

# **CURRICULUM VITAE**



*CECILIA CANAHAI*

---

**NAME OF FIRM** : *JEFFARES & GREEN (Pty) Ltd*

**NAME OF PERSON** : *CECILIA CANAHAI*

**NATIONALITY** : *SOUTH AFRICAN*

**DATE OF BIRTH** : *1965/03/29*

**PROFESSION** : *ENGINEERING GEOLOGIST / ENVIRONMENTAL PRACTITIONER*

**POSITION IN FIRM** : *EXECUTIVE ASSOCIATE*

**QUALIFICATION** : *PrSciNat, MSc (Eng Geology), BSc (Eng Geology)*

**SPECIALISATION IN FIRM** : *GEOTECHNICAL / ENVIRONMENTAL/WASTE MANAGEMENT*

**YEARS OF EXPERIENCE** : *21*

**YEARS WITH FIRM** : *10*

---

## **SUMMARY OF EXPERIENCE**

Cecilia Canahai gained her first site experience working as a site geologist for oil and gas exploration, in Romania, in 1988. She completed drilling supervision, sampling, gas chromatography, borehole logging and interpretation, report writing and made recommendations for drilling parameters.

Cecilia joined Moore Spence Jones (Pty) Ltd in 1997 as an engineering geologist, where she completed numerous geotechnical investigations for township and industrial development, sports facility developments, private residential properties and pipeline investigations. She has completed slope analyses with recommendations for rehabilitation. Other aspects of her experience include pavement rehabilitation investigations and tunnel investigations.

She acquired her first experience as an environmentalist while carrying out groundwater pollution monitoring, at SAPREF.

All projects have included fieldwork, on site testing, site supervision of works, material sampling, interpretation of laboratory results, client liaison, and reporting.

Cecilia joined Jeffares & Green (Pty) Ltd in 1999 as an environmentalist / engineering geologist.

As an engineering geologist she has worked in various projects, inter alia, geotechnical investigations for rural water supply schemes, housing developments, roads investigations, materials investigations, lateral support design and geotechnical investigations for dams and tunnels.

As an environmental practitioner she has successfully completed numerous Environmental Impact Assessment Scoping reports, Solid Waste Management, Environmental Management Programme Reports and Closure Reports for various mines/ borrow pits and Environmental Audits. Mrs

Canahai is also involved in other aspects of the environmental field such as scoping and public participation, impact assessment, mitigation and monitoring and preparation of environmental management plans (EMP).

Cecilia was the Pietermaritzburg Branch Quality System Manager, involved in the maintaining the office' quality standard in terms of ISO 9001 (Jeffares & Green is ISO 9001 certified) between 2002 and 2007, when work commitments required her to hand over this particular task to someone else.

She has certificates in Integrated Environmental Management, Environmental Auditing and Internal & Suppliers Auditor in terms of ISO 9001.

### **SOCIETY MEMBERSHIP**

PrSciNat	Registered with the South African Council for Natural Scientific Professions Registration No 400011/00: Environmental Science & Geological Science
SAIEG	Member of the South African Institute for Engineering and Environmental Geologists Membership No 03/211
INWES	Member of the International Network of Women Engineers and Scientists
IAIA	Member of the International Association of Impact Assessment

### **EDUCATION**

1983	:	<b>Certificate of Baccalaureate</b> , Pitesti, Romania
1987	:	<b>BSc (Hons)</b> (Eng Geol) University of Bucharest, Romania
1988	:	<b>MSc</b> (Eng Geol) University of Bucharest, Romania

### **EXPERIENCE**

#### Jeffares & Green (Pty) Ltd

<b>2010</b>	:	Pikitup OSH Legal Audits
	:	Dumbe Coalline Geotechnical investigation for Transnet (stability of proposed cuttings)
	:	Various Geotechnical Investigations for Rand Water Pipelines
	:	Various Environmental Basic Assessments for Rand Water Pipelines
	:	Various Geotechnical Investigations for various Eskom towers (3 year Contract)
	:	Basic Assessment for the installation of Fibre Optic Cable between Pretoria and Rustenburg
	:	Materials recovery facility in Ekandustria Waste Licence Application and Basic assessment
<b>2008 – 2009</b>	:	Pikitup Environmental Compliance
	:	Rand Water G25 Pipeline Basic Assessment study downgraded to and Environmental Management Plan; Saved the Client R100 000,00 in fees.
	:	Pikitup Garden sites and Depot sites Application for Waste Licences & Basic Assessment studies
	:	Pretoria North Modal Interchange: full Environmental Impact Assessment for intermodal facility
	:	N11 Section 4: Environmental services for obtaining Authorization for road rehabilitation and borrow pits
	:	Various Geotechnical Investigations for Eskom towers (3 year Contract)
	:	N6: Environmental services and Applications for Borrow Pits Closures

