Andrew Kerr

Personal details

Nationality	**South African – Temporary Australian Resident**
Profession	**Geotechnical Engineer**
Specialisation	**Foundation Design & Earthworks**
Year of birth	**1976**
Home Address	**Melbourne - Victoria**
Contact Details	**Tel: +61 3 9574 8377** **Mobile: 0410625386**

Key Experience

Andrew is a geotechnical engineer, with extensive experience in the planning, supervision and interpretation of earthworks/onshore/offshore geotechnical investigations in the UK and Middle East. In addition he has gained experience in tender documents, shallow/deep foundation design and slope stability analyses. Supervision of geotechnical ground investigations, borehole logging, dynamic cone penetration and slope inclinometer/standpipe installation.

Andrew acted as the Project Manager for the investigation, design and construction supervision of mining facilities and heap leach pad construction. He was also responsible for managing a team of site engineers specialising in the deployment of geomembrane and geosynthetic composite liners (GCL) and pipe work installation for a heap-leach pad and associated storage pond facilities and stability assessment of mine waste stockpiling and general maintenance.

Education and professional status

EDUCATION

2010	University of Pretoria Short course: Geotech Laboratory Tests
2001-2004	University of Portsmouth, B.Eng. (Hon) Engineering Geology Geotechnics

COMPUTER SKILLS

CPT Task, gINT, CLARA/W, Slope/W

Language ability English

EMPLOYMENT HISTORY

May 2012 – Present

Geotechnical Engineer
Geohart Consultants (Australia)

Kumba Resources

- Geotechnical logging protocol Review

Duties

Vent Shaft Raise-Bore Stability Assessment, NSW, Australia

- Assessed the geotechnical rock mass properties for the proposed raise-bore ventilation shaft.

Tailings Dam Safety Monitoring Programme, Victoria, Australia

- Risk evaluation of the Tailings and Clear Water infrastructures and associated facilities.

July 2010 – April 2012

Geotechnical/Construction Manager
Containment Quality Associates Ltd.(UK/Azerbaijan)

Duties

Heap-Leach Pad Construction, Gold Mine Development, Gadabey, Azerbaijan

- Project manager for the investigation, design and construction supervision of mining facilities. Responsible for managing a team of 8 site engineers, client liaison and contract management.
- Provide leadership of the construction supervision for the earthworks, geomembrane/GCL and pipe work installation for a heap-leach pad and associated process ponds.

- Team Leader / environmental geologist
  Supervision of geotechnical ground investigations, borehole logging, dynamic cone penetration and slope inclinometer/standpipe installation. Routine stability assessment of mine waste stockpiling and general maintenance.

January 2010 – June 2010

Engineering Geologist
BKS Engineering (South Africa)

Duties

Foundation Design for Gas Circuit Units associated with the Gas Heated Heat Exchange Reformer Project, Sasol

- Assessed and written input deriving soil/rock
- Geotechnical parameters; bearing capacities; vertical coefficient of subgrade reaction, use of consolidation tests to calculate settlements and anticipated heave. Design of auger cast in situ piles to carry vertical and lateral loads.

Evaluation of Slope Instability at Mbizana

- Recommended remedial measures to an existing heavily eroded slope prone to progressive slip failure below an existing road section. Designed cut-off trenches, drain interceptors and retaining gabion walls to stabilise the slope. Identified and characterised potential borrow pit source material.

Report for the Proposed New VW Press Shop, Uitenhage

- Carried out foundation rock/soil bearing capacity and settlement calculations concerned with deep pit, slab on grade and column foundations. Data evaluated from undertaken in-situ DCPT tests.

May 2009 – July 2010

Engineering Geologist
Royal Boskalis Westminster (U.A.E)

Duties

Khalifa Port; Abu Dhabi

- Issued weekly reports on a 9.0m high trial surcharge, comparisons made between observed and predicted primary settlements. Calculated liquefaction potential and induced post liquefaction settlements using CPT data to calculate settlements according to contract design uniform and shallow foundations. Issued technical report analysis supported from maintained zone plate load tests
- Rapid dynamic compaction and stone column (vibro-flotation)
- Performed independent checks on bearing capacity, settlement and slope stability analysis for the development foundation scheme for the 'Main Canal Quay Wall'.

