

A PRINCELY APPOINTMENT

DEVELOPER : Health Infrastructure
MAIN CONSTRUCTION COMPANY : A.W. Edwards
ARCHITECTS : HDR Rice Daubney
STRUCTURAL ENGINEER : Jacobs
CONSTRUCTION VALUE : \$70 million

The Prince Of Wales Hospital is a \$70M facility that houses the Nelune Comprehensive Cancer Centre (NCCC) and the Australian Advanced Treatment Centre (AATC), known as 'The Bright Alliance' project. The NCCC will provide ambulatory, outpatient and radiotherapy services and the AATC will be the first purpose-built early phase clinical trial facility in New South Wales which will provide an environment specifically for clinical trial activities.

A.W. Edwards is a leading, privately owned Australian construction and fitout business, established more than 95 years ago.

Their iconic projects span many business sectors and include the MA Noble, Don Bradman and Dally Messenger Stands at the Sydney Cricket Ground, The Concourse at Chatswood, Epping to Chatswood Rail Line Stations, the Nan Tien Temple, Wollongong and the Queen Victoria Building.

A multiple-award winner, A.W. Edwards most recently received the Master Builders Association's 2015 MBA Excellence in Building Awards for the Children's Medical Research Institute at Westmead, and for the Victoria Avenue Community Precinct Project in Concord West, both located in New South Wales.

A.W. Edwards was engaged to provide design and construction services for 'The Bright Alliance' project which involved the construction of a 10-storey concrete structure incorporating detailed fitout to specialist treatment areas, consultation rooms, clinical facilities and sterile areas.

The works also included the demolition of the existing Radiation Oncology building

and construction of service linkages with the Prince of Wales Hospital, Royal Hospital for Women and the Sydney Children's Hospital.

Health services that are currently spread across eight sites on the Randwick Hospital Campus will be consolidated into one centralised building. The new building will house a new health and research centre bringing together cancer and blood disorder researchers, clinicians and patients in a unique and innovative environment.

Currently 230 people work for A.W. Edwards of which 25 were employed on The Bright Alliance project. The contract was awarded in October 2014 with demolition being completed in March 2015.

Of the many challenges that faced Senior Project Manager, Kyle Sweeney, the most exacting was that the project consisted of four separate stages. As each stage is completed detailed documentation, certification and procedures are required to be carried out, effectively quadrupling the effort that would be required for a single stage handover.

Another was that the bulk excavation extended more than two floors below the

footpath level. All construction work was undertaken in a fully operational live hospital environment. This required a tremendous amount of planning for the staging and design of the building so that there was minimal impact to hospital operations.

"Close proximity to an adjacent building created additional complications for the location of our jump forms and materials handling," Kyle said.

The new buildings façade is complex, comprising of several different elements such as glazed curtain wall panels, poly composite cladding and a terracotta cladding rain screen, together with many changes in projection and direction. "Whilst creating many issues during construction the façade will present a wonderful exterior to the building," Kyle added.

This project is one more example of A.W. Edwards' ability to enhance their customer's investments through their high quality, predictability and strong building performance.

For more information contact A.W. Edwards, 131 Sailors Bay Road, Northbridge NSW 2063, phone 02 8036 7200, email nsw@awedwards.com.au, website www.awedwards.com.au



Below Matt Dalley Demolition removed and recycled over 5,000 tonnes of concrete from the job site.

Below Arctic Combined dismantled the previous air conditioning system and enhanced the new system.

Below Shev Constructions installed and provided exterior cladding solutions for the project.



Matt Dalley Demolition specialises in industrial and commercial demolition services and The Prince of Wales Hospital – The Bright Alliance project highlights its expertise of demolishing in sensitive environments.

“We demolished and recycled over 5,000 tonnes of concrete, most of it over a six week period at the old radiological department. The heavily reinforced concrete walls were up to 1.5m thick with 300mm thick steel shielding plates embedded and they had to be removed with no disruption to the hospital,” said General Manager, Glen Felstead. They used a combination of high pressure concrete hydraulic splitting and concrete pulverisers to do the job, this ensured that the work could be carried out in normal working hours and the construction program could be maintained.

Matt Dalley Demolition is a SafeWork NSW Licensed Unrestricted Demolition Contractor and AS1 Friable Asbestos Remover. They employ a team of experienced demolishers and its management systems are independently certified to ISO9001, AS4801 and ISO14001.

For more information contact Matt Dalley Demolition Pty Ltd, website www.dalleydemo.com.au

Arctic Combined Services specialises in installing and maintaining refrigeration and air conditioning systems. The company was founded in 1992 and the current owners bought it four years later. “Since then the company continues to grow and make a valuable contribution to the industry,” says Co-Owner, Pat Schuberg.

Three of the company’s staff worked on The Prince of Wales Hospital – The Bright Alliance project and accounts for most of Arctic Combined Services work.

For the hospital’s latest expansion – to build an \$80 million facility to house two centres – Arctic Combined Services dismantled the old air conditioning and modified the new system.

Arctic’s Jackson Schuberg said they “disconnected the old system, shut the air vents and ducting and once the new system had been installed in the new building they checked the chill water noise and made adjustments ensuring it all worked smoothly.”

For more information contact Arctic Combined Services Pty Ltd, PO Box 1256, Sutherland NSW 1499, phone 02 9311 2202, fax 02 9576 6690, email arcticcombined@gmail.com

When it comes to providing superior results and expertise in building and façade solutions, Shev Constructions have what it takes.

