



Case Study

application Pavement Overlay
location Lanham, MD
product Mirafi® MPV500

job owner

National Asphalt Pavement Association

contractor

American Paving Fabrics

asphalt contractor

Gray & Son

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

The existing asphalt pavement in The National Asphalt Pavement Association (NAPA) parking lot was experiencing considerable alligator cracking and was scheduled to be re-paved. After some site investigation, it was determined that more serious patching would be required due to the unexpected pumping that was observed in some areas of the pavement surface.



Alligator cracking observed in several areas.



Wet, soft subgrade exposed in the test pit.

THE DESIGN

After excavating a couple of test pits, everyone involved on the project realized that just a standard overlay would not be adequate. The majority view was that the appropriate repair would require full depth removal and replacement of the pavement cross section, over a wider area than originally planned. Due to the costs and time associated with this type of construction repair, everyone agreed that other options needed to be assessed. The decision, made by committee that included the contractors involved with input from the sitting President of NAPA, was to incorporate Mirafi® MPV500 to significantly reduce the surface water infiltration into the pavement, and to provide some stress relief between the existing surfaces/patches and the new overlay. While this was not thought to be the perfect fix, it was understood that this solution would significantly increase the longevity of the new overlay.

THE CONSTRUCTION

After the edge milling and patching was completed, American Paving Fabrics, placed PG64/22 at a rate of approximately 0.25 gallons/SY over the prepared surface and placed the Mirafi® MPV500. The paving overlay machines followed right behind them with their HMA overlay.



Recompaction of base course in test pit areas and edge milling being preformed.



Base course being replaced.

THE PERFORMANCE

The finished pavement looks great and will be inspected going forward to determine the increase in service life that the interlayer system provided. Each of the contractors involved in the pavement rehabilitation project were given a NAPA Recognition Award at their February 2008 conference.



Aerial shot of the area.



Finished parking lot.



Distribution truck shooting PG64/22 asphalt cement with paving fabric being placed behind it.



Asphalt surface mix being placed.

TenCate™ Geosynthetics North America assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. TenCate™ Geosynthetics North America disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.

Mirafi® is a registered trademark of TenCate™ Geosynthetics North America.

© 2010 TenCate Geosynthetics North America

09.10

365 South Holland Drive Tel 800 685 9990 Fax 706 693 4400
Pendergrass, GA 30567 Tel 706 693 2226 www.mirafi.com

