## **Environmental Assessment**



Sydney Level 2, 490 Crown St Surry Hills NSW 2010 Australia T 02 9380 9911 F 02 9380 9922

Melbourne Level 1, Building D 80 Dorcas St Southbank VIC 3006 Australia T 03 8648 3500 F 03 8648 3599

sjb.com.au planning@sjb.com.au **Former Rachel Forster Hospital** 

134-150 Pitt Street, Redfern

**VOLUME 1** 

28June 2007





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#### **Environmental Assessment**



#### **Submission of Environmental Assessment**

Prepared under part 3A of the Environmental Planning and Assessment Act 1979

## **Environmental Assessment prepared by**

Name Stuart McDonald

Qualifications Bachelor of Urban and Regional Planning (Hons)

University of New England 1982

Certified Practising Planner

Certified Town and Country Planner 1983

Accredited Mediator

Australian Commercial Disputes Centre 1998

Corporate Member Planning Institute of Australia

Address SJB Planning

Level 2, 490 Crown Street Surry Hills, NSW 2010

In respect of Former Rachel Forster Hospital

## **Applicant & Land Details**

Applicant name Robert Domm

Applicant address Redfern-Waterloo Authority

Level 11, Tower 2 Lawson Square Redfern, NSW 2016

Lot No, DP Lot 7 DP 664804

134 – 150 Pitt Street, Redfern

Environmental Assessment Environmental Assessment dated 28 June 2007

Statement of Validity I certify that I have prepared the contents of the environmental

assessment in accordance with the Director-General's Requirements dated 15 May 2007, and that to the best of my knowledge, the information contained in the environmental assessment is neither false

or misleading.

smooald

Signature

Name Stuart McDonald

Date 28 June 2007



#### **EXECUTIVE SUMMARY**

This Environmental Assessment Report (EA) is submitted to the Minister for Planning on behalf of the Redfern-Waterloo Authority pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of the redevelopment of the former Rachel Forster Hospital site for residential and public open space purposes.

The site is located within the operational area of the Redfern-Waterloo Authority and has been identified as a State Significant Site under State Environmental Planning Policy (Major Projects) 2005. The Minister for Planning is the consent authority for the development. On 15 May 2007, the Minister for Planning provided authorisation for the Redfern-Waterloo Authority to apply for concept approval for the redevelopment of the site.

The Concept Plan seeks approval for the redevelopment of the site for residential and open space purposes. Approval is sought for the following key parameters:

- Land use Use of the site for residential purposes comprising residential flat buildings, and the dedication of land for public open space purposes;
- **Density** a residential floor space ratio of 2:1 is sought, equivalent to approximately 13,846m<sup>2</sup> of gross floor space;
- Building location and envelopes retention and adaptive re-use of one of the former hospital buildings, the retention of the existing colonnade fronting Pitt Street, demolition of the remaining structures on site, and the construction of three new detached building envelopes over a basement car park;
- **Building heights** ranging from four (4) storeys (three storeys above natural ground level) to a maximum of seven (7) storeys (six storeys above natural ground level);
- Parking & vehicular access two levels of basement parking to accommodate approximately 160 vehicles, with one access provided to the south-western corner of the site;
- Open space and landscaping Removal of trees and proposed dedication of land for public open space purposes; and
- **Approvals** Following approval of the Concept Plan a Project Application detailing the development be submitted to the Minister for Planning for approval.

The final number, layout, mix and size of apartments do not form part of this application, and will ultimately be determined in a subsequent Project Application. However, the architectural concept plans include an indicative apartment layout illustrating different apartment types that may be accommodated within the building envelopes.

The Concept Plan provides a design response that is sensitive to the existing site and compatible with the surrounding built form will not result in any significant adverse impacts on adjoining or nearby properties. The development respects the architectural and social heritage significance of the former hospital and will incorporate public open space for the use and enjoyment by the wider community.

The proposal is considered to be well justified and complies with the objectives of the State Environmental Planning Policy (Major Projects) 2005. It is consistent with the Redfern-Waterloo Built Environmental Plan – Stage One 2006 and the Metropolitan Strategy for Sydney.

The redevelopment of the site is an important component of the Redfern-Waterloo Authority's program for urban renewal. It will contribute to the revitalisation of Redfern –Waterloo with the redevelopment of a disused site for quality residential accommodation and open space. Importantly the development will provide funding for the provision of a new community health centre at the former Redfern Court House and Police Station.

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The redevelopment will trigger investment and wider interest in the revitalisation and renewal of Redfern-Waterloo. Ultimately, it will complement other significant initiatives which have been undertaken by the Authority toward the achievement of social and economic progress in the area.



#### 1.0 INTRODUCTION

#### 1.1 Overview

This Environmental Assessment report (EA) has been prepared on behalf of the Redfern-Waterloo Authority by SJB Planning and is submitted to the Director General (DG) of the Department of Planning (DoP) in accordance with Part 3A of the Environmental Planning and Assessment Act 1979 (*EPA&Act 1979*) for the redevelopment of the former Rachel Forster Hospital located at 134 – 150 Pitt Street, Redfern.

The site is listed in Schedule 3 of State Environmental Planning Policy (Major Projects) 2005, and approval is sought from the Minister of Planning pursuant to Part 3A of the EP&A Act 1979. The Project has a Capital Investment Value of \$44.13 million and seeks to redevelop the site to accommodate residential development with the adaptive re-use of one of the existing buildings and the construction of new residential buildings.

The concept provides for in the order of 13,846m<sup>2</sup> of residential floor space, which will enable a development comprising in the order of 150 dwellings. The final layout, mix and size of apartments does not form part of this application, and will ultimately be determined in a subsequent application.

In conjunction with the residential redevelopment of the site, public open space adjoining Pitt Street is proposed to be dedicated to the City of Sydney Council.

### 1.2 Project Objectives

The Project objectives for the redevelopment of the site include:

- Protect the heritage significance of the site;
- Provide a high quality residential development offering housing choice and amenity;
- Provide safe publicly accessible open space:
- Minimise impacts upon adjoining properties;
- Complement the surrounding streetscape and urban form; and
- Achieve a commercial return to fund a new community health centre on the former Local Court House and Redfern Police Station site.

### 1.3 Scope and Format of the Report

This report has been prepared pursuant to provisions of the *EP&A Act 1979* and the *Environmental Planning and Assessment Regulation 2000 (EPA Regulation).* 

The scope and format of the report has been set out as follows:

- Section 1 provides an introduction to the Project and report.
- Section 2 provides information about the site and context.
- Section 3 outlines the strategic context of the Project
- Section 4 outlines and details the proposed Project.
- Section 5 outlines the Director General Requirements of the Project.

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- Section 6 provides an assessment of the proposed Project against the relevant environmental planning instruments and policies
- Section 7 provides an assessment of the potential impacts of the proposed Project on the environment and management measures to mitigate or minimise potential impacts.
- Section 8 presents the findings and conclusions of the assessment.

The Concept plan has been prepared by Lippmann Associates and is contained in Appendix A. The Concept Plan and EA are supported by specialist reports and documentation relating to heritage, transport and traffic, hydraulics and services, geotechnical investigations, contamination, arboriculture, Building Code of Australia, structural engineering, landscaping and site surveys. The documents are included in the Appendices. The draft Statement of Commitments is included in Appendix B.

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#### 2.0 THE SITE

## 2.1 Site Description

The former Rachel Forster Hospital site is located at 134-150 Pitt Street, Redfern, and is legally described as Lot 7 DP 664804 (Figure 1). It is bounded by Albert Street to the north, residential development to the south, Pitt Street to the east and a warehouse and residential development to the west.

The site has an area of approximately 6,923m<sup>2</sup>. The site has frontages to Pitt Street (96 metres) and Albert Street (76 metres). The general topography of the site slopes towards the southwest with a fall in level of approximately 3 metres. The western portion of the site is at a lower grade than Pitt and Albert Streets.

The site is occupied by various disused former hospital buildings. The general siting of the main buildings are configured in the form of a 'H' (Figure 2). An additional building extends out from the centre to the west. A detached weatherboard garage, and detached concrete block building containing an indoor swimming pool also occupy the site.

A five storey building, referred to as Building 1, extends along the southern boundary of the site. Due to the topography of the site an additional sub-basement level for Building 1 is exposed to the west, resulting in an overall height of 6 storeys (including basement). Significant plant structures are located on the roof of this building.

Building 1 is linked to a central two storey wing, known as Building 2, which fronts Pitt Street. This building reads as a two storey building from Pitt Street, with an additional basement level exposed to the west. Similar to Building 2, another two to three storey building, identified as Building 3, fronts Albert Street, and is also linked to Building 2.

Car parking on site is informal and is limited to the open space areas of the site including; the semi-circular driveway off Pitt Street, the concrete surface along the southern boundary, and the impervious areas within the mid sections of the site.

Vehicular access to the site is via the semi circular driveway off Pitt Street, a singular driveway in the north western corner of the site off Albert Street, and a driveway to the south eastern corner off Pitt Street.

Existing site conditions are illustrated on the survey plan included in Appendix C.

The use of the site as a hospital ceased in 2000 when staff and facilities were transferred to the nearby Prince Alfred Hospital in Camperdown. Since the closure of the hospital the majority of the site has been disused with the exception of Community Health Service, which operates from the building fronting Albert Street. This facility is proposed to be relocated to the former Redfern Courthouse and Police Station site on Redfern Street. The Department of Health will shortly be making an application to the Minister for Planning for a new expanded health service at the former Courthouse site.





Figure 1: Site location plan



Figure 2: Aerial photograph of site



#### 2.2 Site History

The Rachel Forster Hospital, designed by Leighton Erwin architects, was officially opened in December 1941 by Lady Wakehurst, wife of the Governor of New South Wales. Staff occupied the new hospital on 15 December 1941; patients, however, would not be moved into the hospital until 25 February, 1942. In a reflection of the growing intensity of war in the Pacific, air raid shelters and emergency operating and treatment rooms were constructed in the basement of the Hospital before the completion of the building.

Expansion of the Hospital continued during World War II and in the immediate post war period. In 1941, the hospital was recognised as a Training Centre for nurses. In 1945, a new Nurses' Home and a Cafeteria were opened. Among the most important Post World War II developments was the opening of the Breast Clinic, under Dr. Kathleen Cunningham in the latter part of 1950. A new Outpatients' wing was opened in 1953. The second floor of the new wing was occupied by various specialist clinics. In 1955 Rachel Forster became the first hospital in Sydney to undertake the relatively new study of Mammography.

In the 1960s the Hospital Board decided to employ male resident doctors and in August 1967 a male ward was opened in response to a need for general hospital services due to the construction of residential flats in the immediate area.

The Rachel Forster Hospital continued to offer a wide range of services until it closed in 2000. The remaining staff and facilities were transferred to Prince Alfred Hospital, Camperdown.

Historic photographs of the Hospital are reproduced in Figures 3 and 4.

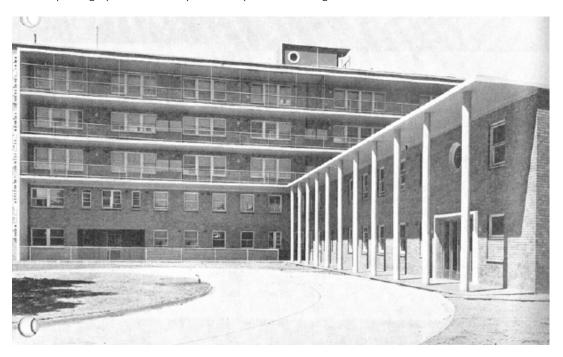


Figure 3: The Rachel Forster Hospital, 1942. Decoration and Glass, February 1942.





Figure 4: Rachel Forster Hospital, c.1960. Photograph from undated pamphlet entitled Rachel Forster Hospital Sydney, part of *Rachel Forster Hospital, Sydney, NSW: Records, 1904-1974*. Mitchell Library, ML MSS. 2458.

#### 2.3 Site Context

#### 2.3.1 Location and access

The site is well located in terms of access to employment, transport and a range of services making it ideal for redevelopment for residential purposes (Figure 5). The locational benefits of the site are evidenced by the following:

- The site is situated within 3km of the Sydney CBD providing excellent access to employment and business opportunities.
- Redfern railway station is located within 500m, providing exceptional access to the Sydney
  rail network. The site is within 200m of bus services operating from the city to: Marrickville,
  Port Botany and East Gardens (routes 308, 309, 310) and 500m of services operating from
  Millers Point to Kingsford (route 343). Other services are also provided which operate in peak
  times.
- The site is located within an established residential area.
- The site is located within close proximity to a range of community facilities.
- Redfern Park and Oval are within 250m of the site providing good recreational opportunities.
  The provision of publicly accessible open space as part of the redevelopment of the former
  Rachel Forster site will enhance recreation and open space opportunities for the surrounding
  community.

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- The site is within 200m of local shops and services located on Redfern Street and approximately 300m of Regent Street which provides additional services. The Surry Hills shopping centre is approximately 1km from the site and other centres are accessible via train or bus.
- As the social and economic renewal of Redfern-Waterloo continues under the Built Environment Plan the locational benefits of the site for residential development will be enhanced with greater employment and business opportunities, access to social and cultural facilities and improved infrastructure.

