



LSB HELPS YHA CONSERVE 'BIG DIG SITE'



The innovative LiteSteel® beam (LSB®), manufactured and distributed by LiteSteel Technologies, a OneSteel Group Company, was an integral part of the success of development of the area known as the 'Big Dig Site' in the historic precinct of The Rocks in Sydney.

The 2650m² site has outstanding cultural significance, containing rare physical evidence of Australia's first European settlement and in 1994 the first major archaeological excavation of the site was begun, unearthing over 750,000 artefacts and the remains of more than 30 buildings.

In January 2006 the Sydney Harbour Foreshore Authority called for innovative proposals for the design and conservation development of the area with YHA Australia and their team of Structural Design, Architectural, Building and manufacturing partners, presenting a solution that met the stringent criteria needed to make these "old digs" come back to life and conserve this significant site.

The subsequent new 106 room, four storey, twin building design complete with a central lift tower and atrium in each tower, is sure to become one of the Worlds great YHA Hostels given its majestic locations adjacent to the Harbour Bridge in the Rocks of Sydney complete with unobstructed views of the opera house and Sydney Harbour.

The building has been designed utilising a full steel portal frame design minimising the impact on the sensitive substrate, lowering the overall carbon footprint of the site and concrete was virtually unused on the site.

LiteSteel Beam (LSB) was utilised as the joists throughout the 4 storey steel portal allowing over 80 tonne of Structural Steel & and all of the Engineered Timber to come out of the project. With its long span, light weight attributes as well as it's considerably superior performance to timber, LiteSteel beam (LSB) was integral to the success of the project.

LiteSteel Technologies Engineers and Sales and Marketing team worked closely with the Builders and Consulting Structural Engineers throughout the design and construction phases, delivering significant value in time and monetary savings, with much of the superstructure of the buildings fabricated off site and installed without the waste and hassle of most onsite solutions.

Specialising in Steel Building solutions for the Residential, Commercial and Industrial applications markets, can you afford to build your next project without first talking to the team at Litesteel Technologies?

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**FRAMELESS BEAUTY AND
OUTSTANDING STRENGTH**



Architects can explore whole new realms with Sky Glass. Manufactured by Bevelite, an Australian Glass Group company, this is a custom engineered solution for incorporating glass panels in both interior and exterior applications. Sky Glass is not only strong before it breaks, but if it breaks, fragments remain bonded to a special structural interlayer, and the whole panel continues to provide a barrier or prevent falls until it is replaced. This is a perfect material for satisfying both safety and aesthetic considerations.

Several other features make Sky Glass superior to standard laminates. Being stronger and lighter, it allows increased spans and loadings while decreasing the amount of structural support required. It also has superior delamination resistance in exposed applications and can withstand extreme weather.

Most often, designs call for panels which are square or rectangular, however, shaped panels are available, and are engineered to suit. Each piece being custom made means almost any size, thickness or fixing option can be catered for. Sky Glass is suitable for frameless balustrades, facades, overhead glazing, patio windbreaks, pool fences and floors. Each piece is manufactured to AS/NZS 2208 - Safety Glazing Materials for Use in Buildings (Human Impact Considerations), AS/NZS 4667 - Quality Requirements for Cut to Size/processed Glass, AS1288 - Glass in Buildings - Selection and Installation and AS1170.2 - Structural Design Actions - Wind.

An example of the possibilities is the facelift given to the Mathew Bligh Apartments, 29 East Esplanade, Manly NSW. The project involved demolishing the existing steel balustrade, which consisted of a steel beam

weighing 250kg per balcony. Once this was removed, Architectural Glass Systems installed a new Frameless Sky Glass balustrade. Their biggest challenge was demolishing the existing balustrades in a safe manner. Chain block and tackle were used to hold the beam whilst it was cut away from the building. The beam was then lowered on to the balcony, cut into sections and carried out of the building for disposal. The benefit of the frameless balustrade using Sky Glass is that residents can now enjoy uninterrupted views, rather than looking through the handrail as they previously had to do.

