ASPECTS REGARDING EVALUATION OF COMPACTING PROCESS BY VIBRATION OF ENZYME-STABILIZED SOILS

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Abstract. The analysis of the current state of applications and the results of studies carried out at international level have led to the approach of an eco-efficient methodology for the recovery of waste generated from construction activities, demolition, and the addition of alternative stabilising materials to obtain optimized structures capable of providing a higher quality of the works carried out. Three types of stabilising slurry agents were selected for the experimental programme: the water-based polymer product AggreBind (AGB-BT), the Terra 3000 solution based on the Power binder, and the Earthzyme polysemantic product. Experimental studies on the use of these types of products in earthworks for stabilizing embankments, building and repairing road systems and industrial platforms have shown significant increases in strength and bearing capacity. The use of these environmentally beneficial alternative materials has led to significant reductions in construction time, decreasing total construction and maintenance costs in the short and long term.

Keywords: Stabilization, waste, recovery, recycling, road systems, ecological material.