

**Environmental Assessment**

**Proposed Extension of Kareena Private Hospital**

Prepared for Ramsay Health Care Ltd

9 December 2008

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ARCHITECTURE INTERIOR DESIGN LANDSCAPE ARCHITECTURE PLANNING URBAN DESIGN

## **Contents**

### **i Statement of Validity**

### **ii Executive Summary**

#### **01 Introduction**

- 1.1 Purpose of the Report
- 1.2 Background to Kareena Private Hospital
- 1.3 Background to Approvals Process

#### **02 Description of the Site**

- 2.1 Site Location
- 2.2 Established Land Uses
- 2.3 Regional Context

#### **03 Description of the Proposal**

- 3.1 Project Objectives and Need
- 3.2 Extension of Existing Hospital Building
- 3.3 Building Height and Floor Space
- 3.4 Vehicular and Pedestrian Access Arrangements
- 3.5 Statement of Design Intent
- 3.6 Materials and Finishes
- 3.7 Air Conditioning / Roof Plant
- 3.8 Associated Landscaping
- 3.9 Signage
- 3.10 Operations
- 3.11 Utilities and Services
- 3.12 Construction Process

#### **04 Environmental Assessment**

- 4.1 Suitability of the Site
- 4.2 Sydney Metropolitan Strategy- City of Cities: A plan for Sydney's Future 2005
- 4.3 Draft Subregional Strategy- Southern Region
- 4.4 The Public Interest
- 4.5 Social Benefits
- 4.6 Economic Benefits
- 4.7 Environmental Planning Instruments
- 4.8 Urban Form

## **Contents**

- 4.9 Environmentally Sustainable Design Measures
- 4.10 Waste Management
- 4.11 Utilities and Services
- 4.12 Acoustic
- 4.13 Transport, Traffic and Access Impacts
- 4.14 Construction Impacts
- 4.15 Operational Impacts
- 4.16 Crime Prevention through Environmental Design (CPTED)
- 4.17 Landscape
- 4.18 Potential Amenity Impacts on Neighbours
- 4.19 Consultation

### **05 Draft Statement of Commitments**

- 5.1 Environmentally Sustainable Development
- 5.2 Management of Construction Noise, Vibration, Dust and Erosion
- 5.3 Management of Construction Waste
- 5.4 Management of Construction Traffic
- 5.5 Management of Operational Noise
- 5.6 Energy Efficiency and Greenhouse Gas Emissions
- 5.7 On Site Bicycle Parking
- 5.8 Signage

### **06 Conclusion**

#### **Appendices**

- Appendix A Architectural Drawings– HASSELL
- Appendix B DG Environmental Assessment Requirements
- Appendix C Minister Declaration
- Appendix D Construction Management Plan – AKALAN
- Appendix E Storm Water Drainage Statement- Thomas Taylor Whitting
- Appendix F Acoustic Assessment – Wilkinson Murray
- Appendix G Traffic and Parking Assessment Report – ARUP

## Contents

Appendix H	Landscape Plan - HASSELL
Appendix I	Waste Management -KPH
Appendix J	Shadowing Diagrams - HASSELL
Appendix K	Photomontages- HASSELL
Appendix L	Crime Prevention through Environmental Design (CPTED) Report- HASSELL
Appendix M	Building Code of Australia Statement- McKenzie Group
Appendix N	Utility and Services Report- Connell Wagner
Appendix O	Obtrusive Lighting Report- Connell Wagner
Appendix P	Consultation Letter
Appendix Q	Hydraulic Services Drawings and Report- GDK Hydraulics Consulting

## i Statement of Validity

Submission of Environmental Assessment

*Prepared under Part 3A of the Environmental Planning and Assessment Act 1979.*

### **Environmental Assessment prepared by**

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### **Applicant & Land Details**

**Applicant** Ramsay Health Care Ltd  
C/O HASSELL  
**Subject site:** Kareena Private Hospital  
86 Kareena Road (North), Caringbah  
**Lot & DP** Lot 1 DP 203024  
Lot 2 DP 203024  
Lot 3 DP 650201  
Lot Y DP 417162  
Part Lot 2 DP 20431  
Part Lot 4 DP 20431  
Lot 101 DP 814378  
Lot 102 DP 814378  
Lot 6 DP 20431  
Lot 26 DP 21004 (439 Kingsway)

### **Project Summary**

Expansion of Kareena Hospital to support an additional 67 beds associated administrative facilities, refurbished rehabilitation department, additional 29 on site car parking spaces and associated landscaping and signage.

### **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 Regulation and that, to the best of my knowledge, the information contained in this report is not false or misleading.

### **Signature**

**Name** Bridget Jarvis  
**Date** 13 January 2009

## ii Executive Summary

Kareena Hospital has a well-deserved reputation in the provision of medical care; however, its services are being compromised by outdated building stock and plant that is nearing the end of its useful life. As a result, key facilities within the hospital need to be expanded, as they are now insufficient to meet the standards expected and demanded.

The Kareena Private Hospital currently provides a range of medical facilities to the Sutherland Shire community, with the majority of patients (83.5%) being residents of Sutherland Shire Council. However the hospital is regularly operating at 100% capacity and has not had the capability to accommodate further growth due to the limitations in bed capacity and theatre capacity. When at capacity, patients may need to be transferred out of Sutherland Shire for care.

This Major Project application is seeking:

- Concept Approval for the rezoning of Lot 26 DP21004 (439 Kingsway) from Local Housing to Zone 12 - Special Uses (Medical Facility), to enable the use of this land for parking associated with the Kareena Private Hospital; and
- Project Approval for all works associated with the proposed expansion of the existing Hospital to support an additional 67 beds, extension of theatre suite at ground floor; associated administrative facilities, 29 on site car parking spaces and associated landscaping and signage.

The subject site is located at 86 Kareena Road, Caringbah (corner of Kareena Road (North) and Kingsway). The site has an approximate area of 9,600 square metres and slopes away from the Kingsway frontage. Vehicular access to the site is provided via Kareena Road.

- The established use and function of the site and the growing demand for medical facilities within Sydney Metropolitan Area.
- A small portion of the site is zoned in accordance with the adjacent residential zone and is pending a rezoning (submitted to Sutherland Shire Council on 31/07/07 Application R2N07/0001). This Concept Application requests the Minister's consent for variation to the Sutherland Shire LEP in accordance with Section 750 (3) and Section 75R (3A) of the Environmental Planning and Assessment Act to facilitate the rezoning of this land.
- The built form, landscape and overall urban design response is considerate of the surrounding residential development and will ensure maintained amenity.
- This Project Application seeks the use of Section 75J (3) (and 75R) of the Environmental Planning and Assessment Act 1979 to vary the building height development standard.
- The provision of 127 on-site parking spaces exceeds that required by the Sutherland Shire DCP (2006).
- The loading area has been reconfigured to reduce any potential conflict between passing cars and service vehicles.

When assessed against all relevant matters in the Director General Environmental Assessment Requirements, and Section 3A of the Environmental Planning and Assessment Act the Concept Approval and Project Application are considered to be acceptable and worthy of approval.

## 01 Introduction

### 1.1 Purpose of the Report

This Environmental Assessment has been prepared for Ramsay Health Care Ltd. It accompanies a Major Project application for the extension of Kareena Private Hospital located at 86 Kareena Road, Caringbah.

Kareena Hospital has a well-deserved reputation in the provision of medical care; however, its services are being compromised by outdated building stock and plant that is nearing the end of its useful life. As a result, key facilities within the hospital need to be expanded, as they are now insufficient to meet the standards expected and demanded.

This Major Project application is seeking:

- Concept Approval for the rezoning of Lot 26 DP21004 (439 Kingsway) from Local Housing to Zone 12 - Special Uses (Medical Facility), to enable the use of this land for parking associated with the Kareena Private Hospital; and
- Project Approval for all works associated with the proposed expansion of the existing Hospital to support an additional 67 beds, extension of theatre suite at ground floor; associated administrative facilities, 29 on site car parking spaces and associated landscaping and signage.

The Environmental Assessment specifically responds to the Director General's Environmental Assessment Requirements (dated 29/09/08, refer Appendix B), and is supported by the following specialist documentation:

- Site and architectural plans prepared by HASSELL;
- Shadow Diagrams prepared by HASSELL;
- Photomontage prepared by HASSELL;
- Construction Management Plan prepared by Ramsay Health Care Ltd;
- Landscape Plans prepared by HASSELL;
- Parking and Traffic Assessment prepared by ARUP;
- Stormwater Management Statement and plans prepared by Thomas Taylor Whitting;
- Hydraulic Services Drawings and Report prepared by GDK Hydraulics Consulting;
- Waste Management Plan prepared by Akalan;
- Obtrusive Lighting Report prepared by Connell Wagner;
- Acoustic Report by Wilkinson Murray;
- Feasibility Report by Connell Wagner;
- Building Code of Australia Statement prepared by McKenzie Group.

The following sections of this report provide:

- An introduction and background to the subject application;
- Description of the site and its broader strategic context;



## 01 Introduction

- Detailed description of the proposed Hospital extension;
- A detailed Environmental Assessment;
- Conclusion; and
- Draft statement of commitments

## 01 Introduction

### 1.2 Background to Kareena Private Hospital

Kareena Private Hospital was established over 42 years ago by local doctors and since this time has provided a health care service to the people of Sutherland Shire and beyond. Ramsay Health Care Ltd own and manage the Hospital and are committed to developing and improving the health care services offered at the site to meet community demand.

The Hospital is an acute care hospital offering one of only three private Emergency Department services in NSW. The hospital is one of only two private hospitals in the Sutherland Shire and by far the largest (the other hospital located within Sutherland Shire having only 50 beds and providing predominantly day only and rehabilitation services).

This proposal seeks to expand the capacity of the Kareena Private Hospital to improve the services provided and to meet the health care needs of the public.

### 1.3 Background to Approvals Process

Ramsay Health Care Ltd have been actively seeking the upgrade of the Kareena Private Hospital since its acquisition. A scheme to extend and upgrade Kareena Private Hospital was previously lodged as a Development Application with Sutherland Shire Council in 2006. This involved an extensive process of liaison and negotiation with Council, its independent Architectural Review Advisory Panel, and importantly, the local community. It is important to note that Ramsay Health Care Ltd chose to pursue a development application to the local authority under Part 4 of the *Environmental Planning and Assessment Act 1979* in an attempt to foster an early relationship for future and ongoing development at the site.

It is noted that the scheme has developed since this initial time of lodgement; however, relevant to this Environmental Assessment is the historical context of liaison and negotiation with Sutherland Shire Council.

Ramsay Health Care in association with HASSELL, presented Sutherland Shire Council's Architectural Review Advisory Panel with a proposed scheme to extend Kareena Private Hospital on three occasions (13 December 2006, 31 May 2007 and 6 November 2007). A précis of the liaison undertaken on the project is provided below as background to the current application and previous schemes for the hospital:

#### *i. Architectural Review Advisory Panel – 13 December 2006*

The Panel raised the following issues/recommendations in relation to the scheme:

- Appropriately incorporating the 'corner' element into the proposed additions;
- Plant material should be well screened and setback;
- Give emphasis to the design of the building entrance;
- Proposed additions should be integrated with the existing building; and
- Provide landscaping along the Kingsway.

#### *ii. Pre-DA – 24 January 2007*

A Pre-Development Application meeting between Council's planning staff, Ramsay Health Care Ltd and HASSELL was held to discuss the proposed scheme. This meeting was held on the 24 January 2007, with Council highlighting the following issues in relation to the proposed scheme for detailed investigation:

## 01 Introduction

- Zoning;
- Car parking;
- Social Impact;
- Arborist report; and
- Height and appearance to the Kingsway.

The application considered these items in the progression of the scheme:

### *iii. Community Consultation – 3 April 2007*

Prior to lodging the development application and in addition to the public notification period, Ramsay Health Care Ltd in association with HASSELL consulted with adjoining landowners and other key stakeholders via an information evening held at Kareena Hospital on 3 April 2007. Aware of the concern of the immediate residents in the area of the impacts on parking and traffic as a result of the 'Medical Cluster', Ramsay Health Care Ltd chose to present the draft scheme for comment to those residents in an open forum.

The project planners and architects, in addition to specialist traffic consultants, presented to the community both the draft scheme and the overall master plan for the site.

