard, as a general proposition, one "GoGet" car is able to meet the needs of many users, substantially reducing the need for a 'designated' car and thereby reducing parking demands. Based on the experience of "GoGet", one shared space is equivalent to 5 'normal' spaces. It is therefore recommended that consideration be given to the dedication of one or two car share spaces within the site.

The implementation of a car share policy is a matter that can be conditioned having regard for relevant guidelines in association with individual applications.

SERVICING

The access and internal movement system has been developed to ensure safe and convenient access to all parts of the site, based on the required Design Vehicle. The largest commercial vehicle is the standard Service vehicle as defined under AS 2890.1 which is an 8.8m MRV. However, the need to accommodate garbage vehicles is expected to require access by a maximum 10.5m rigid truck. Compliance with relevant standards is proposed. Service vehicles will enter and exit via the main access onto Barber Avenue in a forward direction and are provided with a separate, dedicated loading facility.

Servicing of the residential component of the development (in Stage 2) can be undertaken on-street in Barber Avenue using Councils garbage services; as well as from within the internal roadway. This will be resolved as part of the relevant future Project Applications.

7.4.3 PARKING ASSESSMENT IMPACTS

PARKING REQUIREMENTS

The site is subject to the controls of the Penrith DCP 2006 (Section 2.11 Car Parking), although regard needs also to be given to the requirements of the RTA's Guideline as well as other survey based assessments where they are of assistance. Specifically, the Director General's requirements seek to reduce parking as far as possible while promoting other (non-car) travel modes. This however needs to be balanced against the practical reality that some car-dependent uses (for example supermarkets) are to a degree car-dependent (even to serve the local catchment) and need to provide sufficient parking to ensure that on-street demands do not occur, which would potentially create amenity impacts.

The required parking levels for each land use component are identified in Table 5 and are labelled as unconstrained demand.

PARKING PROVISION

Parking supply for the development is provided in accordance with the principles of constrained demand which is in accordance with the objectives of the DCP as well as the Director General's requirements and will reflect the high proportion of walking trips that are expected in this location, including residents and employees passing by on their

way home from work as pedestrians, from bus and rail services (particularly hospital employees); as well as employees and residents associated with the site itself.

TABLE 5: PARKING DEMAND AND PROVISION

Land Use	**Relevant Parking Standard**	**Unrestrained Demand**	**Provided**
Retail	RTA Guidline	266	193
Commercial	DCP + RTA Guideline	505	335
Residential	DCP	128	191
Serviced Apartments	DCP + RTA Guideline	84	42
TOTAL		**983**	**711**

It can be seen that the development would require 983 spaces based on the unrestrained demand for parking; whereas only 711 spaces are proposed. This is an overall 28% reduction in parking which will suppress travel by non-car modes and readily achieve what may be expected to be a maximum target of a 10-15% reduction in private car travel in this location.

The only land use that the development does not seek to suppress demand for is the residential component. The development concept plan proposes to increase the resident parking for the 74 two bedroom

units from 74 spaces to 137 spaces, resulting in an overall provision of 191 resident spaces. This equates to a rate of 1.85 spaces per unit. This is slightly higher than the expected demand and it is considered that a maximum rate of 1.6 spaces per two bedroom unit would be more appropriate and is more in line with 2006 census data relating to car ownership.

However, it is emphasised in this regard that this is unlikely to detract unduly from public transport use for the journey to work. Rather, these cars will be necessary for the many off-peak trips that are not well served by public transport, including shopping, recreational, educational and other social trips, most of which occur during the evenings and on weekends when public transport provision is substantially downgraded and is likely to remain so.

7.4.4 TRAFFIC ASSESSMENT IMPACTS

TRIP GENERATION

It is usual practice to adopt trip rates published by the Roads and Traffic Authority for individual land use components, as set out in the document entitled “Guide to Traffic Generating Developments”.

While this is appropriate for some development, it is not appropriate for the proposed development as parking demand in particular will be actively suppressed, to take advantage of the excellent public transport and the high proportion of local trips.

The resulting traffic generation from the overall site is presented in the TMAP but summarised in Table 6.

TABLE 6: VEHICLE TRIP GENERATION RATES

Land Use	GFA (m^2) – Units	Weekday AM Peak		Weekday PM Peak	
		IN	OUT	IN	OUT
General Retail	4692 (NFA)	22		56	56
Supermarket	1377 (NFA)	24		61	61
Commercial	20,190	112	48	48	112
Residential	106 Units	6	26	26	6
Serviced Apartments	84 Units	4	20	20	4
TOTAL		**1684**	**94**	**211**	**239**
		262		**450**	

TRAFFIC DISTRIBUTIONS

The impact of the above traffic generation and distribution onto the surrounding intersections is indicated by the future performance of the surrounding critical intersections. The above trips have been assigned to the road network on the basis of the distributions that have taken into account the nature of the trip and available access opportunities. For example, the retail catchment in relation to retail trips results in a different distribution to journey to work trips. The route choices are also different for each peak period. Overall, trips have been distributed on the basis of the journey to work data and

modelling from the economic impact statement. The distributions used for this assessment may be summarised as follows:

North	8%
South	8%
East:	26%
West:	58%

These trips have been assigned to the road network having regard for the access arrangements which include:

- All entries via a left turn into Barber Avenue;
- Exits shared between Barber Avenue and a left turn exit onto the Great Western Highway.

The Great Western Highway exit is critical for the development in order to achieve an efficient distribution of trips, particularly with 58% of driver arriving and departing from/to the west along the Highway.

WEEKDAY PEAK PERIOD TRAFFIC IMPACTS

A general context for the application is to review the impacts that the existing development operating at full capacity would have on the road network. To the extent that traffic activity currently occurs on the site, this has not been taken into account so that future intersection performances as assessed are considered conservative.

The resulting performance of key intersections is provided in Table 6 below.

TABLE 7: FUTURE INTERSECTION PERFORMANCE

Intersection Description	Period	Control Type	Degree of Saturation	Intersection Delay	Level of Service
Parker St. & The Great Western Highway	AM	signals	1.311 (1.311)	61.6 (60.3)	E (E)
	PM		1.314 (1.313)	94.5 (68.1)	F (E)
		Improved geometry	1.095	86.6	F
Parker St. & Barber Ave.	AM	priority	0.339 (0.301)	25.5 (21.4)	B (B)
	PM		0.762 (0.350)	37.0 (22.1)	C (B)
Parker St. & Derby St.	AM	signals	1.00 (1.00)	25.6 (25.6)	B (B)
	PM		1.00 (1.00)	28.1 (27.3)	B (B)
Somerset St. & The Great Western Highway	AM	priority	0.343 (0.333)	14.6 (13.6)	B (A)
	PM		0.559 (0.427)	16.7 (15.9)	B (B)

Note: Existing performance parameters are shown in brackets

It can be seen that most intersections remain at existing levels of service and where a change occurs, the level of service remains at 'D' (or better) and this is a satisfactory result. This (worst) level of service relates to the left turn movement out of Barber Avenue into Parker Street in the PM peak and is associated with an average delay of 50.1 seconds and a 95th percentile queue of 7.6 vehicles.

