



Capability Statement

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Our Story

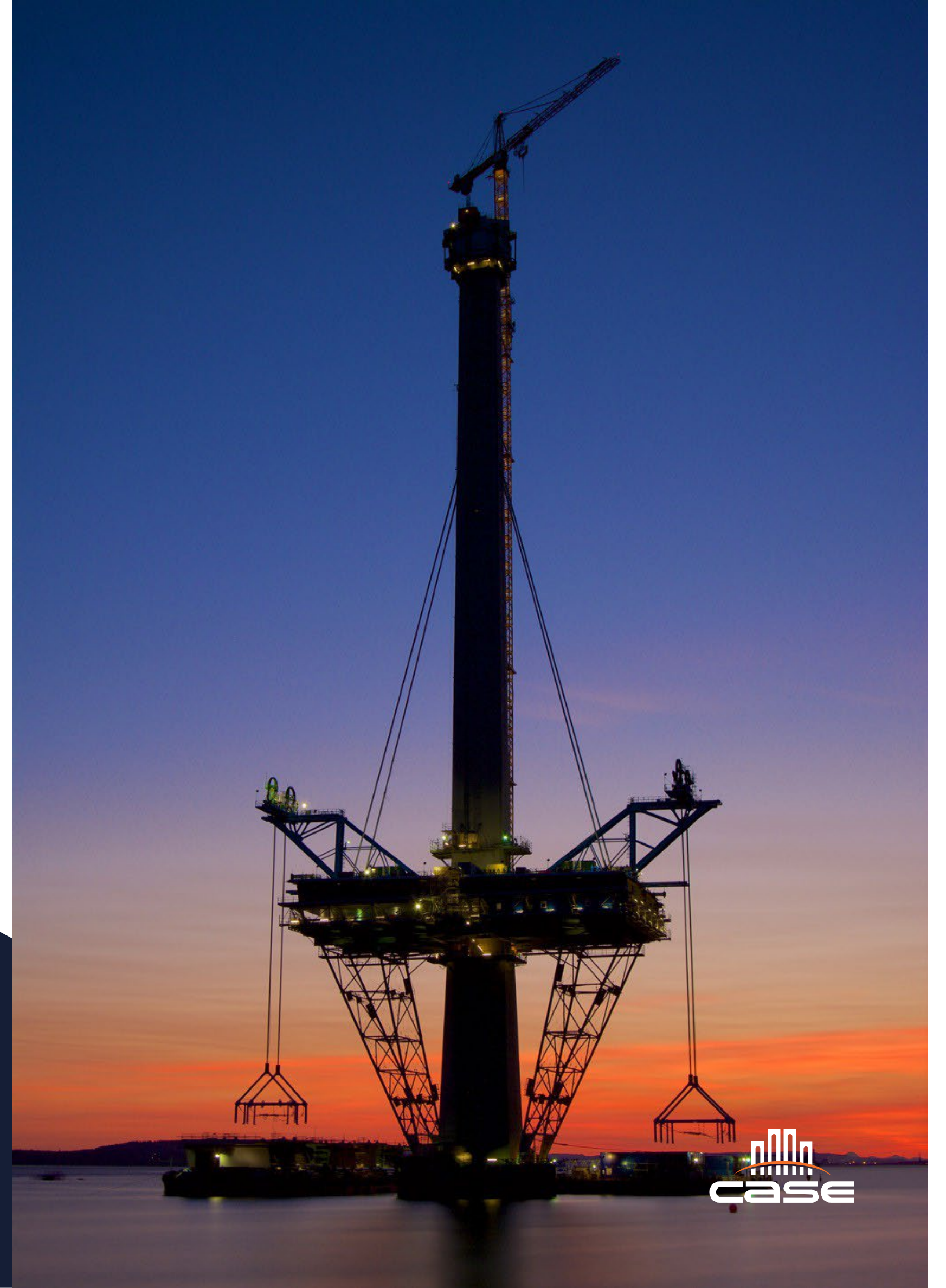
CaSE Civil & Structural Engineering was founded in 2016 by Colin Calder and Jonathan Davies to deliver innovative solutions for complex engineering challenges. With extensive experience in major infrastructure projects across Asia, Scotland, and Australia, they built a team of skilled engineers and temporary works designers specialising in bridges and complex structures.

Our team includes professionals from leading construction companies, bringing expertise in steel and reinforced concrete structures. We have a proven track record in bridge construction and rehabilitation, delivering tailored solutions for high-profile projects.

CaSE has global experience in bridge rehabilitation, focusing on constructability by integrating insights from on-site engineers and specialist temporary works designers. We provide expertise in tender and concept design, selection of rehabilitation methodologies, specialist subcontractor selection, construction animations, and permanent/temporary design management.

Our repair and strengthening design solutions minimise stakeholder impact through advanced methodologies, temporary works solutions, and access systems such as hanging scaffolds and under-bridge gantries. We carefully select and handle materials to optimise project outcomes.

Since our founding, we've expanded globally with offices in Australia, the United States, Brazil, New Zealand, the UK, Dubai, and Saudi Arabia. With hundreds of successful projects, we blend modern engineering tools with decades of experience to deliver exceptional outcomes in bridge rehabilitation and beyond.



Vision

To be the global benchmark in delivering innovative, practical, and sustainable engineering solutions, empowering communities, advancing complex infrastructure, and setting new standards for excellence and safety.

Mission

We partner with clients across the globe to solve the most complex engineering challenges through:

- Unmatched technical expertise and agile delivery
- Seamless integration with client teams
- A commitment to safety, sustainability, and community impact
- A culture of collaboration, integrity, and continuous improvement

Whether providing design, construction, traffic, or commercial services, CaSE exists to deliver outstanding infrastructure outcomes efficiently, responsibly, and reliably.



Our Global Operation

24 Hour Team

Accelerate the delivery of effective solutions

Global Offices

Our talent is spread all over the world



The CaSE Business

At CaSE, we excel in delivering innovative solutions for infrastructure projects through a global team of talented and experienced engineers. We hold a reputation for exceptional quality and service, taking great pride in fostering meaningful partnerships with our clients. Our collaborative approach not only accelerates project timelines but also ensures unparalleled client satisfaction. When you partner with us, you are choosing to work with a team committed to setting new standards in innovation, collaboration, and safety.

Within the CaSE Group, we offer five specialist practice areas:



Merging expertise and technology we deliver bespoke digital solutions to solve infrastructure challenges, utilising visual and interactive methods for faster, safer, and more efficient project decisions across the project lifecycle.

- Realistic construction animations
- Community engagement videos
- 3D design of temporary and permanent works
- BIM and Digital Engineering
- Clash detection and resolution
- 4D programming and visualisation
- Site laser scanning and photogrammetry
- AR and VR
- Digital rehearsals for SiD / HAZOP
- Training and induction animations



Our Construction Personnel including skilled Managers, Engineers and Supervisory staff integrates seamlessly with the client's team to successfully deliver projects.

- Design Management
- Project Management
- Construction Advice
- Health & Safety Management
- Procurement of Equipment
- Alliance Advice
- Construction Management
- Risk Management
- Alliance Management



Our designers use a variety of the latest design and modelling software including BIM to create high-quality innovative and sustainable solutions.

- Heavy Transportation
- Suspended Formwork
- Steel Design & Fabrication
- Lifting Frames
- Access
- Demolition Engineering
- Heavy Propping
- Permanent & Temporary Works
- Precast Mould Design
- Digital Engineering



The Commercial team offers specialist advice that is comprehensive, tailored, efficient and founded on decades of pragmatic experience.

