

FEASIBILITY OF RECYCLING SURFACING MATERIALS BACK INTO THIN SURFACING SYSTEMS

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ABSTRACT

Proprietary thin asphalt surfacing systems were first introduced into the United Kingdom in 1991. The need to recycle thin surfacing systems is more critical than with many other generic surfacing materials because of the quantity of relatively scarce aggregates with high skid-resistance properties within the layer. Laboratory investigations and site trials have been successfully undertaken. The trials were on the access to an asphalt plant and on two heavily trafficked sites on the Highways Agency road network, and included the use of polymer modified binders (PMBs) and up to 30 % reclaimed asphalt (RA) in the mixed asphalt. The trials demonstrate that 10 % RA can be easily added to new materials without affecting grading. As the proportion of RA increases up to 30 %, greater care needs to be taken on assessing grading compatibility and how to treat the residual binder present in the RA as a proportion of the 'active' binder content in the recycled surface course layer.

KEY WORDS: Asphalt, surfacing, recycling, polymer-modified, performance