

NEW BEGINNINGS

Watpac delivered 3 stages for the \$75 Million Adelaide Airport Land Infrastructure project.

MAIN CONSTRUCTION COMPANY : WATPAC
PROJECT END VALUE : \$75 Million
COMPLETION : February 2013
STRUCTURAL ENGINEER : Wallbridge & Gilbert
ARCHITECTS: Woodhead
SERVICES ENGINEERS: Aecom

Watpac was awarded the contract for the Adelaide Airport Land Infrastructure project in January 2011. The development consisted of the following three stages –

Stage 1 – Construction of the road network to allow diversion of traffic from the dual carriageway, Sir Richard Williams Drive. This enabled the new carpark building to be constructed over this roadway in Stage 2.

Stage 2 – Construction of a 5 level flat plate carpark of 12,000m² per floor. Car rental companies occupy the ground floor, while the top 4 levels each have the capacity to hold approximately 400 cars.

Stage 3 - Construction and landscaping of the existing on grade carpark between the new carpark and the terminal building.

The key feature of this area includes a structural steel, curved and twisting rhomboid shaped screen structure approximately 160 metres long ranging from 15 metres high to 10 metres high. Two faces of this structure are clad with a woven stainless steel mesh screen. The screen structure has electrical and data cabling weaved through the structure (within the round pipe sections) The new Plaza area has granite paving in two colour bands over an area of 12,000m², and a large elliptical concrete patterned paved area, with two tones of coloured concrete in random curved patterns. 59 x 3-4 metre high trees are planted within this elliptical area.

The Plaza Screen structure was a very complex structure to construct. It required 3D modeling to achieve integrated shop drawings, a 6-8 month collaborative approach to resolving design and construction detailing, and was a very complex structure to erect. It is a testimony to the adaptive and collaborative approach by the Watpac team and its key subcontractors involved in this structure; Samaras Structural Engineers, Zest Vision and Augen Works that this structure was completed within the time frame of the project and with very few issues during construction. Another complex and significant undertaking on this project was the granite paving and the patterned coloured concrete

to the central ellipse of the Plaza area. The random curved concrete shapes of the paving are unusual and is possible the first of its kind to be constructed in such a fashion. The Landscaping subcontractor, Outside Ideas, together with Panorama Concrete, was responsible for the successful completion of this expansive landscaped plaza.

A collaborative approach to the contract exhibited by Watpac and Adelaide Airport Limited has enabled this iconic entry to Adelaide to be completed on time, within budget and to a high quality.

Established in 1983, Watpac is a leading national construction, mining services and property development company listed on the Australian Securities Exchange. Over the past decade, Watpac's strategy of growth through strategic acquisitions has seen the company broaden its services by expanding into New South Wales, the ACT, Victoria, South Australia, Western Australia and the Northern Territory. In 2013 Watpac is celebrating 30 years of growth and success, employing more than 1,350 people across Australia.

Watpac Construction (SA) Pty Ltd commenced in Adelaide in latter half of 2010, with just a State Manager (Mr Tim Tape). The Adelaide Airport Landside Infrastructure Project was the first tender submitted by Watpac Construction (SA) Pty Ltd, and due to the good planning and freshness of the company, the tender was successful. A project team was established mostly locally resourced but augmented by expertise from Watpac interstate.

Over the past two years Watpac Construction (SA) Pty Ltd has successfully won two further major contracts with one more currently being negotiated for an imminent commencement.

For more information contact Watpac Construction (SA) Pty Ltd, Level 4, 199 Grenfell Street Adelaide SA 5000, GPO Box 2708 Adelaide SA 5001, phone 08 8445 5260, fax 08 8445 5261, website www.watpac.com.au





A CLEAR FINISH

Urban Glass and Aluminium have the capacity to design, fabricate & install many forms of glazing systems & façades ranging from commercial shop fronts, through to unitised curtain walls and frameless glass assemblies.

With their team of highly experienced staff and the highest quality materials, Urban Glass and Aluminium have earned a reputation as leaders in their field.

The team was chosen to supply their products and services on the recently completed Adelaide Airport multi-level carport. Along with providing an area for short-term parking, the new multi-level car park and pedestrian plaza includes facilities for rental cars, taxi pick-up, bus parking, food and beverage outlets and small retail outlets. Urban

Glass & Aluminium's primary scope of works for the Adelaide Airport development involved design, fabrication & installation of an 800m², structurally glazed façade to the car park's lift shaft. This impressionable façade faces the airport's main terminal building.

