



SHINING A LIGHT ON LEARNING

DEVELOPER : University of Sunshine Coast
 MAIN CONSTRUCTION COMPANY : Hansen Yuncken
 ARCHITECT : Hassell
 CONSTRUCTION VALUE : \$102 million

USC Moreton Bay's Foundation Building comprises 16,000m² of floor space and includes a stunning 600-capacity internal atrium, large theatre-type auditorium for lectures and community events, multi-purpose rooms, laboratories, student centre, library, food and beverage spaces, and multi-deck carpark designed to cater for rapid growth of the student population while providing relaxed study areas as well as a venue for community events.

USC Moreton Bay's foundation building is the first project of its kind to have received a Federal Government loan to cover construction costs. It represents the culmination of years of planning by the university, together with Moreton Bay Regional Council, to provide a full-service university campus for an area the size of Brisbane. With over 400,000 residents, Moreton Bay has a large student demographic lacking adequate education infrastructure, until now.

Hansen Yuncken constructed the building with Hassell Studio as the university-novated architect. The expansive building will cater for the first three years of student growth at the USC Moreton Bay campus before further buildings are required.

As USC is offering a large number of different courses and degrees, it required a diversified approach to the building design.

The building includes student collaboration and learning rooms, library facilities, retail and student breakout areas and a 460-seat auditorium that can be compartmentalised with an acoustic sliding partition. The building was designed to be modifiable and extendable in the future. Key plant areas and equipment were sized to accommodate future university expansion.

The central focus of the building is known as the Rise; a grand, tiered seating area which ascends through all three floor levels, featuring a large overhead LED screen, and serves as a communal gathering place for students. "The building features state-of-the-art IT and AV that was designed inhouse by the university with their own consultant who was novated across to Hansen Yuncken," said Justin McGrath, Senior Project Manager. "We dovetailed them into our construction programme and integrated them with the rest of the team."

The equipment in the building was procured directly by the university and pre-wired and tested at their Sippy Downs campus to make site installation and commissioning less of a programme constraint.

The tight timescale was one of the most challenging aspects of the project. "It was a lot to come together within a 15 month construction period," said Justin. "The building had to be open for the start of the first semester of 2020 with no extension of time allowances in the contract."

Hansen Yuncken carefully selected their subcontract team to ensure on time completion. "We looked at price but also capability, particularly in project critical areas. We were clear and transparent during the tender negotiation phase regarding what was required," explained Justin. "It was important to us to have that honesty upfront to ensure that all trades could collaborate well together on the project."

This collaborative effort was a key part of the project's success. "I had a lot of personal discussions with trades who said it's one of the best jobs they have worked on and it's very satisfying to hear that," said Justin. "A lot of credit goes to the subcontractors for working with us to get the building done on time."



Over their 100 years of operation, Hansen Yuncken have created landmark projects across many sectors and the Foundation Building is a new milestone in their extensive education portfolio. "Diversified projects like this are difficult to construct but Hansen Yuncken are not afraid of delivering more complex and technical jobs," Justin said. "It helps them stand out from competitors which has held them in good stead throughout their history."

Hansen Yuncken pride themselves on their history of innovation and performance. Their mission is to expand and diversify their sector by bringing wisdom and problem solving to every project in a spirit of open and fair collaboration. "For us it comes down to personal relationships, communication and taking the client on the journey," said Justin. "It leads to a more successful and satisfying outcome for all involved."

For more information Hansen Yuncken, Level 1, 639 Wickham Street, Fortitude Valley QLD 4006, phone 07 3872 4000, email brisbane@hansenyuncken.com.au, website www.hansenyuncken.com.au

Below Fitout Glass and Aluminium provided the internal aluminium framing and glazing throughout the Foundation Building.



Fitout Glass and Aluminium are an installer of commercial glazing systems and glass to the commercial construction industry. Their services include installation of glazed internal office partitions, fabrication of aluminium framing and doors, frameless glass systems and commercial balustrading. They were appointed to provide internal aluminium framing and glazing to the Foundation Building at the new University of Sunshine Coast Moreton Bay campus.

