



Earthworks

Geotechnics

Environment

Groundwater

Rock Mechanics

Geophysics

Earthworks

Integrated Practical
Solutions



Earthworks Services



Our 50 years of experience gained over 100,000 completed projects, combined with our highly skilled and hands-on team of consultants, delivers clients innovative advice and solutions across a wide range of industries.

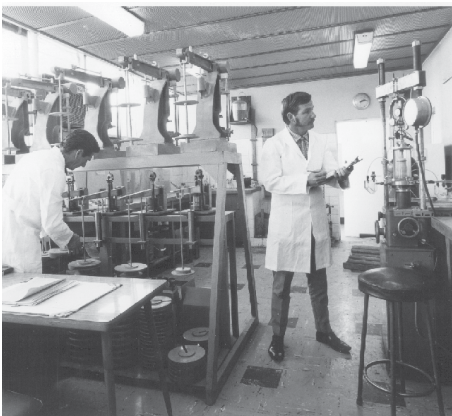
Expertise from the Earth's Surface Down

Douglas Partners provides expertise for projects that interface with the Earth's surface. Specialist disciplines include geotechnical engineering, rock mechanics, contaminated land, groundwater, geophysics and earthworks.

We have wide regional coverage, with over 500 staff in 20 branches across Australia including 15 NATA registered laboratories. This allows staff and resources to be available on the ground to service projects quickly and reliably. Our specialist disciplines work closely together to provide integrated and efficient service and solutions.

Quality is a hallmark of our work. Of course we have an ISO9001 accredited QA system, however our dedication to quality runs much deeper than this, it's part of the culture and can be summed up by our mantra: "Keep it Simple, Get it Right, Do it Well".

With an in-house team of professional consulting staff specialising in the development, control and protection of environmental resources, Douglas Partners' highly qualified Laboratory and Earthworks experts provide clients with services and support across a wide range of industries.





Services Across Sectors

Douglas Partners consulting services provide our clients with a range of integrated and specialist skills with the aim of delivering practical solutions across a large number of business sectors including:



DEFENCE



PROPERTY & BUILDINGS



WASTE MANAGEMENT



ENERGY



RESOURCES



WATER



HEALTHCARE



SPORT & RECREATION



LAND DEVELOPMENT



TRANSPORT



MARINE



TELECOMMUNICATIONS

Integrated Practical Solutions



Earthworks Services



Earthworks Testing and Services

Douglas Partners testing laboratories provide construction materials testing for industrial, commercial and residential subdivisions, mines and associated infrastructure, roads, pipe lines, quarries, railways, bridges, tunnels and dams. We conduct and maintain quality assurance testing of aggregates, soils and concrete during the construction of major infrastructure projects. Our laboratories are staffed with highly qualified technicians who work with our clients to provide unique and innovative solutions that are technically, easy to understand and practical to implement. We take great pride in our work and focus on exceeding client expectations.

We promote an enjoyable and stimulating work environment with an absolute commitment to safety. Our staff development sets us apart with all technicians undertaking on-going training. Our laboratories are NATA accredited and comply with current Australian Standards and International Standards such as British Standards (BS), American Society of Testing and Materials (ASTM), and various State & Territory test methods.

Douglas Partners' laboratory services provide clients with:

- Fast turnaround and accurate test results
- Reliable service
- Conduct our business with integrity and in compliance with our accreditation body
- Comprehensive range of construction materials testing including soils, rocks, aggregates and concrete
- Fully integrated LIMS software that allows clients to access their test reports on-line
- Tender preparation service
- Full geotechnical and environmental engineering support



Level 1 & Level 2 Compaction Testing & Inspection

Douglas Partners can provide compaction testing services during construction in order to verify that the soil has been compacted in accordance with the specification. We service all sectors and industries, including state and local government, property developer, small business and individuals. We conduct our work to ensure it fits strategically with clients objectives.

Services offered include:

- Level 1 Testing & Inspection in accordance with AS3798
- Level 2 Compaction Testing
- Monitoring of earthworks and suitability of materials during the construction phase

Laboratory Compaction Tests:

- Standard Compaction
- Modified Compaction
- Maximum / Minimum Density Index (Cohesionless Material)

Field Density Tests:

- Nuclear Gauge Method
- Sand Replacement Method

“Without exception Douglas Partners have been able to add value to the project work we have been jointly involved in. We have found their staff to be knowledgeable, experienced, flexible, and a pleasure to work with.”

