
Designing student experiences

Education Capability Statement

Buildings | Australia & New Zealand





A community of experts

Stantec's global network of designers, engineers, scientists and project managers work together at the intersection of community, creativity and client relationships. Careful balancing of these priorities results in projects that advance the quality of life in communities across the globe.

But wherever Stantec is located it is our local teams who have the skills, experience and knowledge to drive the projects in their own back yards. In Australia and New Zealand (ANZ), our local offices of award-winning multi-disciplinary engineers have been helping both private and government clients build communities for over 60 years.

Our people have long-standing client relationships and are inspired to advance the communities in which they live, delivering cost-effective, quality consultancy services.

Whether we're partnering with clients to design a hospital or mixed-use development, a research facility or industrial park, an education campus or airport, we design with community in mind because we believe in the **power of places to transform lives, to meet the needs of a community today, to help fulfil its potential tomorrow.**

Our global business

25K

Employees

400+

Locations

6

Continents

#01

From start to finish. Our team leaders continue to manage the projects for which they tender, right through to completion. Change in team management causes delays and undermines a project's stability and design direction. Continuity is more conducive to achieving your goals within programme and budget.

#02

Value-adding innovation. Stantec's Creativity & Innovation program encourages our global network of engineers to develop tools, processes and technology. These creative ideas might save time at the design stages of a project, reducing client costs. Others offer powerful marketing potential for stakeholder engagement. Celebrating our best ideas with investment means they are fully developed to benefit all our clients and communities, wherever they may be.

#03

The right experience. From research stations in Antarctica to solar projects in rural Australia. From bespoke luxury residences to affordable high-rise apartments. From stadiums to play parks... and everything imaginable in between. We have the right skillsets to help you achieve your construction goals.

#04

Focus on buildability. Engaging with engineers in the early stages can save time and money in the long-term. Pragmatic spatial considerations, site-appropriate construction methods, informed materials selection, compliance with legislation and consideration of the operational environment. Our advice gives reassurance to stakeholders, boards and financiers that all factors have been fully considered.

#05

We're at the right tables. Our people are active proponents within Australia's property industry, seeking positive change on behalf of their communities. The influential tables at which we sit include the Urban Development Institute of Australia, the Property Council of Australia, Consult Australia and Green Building Council of Australia.



We don't just say we deliver outstanding solutions and client service. We prove it.

Stantec has been recognised numerous times at the independently assessed Beaton Client Choice Awards in Australia and New Zealand.

