

T2 NEWSLETTER

Issue 2: No. 1

T2 FORGES NEW PARTNERSHIP WITH SUCCESSFUL NGO

The Technology Transfer Centre, as part of its objective of promoting the study of maths and science in our schools, recently entered into a new partnership agreement with PROTEC Pietermaritzburg. PROTEC (the Programme for Technological Careers) is a long-established and reputable NGO that has been offering supplementary educational programmes to disadvantaged learners since 1982. The Pietermaritzburg branch opened in 1990, and has a proud history of providing talented learners with openings and opportunities that would otherwise have been denied to them.

In term of the agreement, the department has undertaken to sponsor the attendance of a group of fifteen selected learners from disadvantaged township schools surrounding Pietermaritzburg on the PROTEC programme for a period of three years until they matriculate at the end of 2005. In keeping with national priorities, eight of the fifteen are female.

Learners who have committed themselves to the programme attend lessons on 30 Saturdays per year, in addition to taking part in various other vocational and career guidance activities during the school holidays.

PROTEC assists in placing its learners on the paths of technological careers that require a good grounding in Maths and Science. In addition to these subjects, additional tuition is also provided in English, Careers Guidance, and Computer Studies.

For additional information on the work done by PROTEC Pietermaritzburg, please contact Lloyd Smuts on (033) 394-2235.



CHILDREN IN PROTEC PMB

New accident reporting procedures come into force

Traditionally, the responsibility of attending to accident scenes and completing all the official paper work pertaining to accidents has fallen on the shoulders of the SAPS. Because of the crime situation in South Africa, this responsibility is not high on the priority list of the SAPS. This has, not only resulted in poor utilization of police resources, but also impacted negatively on the quality of accident statistics.

In a bid to correct the situation, the national Department of Transport spearheaded an initiative to reduce the burden of administering accidents reports from the SAPS by shifting some responsibilities to provincial, metro and municipal traffic departments. This initiative culminated in the introduction of a new Accident Reporting (AR) form.

The implementation of the new AR form calls for the following: -

- The SAPS need only attend to serious accidents where a criminal case docket needs to be opened. Provincial, municipal or metro traffic officials can attend to all other accidents.
- The officials attending to an accident are empowered to register accident details on the new AR forms.
- Members of the public can report accidents to any provincial, municipal, metro traffic department or the SAPS.

These requirements implicitly call for the establishment of facilities for members of the public to report accidents in traffic departments and for traffic departments to make logistic arrangements to attend to accidents occurring in areas falling within their jurisdiction.

The KwaZulu-Natal Department of Transport believes that good accident statistics are critical to effective traffic law enforcement and therefore road safety. Traffic departments throughout the province need to make arrangements to attend to and record accident information as soon as possible.

For more information on the new AR forms contact: D. Anthony: Department of Transport: KwaZulu Natal: +27 033 355 8654

Bridge and Major Culvert Inspection contract awarded

M. Wiles

Following a rather drawn out tender process, the annual bridge and major culvert visual inspection contract was awarded to Messrs Jeffares & Green (Pty) Ltd. A total of 216 bridges and 256 culverts, spread evenly throughout the province, will be inspected during the course of 2003. The delays in the tendering process resulted in no inspections being carried out for the year 2002. This has further lengthened the inspections cycle, which, at 6 years, is already unacceptable.

T² spearheads the first Bridge and Major Culvert Map Book

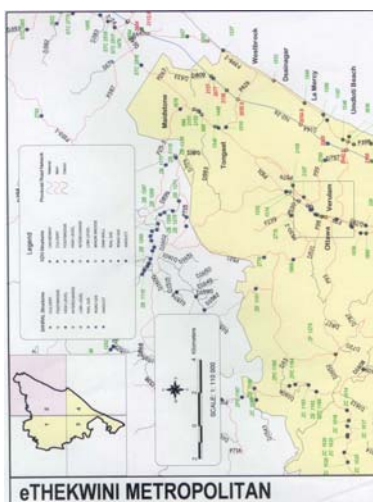
Bridges and major culverts can now be identified by location. A total of 58 coloured maps, based on the municipality boundaries in the province, have been produced. Structures are symbolised on these maps by class of structure and are labelled by structure number. The map book also contains comprehensive indexing that includes inventory data such as class, structure type, bridge rail, span or cell combinations and dimensioning for each structure.

Twenty copies of the map book have so far been produced and will be distributed to the Regions in due course.

Bridges and Culverts Condition report available on the intranet

A condition report on the bridges and culverts inspected during the 2001 / 02 inspection cycle is now available for viewing or downloading by departmental employees on the Technology T2 Centre's intranet site.

T² can be found in the intranet at <http://kzndoti.kzntl.gov.za/directorates/t2>.



Bridge & Major Culvert Map Book

Figure 1: Map Book

For more information on Bridge and culvert programme or Map Book Please contact: Mr. Mike Wiles: KwaZulu-Natal Department of Transport: +27 033 355 8770

Cold Mix Pothole Patching Products put to the test.

In recent years a number of cold mix asphalt products have been developed for repairing potholes in pavements. While promoters of these products extol their virtues for every application, no independent evaluations of the products exist to guide potential users on the merits of individual products. The Technology Transfer Centre is about to undertake a research project to evaluate the performance of potholes patched with various cold mix asphalt products. Eight asphalt companies have indicated their willingness to participate in this project.

A site on Main Road 21-1 has been identified for the field trials that will involve patching identical potholes to base level using different products and monitoring their performance over time. Factors which will be taken into account in judging performance include ease of use, cost and durability.

