

ABIGROUP SERVES JUSTICE

MAIN CONSTRUCTION COMPANY : Abigroup
CLIENT : Project Services, Queensland Government
PROJECT END VALUE : \$93 Million
COMPLETION : October 2009
ARCHITECTS : AB+M Cox Rayner
STRUCTURAL ENGINEER : Robert Bird Group
QUANTITY SURVEYOR : Steele Wrobel

IPSWICH COURTHOUSE

Justice has a striking new look at Ipswich, with the opening of a new five level Magistrates Court and 24 hour Police Station and Watch House built by Abigroup. The \$93 million D&C project is an outstanding architectural resolution of a set of complex and quite specific needs, housing 12 District and Magistrates Courts and built for a 4.5 Star Green Star As Built rating.

Many practical factors had to be considered in the design process, such as how to interface the Police Station and Watch House with the Court, in order to facilitate proceedings and maximise security, while at the same time giving the station independence to suit its 24 hour a day operations.

Technology is one of the new building's main features. Closed Circuit Television and Video Conferencing facilities have been included. The video-conferencing technology will bring a much improved experience for vulnerable witnesses, who will no longer have to be present in the courtroom to give evidence. Witnesses in remote locations will also be able to use the technology to participate in trials.

Ipswich's new Courthouse is a far cry from the forbidding bastions of the past. Extensive use of high performance glazing in the facade, in addition to light wells and skylights, creates a naturally bright interior. This is echoed and amplified by the extensive use of timber panelling throughout. This high quality wall panelling was manufactured offsite to maintain program and quality.

There are artistic engravings with a Murri theme near the Court Entrance, and another practicality which had to be catered for in the structural design and fit out was the inclusion of a specifically Murri Court, designed to address Indigenous needs in this context.



The new Courthouse has been constructed on the site of a former TAFE College, and in another aesthetic touch, relics such as ceramic bottles and laboratory dishes feature in a backlit display case within the new administrative area.

Abigroup commenced on site late July 2007, and had the structure complete by the following November, the roof completed in February 2009 and practical completion accomplished by mid November 2009. Up to 20 Abigroup staff were on site throughout, working alongside more than 40 sub contractors throughout the works program. Peak daily labour was an estimated 230 workers on site.

"The big challenge with this project was the program. Very complex floor levels made precise programming difficult," said Abigroup Site Manager Simon Shannon.



"The facade required the integration of off form concrete, precast concrete, steel edge beams, glass walls, zinc panelling, limestone cladding and timber blade fins. The services were also complex, involving the integration of high level security systems for Police Station, Watch House and Court House. Also, being an inner city site, there were Site Restrictions on craneage and deliveries."

Abigroup have constructed some of Australia's biggest budget civil infrastructure and construction projects, including the M2, M7, and more Sydney Olympic venues than any other contractor. They combine extensive engineering expertise and substantial construction knowledge, offering clients a full service from the earliest stages of financing, approvals, planning and design through to construction, integrated fit-out and commissioning. Their expertise includes a results-driven understanding of ecologically sustainable development, whole-of-life analysis, project management and quality assurance. Having a highly collaborative approach is an asset for projects which serve critical community needs and embody high degrees of complexity, such as the new Ipswich Courthouse. Another current Abigroup project of vast complexity is the Princess Alexandra Hospital Emergency Department Expansion.

This \$105 million project involves constructing an Emergency and trauma management department including overnight observation wards, Mental health emergency care ward, CAT Scanner and PET Scanner; a helideck complete with integrated fire fighting system retrofitted to the existing hospital rooftop area and hotlift from the new emergency department to the rooftop helideck; and new Oncology facilities, including three new 18MV bunkers for nuclear medicine.

Abigroup have extensive health sector experience. They designed, constructed, refurbished and commissioned the new Mater Hospital redevelopment at Newcastle, and as a member of the Novacare Consortium will contribute their skills to maintaining the facilities for 25 years under a Public Private Partnership agreement with NSW Health. Their abilities will truly be put to the challenge in the coming months with the recent awarding of a \$1.2 billion contract from the Queensland Government to construct the new Queensland Children's Hospital.

ABIGROUP LIMITED & ABIGROUP CONTRACTORS

Head Office
 924 Pacific Highway
 Gordon NSW 2072
 t. 02 9499 0999
 f. 02 9499 8822

Queensland Office
 Abigroup Contractors (Northern Region)
 Abigroup House
 Stanley Street Plaza
 South Bank QLD 4101
 t. 07 3020 8200
 f. 07 3020 8350



PUTTING A FINE FACE ON JUSTICE

More than half a century of experience, and terrific troubleshooting skills, went into the façade McLay Industries gave the new Ipswich Courthouse.