2022 Beaton Client Choice Awards Winner:

- Best Provider to Property

2019 Beaton Client Choice Awards Winner:

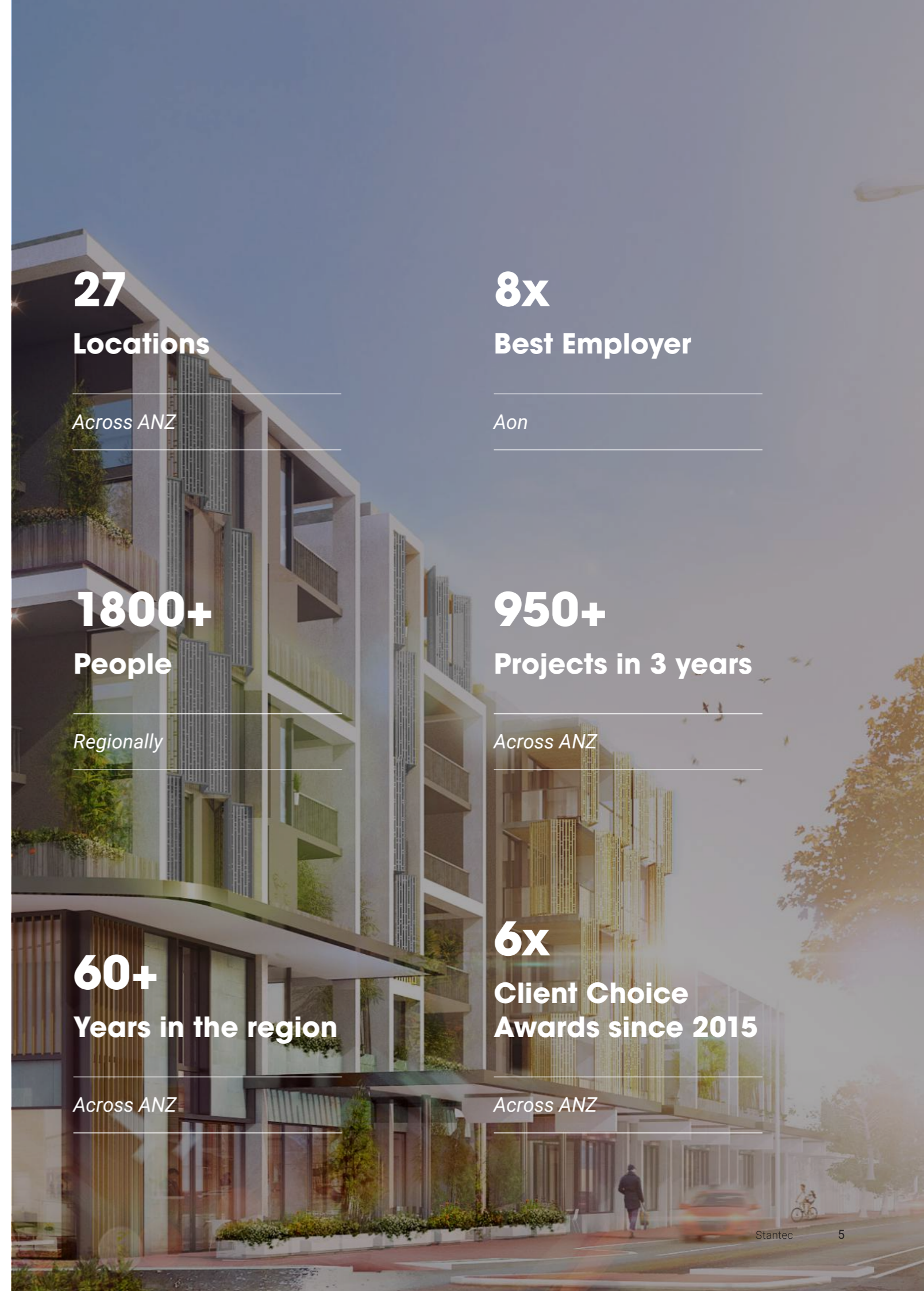
- Most Client Focused Consulting Engineer

2017 Beaton Client Choice Awards Winner:

- Best Consulting Engineering Firm (revenue \$50m-\$200m)

2016 Beaton Client Choice Awards Winner:

- Best Provider to Property Sector



27
Locations

Across ANZ

8x
Best Employer

Aon

1800+
People

Regionally

950+
Projects in 3 years

Across ANZ

60+
Years in the region

Across ANZ

6x
Client Choice Awards since 2015

Across ANZ

Building the future of learning

There's a transformation happening in the world of learning and education. It's no longer just about cultivating enquiring minds.

We understand our clients need to provide a learning environment where the world's social and environmental problems can be solved. That's where our education specialists at Stantec come in.

Through the innovative design of world-class education campuses and schools – we're helping create the future.

We appreciate that Education clients have very unique needs and it's about more than just designing a brilliant building. It's about:

- Environmental impact
- Integration of systems and interfaces
- Class dynamics
- Flexibility and flow across the whole of the learning campus

Design directly influences student and teacher behaviour which in turn affects learning outcomes.

At all times our priority is to understand the desired outcomes for students, while engaging all stakeholders in the project.

A selection of major education projects we've worked on include:

- Monash University, NSW
- LaTrobe University, VIC
- Curtin University, WA
- University of Queensland
- Sydney Grammar School, NSW
- Cavendish State High School, QLD
- Manea College & Trade Training Centre, WA
- Haileybury City, VIC
- Annes Landing Primary School, WA
- Good Shepherd Catholic Primary School, QLD
- Dandenong Education Precinct, VIC
- Emanuel School, NSW



I seek to enhance projects by harnessing proven technology in innovative ways.

Mark Carroll
Electrical Section Manager,
Associate Director





Engineering for Education

Design for education facilities requires a strong understanding of how the spaces will be used.

We work collaboratively with educators to ensure that learning spaces are intuitive, flexible, motivating and functional.