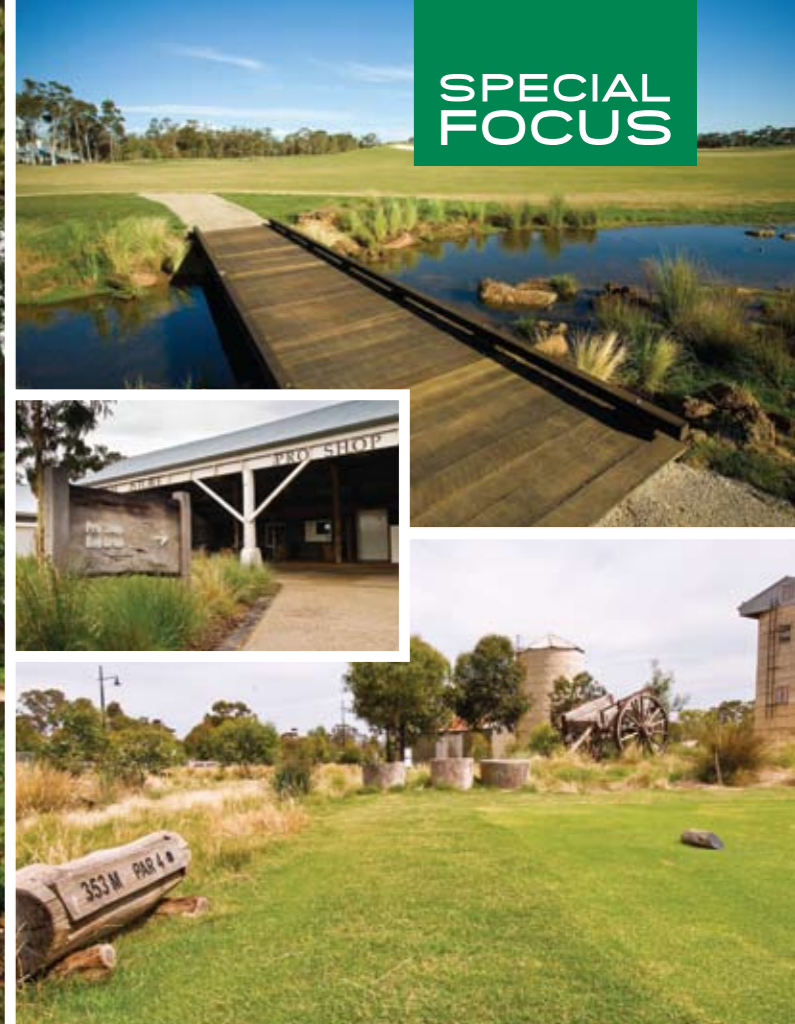
The creators of Sky Glass, Bevelite, have been leading the field in glass processing for 23 years, and are continually developing new products and upgrading their production capabilities. Formed in early 2008, The Australian Glass Group brings together the talents of Bevelite and two other established companies, Moen Glass Melbourne and Canberra, and CL Glass Qld. They engage with a combined tried and true network of top quality glaziers nation-wide, allowing projects anywhere to be supplied with Sky Glass custom manufactured at the Bevelite site in NSW.

AUSTRALIAN GLASS GROUP

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AN EXTRAORDINARY SMALL-TOWN STORY

Tract Consultants undertook a one in one hundred years task with the planning and landscape architecture of the Eynesbury Township for joint venture developers, Geo Property Group and Woodhouse Pastoral Company. This is the first new town to be founded in Victoria in a century, and also the only one where ecological sustainability is built into the community landscape.

There have been multiple, complex stages to Tract's endeavours. First, in a two-year process, they obtained the rezoning of the Eynesbury township land, approximately 7400 ha situated roughly 40km from the Melbourne CBD, from Green Wedge Zone to Mixed Use Zone. Then Tract prepared the Eynesbury Incorporated Plan and the Eynesbury Development Plan, setting the broad objectives for development and an overall design concept. In addition to the initial strategic planning task, Tract's landscape architects played a significant role in the 'place making' process, responding to the area's unique environmental features in landscape masterplans for the township, and plans for streetscapes and community spaces.

Being situated amidst agricultural land gives Eynesbury a unique opportunity to benefit both the natural landscape and food production, by providing a source of recycled water to otherwise semiarid land which is suffering the effects of long-term drought. Features such as wetlands, creeks, equestrian trails and bushland preservation and enhancement add to the sense of rural oasis.

"The Grey Box Forest, extensive landscaping to the Eynesbury Golf Course and restored Homestead Garden have been integral to determining the landscape response first stages of land release. A key objective was to maintain the open rural feel of Eynesbury, and extensive open spaces and indigenous landscaping has been undertaken to preserve the rural

and environmental qualities of the site," said Tract Principal Landscape Architect, Alistair Wenn.

"Within the streetscapes, the naturestrips are wider than usual, allowing for native and indigenous 'copse-style' tree planting. Rain gardens retard and treat runoff before it enters the adjacent waterways. Kilometres of shared paths, waterways and trails will provide access to many of Eynesbury's unique features and promote passive outdoor activity."

Numerous permits had to be obtained for elements such as restoration of the Heritage-listed stone homestead, construction of the golf course, upgrades to access roads, and a 'third pipe' to deliver recycled water from Sorbiton waste water treatment plant, another unique feature of the Eynesbury plan. Tract's planning and landscape architecture teams also supported construction projects such as the first stages of the subdivision, construction of the community house and associated recreation facilities.

Tract incorporated input from specialist consultants for Aboriginal and Cultural Heritage, post-settlement Heritage, flora and fauna, civil engineers, traffic engineers, community infrastructure, retail, economics, wildfire management, arborist and drainage. They had to meet the requirements of two local Councils, Shire of Melton and Wyndham City Council, as the township straddles two shire boundaries, in addition to satisfying Heritage Victoria, Country Fire Authority, Department of Sustainability and Environment and Melbourne Water.

"As part of the approvals process, a suite of management plans were prepared that achieved protection of the Grey Box forest in perpetuity, protection and enhancement of areas of native grasslands which represent one of the most threatened EVC's (Ecological Vegetation Class) in

Victoria, pest plant and animal management, and environmental strategies for Green Hill and the Werribee River gorge," said Associate Town Planner Luke Chamberlain.

"The Heritage listed Eynesbury Homestead is of particular note as are some of the associated structures: staff quarters (now the golf changerooms), stables (now the golf pro shop), silos, killing sheds and smokehouse.

