

## GEOTECHNICAL EVALUATION

Our evaluation of the subsurface soils is based on the soil conditions encountered during this study, the available project information, and our site observations. The test data has been evaluated using established correlations between N-values similar with those recorded at this site and the observed performance of similar soil types.

The strata 1 soils are suitable for use as embankment and structural fill material. Roots and other organic material encountered during site development and excavation should be removed from proposed fill material. The soils extend below the water table and should be allowed to dry prior to placement and compaction. This can be accomplished by stockpiling the material and allowing it to drain, or by spreading it in relatively thin lifts on the surface to be filled, and allowing it to dry prior to compaction.

The soil sample collected from stratum 2, because of the relatively higher silt and clay content, additional effort to properly moisture condition this material will be needed in order to compact it to high densities. In general, silt and clay material is not economically feasible for use as embankment or structural fill material in southwest Florida because of the moisture conditioning and processing required to obtain compaction. It may be placed in landscaping berms or other areas where strength and compressibility are not concerns. The material with higher silt and/or clay content, (strata 2), may be readily mixed with the cleaner sands, (stratum 1) to improve the workability of the soils.

Stratum 3 and 4 soils, in general, a clayey and silt materials with so significant clay fines is not economically feasible for use as an embankment or structural fill material because of the moisture conditioning and processing that is required to obtain compaction. This stratum was encountered in all the borings. In general, clay material is not economically feasible for use as embankment or structural fill material in southwest Florida because of the moisture conditioning and processing required to obtain compaction.

Stratum 5 is weathered soft limerock. It appears that the quantity of this rock is not sufficient for mining purposes. This material may be excavated and mixed with Stratum 1 soils for use as structural fill. Large boulders may be encountered within this strata. These boulders should be crushed to a maximum size of 6 inches prior to use as a fill material.