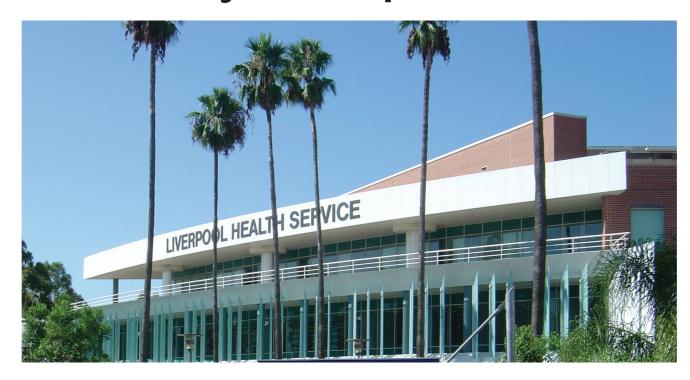


Liverpool Hospital Redevelopment - Stage 2

# Infrastructure and Ancillary Hospital Works



Project Application and Environmental Assessment

Prepared By LFA (Pacific) Pty Ltd

and

Capital Insight Pty Ltd

For Department of Planning

On behalf of NSW Health





Liverpool Hospital Redevelopment Stage 2 Infrastructure and Ancillary Hospital Works (MP08\_0062)

Project Application and Environmental Assessment

October 2008

Prepared for

Department of Planning

on behalf of



Prepared by



LFA (PACIFIC) PTY LTD

ARCHITECTS URBAN PLANNERS LANDSCAPE ARCHITECTS INTERIOR DESIGNERS ABN 92 830 134 905 www.lfa.com.au

SUITE 4, EDGECLIFF COURT, 2 NEW MCLEAN ST, EDGECLIFF NSW 2027

T 02 9327 6822 F 02 9327 5554 E Ifa@lfa.com.au

### in Consultation with

Capital Insight Pty Ltd	Project Director - Procurement	
	Staging	
Bovis Lend Lease	Managing Contractor	
	Structural Design Brief - Engineering Services Building	
LFA (Pacific) Pty Ltd	Child Care Facility	
	Landscaping	
Rice Daubney	Multi storey car park	
	Engineering Services Building	
	Pedestrian Bridge	
Acoustic Logic Consultancy	Acoustics and Vibration	
Archaeological & Heritage Management Solutions Pty Ltd	Draft Historical Archaeological Assessment, Research Design and	
	Excavation Methodology	
C & M Consulting Engineers	Civil Engineering Brief - Engineering Services Building	
Connell Wagner Pty Ltd	Vehicular and Pedestrian Bridges	
EIS (a division of Jeffery & Katauskas Pty Ltd)	Environmental Services	
EMS Solutions Pty Ltd	Hazardous Materials Report	
Jeffery & Katauskas Pty Ltd	Geotechnical Engineering	
Leighton Irwin Pty Ltd	Multi Storey Car Park - Technical Specification	
Otto Cserhalmi & Partners Pty Ltd Architects	Heritage	
Parking Consultants International	Car Park Survey	
Sinclair Knight Merz Pty Ltd	Services/ESD	
Taylor Thomson Whitting (NSW) Pty Ltd	Road Works	
Transport and Traffic Planning Associates	Traffic	

# Contents

State	Statement of Validity	
Exec	cutive Summary	2
Sche	edule of Director General's Requirements	3
1.0	Introduction  1.1 Report Structure and Purpose 1.2 Background to the Liverpool Hospital Redevelopment Project 1.3 Project Objectives 1.4 The Site 1.5 Development for which Approval is sought 1.6 Consultation 1.7 The Proponents and Study Team	5 5 7 9 9 10 11
2.0	Site Analysis  2.1 The Region  2.2 Sub-regional Context  2.3 Liverpool Hospital Precinct  2.4 Zoning  2.5 Land Ownership  2.6 Topography  2.7 Contamination  2.8 Flooding  2.9 Landscape and Open Space  2.10 Building Height  2.11 Access	12 12 13 14 14 15 16 16 16 17
3.0	Concept Plan	19
4.0	The Project Plan  4.1 Introduction  4.2 Site Access, Planning and Design Principles  4.3 Project Components  • Roadworks  • Car Parking  • Bridges  • Child Care Centre  • Engineering Services Building  4.4 Ecologically Sustainable Design	21 21 22 23 23 24 25 27 28 29
5.0	Environmental Assessment 5.1 Introduction 5.2 Relevant Environmental Planning Instruments and Guidelines 5.3 Key Issues	30 30 31 35 35 36 42 47 48 49 52
6.0	Draft Statement of Commitments	58
7.0	Conclusion	70
Sche	edule of Appendices	71



