

WHERE LIFE BLOOMS IN THE HEART OF NORWEST

DEVELOPER : Sekisui House
MAIN CONSTRUCTION COMPANY : Growthbuilt
ARCHITECT : Rothelowman
STRUCTURAL ENGINEER : BG&E
CONSTRUCTION VALUE : \$30 million

Designed by renowned architects Rothelowman, Aire the Orchards offers 57 beautifully appointed designer apartments including one, two, three and four-bedroom options set in lushly landscaped surrounds featuring private and communal open spaces, residential lounge and rooftop terrace areas with BBQ facilities, cabanas and access to an infinity pool.

Aire is Stage 2 of Sekisui House Australia's masterplanned community The Orchards which is spread across seven stages with a range of buildings of differing heights providing purchasers with 1,300 high-quality and generously proportioned designer apartments.

Leading Tier 2 Design & Construction company Growthbuilt were appointed as the main contractor for Aire starting with the Early Contractor Involvement (ECI) phase which allowed them to engage with the client, architect, engineers and wider team to help bring the client's vision to life.

During the ECI phase Growthbuilt also appointed specialist design consultants and investigated constructability, methodology and value engineering proposals to foster greater collaboration with the client and improve project outcomes.

One unique aspect of the project was the façade design which featured articulated and curved precast panels that had to be fabricated from custom moulds. Growthbuilt and their team completed structural and façade engineering, coordination and shop drawings for the façade.

They found a solution to make more efficient and cost effective precast panels that could achieve a simpler and sleeker look while enabling them to achieve the client's vision within the project budget and timeframe.

The precast façade panels were also designed to be load bearing which enabled Growthbuilt to minimise the number of internal columns required, increasing the amount of saleable area in the project and delivering a marketability benefit to Sekisui House Australia.

Some cutting-edge technologies were used on the project including a proprietary heavy-duty spring system to isolate the

rooftop infinity pool in order to reduce noise and vibration for the penthouse located directly underneath it. Growthbuilt also worked with the design team to re-design the rooftop plant and terrace area to ensure it could be safely maintained during the building's operational life.

Aire has been designed as a standalone landmark building but also as an integral part of The Orchards. Part of Growthbuilt's scope was to connect Aire's 3-levels of underground car parking with the neighbouring Imperial, The Orchards to create a shared amenity for both developments.

During the design and construction of the project Growthbuilt maintained an open, professional and collaborative relationship with the whole project team, based on trust and a shared understanding of the client's vision. "Understanding Sekisui House's vision has been key to our relationship," said Joint CEO and Director, Peter Sukkar.

"As a builder, we focus on producing high-quality built forms that last for generations. Growthbuilt goes the extra mile, exceeding expectations onsite, offsite and throughout the whole building journey."

Growthbuilt are focused on producing high-quality work on new-build, fitout,

adaptive reuse and refurbishment projects within their sector expertise which includes residential, aged care, commercial, hospitality, education and mixed-use projects. They have an 90% repeat client base and a passionate and committed team with a depth of experience.

Growthbuilt were able to draw on their proven track record of delivering similar high-end residential projects to ensure a successful outcome on Aire. Growthbuilt's loyal subcontractor, consultant and supplier base was also integral to the project's success.

"At Growthbuilt we have a strong win/win business culture which is adopted by all our employees and our partners," said Peter. "It helps ensure we always maintain great team cohesion on our projects as everyone is focused on producing high-end, high-quality products that deliver the best value for our clients."

Sekisui House Australia recognises this, and have appointed Growthbuilt, for the second time, to deliver their 330 luxury apartment development Lumia, Stage 3 of The Orchards Masterplan.