Fitout Glass and Aluminium were involved in the project from early on. “We started working with the architects, Hassell, very early on,” said Micah Woods, Director. “It all started with a phone call from Hassell regarding the ceiling heights and oversized glazing on the project. We were asked to suggest some products that worked and we helped to come up with the solution.”

This early involvement set Fitout Glass and Aluminium up for a successful project. “Obviously the Foundation Building is a large scale job and required lots of coordination with other trades to keep up with the programme,” said Micah. “In the end there wasn’t much trouble for us on the job and that was partly thanks to having been involved with the design from the start.”

Installation of the large glazing elements required careful consideration. “The lift shaft in particular featured very large glass panels that had to be craned in from the top floor,” said Micah. “The logistics involved in getting them onsite, lifting and craning them safely and getting them in place was challenging, but we found a way.”

The project also involved oversized internal automatic sliding doors that were procured and installed by Fitout Glass and Aluminium. “The doors were very large so we had to lay them down in the vehicle to get them up there for installation,” Micah said.

Another challenge on the project was the need for a 100mm aluminium section that met the project’s acoustic requirements.

“We worked with our aluminium supplier to reduce their existing 150mm section to 100mm while still meeting the acoustic requirements,” explained Micah. “We got it tested and it works. Now it’s on the market and has been quite a successful product.”

Throughout the project, Fitout Glass and Aluminium maintained a good working relationship with the other parties involved. “Hansen Yuncken were really good to work with and so were the other trades onsite,” said Micah. “Safety was very good on the job and in that regard Hansen Yuncken are second to none.”

Fitout Glass and Aluminium are based in Brisbane and primarily serve South East Queensland, although they have worked as far afield as Cairns and Coffs Harbour. The company’s large workforce of up to 100 employees gives them the capability to service many projects at one time without compromising on their integrity or the quality of their workmanship.

The values of Fitout Glass and Aluminium are reflected in all their projects, including their focus on innovation and environmental responsibility. They believe that clients and suppliers are critical to the safe delivery of the highest quality products for end users and that a partnering approach provides the best outcomes for all.

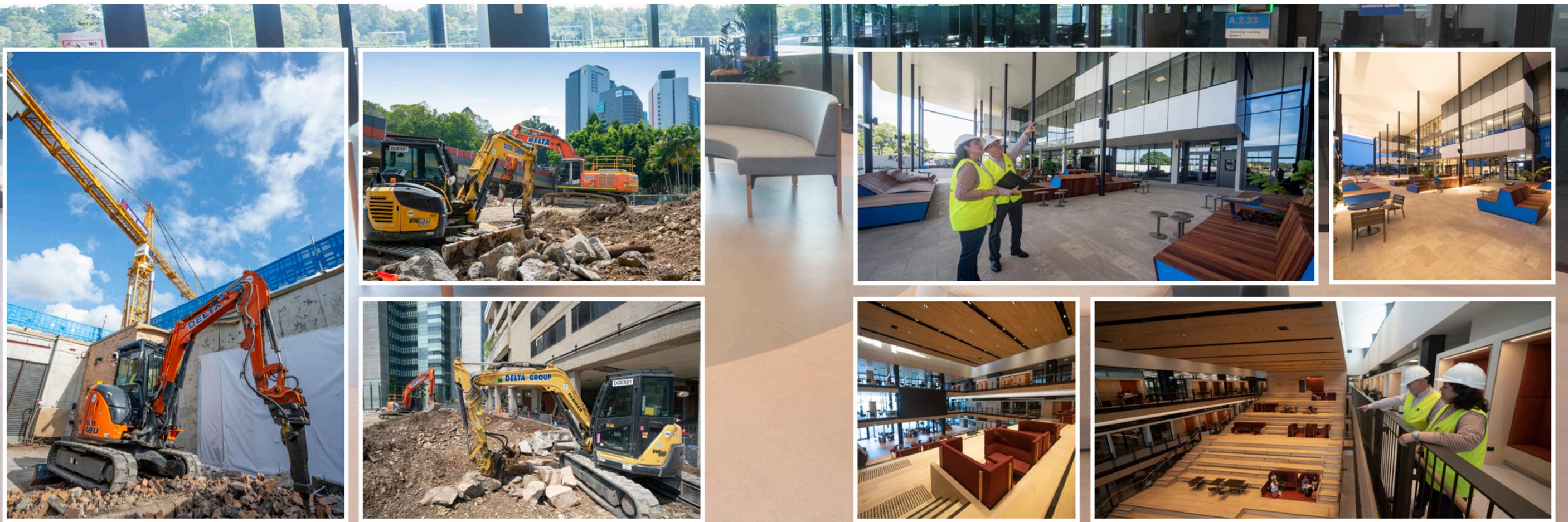
“We always try to work with builders and designers to address design issues and come up with workable solutions”, said Micah. “We love doing jobs right and we will offer a solution every time. We try not to say no to anybody – we are always willing to help from the largest project to the smallest.”

