Hurstville Private Hospital Redevelopment
Preferred Project Report

Prepared by Inspira Property Group

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Executive Summary

Purpose of this report

A Major Project Application has been made to the Department of Planning and Infrastructure under Part 3A of the *Environmental Planning and Assessment Act, 1979* (as amended by the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No. 22*).

It relates to the proposed redevelopment of Hurstville Private Hospital which will comprise additions and alterations to the existing Hospital, focussed on the existing Medical Centre on the corner of Pearl and Millett Streets, Hurstville. The existing Hospital comprises 6,206 square metres (m^2) of gross building area. There will be 5,201 m^2 of new building work including additions to the upper and lower basements, and 3,258 m^2 of the existing hospital will be redeveloped and refurbished.

The proposed development works have a Capital Investment Value of approximately $32.2 Million.

A request for declaration of the Major Project and the issue of Director-General's Requirements was sought on 16 February 2011 and a revised request was submitted on 23 March 2011. The project was declared to be a Major Project on 29 March 2011. Accordingly the Director General's Requirements (DGRs) were issued to Continuum Healthcare Group (the former proprietors of the Hospital) on 22 July 2011. The Environmental Assessment Report and supporting documentation was submitted in 30 October 2012. The Project Application was exhibited from 21 November 2012 to 21 December 2012. Submissions have been received from three (3) Government agencies and four (4) local residents. The attached Preferred Project Report and supporting reports and drawings detail the proponent's response to those submissions and any amendments which have been made to the Project Application.

Conclusion

The PPR addresses the DPI issues, and those of other Government agencies and local residents. The proposal provides an opportunity to expand the Hospital and allow for an orderly upgrade of the building, ensuring the sustained viability of operations and continuous improvement of the service offering. The potential impacts of the proposed development are minor and able to be managed. Given the planning merits of the proposal and the community service provided by the Hospital, the proposed development warrants approval by the Minister for Planning and Infrastructure.

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Statement of Validity

Prepared under Part 3A of the *Environmental Planning and Assessment Act, 1979* (as amended by the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No. 22*).

Preferred Project Report prepared by

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Qualifications	Masters Planning, Masters Property Development, Masters Environmental Management, Diploma Applied Science (Nursing), Certificate IV Property Services (Real Estate), Licensed Real Estate Agent, Certified Practising Planner, MPIA, REINSW
Address	S 108, 203 – 233 New South Head Road, Edgecliff NSW 2027
In respect of	Major Project Application for the redevelopment of Hurstville Private Hospital

Project Application

Applicant Name	Hurstville Private Pty Ltd
Applicant address	Suite 6, Level 10, 163 O'Riordan Street Mascot NSW 2020
Land to be developed	37 Gloucester Road Hurstville
Proposed Development	Redevelopment of Hurstville Private Hospital

Report Declaration

The Preferred Project Report is attached.

Declaration

I certify that I have prepared the contents of this Preferred Project Report and to the best of my knowledge:

1. It is in accordance with the *Environmental Planning and Assessment Act* 1979 and *Environmental Planning and Assessment Regulation* 2000
2. It contains all information that is relevant to the environmental assessment of the development and
3. It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

Signature

Name Helen Elizabeth Spira

Date 15 February 2013

1.0 Response to Submissions

1.1 Introduction

This Preferred Project Report (PPR) is submitted on behalf of Hurstville Private Pty Ltd in response to the Department of Planning and Infrastructure's (DPI) letter dated 10 January 2013 (Refer Appendix A). The Department's letter is in response to its preliminary assessment and submissions received following public exhibition of the Environmental Assessment for the proposed Hurstville Private Hospital redevelopment located at 37 Gloucester Road, Hurstville (Department Reference: MP11_0042).

The public exhibition was from 21 November 2012 to 21 December 2012.

Submissions in response to the public exhibition were received from the following:

- Four (4) responses from the general public
- Roads and Maritime Services and
- Sydney Water.

In addition, the DPI identified a number of issues with the proposal primarily relating to the design of the proposed car park deck to be located at 12 Millett Street, Environmentally Sustainable Development (ESD) measures, building and urban design details.

This report identifies how the issues raised in the submissions have been addressed to minimise the potential environmental impacts of the proposal.

A revised Statement of Commitments is also provided incorporating amendments as a result of the responses to these submissions.

This PPR should be read in conjunction with the Amended Architectural Plans and the specialist consultant reports that have been lodged with this report. A copy of the plans is provided in Appendix B.

The report has been prepared by Inspira Property Group on behalf of the owners of the Hospital, Hurstville Private Pty Ltd based on information prepared by the proponent and appointed consultants.

2.0 Summary of Submissions

2.1 General Public

A total of four (4) submissions were received from the general public in response to the public exhibition of the Environmental Assessment for the proposed redevelopment of the Hurstville Private Hospital located at 37 Gloucester Road, Hurstville.

Of the 4 submissions, three were concerned with the proposed car parking and turning bay deck to be developed over the existing at-grade car park located at 12 - 14 Millett Street, Hurstville. The submissions addressed privacy, over-sighting, noise and solar access issues associated with the deck.

Two of these submissions were also concerned with impacts on availability of street parking, and road safety.

The fourth submission addressed the following matters:

- Proposed height of building
- Increased traffic and reduced on-street parking
- Privacy
- Noise and amenity
- Rubbish dropped on the street
- Waste blown from garbage bins
- Noise from waste collection trucks
- Alleged damage to property from previous construction activities.

2.2 Government Agencies

The following provides a summary of the comments received from NSW Government agencies:

Sydney Water:

- The current wastewater system has sufficient capacity to serve the proposed development
- The applicant should submit an application for permission to discharge trade wastewater if the development generates trade wastewater.
- The developer should apply for a Section 73 certificate.
- The drinking water main requires amplification.

Roads and Maritime Services:

- All vehicles are to enter and exit the site in a forward direction.
- The proposed turning areas are to be kept clear of any obstacles, including parked cars, at all times.
- The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2-2002 for heavy vehicle usage.

- The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuverability through the site, shall be in accordance with AUSTROADS.
- All traffic control during construction must be carried out by accredited RMS approved traffic controllers.
- The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.
- All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

2.3 Department of Planning & Infrastructure

Following public exhibition of the Environmental Assessment (EA) the Department reviewed the submissions received and considered the proposal as detailed in the EA. The Department identified a number of issues which are identified in the letter attached in Appendix A, and the submissions attached in Appendix H.

The issues identified include:

- Compliance with local planning instruments and guidelines
- Built form and urban design
- Environmental and residential amenity
- Staging
- Transport and accessibility
- Environmentally sustainable development
- Voluntary Planning Agreement contributions and
- Draft Statement of Commitments.

3.0 Response to Key Issues

3.1 Summary of Proposed Amendments

Included in the Appendices of this report are:

- Amended Architectural Plans
- Amended Landscape Plan
- Supplementary Environmentally Sustainable Development (ESD) Report
- Supplementary Cogeneration Feasibility Report
- Supplementary Traffic, Parking and Sustainable Travel Plan report
- Community Consultation Report
- Draft Environmental Management Plan

3.2 Car Park at 12 Millett Street

Further consideration has been given to the access arrangements off Miller Street into the basement car park, and to the proposed second deck over the existing at-grade car park located at 12 Miller Street.

Responses to the DPI Submissions Letter are contained in the Amended Architectural Drawings and the supplementary Traffic and Parking Report.

Deck over 12 Millett Street

OVERSHADOWING

The proposed deck over the at-grade car park at 12 Millett Street which would have been able to accommodate tandem car parking and a turning bay for service vehicles has been redesigned to accommodate only the turning bay and 4 car spaces. This will reduce the size of the deck. The depth is reduced from 12.066 metres to 8.466 metres. The width is 18.589 metres.

A 1.8 metre high timber fence will surround the deck in addition to safety barrier measures on the internal face.

Shadow diagrams have been prepared by HSPC and are included in Appendix B. The shadow diagrams indicate the shadow impacts from 9 am to 3 pm for December, June and March.

Given that the existing site comprises an at-grade car park, it does not result in any overshadowing impacts to neighbouring properties or the public domain. The car park is permissible within the zone.