The information evening provided attendees with an introduction to the hospital, why the master plan has been developed, a presentation on future plans for hospital including the role the hospital plays in the local community, as well as providing an opportunity for landowners to give feedback on the proposed development application scheme.

### *iv. Architectural Review Advisory Panel – 31 May 2007*

The development application was discussed at a second Architectural Review Advisory Panel meeting on 31 May 2007. The panel raised the following issues in relation to the proposed DA scheme:

- Proposal should express an urban character;
- Residential amenity should be retained;
- Landscaping is required; and
- Eastern side building setback.

### *v. Council Correspondence – 31 July 2007*

Following an initial assessment undertaken by Sutherland Shire Council planning staff, the applicant was advised via correspondence dated 31 July 2007, that Sutherland Shire Council was not willing to support the development application based on concerns relating to:

- Height and Built Form;
- Car Parking and Loading; and
- Comments from Sutherland Shire Council's Architectural Review Panel.

Sutherland Shire Council at this stage provided the applicant with an opportunity to withdraw the DA; otherwise it would be refused under delegation within fourteen (14) days.

## 01 Introduction

In response to this advice, the applicant arranged to meet with the relevant Sutherland Shire Council officers on 16 August 2007 to discuss the possibility of providing Sutherland Shire Council with an amended scheme that addressed their concerns.

It was agreed by Sutherland Shire Council, in their letter dated 22 August, that the applicant would not be required to withdraw the application on the basis that the scheme could be suitably amended having regard to the concept plans tabled during the meeting.

### *vi. Amended Scheme – October 2007*

An addendum to the DA was lodged with Council in October 2007. The amended scheme essentially proposed to amend the original scheme through:

- removal of administrative space;
- removal of the proposed eastern wing and northern ward extension of the proposed development;
- reconfiguration of internal areas;
- reallocation of all car parking at-grade.

This compromise by Ramsay Health Care was put forward even though the resultant scheme did not meet the identified demand for health facilities in this location.

### *vii. Development Application Refusal – 6 November 2007*

Sutherland Council refused the development application on 6 November 2007 under delegated authority. This determination was not discussed with the applicant.

### *Current Scheme*

In response to changes in market conditions, the evident demand for future health care facilities and Ramsay Health Care's intent to now implement the strategic long term vision for the subject site, the proponent has revised the proposed scope of works from that considered by Sutherland Shire Council in 2007. The scheme proposed and assessed by this Environmental Assessment aims to implement the longer term vision for the Hospital site, proposing work which will extend the viability and functionality of Kareena Private Hospital to assist in meeting the future demands for health care facilities in Sutherland Shire and the broader Sydney region.

The scope of works as proposed vary from those put forward in the original development application submitted to Sutherland Shire Council and the proposed scheme is now considered to fit the definition of a Major Project as set out below:

- The development has a capital investment value of approximately \$24.7 million and is for the purpose of providing professional health care services to people admitted as inpatients;
- The development includes works to provide ancillary facilities for day surgery, day procedures; and
- The site is located within an area identified in local, regional and state strategic plans as being an appropriate place to locate development which reinforces the existing cluster of medical facilities.

The Minister has confirmed that the proposed works are deemed to be a 'major project' to be determined under Part 3A of the Act (refer Appendix C).

## 02 Description of the Site

### 2.1 Site Location

The subject site is located at 86 Kareena Road, Carringbah (corner of Kareena Road (North) and Kingsway). The site has an approximate area of 9,600 square metres and slopes away from the Kingsway frontage, with a fall of over 2 metres. The site has been benched below the level of the Kingsway by approximately 1 to 3 metres.

The legal description of the allotments comprising the full development site is set out in the table below. This allotment break down is depicted in Figure 1.

Description
Lot 1 DP 203024
Lot 2 DP 203024
Lot 3 DP 650201
Lot Y DP 417162
Part Lot 2 DP 20431
Part Lot 4 DP 20431
Lot 101 DP 814378
Lot 102 DP 814378
Lot 6 DP 20431
Lot 26 DP 21004 (439 Kingsway)



Figure 1: Subject Site

- The northern boundary of the site is adjoined by a private medical practice and low density residential development;
- The eastern boundary is adjoined by private medical practices in the ownership of the Applicant, in addition to low density residential development fronting Karoola Crescent;
- The western frontage is bounded by Kareena Road North, with low-density residential development on the opposite side of Kareena Road zoned for Local Housing (Medical Facilities), in addition, a commercial use is located on the corner of Kareena Road North and the Kingsway;
- The southern frontage is bounded by the Kingsway, with The Sutherland Hospital further to the south.

## 02 Description of the Site

### 2.2 Established Land Uses

The subject site is currently occupied by the Kareena Private Hospital, a vacant block of land, and one disused residential building (formally used for provision of medical services). Kareena Private Hospital includes a comprehensive range of medical, surgical and maternity services. It also operates one of only three private Emergency Department services in NSW.

Currently, Kareena Private Hospital offers the following specialties:

- Maternity and Obstetric care (including Level II Special Care Nursery);
- Orthopaedics;
- Acute Medical and Surgical services (including Urology, General, Gynaecology, Ear Nose & Throat and Vascular surgery);
- Angiography and Cardiac Catheter unit;
- Rehabilitation services (both medical and musculoskeletal);
- Day Surgery Unit;
- Emergency Care; and
- Diagnostic and ancillary services.



*Figure 2 Photo showing the existing residential building located at the eastern end of the subject site*

## **02 Description of the Site**

### **2.3 Regional Context**

The subject site is situated in the southern metropolitan region of Sydney, proximate to the major centre of Miranda and approximately 30 minutes drive south of the Sydney CBD.

This area of Miranda and Caringbah is a defined medical cluster, dominated by medical uses adjoined by residential uses. Further afield, the region is dominated by 'special uses' such as medical uses, educational and senior's housing developments.

## 03 Description of the Proposal

### 3.1 Project Objectives and Need

The project objectives of the Kareena Private Hospital extension are primarily to maintain the well-deserved reputation which the hospital has established in the provision of health care by expanding on key facilities within the hospital. This will allow a higher standard of service and more specialist facilities to be added to the current services provided so that they are sufficient to meet the standards expected and demanded. The proposed works will:

- Provide an opportunity to further strengthen the role of this part of Sutherland Shire Council, as identified in state, regional and local strategic and statutory plans as a regional centre for medical provision;
- Strengthen and compliment the existing cluster of medical services along this part of the Kingsway, providing opportunities for employment growth;
- Generate further training opportunities and retention of medical expertise in Sutherland Shire Council, seeking to promote Caringbah and Miranda as a centre of excellence in biomedical research and development; and
- Promote sustainable use of infrastructure through the refurbishment and expansion of an existing facility, negating the need to develop new facilities on land else where (dissipating the benefits of clustering and taking up land which could be used for other purposes).

The proposal seeks to extend the existing services of the Hospital to increase its capacity to meet the need of the community.

The key elements of the proposed works are outlined below:

### 3.2 Extension of Existing Hospital Building

The proposed works seek to extend the existing Hospital building to the south, east and north to accommodate the following:

- Expansion and refurbishment of the rehabilitation department (south elevation)

The rehabilitation department located at the lower ground floor will be refurbished to accommodate an expanded rehabilitation programme including day programs, supported by a gymnasium and hydrotherapy pool facility. This will provide improved facilities for patients and allow new patients to attend Kareena Hospital for treatment.

- Introduction of additional bedrooms (south elevation)

An additional 37 single bedrooms with ensuite at ground floor, and 37 single bedrooms with ensuite at first floor level (total 64 single bedrooms across two levels). Each level accommodating associated staff station, store room and communal bath facilities and necessary circulation space.

- Additional bedroom suites (north elevation)

The existing Hospital building will be extended at the northern part of the site to accommodate an additional 8 bedrooms with ensuites at lower ground level.

- Extension of Theatre Suite (eastern elevation)

The theatre suite at ground floor will be expanded to provide larger operating and recovery theatres and a larger central sterilising department to cater for increasing complexities in surgery techniques and instrumentation. The recovery unit will also be increased to comply with the Australian Health Facility



### 03 Description of the Proposal

Guideline requirements for area and services. These facilities will increase the amount of facilities that are on offer in the area and means that Kareena Private Hospital can accommodate the treatment of more people.

- Administration

At second floor level, it is proposed to introduce 400 square metres of administrative floor area with a centrally located courtyard.

- Hospital Entry

The main entry to the Hospital will remain at the western elevation (fronting onto the Kareena Road North entry car park), and adjacent to the Ambulance bay. This main entry will remain the formal 24 hour access to the Hospital.

A second secure entry will be introduced at the southern elevation, available to staff, patients and visitors during the day, and for staff only after evening visiting hours. This entry will be managed by a suitable security access system.

#### 3.3 Building Height and Floor Space

The building form proposed will range in height from two to four storeys, to a maximum RL of 50.42. Due to the topography of the site, the extension to the built form will present as a two storey built form with a third storey recessed when viewed from the Kingsway. The proposed floor space for the Hospital expansion is summarised in the table below:

FLOOR LEVEL	PROPOSED FLOOR SPACE
Lower Ground Floor	610 square metres
Ground Floor	1569 square metres
First Floor	1431 square metres
Second Floor	513 square metres

#### 3.4 Vehicular and Pedestrian Access Arrangements

The existing entry to the site from Kareena Road is maintained, providing both pedestrian and vehicular entry for visitors, patients, staff, emergency vehicles and services.

The key components of this proposal in relation to the movement of traffic and pedestrians are:

- Addition of parking spaces to be located over the lower ground and ground levels to accommodate a total of 127 car parking spaces on site;
- Pedestrian links throughout the car park to accommodate the safe and efficient pedestrian movement through the site from designated car parking areas;
- Loading dock facilities to be maintained and improved in terms of pedestrian safety and truck access.

## 03 Description of the Proposal

### 3.5 Statement of Design Intent

The design and form of the proposal is primarily guided by the need to allow the efficient operation of the hospital while intensifying the use at the site in response to escalating demand whilst maintaining adequate amenity to surrounding residential development. The proposal has also been designed in response to the feedback from Sutherland Shire Council and its Architectural Review Advisory Panel, with particular emphasis on

- Incorporating the 'corner' element into the proposed additions;
- Screening and landscaping;
- Impacts on parking; and
- Built form height and appearance to the Kingsway.

The building has been designed to present as a contemporary built form to the Kingsway frontage, to significantly upgrade the visual appearance of the building.

All new built areas are predominantly located towards the main road frontages of the site, being Kareena Road North and the Kingsway, thus separating introduced built form from the existing residential uses to the north and east.

Internally, the design significantly improves and increases the functioning areas of the hospital to modern standards. The proposed internal re-planning of the hospital will improve clinical functionality and address current issues related to:

- Adequate accommodation for the treatment of both inpatient and day patient services;
- Provision of efficient adjacency of departments improving clinical flows;
- Provision of staff support areas currently deficient in the existing Hospital;
- Provision of inpatient accommodation to meet current market expectations for private health care facilities.

The proposed floor plan, sections, elevations and photomontage accompany this development application. Please refer to drawings in Appendix A.

### 3.6 Materials and Finishes

This proposal intends a significant upgrade of the existing built form that is reflective of contemporary Australian architecture.

The building has been designed with a selection of materials to modulate the main façade and present a modern built edge, involving a lightweight cladding façade system, which is suitable to its local context. A colorbond metal deck roof system finished in "Bushland" will be used to soften the current dark green roof deck finishes. The following table details the external materials further:

Material	Colour
Facade material general	Vitrapanel colour Autumn Rust (similar to terracotta in colour)
Railings	Generally stainless steel rails to balconies and other external areas
Window frames	Clear anodised alum

### 03 Description of the Proposal

Roof	305 profile colour shale grey
Glass	Low E performance glass colour grey
Sun shading screens to windows	Hot dipped galv or alum perforated screens not finished
Soffits	Painted fibre cement
Exposed concrete element	Off-form concrete
Louvre (plant)	Alum or colour bond steel – colour shale grey

A materials and samples board accompanies this Project Application.

#### 3.7 Air Conditioning / Roof Plant

The air conditioning plant will be upgraded and extended to provide an improved air conditioning service that complies with current and future regulatory requirements of air quality and energy sustainability and relocation to south western part of building.

A new roof plant will be introduced above the western portion of the roof, above the established hospital building. A second roof plant will be located centrally.