For more information contact Fitout Glass and Aluminium, 185 Lavarack Avenue, Eagle Farm QLD 4009, phone 07 3393 9033, email info@fitoutglass.com.au, website www.fitoutglass.com.au



Below Delta Group logged more than 7,000 site hours completing civil construction works on the project.

Below Wilde and Woollard Queensland provided cost planning, tender documentation, tender review and construction phase project auditing services.



Delta Group provided a range of civil construction services including more than 2,600m³ of bulk excavation, 50m of stormwater drainage works, installation of pavements, 1,000m³ of detailed excavation, pile trimming of 200 piles and blinding to all footings and pile caps.

Delta Group's works spanned from October 2018 to completion in January 2020. Over the course of the project Delta Group were required to accommodate a 70% increase in their initial scope.

"We had the resources to deal with the increased scope," said Peter Gaylard, Divisional Manager, Queensland. "At peak we had a 15 strong workforce including eight separate trades onsite and we logged more than 7,000 site hours on the project."

Not only were Delta Group's works completed on time and within budget, but they also achieved their target of recording no lost time injuries or medically treated injuries. "The work we do is a high risk part of a high risk industry so safety is a major focus for us," said Peter. "For Tier 1 builders we pride ourselves on being the best choice. It's critical to have a great partner for early works and our clients can have confidence in us."

Delta understands the project lifecycle better than any other contractor. "We can be trusted to deliver the works and that trust and confidence is key," said Peter.

"We pride ourselves on understanding the project lifecycle better than any other contractor," Peter added. "From high rise demolition in the CBD to civil construction projects like the USC Moreton Bay Foundation Building; or even commercial skip bin hire and landscaping – we have the capacity to deliver Tier 1 contracting services across the full spectrum of any construction project lifecycle."

Delta Group is one of the largest diversified contractors of their type. Their expertise has been proven across multiple disciplines in the world's most challenging environments. As a partner to leading clients worldwide they continue to shape the urban and industrial landscapes of tomorrow.

For more information contact Delta Group, Commercial Building, 33 Remora Road, Hamilton QLD 4007, phone 07 3268 5395, fax 07 3630 2269, email deltaqld@deltagroup.com.au, website www.deltagroup.com.au

Established in Brisbane in 1928, Wilde and Woollard Queensland is a proactive quantity surveying company committed to delivering high quality, project specific services for their clients. They are a member of the national Wilde and Woollard group of practices.

As a leading provider of cost management and related services to the higher education sector in Australia, Wilde and Woollard were engaged by the University of the Sunshine Coast to provide cost planning, tender documentation, tender review and construction phase project cost auditing services for the new Moreton Bay campus Foundation Building.

A key requirement for the project was to deliver value for money. "Right from the outset we worked with the architect to design a building that came within the client's budget," said John Waterworth, Director. "The project was budget driven but also had to be functional."

The project had a very tight programme which was dictated by the university client, which required the building to be operational for the first semester 2020. "From the start to the finish this was an intense project. To deliver such a high quality project in a short time and within

the budget is a credit to the good team effort of everyone involved," said John.

