

CHEQUER BOARD PATTERNS ARE CHILD'S PLAY FOR PACT

The \$27.5 million Baldivis Senior High located forty kilometres south of Perth on the Kwinana Freeway in the newly developed area of Rivergums Estate will cater for 600 students in Years 8 to 12, eventually rising to 1200 students.

MAIN CONSTRUCTION COMPANY : Pact Construction
PROJECT MANAGER : Kelvin Chance
ARCHITECT : JCY
SURVEYOR : RM Survey
COMPLETION : November 2012
PROJECT VALUE : \$27.5 Million

The Baldivis Senior High School is a \$30.4 million project completed in December 2012 ahead of the contract program. Leading Western Australian construction company, Pact Construction, embarked on this WA government school construction project in mid 2011. Part of the Alcock Brown-Neaves Group of companies, Pact is the commercial construction arm of the ABN Group, one of the largest residential construction companies in Australia. Designed by award-winning architects JCY, Baldivis Senior High will cater for 600 students in Years 8 to 12, eventually rising to 1200 students once the later stages of the project are delivered in 2014.

Forty kilometres south of Perth on the Kwinana Freeway, Baldivis is minutes from the coast and beach. The site of the school is in the newly developed area of Rivergums Estate and close to residential development. Ultimately there will be a co-location with a new primary school on the same site.

Pact Construction has a growing reputation for 'whole of project' management, reflecting its strength and experience in multi-level commercial residential and civil projects. The company's Statement of Environmental Policy declares it is committed to delivering project

outcomes, where practical, in an ecologically sustainable manner. Pact recognises the need to ensure equity between social, economic and environmental goals.

The Baldivis Senior High School features six interconnected buildings, linked by colour-bond steel roofing and by walkways, comprising a Performing Arts Theatre, Library and Administration Facility, Science Lab, Cafeteria, Sports Hall and Learning Workshop Area. The Materials Technology education program is housed in a seventh free-standing building. A unique chequer plate pattern in the concrete panels of the main external walls is repeated in the interlinking walkways, external claddings, canopies and staircase balustrades.

Project Manager Kelvin Chance said, "The chequer plate pattern in the tilt up concrete looks very good and it has been repeated throughout the design, even on the bench seats. There is aluminium cladding used extensively which also features the pattern. It was a bit of a challenge in the beginning, particularly with the tilt-up concrete panels. We had to pour the concrete on to an MDF template, then lift it off the form liners once it had cured. We had to produce a number of sample panels until we found the correct release agent, to prevent the concrete adhering to the MDF form liners."

New tennis courts, a football and cricket oval and a playing field for the school, have been complemented by a comprehensive landscape design. Chance said the only difficulty encountered was sharing an access road



with a co-existing subdivision construction for new housing, requiring Pact to work in co-ordination with the other site. He said the Baldivis Senior High School is one of only two new schools in the Perth metropolitan area to have a fully integrated air conditioning system fitted. Usually such systems are fitted only to schools north of Geraldton.

Jason Kunkler, General Manager of Pact Construction, said, "The completion of the Baldivis Senior High School was well ahead of program, with great results in terms of quality and finish – a testament to the work of the project delivery team. The successful delivery of this school has been a credit to our team and a demonstration of our commitment to deliver quality and certainty in every project we're involved with."

Pact is currently working on many other projects including: an office development in Osborne Park; a five storey office building in West Perth; the new Library building for the City of Rockingham; a nursing facility extension in Kellerberrin; Subi-Centro North apartments with a retail/office/restaurant complex at Subiaco; a mixed use development in Subiaco; the New Head office for WA local Government in West Leederville and Edith Cowan University's new Building 34 in Joondalup just to name a few.



For more information contact Pact Construction, Unit 4, 12 Cowcher Place Belmont WA 6104, phone 08 9340 5900, website: www.pactconstruction.com.au





SAFEMASTER'S INNOVATIVE APPROACH LEADS TO HEIGHT SAFETY

Safety is of paramount importance on any construction site, no matter how large or small the project. Safemaster is contracted to supply, install and certify a roof access safety system for the Baldvis Senior High School project.

One of Australia's leading suppliers of height safety products, Safemaster's continuing product development allows it to keep pace with industry changes and the requirements of relevant standards and legislation. The company has the versatility to address the demands of very different developments, from modern architecture to heritage buildings and harsh industrial environmental conditions.

Based in Canning Vale, Perth and established in 1998, Safemaster has built a strong position in the marketplace by offering the industry best practice to support and produce the highest level of products and services. Safemaster safety products include anchor point systems; rigid liferail systems; static line systems; guardrail systems; walkway systems; modular ladder systems; harness gear and accessories; and stepladders, stairs and platforms. All Safemaster products comply with the relevant Australian Standards. The company also hires out some safety equipment and accessories.

