



U.S. INTERSTATE 40 NEWKIRK TO TUCUMCARI, NEW MEXICO

Application: A five-mile segment of I-40 located in eastern New Mexico was spot-repaired with the GlasGrid® Pavement Reinforcement System. The work was part of a four-year, four-phase, \$70 million reconstruction project that began in 2004. Installation of the GlasGrid System saved the state \$500,000 in repair costs.

The Challenge: Located in a growing area that was also a popular tourist destination, the repairs had to be completed quickly with minimum traffic disruption. The budget precluded lane widening or the construction of detour lanes.



The GlasGrid® System saved the New Mexico DOT \$500,000 in direct costs.

Site Conditions: Originally built in 1962, the segment's 10-in. thick concrete surface had been repeatedly overlaid, while truck traffic had increased significantly in the area. The combination of an aging road, multiple repairs and continuous heavy trafficking had resulted in serious rutting conditions.

Alternative Solutions: "The project started out as a mill-and-overlay job with some full reconstruction up to two feet down into the subgrade," said Marivel Cano, Tensar International's Arizona/New Mexico regional manager. "But full-depth reconstruction would have required lane widening or construction of detour lanes to accommodate the truck traffic. That would have delayed construction schedules and wasn't included in the budget."

The Solution: The highway contractor proposed the GlasGrid System as a value-engineered alternative. In the deep seated rutted areas, the concrete was extracted down to the base and the cement-treated base was then compacted. A compacted hot mix was added and brought flush to the concrete slab surface. The surface was then topped with a 3-in. layer of asphalt concrete (AC), followed by a layer of GlasGrid mesh, a 6-in. lift of AC, a second GlasGrid layer and finally a 3-in. asphalt surface course. The less distressed areas

PROJECT HIGHLIGHTS

Project:

U.S. Interstate 40

Location:

Newkirk to Tucumcari
New Mexico

Installation:

June–September 2008

Product/System:

GlasGrid® 8511 Complete Road System

Quantity:

50,000 square yards

Owner/Developer:

New Mexico DOT

Design Engineer:

New Mexico DOT

Installation Contractor:

Fisher Sand & Gravel-New Mexico, Inc.

Materials Supplier:

Titan Construction Products, Inc.

CASE STUDY



REINFORCED ASPHALT OVERLAY

CASE STUDY

were treated with a 6-in. AC lift and a single GlasGrid layer before the asphalt surface course. With spot repairs running in 150- to 175-foot segments, the contractor was able to implement one-day lane closings and avoid nearly five miles of continuous lane closures.

The GlasGrid Advantage: The GlasGrid System is the leading reinforcement interlayer system for pavement overlay design. It has been successfully used within asphalt overlays on highways, airport aprons, runways and parking lots across the world. Reflective cracking initiated by thermal loading, lane widening, asphalt construction



The GlasGrid System allowed the contractor to make repairs quickly using temporary, one-day lane closures.

joints, among many other causes, can easily be combated with the GlasGrid System.

Properly installed, the system can extend pavement life up to 200%, dramatically reducing maintenance and life cycle costs. The New Mexico DOT saved \$500,000 in direct costs by avoiding the expense of widening existing lanes or constructing detour lanes. In addition, it plans to extend its service schedule from four to eight years on the GlasGrid-treated segments, saving the agency even more.

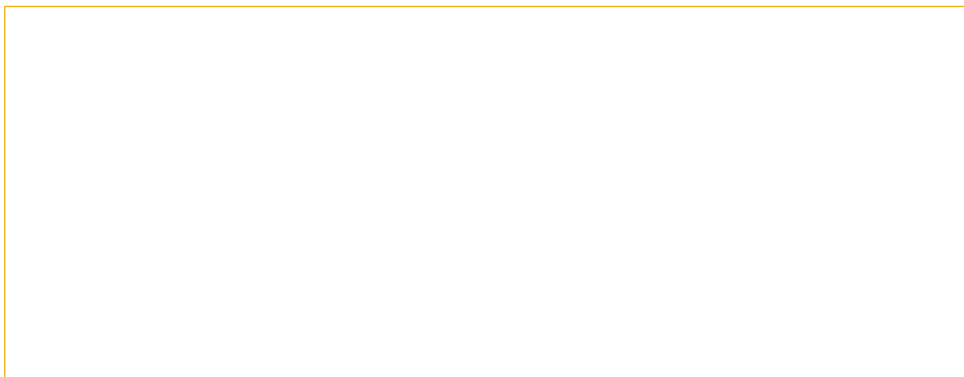
Additional Information and Services:

Tensar International Corporation, the leader in geosynthetic soil reinforcement, offers a variety of solutions for foundation and roadway projects. Our products and technologies, backed by the most thorough quality assurance practices, are at the forefront of the industry. Highly adaptable, cost-effective and installation friendly, they provide exceptional, long-term performance under the most demanding conditions. Our support services include site evaluation, design consulting and site construction assistance.

For innovative solutions to your engineering challenges, rely on the experience, resources and expertise that have set the industry standard for more than two decades.

For more information on the GlasGrid Pavement Reinforcement System or other Tensar Systems, call **800-TENSAR-1**, e-mail info@tensarcorp.com or visit www.tensar-international.com.

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