

# **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:-*

## **STEYN-WILSON LABORATORIES (PTY) LTD**

**Co. Reg. No.: 2017/305308/07**

Facility Accreditation Number: **T0835**

is a South African National Accreditation System accredited facility  
provided that all 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  
quality management system

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

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**Mr R Josias**  
**Chief Executive Officer**

**Effective Date: 19 March 2018**  
**Certificate Expires: 18 March 2023**

ANNEXURE A  
**SCHEDULE OF ACCREDITATION**

Facility Number: **T0835**

**Permanent Address of Laboratory:**

Steyn-Wilson Laboratories (Pty) Ltd  
 11 Gooderson Road  
 Blackheath  
 Cape Town  
 7581

**Postal Address:**

PO Box 58  
 Blackheath, Cape Town  
 7581

**Tel:** (021) 905 0435**Fax:** 086 4999 482**E-mail:** michelle@steynwilson.co.za**Technical Signatories:**

Mr J Steyn  
 Mr R Wilson  
 Mr K Booysen

**Nominated Representative:**

Mrs M Steyn

**Issue No.:** 01**Date of Issue:** 19 March 2018**Expiry Date:** 18 March 2023

| Materials / Products Tested  | Type of Tests / Properties Measured, Range of Measurement   | Standard Specifications, Techniques / Equipment Used |
|--|---|--|
| Soil, Gravel and Sand  | Division of sample using a riffler  | TMH5 MD1   |
|  | Division of a sample by quartering  | TMH5 MD2   |
|  | Wet preparation and particle size analysis  | SANS 3001 GR1  |
|  | Dry preparation and dry particle size analysis of gravels and sands   | SANS 3001 GR2  |
|  | Dry preparation and dry particle size analysis of gravels and sand  | SANS 3001 GR10                                       |
|  | Determination of the liquid limit with the two-point method   | SANS 3001 GR11                                       |
|  | Determination of the flow curve liquid limit  | SANS 3001 GR12                                       |
|  | Determination of the moisture content by oven-dry   | SANS 3001 GR20                                       |
|  | Determination of the maximum dry density and optimum moisture content   | SANS 3001 GR30                                       |
|  | Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitious stabilized materials | SANS 3001 GR31                                       |
|  | Determination of the california bearing ratio   | SANS 3001 GR40                                       |
| Determination of the carlifornia bearing ratio of lime treated materials | SANS 3001 GR41  |  |

**Aggregates**

|  |                |
|--|----------------|
| Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials  | SANS 3001 GR50 |
| Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum | SANS 3001 GR51 |
| Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials   | SANS 3001 GR53 |
| Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials   | SANS 3001 GR54 |
| Particle size analysis of aggregate by sieving   | SANS 3001 AG1  |
| Determination of the average least dimension of aggregates by direct measurement   | SANS 3001 AG2  |
| Determination of the average least dimension of aggregates by computation  | SANS 3001 AG3  |
| Determination of the flakiness index of coarse aggregate   | SANS 3001 AG4  |
| ACV (aggregate crushing value) and 10% FACT (fines aggregate crushing test) values of coarse aggregates  | SANS 3001 AG10 |
| Determination of rock durability using 10% FACT ( fine aggregate crushing test) values after soaking in ethylene glycol  | SANS 3001 AG15 |
| Determination of the loose and compacted bulk density of course and fine aggregates  | TMH1 B9        |
| Determination of the bulk density, apparent density and water absorption of aggregates particles retained on the 5.0mm sieve for road construction material                | SANS 3001 AG20 |
| Determination of the bulk density, apparent density and water absorption of aggregates particles retained on the 5.0mm sieve for road construction material                | SANS 3001 AG21 |
| Apparent density of crushed stone base   | SANS 3001 AG22 |
| Particle and relative densities of aggregates  | SANS 3001 GR23 |

|   |   |  |
|---|---|--|
| <b>Chemical</b>   | Particle size of material smaller than 2mm  | ASTM D422  |
|   | Sand equivalent value of fine aggregates  | SANS 3001 AG5  |
|   | Determination of the pH value of a soil suspension  | TMH 1 A20  |
|   | Determination of the electrical conductivity of a saturated soil paste and water                                      | TMH 1 A21T   |
|   | Determination of the ethylene glycol durability index for rock  | SANS 3001 AG14   |
|   | Determination of the initial stabilizer consumption of soils and gravels  | SANS 3001 AG57   |
|   | Determination of the cement or lime content of stabilized materials by means of the back-titration (acid base) method | SANS 3001 AG58   |
|   | <b>Concrete</b>   | Mixed fresh concrete in laboratory                                     |
| Sampling of freshly mixed concrete  |   | SANS 861-2   |
| Making and curing of concrete cubes   |   | SANS 861-3   |
| Consistence of freshly mixed concrete ( Slump test)   |   | SANS 862-1   |
| Compressive strength of hardened concrete   |   | SANS 863   |
| The drilling, preparation, and testing for compressive strength of cores taken from hardened concrete |   | SANS 865   |
| <b>Asphalt</b>  |   | Making of asphalt briquettes for marshall stability, flow and quotient |
|   | Determination of marshall tests stability, flow and quotient  | SANS 3001 AS2  |
|   | Determination of bulk density and void content of compacted asphalt   | SANS 3001 AS10   |
|   | Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate  | SANS 3001 AS11   |
|   | Determination of the soluble binder content and particle size analysis of an asphalt mix                              | SANS 3001 AS20   |
|   | Determination of moisture in asphalt  | SANS 3001 AS23   |
|   | Tentative method of the determination of the indirect tensile strength of asphalt material                            | TMH C12T   |
|   | <b>Sampling</b>   | Determination of in-situ density using a nuclear gauge                 |

|   |                |
|---|----------------|
| Measurement of the in-situ strength of soils by the dynamic cone penetrometer (DCP)   | TMH6 ST6       |
| Ball penetration test for the design of surfacing seals   | SANS 3001 BT10 |
| Texture depth measurement for the design of surfacing seal  | SANS 3001 BT11 |
| Determination of in-situ water permeability of bituminous road surfacing or base course layers by using the falling head (Marvil) apparatus | SANS 3001 BT12 |
| Sampling from a sample pit in natural gravel, soils and sand  | TMH5 MA2       |
| Sampling from stockpiles  | TMH5 MB1       |
| Sampling of ready-mix asphalt   | TMH5 MB7       |
| Sampling of slurry mixes  | TMH5 MB8       |
| Sampling of freshly mixed concrete  | TMH5 MB9       |
| Sampling of treated pavement layers to determine content and distribution of the stabilizer agent   | TMH5 MB10      |
| Sampling of road pavement layers  | TMH5 MC1       |
| Sampling of asphalt and concrete from a completed layer or structure  | TMH5 MC2       |

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Original Date of Accreditation: 19 March 2018

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

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**Accreditation Manager**