

MCCONNELL

DOWELL

CREATIVE CONSTRUCTION™

A woman wearing a white hard hat with a headlamp and safety glasses is looking upwards at a construction site. She is wearing an orange high-visibility work shirt with reflective silver stripes and a dark blue collar. The shirt has a 'MCCONNELL DOWELL' logo on the left chest and a 'Birley' logo on the right chest. Her right arm is raised, reaching towards a metal structure. The background shows industrial equipment and a concrete ceiling.

CONSTRUCT YOUR CAREER

McConnell Dowell's Graduate Program



A Message From Our Managing Director

It's an exciting time. Your studies are complete or drawing to a close and a world of career possibilities and choices lie ahead. So, let me tell you why I think you should choose McConnell Dowell.

Firstly, check out the words that underline our logo. Creative Construction.

These two words mean a lot to us. More than just a marketing slogan, they are the essence of our company, 60 years in the making, and the perfect description of the work you'll do when you join the McConnell Dowell team.

We build safe, smart, efficient infrastructure – everything from tunnels, railways, pipelines and jetties; through to dams, bridges and airport runways. We work around Australia and internationally. From the congested inner-city to remote regional locations. From snowy Dunedin to steamy Dubai. There's nothing simple about what we do or where we do it. So we need to be smart and continually challenge ourselves to find creative solutions.

But we're not just about construction. We are unique amongst our industry peers, having a strong in-house Engineering group who are dedicated to developing smarter, more innovative construction techniques. We also have an industry-leading graduate partnership with Engineers Australia.

All that adds up to a world of career possibilities for you.

However, you must be up for a challenge. We'll train you well, but we'll also be looking for you to develop your resilience and initiative – key traits that you'll need to take on and solve the technical and business challenges that today's infrastructure customers present us. But don't worry, we'll support you every step of the way.

We are a safe, values-driven company. We respect our people, the environment and the communities in which we work. And we respect our graduates too. We've seen many rise to senior leadership roles within our company and across our industry. We know what you can achieve when given a great start and the right ongoing career guidance and support.

One of our values statements is "Act today with the future in mind". I think that applies perfectly to the career decision that sits before you.

Choose wisely, apply for the McConnell Dowell Graduate Program and we'll help you construct a great career.

Jim Frith
Managing Director
McConnell Dowell Australia

Company Profile

McConnell Dowell is the Creative Construction Company building better communities through safe, smart, efficient infrastructure.

Since 1961, we have built thousands of quality assets and facilities for customers and communities. Our expertise has grown steadily to span civil, electrical, fabrication, marine, mechanical, pipelines, rail, tunnel and underground construction.

With over 3,500 employees and professional engineering and construction teams in Australia, New Zealand, Asia and the Middle East, our customers benefit from our unique mix of local knowledge and international experience.

Our culture is founded on expertise, creativity and progressive thinking. We constantly challenge ourselves and our partners to find the best solution for every project. This attitude, along with our safe, high-quality, systematic and structured approach, has earned us the trust and loyalty of our customers.

We engage in all types of business relationships, from fixed price contracts through to risk-reward based systems such as Early Contractor Involvement and alliancing.

Most importantly, we have a reputation for delivering what we promise in three key sectors:

Infrastructure – the foundation of today's urban communities

From metro tunnels in Singapore, geothermal energy production in New Zealand, to award winning desalination plants in Australia, McConnell Dowell is building better communities through safe, smart, efficient transport, power and water infrastructure.

Resources – the backbone of economies

McConnell Dowell is driving progress and supporting growth and prosperity in cities and rural communities through the delivery of new oil and gas and mining facilities, marine terminals, process plants and modules, cross-country pipelines and underground mines.

Building – the fabric of our cities

Our building group, Built Environs, leads the way in delivering architecturally stunning and environmentally sustainable facilities. These include accommodation, commercial, defence, education, entertainment, sport, government, health, industrial, office, retail and transport.

Our Vision & Values

Purpose
Providing a better life.

Vision 2025
To be a leader in the delivery of infrastructure, building & resource solutions.

2025

SAFETY & CARE
HONESTY & INTEGRITY
CUSTOMER FOCUS
WORKING TOGETHER
PERFORMANCE
EXCELLENCE



Program Introduction



The McConnell Dowell Graduate program has been designed to give you a comprehensive introduction to multi-discipline engineering and construction, and help to equip you with all the skills you need to kick start a great career.