The diverse team have more than 15 years experience providing quality solutions for major industrial and commercial projects.

With their head office, and manufacturing division, based in South West Sydney, the highly qualified and talented staff have the expertise to undertake extensive works including project management, factory production and site install.

Here is a snapshot of what Shev Constructions do best:

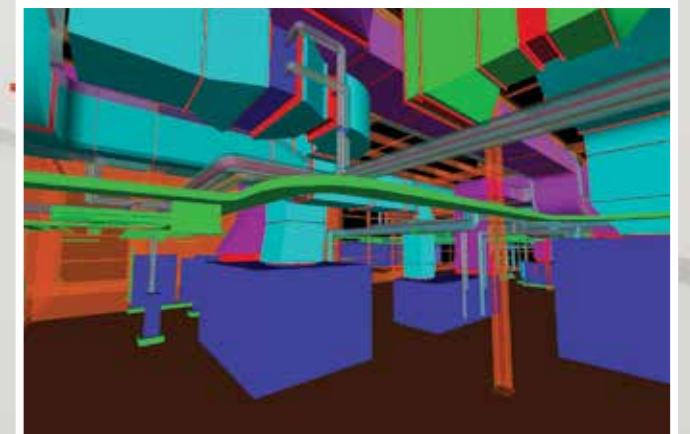
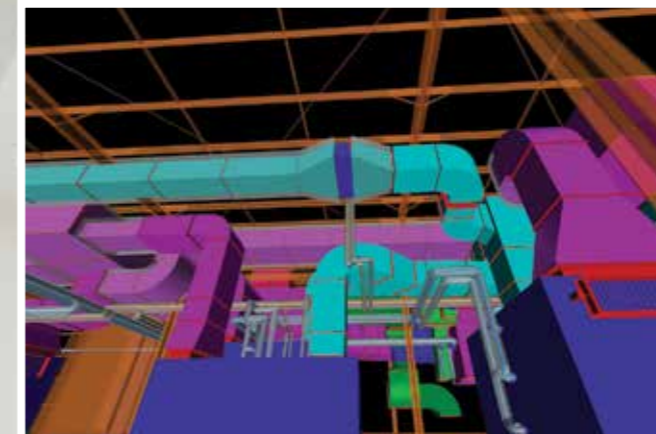
- Implement creative and technical discussions with architects, designers and engineers
- Interpretation of drawings or ‘from design idea to practical implementation’
- Provide direction and advice on the most suitable implementation solutions for each client
- Manufacturing of cladding such as cutting, grooving, curving and assembly
- Seamless installation of cladding on site

Shev Constructions is committed to remaining at the forefront of their industry when it comes to new design, new materials and new installation methods.

The scope of works covered by Shev Constructions range from small shop front shop solutions through to major industrial cladding. They focus on understanding their customers needs for innovative, cost efficient and durable solutions which are delivered on time and to budget.

Some of the notable projects undertaken by Shev Constructions include: Air Apartments, St. Leonards; Narellan Town Centre; Prince of Wales Hospital NCCC and AATC; Aqua Bondi Junction; 8 Parramatta Road, Strathfield; University of Western Sydney, Rydalmere; and Watersedge Apartments, Rhodes;

For more information contact Shev Constructions, 20 Mount Erin Road, Campbelltown NSW 2560, phone 02 4626 2000, email reception@shev.com.au, website www.shev.com.au



BIMSERVE is a BIM coordination, management and consultancy company that offer a range of services in 3-dimensional (3D) and BIM (Building Information Modelling) coordination, detailing and management to the mechanical, electrical, plumbing and fire-protection industries.

The coordination approach and workflow used saves time, money and importantly pinpoints any services clashes well before the ground is broken. Much like virtual reality, the building can be projected onto a large screen, providing a 3D and 360-degree-explorable walkthrough of a development. "It's like looking at the project 18 months ahead. We can see if there are any issues with a design straight away and provide a solution to contractors – it saves time and money and reduces surprises," said BIMSERVE Managing Director, Pan Davarias.

BIMSERVE's staff have more than 100 years experience collectively in services coordination documentation, while four of the senior staff are design drafters well-versed in creating engineering and fabrication documentation. "We work predominantly in the commercial sector on hospitals, laboratories and office spaces and are currently working on a couple of large residential projects," he said.

Pan and four staff worked on the Prince of Wales Hospital – The Bright Alliance project in the eight months to mid-April this year. It was a two-part process involving reviewing consultant's 3D documentation, then checking the coordinating for services reticulation, buildability and installation. BIMSERVE then submitted its report to main contractor, A.W. Edwards.

"We also managed the coordination of the services of subcontractors' 3D documentation. We use the BIM to review models, run clash detection for all building elements and provide resolution, so where we found services clashing, we marked up the area for each trade that needed to move to resolve the issue quickly and efficiently," said Pan.

"BIM isn't one piece of software from a particular company. It's a concept which brings together design, manufacturing and installation in a collaborative environment," explains Pan. For the Prince of Wales Hospital project the only challenge was guiding subcontractors to ensure the project was BIM compliant with the requirements of the client.

For more information contact BIMSERVE Pty Ltd, Suite 601, 32 York Street, Sydney NSW 2000, phone 02 9262 2965, fax 02 9299 9666, email info@bimserve.com.au, website www.bimserve.com.au