

HORNSBY MENTAL HEALTH FACILITIES

CONSTRUCTION : Hansen Yuncken
CLIENT : Health Infrastructure
PROJECT VALUE : \$26.7 Million
COMPLETION : May 2013
ARCHITECT : Hames Sharley
SURVEYOR : Craig & Rhodes
STRUCTURAL ENGINEER : Enstruct Group



Health Infrastructure's new Hornsby Mental Health Facilities bring together mental health services for children, adolescents and adults to the one location.

Hansen Yuncken, one of Australia's oldest and largest construction companies, oversaw the construction of the \$26.7 million, two storey, four wing Mental Health Facilities at Hornsby Hospital on Sydney's North Shore from March 2013 to May this year.

Emmet Browne, Project Manager for Hansen Yuncken, said the project involved interaction with stakeholders from several hospitals and management of more than 20 subcontractors. "It was a great opportunity for Hansen Yuncken to strengthen its relationship with Health Infrastructure" he said.

As with most developments, there were some unexpected challenges along the way. "Ground conditions were less than ideal and consisted

of a clay type soil. We needed to excavate to rock to establish a bearing for the foundations".

In addition, design features were included to address the needs of patients in severe distress. Anti-ligature fittings and fixtures were used and walls, doors and windows were designed to withstand high impact, almost to a prison-grade level.

The façade design incorporated brickwork, vitra panels, external cladding, metal cladding and windows, all of which needed to be waterproofed and fit together. The result is an eye-catching and colourful mix of red, orange and yellow pre-finished vitra panels together with white and grey metal sheeting.

A further challenge was the innovative patterned brickwork. Cream, brown and red bricks were laid in a pattern measuring three by two metres. The labour-intensive process resulted in a warm, distinctive pattern that adds to the façade's appeal.

Hansen Yuncken, founded in 1918, employs more than 650 people and has completed more than 4,500 projects across Australia. In New South Wales, Hansen Yuncken has constructed facilities such as the Medica Centre in Hurstville, Orange Hospital, Prince of Wales and Concord Hospital refurbishments and the Central Coast Regional Cancer Centre.

Hansen Yuncken has established a reputation in the Australian construction industry as a leader in Sustainability. Their involvement

in the design, development, construction and commissioning of many of Australia's leading Green Buildings has been extensive and includes Council House 2, the 60L Green Building and Automotive Centre of Excellence in Victoria, the South Australian Water Building and Metcash Distribution Centre in NSW.

In 2010 Hansen Yuncken was named Australia's Private Business of the Year in BRW Magazine.

For more information contact Hansen Yuncken, telephone (02) 9770 7600, or visit the Hansen Yuncken website at www.hansenyuncken.com.au.

HIGHLIGHTS BRIGHTEN NEW HOSPITAL

Hornsby's newest medical building is alive with colour thanks to Highlight Interior's work.

Pre-painted vitra panels in yellow, orange and reddish-pink adorn highlighted exterior walls as per innovative architect plans.

Joe Xu & Dean Zhu founded the company six years ago and they now employ around 40 people.

Highlight Interior is a licenced plasterboard contractor and also specialises in external CFC cladding and vitra panels. And they have become a James Hardie's recommended installer recently.

On the Hornsby Medical Facilities build, Highlight Interiors installed all external cladding including the visual highlight, the vitra panels, which are pre-painted in Dulux colours, including a pinkish-red, orange, yellow and dark grey.

"It definitely stands out," Mr Xu said. "It looks great, it's shiny as well. It's bright and outstanding from the other parts of the façade."

One of the challenges this contemporary design presented were the angled exterior walls. Highlight Interior has to build cladding boards on angles and to achieve that, the frame must be on certain angles to accommodate the boards. Highlight Interior ensured complete accuracy when building the angled frames. Each panel was screwed to the support frames along the edges. There are express joints between boards, which meant the frame's precise measurements were critical. Accuracy was paramount to slotting in the cladding onsite.

All up, the job took six months. The vitra panels measured just under 300 sq m in total, while the cladding work encompassed an area of about 1800 sq m.