By the year 2010, the company had installed 383 roof access ladders; 10,112 anchorage points; over 2500 safety signs; and around five kilometres of static line and hundreds of harness kits, while fitting up over 1500 buildings with compliant fall prevention systems.

Ongoing investment in research and development permits Safemaster to find solutions for the needs of a project. This often involves innovation and for the Baldvis project, an aluminium suspended

staircase with platforms was designed and fabricated to measure in the Safemaster workshop.

Both the Performing Arts Theatre and the Sports Hall are too high for the roof to be reached externally by an extension ladder, so Safemaster has fixed the suspended staircase and platforms to an internal wall on both these buildings. The first platform is two and a half metres above ground and must be reached by a portable ladder, ensuring access by authorised persons only, then a fixed ladder leads to the second platform. The staircase allows access to the roof through the hatch that has also been installed by Safemaster. Instead of the steel hatches that would be more usually installed, the hatches have an acrylic see-through dome and they act as a skylight.

Commenting on the project, Operations Manager Richard Wilkinson said, "It has been free of problems and it has gone well. We've had a few adjustments to make to the design of the staircase and platform as we've gone along, but everything has worked out well."

Published on its pro-active website, Safemaster's eNEWS offers some excellent advice on working at heights; regular reviews on Australian industry standards and regulations; and keeping up with the latest fall prevention products and techniques, as well as giving a broad view of the industry.

Other projects Safemaster is currently working on are the Burswood Gaming Extension, Hollywood Hospital, and Harvey Agricultural College.

For more information contact Safemaster, 98 Catalano Circuit, Canning Vale WA 6155, phone 08 6218 5158, website: www.safemaster.net.au



ALL SYSTEMS GO WITH SIEMON

Enabling telephone and computer communications, data cabling is a significant and vital part of any major construction project. The Siemon Company is responsible for the supply and installation of data cabling for the telecommunications systems on the Baldvis Senior High School project.

Siemon had the exclusive contract with the Department of Education to supply data cabling for all government schools in Western Australia, whether new projects or those engaging in refurbishment. Siemon's Global Project Services (GPS) was contracted to manage all data centre work and issue work to its selective list of Siemon Certified installers who are responsible for the installation of all the data cabling.

Established in 1903, with headquarters in Connecticut, USA, the family-owned firm of Siemon now has global offices and manufacturing and service partners throughout the world. Its Perth office was established in

2007 and has three permanent staff. In 2012, Siemon has worked on over 1500 projects within Australia through GPS Schools Project alone and has been involved in many other projects throughout Western Australia. The company doesn't just work on the WA Schools Project: there are two sides to the business – GPS & Enterprise. The Enterprise section handles everything other than major contracts which go through GPS.

Siemon is a world-class leader in the development and manufacture of telecommunications copper and fibre structured cabling systems (copper, fibre optic, rack and cable management). Its services include the Siemon Certified Installer program.

At Siemon Labs in the US, R&D keeps the firm ahead of the market in high quality structured cabling systems while also working on the development of industry standards. Its comprehensive product range encompasses over 400 active patents specific to structured cabling. The



company has achieved ISO 9001 and 14001 standards certification – international recognition of its commitment to quality – and actively participates in standards committees.

Known for its quality system installations, Siemon designs, manufactures and builds communications networks to suit the needs of a project. Its trained and certified cabling consultants engage fully in network planning and implementation.

For the Baldvis project, Siemon used Category 6 cabling, jacks and patch panels, and OM3 12-core fibre with Fobots. The communication cabling was installed by Siemon Certified installers O'Donnell Griffin, employing 2-5 men on site.

Of the project, Senior Field Operations Manager for Siemon in WA, Kye Topping said, "the work was carried out to standards and specifications passed down by the Western Australian government, we are very familiar with these as Siemon has extensive experience with department of education projects and were the nominated data supplier for all WA government schools from 2007-2012."

A core rack will be established in the Administration building on the Baldvis site. From which the communications backbone cables which consist of a 20pr copper cable for telephone requirements and a 12 core OM3 fibre optic cable for all computer/data requirements will be distributed to all other buildings within the school campus. Once the backbone cables are terminated within the comms racks in each building they are then connected to IT hardware then distributed throughout the building to all telephone and data outlets via Siemon Cat6 cable.

Besides the Baldvis project, Siemon is currently working on several other new school projects and building upgrades, as well as various minor school installations.