Roof plant has been designed and located to be separated as far as possible from the adjoining residential land uses and to allow for the construction and upgrade of the plant with no operation interruptions.

#### 3.8 Associated Landscaping

The landscape design is seen as a vital aspect of the proposed development. There is very little formal landscaping on the current site. The landscape proposed as part of these works seeks to provide a landscape amenity with a variety of 'experiences' for the future users of the hospital, that is, the patients, visitors and staff.

The landscape design is simple and uncluttered, highlighting the character of the proposed building while also providing a range of different functional spaces and a high degree of amenity for hospital users.

Landscaping is particularly important for the amenity and privacy of the residential neighbours located on the north and east side of the hospital. The landscaping scheme has been developed to maximise the privacy between the Hospital site and its neighbours.

Key aspects of the proposed landscape design include:

- Introduction of formal landscape zones fronting the Kingsway.
- Formal landscaping introduced at the eastern boundary, to provide a natural screening of the site from adjoining residential uses.
- A courtyard and landscaped garden area is introduced at the northern elevation.
- Landscaped parking area.
- There are several courtyards that have been created within the greater building mass. These allow natural light penetration into the building and generate opportunities for landscaped 'breakout' spaces for patients and staff, providing sanctuary areas for solitude and passive recreation.

A detailed landscape plan has been prepared by HASSELL and accompanies this submission and is attached as Appendix H.

## 03 Description of the Proposal

### 3.9 Signage

Building identification signage will be introduced on the Hospital building. The size and location of signage has been incorporated into the design of the proposed building form and appropriately reflects the function of the Hospital.

Shown below is a photo of the existing sign that the Hospital would like to replicate on the new development. This would be located on the southern elevation with good vision of the intersection of the Kingsway and Kareena Rd.

The signage will be non-illuminated and wall mounted. It will consist of tensioned vinyl Smith flex face sign with front applied vinyl graphics to Ramsay Healthcare corporate standards. The panel size will be consistent with the existing signage of 3200mm x 3200mm.



*Figure 3 Showing the existing building identification signage*

Within the site, a series of way finding signage will be introduced throughout the car park areas, to appropriately guide visitors and staff through the site to achieve safe and convenient pedestrian traffic movement.

Signage details are incorporated into the Draft Statement of Commitments in Section 5.

### 3.10 Operations

The proposed extension to the existing Hospital site will not amend any of the established operations of the Kareena Private Hospital.

### 03 Description of the Proposal

The increase in bed numbers are not expected to create a linear increase in staff members. It is anticipated that the number of staff will increase by approximately 16. In addition an extra 2 staff and 2 doctors will be on site during the day as a result of the new gymnasium and operating theatre.

#### 3.11 Utilities and Services

##### Electrical Services

With the new expansion the maximum demand load is calculated at 438kVA, this indicates that the existing substation spare capacity is an insufficient source for the proposed extra power demand. An alternative source of power is required; possibly a second transformer with a capacity of 500- 600kVA. New substations or alternate sources of power will be an Energy Australia asset, and as such will require an application for connection submission.

#### 3.12 Construction Process

Structures associated with the existing hospital will need to be demolished, and accordingly consideration of construction management is made in this proposal. It is recognised that the construction management is important as the hospital is an existing service which is required to continue its functionality. Therefore, a Construction Management Plan has been prepared by Ramsay Health Care Ltd and is provided in Appendix D. Further consideration will be given to Construction Management when a contractor is appointed.

## 04 Environmental Assessment

### 4.1 Suitability of the Site

The suitability of the site to support expanded hospital services as proposed is determined having consideration to the current function of the site, the land use and built form character of the immediate surrounds and the designated land use zoning of the site.

Supporting the Kareena Private Hospital, the subject site is appropriately utilised for medical purposes, and would appropriately support the expansion of this hospital use.

The subject site is situated close to a cluster of medical facilities and bounded by low density residential uses to the north and east. The NSW Government's Draft South Subregional Plan recognises the advantages that accrue through the clustering of health facilities in the vicinity of the site (discussed further below in Section 4.2 and 4.3). This is also recognised within the Sutherland Shire Development Control Plan 2006 which notes that:

*"Sutherland Hospital and Kareena Private Hospital offer considerable opportunities to make an area of Caringbah a leading centre for a raft of medical-related facilities. The concentration of these facilities into one area will limit the number of trips required to seek specialist medical advice and develop into an area of medical excellence. It will enable the Caringbah Centre to feed off additional patronage that would otherwise be dispersed to other areas. Its reliance on a major public transport node can also be taken advantage of. The medical cluster caters for the people of the Shire and provides specialist medical services to a wider catchment. An area adjoining Sutherland Hospital has been identified as an essential area for this purpose."*

The statement above establishes the frame of reference for medical related activities in the vicinity of the Sutherland Hospital. It is desirable that medical-related development be integrated with the existing urban fabric, whilst still achieving the 'green' principles of service and infrastructure agglomeration. The redevelopment of the Kareena Private Hospital will contribute to the area becoming a centre of medical excellence.

The subject site is designated within the Sutherland Shire Council Local Environmental Plan (2006) (SSLEP) as falling within two zones: Zone 12 - Special Uses (which applies to the vast majority of the site), and Zone 4 Local Housing (applying to Lot 26 DP 21004). The rezoning of that part of the site zoned for Local Housing has been considered by and adopted by Sutherland Council. The rezoning will allocate this land as Zone 12 – Special Uses. This rezoning is sitting with the Minister for approval.

The proposed expansion of Kareena Private Hospital would be permissible with consent within Zone 12 - Special Uses (Medical Facility) and therefore remains appropriate in the context of the site's zoning.

The redevelopment addresses and improves the identity and future capability of Kareena Private Hospital. It also recognises the important contribution the facility makes to further the health benefits of Sutherland Shire residents. The Sutherland Shire Council identified this site as part of its strategic direction for the creation of a medical hub, and as such, the context and setting for the proposed redevelopment of the Kareena Private Hospital is consistent with this long term strategy. The proposed expansion also aligns with the Department of Planning's overall metropolitan strategy for Sydney and Subregional strategy for the south.

Having regarded the strategic vision for this site as part of a medical hub, the zoning to support the function as proposed and the immediate locality supporting medical facilities, the subject site is considered suitable to support the proposed expansion of the Kareena Private Hospital.

### 4.2 Sydney Metropolitan Strategy - City of Cities: A Plan for Sydney's Future 2005

The Metropolitan Strategy (Metro Strategy) is the major planning initiative of the Department of Planning to meet the challenges associated with:

- Population Growth over the next 25 years. Residential accommodation and employment opportunities are needed for an additional 1.1 million people who are projected to be living in the Greater Metropolitan Region by 2025.
- Dwindling land supply and the need to contain growth to protect conservation areas and agricultural land.
- Improvements to infrastructure, particularly public transport.
- More effective use of natural resources, particularly energy and water.

The Metro Strategy determines where the key centres in the Sydney Metropolitan area are located to determine opportunities for growth and employment generation.

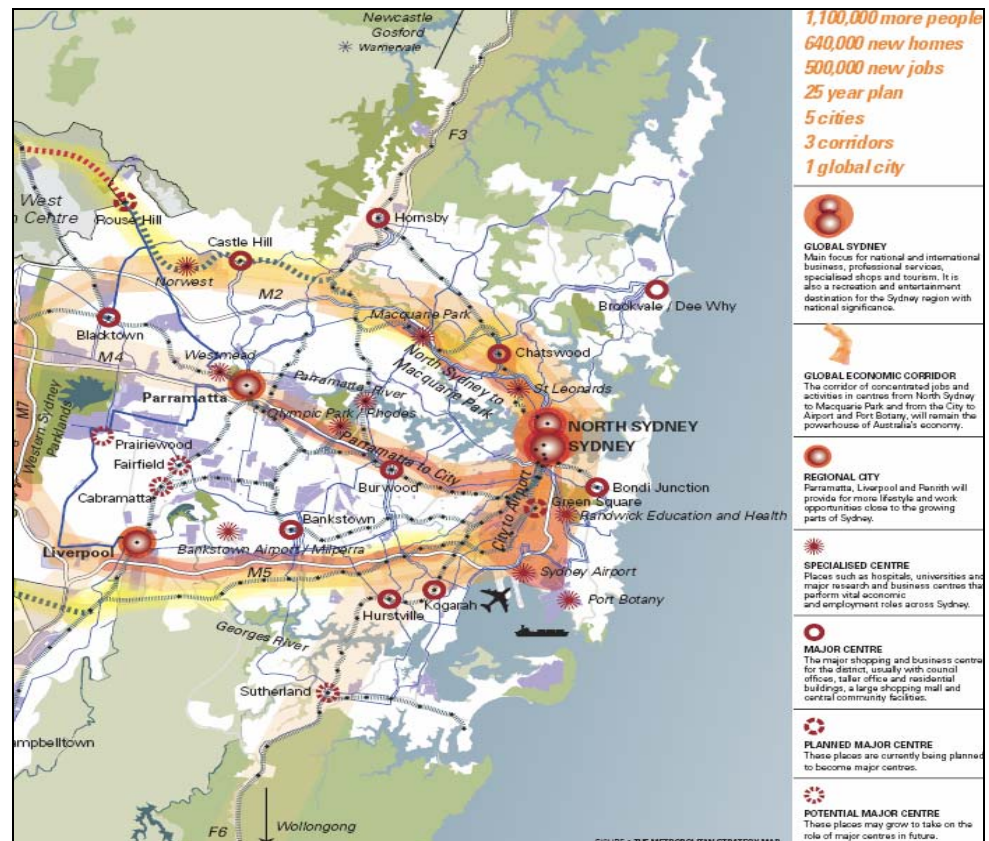


Figure 4 showing the Cities and centres (source: Department of Planning, City of Cities, A plan for Sydney's Future)

There are 5 aims set out in the Metro Strategy to achieve these challenges. These are:

- Enhance Liveability: Enhance Sydney's liveability, by ensuring a diverse choice of housing for an ageing and changing population, close to services, while protecting the character of our suburbs and communities.

- Strengthen Economic Competitiveness: Strengthen Sydney's long-term economic prosperity by increasing the city and region's competitiveness in globalised markets, and sharing the benefits across the city.
- Ensure Fairness: Provide fair access to jobs, services and lifestyle opportunities by aligning services close to where people live, and by providing access to high quality transport.
- Protect The Environment: Protect Sydney's unique environmental setting and reduce the city's use of natural resources and production of waste.
- Improve Governance: Improve the quality of planning and decision making, and give the community confidence in our institutions

There are seven strategies in the Metro Strategy designed as triggers to meet the above aims including 'Economy and Employment', which aims to strengthen globally competitive industry networks and clusters and increase innovation and skills development.

In spatial terms, the Strategy aims to:

- Protect employment lands in strategic locations
- Encourage the redevelopment of disused industrial sites in suitable locations served by utilities and public transport and proximate to the labour force – and improve opportunities for new investment and jobs in these areas; and
- Plan and develop new greenfield sites to meet demand in new growth areas and growth that cannot be accommodated in established areas.

The strategy for economy and employment growth forecasts 500,000 new jobs will be required in Sydney by 2031. Jobs traditionally located within industrial areas, including manufacturing, textiles, clothing, machinery, transport and storage, are predicted to decline.

The proposed expansion of the hospital means increased capacity of the medical capabilities with the expansion and refurbishment of the rehabilitation department. As discussed further in Section 4.5, the ageing population will increase the demand on hospital facilities, particularly those which are located in close proximity to public transport systems.

It is considered that the project complies with the general aims of the strategy for Sydney as it supports the aim to strengthen economic growth by clustering the medical facilities in the Miranda-Caringbah area while balancing social and environmental impacts. The expansion of Kareena Private Hospital will seek to meet the aims of the Sydney Metropolitan Strategy by strengthening the region's economic prosperity, providing jobs away from the declining industrial industry and offering diversity and specialist services in line with the above strategies for Sydney as a whole.



### 4.3 Draft Subregional Strategy – Southern Subregion

Due to the size and complexity of the metropolitan region, 10 subregions have been established, with each developing a draft Subregional Strategy to interpret the actions and objectives of the Metropolitan Strategy at the subregional and local level. Sutherland Shire Council is part of the South subregion which also includes South Kogarah, Hurstville, Canterbury, Rockdale and Marrickville local government areas (LGA).