The notable exception occurs at the major intersection of Parker Street with the Great Western Highway, where average delays increase in the PM peak from 68.1 seconds to 94.5 seconds. This result is not assisted by the provision of longer right turn storage lanes (which presently overflow) and the issue relates principally to the lack

of through lane capacity along the Highway. This is a strategic issue for the RTA and in order to accommodate even general growth in background traffic levels, it is anticipated that the RTA will need to investigate such options, irrespective of the subject development. In the interim, the resultant delay, though significant, is not uncommon throughout the metropolitan area.

Nevertheless, the potential for improving the performance of the intersection was discussed with the RTA and they suggested the provision of an additional southbound through lane in Parker Street across the intersection, by reducing the size of the islands.

This modified option was also modelled and is represented in Table 7 under the heading “improved geometry”. The opportunity has also been taken to adjust the phase times to provide optimal performance. This results in a slight improvement, with the degree of saturation reducing from an existing 1.314 to 1.097 (better than existing); and with the average delays reducing from 94.5 seconds to 86.6 seconds.

The two affected islands will be reduced in area but will have an area of at least 20m^2 which is more than the minimum of 8m^2 under the RTA’s Road design Guide and in addition, there is a possibility of increasing this subject to detailed design.

It is noteworthy that the development is expected to generate only 19 veh/hr exiting the site onto the Great Western Highway and then turning right into Parker Street. This is a moderate increase over the 333 veh/hr that presently undertake this right turn manoeuvre. The modelling indicates that the 95th percentile back of queue for this right turn is presently 160 metres and this is unchanged in the future. In this regard, the proposed exit driveway onto the Highway is 130 metres from this intersection, so that on occasions, vehicles will not be

able to join this queue. This is not considered a significant issue in that the volumes are low (less than one movement every three minutes) and in addition, alternative routes are available should the right turn movement be blocked.

DEMOLITION TRAFFIC IMPACTS

It is anticipated that a detailed demolition and construction traffic management plan will be prepared prior to construction of each project stage and in response to a suitable condition of consent, taking due account of proposed development stages. In principle, it is assumed that all construction vehicle access will be via Barber Avenue.

SITE ACCESS ARRANGEMENTS

The development will make reliance on the proposed combined entry-exit driveway onto Barber Avenue. This has sufficient capacity to accommodate all entry volumes. The entry driveway is indicated on the plans with a short deceleration lane although in practice, this is not considered necessary onto a local road and in addition, raises potential conflicts with pedestrians. Hence, it is recommended that a standard driveway be provided, with appropriate splays to accommodate the design truck (a 10.5m garbage truck).

The site is also proposed with an exit-only driveway onto the Highway. This is located about 130 metres from its intersection with Parker Street and is afforded excellent sight distances. It is emphasised that there will be negligible traffic exiting the site that will need to turn right at Parker Street, with only 25 of the journey to work trips to/from the north. It is also emphasised that this exit is very beneficial in light of

the fact that 58% of departures are to the west (principally along the Highway) so that this exit overcomes the need for traffic recirculation that would otherwise occur.

All accesses will need to comply with relevant standards and will operate safely and efficiently.

7.4.5 CONCLUSION

The site is currently underutilised and is available for redevelopment as an integral part of the Nepean Hospital precinct;

The redevelopment seeks to minimise parking to encourage alternate travel modes in accordance with the DGR's. This is assisted by the strong affinity that the site has with existing uses within the precinct, which will result in a high proportion of walking trips;

The site is uniquely placed to take advantage of excellent public transport services. The adopted vehicle trip rates reflect reliance on these services which is consistent with State Government Policy. The preparation of a Transport Access Guide is also expected to be required as a standard condition of consent.

The road network has been assessed with the proposed development and operates generally satisfactorily, including the site accesses and all local intersections. The notable exception is the major intersection of Parker Street with the Great Western Highway, where average delays are already unacceptable and will increase in the PM peak from 68.1 seconds to 86.6 seconds. This intersection requires increased through lane capacity along the Highway and this is a strategic issue for the RTA in order to accommodate even general growth in background traffic levels. It is anticipated that the RTA will

need to investigate improvement options, irrespective of the subject development. In the interim, the resultant delay, though significant, is not uncommon throughout the metropolitan area; and

The access and internal design aspects of the development are acceptable and individual Project Applications will need to comply with AS 2890.1 and AS 2890.1. The site proposes an exit-only driveway onto the Highway. This is located about 130 metres from its intersection with Parker Street and is afforded excellent sight distances. It will operate satisfactorily and is very beneficial in light of the fact that 70% of departures are to the west (principally along the Highway) so that this exit overcomes the need for traffic recirculation through residential precincts that would otherwise occur due to the need for all traffic to otherwise turn left into Parker Street from Barber Avenue.

It is therefore concluded that the proposed development is supportable on traffic planning grounds and the proposed development will operate satisfactorily.

7.5 ECOLOGICAL SUSTAINABLE DEVELOPMENT

Sustainability has represented a fundamental objective of the entire design process and as such a raft of ESD initiatives have been integrated into the development proposal. These are identified in detail in the ESD report provided at Appendix N and summarised below:

7.5.1 DESIGN

Throughout design process the building will adopt the best practice items from leading sustainability tools like Green Star ESD items and many of these items have been detailed within this report.

Energy modelling during design will be performed to optimise the buildings systems in terms of energy efficiency. One member of the design team will be an accredited ESD professional and will be able to assist in the implementation of the ESD items into the design.

7.5.2 CONSTRUCTION

During construction, waste will be recycled and an Environmental Management Plan will be created for the building.

7.5.3 POST CONSTRUCTION

Building tuning of equipment & systems will be performed over the first year to optimise the performance of the building in terms of energy efficiency and a building user guide will be available to the occupants so that the buildings ESD items may be used to their full potential and maintained to optimal performance.

7.5.4 BUILDING FORM

The building orientation allows for a high level of daylight during normal occupancy hours in all buildings while reducing energy consumption through shading elements. The residential building has openable doors to assist with natural ventilation. The glazing will mainly be double glazed units with low U values and Shading Factors.

7.5.5 WATER

All fittings and fixtures will be highly efficient in terms water consumption and rain water harvesting will be incorporated into the building to reduce water consumption.

