

## **RADAR TECHNIQUE IN APPLICATION OF INTERLAYER IDENTIFICATION CONNECTIONS**

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### *ABSTRACT*

One of important issues in pavement construction is to ensure that layers applied directly one on top of the other make up a continuous whole and form an integral construction complex. An appropriate interlayer connection plays here significant role ensuring proper transmission of distortions generated by wheels of vehicles to lower layers and preventing water penetration between the layers. In case of damaged pavements where lack of bond between the layers is supposed to be a problem, important thing is to indicate the range of distress.

The paper discusses the way of evaluation of the asphalt pavement interlayer connection quality with the use of GPR (Ground Penetrating Radar) techniques. This is done on the basis of the results form field investigations on one of new pavement section where surface damages ware found. The field evaluation was performed along selected section with using the 2GHz antenna and drilling cores collection at specific locations associated with strong double reflections. The preliminary inspection of the drilling cores provided some real insight into structure of different delaminations and defects causing these characteristic reflections.

*KEY WORDS:* Ground Penetrating Radar, pavement, interlayer connection, signal processing.