"The whole town is subject to approved Design Guidelines for both building design and landscaping which set a preferred character for the township. The small town 'feel' is an important aim which will guide the amenity of neighbourhoods and streetscapes.

Tract continues to provide planning and landscape architectural services for this innovative township, translating the overall masterplan into a successful on-ground development.

Tract's specialised urban design team complements the company's wider mission. A pioneer in integrating the disciplines of town planning and landscape architecture since the 1970's, Tract now further bridges these disciplines with a dedicated urban design team. The company's design philosophy was based on ESD long before the advent of Green Star.

"ESD is vital in building new communities that are environmentally, socially and economically sustainable," said Luke.

"Tract is committed to improving the natural and cultural environments through our planning, design, and community building expertise. At no time during our history has there been a greater challenge to protect and improve the wellbeing of the natural environment and humankind. The growth of

the suburbs, supply of infrastructure and services, community identity, creation of sense of place and lifestyle opportunities are all challenges facing communities of the future. In order to meet these challenges, Tract's aim is to provide leadership and solutions that ensure the health and prosperity of the natural and urban environment."

"Tract looks forward to an ongoing role in helping to build a unique, vibrant and sustainable Eynesbury that meets best practice industry standards, and supports a proud and engaged community."

Tract has offices in Melbourne, Brisbane, Sydney and Darwin, with over 100 combined staff in the fields of Planning, Urban Design and Landscape Architecture. Projects include greenfield, brownfield and inner-urban developments and redevelopments; urban renewal; transport linkages and transit-oriented developments; tourism-based developments, mixed-use activity centres and infrastructure for both private and public sectors. Their continued excellence has been recognised with dozens of AILA, UDIA, and PIA Awards. They have achieved outstanding success in many landmark projects including Manly Wharf and Transport Interchange, Cairns Esplanade, the ongoing New Quay Development, the Twelve Apostles Visitor Centre, Eastlink, and a range of international projects in various places from China to Gibraltar.

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HANNAS PROVIDE A RANGE OF SERVICES

Hannas has a 20 year history of commitment to delivering cost effective, innovative, professional and sustainable solutions to clients and partners across all areas of its business, whether the project is large or small, civil and construction, property services, facilities management.

Hannas applies best practice processes across all its operating sectors. Hannas is committed to the ongoing development and improvement of its systems, tools and processes, and has a dedicated team responsible for managing and implementing an integrated management system, spanning Quality, health, safety and environmental requirements.

Hannas has an outright commitment to sustainable processes and takes pride in providing environmentally aware solutions within. Hannas was shortlisted and highly commended for various projects at the CCF Case Earth awards. Hannas manages a portfolio of environmentally challenging projects. Minimisation is integral to maintaining and reducing negative impacts on the environment, and Hannas is heavily involved in researching and introducing such systems to the industry.

In 1999, the Hannas Group acquired an 8.1 ha site at Enfield NSW, with a view to future development. The land had formerly been used for the extraction of clay for brick making. Remediation and reclamation of the site involved the importation and placement of some 1 million cubic metres of engineered fill, to bring the former extraction area back to its original ground level.

Associated works include stabilisation of the pit walls, the removal of around 500 million litres of water from the pit, geological mapping and recording for education purposes of an igneous dyke (a heritage geological formation on the site) and the construction of new habitats to enhance the survival prospects of a Green and Golden Bell Frog colony, which is classified as an endangered species. This project won Hannas a CCF Case Earth Award.

Hannas is devoted to maintaining sound relationships with local and regional communities, and realizes the importance of integration and participation of local residents, businesses and all other parties involved with projects, in order to sustain good working practices and harmony within various environments. Sensitivity and a commitment to being a reliable partner across all projects, has built solid, positive relationships with participating stakeholders and communities.

Civil and Construction

Hannas civil and construction capabilities cover earthworks, roads, water, rail, heavy industrial installations and infrastructures across a broad range of industries. Expert engineering and innovative construction techniques allow Hannas the flexibility to deliver at many levels, from maintenance works to multi-million dollar projects. Collaborative project planning and management with clients, partners, stakeholders and contractors deliver sound value and results.

Full service property facilities

Hannas provides a unique and diversified offering to the property services market. From the development of residential, commercial and industrial projects and working with multinational partners, through to providing exclusive investment opportunities to a range of individual clients and investors, Extensive experience in property services spans design, engineering, construction, property analysis and investment and project management, allowing Hannas to deliver expert results across a number of fields.



Facilities Management

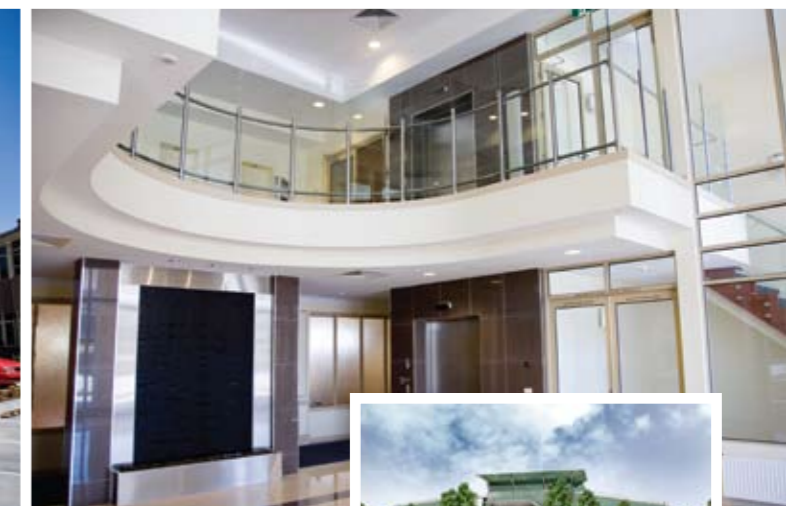
Hannas' internal capabilities and expertise include all aspects of strategic and operational facilities management, helping to improve business processes and asset performance, provide reliable asset performance information and reduce procurement costs. .



