

WESTMEAD HOSPITAL REDEVELOPMENT



PROJECT DETAILS

PROJECT LOCATION:
Cnr Darcy Road and Bridge
Street, Westmead 2145

COMMENCEMENT DATE:
October 2004

COMPLETION DATE:
January 2008

TYPE OF CONTRACT:
Design and Construct

CONTRACT VALUE:
\$24 million

GROSS FLOOR AREA:
-

PROJECT MANAGER:
Mark Rout

**CONSTRUCTION
MANAGER:**
Mark Bedwell

OVERVIEW TRADE PACKAGE

Star Electrical were engaged by Thiess Contractors in October 2004 for the redevelopment of Westmead Hospital. This consisted of construction of new building and refurbishment of existing surrounding hospital buildings.

Star Electrical Co successfully completed all the Electrical and Communication Services for this project this included the following:

- Main Switchboard replacement
- New distribution boards incorporating local ATS units to provide sequential changeovers prioritising critical services
- Electrical low voltage systems
- Cable support systems
- Interfacing into all existing systems
- Electro medical installation
- Body and cardiac protected areas
- EWIS expansion
- Replacement and additional emergency standby generators
- PLC and SCADA system for control and monitoring
- Multiple Uninterruptible power supplies
- Lighting installation and control
- General and special purpose power installation
- Medical services panels and pendants
- Communications systems
- Security systems
- Nurse call systems
- Audio visual and MATV systems
- Lightning protection systems
- Master clock systems
- External and helipad lighting

COMMERCIAL FACTORS

Active liaising with the Western Sydney Area Health, developed a program and implementation plan that would assist in delivering a challenging project to a strict program as halting of services was not an option as it had to remain operational 24/7.

PROJECT CHALLENGES

Prior to commencement onsite Star Electrical, Thiess Construction and the Westmead Hospital Administrative Team worked through foreseeable issues highlighted through their concerns in keeping all systems operational during the re-development and construction period. This included:

- Detailed submission and reporting on the Main Switchboards replacement and changeover
- Replacement on existing undersized Generator Sets and Generator Main Switchboard and installation of the new generators and switchboard,
- Upgrading of the existing PFC units in 7 Main Switchrooms located around the site, extension and

- Interfacing of the existing Nurse Call, Security, Communications, Public Address, UPS backup and Master clock systems.

During the construction the hospital had to remain fully operational. There were numerous power outages and changeovers in all facets of the installation i.e. Electrical, Communications, Security, Nurse Call and Fire Services.

PROJECT SPECIFICS

Westmead Hospital is one of New South Wales Health Services busiest hospital's located in Sydney western suburbs. Accommodating Operating Theatres, Emergency, Neo Natal, Radiology and a Children's Hospital.

This redevelopment project consisted of the construction of new building and refurbishment of existing surrounding hospital buildings.

The capital works projects carried out at Westmead Hospital comprised the following five milestones:

- **Milestone 1: Infill Building**
New construction of a three-level building at the northern end of the Westmead Hospital campus that ties into the existing building blocks.

- **Milestone 2: The Westmead Cancer Care Centre**
This milestone comprises primarily refurbishment of existing space and minor new construction to create a multi-disciplinary ambulatory cancer care centre.

- **Milestone 3: Women's Health and Newborn Care Comprehensive Clinical Centre**
This milestone comprises a combination of new construction and refurbishment of existing space to create a multi-disciplinary Comprehensive Clinical Centre (CCC), combining each element of the Women's Health and Newborn Care clinical stream in a single facility.

- **Milestone 4: Renal, Urology and Transplant Comprehensive Clinical Centre**
This milestone comprises refurbishment of existing space to create a multi-disciplinary CCC, combining each element of the Renal, Urology and Transplant clinical stream in a single facility.

- **Milestone 5 – Engineering Works**
This milestone comprises upgrade and refurbishment of various engineering services at Westmead Hospital.