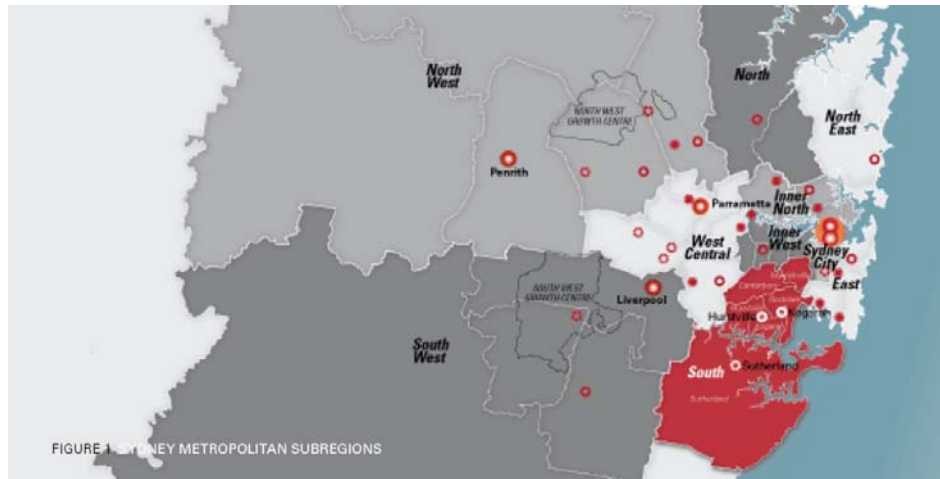


Figure5 showing the location of the southern region (Source: South Subregion draft Subregional Strategy)

Sutherland is the second most populated LGA in NS W with over 215,000 residents and covers an area of 334 square kilometres. Being the southern most LGA within the South Subregion it is well connected to both Sydney and the Illawarra Region.

The Subregional Strategy identifies the significant features of the Shire including Sutherland Hospital and the medical facilities cluster of Caringbah, which includes Kareena Private Hospital. Sutherland Town Centre is identified in the Metropolitan Strategy as a Potential Major Centre and the Caringbah–Miranda area, in which the subject site sits, has been designated to provide more retail, health and employment services.

One of the key actions for the South Subregion is to investigate and resolve the roles of Caringbah, Miranda and Sutherland. This includes the following actions:

- Resolve the future roles of Caringbah, Miranda and Sutherland. Investigate the formulation of a ‘higher learning precinct’ incorporating specialties of ANSTO.
- Promote Caringbah and Miranda as ‘centres of excellence’ in biomedical and bioengineering research and development.

The 2005 Metropolitan Strategy nominates Sutherland as a Potential Major Centre. Miranda and Caringbah were identified as Town Centres in subregional workshops held with councils. Whilst Sutherland plays an important role for employment as a local administration centre, Miranda provides significantly more services and employment in retail and Caringbah’s strength lies in provision of health services.

The South Subregional Strategy discusses the close proximity of Caringbah and Miranda which are conveniently located and serviced by rail and road infrastructure, with both having potential for employment and residential growth. It is important for the long term future of the South Subregion that these centres do

not compete for similar roles. They need to complement each other while broadening employment opportunities, retail and services for the local community, particularly given the physical attributes of the Sutherland Shire peninsula and associated transport challenges.

### *Knowledge Assets and Key Industries*

In its discussion of knowledge assets and key industries, the Draft South Subregional Strategy identifies Sutherland Hospital Non Acute Mental Health Unit as a state infrastructure strategy projects in the south subregion and the area is recognised as a knowledge asset and key industry.

The strategy recognises that the area is well serviced with hospitals. In Sutherland Shire, a medical precinct is being developed around Sutherland Hospital at Caringbah, while St George District Hospital and St George Private Hospital Kogarah service the central parts of the subregion.

The importance of attracting knowledge and high skill industries to support emerging education and medical facilities such as those at Kogarah, Hurstville, Caringbah, Miranda, Rockdale and Loftus is acknowledged.

There is existing knowledge infrastructure in the South including hospitals at Caringbah (Sutherland Hospital) and Kogarah (St George Public Hospital and St George Private Hospital), TAFE colleges at Petersham, Kogarah, and Sutherland (Loftus and Gympie), and a University of Wollongong presence at Loftus. This is supported by the promotion of Kogarah and Caringbah—Miranda as centres of excellence in biomedical and bioengineering research with development by the Department of Health, Department and State and Regional Development and Department of Planning to strengthen industry clusters.

Kareena Private Hospital's location between Caringbah and Miranda makes it well placed to continue providing health care services. The expansion of the hospital means that more specialist services will generate further training opportunities and retention of medical expertise in Sutherland Shire Council.

The expansion of Kareena Private Hospital will increase the knowledge infrastructure as well as developing innovation and skills development as the hospital strengthens and complements the existing cluster of medical services along this part of the Kingsway which will provide opportunities for employment growth. In addition, it negates the need to develop new facilities on land elsewhere (dissipating the benefits of clustering and taking up land which could be used for other purposes). These benefits are discussed in more detail below in Section 4.6.

### 4.4 The Public Interest

The proposed expansion of the Kareena Private Hospital is in the public interest. The enhancement to the established hospital facility will have a positive social and economic impact through the provision of much needed inpatient and outpatient services and through synergies with services offered by Sutherland Hospital.

An estimate of the number of new jobs that will be created during construction phase as well as likely additional permanent full-time jobs in the region once the refurbishment and extension are complete. Additionally, an estimate of the additional earnings, spending and fiscal benefits (including personal income taxes, GST, and Council tax), that accrue to the various levels of government as a result of this project.

As at 30th June 2008 Kareena had 275.17 full time employees. With the increase in beds, there will be approximately 16 new staff. In addition to this, an extra two staff and two doctors are to be on site each day as a result of the new gymnasium and operating theatre.

### 4.5 Social Benefits

The Kareena Private Hospital currently provides a range of medical facilities to the Sutherland Shire community, with the majority of patients (83.5%) being residents of Sutherland Shire Council. However the hospital is regularly operating at 100% capacity and has not had the capability to accommodate further growth due to the limitations in bed capacity and theatre capacity. When at capacity, patients may need to be transferred out of Sutherland Shire for care.

The figure below identifies the number of total discharges over the Sutherland Shire area, recorded from Kareena Private Hospital between July 2005 and June 2006. As can be seen, the greatest concentration of patients treated by the hospital came from Sutherland Shire Council area, which demonstrates that the hospital does care for predominantly local people.

## 04 Environmental Assessment

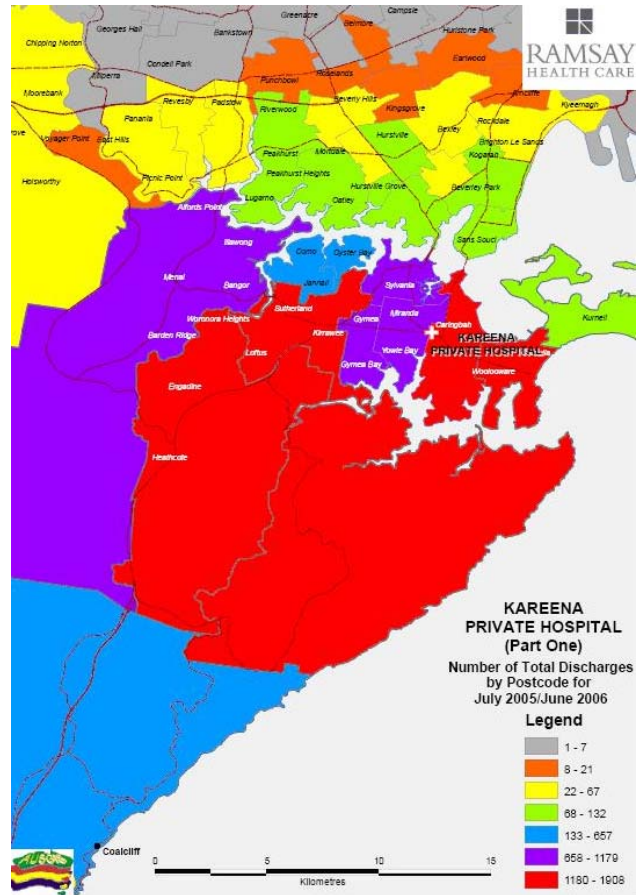


Figure 6 showing the location of Kareena Private Hospital in the Sutherland Area (Source: Ramsay Health Care Ltd)

The level of demand for health services provided by Kareena Private Hospital is increasing annually. The following table demonstrates actual occupancy rates from 2004-2008 and estimated occupancy of the hospital for 2008/2009.

	Actual 2004/2005	Actual 2005/2006	Actual 2006/2007	Actual 2007/2008	Projected 2008/2009
<b>Total Patient Separation</b>	13,592	13,089	14,078	14,654	15,265
<b>Inpatient Occupancy</b>	79.3%	78.7%	85.9%	89%	90%
<b>Emergency Presentations</b>	4378	4810	5146	5166	5293

As can be seen above in patient occupancy and emergency presentations, Kareena Private Hospital's occupancy has increased between 2004 and 2008. Ramsay Health Care has indicated that the hospital is regularly operating at 100% capacity (particularly on weekdays and for much of the winter period), on which occasions, both the hospital and Emergency Department are unable to accept further patients at these times. When this occurs, patients often have to be transferred out of the Shire for treatment.

Kareena Private Hospital has continued to treat more patients over the recent years and in order to continue to provide this service to the local community, the redevelopment of the hospital is required, to improve and expand the facilities available to the patients.

The social benefits to the local and wider region afforded by Kareena Private Hospital include:

- increasing the demand and operational capacity of Kareena Private Hospital to meet the increasing health service demands of Sutherland Shire residents;
- increased health and allied services to better meet the current and future needs of the Sutherland community, particularly in the area of ageing population;
- expanded health awareness and education programs in addition to the current range of activities with recognition as 'Health Promoting hospital' under the World Health Organisation;
- improved on-site and formal parking for the Kareena Private Hospital;
- improved safety and security of hospital patients, visitors and employees; and
- Building on an existing hospital facility and community focus for Sutherland Shire.

### 4.6 Economic Benefits

The Kareena Private Hospital acts as a significant employer in the region. As part of the Caringbah Health Cluster, Kareena Private Hospital provides a significant contribution to local employment. Kareena Private Hospital provides extensive employment opportunities for the community, with the Hospital currently employing over 450 staff, with approximately 350 staff being either part time or casual workers. Additionally, Kareena Private Hospital employs a further 75 medical doctors, managerial, administration and support staff. Employment services for the community are important, particularly given that 15.7% (or 16,637) of Sutherland Shire residents are employed in the education, health and community services sector.

The Kareena Private Hospital's role in this medical cluster is that it helps to create a magnet that attracts investment and builds the strengths of the local and regional economy. Its close proximity to Sutherland Shire Hospital also assists in the recruitment of medical specialists to work in the area as they are able to care for both their public and private patients without travelling significant distances.

## 04 Environmental Assessment

### 4.7 Environmental Planning Instruments

The following environmental planning instruments affect the subject site:

- State Environmental Planning Policy (Infrastructure) 2007;
- Greater Metropolitan Regional Environmental Plan No.2 Georges River Catchment; and
- Sutherland Shire Local Environmental Plan 2006.

The proposal's compliance with these planning instruments is discussed in Sections 4.7.1 to 4.7.3 below.

#### 4.7.1 State Environmental Planning Policy (SEPP) (Infrastructure) 2007

State Environmental Planning Policy (SEPP) (Infrastructure) 2007 aims to provide a consistent planning regime for infrastructure and the provision of service access across NSW, along with providing for consultation with relevant public authorities during the assessment process.

Referral to the RTA is required for proposed hospital facilities with 100 or more beds having access to a classified road or to a road that connects to classified road (if access within 90m of connection, measured along alignment of connecting road) (Schedule 3 of Traffic Generating Development).

The proposed expansion will introduce an additional 67 beds to the established hospital site resulting in a total 109 beds. The Kareena Private Hospital does not have direct access to an arterial road; however, vehicular access via Kareena Road is within 90 metres of the Kingsway (an arterial road). To date, this project has involved consultation with both the RTA and the Ministry of Transport. Comments are given in Appendix P. It is anticipated that this application will be referred to the RTA.

