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IMPLEMENTATION OF THE PRINCIPLE OF SUSTAINABILITY TO THE EVALUATION OF HIGHWAY CONSTRUCTION METHODS

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ABSTRACT

Today, the implementation of the meaning of “sustainable development or sustainability” in Highway Engineering in general, and in the use and appropriateness of materials in particular, is an imperative need. The proper implementation must take into consideration technological and social constraints, reasonable management of resources, equitable distribution of profits and appropriate environmental policy.

The existing reserves of resources at industrial and developing countries, as well as the possibility and the rates of their regeneration are important issues to be examined in the frame of highway engineering projects.

In the context of this paper, an attempt to assess the meaning of sustainable development at two conventional sections of pavements is presented and a quantitative calculation of the consumed energy and environmental loadings during the production of apportioned materials is also illustrated.

KEY WORDS: Sustainable development, highway construction, reserves, emissions.