



engenium
smart project delivery

Project Construction Support

When planning or executing the construction phase of a project it is critical to have well engineered temporary works to compliment the main works.

Well designed and implemented temporary works have various forms and involve at least one technical field such as civil, structural or mechanical engineering.

Engenium have highly experienced engineers with a focus on innovation. We have the ability to communicate and interact with the main works designers to provide a technically competent, fit-for-purpose solution that is cost and time responsible and well interfaced with the main works design and construction process.

Structural Temporary Works

Most projects will require temporary works to enable the safe and efficient construction of the main works for infrastructure such as process buildings, mine shafts and concrete tunnels for underground transport paths, office buildings, bridges, workshops and warehouses.

Engenium has the right people and a proven track record of providing services in this space and our team works closely together with the contractors and builders to ensure the design is well aligned to the project needs.

Fixed Plant Structures and Civil Works

Engenium can provide expert Design Services for areas such as Temporary Retaining Walls, Temporary Support Structures, Temporary Platforming and Access Ways, Construction Roadway Design and Stormwater Management Planning.

Mobile Plant Structures

In many situations the project requires temporary works that are mobile in nature. Engenium has Design expertise and experience in areas such as Mobile and Automated Platforms, and Walkways for construction and inspection access.

We have expanded capabilities in Mechanical, Electrical and Automation functions to enable a fit-for-purpose solution to the project's accessibility issues.



Delivering Value. Delivering Results.

Mechanical Temporary Works

Projects often require temporary infrastructure that needs to be customised for the specific site. Mechanical services are used in strategic areas to facilitate continuous site operations.

Pumping and Dewatering

The management of water from underground tunnelling, construction activity run-off and weather events requires pumping and dewatering services that are fit for purpose and reliable. They must operate to demand and minimise site obstruction and interference. Engenium can assist in System Design and Selection for all your site based needs.

Lifting Equipment and Cranage

Lifting equipment is integral for undertaking construction services involving cranes, as well as jacking and winching systems. Engenium can select and design Hydraulic and Mechanical Winching and Hoisting Systems, as well as Customise Spreader Beams and Lifting Frames to suit your specific construction needs.



Transport Temporary Works

To realise significant project advantages many projects employ equipment, machines and components such as pre-fabricated oil rig platform modules, flotation cell modules, trams and trains, bulldozers and even entire pre-fabricated houses.

These assets are often fabricated off-site, then transported, and are often not designed for the transport mode as it does not form part of the normal operating duties. Engenium has the expertise and experience to customise solutions for your specific needs.

Module Transport System Design

Modules are pre-fabricated and in many cases completely fitted out prior to transportation. In these cases it is important to consider the transportation modes, as the loading cases and kinematic envelopes of the entire transport process must be understood, especially for multi-modal transport options.

It is also important to understand the transport path which often can include road, sea or air options with each option placing different requirements on the temporary works design. Engenium has the engineering resources to understand these requirements and provide reliable solutions to suit.

Demolition and Deconstruction

The understanding of structural issues and hazards reduces accidents and saves time and money. Engenium has experience in Structural Assessment and Engineering Support for such projects.

As a multi-discipline consulting engineering firm we can also assist in areas of Electrical, Civil Drafting, Mechanical Equipment and Services. We are very familiar with the relevant Australian standards, the Work Health and Safety Act, regulations and demolition requirements.

Our services include Detailed Structural Assessment and Condition Reports, Point Cloud Scanning and 3D Modelling, Temporary Works (including bracing and props), as well as Collapse Investigations.



Project Management and Support

Engenium's Project Management and Support Services are designed to assist the major works project manager and their project team to develop Temporary Works Planning and Implementation in a streamlined and effective manner.

Engenium's project managers are professionals with significant experience in Engineering and Design. This allows us to closely interface with the major works project team and provide solutions that suit their needs, including adding value through creative and integrated design solutions.

Our goal is to add value to the project through the Interface Management of the projects temporary works in areas such as Cost Reduction, Efficiency Gains, Safety Gains and Statutory Compliance.