From early childhood and daycare centres to primary and secondary schools, our team understand that flexible, adaptive spaces are required to facilitate learning and meet the needs of both students and teachers.

Project value:
\$20 million

Location:
Located in West Melbourne, Haileybury City will be Melbourne's first Early Learning to Year 12 independent school campus in the CBD

Haileybury City Campus, VIC

CASE STUDY

The innovative campus is designed to meet the education needs of students living in the CBD, inner and middle suburbs and offers extended hours for working parents. Stantec have been engaged to convert the original nine-storey office building to cater for 750 students. Key attributes include:

- Vertical school
- Working with an existing building
- Tight program and budget
- Innovative solutions
- 1,500m² of outdoor green recreation space on three terraces

The project will be completed in a staged construction with stages one and two completed in 2016 and stages three and four completed by the end of 2018.



Integrated technology to facilitate learning

Technology is becoming increasingly important in today's modern learning environments.

E-learning, flipped classrooms, gamification and project-based learning rely on highly connected digital classrooms that can adapt to future developments as they emerge.

Our team are experienced in designing solutions that meet the needs of current and future learning philosophies.

Project value:
\$35 million

The new Performing Arts Centre at Presbyterian Ladies College is one of the most advanced and sophisticated developments of its kind.

Performing Arts Centre, VIC

CASE STUDY

The new 550 seat auditorium finished in intricate wood panelling designed for maximum acoustic resonance.

The new auditorium is supported by an expansive music rehearsal studio, individual study and performance rooms and a drama rehearsal space.

The design was developed in close coordination with the Architect (Cox Architecture), acoustics and theatre consultants and required extensive modelling and detailing of all structure (including secondary steel) and building services in Revit to ensure a high level of coordination.



Providing authentic learning experiences

Our team are skilled and experienced in designing services and infrastructure to support authentic learning experiences from science and laboratory spaces to classrooms, libraries and specialist learning areas like performing arts, food technology and trade training centres.

Creating a specialised learning facility means:

- Providing a solutions driven design that considers the vision, budget, site opportunities and future works
- Designing facilities with flexibility that can adjust with the changing requirements in educational methodologies and trends
- Acknowledging the importance of digital and interactive spaces and creating appropriate, flexible communication networks from the beginning
- Understanding the specialist service requirements and technology needs for the learning space
- Creating a cost effective design that will stay relevant and continue to be user-friendly far into the future

Project value:
\$35 million

Building 304 at Curtin University provides custom research facilities dedicated to the Centre for Crop and Disease Management

Curtin University Grains Research, WA

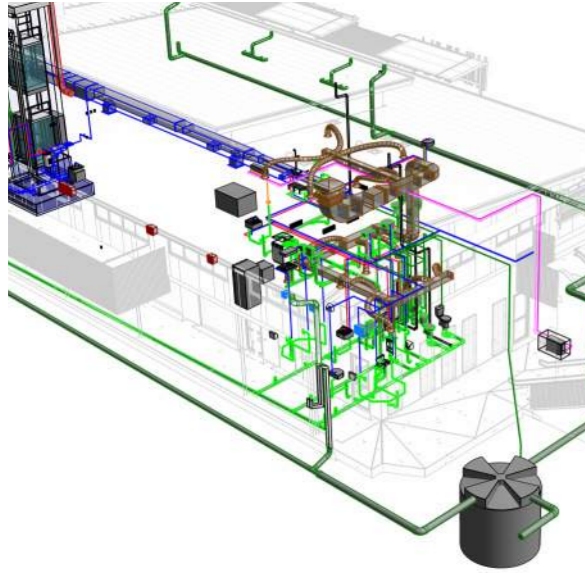
CASE STUDY

The project is a four-storey research building with two full levels of QC2 laboratories and a shared third level of QC2 and QC3 laboratories.

The project also included dedicated plant rooms, offices, meeting rooms, public restrooms and atrium in the main lobby area.

