

PROJECT CASE

Replacement of a granular drainage base VALENCIENNES bypass (59)

Date

May 2020

Surface area

1st phase of 15,000 m²

Product(s)

SOMTUBE 550 FTF1 D20

Earthworks company

NGE Hauts-De-France

Project management

SETEC

Implementation assistance by AFITEXINOV

Issue(s)

During work on the Valenciennes bypass (59), the layout of the new ring road revealed a wetland area under heavy stress due to rising groundwater. The original solution was a granular drainage base.

Solution(s)

The solution envisaged was a high-capacity draining geocomposite to replace this drainage base and therefore save installation time and reduce the use of granular material:

- SOMTUBE 550 FTF1 D20 draining geocomposite de type designed in accordance with soil data and granular equivalency;

Description and purpose of the product

The structure of the SOMTUBE FTF geocomposite consists of the following elements, which are assembled by needling:

- A non-woven needled polypropylene filter,
- Polypropylene mini-drains
- A non-woven needled drainage layer made of polypropylene,
- A non-woven needled polypropylene filter.

A specific design was created by AFITEXINOV to define the product best suited to the project, particularly in wetland areas.



*Water-saturated loam soil of the site,
prepared to host SOMTUBE FTF*



Handling of SOMTUBE FTF on site

Packaging

SOMTUBE 550 FTF1 D20 comes in the form of rolls 3.90 m wide and 70 m long. It is packed in plastic to ensure UV protection. It can be stacked on site to save space.



Packaging of SOMTUBE FTF on site

Work progress



Product unpacking, unrolling and overlaps



Connection to the peripheral ditch, backfilling and compaction

Advantages of the proposed solution

This solution helps:

- Drain rising groundwater;
- Hydraulically replace thick granular layer with a quickly installed manufactured solution;

Contact

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