

CREATING NEW BENCHMARKS FOR MENTAL HEALTH FACILITIES

The \$110 Million Glenside Campus redevelopment includes construction of seven major buildings on over 70,000m² of campus.

MAIN CONSTRUCTION COMPANY : Hansen Yuncken
CLIENT : Department Of Health SA
PROJECT END VALUE : \$110 Million
COMPLETION : July 2013
ARCHITECTS : Swanbury Penglase Architects & Medical Architecture
STRUCTURAL / CIVIL ENGINEER : Kellogg, Brown & Root
COST CONSULTANT : Rider Levett Bucknall



SA Health appointed Hansen Yuncken as the Managing Contractor for the Glenside Health Facilities project in early 2010. The team has since been constructing the new 129-bed, \$110m development on the southern portion of the existing facility. This new development has been preceded by the demolition of several existing hospital buildings to make way for the new mental health and substance abuse hospital.

The project has seen the construction of eight major buildings spanning the new campus. Included is a Facilities Management Hub, 22 Supported accommodation residential units, Specialist Rehabilitation Service Shared Activity Centre, Helen Mayo House for mothers and babies, Drug and Alcohol Inpatient Services, Acute Inpatient Services, and an Administration building.

Hansen Yuncken agreed to handover the Rehabilitation Services Inpatient Unit, Helen Mayo House Perinatal Unit and the Shared Activities Centre in November 2012 to allow early occupation by SA Health. The late decision for this staged handover and occupation required provision for temporary services so that operations could continue until the final utilities became available when the balance of the buildings were handed over in July 2013. This staged handover allowed the whole project team to trial the commissioning and handover plan and for SA Health to trial the operational aspects of the new facility. This provided significant 'lessons learnt' for the project team as they prepared for the major handover of the facility.

The key issue facing this project has been the size of the buildings and the overall works site, along with the logistics of managing such a large scale project which has multiple buildings being constructed at the same time. The development has seen extensive landscaping which forms a major element of the project to assist in the wellbeing of the residents. It has also been designed to bring the general community into the campus and to reduce the stigma associated with mental illness.

The construction is generally timber frame brick veneer construction with a structural steel spine supporting the majority of the services.

For over 95 years, Hansen Yuncken has been delivering major commercial and institutional buildings, some 4,500 projects in all. They operate nationally with offices in Victoria, New South Wales, South Australia, Tasmania and Queensland. The company directly employs around 680 staff, and has an annual turnover which consistently exceeds \$1.0 billion.

For more information contact Hansen Yuncken, Level 1, 191 Fullarton Road Dulwich SA 5065, phone 08 8229 7300, email adelaide@hansenyuncken.com.au, website www.hansenyuncken.com.au



Hills Antenna & TV Systems supplied Exterity IPTV product to be installed in the new Glenside Hospital by BJM Engineering Services Pty Ltd.

Network convergence will help the Glenside hospital use their IT infrastructure to enable their IP networks to carry all TV to all non patient areas of the hospital. Traditional hospital TV systems have been based around a separate coaxial cable system. This type of system cannot compete with the quality and simplicity of the Exterity Building IPTV solution. Unlike traditional systems, Exterity can supply an unlimited number of high-definition channels with picture quality equal or better than the home experience to as many people as you please. There's no need for the expense of a separate, hard-to-maintain analogue cabling system: you can run one network to deliver all the services people now expect: TV and video, phone, and Internet access. Head End: In Glenside's building IPTV system, specialised network servers TV gateways that provide TV channels as MPEG "streams". Any device compliant with the appropriate MPEG standards can display the channels. The content sources

include: DVB-T streams from the terrestrial TV aerials and receivers.

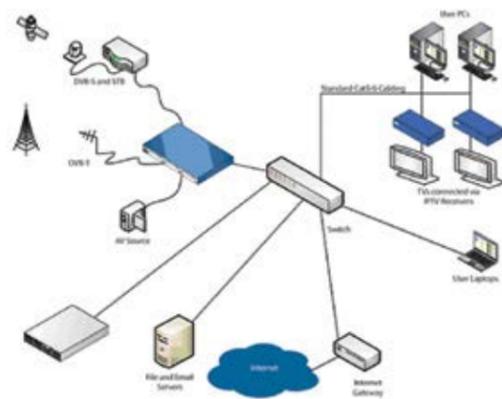
End Points: These can be displayed on many devices including personal computers, via a browser or PC client. TV's, AV displays and projectors via IPTV receivers and interactive whiteboards.

The advantages to the Glenside Hospital are that it is a Flexible. It can be expanded

easily by easily adding TV or video source by connecting another head end device to the network, just like any other kind of network server.