For more information on the above project contact Mr. A. Paine: KZN Department of Transport: 033 355 8754

Ecobond Field Trials D9

One of the biggest challenges facing the Department of Transport is the unavailability of suitable road building materials in the northern parts of the province. Good gravels are hard to come by and where they are available, haul distances tend to be long. The T² Centre is involved in research projects aimed at finding solutions to this problem. One of our main areas of interest is finding appropriate treatments for sands, which are abundant in the area, so that they can be used as road building materials.

Stewart Scott, the consultants involved in the upgrading of D9 proposed the use of "Ecobond", a proprietary product designed to treat soils, gravels and sands for use as pavement layers. Ecobond hardens the soil and makes it water-resistant with good durability. A 2 km long experimental section is being constructed on D9 using Ecobond as the stabilizing agent.

The T² Centre is involved in recording the process of construction and will also carry out the long term monitoring of performance. It is hoped that the results of this experiment will shed some light on the suitability and long term performance of Ecobond as a material stabilizer.

For more information on the above project: Mr. A. Paine: KZN Department of Transport: 033 355 8754

Occupational Health and Safety gets a temporary home in T²

The Occupational Health and safety Officer is currently being accommodated within the Technology Transfer Centre and operates from the Training Centre at Mountain Rise Pietermaritzburg.

This arrangement is beneficial, as Health and Safety Training is of prime importance to the department as a whole. We believe that it is important that newly appointed officials as well as serving officials are exposed to advanced health and safety training.

The Occupational Health and Safety Officer assists with the research of new courses, does safety inspections, and produces a comprehensive audit report that is forwarded to all senior managers and officials in charge of depots.

Road Superintendent/Road Works Foreman Courses Under Review

The Technology Transfer Centre is in the process of reviewing the contents of the Road Superintendent and Road Works Foremen courses in order to make them more relevant. A major change proposed is to discontinue offering them as full courses as currently done. Instead, the Road Superintendent and Foreman courses will be broken down into modules covering specific aspects. The modules would then be available for any departmental employee to attend as opposed to the courses that were only available to prospective or serving road superintendents or foremen.

Subject experts within the Department are assisting in the updating of these modules and will possibly also facilitate when the process is completed.

Upcoming Courses at the Training Centre

COURSE	DATE	DURATION	VENUE
The use and implementation of Road Traffic Signs	June – September	1 Day	On Site
Basic MAN Management	August – October	3 Days	On Site
First Aid	June – November	3 Days	On Site
Introduction to Concrete	June - September	2 Days	CONTEST
Driver Training code 10	June – August	2 Weeks	TTC
Intensive Fire Safety	June	4 Days	TTC
Refresher Operator Training	June	1 Day	On Site
6M Simulation	July – August	2 Day	On Site
CoC on Operator Training	June – August	1 Day	On Site
Minor Plant Operator	July – August	1 Day	On Site
Aids Awareness	June-August	1 Day	On Site
Workers Safety	August	1 Day	On Site
Radio Communication	August	1 Day	On Site
Health and Safety Supervisors	June – September	3 Days	MEC
Management Office Ergonomics	June - September	2 Days	TTC
Advance Fire & Evacuation	June – September	5 Days	TTC

For more information on these courses Contact: S. Koekemoer: Department of Transport:
+27 033 3979 508

T² lends a hand in the Pietermaritzburg 2003 Bridge Building Competition

One of the key objectives of the T² Centre is to contribute to the growth of the national pool of technical personnel by developing and supporting programmes that enhance interest in maths and science in schools. The bridge building competition is organized by SAICE and aims to stimulate interest in civil engineering amongst high school students. The T² Centre was involved with this year's bridge building competition precisely because it promotes the same objective.

The 2003 SAICE Bridge Building competition, was held at the Voortrekker High School in Pietermaritzburg. Over 30 schools participated and a total of 41 bridges were tested. The winning team were from Voortrekker High. Their impressive bridge broke at an impressive 76 kg.

The Technology Transfer Centre provided sponsorship in the form of plane tickets for the winners to attend the national competition in Cape Town. We also used the opportunity to showcase the activities of the department and highlight career opportunities offered by the Department of Transport.

T² on the World Wide Web

The Technology Transfer Centre is now on the web. The T² web address is www.kzntransport.gov.za/t2. Documents, articles, and upcoming events will be made available on our site for access by interested parties. Electronic versions of current and previous newsletters will also be available on the net.

TEAM BALA



The responsibility of capturing accident statistics was moved from Road Safety to T2 at the beginning of the last financial year. The system came to us with a huge capturing backlog, running to up to 10 months for some SAPS stations.

The Accident Management System (AMS) component of the Technology Transfer Centre gave top priority to the reduction of the backlog. Measures were put into place at the beginning of March 2003 to reduce the existing backlog before the end of May 2003. The team pictured, from Bala Survey and Research, with hard work and determination successfully eliminated that backlog mid by May 2003, 2 weeks ahead of schedule.

T² would like to congratulate this team for their efforts and dedication. Well done guys!



The 22nd Annual SATC conference will be held on 14 – 16 July 2003 in Pretoria. The Technology Transfer Centre is coordinating the Department of Transport (KZN) attendance. For more information contact: Maria Dewar: 033 355 8799 or dewarm@dotho.kzntl.gov.za

In terms of the Occupational Health and safety Act, Plant Operators should be trained and evaluated on Machines and be in possession of a Certificate of Competency before they can operate any machine.

It is the duty of the Technology Transfer Centre to evaluate and train operators on their respective machine. Two instructors from the Technology Transfer Centre are currently visiting district offices explaining importance of the Certificate of Competency to line managers.

**Should you have any queries regarding the above please contact:
Mr. S. Koekemoer on: +27 033 3979 508**