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SUNSHINE COAST VERNACULAR



DESIGN DEVELOP CONSTRUCT

Established in 1988, The DE Nova Group has a wealth of experience in areas of project development. Our intelligent designs are both exceptional in appearance and practicality, whilst ensuring a cost effective construction. We strive to ensure that our knowledge of construction systems, product specifications and client and industry specific requirements are at the forefront.

The De Nova Group can offer industry specific expertise, and will provide design solutions to suit individual needs. Areas of expertise include:

- Aged Care
- Residential
- Child Care
- Hotel and Gaming
- Leisure and Entertainment
- Alterations, additions and restoration of existing building stock
- Retail / Industrial / Corporate Building Solutions

Our firm will develop a project haven given consideration to building design systems and solutions to achieve an operationally cost effective building. The aim of every project is to develop a building of exceptional planning in layout and functionality, to be aesthetically a building all can be proud of, and just as important is the need to be cost effective to construct, without compromising quality.

The De Nova Group has enjoyed a wealth of experience in several areas of the building industry with a primary focus on the aged care and retirement industry, whilst also completing a large number of

childcare, residential apartment, hotel, medical, commercial and industrial developments. Our level of experience and expertise in the building industry allows us to continue to prosper in what is an exciting period in design development and building construction.

In relation to health related design the De Nova Group has designed in excess of three hundred and fifty aged care facilities Australia wide and is well known as a leader in this field. Our designs have included minor additions to existing facilities through to multi level buildings. Our expertise extends to the conversion of heritage buildings for aged care facilities. We have a thorough understanding of all levels of Aged and Retirement Care including high care, low care, dementia, day respite, rehabilitation, independent living units, retirement villages, community and recreation facilities.



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The Brad Read Design Group is proud of La Balsa, a six storey office and retail complex, providing sought after office space for Mooloolaba. The main building consists of a ground floor, incorporating cafes and retail, with levels two to five dedicated to office space. Building 2 has a large ground floor of office space with two double storey residences above. A two storey entry foyer with high quality finishes graces the main building.

The contemporary design complements the Sunshine Coast vernacular style. Powder coated, perforated metal sun screening to the tower and large multi-levelled powder coated steel framed glass awnings to the front facade, add interest and articulation to the Brisbane Road elevation. Use of Vitrapanel to the front and side elevations provide a high quality, long lasting finish contrasting with white rendered walls.

Hot dip galvanised posts with glass balustrading to the upper levels of the tower, allow residents to enjoy surrounding views. Powder coated, perforated metal insert balustrades provide lower level privacy. Innovative use of a diaphragm wall to the two storey basement counters water ingress problems usually faced when working with such a high water table.

A striking feature are the large 'butterfly' skillion roofs, supported by angled columns, with incorporated powder coated battened screening to the upper floor of the tower. The residential units have large terraces providing dedicated private open space. Incorporation of rock faced retaining walls and planters to lower levels provide soft landscaping. La Balsa has two basement car park levels, for over 200 cars.

Brad Read Design Group is an experienced team covering building, interior design, construction documentation and supervision. Brad Read is a qualified building and creative designer, with over 25 years of industry experience. Brenden Creed assists with the company's creative design and is responsible for information technology. He has had extensive experience across an impressive range of building designs both locally and overseas.

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CREATIVE DESIGN INSPIRED BY REASON



Images by Emma Cross



Every building needs to have a reason for existing. Mantric's mission is to ensure design embodies that reason, while making the smallest footprint possible on the environment.

"Our ethos as architects is all about collaboration at all levels. It is about working with clients and local authorities to get the best possible design outcome, and the contractor and everyone else involved joins that collaboration," explained Mantric Director, David Newstead. "We say, 'we're expert designers, not expert builders', involving the builder can improve and streamline the design process. Sub contractors bring in their experience too of how to get the best outcomes. The collaboration process means all the consultants and stakeholders are on the same page, which is much easier for dealing with relevant authorities."

"Our mantra is to apply the principles that are defined by the project, to understand and drive the principles that have brought the building into being."

Since opening up shop in Melbourne in 2003, the majority of Mantric's work has been for local government and institutions, in addition to commercial interiors, and architectural industrial projects. As a boutique firm, they have partnered with interstate firms for projects around the nation, undertaking architecture design, interior design, masterplanning and feasibility studies.

Recent work includes the \$6 million Caulfield Park project, the \$44 million Glen Eira Aquatic Centre due to open in 2011, a Community Hub for the Shire of Yarra Ranges at Monbulk due to open April 2010 and Victoria University St Alban's Campus. The \$10.5 million St Alban's project involved the design of innovation learning spaces for teacher training, including both hi-tech multi-media enabled spaces and recreational spaces.