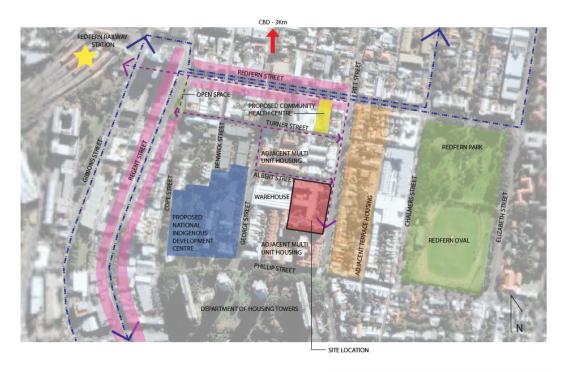




Figure 5: Site context plan

## 2.3.2 Land Use and Built Form Context

The former hospital site is located within an established residential area and is surrounded by housing with the exception of a warehouse adjoining the western boundary. All land immediately surrounding the site, including the warehouse site, is zoned for residential purposes.

The surrounding residential development is characterised by terrace housing to the north and east and medium and high density housing to the west and south. Development along Pitt Street and Albert Street is characterised by two to three storey terrace houses. The southern boundary of the site is adjoined by a modern multi-unit residential development up to six storeys in height.

The six Department of Housing towers to the south are prominent elements within the built form context, with the tallest towers exceeding 30 storeys, providing a backdrop to the site.

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The diversity in the scale and form of the surrounding residential development supports the establishment of a mix of lower and medium scale residential buildings on the site, which is appropriate and sensitive to the site's context.

Other notable land uses in the vicinity of the site include:

- Redfern retail/commercial strip along Redfern Street;
- The former Redfern Public School located on the corner of George, Philip and Cope Street (This site is to be redeveloped by the Indigenous Land Corporation to create a National Indigenous Development Centre);
- Australian Technology (Business) Park, located approximately 750 metres west of the site;
- Redfern Railway Station located approximately 500 metres north-west of the site; and
- South Sydney Rugby League Club and Redfern Park to the east of the site, fronting Chalmers Street.

The context of the site is illustrated in the photographs included in Figures 6 - 10.

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<<North





Figure 6: Pitt Street eastern side streetscape study









Figure 7: Pitt Street Western Side Streetscape Study

North





<<East





Figure 8: Albert Street Southern Side Streetscape Study

West>>







Figure 9: Albert Street Northern Side Streetscape Study

Fact

#### **Environmental Assessment**



Figure 10: Building form south of subject site, comprising Department of Housing residential towers.

# 2.4 Site Analysis

A Site Analysis Plan has been prepared by Lippmann Associates and is included at Figure 11. The site analysis illustrates:

- Existing natural elements of the site and immediately adjacent to the site (including all hazards and constraints);
- Property dimensions;
- Footpath crossing levels and alignments;
- Existing pedestrian and vehicular access points and other facilities;
- Slope and topography;
- Utility services;
- Boundaries; and
- Orientation.

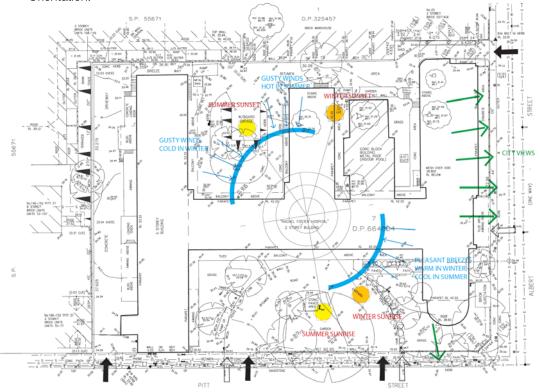


Figure 11: Environmental Site Analysis of the site

## 3.0 STRATEGIC CONTEXT OF THE PROJECT

#### 3.1 Strategic Overview

The site is located within the operational area of the Redfern Waterloo Authority and has been identified as a State Significant Site under State Environmental Planning Policy (Major Projects) 2005, and the Minister for Planning is the consent authority.

Given the state significance of the site, a discussion of the key NSW strategies that apply to the site is provided below:

#### 3.2 The NSW Government's State Plan

The State Plan, A New Direction for NSW, was launched by the Premier on 14 November, 2006.

The purpose of the plan is to deliver better results for the NSW community from Government services. The State Plan sets out the goals that the community wants the NSW Government to work towards. The key goals of relevance to the proposal include:

	Priorities	Targets
E5	Jobs closer to home	Increase the number of people who live within 30 minutes of a city or major centre by public transport in metropolitan Sydney.
E6	Housing affordability	Ensure a supply of land and a mix of housing that meets demand.

The Project satisfies Priority E5 and E6 of the NSW Government's State Plan as it provides medium density residential accommodation within close proximity to public transport and Sydney CBD, and provides flexible building envelopes to allow the opportunity for a mix of housing.

#### 3.3 Metropolitan Strategy - City of Cities, A Plan for Sydney's Future

The NSW Government released the Metropolitan Strategy in December 2005. The strategy is a broad framework to secure Sydney's place in the global economy by promoting and managing growth.

The Metropolitan Strategy applies to the wider Sydney region including the City of Sydney local government area in which the site is located. The City of Sydney local government area is located within the Sydney City subregion.

The proposal assists with meeting the objectives of the Strategy in the following regard:

- It contributes towards the additional 55,000 dwellings the Strategy identifies as being accommodated within the City of Sydney local government area by 2031;
- By providing for the potential for a mix of housing;
- By providing housing close to employment, transport and services;
- By ensuring a high quality residential design; and
- By providing quality open space.

### 3.4 Redfern-Waterloo Authority

The Redfern-Waterloo Authority (RWA) was created by the NSW Government in October 2004 under the *Redfern – Waterloo Authority Act 2004.* 

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The objects of the Redfern - Waterloo Authority Act 2004 are:

- (a) to encourage the development of Redfern–Waterloo into an active, vibrant and sustainable community, and
- (b) to promote, support and respect the Aboriginal community in Redfern–Waterloo having regard to the importance of the area to the Aboriginal people, and
- (c) to promote the orderly development of Redfern–Waterloo taking into consideration principles of social, economic, ecological and other sustainable development, and
- (d) to enable the establishment of public areas in Redfern-Waterloo, and
- (e) to promote greater social cohesion and community safety in Redfern-Waterloo.

The objectives that are relevant to the proposal are addressed below:

- The development will provide new housing and public open space on a predominantly disused site and will assist in encouraging activity on the streets. The inclusion of public open space adjoining the site will further promote resident and community interaction.
- The development will help to promote a more sustainable and cohesive community by increased housing and diversity.
- The Project will generate funding which will be used to provide a new community health centre.
- The incorporation of ecological sustainable development principles will further ensure the Project will achieve the NSW energy and Water targets.
- The Project establishes and proposes to dedicate 1,016m² of public open space fronting Pitt Street.
- The Concept plan has been designed to ensure safety and security in accordance with the principles outlined in the Department of Planning's Guideline: *Crime Prevention Through Environmental Design*.

The RWA is responsible for implementing a 10 year Redfern-Waterloo Plan. The Plan is made of three components:

- 1. Employment and Enterprise Plan
- 2. Human Services Plan
- 3. Built Environmental Plan (Stage One)

The Redfern-Waterloo Built Environment Plan (Stage 1) provides a planning framework for the redevelopment of the RWA's strategic sites in Redfern-Waterloo, which includes the former Rachel Forster Hospital site.

The proposal is consistent with the Plan. An assessment of the Project against the Design Concept controls and principles is undertaken in Section 7 of the EA.

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## **4.0 PROPOSED DEVELOPMENT**

### **4.1 Project Overview**

Concept approval is sought from the Minister of Planning for the redevelopment of the former Rachel Forster Hospital site for residential and open space purposes (Figure 12). The site is surplus to the needs of the NSW Department of Health.

This Environmental Assessment for Concept Plan Approval under Part 3A is submitted to the Department of Planning in accordance with the draft guidelines for Part 3A Concept Plan Applications. It follows a request made to the Minister to consider the Project under Part 3A made by Redfern-Waterloo Authority in March, 2007 by Lippmann & Associates, together with the submission of a Preliminary Environmental Assessment. The Assessment responds to the final Director-General's Requirements issued to the Redfern-Waterloo Authority on 15 May 2007.

In accordance with the draft guidelines for Part 3A Concept Plan Applications prepared by the Department of Planning, a Concept plan approval is described as follows:

'concept plan assessment and approval process provides for a proponent to obtain an approval upfront of the concept of a major, complex project prior to undertaking more detailed studies in relation to implementing the various components of a project. It means that the broad parameters can be determined earlier following consideration of alternatives prior to the need to finalise the details of the project.'

The key parameters for which Concept Approval is sought from the Department of Planning include:

- The retention and adaptive reuse of the existing five (5) storey (above ground level) building located along the southern part of the site, referred to as Building 1. An additional storey will be added to this building resulting in a height of six storeys above ground level and an overall height of seven storeys (including the basement level).
- Demolition of the existing buildings within the centre of the site, with the exception of the existing colonnade fronting Pitt Street.
- Construction of a new three storey building behind the existing colonnade, referred to as Building 2.
- Demolition of the existing building along Albert Street and construction of a new three/four (3-4) storey building with basement, referred to as Building 3.
- Construction of a new three storey building, referred to as Building 4 in between Building 2 and the western boundary of the site.
- Two levels of basement car parking for approximately 160 vehicles.
- The proposed dedication of land fronting Pitt Street for public open space.

The concept will enable a development comprising approximately 150 dwellings. The layout, mix and size of apartments do not form part of this application, and will ultimately be determined in a subsequent application. It is requested that the subsequent approvals detailing the Project remain as a Part 3A development, and the Minister for Planning remain as the consent authority.





Figure 12: Artist impression of Project when viewed along Pitt Street.

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#### 4.2 Project Background

The site was used as a Hospital from 1941 to 2000. Since the closure of the hospital the majority of the site has been disused. The only facility operating from the site is a Community Health Service which currently utilises the building fronting Albert Street. This facility is proposed to be relocated to the former Redfern Courthouse and Police Station site on Redfern Street. The Department of Health will shortly lodge an application to the Minister for Planning for a new expanded health service at the former Courthouse site.

In 2006 the Redfern-Waterloo Authority prepared the Built Environment Plan (Stage 1)(BEP) to provide parameters for the future redevelopment of Redfern-Waterloo Authority's Strategic Sites, which included the former Rachel Forster Hospital site. The BEP defines the future land use, character and design intent for the site. The land use and design intent outlined in the BEP were give statutory effect with the inclusion of zoning, height and floor space ratio controls in the SEPP(Major Projects). The former Rachel Forster Hospital is zoned 'Residential Medium Density' under the provisions of the SEPP.

In early 2007, Lippmann Associates were commissioned by the Redfern-Waterloo Authority to prepare conceptual design options for medium density residential development on the site to ultimately gain concept approval from the Minister for Planning.

## 4.3 Project Alternatives

During the planning investigation of the site, the Project team considered a wide range of residential development options for the site.

The preferred design option was detailed in the Preliminary Environmental Assessment and forms the basis of this Concept Plan Application. The preferred design option was selected because:

- it is consistent with the strategies, land use and design concepts of the Redfern -\_Waterloo Built Environment Plan;
- it responds to the characteristics, built form and heritage significance of the site;
- it is compatible with the surrounding built form;
- it minimises impacts on adjoining and nearby properties; and
- it maximises the provision of public open space for the benefit of the local community.

### 4.4 Project Description

A detailed description of the proposal for which concept approval is sought is provided below:

### 4.4.1 Land use

The concept plan proposes to use the site for medium density residential development and public open space.

### 4.4.2 Density

The concept plan seeks approval for the maximum floor space permitted under the FSR control of 2:1. Based on the site area of 6,923m<sup>2</sup>, this equates to a gross floor area of 13,846m<sup>2</sup>.

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## 4.4.3 Building Heights, Envelopes and Location

The Concept Plan seeks consent for the general siting, height and envelope of buildings for the proposed development. The Concept proposes to retain the general 'H' configuration of the existing former hospital buildings, but with the addition of a fourth building adjacent to the western boundary of the site (refer to Figure 13).

The building envelopes, including the height, footprints, setbacks and building separation for which concept approval is sought are described below:

### Building 1

Building 1 is an existing building located adjacent the southern boundary. Building 1 is proposed to be retained and adapted, including new additions along its southern façade and above. The proposed building envelope comprises:

- The addition of another level above the existing roof level of the building, resulting in a six (6) storey height above ground level. The building will have an overall height of seven (7) storeys, including the basement level.
- A height of RL RL55.10 (excluding any roof top plant equipment). This represents an increase of 1.77 metres above the height of the existing parapet (RL53.33).
- A wall height of approximately 23 metre above existing ground level.
- Additions to the existing building footprint with a 3.887 metre extension to the southern elevation. The existing southern elevation will be demolished.
- The additional floor to the roof top will be setback 2.5 metres from the western and eastern facade and 2 metres from the northern facade of the existing building.
- Existing setbacks will be retained, with the exception of the southern setback:

Eastern boundary (Pitt Street): Nil
 Southern boundary: 6 metres
 Western boundary: 3 metres

# **Building 2**

Building 2 is a new three (3) storey building proposed to be built on the western side of the existing two storey colonnade. The proposed building envelope comprises:

- A height of RL45.05 (excluding any roof top plant equipment).
- A wall height of approximately 8.28 metre above existing ground level.
- A building footprint measuring 16 metres by 36 metres. The proposed building is located within the existing building footprint.
- Building setbacks and separation:

Eastern boundary (Pitt Street): 24 metres

- Buildings 1 (south): 6.5 - 9 metres (9m at ground level and 6.5m above

ground to balconies)

- Building 3 (north): 6.5 - 9 metres (9m at ground level and 6.5m above

ground to balconies)

Building 4 (west): 10 metres

### Building 3

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Building 3 is a new four (4) storey building (three storeys above street level) proposed to be built along the Albert Street frontage. This building will be three storeys in appearance above the existing ground level and will capitalise on the existing excavated basement level. The proposed building envelope comprises:

A height of RL45.05 (excluding any roof top plant equipment and clerestory windows).