The results of the shadow analysis of the amended deck design confirm that solar access to the living areas and outdoor areas of the adjacent properties; in particular the villas to the south located at 8 – 10 Millett Street, remain compliant with solar access requirements for residential development. The Hurstville DCP No. 1 notes that: "The design of buildings should minimise the overshadowing of neighbouring private open spaces or windows to habitable rooms... Buildings should be designed to allow at least 3 hours of sunshine upon the open space areas of adjacent dwellings between 9.00 am and 3.00 pm on 22 June".

As noted in the shadow diagrams, the shadow cast by the deck with its amended design is marginal, and is compliant with the solar access requirements of Hurstville Council's Development Control Plan. There are no shadows on habitable areas given that the deck is set back against the garage of the rear villa at 16 Millett Street and is setback 1.382 metres from the boundary of 12 Millett Street where that villa's garage and driveway is located.

SETBACKS

The amended deck design aligns with the northern boundary of 16 Millett Street where the rear villa garage is located.

The existing at grade car park pavement is set back 2 metres from the northern boundary as per the Conditions of Consent for the Development Approval.

The deck is set back 1.382 metres from the southern boundary. There is a set of stairs from the upper to lower deck of the car park on the immediate southern boundary and within the setback.

Hurstville' s DCP No. 1 sections relating to Multiple Dwellings and Residential Flat Buildings, Outbuildings, accessibility and car parking have been considered with regard to the villa developments to the north and south of the car park located at 12 Millett Street.

PRIVACY

The cantilevered deck proposed over the car park at Millett Street will include a crash rail which complies with Australian Standard AS2890.1:2004 *Parking Facilities, Part 1: Off street car parking,* AS1170.1:2002 *Structural Design Actions, Part 1: Permanent, imposed and other actions* and relevant Building Codes. In addition there will be a timber fence to 1800 mm high to obscure views down to adjacent residences.

The deck is set back from the rear of the villas located at 16 Millett Street, adjoining a masonry wall of a garage on the northern boundary. To the south is the masonry wall of the garage and the driveway access to the rear villa located at 3/10 Millett Street, Hurstville.

LANDSCAPING

The proposed landscape plan for 12 Millett Street has been amended to include a hedge of shade trees, Waterhousea Floribunda, in accordance with Hurstville DCP 1 Clause 3.1.2.2.(1) Landscaping.

3.3 Noise and Amenity

NOISE FROM VEHICLES

The amended car park design indicates that only 4 new spaces will be created on the deck. These spaces are to be allocated to staff. Staff will be mindful of the need to minimise noise entering and leaving the car park late at night or in the early morning.

The addition of a maximum of four (4) vehicle movements as a result of the addition of the deck on the Millett Street car park is insignificant.

The increase in noise will be less than 0.2dBA and therefore complies with the environmental criteria. In their report attached to the original Environmental Assessment Report, GHD has assumed that mechanical plant, emergency vehicles and car park activities would operate at all times of the day. They

advise that operational noise targets should not be exceeded at any time of the day and sleep disturbance criteria will not be exceeded at any of the sensitive receiver locations (ie adjacent habitable rooms).

WASTE REMOVAL

It is noted that existing waste removal trucks visit in the early hours of the morning. Existing waste management policies comply with NSW Health guidelines and waste contractor servicing complies with Hurstville City Council policies and conditions of consent.

The Hospital's waste management policies and the waste contract will be reviewed as part of the redevelopment project to minimise noise and off-site impacts.

LOSS OF ON-STREET PARKING AND IMPACTS ON CHILDCARE CENTRE DROP-OFF ZONE

The original application included additional car spaces beyond that required under Hurstville City Council's Development Control Plan No. 1 (DCP 1).

The Amended Architectural Drawings show that additions to the Hospital now include increased car parking which provides six (6) fewer spaces than required under the guidelines for car park space requirements detailed in DCP 1.

It is noted that there is an existing dedicated 'drop off zone' for parents directly in front of the child care centre located at 18 Millett Street. The parking is restricted to 15 minutes to ensure that this area is always available for parents during pick up or drop off times for their children.

MINOR WORKS ON HOSPITAL DURING DECEMBER 2012

As the Hospital is proposed to remain operational when the works which are the subject of this Major Project Application are scheduled to proceed, some minor works were undertaken when the Hospital was closed during the Christmas break. These works were the subject of a separate Development Application (DA) approved by Hurstville City Council. Areas affected include the sterile areas which cannot be disturbed once the Hospital is operational. Works include strengthening of columns under the Medical Centre. The replacement of the roof which formed part of the DA recently approved by Council will be undertaken during the Easter 2013 break when the Hospital theatres are closed.

TRAFFIC AND ROAD SAFETY

The Traffic and Accessibility Impact Assessment and the Supplementary Report prepared by the consultants Colston, Budd, Hunt and Kafes demonstrated that there will be no significant impacts on local road networks and no significant impacts on road safety, subject to the Construction Management Plan and the Sustainable Travel Plan to be implemented by the proponent.

DILAPIDATION REPORTS

A dilapidation report will be carried out on all adjacent properties which may be affected by the proposed works.

3.4 Built Form & Urban Design

Walkway on northern wall

A walkway bridge was noted on the Architectural Drawings submitted with the Major Project Application. The bridge was located on the new upper levels on the northern face of the building. The walkway permits a path of travel without entering the wards on the upper levels. Having the walkway on the northern side of the new upper levels of the building was proposed rather than bedrooms, offices or other habitable spaces.

The Amended Architectural drawings indicate that the walkway has been relocated to an internal recessed location. Potential overlooking from the new building has been addressed by setting the walkway back a further 4 metres within the building, which also further articulates the building facade. Frosted privacy glass will be installed to 1.8 metres above floor level wherever there are windows on the northern façade.

At 'ground' level, the upper basement parking and the existing fenestrations will be retained, permitting natural ventilation. The façade will be painted a charcoal colour to reduce visual impacts.

The existing perimeter fencing between the Hospital property and adjoining residential property will be retained.