# Schedule of Figures

Execu	utive Summary Infrastructure and Ancillary Hospital Works	2
1.0	Introduction Fig 1.01 - Initial Staging Plan Fig 1.02 - Infrastructure and Ancillary Works - Changes to Concept Plan Fig 1.03 - Infrastructure and Ancillary Hospital Works	5 6 10
2.0	Site Analysis  Fig 2.01 - Regional Context and Local Government Areas  Fig 2.02 - Site Context  Fig 2.03 - Liverpool LEP (2008) Land Zoning Maps  Fig 2.04 - Land Ownership  Fig 2.05 - Flooding  Fig 2.06 - Liverpool LEP (2008) Height of Buildings  Fig 2.07 - Liverpool DCP (2007) - Street frontage heights  Fig 2.09 - Multi Storey Car Park North West Perspective  Fig 2.08 - Hume Highway Intersection	12 13 14 15 16 17 17 18
3.0	Concept Plan Fig 3.01 - Concept Plan	19
4.0	The Project Plan  Fig 4.01 - Infrastructure and Ancillary Hospital Works  Fig 4.02 - Hart Street Landscape Plan  Fig 4.03 - Car Parking  Fig 4.04 - Pedestrian Bridge Layout Plan  Fig 4.05 - Pedestrian Bridge South Elevation  Fig 4.06 - West Campus Landscape  Fig 4.07 - Child Care Centre Floor Plan  Fig 4.08 - Child Care Centre Perspective  Fig 4.09 - Engineering Services Building Site Plan  Fig 4.10 - Engineering Services Building East Elevation	21 23 24 25 25 26 27 27 28 28
5.0	Environmental Assessment  Fig 5.01 - Proposed Movement System  Fig 5.02 - Road Bridge and Approach Ramps  Fig 5.03 - Pedestrian Bridge  Fig 5.04 - Pedestrian Bridge Elevations  Fig 5.05 - Pedestrian and Bicycle Paths and Linkages  Fig 5.06 - Multi Storey Car Park South West Perspective  Fig 5.07 - Multi Storey Car Park North Elevation  Fig 5.08 - Engineering Services Building Roof Plan  Fig 5.09 - Engineering Services Building South Elevation  Fig 5.10 - Child Care Centre South Elevation  Fig 5.11 - East Campus Landscape  Fig 5.12 - Shadow Diagrams  Fig 5.13 - Multi Storey Car Park (Ground Level)  Fig 5.14 - View into Hospital precinct from the intersection of Elizabeth and College Street  Fig 5.15 - Child Care Centre Site Plan  Fig 5.16 - NSW Health commitment to review operational policies and procedures	36 38 39 39 41 42 43 43 43 44 45 45 46 47 50
	Schedule of 7	Гables
1.0	Introduction	

	Table 1.01 - Study Team	11
4.0	The Project Plan	
	Table 4.01 - Parking Distribution	24





# **Statement of Validity**

### Submission of Project Application and Environmental Assessment

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

### Environmental Assessment prepared by

Name : Alf Lester

Qualifications : Bachelor of Architecture (Hons), University of NSW, 1964

Dip. Civic Design (Distinction), Edinburgh University, 1967

Fellow of the Australian Institute of Architects Member of Planning Institute of Australia

Address : LFA (Pacific) Pty Ltd

4/2 New McLean Street Edgecliff NSW 2027

In respect of : Liverpool Hospital Redevelopment Project

Applicant & Land Details

Applicant Name : NSW Health Infrastructure

Applicant Address : Capital Insight

C/- Sydney South West Area Health Service

Level 7

2-4 Speed Street LIVERPOOL 2170

Land to be developed : Goulburn Street

Liverpool

Lot & DP : Lots 1,2,3 DP827031, Part 2 DP596770, Lot 1 + Part 2 DP596770, Lot 1

DP581947, Part A DP432628, Part A and B DP404723, Lot 1 DP724028, Lots

2-13 DP758620, Lot 1 DP596700

### **Environmental Assessment**

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

in accordance with the Director General's requirements dated 28 March, 2008 and that to the best of my knowledge, the information contained in the

