

DEVELOPING THE NEXT GENERATION OF ASPHALT SURFACINGS, FROM CONCEPTION TO ROAD TRIALS

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ABSTRACT

This paper disseminates key technical findings focused on developing the next generation of asphalt surfacings called the “Premium Asphalt Surfacing System (PASS)”. This project is tasked with “ensuring that asphalt surfacings continue to deliver value for money on the (UK) Strategic Road Network and to maximise the benefits from innovation”. The project was completed by AECOM in collaboration with Highways England, Eurobitume UK and Mineral Products Association (MPA). The objective of this project is to develop asphalt surfacings with improved mechanical and performance properties without compromising on durability, safety and noise. The mix design principle for PASS comprises of a dense, low voided, durable asphalt material with good surface characteristics. Laboratory assessments on PASS comprised mixture volumetrics, deformation resistance, water sensitivity and void structure analysis (using micro CT Scan). The field assessments comprised in situ density, texture depth, surface regularity and noise assessment using the Statistical Pass By (SPB) tests.