It enables them to have a faster response to opportunities and preserves and future-proofs their infrastructure investment. The beauty of the IPTV system is that it is open ended, secure and gives a better return on LAN investment.

Building IPTV can be illustrated as follows:



SCHNEIDER ELECTRIC'S INTEGRATED SECURITY SOLUTION AT THE GLENSIDE HOSPITAL CAMPUS

Energy management specialist and global security leader Schneider Electric has supplied the Glenside Hospital Campus with a state-of-the-art integrated security solution to help manage staff and patients safety. Schneider Electric's innovative solutions implemented across the facility include restricted access and security services, IP video intercom, nurse call, paging, patient tracking, VESDA fire system and CCTV surveillance to the entire campus.

Schneider Electric's advanced platform also monitors critical building management alarms and fire alarms with high level interfaces communicating to a campus wide paging and emailing system. A Clipsal C-Bus energy management system is also integrated into the overall solution, all of which complies with Green Star standards. Through the integration

of standalone systems into a smart platform, operators can easily control and monitor activity anywhere on the campus.

Schneider Electric's global experience in healthcare security solutions has helped deliver some of the largest and most complex healthcare projects in Australia and New Zealand including the Royal Children's Hospital in Melbourne and Lyell McEwin Hospital in Adelaide. **For more information, contact Schneider Electric:** phone 08 8161 0988, 33-37, Port Wakefield Rd Gepps Cross SA 5094, website www.schneider-electric.com.au.



THE GLENSIDE HOSPITAL CAMPUS CAN BE SEEN AS THE PERFECT EXAMPLE OF THE FOURTH UTILITY PRINCIPLE



ELECTRICAL TELE-COMMS

The hospital structured cabling system is a technology superhighway encompassing the telephone, staff administration computing network, staff administration POE WAP network, NEC VoIP POE telephone and voice services network, BMS network, Security network and devices including secure Access and entry solution, IP intercom network, patient tracking, staff positioning information, nurse call, paging system, Vesda fires System, CCTV across the entire site, and the latest piece in the puzzle the IP television solution by hills exterity.

BJM have delivered Hansen and Yunken a state of the art Commscope SYSTIMAX cabling solution to hand over to the South Australian health department that primarily has a Category 6A cabling solution in the horizontal and a single mode fibre optic backbone. The horizontal information outlets have been installed from strategic communication room locations specified by Adelaide consulting firm Bestec to ensure that every campus end point can be reached within the 90.0m maximum required to achieve the industry defined standards. No more than 20 meters of cable is needed to

connect any part of a work area to the nearest CP, making it fast to deploy new systems and reconfigure or upgrade in the future.

The foundation is the Commscope SYSTIMAX VisiPatch 360 system. VisiPatch 360 is IDC-based and allows a user to deploy traditional IP (four-pair) applications or extra-low-voltage applications (some less than four-pair) on the same platform. VisiPatch 360 also lends itself very well to a zone-wiring architecture, where consolidation points can be used to provide easy access to connections within a zone. The entire site has been covered by a network of fully populated Visipatch 360, 32 port consolidation frames Back to the secondary nodes.

The site has full redundancy featuring two primary node communications rooms at opposing ends of the campus, linked to each other with multiple 24 and 6 core single mode fibre optic cables for high-speed backbone uplinks. The rooms are then both connected to every secondary node on the campus with a 24 core single mode fiber optic cable to complete the redundancy mesh. Every

communications room including primary and secondary rooms is served by a UPS power supply that is then supported by a generator back-up system. Each UPS system is also monitored on the master network to detect any fluctuations or drop out of supplies and manage the problem until staff can attend following a self-generated fault alarm.

This ensures all mission critical systems and devices will be maintained 24/7 including standard low voltage powered devices to state of the art POE devices. The fourth utility is encompassing every electronic service of the campus environment and delivery high quality connections that allow for reliable operation and functions. BJM Engineering services are amongst the best in Adelaide and Australia in delivering high quality and high performance Network and system infrastructure that will ensure customer needs are met and exceeded to allow migration to the next generation of equipment.

For more information, contact BJM Engineering Services, phone 08 8362 7000, email admin@bjmsa.com.au, website www.bjmsa.com.au





BRINGING IT ALL TOGETHER

For the Glenside Campus Health Facility, Premier Electrical Services (SA) were contracted to supply the required labour to install the following electrical systems:

- Low voltage systems including light & power,
- Site main switchboard,
- Main distribution boards,
- Distribution Boards,
- Uninterruptable Power Supplies (UPS),
- Back up generating system,
- C-Bus lighting control system
- High voltage connections to the private
- High Voltage system.

The areas of the Campus that the team worked on included:

- Special Rehab (Unit3),
- Shared Activities (Unit4)
- Helen Mayo (Unit5).

