



# Bluebell Railway Infrastructure

Permanent Way Department

Eye Hospital

Corrective Track Works

October 2020

# Eye Hospital - Corrective Track Works Background

Kingscote to East Grinstead - 15 Miles 63 Chains.

- Track drainage problems in the Eye Hospital area began to be identified during 2019 by routine Track Patrols and following this a detailed inspection of the area was undertaken. It was discovered that there was some damage to the geotextile membrane below the track, and that this had been caused by tamper tines which had punctured the material in numerous places over approximately 120m. Under passing traffic during the very wet Autumn and Winter of 2019 clay began pumping up into the ballast, which in turn led to voiding under the sleepers and a rapid decline in track quality, resulting in a short 3 Metre Track Twist. Due to the severity of the twist fault and to protect Safety of the Line the Infrastructure Manager took the decision to block the line until corrective works could be undertaken.

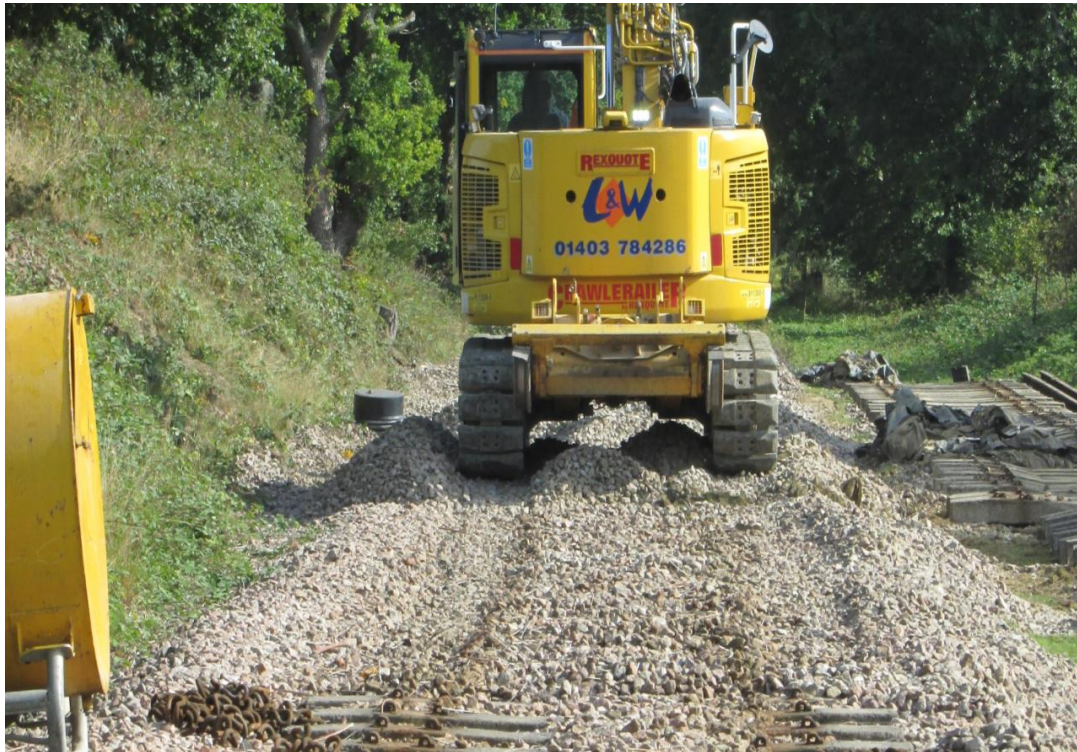
**Eye Hospital – Kingscote to East Grinstead - 15 Miles 63 Chains**  
Poor Track Geometry - Short 3 Metre Track Twist.





## Eye Hospital – Kingscote to East Grinstead - 15 Miles 63 Chains

The L&W machine operator removed the rails and sleepers, storing them in the Down Cess.





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With the clay contaminated top ballast removed the extent of the damage to the geotextile material and resultant clay pumping became obvious.





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Following the removal of the contaminated material and regrading of the formation, the new geotextile material was positioned, and the bottom stone then spread out on top, ready for the track to be installed.





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With the track replaced the final task was to re-establish track geometry using the latest track maintenance equipment, Balfour Beatty's new Plasser and Theurer tamper DB73949.





This project was made possible by a grant from the National Lottery Heritage Fund Emergency Grant Scheme. This scheme provided up to £250,000 to sustain heritage organisations during the Coronavirus Pandemic.

The Bluebell Railway was pleased to receive a grant for the maximum amount.