7.5.6 ENERGY

Throughout the commercial development energy efficient lighting will be installed with zoning control and an efficient layout. Reverse cycle air conditioning systems will be installed that will only run when required within each tenancy which will be highly efficient. There is a central atrium with a glass roof which will reduce the required lighting levels and possible natural ventilation options will be looked at during the design stage.

Within the carpark there will be bicycle spaces for 10% of the building occupants and visitor cyclist facilities outside the entrance to the building.

7.6 ECONOMIC IMPACT

7.6.1 INTRODUCTION

A detailed economic impact assessment has been prepared by Hill PDA and is provided at Appendix J. The assessment examines key strategic planning and policy considerations, together with the latest trends in retail and commercial development and then models the impacts of the development within the context of the local demographic characteristics and floor space supply.

Key outcomes from that assessment are provided below.

7.6.2 TURNOVER AND EXPENDITURE SOURCES

EXPENDITURE FROM WORKERS

In 2013 (after the opening of the proposed retail centre), it is estimated that there will be a total of around 6,000 jobs located in Kingswood. New workers on site as a result of the proposal will create additional retail expenditure. This is because it relates to retail spending close to the place of work. Hill PDA has estimated there will be up to 800 new jobs within the proposed development.

Workers on average spend around $2,500 to $3,000 every year on retail goods and services close to their place of work. This represents around 20% to 25% of total personal expenditure. Obviously this amount can vary considerably depending upon the range and availability of retail outlets near the place of work.

Using these rates it's estimated that by 2013 (after the opening of the proposed retail centre) the potential expenditure generated by workers

in the immediate area (including the Hospital) that could be captured by retailers on the subject site is around $18m to $19m.

Some of this expenditure could be captured by the proposed ALDI store and specialty stores, say 50% to 60%. This equates to around $9m or $10m. This expenditure is likely to include take-away foods and meals in restaurants but it could also include some food, grocery and convenience items.

The balance of the retail turnover will be sourced from residents, tourists, hospital visitors and UWS students.

EXPENDITURE FROM RESIDENT HOUSEHOLDS

In order to measure need for retail and commercial floorspace from residents, a trade or catchment area needs to be defined. Hill PDA has identified a Primary, Secondary and Tertiary Trade Area for the proposed retail component at Kingswood.

The Primary Trade Area will consist of:

- New residents and workers in the proposed development;
- Existing hospital staff and patrons; and
- Residents of Kingswood south of the Great Western Highway.

The Secondary Trade Area will consist of:

- The balance of Kingswood, north of the Great Western Highway;
- The majority of Orchard Hills (north of Wentworth Road), including the UWS Penrith Campus located directly east of the Primary Trade Area;

- The suburb of Penrith, north of the railway line and as far west as Castlereagh Road; and
- The suburbs of Claremont Meadows, Cambridge Park, Cambridge Gardens and Werrington Downs.

The Tertiary Trade Area will consist of:

- The balance of the suburb of Penrith, south of the railway line; and
- The whole suburbs of Jamisontown, South Penrith, Cranebrook, Werrington and Werrington County.

Resident expenditure was estimated for 2009 and forecast for 2011, 2016, 2021 and 2026 for the above Trade Areas based on:

- Compound annual population growth rates for the Primary, Secondary and Tertiary Trade Areas of 0.75%, 1.58% and 1.00% respectively; and
- Expected growth in real expenditure per capita of 1.30% per annum for all commodities.

Table 6 indicates households in the Primary Trade Area are forecast to generate around $89.2m of retail expenditure in 2011. Of this, $26.3m is related to supermarket expenditure, $8.7m to specialty food stores and so on. Growth in total expenditure of around $30.9m from 2011 to 2026 is forecast for the Primary Trade Area. Growth in supermarket and grocery expenditure is forecast to increase by around $9.1m over the same period.

TABLE 8: PRIMARY TRADE AREA FORECAST HOUSEHOLD EXPENDITURE BY RETAIL STORE (2009$M)

Retail Store Type	2009	2011	2016	2021	2026
Population	**7,183**	**7,282**	**7,537**	**7,803**	**8,080**
Supermarkets & Grocery Stores	25.3	26.3	29.0	32.0	35.4
Specialty Food Stores	8.4	8.7	9.6	10.6	11.8
Fast-Food Stores	6.9	7.2	8.0	8.8	9.7
Restaurants, Hotels and Clubs*	6.5	6.8	7.5	8.3	9.1
Department Stores	7.1	7.4	8.1	9.0	9.9
Clothing Stores	4.1	4.3	4.8	5.3	5.8
Bulky Goods Stores	12.1	12.5	13.8	15.3	16.9
Other Personal & Household Goods	13.0	13.5	14.9	16.4	18.2
Selected Personal Services**	2.4	2.5	2.7	3.0	3.3
Total Retailing	**85.8**	**89.2**	**98.5**	**108.7**	**120.1**

The Secondary Trade Area consists of the balance of Kingswood, the majority of Orchard Hills, the suburb of Penrith (north of the railway line) plus the suburbs of Claremont Meadows, Cambridge Park, Cambridge Gardens and Werrington Downs. The Secondary Trade Area is forecast to generate around $335.7m of retail expenditure in 2011, with growth in total expenditure of around $179.8m from 2011 to 2026.

The Tertiary Trade Area consists of the balance of the suburb of Penrith (south of the railway line) plus the suburbs of Jamisontown, South Penrith, Cranebrook, Werrington and Werrington County. Households in the Tertiary Trade Area are forecast to generate around $596.5m of retail expenditure in 2011, with growth of around $177.9m from 2011 to 2026.

It is generally accepted that around 35% to 40% of total household expenditure is captured by supermarket based shopping centres or village centres and neighbourhood centres. Around 25% to 30% is captured by major centres such as Penrith CBD and the remainder is

captured by town centres and "out-of-town" outlets such as homemaker centres.

Therefore, by 2013 (the first year of operation), it is estimated that $33m of retail expenditure is available from the Primary Trade Area, $125m from the Secondary Trade Area, and $217m from the Tertiary Trade Area. Obviously not all of this will be captured by the retail component of the proposed development.

However it can be expected that the retail component of the proposed development will capture around 30% or $9m to $10m of the expenditure available in the Primary Trade Area, $9m to $10m (7% to 8%) from the Secondary Trade Area, and $3m to $4m (1% to 2%) from the Tertiary Trade Area. In total, the combined Trade Areas will provide the proposed development with around $21m to $24m of retail expenditure.