Project features:

- Custom designed and fabricated thermal waste treatment system which treats all waste water from the QC3 area
- Reverse osmosis treatment plant with circulation loop with full by passable outlets and zones
- All hydraulic services have zone isolation with bypasses from central plant and supply systems (disruption on one level would not affect other levels 3 when the bypass is active)



Good Shepherd Springfield Catholic Primary School, QLD

Stantec provided the engineering services for the construction of Stage 1 of Springfield Catholic Primary School for the Catholic Education Department.

area and sports oval.

Project value: \$10 million

The project involved significant earthworks and retaining, stormwater drainage and carparking requirements, as well as administration building, five classrooms, a child care centre, covered play



Laverton P-12 & Western Autism School, VIC

This project was Stage 1 of a purpose built school to cater for 200+ students from ages 5 to 18 around a Stages of Schooling framework (Early, Middle and Later Years).

Project value: \$6 million

The school required general purpose teaching spaces, withdrawal areas, specialist areas, staff offices and administration facilities.



Emanuel School, NSW

The project involved the retrofit of an existing basement of the Emmanuel School into a 250 seat auditorium. The performance space was fitted out with audio and lighting equipment, stage management communications, stage curtains, projection and AV equipment.

Acoustic challenges included:

- Working with an existing room volume
- Constrained floor to ceiling height
- Tight budget

Acoustic design features included an open control room and mid-frequency reverberation time suitable for speech and music.

Other project challenges included minimising disruption to the school environment and respecting the very tight programme.

Project value: \$8 million

Completion: 2015



Project value: \$16 million

The learning spaces have been designed with no fixed furniture to allow flexibility and accommodate any style of learning

Guildford Grammar Preparatory School, WA

The project comprises the development of the preparatory school administration, learning spaces for years 3-6, staff collegiate spaces, parent drop off and parking modifications, external courtyards and student gathering spaces.

The project incorporates recent advancements in learning and building technologies.

Highly flexible classroom spaces are equipped with projection and audio and touch screen displays, whilst a Building Management System (BMS) automates climate control.

The building also includes a seven kilowatt solar array to offset energy use throughout the day.

The project received a Commendation at the Australian Region's 2016 Educational Facilities Awards.



St Georges Anglican Grammar School, WA

Stantec was engaged to provide a high quality fit out for Perth's first inner city school within an existing multi-storey commercial office building.

This project required careful consideration to ensure that a high quality educational environment was achieved within a commercial building.

The project incorporates reception and administration facilities, general learning areas, a roof-top deck, canteen and specialist classrooms for music, drama and science laboratories.

Project value: \$2.5 million



Cavendish State High School, QLD

This project was extended at schematic design phase to double the original proposed development, with 14 general learning areas, two flexible learning areas and other associated amenities and administration buildings. In addition to the extended scope, design works included:

- Terraced block retaining walls
- An investigation into the partial demolition of 'O' Block and the introduction

- of a new roof structure
- Review of the existing civil, electrical and hydraulic services design to incorporate existing stormwater lines

Stantec undertook all engineering services on this project which included two levels of learning accommodation with a central walkway.

Project value: \$8.5 million



Frensham School Linden & Turner Boarding Houses, NSW

Frensham School engaged Stantec to provide the building services engineering design for the extension and refurbishment of the Linden Turner Boarding House.

The project added an extra storey and 20 beds with amenities and other boarding house facilities.

The project required Stantec to provide an innovative, collaborative and cost effective design to provide BCA compliant solutions that incorporated the client requests.

Project value: \$4 million



Project value: \$40 million

Vertical schools are emerging as a unique solution to provide quality education in high-density urban areas

Prahran High School, VIC

This project involves construction of a new five-storey vertical high school next to Swinburne University. The school will open in term one, 2019 with its first cohort of Year 7 students.

The vertical school features an open atrium at the centre of the building, modern teaching areas, a performance space and outdoor areas on every level.

A series of cascading bleachers will interconnect the different learning areas, promoting social interaction and physical movement. Key attributes include:

- Vertical School
- Tight programme and budget
- Innovative solutions

Taronga Institute of Science and Learning

Taronga has the largest zoo-based conservation science team in Australia and works in close partnership with Government agencies and the international zoo and conservation community to protect our natural environment.

The newly completed Taronga Institute of Science and Learning facility includes:

- Classrooms and lecture rooms for teaching with localized exhibits for animals
- Laboratories and research facilities
- Lecture theatre
- Open offices for life science, HR and education
- Commercial office fitout

What was Stantec's involvement?