- Negotiation of Contract Claims
- Contract Management
- Variation Management
- Risk Management
- Dispute Avoidance & Resolution
- Financial Management
- Financial Reporting
- Claims Preparation
- Claims Management
- Claims Defence & Resolution



The Traffic & Transport team draws on decades of experience delivering many of Australia's largest transport infrastructure projects to provide our clients with strategic advice and practical solutions to solve complex infrastructure problems.

- Traffic Management Plans
- Traffic Staging & Temporary Traffic Management Design
- Temporary Works Design Management
- Traffic Impact Assessments
- Traffic Analysis & Modelling
- Road Safety Audits
- Road Safety Barrier Design & Advice
- Construction Logistics & Heavy Vehicle Transport Management

World-Class Engineering Expertise



Australia's engineering landscape has transformed significantly, and in this era of change, CaSE Civil and Structural Engineering emerges as a key player. Operating seamlessly across 9 global offices, we provide a unique blend of worldwide reach and local insights to the Australian market.

Renowned for overcoming challenges in stalled projects and handling large-scale initiatives, CaSE offers tailored solutions that meet client's needs. Our commitment to excellence is evident at every project stage, covering design, commercial advice, construction personnel, and traffic management. In response to the surging demand for major infrastructure projects, CaSE specialises in solving complex problems, making us a reliable partner during high-demand periods.

Understanding the dynamic nature of our clients' workloads, we ensure seamless integration and on-time delivery, regardless of project scale or complexity. Our global team brings their expertise to oversee major infrastructure projects worldwide, with a consistent track record of delivering exceptional results and a profound understanding of complexities in sectors like rail, airports, tunnels, and bridges. CaSE is poised for shared success with our clients.



Sectors



Whether it's an airport, rail, bridge, or road project, our extensive experience empowers us to tackle diverse sectors with confidence, thanks to our team of industry specialists.

Our teams are internationally recognised for consistently delivering reliable, innovative, and safe solutions. With a wealth of practical experience, we offer advanced engineering solutions across multiple sectors.

Airports

Airports and the associated infrastructure are complex and have demanding operating environments. We understand that airport projects require experienced personnel that understand both the operations and restrictions to assist with planning and execution for expansion and upgrades.

- Project Delivery & Design Management
- Constructability Advice & Assessments
- Subject Matter Expert (SME)
- Independent Verifier/Certifier
- Airfield Inspection & Compliance

Contact



Michael Eager
michael.e@case.international

Rail

Progressively, society has witnessed a rise in demand for transportation in cities, suburbs, and regional centres. It is inevitable and vital to have integrated and efficient mass-transit options for commuters, freight, and communities.

- Program & Project Governance
- PMO Establishment
- Permanent & Temporary Works Design
- Stakeholder Management
- Design Management & Project Delivery

Contact



Michael Eager
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Tunnelling

As our infrastructure continuously grows, so do the technical demands on tunnels to support our modern world. Tunnelling often presents significant engineering challenges requiring practical knowledge, technical skills, and commitment borne out of experience.

- Project Delivery & Design Management
- Constructability Advice & Assessments
- Subject Matter Expert (SME)
- Independent Verifier/Certifier

Contact



Patrick Deed
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Bridges

CaSE is a leader in the design and construction of bridges, providing robust bridge engineering capability through decades of experience from a diverse range of structures across the world, providing end-to-end bridge construction services.

- Permanent Works Design
- Temporary Works Design
- Proof Engineering / Independent Verification
- Stage by Stage Analysis
- Constructability Reviews

Contact



Jonathan Davies
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Marine

CaSE offers practical hands-on marine experience to offer innovative and durable designs. We understand the challenges of maintaining marine assets in adverse environmental conditions and the impact that those conditions can have on a structure's durability and lifespan.

- Marine Infrastructure
- Certification & Independent Verification
- Coastal Works
- Permanent & Temporary Works Design

Contact



John Henderson
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Mining/Renewables

CaSE understands that sustainability sits at the core responsibility of how we operate in our industry. But this also comes with a set of challenges with depleting resources and the state of the world economy.

- Infrastructure Advisory
- Mine Engineering
- Energy Management
- Permanent & Temporary Works Design
- Project & Construction Management

Contact



Peter Brown
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Buildings

In our modern society, the role of buildings has become even more important. Facing an increasing demand to reduce the carbon footprint of the industry, it is the core responsibility of our industry to develop an expertise in building engineering whilst still ensuring productivity, safety, and sustainability.

- Project Delivery & Design Management
- Constructability Advice & Assessments
- Repair Methods and Constructability
- Building Information Modelling (BIM)
- Building Certification

Contact



Jonathan Davies
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Roads

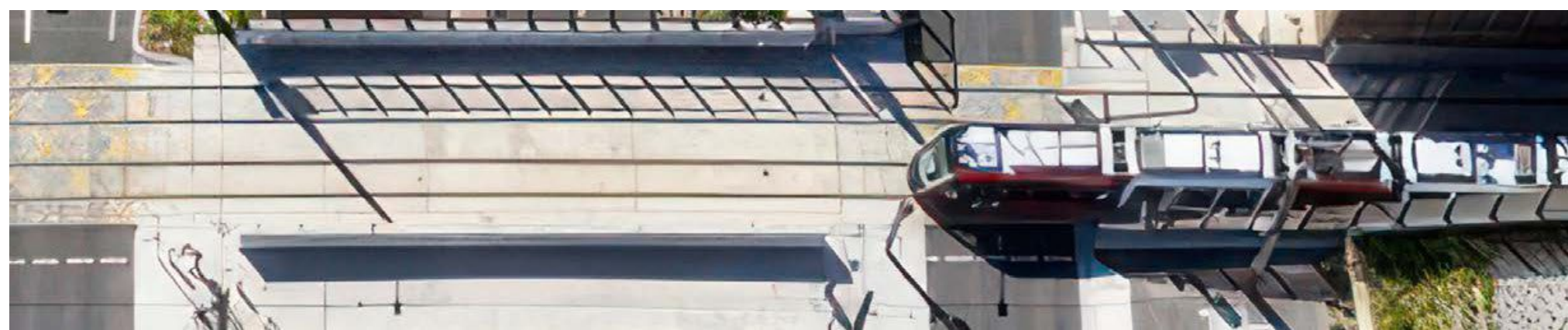
CaSE understands the need for long-term solutions to improve safety and connectivity and reduce traffic congestion for better local access to major urban and rural centres. Road infrastructure is essential to the performance and capacity of our economic growth and quality of life.

- Geotechnics and Ground Engineering
- Project Delivery
- Project Management
- Engineering Design
- Traffic Management

Contact



Ben McLean
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Temporary Works

Our experienced team offers comprehensive temporary works design solutions that blend strategic engineering and innovative technology, including Building Information Modeling (BIM). Our expertise spans various sectors enhancing project safety and efficiency.

We collaborate closely with project stakeholders to ensure solutions are well-integrated considering potential impacts on all aspects. We pride ourselves on comprehending temporary works projects' dynamic and time-sensitive nature, consistently crafting solutions that efficiently use readily available materials and effective construction and design techniques.