In addition, it is acknowledged that new residents that locate on site as part of the proposed development will create additional household expenditure that will be spent in retail. In order to calculate the number of new residents to reside within Stage 1 of the proposal, Hill PDA has assumed the following resident population ratios:

- 36 studio apartments at 1 person per apartment;
- 36 one-bedroom apartments at 1.5 persons per apartment;
- 12 two-bedroom apartments at 2.5 persons per apartment.

Based on the above assumptions, the residential component of Stage 1 of the proposal results in 120 new residents locating on site based on full occupancy.

According to *Marketinfo 2009* data, existing Primary Trade Area residents have an average retail spend per capita of around $8,500 per annum. Escalating this at 1.30% per annum for real growth in results in an average retail spend per capita of around $9,000 per annum in 2013.

Applying this average annual spend, new residents in the proposed development will generate around $1m to $1.2m of retail expenditure that could be captured by retailers on the subject site in 2013. It is possible that the retail component of the proposed development could capture 40% to 50% of this expenditure (i.e. $400,000 to $600,000).

7.6.3 DEMAND FOR RETAIL SPACE

It is estimated that the retail component of the proposed development will turnover $27.6m upon its first full year of trade in 2013 based on target turnover levels. However, there is around $30.4m to $34.6m of household expenditure available to the proposal as sourced from:

- Workers in Kingswood and within the proposed development - $9m to $10m;
- Trade Area residents - $21m to $24m;
- New residents within the proposed development - $400,000 to $600,000; and
- Further expenditure generated by hospital visitors, tourists and university students.

The above demonstrates that there is more than sufficient expenditure to support the retail component of the proposed development.

7.6.4 IMPACT ASSESSMENT

ECONOMIC IMPACTS OF RETAIL FLOORSPACE

Assuming development proceeds, the net increase in retail turnover of $27.6m will be captured from competing retail centres. In order to quantify the scope of this turnover capture from existing competing centres Hill PDA prepared a bespoke gravity model. The gravity model was designed on the premise that the level of redirected expenditure from a centre is directly proportional to the turnover of that centre and indirectly proportional to the square of the distance from the subject site.

Results of the model and further analysis undertaken in the economic impact assessment concluded that:

Any retail provided for by the proposed development will form an extension to existing retail provision along the Great Western Highway and therefore will be part of the Kingswood retail centre and part of the Kingswood Specialised Centre. As a result, the redirection of turnover to an expanded Kingswood retail centre and the subsequent impacts on surrounding locations was examined and is represented in table 9 below:

TABLE 9: REDIRECTION OF TURNOVER FROM EXISTING CENTRES ($m2009)

Retail Centre	Distance from Subject Site (km)	Approx. Retail Floor Space*	Turnover in 2009	Turnover in 2013 without Proposal	Turnover in 2013 with Proposal	Immediate Shift in Turnover	% Shift in Turnover in 2013	Shift in turnover from 2009 to 2013	% Shift in turnover from 2009 to 2013
Proposed Centre					27.6	27.6			
Kingswood Gt Westn Hwy		5,450	24.5	26.9	25.4	-1.5	-5.5%	0.9	3.5%
Total Kingswood Centre		**5,450**	**24.5**	**26.9**	**53.0**	**26.1**	**97.2%**	**28.5**	**116.0%**
Penrith	2.0	121,500	750.0	821.4	807.4	-14.1	-1.7%	57.4	7.6%

Retail Centre	Distance from Subject Site (km)	Approx. Retail Floor Space*	Turnover in 2009	Turnover in 2013 without Proposal	Turnover in 2013 with Proposal	Immediate Shift in Turnover	% Shift in Turnover in 2013	Shift in turnover from 2009 to 2013	% Shift in turnover from 2009 to 2013
CBD (excl. Centro)									
Centro Nepean	2.6	20,100	170.8	187.0	184.6	-2.4	-1.3%	13.8	8.1%
Penrith South (Smith St)	2.9	1,400	7.4	8.1	7.9	-0.1	-1.6%	0.6	7.7%
Bringelly Road Kingswood	1.5	1,250	5.9	6.5	6.4	-0.1	-1.1%	0.5	8.3%
Centro Lennox	6.0	9,050	77.5	84.9	84.5	-0.4	-0.5%	7.0	9.0%
Emu Plains Claremont Meadows Shopping Centre	3.9	1,500	12.2	13.3	13.1	-0.2	-1.4%	1.0	7.9%
Cranebrook Shopping Centre	6.0	2,450	15.5	17.0	16.9	-0.1	-0.5%	1.4	8.9%
Glenmore Park Town Centre	7.8	6,250	65.0	72.6	72.3	-0.3	-0.3%	7.3	11.3%
Manning St Kingswood	2.0	750	4.1	4.5	4.5	0.0	-0.7%	0.4	8.7%
Kingswood Park Shopping Centre	2.0	2,150	16.1	17.6	17.1	-0.6	-3.2%	1.0	6.0%
Oxford St Cambridge Park	2.0	2,200	10.8	11.8	11.6	-0.2	-1.9%	0.8	7.4%
Southlands Shopping Centre	2.9	6,300	50.0	54.8	53.7	-1.1	-1.9%	3.7	7.4%
Stafford St (South Penrith)	2.0	1,000	5.4	5.9	5.7	-0.2	-2.6%	0.4	6.7%
Cambridge Gardens Shopping Centre	2.1	3,600	31.3	34.3	33.0	-1.4	-4.0%	1.6	5.1%
Werrington - Victoria St & Station	4.5	2,750	16.0	17.6	17.4	-0.2	-0.9%	1.4	8.5%
Werrington Shopping Village	4.1	6,200	36.2	39.6	39.4	-0.3	-0.6%	3.2	8.8%
St Marys	5.8	43,000	210.0	230.0	228.7	-1.3	-0.6%	18.7	8.9%
Other Localities						-3.5			
TOTAL		**236,900**	**1,508.7**	**1,653.7**	**1,657.1**	**-0.1**	**0.2%**	**148.4**	**9.8%**

Assuming retail on site is provided by 2013, the increase in retail turnover of $27.6m from the provision of an ALDI supermarket and associated specialties will be captured from existing retailers both within and outside the trade areas. For example $14.1m will be drawn from Penrith CBD, $2.4m from Centro Nepean, $1.5m from existing retailers in Kingswood along the Highway and so on.

As shown no one centre will experience an immediate loss of more than 10%. An immediate loss of less than 10% is considered to be below moderate and considered reasonable within the boundaries of competitiveness. At these levels it is highly unlikely that any retail centre would suffer social detriment and significant closures.

The negative impacts described above are immediate and do not consider growth in expenditure over time as a result of demographic trends, household growth and increasing affluence. Therefore, the immediate negative impacts are lessened by real growth in turnover from 2009 to 2013. All centres are expected to enjoy increased turnover if there are no further additions to supply other than the subject site.