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- A varying wall height of approximately 9.43 11.01 metres above existing ground level.
- A building footprint measuring 19.7 metres by 75.95 metres.
- Building setbacks and separation:

- Eastern boundary (Pitt Street): Nil - consistent with Building 1.

Northern boundary (Albert Street): 3.2 metres

- Western boundary: Nil

- Building 2 and 4 (south): 7-9 metre (9m at ground level and 7m above

ground to balconies)

## Building 4

Building 4 is a new three (3) storey building proposed to be built between Building 2 and the western boundary. The proposed building envelope comprises:

- A height of RL45.05 (excluding any roof top plant equipment).
- A wall height approximately 10.05 metres above existing ground level.
- A building footprint measuring 36 metres x 16 metres.
- Building setbacks and separation:
  - Western boundary (Pitt Street): 4 metres.Building 2 (east): 10 metres
  - Building 1 (south): 6.5-9 metres (9m at ground level and 6.5m

above ground to balconies)

- Building 3 (south): 7-9 metre (9m at ground level and 7m above

ground to balconies)

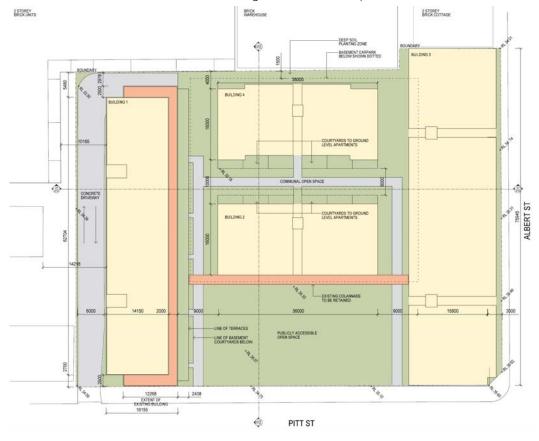


Figure 13: Site plan of proposed concept, illustrating proposed location, orientation and setback of proposed building forms.

# 4.4.4 Open space, landscaping and trees

# Open Space

The Concept proposes that the area of open space on the eastern boundary fronting Pitt Street (that currently incorporates a semi-circular driveway) be dedicated as public open space to the City of Sydney. The proposed open space dedication is to be approximately 1,060m² in area. It will be fronted on three sides by residential apartments and will be accessed from Pitt Street (refer to Figure 14).

Private open space will primarily be in the form of balconies, with the opportunity for courtyards/terraces to ground level apartments.



Figure 14: Proposed public open space dedication

# Landscaping

A Landscape Concept Diagram & Principles prepared by Oculus – Landscape Architects accompanies this application, and is contained in Appendix D. The landscape concept plan nominates the following principles to guide further detailed design of the proposed open space and the general landscaping throughout the site:

• 'Use landscape design to delineate between private and public space.

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- Contribute to the character of Pitt Street's streetscape by providing a vegetated open space, with tree retention, new tree and shrub planting, and a retaining wall which provides an informal seating edge along the footpath.
- Retain the large, existing established trees where possible.
- Specify new vegetation which requires low water use and where appropriate to the landscape design, incorporate native species with low maintenance requirements.
- Provide direct and clear pathways to private entrances to enhance safety for residents. Where possible, provide individual direct street access to ground level apartments.
- Favour mass native planting over turf as it is more successful in low water and low sunlight conditions.
- Increase security and safety within the public space by providing low level lighting which does not impact on residential apartments above.
- Location of the public open space maximises surveillance from the street and adjacent apartments.
- Landscaping for the site should be consistent with the findings and recommendations of the arboricultural report prepared by 'Landscape Matrix'.

#### **Trees**

An arboricultural report has been prepared by Landscape Matrix Pty Ltd and is contained in Appendix E. The report analysed 19 individual trees or groups of trees on the site and adjoining properties. The report identifies those trees that require removal or are potentially impacted upon by the proposed development, as well as those trees that should be considered for removal. Recommendations on tree protection measures are also included.

Concept approval is sought for the removal of the trees. Landscaping detailed in a subsequent Project Application is to undertaken in accordance with the findings and recommendations of the arboricultural report as outlined below:

- The following eight (8) trees require removal to facilitate the proposed development as they are located within the building / basement footprints:
  - Tree # 10 Syzigium luehmannii (Small-leaved Lilli Pilli)
  - Tree # 11 Lophostemon confertus (Brushbox)
  - Tree # 12 *Celtis sinense* (Chinese Hackberry)
  - Tree # 13 Celtis sinense (Chinese Hackberry)
  - Tree # 14 *Jacaranda mimosifolia* (Jacaranda)
  - Tree # 15 *Plumeria rubra* (Frangipani)
  - Tree # 16 Ceratonia siliqua (Carob Tree)
  - Tree # 17 *Celtis sinense* (Chinese Hackberry)
- The following four (4) trees are recommended for removal due to poor/declining health, structural problems, risk of failure and noxious weed species. Two of the trees (12 and 16) are located within the proposed building footprints.
  - Tree # 2 Ligustrum sinense (Small-leaved Privet-noxious weed)
  - Tree # 5 *Cinnamomum camphora* (Camphor laurel)
  - Tree # 12 *Celtis sinense* (Chinese Hackberry)
  - Tree # 16 *Ceratonia siliqua* (Carob Tree)
- The following three (3) trees have the potential to be impacted, directly or indirectly, by construction activities:
  - Tree # 9 Liriodendron tulipifera (Tulip Tree)
     Tree # 18 Glochidion ferdinandii (Cheese Tree)
     Tree # 19 Celtis sinense (Chinese Hackberry)

Given the extent of potential impact to Tree # 9, the existing structural problems and the short Safe Use Life Expectancy (SULE) of the tree, it is recommended consideration be given to its removal. With regard to Trees 18 and 19, these trees are located on the adjoining property to the

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south, adjacent to the proposed driveway. Provided the levels of the driveway are maintained the trees can be retained.

The report also makes recommendations in relation to trees that are not identified for removal. This includes:

- The staged removal of all specimens of Celtis sinense (Chinese Hackberry) in conjunction with replacement planting as this species is an aggressive weed with many juvenile and semi mature species present on the site. The retention of these trees in the long term will provide an ongoing seed source for future spread of this species both within and beyond the site (via stormwater and bird dispersal).
- Further investigations and testing be undertaken for existing Brushbox (#3)and large Camphor laurel (#6) to provide an accurate assessment of the tree's structural integrity.

#### 4.4.5 Parking and Vehicle Access

The concept plan proposes two levels of basement car parking located beneath buildings 2, 3 and 4. This will involve excavation of the centre of the site, west of the existing colonnade to approximately 6 metres below the existing natural ground level.

The basement car park is capable of accommodating in the order of 160 car parking spaces, plus bicycle parking and storage facilities.

The basement parking is proposed to be accessed from Pitt Street via the existing 6.6m wide combined entry/exit driveway which extends along the southern boundary of the site. Vehicle ramps descending into the basement are proposed to be located at the south-west corner of the site, along the western side of Building 1.

An assessment of the carparking and vehicle access has been undertaken by Transport and Traffic Planning Associates and is attached at Appendix F.

#### 4.4.6 Pedestrian Access

Pedestrian access to the basement would be via internal lifts and stairs located within each of the four buildings.

Pedestrian access to the site will be primarily via the Pitt Street frontage of the site through the public open space with the potential for separate access to individual ground floor apartments. Building 3 will be principally accessed from Albert Street with the potential for separate access to individual ground floor apartments (refer to Drawing No. A013 illustrating the indicative apartment layout prepared by Lippmann Associates in Appendix A).

#### 4.4.7 Site facilities

On-site servicing facilities are likely to be accommodated within an area adjacent to the driveway. This area is likely to contain site facilities such as garbage, recycling, and utility services. Other spaces within the basement parking level can also be utilised for storage rooms and bicycle storage.

# 4.4.8 Capital Investment Value

The Capital Investment Value of the Project in accordance with the Majors Projects SEPP is estimated to be \$44.13 million.

A Quantity Surveyors Report prepared by WT Partnership is contained in Appendix G.

# 5.0 DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The Director-General's Environmental Assessment Requirements for the Project were issued on 18 April 2007.

Table 1 illustrates sections of this report which specifically address the matters identified in the Director General's EA requirements for the Project.

	Director-General's Environmental Assessment Requirements	Comments
Gal	neral Requirements	
1.	an executive summary;	Page 6
2.	demonstration as to how the development, when completed, will achieve the objectives of the SEPP (Major Projects) 2005 Schedule 3, The Redfern-Waterloo Authority Sites – Residential – Medium Density Residential;	Section 6.1
3.	Landowners' consent for the development site;	As this is a Crown application landowners consent is not required to be submitted with the application, but will be provided after lodgement.
4.	description of the site, including cadastre, title details, existing easements (including sewer mains, and/or encumbrances);	Section 2.1
5.	details of the proposed layout, land uses, size and scale of the main components of the development, FSR, height (AHD);	Section 4.4
6.	details of the methodology used for the calculation of the FSR in accordance with the relevant Environmental Planning Instruments (EPI);	Section 6.1.3
7.	an assessment of the environmental impacts of the Project with particular focus on the key assessment requirements specified below;	Section 7
8.	a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the impacts of the Project;	Section 7.11 and Appendix B
9.	a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures;	Appendix B
10.	a conclusion justifying the Project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and whether or not the Project is in the public interest	Section 7.19 and Section 8

# **Environmental Assessment**

En <sup>a</sup> info	signed statement from the author of the vironmental Assessment certifying that the ormation contained in the report is not false or sleading; and	Page 5
ca <sub>l</sub>	Quantity Surveyors Certificate of Cost to verify the pital investment value (CIV) of the Project calculated accordance with the definition of CIV (EP & A Regs., 00)	Appendix G
Key Iss The En	vironmental Assessment must address the following	
• PI	elevant EPIs and Guidelines to be addressed lanning provisions applying to the site, including ermissibility and the provisions of all EPI's and olicies including:  Standard Instrument (Local Environmental Plans)	
-	Order 2006; SEPP (Major Projects) 2005 Schedule 3, The	Section 6.5
-	Redfern-Waterloo Authority Sites; SEPP 65 – Design Quality of Residential Flat Development;	Section 6.1
	SEPP (Building Sustainability Index: BASIX) 2004) the Redfern-Waterloo Built Environment Plan	Section 6.3
	(Stage One) August 2006.	Section 6.4
		Section 6.6
re	ddress provision of public infrastructure having egard to the Redfern-Waterloo Authority Section 31 ontribution plans;	Section 6.7
er	ature and extent of any non-compliance with relevant nvironmental planning instruments, plans and uidelines and justification for any non-compliance.	Height Control, Major Projects SEPP and Redfern-Warterloo Built Environmental Plan (Stage 1) 2006.
		Section 6.1.3
• The exists in	ne proposal must be capable of exhibit design scellence in accordance with the provisions contained the SEPP Major Projects (2005) Schedule 3 – The edfern-Waterloo Authority Sites having regard to:  a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved; the form and external appearance of the building will improve the quality and amenity of the public domain, the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water	Section 6.1.4

	efficiency.	
•	Visual aids such as 3 dimensional rendering should be used to demonstrate visual impacts of the proposals in particular having regard to the siting and design, bulk and scale relationships, appropriate use of materials and detailing having regard to the heritage fabric of the building and surrounding properties.	Figure 13 and Appendix 1
•	An assessment of the impact of the proposal having regard to the siting and design, bulk and scale relationships, and the resultant architectural composition relative to the existing and surrounding built form.	Section 7.3
•	Where practicable plant equipment should be located within the basement to minimise the visual and acoustic impacts. Where this can not be achieved justification for roof top plant rooms is required. Any rooftop plant shall be designed as an integral part of the building; minimise the visual bulk of the building; not increase overshadowing of the adjacent development; and be adequately attenuated to avoid acoustic impacts on surrounding properties.	Appendix B
•	Demonstrate that the proposed buildings will satisfy the requirements of SEPP 65 – Design Quality of Residential Flat Development.	Section 6.3
3.	Overshadowing Demonstrate that the proposed building siting does not have unacceptable level of impacts on overshadowing, privacy and views of the adjoining sites.	Section 7.16
•	Provide plans/elevations and shadow diagrams demonstrating impacts of the proposal on the adjoining sites, including additional overshadowing.	Plan and Isometric views provided in Appendix A
4.	Ecologically Sustainable Development The EA shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases.	Section 7.17
5.	Heritage Identify any items of European heritage significance and provide a heritage impact statement in accordance with the <i>Heritage Manual</i> , (NSW Heritage Office & DUAP 1996). Specifically, the design and form of the proposal needs to respond, and added any impacts on the character of the surrounding conservation area and nearby heritage items.  Identify whether the site has significance to Aboriginal cultural horitage and where applicable propage and	Section 7.1  Section 7.2
•	Identify whether the site has significance to Aboriginal cultural heritage and where applicable prepare an independent Archaeological report in accordance with	Section 7.2

	the draft Guidelines for Aboriginal <i>Cultural Heritage Impact Assessment &amp; Community consultation</i> , DEC, July 2005	
6.	Safety/Public Domain/Landscaping Demonstrate how the proposed building envelopes, building design and treatment of the public domain will:  - Maximise safety, security and public surveillance within the public areas including disabled access to the side of the front entrance and car park access. Specific regard should be given to the Department of Planning's Guideline; Crime prevention and assessment of development	Section 7.15
	<ul> <li>applications, 2001;</li> <li>Address linkages within and between other public domain spaces, including Redfern train station;</li> </ul>	Section 7.9
	<ul><li>Ensure access for people with disabilities;</li><li>Minimise potential for vehicle and pedestrian</li></ul>	Appendix B
	conflicts.	Section 7.9
•	Provide an aborist's report to assess the condition of existing trees proposed to be removed and methods of protection during construction.	Appendix E
•	Provide landscaping plan for the public domain.	Appendix D
7.	Staging Clearly delineate any proposed staging of the proposal.	The proposal is not staged.
8.	Dedication Provide details of any proposed dedication of open space to Council.	Section 4.4.4 and Appendix D
9.	Traffic Impacts  A traffic and transport impact study shall be submitted with the EA which assesses the traffic and transport impacts of the Project. The study shall:  - impact on local and arterial roads; adjacent road intersections; access points to development; existing traffic volumed with and without the development; AM and PM peak volumes; pedestrian traffic; parking requirements; provision and treatment of car parking; potential parking overflow; cumulative impacts of adjoining and adjacent developments; where appropriate;  - detail measures to be implemented to mitigate any impacts identified;  - identify any required upgrading of roads and improvement works to ameliorate any traffic inefficiency and safety impacts associated with the development and the need for associated funding for upgrading or road improvement works;  - detail strategies for encouraging public transport	Section 7.6 and Appendix F