Not being involved from the beginning of the project put Premier Electrical Services (SA) at a slight disadvantage with a gap between the electrical contractors on site and other trades advancing quickly. Premier Electrical Services (SA) had minimal time to take stock, bring manning to the required levels to not just catch up, but to get ahead of other trades at the same time creating the site specific procedures and processes so that all this could be done safely and at a high standard required by the builder. Using their industry knowledge and expertise, Premier Electrical Services (SA) rose to the challenge and provided an outstanding service for the project.

Premier Electrical Services (SA) is a family owned business that provides a specialised service in the light industrial and commercial areas across South Australia. The company boasts a highly experienced team of professional and technical staff who are able to assist with projects of all sizes along with delivering their services on major construction projects. Premier Electrical Services (SA) have worked with prominent builders and developers such as Hansen Yuncken and Baulderstone. The company is committed to providing the highest quality products, competitively priced, with services exceeding customer's expectations. Premier Electrical Services (SA) continues to invest in facilities, systems and highly trained technical personnel providing added-value to their business relationships.

Capabilities include:

- Low voltage power installation on commercial projects
- High Voltage installation and maintenance
- Appliance testing and tagging
- Emergency & exit light installation, testing, certification, additions, moves and changes.
- Earthing system testing and upgrading,
- Lighting system installation, testing and upgrading,
- Communications and data system installations, moves and changes
- Switchboard and switch room inspection and maintenance
- Electrical system installations, moves and changes
- Coordination of multi discipline projects

Premier Electrical Services (SA) follow strict Health and Safety guidelines and have policies and procedures in place to ensure the safety of employees, contractors and all other trades they control.

For more information contact Premier Electrical Services (SA), Contact: Marino Benzija 0439 192 933, Nigel Hotston 0439 392 559, email admin@premierelectrical.com.au, website www.premierelectrical.com.au



SOMETHING TASTEFUL

Taste Furniture was chosen to furnish 25 units within the recently developed Glenside Campus Health Facility. The project required both indoor and outdoor furniture.

With each unit, a different colour combination was in place and Taste Furniture worked tirelessly to provide the perfect amalgamation for each unit.

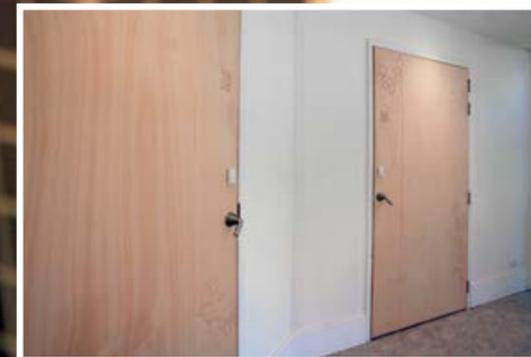
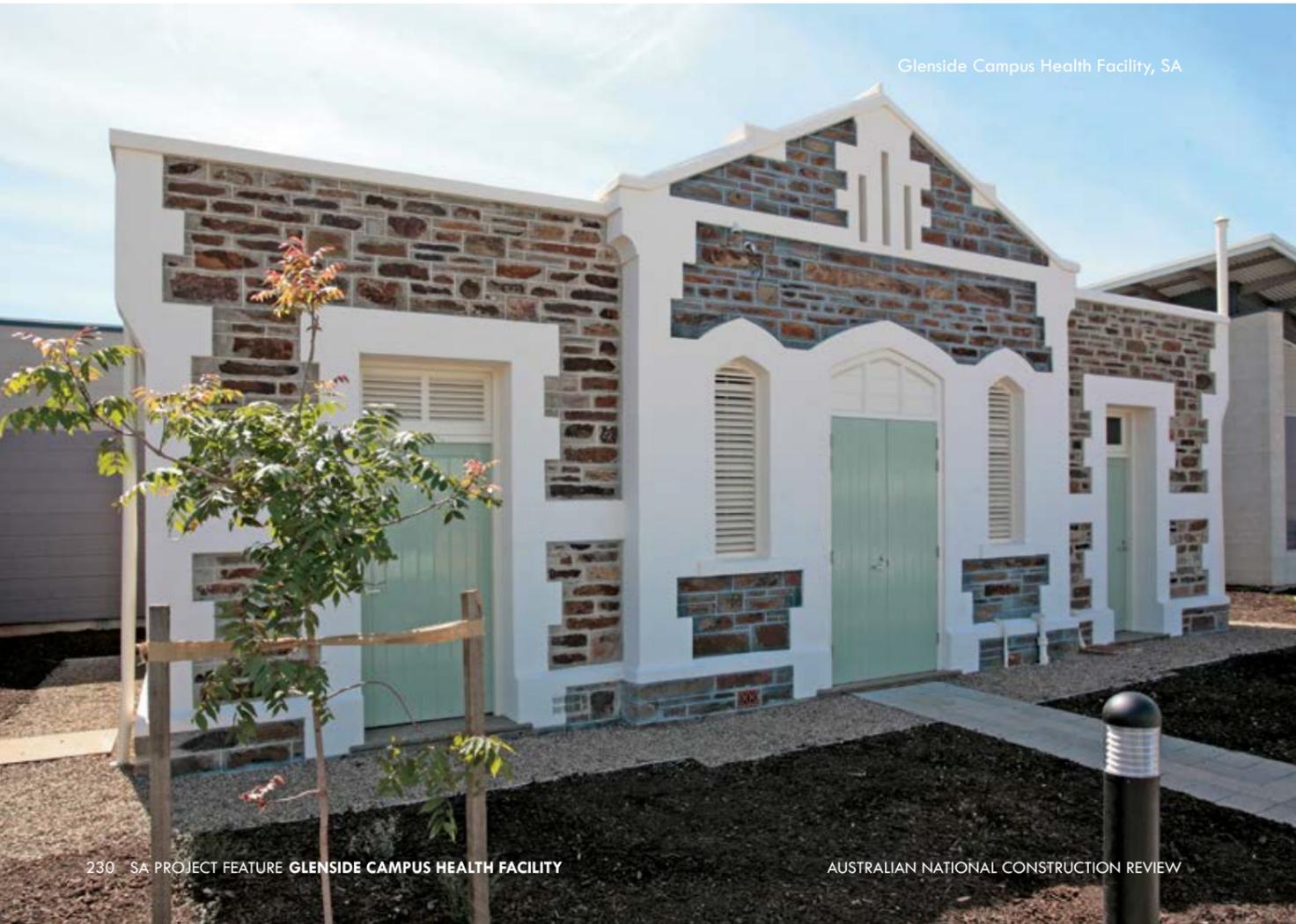
With years of experience in providing innovative furnishings, Taste Furniture used some old fashioned techniques when making the unique furniture for the Glenside Campus Health Facility project. An example of this is the way they used a mortise and tenon joint for an

