

## **CURRICULUM VITAE - Confidential**

SURNAME: Van Rooyen NAME: Dirk Johan

**Date of Birth:** 23 February 1953

**Age:** 59

**Nationality:** South African

**Languages:** English, Afrikaans and Zulu

**Firm:** Geotechnics Africa Western Cape

**Position in Firm:** Senior Engineering Geologist

Qualifications: Professional Natural Scientist, South African Council for Natural

Scientists – Reg. No 400207/84

**Education:** BSc (Hons) (Engineering Geology) University of Pretoria, 1979.

**Membership:** South African Institute of Engineering Geologists

COUNTRIES OF WORK South Africa, Botswana, Swaziland, Mozambique, Angola,

**EXPERIENCE:** Namibia, Tanzania, Mauritius and Sudan.

**PROFESSIONAL** 1979 - 1980 South African Fuel Research Institute

**CAREER:** 1980 - 1983 Ove Arup Incorporated, South Africa

1983 - 1988 Associate Ove Arup Incorporated, South Africa

1988 - 1998 Founded Geotechnics Africa CC

1992 - 1998 Founded Foundation Engineering Services (Pty)

Ltd (a Botswana registered company)

1997 - To date Established Geotechnics Africa Western Cape

#### **PUBLICATIONS**

#### VAN ROOYEN D J, and HAMMOND A J

The lithology and structure of the Parktown Formation: Symposium on the Engineering Geology of Cities in South Africa, Pretoria, 1981; pp 26 – 34.

## **EXPERIENCE:**

Dirk has 33 years experience in engineering geology and has undertaken geotechnical investigations throughout Southern Africa and neighbouring countries, including Central, East and West Africa. He has provided the engineering geological component of two major port expansion programmes, one in the RSA and one in Angola. He has also worked on several major site selection studies for power stations and other industrial complexes, undertaken engineering geological investigations for townships, golf estates, shopping centres, hotels and casino complexes, investigations into problems related to groundwater assessment and proving of borrow pits, materials and centreline investigations for roads and pipelines, and foundation investigations for projects ranging from low-cost housing to multi-storey developments. Dirk has also worked closely with geohydrologists and groundwater consultants to provide geological assistance and collection of groundwater data for small to major groundwater studies.

#### SCHEDULE OF REPRESENTATIVE PROJECTS WORKED ON IN THE PAST:

#### 2011 – Namagua Wind Energy Facility, West Coast

Geotechnical Appraisal investigation for a new 50MW wind energy facility near the West Coast and approximately 15km west of Bitterfontein on the N2.

## **2010 to 2012 – Solar Energy Plant Projects**

Geotechnical Investigations for three photo-voltaic solar energy plant projects in the Central and south-western Karoo.

#### 2010 to 2012 – Wind Energy Facility Projects

Geotechnical appraisal and preliminary Investigations for the establishment of 40 to 247 wind turbine generators for proposed new wind energy facilities in the Namaqualand, De Aar and Springbok regions.

### 2010/2011 - Overberg Road Materials Supply Strategy

Location and proving of approximately 40 borrow pits for the sourcing of wearing course materials for the resurfacing of existing gravel roads in the Overberg region.

### 2000 – 2002 Arabella – Sheraton Hotel, Cape Town (LCC)

Resident Engineering Geologist for the investigation and supervision of under-slurry diaphragm wall construction, piling and dewatering of a deep basement and multi-storey hotel complex within the reclaimed foreshore of Cape Town.

### 2002 – 2003 Klipheuwel Windfarm (ESKOM)

Geotechnical Investigations for the establishment of a new wind farm research site.

#### 1997 – 2004 Hermanus; Silwerstrand, Arabella, Boschenmeer and Oubaai Golf Estates

Geotechnical Investigations for the establishment of new golf estates, hotel complexes, clubhouses, irrigation dams, access roads and pipelines to residential components and commercial sites.

## **Arabella Country Estate (LCC)**

Engineering geologist responsible for geotechnical input and advice on foundations for the residential development and ancillary buildings located on the Hermanus River Golf Estate.

#### Hermanus Mountain Golf Estate (Alexander House (Pty) Ltd)

Geotechnical Investigation for a new residential development and eighteen-hole golf course on Portion 3 of the farm Hermanus River 542.

## Arabella Hotel and Golf Club (LCC)

Geotechnical investigation for a proposed new five storey hotel and golf club complex on the Arabella Golf Estate between Kleinmond and Hermanus.

#### 1999 Pinnacle Point Casino, Mossel Bay (VKE & LCC)

Engineering Geologist responsible for the geotechnical investigation for a new Casino and Hotel Complex, centreline surveys for the main access roads and bulk sewer infrastructure and pipelines.

## **Caledon Casino and Hotel Complex (LCC)**

Resident Engineering Geologist for the monitoring and supervision of the earthworks, including engineering geological services for the selection of natural materials for the construction of new access roads and parking areas and the installation of piped services and subsoil drains.

### Sandton Square, Sandton.

Geotechnical investigation for a multi-storey office and shopping complex and basement parking.

#### Village Walk, Sandton.

Geotechnical investigation for a shopping complex with multi-level basement parking in Sandton.

#### Whale Rock, Clifton, Cape Town

Engineering geologist responsible for assessing rock mass conditions with specific reference to excavatability and stability of a deep cut into the steep slope above Clifton Beach.

#### Fourways Garden Hotel and Conference Centre, Sandton

Engineering geologist responsible for foundation investigation for hotel buildings and conference centre.