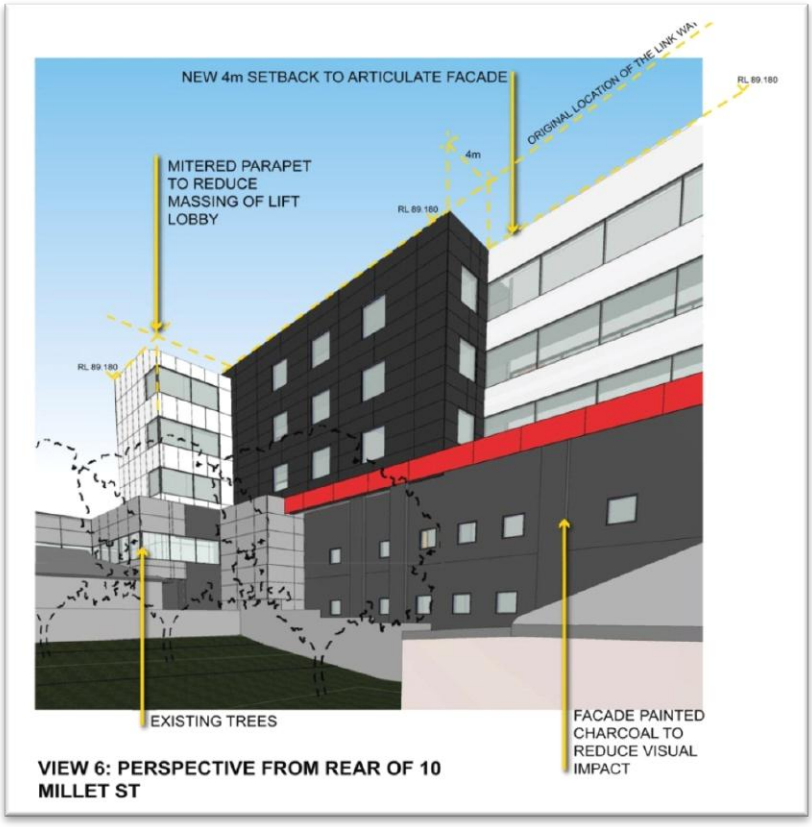

FIGURE 1: PROPOSED SETBACKS TO MINIMISE OPPORTUNITIES FOR OVERSIGHTING DOWN MILLETT STREET

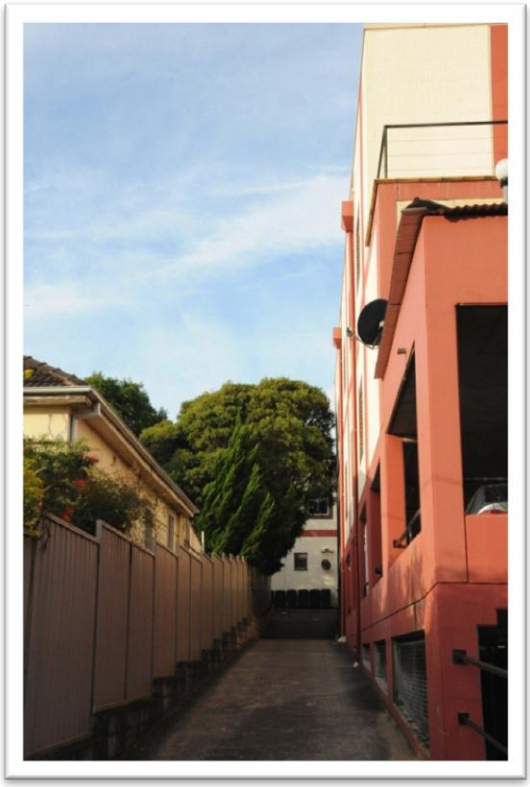

FIGURE 2: LOCATION OF EXISTING UPPER BASEMENT PARKING AND FENCING BETWEEN HOSPITAL AND ADJOINING PROPERTY. PARKING LEVEL WILL BE RETAINED AND ENCLOSED, FENCING WILL BE RETAINED. A SECURITY GATE WILL BE PLACED AT THE ENTRANCE TO THIS LANEWAY AND WHERE THE BINS ARE CURRENTLY LOCATED.

New Lift Tower - North-East Corner

A range of options were considered with regard to determining the best location for the new lifts from the basement car park to the upper level wards. There are a number of existing building and operational constraints which limited options for the location of the new lift shaft.

The options are described following and sketches are attached in the Amended Architectural Drawings in Appendix B.

Option 1

The two (2) new lifts are located between the Operating Suite and Kitchen opening directly into the corridor adjacent to the theatre exit from Recovery:

- The surrounding structure is very close to the boundary fence to adjoining properties
- The façade of the lifts is a blank wall adding to the bulk structure of this part of the hospital
- The waiting area for the lift interrupts the flow of traffic in the corridor
- Construction of the new lifts will not impact on the operating of the Operating Suite
- The walls of the new shaft are accessible to allow for acoustic separation.

Option 2: (Rejected)

The two (2) new lifts are proposed within the existing Operating Suite precinct:

- The location of the lifts adversely impacts the functionality and capacity of the Operating Suite blocking access corridors which :
- Stops the transfer of patients from Stage 1 Recovery to the inpatient units
- Stops the transfer of patients into the hold bays and from the hold bays to the operating theatre
- Stops the transfer of patients from Stage 1 to Stage 2 Recovery
- Reduces the number of Stage 2 Recovery beds
- Creates a dead end corridor within the Operating Suite that precludes evacuation of patients and the entry of addition staff in an emergency
- The construction of the new lifts will greatly impact the operation of the Operating Suite and the hospital
- The waiting area for the lift interrupts the flow of traffic in the corridor
- There are numerous obstacles when building lift shafts and pits within this existing area, including: bored piers, deep beam foundations, trunk stormwater and sewer diversions, existing roof deck plant equipment and the noise and dust created within this sensitive area.

Option 3 (preferred)

The two (2) new lifts backing onto the stairwell:

- The lifts open onto a dedicated waiting area
- The surrounding structure is further from the boundary than Option 1
- The façade includes windows to the waiting area which will relieve the bulk of the structure
- The corridor will not be impeded by patients/trolleys waiting for lifts
- Construction of the new lifts will not impact on the operations of the Operating Suite
- The walls of the new shaft are accessible to allow for acoustic separation
- The lifts area is located within the existing two storey structure.

This preferred option has been detailed in the Amended Architectural Drawings.

Street Frontage Treatments to Pearl and Millett Streets

The details of the Peal Street frontage treatment on the corner of Pearl and Millett Streets are noted on the Amended Architectural Drawings.

With regard to the pebble treatment proposed, the pebbles will be set into the concrete pavers fixed in the planter box 150mm above the finished footpath level.

Crime Prevention Through Environmental Design

REAR LANEWAY/ACCESSWAY

The laneway will be secured with a gate at each end at all times between Millett Street and the south-eastern corner where the new lift shaft is to be constructed. It will no longer be a thoroughfare between Gloucester Road and Millett Street. The laneway will retain sufficient clearance to permit a disabled person in a wheelchair to move freely. The area is patrolled after hours.

STAFF ONLY CAR SPACES

All staff-only car spaces have been identified in the Amended Architectural Drawings. There are staff only car spaces adjacent the lift lobby in the basement car parks. There is also staff-only parking in the car park located at 12 Millett Street. All access to staff-only car parking is by employee swipe card only.

A roller grille system will be constructed at the entrance to the basement parking on Millett Street which will restrict access after-hours. The location of the roller grille is noted on the Amended Architectural Drawings.

3.5 Staging

The partial redevelopment of Hurstville Private Hospital is proposed to occur in a single stage. The construction sequencing will occur in an orderly manner commencing with demolition and site preparation work. There will be some excavation in the basement of the existing Medical Centre for the expanded basement car park and the new lifts. The focus of the works is the redevelopment over the Medical Centre.

There will be some minor refurbishment works in other parts of the Hospital which will occur in an orderly manner to ensure that the Hospital remains fully operational during the construction program and that there is minimal disruption to services and delivery of patient care.

Construction will begin on completion of the approval process. Early works and site preparatory works will be undertaken followed by development over the existing Medical Centre.

The phasing of the proposed works is as follows:

1. Pre-construction planning
2. Final design management
3. Demolition
4. Site establishment
5. Construction
6. Completion activities
7. Approvals
8. Commissioning.

The intention is to continue all medical and clinical functions in the Hospital to the maximum capacity possible.

3.6 Waste Management

Waste generated by the Hospital is currently managed according to industry best practice and increased waste volumes generated by the increased number of admissions to the Hospital will be incorporated into the existing systems. The procedures and policies for waste management are detailed in the Operations Management Report in the original Environmental Assessment Report and comply with NSW Health Waste Management Guidelines for Health Facilities.

Opportunities to minimise waste during normal Hospital operations will be achieved by implementing waste strategies which are detailed in the draft Environmental Management Plan in Appendix G. Effective waste minimisation strategies include waste avoidance, reduction, re-use and recycling.

3.7 Transport and Accessibility

Reference is made to the Amended Architectural Drawings and the Letter Report prepared by Colston Budd Hunt and Kafes (CBHK) in response to the issues raised in the submission from DPI.

Consolidate Driveways on Millett Street

The driveways are proposed to be consolidated from five (5) to three (3) by closing the thoroughfare from Gloucester Road through the rear lane to Millett Street and by consolidating and levelling the lower basement car park entry. This will also allow the installation of a roller grille for after-hours security.

The driveways to 12 Millett Street and the lower basement level are existing and not proposed to change. They do not form part of the subject application and no S138 approval under the roads act is being made for these driveways.

The driveway to the upper basement level and loading area at the southern end of the site on Millett Street provides access to some 21 parking spaces plus the loading area. The Australian Standard for Parking Facilities (Part 1: Off-streetcar parking), AS 2890.1:2004, indicates that the driveway is a "Category 1" driveway (serving less than 25 spaces with access to a local road).

A "Category 1" driveway should be a combined entry/exit driveway with a minimum width of three metres. The proposed driveway to the upper basement level effectively provides a width of some 6.7 metres, clear of the loading area, which readily satisfies AS 2890.1:2004.

Additionally, the driveway should provide for turns by service vehicles entering and exiting the development. Swept paths are attached in figures prepared by the architect (DA-083 and DA-084) show that the driveway will accommodate these turns.

Finally, a condition of consent could be included requiring the driveway to be located six metres from the tangent point at the Pearl Street intersection, as required by Figure 3.1 of AS 2890.1:2004 (and as proposed in the Amended Architectural Drawings).

Loading and Servicing

The CBHK letter report notes that a survey of existing service vehicle activity and an assessment of anticipated service vehicle activity indicates that two to four small to medium rigid trucks per day may reverse between the site and Millett Street. The Australian Standard for Parking Facilities (Part 2: Off-street commercial vehicle facilities), AS 2890.2-2002, indicates that "regular service" (more than once per day) from a "minor road" (road carrying predominantly local traffic, such as Millett Street), should occur in a way that only one reverse manoeuvre occurs either to or from the street. The design provides for vehicles to enter and exit the site using one reverse manoeuvre.