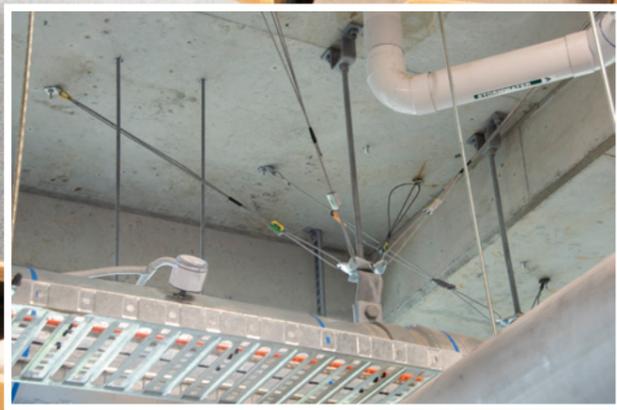
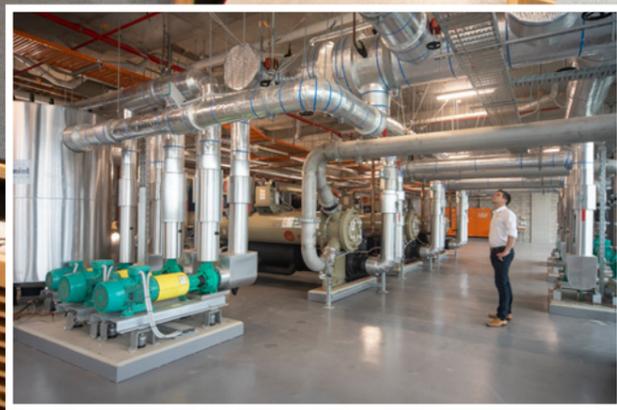
In addition to the USC Moreton Bay Foundation Building, Wilde and Woollard have delivered cost management services for a wide range of tertiary education projects across Australia and are proud of the position they have achieved through a commitment to this sector spanning 30 years.

Wilde and Woollard is one of the oldest continuously operating construction cost consultancies in Australia. They are proud of their contribution to the Australian built environment. Their heritage over the past 92 years shapes their key values of trust, integrity and client focused service delivery.

For more information contact Wilde and Woollard Queensland, Level 14, Brisbane Club Tower, 241 Adelaide Street, Brisbane QLD 4000, phone 07 3368 3050, email mail@wwbrisbane.com, website www.wildeandwoollard.com

Below KUSCH designed the prefabrication systems and seismic restraint solutions for building services.

Below Ontime Guardrail installed RHINO-STOP® Elite safety barriers to the USC campus multi-storey car park.



KUSCH Consulting Engineers is a structural consulting firm that specialises in the design of support systems for building services, often referred to as non-structural elements. KUSCH designs prefabrication systems and seismic restraint solutions for building services on major construction projects across Australia.

The National Construction Code and AS1170.4 requires that ceilings, partitions and building services be designed and installed to resist earthquake loads without harming occupants, and to remain fully operational after an earthquake within critical facilities.

KUSCH supported main contractor Hansen Yuncken, with a project wide seismic design service for the Foundation Building at the University of Sunshine Coast Moreton Bay campus. KUSCH provided guidance and direction to ceiling and partition designers and completed the seismic design for each services trade, ensuring that the bracing required to resist horizontal seismic loads could be constructed within often congested ceiling spaces.

“It’s somewhat unique for contractors to engage a seismic consultant as part of the design team,” said Martin Kusz, Director of Engineering. “Typically, the seismic design of non-structural elements is pushed

onto individual contractors during the construction phase of a project. However, this has the potential to create coordination and construction issues and can result in poor seismic performance overall as most elements interact with each other in some way.”

“Making the seismic performance of all non-structural elements a single consultant’s responsibility ensured consistent outcomes across all trades,” said Martin. “It facilitated practical assessments of interactions between elements and evaluation of inherent seismic resilience throughout the project. This improved the overall efficiency of the design by minimising the additional seismic bracing materials that were required.”

Since 2013, KUSCH has grown in scope and size every year. Their success has been built on the firm’s belief that cooperation and a can-do approach enable the most imaginative and complex projects to be brought to life.

