Research Project 30

Tire-Rubber Anti-Vegetation Tile Evaluation

Recycled Materials Resource Center

University of New Hampshire

Federal Highway Administration

Project Objectives

TxDOT will use RMRC Investigative Research funds to purchase anti-vegetation tiles to control vegetation around guardrails and sign posts in several TxDOT districts and evaluate their ease and cost of installation and their long-term performance in diverse climate conditions. The project will also compare life-cycle costs of the tiles to other TxDOT-approved non-mow strip designs.

Project Description

This is a short-term technical problem solving project that was developed to allow Texas DOT (TxDOT) to evaluate the ease of installation, cost, and effectiveness of anti-vegetation tiles made from recycled tires. The tiles are designed to control vegetation around guardrails and signposts. Nine TxDOT district offices in various parts of the state are taking part in this demonstration project, including: Austin, Beaumont, Childress, Corpus Christi, Dallas, El Paso, Lufkin, Pharr, and Tyler. The diverse climate and terrain of these districts will allow the project results to be applied across the United States. The project will also compare life-cycle costs of the tiles to other TxDOT-approved non-mow strip designs.

To assist each district, the PI developed a package of guidance information that included the following: Project Installation Instructions, a Project Installation Report, a Project Time Report, A/V Tile Demonstration Project Pictures (taken by TxDOT Recycling Section personnel during the first installation in Austin), and Project Dos and Don'ts.

By the end of May, Austin, Childress, Corpus Christi, Dallas, and Pharr had completed the installation of their sign post tiles, with installations being finalized for the Beaumont and Tyler districts. Comments from districts that have finished installations suggest that the tiles are easy to install, accept able in appearance and cost effective. The next major test will be an evaluation of the tile effectiveness as crews head out for the first round of vegetation mowing this summer.

Project Partners

Welch Products

End Products

Alternative specification for using rubber tiles.

Further Information

The Recycled Materials Resource Center (RMRC), a cooperative agreement between the University of New Hampshire and the Federal Highway Administration, is a national center that promotes the appropriate use of recycled materials in the highway environment. Its focus is on the long-term performance and environmental implications of using recycled materials.

For detailed quarterly progress reports for Project 30, as well as all RMRC-funded research projects, please see: http://www.rmrc.unh.edu/Research/researchlevel2.asp.

Project Principal Investigator
Woody Raine
Texas Dept. of Transportation
GSD - Recycling Program
125 E. 11th Street
Austin, Texas 78701
Tel: (512) 302-2422
Fax: (512) 302-2428
Email: wraine@dot.state.tx.us

RMRC
University of New Hampshire
Gregg Hall, 35 Colovos Road
Durham, NH 03824
Tel: (603) 862-4704
Fax: (603) 862-3957
http://www.rmrc.unh.edu