

## APPENDIX **N**

### Outline Site Management Plan



# Wagga Wagga Base Hospital Redevelopment

## **Outline Site Management Plan Acute Hospital Portion B Phases 2 & 3 December 2012**

Revision 1

*PREPARED BY  
HANSEN YUNCKEN PTY LTD  
Level 6, 15 Bourke Rd  
Mascot NSW 1460  
ABN 38 063 384 056*

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# 1 SITE MANAGEMENT PLAN CONTROL

## 1.1 Approval

Reviewed by:

**National Management Systems Manager:**

Name:

Signature:

Date:

HY Approval by:

**Senior Project Manager**

Name:

Signature:

Date:

Submitted to HI Project Director:

Name:

Position:

Signature:

Date:

## 1.2 Distribution

The Site Management Plan is distributed to registered copyholders within Health Infrastructure. Below is the list of copyholders. The list will be controlled and updated by the Senior Project Manager who will ensure that revisions are issued to the registered copyholders.

Health Infrastructure shall ensure this SMP and all subsequent revisions are approved and distributed in accordance with company procedure.

Organisation	Name of Holder	Position of Holder
Health Infrastructure	Bruce Gould	Project Director & Principal's Representative (Management Team Chair)
Health Infrastructure	Lloyd Esau	Director Major Projects
Health Infrastructure	Greg Beevor	Project Director

## 1.3 Revision Status

Revision No	Date Authorised	Brief Description for Issue	Prepared By	Authorised By
01	30 November 2012	Draft for DA submission	Michael Martin – Project Manager	John Hunt – Snr Project Manager

## 2 DEFINITIONS & ABBREVIATIONS

The following definitions and abbreviations have been used in this Design & Construction Management Plan. Further definitions and abbreviations are provided in referenced and supporting procedures and plans.

<b>CORP</b>	Hansen Yuncken Corporate
<b>EPA</b>	NSW Environment Protection Authority
<b>ESD</b>	Ecologically Sustainable Development
<b>HI</b>	Health Infrastructure
<b>HR</b>	Human Resources
<b>HSE</b>	Health, Safety & Environment
<b>HY</b>	Hansen Yuncken Pty Ltd
<b>LCC</b>	Life Cycle Costing
<b>MLHN</b>	Murrumbidgee Local Health Network
<b>OHS</b>	Occupational Health and Safety
<b>PCG</b>	Project Control Group
<b>PMR</b>	Project Management Representative – Design Manager
<b>PROC</b>	Procurement

# Site Management Plan

## Wagga Wagga Base Hospital Redevelopment

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<b>PROJ</b>	Project Management
<b>QC</b>	Quality Control
<b>RFI</b>	Request for Information
<b>S/C</b>	Subcontract(s) or Subcontractor(s) as the context requires
<b>SMP</b>	HY Site Management Plan (this document)
<b>SSO</b>	HY Site Safety Officer
<b>WOL</b>	Whole of Life
<b>WWC</b>	Wagga Wagga City Council

## 3 SITE MANAGEMENT

### 3.1 PURPOSE

The purpose of this Plan is to outline the key intentions and constraints for construction activities on the Wagga Wagga Base Hospital Redevelopment.

The SMP is used to set the ground rules for integrating and managing the Construction process within an active Hospital Facility, and ensuring minimal disruption is made to the day to day hospital operations that could affect the public and staff of the hospital.

### 3.2 PROJECT DESCRIPTION

#### 3.2.1 The Project

The Wagga Wagga Base Hospital is the major acute care provider and referral hospital in the Murrumbidgee Local Health Network. The redevelopment of the Hospital, once complete, will align the Hospital's facility requirements to the projected Clinical Services Plan activity projections to 2021/22.

The project comprises of a new Acute Hospital Portion – B (Phase 2) and the demolition of the existing Ward Block and construction of external works and canopy on the site of the existing Ward Block (Phase 3).

#### 3.2.2 Phase 2 Construction of Acute Hospital Portion B

Acute Hospital Portion B comprises a ground and first floor comprising the podium levels three suspended floors of clinical services in each of two towers, plant areas at level 6 and a helipad above a plantroom. The building is founded on piles and the structure consists of post tensioned concrete with reinforced concrete core walls for lift and stair shafts and reinforced concrete columns. The façade is a modular prefinished panel and glass over a lightweight framed structure. Roof is generally metal roof decking and waterproof membrane to flat concrete slabs.

