



MATTHEW RAYMOND LOWING

BE (Civil)

Country of Citizenship: Australia

Educational Qualifications: Bachelor of Civil Engineering
University of Sydney, 1994

WA Restricted Shotfirer's Licence (P006431)
Self Contained Breathing Apparatus TE06215

Languages: English, Indonesian (Bahasa Indonesia)

FIELDS OF SPECIAL COMPETENCE:

- Monitoring civil engineering ground deformations
- Open pit mining operations
- Drill and blast operations
- Crushing and screening operations

Matthew Lowing is an Associate of Pells Sullivan Meynink Pty Ltd. He graduated from the University of Sydney in 1994 and worked in the environmental contracting field before joining Leighton Contractors Pty Ltd contract mining division in Western Australia in 1995. Mr Lowing joined Pells Sullivan Meynink Pty Ltd in June 1997.

EXPERIENCE:

June 2005 - Present

Pells Sullivan Meynink Pty Ltd, Sydney, Associate Geotechnical Engineer

June 1997 – June 2005

Pells Sullivan Meynink Pty Ltd, Sydney, Geotechnical Engineer

1995 - April 1997

Leighton Contractors Pty Ltd, Western Australia, Site Engineer

1993-1995

Gilbarco Aust. Ltd, Sydney, Environmental Project Engineer

OPEN PIT MINING

1 of 3

Kelian Gold Mine,
High Level Diversion Conduit
Sealing,
East Kalimantan

Grouting of the High Level Diversion Conduit through the Nakan Dam. Involved inspection of the conduit using breathing apparatus; mobilisation of a national dive team to clean precipitate from the invert; the plugging of the leaking 1.0m diameter diversion conduit with a purpose-built water-inflated packer followed by a 36 hour grouting operation.

Kelian Gold Mine,
Final Landform Design
East Kalimantan

Design of final landforms to facilitate long-term drainage and stability of the Kelian Gold Mine following closure; development of the mine closure construction programme; costing of the programme; review of as-constructed drawings; on-going inspection and advice.

Kelian Gold Mine,
1280 Waste Dump Re-Profiling
East Kalimantan

Inspection and advice in relation to the 1280 waste dump re-profiling.

Kelian Gold Mine,
AMD Encapsulation Materials
Investigation
East Kalimantan

Geotechnical investigation of potential waste dump encapsulation materials to provide an oxygen diffusion barrier for acid producing mine waste rock dumps.

Kelian Gold Mine, Nakan Dam,
East Kalimantan

Site engineer in charge of Stage 2 Completion of 128m high and 75m high earth and rockfill dams. Duties included direction of national labour and plant on a continuous shift operation; approval of foundations; review of construction to ensure design conformity; supervision and training of soils laboratory personnel; soils testing in the absence of technicians; compilation and review of earth testing results, compilation and review of instrumentation readings; liaison with the Indonesian Department of Public Works (Dam Safety Unit) and the Indonesian Dam Safety Commission both on site and in Jakarta on matters of dam certification; Preparation of the as-constructed report and operation and maintenance manual for the Nakan Dam.

Kelian Equatorial Mining
Namuk Tails Dam, Indonesia

Modelling of tails deposition within the Namuk Tails dam over the proposed 7 year mine life utilising PSM's in-house tails modelling program TAILDAM7 and SURFER (DTM package).

OPEN PIT MINING

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Cadia Holdings Pty Ltd
Cadia Gold Mine
Tailings Dam, Orange, NSW

Designer's representative for construction of the \$15M Stage 1 tailings storage facility. Duties included approval of foundations, review of construction to ensure design conformity, review and compilation of earth testing results, reading and compilation of pneumatic piezometer readings and field trials of construction materials.

Cadia Holdings Pty Ltd
Cadia Gold Mine
Waste Dump Encapsulation Trial
Orange, NSW

Geotechnical investigation of potential waste dump encapsulation materials to provide an oxygen and water diffusion barrier for acid producing mine waste rock dumps; construction of test pads of potential encapsulation materials; laboratory and field permeability testing of constructed pads.

Cadia Holdings Pty Ltd
Cadia Gold Mine
Cadiangullong Ck Crossing
Orange, NSW

Construction of the environmentally sensitive Cadiangullong Ck crossing to provide haulroad access to satellite pit.

