

CURRICULUM VITAE

Name of Firm : Ndodana Consulting Engineers **Name of Staff** : E Horak
Profession : Civil Engineer **Year of Birth** : 1954
Years with Firm: n/a **Nationality** : South African

Membership in Professional Societies : Registered Professional Civil Engineer, Fellow membership status SAICE and SAAE

KEY QUALIFICATIONS:

- Asphalt and Pavement Materials
- Pavement Rehabilitation and Recycling
- Pavement Maintenance and Management including Pavement Management Systems
- Planning and Design of Paved and Gravel Roads
- Airport Pavement Design and Rehabilitation
- Transportation Engineering
- Traffic Engineering
- Accelerated Pavement Testing

EDUCATION:

- Management of Technology (MOT) Short Course, Graduate School of Business, (1994), University of Cape Town
- Advanced Executive Programme (AEP) Diploma (with distinction, 1990), SBL, UNISA, Pretoria
- Ph.D - Civil Engineering (1988), UP, Pretoria
- M Sc - Transp. Eng. (1984), Berkeley, California
- M Eng. -Civil Engineering (1983), UP, Pretoria
- B Eng (Hons) Civil Engineering (1980), UP, Pretoria
- B Eng Civil (1977), UP, Pretoria.

EXPERIENCE AND EMPLOYMENT RECORD:**Experience Record:****1. Research Activities**

Emile Horak spent 14 years working in the fields of research, development and technology transfer with Transportek, CSIR. He specialised in the field of pavement engineering and transportation engineering with international recognition in pavement performance, accelerated pavement testing and response analysis (materials, design, rehabilitation and behaviour). He acted as a specialist for various consulting engineering firms and for various clients on road rehabilitation and design projects. Lately his area of specialist is in road maintenance and management.

Emile published and presented more than 70 reports and papers at international conferences and in periodicals in various fields of expertise. He has been awarded a number of awards for some of his papers and for technology transfer.

2. Consultancy

Emile is a founding partner of a specialist consultancy firm, KUBU Consultancy (Pty) Ltd, and Emile Horak and Associates (Pty) Ltd. He is doing mainly specialist consultancy work for a variety of clients. A number of jobs are done as specialist consultant in joint venture or in a consortium with other consultancy firms. The most recent large projects Emile has been involved in are:

- Acting as specialist consultant to Ndodana Consulting Engineers (NCE) on projects such as:
 - * Rehabilitation and analysis of the special maintenance of the Kimberley and Upington airports for ACSA. Done in 2003 and 2004 as specialist for NCE.
 - * Specialist consultant in the successful tendering of NCE on the Johannesburg ring-road (N1,N3,N12) routine road maintenance contracts of SANRAL
 - * New design of rapid exit taxiway and holding area and rehabilitation of the main runway for the Johannesburg International Airport (JIA). Currently underway. This work was done as specialist for the joint venture Steward Scott International (SSI) and NCE
 - * Specialist investigation on the R61 (Ramsgate to Port Edward) in KwaZulu Natal to determine the cause of the pre-mature cracking and stripping of the asphalt surfacing. Appointed jointly by the client, consultant JV and contractor JV.
 - * Appointed by the Johannesburg Roads Agency (JRA) as specialist with NCE and PHR consultants to write a design guideline and procedures document to upgrade gravel streets in urban areas.
 - * Act as specialist consultant for NCE on various street upgrade projects done in Joint Venture with contractors and the JRA construction unit.
 - * Upgrading of runways, taxiways and holding area and reconstruction of the main runway for the Bloemfontein International Airport (BIA). Currently underway.

* Upgrading of runways, taxiway and hard stand areas and reconstruction of the main runway for the waterkloof Airforce Base(WAFB). Currently underway. This work was done as specialist for the joint venture Ninham Shand Engineers, Africon International and Ndodana

- Specialist advice on the Polokwane International Airport tower and runway extension in the joint venture between NCE and Ninham Shand (N&S)
- Specialist partner in the joint venture, Africon, NCE and KUBU (ANK) appointment for SANRAL on a R500 million rehabilitation of the N12-19. Currently in detail design stage
- Specialist partner in the joint venture DEC/KUBU appointment for SANRAL on the upgrade and rehabilitation of the N2-14. Currently in the preliminary design stage.
- Successful completion of the R165 million rehabilitation design and supervision of the N2-4 for SANRAL in the joint venture MBS/NCE/KUBU (MNK) joint venture in 2004.
- Was appointed by Gautrans in 2002 to investigate the feasibility of privatisation of the Gautrans routine road maintenance unit in joint venture with DEC. Currently this is used as blue print for the actual implementation.
- Appointed as specialist with Jeffares & Green on a 10 year long term performance based road maintenance contractor, BEST roads for the client Main Roads Western Australia to develop operational plans and management plans to get the contract back on track. Currently still underway.
- Was originally appointed by National DoT and later SANRAL to launch routine road maintenance by contract for the development of SMMEs on the national roads network. This system developed has now successfully been implemented and developed to the stage of multiple year appointments.