Highlight Interiors recently completed work on Narellan Police Station with ADCO Constructions, constructing both exterior cladding and the interior fit out. It has worked on a number of residential apartment blocks in Burwood, Carlingford, Hornsby and Wahroonga, suburbs in Sydney's inner west, north west and north. It also worked with other builders such as: Total Constructions in renovating British America Tobacco Australia Headquarter in Sydney and Cabrini Aged Care facility in Westmead, etc.

For more information contact Highlight Interiors, phone 0433 751 855, email: highlightinterior@yahoo.com.au



mbm CONTROLLING COST FROM PROJECT INCEPTION



Before any Builders even thought of Tendering, **mbm** was cost managing the Hornsby Hospital Mental Health Facility project.

At feasibility stage, more than 18 months before the contractor was appointed, **mbm** were developing budgets based on the preliminary design and the client prepared functional brief. The original project budget was developed from a scheduled list of functional areas. **mbm's** role encompassed the cost control and management of the overall project budget, which included professional, client and authority fees as well as construction, decanting, relocation and commissioning costs.

As the design developed through the pre construction phase, **mbm** monitored the cost impact of the project design at various stages with increasingly detailed estimates and continuous cost advice. This ensured the project remained within budget as the design progressed.

"Our involvement starts before the builder comes on board," explained Paul Janes, a Director of **mbm**, a Cost Consultancy firm with offices in Sydney, Melbourne, Brisbane, Canberra and Perth. "We are managing the project cost, on behalf of the client, from inception right through to construction completion and agreement of the final account".

From the feasibility, estimating and cost planning phase, to tender estimates, analysis and evaluation, **mbm** were continually providing cost management advice as well as managing expectations to ensure the budget was not

exceeded. **mbm** developed a Pre Tender Estimate, forecasting the cost of the construction portion of the project. Tenders were sought from 4 suitable building contractors.

"**mbm's** pre tender estimate was within 3% of Hansen Yuncken's successful tender price" said James Larkin, **mbm's** Senior Quantity Surveyor who was responsible for day to day cost management of the project, "and fell in the mid-range of the returned tenders, in what was a very competitively priced project."

Since construction began **mbm** has been monitoring construction progress on a monthly basis, assessing and valuing progress on site. A monthly report is provided to the client recommending how much the contractor is to be paid. Throughout the construction phase of the project **mbm** in conjunction with the Project Managers monitor and agree variations to the project resulting from additional scope, design changes or site coordination issues. Hansen Yuncken are on track to deliver the project within program. The successful outcome of this project has not been without it's challenges which included demolition of the former building, a major decanting contract for relocating staff to other parts of the hospital, a limited site topography to fit the required scope, and all within a fully operational existing hospital precinct.

For more information contact **mbm**
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Construction Progress Valuation Report No. 12
Hornsby Mental Health Unit

Reviewed by:

Job No.:

MBM



BRICKLAYING THAT STANDS OUT

Macarthur Block and Bricklaying Services laid some standout brickwork at Hornsby Hospital's new mental health facilities. "Apart from the usual brick and block laying work, we had to position patterned brickwork on the exterior," said Rennie Waters, Director of Macarthur Block and Bricklaying Services, which was founded 32 years ago. "It had three different types of bricks in a nominated pattern."

The brick colours – cream, red and brown – formed a standout pattern on the hospital's outside wall. But like most state-of-the-art touches, it took some painstaking work. Each brick had a pre-designated place to be laid in a two-metre by three-metre pattern, which was continually repeated. Concentration was needed to continually maintain the pattern but the arresting results were worth it. "It's unusual," Mr Waters said. "I have only come across it a couple of times before."

Macarthur Block and Bricklaying Services has between 10 and 40 employees. They also built the new Mental Health facilities in Orange, electrical substations throughout Sydney and in May completed residential and commercial facilities at the Villawood Immigration Detention Centre for builder Hansen & Yuncken.

For more information contact Macarthur Block and Bricklaying Services, phone 02 4647 5227 or mobile 0418 297 515, email: info@macbrick.com.au

Hornsby Mental Health Facilities, NSW

