DEVELOPER : St John of God Hospital & Generation Healthcare REIT
DESIGN AND CONSTRUCTION COMPANY : Hansen Yuncken
ARCHITECT : Silver Thomas Hanley
STRUCTURAL ENGINEER : Wallbridge Gilbert Aztec
SERVICES ENGINEER : Wood & Grieve Engineers
CONSTRUCTION VALUE : $120 million

A SUCCESSFUL OPERATION

The $120M St John of God Berwick Hospital is located in one of Australia's fastest growing communities and provides 164 new beds, six operating theatres, two endoscopy theatres, a cardiac/vascular catheter laboratory, six birthing suites and approximately 350 basement carparks. The project also includes the first Intensive Care Unit for the region and a dedicated Cardiac Unit.

The St John of God Hospital was delivered in partnership with Generation Healthcare REIT and is operated by St John of God Health Care. The purpose built facility located in Berwick, provides the community with a much needed facility, bringing a number of services to the area including an intensive care unit.

"We have a great relationship with St. John of God Health Care, having worked on Stage 1 of the project, and now Stage 2. The new hospital is located in a health and medical precinct," Hansen Yuncken Project Manager, Chris Cavenett said.

"We are pleased to not only be the main construction company for the new hospital but also to be part of the team providing a new facility for the Berwick community. That has been very rewarding for the Hansen Yuncken team."

The project required the construction of a 5-storey building to house two levels of basement, associated plant rooms, a suite of ground floor consulting rooms, in addition to theaters and the intensive care wards. "It is a diverse building and our role was quite clear from the outset in that we worked directly from drawings. The client was very well versed in what was needed," Chris said.

Hansen Yuncken was onsite from January 2016 and at its peak, the company had around 300 construction personnel onsite. The team had a tight build schedule and was required to work within a number of parameters unique to the project.

"As it was a hospital development there were seismic requirements which meant there was a joint in the centre of the building. That made building the intricate podium on the ground floor a challenge as the joint ran through the middle," explained Chris. "We ended up constructing the East and West buildings – originally envisaged for the hospital – as one building." The seamless management of the intricate build was aided by the use of modelling, which helped pre-plan where services and trades needed to work within the different spaces.

"Modelling involves 3D computer drawings and assists in a more precise understanding of spatial requirements before actual construction. For example, the mechanical and the electrical contractors modelled how their services would be co-located within corridor spaces. It was the key to construction moving forward," Chris said.

Along with the use of modelling software, Hansen Yuncken used an innovative approach of prefabrication to help streamline installation processes for the relatively small space available onsite. Chris explained that of the 150 ensuites needed for the hospital, 87 were preassembled pods. With these units built offsite, their quality could be controlled in a factory environment, and then brought onto site complete.

Hansen Yuncken has trusted expertise in the construction of large scale projects across a number of sectors. Their history of constructing some of Australia's most notable health projects is well documented, and includes recent completion of Australia's largest hospital, the $2.3 billion New Royal Adelaide Hospital now in full operation.

The company is committed to bringing sustainability to each of their projects, with a strong sense of responsibility to the communities these developments are a part of.

Incorporation of new technologies such as modelling and the selective use of prefabricated elements, not only allows developments to be completed within project timelines, but also ensures a strict control of wastage within the project schedule, in terms of both time and materials.

For more information contact Hansen Yuncken, Level 3, 479 St Kilda Road, Melbourne VIC 3004, phone 03 9831 6500, website www.hansenyuncken.com.au

Below Mills Glass provided the curtain wall, louvres, composite wall and external façade on the project.

Teamwork was the key to the success of the biggest project to date for Victorian based commercial aluminium and glazing company, Mills Glass during the redevelopment of the St John of God Berwick Hospital in Melbourne.

Mills Glass supplied glazing to the external façade curtain wall, composite cladding and louvres. Twenty staff were employed onsite during construction peaks. "It's our biggest project so far and it has had challenges for us as a company. We had to lease another factory to store the curtain wall but I've been really happy with my staff's performance on this project," said Mills Glass Director, Ben Mills.