The driveway entry off Gloucester Road will be retained to permit access to the car spaces on the deck and at the immediate rear of the Hospital, and service deliveries for the kitchen. The driveway will be widened slightly by removing the existing kerb against the building and the 3 Leopard trees which have

been planted immediately adjacent the building. The Leopard trees (Caesalpinia ferrea) are inappropriately located adjacent the building because they have invasive root systems, and drop seeds which are slippery.

Car parking

The original Application indicated that an increase of 21 car parking spaces is required for the new development to achieve compliance with the Hurstville Development Control Plan No. 1 (Car Parking) (DCP). With the amendments made to the plans as a result of the changes made in the design response to submissions from the public and Government agencies, an increase of 14 spaces is proposed, which is 6 fewer than required under the DCP. The total number of car spaces will be 85.

Bicycles

Secure bicycle parking is to be located in the Lower Basement car park. Refer to the Amended Architectural Drawings. There will be 15 spaces available in a secure parking area which exceeds the NSW Planning Guidelines for Walking and Cycling which would require 5 to 10 bicycle spaces.

A rack for casual parking will be located at the front of the building.

End of trip facilities are available for all staff, on the ground floor in the building. There are also shower and change facilities for theatre staff adjacent the Operating Theatres.

Draft Sustainable Travel Plan

To encourage travel modes other than private vehicle, it is proposed to adopt a travel demand management approach, through a sustainable travel plan to meet the specific needs of the hospital. The specific requirements, including number of employees, hours of work, shift times, etc., will be incorporated in the sustainable travel plan to support the objectives of encouraging the use of public transport.

The principles of the sustainable travel plan, to be developed by Healthe Care in consultation with Council, RMS and other stakeholders, will include:

- encourage the use of public transport, including rail services through Hurstville and bus services in the area;
- work with public transport providers to improve services;
- encourage public transport by employees through the provision of information, maps and timetables;
- raise awareness of health benefits of walking and cycling (including maps showing walking and cycling routes);
- encourage cycling by providing safe and secure bicycle parking and end of trip facilities;
- provide appropriate on-site parking provision, consistent with Council's controls and the government's objective of reducing traffic generation.

The sustainable travel plan will assist in delivering sustainable transport objectives by considering the means available for reducing dependence solely on cars for travel purposes, encouraging the use of public transport and supporting the efficient and viable operation of public transport services.

3.8 Environmentally Sustainable Development

A feasibility assessment was undertaken of a number of building sustainability initiatives for the hospital. The report prepared by Erbas is attached in the Appendix. Initiatives examined include:

- solar hot water system
- solar power generation
- rainwater harvesting
- recycled water use
- efficient tapware
- efficient lighting
- efficient building services
- Green Star benchmarking and
- Co-generation feasibility.

Waste minimisation has been examined in the body of this report and the draft Environmental Management Plan.

With regard to the sustainability initiatives, in summary many have a physical footprint on the site which would either load the structure of the building or alternatively spatial requirements for plant and equipment are not available and/or too costly.

Evaluation of each initiative has considered whether the benefits outweigh costs, spatial impacts and operational impacts.

The recycled water would be a worthwhile consideration, as the hospital generally discharges large volume of waste water. The hospital will need to consider where this water can be used and the level of filtration required to meet that requirement.

For general building services, the design team has incorporated efficient tapware, light fittings, plant and equipment into the proposed design.

An energy model of the hospital will be developed to compare against an industry reference such as Green Star Healthcare energy calculator. This will be carried out in the later part of the design phase to develop an energy model that is a close representation of the final design. The model will be used to benchmark the performance expected from the final building design with the incorporation of various building items such as the tapware, lighting and HVAC systems.

In addition to the sustainability initiatives, a feasibility study for co-generation was undertaken.

The options assessed are described following and further details are provided in the report by Erbas which is attached in Appendix D.

3.9 Solar Energy

A preliminary review of the proposed available space indicated that there could be potentially over 800m^2 gross roof area on the new building. Some of this area would be required for plant and equipment, (which has not yet been finalised), however there would still be residual area available to

harvest solar energy on the roof given the structure could be strengthened to support the additional load of the solar panels.

The feasibility assessment included a simple estimate of the payback period for solar panels. The assessment found that the relatively long payback period would make this a less attractive sustainability initiative. It would be more practical to have solar panels to supplement a percentage of the total electricity demand for the hospital. In this way, a balance could be struck between utilising renewable energy without the additional load burden on the structure and use of roof space.

A payback period of 37 years was the result of the assessment.

There are a several limitations with the use of a solar hot water system in a hospital. A hospital requires a constant supply of hot water and to fully meet the needs of the hospital, it would require a significant portion of the surface area on the roof to be covered with solar panels.

Secondly, there will be times particularly in winter, where hot water cannot be generated by a solar hot water system. Therefore, there is still the need for a reliable backup system to support the solar hot water system.

Thirdly, a solar hot water system requires storage tanks to maintain a reliable hot water supply. There are already significant spatial limitations in the hospital, however it is proposed that the development will incorporate a solar hot water system to supplement the proposed central hot water system. The solar hot water will be pre-heating hot water and assisting the central hot water plant.

3.10 Rainwater Harvesting

Rainwater harvesting is a very simple way to capture a natural resource that is essential to sustain life. Rainwater can generally be used for toilet flushing and landscape irrigation without further treatment.

For toilet flushing, additional infrastructure would be needed. This is considered impractical for the existing part of the building. The use in the new building will be considered, however design elements including the size of storage tank, location of the storage tank must be considered. The proposed size of the storage tank (s) will be considered as a minimum of 15,000L and is subject to final water usage calculation during design stage of this project.

Of most importance is the need to ensure that water quality meets standards for a surgical hospital.

At this stage rainwater harvesting may be considered for landscape irrigation purposes only.

3.11 Recycled water

With the number of people visiting and working in the hospital, it is anticipated that there would be a high volume of water used and discharged from the site. The use of recycled water was also assessed as part of the feasibility study.

Generally, hospitals have large sites and produce water that can be recycled and the treated water can be used on landscaped areas. However this site has very limited landscaped area to utilise the recycled water. If recycled water were to be utilised within the hospital, it would need to be treated to a high quality using filtration or other disinfection methods. Any disinfection infrastructure has large spatial

requirements for both the filtration plant and water storage. The ongoing maintenance regime and costs are also significant.

Due to the installation and operational costs, spatial requirements and limited areas for use of recycled water, a recycled water system is not recommended for this project.

3.12 Building Services Equipment

Commercial buildings are responsible for approximately 10 per cent of Australia's greenhouse gas emissions and those emissions have grown by 87 per cent between 1990 and 2006.

Improving the energy efficiency of commercial buildings has the potential to deliver savings on energy bills and building maintenance costs, increasing building value, improving amenity and boosting productivity.

Providing a clean and comfortable environment for medical treatments and recovery is fundamental to the hospital's operations. Reliable and efficient building services are therefore critical to the hospital's core functions.

Below is a list of major plant considered in the feasibility assessment:

- Electric drive chiller(s)
- Gas fired boiler(s)
- Air handling units and
- Fans and pumps.

3.13 Electrical Services

LIGHTING

The hospital is operational 24/7 and therefore internal lights are considered a major energy consumer.

An efficient lighting strategy will be incorporated including:

- efficient lights fittings such as LED down lights and recess T5 florescent for majority of the areas
- lighting control strategy such as zoning opportunities
- movement sensors. This could apply to infrequently used spaces such as meeting rooms.

GAS GENERATOR

A gas-fired generator allows the building to generate its own electricity. Gas power generators utilise an alternative fuel source to power the hospital either as the main power source or as a backup. Natural gas has lower greenhouse gas emissions than coal or diesel which is the traditional source of power generation from coal fire power station and diesel backup generator. Additionally, in combination with the use of an absorption chiller, the heat rejected from the generator can be fully utilised to generate air conditioning to the space.

The principle of using a gas generator has a number of benefits to both the user and the environment.

Electricity generated locally reduces the efficiency loss as compared to the long distance of transmission from coal fired power plant to the end user. This method maximises the power conversion from fuel to electricity.

