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(57) Abstract:

The present invention discloses a method for increasing the suitability of various plasticity (Low, Medium, and High) gravel soils to base and sub-base layers of road construction as according MoRTH specifications with various gradations, cement treatment, and partial curing method. The optimized percentage of cement addition to the base and sub layers is determined with respective to the material properties of the sub-grade soil. An ideal cost effective gradation with optimal cement consumption is disclosed in the invention. The gradation effect on cement-treated base and sub-base layers. CBR samples undergo 7days moisture, 7days water, and 7days partial curing (3days moisture+4days water). Thus cured samples with various curing environments are investigated for high mechanical strength and other desired attributes of the intended application.

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