

Structural Evaluation of Cell-Filled Pavement

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Abstract : This paper describes the findings of a study carried out for evaluating the performance of cell-filled pavement for low volume roads. Details of laboratory investigations and the methodology adopted for construction of cell-filled pavement are presented. The aim of this study is to evaluate the structural behaviour of cement concrete filled cell pavement laid over three different types of subbases (water bound macadam, soil-cement and moorum). A formwork of cells of a thin plastic sheet was used to construct the cell-filled pavements to form flexible, interlocked block pavements. Surface deflections were measured using falling weight deflectometer and benkelman beam methods. Resilient moduli of pavement layers were estimated from the measured deflections. A comparison of deflections obtained from both the methodology is also presented.

Keywords : cell-filled pavement, WBM, FWD, Moorum

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