For more information contact KUSCH Consulting Engineers, 36 Hollonds Street, Mount Beauty VIC 3699, phone 0437 040 025, email admin@kuschgroup.com.au, website www.kuschgroup.com.au

Ontime Guardrail are a specialist supplier and installer of barriers for roads, mine sites, carparks and warehouses. For close to 30 years they have made a significant contribution to road and site safety on projects in Queensland, Northern Territory, Western Australia and New South Wales.

At the University of Sunshine Coast Moreton Bay campus, Ontime Guardrail installed RHINO-STOP® Elite safety barriers to the multi-storey carpark adjacent to the new Foundation Building.

RHINO-STOP® Elite is a modular carpark safety barrier which incorporates superior crash performance along with a slender profile and galvanised or powder coated finishing options. “The RHINO-STOP® product is significantly stronger than other products that are anchored with a rigid post. It has been crash tested and proven to prevent the concrete structure from being damaged on impact,” said Damien Duncan, Director of Ontime Guardrail.

“We have been the sole Queensland installer of the RHINO-STOP® Elite product since it was first released in Australia six years ago,” said Damien. “Since then we’ve completed installations on many multi-storey carparks in the state.”

All guardrails supplied by Ontime Guardrail are manufactured to the highest standards. Their professional workforce is highly trained in road safety barriers and they are also BMA mine certified with extensive mine site experience. As well as new installations they can also carry out repair and maintenance works.

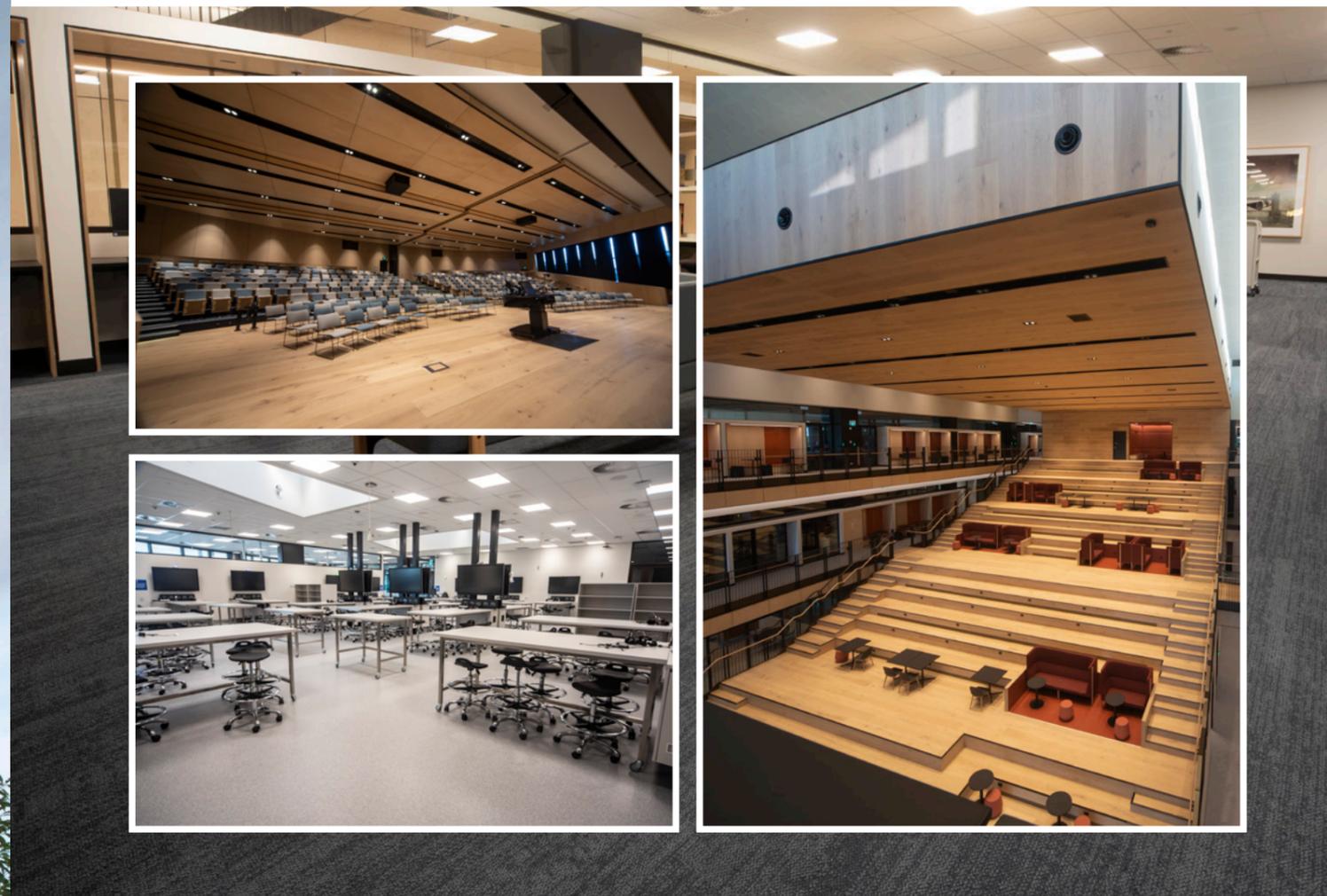
Ontime Guardrail maintains a fleet of plant and machinery and a large amount of available stock to be able to mobilise and deliver any project as quickly as possible. Their mission is to supply and install quality assured guardrail on time to every project.