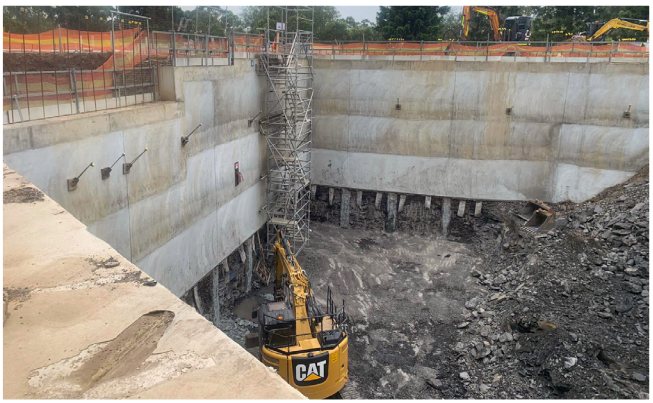
For more information contact Growthbuilt, Level 9, 100 William Street, Sydney NSW 2000, website www.growthbuilt.com.au



Below Chalouhi completed a range of civil tasks for the development including deep excavation, demolition and shoring.



Below Xavier Knight completed the façade engineering services, to assess weatherproofing integrity, practicality and constructability.



Sydney-based company Chalouhi is a trusted and reliable civil engineering provider, which has been helping shape the landscape of Sydney for more than a decade. The company's reputation is largely thanks to its experienced team of estimators, engineers and project managers who are providing valuable engineering advice during every stage of a project.

Appointed as the civil contractor at Aire - The Orchards development by client Growthbuilt, Chalouhi's ability to multi-task across all works was heavily showcased. Every step was critical in successfully delivering what is being described as the 'gold standard' in resort-style apartment living.

Chalouhi commenced on site with the design and construct of shoring works. Chalouhi then began deep excavation, demolition and shoring works concurrently to enable the extension of the existing neighbouring basement carpark. Simultaneously Chalouhi completed road works, stormwater installation and retaining wall construction.

Chalouhi's design team, which works to provide effective solutions across a range of unique projects all over Sydney, designed an innovative shoring system at Aire - The Orchards. The design of both the shoring

walls and the foundation piles has taken future works and services into consideration while suiting all stakeholders and maintaining Chalouhi's high quality standards.

Working in a live environment during construction, the existing apartments and neighbouring retirement village presented its own challenges, Chalouhi's ability to navigate these challenges efficiently and with minimal disruption to residents was imperative. This was ensured through the use of dust suppression, progressive hoarding construction as well as noise and vibration monitoring.

The Orchards, is a landmark project for the Norwest region and Chalouhi is proud have it join their extensive portfolio of works as the preferred civil contractor at Stage 1 (Imperial), Stage 2 (Aire) and Stage 3 (Lumia).

For more information contact Chalouhi, 22/22 Centenary Avenue, Moorebank NSW 2170, phone 02 9790 3799, email admin@chalouhi.com.au, website www.chalouhi.com.au

Specialising in structural, façade and civil engineering, Xavier Knight (XK) was established with an ambition to raise the standard of engineering services available in our built environment. Employing a team of 50 staff, Xavier Knight boasts a Senior Technical Team committed to delivering the most practical, sustainable and cost-effective engineering solutions.

Providing façade engineering services, Aire The Orchards development is a great testimony of XK's expertise and successful implementation of the recent legislative changes of the DBPA 2020.

In close collaboration with architects Rothelowman, XK reviewed the architectural design at the design development stage and assessed the façade for weatherproofing integrity, practicality and constructability whilst delivering on the architectural design intent. XK also developed the weatherproofing performance solution and façade specification and reviewed the Design and Construct façade packages, advising on improvements to the performance of the façade system whilst lowering the cost of construction.

"It is important that a façade of a project is confident and exudes a pleasing aesthetic to the community. It is the first thing we see,

and is what leaves a lasting impression," commented Feris Chehade, XK Managing Director. "This is why we are so passionate about achieving the architectural intent in our projects. It's not just artistry, but the community and cultural impact too."