In order to meet the required structural & energy performance parameters specified for the project, Urban Glass & Aluminium sourced an appropriate high performance Low-E coated, toughened laminate and double glazed seraphic coated spandrel glass.

Further scope undertaken by Urban Glass & Aluminium included the faceted Link Bridge glass balustrades (which join the main terminal to the new car park), stair glass balustrades and a range of aluminium framed commercial windows.

The lift façade presented many challenges from design through to installation in order to achieve the clients overall design intent of a slim-line glass façade fitted to the exposed structural steel framing. In

order to gain production efficiency and reduce onsite labour, Urban Glass & Aluminium designed and extruded a bespoke aluminium 'cassette' system specifically for the project.

This allowed the glazing system to be panelized, fabricated & glazed in the factory under stricter quality control measures with finished panels then delivered to site ready to install at a quicker pace. This resulted in a final product with both a higher quality and shorter build time than would have otherwise been produced if built entirely on-site.

All the doors and windows supplied by Urban Glass and Aluminium are constructed from the highest quality aluminium and great care is taken to ensure each step of the manufacturing process, from design to implementation, is completed to exacting standards.

Covering a broad array of construction projects, the extensive product range offered by Urban Glass and Aluminium includes:

- Curtain Wall Systems

- Aluminium windows & aluminium doors
- Glass pool fences & balustrades
- Glass louvers (electronic & manual) & aluminium louvers
- Splashbacks & shower screens
- Automatic Door Operators

No matter the scale of the project, Urban Glass and Aluminium can help their clients realise their vision by meeting even the most exacting standards.

With the quality of products proven, Urban Glass and Aluminium take pride in featuring a highly trained team, who are passionate about the design, manufacture and installation of their products.

For more information contact Urban Glass & Aluminium Pty Ltd, 26a Taminga Street, Regency Park SA 5010, phone 08 8244 4677, website www.urbanglass.com.au



SIMPLY AMAZING

Augen Design is a company based on strong foundations of skill and empathy towards materials/aesthetics and an innovative approach to providing practical solutions for their clients. The team at Augen Design worked tirelessly on the Adelaide Airport project providing their extensive experience in order to deliver an eye-catching, complex stainless steel mesh structure, the only one of its type in Australia.

Their scope of works for the Plaza Screen structure involved detailing the initial concept, working out a logical solution to make the concept a reality through to installation and fine-tuning of the exclusive mesh system. The end result features almost 280 individual, custom made panels that fit intricately into one collection. Each panel is unique within this structure. Augen Design worked closely with Woodhead architects, WATPAC and Samaras Structural Engineers to ensure this part of the project was completed with ease. GKD Australasia supplied the 'Tigris' stainless steel metal fabric, ready for Augen to install.

A great deal of effort was placed in making sure this structure was completed to the highest satisfaction. The 3D structure was designed then transformed into 2D drawings. The 2D drawings were then converted into individual shop drawings, then fabrication and installation followed. Augen Design took ownership of the entire process to accomplish an exceptional end design. Augen Design has worked on many prominent projects providing a service that is unmatched in their industry. The company has exceptional intellectual ability, creativity, and originality. They possess knowledge of the manufacturing processes and requirements, therefore ensures all aspects and possibilities are covered on each individual projects. Thus being able to achieve and complete complex projects with an unprecedented insight.

