



Case Study

application Base Reinforcement
location Augusta, ME
product Mirafi® RS580i

job owner
engineer
date of installation

A.H. Harris & Sons, Inc.
Quirion Construction
May 2015

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

Due to increased sales, a distribution company in Augusta, Maine recently leased a larger show room/office and warehouse facility. The area to be used for outside storage had weak soft soils at the surface that did not have the strength to support forklift and tractor trailer traffic. Once the ground thawed, forklift trucks were getting stuck and truck traffic created severe rutting, making it very inefficient.

The challenge was to create a larger storage yard over soils that had a very weak bearing capacity, while keeping construction costs to a minimum.

THE DESIGN

The original design required excavation of approximately 12" of the unsuitable material, and replaced with 24" of base material. By utilizing TenCate Mirafi® RS580i high strength, woven geosynthetic, the contractor was able to place it directly on the existing subgrade and place 12" of base material topped with 2" of reclaimed asphalt.

THE CONSTRUCTION

The contractor rough graded the existing subgrade and then placed TenCate Mirafi® RS580i. Base course gravel was dumped at the north end of the project and then pushed out over the fabric. Once the base course was placed and compacted, the contractor placed 2" of reclaimed asphalt for the wearing surface.



Rutting in the ground's surface from forklift traffic.



Materials stockpiled in the storage yard placed on the of Mirafi® RS580i reinforced gravel and reclaimed asphalt layers.



Installation of gravel layer over Mirafi® RS580i.

THE PERFORMANCE

The owner is extremely happy with the outcome, not only did they increase the size of their outdoor storage facility, they have a yard that can support heavy forklift and tractor trailer traffic without getting stuck. There are no longer any delays in loading or unloading their delivery trucks.



Placing reclaimed asphalt over the compacted gravel.



Soft, wet and weak subgrade soils before placement of Mirafi® RS580i.

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