For the Yarra Ranges Community Hub, Mantric put into practice their sustainability imperative, working with the client to reduce the building's physical footprint in response to the actual needs of the community for various types of spaces.

"More dollars need to be put into quality, not size. To work through with the client how efficient spaces are is a sustainability aspect," said David. "We also consider water sensitive urban design, the need to hold as much water around a site as possible. We are focused on behaving sustainably throughout our practice. In design, our role is to lead people to sustainable outcomes, and we work for sustainable additions to buildings with the client before anyone begins the project."

"Buildings can be an education tool for occupants, for example that they should open windows instead of rely on air conditioning, a lot of habits developed from bad buildings. Movement sensors for lighting which account for natural daylight levels, BMS systems and choosing the right appliances all play a part. Budgets need to reflect the policies, the greatest challenge is getting the market to understand sustainable practice costs more – we've been building too cheaply for too long. ESD is about innovation, asking 'what's the next thing we can do that improves on the previous project?'"

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THE DRIVING FORCE OF EUREKA

Built on strong family values of integrity and honesty, Eureka Steel Fixing Queensland, recognises that its own continued success and the success of its clients' projects, relies heavily on the performance of its team. A team, which has proven invaluable as the driving force behind key projects throughout eastern Australia.

Through continued high level performance on large commercial, residential and civil projects, the Eureka project teams are highly regarded for their innovative approach, their ability to identify cost saving opportunities for their clients, to simplify solutions and initiate immediate action.

This enviable reputation has been developed through a combination of experience, a highly effective training and retention strategy and the latest high quality services and facilities.

Earlier this year, Eureka Steel Fixing set up a pre-fabrication yard at its Queensland base in Molendinar to enable columns, pad footings, pile caps, walls or beams to be pre-fabricated ahead of time and delivered directly to site for installation.

This facility not only provides extensive advantages in time and cost savings to clients but also provide a unique 'in-house' training facility in practical steel fixing skills for Eureka employees.

The facility is an integral part of the Eureka Training and Retention Strategy which involves the shared understanding between management and staff that increased skills influences productivity and hence sustained economic growth and employment.

Both formal and informal training is undertaken with the experience and skills of senior staff utilised to deliver training in fabricating steel reinforcement, construction of columns and towers, plan reading, the proper handling of cutting equipment, welding, forklift operations, working as a team, manual handling and most critically, safety.

This unique and refreshing focus on investing not only in quality workmanship and safety today, but in the future skill base of the industry is reaping rewards with Eureka's portfolio of projects continually growing with key landmark developments.

They are currently working on Soul at Surfers Paradise, Oracle Towers at Broadbeach, One One One in Brisbane and Little Beach at Paradise Point.

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From left:- Matthew Jakubenko: Site Manager, Brendan Jakubenko: Chief Draftsman, Peter Jakubenko: Managing Director, Clive Lederhose: Project Manager

SUPER-SKILLS WITH STEEL

Queensland construction projects can now call on Active Steel Pty Ltd to provide them with their reinforcement requirements opening a new 2,000m² facility in Crestmead in January 2009.

Active Steel is a privately owned Australian family business which commenced operations in Sydney NSW in 1995, specialising in the manufacture, supply and delivery of steel reinforcing product. The company is one of the most technologically advanced operations within the industry. Significant investment in the latest computer aided design and European manufacturing systems have given Active Steel the ability to produce to exacting tolerances with speed and efficiency.

Active Steel's Crestmead facility has also been fitted out with the latest technology for the cutting and bending of steel. "This represents a significant investment" explains the company's owner, Terry Stokes, "Everything is brand new and we have the most up to date equipment available from Europe"

Active Steel has experienced and quality personnel to be able to deliver on the most challenging of projects, combined with an open and innovative approach and advanced manufacturing facilities it is not surprising they are involved in some of the largest projects past and presently underway in NSW. The majority of their projects have been civil infrastructure – bridges, sewerage treatment plants, major commercial projects, hospital upgrades and large residential developments.

With experience and adaptability in providing the required product efficiently and within time and scheduling constraints, Active Steel also

communicates and coordinates with clients to establish the most effective solutions to challenges presented.

As the Queensland building boom continues its momentum, they are looking forward to providing superior service and product across the full spectrum of civil infrastructure, commercial, industrial and residential projects.

Active Steel's Crestmead operation will offer a full range of reinforcing products and services – Reinforcement Detailing Service, Square and Rectangular Mesh, Engineered Mesh, Pile Cages, Swimming Pool Steel, offsite prefabrication of columns and beams, Cutting and Bending of Bar and delivery of goods to site / store. A complete range of accessories will also be available for the tying and placement of reinforcement steel.

With full third party accreditation by ACRS (Australian Certification Authority for Reinforcing Steels) products are made to meet the Australian Standard (AS/NZ4671), Active Steel is also a member of the SRIA (Steel Reinforcement Institute of Australia).

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NEW BRAND FOR ALLTYPE WELDING

Driven by their new website, www.alltypewelding.com.au, Alltype Welding have launched a corporate rebranding campaign, which showcases their capabilities in delivering a complete system from start to finish.

