PROJECT PROFILE

Los Angeles, CA



PROJECT

Los Angeles Transportation Center (LATC)

APPLICATION

Growing demands and aging infrastructure created the need for the Union Pacific Railroad intermodal facility modernization.

SITE CONDITIONS AND CHALLENGES

Several project challenges caused the team to pursue alternative rail section designs:

- Subgrade conditions ranged over a variety of subgrade strengths with contaminated soils
- Over budget
- Aggressive construction schedule

SOLUTION/DESIGN

Tensar TriAx Geogrid was placed on the subgrade, reducing the sub-ballast thickness from 12 inches to 6 inches. The Tensar design provided the following value:

- Expedited construction
- Reduced cost
- Increased the factor of safety, enhancing life.

PERFORMANCE

On-site Automated Plate Load Testing (APLT) validated that 6 inches of sub-ballast placed on TriAx Geogrid provided superior sub-ballast performance (i.e. higher modulus, less permanent deformation) compared to the 12 inches of sub-ballast without TriAx Geogrid.

PROJECT HIGHLIGHTS

Installation Date: 2017 - 2018

Product: Tensar TriAx Geogrid; ~150,000 SY

Engineer: TransSystems

Tensar

Tensar International Corporation 2500 Northwinds Parkway Suite 500 Alpharetta, GA 30009 800-TENSAR-1 tensarcorp.com

Rail Section Alternatives		
Railroad Section	Non-stabilized Section	TriAx Geogrid Enhanced Section
Depth of Ballast	8.0-inch	8.0-inch
Depth of Subballast	12.0-inch	6.0-inch
Geogrid Type	N/A	Tensar TriAx Geogrid
Total Thickness	20-inch	14-inch





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