**DESIGN OF A FLEXIBLE PAVEMENT FOR AN EXISTING COLONY**

**ABSTRACT**

Pavements are required for the smooth, safe and systematic passage of traffic. Pavements are generally classified as flexible and rigid pavements. Flexible pavements are those which have low flexural strength and are flexible in their structural action under loads. Rigid pavements are those which possess note worthy flexural strength and flexural rigidity.

The profound development in the automobile technology has resulted heavy moving loads on the existing highways for optimization of the transport cost. The existing roads which are designed based on the thumb rules are not able to cater to the heavy wheel loads resulting in the deterioration of the existing roads.

In the project report, an attempt is made to design a road at P.M.Palem, based on the principles of pavement design. On the existing alignment of the road, soil samples are collected for the determination of soil characteristics like consistency limits, sieve analysis, C.B.R. values etc.., Based on this the thickness of the pavement (flexible) is designed. The alignment of the road is also designed and fixed by surveying and leveling. The total road length being 497 meters of which, one section is 247m, other is 200m and the third section is 50m.