Aimed at providing comprehensive information to both suppliers and customers, the website provides a broad overview of Alltype's range of services which includes steel detailing, fabrication, abrasive blasting, protective coatings, transport and erection.

With over 25 years experience, Alltype Welding remain a family operated business, founded by Managing Director, Peter Jakubenko with skilful team including managers, draftsmen, boiler makers, welders, sand blasters, painters, truck drivers, machinery operators, crane operators, riggers and dogmen - a big team which provides big results.

The cornerstone of the company's operation is a large 8000sqm indoor workshop at their factory in Stapylton Queensland which is complete with 7 overhead cranes with a lifting capacity of up to 20 tonnes, fabrication bays, indoor sand blasting facilities with a floor capacity of 25 tonne, indoor painting facilities and 10,000sqm of hard stand lay down and storage space.

The company's range of equipment includes equipment for transporting structural steel, access equipment, cranes by Libherr, Kato, Tadano and Kamatso and a wide range of specialist welding equipment.

They have just completed the Signature Apartments in Queensland and are currently working on a number of other significant projects including packages 4 and 5 of the RAAF Base Amberley Redevelopment Stage 3 and Stage 1 of the Cameby Downs Coal Project.

With their firm foundations and vast experience, Alltype Welding continue their strong commitment to the advancement of the fabrication and erection of structural steel industry with their company representatives active on numerous committees to help to develop costing and safer work procedures and practices both for Alltype and the industry.

Reaffirming their position as a major operator in the steel fabrication industry.

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ALLTYPE WELDING
 STEEL. CONSTRUCT. LIFT.

HOWARD FACES ISLAND CHALLENGE



Specialist formwork, reinforcing and concrete works contractor, Howard Concrete Constructions Pty Ltd are proud to have been involved in a number of world renowned projects including the Hamilton Island Golf Course and Yacht Club.

On the Golf Club project, Howard completed all formwork, steelwork and concrete works including the dam wall plus 11 Kms of Buggy Roads and on the Yacht Club, assisted in the suspended soffit formwork and completed all steel reinforcing and concrete works.

Howard faced numerous challenges to complete this project including dealing with the logistics of transporting materials, employees and contractors to and from an island, the unusual shaped walls of the Yacht Club, carting concrete over 1 Km from the agitator to the construction site with a tipper machine and screeding concrete up very challenging hills.

The results of their achievements are most impressive and Howard Concrete are now working on the Port of Airlie project and Abbot Point X50 Expansion Marine Works

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DRILLING AND BORING

Queanbeyan-based ACT Horizontal and Directional Boring offer a wide range of drilling and boring services from basic sprinkler bores under footpaths and driveways to multiple pipes under major roads, trees and buildings.

ACTHDB's trenchless solutions are particularly effective as they can be applied to situations when work is required around trees, garden beds and houses without causing damage to the property.

Since taking over the business in 2005, owners David Sturzaker and Paul Engel have built on the company's solid reputation and expanded their portfolio of projects to include the upgrade of hospital car parks, expansion of schools, relocation of service utilities on major road upgrades and several projects at Canberra Airport.

ACTHDB maintain an impressive fleet of equipment and highly skilled workforce and are well-equipped to handle both large and small size projects.

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SMARTER SAFETY SOLUTIONS ON MIRVAC WATERFRONT



After seven years of planning, work is underway on Mirvac's Waterfront Newstead development soon to become one of Brisbane's most enviable locations. Uni-Span Australia are proud to hold the scaffolding contract for Pier, which is the first stage of prestige residential development and which commenced construction in March 2009.

The 52 week contract entails supply, installation and eventual dismantling of all perimeter scaffolds as well as falsework support, stair access and egress, loading bays, a gantry, handrails and height safety, and stairwell scaffolds. At peak, this amounts to around 1000 tonne of product. Uni-span's commitment to innovation means constant product development, always with an eye to improving site safety and productivity. Examples of new products at work on Waterfront Newstead include Uni-span's new adjustable snap on bracing for falsework, steel lap plates and steel sole boards.



According to Steve O'Brien, lead scaffolder at Waterfront Newstead, "The snap on bracing is far quicker and easier to install. Uni-span's new bracing arrangement means one man can comfortably and safely install the brace in seconds." The product further rationalizes stock, being one complete unit versus the traditional tube and fittings.

Uni-span's containment system, uni-mesh, proved the ideal solution for perimeter protection. This proven and widely accepted system allows for both "chain and shade" to be installed simultaneously, improving productivity without compromising safety. Mirvac's logo was detailed onto 120 linear metres of the UNI-MESH, providing excellent signage exposure for the site.

Uni-span's know-how can solve site challenges. For Pier, a clever access solution was provided to 6 levels on the first building and 8 levels on

the second, where Alpolic fins are being installed at a sharp angle to the building after the structure is up. A custom-designed solution was implemented which gave both a high level of health and safety and ensured the scaffold was cost effective. The result provided installation workers with a safe, ready work area, from the top down.