August 2008 – April 2009

Geotechnical Engineer
Mouchel (U.A.E)

Khalifa Port & Industrial Zone, Abu Dhabi

Duties

- Acting site representative engineer supervising ground investigations for roads, bridges, water tanks, utilities (pumping and electrical substations).
- Administered the contract, held meetings with client/contractor and issued routine 'Variation Orders', 'weekly 'Meeting Minutes', 'Bill of Quantities', etc. thereby ensuring continued contact and monitoring of the investigation work.
- Design preparations for road pavement subgrades; sections underlain by clay layers; advised specific chainage locations along which road pavements required geogrid/textiles stabilisation with appropriate thickness modifications to capping/subbase layers.
- Use of consolidation test values to calculate settlements relevant to proposed water tanks, road embankments and generalised foundation loads.

Ghantoot Development, Abu Dhabi

- Performed independent checks on bearing capacity, settlement and slope stability analysis for the development foundation scheme for the 'Main Canal Quay Wall'.

April 2007 – July 2008

Geotechnical Engineer
Great Lakes Dredge & Dock Company (Bahrain)

Duties

Al Muharraq & Durrat Island Projects, Bahrain:

- Main duties involved supervising onshore cone penetration testing and offshore borehole drilling operations for two on-going projects.
- Planning and mobilisation of an offshore jack up barge assessing dredged material thickness by vibro-core and rotary drilling methods, thereby ascertaining potential quantities available from designated offshore borrow areas.
- Attended weekly meetings with site representative engineer and responsible for weekly in-house
- geotechnical progress reports.
- Testing of reclamation fill comprised of cone penetration testing (CPTU); test data prepared in accordance with specifications for client issuance using 'CPT Task' software.
- Performed routine field density tests by 'sand cone

replacement' method with determined laboratory maximum dry density, optimum and moisture content range required for satisfactory compaction.
- In situ compaction trials undertaken by three-sided impact and heavy duty vibratory roller methods. Soil density quality verifications on post placement and compaction based on CPT tests with graphical representation showing relative densities in accordance with contract specifications.

April 2006 – March 2007 **Assistant Geotechnical Engineer**
WS Atkins (UK/U.A.E)

Duties

Dubai Metro Rail Green Line Project, Dubai
- Preparation and written input to geotechnical combined factual/interpretative reports for elevated sections (piled piers) and underground stations (diaphragm walls). In situ testing such as SPT, diagraphy, elastometer (Menard) and packer tests with available laboratory tests results to compile geotechnical/chemical ground properties.

Olympic Park, Lower Lea Valley, London
- Preparation and written input for the 'Preliminary Geotechnical Interpretative Report, Olympic Park'. Compilation of data from previous and on-going ground investigations to be used for proposed structural, earthworks and foundation design. Carried out schematic pile designs.

Orwell Bridge, Pier 9 Remedial Works, Ipswich
- Designed a sheet pile wall using 'WALLAP' model to retain material due to increased scouring of the west flank adjacent to the pier thus preventing future weakening of the pier skirt and pile cap foundations. Profiled geological cross sections and selection of soil parameters derived from CPT test data.

M61 Junctions 6 to 9, Manchester
- Involved in the preparation of a 'Principal Geotechnical Inspection Report', providing data for all the highway geotechnical assets (highways earthworks, i.e., embankments, cuttings, bunds and at grade sections).

September 2004 – March 2006 **Graduate Engineer**
Faber Maunsell/AECOM

Duties

A1 Barton to Dishforth, Durham
- Assistant site representative engineer for Phase 1 and 2

of the 40 km A1 trunk road to dual three lane motorway from Dishforth to Barton Junction, North Yorkshire. Ground investigation supervision for earthworks and bridge structures.