



Road Widening & Reconstruction Athlone to Hilton, N3, Section 3

Case Study

Project:	Athlone to Hilton, N3, Section 3	Date:	June 2002
Client:	S A N R A Ltd	Quantity:	500 m 10 000 m ²
Consultant:	Ingerop Africa, Letsunyane & Ass, Preben Naidoo (joint venture)	Product:	Flo-drain bidim A2
Contractor:	Basil Read / Milling Techniks Consortium		



The N3 is a key national route between the port of Durban and Johannesburg. This road continuously carries fully laden trucks at maximum axle loads.

Under these sustained heavy loads the road started to show signs of distress. Major rehabilitation and reconstruction of the climbing lanes was required, and a reinforced concrete pavement was designed. Widening and complete rehabilitation of the balance of the lanes also had to be done.

A retaining wall had to be constructed through a cutting immediately adjacent to the layer works and the drainage had to be effective. A one metre high **Flo-drain**, wrapped with **bidim A4**, was selected for this section of the project due to the width restraints. It was not practical to construct a conventional, one metre deep, stone drain due to the limited space between the retaining wall and the road box cut slope. Apart from the restricted excavation area, there was also a concern that a conventional drain placed at this critical point

could not be compacted properly and may lead to settlement or sliding of the retaining wall. The **Flo-drain** was found to be an efficient drainage system for this application. Because it is pre-manufactured the contractor found the **Flo-drain** system quick and easy to install. **bidim A2** was used in the conventional subsoil drain sections where space restraints were not an issue.