This kind of smart thinking and safety consciousness, along with their commitment to clients, won Uni-Span the July 2009 Manufacturing and Construction Business Excellence Award in the Gold Coast Business Excellence Awards. New and innovative products within the Uni-Span range in use on the Pier project include:

- Adjustable Snap on Bracing – Applied to the false work system giving substantial labour savings.
- Steel Lap Plates – An indestructible multi-use substitute for wooden lap boards, available in two board (6kg) size for spans up to .5m and three board (10kg) size for .5m spans.
- Steel Sole Boards – made from galvanised steel with heavy-duty molded hooks to attach jacks.
- UNI-MESH – a light weight screen and containment system. This system was also used by Bovis Lend Lease during construction of the Lowy Cancer Research Facility.
- Kwik Az – a nifty new tool and method which offers a faster, more secure way of attaching perimeter containment screening and fencing.

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P & C Fencing is a Sydney based ISO 9001 Quality assured Fencing company with well over 30 years of experience, and an extensive list of regular customers within the commercial industry.

Although specialising in steel and aluminium products, **P&C Fencing** can supply or supply and install nearly any type of fencing or gate product.

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IMAGINATION'S POSSIBILITIES REALISED

Locker Group's ability to create woven wire products which match the imagination of architects and also offer premium strength and durability is one of the most eye-catching parts of the street frontage of the new Hotel Ibis at King Street Wharf in Sydney.

Cox Richardson Architects' design called for a decorative sunscreen to surround the retail and hospitality areas. Locker Group's 50 years of experience with metal products and specialist knowledge of materials proved invaluable, as a variety of materials were considered, including expanded metal, stainless steel braided wire mesh, and flat ribbon wire mesh before the final design specified Boston 712A aluminium woven wire mesh. Around two tonnes of aluminium wire was used to manufacture the 145 panels, which range in size from approximately 2100mm x 700mm through to 2000mm x 1400mm.

Facade sub-contractor Altius Construction and Engineering and Locker Group together formulated the ideal fixing arrangement to suit the peculiar demands of the vertical and horizontal elevations of the project. Design challenges included rolling some panels to match the curved shape of parts of the steel frame structure; the aluminium extrusion facilitated fast and straight-forward installation in this complex geometry.

The sunshading is both highly decorative and provides extremely effective shading, allowing unobstructed airflow while reducing both

UV and temperatures inside the Hotel Ibis' public areas. One of the reasons for selecting aluminium wire was colour-matching. To meet the architect's design vision, Locker Group anodised both the extrusion and woven wire.

"Locker Group's combination of local manufacturing and tight project management ensured the time constraints were met, and unforeseen site issues, relating to complexity in panel shapes and sizes, could be dealt with promptly and resolved without delaying the overall project," said Architectural Commercial Representative Robert Whiteley.

Hotel Ibis combined the talents of Locker Group Western Australia, who wove the wire, Locker Group Victoria who did the trimming and rolling, and Locker Group Sydney who provided project management.

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Current Project- 717 Bourke St, Dockland VIC



Sydney University- Law Faculty Building, Sydney NSW



City Central Tower 1 & 2, Adelaide SA



EXCELLENCE IS NEPEAN'S FOCUS



CHINA SOUTHERN GLASS AUSTRALIA PTY LTD

China Southern Glass (Australia) has been providing architectural glass to the Australian market for more than 10yrs now, and has completed more than 150 projects all around Australia. Our quality Double Low E glass has been achieved a 4, 5 and 6 Green Star certified rating from Green Building Council of Australia (GBCA) across Australia. This glass will soon be superseded by the outstanding new Triple Low E coating currently in trial production.

Our products range from Insulating Glass, Float Glass, Low E IGU, Solar Reflective Glass, Tempered and Heat strengthened Glass, Heat Soak Test, Curved Tempered Glass, Laminated Glass and Enamelled Glass all backed by full warranty and Australian Standards requirement. In Architectural glass colour range, CSGA has already received positive feedback on the new Crystal Grey colour and Super clear – Low Iron Glass.

Current CSGA projects in Architectural Glass include 140 William St in Perth, City Square in Perth, Royal Children's Hospital in Melbourne, 717 Bourke St in Melbourne, Techport in Adelaide, Oracle on the Gold Coast and 100 Market St in Sydney.

CSGA is a subsidiary of CSG Holding. CSG Holding is a publicly listed company which has up to 10,000 employees, and nine production bases in Shenzhen, Guangzhou, Hainan, Tianjin, Chengdu, Hebei, Wujiang, Dongguan, and Yichang in China.

China Southern Glass Holding celebrated the 25th anniversary of operations in 2009, and has 28 subsidiaries including the Australian operation. CSG Holding also celebrated its first big milestone achievement of building the complete supply chain of Solar Module production from raw material of Polysilicone mine, Ingot and Wafer, Solar Cells, Solar Glass to the final Solar modules. This control provides consumer confidence in CSG Quality, Service and competitive edge over our competitors.

The PV Solar panels come in a range of sizes from 75 watts through to 285 watts, and are certified to TUV IEC 61215 and IEC 61730, which is the standard required to attract the Government's solar energy rebates. CSGA supply the solar panels to both commercial and residential projects.