Designed by our human resources experts, and with input from our experienced project managers, engineers, and business leaders, you'll learn the essential skills and insights needed to flourish in today's dynamic construction industry.

Comprehensive

The Program is two years long and includes structured rotations covering our entire business.

From on-site project engineering, management and delivery, to the essential business support roles like safety, and new business, you'll work alongside our leaders and learn about every facet and function that makes up a leading construction company like McConnell Dowell.

The rotations may see you travel to different parts of Australia during the Program.

Challenging

The practical and immersive experience gained through these rotations is backed up with essential classroom learning to reinforce and nurture your development pathway. You'll be engaged in a learning environment that is both challenging and rewarding.

Personalised

Our Program is also underpinned with a strong professional and personal development focus that provides you a deep understanding of yourself and your career aspirations and options. Activities in this element of the Program include structured mentoring; objective and performance management; and career development planning.

Professional Development

Attend courses facilitated by Engineers Australia to continue with your professional development. Tailor your Professional Development journey to best suit your individual needs and interests.

And let's not forget the most important thing. At the end of the McConnell Dowell Graduate Program you'll be offered a permanent position with the McConnell Dowell team - the start of your career with the Creative Construction company.

Professional Development



The McConnell Dowell Graduate Program is not just about building your technical knowledge and knowhow; it's also focused on developing your personal skills and experiences, to provide you with the complete 'toolkit' for career success. As a McConnell Dowell graduate you will:

- Attend regular seminars and forums with experienced colleagues and industry luminaries, to widen your understanding of our industry and build those important business connections.
- Meet regularly with your mentor, an experienced engineer/business leader who will share their wisdom and help guide you through the opportunities and challenges of the Program and our industry.
- Take advantage of twice-yearly performance reviews with your manager to monitor your progress, set goals and review your development plans.
- Participate in a range of short courses and seminars to further develop and enhance your professional competencies and personal skills.

Engineers Australia's Professional Development Program

Being part of the McConnell Dowell Graduate Program gives you the opportunity to attend 6 courses from Engineers Australia's comprehensive suite of professional development programs. Delivered by Engineers Australia, this will allow Graduates to tailor their professional development to meet their individual needs. Topics include Business Communication, Contract Foundations, Engineering Due Diligence and Finance

Acumen for Engineers. Attending these additional development programs will give graduates a professional head start, teaching core business and leadership skills.

For more information on engineers Australia's professional development programs visit:

eeaust.com.au/courses/business-and-leadership

Program Rotations

During your two year Graduate Program you'll undertake structured rotations covering a broad cross-section of the McConnell Dowell business and the construction industry.



Health, Safety, Environment & Sustainability, Quality (HSEQ)

Embedded in our HSEQ team you'll gain an understanding of our industry's complex legislative and regulatory requirements; and gain an understanding of what it takes to ensure the safety of our workforce, the community and the environment. Working with our HSEQ professionals, you'll help gather and analyse performance statistics, and maintain our HSEQ issues registers. You'll also provide input into HSEQ responses for tenders, help draft Project Execution Plans for new projects, and participate in HSEQ audits on our current project sites.



Engineering & Construction

As a member of our Engineering & Design team you'll see first-hand the essential connection between engineering and construction. Working alongside our experienced engineers, you'll be actively involved in temporary works design, Safety in Design reviews; and engineering risk assessments. Moving onto site you'll work with the construction team, preparing and checking designs, developing project performance reports, scheduling and planning site activities, and managing drawings and technical documentation.



Commercial

Construction is big business and as part of our Commercial team you'll gain an in-depth understanding of the commercial and contractual environment that is part and parcel of our industry today. Working alongside our commercial managers and contracts engineers you'll assist in the review of terms and conditions for tender submissions, review and prepare variations and claims on current projects; review quotes from suppliers and subcontractors; and assist with document control for any current legal proceeding.



Human Resources

More than anything else, construction is a people business and our human resources team play a crucial role in finding the right people at the right time to deliver and support our projects. You'll get involved in all facets of HR policy development and management including recruitment, training & development, workforce planning, and remuneration and retention strategies.



New Business & Strategy

Before we build it, we have to win it and working in our NBS team you'll gain a comprehensive understanding of the business development process. You'll undertake market research and help gather intelligence on our clients and future prospects. Other activities include assisting bid managers prepare for the non-price aspects of tenders, participating in client tender briefings, and assisting with marketing and promotional activities.