# **Environmental Assessment**

	T
patronage; - provide details of service and delivery vehicles movements; - provide details of bicycle facilities to be incorporated into the development; - detail adequate emergency vehicle access.  10. Construction Impacts  • Address measures to ameliorate potential impacts arising from the construction of the proposed development.	Section 7.11
<ul> <li>11. Potential Contamination On Site</li> <li>The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP 55.</li> </ul>	Section 6.2
Stormwater     Address stormwater issues associated with the development having regard to Water Sensitive Urban Design principles.	Section 7.7 and Appendix F
<ul> <li>13. Social and Economic Impacts</li> <li>Identify cultural, social and residential opportunities that will be provided to support the development of a sustainable community within the broader Redfern-Waterloo area. Address social impacts of the proposal.</li> <li>The Plan must address long term social sustainability issues and address impacts on community safety, the local community impacts, and measures to ensure the minimisation of crime and anti-social behaviour.</li> <li>Address impacts on Aboriginal and European community within Redfern.</li> </ul>	Section 7.18
<ul> <li>14. Services/Infrastructure and Utilities</li> <li>In consultation with relevant agencies, address the existing capacity and requirements of the development for water, electricity, waste disposal, telecommunications and gas.</li> <li>Details of any augmentation to services and utilities required to meet the demand generated by the proposed Project.</li> </ul>	Section 7.14
Plans and Documents to Accompany the Application	
Concept Plan  The existing site survey plan is to be drawn to 1:500 scale (or other appropriate scale) and show:  the location of the land, the measurements of the boundaries of the land, the size of the land and north point;  the existing levels of the land in relation to buildings and roads;  location and height of existing structures on the site; and  location and height of adjacent buildings and private open space.	Appendix C
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2.	A Site Analysis Plan must be provided which identifies existing natural elements of the site and immediately adjacent to the site (including all hazards and constraints), existing vegetation, property dimensions, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, utility services, boundaries, orientation, and all structures on neighbouring properties where relevant to the application (including windows, driveways etc).	Section 2.4 and Appendix A
3.	<ul> <li>A locality/context plan drawn to 1:500 scale (or other appropriate scale) should be submitted indicating:         <ul> <li>significant local features such as parks, community facilities and open space, water courses and heritage items;</li> <li>the location and uses of existing buildings, shopping and employment areas;</li> <li>traffic and road patterns, pedestrian routes and public transport nodes;</li> <li>The existing site plan and locality plan should be supported by a written explanation of the local and site constraints and opportunities revealed through the above documentation.</li> </ul> </li> </ul>	Figure 5 and Appendix A.
4.	The <b>Environmental Assessment</b> in accordance with the Director-General's Environmental Assessment Requirements as outlined above.	
5.	The Architectural drawings (where relevant) are to be drawn to scale and illustrate the following:  - the location of any existing building envelopes or structures on the land in relation to the boundaries of the land and any development on adjoining land;  - the floor plans of the proposed buildings indicating layout, room uses, size and orientation;  - the location and size of vertical and horizontal circulation of lifts, stairs and corridors;  - sections and elevations of the proposed development;  - fenestrations, balconies and other features;  - servicing points;  - the height of the proposed development in relation to the land;  - any changes that will be made to the level of the land by excavation, filling or otherwise;  - the level of the lowest floor, the level of any yard or unbuilt area and the level of the ground;  - parking arrangements, where vehicles will enter and leave the site, and how vehicles will move about the site;  - pedestrian access to, through and within the site.	Appendix A

# 6. The **shadow diagrams** for developments comprising two or more storeys are to show solar access to the site and adjacent properties at summer solstice (Dec 21), winter solstice (June 21) and the equinox (March

21 and September 21) at 9.00 am, 12.00 midday and

# Appendix A

Appendix M

# 7. The **Other Plans** including (where relevant):

3.00 pm.

# Stormwater Concept Plan – illustrating the concept for stormwater management from the site to the Council drainage system and include a detailed site survey. Where an on-site detention system is required, the type and location must be shown and must be integrated with the proposed landscape design, site discharge calculations should be provided and must include details of all major overland flow paths;

Figure 12

View analysis – artist's impression,
 photomontages, etc of the proposed development
 in the context of the surrounding development;

Appendix A

 Coloured elevations – of the proposed buildings drawn to the same scale as the architectural drawings. The elevations are to indicate height and key datum lines, building length and articulation, the composition of the façade and roof design, existing buildings on the site, building entries (pedestrian, vehicular and service), and profile of buildings on adjacent properties;

Appendix D

 Landscape Concept Plan – plan or drawing that shows the basic detail of planting design and plant species to be used, listing botanical and common names, mature height and spread, number of plants to be utilised and surface treatments (i.e. pavers, lawn etc); details of any plants to be removed.

Table 1: Director General's Environmental Assessment requirements

#### **Environmental Assessment**

#### **6.0 PLANNING INSTRUMENTS AND POLICIES**

The redevelopment of the site for residential development is defined as development under the Environmental Planning and Assessment Act 1979.

The relevant environmental planning instruments applicable to the proposal include:

- State Environmental Planning Policy (Major Projects) 2005.
- State Environmental Planning Policy 55 Remediation of Land.
- State Environmental Planning Policy 65 (Design Quality of Residential Flat Buildings).
- State Environmental Planning Policy (Building Sustainability Index) BASIX.
- Standard Instrument (Local Environmental Plans) Order 2006.

In addition, the Redfern-Waterloo Built Environmental Plan – Stage One 2006, the Redfern-Waterloo Authority Contributions Plan 2006 and the Redfern – Waterloo Authority Affordable Housing Contributions Plan 2006 apply to the site.

Part 5, Division 1, Clause 3 of State Environmental Planning Policy (Major Projects) 2005 states that all other environmental planning instruments do not apply to the Redfern–Waterloo Authority Sites, except for other state environmental planning policies.

A discussion of the relevant instruments and policy controls is provided below:

# 6.1 State Environmental Planning Policy (Major Projects) 2005

The Major Project SEPP was gazetted on 25 May 2005 and applies to the whole state.

The SEPP aims to:

- identify development to which Part 3A of the EPA Act 1979 applies;
- identify development that is critical infrastructure under Part 3A;
- facilitate the development, redevelopment or conservation of State Significant sites;
- facilitate service delivery outcomes for public services and the redevelopment of major sites for a public purpose or redevelopment of major sites which are no longer appropriate or suitable for a public purpose; and
- rationalise and clarify the provisions making the Minister the approval authority for state significant sites,

The SEPP defines certain developments that are major projects under Part 3A of the EP&A Act 1979 and that are determined by the Minister for Planning. The SEPP also identifies that development that, in the opinion of the Minister, is development of a kind referred to in Schedule 3 (State Significant Sites) is declared to be a Project to which Part 3A of the Act applies.

The Major Project SEPP was amended in August 2006 (Amendment No 7) to include specific provisions in relation to development of certain land in Redfern. The relevant provisions are contained in Schedule 3 of the instrument and are discussed below:

# Applicability of the SEPP

Part 5, of Schedule 3 of the SEPP identifies the Redfern-Waterloo Authority Sites as State Significant Sites and Clause 5 identifies that Part 3A of the Act applies to development with a capital value of more than \$5million within the Redfern-Waterloo Authority Sites.

The former Rachel Forster Hospital site is identified within Map 3 to this Schedule and its redevelopment will have a capital value in excess of \$5million. Consequently it is considered that the proposed development is a Major Project subject to the provisions of Part 3A of the Act.

It is important to note that Clause 2 of Part 5, Division 1 of Schedule 3 of the SEPP (Major Projects) states that definitions are as per the meanings prescribed by the Standard Instrument (Local Environmental Plans) Order 2006. Clause 3 of the SEPP (Major Projects) provides that all other environmental planning instruments do not apply to the Redfern-Waterloo Authority sites, except for other State Environmental Planning Policies.

The site is identified as being zoned *Residential — Medium Density Residential* as shown on the map marked "Redfern–Waterloo Authority Sites Zoning Map".

#### Objectives of the zone

Part 5, Division 3 of Schedule 3 identifies the provisions relating to development of Redfern–Waterloo Authority Sites, in particular Clause 7(2) requires the consent authority to consider each of the objectives for development within a zone when determining an application.

- (1) The objectives of the Residential Zone—Medium Density Residential are as follows:
  - (a) to provide for a range and variety of housing types in the Zone,
  - (b) to allow for other types of development to provide facilities or services to meet the day to day needs of residents in the local area,
  - (c) to enable other development that is compatible with housing,
  - (d) to ensure the vitality and safety of the community and public domain,
  - (e) to ensure that buildings achieve design excellence,
  - (f) to promote landscaped areas with strong visual and aesthetic values to enhance the amenity of the area.
- (2) Development for any of the following purposes may be carried out on land within the Residential Zone—Medium Density Residential only with development consent: boarding houses; child care centres; community facilities; dual occupancies; dwelling houses; group homes; health consulting rooms; home industries; multi dwelling housing; neighbourhood shops; places of public worship; residential flat buildings; seniors housing; shop top housing; telecommunications facilities; temporary structures.
- (3) Except as otherwise provided by this Policy, development is prohibited on land within the Residential Zone—Medium Density Residential unless it may be carried out under subclause (2).

The site is zoned *Residential – Medium Density* (Figure 15). The Project seeks to redevelop the site for residential development which is permissible. The Project is also considered to be consistent with the objectives of the zone for the following reasons:

- The building floor plates and building envelopes allow the opportunity for a mix of housing types, forms and sizes. The concept design prepared by Lippmann Architects contained in Appendix A, demonstrates indicative floor layouts that could be accommodated within each building. The indicative layouts demonstrate how a mix of dwelling sizes, and types comprising one bedroom, one bedroom plus study, two and three bedroom apartments may be achieved to accommodate the wider needs of the community;
- the Concept Plan demonstrates that the site will provide the required facilities or services to meet the day to day needs of residents. The proposed dedication of public open space will also meet the needs of the wider community;

#### **Environmental Assessment**

- the vitality of the community will be achieved through the provision of a new residential development that will provide greater housing choice and attract a mix of residents to the area.
- the safety of the community and public domain will be ensured through the appropriate design
  of unit layouts, presence to street frontages and the design of communal and private open
  spaces. The siting and orientation of the proposed residential building forms along the
  proposed perimeter of the public open space will further improve public safety by way of
  casual surveillance;
- the Concept Plan provides flexible building envelopes and heights with suitable setbacks and landscaped grounds that will enable the subsequent Project Application to achieve design excellence, as outlined in the assessment of Clause 22- Design Excellence below. Design excellence will be demonstrated through appropriate design, layout, amenity, articulation, presentation to street frontages, ecological sustainability and quality materials and finishes; and
- the Concept Plan proposes to retain the large landscaped area on the eastern part of the site fronting Pitt Street for public open space. This will maintain the strong visual and aesthetic values of the site and will enhance the amenity of the area.

## **Height and Floor Space Ratio Restrictions**

Clause 21 of Part 5, Division 3 of the SEPP (Major Projects) limits the height and floor space ratio of the site in accordance with the *Redfern–Waterloo Authority Sites Height Map* and *Redfern–Waterloo Authority Sites Floor Space Ratio Map*. The Maps indicate a maximum floor space ratio of 2:1, with a six storey height limit for the majority of the site, with the exception of a three storey height limit along Albert Street. It is noted that sub-clause (3) allows the Minister to vary the Height and Floor Space Ratio control in an approval for a concept plan for the development.

#### Height

Buildings 1 and 3

The height controls established in the SEPP (Major Projects) were intended to give effect to the maximum heights proposed in the Redfern-Waterloo Built Environmental Plan (Stage 1).

The Built Environment Plan identified the existing building height of Building 1 as five storeys, being the existing height of the building above natural ground level when viewed from Pitt Street. A plant room equivalent to 3.3 metres in height is located above the 5<sup>th</sup> storey of this building. There is also an existing basement located under the building which was previously used for hospital purposes.

The heights proposed in the Built Environment Plan were based on an urban design analysis of the existing site and surrounding development. In developing the height controls for this part of the site, the Built Environment Plan envisaged that an additional storey above Building 1, approximately equivalent to the height of the existing plant room would be appropriate. This would enable the development of a building of up to six storeys above natural ground level. It was also envisaged that the basement could continue to be used for residential purposes as it had been used in the past. Hence, the fact that the concept plan seeks to utilise the existing basement levels does not physically alter the intent of the Plan.