Siemon has offices around Australia and New Zealand. For your State Manager please call 1800 626 221 or visit www.siemon.com.au





TES LIAISES ON A NEW SUBSTATION AT BALDIVIS

Providing cost efficient and innovative electrical solutions to a variety of clients and industries, TES Electrical is recognised in Perth as the electrical contractor for some major projects, including the new development 'Balddivis Senior High School'.

As the electrical contractor for the project, TES was responsible for all electrical services including all the underground infrastructure, electrical installation, fire alarm installation, security, access control, communications infrastructure and AV systems. Liaising with Western Power for the construction of a new substation has been an integral part of the electrical services provided by TES.

Building on more than 30 years' service, TES Electrical is the preferred contractor for some of Western Australia's most reputable builders. From their offices at Cockburn Central, Perth, its fleet of specialist vehicles, equipment and personnel have the capacity to provide cost effective and reliable services for a wide range of electrical projects, whatever their size or complexity.

TES provides a diversity of electrical installations and services including high voltage, complete electrical installations encompassing lighting, warning systems, security, access control, intercom, public address systems, duress and patient call systems and, on completion of a project, an ongoing building maintenance program.

Major projects require the ability to work with other contractors, consulting over timelines and interlocking needs. A senior project manager for TES said of the Balddivis project, "Due to the tight program constraints and high quality finish of the structures, we have had to work very closely with other trades. Working in close proximity to others, we still maintained a high standard of installation."



ONE ENTERPRISE COLOURS IN THE WINDOWS AT BALDIVIS

A major contributor to the Balddivis Senior High School Project, One Enterprise has supplied and fitted all the commercial windows and glass doors, including elements of coloured glass, filmed glass and aluminium chequerplate throughout the project.

Founded twelve years ago, One Enterprise has expanded to employ 30 people and 10 contractors, eight of whom worked on the Balddivis project. The company's range of products has grown to include commercial windows, (external and internal), louvres, sunshades, aluminium cladding and other related products.

Managing director Paul Totten said, "Where possible, we are trying to become a single point of contact for the builder or the architect, where they can get the expertise they need and find various products under one roof. Our aim is to simplify the building process for our clients and become a single source for multiple needs."

"The Balddivis project has been a great challenge for us," said Totten. "There are multiple elements to the design of the buildings, and instead of simply fitting windows to a building, we had to have a greater level of aesthetic awareness to ensure correct alignment of the windows with other elements, as well as coordination of colours. As we near the end of the project, and are fitting coloured glass and aluminium chequerplate to the job, it is rewarding to see the final result."

Other recent projects for One Enterprise include the Westrac Distribution Centre in South Guildford; the Western Power refurbishment in Perth; refurbishment works for Dumas House in West Perth and R J Vincent in Balcatta; and the phase one refurbishment of Rendezvous Hotel in Scarborough.

For more information contact One Enterprise Pty Ltd, 10 Bombardier Road Wangara WA 6065, phone 08 9408 1833, fax 08 9408 1933



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Balddivis Senior High School, WA

ACCESS SAFETY IS TOPS WITH ALTURA AT BALDIVIS

Providing advice and documentation for access safety systems within the built environment, Altura is a niche professional consultancy. Altura is proud of its capacity to provide consultancy services for the implementation of advanced height safety and access risk management solutions on projects of any scale.

Taking over operations in 2011, from an existing consultancy with over 11 years' experience, Altura draws on the expertise of a multi-disciplinary panel of professionals with broad industry knowledge.

Altura's role in the Balddivis Senior High School project began with the development of access safety strategies, through consultation with relevant disciplines e.g., architectural, structural, landscape and mechanical, to ensure the final system of work meets all requirements.

From approved strategies for permanent equipment, such as anchorage systems and access equipment, Altura developed drawings and specifications for competitive tender and construction purposes. Into the construction phase, Altura inspects and assesses installed systems for compliance with regulatory requirements and the design documents.

For the Balddivis project, Altura Managing Director Brendan Sutton explained, "Altura assessed all requirements for performing work at height and developed strategies for controlling risks across the project." Options for controlling height safety and access risk included a combination of temporary and permanent equipment solutions to carry out safe and effective maintenance at height across the project.

Sutton said "The Balddivis project has a large amount of roof-mounted plant and equipment which will require maintenance. Altura has designed a system of work that maximises roof access and limits the requirement to use additional fall prevention systems, reducing overall risk while saving time and money."

Currently Altura is working on various other projects including Kings Square, WA Institute of Medical Research (WAIMR), WA Institute of Sport and St. John of God Midland Health Campus.

For more information contact Altura – Height Safety Professionals, 15/20 Churchill Avenue Subiaco WA 6008, phone 08 6143 5850, email: enquiries@altura.net.au