- 2007 – 2008** :
- N6 Section 8 Closure Documentation for quarry and borrow pits for Road Rehabilitation
  - Lesotho Lowlands Water Supply Scheme: Geotechnical Investigation
  - Lusikisiki Police Station Geotechnical Investigation
  - Toscana Ridge Geotechnical Investigation for Housing development
  - Phinda Game Reserve: Geotechnical investigation for Housing development
  - Lusikisiki Police Station: Geotechnical Investigation.
  - Pretoria North Station Modal Interchange: full Environmental Impact Assessment for various road realignments, modal interchange and railway refurbishment in Pretoria.
  - N1 Section 14: Full Environmental Impact Assessment for the N1 rehabilitation.
  - Mt Ayliff & Mt Frere Access Roads – Environmental services for obtaining authorization from DEAET and DME for 12 access roads and associated borrow pits.
  - N2 Pongola Borrow pits: Application for borrow pits Closure
  - N2 Section 32: environmental services for obtaining Authorization for road rehabilitation and borrow pits
  - Umzimkhulu Municipality: Various environmental services for the upgrade of roads in Umzimkhulu
  - Environmental Management Plan for the rehabilitation of Dorpspruit River, Pietermaritzburg
  - Kwamashu Police Station Basic Assessment Report
- 2006 – 2007** :
- Elliottdale Landfill Site Classification and Permitting
  - Impendle Housing Development (1500 units): Geotechnical Investigation.
  - Lesotho Lowlands Bulk Water Supply Scheme: Geotechnical Investigation
  - Environmental Impact Assessment for various access roads in the Mt Frere and Mt Ayliff areas for the Umzimvubu Municipality.
  - Bubu Access Road : Geotechnical and materials investigation
  - Erf 3 Bishopstowe: Geotechnical Investigation for housing development
  - Willowton Proposed Shopping Centre: Geotechnical Investigation
  - Black Umfolozi River Bridge: Basic Assessment for environmental authorization
  - Mtwalume River sand mining Environmental Management Plan
  - Vulindlela Access Road: Environmental Management Plan for construction
  - Inhlazuka CWSS Environmental Management Plan for construction
  - Ladysmith Development: Preliminary Geotechnical & Environmental assessments
  - Black Umfolozi River Bridge - Basic Assessment Report as per NEMA Regulations 386.
  - Erf 3 Bishopstowe Geotechnical investigation for housing development
  - Vulindlela Access Roads – Environmental services for road rehabilitation.
- 2005 – 2006** :
- Closure of Landfill Site Hluhluwe & Identification of new Landfill Site to replace the old Landfill Site
  - N11 Sections 6 and 7 Borrow Pits and Quarry Permitting: environmental services (EIA & EMPR's) 10 borrow pits and one quarry
  - N12 Section 12 Borrow Pits & Quarry Permitting: environmental services (EIA & EMPR's) for 8 borrow pits and one quarry
  - Impendle Community Water Supply Schemes – Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structures.
  - Masomonco Community Water Supply Scheme - Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structure.
  - KwaNovuka Community Water Supply Scheme - Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structure.
  - Umtshezi Municipality Land Use Management System – Broad Environmental Scan

- : Vryheid Housing Development – Geotechnical Investigation
  - : Illovo River Mining Right – environmental services for a sand mining operation on the Illovo River
  - : Kwa Gqugquma Community Water Supply Scheme - Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structure.
- 2004 – 2005**
- : Geogedale development – environmental services for sand mining
  - : God’s Haven Housing Development – Geotechnical Investigation
  - : Kwa Senge Clinic – Geotechnical Investigation
  - : Umdoni Municipality Cemetery – Geotechnical & Environmental Assessments
  - : N6 Borrow Pits and Quarry Permitting: environmental services (EIA & EMPR’s) 10 borrow pits and one quarry
  - : Umkomaas River Mining Right – environmental services for sand mining operations on the Umkomaas River
  - ; Umkomaas River Footbridge – Geotechnical Investigation
  - : Marburg Prison – Geotechnical Investigation
  - : Enkanyezini Community Water Supply Scheme - Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structures.
  - : Shemula Community Water Supply Scheme - Environmental services for obtaining authorization from DAEA for the construction of a community pipeline and associated structures.
  - : Mtwalume River Mining Permit – environmental services for sand mining operation on the Mtwalume River.
  - : Umzimkulu River Mining Right – environmental services for sand mining operations on the Umzimkulu River
  - : Umvoti River Mining Rights and Permits – environmental services for various sand mining operations on the Umvoti River
  - : N2 Pongola quarry – Geotechnical Investigation
  - : Rugged Glen - Environmental services for upgrading and construction of new structures.
- 2003 – 2004**
- : Kwa Mpande Geotechnical Investigation for school
  - : St Ives Environmental Scoping for tourism development on the Midlands Meander
  - : Ladysmith Petrol Station – Geotechnical Investigation and Scoping report
  - : Kwa Ngwanase Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Kwa Ngwanase Community Water Supply Scheme Environmental Scoping for proposed pipeline and associated structures.
  - : Emkhuzeni & Mhlangana Community Water Supply Schemes – Geotechnical investigation for pipelines and associated structures.
  - : Emkhuzeni & Mhlangana Community Water Supply Schemes Environmental Scoping for proposed pipelines and associated structures.
  - : Inanda Dam Mining Permit – environmental services for a sand mining operation on the Inanda Dam.
  - : Mdloti River Mining Conversion of old right to Mining Right.
  - : Edwin Swales – Environmental Management Plan compilation and Auditing.
  - : Estcourt Prison – Geotechnical Investigation
  - : Kombuzi Environmental Management Programme report for mining
  - : Umhlumayo Community Water Supply Scheme – Geotechnical Investigation
- 2002 – 2003**
- : Dumbe Housing Development – Geotechnical Investigation.
  - : Clouds oh Hope – Children’s Home – Geotechnical Investigation
  - : C4 Water Pipeline – Johannesburg – Geotechnical Investigation.
  - ; Kombuzi Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.

