



**UTILITY TRENCH REPAIRS  
PARKER, COLORADO**

**Application:** Installation of the GlasGrid® System to reduce reflective cracking following utility trench repair is now standard procedure for the Town of Parker, Colorado.

**The Challenge:** Reflective cracking of pavement surfaces following utility trench repair is a common challenge faced by towns, cities and counties. Located 20 miles southeast of Denver, Parker, Colorado was no exception; the growing town of 42,000 was confronted with trench repairs increasing in both number and frequency (due to accelerated surface failure).

**Site Conditions:** Sites featured conditions typical of trench repair work, with no evidence of unusually soft soils or severe instances of reflective cracking.

**Alternative Solutions:** An unreinforced solution was ruled out, and no alternative reinforcement or repair solutions were considered.

**The Solution:** Since late 2005, crews from the Public Works Department’s Streets Division have used a self-developed GlasGrid System “T-Lock” installation procedure with great success (see diagram). Following utility placement and the addition of flowable fill to the bottom of the existing asphalt layer, asphalt was placed and compacted to meet the milled surface elevation of the T-Lock. GlasGrid mesh was then placed on-center over the top of each trench wall, redirecting the stress to resist migration of the reflective crack. A minimum 1.5-inch layer of asphalt was then placed directly onto the reinforcement mesh, bringing the utility cut flush to the existing pavement surface.

Ron Martinez, Parker’s Streets Superintendent, claims that the T-Lock repair procedure has greatly reduced the amount of warranty work associated with trench repairs. In addition, use of the GlasGrid System has reduced maintenance expenses while increasing pavement surface life—all at a low installation cost. The Public Works Department has

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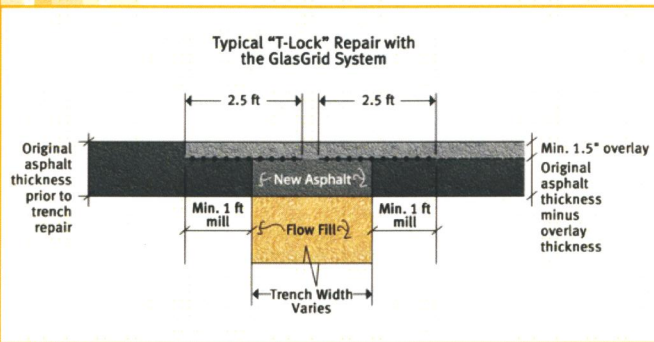


Illustration of Parker, Colorado’s GlasGrid System “T-Lock” Repair.

**PROJECT HIGHLIGHTS**

- Project:** Utility Trench Repairs
- Location:** Parker, Colorado
- Installation:** 2005–present
- Product/System:** GlasGrid 8501  
GlasGrid® Pavement Reinforcement System

- Quantity:** 2,700 square yards
- Owner/Developer:** Town of Parker, Colorado
- Design Engineer:** Ron Martinez, Town of Parker, Colorado
- Installation Contractor:** Streets Division, Town of Parker, Colorado
- Installation Contractor:** Vance Brothers, Inc.





## REINFORCED ASPHALT OVERLAY

modified the T-Lock procedure for pothole repair, cold joints between old and new portions of asphalt on flexible roadways and patchbacks between concrete and asphalt surfaces. It also uses GlasGrid for repair of longitudinal and transverse cracks as well as full-width applications in overlay projects.

**The GlasGrid Advantage:** Introduced in 1989, the GlasGrid System consists of a stiff, environmentally friendly fiberglass material coated with an elastomeric polymer. The grid is rolled out over a thin leveling course placed before the main asphalt overlay. With its pressure-sensitive adhesive backing, installation of the GlasGrid System is easy; it is generally considered to be the most expediently applied geosynthetic interlayer system available.

The GlasGrid System has been successfully used within asphalt overlays throughout the world to counter reflective cracking initiated by one or more of the following:

- Concrete pavement longitudinal and transverse joints.
- Thermal loading.
- Lane widening.
- Cement-treated or stabilized layer shrinkage cracks.
- Block cracks.
- Asphalt construction joints.



*Installation of the GlasGrid® System dramatically retards migration of reflective cracking to maintain a smooth surface and extend pavement life.*

### **Additional Information and Services:**

Tensar International Corporation, the leader in geosynthetic soil reinforcement, offers systems for improving structures such as roadways, railyards, construction platforms and parking lots. 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.

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For more information on the GlasGrid Pavement Reinforcement System or other Tensar Systems, call **800-TENSAR-1**, e-mail [info@tensarcorp.com](mailto:info@tensarcorp.com) or visit [www.tensar-international.com](http://www.tensar-international.com).

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Parker, Colorado

**PROJECT**

Town of Parker, Colorado  
Utility Repairs

**LOCATION**

Parker, Colorado

**APPLICATION**

Reinforced Asphalt Pavement Overlay

**PRODUCT**

GlasGrid 8501

**QUANTITY**

2,500 square yards

**OWNER AND/OR DEVELOPER**

Town of Parker, Colorado

**CONTRACTOR**

Vance Brothers, Inc.

**ENGINEER**

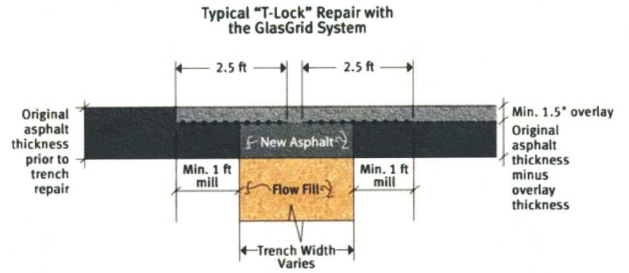
Ron Martinez  
Town of Parker, Colorado

**INSTALLATION DATE**

Late 2005 – Present

**PROJECT DETAILS**

The Town of Parker, Colorado was experiencing reflective cracking in pavement surfaces caused by utility trench repair. The "T-lock" trench repair detail that was used with the GlasGrid System was easily constructed and greatly reduced the amount of warranty work associated with this type of repair. The Town of Parker, Colorado has realized many benefits of using the GlasGrid System such as low installation costs, reductions of reflective cracking and increased service life of pavements.



T-Lock repair without the GlasGrid System



T-Lock repair with the GlasGrid System



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