AN EXPERIMENTAL INVESTIGATION ON THE NICOSIA CLAYS

by

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Project Report

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1.0 SUMMARY

The purpose of the work was to take samples and establish some of the engineering properties of the Nicosia clay by carrying various laboratory tests.

The scope of the project may be summarized as follows:

(i) To discuss generally the different types of soils from the civil engineering point of view.

(ii) To discuss in detail the properties of clays.

(iii) To carry out tests on clay samples.

(iv) To discuss the results of the tests stated above.

A brief description of the engineering properties of soils is given with more emphasis on the engineering properties of clays in general and in particular, the shear strength of clays.

Four samples were obtained from construction excavations which were under way in the Makedonitissa and Strovolos areas. Three of the samples were typical of the Nicosia Marl

type and the fourth was of a silty clay type typical of Alluvial deposits present in the Nicosia area.

The tests carried out on all samples included classification tests consisting of Natural Moisture Content, Bulk Density and Atterberg Limits and Quick Undrained Triaxial Tests to obtain the shear strength of the samples.

Some of the engineering properties of the Nicosia Marl established by geotechnical investigations carried out by others are also given in this study in a summary form.

It can be concluded that, the engineering properties of the Nicosia clay vary considerably.

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