- Borehole Log must confirm scale, sample key, legend for type of soil, ends of stratum and ground water table level.

1.2.24 Stating the depths range at which the ground water table was encountered and to show if the ground water table is subjected to tidal weather seasonal variations or by artificial induced effects. Therefore reconfirmation is recommended prior to any works related to the ground water regime. Standpipe peizometers to be installed inside minimum two boreholes for each site after drilling and cleaning of drilling mud by clean water flushing for monitoring the ground water depth.

1.2.25 Conducting a number of field permeability tests (Falling head for soil and packer tests for consolidated and rock material) to measure the conductivity of ground materials.

1.2.26 Earth profile must be plotted using the findings of boreholes in different ground sections as per Fig. (1.5).

1.2.27 Mentioning all the field and laboratory tests achieved in details and illustrating the results properly as per Fig. (1.6).

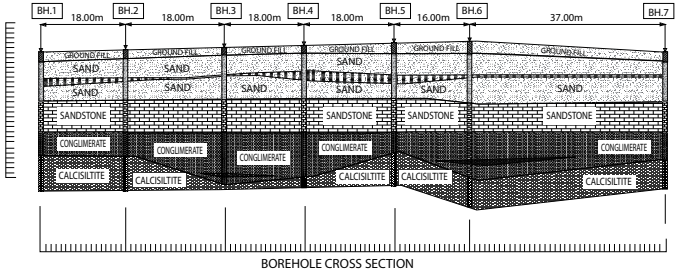

Fig. (1.5). Earth Profile

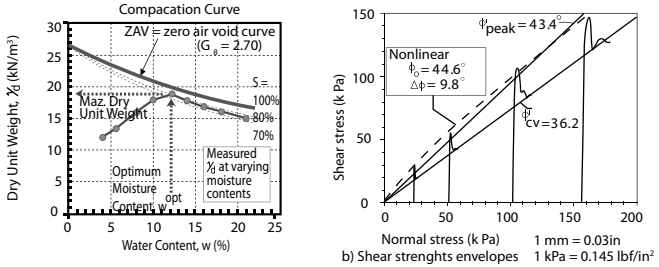

Fig. (1.6): Describing Soil Properties

TABLE OF CONTENTS

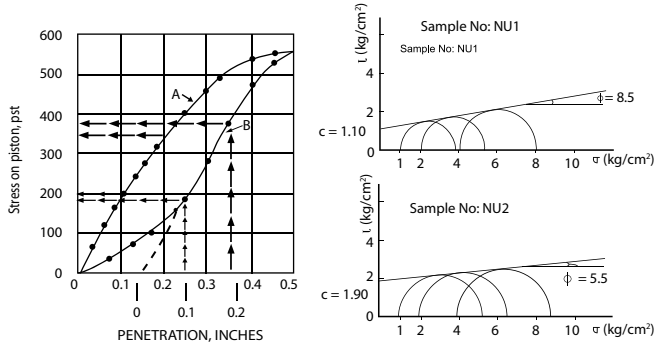

Fig. (1.6): Describing Soil Properties

1.2.28 Chemical analysis to study the possible susceptibility of foundation concrete to aggressive in-situ conditions and corrosivity and thereby to determine the concrete mix specifications by determining pH, Sulphur Trioxide and Chloride content of the soils and ground water. Minimum number to be considered should be three soil samples from above the ground water table, and three ground water samples for each plot.

1.2.29 Recommendations for choice and the type of foundation based on the geotechnical study carried out by the geotechnical engineer and the local experience in the area.

1.2.30 Information about the seismicity of the area; Soil Profile Type to be considered in the seismic analysis according to (Table 16-J) as per UBC 1997, Volume 2, 'Structural Engineering Design Provisions', Division IV 'Earthquake Design'. Conduct a representative downhole / cross hole seismic logging test(s), Fig. (1.7), for an appropriate number of boreholes based on the area of the site and geologic variations, to measure the shear and primary seismic wave profiles and dynamic soil / rock parameters. Table (1.9) is for UBC 1997 Soil Profile Class Estimation.

1.2.31 Liquefaction analysis in case of reclaimed soil: (CPTU is highly recommended).