- : Hlahlindlela Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Shemula Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Mt Frere rehabilitation of 3 roads – Geotechnical Investigation
  - : Mbono Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Camperdown Spar - Geotechnical Investigation for failed pavement.
  - : Thokoza Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Nqutu Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - ; Taxi Rank at Lusikisiki – Geotechnical Investigation
  - : Kwa Hlope Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
  - : Mbazwane Community Water Supply Scheme – Geotechnical investigation for pipeline and associated structures.
- 2001 – 2002** : Amangwe Community Water supply Scheme Environmental Scoping for Pipeline and associated structure
- : Black Umfolozi River Bridge - Basic Assessment Report as per NEMA Regulations 386.
  - : Mt Ayliff & Mt Frere Access Roads – Environmental services for obtaining authorization from DEAET and DME for access roads and associated borrow pits.
  - : Erf 3 Bishopstowe Geotechnical investigation for housing development
- 2000 – 2001** : Black Umfolozi River Bridge - Basic Assessment Report as per NEMA Regulations 386.
- : Mt Ayliff & Mt Frere Access Roads – Environmental services for obtaining authorization from DEAET and DME for access roads and associated borrow pits.
  - : Erf 3 Bishopstowe Geotechnical investigation for housing development
- 1999 – 2000** : Nzinga and Langkloof CWSS: Geotechnical Investigation for pipeline and reservoirs, Environmental Scoping: & Environmental Management Programme reports for mining
- : Mbazwana CWSS: Geotechnical Investigation for pipeline and reservoirs, & Environmental Scoping
  - : Nhlngano to Sicunusa Road: Geotechnical & Materials Investigation
  - : Edendale Hospital New Wing: Geotechnical Investigation
  - : Spandikroon, Dival & Mhlabathini CWSS: Geotechnical Investigations for pipeline and reservoirs, Environmental Scoping: reports
  - ; Tugela Estates CWSS: Geotechnical Investigations for pipeline and reservoirs
  - : Debep Quarry Drilling Investigation for materials for road Construction
  - : N2 Road Rehabilitation at Kei River Geotechnical investigation for road rehabilitation

Moore Spence Jones (Pty) Ltd

- 1998 – 1999** : Indian Ocean Fertilizers (Richards Bay): Geotechnical Investigation for new plant
- : Housing Development at Hammarsdale: Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
  - : Zimbali Housing Development: Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
  - : Cato Manor: Stability Investigation of platform cuttings
  - : Mpophomeni Housing Development: Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.

- : Fleetguard Pmb: Geotechnical investigation for warehouse foundations, earthworks, suitability of materials for road construction, etc.
  - : Stukenberg Water Pipeline: Geotechnical investigation for slope stability, pipeline re-routing and tunnel investigation, etc.
  - : Booth Road Housing Development: Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
- 1996 – 1998** : Gateway Development: Geotechnical Investigation for founding conditions, Assessment of waste, Site stability, etc.
- : Azalea Housing Development Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
  - : Matatiele Housing Development Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
  - : Kwa Dabeka Housing Development Geotechnical investigation for foundations, earthworks, suitability of materials for road construction, etc.
  - : Newlands West: Geotechnical Investigation at cracked houses
  - : AECl: Geotechnical Investigation into the stability of the slimes dams at AECl
  - : SAPREF: Groundwater Pollution monitoring

Craiova Drilling Company Romania

- 1992 - 1988** : Site geologist - Responsible for Drilling supervision at various oil & gas exploration & exploitation boreholes. Main duties included sample and core analysis and description, data logging and interpretation, down-the-hole logging and on site interpretation, gas chromatography and geo-service logging, compilation of reports and recommendations for drilling parameters.

A major project Mrs Canahai was involved in, was the drilling supervision of a 6000m deep exploration hole. Responsibilities included liaison with design engineers and contractors, gas chromatography and geo-service logging, compilation of reports and recommendations for drilling parameters.

**PUBLISHED PAPERS**

“Mineralogical Study of Devonian Deposits of the Hercinic Orogen, Dobrogea”, *MSc Thesis*, University of Bucharest (Engineering Geology), 1988.

**LANGUAGES**

**English** : *Very Good*  
**Romanian** : *Excellent*