



GEOTECHNICAL TESTING REPORT
ON STABILIZED SOIL CORE SAMPLES COLLECTED
FROM A ROAD PROJECT AT NTR MARG, HYDERABAD

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Job No. 3380/A

INTRODUCTION

M/S Vishwa Samudra Engineering private Limited, Nellore with their technical partners M/S Avani Ecoprojects Private Limited, Hyderabad have executed 3.6 km road project using Asphalt full depth recycling technology at NTR Marg between Telugu talli flyover to Necklace Road circle towards lake using an additive with brand name of StabilRoad. In this connection Sri Krishna Madhav Remella, Director of Avani Ecoprojects Private Limited, Hyderabad has requested the Geotechnical Engineering Division of National Institute of Technology – Warangal to test the stabilized core samples collected from the above project work for their compressive strength and water absorption.

DETAILS OF SAMPLES

Totally three number of core samples which were collected after curing for 7 days at different chainages of the road executed were sent to the soil mechanics laboratory of the geotechnical engineering division for testing. The details of the samples along with identification numbers and location of collection are given in table 1.

Table 1: Details of supplied core samples

S. No.	Sample reference no.	Location of the core sample
1	C 4	267 meters chainage, 1.6 m from road median RHS
2	C 8	460 meters chainage, 2.1 m from road curb LHS
3	C 11	830 meters chainage, 2.2 m from road curb LHS

The following tests were conducted as per IS code of practice.

1. Compressive strength of the core samples
2. Water absorption

The photo of compressive strength testing on these core samples is given in the figure below and results from the above tests are given in the following table 2.

Table 2: Results of tests conducted on the supplied stabilized soil core samples

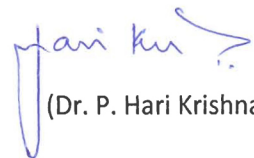
S. No	Location	Water absorption (%)	Compressive strength (kg/cm ²)
1	C 4	4.49	72.8
2	C 8	3.11	75.9
3	C 11	5.45	79.1



Figure 1: Compressive strength testing of the stabilized core specimen

OBSERVATIONS & RECOMMENDATIONS:

It can be observed that the uniaxial compressive strength of the stabilized soil specimens is varying between 72 to 79 kg/cm². These values are beyond the suggested range of 45 to 70 kg/cm² for cemented base courses as per IRC: 37 – 2012. The water absorption of these specimens is ranging from 4% to 6%, which can be considered as low.



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