#### Formulé 1 Hotels (M&R Building (Pty) Ltd)

Foundation investigations for new Formulé 1 Hotels in Cape Town, Parow, Johannesburg, Sandton, Pretoria, Bloemfontein, Bedfordview, Nelspruit, Kimberley, Bedfordview, East London, Vereeniging and Richards Bay.

#### Pecanwood Development, Hartebeespoort Dam

Geotechnical investigation for 117 Cluster houses on potentially expansive soils on the southern shore of the Hartebeespoort dam.

#### 2003 Torres Atlantico, Luanda (Franki Africa)

Geotechnical Investigation for a 38 storey bay-front twin tower building and parking basement on deep estuarine deposits in Luanda, Angola.

#### 2006 – 2007 Saldanha Iron Ore Expansion Programme:

Engineering Geological component in the geotechnical drilling programme undertaken for the Deepening of the Port of Saldanha, Western Cape.

#### 2003 Iron Ore Tippler, Saldanha (Franki Africa)

Evaluation of calcretised marine sands affecting excavations for the installation of an underslurry diaphragm retaining structure to the new iron ore tippler in Saldanha.

### 2002 - 2003 Lobito Bay Angola (Franki Africa)

Geotechnical Investigation for a new Quay Wall, Fabrication Yard and Dredging Area at the Port of Lobito in Angola.

#### 2003 Covaco River Bridge (Franki Africa)

Foundation investigation for the reconstruction of the flood-damaged Covaco River bridge on the main road linking Benguela and Lobito.

#### Matimba Power Station, Transvaal (ARUP)

Engineering geologist responsible for engineering geological services for site selection and feasibility studies, and subsequent detailed site investigation for a future power station.

## **Grootgeluk Coal Preparation Plant, Escom Extension (ARUP)**

Engineering geologist responsible for geotechnical investigation for a proposed new processing plant at Grootgeluk Coal Mine, Ellisras.

## Modderfontein, Witwatersrand

Engineering geological investigation for proposed new sanitary landfill site.

#### Ga-Rankuwa and Mogwasi Industrial Townships, North-west Province

Foundation investigations for sixteen factories and two commercial developments.

# 2007 - Road Centre Line and Materials Investigation; Cabinda, Angola (Roc Oil Australia)

Engineering geological investigation for the construction of new access roads and on-land drilling platforms for oil exploration and production boreholes, on the outskirts of the town of Cabinda in Angola.

## SAB: EC 2000, Port Elizabeth

Geotechnical investigations for a new brewery and regional office building in the Perseverance industrial township of Port Elizabeth.

#### 1997 – 1998 Robben Island Phases 1 and 2, Western Cape (ARUP)

Centre line survey for the rehabilitation and upgrading of service roads and tourist routes, and installation of a new interceptor sewer line and pump stations.

#### 1997 Golden Pride Mine, Tanzania (Lycopoduim Australia)

Geotechnical investigation for a new gold processing plant and infrastructure near Nzega, Tanzania.

## 1994 Letsibogo Dam, Botswana (ARUP)

Location of natural materials for the construction of an earthfill embankment for the Letsibogo Dam near Silibi Pikwe in Botswana.

#### **Grootegeluk Coal Mine Expansion Project Ellisras (ARUP)**

Geotechnical investigation for new coal production plant and centreline surveys for access roads, conveyor network and pipelines.

### **Kraaifontein Factories**

Geotechnical investigations for the establishment of new factories and hardstanding areas for heavy duty vehicles.

## Oostenberg Hospital, Kuils River.

Site investigation for a proposed new private hospital in Kuils River.

## 1998 Beit Bridge Border Post (EVN)

Engineering geological investigations for the establishment of a new trucking port and the upgrading of the Border Control Post and services at Beit Bridge.

### Lorraine Farm, Hemel and Aarde Valley (MBB Consulting Engineers Inc.)

Site investigation for a proposed new wine cellar in the Hemel and Aarde Valley near Hermanus.

#### 1997 Westlake Development, De Rust (Hanrob cc)

Geotechnical Investigation for a 120ha residential development, including conference centre, hotel, sports facilities, restaurant, clubhouse and irrigation dams on the southern shore of the Hartebeestpoort Dam north of Pretoria.

# 2007 - 2009 Low-Cost Subsidy Housing Schemes (Breede River Winelands/Langeberg Municipality)

Township Investigations for the establishment of several low-cost subsidy housing schemes for the Breede River Winelands/Langeberg Municipality in Robertson, Ashton, Bonnievale and Montagu.

# 2005 - 2009 Low-Cost Cemetery Site Selection (Breede River Winelands/Langeberg Municipality)

Geotechnical Investigations for the site selection and establishment of new low-cost cemeteries in Bonnievale, Ashton (Zolani) and Montagu for the Breede River Winelands/Langeberg Municipality – 2005 to 2009.

#### **Soweto Cemetery, Gauteng (South African Memorial Parks)**

Engineering Geological Investigation for the establishment of the proposed new Soweto Memorial Park Cemetery in Gauteng.

## 1994 Paardekraal (EVN)

Cemetery site investigation and the location and detailed proving of sources of road construction and pipe bedding materials for the establishment of residential townships on the farm Paardekraal north of Rustenburg.

## Wildebeesfontein North

Engineering geological investigation for a 270ha residential township on potentially expansive soils north of Rustenburg, Transvaal.

## Kamagugu Housing Development Phase II, Nelspruit

Engineering geological investigation of an approximately 120ha piece of land for 615 stands on the outskirts of Nelspruit in Mpumalanga.