Taking into consideration the estimated turnover captured by the proposed development, by 2013 most centres will experience an increase in trade. For example Penrith CBD will benefit from a 7.6% increase in turnover, Bringelly Road 8.3% increase in turnover and so on.

ECONOMIC IMPACTS ON KINGSWOOD

The impact modelling results suggests that the existing retailers in Kingswood on the Great Western Highway will be negatively impacted by the proposed development with an immediate loss in turnover of 5.5%. This is probably a near worst case scenario because the

impact modelling does not allow for retailers on the Highway to develop a potential nexus relationship with the proposed centre. With a new anchor on the subject site (ALDI) and the railway station 600m to the east it's expected that additional pedestrian traffic will benefit existing retailers.

There are no supermarkets or suitable anchor retailers in the Primary Trade Area or suburb of Kingswood. The ALDI store is expected to bring more shoppers into the immediate locality which is likely to have some benefit for existing businesses. Demand for a supermarket is supported by resident expenditure generated from the Primary Trade Area alone. The fact that ALDI would locate a new food store only 650m to the east of an existing ALDI store in Penrith is testimony to this undersupply.

In terms of assessing economic impacts, previous court judgements such as *"Fabcot Pty Ltd v Hawkesbury City Council (97) LGERA" and "Cartier Holdings Pty Ltd v Newcastle City Council and Anor [2001] NSWLEC 170"* have provided some guidance on relevant issues. The Land & Environment Court has stated that Councils should not be concerned about competition between individual stores as this is a matter of fair trading. It should however concern itself with impact on established retail centres. In applying this principle to the subject site the conclusion is that the overall impact will be net positive.

ECONOMIC IMPACTS OF COMMERCIAL FLOORSPACE

The Concept Plan for Stage 1 indicates the proposed development will accommodate 19,738sqm of commercial floorspace. It is expected that the majority of occupiers will be medical businesses, such as pharmaceutical firms, pharmacy/chemist, orthodontics, ophthalmic, cosmetic, plastics, equipment, radiology, and specialist rooms.

The University of Western Sydney, the Nepean Public Hospital and Private Hospital have expressed interest in approximately 15,000m^2 of floor area for:

1. E health facility
2. Hotel/ step down patient facility
3. Virtual medical theatre
4. Medical suites for specialists

These uses will clearly be synergistic with the existing uses in the immediate locality and will develop a strong nexus relationship with the Hospital.

The impacts from the commercial space will clearly be net positive. It will deliver additional employment and expand the role of Kingswood as the primary medical centre for Outer Western Sydney. The additional employment will further generate additional expenditure in the locality which will support the existing and proposed retail space. The subject site should be promoted and supported for higher density employment uses not just because of the Hospital but because of its strong integration with public transport being only 600m from Kingswood Station.

7.6.5 IMPACT ON RETAIL HIERARCHY

The Penrith City Centres Hierarchy Interim Policy (2007) not only describes the various centres within Penrith LGA, but nominates their role and quantum of retail and commercial floorspace. The Hierarchy nominates the retail centre of Kingswood together with the Nepean Hospital Precinct as a single Specialised Centre. That is, any retail within the Hospital Precinct is part of the overall Kingswood centre.

The Policy notes that the Kingswood Specialised Centre provides "specialised uses that perform vital economic and employment roles across the metropolitan area." As a result, any retail provided for by the proposed development will form an extension to existing retail provision at Kingswood and therefore be part of the Kingswood Specialised Centre as identified under the Interim Policy.

By comparison, as outlined in Section 3.2 of this report, under the Draft North West Subregional Strategy (2006-2031) Kingswood is considered a Small Village. Within the Draft Strategy a Small Village is described as:

> *"A small strip of shops and an adjacent residential area within a 5 to 10 minute walk. Contain 150 to 900 dwellings."*

Notwithstanding, the exclusion of the Nepean Hospital Precinct in this instance, the proposed development should still be viewed as an extension to the existing Kingswood Small Village Centre. The inclusion of an ALDI food store and additional specialty retailers will raise the profile of Kingswood to a Village Centre with a stronger influence in the immediate area. It will provide a food and grocery destination shopping centre for the residents of Kingswood south of the Highway where currently none exists.

Furthermore, as shown in earlier section of this report no one centre is expected to be severely impacted by the proposed development and all centres are expected to enjoy increased turnover levels over the next three years. Hence there will be no adverse impacts on the retail hierarchy.

7.6.6 ECONOMIC BENEFITS OF PROPOSED DEVELOPMENT

MULTIPLIER EFFECTS FROM CONSTRUCTION

The construction industry is a significant component of the economy. The industry has strong links with other sectors, so its impact on the economy go further than the direct contribution of construction. Multipliers refer to the level of additional economic activity generated by a source industry.

There are two types of multipliers:

Production induced made up of:

- First round effect: which is all outputs and employment required to produce the inputs for construction; and
- An industrial support effect: which is the induced extra output and employment from all industries to support the production of the first round effect.

Consumption induced: which relates to the demand for additional goods and services due to increased spending by the wage and salary earners across all industries arising from employment.

The source of the multipliers adopted in this report is ABS and Australian National Accounts: Input-Output Tables 1996-97 (ABS Catalogue 5209.0). These tables identify first round effects, industrial support effects and consumption induced multiplier effects at rates of $0.466, $0.438 and $0.962 respectively to every dollar of construction.

Therefore at an estimated cost in construction of $82m (stage 1) will generate a further $74m of activity in production induced effects and $79m in consumption induced effects. Total economic activity generated by the construction of the proposed development is therefore approximately $235m.

Note that the multiplier effects are national, and not necessarily local. The ABS notes that *"Care is needed in interpreting multiplier effects; their theoretical basis produces estimates which somewhat overstate the actual impacts in terms of output and employment. Nevertheless, the estimates illustrate the high flow-on effects of construction activity to the rest of the economy. Clearly, through its multipliers, construction activity has a high impact on the economy."*

EMPLOYMENT GENERATION

The proposed development will generate employment in two ways – through construction and through retail and commercial operations. It is estimated that one full time construction position for 12 months is created for every $178,900 of construction work undertaken.

Hill PDA has been advised the estimated total construction cost of the proposed development (Stage 1 and 2) is around $109m (inclusive of GST) and will take around 3 years to construct once approved. The estimated construction cost of Stage 1 is $82m (inclusive of GST) and will take 2 years to construct. As a result, Stage 1 will create 419 job years directly in construction related activities and 1,723 total job years in the local economy.

The operation of the supermarket (1,535sqm), specialty stores (2,004sqm) and commercial office (19,738sqm) within the development post completion will also generate employment.

