

HIGHER TECHNICAL INSTITUTE

NICOSIA - CYPRUS

CIVIL ENGINEERING COURSE

DIPLOMA PROJECT

SITE INVESTIGATION

C / 789

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## S U M M A R Y

The Site Investigation is a comprehensive study that may cover all aspects of the site conditions. Its extent and type depend on the site conditions of each particular site, on the type of the proposed structure and very often on the budget approved for the investigations.

Site Investigation may be required not only for new works, but also for the extension of existing ones, for damaged works, for the safety of existing works etc.

The desk study involving collection and assesement of existing available data and the site inspection prior to the exploration programme preparation is an essential part of the Site Investigation. A preliminary study is usually carried out and if the project is proved to be feasible the detailed study follows.

Engineering geological survey, followed by excavation of trial pits, trenches or adits and the necessary number of borings in combination with in situ and laboratory testing are the most common techniques of Site Investigation.

The evaluation of all the data obtained in combination with the existing ones are incorporated in a technical report with the conclusions and recommendations of the geotechnical consultant.

The objectives of this project are :

- To give an extensive account on the types of Site Investigation, its extent and the various techniques used. Special emphasis has to be given to the present-day practice of the Cyprus construction industry.

- To participate both field and office works of a site investigation study involving boring, in situ and laboratory testing, aiming

- i) to assess the general suitability of the site for the proposed works,

ii) to foresee and provide against difficulties that may arise during construction and completion of project due to ground and other local conditions,

iii) to enable an adequate and economical design to be prepared.

The results of this site investigation are presented in this work as a case study. The writer was deeply involved in all stages of the site investigation including the preparation of the technical report.

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