

Newington College celebrates its 150th Anniversary in 2013. To commemorate this important event, the College planned a series of new buildings and upgrades. Construction started in December 2011 and finished in January 2013. "The College is absolutely delighted with the finished product," says Dr David Mulford, Headmaster of Newington College.

The success of the project can be attributed to the vision of the Headmaster, Dr David Mulford, and the combined expertise of Budden Nangle Michael & Hudson Architects, A W Edwards Pty Ltd and Cadence Australia Pty Ltd. They formed a successful partnership between client, architect, builder and project manager. "The greatest achievement," says Ray Hudson from Budden Nangle Michael & Hudson Architects was, "The integration of a modern building with a high performance glazed façade in a heritage precinct in a manner that has enhanced the precinct, respected and reinforced the prominence of the Founders Building and

created a new heart for the College." The Headmaster's vision for the Sesquicentenary project was that "the key elements were the central location and hence it had to be of impressive architectural merit." He also stressed the importance of "the proximity to our sandstone heritage Founders Building; the need for exciting learning spaces that promoted creativity, flexibility and community; the need for vastly improved access; the demand for excellent sustainability features; and because of its historical significance the building had to be of a quality finish and detail."

Budden Nangle Michael & Hudson Architects, specialise in educational and research facility master planning. The 5 member project team lead by Ray Hudson (master planner and designer) and Alex de Belin (project architect), successfully overcome huge challenges to meet this vision in both the design and architectural documentation stages. "The co-operative and intensive briefing process with the College and the close working relationship established with the College administration during

the master planning and design development stages were fundamental to the clarity of the design response," says Ray Hudson.

Some of the challenges were the heritage context, the significance of the building work for Newington College, the complex acoustic environment, the creation of transparent and gently reflective facades of clear glazing with high thermal and acoustic performance, the resolution of access across the College campus and the creation of a new centrepiece/heart for the College with the new Quadrangle created by the Sesquicentenary Building and the existing Founders Building. A complex wide cavity twin wall façade with solar tracking louvre system, a 1m wide cavity with integral service/cleaning access were some of the innovative features in the project. Another was the acoustically and thermally sealed system using spill air from the air-conditioning system to create a façade that allowed the use of clear glass while exceeding Part J and thermal performance objectives by over 200%.



Award winning, A W Edwards Pty Ltd, (head contractor) completed the project on time and on budget and impressed all involved. A family owned and operated construction company since 1921, it specialises in Design and Construct, Lump Sum Construct, Construction Management and Lump Sum Negotiated commercial construction projects up to approximately \$200 million in value. "Completion of each of the project stages and overall works on time with minimal effect on the operation of the College was a major challenge," said Paul Maher, the Project Manager. "The project objectives could not have been achieved without the close co-operation of all the sub-contractors many of whom have had a long association with A W Edwards."

Some unusual challenges that A W Edwards' experienced team overcame were the provision of temporary demountable science laboratories for use by the students during the first stage of construction and the acoustic requirements necessary under Sydney aircraft flight paths. Another challenge was the construction of the complex ventilated façade system to the new Rae Building.

The official opening of the new Rae and Pyke Buildings will be on the 16 July 2013, which is the 150th anniversary of the opening of Newington College. It is a fitting end to a successful partnership and a great celebration of the modern educational facilities which would have been undreamt of in 1863.

For more information contact Newington College, 200 Stanmore Rd, Stanmore NSW 2048, phone 095689333, website: www.newington.nsw. edu.au Budden Nangle Michael & Hudson Architects, 17/130 Pacific Highway Greenwich NSW 2065, phone 02 9906 5599, mobile 0409 119 366, email: ray\_h@bnmh.com.au, website: www.bnmh.com.au A W Edwards Pty. Limited, 131 Sailors Bay Road, Northbridge NSW 2063, phone 9958 1474, mobile 0416 135 653 (Paul Maher – Project Manager), email: pmaher@awedwards.com.au, website: www.awedwards.com.au

70 NSW PROJECT FEATURE NEWINGTON COLLEGE AUSTRALIAN NATIONAL CONSTRUCTION REVIEW WWW.ANCR.COM.AU NSW PROJECT FEATURE NEWINGTON COLLEGE 71



## FOR AS MANY NABERS STARS AS POSSIBLE!

The Sesquicentenary Building Project at Newington College has shown that Greenstar Automation Pty Ltd has the experience.

The company aims "to identify and implement concrete strategies to Reduce Energy Consumption and CO2 Emissions... making the world of commercial property greener, cheaper to run and more environmentally aware..."

Founded in September 2007, Greenstar Automation Pty Ltd is a Siemens Authorised Solution Partner. At present, it has 9 full time employees and is expanding. Ian Adams, the founder and Managing Director, has over 30 years experience. Prior to the formation of Greenstar he was the Engineering Manager Asia Pacific for Honeywell Ltd.

Greenstar provides service support for anyone with a building automation system type Siemens System 600, or Siemens Insight Apogee. The company provides energy management identification and reduction services using mechanical and building automation technologies and new systems or upgrade installation services. Other services provided include risk management as it pertains to building automation as well as mechanical electrical services and electrical compliance audits, customer training, parts management and reconstruction of lost documentation.

