



RACING TOWARDS THE FUTURE

DEVELOPER : St Margaret's Anglican Girls School
 MAIN CONSTRUCTION COMPANY : Tomkins Commercial & Industrial Builders
 ARCHITECT : Blight Rayner
 CONSTRUCTION VALUE : \$25 million

The St Margaret's School Sports Precinct includes the construction of a water polo sized heated swimming pool with two 50m lanes, tennis courts with lights, a gym with engineered sprung maple timber floor, a strength and conditioning gym, an indoor climbing wall, a dedicated ergometer room, modern health and physical education classrooms, acoustic operable walls, and a custom 22m panel lift door which connects the indoor gym to the outdoor tennis courts creating an enviable world class precinct.

St Margaret's Anglican Girls School, situated in Ascot in Brisbane's northern suburbs, has unveiled a multi-million dollar state-of-the-art sports precinct. An independent day and boarding school, the school is renowned for providing a holistic education for its students, with sport, health and physical education are an integral part of the school's programme.

Designed by architects Blight Rayner and built by award-winning and privately owned Queensland construction company Tomkins Commercial, the new world class precinct includes a water polo sized heated swimming pool with two 50m lanes, tennis courts with lights, gymnasium with an engineered sprung maple timber floor, a strength and conditioning gym, an indoor climbing wall featuring seven belay stations and 76m² of climbing, a dedicated ergometer room to support rowing, and modern health and physical education classrooms.

St Margaret's Principal, Ros Curtis said the precinct is an educational environment designed to inspire, develop and build the health and wellbeing of students. "These are important priorities for the school

which boasts a 125-year tradition of providing an all-round education, nurturing and developing the physical, mental, spiritual and academic needs of students."

Project Manager for Tomkins, Jacob Proberts, said that the project was both stimulating and challenging because of a number of highly detailed architectural features and new building technology involved in the construction. "The swimming pool was suspended off the ground with a basement below. The heated pool holds 1.3 million litres of water, with nine 25m lanes for women's water polo in addition to two 50m lanes for swimming training and is FINA compliant."

The pool shell required several concrete pours with two suspended slab pours and an additional six pours for the walls. The walls include gutter details that are formed with folded steel, reducing the risk of future repair costs and increasing the cleanliness of the pool.

"An outstanding feature of the pool construction is the retractable roof installed by MakMax. It is the largest in the southern hemisphere

and uses tensioned cables for support, which required pre-cambering of steel elements to form the final shape when tensioned," Jacob added.

The gym has 768 newly designed retractable seats by Interseat. The engineered sprung maple timber floor required accurate installation to achieve the exacting levels necessary to produce a surface that both absorbs shock and allows for a small amount of spring.

Two multi-purpose courts were constructed outside the gym and provide space for HPE classes and training. The courts are separated from the gym by a 22m counterweight door system which, when raised, allows for unfettered access between the indoor and outdoor spaces.

Tomkins managed the design and construction of the project in three stages with the first the construction of the new gym and the refurbishment of a nearby school building to house staff rooms and offices. The second stage included the construction of the pool including change rooms, before delivering the completion of the retractable roof and cladding around the pool. Translucent cladding ensures the internal spaces are flooded by natural light.

A high degree of cooperation with the school during the construction programme enabled work to be completed smoothly. "From a safety

and logistics perspective, we had to be conscious of traffic movement around school drop off zones as well as the needs of the local community," said Jacob.

Tomkins has extensive experience in the education sector, with many university and college projects in their portfolio. The company is currently working on a multi-purpose sporting facility for Iona College, Lindum as well as high end residential developments at New Farm and Woolloongabba.

Principal, Ros Curtis said that the school community was very excited about the precinct and its high standard of design and construction. "It will equip our girls with life skills that will support them beyond the school gates to be happy, positive, optimistic and connected individuals."

