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ROAD MAINTENANCE; CAUSES TO HIGHLIGHT WHEN CHOOSING IN BETWEEN GEOSYNTHETICS

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ABSTRACT

A variety of untraditional solutions involving the use of various types of geosynthetics have turned up world-wide over the last 30 years as a result of the need to maintain an increasing number of worn-down roads to obtain an acceptable standard and comfort for vehicles. Improvements to common methods of road maintenance have been highlighted, in order to accomplish the road maintenance within a generally more and more pared-down budget.

To obtain the expected surplus advantages, cost-benefit savings, and to decide between the adding of either necessary reinforcement or membrane effect to the road construction, the choice of an actual solution must be based on the efficiency of the geosynthetics, however, not at the expense of the customer.

When expensive or overestimated solutions of geosynthetic composite products are used in road maintenance, there is a risk of simply destroying the whole idea of the geosynthetics interlayer as a whole if the consultant or contractor returns to choosing more cm of asphalt instead.

This paper will thus focus on some main principles when choosing between the use of strong rigid materials for reinforcement and the use of flexible paving fabrics for the creating of membrane effects. Furthermore, put into focus the economical aspect between the different methods. Hence, discussing the outcome of resources invested with the driving comfort and added lifetime extension obtained by the different method of road maintenance.

KEY WORDS: Paving fabric, membrane effect, reinforcement, and cost-benefit.