This is similar to the situation applying to the concept plan for proposed Building 3. In this case, the proposed building is generally located within the footprint of the existing building fronting Albert Street. There is also an existing basement below ground level which has also been used for hospital purposes. Based on urban design analysis the Built Environment Plan envisaged that a three storey height limit above ground level would be appropriate for this part of the site. It was always expected that the basement level would continue to be used as part of any redevelopment.

In determining the appropriate storeys for the site in the Built Environment Plan it was not expected that the definition of a 'storey' would include levels below ground level (such as a below ground car parks or the existing basements). Even though the SEPP (Major Projects) was intended to give effect to the Built Environment Plan, the definition of 'storey' for the purposes of Redfern Waterloo sites was not made explicit.

Consequently, a matter of technical non compliance has become evident due to the definition of 'storey' in the Standard Instrument (Local Environmental Plans) Order 2006 even though the Concept Plan for Buildings 1 and 3 is consistent with the intent of the Built Environment Plan.

The Standard Instrument (Local Environmental Plans) Order 2006 defines storey as 'a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include: (a) a space that contains only a lift shaft, stairway or meter room, or (b) a mezzanine, or (c) an attic.' Reference to the Standard Instrument is provided by Schedule 3, Part 5, Clause 2 of the Major Project SEPP.

The following summarises the justification to support this technical non compliance:

- The proposed height shown as 'storeys' for the former Rachel Forster Hospital site in the Built Environment Plan was based on urban design analysis which took into consideration the existing site characteristics (including existing building heights above ground level) and the surrounding built environment.
- The storeys proposed in the Built Environment Plan for the former Rachel Forster Hospital site apply to levels above ground level.
- The SEPP (Major Projects) gives effect to the Built Environment Plan but did not specifically describe the meaning of a 'storey' as it applied to RWA sites.
- The Concept Plan delivers a design for these buildings which is sensitive to the heritage significance of the site and compatible with the surrounding development.
- The design of the buildings will achieve a high quality development which will have minimal impact on the amenity of surrounding residents.
- The design complies with the Redfern-Waterloo Built Environment Plan (Stage 1) 2006.

# Buildings 2 and 4

Buildings 2 and 4 are 3 storeys above ground level and below the maximum permissible height of 6 storeys identified in the SEPP (Major Projects).

#### Floor Space Ratio

The concept plan seeks approval for the maximum floor space permitted under the FSR control of 2:1. Based on the site area of 6,923m², this equates to a floor area of 13,846m².

A floor area calculation has been prepared by Lippmann Associates (Drawing A 015) in respect of the proposed concept scheme, and indicative layout. This has been provided to satisfy the Director General requirements by demonstrating the methodology in calculating the FSR. This scheme illustrates a floor area in the order of 13,582m<sup>2</sup> achieving a floor space ratio of 1.96:1.

The methodology used in calculating this FSR is based upon the definition provided in Clause 23 of the Standard Instrument (Local Environmental Plans) Order 2006 which defines Floor Space Ratio as, 'the ratio of the total floor space area of all buildings within the site to the site area.' For the purposes of calculating floor area for the concept plan the following areas were excluded from the calculation:

- any area for common vertical circulation such as lifts and stairs,
- any basement used for storage, vehicular access, loading areas, garbage and services
- plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- car parking
- terraces and balconies with outer walls less than 1.4 metres high.

It is noted that the calculation of floor area was made on the basis of an indicative floor layout only.

#### **Design Excellence**

Clause 22 of Part 5, Division 3 of the SEPP requires the consent authority to consider whether the proposed development exhibits design excellence. Given the proposal seeks concept approval only at this stage, and the internal planning of the buildings together with the details of the external elevations have not been finalised, a detailed assessment of design excellence cannot be undertaken at this stage and will be undertaken with the subsequent Project Application. The Statement of Commitments accompanying this application addresses this issue. Notwithstanding, the proposal has been assessed against sub clause 2(a), and (b) of the SEPP (Major Projects). Compliance with the Design excellence principles are nominated within the Draft Statement of Commitments contained in Appendix I.

(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved.

The building typology in the immediate locality is characterised by two to three storey attached terrace dwellings to the north, and three to five storey multiunit housing to the south. These building forms generally present a hard edge to the street. Consequently, the site is located in a transition zone within the Pitt Street streetscape between the multi unit housing to the south and terrace dwellings/townhouses to the north. The Concept Plan seeks to respond to this typology and to contribute to the streetscape and built form of the surrounding area by:

- proposing compatible building heights to the immediate surrounding development,
- providing a transition in height from the south of the site (6 storeys above ground) toward the north (3 storeys above ground,
- introducing setbacks to achieve an appropriate scale and to minimise any impacts
- achieving permeability through the site by providing building separation and the provision of open space areas
- formalising the publicly accessible open space to break up the building mass,
- demonstrating through indicative floor plans that the Project could achieve vertically proportion building elements that could complement the rhythm of terrace housing within the Albert and Pitt Street streetscape.

Evidence that the detailing and materials will achieve design excellence will be provided with the Project Application.

(b) whether the form and external appearance of the building will improve the quality and amenity of the public domain,

The Concept Plan has been designed to locate and orientate the building forms of the development to ensure sufficient solar access is provided to the proposed open space adjacent to Pitt Street. As demonstrated in the shadow diagrams contained in Appendix A, solar access is

provided to 50% of the space in mid winter between 9am – 1pm. Amenity is further improved to the open space by the siting and orientation of the building around the perimeter of the proposed open space to encourage casual surveillance.

(c) whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency.

Measures to meet sustainable design principles include:

- ensuring that Building 1 and Building 3 face north to maximise solar access to living areas and open space areas;
- providing for cross ventilation through design elements and orientation;
- providing for a separation between buildings to maximise privacy;
- wrapping the building form around the proposed public open space to maximise safety and surveillance.

Further details on how the concept plan will enable ESD principles to be incorporated in the Project application may be found in Section 7.17 of this report.

As the proposed buildings do not exceed 12 storeys a design excellence competition is not required to be undertaken in accordance with subclause (3).

#### 6.2 State Environmental Planning Policy 55 - Remediation of Land

Clause 7 of State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) requires a consent authority must not consent to the carrying out of any development on land unless:

- (a) it has considered whether the land is contaminated, and
- (b) if the land is contaminated, it is satisfied that the land s suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is proposed to be carried out, and
- (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

A Preliminary Contamination Assessment was undertaken by Douglas Partners Pty Ltd in November 2003.

The 2003 assessment comprised the drilling of 10 test bores, as follows:

- Three (3) bores were placed on the southern portion of the site, representing the area proposed to be used as a driveway:
- Three (3) bores were placed on the eastern portion of the site, representing the area of land proposed to be dedicated to Council for open space use; and
- The remaining bores were located in the western portion of the site, which represents the area to be redevelopment as a carpark and residential use.

Following this preliminary assessment, a subsequent site inspection was undertaken by Douglas Partners Pty Ltd at the site on 13 February 2007. The subsequent review confirmed that no discernible physical changes have occurred at the site since the 2003 assessment. The overall land use category of the proposed development area remained unchanged (i.e. residential with minimal soil access), and the only substantial change is the area to be developed as open space.

Consequently, a 'Review of Previous Reports' was prepared by Douglas Partners. This review included an assessment against the site assessment criteria for recreational open space. Not

#### **Environmental Assessment**

withstanding this, noting that the land use category of the remainder of the Project remained unchanged, Douglas Partners considered that the original recommendations made in the Preliminary Contamination Assessment report were still valid.

The recommendations are listed below:

The land parcel proposed to be dedicated to council can be rendered suitable for the proposed open space area subject to the removal of the top soil (nominally to 0.5m below ground level) material. Given the fact that the proposed open space is currently a bitumen paved carpark, it is envisaged that appropriate earthworks involving removal of the bitumen pavement and surficial filling will be required. In this regard, the detected contaminants in the vicinity of Bores 6 and 10 can be removed at the time of site development.

In this regard, the site can be rendered suitable for the proposed construction of residential land use subject to the removal of the contaminated surficial filling material in the open space area. The process is envisaged to be simple and straightforward, and the extent of excavation can be determined via step out validation analysis.

As the proposed development involves the construction of residential / apartments with 2 levels of basement car park at the western portion of the site, bulk excavation to depths in excess of 6 m and off-site disposal of spoil would be required.

In other words, contaminated soil present in the vicinity of Bore 9 will be removed as part of the site bulk excavation process. The current development plans also indicate that soil material in the vicinity of Bore 2 is to be permanently paved and is to be used as driveway. In this regard, it is considered that the site can be made suitable for the proposed development.

In summary, the site can be rendered suitable for the proposed development with open space and residential / apartments.

The Draft Statement of Commitments includes a commitment by the proponent to remediate the site in accordance with the Contamination Assessment included at Appendix H.

# 6.3 State Environmental Planning Policy 65 (Design Quality of Residential Flat Buildings)

SEPP 65 was introduced in 2002 to improve the design quality of residential flat development in NSW.

In accordance with Clause 4, this SEPP applies to development being:

- (a) the erection of a new residential flat building, and
- (b) the substantial redevelopment or the substantial refurbishment of an existing residential flat building, and
- (c) the conversion of an existing building to a residential flat building.

The Project seeks to redevelop the site for residential development comprising residential flat buildings, accordingly SEPP 65 applies. The SEPP establishes 10 Design Quality Principles that are required to be addressed in the preparation of residential development applications.

Given the Project seeks concept approval only at this stage, and the internal planning and details of the external elevations of the buildings are not yet finalised detailed design statements do not accompany this Environmental Assessment, and an assessment against the Residential Flat Design Book has not been undertaken. Notwithstanding this, Lippmann Associates have assessed the Concept Plan against the Design Quality Principles. The assessment is contained in Appendix I. A summary is provided in Table 2 below.

SEPP 65 Principles	Design Quality Principles
Principle 1: Context	The Project is for residential purposes and is consistent with the surrounding context comprising attached residential terrace and multi unit development. The site is well located in terms of access to employment, transport and a range of services making it ideal for redevelopment for residential purposes.
Principle 2: Scale	The concept plan has been configured such that the building to the north of the site reflects the scale of the terrace housing in Albert Street, and the extension to Building 1 at the southern section of the site is consistent with the multi-unit development on Pitt Street and to the south.
Principle 3: Built Form	The concept plan responds to the built form of the existing buildings on site and surrounding streetscape. Building1, 2 and 3 maintains the 'H' shaped configuration of the original former hospital buildings. These buildings are also largely located within the original building footprint.
	The built form is consistent with the design concept outlined for the site in Redfern-Waterloo Built Environment Plan (Stage 1) 2006.
Principle 4: Density	The density is controlled by the SEPP (Major Projects) 2005 with a floor space ratio (FSR) of 2:1 applying to the site. The FSR was derived from urban analysis that was undertaken in the development of the Redfern-Waterloo Built Environment Plan (Stage 1) 2006, which included examination of the development density and built form on site and of the surrounding area.
	The concept plan is not seeking approval for a floor space ratio other than the maximum permitted FSR of 2:1. Based on the site area of 6,923sqm the maximum gross floor area that can be achieved for the site is 13,846sqm. This would yield in the order of 150 apartments on the site.
	The appropriateness of the density is also supported by the local benefits of the site. The site is 3km of Sydney CBD Redfern, 500m of Redfern Station and a range of other services and facilities.
Principle 5: Resource, energy and water efficiency	As the proposal is for a concept plan, many of the issues regarding resource, energy and water efficiency will be resolved during the detailed design stage undertaken with a subsequent Project Application.
	The design of the concept plan is intended to enable the achievement of water and energy efficient reduction targets and satisfaction of BASIX at the Project Application stage.

	The general location and orientation of the buildings maximises sunlight, daylight and ventilation to reduce reliance on artificial heating and cooling. As demonstrated in the Indicative Apartment Layout (Drawing No. A013) the buildings are capable of accommodating crossover apartments which maximise natural ventilation and solar access.
Principle 6: Landscape	A conceptual landscape design and principles have been developed by Oculus Landscape Architects to demonstrate how landscaping could enhance the site, streetscape and neighbourhood character. Some of the key principles of the landscape design include:
	<ul> <li>Contribute to the character of Pitt Street by providing a vegetated public open space with tree retention, new tree and shrub planting, paths and informal seating.</li> <li>Use landscape design to delineate between the public open space and private space.</li> <li>Provide landscaping for privacy and visual amenity for future residents.</li> <li>Provide vegetation that requires low water use and low maintenance.</li> </ul>
Principle 7: Amenity	The concept plan seeks to optimise amenity in terms of daylight and sunlight access; ventilation, views and outlook; and private open space and access to public open space. The layout, mix and size of apartments does not form part of this concept plan application. An Indicative Apartment Layout (Drawing No A013) has been prepared to demonstrate that the proposed building footprints, location and envelope will maximise apartment amenity.
Principle 8: Safety and security	One of the concept plan objectives is to ensure the development is safe and secure for residents and visitors as well as contributing to the safety of the public domain.  The communal and private open spaces within the development are for passive recreation allowing a level of passive security via resident observation from adjoining terraces.
Principle 9: Social dimensions	The concept plan will increase housing opportunities within the Redfern area. As demonstrated by the Indicative Apartment Layout (Drawing No A013) a mix of apartment types, layouts and sizes can be accommodated with the buildings including: 1 bed; 1 bed + study; 2 bed; 3 bed; single and two storey. This will enable a diverse social mix within the Redfern area to be achieved in an aim to sustain a vibrant community.
Principle 10: Aesthetics	As the proposal is for a concept plan, the details of the building appearance are not yet known. A draft Statement



Table 2: Summary assessment against design quality principles under SEPP 65 (prepared by Lippmann Associates).