McLay Industries supplied, installed, and glazed the exterior of the façade to the Courthouse, Watch House and Police Station, along with automatic, sliding and hinged doors. Their scope also included the design, supply and installation of steel columns supporting a point-fixed glass wall.

As a progressive manufacturer, there was extensive use of Green materials, such as all low E glass throughout. Their aluminium frame series was utilised extensively – 419 150mm Flushline

100 Flushline, 50 Series Windows, 275 Series Doors, 889 Sliding Door System, Dorma Stacking and automatic Door Systems. All the company's aluminium scrap from manufacturing is recycled. Finishes supplied for the Courthouse were Evershield "Dark Bronze Burnt Sienna" 20UM Anodised and for the Police Station and Watchhouse, Evershield "Matt Natural Platinum" 20UM Anodised.

"Design was developed over months preceding the tender stage, so once we were awarded the project we were already at the stage where economies and efficiencies had been designed into the project," said Managing Director Robert McLay.

There were several challenges. There was up to 430kg in one sheet of glass 4.5metres wide in the Forecourt, which took an 80 ton crane to place. Sequencing was vital and often a challenge, with access being limited once the glass was in place. Access was largely from the exterior of the Forecourt with Scissor and Boom lifts.

Being custom work, no two pieces of glass were the same size – so on site surveyors were needed to measure the placement of the glass in the Forecourt. Everything was measured on site. Another design challenge was interfacing with the external curtain wall. The final layout of the facade glass required input from structural engineers because of the architect's requirements and the weight of some of the glass. To satisfy the acoustic performance requirements, double glazing was required in both the Children's and the Murri Courts.

"McLay Industries stands as a leader in the supply and installation of Façade Systems. To add to our list of successful projects underway and recently completed works, we have our history as a family business since 1952. McLay Industries are committed to delivering a high quality finished product, every time, regardless of the size or scope of the Project. We are committed to looking at ways to improve and become more effective as projects grow and the scope changes," said Robert.

McLay Industries are a fully integrated operation, with a large in-house team of estimators, a full drafting office and an engineer on staff. On site at their factories, both in Brisbane and in Perth, they have skilled tradesmen and full fabrication and powder coating facilities. This combined expertise has been utilized on projects throughout South East Queensland and in Western Australia.

MCLAY INDUSTRIES PTY LTD
246 Lytton Road
Colmslie QLD 4170
t. 08 3399 3333
f. 3399 5542
www.mclayindustries.com.au



BEATING THE RAIN

QB Waterproofing's work at the Ipswich Court House has certainly passed the weather test, since completion the region has had some of the wettest days on record. During construction itself, some serious drenchings made providing all waterproofing for the structure, including basements, below ground levels, balconies, roofing, internal wet areas and planter boxes, a real damp-defying endeavour.

"The heavy weather was a challenge which affected our schedules, but it reaches a point where it just has to be worked around. The stage where we were getting the structure out of the ground was the hardest," said QB Waterproofing Manager, Paul Harris.

"The end result is very good. Everyone worked together to bring the project to completion successfully."

As the works program involved concurrent staging, with multiple trades on site at once, QB Waterproofing's crew needed to co-ordinate closely with both the Head Contractors and other sub-contractors to perform their work. A variety of Tremco waterproofing products were utilised, from torch on membranes to a wide range of liquid membranes. All of the products were low VOC to comply with the project's Green Star requirements.

QB Waterproofing had six level 3 certified waterproofers on site for over a year. Despite safety issues including working at heights, in

confined (and often wet) spaces, and operating in trenches next to walls, there were no LTIs.

Safety consciousness, in depth product knowledge and decades of construction industry experience are core company strengths. All work meets the Certified Standard AS-3640/2004, and the company is BSA licensed. Since commencing operations four years ago, QB Waterproofing have undertaken other significant projects in the Greater Brisbane area, including ADCO's 10 storey CDOP commercial office development and the Water's Edge Apartments at Cleveland.

"We aren't the biggest waterproofing company in the industry, but what we offer is total waterproofing systems rather than just products. We can design the systems to suit the particular job, rather than just install a generic product, and we have excellent technical backup from our suppliers," said Paul.

QB WATERPROOFING PTY LTD
PO Box 9355
Wynnum Plaza QLD 4178
t. 07 3348 7442
f. 07 3348 2350
e. qbwaterproofing@bigpond.com