Applying the rate of one full and part time job per 21.3sqm (GFA) of supermarket and grocery floorspace and one job per 30sqm (GFA) for specialty stores the retail component of the development will generate around 130 to 135 full time and part time jobs.

Assuming one job is generated per 30sqm (GFA) of commercial floorspace, the commercial component of the development will generate around 650 to 660 commercial office jobs.

Furthermore, there are around 0.44 jobs to 1 room in a serviced apartment building. Given that Stage 1 of the development includes 84 serviced apartments (possibly Aged Care), it can be assumed that around 40 jobs will be generated.

As a result, Stage 1 of the proposed development will generate up to 800 full time and part time jobs post construction.

SHOPPER CONVENIENCE

The proposal will offer an alternative shopping destination and a choice of products at competitive prices. The proposal will provide a level of service commensurate with the needs of the local population and is an appropriate response to the needs of the growing demand for retail space in the defined trade area.

SUSTAINABILITY

The proposed development is well situated to provide sustainable alternatives for shoppers, employees and Hospital visitors to private car use. The site is also located within an area proposed for higher density uses including residential and commercial and therefore provides important local retail amenities for existing and future occupiers without the need to travel.

IMPROVED RETAIL OFFER AND INCREASED COMPETITION

The retail element of the new development will provide an improved range of goods and services for local residents. Not only would the range of shops and services improve, but increased competition between retailers is widely acknowledged beneficial for consumers.

MEET EXISTING AND FUTURE DEMAND FROM HOSPITALS

The existing hospitals already generate significant retail demand from existing staff, patients and visitors. This demand is only expected to increase as both hospitals, but particularly the Nepean Public hospital, commence the significant capital works program that they have planned and committed to.

Importantly, none of the hospitals future planning seeks to provide the type of retail services contemplated by the subject development

As such the subject development will meet not only the existing demand but future retail demand from the adjacent hospitals precinct. There is considered no other opportunity available to meet this demand.

INVESTMENT STIMULUS

Where a major property investment decision has been made it is generally viewed as a strong positive commitment for the local area. Such a major investment will in turn stimulate and attract further investment to the immediate area.

In economic terms the value of this stimulus is often difficult to directly quantify and the effects are often not realised for many years after facilities and infrastructure have been built and are operational. Nevertheless investment, like that of the proposed scale, will help raise the profile of the local area, as a place to live, shop, work and invest. This can only be viewed as positive.

7.7 SOCIAL IMPACT

7.7.1 PROVIDES HOUSING DIVERSITY

The Penrith LGA is characterised by a predominance of traditional, detached dwelling houses which do not meet the diverse housing needs of an increasingly diverse community and household units.

The development seeks to directly address this lack of diversity by providing diverse housing types, including serviced apartments and 1-2 bedroom units that are currently not widely available within the LGA.

The housing typology may prove attractive to a range of demographic household units including empty nesters, first home buyers, sole parents, single person households, students and workers in the health industry etc as it provides secure and accessible housing.

This ensures that that the development will meet the housing needs of community members over the full span of their life cycle and will therefore allow them to age in place.

For these reasons the development is considered to have a positive social impact upon both the local and regional community.

7.7.2 CAPTURE SOCIAL CAPITAL

The Penrith region is characterised by an imbalance between population and local employment opportunities resulting in a need for many residents to commute daily from the region.

The provision of significant local employment opportunities will lessen the need of residents to commute and therefore allows them to be more fully engaged in their local communities thereby capturing the full value of their social capital.

7.8 INFRASTRUCTURE + SERVICES

7.8.1 STORMWATER

The existing site is split into two main catchments that drain to separate discharge points to the east and west of the site. Upstream of the site, it is bounded by the Great Western Highway to the North and Parker St to the west where the kerb and gutter acts as a flow boundary and effectively prevents these external catchments from affecting the site. The only external catchment affecting the site is the potential for some minor roof gutter overflow from the Nepean Private Hospital site which can be channelled to Barber Ave to the south without difficulty.

A stormwater drainage concept report and plan has been prepared for the proposed development and is located at Appendix L. A summary of the proposed stormwater drainage system is provided below:

- In accordance with the NSW Floodplain Development Manual and generally accepted engineering practice, it is not advisable to divert stormwater flows from one catchment to another as this may lead to an increase in the impacts of flooding on downstream property where flows have increased. For this reason existing stormwater discharge rates from the east and west catchments will be maintained post development.

- Drainage from the roof areas of Stage one will be collected in two onsite detention storage tanks located within the building structure that will discharge separately from the East and West catchments. A combined total of approximately 122 cubic metres storage is to be provided to detain developed peak flows up to the 100 year ARI event. Preliminary calculations have been undertaken using the DRAINS software package to determine the required level of detention storage however detailed modelling will be required to size the detention storage once a more thorough design of the development is undertaken.
- Drainage from the podium level areas is to be captured by separate pit and pipe systems and conveyed to the identified outlets for the East and West catchments. This system shall be sized to drain all storms up to and including the peak 20 year ARI event.
- Podium drainage from the West catchment is to be captured and conveyed to the existing drainage system within Barber Avenue. Podium drainage from the East catchment is to be conveyed to the south eastern corner of the site where legal connection to the existing Hospital drainage system within the car park will shall be made via an easement for drainage. Further detailed investigations of the hospital drainage network are to be undertaken to identify the most appropriate connection point and the location of the required easement. It is understood that a water retention system is incorporated into the design of the existing hospital stormwater network. Detailed design is to investigate and provide appropriate measures to ensure that the downstream drainage network is not impacted by an increase in peak flows at any particular location in the network due to the proposed development.

- Flow paths within the external podium areas must be provided to ensure that the flows from the 100 year event can be safely channelled from the site without inundating habitable floor space. Overland flow paths shall be required to be of sufficient capacity to cope with a blockage of the OSD system and the podium drainage network. Finished floor levels shall be set above the calculated 100 year ARI water level within the development in accordance with Council requirements.

7.8.2 UTILITIES

All utility authorities have been consulted as part of the design process. The outcomes of those consultations are provided in detail as part of Appendix L and in summary below:

WATER

A 250mm diameter Sydney Water water main is located along the northern side of Barber Avenue. *Sydney Water* has indicated in the Section 73 Feasibility that this water main is to be used to supply potable water to the development and has the capacity to cater for the proposed development.

SEWER

There is a network of 150mm diameter sewer mains surrounding the proposed property boundary. *Sydney Water* has indicated in the Section 73 Feasibility Study that the preferred sewer connection point is to directly north of the existing Nepean Private Hospital and that the sewer connection point has sufficient capacity to cater for the proposed development.