Lifting & Jacking Systems

Heavy lift

- Studies and design
- Heavy equipment installation
- Strand jacking
- Lifting frames

Heavy elements installation

- Large steel beams and columns
- Precast concrete beams, match-cast elements, precast panels

Hydraulic jacking schemes

- Temporary supports and sliding schemes
- Jack selection and advice on method
- Bearing replacement
- Installation of elements
- Load testing

Lifting /sliding /skating /jacking systems Assistance



Demolition Engineering

General demolition

- Temporary propping
- Demolition sequence
- Loading plans

Bridge demolition

- Truss strengthening
- Permanent works checks
- Span jacking

Heavy Transportation

Design for heavy element moves

- Truss strengthening
- Permanent works checks
- Span jacking

Proof engineering/Peer review of heavy lift operations



Permanent Works

Ground retention systems	Analyses to model ground movement effects and induced member forces
Cut & coverstructures	Structure-Ground interaction
Steelwork structures	- Preset geometry - Staged erection analysis - Crane-lift, fit-up design
Concrete structures	- Concrete Structures - Reinforced & Post-tensioned Design - Precast concrete elements - Alternatives - Precast moulds & lifting methodologies

Construction Engineering

Construction planning advice	- Construction Methodology Reviews - Constructability assessments
Steelwork design & Erection engineering	- Stage erection analysis - Lifting analysis - Deflected shape & angular distortion calculation - Fit-up analysis of steel girders

Temporary Works - Bridges

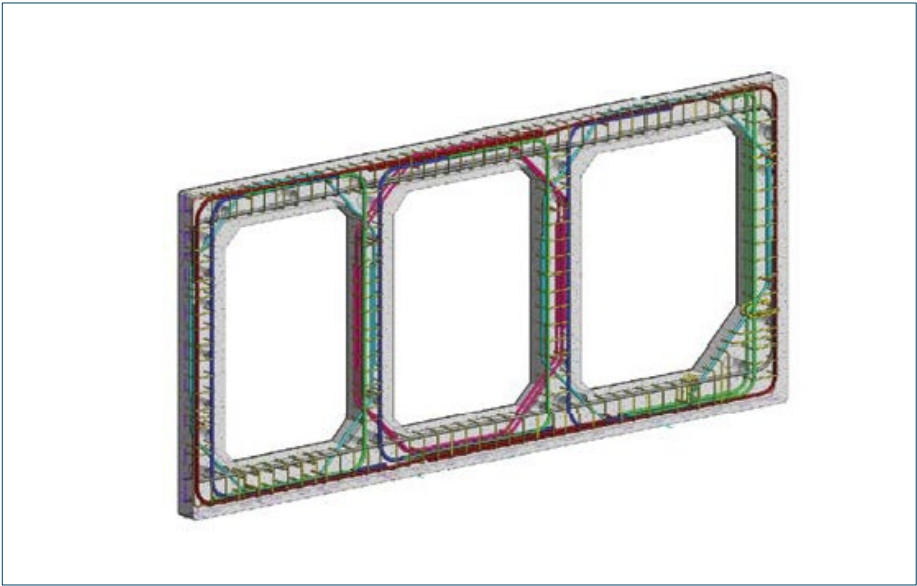
Bridges – substructure	- Coffer dams and temporary ground supports - In-situ pier and deck formwork and falsework - Access systems - piers and superstructure - Marine precast pile caps and formwork
Bridges – superstructure construction	- Girder/Segment stability and restraint systems - Segment and girder lifting devices and methods - Form-travellers for bridge superstructure and parapets - Incremental launch formwork and launching noses, side guides - Out of balance propping systems - Adjustment system for fit-up/cover tolerances

Stability analyses	- Structure stability during construction stages - Identifying of temporary support requirements through the construction sequence
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Geometry control of match-cast (shortline precast) elements

Digital Engineering

Design documentation	- BIM, Revit, Tekla modelling 3D reinforcement modelling & clash detection - Construction visualisations
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Featured Projects

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HS2

Sector: Rail
Client: BBV JV
Location: London (UK)



Temporary Works Provided

- Traffic diversion from the existing brick arch bridge
- Secant Pile Wall Design
- Reinforced Earth Embankment and Wall Design
- Excavation Slope Stability
- Method Engineering for Integral bridge construction & piled retaining wall construction
- Vehicle Restraint System (VRS) Barrier foundation

Scope

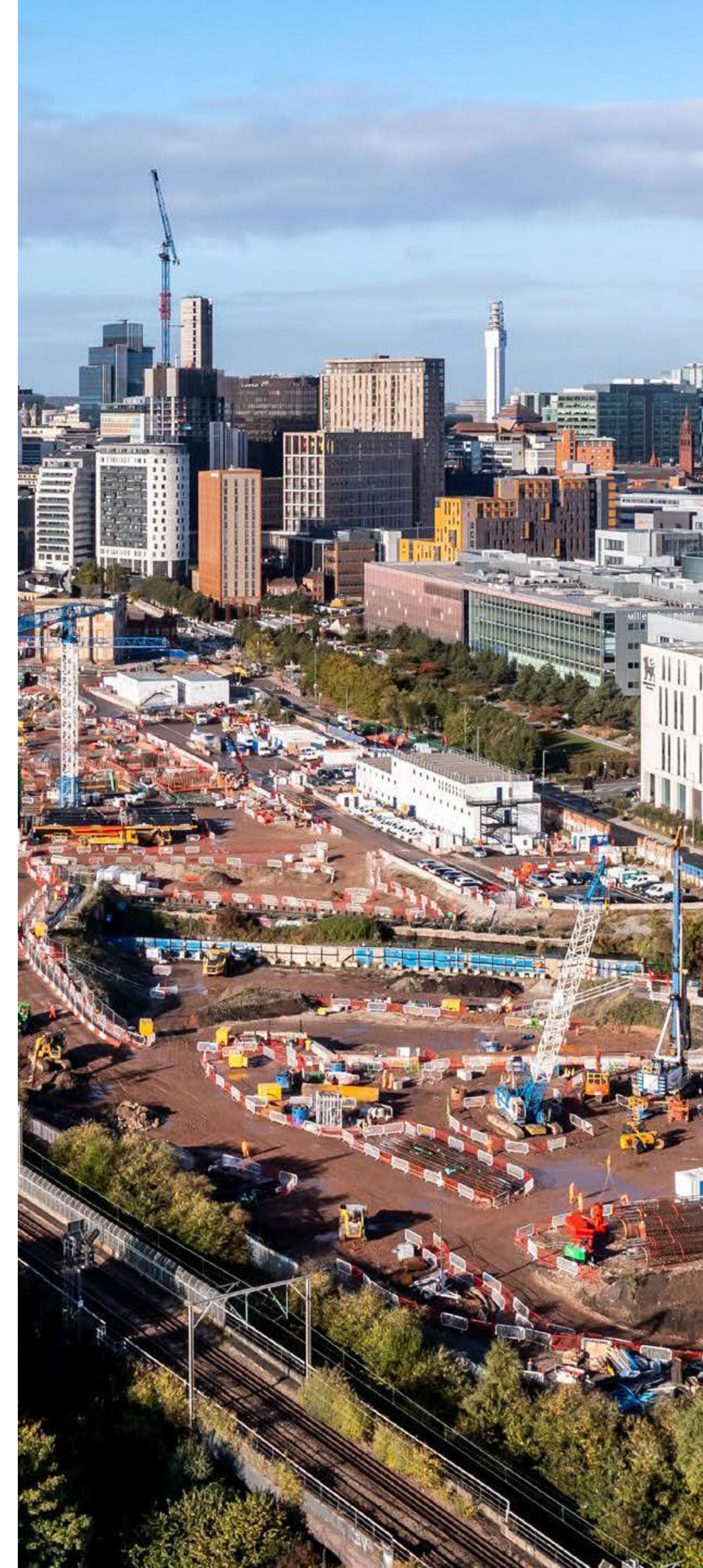
The High Speed 2 (HS2) project envisions a seamless high-speed rail link connecting the North West and South East of England, with key stops in Manchester, Birmingham, and London. It is set to revolutionise connectivity within the UK, fostering improved access for major cities, businesses, industries, and a population of 30 million individuals, reducing travel time between main areas.