MAIN OR BACKUP POWER

The following factors would need to be considered for the use of a gas - fired generator:

- Is it suitable as the main power supply away from the traditional grid supply
- Is it suitable to cater for the base heating/ cooling requirements
- And/ or would it be used as a backup power source.

There are benefits associated with the use of a gas fired generator as a power source. As discussed earlier, the fuel source has less impacts on the environment in terms of emission levels.

Gas generation also has financial benefits. With gas supply prices currently at a lower rate than electricity, gas provides an opportunity to reduce utility costs. While gas generation has a number of positive attributes in terms of both costs and the environment, there are a number of limitations that will need to be considered. These are noted in further detail following in the co-generation feasibility assessment and in the main report by Erbas in the Appendix.

Tapware

With a significant amount of tapware proposed to be fitted throughout the hospital, the use of efficient tapware can provide significant savings over the year. It is anticipated that most of the amenities would be fitted with 5-Star efficiency tapware.

Building Fabric and Facade

The building fabric plays an important role in reducing and delaying the impact of the solar heat gain. A well-insulated structure reduces the impact of the solar load on the building and consequently air-conditioning systems.

The design team, in particular the architect, mechanical engineer and the ESD consultant, will work closely to identify potential areas that would be affected by the solar gain. Solutions which provide shading as well as improving insulation will be analysed to achieve the best performance and environmental outcomes.

3.14 Benchmarking

Performance benchmarking of a hospital is currently undertaken by comparing to other buildings of a similar nature. Two (2) approaches are proposed to compare energy performance:

- In order to rate HPH in terms of energy performance amongst its peers, energy usage can be compared with hospitals of a similar size and providing similar services;

- HPH can use computer simulation to predict the energy performance and greenhouse gas emissions of the building and compare that against an industry rating tool such as Green Star Healthcare v1 Greenhouse Gas Emissions Calculator.

This process will involve the simulation of all the design elements of the building such as structural, architectural, and building services designs. This simulation will generate a detailed model of the building's energy consumption. The results are then compared against a reference building as described by the Green Star Healthcare V1 – Greenhouse Gas Emissions Calculator Guide.

Two (2) energy models for the building are proposed. The first model is the proposed building as per the architectural details, materials and equipment selected by the design team. The second model is the reference building. The reference building is a representation of the proposed building in terms of the architecture of the building, however it utilises a predefined services requirement and efficiency to determine the energy consumption of the building using a generic Green Star reference building.

The comparison of the two building energy models will provide a guide to performance and benchmark against other similar buildings.

This benchmarking exercise will be conducted in the later part of the design phase. This would allow time for each of the disciplines to develop their design strategy and to be able to provide some indicative data regarding the equipment selected for the project.

It is anticipated that the building will achieve a similar performance to the conditional requirements of Green Star benchmark references.

3.15 Cogeneration Feasibility Study

The common perception of Co-gen systems is that they are sustainable, generate energy, and utilise any waste heat for use by other building services. A feasibility study was undertaken for the Hurstville Private redevelopment project.

A more detailed study will be carried out in the later part of the design phase to develop an energy model that is a close representation of the final design.

Based on some preliminary assumptions for the system, a tri-generation system for the Hospital would comprise the following:

- 230kW$_e$ Natural Gas Generation Set
- Waste Heat Recovery providing heating for absorption cooling, space heating, and domestic hot water
- 175kW$_r$ Hot Water Single Stage Absorption Chiller

The proposed configuration and optimal sizing of the tri-generation plant is based upon estimates of the thermal and electrical loads for the proposed development. An estimate of the electrical load profile for the building was developed in order to size the generation plant using equipment specifications developed as part of the building design process.

The proposed design incorporates:

- high efficiency chiller
- high efficiency boiler
- variable speed drive motor control on fans and pumps to optimise operation (where suitable)
- economy cycle - where permissible by hospital operation
- building management control system to monitor and control the operation of all mechanical systems to optimise efficiency.

To maximise the financial return from the tri-generation system the plant size has been selected to maximise the operating hours for the generator set and absorption chiller. A preliminary life cycle cost assessment was undertaken to test the feasibility of the proposed system.

The tri-generation system would operate at base load for approximately 19 hours every day of the year.

The tri-generation system would cost an additional $920,000 over and above the cost of the conventional thermal plant proposed for the building, and would result in annual operational cost savings of approximately $18,000 per annum depending on utility rates.

The likely payback for the system would be approximately over 12.5 years depending on the escalation rates for electricity and natural gas.

At this stage of the design process, the main constraints to inclusion in this redevelopment project include:

- Need to guarantee constant energy supply
- lack of sufficient space and
- up-front costs.

However as noted, a more detailed feasibility assessment will be undertaken closer to the final design stage of the project.

3.16 Contributions and VPA

A draft Voluntary Planning Agreement (VPA) was included in the Appendix of the Environmental Assessment Report. Negotiations with Hurstville City Council regarding contributions or Works in Kind have been conducted as part of the Major Project design process.

Discussions with Council have focused on renewal of the public domain areas in front of the Hospital additions on the corner of Millett Street and Pearl Street, Hurstville. The works proposed are identified in the Landscape Drawings in the Appendix and include:

- New paving to Millett Street and Pearl Street in front of the redeveloped Hospital building and building additions
- New soft landscaping
- New kerbs and drainage as required
- New lighting as required
- Maintenance of landscaping until established and for a ten year period.

Other works proposed and to be considered by Hurstville City Council include works to improve pedestrian safety and intersection works to improve traffic flow in the area. The negotiations regarding the Voluntary Planning Agreement are not yet finalised and are subject to a separate Council resolution.

3.17 Response to Sydney Water

In response to the issues raised by Sydney Water the following actions in relation to servicing infrastructure are proposed:

1. The drinking water main available for connection will be upsized from the existing 100mm to a 150mm main to 200 mm as directed;
2. Should the development generate trade wastewater, the property owner will submit an application for permission to discharge trade wastewater to the sewerage system before business activities commence; and
3. Prior to the commencement of any physical works, the property owner/developer will engage a Water Servicing Coordinator to get a Section 73 Certificate and manage the servicing aspects of the development.

These actions are reflected in the revised Statement of Commitments.

3.18 Response to Roads and Maritime Services

Roads and Maritime Services (RMS) provided a number of advisory comments regarding the proposal. The comments are noted following with responses.

Comment:

All vehicles are to enter and exit the site in a forward direction.

Response:

Compliance with this will occur in all locations except the entry to the lower basement which is described earlier and satisfies the Australian Standard for Parking Facilities AS 2890.2 – 2002.

Comment:

The proposed turning areas are to be kept clear of any obstacles, including parked cars, at all times.

Response:

Noted.

Comment:

The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay

dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2-2002 for heavy vehicle usage.

Response:

Noted. Existing and proposed areas of non-compliance are identified on the Amended Architectural Drawings.

Comment:

The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuverability through the site, shall be in accordance with AUSTROADS.

Response:

Noted. Refer to the Amended Architectural drawings for areas of compliance and non-compliance and justification for non-compliance.

There will be one street tree removed on the Gloucester Road frontage and three (3) small trees removed within the property which is immediately adjacent the maternity wing in order to widen the Gloucester Road driveway entry.

A new street tree will be planted in a more appropriate location.

The 3 Leopard trees within the property have invasive root systems and drop numerous seeds and are considered inappropriate in this location.

Comment:

All traffic control during construction must be carried out by accredited RMS approved traffic controllers.

Response:

Noted.

Comment:

The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.

Response:

Noted.

Comment:

All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

Response:

Noted.

3.19 SEPP 33: Hazardous and Offensive Development

Consideration has been given as to whether the project constitutes potentially hazardous or offensive development under the State Environmental Planning Policy 33: Hazardous and Offensive Development (SEPP 33). According to the definitions following from the SEPP 33, the existing Hospital and proposed redevelopment do not constitute potentially hazardous or offensive development and accordingly this State Environmental Planning Policy does not apply to the assessment of the Major Project.

> "Definitions of "potentially hazardous industry" and "potentially offensive industry"
>
> In this Policy:
> "potentially hazardous industry" means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:
>
> (a) to human health, life or property, or
>
> (b) to the biophysical environment,
>
> and includes a hazardous industry and a hazardous storage establishment.
> "Potentially offensive industry" means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment."