Cadia Holdings Pty Ltd
Cadia Gold Mine
Copper Gully Creek, Orange, NSW

Designer's representative for construction of the water detention embankment and haul road crossing.

Cadia Gold Mines
Orange, NSW

Design of haul road crossings for tailings pipelines including cover heights and RC design.

Cadia Gold Mines
Cadia Tails Dam, Orange, NSW

Modelling of tails deposition within the Cadia Tails dam over the proposed 12 year mine life utilising PSM's in-house tails modelling program TAILDAM7 and SURFER (DTM package).

Fieldwork included shear vane testing and sampling of the terrestrial tails, sub-aqueous tails and slimes; Installation of pneumatic piezometers into the terrestrial and sub-aqueous tails.

Muja
Western Australia

Pit slope stability assessment

Waihi Gold
Waihi, New Zealand

Pit slope stability assessment

OPEN PIT MINING

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WMC
Environmental Pond No. 2
Nifty Copper Operation

Site and QA engineer for the construction and HDPE lining of 54 ML contaminated water storage facility.

WMC
Leach Pads 2 and 3
Nifty Copper Operation

Site Engineer for the completion of construction and HDPE lining of Leach Pads 2 & 3 and associated HDPE pipework.

Nifty Copper Operation
Great Sandy Desert, W.A.

Site Engineer for Leighton Contractors Pty Ltd's contract mining operation. Duties included preparation of daily/monthly cost/profit reports, document QA and OH & S conformance, purchasing, and scheduling of resources. Operation of mobile plant including Cat 777C and 773B Off-Highway Trucks, Cat 980F and Komatsu 420 Front End Loader.

Nifty Copper Operation Great Sandy
Desert, W.A.

Management of crushing and screening operation including operation and repair of crushing circuit, purchase, and shutdown scheduling.

WMC
Nifty Copper Operation
Open pit drill and blast

Open pit blast management including pattern marking, loading, tying in and detonation of non-electric initiation systems.

TUNNELLING

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Transgrid	Supervision of polyurethane grouting of Transgrid Energy Tunnel from St Peters to Redfern technology Park.
Thiess-Hochtief Joint Venture Epping to Chatswood Rail Link	Senior Geotechnical Engineer responsible for the mapping, ground deformation monitoring, and groundwater inflow measurement of the TBM tunnels, underground station caverns, NorthShore Rail Line, Northern Line and the Lane Cove River Crossing
Maunsell Eastern Distributor, Sydney	Inspection of tunnelling progress, marking up positions of side wall rock bolts, updating monitoring data, and preparation of field engineering directives to the tunnelling contractors

CIVIL ENGINEERING PROJECTS

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Sydney Airport, FAC	Field trials for stabilization of off-runway surfaces of new N-S runway.
Donaldson Coal (for Hunter Water)	Superintendent for the replacement of 2km of DN900 Chichester Trunk Gravity Main locking bar pipeline at Blackhill (Newcastle, NSW) with DN900 Sintakote underground pipeline.
Kelian Gold Mine, Final Landform Design East Kalimantan	Design of pipework and steel detail for Final Landforms drainage.
Rio Tinto Iron Ore	Mechanistic and empirical haulroad pavement design for Marandoo Mine Extension.

LEGAL AND ARBITRATION CASES

1 of 1

Slater & Gordon on behalf of Andrewartha Andrewartha Vs BHP Steel (Ais) Pty Ltd Cataract River, NSW	Site inspection, review of pre-court documentation, preparation of material for court submission. Outcome: Court found in favour of plaintiff.
Clayton Utz on behalf of John Holland Construction United Well Investment Limited and John Holland Construction & Engineering Pty Ltd Rushcutters Bay, NSW	Site inspection, review of pre-court documentation, preparation of geotechnical model. Outcome: Expert found in favour of John Holland Construction
Blake Waldron Dawson on behalf of Leighton Contractors Leighton Contractors Vs Western Metals Gunpowder	Site inspection; review of tender documentation including drill and blast parameters. Outcome: Out of court settlement.
Clayton Utz on behalf of Thiess.	Assessment of tertiary sediment strengths from sonics data.
Clayton Utz on behalf of RTA.	Assessment of blasted rock volumes.

PUBLICATIONS

Fowler M & Lowing M *Experience of geotechnical monitoring instrumentation on the Epping to Chatswood rail line* AGS AUCTA Mini-symposium *Geotechnical aspects of tunnelling for infrastructure projects* Oct 2005