“We always try to ensure we do the job quickly and to the highest standards while maintaining a safe working environment for our employees,” said Damien. “At Ontime Guardrail we pride ourselves on our people and training.”

For more information contact Ontime Guardrail, 51 Commerce Circuit, Yatala QLD 4207, phone 07 3287 3000, fax 07 3804 6700, email sales@ontimeguardrail.com.au, website www.ontimeguardrail.com.au



Below Embelton installed thousands of meters of engineered European oak flooring, Harlequin dance floor, vinyl and carpet for the project.



Embelton was founded in 1925 and operates in two main industries - flooring and acoustic isolation. The company is headquartered in Melbourne and employs over 100 permanent staff and hundreds of contractors nationally. Embelton is also one of Australia's largest wholesale flooring distributors.

Embelton combines a nationwide supply and installation capability with a reputation for quality products, service and expertise. They were contracted to supply and install floor coverings for the Foundation Building project at the USC Moreton Bay campus.

The work included the installation of 1,700m² of engineered European Oak Flooring in the Stoop area Auditorium and Harlequin dance floor along with 600m² of vinyl and 5,700m² of carpet tiles throughout the classrooms and common areas. 300 linear metres of solid timber stairs were also custom fabricated and installed in the project.

Also, areas of the project incorporated the supply and installation of a modular access floor system to provide access to underfloor services at all point across the floor. Embelton worked closely with main contractor Hansen Yuncken to achieve a successful outcome within a tight schedule.

Embelton collaborates closely with acoustic consultants, structural engineers, architects, builders and installers to design and supply best-in-class solutions on major projects across Australia, Asia, Europe and the Middle East.

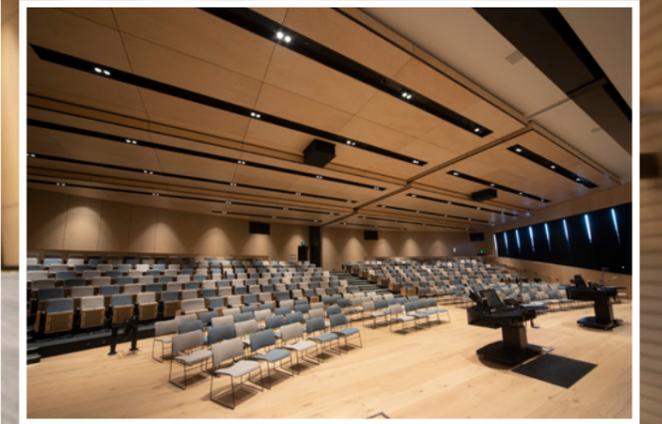
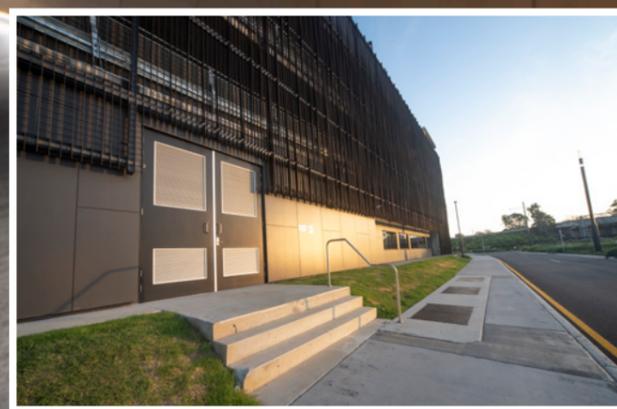
In 2020, Embelton is celebrating being in business for 95 years. As the company has grown they have gained a wealth of experience and knowledge in the Australian Construction industry. Their expansion has seen them come together with some of their competitors, most notably with the recently announced the acquisition of Omnifloor, one of Australia's largest and most successful flooring contractors.

