

RESTRICTED

CHAPTER 7
SOIL MECHANICS AND PAVEMENT DESIGN
SECTION 31-GENERAL

0701. In designing a road to stand up to given traffic conditions the main features are:-

- a. Improvement of the natural sub grade.
- b. Provision of a pavement to distribute the load to resist abrasion, and to keep out water.

0702. A stable soil or surface is one which will not deform laterally under wheel loads. If the natural surface on the proposed road alignment is stable, or if it can be made so by stabilization it will carry traffic, at least for a period, without a superimposed base, but for all-weather roads it is usually necessary to provide a pavement of hard material.

0703. In order to be stable a soil must be:

- a. Well graded.
- b. Thoroughly compacted.

The composition of the soil determines whether or not these conditions can be obtained.

0704. The nature and grading of the soil can be established by tests on the results of which are based the measures to be taken for sub grade improvement the design of the pavement to be superimposed.