



Erosion Protection Temporary Construction Platform N2, Sundays River Bridge, Eastern Cape

Case Study

Project:	Upgrading N2, Section 11 Coega - Colchester, Sundays River Bridge B1215B Westbound	Date:	March 2011
Client:	SANRAL	Product:	bidim A6 glazed Geocontainer®
Consultant:	Aurecon	Quantity:	1534 bags
Contractor:	Concor Roads & Earthworks		

Problem

In order to ease the traffic flow along this section of the national road, a twin bridge was planned to carry westbound traffic. Construction of a temporary construction platform was required for piling equipment access. This platform was constructed of dune sand which needed to be contained.

Solution

The Sundays River at this location is, on average, 2.5 – 3.0m deep with flow velocities of approximately 2.2m/s. Glazed **bidim®** A6 geocontainers were dry-filled in formwork, stockpiled and then placed in position with a crane. The A6 grade was selected as the most economical option as there were no large or sharp objects in the uniform dune sand. The bags prevented contamination of the river system and minimised the requirement for sand fill by steepening the angle to around 45 degrees. The fill required was approximately 3 500m³ either side of the river which it is estimated may have doubled in volume without the **Geocontainer®** surround, particularly if the river had come down in flood. Specially glazing the bags for this project meant the continuous filaments of **bidim®** would remain intact facing the water flow. On completing piling, the temporary platform was removed from the river.

Benefits

As a temporary platform, cost played a significant role in the choice of solution and the **bidim®** A6 **Geocontainer®** met this criterion.

This phase of the project lasted 17 months during which time both the east side platform and then the west side platform were successfully supported by these bags.



Filling operation



Temporary stockpiling



Completed platform (East)