

Performance Monitoring of Drainable Bases under Asphalt Pavement

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Abstract

Providing adequate drainage layers underneath pavement surface course has been recognized as one of the most important design considerations. In Ohio, several different types of permeable base materials, including both bounded and unbounded open graded aggregates, have been used. However, there is no documented study on the comparative drainage efficiency of these base materials under field in-service conditions. This paper presents instrumentation and monitoring project aimed at measuring moisture variations over time in pavement sub-layers. Representative field measured moisture data for three sections are presented. A statistical analysis of COV of moisture content at different base sections reveals that ODOT 306 cement treated base performed the best.

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