



Grass and Sorghum grain on growing on the Terrafix units

ReMaCon Products cc, a licensee for “Terraforce” in Gauteng, recently supplied over 2200 m<sup>2</sup> of “Terrafix 120” erosion control blocks to LET Construction (Pty) Ltd for the “Total Coal Forzando Project” near Bethal in Mpumalanga.

A ‘box cut’ incline shaft for coal mining access was excavated. A total volume of 270 000 m<sup>3</sup> of soil and rock were removed to a maximum depth of 39m at the underground coal mine entrance. This is the second largest incline ‘box cut’ operation undertaken in South Africa by LET Construction.

The underlying 132 000 m<sup>3</sup> of sandstone was blasted and the steep sides gunited to stabilise them. The soft soil above consisted of red clay with an overlay of black turf, which was cut to 45° sloping down to 30° and required protection against erosion by running water.

The consulting engineers, TWP (Townshend, van der Walt & Partners), decided to use the Terrafix 120 due to its cost efficiency when compared with the gunite option. Furthermore, Terrafix 120 was quick and easy to place using unskilled labour. Topsoil collected on the site originally contained enough grass seeds including sorghum grain to ensure a dense, green vegetation cover coupled with a strong, earth reinforcing root system.

The recent heavy rains, over 1000mm between January and March, exceeded the annual average rainfall for the area, and had no effect on the stability of the slopes. In this instance the blocks were packed in the densest pattern of 10 blocks per sq.m., a pattern that has shown in the past that it can perform above industry standards.

The contract with a total value of R27 million, commenced 17<sup>th</sup> July 2005 and is due for completion End April 2006.

Engineer: TWP Consulting  
Contractor: LET Construction  
Manufacturer: ReMaCon Products cc



View of the 45 degree elevation