Finance

They say that "money makes the world go around" and the same applies to a growing construction company like ours. As part of the finance team you'll help monitor, manage and report on our projects' revenues, cash flow and profit performance. You'll also see first hand the dynamics of our accounts payable and receivable system, interacting with our suppliers and subcontractors.

Current & Recent Grads



Paul Dally
Graduate Engineer

What's your academic background?

I studied a Bachelor of Engineering (Honours) (Civil & Structural) with Bachelor of Finance at the University of Adelaide. I was fortunate enough to work for McConnell Dowell in my final year at University as an Undergraduate Engineer in project planning for the Port Dock Rail Spur project.

What's your job about?

I have currently been working on the start-up of the Port Dock project including procurement and estimating. Once the team mobilises to site, I will have the opportunity to work as a site engineer until the close-out of the project. From there, I will be rotated through the remaining sectors of the Graduate Program being HSEQ, Commercial and New Business & Strategy.

What's the coolest thing about your job?

It is really cool to see all the work that is done in the background from the start of a job that is then implemented practically to build something tangible.

What are the challenges of your job?

Many hurdles are encountered with the job, which have potential to slow productivity, however overcoming these challenges is extremely rewarding and satisfying.

Why choose to work for McConnell Dowell?

I chose to work for McConnell Dowell because of the opportunities that they offer through the Graduate Program as I wasn't 100% sure on which field I wanted to go into once I finished University. The rotation through various sectors not only offers the exposure of MCD, but also the prospect of travelling interstate, whilst also diversifying the number of great people you work with within the company.



Ashlee Othen
Graduate Engineer

What's your academic background?

Following high school, I took a year off before completing a Bachelor of Mechanical Engineering (Honours) and a Bachelor of Finance at the University of Adelaide.

What's your job about?

I am currently on a site engineering rotation, so I am exposed day to day site management and organisation including scheduling, tracking, procurement and quality control.

What's the coolest thing about your job?

I love the sense of achievement when you see the finished product of your work. It can be the smallest thing but following all the paperwork and organisation it is rewarding to see the finished result.

What are the challenges of your job?

Paperwork! There is a lot of organisation that goes into procurement, subcontractor management and correspondence with the client.

Why choose to work for McConnell Dowell?

McConnell Dowell undertakes so many different types of projects and has offices around Australia and the world which presents very exciting opportunities for a young engineer. I really enjoy the culture of McConnell Dowell and appreciate the supportive and friendly environment.



Nick Santilli
Graduate Engineer

What's your academic background?

I completed an Associate Degree in Engineering Technology before transferring to the Bachelor of Engineering (Civil and Infrastructure) (Honours) at RMIT.

What's your job about?

Over the next 2 years, I'll be heavily involved in assisting with the delivery of different infrastructure projects. Some key responsibilities will include planning and sequencing of work activities as well as monitoring and managing project costs, timeframe and productivity.

What's the coolest thing about your job?

One of the coolest aspects of my job is being immersed in the practical sides of construction and having a greater appreciation for how things come together to produce the final product. I think one of the biggest rewards being a part of the successful transformation of a design into a real-life structure.

What are the challenges of your job?

I will be involved in making sure all construction activities progress according to the budget and program, whilst ensuring all risks which have the potential to cause major delays and cost blowouts are appropriately controlled or mitigated. Despite this, I am often driven by challenges and I am sure this will be a great learning experience and very rewarding.

Why choose to work for McConnell Dowell?

I was lucky enough to get work experience at McConnell Dowell where I worked on the Swanson Dock Rehabilitation project. I realised that McConnell Dowell has a high regard for its employees personal-development and professional growth.



Nicolette Bulseco
Graduate Engineer

What's your academic background?

I did a Bachelor of Science and a Master of Engineering degree at the University of Melbourne, specialising in structural engineering with a foundation in civil engineering.

What's your job about?

As a Graduate Engineer, I will be exposed to all aspects of project management, rotating from the Site Engineering, Design Engineering, Health, Safety, Environment & Quality, Commercial and Estimating & Procurement teams all in two years. Since starting, I have been working on the Melbourne Airport Runway Development project which is currently undergoing the design stage.

What's the coolest thing about your job?