# 6.4 State Environmental Planning Policy (Building Sustainability Index) BASIX

The BASIX SEPP was introduced in 2004 to encourage sustainable residential development throughout NSW. This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure the effective introduction of BASIX in NSW. The SEPP requires the submission of a BASIX Certificate providing commitments to reduce consumption of mains-supplied potable water, reduce emissions of greenhouse gases and to improve the thermal performance of a building.

As the Project only seeks Concept approval, the application is not accompanied by a BASIX Certificate. However a BASIX Certificate will be submitted with the Project Application. Notwithstanding, the design of the Concept Plan will enable Ecologically Sustainable Development principles, to be incorporated to guide the development of the detailed design of the Project and to ensure compliance with BASIX as outlined in section 7.17 of this report.

# 6.5 Standard Instrument (Local Environmental Plans) Order 2006.

The Director-General's Requirements for this Project requires that the Environmental Assessment should consider the provisions of the Standard Instrument.

Standard Instrument (Local Environmental Plans) Order 2006 is relevant only insofar as it is the standard instrument for determining the meaning of words or expressions referred to the Major Projects SEPP. The definitions referred to in the Standard Instrument have therefore been used in this Environmental Assessment as relevant.

# 6.6 Redfern-Waterloo Built Environmental Plan (Stage 1) 2006

The Redfern-Waterloo Built Environmental Plan (Stage 1) 2006 was prepared to guide future redevelopment on the former Rachel Forster Hospital site together with other land within the operation area of the Redfern-Waterloo Authority. The following is an assessment of the Concept Plan against the land use strategy, floor space ratio, height, heritage and open space provisions of the Plan.

#### Land use strategy

The Plan identifies the future land use strategy for the site as 'Predominantly residential development consistent with the surrounding land uses' with the opportunity for 'community uses in keeping with the residential use'.

The Plan identifies the proposed land use zone as 'Residential Zone – Medium Density Residential' (Figure 15). The concept plan for residential development is consistent with the land use strategy.







Figure 15: Former Rachel Forster Hospital Land Use

# Floor Space Ratio & Height

The Plan identifies maximum height and floor space ratios for the site. These are illustrated in Figure 4.11 and 4.12 of the Plan. The Plan indicates a maximum floor space ratio of 2:1, with a 6 storey height limit covering the majority of the site, and a three storey height limit along Albert Street to the north. (Figure 16)

Compliance with the floor space ratio and height control are further discussed in Section 6.1.3 of this report. In summary, the Concept plan compiles with the floor space ratio control, and seeks

#### **Environmental Assessment**

variation of the height control due to the technical non-compliance with the definition of 'storey' in the Standard Instrument SEPP.









Figure 16: Former Rachel Forster Hospital Height & Floor Space Ratio

# **Proposed Design Concept**

An assessment of the Concept Plan against the *Proposed Design Concept* for the site as outlined in Plan is provided below:

# General

Respect the character of existing development and development on Albert and Pitt Streets and provide an appropriate interface with adjoining and surrounding residential development by:

- providing a three storey height limit to Albert Street in response to the scale of terrace housing that dominates the street;
- ensure that new buildings along Albert Street have the same rhythm and proportions as terrace housing;
- allowing buildings of up to six storeys on the central and southern sections of the site
- locating on-site car parking below ground level;
- ensuring new development responds to the predominant terrace house typology along Pitt Street with a contemporary interpretation;
- discouraging blank facades and extensive car parking entry and servicing areas along public streets.

The Plan identifies a maximum 6 storey height limit covering the southern end of the site, and a three storey height limit along Albert Street to the north. (Figure 16).

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The proposed heights in the Built Environment Plan are expressed as 'storeys' above ground level. The Concept Plan achieves the design intent outlined above as follows:

- Proposed Building 3 fronts Albert Street. The building comprises 3 storeys above ground and complies with the height control for this part of the Site in the Built Environment Plan. The building will be able to respond to the town house and terrace typology on Albert Street through its design and the provision of courtyards and terraces fronting Albert Street
- Proposed Buildings 2 and 4 are 3 storeys above ground level and comply with the 6 storey height limit identified in the Built Environment Plan. Building 2 fronts Pitt Street and will respond to the terrace development on Pitt Street through its form and scale, setback from Pitt Street, vertical elements, and colonnade.

Parking to the site is provided by a two-level basement car park accommodating around 160 vehicles, and the Project will not include any extensive car parking entries or servicing areas along public streets.

# Heritage

Protect the heritage of the site by:

- identifying heritage items on the site in accordance with the Heritage Strategy in Section 3.5;
- ensuring new development responds sensitively to significant heritage items;
- retaining and adaptively reusing the heritage buildings and landscape associated with the site;
- encouraging an interpretation plan to commemorate the history of the site and conservation of significant features such as the memorial panels.

Diagram 3.6 of the Plan indicated the five storey surgery building (Building 1) and part of two storey colonnade building as being a Heritage Item. (refer to Figure 17)

The Concept Plan protects the heritage of the site by:

- the adaptive reuse of the five storey building on the southern boundary of the site;
- maintaining the colonnade on the eastern elevation of proposed Building 2;
- responding to the configuration and layout of the existing hospital buildings;
- formalising the open space fronting Pitt Street and incorporating it into the concept design;
- preparation of a heritage impact statement which addresses the heritage significance of the site, and
- an interpretation plan will be prepared for the subsequent Project Application, as detailed in the Draft Statement of Commitments.



#### Figure 17:

Extract of Diagram 3.6, Redfern-Waterloo Built Environmental Plan (Stage 1) 2006 illustrating the five storey surgery building (Building 1) and part of two storey colonnade building as being a Heritage Item.

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A Heritage Impact statement has been prepared by Weir + Phillips and is contained in Appendix J. This Statement addresses the heritage significance of the items on site in accordance with Section 3.5 of the Built Environment Plan. The preparation of an interpretation plan will be prepared for the subsequent detailed application, and is detailed in the Draft Statement of Commitments.

# **Open Space**

The provision and configuration of open space is to:

- be in accordance with the Open Space and Public Domain Strategy in Section 3.3;
- provide quality landscaping to reinforce the landscape setting of the site and Pitt Street;
- provide a high level of residential amenity for new developments by providing adequate private and communal open space within and around the site;
- be located and designed to achieve a high level of privacy and separation between dwellings;
- be provided for all new dwellings;
- be adjacent to active uses to enable surveillance and maximise the safety and security of open spaces;
- have good solar access;
- be appropriately designed and landscaped with planting, paving, lighting, benches, and furniture.
- Orientate new development towards Pitt and Albert Streets to provide surveillance of the public spaces for improved safety.

Diagram 3.5 of the Plan indicates publicly accessible open space area between the two vehicular entrance points fronting Pitt Street, which would possibly include parks, plazas or urban spaces. (Figure 18)



Figure 18: Indicative location of publicly accessible open space (Diagram 3.5, Redfern-Waterloo Built Environmental Plan (Stage 1) 2006).

The Concept proposes that the area of open space on the eastern boundary fronting Pitt Street (that currently incorporates a semi-circular driveway) be dedicated as public open space to the City of Sydney. The proposed open space dedication is around 1,060m² in size. It will be fronted on three side by residential apartments, and will be accessed off Pitt Street (Figure 18). This configuration and location enables the open space to be accessed by residents of the proposal and surrounding residents. Formalisation of this open space will enhance the streetscape and provide visual amenity for residents. This public open space dedication is consistent with Diagram 3.5 of the Built Environment Plan.

A landscape concept plan has been prepared and is contained in Appendix D. This concept plan includes appropriate principles to reinforce the landscape setting of the site and Pitt Street. The concept plan has been designed to provide detached building forms that include appropriate separation to ensure adequate light, ventilation and privacy is achieved to all apartments. The

Concept plan allows the opportunity for all apartments to have access to a private balcony, and for ground floor apartments to have access to adequate private open space. Communal recreation space for the intended residents is best served through the proposed open space dedication to promote community interaction.

The concept proposes the public open space be fronted on three sides by residential apartments. The remaining side is open to Pitt Street. This layout maximise the casual surveillance of the open space, and improves its safety and security. The shadow diagrams contained in Appendix A demonstrate sufficient solar access is provided to the proposed public open space area.

A detailed landscape design for the Project will be included in the subsequent Project Application, and is reinforced in the Draft Statement of Commitments.

# 6.7 Redfern-Waterloo Authority Contributions Plan 2006 and the Redfern – Waterloo Affordable Housing Contribution Plan

The Redfern-Waterloo Authority Contributions Plan 2006 and the Redfern Waterloo Affordable Housing Contribution Plan apply to the Project as the site is located within the Redfern-Waterloo Authority operational area, and the proposed development is a Project to which Part 3A of the EP&A Act applies.

Payment of the development levies will be required paid prior to the issue of a Construction Certificate for the development. This is reinforced within the Draft Statement of Commitments.

#### **Environmental Assessment**

# 7.0 KEY ISSUES

#### 7.1 European Heritage

A heritage impact statement has been undertaken by Weir + Phillips and is contained in Appendix J. The report provides a comprehensive overview of the site history and assessment of the site significance. The key findings and conclusions of the heritage assessment are outlined below and have informed the formulation of the concept plan.

The former Rachel Forster Hospital site, Redfern, has state historic and social significance as a place where a wide range of medical and social services were provided to women and children from 1937 until 2000 and to men from 1967 to 2000. The association of the site with medical services extends back to the early colonial period. The site has state historic significance for its association with women pioneers of twentieth century medicine in New South Wales, six of whom opened the Hospital's predecessor- the New Hospital for Women and Children- in Surry Hills in 1922. When opened in 1922, the Hospital was part of a wider movement to improve women and children's health arising out of female emancipation. The former Rachel Forster Hospital Site has aesthetic significance as a fine example of modernist hospital design and the work of Irwin Leighton (1892-1962) and has aesthetic significance for its contribution to the streetscape as a well-designed modernist complex.

Much of the significance of the site is vested in its founders, the development of medical services in New South Wales and the association derived from its use by the general public over many years. This significance is best maintained and recognised through a comprehensive interpretation strategy. This strategy would form part of a Conservation Management Plan.

The aesthetic significance of the building is vested in its 'modern design' for a hospital of its time. As the building was built on a limited budget, much of it is humble and utilitarian in design with rear and side elevations reflecting the function of the interiors in unrelieved face brick walls. Reflecting this restrained design are the architectural elements comprising the 'iconic view'. The parts of the building demonstrating 'modern design' and hence aesthetic significance are confined principally to the east elevation of Building 2 and the north and east elevations of Building 1.

The Concept Plan takes into consideration these significant elevations and maintains their essential characteristics by the following means:

- The understanding of the relationship between the colonnade and the horizontality of Building 1 is maintained,
- The formal composition of the east elevation of Building 1 is maintained.
- An addition is made to the top floor of Building 1 while its overall form is retained
- New additions to Building 1 are set back or attached to elevations with low significance.
- Buildings of low significance are replaced with new purpose built buildings.
- Provision is made for the retention of a landscaped forecourt.
- The basic 'H' configuration of the buildings is maintained.

The impact of the Concept Plan on the heritage significance of the site is manageable as associative and cultural significance is maintained through interpretation and the aesthetic significance is maintained through the retention of the most significant architectural elements

#### 7.2 Archaeology

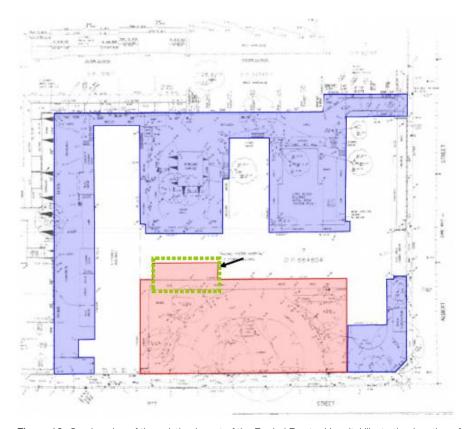
A preliminary archaeology assessment has been prepared by Archaeological & Heritage Management Solutions Pty Ltd and is contained in Appendix K. The report provides a preliminary assessment of the following:

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- Visible historic relics identified on the site. This includes a well located within the basement of the existing colonnade building (Building 2), which was uncovered by Weir + Phillips during the preparation of the Heritage Impact Statement.
- Archaeological potential and significance of the historic relics, including whether or not they
  are associated with occupation of the site by William Redfern.
- Potential for the site to contain remains of Aboriginal occupation.
- Archaeological impacts of the proposed concept plan.

Figure 19 from the report demonstrates the extent of the area considered to have the potential to contain historical archaeological relics and/or Aboriginal sites (red shading). This area is limited to the eastern frontage of the site and the eastern portion of the existing Building 2 between the main corridor in the basement and the front building wall. The approximate location of the well is also indicated by the arrow. The area shaded blue is below slab and the unshaded areas within the building footprint denotes the basement corridors and rooms. Neither of these areas is considered to have potential to contain remains of past occupation.

The only portion of the site that would be directly impacted by the construction of the Project is denoted by the dotted line (green box). This comprises approximately 144m²of the proposed development area. The balance of the area of archaeological potential (shaded red) will only be the subject of superficial impacts as the majority of the area is proposed to be dedicated for public open space.



**Figure 19:** Overlay plan of the existing layout of the Rachel Forster Hospital illustrating location of well in the basement (arrow) and the probable extent of soil deposits with potential to contain physical remains of historical and Aboriginal occupation (shaded red).

The assessment indicates that the proposed development site includes a localised area that would be impacted by the proposal and which contains relics associated with historic occupation considered to date to the period between the mid-Nineteenth Century and 1941. On the basis of available information that has been reviewed to date the historic relics are assessed as having local heritage significance. However, further targeted historical research is required to determine the significance of the relics, in particular whether or not the relics identified at the site are associated with occupation by William Redfern, or other significant historical occupation. The archaeological assessment recommends this work be undertaken prior to the determination of the Concept Plan and that a revised statement of significance should be prepared for the site, taking into consideration any results obtained by the research.