As the biggest rail investment ever made in the North of England and it is Europe's largest infrastructure project, HS2 holds the potential to redefine transport and promises to enhance the lives of individuals by fostering greater connectivity, and economic growth in a new zero carbon flagship transport project.

Our Role

As part of the High Speed Rail (HS2) being constructed between London and Birmingham, BBV JV needs to replace an existing bridge at Cromwell Lane near Coventry crossing the new rail tunnel corridor. In order to avoid stopping the traffic, the road needs to be temporarily diverted to allow for tunnel construction below the existing bridge footprint. The existing corridor also needs to be widened at the bridge location, to allow pedestrians to pass on the side of the tunnel via an underpass.

This project is currently a work in progress, and the CaSE team is engaged to provide end-to-end support once several temporary works are required to enable the project to be completed. The scope of works performed includes structural and geotechnical design of temporary works, 3D modelling of it and 3D construction sequence.





Westgate Tunnel

Sector: Road, Bridge
Client: Transurban,
CPB Contractors, John Holland JV (CPBJH JV)
Location: Melbourne (AUS)
Project Value: AUD 6.7B

Scope

The West Gate Tunnel Project worth \$6.7 billion is a partnership between the Victorian Government and Transurban. It will be built by construction contractors CPBJH JV and will deliver a vital alternative to the West Gate Bridge, making Melbourne's west an even better place to live, work and play.

The West Gate Tunnel Project will deliver a vital alternative to the West Gate Bridge, providing a much needed second river crossing, offering a quicker and safer journey for the entire community. At completion, the project will make travel easy for drivers saving up to 20 minutes time from the west, getting 9000 trucks a day off residential streets in the inner west and creating an express route to the CBD for cyclists.

Our Role

CaSE Design was awarded several bridge engineering and temporary works packages for this project. The project includes a bridge over the Maribyrnong River to connect the tunnels with an elevated road above Footscray Road, ramps to the port at MacKenzie Road and Appleton Dock Road for direct freeway access and elevated roadway connecting to CityLink, Dynon Road, and Footscray Road, running above the centre of Footscray Road.

As well as temporary works design, CaSE scope includes the analysis of more than 100 girders of the steel composite bridge structure using MIDAS Civil software to analyse stage deflections, optimise lifting and construction methodology, and ensure the stability of the structure in all temporary stages while the bridge is being built.

The CaSE team provided the following services:

- Review of construction methodology
- Stage by Stage Analyses of Steel girders during various stages of construction
- Design of temporary works to support steel girders in their temporary condition and ensure stability
- Permanent Work constructability review
- Design of falsework and formwork for precast segmental portals
- Design check for jacking and transport of segmental portals
- Shop drawings for steel girders combining permanent and temporary works
- Design Management
- The interface between designer, Contractor& JV
- Site inspections pre/post girder installation on temporary works



Projects

Qatar Al Bustan Street North



Sector: Bridge
Client: Consolidated Contractors Company (CCC)
Location: Doha, Qatar
Project Value: USD 774M

Scope

Sabah Al Ahmad Corridor (previously called Al Bustan) is part of the Qatar Expressway Programme and aims to provide an alternative to the existing expressway with free flow traffic on a length of 14 km from the North of Central Doha to the South, to improve connectivity to the FIFA World Cup stadiums. The project involved upgrading the existing main road by constructing various overhead bridges over existing crossroads, as well as connecting ramps to remove traffic lights.



Our Role

The Qatar's Public Works Authority (Ashghal) has awarded CCC (Consolidated Contractors Group) a USD 774M contract to design and build the Al-Bustan Street North project.

As part of the Al Bustan Street project, junction B6 is an interchange designed to enhance the connectivity at the existing crossing of Al Shamal Road highway, going over the proposed Al Bustan Street on an existing bridge. The new junction includes 8 bridges B1 to B8, with 2 levels of ramps over the highway, up to 30m above ground level.

Bridges B3 to B8 are precast box concrete segmental built with balanced cantilever method, with spans up to 90m. VSL Middle East has been engaged by CCC to precast and erect these bridges.

Some spans are required to be erected by custom designed Lifting Frame on the deck, due to crane access restrictions. VSL Middle East (ME) has engaged VSL Technical Centre Singapore (TC SG) to design the Lifting Frames to lift 80t precast segments, pass through and rotate them. CaSE Design has performed the role of Independent Checking Engineer for this complex temporary works for VSL.

The CaSE team provided the following services:

- Review and advise permanent works designer on constructability of the balanced cantilever design.
- Design and commissioning of a lifting frame structure, able to lift segments up to 80t. Segments were picked up on the "pier side" and rotated to pass in front of the lifting frame and lowered at the top of the cantilever.
- Design of a pier bracket installed on top of 30m tall round piers, able to withstanding out of balanced effect for the construction of 45m cantilever span.
- Design of pier access platforms, supported on top of 30m tall columns.
- Design of segment lifting beams for segment lifting by crane and lifting frame.
- Geometry control modelling, site training and advisors for 125m radius precast segment spans.
- Independent check of the lifting frame structure.
- Independent check of the pier bracket structure.

Bolivia Hill

Sector: Bridge

Client: Transport for NSW, Georgiou and SRG Global

Location: Bolivia Hill (AUS)

Project Value: AUD 133M

Scope

The New England Highway Upgrade at Bolivia Hill (NSW, Australia), 58km north of Glen Innes, included the construction of a 3-span, 320m long by 11.8m wide box girder bridge. With the remote location, and long bridge spans of up to 150m, construction methods used post-tensioned balanced cantilever technology and cast-in-situ concrete.



Our Role

Engaged by GSRG, we were the Specialist Temporary Works Consultant to check various Temporary Works equipment and installations, both new and existing, throughout the construction phase.

Using 3D modelling to model the pier segment reinforcement, as well as resolving clashes, our team optimised pour heights to increase production.

CaSE was involved directly in the initial above-ground works commenced on dual pier blades 18m high built using formwork lifted by a mobile crane. 12m long, 8m high pier heads were then poured on the formwork supported on a platform cantilevering 6m outward from the blades.

The formwork created for the pier head was a combination of off-the-shelf formwork together with components from existing form travellers, modified for dual-purpose use to minimise the number of crane lifts. CaSE Design checked, inspected, and certified this overall formwork and access system.

