



Civil



About EIC Activities

EIC Activities is CIMIC Group's engineering and technical services business.

Our engineering and risk mitigation expertise provides CIMIC Group with a competitive advantage for winning and delivering profitable projects that also generate value for clients.

EIC Activities ensures the Group's collective experience, technical capabilities, innovations and leading-edge technology applications are leveraged to deliver our client's objectives.

About CIMIC Group

CIMIC Group is an engineering-led services, construction and natural resources leader with a history dating back to 1899.

Powered by 39,000 people, and pioneering technology and engineering, we deliver high-value and sustainable solutions across the lifecycle of assets, infrastructure and resources projects in around 20 countries.

CIMIC Group comprises our engineering and construction businesses CPB Contractors and Leighton Asia, our integrated solutions providers UGL and Sedgman, our natural resources company Thiess (60% ownership), and our development and investment arm Pacific Partnerships – all supported by our in-house engineering consultancy EIC Activities.

Our mission is to generate sustainable returns by delivering innovative and competitive solutions for clients and safe, fulfilling careers for our people. We strive to be known for our principles of Integrity, Accountability, Innovation and Delivery, underpinned by Safety.





Our civil engineering services

As a member of CIMIC Group, EIC Activities provides services to CIMIC's operating companies exclusively. Our engineers are dedicated to work in the best interests of CIMIC to produce cutting edge design, mitigate risk and identify opportunities to create value.

To achieve this, EIC Activities' Civil team provides the following services:

- Analysis and design for a wide variety of civil engineering infrastructure including roads, rail, pavements and drainage
- Review and challenge of designs to mitigate risk and optimise design outcomes
- Review of reports and factual data to advise on properties and parameters for design
- Assessment and provision of alternative cost-effective design solutions
- Provision of design delivery services including concept design, detailed design, reporting and documentation, design verification and proof engineering
- Advice on constructability and construction methods, and provision of construction phase services (CPS)
- Whole of life assessment of infrastructure designs
- Support with legal and commercial matters including claims, disputes and forensic engineering
- Design/engineering management, either as a separate entity or via secondment into project teams
- Training of staff to increase knowledge of civil engineering design and its interface with construction through drawings, specifications and quality control.

Our civil engineering capabilities

EIC Activities' Civil team is a group of highly experienced engineers with skills that cover the broad scope of civil engineering and the capability to provide support throughout the entire project life cycle: from concept planning and scope; through investigation, design and specification production; to construction phase services including temporary works and quality review; and post-construction maintenance, defect liability assessments and owner handover.

The Civil team brings together highly experienced engineering professionals with consulting, design and construction experience, along with the flexibility of being supported by a number of trusted partner organisations.

Our civil capabilities and expertise include:

Road and rail

Assessment, design and value engineering of road and rail infrastructure, including:

- alignment design and optimisation
- intersections
- road/rail interface design (passive and active level crossings and grade separations)
- furniture, signs and line marking
- staging, temporary traffic management and temporary works.

Flooding and drainage

Assessment, design and value engineering for all aspects of water management, including:

- sizeable flood studies (flood estimation and hydraulic modelling)
- complex flood management schemes
- waterway cross drainage
- energy dissipation and erosion control structures
- civil infrastructure surface and piped drainage systems.





Energy and resources

Assessment, design and value engineering for civil balance of plant in the energy and resources spaces, including:

- pad layouts, hardstands and lay down zones
- access track alignment design and optimisation
- drainage design
- cut/fill, pavement and drainage specifications.

Earthworks

Advice on earthworks design and construction, including:

- design and specification
- testing and quality assurance/quality control
- materials sourcing and assessment.

Pavements

Assessment, design and value engineering for road, rail, airfield and mining pavements, including:

- pavement investigation and rehabilitation assessment
- material testing, selection and reuse
- earthworks and subgrade specification and treatment (e.g. in situ stabilisation)
- specification development
- quality assurance and quality control (QA/QC) assistance
- whole-of-life pavement analysis.

Design management

Our Civil engineering staff have undertaken engineering management/ design management on numerous projects of varying scale and scope and have the skills to step into a design management role whenever the need arises.

Case study

HumeLink West - UGL and CPB Contractors

Design and delivery of civil works packages

Challenge

The EIC Activities civil team is supporting the HumeLink West project.

HumeLink West, being delivered for Transgrid by UGL and CPB Contractors, is critical to connecting the Snowy 2.0 and other renewable energy projects into the grid and is a priority project for the Australian Energy Market Operator and the Commonwealth and NSW Governments.

HumeLink West encompasses approximately 140 km of 500 kV overhead transmission lines connecting Wagga Wagga, Maragle in the Snowy Mountains and HumeLink East at Wondalga. It also includes construction of new 500kV substations at Maragle and Gugaa, together with upgrade of a third substation at Wagga Wagga.

Solution

The civil team's scope includes:

- design and design management of civil works packages (access roads, transmission tower pads, brake and winch sites, drainage)
- establishment of two 350 worker accommodation facilities
- provision of four material and equipment laydown compounds
- installation of 65 new access points and 300 kms of access tracks
- intersection safety upgrade assessments
- pavement design for access tracks, accommodation facilities and laydown compounds.



Contacts



Sean Colloty

Principal - Civil
Team Leader - Civil

Sean.Colloty@eicactiv.com
+61 421 053 845
Brisbane

Summary

- 40 years' regional and international experience across a broad range of civil engineering sectors, including transportation, municipal engineering, civil infrastructure and project management
- experience in preparation of contract documents/technical specifications and contract administration
- MEngSci (Civil) - QUT
- CPEng, RPEQ, NER, MIEAust.

Relevant Experience

- infrastructure delivery for increased capability of military barracks
- underground service investigations and relocation strategies
- design, construction admin and asset handover of large-scale sporting venues and athletes' accommodation
- state authority projects – design, specifications, contract documentation
- design lead, project manager and technical reviewer roles on large infrastructure and subdivisional developments.



David Barker

Principal - Pavements

David.Barker@eicactiv.com
+61 438 596 157
Brisbane

Summary

- 26 years' consulting experience in geotechnical, earthworks and pavements engineering and the management of engineering and design for major civil engineering infrastructure projects
- specialisation in design and construction of pavements and earthworks
- Bachelor of Engineering (Civil)
- MIEAust, NER, CPEng, RPEQ.

Relevant Experience

- geotechnical materials laboratory testing
- geotechnical investigation, interpretation and assessment
- pavement analysis and design
- civil infrastructure and earthworks analysis and design
- design and engineering management of major civil infrastructure projects.



contact@eicactiv.com

www.eicactiv.com

A MEMBER OF THE CIMIC GROUP