"Our team did a really good job and went above and beyond what was expected, at times working 12 hour shifts in the factory."

The St John of God Berwick Hospital $120 million redevelopment was completed on the hospital's Kangan Drive site at Berwick in Melbourne.

To assist with the St John of God Berwick Hospital redevelopment project, Mills Glass invested in Computer Numerical Control (CNC) machining. CNC machining creates efficiencies during fabrication. Through the use of computers, machine tools are controlled, enabling automatic routing and greater precision.

The Emmegi Comet T6 HP handled aluminium, steel and industrial profiles with ease during the hospital redevelopment project and also offered the possibility of working with different profiles and materials in the same fabrication cycle.

Mills Glass also understands the need for flexibility in glazing solutions and the need to collaborate closely with designers, architects and builders to find the right mix of glass products and innovation for projects.

The St John of God Berwick Hospital redevelopment provided valuable learnings for the company that they can build upon and take forward. "As a business, we learned a lot on this bigger project and we've incorporated those learnings into the work we do on these types of landmark developments and redevelopments," said Ben.

"We've also won the contract for another hospital redevelopment in Melbourne's CBD at The Royal Victorian Eye and Ear Hospital. Our business usually works on one landmark project each year, with medium and smaller projects filling in the remainder of our yearly schedule. The Royal Victorian Eye and Ear Hospital will be our landmark project for 2017-2018," said Ben.

Mills Glass complies with all relevant Australian Industry Standards and its licenced tradesmen are fully insured and trained to work safely and efficiently to complete projects to high standards.

The company is based in Campbellfield, Melbourne and works across the City and the Melbourne region, though is centrally located to service Victoria. Since its inception in 2010, it has grown steadily from a staff of one to a current workforce of 40.

"When we started, it was just me but we've grown in the seven years of operation. I think that's because our business prides itself on quality workmanship. We don't take shortcuts and we focus on using high quality, locally made products," said Ben. Employee safety has also been important, with the business placing a priority on a safe working environment for staff.

For more information contact Mills Glass, 2/27 Metrolink Circuit, Campbellfield 3061, phone 03 9303 9193, email info@millsglass.com.au, website www.millsglass.com.au

St John of God Berwick Hospital, Victoria

Below dormakaba provided access solutions across all of the rooms and buildings of St John of God.

Trading as Kaba in 1862 and Dorma in 1908, a company merger in 2015 has established dormakaba as specialists in the field of security and access to buildings and rooms.

With over 500 employees in the Pacific and 15,000 globally, dormakaba were engaged to provide smart and secure access solutions for St John of God, a new $120 million hospital development on Kangan Drive in Berwick.

For dormakaba, providing access solutions involves a range of products, from automatic doors, mechanical key systems, door hardware, electronic access and data, physical access systems, interior glass fittings, to safe locks and services. More specifically for St John of God Hospital this meant the provision of locks, door handles, door closers, hinges, automatic sliding door operators and automatic swing door operators.

Of particular interest is the supply by dormakaba of automatic doors to operating theatres, endoscopy theatres, a cardiac/vascular catheter laboratory and an intensive care unit of the new hospital. The fitting of these automatic units has made for a smooth transition for patients and staff approaching sensitive areas.

Already highly active in the construction industry with current projects across health, defence, education, retail, hospitality and sport as well as multi residential, dormakaba's work for St John of God was well within their range of expertise. With their expert knowledge of the project's requirements, dormakaba's documentation of all door types went smoothly and displayed no challenges or performance issues.

Recognised globally as one of the top three companies in their field, dormakaba promise transparent and sustainable services to both individuals and commercial organisations. At dormakaba, instilling trust in their customer relations is pivotal to their extensive and continuous success.

For more information contact dormakaba, 46-52 Abbott Road, Hallam VIC 3803, phone 1800 675 411, email info@dormakaba.com.au, website www.dormakaba.com.au