The CaSE team provided Temporary Works such as:

- Pier segment falsework/ formwork check and certification
- Form-traveller modifications design inspection
- Pier segment reinforcement 3D modelling, 2D detailing
- Rebar/ embodiment clash study
- Permanent and Temporary Works Interface checking
- Temporary to Permanent Works connection design
- Bridge Specialist technical support

Projects



Cross River Rail

Sector: Rail, Road, Tunnel
Client: CPB BAM Ghella and UGL JV
Location: Brisbane (AUS)
Project Value: AUD 5.4B

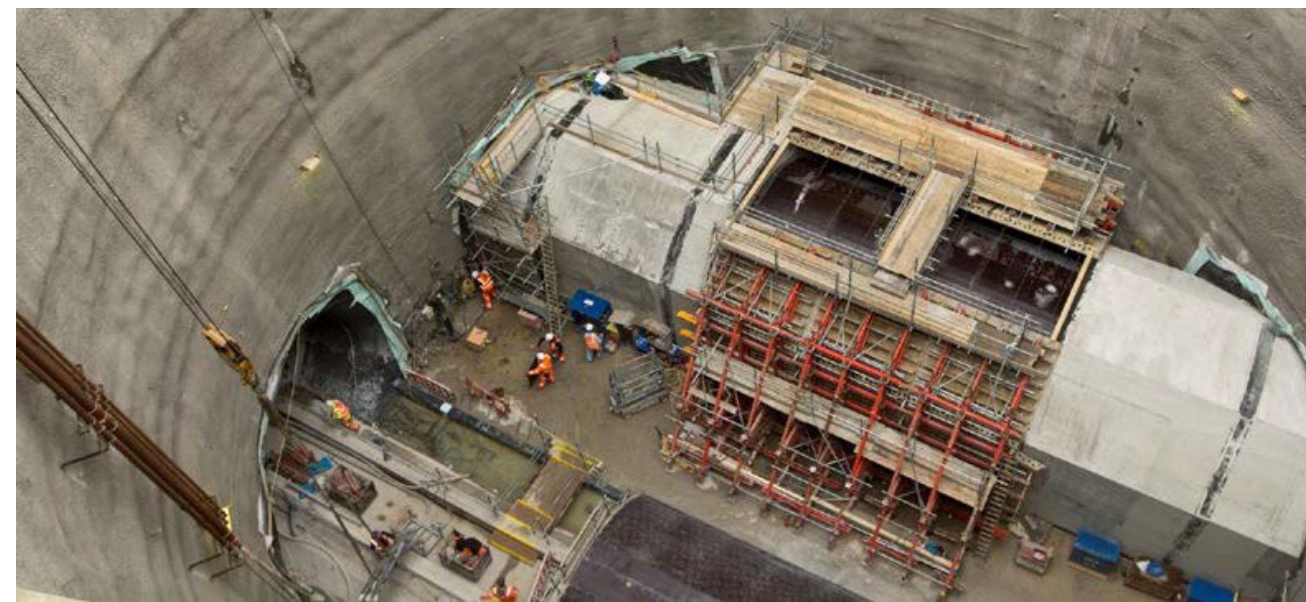
Scope

Cross River Rail is a new 10.2 kilometre rail line from Dutton Park to Bowen Hills, which includes 5.9 kilometres of twin tunnels under the Brisbane River and the CBD. The project will unlock a bottleneck at the core of our transport network and it will transform the way we travel across the whole of South East Queensland. This critical public transport infrastructure project which will improve our quality of life, help our economy keep growing and generate thousands of jobs.

The Joint Venture team of CPB BAM Ghella and UGL is responsible for the detailed design and delivery of the tunnels and four new underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street.

Our Role

CaSE has been providing extensive support to the project including temporary works design, site inspections and constructability advice for Coffs Harbour Precast yard, Boggo Road, Gabba, Roma and Albert Street stations. Key personnel have been embedded into the team in Coffs Harbour and the Gabba during critical construction phases. CaSE was also involved in providing proof engineering services for the station segment erection equipment designed and supplied by DEAL.





The CaSE team provided the following services:

Precast Segmental station construction

- Tender and construction stage support
- Matchcast segments for mezzanine, lifting and transportation
- Provision of deliverables to support efficient production of shop drawings for clash-free precast segments
- Design check for erection equipment and heavy falsework towers
- Station FRP - design of heavy falsework and site inspection

Provision of Personnel

- Precast yard engineers
- Site inspection
- Site Personnel

Temporary Works

- Design of Access Systems
- Falsework/formwork Design
- Independent Check
- Temporary Works Design
- 70T precast rotation frame

Sydney Metro South West

Sector: Tunnel

Client: Transport for NSW, John Holland CPB Ghella JV

Location: Sydney (AUS)

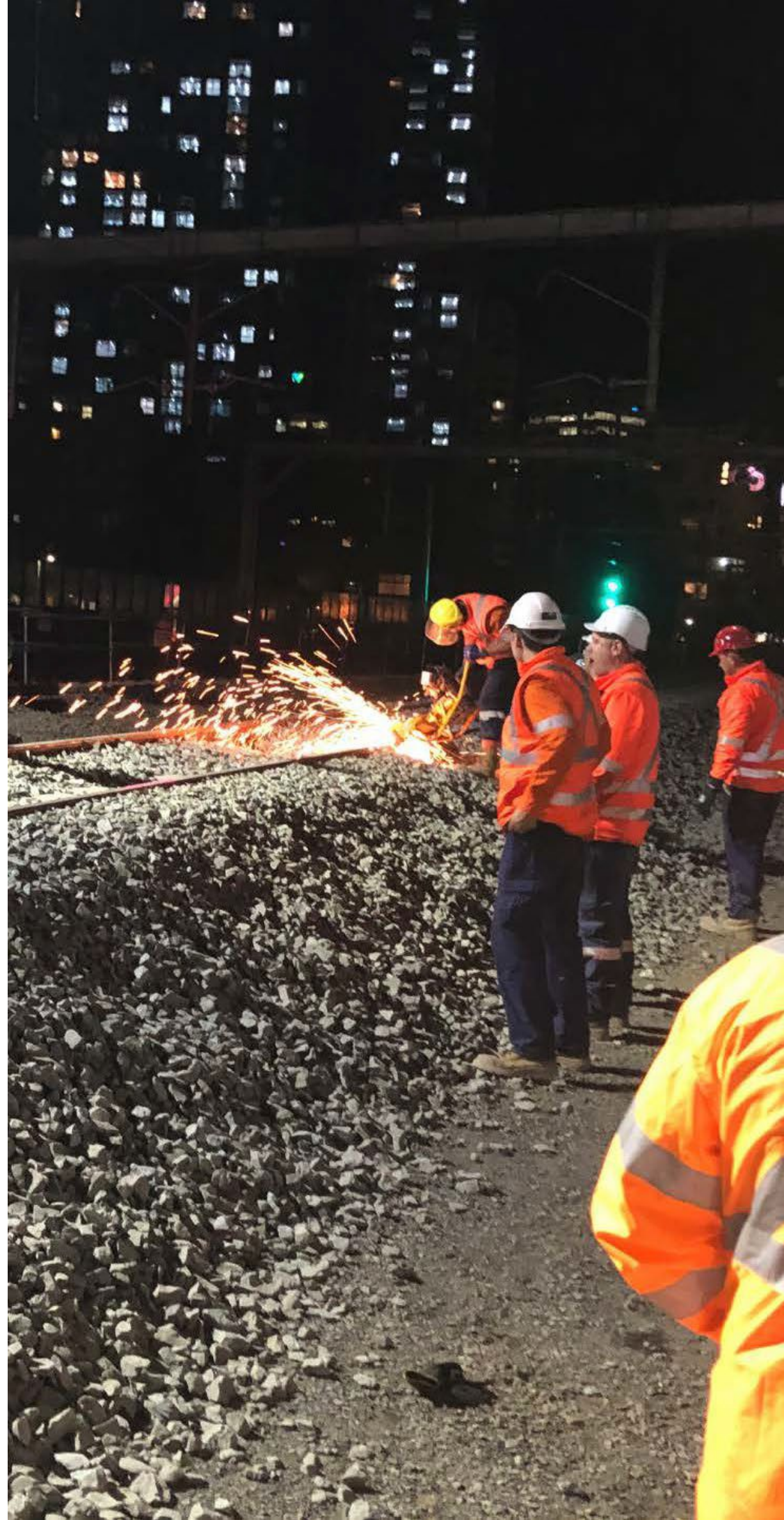
Project Value: AUD 15.5B

Scope

Sydney Metro is Australia's biggest public transport project.