##### 3.2.2.1 Phase 2 Substructure

The site will be cleared prior to the commencement of Phase 2 with a number of single storey lightweight buildings previously relocated or demolished. The substructure will mainly consist of piles with pile caps and lift shaft base construction and a cut and fill excavation across the gently sloping site. This work is expected to take approx. 3 months to complete. Piling is expected to be a bored type pile with reinforced concrete pile. Approx 4,500 cubic metre of excavation and concrete is required for the piling. This represents approx. 12 trucks per day of concrete and 12 trucks of earth removal per day. All egress and access to the site will be from the south via Yathong Street and Rawson Lane as shown on the traffic management plan. A hardstand temporary access to the site will be provided and roads will be maintained clean with a mechanical sweeper as required. The work is programmed to be completed over the summer months and water will be used to reduce dust from plant movements on site. Plant will have noise suppressors fitted as required by the regulations and no percussion piling is planned thus reducing noise and vibration to plant and truck operation and movements. The site is bounded by buildings to the north, east and west and a compound will be set up bounded by fixed fencing and gates to the south of the site as shown on the plan. Sediment and erosion will not generally be problems during this stage, however if pits require pumping a holding tank will be utilized. Sediment controls will be established to protect drains in Yathong Street from any storm runoff from the site.

##### 3.2.2.2 Phase 2 Structure

The duration for building the structure is approximately 9 months and will require a crew size of approx. 50 to 60 people increasing to 70 to 80 on the approx. 30 days with large concrete pours. Vehicle movements will be approx. 15 to 20 per day on average and increasing to approx. 40 on the days with large concrete pours. An electric powered crane will be set up on the south of the building to handle the main lifting and horizontal

transport. The crane will lift from the site compound to the south of the building and trucks will enter from Yathong Street and exit along Rawson Lane. Traffic control will be maintained at the compound entry gates. Waste bins will be maintained in the site compound and recyclable waste will be separated into different bins for collection. The structure is separate from other buildings thus structure borne noise and vibration will not affect other buildings. A sound meter will be maintained on site to investigate any noise complaints, however it should be noted the nearest private residence is approx. 50 metres from the site. Materials will be stacked in the site compound or on level 2 roof. A man and materials hoist will be erected to the south of the building to provide transport from the site compound up the building as the works progress. A second hoist will be established to the west façade of the building to take people from the site establishment between the Acute building and the Phase 1 Mental Health building.

### **3.2.2.3 Phase 2 Façade and Roof**

The façade and roof will take approx. 12 months to complete and will be installed from scaffold around the structure of the building. The materials will generally be delivered on pallets and craned into position on the floors of the building prior to installation from the scaffold. This work will not cause any excessive noise or vibration. Waste will be crane lifted from the slabs and placed in bins and removed from site. Waste materials will be separated for recycling.

### **3.2.2.4 Phase 2 Internal Finishes and Services**

The internal finishes and services will start approx. 12 months after commencement on site and proceed for approx. 18 months. Expected labour force during this period is expected to vary between 100 and 180 people. The crane is expected to be on site for the first 6 months of this period until the internal lifts are completed and can be used for access for labour and materials. During this period some major equipment will be delivered and installed. Deliveries and waste will be managed in the same manner as during the structure and façade ie. through the site compound to the south of the building.

## **3.2.3 Phase 3**

### **3.2.3.1 Demolition of Existing Ward Block Tower and Associated External Works**

The existing ward block tower will be demolished following the completion of Phase 2 and the decanting from the existing building to the new building. The demolition is expected to take approx. 6 to 9 months depending on the condition of the building following decanting and hazardous materials surveys. Demolition is planned in two stages. Firstly the lower levels will be demolished and then the tower building will be fully scaffolded to the external and demolished one level at a time. A tower crane will be erected beside the tower building for materials handling and removal of plant and equipment. A site fence will be erected around the site with two sets of gates fronting Lewis Drive. Trucks will enter the site from Yabtree Street and be loaded with demolition materials within the site compound. The trucks will then leave through Lewis Drive thus avoiding as much disruption as possible to surrounding traffic. The site will be isolated from the public and traffic control will be implemented at the gates to the site. All loading and materials handling will be within the fenced compound. Materials will be hosed down to avoid dust. Demolition materials will be recycled where possible. Sediment control will be installed along Lewis Drive to the drain outlets. The site area is mostly covered by concrete and mud control should not be necessary. Noise and vibration will be monitored, however the building is isolated from other buildings. Engineers will prepare a report and methodology to ensure floors are not overloaded during the works and temporary propping is used where required. The crane will be an electric powered tower crane to reduce noise

## **3.3 WORKING HOURS**

Generally, the working hours have been established as 7:00am to 5:00pm Monday to Friday and 7:00am to 5:00pm on Saturdays.