GAS

A 50mm diameter medium pressure gas main is located in Barber Avenue. It is envisaged that gas supply to the proposed development will be supplied via this gas main.

Jemena gas authority have indicated that gas supply is available for the site, however a formal submission needs to be made during detailed design to confirm the capacity in the existing gas supply network.

ELECTRICITY

The development will be provided with HV reticulated underground cable to allow future interconnection of Indoor substations for Building A and Kiosk substation for Building B serving the developments.

- Maximum Demand for the proposed Stage 1 (Building A & B) is as follows:
- Building A – 2710 KVA served by indoor substation
- Building B- 990 KVA served by kiosk substation

Based on Integral Energy's desktop assessment, a new dedicated feeder from Kingswood Zone Substation will be required for the development.

COMMUNICATIONS

The development will be provided with underground communication services. Communication services will enter into the site from Barber Avenue allowing future interconnection to the Main distribution Frames for Building A and B. Pits will be strategically located in compliance with the communication authority

Telstra are obligated under their universal services to provide base telephony services to the development via their existing infrastructure.

A formal application has been registered with Telstra Smart community for the Stage 1 development.

7.9 ACOUSTIC + VIBRATION IMPACTS

The site is located adjacent to an arterial road and in relatively close proximity to a heavy rail line and so may be exposed to acoustic and vibration impacts.

Similarly, the site adjoins a hospital which presents different noise receptor sensitivities to that of adjacent residential development.

A detailed acoustic and vibration assessment was undertaken by Acoustic Logic and is provided at Annexure K. That report provides the results of their acoustic assessment for the proposed development. Key finding are provided below.

7.9.1 NOISE IMPACT ASSESSMENT

Noise at the site has been measured and noise goals have been set in accordance with the Director Generals Requirements. An assessment of noise emissions has been conducted with reference to the Penrith City Council and DECCW acoustic requirements.

The assessment reveals that provided the identified construction recommendations as set out in that report are adopted, primarily glazing and acoustic seals, then it considered that noise impacts on the proposed development will be acceptable.

7.9.2 VIBRATION ASSESSMENT

Railway vibration and train and traffic noise intrusion into the proposed mixed use development has also been assessed. The assessment has been conducted in accordance with the requirements of NSW Government Department of Planning "Development Near Rail Corridors and Busy Roads"- Interim Guideline and The Australian Standard AS2107 and council requirements.

This assessment reveals that internal level of human comfort will comply with the relevant criteria without any additional treatments.

Again, provided noise intrusion recommendations are adopted external noise impacts will be satisfactory.

7.9.3 NOISE EMISSIONS ASSESSMENT

The development itself also has the potential to generate noise emission impacts both on proposed residential development and the adjacent hospital.

Noise emissions from the development, particularly mechanical plant and the loading dock have therefore been assessed. The assessment concludes that the following measures if implemented would suitably mitigate any impact:

> **Mechanical Plant:** Detailed review of all external mechanical plant should be undertaken at construction certificate stage (once plant selections and locations are finalised). Acoustic treatments should be then determined in order to control plant noise emissions to the levels identified.
>
> **Loading Dock:** Should only be used during business hours (between 7am and 10pm).

7.9.4 CONSTRUCTION NOISE ASSESSMENT

With any major construction site there will be noise associated with demolition and construction. The management of impacts arising from these activities is now routine practice, both to address impacts to surrounding properties, and for commercial reasons, to limit impacts on nearby tenancies.

The development and implementation of appropriate Noise Management Plans during that phase should suitably mitigate those impacts.

7.10 CONTAMINATION

A Phase 1 Environmental Site Assessment was undertaken by Environmental Investigation Services and is provided at Appendix M. This assessment concludes that the site can be made suitable for the proposed development provided that the following recommendations are implemented:

- Undertake a preliminary Phase 2 environmental site assessment to include sampling and analysis of soil and groundwater
- Undertake an inspection of the existing buildings prior to demolition, to assess the potential use of hazardous construction materials such as asbestos, lead and PCB's
- If contamination and/or hazardous construction materials are encountered prepare a remediation action plan (RAP) for the proposed development. The RAP will provide remedial

procedures to be followed during the proposed development works.

- Undertake a validation assessment for the remedial works undertaken at the site and prepare a validation report.

7.11 FLORA + FAUNA IMPACTS

The site has been largely cleared of vegetation and now only contains relatively isolated and scattered trees, inclusive of exotic or garden type tree species located around the curtilage of the built forms. The location of these trees is also shown on the survey plan.

Vegetation on site is not identified as having any ecological significance or even local character values and does not support any native fauna habitat of any significance.

Accordingly the development can not be considered to cause any adverse impact on the flora and fauna values of the locality or region.

7.12 HERITAGE

Neither the site nor the immediate area accommodates any items of environmental or cultural heritage that would otherwise constrain development of the site.

7.13 CONTRIBUTIONS

Penrith City Councils s.94 contribution Plans that are relevant to the subject site, create a nexus between new residential development and the demand for new infrastructure. Stage 1 of the development does not provide any permanent residential development and therefore would not attract s94 contributions.

Contributions for Stage 2 of the development will be resolved as part of the advancing of that development element during its relevant Project Application stage.

However, Stage 1 still does generate a scope of works that demands local infrastructure works. These are identified below:

- Great Western Highway footpath widening
- Provision of street trees to all street frontages
- GWH and Parker St Intersection improvements as identified at Appendix E of the TMAP to RTA requirements

The footpath and street tree elements will be provided as 'works in kind' contribution as detailed by a Voluntary Planning Agreement (VPA).

A second VPA will also outline details of the monetary contribution required to be made to the RTA for the identified intersection works.

8.0 DRAFT STATEMENT OF COMMITMENTS

In accordance with the Director-General's Environmental Assessment Requirements, the proponent is required to include a Draft Statement of Commitments in respect of environmental management and mitigation measures on the site. The following are the commitments made by the proponent:

8.1 PUBLIC DOMAIN + LANDSCAPING

- A publicly accessible through-site link will be provided and maintained between the Great Western Highway and Barber Ave
- Lighting to pedestrian plaza will be provided to the relevant Australian Standard
- A public domain and landscape implementation report shall be prepared and submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate
- All elements of the public domain and landscaping will be maintained by the proponent throughout the life of the development

8.2 TRANSPORT AND ACCESSIBILITY

- The proponent will make a monetary contribution to the RTA via a Voluntary Planning Agreement (VPA) for the identified improvements of the Great Western Highway and Parker St intersection
- The proponent will widen the footpath at the southern side of the Great Western Highway from across the frontage of the development
- The proponent will prepare and implement a Transport Access Guide for the development that will outline how the development will reduce private vehicle usage by 10%
- The access and internal design aspects of the development are acceptable and individual Project will comply with AS 2890.1 and AS 2890.1
- A construction Traffic Management Plan will be prepared prior to the issuing a construction certificate