"We are thrilled to bring together the Embelton and Omnifloor Commercial Contracting Businesses," said James Embelton, Managing Director. "As part of this transaction, joining the team are an outstanding team of highly experienced flooring contractors, positioning Embelton as the largest and most experienced Commercial Flooring Contractor in Australia."

For more information contact Embelton, 147-149 Bakers Road, Coburg VIC 3058, phone 03 9353 4811, email gpevic@embelton.com, website www.embelton.com

Below ERDS provided planning and design services to ensure the electricity supply to the campus.

Below Fagaleo Custom Seating designed 300 bespoke timber seats for the auditorium for the project.



ERDS are a leading electrical planning and design consultancy that has been operating in Queensland since 1997. They provided planning and design services to establish the electricity supply to the University of Sunshine Coast's new Moreton Bay campus.

"Initially we extended the existing backbone (HV) network on behalf of the network operator, Energex," said Matthew Keeffe, Senior Project Manager. "This involved crossing public and private land to find the most economical and effective route and connection point."

The connection works involved extensive negotiation. "There were many stakeholders involved including Moreton Bay Regional Council and the Department of Transport and Main Roads," explained Matthew.

Once the supply connection was established ERDS designed a new indoor chamber substation within the Foundation Building. "The substation includes an 11kV supply provision for the proposed building load plus future supply for the whole campus. The substation was designed to Energex requirements as they will own the asset. ERDS is an A-Rated Energex accredited design consultant that has a well established working relationship with Energex. In addition to the chamber substation, ERDS completed the subdivision design for

Stage 1 of the development and the lighting and traffic signal design for the main entry to the campus," said Matthew.

ERDS is at the forefront of electrical substation design works – the team has extensive industry experience, a large network of contacts and expertise in all aspects of electrical supply for developments in Queensland.

ERDS offer a large range of specialist design services including distribution networks, subdivisions, large customer connections, lighting and traffic signalling and intelligent transport systems. Their one-stop-shop service offering spans from assessments and feasibility studies through to Issue for Construction designs, authority approvals and tendering.

The attention to detail, teamwork and communication that ERDS applies to their projects is second to none and on all their projects they strive to be a preferred partner by providing high quality, responsive and cost effectiveness deliverables to their Clients.

For more information contact ERDS (Electrical Reticulation Design Services) Pty Ltd, Unit 1, 44 Borthwick Avenue, Murarrie QLD 4172, phone 07 3518 3100, email admin@erds.com.au, website www.erds.com.au

The campus features a range of state-of-the-art spaces including a flexible auditorium for teaching and community events. Among the innovative and unique design features of the new auditorium are the 300 bespoke timber seats that were manufactured and installed by Fagaleo Custom Seating, a Queensland based company operating nationwide.

As an established specialist provider of custom seating to auditoriums, cinemas, places of worship, performing arts centres and offices, Fagaleo Custom Seating were appointed by Hansen Yuncken and worked closely with the university to accommodate their requirements and finalise the order before fabricating and installing the seats.

"The majority of the fabrication was done inhouse. We worked closely with our suppliers to ensure we could receive materials and complete the order on time," said Les Heinemann, General Manager. "The installation process was smooth and we had no issues. We have worked with Hansen Yuncken before and we find them very good and professional to work with."