Work outside these hours may be required for activities such as large concrete pours, craning of materials etc. These activities will be considered on a case by case basis and in consultation with WWCC.



### **3.4 CONTRACTOR'S SITE AMENITIES & COMPOUND**

#### **3.4.1 Main Project Office for Phases 2 & 3**

The main Project Office will be located on the existing carpark to the North of Yabtree Street. This project office will be established following the completion of the new Northern Car Park and remain for the duration of the project.

#### **3.4.2 Site Offices & Amenities**

##### **3.4.2.1 Phase 2**

Two areas of site accommodation will be established to provide lunch and change facilities and site offices. A compound will be established between the Mental Health building and the Phase 2 construction site to house contractors sheds and lunch and change facilities. A second compound will be established on the roof of the podium level of the Phase 2 structure for lunch and change facilities.

##### **3.4.2.2 Phase 3**

Site amenities will be established adjacent to the existing tower block within the fenced site area. The amenities will consist of lunch, change and toilet sheds and an office.

### **3.5 SITE FENCING AND PUBLIC PROTECTION**

Protection of the public and property is of paramount importance to Hansen Yuncken and is an integral part of the Hansen Yuncken OH&S policies and procedures.

#### **3.5.1 Phase 2**

Temporary fencing will be erected around all construction works on site. During substructure and structure works site fencing will be located around the site offices and amenities along Yabtree Street, Lewis Drive and Yathong Lane. Temporary fencing will also be located around the area adjacent to the Mental Health Building and the area to the south of the Phase 2 for loading and deliveries..

#### **3.5.2 Phase 3**

Fencing will be erected around the perimeter of the existing hospital. The fencing will have shade cloth to assist with dust control.

This will be in place prior to the demolition works and remain until completion of the new external works.

### **3.6 TRAFFIC MANAGEMENT**

#### **3.6.1 Phase 2 Works Construction of New Clinical Services Building**

The main delivery and waste removal traffic is to be directed west along Yathong Street to the main delivery and unloading compound and exit into Rawson Lane. Minor deliveries with light vehicles will be from Yabtree Street and Lewis Drive to the North of the Phase 2 works.

#### **3.6.2 Phase 3 Works Demolition of Existing Hospital**

Trucks will be required to approach the site from Yabtree Street and turn into the site compound and exit along Lewis Drive.

### **3.7 CONSTRUCTION PROGRAMME**

#### **3.7.1 Phase 2 Works Construction of New Acute Hospital**

Some key milestone dates are as follows:

1. Start works on site: January 2014
2. Substructure complete: April 2014
3. Structure complete: April 2015
4. Façade and roof complete: October 2015
5. Works complete: July 2016

#### **3.7.2 Phase 3 Demolition of Existing Hospital and new External Works and Landscaping**

Some key milestone dates are as follows:

1. Commence works: August 2016
2. Complete demolition: March 2017
3. Complete external works: August 2017

### **3.8 DISRUPTION NOTICE PROCESS**

Hansen Yuncken recognises that during the construction period it will need to plan and organise its work activities to minimise disruption to the existing buildings and services. To ensure this position Hansen Yuncken has developed a disruption process that will enable WWBH to be aware of any works that may impact on their services and enable any preparation and consultation to be effected.

Disruption process is as follows:

1. HY provide Notice of Disruption (NOD) to HI & WWBH advising of upcoming disruptive activities and planned approach to minimize affect. NOD to be issued a minimum 5 business days prior to planned commencement of works.
2. HI & WWBH to advise approval of NOD with or without comments/amendments.
3. HY to undertake works in accordance with NOD approval.

### **3.9 WEEKLY SITE MEETINGS**

Weekly site meetings will be conducted at an agreed time and attended by key project stakeholders (HI/WWBH). Weekly meetings will be an opportunity to discuss current progress on site, upcoming works/disruptions and any project related issues encountered. Minutes will be distributed to the team following each meeting.

### **3.10 ENVIRONMENTAL MANAGEMENT**

#### **3.10.1 Local Environment**

Hansen Yuncken through its Corporate Policy and Management Systems is committed to meeting all company, legislative, regulatory and industry criteria in relation to environment and waste management.

Hansen Yuncken is aware of the effects that construction can have on the local environment. Hansen Yuncken is committed to managing issues such as hazardous material, waste disposal, street trees and stormwater management, while embracing a consultative approach with neighbours on issues such as noise and traffic management.