From the Northwest, metro rail is being extended under Sydney Harbour, through new underground city stations and beyond to the Southwest. This will be a 30km metro line between Chatswood and Bankstown.

It is expected that by the end of 2024, Sydney will have 31 metro railway stations and a 66km standalone metro railway system, revolutionising the way Australia's biggest city travels and improving the life quality of the local community and tourists.



Our Role

Our team participated in excavation, temporary support, anchor waterproofing, and permanent concrete cassette work at the station. We utilised a slurry TBM for excavation, installed concrete segments, excavated cross passages, and performed defect repairs and closeout activities.

Our services encompassed site quality assurance management, inspections, site auditing, lot review, non-compliance and defect management, as well as closeout procedures. Additionally, we managed client and independent expectations and addressed issues promptly. We also oversaw the site's completion process, which involved redline markups, handover, and work completion submissions.

The CaSE team provided the following services:

- Operation of precast facility
- Delivery of 98,742 precast segments
- On- site transportation
- Excavation of five tunnel boring machines (TBM)
- Strong Quality control & issue management

West Connex Stage 3B (Rozelle Interchange)

Sector: Tunnel, Road, Bridge

Client: Transport for NSW, CPB Contractors and John Holland

Location: Sydney (AUS)

Project Value: AUD 3.9B

Scope

WestConnex Stage 3B Rozelle Interchange and Iron Cove Link, or M4-M5 Link, is the final stage of WestConnex, Australia's largest road infrastructure project. It will provide a new underground motorway interchange to City West Link and an underground bypass of Victoria Road between Iron Cove Bridge and Anzac Bridge. These underground elements will link to the future Western Harbour Tunnel.

The interchange in Rozelle will be mostly underground at the site of the old Rozelle Rail Yards. This will connect the suburbs of Lilyfield, Rozelle, Annandale and Glebe, and provide better connections to The Bays Precinct.

The 33-kilometre motorway project is due to open by the end of 2023 and it will deliver new active transport options in Rozelle, creating improved cycling and pedestrian links and up to 10 hectares of new open space.



Our Role

Case provided the Project Traffic Representative (Traffic Manager), responsible for the development and implementation of the Traffic Management and Safety Plan as well as overseeing all traffic management and ensuring the overall success of the Project.

Also, our team of experts provided temporary design works, management and provision of personnel.

The CaSE team provided the following services:

Temporary Works

- Bridge barrier concept design
- Temporary secant piled retaining wall

Contractor Services

- Construction management support
- Cut and cover work support
- Provision of Personnel

Traffic & Transport

- Temporary traffic staging

Melbourne Metro

Sector: Tunnel

Client: Rail Projects Victoria, Cross Yarra Partnership

Location: Melbourne (AUS)

Project Value: AUD 11B

Scope

The Melbourne Metro Tunnel will create a new end-to-end rail line from Sunbury in the west to Cranbourne/Pakenham in the South East, which includes the construction of twin 9-kilometre rail tunnels.

Construction is underway on the Metro Tunnel which will untangle the City Loop so more trains can run more often across Melbourne. The Metro Tunnel creates room on the network to enable over half a million additional passengers per week across Melbourne's train network to use the rail system during peak periods.

Untangling the City Loop means more trains, more often, next-generation signalling technology and five new stations benefiting all Victorians and visitors by making it easier to move around the city and visit important destinations such as Melbourne Airport.

Our Role

CaSE was involved in a detailed design check of fabricated TBM cradle support structures to span a large sewer line, originally designed by others as a steel trussed frame.

Furthermore, our engagement revolved around a detailed design check of fabricated TBM cradle support structures to span a large sewer line, originally designed by others as a steel trussed frame. After the structure was found to be inadequate for loading requirements, global and local strengthening to Australian Standards was specified, including FEM modelling of main trusses converted into plate girders via welded infill plates. We also provided the verification and modification of False Tunnel support structures for compliance with the loads provided and relevant design codes.

The CaSE team provided the following services:

- Temporary works design
- Falsework/formwork design
- Site inspections
- Detailed design
- Post fabrication modifications of the Tunnel Boring Machine (TBM)
- Supporting cradle structure & spanning sewer line, critical in launching the TBM for excavation
- Structural and design assessments



Glasgow Airport

Sector: Airport, Bridge

Client: Wills Bros Civil Engineering Ltd

Location: Glasgow (UK)

Project Value: GBP 27M

Scope

The Glasgow Airport Investment Area Scheme was a significant infrastructure project in Renfrewshire, Scotland to manage the carbon in infrastructure and setting a standard for low carbon development. The project improved connections between existing business areas. The £39.1million collaborative project was led by Renfrewshire Council.

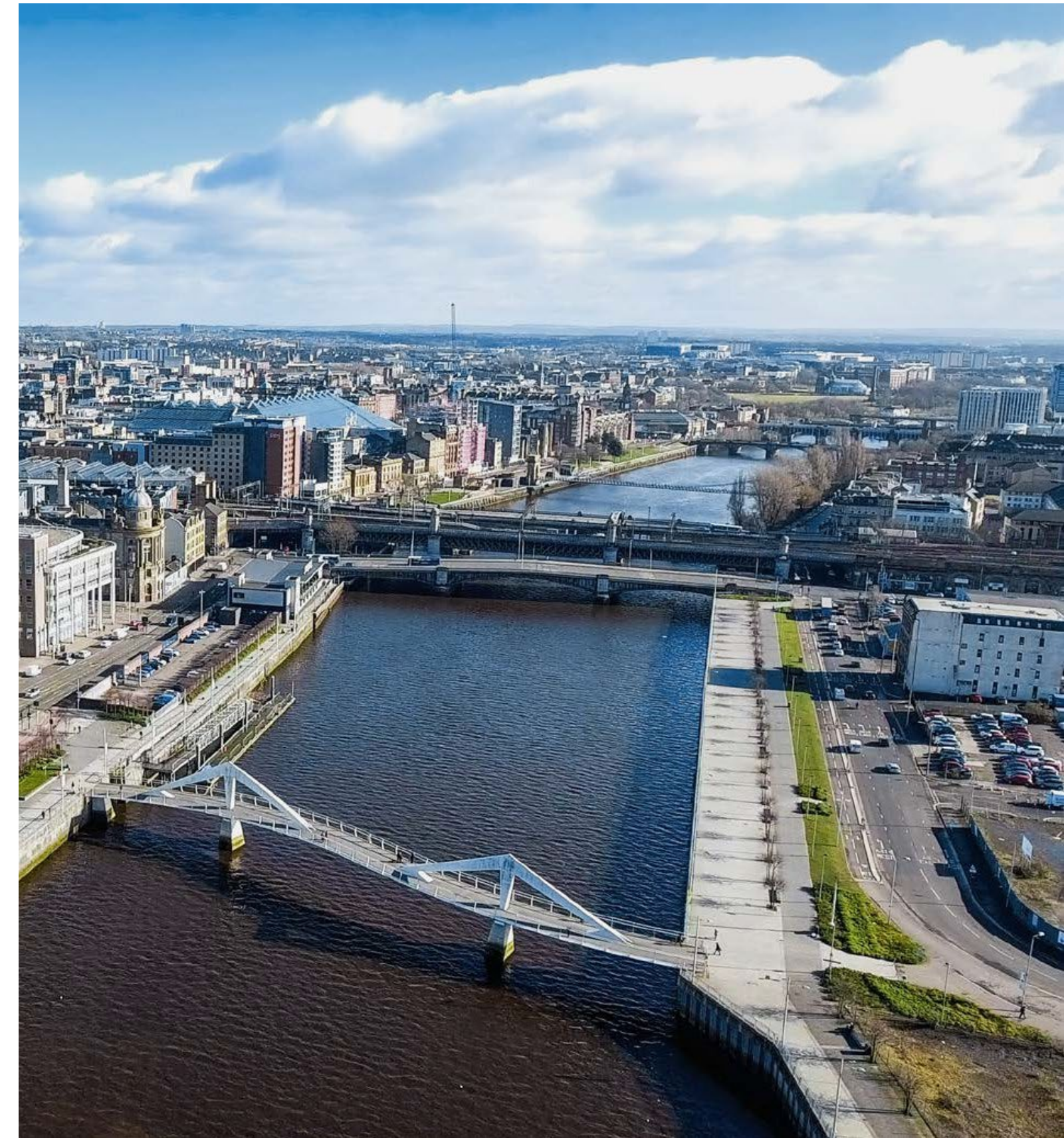
Our Role

CaSE was involved in the feasibility Study for the launched installation of Blackcart Bridge, as well as the Hardstand Design for fabrication and assembly of the Blackcart Bridge Preassembly yard.