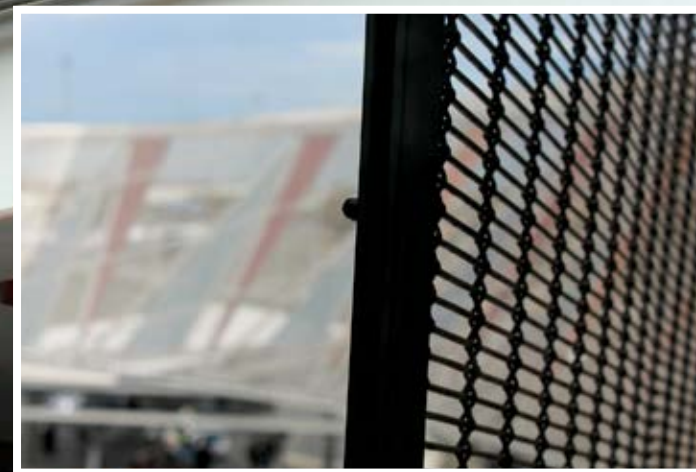
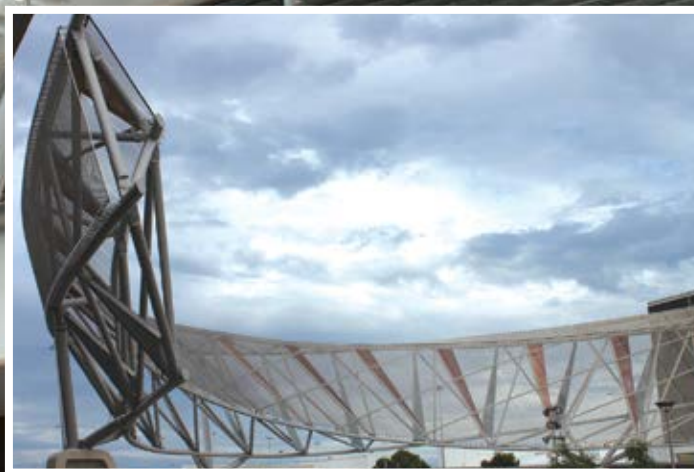
The company can provide solutions designed from various materials including acrylics, polycarbonates, mild steel, timbers and stainless steel mesh. They specialise in project design, product design, interior design, public art and the design/detailing and installations on major construction projects. Augen Design offers a personal service which means they are dedicated to working with their clients throughout the entire duration of a project. The team are experienced in working on initial concepts, project changes, liaising with consultants and subcontractors right through to delivery and installation of their exclusive designs.

Sylvain Haass, Company Director of Augen Design started his career many years ago in Industrial design as a product designer. His commitment and dedication has seen him develop a company that values its clients and provides an unrivaled level of experience. Sylvain has extensive knowledge of a substantial variety of materials from acrylics, polycarbonates, mild steel, timbers and finishes right through to the stainless steel mesh used for this particular iconic structure. Sylvain offers empathy, experience and a hands on approach to all aspects of design/documentation, manufacturing, fabrication and installation. He draws on his design and affinity to aesthetics to ensure all projects meet the design intent created by the initial team of architects.

For more information contact
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WORLD WIDE WEAVE



TOPPING IT OFF

Advanced Roofing Contractors was selected by Watpac to provide their services on the Adelaide Airport project.

Advanced Roofing Contractors installed the roofing component, which was made up of 12,000m² of Fielders Colorbond Kingclip, along with laying of safety mesh and sarking, stainless steel box gutters & flashings to the new multi-level car park.

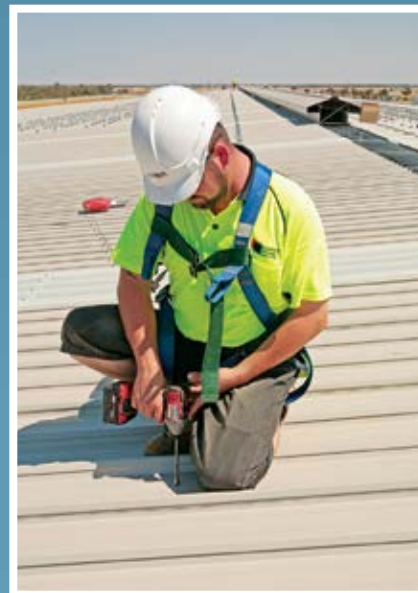
Commencing operation in 2008, Advanced Roofing Contractors is a family owned and operated business. After experiencing rapid growth, the company moved to larger premises in Port Adelaide in 2010. Company Director, David Hargreaves, previously owned and operated a domestic roofing business for 20 years, and has worked in the roofing construction industry for more than 50 years.

The company specialises in commercial sheet metal roofing and cladding. They boast a dedicated staff of 15 full-time construction employees, 2 TAPS (Trainee and Apprentice Placement Service) apprentices and several customer focused office personnel. The team strives to deliver professional service with an emphasis on quality & commitment to workplace safety.

For the Adelaide Airport project, on-site supervisor Craig Page and company supervisor Andrew Szekely managed the development, which reached completion within the specified time frame despite the extreme weather conditions. The dedication of Advanced Roofing Contractors staff and their efforts to maintain schedules has been recognised and greatly appreciated.

