THE DESIGN OF ASPHALT REINFORCEMENT FOR ROAD APPLICATIONS: REINFORCEMENT SELECTION, DESIGN OF OVERLAY THICKNESS, AND IMPACT ON DESIGN LIFE

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ABSTRACT
Asphalt reinforcement to extend the life of pavements or reduce maintenance has been difficult to design. Most design considerations are based on experience and expectations. Recent developments in computer modelling based on CAPA-2D developments have made it possible to improve design procedures geogrid reinforcement of asphalt layers. General design considerations in selecting the appropriate type of reinforcement to solve a broad range of problems in asphalt pavements will be discussed. A step-by-step approach is presented in which all relevant requirements are considered for a successful design. Several design examples will be presented based on actual cases.

KEY WORDS: pavements, asphalt reinforcement, geogrids, interlocking, overlay design