For more information contact St Margaret's Anglican Girls School, 11 Petrie Street, Ascot QLD 4007, phone 07 3862 0777, fax 07 3862 0701, email WJohnston@stmargarets.qld.edu.au, website www.stmargarets.qld.edu.au

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Below Network Locksmiths and Security supplied and installed the SALTO Virtual Network Access Control System to the project.

Below MakMax Australia were responsible for the custom designed 40mx30m variable shade system over the pool.



Network Locksmiths and Security team of certified professional technicians can design, install and commission electronic security solutions tailored to the specific requirements of the education sector, as well as commercial and industrial clients.

Owners, Guy Parker and Belinda Parker each have over 30 years experience in the security industry and provide hands on leadership on all projects. Belinda is qualified in project management and is the only female technician in Queensland certified by SALTO Systems. Guy is a Master Locksmith, skilled in all aspects of locksmithing, safes and electronic security.

Network Locksmiths and Security was contracted to provide the SALTO Virtual Network (SVN) Access Control system to the St Margaret's School Sports Precinct. The company supplied and installed the SALTO electronic locks to a number of doors in the precinct and installed a SALTO online reader to control access and security in the lift. The project team worked with the Schools' IT and Facilities Departments to commission the system, ready for the school to use.

The SALTO SVN and RFnet capability for online and offline doors, as well as lifts, gives the school full audit trails, the ability to grant

access to specific rooms or areas for selected time periods, and to adjust locking schedules quickly and easily. Access related information is kept encrypted on the contactless Mifare/Desfire smart cards, doors throughout the campus are able to update and receive information from the cards; delivering all the benefits of traditional hard wired access control without the price tag.

The company employed four of their eight strong team during the three months on the project. "We worked collaboratively with multiple trades and the school on the project. This ensured timelines were met and any variations were actioned quickly," Belinda said.

Network Locksmiths and Security has installed the SALTO SVN Access Control System to multiple building projects including St Rita's College, Hillbrook Anglican School and All Hallows School. They offer complete end to end solutions for electronic security and locksmith services to all areas of South East Queensland.

For more information contact Network Locksmiths and Security, 7/787 Kingsford Smith Drive, Eagle Farm QLD 4009, phone 07 3493 5990, email belinda@networklock.com.au, website www.networklocksmiths.com.au

Brisbane based MakMax Australia specialise in creating unique and iconic urban landscapes using lightweight fabric structures. MakMax Australia has recently designed, engineered, fabricated and installed an innovative variable shade system for the new swimming pool at St Margaret's Anglican Girls School Sports Precinct.

MakMax Australia custom designed the structure to cover the 1,200m² pool area using a structural grid of cables spaced at approximately 2.5m apart, which in turn support four opposing pairs of 150m² fully motorised fabric sections.

Concept development began in June 2018 and the tender was awarded in February 2019. A full scale prototype model of a fabric panel was installed at MakMax's fabrication facility in July 2019 and extensive testing was undertaken to verify the design. The push-button controlled motorised panels close from the outside to the centre as a whole or in individual sections, allowing for different parts of the pool area to be covered, providing sun protection for students using the pool at different times of the day.

The roof support system is designed for minimal maintenance by combining corrosion resistant aluminium battens with a robust

stainless steel cable supported operating system. Soltis FT381 from Serge Ferrari was chosen for the panels, a high translucency mesh material that allows natural light to enter, while protecting swimmers and spectators from harmful UV rays.

The MakMax engineering team always relish a design challenge. "Being designer builders, we had the ability to design, test, check and refine our ideas to ensure what came to site would work as expected," said Director of Engineering, Martin Eddleston. "Complexities of high cable loads, precambering of steelwork and specific erection sequences were all coordinated with the head contractor and our partner subcontractors. Our extensive education experience means the design always progressed to best meet the schools needs and operational requirements."