Greenstar's involvement in the new "state of the art" science and library building at Newington College included control of heating, ventilation, and air conditioning equipment, interfacing between fume cupboards and both mechanical outside air systems and Daikin VRV systems. Greenstar Automation used the innovative PTEC's (programmable Terminal Equipment Controllers) for customised control interfacing of fume cupboards, C02 control in the lecture theatre and relief air control in the library. Another innovative product was the CBUS and Daikin BACnet Interface for the starting/stopping of air conditioning via the lighting control switches.



Other projects Greenstar Automation has worked on include White Bay Overseas Passenger Terminal 5, 363 George Street, One Central Park, 30 Hickson Road and 45 Clarence Street in Sydney as well as various buildings at the University of Wollongong. Current clients include Sydney South Western Area Health Services, Westmead Private Hospital, Dexus Property and Management and CBRE.

For more information contact Greenstar Automation Pty Limited, 18 Harriett Close, Glenmore Park, NSW 2745, phone 02 4733 1003, mobile 0423 302 259, email: info@greenstarautomation.com.au, website: www.greenstarautomation.com.au

## A SCHOOL WITH SOLID FOUNDATIONS

Citilink Piling's expertise made them an obvious choice for the Newington College Sesquicentenary Building Project.

From design through to installation, Citilink Piling has been providing the Australian construction industry with foundation solutions since 2007. With an emphasis on personal service, Citilink offers their clients a variety of methods and systems to ensure the project is completed in the most simple, cost effective and timely manner. The company employs a team of thirty professionally qualified and experienced staff, including in-house engineers.

Citilink Piling has successfully completed over 200 projects—from major multi-million dollar schemes, within both the commercial and civil infrastructure industries, through to smaller residential developments. It specialises in designing, manufacturing and installing piling solutions in or on poor ground and in challenging build environments. Citilink strives to be the best in the industry by investing in the company, its employees and in state of the art equipment.

With six staff working on the project, Citilink was responsible for the drilled foundation piles, ranging in diameter from 450mm to 1200mm. The job proved to be extremely challenging due to the extremely high inflow of natural ground water.

Citilink Piling specialises in an array of piling methods. The drilling of bored piles, range from 400mm to 2500mm in diameter and can extend to 45m in hard rock. The grout injected piles range from 300mm to 1200mm in diameter, up to depths of 20m.

The company offers shoring or retaining wall options, via drilling of contiguous and secant pile shoring walls. Another option is steel sheet piles, offering the opportunity to drive sheets from 600mm wide to 1200mm wide, and up to 16m in depth. The company can also offer driven piles, with the ability to drive timber, precast concrete and steel members up to 20m in depth. Whatever the job, Citilink Piling has the expertise to find the perfect solution.

Other projects that Citilink Piling is currently working on include the expansion of Blacktown Hospital, DFO expansion, Oran Park Town Centre and Umbrella Creek Bridge.

For more information contact Citilink Piling Pty Ltd, Head Office: 12 & 13, 287 Victoria Rd, Rydalmere NSW 2116, Workshop: 11 Ti-Tree Place, Wilberforce NSW 2756, phone 02 9838 1802, website: www.citilinkpiling.com.au





When it comes to moving furniture, equipment, chemicals and books, a wizard would be handy. Knightmoves Business Relocations Pty Ltd proved the next best thing. The company specialises in all facets of corporate relocation.

Founded in 2010, Knightmoves has premises in Sydney, Brisbane, Melbourne and Canberra with 20 permanent employees, 50 part time employees, and over 250 casual employees.

In its time of operation, it has funded and sourced over 15 vehicles fitted with tracking devices, 10,000 Security Crates, 2000 skates and 100 Security Move Modules.

Kightmoves faced significant challenges in the Sesquicentenary Building Project at Newington College. The company worked under the direction of AW Edwards to relocate furniture from about 30 classrooms and move 1000 boxes and chemicals from temporary science labs in demountables to the new classrooms. Staff carried each piece of furniture, each box, and various chemicals up numerous stairs (1/3 up 6 flights, 1/3 up 4 flights and 1/3 up 2 flights).

Relocation project manager Logan Le, on site supervisor Jone Vuluma and Kightmoves can be proud of their achievement in being able

to accommodate last minute changes to fit in with the construction schedule, be on time and on budget, all without any injury to staff. Kightmoves other projects include the relocation of 2000 staff, 2000 PC's and 12,000 crates for the Department of Innovation, Industry, Science and Research, the relocation of 400 staff, over 2000 cartons, 800 PC's/Laptops and 5 floors of excess furniture for Aurizon and a variety of relocations for Sydney University.

Knightmoves newest state of the art equipment line is the Knightmoves Security Module ® used by leading US Law Enforcement agency to fulfil its security requirements. Knightmoves claims the module is the only one that can provide for a high security move. Its features include lockable doors, rounded edges, water resistant material, adjustable shelves and fold back doors.

The company's motto is, "At Knightmoves Business Relocations we focus on moving your business so you can focus on maintaining yours."

For more information contact Knightmoves Business Relocations Pty Ltd, Unit C, 120 Hassall Street, Wetherill Park NSW 2164, phone 1800 871 646, mobile 0488 066 148, email: info@kmbr.com.au, website: www.kmbr.com.au