#### 4.7.2 Greater Metropolitan Regional Environmental Plan No.2 Georges River Catchment

This Regional Plan aims to protect the water quality of the Georges River and the environmental quality of its entire catchment. More specifically the objectives are:

- *to maintain and improve the water quality and river flows of the Georges River and its tributaries;*
- *to protect and enhance the environmental quality of the Catchment for the benefit of all users through the management and use of the resources in the Catchment in an ecologically sustainable manner;*
- *to ensure consistency with local environmental plans and also in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment;*
- *to establish a consistent and coordinated approach to environmental planning and assessment for land along the Georges River and its tributaries and to promote integrated catchment management policies;*
- *to encourage more effective consultation between local government and State Government agencies in executing the responsibility for environmental planning within the Catchment;*
- *to provide a mechanism that assists in achieving the water quality objectives and river flow objectives agreed under the Water Reform Package;*

This proposal will not have any detrimental effect on the Georges River Catchment. A Stormwater Management Plan accompanies this application, and addresses any potential issues (refer 4.10 of this report).

## 04 Environmental Assessment

### 4.7.3 Sutherland Shire Local Environmental Plan 2006

The relevant local planning instrument for the site is the Sutherland Shire Local Environmental Plan 2006. The subject site is, for the majority, zoned Zone 12 – Special Uses (Medical Facility) under the LEP. One parcel of land located at the far south-east corner of the site is zoned Zone 4 – Local Housing (Lot 26 DP 21004, 439 Kingsway). A zoning table extract is provided below.

In June 2007, a rezoning application for this land was submitted and subsequently adopted by Sutherland Council. The rezoning will bring this land in line with the Special Uses (Medical Facility) zoning of the remainder of the site. The rezoning application is currently with the Department of Planning, pending gazettal. Hospital facilities are currently not permitted within Zone 4 – Local Housing. This Concept Application requests the Minister's consent for variation to the Sutherland Shire LEP in accordance with Section 750 (3) and Section 75R (3A) of the Environmental Planning and Assessment Act.



Figure 7 - Sutherland LEP 2006 zoning

### *i. Permissibility*

The proposed hospital extension is defined as a 'medical facility' under the LEP, being:

*"A building or place used for the medical or surgical treatment of persons, whether public or private, including any of the following:*

*(a) Any associated shop or dispensary,*

***(b) A hospital (other than a psychiatric hospital),***

*(c) A sanatorium,*

*(d) A health centre,*

*(e) A home for infirm persons, incurable persons or convalescent persons,*

*But does not include any part of a correctional centre used for the medical or surgical treatment of persons (Dictionary, SSLEP 2006)*

Zone 12 – Special Uses (Medical Facility) stipulates that development is allowed only with consent for the purpose of The particular use indicated in respect of land by lettering on the map.

As the Medical Facility use is indicated on the LEP map, the hospital use is therefore permissible with consent.

### *ii. Zoning Objectives*

The objectives for the Zone 12 – Special Uses (Medical Facility) zone are:

*(a) To provide for a range of community facilities and services to meet the needs of the community,*

*(b) To allow for development by public authorities,*

*(c) To provide for a variety of development in accordance with local educational, religious or similar community demand,*

*(d) To ensure the scale and nature of new development is compatible with the surrounding urban form and natural setting of the zone,*

*(e) To recognise critical requirements, as identified by the Commonwealth, relating to the use of Commonwealth land for defence purpose (Part 2 Section 11)*

The proposed development satisfies these objectives, in that:

- The proposed hospital expansion will reinforce and upgrade the health facilities provided at the site;
- The site is located within the area of a medical cluster and will service the needs of local residents as well as those in surrounding areas; and
- The proposed development better utilises existing infrastructure, is compatible with the surrounding similar medical uses and urban form of the Sutherland District Hospital on the southern side of the Kingsway.

### *iii. Building Height (clause 33, Sutherland LEP)*

The proposed expansion of the Kareena Hospital will introduce a series of built form elements which are a height and form which respond to their intended function; their visual prominence to surrounding public places and private residences; their context within the site and surrounds; and identified amenity issues.



## 04 Environmental Assessment

There is no specific building height control which is applicable to the Special Uses (Medical Facility) zone. Sutherland Shire Council imposes a 'default' height control for any land which does not have a specific height control nominated. The building height default position is outlined below:

*(4) Height of building generally—default position*

*A building must comply with each of the following:*

*(a) the building must not comprise more than 2 storeys,*

*(b) the building must not exceed the following:*

*(i) a height of 7.2 metres, as measured from ground level to any point on the uppermost ceiling in the building,*

*(ii) a height of 9 metres, as measured from ground level to the highest point of the roof of the building.*

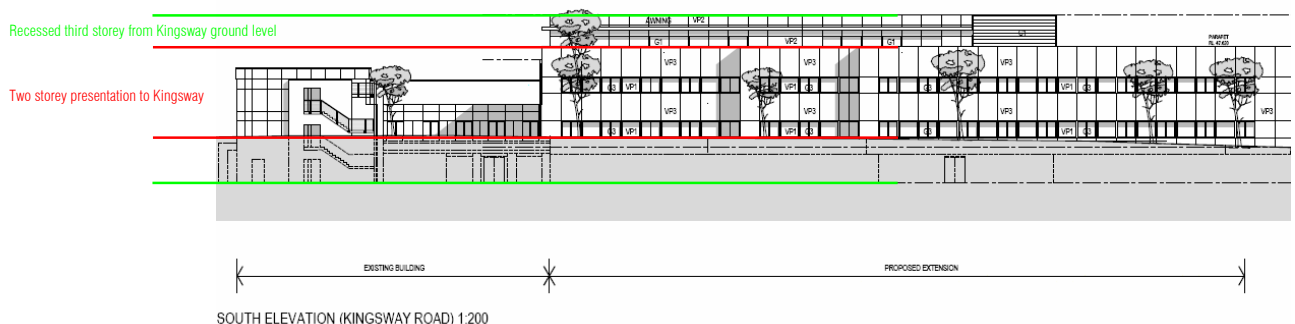
These height controls are not specific to hospital buildings, but a generic 'residential' height imposed on miscellaneous buildings within the Shire. Based on the application of the above control, a maximum of 2 storeys and 9 metres measured from ground level to the highest point of the roof is to be applied.

The development will result in a range of buildings having varying heights across the site. Overall, the highest point of the proposed development will be the plant room and administration room.

*i. South Elevation – presentation to the Kingsway*

New building elements will have a total height of 15.2 metres to the topmost part of the building. This incorporates three storeys, with a third recessed at roof level.

The existing ground level of the site sits some 3.2 metres below the footpath level of the adjacent Kingsway. As a result, the building will present two storeys to the Kingsway, with a third level recessed. The actual height of the building as measured from the Kingsway ground level will be 12 metres.



*Figure 8 Showing the east elevation*

*ii. East elevation*

The building form presenting to the eastern elevation has been setback with upper storeys recessed to reduce the visibility of these elements from neighbouring properties. The site is positioned at a ground level

## 04 Environmental Assessment

below residential properties to the east. As such, the actual height will be comparatively reduced. The tallest part of the building remains the Administration building at RL 50.42, a total height of 15.2 metres.

The building presentation to the eastern elevation ranges from two to three storeys.

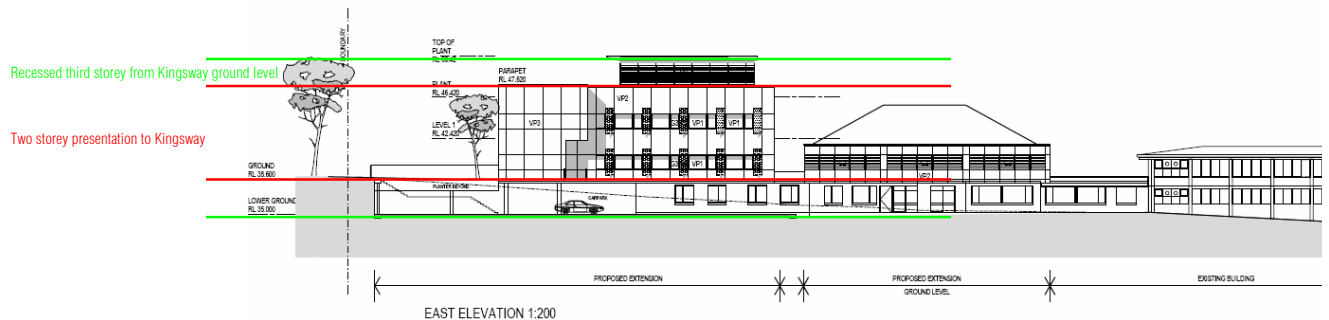


Figure 9 Showing the east elevation

### iii. South Elevation

The building form to the south will present as two storeys, with a height of 12 metres and will have a two storey presentation.

Based on Sutherland Shire LEP's default height control, this application seeks the use of Section 75J (3) (and 75R) of the Environmental Planning and Assessment Act 1979 to vary the building height development standard.

### iv. Variation to the 'default' height controls – 75J Giving of approval by Minister to carry out project

Having regard to the circumstances of the application, the retention of residential amenity and the social benefits brought by the proposal to the community, it is considered that the variation to the default height development standard as set out in Sutherland Shire LEP is justifiable with the proposed Hospital expansion seen as a contemporary design response to the requirements of a modern health facilities, the character of the site and its context.

For these reasons, it is requested that the Minister approve the Project Application which seeks to depart from the 'default' building height control.

### iv. Building Density (clause 35, Sutherland LEP)

There is no specific density control within SSLEP 2006 for land zoned Zone 12 – Special Uses (Medical Facility), therefore, the objectives of the building density clause within the LEP have been referred to. The objectives are as follows:

(a) To ensure that development is in keeping with the characteristics of the site and the local area,

*(b) To provide a degree of consistency in the bulk and scale of new buildings that relates to the context and environmental qualities of the locality,*

*(c) To minimise the impact of buildings on the amenity of adjoining residential properties,*

*(d) To ensure, where possible, that non-residential buildings in residential zones are compatible with the scale and character of residential buildings on land in those zones.*

The proposal responds to the above objectives through the following:

- The proposal is in keeping with the intended 'medical hub' for the region;
- The proposal responds to the slope of the site, whilst mindful of the pedestrian scale to the Kingsway;
- All care has been taken to minimise the impacts on adjacent sensitive residential uses through the location of the additional built form along the main road frontage.

### ***vi. Urban Design - general (clause 48, Sutherland LEP)***

Urban design and built form are discussed further in section 4.8 below. This discussion relates to the proposed developments response to the legislation.

In designing the extension of the Kareena Private Hospital, it was important to balance the functional requirements of the hospital and the design outcome. The building's response to the immediately surrounding streetscape and the neighbouring residential properties was considered in detail in delivering an appropriate urban design outcome for the site.

The Sutherland Shire LEP requires the consent authority to address the following relevant principles in relation to urban design principles (*refer clause 48, Sutherland LEP*):

*(a) the extent to which high quality design and development outcomes for the urban environment of Sutherland Shire have been attained, or will be attained by the proposed development;*

- The proposal represents a significant upgrade to the existing medical facility at the site, not only for the users such as staff, patients and visitors, but in terms of the overall aesthetic of the built form.

*(b) The extent to which any proposed buildings are designed and will be constructed to:*

*(i) Strengthen enhance or integrate into the existing character of distinctive locations, neighbourhoods and streetscapes;*

*(ii) Contribute to the desired future character of the locality concerned;*

- The proposal is characteristic of a contemporary medical / health building, reinforcing the identified medical cluster as defined in Council's strategic policy for this location.
- The hospital expansion has been mindful of mitigating impacts on sensitive residential uses adjacent by locating the majority of new building along the Kingsway frontage, particularly the new plant.
- As referenced above, Council's DCP identifies this area as a medical / health hub along with the Department of Planning's Metropolitan Strategy, which is further strengthened through this proposal.
- It also utilises strong landscaping features which enhance the character and experience of the space for patients, visitors and staff. Visual buffers are proposed for the east and north boundaries to improve neighbour amenity as well as providing courtyard areas within the hospital grounds.