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Whether it's designing and constructing an entire turnkey system, or fabricating steel for a commercial high rise or bridge, Nepean Engineering delivers the goods. Certified to ISO 9001:2008 Quality Standards and founded 35 years ago, they are the core of Nepean Group, Australia's leading privately owned specialised engineering and industrial manufacturing group. Group operations range from agricultural products, mining conveyor systems to structural steel fabrication and erection of commercial and industrial buildings. In addition, they produce Longwall miners, aircraft tow tractors, methane gas extraction plants, manufacturing electronics including SCADA systems, scientific instruments, steel products for infrastructure and residential applications, mobile lighting towers, steel gantries and galvanising services.

Their client base extends to the USA, Canada, Middle East, Africa and Asia. It is a testament to their skills that Nepean's Vehicle Inspection Systems, which comprise innovative robotic units designed and produced wholly in-house are used not only by the RTA, but also exported extensively to the USA, South Africa and New Zealand. They are equipped with laser cutting equipment for manufacture of precision equipment, and have ASSDA accreditation for stainless steel fabrication and welding.

Nepean Group invested \$13million in 2008-9 in R&D much of this added more leading edge capital equipment and capacity for Nepean Engineering. Recent additions to the expansive Engineering workshop facilities include a state of the art DAITO SEIKI beam profiling line, which drills, copes and cuts automatically to a high degree of accuracy and speed. They have also acquired a Top Turn Series 80 (6m between centres) lathe capable of taking on large jobs where a high degree of accuracy is required. There is also a new Kunming Machine Tool TH6916 horizontal floor borer with a Hyden Hain controlled 40 tool

changer, 12m x-travel and a 40 tonne rotary table. This machine is capable of taking on large mining and fabricated items including railway rolling stock.

"If we are involved in the early part of a major project's design process, we can usually help our clients to save money," said Nepean Executive, Christopher Mooney. "Our people have the technical competence to solve complex engineering problems; we have some of the best and most experienced design engineers in New South Wales. We are well known for our capability and accuracy, for example the world's tallest steel and glass lift core for the 39 storey Deutsche Bank Building in Sydney exceeded the client's expectations. NATA certification is available."

Having manufacturing and fabrication offices spread across the country means Nepean Engineering can access group-wide projects just about anywhere, including Western Australia, where Nepean Group companies service mining and infrastructure projects. Recent noteworthy construction projects include the award-winning One National Circuit Canberra and the Tabitha Building (Commonwealth Bank's new HQ at Homebush). Nepean also provide services directly to some of the world's biggest engineering firms for design and manufacture of special purpose machinery.

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JDN MONOCRANE AT ASC SHIPYARD



JDN MONOCRANE is a wholly owned and operated all Australian company founded in 1979 that designs, manufactures, installs and distributes a completely comprehensive range of cranes, electric hoists, materials handling and warehousing systems. The company also provides design support and componentry to other crane makers throughout the Asia-Pacific region. JDN MONOCRANE's strengths lie in its ability to combine the most reliable componentry with in-house advanced engineering and programming skills. This provides clients with top performance installations at very competitive prices.

At ASC Shipyard, JDN MONOCRANE designed, manufactured, delivered, installed and commissioned 13 Overhead Travelling Cranes and associated works to a value of more than \$6 million. It is one of the largest projects of its type ever undertaken by an Australian crane manufacturer, and all within a remarkably short period of time. Work on the design began shortly after the official Letter of Intent was issued by the Head Contractor in June 2008. The last cranes were commissioned by mid November 2009.

The manufacturing work was done entirely in JDN MONOCRANE's factory in Dandenong in Victoria, with the on-site project management, installation and commissioning handled through the company's Adelaide Office. JDN MONOCRANE's factory facilities are comprehensive with a second manufacturing facility in Yatala in Queensland.

Project director, John Gillan, stressed the importance of JDN MONOCRANE's good working relationship with the Head Contractor, Hansen & Yuncken, in the smooth operation of the contract. "Installing and commissioning such large, heavy equipment in the limited confines of the various buildings demanded a very detailed and co-ordinated effort to ensure that other trades weren't needlessly inconvenienced and to maintain the tight building programme."

Of the 13 Overhead Cranes, seven are Double Girder construction and six are Single Girder. The largest four of the Double Girder Cranes are each of 100 Tonne capacity, two with 37 metre span and two with 27 metre span. The other Double Girder Cranes are an 80 Tonne unit with 16.5 metre span and two x 35 Tonners, each with spans of 26 metres. The Single Girder Cranes comprise three x 20 Tonners with 21 metre span, a 16 Tonne with 13 metre span, a 10 Tonne with 21 metre span and a 5 Tonne with 14 metre span. All cranes are controlled by sophisticated Autec Radio Control Systems which also enables Tandem Operation of the 100T, 35T and 20T Cranes, each combination controlled from a dedicated Master Transmitter.

All cranes also incorporate some important, world leading functionality features developed by JDN MONOCRANE. HYPERSPEED allows up to approximately 25% of the SWL to be raised or lowered at twice the normal lifting speed producing unparalleled hoisting performance whilst also incorporating micro-creep speeds to facilitate fine assembly operations. i-GLIDE allows the crane and load to accelerate and decelerate with the smoothest properties possible, independent of the load and absolutely minimizing potentially dangerous hook sway.

JDN MONOCRANE has been setting new standards in crane performance technology, crane & hoist design, crane & hoist manufacture and crane service. Today, with extensive resources, a commitment to quality principles and a dedication to Customer satisfaction, they are providing innovative answers for clients throughout the Asia-Pacific region.