*John Eggleston
Senior Project Manager
Robert Luxmoore Pty Ltd*



Earthworks Services



Soil Testing

Douglas Partners can provide a broad range of testing to determine soil characteristics and properties, from CBR testing to determine pavement thickness designs to soil classification testing for residential, commercial & industrial developments. We also undertake specialised soil testing to determine permeability, dispersion, strength, consolidation and direct shear. We are totally committed to extending our range of services to meet our client's requirements.

Services offered include:

- Atterberg Limits
- Linear Shrinkage
- Moisture Content
- Shrink Swell Index
- Sieve Analysis
- Hydrometer Test
- Foreign Materials
- Triaxial Permeability
- Constant & Falling Head Permeability
- Emerson Class Number
- Pinhole Dispersion
- California Bearing Ratio (CBR)
- Insitu CBR
- Unconfined Compressive Strength (UCS)
- Unconsolidated Undrained (UU) Triaxial Compression
- Consolidated Undrained (CU) Triaxial Compression
- Consolidated drained (CD) Triaxial Compression
- Direct Shear
- Hand Vane Shear
- One dimensional consolidation



“At all times we have found that Douglas Partners has provided a high level of service to us. Their advice has been reliable and they have been very timely in their service delivery. Based on our experience to date, we wouldn’t hesitate to engage them in the future.”

*Stephen Parkin
Director
Armstrong Parkin Architects*

Aggregate Testing

Douglas Partners can provide aggregate testing for quarry production and quality assurance conformance to a range of specifications for pavement gravels, drainage materials, asphalt materials and concrete mixes. We can undertake testing for size, shape, durability, strength, density and chemical.

Services offered include:

- Sampling
- Sieve Analysis
- Average Least Dimension
- Clay & Fine Silt Content
- Flakiness Index
- Fractured Faces
- Friable Particles
- Los Angeles Abrasion Value
- Material Finer than 75µm
- Maximum Dry Compressive Strength
- Organic Impurities Other than Sugar
- Particle Shape (proportional caliper)
- Particle Density and Water Absorption
- Sodium Sulfate Soundness
- Weak Particles
- Organic Impurities Other than Sugar
- Unit Mass (loose + compacted)
- Bulk Density
- Wet / Dry Strength Variation
- Aggregate Crushing Value
- Slake Durability

Earthworks Services



Concrete Testing

Douglas Partners can provide concrete testing for various applications, including pavements, bridges, drainage culverts & headwalls, industrial, commercial & residential buildings, precast walls, retaining walls and driveways. Our knowledge extends into providing concrete mix designs for individual organisations or the larger national companies.

Services offered include:

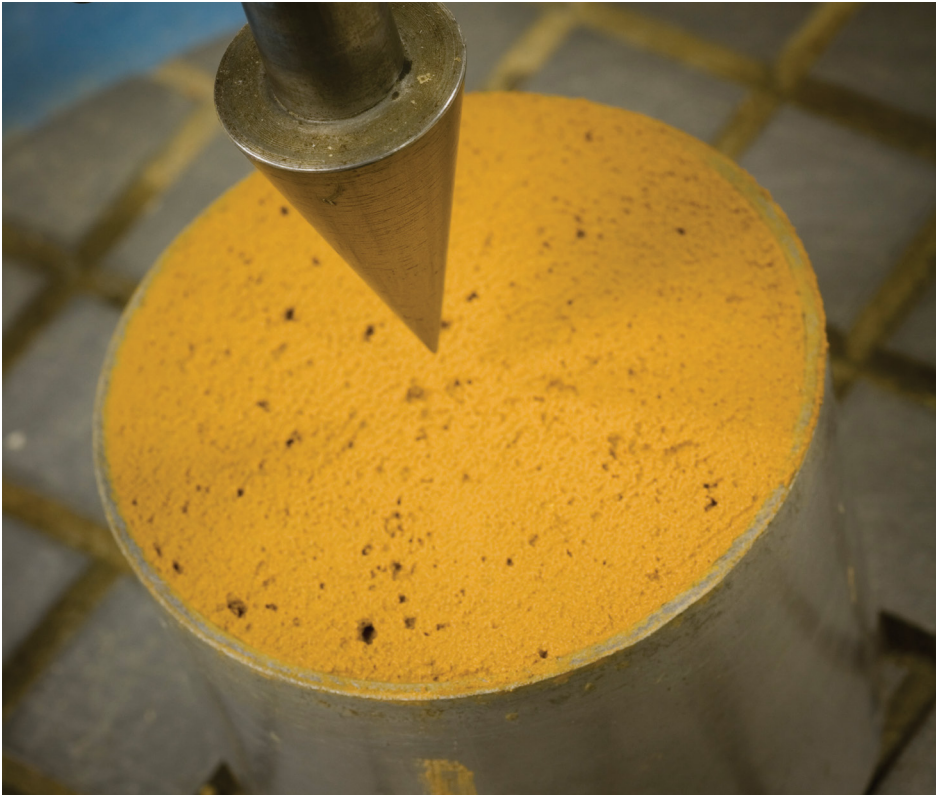
- Sampling
- Compressive Strength
- Slump
- Mass Per Unit Volume
- Trial Mixes
- Mass Per Unit Volume
- Bleed of Concrete
- Grout Testing
- Brazil Splitting
- Flexural Strength
- Drying Shrinkage
- Compressive Strength of Concrete Cores
- Slump Flow for Self Consolidating Concrete