### **3.10.2 Waste Management**

A waste management plan will be developed that will identify the approximate quantities and classify the types of waste and possible licensed disposal sites. Separate bins will be provided for reusable or recyclable waste.

Hansen Yuncken will review waste management strategies with each subcontractor during their pre-commencement/induction meeting.

Hansen Yuncken will promote the separation of site waste materials to facilitate recycling. Hazardous waste will be removed by licensed transport to appropriately licensed disposal facilities, as required.

A hazardous materials survey will be carried out prior to commencing construction or demolition works and only appropriately licensed organisations will be engaged to dispose of the waste.

### **3.10.3 Stormwater Management**

Before starting on site, Hansen Yuncken will complete a Dilapidation Report on the existing stormwater systems.

HY will audit the site requirements for stormwater management and prepare a strategy to manage contaminated run-off. The EPA Code of Practice for Stormwater Pollution Prevention will be used as a guideline for control measures.

Run-off will be monitored during the construction phase to ensure that stormwater contamination is minimised.

Self-contained wash-down units will be provided for the Painting trade.

### **3.10.4 Sediment, Erosion and Dust Controls**

Hansen Yuncken will ensure that measures are taken to control dust during the construction process.

Loading areas are located on established hardstands and watering of the site will also be implemented to control dust. Fencing will also be installed and maintained to the full site perimeter. Street sweeping machines will be on site during excavation activities.

A detailed plan will be developed in accordance with 'Managing Urban Stormwater – Soils & Construction Volume 1 - 2004 (produced by Landcom) Chapter 9 – Urban Construction Sites.

Stockpiling of excavation materials on site will be avoided where possible. Where it is necessary to stockpile, the pile will be fenced and barriers used to minimize erosion and avoid sediment or fine particles entering the stormwater system.

### **3.10.5 Noise Control**

The Interim Construction Noise Guideline will be the reference document for establishing and managing the noise control measures on the project. Quantitative method will be used for assessing airborne noise and impact and establishing the Noise Management Plan requirements. The sensitive land uses are initially identified as the nearest residential premises and hospital wards and operating theatres in adjacent buildings.

Standard hours of work are nominated as 7:00am to 6:00pm Monday to Friday and 7:00am to 5:00pm on Saturdays with no work on Sundays or public holidays unless prearranged and necessary. ie erecting crane out of standard hours due to safety concerns and limiting the number of workers on site.

All equipment that is used on site will be equipped with the required noise suppression apparatus to ensure EPA guidelines are met. The preferred method of controlling noise will be reduction of noise at the source, however where this is not feasible or reasonable control measures will be established ie noise barriers.

The use of noisy equipment will be restricted and operated in accordance with Development Approval and EPA requirements.

Specific planning and noise suppression arrangements will be required to control activity within the existing environment.

### **3.10.6 Complaint Procedures**

A procedure for dealing with complaints regarding noise, dust and other environmental nuisance will be established and a register will be maintained at the project office.

### **3.11 OCCUPATIONAL HEALTH AND SAFETY**

#### **3.11.1 General Statement of Policy**

The management of Hansen Yuncken Pty Ltd is committed to take all practicable action to ensure that all employees are provided with a safe and healthy place in which to work and to maintain standards throughout its operations that will reflect this policy.

Hansen Yuncken is committed to maintaining contact with workers who are injured in the course of their duties. Where an injured worker is unable to perform his/her normal duties, then the company will provide suitable alternative duties where possible.

Hansen Yuncken undertakes to maintain open lines of communication with WorkCover's Case Manager, appointed Rehabilitation Advisers and Providers, and Medical Experts.

#### **3.11.2 Project OH&S Management**

Hansen Yuncken site management team will ensure that the project is managed in accordance with the Hansen Yuncken OHS Policy.

- Hansen Yuncken will prepare a project specific Project Management Plan. This plan will provide a framework for managing OHS on the site.
- Hansen Yuncken will appoint a site specific Site OHS Supervisor.
- All construction personnel will be required to hold the Construction Industry induction identification.
- All individuals entering the site will be required to undertake a brief site induction which is conducted by the Hansen Yuncken Site OHS Supervisor.
- Hansen Yuncken conducts a formal review of each subcontractor's work to assess any risks to site workers. Work Method Statements are then developed for those parts of the works identified as being hazardous.

### **3.12 APPENDICES**

#### **3.12.1 Appendix A Phase 2 Site plan ground level**

#### **3.12.2 Appendix B Phase 2 Site Plan podium level**

#### **3.12.3 Appendix C Phase 2 Site Plan upper floors**

#### **3.12.4 Appendix D Phase 3 Site Plan ground level**