

ECML HIGH SPEED STAGE II STILTON FEN TRIALS

Maintenance problems have existed for many years on a section of the East Coast Main Line (ECML), where an embankment is built over difficult boggy ground. The report discusses trials undertaken to consider whether the construction of a berm alongside the embankment would improve the stability and permit an increase in line speed.

The effect of train speed, differing axle loads and the effectiveness of the berm *in situ* were assessed. The results showed that:

- The influence of speed on the magnitude of displacements was minimal.
- Axle load is not as important as bogie load; results showed that a 100 tonne tank wagon travelling at 60 miles/hr would have a more detrimental affect on the formation than a passenger train travelling at 100 miles/hr.
- The existence of a berm alongside the Down line did not appear to have any effect on the magnitude of displacements on that side.

The report stresses that the results taken apply solely to the point on the embankment where the equipment was fixed and the embankment conditions at the time.