8.3 NOISE MANAGEMENT:

- A construction Noise Management Plan will be prepared prior to the issuing a construction certificate
- All glazing will be provided as per Table 3 of the Acoustic Assessment report prepared by *Acoustic Logic*
- A detailed review of all external mechanical plant should be undertaken at construction certificate stage (once plant selections and locations are finalised). Acoustic treatments should be then

determined in order to control plant noise emissions to the levels identified

- The Loading Dock shall only be used during business hours (between 7am and 10pm)

8.4 STORMWATER

- Two separate detention storage tanks with a total volume of 122 cubic meters will be provided to limit post development discharges from the site to less than pre developed flow rates
- Further investigations and detailed design will be undertaken prior to the Construction Certificate is required to provide for the safe carriage of overland flows generated within the site during major storm events and to ensure that the finished floor levels of habitable floor space are at a sufficient height above defined flow paths to avoid inundation
- Further investigation and detailed design will be undertaken prior to the Construction Certificate is required to identify the capacity of the drainage network servicing the Nepean Private Hospital and at what location a legal piped connection draining from the Eastern catchment of the proposed development can be made
- Sediment and erosion control during the construction phase will be managed generally in accordance with the plan included in Appendix C of the Stormwater Management and Utilities Report prepared by *Hyder*

8.5 CONTAMINATION

- Undertake a preliminary Phase 2 environmental site assessment to include sampling and analysis of soil and groundwater
- Undertake an inspection of the existing buildings prior to demolition, to assess the potential use of hazardous construction materials such as asbestos, lead and PCB's
- If contamination and/or hazardous construction materials are encountered prepare a remediation action plan (RAP) for the proposed development. The RAP will provide remedial procedures to be followed during the proposed development works
- Undertake a validation assessment for the remedial works undertaken at the site and prepare a validation report

8.6 ESD

- Energy modelling will be performed during the design stage to assess the energy efficiency of the building and to assist in optimising the design
- A Building User's Guide which includes information on Energy and Environmental Strategy, Monitoring and Targeting, Building Services, Transport Facilities, Materials and Waste Policy, and Expansion/Re-fit Considerations will be supplied to all users of the building
- There will be a contractual requirement with the contractor to have an Environmental Management Plan (EMP) and have an ISO 14001 Environmental Management System Accreditation applicable to the building

- The proponent will commit to a firm 12 month commissioning building tuning period after handover with minimum of quarterly reviews
- A comprehensive waste management plan will be implemented with 60% of all waste by weight being recycled or reused. A dedicated on-site waste management area will be established to sort and segregate the waste. Waste skips or bins will be provided for the following materials;
  - Cardboard
  - Timber
  - Metal
  - Soft Plastic
  - Polystyrene
  - Insulation
  - Concrete
  - Glass
  - Bricks

  Records will be kept by the contractor to demonstrate the actual percentage of waste recycled
- To reduce the embodied energy and resource depletion associated with the development 30% of in-situ, 20% of pre-cast and 15% of stressed concrete will be substituted with industrial waste product or oversize aggregate
- A dedicated storage area will be provided for the separation, collection and recycling of office consumables. The storage area will be located in the basement next to the lift shaft to provide easy access for all building occupants and recycling companies. The storage area will provide recycling bins for the following waste streams, paper, glass, plastics, metals and organic (compost) materials

- The carpark has been designed at the minimum planning allowance to assist in reducing the number of cars. In the carpark 10% of the carparks will be dedicated solely for small cars, carpool participants or hybrid/alternative fuel vehicles
- Secure cyclist facilities will be provided to accommodate 10% of the building staff. The facilities will include secure bicycle storage and lockers, accessible showers with changing facilities. Visitor bicycle storage will be provided in an accessible location, signposted near the main public entrances
- A Green Star Accredited Professional will have intimate involvement during the design stage to assist in implementing all of the ESD initiatives

8.7 ACCESSIBILITY

- Residential serviced apartment passenger lifts will have a 1400mm x 1600mm internal dimension (travel more than 12m), compliant with the DDA Access Code 2010 Table E3.6 (b)
- The development will provide 9 x accessible serviced apartments under DDA Access Code
- 5 (2%) of the total amount of retail car parking to be made available as wheelchair accessible, compliant with the DDA Access Code 2010
- 5 (1%) of the total amount of commercial car parking to be made available as wheelchair accessible, compliant with the DDA Access Code 2010

- The development will provide 9 x accessible residential carparking bays allocated for this development, compliant with the DDA Access Code 2010 Table D3.5

8.8 ELECTROLYSIS FROM RAIL OPERATIONS

- Prior to the issue of a Construction Certificate the proponent will engage an Electrolysis Expert to prepare a report on the Electrolysis Risk to the development from stray currents. The proponent will incorporate in the development all the measures recommended in the report to control that risk. A copy of that report will be provided to the Principal Certifying Authority with the application for a Construction Certificate

9.0 JUSTIFICATION + CONCLUSION

The subject development proposal represents a significant urban renewal initiative of land that forms part of the Nepean Health Precinct. This precinct has been identified by both state and local agencies as a major focus for new employment growth in the LGA and sub region.

The development has been advanced in response to considerable demand for new commercial and retailing space that would enhance, complement and synergise with the existing public and private hospitals.

The development takes advantage of the site's excellent proximity to regional transport linkages and regional institutional facilities inclusive of Nepean District Hospital, The University of Western Sydney and Kingswood TAFE which all play a key role in the local community.

It is therefore considered that the proposed development is complementary to this aspiration of Penrith Council and the State Government to see Kingswood emerge into a specialised Health Precinct, and its mixed use nature will deliver the services and amenity that might otherwise take considerably longer to achieve.

The development also provides a significant contribution to housing and employment targets identified for the Penrith Regional City in the Metropolitan and sub-regional strategies.

The development is therefore considered to be entirely consistent with both local and state strategic planning initiatives for the local area and region in particular by providing a truly mixed use development that builds upon the specialised economic centre categorisation of the Kingswood business centre and its health precinct.

The development also presents significant opportunity for design and environmental innovation and a detailed environmental assessment has not revealed any likelihood of significant adverse impact.

Given the environmental planning merits described above, and significant public benefits proposed, it is requested that the Minister approve both the Concept Plan and Project Plan under the relevant provisions of the Environmental Planning & Assessment Act, 1979.

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

Appendix G

Appendix H

Appendix I

Appendix J

Appendix K

Appendix L

Appendix M

Appendix N

Appendix O

Appendix P

Appendix Q

Appendix R