Access roads under construction using Tensar® InterAx® geogrid

Roads, Pavement & Surfaces
№ 495

Guoxin Jingjiang Power Plant Expansion

Taizhou, Jiangsu, China

CONSTRUCTED IN 2023

Reliable solution for difficult subgrade

Guoxin Jingjiang power plant expansion project worth 839 million yuan is the main energy project in the Jiangsu province of China. The site required an access road to carry construction traffic. Post construction this would then serve as the structural base of a permanent road.

CLIENT'S CHALLENGE

The construction site adjacent to the river has a high water table and subgrade comprising a thick deposit of silty soil, with a low bearing capacity and high settlement potential. The original geosynthetic solution was underperforming, requiring deep replacement of existing unsuitable material (USM). The access road has to be built rapidly and safely to ensure the construction proceeds according to schedule, so the client sought a more economic alternative solution that would meet the deadline.

TENSAR SOLUTION

Tensar proposed a mechanically stabilised layer (MSL), using multiple layers of Tensar® InterAx® geogrid and crusher run aggregate, for the access road to overcome the subgrade challenge. The solution also helped to mitigate differential settlement, preventing crack propagation in future pavement construction. The reliable performance of the Tensar MSL reduced earthwork activities and ensured timely access to the construction site.

Benefits

No downtime
allows traffic immediately after compaction

Reduced construction cost
by eliminating removal of USM and extending pavement life

Reduced carbon emission
by reducing earthwork activities