*(c) the extent to which recognition has been given to the public domain in the design of the proposed development and the extent to which that design will facilitate improvements to the public domain;*

- The proposal responds to Sutherland Shire Council's height provisions by providing a two storey scale frontage to the Kingsway.
- Landscaping has been introduced along the Kingsway elevation and throughout the site to enhance the public domain, and to improve its transition to adjoining residential zones.
- Enhanced pedestrian links to the site from Kingsway will be provided with the introduction of new pedestrian ramp to the site.

*(f) the extent to which the proposed development will preserve, enhance or reinforce specific areas of high visual quality, ridgelines and landmark locations, including gateways, nodes, views and vistas;*

- The site is not of any particular high visual quality, however, the updating of the overall built form is considered as a positive contributor to the overall built environment of the area. Historically, hospital and other institutional buildings have required large floor plates and as a result, presented as urban 'monoliths'. The horizontal articulation, modulation of built form and use of materials for this proposal ensures that the resultant built form activates the public domain, and enhances the visual appearance of the site.

*(g) The principles for minimising crime risk set out in Part B of the Crime Prevention Guidelines and the extent to which the design of the proposed development applies those principles;*

There are four principles that need to be used in the assessment of development to minimise the opportunity for crime – Surveillance, Access Control; Territorial Reinforcement; and Space Management.

- Surveillance:

The proposal has been designed to ensure that clear sightlines between public and private places are provided where possible (mindful of the slope of the site). Effective lighting of public places and in

particular car parking areas is achieved, and landscaping has been designed to make spaces more visually appealing, without obscuring sight lines or creating hiding areas.

— Access control:

A clear and designated access point to the site has been proposed at Kareena Road, with the existing vehicular and pedestrian access to the site at Kareena Road remaining unchanged.

On site security will be maintained as per the established security operations at the site. New staff entry points will be managed by a security swipe system, with the main 24 hour emergency entry to the Hospital remaining unchanged to that existing.

— Territorial reinforcement:

The design provides a clear transition and boundary between public and private space and clear design cues on who is to use space and what it is to be used for. This is reinforced through the use of wayfinding signage.

— Space management:

Where applicable, space management has been incorporated for those landscaped spaces to ensure that these are appropriately utilised and well cared for. Space management strategies enforced by Kareena Private Hospital include site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements.

### ***vii. Ecologically sustainable development***

Ecologically sustainable development is discussed in full in Section 4.9. This discussion relates directly to the legislation applicable to the site.

The Sutherland Shire LEP requires the consent authority to address the following relevant components in relation to urban design principles (refer clause 51, Sutherland LEP):

*(a) The principles of ecologically sustainable development;*

- The proposal seeks to extend an existing hospital facility, to better utilise the excellent existing health infrastructure and services currently available at the site and provide an increased service to the local and wider community. This is a more efficient and sustainable use of the site and this established medical facility.

*(b) The extent to which the proposed development will meet the needs of the present without compromising the ability of future generations to meet their needs;*

- The proposal seeks to augment the existing medical services currently offered at the site in response to the growing demand for such services. The proposal will directly respond to the future needs of both the existing and future population, seeking to increase the total number of available beds to increase health care needs due in part to the ageing population of the region.

*(c) the extent to which the proposed development will improve the quality of life, both now and into the future, in a way that maintains the ecological processes on which life depends;*

- Essentially, the health facilities proposed will directly improve the quality of life of those who require those health services on offer. Through the provision of these additional services at an existing hospital site,

without undue amenity impacts, the ecological 'footprint' of this proposal far outweighs the alternative options of a new health facility at the site, or the provision of such services in a greenfield location.

*(d) The extent to which the proposed development will contribute to the achievement of high quality ecologically sustainable development outcomes for the urban environment of Sutherland Shire;*

- The proposal will increase the level of natural light available to internal areas through strategic placement of windows. Recent studies have found that the discharge rate of patients in rooms with natural lighting is almost double that of those without. The English Commission for Architecture and the Built Environment (CABE) quotes a 21% improvement in hospital discharge rate from a hospital renovation, effectively reducing total costs by 21%.

*(e) The extent to which the proposed development will retain and enhance the natural environment;*

- As detailed previously, this proposal intends to redevelop an existing site with limited natural or retained vegetation. As such, this objective is not strictly relevant; however the proposal will introduce landscaping measures in order to soften the appearance of the hospital.

### **viii. Energy efficiency and sustainable building techniques**

The Sutherland LEP requires the consent authority to address the following relevant components in relation to urban design principles (refer clause 52, Sutherland LEP):

- (a) The extent to which potential energy consumption may be reduced during the construction, occupation, utilisation and lifecycle of proposed buildings,*
- (b) the extent to which sustainable natural resources, such as the sun and wind, will be used in proposed buildings to create naturally comfortable living and working environments,*
- (c) The extent to which proposed building materials and construction techniques are ecologically sustainable and will:*
  - (i) Minimise the expenditure of energy (including, in the case of building materials, any expenditure of energy involved in their manufacture), and*
  - (ii) Maximise the useful lifecycle of proposed buildings.*

As detailed above, as this proposal seeks to extend the existing development at the site, the energy efficiencies saved through the adaptive re-use are significant when compared to a 'new build' situation.

Throughout the building's design, the architects have sought to maximise energy and water efficiencies through increased natural light and ventilation, water and stormwater re-use where applicable. This is discussed further in the Environmentally Sustainable Design Measures overview in Section 4.9 below.

### **ix. Transport accessibility, traffic impacts and car parking**

The Sutherland Shire LEP requires the consent authority to address the following relevant components in relation to transport and traffic design and minimisation principles (refer clause 53, Sutherland LEP):

- (a) The extent to which the proposed development maximises opportunities, through design integration, to provide:*
  - (i) Efficient links to identified transport nodes and corridors, such as railway stations, bus routes, pedestrian and cycle paths, and*

## 04 Environmental Assessment

- (ii) Facilities to cater for bicycle users,*
- (b) The extent to which the demand for car parking, where there is good access to public transport nodes, will be managed,*
- (c) The extent to which appropriate levels of car parking will be provided in connection with the development,*
- (d) The extent to which walking, cycling and the use of public transport have been or will be encouraged,*
- (e) The design of proposed car parking areas and access to them.*

The site is located proximate to some of the area's major transport routes, a clear requirement for a medical facility.

By their nature, hospitals require private car access. As a result, the design of this proposal seeks to better integrate those car parking spaces with the overall design of the building, whilst still maximising the site to best utilise the existing soft and hard infrastructure available. New car parking has been integrated around the hospital building.

Bike storage facilities will be provide as part of the upgrade, integrated in the car park area. This is to encourage the use of alternative transport use to the site by. A response to traffic needs is detailed in Section 4.13.

### 4.8 Urban Form

Kareena Private Hospital serves the Sutherland Shire, offering an alternative private health treatment option to the Sutherland Community. The hospital offers the following specialities:

- Obstetric care
- Special Care Nursery
- Rehabilitation services
- Day Procedure
- Emergency Care

Kareena Private Hospital has a formidable reputation in its excellent provision of medical care however its services are compromised by old building stock and plant that is nearing the end of its useful life. The current building stock lacks a highway identity and has aesthetically become tired. The Redevelopment programme will address the following:

- Update of plant to provide air-conditioning that complies with current and future regulatory requirements of air quality and energy sustainability.
- Revitalisation of interior environments to match client expectations of a private health facility and help attract and retain the best medical staff.
- Reconfiguration of internal spaces to create more single bedrooms and a "hot floor" of critical care treatment aligned with the theatre suite. This reconfiguration will align the facility with recognised best practice in health care buildings.
- Revitalised rehabilitation suite which can support an expanded rehabilitation programme supported by a hydrotherapy pool facility.
- Provide additional beds to meet increases in bed demand.
- Lower level car parking for staff.
- Extension of the theatre suite to provide larger theatres and a larger central sterilising department to cater for increasing complexities in surgery techniques and instrumentation. The recovery unit will be enlarged to comply with health building guidelines requirements for area and services.
- To update and extend the exterior building elements to create an address and revitalise the building's identity commiserate with the high standard of medical care Kareena Private has to offer.

The new buildings will be constructed over carparking and will involve light weight cladding façade systems. It is planned that a lightweight building facade with invisible fixing systems on steel framing and compressed fibre cement sheet with an applied finish will be used. A colorbond metal deck roof system will be used to soften current dark green roof deck finishes.

Additional landscaping along the Kingsway roadway enhances the experience of approaching and entry the facility. Courtyards have been created within the extended building mass which facilitates light penetration into the building and generates opportunities for landscaped breakout spaces for patients and staff. These spaces are currently lacking due to available space at grade level being occupied by cars.



## 04 Environmental Assessment

The redevelopment addresses and improves the identity and future capability of Kareena Private Hospital. The redevelopment recognises the important contribution the facility makes to further the health benefits of Sutherland Shire population.

The design and form of the proposal is primarily guided by the need to allow the efficient operation of the hospital while intensifying the use at the site in response to escalating demand whilst maintaining adequate amenity to surrounding residential development.

The building has been designed to present as a contemporary built form to the Kingsway frontage, significantly upgrading the outward appearance of the building.

All new built areas are predominantly located towards the main road frontages of the site, being Kareena Road North and the Kingsway, thus reducing any possible amenity impacts on the existing residential uses to the north and east.

Internally, the design significantly improves and increases the functioning areas of the hospital to modern standards. The proposed internal re-planning of the hospital will improve clinical functionality and address current issues related to:

- Adequate accommodation for the treatment of both inpatient and outpatient services;
- Provision of efficient adjacency of departments improving clinical flows;
- Provision of staff support areas currently deficient in the existing Hospital;
- Provision of inpatient accommodation to meet current market expectations for private health care facilities.

### 4.9 Environmentally Sustainable Design Measures

The key sustainable development objectives for the Kareena Hospital Redevelopment, based on the three principles of social, environmental and economic sustainability are:

- Increase employment opportunities for the community through the development of staffing opportunities in the redevelopment of the inpatient, therapy and theatre facilities at Kareena Private Hospital and the derivative support structures related to partnership created with both the public and private sector.
- Efficiencies realised in purpose built facility in relation to existing inpatient accommodation which will enhance the current operations of the Hospital.
- Improved staff efficiency through the development of highly functional treatment and patient accommodation areas.
- Reduced cost to community in travel outside of the Sutherland Shire to seek specialist medical treatment.
- Improvement in quality of life through access of local enhanced medical treatment facilities will contribute to community overall.
- New purpose built, energy efficient building will replace some of the outdated and energy hungry and maintenance dependent buildings stock currently on the site.
- Improved clinical integration will reduce staff duplication and need for users to access multiple sites for treatment.

- Attraction of specialist staff to the new facility will improve medical services to the local community and the wider catchment population of Kareena Private Hospital.
- Energy efficiencies in new building will help realise better space utilisation and improved energy usage in relation to cost/m<sup>2</sup>.
- Functional, healthy and safe indoor environment (in terms of thermal comfort, visual comfort, acoustic comfort and indoor air quality).
- Minimised non-renewable resource consumption and environmental impacts (greenhouse, other air and water emissions, solid waste).
- Cost-effectiveness over the whole life cycle of the proposed facilities
- In conjunction with the functional requirements, the building form will incorporate passive design considerations to minimise the capacities and operation of engineering services, and to minimise energy use.
- The building's passive design and engineering services will complement each other, through an integrated design process involving all disciplines right from the beginning, to achieve the sustainable design outcomes for the whole building.
- The required sustainable design outcomes include thermal comfort, visual comfort and acoustic comfort for the building users, as well as ensuring good indoor air quality.
- The building form will be optimised to minimise solar heat gain in summer and maximise in winter, maximise day lighting access and benefits, and provide optimum energy efficiency outcomes.
- The engineering services and building passive design shall complement each other in design and operation to jointly achieve the functional outcomes for the building. This will include providing an energy efficient, healthy, thermally comfortable and acoustically acceptable indoor environment.
- Only environmentally sound materials will be used wherever possible. There will be limited use of non renewable resources and hazardous substances.
- Renewable energy systems will be used where possible and economically viable.
- Key issues to be embraced in developing an energy efficient outcome for the project fall under the following criteria:

*i. Building Fabric*

Where temperature and humidity control is not critical (e.g. offices, circulation and non-critical treatment spaces), space conditioning, during times of favourable weather conditions, will be achieved through natural ventilation and the design will need to address the requirements through the placement of building elements to facilitate this. Air-conditioning will only be provided in areas where temperature control is critical for operation or human comfort, areas such as interview/inpatient rooms and specialist treatment zones, that may need to be enclosed due to privacy issues, or where passive

Where design techniques will not meet an acceptable level for human comfort, mixed-mode systems that provide natural ventilation for the majority of time and air-conditioning only in extreme temperatures will be investigated.