The building's sculptural form was thoughtfully designed and shaped to respond to its context, with smooth edges and rebated sections. "We have a vast knowledge of materials and the suitability of their application. For the Aire project, we used curved, load-bearing precast panels and CSR Hebel panels to form its exterior; and to address accessibility and weatherproofing, the balconies were designed with pavers on jacks."

"By facilitating collaborative conversations and keeping project partners a part of our design process, we are able to achieve the desired outcomes efficiently and effectively. Building that relationship and open line of communication with project partners is an essential element in all our projects," Feris added. "We respected the creative vision of the building envelope and delivered a cost-effective and buildable solution."

For more information contact Xavier Knight, phone 02 8810 5800, email info@xavierknight.com.au, website www.xavierknight.com.au

Below Tight Seal Water Proofing completed a extensive range of waterproofing tasks across the Aire the Orchards project.



Below Aus Windows manufactured and installed aluminium windows and doors to the façades, lobby and balconies.

When Remon Gorkis and Shane Cardona established Tight Seal Waterproofing in 2013, their aim was to successfully show people what quality was all about. Tight Seal Waterproofing undertakes all types of waterproofing – including liquids, sheets and polyurea waterproofing – basically any type of waterproofing system.

“We do rooftops, balconies, lift pits, basements, bathrooms, planter boxes, retaining walls – any waterproofing aspect on a building site,” Remon explained.

Together, Remon and Shane have more than 40 years’ experience when it comes to waterproofing solutions. “Between the both of us [this experience] is what we’ve given to the industry, and what we show on all our jobs is quality,” Remon said. “Obviously, myself and Shane with the expertise that we have and the work that we do, it says a lot for itself.

“Basically, we’ve built our reputation on quality,” he added. In further testament to this reputation, since establishing the company in 2013 Tight Seal Waterproofing has grown over the years and now has 25 employees.

In working on Aire The Orchards, Tight Seal Waterproofing carried out waterproofing works to the development’s balconies, roofs, planter boxes and podiums.

As well as preparation, the works required walls in the building’s substrates, ensuring fill thicknesses and applying the membrane, and ensuring the thicknesses were all correct.

“All products were supplied by Tremco and all the balconies were an agcrete product. The external roof was Tremco,” Remon said.

He added that a highlight of the project was collaborating with Probuild to provide the consumer with a quality result.

Tight Seal Waterproofing is currently working on a number of projects by prominent developers, including Total Construction, Richard Crookes Constructions, Hansen Yuncken and Taylor.

For more information contact Tight Seal Waterproofing, phone 0415 652 008, email remon@tightsealwaterproofing.com.au.

Specialising in the design and manufacture of commercial grade aluminium windows and doors, Aus Windows boasts a highly-skilled team with 22 years experience in the industry.

Added to this is a commitment to producing the highest standard of product, complete with innovative design and scope. Aus Windows, which commenced in 2010, also prides itself on efficiency of service.

“All of Aus Windows product ranges comprise of premium, high quality systems that have been specifically designed for the residential and architectural application,” Project Manager, Peter Giannakakos added.

It was this experience, commitment and high-quality systems that saw Aus Windows contracted to complete work on Aire The Orchards residential development.

The company manufactured and installed aluminium windows and doors to the façades, lobby and balconies. All products used by the company on the project were from aluminium systems specialists Alspec. Peter said the company did encounter a challenge on Aire The Orchards development around its façades.

“Our biggest challenge on the project were the two façades that incorporated large curved aluminium frames and glass as per the architect’s specification,” he said.

Peter adds however, that all design challenges were carefully considered during the initial design stages of the project, ensuring the project ran successfully.

“Together with the builder and architect, this process was easy which made the project run smoothly on site,” he said. “Predetermining the curved façades was not easy however given the above, all sizes came out perfect.

“The project ran absolutely flawlessly – together with the site team and installers there was no real issues.”

Aus Windows is currently undertaking a range of similar projects throughout Sydney.

For more information contact Aus Windows Pty Ltd, 37 Raymond Avenue, Matraville, New South Wales, 2036, phone 02 8068 6955