The best part about the job is seeing an idea come to life. From planning up until construction, being part of the process where the plans are slowly manifesting into a tangible, physical structure is what makes the job exciting.

What are the challenges of your job?

Coming from university, working a 9-5 job is something to get used to. The challenge for me was balancing my time wisely so that I can dedicate time to commitments outside of work and some time for myself.

Why choose to work for McConnell Dowell?

I chose McConnell Dowell because of the opportunity for professional growth. Besides the potential to work on large-scale, multidisciplinary projects, nationally and internationally, McConnell Dowell is also committed to developing their graduates to becoming well-balanced engineers. Since starting, I have received continuous support from everybody, and feel lucky to have such a strong support system.

Some of Our Projects



LEVEL CROSSING REMOVAL PROJECT – KOROROIT CREEK ROAD WORK PACKAGE, VICTORIA, AUSTRALIA

Client	Level Crossing Removal Authority
Location	Victoria
Contract	Alliance
Value	~\$350 million
Completed	Est: 2023

Project Description

One within a program of six possible projects, this level crossing removal took place on busy Kororoit Creek Road in Williamstown North. It involved the construction of a new rail bridge over road and the duplication of 800 m of rail track. The delivery team was an Alliance involving McConnell Dowell, the Level Crossing Removal Authority, MTM, and Arup and Mott MacDonald in joint venture.

Value: \$300-400 million for the overall program of six level crossing removals.

Challenge

The project is took place in a constricted urban environment that was made more difficult due to the adjacent ExxonMobil oil refinery and its numerous fuel pipeline connections, (including the main jet-fuel line to Melbourne Airport), that criss-cross the construction zone.

Performance

The fast-track design was completed on time and the Alliance team developed an innovative staged construction solution that significantly reduced the rail occupation period by more than 50% from the initial 3 months. McConnell Dowell's leading pipeline construction experience has ensured ExxonMobil remain a satisfied stakeholder, while the specialist communications group engaged by the Alliance has also introduced a more strategic approach to local community consultation and engagement.



CHITH EXPORT FACILITY, WEIPA, FAR NORTH QUEENSLAND, AUSTRALIA

Client	Rio Tinto (Bechtel EPC)
Location	Far North Queensland
Contract	Early Contractor Involvement
Value	\$160 million
Completed	2018

Project Description

In collaboration with client Rio Tinto and their EPCM team, McConnell Dowell delivered a new bauxite export facility with a 650m access jetty and a 350m wharf in remote North Queensland. The work scope also included an onshore conveyor and transfer stations.

Challenge

Due to the remote location, prefabrication and modularisation played a key role in the project's design and construction approach.

The 350m long wharf was split into seven, first-of-a-kind 'jacket' modules (the substructure) and six topside modules. Each weighing approximately 680 tonnes, the jacket reduced the number of permanent wharf piles from 100 to just 28. The wharf topside modules, placed on the jackets, ranged from 600 to 1400 tonnes and were pre-fabricated complete with all services conveyors, concrete roadways and access walkways.

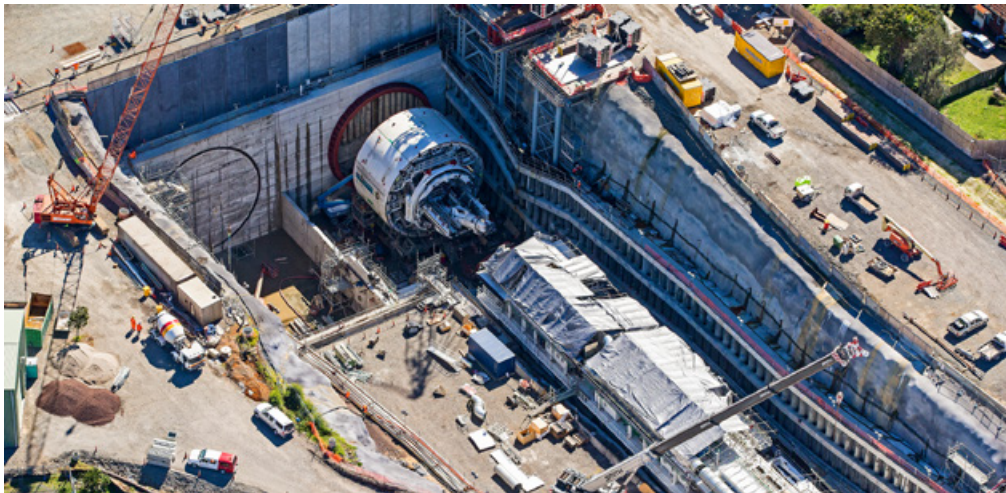
The 650m access jetty was constructed a cantilever traveller frame that minimised high-risk marine-based construction.

