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TITLE OF PROJECT: STABILIZATION OF SOIL USING PLASTIC WASTE

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ABSTRACT (150-300 words):

The practice of Soil stabilization is the process of enhancing soil's physical characteristics through the use of admixtures and techniques. It aims to improve soil stability, increase its carrying capacity, and reduce lateral deformations. Despite the high cost of admixtures like gypsum, fly ash, cement, and lime, natural fibers like coir can be beneficial. However, these fibers are often difficult to handle. Using plastic as a soil stabilizer can help reduce plastic waste disposal, as plastics are non-biodegradable and take hundreds of years to degrade. The highest Maximum dry density is obtained from the 99.6% soil+ 0.4% waste plastic combination. Atterberg's limits showed liquid limit of 39.35%, plastic limit of 15%, and shrinkage limit of 52.76%, with maximum dry density of 1.97 at 10% moisture content.

KEYWORDS: Soil Stabilization, admixtures, waste, soil

CATEGORY: GEOTECHNICAL ENGINEERING