The Foundation Building seating was based on a standard seat from Fagaleo's range but incorporates customised timber features to the

client's specifications and has an increased width to meet bariatric requirements.

"We are flexible enough to adapt our products to suit the specific requirements of any project ranging from slight modifications to major changes," said Les. "We are happy to adapt to the needs of our clients. That's the way that we have worked for almost 30 years."

For more information contact Fagaleo Custom Seating, 86 Eastern Road, Browns Plains QLD 4118, phone 0418 191 083, fax 07 3800 3702, email les@fagaleocustom.com.au, website www.fagaleocustom.com.au

Below GRAPHIS designed a range of signage and wayfinding solutions for the interior and exterior areas of the new campus.

Below SPP Group designed and documented services for fire services, including hydrant and sprinkler tanks and pumps.



Brisbane based experimental graphic design studio GRAPHIS were appointed to design the internal and external signage and wayfinding to the Foundation Building.

GRAPHIS designed a range of clear and legible external signage that draws from the university brand in terms of both colour and font. Much of the external signage was designed to be changeable as the campus continues to evolve.

“The process began with a wayfinding analysis of the site to identify the different modes of access, circulation paths and various user groups. This information formed the basis of the Wayfinding Strategy” said Megan Mackenzie, Director.

“We are also conscious of the wayfinding for the wider campus which will be under development over the next many years. For example, we looked at how to get people from Petrie train station to the Foundation Building and how that will change over time,” explained Megan.

Internally the signage adopted a different look and feel that was closely aligned with the interior finishes of the Foundation Building but retained the university’s standard font, Barlow. “At GRAPHIS we

have three main focuses,” said Megan. “The first is intuitive navigation – to minimise stress or cognitive load. The second is seamless integration with the architectural form and materiality. Lastly is effective communication – clear messaging aligned with the client’s brand.”

GRAPHIS is comprised of passionate strategists, designers and artists with over 30 years experience in sectors including education, commercial, health, residential, retail and government. On all their projects they work collaboratively with the full design team and client to produce beautiful and successful communication material.

For more information contact GRAPHIS, 38 Elliot Street, Clayfield QLD 4011, phone 0410 102 870, email info@graphis.studio, website www.graphis.studio

SPP Group has been designing hydraulic and fire services for over 42 years. The company were engaged on the University of Sunshine Coast Moreton Bay Campus to provide hydraulic consultancy services for the following, sanitary plumbing and drainage, trade waste plumbing and drainage, laboratory waste plumbing and drainage, roof water drainage (including rainwater harvesting), fire hydrants and fire hose reels, fire sprinklers, hot and cold water, rainwater reuse, and LP gas reticulation.

SPP Group also provided advice for the Precinct Masterplan, along with other USC initiatives such as, precinct centralised water storage and booster pump facilities, energy saving measures including solar preheating for the hot water system, rainwater harvesting reuse for toilets, urinals and the irrigation system, and detailed wastewater and water usage monitoring systems.

“The project provided various design challenges for the SPPG Team, including the lack of any authority sewer or water infrastructure to the site at the time of design, however our team, utilising 3D BIM modelling and working closely with Hassel Architect, USC, Hansen Yuncken and MBRC developed the right solutions, including a large sewer pump station with 80,000L of emergency storage capacity,” said Director Darren Campbell.

Alongside their education sector capability, SPP Group are a broad based consultancy with experience in the all of the building sectors including corrections/institutional, retail, residential, mining, defence, science and research and healthcare. They operate Australia wide with offices in Brisbane, Gold Coast, Mackay, Perth and Melbourne.

“As a boutique company we’ve been engaged to provide Consultancy Services on some of the country’s largest projects including Royal Adelaide Hospital, Optus Stadium Perth, Victorian Cancer Care Centre and the first Vertical High School in Queensland, ICNSS,” said Darren. “It was a pleasure to be able to work closely with Hassel, Hansen Yuncken and USC representatives to deliver this project and we wish USC all the best for their new Campus.”

For more information contact SPP Group, Suite 3, Level 1, 36 Park Road, Milton QLD 4064, phone 07 3846 3077, email brisbane@sppgroup.com.au, website www.sppgroup.com.au