

NEW PROJECT:

TOORAK STATION PIT RENEWAL

**TOORAK, VICTORIA
NOVEMBER 2019**



TENSAR® TRIAX®

The Tensar TriAx geogrid is the most advanced geogrid in today's market and the result of 30 years continual innovation and development. It outperforms conventional biaxial geogrids and substantially reduces construction time and costs.

The Tensar TriAx geogrid is based on one of the most efficient, stable structural forms – the triangle. Where biaxial geogrids have inbuilt strength in two directions, with the TriAx it's multi-directional, providing greater stability and increasing bearing capacity.

Railway geogrids improve bearing capacity on railway projects and stabilise the rail ballast and track bed, improving performance. They also limit the movement and displacement of the rail ballast so less maintenance is required over the lifetime of the railway line.

The ballast component was at the end of its lifecycle - contaminated and broken. The track had a mix of timber and concrete sleepers as well as a mix of dog spikes and screw spikes, so was due for renewal.

Geofabrics bidim and TriAx geogrid was specified due to previous projects success.

The pit renewal started with the removal of approximately 300 mm of contaminated ballast back to the capping layer. In this instance, the capping layer was in relatively good condition so it only needed to be compacted. The contractor then placed a separation layer of bidim A44 on top of the newly compacted capping, along with Tensar TX190L geogrid to stabilise and contain the ballast. Once in place, 300 mm of new ballast was brought in and placed on top along with sleepers and new rail.

The station pit has now been completely revitalised with the selected solution, saving the client a lot of money in the long term.

By installing a separation layer between the capping and ballast in conjunction with TX190L, it will minimise the ongoing maintenance costs and massively extend the life of the new ballast that has been put in place.

