



## THE SOUTH AFRICAN ROAD FEDERATION

*will present a 2 day Virtual course*

## URBAN STORM WATER MANAGEMENT DESIGN CONSTRUCTION COURSE

**PRESENTER**  
**ALASTER GOYNS**

**Thursday 18<sup>th</sup> – Friday 19<sup>th</sup>  
March 2021**

**Virtual via MS TEAMS**

**Delegates can claim  
2 ECSA CPD points**

### **CURRICULUM VITAE: ALASTER GOYNS**

For 40 years he has been involved with many of the major outfall sewers in South Africa, initially when employed in the concrete pipe industry and subsequently as independent specialist consultant providing a service to larger consultants, contractors and pipe suppliers. Experience covers the development, introduction and launching of cementitious and inert lining systems for sewer pipes in South African market.

Managing Virginia Sewer Experiment (1999 – present) and a founding member of the study group (initiated 1987). Various pipe materials are being monitored and evaluated under extremely aggressive conditions. He has written several papers on the subject and has presented both locally (10+) and by invitation internationally (5).

He has acted as a specialist consultant on over 20 investigations of overloaded and deteriorated concrete and flexible pipes with diameters from 150 to over 2000 mm either due to excessive fill, problems with bedding conditions or durability issues where the necessary remedial measures were provided.

Since 1999 he has run his own specialist consultancy, Pipeline Installation & Professional Engineering Services, focused on gravity pipelines, trenchless technology and condition assessment for the full range of pipe materials used.

He has a Bsc Civil Eng (WITS) an MBL (UNISA) and is a registered Professional Engineer.

### **WHO SHOULD ATTEND?**

The target audience for this course will be for storm water and road designers. It will look at some theory, but will concentrate on the practical application.

### **COURSE FEES INCLUDING VAT**

<b>SARF members</b>	<b>R3 500</b>
<b>Non Members</b>	<b>R3 950</b>

### **DRAFT COURSE PROGRAMME**

#### **DAY ONE**

08:30 – 08:45	Opening and introduction today
08:45 – 09:45	The need for storm water products
09:45 – 10:00	Hydraulics of pipelines
10:00 – 10:30	BREAK
10:30 – 11:15	Hydraulics of storm water culverts
11:15 – 11:30	Question and answers
11:30 – 12:15	Classification of soil/structure system
12:15 – 13:00	Loads on buried conduits
13:00 – 13:45	BREAK
13:45 – 14:30	Strength of rigid pipes
14:30 – 15:15	Exercise on rigid pipes
15:15 – 15:45	BREAK
15:45 – 16:30	Strength of portal culverts
16:30 – 16:45	Questions and answers
16:45	Closure

#### **DAY TWO**

08:30 – 08:45	Recap of day one
08:45 – 09:30	Structural selection of flexible conduits
09:30 – 10:00	Exercise on Flexible conduits
10:00 – 10:30	BREAK
10:30 – 11:15	Introduction to installation
11:15 – 12:00	Installation of rigid conduits
12:00 – 12:45	Installation of flexible conduits
12:45 – 13:00	Questions and answers
13:00 – 13:45	BREAK
13:45 – 14:30	Trenchless technology
13:45 – 14:30	Condition assessment
14:30 – 15:15	BREAK
15:15 – 15:45	Trenchless rehabilitation and replacement of buried conduits
15:45 – 16:30	Questions and answers
16:45	Closure

Register online at: <http://www.sarf.org.za>  
*Terms and conditions apply*

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