Where natural ventilation is proposed for summer cooling of a building, a thermal model of the proposed building design will be undertaken to confirm performance and ensure that the optimal building design has been achieved which will support natural ventilation. Opening windows, to certain areas, will to be included as part of a passive ventilation system.

The building has been designed with the longest faces of the building facing north/south. Integration of thermal mass in the internal building fabric is encouraged to provide temperature moderation in all temperature extremes.

The insulation of the building to achieve thermal performance will be critical; the minimum thermal rating for complete roof systems on enclosed internal areas will be R4.0. This is a system rating that includes bulk insulation, foil, airspaces and roof structure. The minimum thermal rating for complete wall systems will be R2.5. Where an on-ground slab floor construction is utilised this is to have a minimum R2.0 rigid insulation installed on the slab edge. Elevated floors shall have a minimum thermal rating of R2.0.

Overall building glazing to the east and west facades are kept to a minimum. Windows do not to extend below 600mm height where anticipated standard usage is likely to obstruct low windows with furniture and fixtures. Likewise glazing above 2000mm will only be installed if it can provide glare-free daylighting and displace electric lighting. Access to daylighting will be maximised without introducing excessive glare or unwanted heat gain. It is to be ensured that the window assemblies must include appropriate weather stripping to prevent air leakage, in addition suitable external shading to the windows based on orientation is to be provided to all facades subject to solar gain that will negatively impact on the building's internal environment.

All external doors to be adequately protected with storm seals and draught excluders. Entries should be provided with some form of cover and wind protection.

### *ii. Mechanical Systems*

The following principles are proposed to ensure that HVAC systems are both designed and operated to achieve maximum energy efficiency.

- An economy cooling cycle with up to 100% outside air and the potential for heat recovery shall be assessed for all HVAC systems where cost effective.
- Effective zoning and control shall be provided to deal with different usage within a building.

### *iii. Lighting*

Reducing the wattage of installed lighting whilst still meeting required lighting standards is a central part of lighting energy efficiency. All lighting in new facility is to meet the energy efficiency requirements of the Building Code of Australia. Where possible, movement detectors will be installed in rooms of infrequent use to allow for lights to be automatically switched off if the room is not in use.

### *iv. Hot Water*

To reduce energy use from hot water systems length and size of supply pipes will be minimised and insulated accordingly. In additions options for solar hot water system or solar augmented systems will be investigated.

## 04 Environmental Assessment

### v. *Pipe Work and Duct Work*

To reduce friction losses in piping from bends (and thus reduce pumping energy costs) due consideration must be taken when designing pipe layouts. Hot water supply piping should be fitted with minimum 25mm insulation to reduce heat losses.

### vi. *Operation & Maintenance (O&M) Manuals*

Operating instructions for all mechanical systems to include energy efficient operating procedures.

## 4.10 Waste Management

As the proposed development works are for the extension of the existing hospital, procedures for handling and storing waste are already in place and enforced by Hospital Management. Waste management including biomedical, infectious or toxic wastes, storage of any hazardous materials will be processed in accordance with Kareena Private Hospital Waste and Environmental Audit and Sustainability Plan.

This details Waste Management and Waste Handling, Containment and Transport and Waste disposal including the safe handling, storage, collection and disposal of recycling, general and clinical waste. Kareena Private Hospital also has a Resource Efficiency Policy (including Waste Management) in its OHS Policy Manual currently in operation. This document references the Ramsay Health Care Radiation and Laser and Hazardous Materials Guidelines which gives guidance on the collection and disposal of hazardous wastes associated with hospitals.

The waste management documents are provided in Appendix I.

## 4.11 Utilities and Services

### i. *Electricity*

The feasibility study carried out by Connell Wagner states that the existing substation spare capacity is an insufficient source for the proposed extra power demand. An alternative source of power is required. Therefore a substation has been incorporated into the design. It is located on the parallel to the car parking spaces on the southern Kingsway boundary and is shown on the architectural drawings in Appendix A.

### ii. *Gas*

The Hydraulic Services Scheme Design Report by GDK Services (Appendix Q) and the Feasibility Report by Connell Wagner (contained in Appendix N) state that the gas service will extend from the gas main in Kareena Avenue to all fittings as required. An upgraded gas meter is to be installed within the existing plant area.

### iii. *Telecommunication*

Existing telecommunication technologies will be upgraded to support the expanded facility.

### v. *Storm water*

A stormwater drainage statement has been produced for the site including site plans of the hydraulic services. These address the following issues:

- Onsite stormwater detention design

## 04 Environmental Assessment

- Sewer drainage
- Pool waste drainage for the hydrotherapy pool
- Stormwater drainage (building)
- Hydrant and hose reel system

The implementation for storm water issues is discussed for these areas with appropriate measures to meet the utility needs of the development. See Appendix E for the full stormwater report.

### *vi. Water Supply*

As part of the hydraulic services, the following water supply issues have been discussed:

- Main water supply
- Domestic cold water supply
- Domestic hot water service
- Sanitary fixtures and taps and valves
- Sanitary plumbing

### 4.12 Acoustic

It is seen as vital that the noise generated by the proposed development remain considerate of the amenity of patients and neighbouring residents. There are two aspects to the assessment of noise for the proposed development. The first is construction noise generated by the works required to extend the hospital, the second is ongoing operational noise. The intended mitigation during each of these stages is discussed in further detail below.

#### *i. Construction Noise*

The management of the construction phase has been detailed in the accompanying Construction Management Plan (refer appendix D). The details of this Plan are also detailed below.

The construction phase will be managed to ensure that appropriate amenity is retained to neighbouring properties and will be consistent with DEC Industrial Noise Policy Guidelines and the Protection of the Environment Operations Act.

#### *ii. Operational Noise*

An acoustic assessment and report addressing the possible noise generation as a result of the proposed development was carried out by Wilkinson Murray in November 2008 (refer Appendix F). This assessed the potential impact of additional car parking spaces, increased traffic both accessing the site and at the site and the operation of the proposed roof top plant.

#### *iii. On site car parking*

This application seeks to accommodate additional car parking spaces on the site. Proposed on site parking adjacent to the neighbouring residential properties has been screened by a 1.8 metre solid fence along the eastern boundary, and associated landscaping.

The Noise Assessment states that all of the parking is expected to comply with noise criteria and will not cause nuisance noise generation which will impact on neighbouring residents (Section 4, Page 8). The report notes that the use of the car park areas adjacent to neighbouring residential properties should be restricted during evening periods (after 10pm) to maintain acoustic amenity to neighbouring sites.

During evening periods, the only public entry to the Hospital for visitors and patients is via the main entry (adjacent to the Kareena Road car park). This is also the emergency entry. Persons parking at the site during evening periods will therefore prioritise parking within this Kareena Road car park area (as is existing).

Staff using the rear parking areas are able to access the Hospital via security doors during day and evening periods. The Acoustic assessment puts forward a recommendation to manage this potential noise impact by installation of signage to inform visitors and staff that parking in these designated areas is not permitted after 10pm. This measure has been put forward as a draft Statement of Commitment.

#### *iv. Traffic Noise*

The development has the potential to increase traffic on the roads due to the increased bed capacity and the additional specialist services incorporated into the Hospital. The Noise Assessment suggests that this will be an increase of no more than 25 vehicles per hour which equates to negligible increase in noise.

The traffic noise levels on the roads are already in excess of the noise criteria and the addition of these cars would not impact on the existing noise levels.

#### *v. Roof Plant*

A new roof plant will be introduced above the western portion of the roof, above the established hospital building. A second roof plant will be located centrally.

Roof plant has been designed and located to be separated as far as possible from the adjoining residential land uses. Operational noise from the roof top plant will be well shielded from residence and noise emissions will be below the acceptable noise criteria. Therefore no noise impact is predicted from mechanical services.

Ensuring the construction and operational noise at the site is manageable and amenable for neighbouring properties is essential. As per the accompanying Noise Assessment, it has been found that any potential acoustic impacts can be managed, and the operations of the proposed expansion will not impact upon the amenity of neighbouring residences including those in close proximity to the new car park on the eastern boundary. This will be aided by mitigation measures such as the signage discouraging night time use of the car park and proposed fencing.

### 4.13 Transport, Traffic and Access Impacts

The proposal seeks to introduce additional on site car parking to accommodate a total of 127 car parking spaces (currently 98 provided on site). It will introduce clear and efficient pedestrian links through the car park to accommodate the safe and efficient pedestrian movement of visitors and staff at the Hospital, and will introduce a new pedestrian access from the Kingsway.

The development does not involve any new vehicular access points. The existing entry to the site from Kareena Road is maintained, providing both pedestrian and vehicular entry for visitors, patients, staff,

## 04 Environmental Assessment

emergency vehicles and services. Loading dock facilities have been upgraded for improved manoeuvrability for deliveries to the site.

A Traffic and Parking Assessment Report has been undertaken by ARUP, evaluating the proposed traffic impacts of the scheme (included in Appendix G). Specifically, the scope of the assessment included:

- Assessment of existing transport conditions and arrangements;
- Evaluation of vehicle volumes and parking demand generated by KPH;
- Calculation of the number and distribution of trips likely to be generated by the proposed development of KPH during the critical peak hour period/s;
- Analysis of the impacts of the proposed development on the surrounding road network and public transport networks during the critical peak period/s;
- Review of internal vehicle circulation; and
- Identification of travel demand management measures.

The detailed Traffic Impact Assessment concludes the following (refer page 14):

- *Kareena Private Hospital is well served by public transport in the form of the local bus services and Miranda and Caringbah railway stations, some 1200m from the site. A significant number of on-street parking spaces also exist within close walking distance of the site.*
- *The demand for parking on busy weekdays will continue to equal or exceed on-site supply. The provision of 127 on-site parking spaces however exceeds that required by the Sutherland Shire DCP (2006). The shortfall in parking spaces during the day will be made up through on-street parking in the local area, as well as on-site parking at the adjacent Sutherland Public Hospital.*
- *The loading area has been reconfigured to reduce any potential conflict between passing cars and service vehicles. This has been achieved through the removal of nine parking spaces adjacent to the south western boundary of the site.*
- *The development does not involve any new vehicular access points. The net increase in vehicular traffic generated by the development is forecast to be in the order of no more than 25 vehicles in the peak hours. This is unlikely to cause any noticeable change in traffic congestion levels throughout the day.*

Having regard to the findings of the assessment undertaken by ARUP, it is found that Kareena Hospital expansion will remain acceptable in terms of traffic and parking provision as proposed. The minor shortfall in on site car parking, largely the result of shift working arrangements, is identified to be manageable, with this parking demand able to be absorbed in the immediately surrounding road network.

### 4.14 Construction Impacts

The construction impacts associated with the expansion of the hospital will be minimised by a program of works which allows the hospital to function and serve its patients as much as possible.

Structures associated with the existing hospital will need to be demolished, and accordingly consideration of construction management is fundamental to the ongoing use of the hospital during this time. It is recognised that the construction management is important as the hospital is an existing service which is required to continue its functionality. Therefore, a Construction Management Plan has been prepared by Ramsay Health Care Ltd. This includes identification and consideration of potential impacts for pedestrians and cyclists during the construction of the project including the following:

- noise and vibration;
- soil and erosion control;
- air quality and air pollution;
- wastes management;
- cut/fill and retaining structures;
- traffic management, including pedestrian and cyclist circulation and safety and
- Car parking for construction workers.

The construction management plan is provided in Appendix D.

### 4.15 Operational Impacts

#### *i. Site security*

The established security measures in place for the Kareena Private Hospital will remain unchanged, with new access doors and entries to adopt the existing security system (staff security swipe cards).

#### *iv. Fire Safety and emergency and evacuation procedures*

Kareena Private Hospital has an Emergency Procedures Manual which includes the following procedures for emergency operations:

##### — Evacuation Assessment and Authority to Evacuate

Describes the assessment of the situation by the Emergency Coordinator, Fire Safety Officer, Emergency Services Officer, Senior Fire Brigade Officer before the decision is made to evacuate, having regard to the seriousness of the situation and the threat to human safety, the proximity of hazards and the nature and the type of patients in the area to be evacuated.