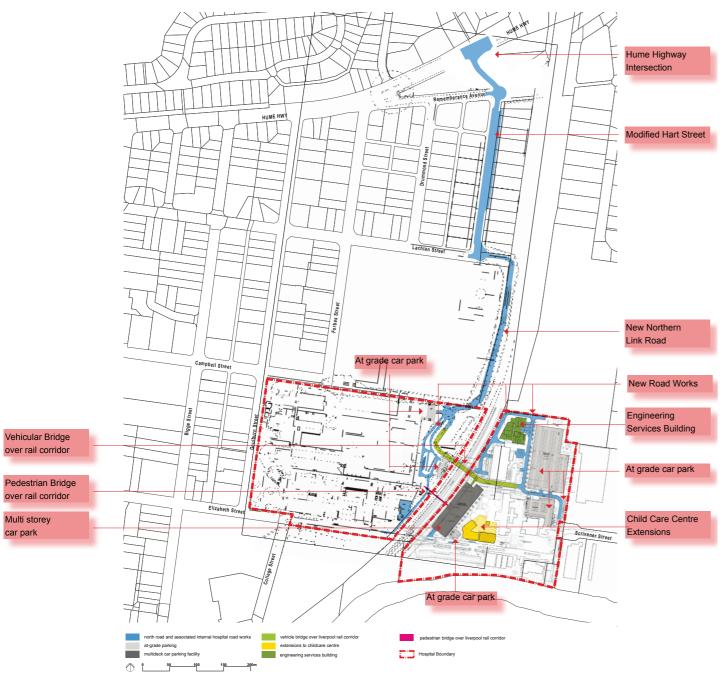
environmental assessment is neither false nor misleading.

Signature

Date 31 October 2008



# **NSW** HEALTH



Infrastructure and Ancillary Hospital Works

# **Executive Summary**

The Liverpool Hospital site is located in the eastern sector of the Liverpool central business district, in close proximity to Bigge Park, Liverpool TAFE and the Georges River.

The Hospital precinct is separated into an East and West Campus by the Great Southern railway line. The existing Hospital is a critical part of the Sydney South West Area Health Services (SSWAHS) network and provides an important range of services to the regional population that is projected to reach 1.25 million by 2031. The need for a significant redevelopment of the Liverpool Hospital to meet the needs of the regional population was recognised by the SSWAHS and masterplanning work on the Hospital precinct commenced. In April 2006 the Minister determined that the Liverpool Hospital redevelopment was a project to which Part 3A of the Environmental and Planning Assessment Act (1979) applied. In September 2006 the Minister declared the proposal to be a Critical Infrastructure Project. In February 2007 the Concept Plan and Preferred Project Report were approved by the Minister. The Concept Plan approval also provided for an Early Works Program including excavation and construction to ground level of works in the vicinity of the proposed new Clinical Services Building.

This Project Application relates to the second stage of development of the approved Concept Plan and is consistent with the staging program submitted as part of the Stage 2.1 Project Application for the Clinical Services Building complex. This Application deals with Infrastructure and Ancillary Works which include:

- Road works
  - Road works within the campus and external to the campus linking the Hospital to the Hume Highway.
- Car parking
  - Construction of a multi storey car park on the East Campus as well as the formalisation of surface car parking on both the East and West Campuses.

- Rail corridor crossings
  - Construction of a vehicular bridge across the rail reserve linking East and West Campus.
  - Construction of a pedestrian bridge across the rail corridor linking the multi storey car park to the Clinical Services Building complex.

### Landscape

 The provision of landscaping to both East and West Campuses associated with the above roadworks and car parking areas as well as landscaping associated with the new road link to the north providing access from and to the Hume Highway.

### Childcare Centre

- Provision of expanded child care facilities on the East Campus to match the needs generated by the increase in hospital staff.
- · Engineering Services Building
  - The construction a new Engineering Services Building located on the East Campus.

The potential impacts of these development proposals have been assessed in accordance with the Director General's Requirements. The key conclusions of the Environmental Assessment is that this Project Application is consistent with the Concept Plan approval and that there are no significant residual impacts.

The provision of a comprehensive health care complex serving the Sydney South West region is vital to community well being. The proposals contained in this Project Application are consistent with that objective, are in the public interest, will result in a substantial contribution to the social, economic and environmental framework in Liverpool and are consistent with the approved Concept Plan. Accordingly the Minister's favourable consideration of this Project Application is sought and it is recommended that the proposals be approved in their entirety.





# **Schedule of Director General's Requirements**

Set out below is a schedule of the Director General's Requirements as well as the relevant sections of this Project Application where the requirement is addressed.