The localised remnant soil landscape immediately below the historic relics, has been assessed as having the potential to contain Aboriginal sites/and or objects. Although it is noted that the probability of such a limited area containing Aboriginal sites is considered to be low, the significance of any Aboriginal sites and/or objects within this area cannot be determined without further archaeological investigation. Accordingly, the Draft Statement of Commitments includes an undertaking to prepare an Aboriginal Heritage Impact Assessment (AHIA) in accordance with the draft Department of Heritage Conservation Guidelines.

The Draft Statement of Commitments also includes an undertaking to:

- Integrate the revised statement of significance and the results of the AHIA within an Archaeological Management Plan for the site that considers
  - heritage interpretation of the archaeological site within the proposed development and/or
  - (ii) archaeological excavation and documentation of the site prior to construction.

# 7.3 Built Form and Visual Impact

The concept plan provides a built form that:

- Protects the historic significance of the site through the adaptive reuse of the former surgery building (Building 1) and the iconic colonnade;
- Maintains the existing open space area to the east along Pitt Street;
- Is consistent with the design concept for the site identified in the Redfern-Waterloo Built Environmental Plan (Stage 1);
- Is consistent with surrounding built form, including the two three storey development on Pitt and Albert Streets and the adjoining and nearby apartment buildings.
- Responds to the existing built form on site;
- Minimises overshadowing of open spaces and adjoining residences;
- Maximises solar access to the existing and proposed building envelopes on the site;
- Addresses Albert Street and the proposed public open space to maximise casual surveillance;
- Reinforces the prevailing setbacks of Pitt and Albert Street; and
- Maximises the opportunity for onsite landscaping to enhance the landscape setting of the site and Pitt Street.

It is considered that the proposed built form is appropriate for the site and will not have an adverse visual impact on the site or surrounds.

#### 7.4 Structural Integrity

The Project seeks to retain and adaptively reuse Building 1. A structural assessment has been prepared and undertaken by Enstruct Group Pty Ltd and is contained in Appendix L. The assessment was based on a site inspection of the building, original structural and architectural drawings, and a previous report prepared by Taylor Thomson & Whitting Engineers, dated April 1997.

The assessment concludes that the building will be able to accommodate the proposed additions and works, subject to upgrade works being undertaken to reinforce the building's lateral structure to satisfy wind and earthquake codes. The assessment also identifies that general upgrading of exposed elements such as concrete balconies, masonry ties, and balustrades will also be required.

Further investigation to determine the extent of these works, and these investigations will accompany subsequent Project Application(s) at the detailed development design stage. This is reinforced in the Draft Statement of Commitments (Appendix B)

#### 7.5 Parking

A review of the parking provision and layout has been undertaken by Transport and Traffic Planning Associates (TTPA) and is contained in Appendix F.

Parking is proposed on the site for approximately 160 vehicles which will be provided over two basement levels accessed from a combined entry/exit driveway and access road off Pitt Street, adjacent to the site's southern boundary. Plans illustrating the parking concept for the site have been prepared by Lippmann & Associates and are contained in Appendix A.

There is currently no carparking development control plan or policy applying to the site. The proposed carparking provision is based on the following parking rates:

- 0.8 spaces per one-bedroom apartments
- 1.2 spaces per two-bedroom apartments
- 2 spaces per three-bedroom apartments
- Visitors 1 space per 8 apartments

The TTPA report indicates that the parking rates are considered appropriate as:

- A significant proportion of the surrounding land uses comprise older style terrace housing
  many of which do not have access to off-street parking. In recognition of this, Council has
  introduced a time restricted resident exempt parking scheme to significant lengths on the
  surrounding streets to discourage all day worker/commuter parking and assist residents of
  adjacent dwellings with access to kerbside parking.
- Residents of the proposed development will not be eligible to participate in the residents parking scheme, and as such it is imperative that adequate parking is provided on-site.
- Surveys indicate that there is a relatively high level of use of kerbside parking provision in the
  immediate vicinity of the site. To ensure that demand for these spaces is not exacerbated it is
  desirable that adequate provisions are made within the site to accommodate the parking
  requirements of visitors.
- The supply of parking in residential developments does not influence traffic generation, but rather it is the number of dwellings which determines such activities.

The report concludes, 'the proposed parking provision is considered to be appropriate and will be sufficient to ensure that the normal day to day parking demands generated by the development do not impact on the accessibility to on-street parking for neighbouring residents and business owners.'

The report also assesses the architectural concept design with regard to parking and access, and concludes. 'The layout of the carpark generally complies with the requirements specified in AS 2890.1 in terms of parking bay sizes, access and circulation aisle widths, height clearances and ramp grades/widths.'

### 7.6 Traffic

#### **Environmental Assessment**

An assessment of the traffic impacts of the Project has been undertaken by Transport and Traffic Planning Associates, and is contained in Appendix F.

To establish the potential traffic generation of the Project, the report utilised the applicable residential rate contained within the *RTA Guide to Traffic Generating Developments*. The Guide specifies a peak hour trip generation rate of 0.29 trips per apartment. Application of this rate to the Project (which will comprise approximately 150 apartments) indicates a peak period traffic generation of some 44 movements per hour, in the following AM and PM peak periods:

AM		
IN	OUT	
10	34	

PM		
IN	OUT	
33	11	

While data was not available of the traffic movements generated by the site at the time when the Rachel Forster Hospital was operational, surveys were undertaken upon Concord and St George Hospitals to provide a sound basis for estimating the morning, evening and peak vehicle trips generated by the site's former use. The Projections were based upon the Rachel Forster Hospital operating as an 89 bed specialist hospital.

Based on these projections the report concludes the proposal is 'not only unlikely to result in any adverse capacity or environmental impacts on the surrounding road network but will also be considerably less than that which would have been generated when the site was occupied by a fully operational hospital.'

In summary, the assessment undertaken by Transport and Traffic Planning Associates established that the Project will generate only a light to moderate level of vehicle activity and that this can be readily accommodated on the surrounding road network.

In addition to the ongoing traffic impacts generated by the Project, A Construction Traffic Management Plan (CTMP) will be prepared to manage construction traffic activity. This CTMP will be prepared and implement prior to any demolition or construction works on site. This is reinforced in the Draft Statement of commitments.

# Public transport

As outlined in the report prepared by TTPA, the site is highly accessible to both road and rail based public transport services being less than 400metres from high frequency bus services on nearby Redfern and Regent Street, and approximately 500 metres from Redfern Railway Station.

Bus services operating within vicinity of the site service the CBD, Mascot, St Peters, Bondi Junction, Botany, Marrickville and Moore Park. The Redfern Railway Station provides access to 10 of 11 lines on the City Rail network as well as convenient connection to Central Station and the extensive network of inter urban and country link services.

Given the site's high level of accessibility to public transport, both residents and visitors of the development are expected to make good use of the services provided, particularly for journey to work purposes.

# 7.7 Management of Stormwater

A preliminary assessment of the management of stormwater on the site has been prepared by Armstrong Consulting Engineers (Hydraulic and Fire Services Scheme Development Report prepared by Armstrong Consulting Engineers, dated May 2007) and is attached at Appendix M. A summary of the stormwater investigations is provided below:

A stormwater detention system (OSD) will be required on site to prevent the Project causing increased load capacities in the existing City of Sydney Council stormwater system. It could also incorporate a silt arrestor and extra storage volume for stormwater reuse.

The possible location of the OSD system, and rainwater storage tanks are nominated in Figures 20 and 21. Further details of these systems will be provided in the subsequent Project Application.

The design criteria for the OSD is proposed to 'calculate the rainfall catchment on site considering the new proposed development that considers time of overland flows, flood paths, site retention, rainfall intensities and grades and coefficients of surfaces and piped drains and incorporate the discharge factor as against the pre development discharge.' There would be a requirement to reduce the new proposed discharge to below or equal to current discharge rates.

In association with the OSD system, a sub soil drainage system would be required to be installed behind retaining walls, below floor slabs for property drainage where in ground subterranean water pressures would be encountered, such as sub basements, basement car parks, basement areas and built up garden areas, retaining walls, planter beds and light wells.

In addition to the OSD system, the report further outlines water sensitive urban design measures, such as recycled water systems, and rainwater storage that could be incorporated at subsequent Project Application stage.

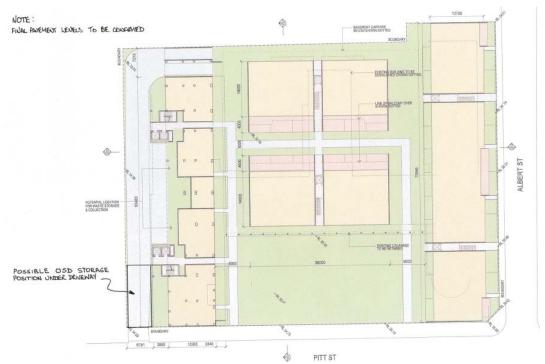


Figure 20: Site plan illustrating possible location of On-site Stormwater Detention system underneath proposed driveway in the south eastern corner of the site.

#### **Environmental Assessment**

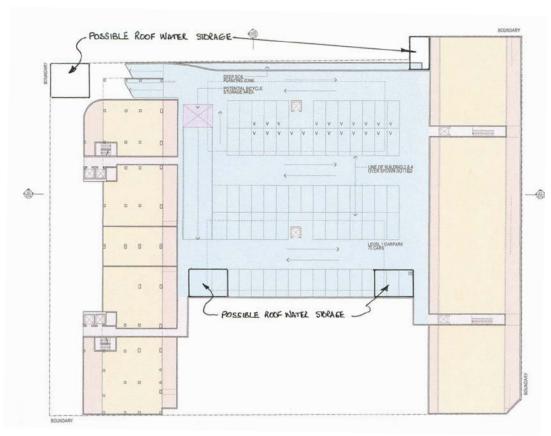


Figure 21: Possible location within the basement parking level for roof rainwater storage and re-use.

Detail work plans and specifications that demonstrate the proposed stormwater system for the Project in accordance with the design criteria set out Hydraulic and Fire Services Scheme Development Report prepared by Armstrong Consulting Engineers, dated May 2007 will be prepared with the subsequent Project Application. This is reinforced in the Draft Statement of Commitments.

# 7.8 Building Code of Australia Capability

A Capability Assessment of the proposed Concept against the provisions of the Building Code of Australia has been undertaken by Philip Chun and Associates dated 8 June 2007, and is contained in Appendix N.

The Report identifies the concept design is capable of meeting the requirements of the deemed to satisfy provisions of the BCA and that where necessary alternative solutions will be proposed to meet the performance requirements of the BCA.

Further assessment will be undertaken at Project Application stage to ensure the detail design of the Project is capable of meeting the performance requirements of the BCA.

#### **Environmental Assessment**

# 7.9 Open Space and Landscaping

# **Open Space**

The open space area on the eastern boundary fronting Pitt Street is proposed to be dedicated as public open space to the City of Sydney. The open space dedication is proposed to be approximately 1,060m² in size and covers a significant proportion of the site. It will be fronted on three side by residential apartments, and will be accessed off Pitt Street. (Figure 14). The proposed open space has been provided in accordance with the open space and public domain strategy contained in the Redfern-Waterloo Built Environmental Plan (Stage One) 2006.

Pedestrian linkages between the site, to Redfern Station and other proposed open space are via existing public streets, namely Redfern Street and Albert Street, as demonstrated in Figure 5.

The proposed public open space preserves the landscape and open space characteristics of the site and Pitt Street, and does not include any vehicular access points that could result in pedestrian and vehicle conflicts. It provides a public benefit to the community who will be able to access and use the open space. At the same time, future residents will benefit from the provision of a large open space adjacent of the development for their recreation.

Private open space for the Project will generally be provided in the form of balconies with opportunity for courtyards from ground level apartments. The communal open space provides landscaping, privacy and visual amenity for residents.

#### Landscaping

A Landscape Concept Diagram & Principles prepared by Oculus – Landscape Architects accompanies this application, and is contained in Appendix D. The landscape concept plan nominates principles to further guide the detail design development of the proposed open space dedication, and the general landscaping through-out the site.

The Concept Plan and Principles demonstrate that the landscaping of the open space can: enhance the quality of the development, improve the streetscape and public domain, reinforce important elements of the existing open space and landscaping, maximise safety and security and provide a pleasant and inviting public space.

# **7.10 Trees**

The design of the Concept Plan incorporates a large area of open space and seeks to maximise the provision and retention of trees on site. However a number of trees will require removal to facilitate the development and its construction.

An arboriculture report has been prepared by Landscape Matrix Pty Ltd and is contained in Appendix E. The report analysed 19 individual trees or groups of trees on the site and adjoining properties. The report identifies those trees that require removal or are potentially impacted upon by the proposed development, as well as those trees that should be considered for removal. Recommendations on tree protection measures are also included.

Eight (8) trees have been identified as requiring removal to facilitate the proposed development as they are located within the building / basement footprint. The health of these trees ranges from moderate to good. Four (4) trees are recommended for removal due to poor/declining health, structural problems, risk of failure and noxious weed species. Two of the trees are located within the proposed building footprints. Three trees identified as being retained have the potential to be impacted, directly or indirectly, by construction activities.

The arborist report also makes further recommendations for future landscaping and tree management of the site. This includes the staged removal of recognised weed specimens in

conjunction with replacement planting. It also recommends investigations and testing be undertaken to determine the structural integrity of trees identified for retention.

The recommendations for the arboriculture report should be incorporated in the future landscaping of the site as outlined in the landscape concept principles prepared by Oculus. This is reinforced in the draft statement of commitments.