Performance

Through collaboration and innovation, the capital cost of the project was reduced by \$40m compared to the original budget. The construction program was reduced by 12 months to just 10 months; and the project was completed with zero lost time injuries.

The project was awarded the prestigious 2019 Australian Construction Achievement Award and the Institute of Engineers (ICE) Brunel Medal, which recognises excellence in civil engineering.





WATERVIEW CONNECTION, AUCKLAND, NEW ZEALAND

Client	New Zealand Transport Agency
Location	Auckland, New Zealand
Contract	Alliance
Value	NZD \$1.4 billion
Completed	2017

Project Description

As part of the Well Connected Alliance (WCA) along-side Fletcher, Obayashi, Beca, Parsons Brinckerhoff and Tonkin & Taylor, McConnell Dowell was responsible for the construction of the Waterview Connection, easing congestion of Auckland's traffic and future-proofing the roadway to handle 83,000 vehicles by 2026.

Challenge

The project signifies the largest change in Auckland's traffic network since the opening of the Auckland Harbour Bridge in 1959. The project required 800,000 m³ of excavation from twin 2.5 km long, 14 m diameter tunnels – the largest ever built in Australasia and constructed using the world's 10th largest TBM. The location also proved difficult; a constrained urban environment meant extensive stakeholder and traffic

management was integral to successful completion. The project included extensive viaducts and ramps in protected areas, with archaeological features that were preserved throughout construction.

Performance

The Alliance team received praise from the NZTA for "Going the Extra Mile" on the project, as well as winning many industry awards. High levels of customer satisfaction were achieved through the consistent community involvement and consultation throughout the five suburbs that the project spanned. Industry judges praised the Alliance's strong collaboration, the commitment to upskill workers and keep people safe, as well as the dedication of the Alliance to deliver a high-quality project with as little social and environmental impact as possible.



NORTHERN GAS PIPELINE, TENNANT CREEK, NORTHERN TERRITORY TO QUEENSLAND, AUSTRALIA

Client	Jemena Northern Gas Pipeline Pty Ltd
Location	Northern Territory/Queensland
Contract	ECI Early Works and Construct Only
Value	\$157 million
Completed	2018

Project Description

McConnell Dowell was engaged by Jemena under an exclusive Early Contractor Involvement agreement to develop and deliver the Northern Gas Pipeline. Scope involved the construction of approximately 481 km of high pressure gas transmission pipelines and associated facilities including two mainline valves and a midline scraper station. The pipeline transports gas from existing offshore and onshore gas reserves in the Northern Territory and will supply industry in Mt Isa.

Challenge

The project was constructed across very remote and arid regions of both the Northern Territory and Queensland. The logistics involved in supplying and supporting a large workforce was a key challenge; along with significant interaction with local industry and indigenous groups. The project required

integration of multiple stakeholders from diverse backgrounds to deliver safely across vast distances and in remote locations.

Performance

Working as an integrated team with the client from the outset of the project was the key to success. Early contractor involvement and collaborative project management strategies enabled the team to develop innovative construction solutions to successfully overcome logistical, stakeholder, environmental, and resource constraints. Operations, design and constructability issues were considered early to achieve optimal, cost-effective outcomes. Effective relationships were built with local construction contractors, local indigenous groups, community groups and industry regulators.



Selection Criteria



- Have relevant tertiary qualifications
- Be self-sufficient person who requires limited supervision and has a strong focus on results
- Be competent in the use of MS Office
- Have strong commitment to the safety promise of “Home Without Harm”
- Be passionate about McConnell Dowell’s values of safety & care, honesty & integrity, customer focus, working together and performance excellence
- Be a permanent resident of Australia
- Be willing to relocate around Australia

Application Process

Applications Close	3 April 2020
Online Assessment	April 2020
Online Interview/Assessment Centre	April to May 2020
Face-to-Face Interview	May 2020
Pre-Employment Checks	May 2020
Offers	June 2020
Commencement	January 2021

Apply here: www.mcconnelldowell.com/people/graduates