indoor dining chair frame. These joints provide an extremely strong and durable structure.

Taste Furniture are importers and distributors of all types of high quality, commercial furniture. Their portfolio contains an array of clients including cafes, churches, clubs, hospitals, hotels, motels, offices, plazas, pubs, resorts, and restaurants.

For more information contact Taste Furniture, Keswick Commercial Showroom 15 Anzac Highway, Keswick SA 5035, phone 08 8293 8816 fax 08 8293 8864, email keswick@tastefurniture.com.au (Attn Karen or Jane), website www.tastefurniture.com.au

Glenside Campus Health Facility, SA



ON TRACK

Woodpend Projects provided specialist solutions along with a project management package for the recently completed Glenside Campus Health Facility redevelopment.

Their commitment to the builder incorporated the following features:

- Pressed Metal Frames
- Tamper Proof Glazing
- Supply and installation of timbers doors
- Architectural Hardware
- Supply, install, programming and commissioning of Salto Access Control
- Design, supply and install of MT5 Lockwood restricted master key system.

As in all projects, challenges presented throughout the life of the project. The bedroom entry doors were one example, where the architect had specified intricate routed landscape designs. This design element was achieved by downloading the cad drawing into the NCAD-CNC program and was completed on the router bed. Woodpend Projects were also required to design a door that had to be approved before manufacturing commenced for the PICU suite bathroom. This door was required to meet the "Harm Minimisation" standards.

The Salto Access control Anti-Ligature "Rawdal" design, which was developed by Woodpend Projects locksmith department, was approved and specified by the architect specifically for this project.

Woodpend Projects, one of many divisions within the Woodpend Group, has been providing project management doorway packages for more than 5 years. The business is continuing to expand with new initiatives and resources constantly being introduced to benefit their clients.

Woodpend Projects has a well-established and reputable business relationship with Hansen Yuncken. Woodpend Projects site manager, strengthened the trusting relationship between Woodpend Group and Hansen Yuncken on this project by resolving any conflicting applications or standards with doorway solutions and taking the risk factor away from the builder. This allowed Woodpend Projects to handle the project with confidence and ease.

For more information contact Woodpend Group, General Manager, Anna Finelli 08 8357 3530, Woodpend Projects, Costing Manager, Wayne Meathrel 08 8357 3530, Woodpend Hardware, Snr. Arch. Hardware Consultant, Bruce Auld 08 8373 0311, Premier Locksmiths, Sales & Marketing, Garry Dalton 08 8373 0311