#### 7.11 Construction Management

In order to manage construction impacts of the Project, and to detail the staging of the proposed construction works, a Construction Environmental Management Plan (CEMP) will be prepared and implemented prior to the commencement of any demolition or construction works on site.

Management of the construction sequence on site and on public land will be further outlined in a subsequent Project Application.

The CEMP will provide a practical tool for the contractor to install suitable environmental control measures prior and during construction to mitigate environmental impacts.

This Plan will include the following:

- (i) Environmental responsibility::
  - A commitment by the builder that environmental mitigation measures will be implemented prior and during construction works. Management and training methods to inform construction workers of their environmental responsibilities.
- (ii) Pedestrian management:

  Management methods to ensure safe pedestrian paths are providing adjacent to the site;
- (iii) *Traffic management*: Management of construction access and egress to the site, including vehicle routes.
- (iv) Construction staging.Management of construction sequence on site and on public land.
- (v) Noise and vibration control plan:
   Management methods to reduce construction noise at nearby receivers by appropriate selection and operation of equipment.
- (vi) Soil and water sediment control management plan:
   Management methods to control and reduce soil and water sediment impacts on the environment This is to also include Dust Management Strategy.

The preparation and implementation of the CEMP is reinforced in the Draft Statement of Commitments.

# **7.12 Noise**

The site and surrounding area can be considered a low noise environment. The main sources of noise are expected to be from residential activities, traffic on the surrounding road network, and potentially the industrial building located on the western boundary.

Construction noise will be managed by the Construction Environmental Management Plan (CEMP), and will be in accordance with the relevant guidelines for construction site noise contained within the EPA Environmental Noise Control Manual.

#### **Environmental Assessment**

#### 7.13 Waste Management

The CEMP to be prepared and implemented prior to the commencement of any demolition or construction works on site will include appropriate measures to mitigate the impact of waste generated during demolition or construction and will include recycling initiatives for the Project.

In regards to ongoing waste management, the Concept has also allowed sufficient space to accommodate refuse/recycling bins to service the needs of the development. As detailed in the Traffic and Parking Report contained in Appendix F, the service area is capable of accommodating more than one waste vehicle and provides sufficient manoeuvring space to enable vehicles to enter and exit the site in a forward direction.

#### 7.14 Infrastructure and Services

A preliminary assessment of infrastructure and services to the development has been prepared by Armstrong Consulting Engineers and is attached at Appendix M. The report includes a comprehensive investigation of hydraulic and fire services for the proposed development. A summary of the assessment of key utility infrastructure services to the Project is provided below:

# Gas

Natural gas is available to the site. A main gas meter would be installed for the development and remote individual gas meters for each unit, central hot water, space heating and central mechanical plant.

# **Electricity**

A new electrical substation may be necessary and will be investigated at Project Application Stage.

#### <u>Water</u>

An 80mm incoming domestic water supply, meter and backflow device exists on site at the southern end of the Pitt street frontage. Investigations will be further undertaken at Project Application stage to ensure existing supply is adequate or any requirement to upgrade the supply to deliver adequate potable water for human consumption is required.

# Sewer

The existing sewer drainage system and house service connection would be required to be replaced as it is unsuitable for servicing the proposed new residential development. A new house drainage system and boundary trap will be installed to drain the sewer to the Sydney Water sewer main.

This preliminary investigation identifies no significant constraints to the site that would hinder the delivery of the Project and subsequent use of the site for residential and open space purposes.

Further investigation of key utility infrastructure to ensure adequate service is provided to the Project will be undertaken at Project Application stage. This will be reinforced in the Draft Statement of Commitments.

# 7.15 Safety and Security

The safety and security of the site and its users, as well as the surrounding public domain have been considered in the development of the Project. The principles of the *Crime Prevention Through Environmental Design* have been taken into consideration in the designing of the buildings, open space and landscaping. An assessment of the Concept against the four principles is provided below:

# Surveillance

Good surveillance can be achieved by:

- Clear sightlines between public and private places
- Effective lighting of public places
- Landscaping that makes places attractive, but does not provide offenders with a place to hide or entrap victims.

The Project has been designed to ensure clear sightlines are achieved between public and private spaces. This is achieved by providing a detached building form which promotes sightlines from Pitt Street through the site to the western boundary. Providing a built form that wraps around the proposed public open space and fronts Pitt/Albert Street further promotes casual surveillance of the public/private realm.

Although only concept approval is sought at this stage, the *'Landscape Concept diagram & Principles'* as detailed in Appendix D provides appropriate measures to ensure lighting and landscaping would contribute to good surveillance, and does not provide offenders with a place to hide or entrap victims.

### **Access Control**

Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. By making it clear where people are permitted to go or not to go, it becomes difficult for potential offenders to reach and victimise people and their property.

Details of the inclusion of barriers to the site will be provided at Project Application Stage. Although it is expected that security fencing be installed to the western, and southern perimeter of the site, together with security gates to the carpark and between the public open space and entry into the development.

Additional security measures, such as intercom systems, motion detectors, and security cameras can be also be installed within the development if required.

# Territorial Reinforcement

Territorial reinforcement can be achieved through:

- Design that encourages people to gather in public space and feel some responsibility for its use and condition:
- Design with clear transitions and boundaries between public and private space;
- Clear design cues on who is to use the space and what it is to be used.

The siting of the building form around the perimeter of the proposed public open space provides a clear delineation between the public and private realm. The proximity of the development to the proposed open space encourages the use of the space by the intended occupants for recreational activities, thereby creating a safe and secure space for occupants and local residents to gather and interact.

The enhancement of the site through refurbishment of the existing heritage buildings, the building of new facilities, extensive landscaping and dedication of public open space, will make for an attractive and lively space which will encourage a sense of pride and ownership amongst the surrounding community.

#### **Environmental Assessment**

#### Space Management

Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti and the removal or refurbishment of destroyed or decayed physical elements.

The Project is expected to be strata subdivided, and will be accordingly managed by way a Strata Management scheme.

The public open space is proposed to be dedicated to the City of Sydney Council, and will accordingly be managed by the Council.

#### 7.16 Solar Access and Overshadowing

The location and footprint of the buildings have been predetermined to a large degree by the retention of the heritage elements (Building 1 and colonnade), the provision of public open space and the general retention of the existing building configuration. This has implications for solar access and overshadowing. The Concept Plan has sought to maximise solar access and minimize overshadowing impacts within these parameters as outlined below.

#### Solar access

The Residential Design Book outlines the following rule of thumb for providing solar access to each apartment.

- Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three (3) hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.
- Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum
  of 10 percent of the total units proposed.

As the Project only seeks concept approval for the redevelopment of the residential use, detailed analysis of solar access to each apartment can not be accurately determined given detailed internal floor planning have not been resolved at this stage.

However, the design of the Concept Plan has ensured that a majority of the apartments are situated within Building 1 and 3 which have a northern orientation. These are the largest buildings within the concept plan and are capable of accommodating the largest number of dwellings This ensures that a majority of apartments will have a northerly aspect. On this basis the concept plan will ensure consistency with the above design code rule of thumb will be achieved with the Project Application.

Solar access to the public open space is demonstrated in the submitted shadow diagrams, and indicates at least 50% of the space receives solar access in mid winter, between 9am to 1pm.

#### Overshadowing

Shadows diagrams in plan and in isometric have been modeled by Lippmann & Associates and are contained in Appendix A.

The shadow diagrams demonstrate that the impact of the proposed development on the existing and surrounding residential properties is minimal largely due to the modest increase in height of the existing buildings on site and restriction of the new buildings to a three storey scale.

Overshadowing of the adjacent residential apartment development to the south (146-152 Pitt Street) is largely due to the height of the existing 5 storey building (Building 1) on the former Rachel Forster Site and the existing residential apartment buildings overshadowing themselves. Overall the overshadowing impacts of the proposed development are considered to be acceptable and minimal. In summary the overshadowing impacts of the proposal are as follows:

Summer Solstice - At 9am there is a marginal increase in overshadowing which appears to be on the roof of two buildings on the adjacent properties to the west. There is no increase in overshadowing between 12pm and 3pm upon adjoining properties.

Equinox- At 9am there appears to be a small amount of overshadowing on the roof and northern wall to the adjacent buildings to the south and west. At 12pm a small amount of overshadowing appears at ground level and in a confined area of one building on the adjacent property to the immediate south. Overshadowing impacts at 3pm are considered to be minimal.

Winter Solstice- At 9am there is a small amount of overshadowing on the higher levels of the northern walls of the buildings on the adjacent property to the south. At 12pm, overshadowing impacts occur upon the residential tower building to the immediate south. At 3pm the overshadowing is considered to be minimal.

Overshadowing from the remaining buildings are generally contained within the site given the three storey scale of the proposed buildings.

Overshadowing of the communal areas is offset by the large area of open space which is located at the Pitt Street frontage of the site, which will be directly accessible to residents of the proposed development at all times.

As concept approval is only sought at this stage for the general building envelopes on the site, definitive details of the overshadowing impacts upon adjoining properties will be further provided in the subsequent Project Application.

#### 7.17 Ecological Sustainable Development

The BASIX SEPP requires the submission of a BASIX Certificate providing commitments to reduce consumption of mains-supplied potable water, reduce emissions of greenhouse gasses and to improve the thermal performance of a building.

As the Project only seeks Concept approval, the application is not accompanied by a BASIX Certificate. However the design of the Concept Plan enables the following Ecologically Sustainable Development principles to be incorporated to guide the detailed design of the project and to ensure compliance with BASIX.

- Design internal apartment layouts to maximise natural ventilation and to capture prevailing winds;
- Orientate apartments layouts to ensure solar access is received within living rooms;
- Promote natural light and ventilation to kitchen areas of apartments;
- Utilise roof forms to capture natural light and ventilation;
- Re-use and recycle stormwater;
- Use of high thermal mass materials within apartments;
- Promote the use of solar or wind generation for common areas,
- Ensure natural light and ventilation is provided to common areas to minimise energy consumption;
- Use of solar shading devices;
- Use of native vegetation;
- Divide the layout of the apartments into zones to reduce heat and cooling energy consumption;

- Reuse of roof water and rainwater run off;
- Utilise low water flow fixtures and tap ware;
- Reuse rainwater for spray irrigation with rain and moisture detector controls; and
- Recycling grey waste water.

The inclusion of the above mentioned ecological sustainable development design principles will ensure the Project will minimise the consumption of energy and water. The Project Application will demonstrate consistency with the ESD principles and strategies outline above, as well as compliance with BASIX. This is reinforced in the Draft Statement of Commitments.

# 7.18 Social & Economic Impacts

This proposal will deliver a number of important social and economic benefits as outlined below:

#### Heritage Protection:

The historical, social and aesthetic importance of the former Rachel Forster Hospital will be respected and protected through the proposed design of the development, adaptive reuse and preservation of proposed open space. This will ensure its significance will be retained for future generations.

#### Housing:

The new development will provide increased housing and offer housing choice in a quality development within close proximity to work and public transport.

#### Public Open Space:

The wider community will directly benefit from the provision of around 1060m<sup>2</sup> of proposed public open space for possible recreation use.

#### Johs

New jobs will be created during the construction phase of the development.

# Community Health:

Proceeds from the sale of the development will be used to develop a new community health centre which will benefit the wider community.

# Maximise return on public land:

The proposed development will generate the use of a disused parcel of government owned land for the benefit of the wider community.

# 7.19 Suitability of the Site

The site is considered suitable for the proposed development for the following reasons:

- The SEPP (Major Projects) provides for intended use of the site as a medium density residential development.
- The proposed development meets the objectives of the Redfern Waterloo-Built Environment Plan (Stage One) and is consistent with all aspects of the Plan as it relates to this site.
- The proposed development meets the objectives of broader state government growth strategies.
- The design for the proposed development responds sensitively to the existing characteristics of the site and is compatible with the surrounding built environment.
- All relevant environmental issues have been addressed in specialist reports and advice duly taken in the preparation of the Concept Plan.
- Specialist Heritage and Archaeological studies have been undertaken and advice duly taken in the preparation of the Concept Plan.

- Specialist traffic, landscaping and aborist advice has been duly taken into consideration in the development of the Concept Plan.
- The proposed development delivers public benefits which will benefit wider community and provide increased housing as well as housing choice.
- The site is adequately served by access to all services.
- Appropriate measures have been included in the design scheme to minimise any impacts.

#### **Environmental Assessment**

# 8.0 CONCLUSION

The Concept Plan for the redevelopment of the former Rachel Forster Hospital site will integrate the site with its residential setting, achieve high quality urban design and contribute to an improved public domain. The information contained in this Plan builds on the preliminary Environmental Assessment which was submitted to the Minster and Director General for Planning in March 2007.

Public benefits of the redevelopment include unlocking the potential of disused government land for housing, the proposed dedication of public open space and the protection of the historic significance of the site. Proceeds from the sale of the site will be directed toward the provision of a new community health centre at the former Court House and Police Station in Redfern Street.

The Environmental Assessment Report submitted with this application addresses the Environmental Assessment requirements issued by the Director General for Planning for the proposed redevelopment. It also addresses the relevant statutory requirements and key environmental issues related to the proposed Concept Plan such as built form, heritage, safety and security and traffic and parking.

Redevelopment of the former Rachel Forster Hospital site as proposed in the Concept Plan is consistent with the future desired character for the site outlined in the Redfern –Waterloo Built Environment Plan (Stage 1) 2006. It is also consistent with State Environmental Planning Policy (Major Projects) and the objectives of the Metropolitan Strategy for Sydney.

It is requested that the Minister for Planning approve the Concept Plan as submitted subject to any reasonable and relevant conditions of consent.