

Trackbed stabilisation on a railway embankment



Rama VI Bridge

BangSue, Bangkok, Thailand

At the Rama VI Bridge section of the State Railway of Thailand, the ballast layer was not performing well due to the mixture of fine material into the layer. To resolve this, Tensar stabilisation geogrid was introduced to stabilise the ballast layer whilst providing subgrade protection.

CLIENT'S CHALLENGE

The railway's differential settlement was a pressing issue experienced by the client. This happened due to the infiltration of subgrade fine material caused by dynamic train loading, leading to the frequent tamping of railway ballast every 3 to 4 months.

TENSAR SOLUTION

The Tensar geogrid has been successfully introduced and installed beneath the ballast layer, providing a notable extension to the overall longevity of the railway. The incorporation of Tensar geogrid has stabilised the ballast layer mechanically, which not only acts as a protective measure for weak foundations but also efficiently mitigates differential settlement.

B E N E F I T S

- **300% improvement** in maintenance cycle (from 4 months to 1 year)
- **Controlled differential settlement** through mechanical stabilisation
- **Subgrade protection** with effective granular interlocking mechanism

Tensar®

A Division of CMC

PROJECT DETAILS

Constructed in
2022



Rail track is supported by mechanically stabilised layer

Rail Trackbed Improvement | No. 467

let us help you with your next challenge: tensarinternational.com email: tensarinfo-intl@cmc.com



We're CMC. You'll find our products strengthening and reinforcing the infrastructure nearly everywhere on the planet – in sports stadiums and public buildings as well as highways, bridges, railways and other structures. To serve this global market, CMC maintains facilities across the United States, Europe and Asia. These sites include everything from local recycling centers, steel mini-mills and micro-mills to large-scale fabrication centers, heat-treating facilities as well as other operations. **cmc.com** ©CMC 2024