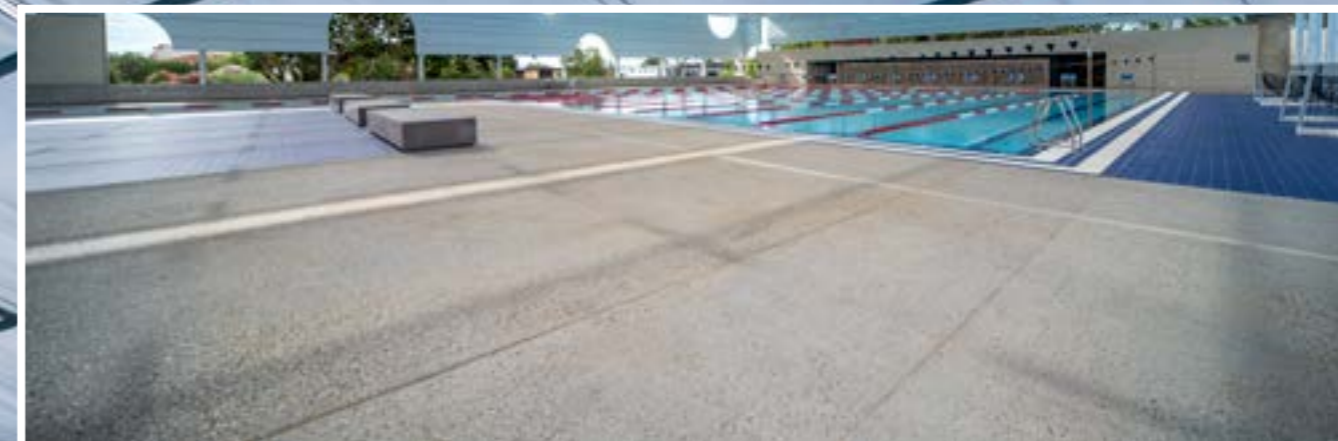
The project led to the development of the MakMax Velarium variable shade system, an adaptable system that would suit any application requiring large span, column free variable shade.

For more information contact MakMax Australia, 133 Lavarack Avenue, Eagle Farm QLD 4009, phone 07 3633 5900, email info@makmax.com.au, website www.makmax.com.au



St Margaret's School Sports Precinct, Queensland

Below Eastman Group completed all the tiling works for the bathrooms, pool surrounds, platforms and general tiling.



Eastman Group is a dynamic, mid-size construction company with proven expertise in commercial and residential projects. Injecting energy into all their projects from the design phase through to handover, Eastman Group works in close liaison with their clients to ensure high quality work is delivered which meets all project parameters.

Eastman Group has recently fulfilled a major assignment at St Margaret's Anglican Girls School in Ascot, Brisbane. The School commissioned a Sports Precinct which includes a 25m heated water polo pool with two 50m lap lanes along one edge, a strength and conditioning gym, physical education centre, a basketball and gymnastics hall and two tennis courts.

The scope of Eastman's work encompassed the tiling work in all the bathrooms, the swimming pool surrounds, the platforms and other general tiling. "We utilised an average of five of our team each day, working in cooperation with builder Tomkins and the School to minimise disruption to the School programme and activities," said General Manager, Molly Wang.

The work proceeded smoothly with the main challenge being the restrictions onsite. "The end result is an impressive recreational and

sports complex for the School," Molly said. "We are proud to have made a quality contribution to the development."

Current projects for the Eastman Group include several luxury residential houses and shop fitouts at both Brookside Shopping Centre and Pinelands Shopping Centre.

"Commercial fitouts are a major component of Eastman's work," Molly added. "Our residential work focuses on custom designed homes, with our senior designers providing clients with creative guidance on how best to translate their dreams into reality. We also build granny flats and do alterations and extensions."

Eastman's holds a builder's open licence and is equipped to undertake Gyprock installation and all forms of tiling. The company also offers an experienced building certifier for building inspections, approvals and certification.

For more information contact Eastman Group, 256 Bradman Street, Acacia Ridge QLD 4110, phone 07 3158 8937, email admin@eastmanqld.com.au, website www.eastmanconstructions.com.au