A Masonry Arch Structural Assessment was conducted for the existing Inchinnan bridge to carry the Blackcart footbridge transported on SPMT's. Other services include pierhead falsework, cantilever formwork, PC beam stability and access and installation-related temporary works for the construction of the Wright Bridge.

The CaSE team provided the following services:

- Construction Engineering
- Design of access systems
- Falsework/formwork design
- Independent check
- Temporary works design



Queensferry Crossing

Sector: Road, Bridge, Marine
Client: Forth Crossing Bridge Constructors (FCBC), Geckotech
Location: Scotland (UK)
Project Value: GBP 790M

Scope

The Queensferry Crossing is a road bridge in Scotland. It was built alongside the existing Forth Road Bridge and carries the M90 motorway across the Firth of Forth between Edinburgh, at South Queensferry, and Fife, at North Queensferry.

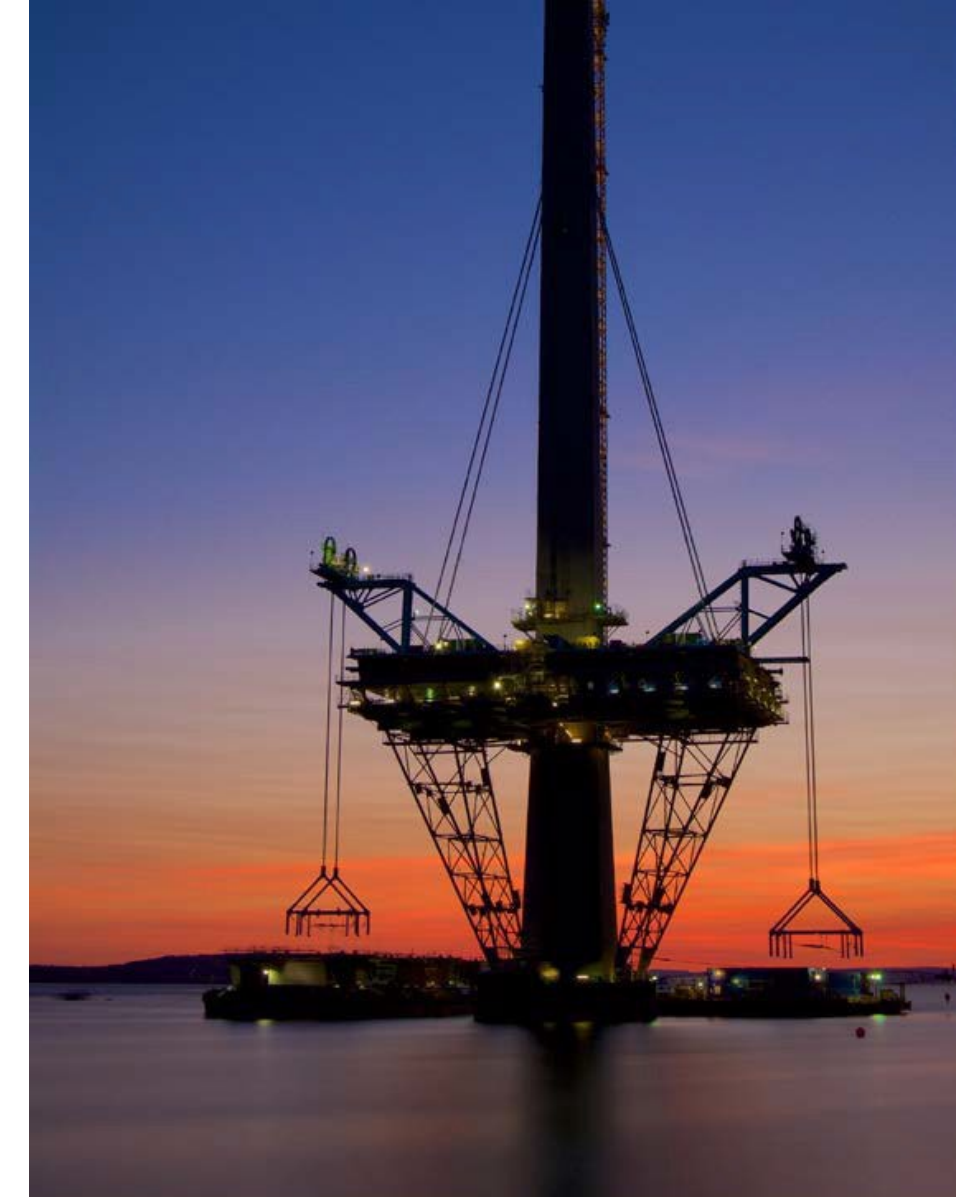
The Crossing is the world's longest three-tower cable-stayed bridge, with an overall length of 2.7 kilometres (1.7 miles), and the largest to feature cables which cross mid-span. It is also one of the largest infrastructure projects in Europe. In total, the overall Forth Replacement Crossing scheme is 22 kilometres (13.7 miles) long, including major motorway upgrades to the north and the south of the bridge.

New connecting roads were built, including new and upgraded junctions at Ferrytoll in Fife, South Queensferry, and Junction 1A on the M9.

Our Role

CaSE team was involved in this project in key roles within Forth Crossing Bridge Constructors (FCBC), principally in the construction of the cable-stayed bridge superstructure and approach viaducts, assisting during the full construction lifetime of the project from the marine works to the cables installation.

Since the bridge opening date, CaSE has been commissioned to provide design and engineering services for the finishing works and maintenance.



The CaSE team provided the following services:

- Provision of Engineering Resources
- Design Management
- Construction Engineering
- Project Management
- On-site Engineering
- Temporary Works Design

Projects

Queensferry Crossing



Our Team



Jonathan Davies

Managing Director / Construction Manager

Jonathan has 25 years of extensive expertise spanning various construction sectors and positions. With a robust foundation in structural and heavy civil engineering, including expertise in projects like bridges, buildings, and precast reinforced concrete, he excels in managing and training multidisciplinary teams and departments.

Jonathan is a seasoned problem solver known for his proactive and pragmatic approach. Over his career, he has consistently demonstrated his innovation and concept development skills, boasting over 15 years of experience in Project and Design Management, contract administration, resource allocation, forecasting, and cost control.

jonathan.davies@case.international



Daniel Taylor

Director / Project Manager

Daniel is a civil and tunnel infrastructure specialist with over 19 years' experience in the construction industry. With a proven ability to motivate and develop large teams to achieve forecast milestones, Dan has a passion for safety and delivering complex projects.

