

PROJECT CASE

RN6 rehabilitation
Zinguichor – Tanaff (Senegal)

Drainage in road structure

Date

2014

Surface area

188,000 m²

Project Owner

MCA Senegal

Product(s)

SOMTUBE FTF

Project manager

Louis Berger/Agiem group

Company

Isolux Corsan
Corsan-Corviam

Description of the project

The rehabilitation of the RN6 national road is consistent with an extensive “poverty reduction through economic growth” programme. The purpose of this project, of paramount importance, is to create a route linking the various towns it will serve to Zinguichor without having to use the Trans-Gambia highway. Access to vital points such as hospitals will therefore be greatly facilitated.

Issues

The section under lot 1, linking Zinguichor to Tanaff, represents a total length of 116 km. This lot was affected by rising groundwater from the Casamance river, which created the need for a drainage layer. As the quarry was located one hundred kilometres or so from the site, a geocomposite emerged as a suitable solution.

Solutions

The SOMTUBE FTF geocomposite was used to:

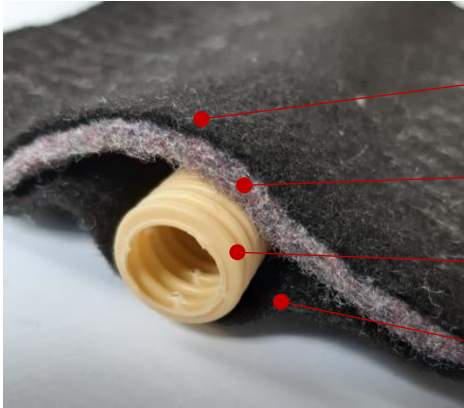
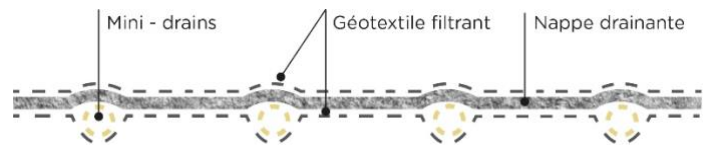
- Effectively drain water from the soil
- Do away with granular material and its transport
- Do away with filtering geotextiles
- Do away with associated earthwork volumes

Draining collector trenches located on either side of the road for discharge purposes.



Description and purpose of the product

SOMTUBE FTF consists of a non-woven needled filtering geotextile made of PP, a non-woven needled drainage layer made of PP, ringed mini-drains made of PP with regular perforations and a non-woven needled drainage geotextile made of PP. The components are coupled together by needling.



Filtering geotextile

Drainage layer

Mini-drain

Filtering geotextile

Work progress



Widths unrolled perpendicular to the direction of traffic



Backfilling in the overlapping direction

Advantages of the proposed solution

- No use of granular materials: savings of **95,000 m³** and associated gain in terms of earthwork
- No filtering geotextiles
- Quickly installed

Contacts

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