3.20 Compliance Summary

TABLE 1: COMPLIANCE WITH PLANNING INSTRUMENTS AND LOCAL CONTROLS

Instrument	Comment	Compatible
State Legislation		
Environmental Planning & Assessment Act 1979	The proposed redevelopment promotes economic and orderly development and is consistent with the objectives of the Act.	Yes
Strategic Plans		
NSW State Plan	The Plan notes that improving and maintaining access to health facilities and services is a key principle.	Yes
Sydney Metropolitan Strategy	The proposed Hospital redevelopment and expansion of employment opportunities close to transport is consistent with the Strategy.	Yes
Draft South Sub-regional Strategy	The Strategy's objectives are to facilitate knowledge infrastructure, health services, increased employment and integration of land uses and transport, and the Project is consistent with these aims.	Yes
Sydney over the next 20 years: Discussion paper	The Paper describes principles aimed at achieving integrated land use, transport and infrastructure outcomes for NSW by 2021. The Hospital redevelopment is consistent with the aims described in the Discussion Paper.	Yes
Hurstville Community Strategic Plan 2021	Hurstville Community's vision for the local area includes providing services for the ageing and growing population. This Project responds to those increased demands for health services.	Yes
State Environmental Planning Policies		
SEPP 55 – Remediation of Land	The site is considered to be able to be made suitable for the proposed land uses through remediation. A Phase 1 and Phase 2 Environmental Site Assessment were carried out by JBS Environmental in 2010 and 2011.	Yes
SEPP Major Development 2005	The project was declared to be a 'Major Project' by the Minister pursuant to Schedule 1 (Class of Development),	Yes

	Group 7 – Health and Public Service Facilities.	
SEPP (Infrastructure) 2007	The SEPP includes provisions relating to development with impacts on local infrastructure. This proposal is not inconsistent and aims to enhance the local health services infrastructure.	Yes
SEPP 33 (Hazardous & Offensive Development)	The SEPP does not apply to this development.	Not applicable
Local Planning Instruments		
Hurstville Local Environmental Plan 1994	The Hospital uses and the proposed redevelopment are permitted with consent.	Yes
Hurstville Local Environmental Plan 2012	The Hospital use and the proposed redevelopment is permissible use in the SP2 Infrastructure Zone. The car park, on land zoned R2 Low density, is regarded as 'related development' and therefore permissible within the context of the Major Project Declaration. The car park is an existing use and permissible with consent in this zone. Hospitals are also permissible with consent in this zone.	Yes for SP2 Infrastructure. Yes for R2 Low Density zone.
Hurstville LGA Wide Development Control Plan (DCP) 1 ▪ Car Parking	To provide sufficient, safe and convenient parking facilities to meet user requirements including pedestrians, cyclists and vehicles.	No. There are 6 fewer spaces than required under the DCP.
▪ Access & Mobility	Ensure compliance with Disability Discrimination Act 1992 and relevant Australian Standards	Yes
▪ Crime Prevention through Environmental Design	Improve safety by design and natural surveillance	Yes
▪ Energy Efficiency	Use less energy, promote energy efficiency	Yes
▪ Drainage & On-site Detention Requirements	Drainage and detention designed to meet specified capacities	Yes
▪ Waste Management	Minimise waste, re-use materials where possible, and recycle where possible.	Yes
▪ Advertising & Signage	Encourage advertising signs which are compatible with the scale, character and amenity of the locality and surrounding development	Yes

3.21 Urban Design Responses

Urban design responses to the Department of Planning and Infrastructure are summarised following.

TABLE 2: KEY URBAN DESIGN AMENDMENTS TO ARCHITECTURAL PLANS

Urban Design Outcome	Response
Reduce car park deck depth to prevent over-sighting of 10 and 16 Millett Street.	The car park is now 18589mm wide and 8466 mm deep. It is contiguous with the garage of the rear villa at 16 Millett Street and set back 1382 mm from the boundary adjacent the garage and driveway at 10 Millett Street. There will be an 1800 mm high timber fence around the deck. There will be no shadow impacts on adjacent habitable areas.
Shade over open car park	Native trees are proposed along the edge of the 12 Millett Street car park to provide shade.
Reduce bulk and scale of new lift shaft	The lift shaft has been relocated into a position to the north-east of where it was originally proposed. The lift lobby parapet will be mitred to reduce massing of lift lobby form as viewed from adjacent properties.
Detail ground floor elevation on Pearl Street	The new Pearl Street frontage will be landscaped and there will be new paving and entry features which are robust and attractive. Additional landscaping will be provided to enhance the entry and exit points on both the Millett Street and Gloucester Road frontages. The corner of Pearl Street and Millett Street will be landscaped. The bin enclosure has been moved further to the south-east. Existing street trees will be retained.
Delete bin enclosure from ground floor corner	Noted above.
Reduce number and extent of vehicle entries off Millett Street to building basement	The number of vehicle entries off Millett Street to building basement has been reduced from five (5) to three (3).
Detail Sustainable Design Measures	The new building has been designed to minimise vertical travel; It optimizes ground level access to the main building functions; It encourages access to the Hospital by public transport, taxi

	or by foot; The design is flexible to accommodate a range of uses and possible expansion; The façade materials are durable and maintain a quality appearance throughout their effective life; Internal materials and finishes have been selected to minimise waste and volatile compounds, and minimise energy and water use. The following ESD measures will be employed in the building: • solar hot water system • efficient tapware • efficient lighting • efficient building services • waste minimisation, avoidance, re-use and recycling. The following innovations will be examined in the detailed design phase: • solar power generation • rainwater harvesting • recycled water use • Green Star benchmarking and • Co-generation feasibility.
CPTED: **Detail safety measures for laneway** **Detail any roller shutters or access restrictions to basement car park**	The building has been designed to comply with CPTED principles to ensure the safety of patients, visitors and staff and to ensure there is a feeling of safety and ownership. The rear laneway will be closed off with security gates between the new lift shaft and the Millett Street exit. The driveways to the lower basement car park will be rationalized to permit the installation of a roller grille. Entries to staff and after hours parking will be by swipe card only.
Shadow Diagrams: **Detail shadow diagrams for redesign of 12 Millett Street car park deck**	The shadow diagrams are included in the Amended Architectural Drawings. There are no shadow impacts on habitable areas of adjacent properties at 12 and 16 Millett Street.
Landscaping: **Amend landscape specifications for 12 Millett Street to provide shade**	Noted above.

4.0 Statement of Commitments

4.1 Introduction

The Statement of Commitments details measures for environmental management, measures to mitigate potential adverse impacts during both the construction and operational stages of the project, and any monitoring that will be undertaken.

The proponent will be responsible for implementation of these Commitments and commits to the preparation of a Building User's Guide prior to the occupation of the building to ensure that plant and equipment is operated as efficiently as possible.

4.2 Demolition Management Plan

A Hazardous Materials Management Plan will be prepared prior to the demolition following a hazardous materials survey to be conducted by an Occupational Hygienist.

All work will be carried out in accordance with AS2601 – 2001 Demolition of Structures and according to the relevant Workplace Health and Safety guidelines.

Demolition works will include measures to mitigate the following potential impacts:

- Demolition vehicle movements
- Dust
- Noise
- Minimising waste
- Minimising exposure and disposal of hazardous wastes
- Erosion and sediments in run-off.

Construction and demolition waste is to be re-directed from landfill where applicable.

An environmental management plan will be adopted by a contractor with ISO 14001 certification.

4.3 Construction Management Plan

A detailed Construction Management Plan will be prepared once the Project is approved, which responds to any specific conditions of consent. The purpose of the Construction Management Plan is to provide a document that ensures that the environmental safeguards and mitigation measures specified in the project consent are implemented and monitored.

The objectives of the CMP are to:

- Ensure all requirements of the project consent are met;
- Ensure the project operates in accordance with the Hurstville Private environmental policies;
- Ensure that relevant statutory requirements are complied with;

- Manage the environmental hazards and risks associated with the Project;
- Minimise the potential for environmental harm;
- Provide a mechanism for communicating and implementing site environmental policy; and
- To provide a process for review and continual improvement of project environmental management.

The Construction Management Plan will address the following topics:

- Construction hours;
- Air Quality/dust control procedures;
- Erosion and sediment control plan
- Demolition plan
- Noise Management procedures;
- Construction traffic management plan;
- Waste Management Plan;
- Community safety plan;
- Arrangements for temporary pedestrian and vehicle access;
- Storage and handling of materials;
- Environmental Training and awareness;
- Contact and complaints handling procedures; and
- Emergency preparedness and response.

