

CASE STUDY:

ASPHALT PAVEMENT REINFORCEMENT

Newell Highway

JERILDERIE, NSW

APRIL 2018

CLIENT: RMS WAGGA WAGGA

CONTRACTOR: DOWNER



GLASGRID

GlasGrid pavement reinforcement geogrids are a high strength self-adhesive reinforcement grid designed to control reflective cracking in asphalt concrete overlays on roads, freeways, bridges and car parks. GlasGrid reduces both thermal and stress-related cracking. Its self-adhesive application allows for quick installation and the fibreglass components account for its exceptional performance.

GlasGrid pavement reinforcement geogrids are manufactured to ISO 9001 quality standards. It is silica based and has a high melting point (+215 degrees C) and pressure-sensitive adhesive. GlasGrid is available in rolls from 1.5 m to 3.0 m wide. It has excellent UV and oxidation resistance and performance is not affected by creep. It is easily milled and recycled and environmentally friendly. GlasGrid pavement reinforcement geogrids are suitable for use in paving fabric applications. It has a low elongation and it bonds well on the levelling course. GlasGrid can be easily installed from the back of a ute and no special equipment is required.

Using GlasGrid can dramatically extend the life of roads, runways and parking lots and lower maintenance costs.

GEOFABRICS
Smarter Infrastructure

“This project has been a massive success so far and everyone has really come to the party on this one”

Deon Van Zyl, Area Manager - Bathurst, Downer

For a number of years RMS Wagga Wagga had experienced cracking through the heavily bound layer of an 1 km section of the Newell Highway in Jerilderie in regional South west New South Wales.

The section of road had been patched extensively over the years by RMS, however most recently the team wanted to find a more long term solution. Instead of digging out 500 mm, the whole pavement, RMS specified milling out 140 mm of pavement and placing GlasGrid, then 90 mm of asphalt then another layer of GlasGrid followed by 50 mm asphalt.

The night works to rehabilitate the pavement included installation of 18,000 m² (two layers) of GlasGrid along the Newell Highway through the township of Jerilderie. G8511, 100 kN/m reinforcing grid was used for both layers.

To suit the roadway width, 3 m wide rolls were cut using a demolition saw (and water to cool down the blade). Also, the grid, when laid out, was easily cut on site using a Stanley knife. The installation team also had a number of curves to install around and were pleasantly surprised by how easy the grid was to install in such sections.

The specification works are part of an RMS trial; where the asphalt reinforcement is designed to increase the life of the overlay. The stretch of road will be monitored over the coming months and years, and if successful will be adopted more widely for pavement rehabilitation works (over conventional and more costly remove and replace pavement treatments).