Last year proved to be an extremely busy year for Advanced Roofing Contractors, with David and his team also completing works for the new Mawson Lakes Central Development, subsidiary buildings at the Adelaide Airport, KJM Contractors' office/warehouse complex at Edinburgh Park, U-Store-It upgrade at Keswick, South Esplanade Apartments and the Charles Campbell Trade Training Centre along with various other contracts.

For more information contact Advanced Roofing Contractors Pty Ltd, Directors : David & Alice Hargreaves, 6 Fisher Street, Port Adelaide, SA. 5015, phone 08 8447 8840, fax 08 8447 8839, email: info@advancedroofing.com.au, website: www.advancedroofing.com.au (under construction)



COMPLETE SECURITY & CONTROL SOLUTION

As a preferred service provider to Adelaide Airport Limited, Johnson Controls became involved in the Adelaide Airport Land Infrastructure project to supply and commission security & access control, building automation and CCTV systems. These systems were to integrate into the existing terminal building system and seamlessly give Adelaide Airport staff visibility and control of their new car park and surrounding infrastructure.

The new security & access control provides electronic access to doors and monitoring of duress points throughout the car park.

The building automation system provides monitoring and control of carbon monoxide extraction systems, general extraction systems, lighting, generator status, water, gas and power meter information.

The new CCTV system provides visual monitoring of each level of the car park and surrounding areas. There are over 70 cameras connected each with recording media that can be accessed by Adelaide Airport for both security and safety concerns. The CCTV system also incorporates a new camera type that features a 180 degree view meaning that these cameras can provide a substantial outlook from one end of the car park to the other.

A complexity that arose during this project was the integration of the CCTV storage system for the car park into the Terminal building, while

maintaining the integrity of the existing system and its data. As the airport operating hours are 4am to 11pm, Johnson Controls spent many hours on site between 11pm and 4am performing this integration.

Johnson Controls is a global diversified technology and industrial leader serving customers in more than 150 countries.

They boast a team of over 170,000 employees who create quality products, services and solutions to optimise energy and operational efficiencies of buildings; lead-acid automotive batteries and advanced batteries for hybrid and electric vehicles; and interior systems for automobiles.

Their commitment to sustainability dates back to their roots in 1885, with the invention of the first electric room thermostat. Through committed growth strategies and by increasing market share, Johnson Controls are committed to delivering value to shareholders and helping their customers succeed.

In 2012, Corporate Responsibility Magazine recognized Johnson Controls as the #5 company in its annual "100 Best Corporate Citizens" list.

For more information contact Johnson Controls, U2, 5-7 Stephen Street Melrose Park, SA, 5039, phone 08 8374 7444, website: www.johnsoncontrols.com.au



Adelaide Airport Land Infrastructure Project, SA

ACCESS TO A MARKET LEADER

The Adelaide Airport Landslide Infrastructure project has seen the construction of a five-level car park, which provides direct access to the existing Adelaide Airport Terminal 1.

Access Hire South Australia was contracted to supply Scissorlifts and Boomlifts to the project for the duration of the construction phase.

Working on the airport project presented some challenges and as a result, specialised large equipment was brought in to reach difficult areas over the pick-up area and to access behind the architectural stainless steel structure which curves from the terminal around to the car-park itself.

Established in 2006, Access Hire South Australia has grown to become South Australia's largest access services company.

They are market leading EWP hire suppliers, and boast Australia's largest privately owned fleet of world leading brands such as Genie & JLG. These state-of-the-art elevating work platforms are of the highest safety standards and enjoys some of the fastest cycle times in the market.

Access Hire South Australia employs a team of dedicated professionals to service and maintain their equipment. The service department is operational 24 hours a day, 7 days a week and is equipped with specialised factory-trained service technicians.

Access Hire South Australia can also arrange transport of equipment to and from work sites by using their affiliated transport company Tilt Trays and Low Loaders Australia.

Other projects which Access Hire South Australia have recently been involved in throughout South Australia include; Adelaide Oval project, Convention Centre upgrade, Tonsley TAFE, Southern Expressway Expansion and the South Road Superway Project.

Featuring a large range of equipment, including access equipment, forklifts, telescopic handlers, generators and lighting towers, Access Hire South Australia have the ability to service a broad range of construction projects.

For more information contact Access Hire South Australia, phone 08 8244 3333, website www.accesshiresa.com.au