The original Traffic Report details the Construction Traffic Management Plan outline.

4.4 BCA Compliance and Fire Safety

All building work will be carried out in accordance with the provisions of the Building Code of Australia and fire safety provisions or alternatives detailed which are 'deemed to comply' as per the BCA report prepared by Davis Langdon and included in the Major Project Application.

The recommendations of the BCA compliance statement are to be applied before detailed design and the release of a Construction Certificate.

4.5 Waste Management

Prior to the commissioning and occupation of the new areas of the Hospital, an updated Waste Management Plan will be prepared which covers existing waste streams and the methodology for dealing with increased waste volumes and management of new locations for the various waste stream receptacles. Plans will be prepared which comply with relevant legislation regarding waste and resource recovery, environmental health and safety, and environmental management including:

- NSW Health Infection Control Policy, May 2007
- NSW Health Waste Management Guidelines for Health Care Facilities, August 1998
- ISO 14001: 1996
- ISO 9001:2000; and
- Relevant Council and DECCW Guidelines.

4.6 Plant and Equipment

Cooling towers and water heating systems shall be operated and maintained in accordance with AS3666:2000, the Public Health Act 1991 and Public Health (Microbial Control) Regulation 2000.

4.7 Aboriginal Cultural Heritage

If any Aboriginal archaeological relics are uncovered during the course of the works, then all works shall cease immediately in that area and the National Parks and Wildlife Service will be contacted. The Proponent shall comply with any requirements of the NPWS to cease work for the purposes of archaeological recordings.

4.8 European and non-Aboriginal Cultural Heritage

If any archaeological relics are uncovered during the course of the works, then all works shall cease immediately in that area and the NSW Heritage office is to be contacted. Depending on the possible significance of the relics, an archaeological assessment and excavation permit under the NSW Heritage Act 1977 may be required before further works can proceed in that area. The proponent shall comply with any requirements of NPWS officers to cease work for the purpose of archaeological recordings.

4.9 Site Environmental Assessment

The proponent has undertaken a Phase 2 Environmental Site Assessment (Appendix M) which indicated that additional soil samples should be undertaken underneath the footprint of the building following demolition works to ensure no additional contamination is present. This is particularly important given that the hospital has developed over time by incorporating areas that may have previously been used for contaminating activities associated with the operation of the hospital in its earlier forms.

Prior to demolition of the buildings, the hazardous material survey undertaken by JBS Environmental Pty Ltd and attached to the Project Application will be used to identify any buildings which may contain hazardous materials. The Proponent will consider the findings of the hazardous waste survey in the Waste Management Plan.

4.10 Landscape and Public Domain

The proponent will provide landscaping and public domain works in accordance with the landscape drawings attached with the Amended Architectural Drawings in Appendix C.

All street trees shall be protected at all times during the works. All trees to be retained on site will be suitably protected by way of tree guards, barriers or other measures to reasonably safeguard against damage to root systems, trunks and branches.

The arborist's' report which advises on the method for pruning and protecting trees during construction is included in Appendix N of the Project Application.

Screening of residential properties to the north and south of the car park at 12 Millett Street will be achieved by planting with Waterhousia Floribunda at 2 metre-spaced centres adjacent to the edge of the car park tarmac. To ensure the viability of the screening trees, a maintenance inspection program will be prepared and a suitable irrigation system provided.

4.11 Built form and Urban Design

The additions and alterations will be designed in compliance with the Amended Architectural Drawings attached in Appendix B.

4.12 Parking and Loading Bays

All car spaces and service bays shall be designed to comply with AS2890: Parking Facilities. Where existing or proposed spaces are not compliant they are indicated on the Amended Architectural Drawings in Appendix B. (Reasons for non-compliance for new works are also detailed in the Amended Architectural Drawings).

All vehicles are to enter and exit the site in a forward direction. Compliance with this will occur in all locations except the entry to the lower basement which is described earlier and satisfies the Australian Standard for Parking Facilities AS 2890.2 – 2002.

The proposed turning areas are to be kept clear of any obstacles, including parked cars, at all times.

The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) will be in accordance with AS 2890.1- 2004 and AS 2890.2- 2002 for heavy vehicle usage. Existing and proposed areas of non-compliance are identified on the Amended Architectural Drawings.

All traffic control during construction will be carried out by accredited RMS approved traffic controllers.

The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.

All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

4.13 Vehicle Driveways and Manoeuvering Areas

The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuverability through the site, shall be in accordance with AUSTROADS. The Amended Architectural Drawings note areas of compliance and non-compliance.

Detailed design is to comply with the Amended Architectural Drawings.

4.14 Accessibility and Pedestrian Access

The design of the access into the Hospital will permit appropriate, safe and dignified use by all people including those with disabilities. Access will be designed to achieve optimum compliance with the following standards:

- NSW Health Facilities Guidelines: Part B, Design for Access, Mobility, Occupational Health and Safety, and Security;
- DDS32 Improved Access for Health Care Facilities
- AS1428 and BCA requirements
- AS 1735.12 (Lifts, Escalators and Moving Walks – Facilities for Persons with Disabilities).
- Accessible car parks will be designated and reasonably located adjacent to passenger lifts.

4.15 Traffic and Parking

Traffic, servicing and parking arrangements are to be in accordance with the traffic report prepared by Colston Budd Hunt and Kafes (November 2012), the supplementary Response to Issues report prepared by Colston Budd Hunt and Kafes (February 2013) and the Amended Architectural Drawings in Appendix B.

A Construction Traffic Management Plan is to be prepared prior to construction.

A draft Sustainable Travel Plan is contained in the CBHK supplementary report and will be implemented by the Hospital administration.

4.16 Lighting

All lighting will be designed to comply with AS1518 with respect to lighting design for roads and public spaces and AS4282 with respect to "The Control of the Obtrusive Effects of Outdoor Lighting."

4.17 Services

The proponent will notify the relevant authorities and obtain relevant certifications for connections to or adjustment of services affected by the proposed construction works and increased demand created by the expanded hospital.

4.18 Integrated Water Management Plan

The proponent will submit an Integrated Water Management Plan which addresses water efficiency opportunities as detailed in the Environmentally Sustainable Development initiatives report prepared by Erbas Pty Ltd, February 2013.

The Stormwater and drainage design will comply with the Concept design prepared by Northrop Pty Ltd (November 2012) and attached to the Project Application.

The Erosion and Sediment Control Plan will comply with the design prepared by Northrop Pty Ltd (November 2012) and attached to the Project Application.

4.19 Operational Management

Detailed design is to incorporate the environmental design initiatives detailed in the Building Services report prepared by Erbas Pty Ltd.

A Commissioning phase will be established to ensure lighting, HVAC and water systems achieve design intent for efficiency measures.

A tenant guide will be provided to aid the building users to maintain and use the building in line with design intent.

Operational waste management guidelines including separation of putrescible from recyclable waste will be disseminated to employees and tenants.

4.21 Consultation

The proponent will continue to liaise with the local residents and stakeholders during the development process. There will be ongoing consultation with relevant authorities.

4.21 Environmental Management Plan

The Hospital already has an Environmental Management Plan which will be updated to reflect changes to the building's operations and servicing. The proponent will finalise the revised Environmental Management Plan, an outline of which is attached in Appendix G, and which addresses the following operational issues:

- Environmental management systems
- Laboratory, cleaning, laundry, kitchen
- Waste management
- Energy management
- Hazardous substances
- Water management
- Wastewater management
- Air emissions
- Purchasing and materials management.

The proponent commits to finalising and implementing a Sustainable Travel plan including the provision of casual and secure bicycle parking.

The proponent commits to implementing the following efficiency devices:

- efficient tapware
- efficient lighting
- efficient building services.

The proponent commits to further consideration of the following innovations in the detailed feasibility assessment as described in the Erbas Pty Ltd ESD Report including:

- solar hot water system
- solar power generation
- rainwater harvesting
- recycled water use
- Green Star benchmarking and
- Co-generation feasibility.

5.0 Conclusion

This Preferred Project Report (PPR) provides a response to the issues raised following the public exhibition of the Environmental Assessment for proposed redevelopment of Hurstville Private Hospital located at 37 Gloucester Road, Hurstville, Project Number MP11_0042.