##### — Evacuation Assembly Points

The assembly point for emergency evacuation is stated as the hospital car park.

##### — Evacuation Stages, Priorities and Egress Routes

This describes the evacuation or movement of patient/s and personnel from immediate or threatened danger, in as rapid and safe a manner as possible as directed by the existing emergency situation. It contains a three stage procedure taking into account the possible mobility levels of patients.



## 04 Environmental Assessment

### — Isolation of services

This details the procedures for Gas and Electricity Supply isolation, turning off Oxygen, medical air, Nitrous Oxide and air conditioning isolation

### v. *Signage*

Drawings showing the signage proposed for the hospital are incorporated into the Draft Statement of Commitments in Section 5. The signage will be designed primarily to aid wayfinding for patients and visitors around the car park in the safest manner possible. They will locate the entrances and the direction of travel to reach them which will coincide with the pathways around the hospital.

#### 4.16 Crime Prevention through Environmental Design (CPTED)

Safety, security and crime have been considered in the design and development of the proposal, with the key principles of the Crime Prevention Through Environmental Design document included as part of the design process. A CPTED report is included in Appendix L.

#### 4.17 Landscape

The proposed expansion of the Hospital site, seeks to maximise areas of landscaping to improve and enhance the site's design and operation. A detailed landscape plan is attached as Appendix H.

The landscaping scheme has been developed to respond to the built form character, promote pedestrian scale, screen and soften car parking areas and maximise the privacy between the Hospital site and its residential neighbours.

Landscaping has been designed to be simple and highlight the character of the proposed building while also providing a range of different functional spaces and a high degree of amenity for hospital users. The following key landscaping areas are proposed:

##### i. *The Kingsway:*

The Kingsway is a busy arterial road running along adjacent to the site. The appearance of the hospital is designed to sit comfortably with its surroundings, and the landscaping is seen as important in integrating the site with its immediate context. The existing bushbox trees on the Kingsway road will be retained to act as a visual buffer for users of the road, pedestrians using the parallel footpath and local residents.

A strip of landscaping has been proposed along the length of the Kingsway frontage, to support medium to tall trees along this boundary. Trees will screen the car park area below, 'green' the site for passing pedestrians and motorists, and also enhance the landscape outlook for patients.

## 04 Environmental Assessment

### *ii. Eastern Boundary:*

Landscaping on the eastern boundary has been integrated to soften the car park area and to enhance visual privacy to adjoining residents. Landscaping along the eastern boundary is integrated with a 1.8m solid fence, consistent with new fencing along this boundary.

Formal landscaping has been proposed along the inside of the fence at the eastern boundary, adjacent to the car parking areas in order to provide a natural screening of the site from adjoining residential properties and to enhance the physical separation between these uses. Mature trees established at the north-eastern corner of the site will be retained, offering natural screening. These will be complimented by the planting of further trees along the boundary.

### *iii. Northern Boundary:*

At the northern end of the site, adjacent to the proposed new infill development, a courtyard and landscaping area is provided for patients and visitors. High quality paving is proposed for this landscape zone, with additional trees lining the boundary fence. A number of these trees will be tall to offer screening to the residents adjoining the Hospital.

### *iv. Internal*

There are several internal courtyards that have been created within the greater building mass. These allow natural light penetration into the building and generate opportunities for landscaped 'breakout' spaces for patients and staff. These internal landscape zones provide independent sanctuary areas for solitude and passive recreation.

Trees are retained around the car parking area to enhance the experience of the patients and visitors coming into the hospital and to soften this necessary hard surface space.

## 4.18 Potential Amenity Impacts on Neighbours

The Kareena Private Hospital site is established immediately adjoining residential properties. Ensuring an amicable and appropriate co-location of these uses is imperative. While protecting the amenity of residents living adjacent to the Hospital is important, it is equally important to reasonably allow the ongoing operation of this long established hospital facility. By its nature, the Hospital operations lend themselves to being amenable to adjoining residential uses.

The proposed Kareena Private Hospital expansion has been considered having regard to retained amenity to residential properties adjoining the site to the east and south. The key amenity indicators of solar access, acoustic and visual privacy, acoustic amenity and obtrusive light spill are discussed below.

### *i. Solar Access*

Chapter 3, Section 14.b.2 of SSC DCP sets out Council's controls relating to solar access and states the following:

*"New development must not eliminate more than one third of the existing sunlight, to useable private open space and windows of living areas, of an adjoining property measured at 9am and 3pm on 21 June."*

The building that is potentially most affected by the proposal is the single storey residential dwelling at 437 Kingsway. Other residences are located sufficiently far from the proposal not to be impacted by over shadowing. See Appendix J for shadow diagrams for the proposed development.

The analysis found that the principal area of open space and the windows leading to the principal living area of the house currently receive more than 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.

Further analysis shows that the area of private open space (rear yard), and glazing in the northern elevation will continue to receive in excess of 3 hours of direct sunlight on the winter solstice (21 June).

The windows in the western elevation of 437 Kingsway will be affected by the proposal between 2pm and 3pm, reducing sunlight received through these windows by approximately 30 minutes. Given that direct sunlight will continue to be received into the rear yard and into the rear of the dwelling (through the glazing in the northern elevation), for in excess of 3 hours on the Winter solstice, the reduction of direct sunlight through the windows in the western elevation is not considered to cause such harm as to warrant refusal of the application.

### *ii. Acoustic*

As discussed above in Section 4.12, the operational noise generated by the car park and plant are within acceptable criterion and will have minimal impact on adjoining residential properties.

By restricting the use of the eastern portion of the car park after 10pm, and incorporating the 1.8m solid wall as a boundary fence, sufficient mitigation measures are in place to ensure that acoustic privacy to adjoining residential properties is retained.

### *iii. Visual amenity*

The design of the Hospital has taken into consideration and incorporated design features to eliminate any direct view lines to neighbouring properties.

The eastern elevation of the propose extension has the potential to overlook residential properties from upper levels. The patient room windows along the eastern elevation have been treated with fixed louvers to ensure that patients can receive sunlight, while not being able to view neighbouring properties. These ensure total privacy to adjoining residential sites.

At lower levels, landscaping has been introduced along the eastern elevation to provide a more natural screening at ground level.

### *iv. Obtrusive light spill*

An intrusive light spill report was conducted by Connell Wagner and is included in Appendix O. This report assessed the potential obtrusive light effects on residents. This assessment was focussed on the new outdoor luminaries which are proposed to be installed in the car park area at the eastern part of the site.

The report concludes that the lighting complies with lighting standards and therefore impact on amenity for neighbouring properties on the eastern boundary would be minimal.

Having regard to the above considerations, it is found that the proposed expansion of Kareena Hospital will retain acceptable amenity to surrounding residential properties

## 04 Environmental Assessment

### 4.19 Consultation

In accordance with the Director General Environmental Assessment Requirements, consultation with the following relevant parties was sought during the preparation of the Environmental Assessment.

- Sutherland Shire Council
- Roads and Traffic Authority
- Ministry of Transport
- Department of Health

These parties were issued with a letter seeking their response to the proposal along with a copy of the floor plans and landscape plans.

A copy of the written letter issued to the relevant parties and their response is included in Appendix P.

No new issues or matters were raised during this consultative process. A response was received by the Ministry of Transport. This referred to earlier comments issued by the Ministry to the Department of Planning during notification of the project application for this scheme. No other written responses were received.

A follow up phone call was made to agencies which had not provided a written response. The Department of Health, the RTA and Sutherland Shire Council did not provide a response.

A summary of the comments received from the Ministry and other agencies during project application stage, (Department of Planning consultation) accompanies (refer Appendix P). All issues have been considered in the final design detailing of the scheme and this Environmental Assessment.

## 05 Draft Statement of Commitments

The Project Application identifies the following Commitments by the applicant.

### 5.1 Environmentally Sustainable Development

Kareena Private Hospital and Ramsay Health are committed to the principles of sustainability as defined in the Environmental Planning Assessment Act 1979. The proposed development will incorporate the following measures in support of the principles of ESD:

- Low energy and resource use building design;

### 5.2 Management of Construction Noise, Vibration, Dust and Erosion

Management of noise, vibration, dust, soil and erosion arising from the proposed construction will be undertaken in accordance with the Construction Management Plan for the development.

Hours of construction shall be limited to the standard hours as detailed in the Sutherland Shire DCP.

### 5.3 Management of Construction Waste

Construction waste from the site and any construction debris in the surrounding areas associated with the extension of the Hospital building will be assessed for reuse, reprocessing, recycling or environmentally disposed by the Building Contractor to comply with the NSW Waste Avoidance and Resource Recovery Act 2001.

### 5.4 Management of Construction Traffic

A Construction Management Traffic Plan will be prepared upon the appointment of a Managing Contractor and prior to the issue of a Construction Certificate. This will refine that put forward in the Traffic Report (Appendix G).

### 5.5 Management of Operational Noise

Plant will be selected and operated in accordance with the DEC Industrial Noise Policy Guidelines and the Protection of the Environment Operations Act.

A detailed assessment of plant noise emissions will be conducted once the type and placement of mechanical plant is confirmed.

To manage potential noise conflict between the car park and adjoining residential development, signage is to be erected to inform visitors and staff that parking in designated areas adjacent to the eastern boundary of the site is not permitted after 10pm.

### 5.6 Energy Efficiency and Greenhouse Gas Emissions

An Energy Management Plan will be developed and implemented that focuses on the containment and/or reduction of greenhouse gas emissions, energy conservation and use of alternative energy sources prior to issue of a Construction Certificate.

### 5.7 On Site Bicycle Parking

Suitable bicycle parking and storage area is to be integrated on the site prior to issue of a Construction Certificate. The bicycle storage area must be designed in accordance with Australian Standard AS 2890.3:1993 Parking Facilities – Bicycle parking facilities. Details are to be provided prior to the issue of a Construction Certificate.

### 5.8 Signage

#### *i. Wayfinding*

Details of wayfinding signage around the hospital site are to be submitted prior to the issue of a Construction Certificate.

#### *ii. Building Identification*

Details of the signage which identify the building is to be submitted prior to the issue of a Construction Certificate.

## 06 Conclusion

This Environmental Assessment has been prepared on behalf of Ramsay Health Care. It accompanies a detailed Major Project application which is seeking the expansion of the established Kareena Private Hospital, located at 86 Kareena Road, Caringbah (corner of Kareena Road (North) and Kingsway).

Specifically, the Application is seeking:

- Concept Approval for the rezoning of Lot 26 DP21004 (439 Kingsway) from Local Housing to Zone 12 - Special Uses (Medical Facility), to enable the use of this land for parking associated with the Kareena Private Hospital; and
- Project Approval for all works associated with the proposed expansion of the existing Hospital to support an additional 67 beds, extension of theatre suite at ground floor; associated administrative facilities, 29 on site car parking spaces and associated landscaping and signage.

The Environmental Assessment has been prepared in response to the Director General's Environmental Assessment Requirements (dated 29/09/08, refer Appendix B), and is supported by a range of specialist documentation.

The Assessment finds that the proposed expansion of the Kareena Private Hospital is appropriate having regard to:

- The established use and function of the site and the growing demand for medical facilities within Sydney Metropolitan Area.
- A small portion of the site is zoned in accordance with the adjacent residential zone and is pending a rezoning. This Concept Application requests the Minister's consent for variation to the Sutherland Shire LEP in accordance with Section 75O (3) and Section 75R (3A) of the Environmental Planning and Assessment Act to facilitate the rezoning of this land.
- The built form, landscape and overall urban design response is considerate of the surrounding residential development and will ensure maintained amenity.
- This Project Application seeks the use of Section 75J (3) (and 75R) of the Environmental Planning and Assessment Act 1979 to vary the building height development standard.
- The provision of 127 on-site parking spaces exceeds that required by the Sutherland Shire DCP (2006). The demand for parking on busy weekdays will continue to equal or exceed on-site supply, however, the shortfall in parking spaces during the day will be made up through on-street parking in the local area, as well as public transport.
- The loading area has been reconfigured to reduce any potential conflict between passing cars and service vehicles.

When assessed against all relevant matters in the Director General Environmental Assessment Requirements, and Section 3A of the Environmental Planning and Assessment Act the Concept Approval and Project Application are worthy of approval.

