

## PARKING LOT RECONSTRUCTION, MAINE

# Reinforcing stability in harsh weather with MIRAFI



**Industry:** Site development  
**Sub-industry:** Roadways and parking lots  
**Location:** Maine  
**Product:** MIRAFI® RS580i

The additional challenge was to minimize the amount of over excavation of the base course which would reduce overall construction time without sacrificing structural stability and to finish construction before the harsh winter weather set in.

## Overview

To rebuild approximately 6 acres of parking lots for a commercial office complex in Maine. The existing parking areas to be rebuilt were in poor condition due to a high moisture content in the subgrade soils and years of frost heaving from extensive freeze thaw conditions during the severe Maine winters.

**The MIRAFI RS580i would also reduce pore water pressure in the base course by providing superior water flow both vertically and laterally through the fabric.**

## CASE STUDY

Reinforcing stability in harsh weather with **MIRAFI**

### Challenge

After the bores were completed, it was determined that a high-strength structure would need to be added to help support the wheel loads. The design called for the existing asphalt surface to be removed and recycled as well as 6 inch to 8 inch of the compromised structural base course to be removed. The **MIRAFI RS580i** was to be placed on top of the remaining base course to add a higher tensile modulus, providing confinement of the base course layer.

Construction began in October and finished in November 2010. The **MIRAFI RS580i** was installed with a minimum 24 inch overlap between adjacent rolls and a minimum 40 inch overlap at roll ends. Because of its high tensile modulus in the cross-machine direction, the **MIRAFI RS580i** was rolled out parallel to the travel lanes. The finished base was then proofed rolled and paved.

### Solution

The **MIRAFI RS580i** has performed very well by reinforcing and stabilizing the base course, especially during several heavy rain events prior to paving. The **MIRAFI RS580i** has provided high reinforcement strength, filtration, separation, and base course confinement which has provided better load distribution in the parking areas.



The owner's construction manager and the general contractor were very satisfied with the **MIRAFI RS580i** which has performed as expected. The project was completed on budget and within the construction time schedule.



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