His most recently projects include part of the senior team delivering Sydney Metro West, Sydney Metro City and Southwest WestConnex Stage 1B New M4 and the award-winning Sydney Metro Northwest.

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Florian Dieterle

Technical Director

Florian has over 14 years of experience as a Design Engineer and a specialist in Bridge Construction, developing complex methodologies and designing associated temporary works. His focus lies in design and delivery of Bridge Construction Equipment for precast-segmental and steel bridges. His pro-active, client-focused, innovative and practical attitude with experience on major bridge projects worldwide make him an essential team member on complex projects, be it at the concept phase finding innovative ways how to build a bridge, be it at detailing user-friendly system or be it trouble-shooting projects with technical challenges.

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Ben McLean

Director - Traffic & Transport

Ben has over 20 years of construction experience, specializing in traffic engineering and project management. He's led major transport infrastructure projects in Australia, excelling in tender submissions, precontract activities, and alliance-style projects. Ben is known for his expertise in temporary traffic management and stakeholder collaboration, boasting a reputation as a disciplined team player and problem solver.

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Our Team



Craig Murray
Principal Engineer

For more than 25 years Craig has expanded on a strong structural engineering background, fundamental to efficient and innovative design practices, to develop broader skills in sound planning, management and execution within the Design & Build industry, primarily in the aviation MRO sector.

His capabilities include Aircraft hanger design and construction, design, design management, project management, scheduling, estimating & cost control are key strengths while his drive, accuracy, and tenacious approach to problem-solving ensure efficient, timely and cost-effective project delivery skills.

craig.murray@case.international



Colin Henderson
Managing Director - UK

Colin is a member of the Institute of Civil Engineering Surveyors, a Civil Engineer graduate from Dundee University, and has a Post Graduate Diploma in Commercial Management and Quantity Surveying from Heriot Watt University.

Colin has over a decade of experience in both engineering and commercial including establishing processes and procedures at the start of a project, identifying, agreeing and pricing change during a project and complex claims experience at the end of a project.

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John Henderson
Senior Consultant

John has been involved in heavy civil marine engineering for more than 40 years. His extensive experience includes tendering, delivering, and providing advice on major marine and bridge projects and leading multi-disciplinary and international teams.

He has a collaborative, innovative and empathetic approach which allows him to provide effective solutions to problems encountered whether they are technical, commercial or environmental.

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Barry Pike
Principal Engineer / Senior Consultant

Barry has more than 45 years of experience in heavy civil construction, temporary works design and implementation. His vast experience encompasses not only the structural design and detailing of the temporary works, but includes assistance in determining the total construction procedure, with full consideration being given to the contractors resources, personnel, and experience.

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Our Team



Joakim Dupleix

Principal Engineer & Regional Manager - Brazil

Joakim Dupleix has over 14 years' experience in structural design specialised in bridge design and related construction equipment. He has experienced different aspects of the bridge life-cycle: tender to detailed design, large scale strengthening of existing bridges as well as construction methods optimisations of segmental bridges.

Joakim also has been directly involved in the development of Geometry Control software ABES, and oversaw its application on various sites. Joakim has worked on projects all around the world and designed steel and concrete structures using the Australian, American and Eurocodes.

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Paul McQue

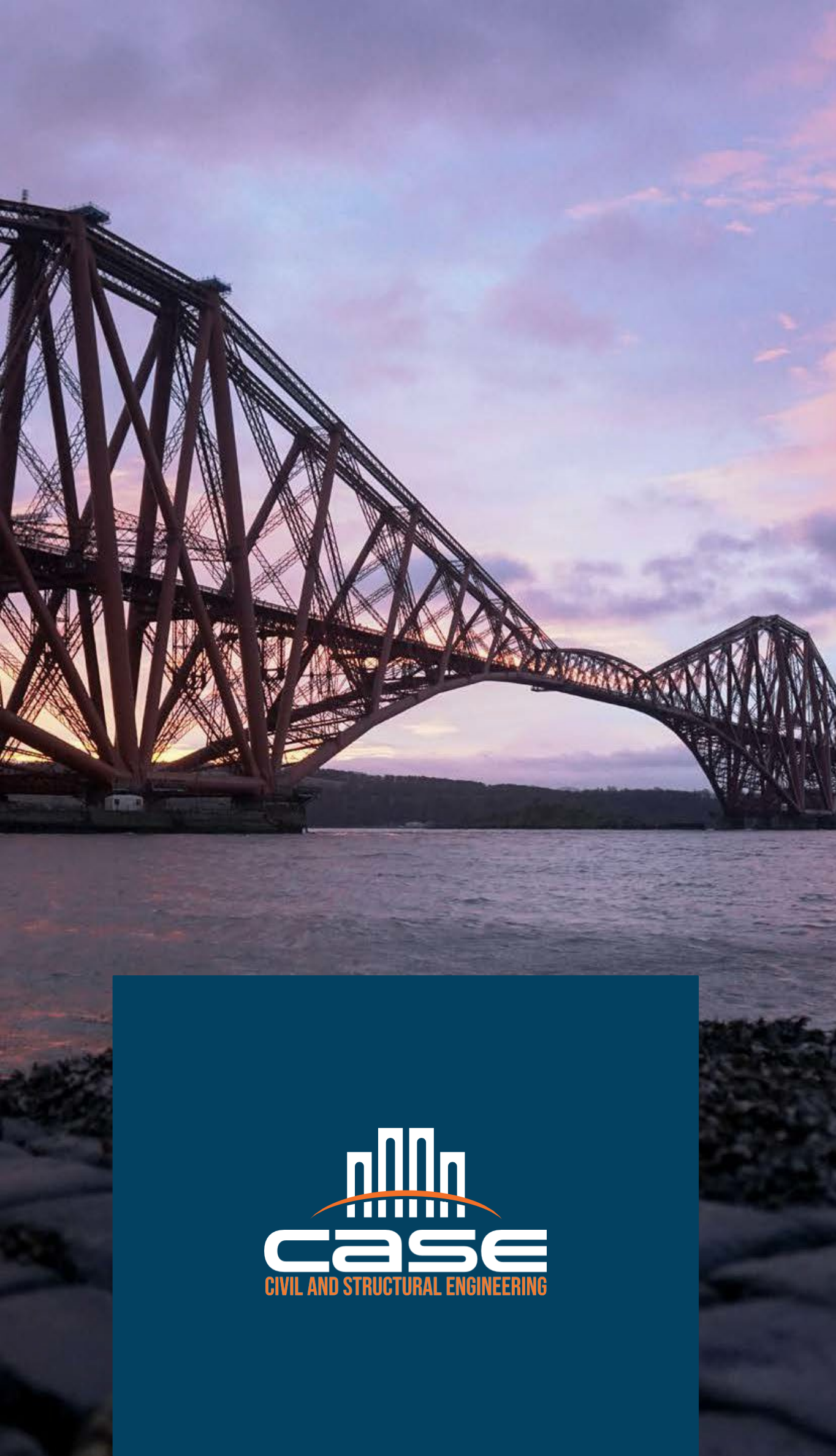
Regional Director - Middle East

Paul is an accomplished leader with extensive global experience steering businesses through rapid growth and transformation. Specialising in operational growth, business development, and high-value initiatives, he has led projects ranging from £2M to £20M, maximising investor returns through targeted growth strategies.

Paul excels in fast-track business growth, driving transformation, forging global partnerships, and leveraging innovative approaches in branding, social media, and AI integration. Known for creating dynamic work environments, Paul has successfully led high-performing teams and driven growth across key markets in the UK, Ireland, Middle East, West Africa, and North America.

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