Surface Pavement Solution for Poor Subgrade Conditions
Web Interim Report

County: Palm Beach

Section/Subsection: 93140-000

FIN: 413804-1-52-01

State Road: 15

Last Updated: August 2014
OBJECTIVE:

The objective of this study is to evaluate the relative performance of four different materials to reinforce pavements built over organic soils and peat. The treatment materials include Petrogrid, Glasgrid, Pavetrac and Asphalt Rubber Membrane Interlayer (ARMI).

The study includes two test sites, location 1 and location 2, constructed during 2008 in the Northbound and Southbound traffic lanes on SR 15 in Northwest Palm Beach County. Location 1 and 2 are separated by less than one mile.

Each test site consists of six test sections, one for each reinforcement material and control sections, one at the beginning and end of each site.

Performance is evaluated in term of deflection, ride, rutting and cracking.

Note: This performance study is a continuation to a research project conducted by Florida Atlantic University. A report for this research project can be accessed from the following weblink:

Project Location

Palm Beach County
SR 15/US 441
• BMP 22.609-EMP 23.177
• BMP 23.973-EMP 24.541
**PAVED SHLDR**

12' LANE

- 0.02 SLOPE
- CASPHALT (T1, T2 & T3)
- 8.0" LIMEROCK BASE.
- 12.0" SUBGRADE.
- 1.0"FC 9.5 & 2.5" TYPE SP STRUCT COURSE.
- EXISTING ASPHALT LAYER TO REMAIN.
- 4.5" MILLING.

**ASPHALT (OVERBUILD)** COURSE 1.5"MIN).

**PAVED SHLDR**

Alternative Treatment

- No Treatment (Control)
- PAVETRAC MT-1
- ARMI
- GLASGRID 8511
- PETROGRID 4582

**NOT TO SCALE**

**TYPICAL SECTION**
Truck Traffic
Count Site # 930002

Palm Beach County
Count Site # 930002
SR 15/US 441
At MP 19.645
Survey Type: Portable

Cumulative EAGs in Design Lane (10^3)

2007  2008  2009  2010  2011  2012  2013

North Bound Traffic  South Bound Traffic
Mean Roughness Index

Location 1

<table>
<thead>
<tr>
<th>Milepost</th>
<th>Control 1A</th>
<th>PetroGrid</th>
<th>GlasGrid</th>
<th>Pavetrac</th>
<th>ARMI</th>
<th>Control 1B</th>
</tr>
</thead>
</table>

Location 2

<table>
<thead>
<tr>
<th>Milepost</th>
<th>Control 2A</th>
<th>PetroGrid</th>
<th>GlasGrid</th>
<th>Pavetrac</th>
<th>ARMI</th>
<th>Control 2B</th>
</tr>
</thead>
</table>