CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

SIGNGIS AFRICA (PTY) LTD
TRADING AS
INDLELA SOILS LABORATORY
Co. Reg. No.: 2000/000109/07

Facility Accreditation Number: **T0401**

is a South African National Accreditation System accredited Testing laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation Annexure "A", bearing the above accreditation number for

CIVIL ENGINEERING TESTING

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2005

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

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Mr R Josias
Chief Executive Officer

Effective Date: 06 June 2012
Certificate Expires: 05 June 2017

ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0401

Permanent Address of Laboratory: Signgis Africa (Pty) Ltd t/a Indlela Soils Laboratory 1 Kurland Road Perseverance Port Elizabeth	**Technical Signatories:** Mr G Waggiet
Postal Address: P O Box 901 Uitenhage 6230	**Nominated Representative:** Mr G Waggiet
Tel: (041) 463-2248 Fax: (041) 463-2219 E-mail: dinny@indlelaec.co.za	Issue No.: 02 Date of Issue: 06 June 2012 Expiry Date: 05 June 2017

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
Sampling and sample preparation with subsequent analysis as per methods below	Sampling from sampling pit in natural gravel, soil & sand	TMH5 MA2: 1981
	Sampling of stockpiles	TMH5 MB1: 1981
	Sampling of road pavement layers	TMH5 MC1: 1981
	Sampling of freshly mixed concrete	SANS 5861- 2:2006 & TMH5 MB9: 1981
	Sample preparation using a riffler	TMH5 MD1: 1981
	Sample preparation by quartering	TMH5 MD2: 1981
Soil & Gravel	Preparation and sieve analysis up to 0.075 mm sieve size	TMH1 A1a; A5 : 1986 & 1990
	Determination of Atterberg Limits (Liquid limit, Plastic Limit & Linear Shrinkage)	TMH1 A2; A3; A4 : 1986 & 1990
	Determining the maximum dry density and optimum moisture content of gravel, soil or sand (Mod AASHTO energy)	TMH1 A7 : 1986 & 1990
	Determining the California Bearing Ratio of untreated soil or gravel	TMH1 A8 : 1986 & 1990
	In-situ density and moisture content of soil or gravel by the nuclear method	TMH A10 (b) : 1986 & 1990

Field Manager

ANNEXURE A

Facility No.: T0401
Date of Issue: 06 June 2012
Expiry Date: 05 June 2017

Sample Type / Materials / Products Tested	Type of Tests / Properties Measured	Standard Specifications, Equipment / Technique Used
Aggregate	Sieve Analysis of aggregates	TMH1 B4 : 1986 & 1990
	Fineness of Fine aggregate	TMH1 B13 : 1986 & 1990
Concrete	Making, curing and determining the compression of concrete cubes	SANS 5861 Part 1-3; SANS 5863:2006
	Making, curing and determining the compression of concrete cubes	TMH1 D1:1986 & 1990
	Slump of freshly mixed concrete	SANS 5862-1: 2006
	Slump of freshly mixed concrete	TMH1 D3:1986 &1990

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Field Manager