The proponent has considered the issues raised by DPI and the submissions from other NSW Government agencies and local residents during the public exhibition process, and the proposed development has been amended accordingly.

The PPR identifies how the issues raised by the submissions and the DPI have been addressed including measures taken to minimise any environmental impacts of the proposal as amended. A revised Statement of Commitments is provided incorporating the proposed amendments.

In summary, the proposal as amended is:

- permissible development subject to the provisions of Hurstville Local Environmental Plan 1994 and the recently made Hurstville Local Environmental Plan 2012
- it is appropriate development for the site
- it will increase employment and economic activity
- it will provide public benefits and
- it will contribute to orderly and economically sustainable land development and urban renewal in a timely manner.

The proposal therefore meets the objectives of planning instruments and Strategies at a local, state and Federal level.

Given the project's general compliance with relevant environmental planning instruments, policies and guidelines, and the minimal impacts the expanded Hospital will have on the surrounding environment, it is recommended that the Project Application is approved, subject to the Statement of Commitments, finalisation of the draft Voluntary Planning Agreement with Hurstville City Council, and pursuant to the relevant provisions of the Environmental Planning and Assessment Act 1979.

Appendix A: Response from DPI

ATTACHMENT 1

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Additional Information Required

Issue	**Comment**
Note	Please note that the department's preliminary view is that the proposed stacked parking to the deck over 12 Millet Street is unlikely to be supported. The department has not yet formed a view about whether a smaller deck one car-length in depth should be supported. It is recommended that you revise the proposal accordingly and consider the comments below in light of this.
Relevant EPIs policies and guidelines	Proposed Carparking Deck at 12 Millett St • Notwithstanding that the proposed carpark can be considered as related development, provide a detailed assessment of the proposed elevated carpark at 12 Millet St against all LEP and DCP controls applying to 12 Millet St (including but not limited to provisions related to parking, built form, setbacks and outbuildings). Demonstrate compliance and highlight and justify any non-compliance (see also below under residential amenity in relation to assessing impacts)
Built form and urban design	Bulk and Scale • Revise the building design to open up the light-well to the northwest by removing the walkway to the north-western side of the light-well in order to reduce the bulk and scale of the building when viewed from adjacent residential properties, achieve a better scale transition and reduce overlooking of adjacent properties • Revise the building design to relocate the proposed lift core/tower (currently near the back corner of 6 Millett St) southeast of its current location, along the south east elevation of the new building in order to reduce the bulk and scale of the development when viewed from adjacent residential properties. Street frontage treatments to Pearl St and Millet St • Clarify the nature of the ground floor elevation and interface with the footpath along Pearl St, including any basement ventilation, the extent of open and closed elements of the ground floor elevation and the relationship

	with the proposed 'climber' landscaping • Delete the bin collection enclosure from the ground floor corner, relocate its functions inside the main building envelope, and replace with low level landscaping • Reduce the number and extent of vehicle entries on Millett St (see below under Transport and accessibility) and clarify what elevational treatments are proposed to vehicular openings to avoid an industrial appearance Crime prevention through environmental design • Provide further information about the safety of the 'laneway'/accessway connecting Gloucester Rd and Millet St following its closure by the proposed development and necessary gates or other security • Identify which carparking spaces are "staff-only car park areas with restricted access after hours" in accordance with the CPTED Report • Provide further information about any roller shutters or access restrictions to the basement carpark (noting the CPTED Report Appendix One: *Hurstville Private Hospital Security Policies & Procedures*)

Environmental and residential amenity	Shadow diagrams • Shadow diagrams depict a different carpark arrangement to that shown on the architectural plans for 12 Millett St. Please rectify and show at a larger scale any new shadows cast on 10 Millet St (please also note the other comments in relation to this part of the proposed development) Overlooking of adjacent properties • Provide more information about the potential for overlooking of 14 and 10 Millet St from the proposed carpark deck at 12 Millet St and options for addressing any overlooking, including any proposed measures (such as screens, or louvers) to address them (including any shadow impacts) • Amend the building design to include privacy barriers such as louvers or screens that prevent overlooking of 6, 6A and 10 Millet Street from the windows of the new development but still allow distant views • Provide a north-west elevation of the building that shows the windows and any other openings, ventilation, exhausts or the like below level two of the proposed new building. Landscaping • Amend the carpark design of 12 Millet St to include shade trees in accordance with *Hurstville DCP1 Clause 3.1.2.2 (1) Landscaping*
Staging	Confirm whether the development is intended to be delivered in one stage.
Transport and accessibility	Consolidate driveways on Millett St • Amend the design to consolidate and minimise the number of vehicle entrances and exits and crossovers on Millet St. Justify any need for more than one exit and one entry on Millett St. • Demonstrate that driveways comply with Hurstville DCPs and with the *Australian Standard for Parking Facilities* by specific reference to relevant provisions of both. • Delete the vehicle access along the north-western boundary unless a clear need can be demonstrated. Loading and servicing • Provide more information about how the servicing of the proposed development is to be achieved and in particular, demonstrate how loading and unloading by vehicles is to occur in a forward direction only. If there is a need for reversing manoeuvres from Millet St, justify why the design cannot be amended to include forward-only servicing and provide detailed documentation as to the frequency of any such servicing (including likely arrival and departure times and vehicle type) and that the frequency is in accordance with the *Australian Standard for Parking Facilities* by specific reference to relevant provisions. Carparking • Demonstrate that carparking complies with *Australian Standard for Parking*

	Facilities noting that the *Transport and Accessibility Impact Assessment* by Colston Budd Hunt & Kafes Pty Ltd makes general statements at its section 3.24 that do not correspond to the drawings (such as aisle widths being less than 5.8m on both basements, and parking bay widths which appear to be impinged by structure) Bicycles • Amend the drawings and the *Transport and Accessibility Impact Assessment* to clearly indicate the numbers, type and locations of bicycle parking and end-of-trip facilities in accordance with the NSW Planning Guidelines for Walking and Cycling. Demonstrate compliance, or justify any departures.
ESD	Provide specific information and certainty about ESD commitments already noted in the EA report, rather than general statements. These should address ESD in energy, water and waste and consider a range of opportunities, such as by: • Identifying the average energy use per square metre for all or relevant parts of the development benchmarked against similar developments, and specifying the necessary performance standards of basic equipment such as light fittings to achieve that performance. • Identifying any renewable energy use or generation opportunities in the building. Specifically evaluate the opportunities for power generation by on-site solar photovoltaic, gas cogeneration, or fuel cell (or combinations of multiple sources) as the primary energy supply, and also as a means of providing back-up power (evaluated against alternatives such as a diesel or petrol backup generator). Justify any decision not to incorporate such measures. • Identifying any opportunities for rainwater harvesting and recycled water use in the proposed development and for grey water use in landscaping and non-potable uses (eg toilet flushing and washing). Justify any decision not to incorporate such measures. • Providing an evaluation of the potential to heat water in the development using renewable energy sources (such as solar or heat exchanger). Justify any decision not to use renewables. • Providing a commitment to achieve an energy efficiency rating in consultation with the Green Building Council of Australia (noting that 'standard' rating tools may not be available for hospital uses). • Detailing the selection criteria for plant and equipment, electrical appliances, water efficient fittings and fixtures, motion detection switches and other fixtures and fittings, setting minimum environmental performance standards, and documenting how this achieves better than average ESD outcomes. • Including in the building elevations passive solar design features such as projecting canopies, hoods and sun shades to windows that will reduce solar heat gain in the building. • Indicating what features the development incorporates to minimise the production of waste during normal operation. Provide a full list of ESD commitments in the Statement of Commitments.

Contributions	Please provide more information about the status of the proposed voluntary planning agreement between the proponent and the council.
Statement of commitments	Amend the statement of commitments to address the issues raised above, and in particular provide draft versions of the following: • sustainable travel plan, including bicycle parking and end of trip facilities • environmental management plan, including detailing of all ESD measures

Appendix B: Amended Architectural Drawings

Appendix C: Amended Landscape Drawings

Appendix D: ESD Studies

Appendix E: Traffic, Parking and draft Sustainable Travel Plan

Appendix F: Community Consultation Report

Appendix G: Draft Environmental Management Plan

Appendix H: Public Submissions

Appendix I: Government Agency Submissions