

CONSTRUCTING HOMES WITH HEART

Abigroup's Atherton Gardens Development in Fitzroy

MAIN CONSTRUCTION COMPANY : Abigroup
CLIENT : Department of Human Services
PROJECT END VALUE : \$35 Million
COMPLETION : May 2012
ARCHITECTS : McCabe Architects
SERVICES ENGINEERS : JBA Consulting Engineers
STRUCTURAL / CIVIL ENGINEER : Robert Bird Group



Sometimes a project isn't just about the innovative construction methods, original use of materials and effective management of timeframes and budgets. Abigroup's efforts at Atherton Gardens, a public housing estate in the inner suburb of Fitzroy included all of those things, but it has also been undertaken with a degree of heart and community commitment which puts it in a league of its own.

Abigroup is constructing the residential project for Victoria's Department of Human Services. The built elements incorporate 152 one and two bedroom apartments, plus retail and community facilities, on a site formerly occupied by a carpark, ground services and trees. The initial tasks included demolition of the carpark and relocation of services, with all waste materials managed in an environmentally responsible manner, by being allocated for offsite redeployment and recycling. The soil required remediation, with Abigroup using an EPA approved method of creating a borrow pit for waste material, which was then capped with a layer of impermeable HDPE plastic, then backfilled.

Construction commenced with bored piers for the superstructure, followed by steel framing and concrete. The distinctive facade of the project was created by the use of 15mm thick precast brick snap panels, which are both aesthetic and practical, requiring no further surface finishes. This is the first time the ceramic textured panels have been used to such an extent, including mitred returns and fills. The design duo of McCabe Architects and Bird de la Cour provided a combined effort in furnishing each new Atherton

Gardens apartment with generous balconies incorporating sliding doors opening out to the excellent views of the Dandenongs and across the city. The fitout is both fresh and spacious, with splashes of green in the kitchen and bathroom tiling, and timber veneer cabinetry in the kitchens.

One in five apartments are either fully Disability Discrimination Act compliant or can easily be converted into fully accessible units if future demographic needs demands adjustment. The fixed joinery is moveable in the kitchens, there are hobbles showers throughout all units, power points are set at the front of benches for easy access from wheelchairs, and there are supported vanities which allow a wheelchair to manoeuvre in underneath so the occupant can access the basin.

There are a number of Environmentally Sustainable Development aspects to the project, including a large rainwater storage tank for landscape irrigation, high performance glazing, access to extensive natural light in the apartment interiors, and sunshades and hoods to reduce glare and heat.

The insulation and façade treatment to the east, west and south, combined with operable windows throughout and sunshading, means that the apartments will remain comfortable throughout the year without the need for air conditioning. Heating is provided through radiators, which are connected to the fully reticulated high efficiency rooftop gas-fired hot water system. This keeps heating and cooling costs to an absolute minimum for tenants.

Abigroup had 11 management and supervisory staff as well as labourers on site throughout, working alongside up to 170 subcontractors, with a peak daily workforce of just under 200.

The dwellings are part of the new mixed tenure model for affordable housing. Under a lease to a local housing association, a percentage will be allocated to those on the public housing waiting list and to those on low incomes. Facilities on site will include a childcare centre, and a community centre. Given the number of support services in Fitzroy, tenants requiring support or community services will be well catered for. Among the existing links are a homework club, a soccer club and a relationship with the nearby Australian Catholic University, which Abigroup is working with to provide funding for lessons in singing and music to the Atherton Gardens community. "This project has been embraced by the community," said Abigroup Project Manager, Steve Cvek.

"With the support of The Department, we have done more than was initially targeted in terms of social benefit. We have used this as a springboard to create real industry experience and hands-on learning opportunities for participants in Abigroup's own graduate program, in a way that also benefits the local community. The graduates did a project at the local King William Street School, replacing stairs and adding line markings for the basketball courts. At Cubbies Reserve, which is a community childcare space, we undertook works to improve the facility. Our graduates managed these projects along real business lines, from

liaising with the clients through to getting quotes, procurement, supervision of subcontractors, and keeping the work running to program.

"We have also had a public tenant employment program as part of this project. As participants gain greater skills, we have been supporting them to attend courses to acquire industry tickets. We have been running another program through the Brotherhood of St Lawrence, which includes some TAFE training followed by an OH&S module so participants gain industry accreditation. "The program has been as complete as we can make it – and it has been quite a personal commitment for me.

