

ASPHALT BASED TRACK AT RADCLIFFE ON TRENT CONSTRUCTION AND RUNNING EXPERIENCE

This report describes the construction of an experimental asphalt based track at Radcliffe on Trent in 1974 and its subsequent performance under traffic. Although the preferred form of construction for non-conventional track is continuously reinforced concrete slab supported on some form of compacted sub-base, this is not practical due to the time required after laying for hardening and installing rail fastenings. Asphalt appears to offer the required characteristics for a support system that can be trafficked immediately after laying and rolling.

Details of the various types of track superstructure are described together with measurements of the strains in the asphalt under test trains and their relation to theoretical predictions.

At the time of writing the total traffic has amounted to approximately 10M tonnes and the retention of the initial track geometry under this traffic loading has been excellent.