Rock Testing

Douglas Partners can provide specialist rock testing to determine the strength and durability of rock used to set design parameters for new developments.

Services offered include:

- Young's Modulus
- Poisson's Ratio
- Unconfined Compressive Strength
- Point Load Strength Index
- Strength Testing
- Brazil Splitting
- Slake Durability
- Moisture Content
- Resistance to Salt Attack



“We have used Douglas Partners extensively for geotechnical advice, earthworks testing and contamination issues at The Hermitage for a number of years now and always found their advice to be accurate and reliable. Most importantly, I have found that the Douglas Partners team have shown the ability to use their commercial acumen in identifying cost effective solutions.”

Penetration & Deflection Testing

Douglas Partners can provide tests to determine bearing capacity for footing designs and crane pads as well as deflection testing of road pavements. The test data can be used for engineering properties prior to construction and post construction for conformance to specification requirements.

Services offered include:

- Dynamic Cone Penetrometer
- Perth Sand Penetrometer
- Benkelman Beam Deflection

*Oliver Roborgh
Development Manager,
Sekisui House Australia*



Integrated Practical Solutions





‘State-of-the-art’ equipment and technologies

From the days of Don Douglas we have aimed at: “Highest quality standards in regard to technology and its application, accuracy and presentation”. In today’s age of fast paced technological change we are increasingly investing in research and development of systems and techniques to allow us to provide reliable and efficient solutions for our clients.

We maintain a wide range of advanced field testing and monitoring equipment to provide the most comprehensive and accurate data for our clients’ projects. In addition, Douglas Partners’ sister company, Ground Test, owns and operates 10 drilling rigs, 4 cone penetration testing rigs and a comprehensive range of in-situ testing equipment.

Our in-house desktop GIS database contains over 100,000 completed project records. This resource provides background knowledge and an understanding of both site specific and regional conditions, assisting with providing prompt advice and solutions, and in many cases avoiding unnecessary costs for our clients.

Our in-house desktop GIS database contains over 100,000 completed project records.

“This team is efficient and service orientated and the level of mutual trust between our organisations ensures that Douglas Partners are our first choice consultant.”

*David Bobyreff
Director,
Minotaur Project
Management*



Metropolitan and Regional Coverage

For information on how Douglas Partners can assist on your project, please contact one of our branches below or email info@douglaspartners.com.au

BALLINA	☎ (02) 6681 1744
BRISBANE	☎ (07) 3237 8900
CAIRNS	☎ (07) 4055 1550
CANBERRA	☎ (02) 6260 2788
CENTRAL COAST	☎ (02) 4351 1422
COFFS HARBOUR	☎ (02) 6650 3200
DARWIN	☎ (08) 8948 6800
GEELONG	☎ (03) 5221 0711
GOULBURN	☎ (02) 4822 8395
GOLD COAST	☎ (07) 5568 8900
MACARTHUR	☎ (02) 4647 0075
MELBOURNE	☎ (03) 9673 3500
NEWCASTLE	☎ (02) 4960 9600
NTH WEST SYDNEY	☎ (02) 4666 0450
PERTH	☎ (08) 9204 3511
PORT MACQUARIE	☎ (02) 6581 5992
SUNSHINE COAST	☎ (07) 5351 0400
SYDNEY	☎ (02) 9809 0666
TOWNSVILLE	☎ (07) 4779 9866
WOLLONGONG	☎ (02) 4271 1836