

Geotechnical Mine Infrastructure

Geotechnical & Engineering Geology

- Geotechnical management and supervision of specialist drilling including: Onshore crossings, Offshore drilling, Longhole directional drilling
- Civil infrastructure investigations and geotechnical design for: tunnels, railways, roads and pavements, pipelines, tanks, shafts, bridges, accommodation, foundations, dams
- Structural geology and interpretation
- Geotechnical, geological and hydrogeological model construction
- Stability assessments of natural slopes and embankments
- Geotechnical risk assessments
- Prediction of ground conditions, preferred geometries and ground support requirements using FEM and FBM numerical modelling (i.e. UDEC and FLAC 3D)
- Mine plant, waste dumps and tailings dam investigation, design and construction supervision
- Contract preparation/tender evaluation and contract management
- Shotcrete design, operator training, technical solutions and reviews
- In-situ stress measurements
- Secondment of specialist project engineers
- Instrumentation installation and monitoring
- Work coordination and scheduling
- Geotechnical peer reviews
- Technical advice for legal council
- Practical application of tunnelling methodology and techniques
- Management of site operations from feasibility to completion
- Tunnelling methodology and constructability
- Tunnel bid assistance
- Tunnel shaft risk and mitigation
- Evaluation and implementation of tunnel systems and logistics
- Quality Control implementation and audits
- Water stop solutions
- Insitu grouting
- Back fill grouting solutions
- Independent assessor and auditing of tunnel sites for client and contractor



Relevant Projects

- Cibaliung Gold Plant geotechnical investigation and recommendations (Indonesia)
- Walhalla surface infrastructure investigation and foundation design (SA)
- Maldon Water Management Dam investigation and contract management (VIC)
- Victorian Desalination plantsite geotechnical investigation (VIC)
- Coal Connect railway extension and duplication and construction supervision (QLD)
- Siana Gold Plant and Tailings Dam geotechnical investigation (Philippines)
- Tunnel investigations and ground support design (City Link, Jindabyne Ski Tube, Sugarloaf Dam)
- Annual dam inspections (New Moon TSF, Hazelwood Power, Goulburn Valley Dams)
- Falls Creek Resort Management slope stability assessment, remedial designs and construction supervision (VIC)
- Newcrest (formally LGL Gold) - Lihir operation plant and accommodation
- Alkane Resources - Tomingley Gold Project plant site
- Austindo Resources - Cibaliung Gold Plant geotechnical investigation and recommendations
- Siana Gold Mine - Plant and Tailings Dam geotechnical investigation
- GHD - Southdown (Grange Resources) process plant, tailings dam, pipeline route and accommodation village sites
- GHD Victorian Desalination - Plantsite geotechnical investigation

ABOUT US

Mining One is an exciting team of highly experienced and professional mining, geotechnical geological and hydrogeological consultants offering excellence in service and commitment to their clients with high level strategic, hands on practical design and implementation.

Our well respected team has extensive industry knowledge and experience in a diverse range of disciplines.

With our engineering knowledge and skills using a variety of software packages we are able to provide safe, cost-effective and problem solving solutions which reduce mine operating costs, increase productivity and maximise economic extraction.

For more information on any of our services please visit at:

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