- Green Star Accredited Professional
- 6 Star Green Star Design & As-built – v1.1 – World Leadership
- Life Cycle Assessment
- Climate Change Adaptation Plan
- Detailed energy modelling for mixed-mode building services design

The project is a true mixed-use building, achieved through a collaborative approach between the entire consultant team, contractor & client. The adaptive design approach and innovative solutions within the project include mixed-mode HVAC system with operable building facade, on-site solar photovoltaic system, on-site rainwater reuse, sustainable materials (timber, flooring and furniture) as well an on-site stormwater management facility.

Project value: \$25 million

Completion: 2018

Winner: Education Architecture Award, NSW Australian Institute of Architecture Awards 2019



Charles Sturt University, NSW

Veterinary Building, Wagga Wagga Campus - approximately \$3 million

Stantec was engaged on the construction of a multi-purpose facility housing an anatomy laboratory and surgery, clinic, museum, specialised teaching spaces and support spaces.

Lecture Theatres, Albury Campus - \$1 million

In 2016, Stantec was involved in the refurbishment and upgrade of the CD Blake Lecture theatre and associated flat floor learning spaces in Building 751 at the Albury Campus. The lighting was designed to upgrade the amenity of the theatre and modernise the learning environment.

Charles Sturt University, Wagga Wagga - \$1 million

Completed in 2016, this project involved the refurbishment and upgrade of the Wal Fife Theatres at the Wagga Wagga Campus. The updated classrooms and lecture theatre feature new energy efficient lighting, fire detection upgrade and integrated desk furniture.



Project value:
\$72 million

Winner:
Educational
Architecture Award,
WA Architecture
Awards 2016

Edith Cowan University Ngoolark Building, WA

Building 34 includes a five-level atrium and houses student service functions, with integration of Noongar cultural references throughout.

Stantec designed the building in BIM Revit, allowing for effective building services design and early detection of potential issues throughout development stages.

Design features included ducted chilled and heating water air conditioning, ventilation, heating and Building Management Systems in compliance with the Building Code of Australia and Australian Standards.

Efficiencies were gained through Stantec's design with heat recover air handling systems to provide supplement free cooling and displacement systems in the atrium.



Monash University, VIC Western Precinct Landscape Project

STRIP & College Walk West - \$5 million

- Completed in 2016, this project links the Clayton Primary Walk at Monash University's Clayton Campus to a new Strip and College Walk West. The design focused on providing a new simple but elegant pedestrian and cyclist environment.
- A primary feature of the project is a 'biobasin' which will provide a teaching resource for the School of Biological Sciences.
- Stantec provided solutions for project challenges, which included retention of existing trees, highly complex existing services, major structural design over existing 900mm diameter stormwater trunk drain and HV electrical services and high pressurised services.

Geology Rock Garden (\$1.5 million)

- The new Earth Sciences Garden at Monash University forms an innovative outdoor learning environment for students, showcasing the geology and geomorphology of Victoria. The garden comprises a stunning arrangement of nearly 500 rock specimens which are laid out to form outcrops in a geological map and is the only garden of this type in Australia.
- Stantec completed the civil, services design, and the significant structural foundations required to support the rock formations.
- The project was recognised with the Outdoor Learning Award from the Association for Learning Environments in June 2016.

Bio-retention Wetland (\$6 million)

- Completed in 2016, Stantec in partnership with E2D delivered the detailed design of the Western Precinct Landscape Project for Monash University, which included bespoke bio-retention wetlands.
- Stantec's solutions overcame project challenges which included highly complex existing services, major structural design over existing 900mm diameter stormwater trunk drain, HV electrical services and high pressurised services.



Project delivery and offering

Buildings ANZ project coordination

No matter what the project, no matter what your needs are, we have the team to help make it happen.

A Stantec Project Engineer will be:

- Responsible for ensuring cohesive team delivery
- The first point of contact for the client

What does this mean for our clients?

Not only will you receive the very best from all Stantec consultants, you will receive seamless design integration across all Stantec disciplines. This will result in identifying and minimising scope-gap, cost or programme risks.



Working together

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.



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