	Section
General Requirements	
The Environmental Assessment must include:	
an executive summary;	Exec. Sum
a description of the proposal comprising:	
<ul> <li>description of the site including cadastre and title details</li> </ul>	2
<ul> <li>design, construction, operation, maintenance, rehabilitation and staging as applicable;</li> </ul>	1
- project objectives and need;	1
<ul> <li>an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below; and</li> </ul>	5
a statement on the validity of the Environmental Assessment, the qualifications of person(s) preparing	Validity
the assessment and that the information contained in the Environmental Assessment is neither false nor misleading.	Statement

Key Assessment Requirements	
Relevant EPIs, Guidelines and other requirements to be addressed	
<ul> <li>Provide an assessment against the Concept Plan and justification for any departures or non-compliances;</li> <li>DCP 30 – Liverpool City Centre urban design guidelines.</li> </ul>	5.2 5.2
Transport, Traffic & Access	
<ul> <li>Land acquisition arrangements and design details for roads and bridges;</li> <li>Internal road design, access points, traffic management and hierarchy;</li> <li>Car parking management across the site;</li> <li>Pedestrian and bicycle paths and linkages;</li> <li>Compliance with Council standards for external roads.</li> </ul>	5.3 5.3 5.3 5.3 5.3
Urban Form and Design	
<ul> <li>Urban design, height, bulk and scale of all buildings;</li> <li>At-grade car park design;</li> <li>Site analysis and architectural plans;</li> <li>External materials and finishes, including a sample board;</li> <li>Photomontages and view analysis;</li> <li>Details of proposed landscaping.</li> </ul>	5.3 5.3 5.3 5.3 5.3 5.3





	Section
Key Assessment Requirements	
Multi-Storey Car Park	
Demonstrate the multi storey car park is of minimal visual impact, maintains amenity of adjoining uses, provides a safe and secure environment and considers the wider heritage impacts on the area;	5.3
Child Care Centre	
Child care centre design to meet relevant legislative requirements including the Children's Services Regulations 2004;	5.3
Amenity Impacts on Neighbouring Properties	
Address the visual impact, privacy and overshadowing of the development on adjoining properties.	5.3
Construction and Operational Impacts	
Key matters to be addressed include:	
Any likely geotechnical impacts;	5.3
Air pollution, soil and erosion and waste material; noise and vibration;	5.3
Details of any cut and fill and whether any fill is proposed to be imported or exported to/from the site.	5.3
Construction management plan addressing erosion and sediment control, site fencing, traffic management, car parking arrangements for construction workers.	5.3
Stormwater drainage and flooding	
Key matters to be addressed include flooding, drainage and stormwater management issues, including on- site detention of stormwater, Water Sensitive Urban Design, and drainage infrastructure;	5.3
Services	
Key matters to be addressed include the capacity of utilities including water, sewer, stormwater, gas, power and telecommunications infrastructure which will serve the project.	5.3

	Section
Key Assessment Requirements	
Draft Statement of Commitments	
<ul> <li>Proposed mitigation and management of residual impacts; and</li> <li>A Statement of Commitments detailing measures for environmental management and mitigation measures and monitoring for the project.</li> </ul>	6 6
If the Director-General considers that the Environmental Assessment does not adequately address the Environmental Assessment Requirements, the Director-General may require the proponent to submit a revised Environmental Assessment to address the matters notified to the proponent. The Director-General may modify these requirements by further notice to the proponent.	
During the preparation of the Environmental Assessment, you should undertake an appropriate level of consultation with the relevant Local or State government authorities, service providers, community groups and other stakeholders. In particular, you should consult with:  • Agencies, other authorities and groups:  - Liverpool Council;  - NSW Heritage Office;  - Department of Community Services;  - NSW Roads and Traffic Authority;  - RailCorp; and  - all utility providers.	1.6 and Appendix (
The application fee is based on Capital Investment Value of the project as defined in the Major Projects SEPP and as set out in Clause 8H of the Environmental Planning and Assessment Regulation 2000. To verify the cost of works for this project you are requested to submit a Quantity Surveyor's report for the project.	See Note
Landowner's consent is to be provided for all land affected by the proposal in accordance with the Environmental Planning and Assessment Regulation 2000.	See Note

## Note 1 Cost of works (\$48,181,718) based on the following:

New Multi Deck Car Park	\$ 17,860,559
East Campus On Grade Car Parking	\$ 2,209,884
West Campus Milestone 6	\$ 1,932,000
Road and Pedestrian Bridge	\$ 10,980,000
Child Care Centre	\$ 2,685,301
Northern Road - Hospital to Lachlan Street	\$ 1,568,387
Northern Road - Lachlan Street to Hume Highway	\$ 3,932,994
Engineering Building	\$ 7,012,593
Total	\$ 48,181,718

Note 2 Refer to Major Application Form