"At St Mary's School we organised an art competition, hiring an artist and supplying all the students including Atherton Gardens tenants' children with squares of ply, which were then used on the hoardings along Brunswick Street and King William Street. We also got street artists to create a mural along the Brunswick Street frontage. And once a month we have been holding a community barbecue at Atherton Gardens on a Saturday, and we use it as an opportunity to educate our younger staff by encouraging them to host it and get to know the different cultural groups on the Estate.

"What we have learned is that it is a two way street – when you engage with the public, they engage with you."

For more information contact Abigroup, Lvl 6, 476 St Kilda Road Melbourne VIC 3004, phone 03 9816 5555, website www.abigroup.com.au



The colourful exterior of the Atherton Gardens project, VIC



QUALITY OUTDOOR SPACES FOR URBAN KIDS

In an inner-city high-density residential setting, challenging, well-designed spaces for playing outside are vital for children's quality of life. Multi award-winning playground designers, Jeavons Landscape Architects, were commissioned to design and document all of the outdoor play spaces for the new Atherton Hub Children's Centre, which provides a kindergarten, child care, playgroups and other children's services to the community.

The outdoor areas they created are highly detailed, sensory and use natural materials, with a design which is accessible and inclusive. The guiding principle is play-based learning, which is critical to children's development, and specifically ensuring play outside forms a fundamental part of the daily program.

Jeavons Landscape Architects have 25 years experience in custom designed landscape architecture for children including primary and secondary schools, special schools, early childhood centres and playgrounds of all budgets, all over Australia, including large scale projects in parks and open spaces. They are currently working on a major new early childhood precinct for Melbourne Zoo, and won an AILA award in 2011 for landscape design on the Clifton Hill Railway duplication project.

For more information contact Jeavons Landscape Architects, website www.jeavons.net.au, phone 03 9387 7337, email info@jeavons.net.au



Tintern School Early Learning Centre, Ringwood completed 2011



Isabel Henderson Kindergarten Rae St Nth Fitzroy completed 2010

COMPLEXITY SHOWCASES WESTKON'S EXCELLENCE

Below Westkon Precast provided unique brick-snap precast panels for the façade of the Atherton Gardens project.



Turning innovative architectural designs into precast concrete achievements is what Westkon excel at. Their ability to deliver extremely complex structural solutions is showcased beautifully in the Atherton Gardens project, where they provided concrete elements for the façade and internal lift shafts.

They manufactured and installed three different patterns of unique brick-snap precast panels for the façade. These included a vertical stretch bond brickwork style, with angled strips at 45 degrees which cross through and over the brickwork, installed to the lift shaft; a basket weave panel for the main facade featuring charcoal and blonde bricks; with a variety of red brick and orange brick horizontal and vertical bands crossing panels.

In total 447 panels were produced, including some unbricked off-white panels, with over 200 bricks in 173 of the panels equating to 2,200m² of brickwork. Specialised mould liners designed by Robertson Façade Systems were used during the manufacturing to hold the 10-15mm thick bricks in place, while the concrete was then poured over the top.

Westkon also completed the panels, tiling works, and the off-form white precast panel facade at the rear of the project. The panels measured from 3mx5m to 3mx7m, and weighed up to 13 tonnes each.

In all, Westkon spent 18 months on the project from initial stages of precast planning through to completion of the construction works. Each panel was

absolutely unique, making for a massive coordination task ensuring every panel was placed exactly where the shop drawings and plans specified.

"It has been done before, but not in quite such a complex way," said Westkon's Atherton Gardens Project Manager, Steven Moore. "The basketweave pattern for example, was very complex. Challenges of this project included matching feature lines up seven stories, ensuring they lined up. All the brickwork had to line up across all the panels in order to achieve the pattern. We had to take a lot of time at the start to ensure the set out, which radiated out from the northwest corner of the building, suited the brickwork."

Westkon are leaders in the field of producing high quality, innovative precast solutions for projects across residential, commercial, health, education and civil construction from their Melton and Sunshine facilities. Their attention to detail and ability to provide the full spectrum of services from design through to construction has enabled them to produce outstanding results for other recent landmark projects including Rectangular Stadium, the Royal Children's Hospital Redevelopment and Convesso Apartments.

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