

ABSTRACT

Everyday, people commute from their origin to their destination. To accommodate people movement good road facilities are required. A good road facility can increase economically, because the development of the city depends on connected transportation system. When the distance is considered, pavement design analysis is required to overcome transportation system problem. There are many recommended analysis method used, for example, AASHTO 1993 and AUSTRROAD 1992. Both of these recommendations are used to redesign the flexible pavement thickness in Cipularang Toll road.

Cipularang Toll Road connects between Bandung and Jakarta city. Due to it, which is built in mountainous area, many obstacles occurred. Soil collapse has occurred in several parts, and influenced traffic smoothness. Finally, government decided to change the type of pavement, rigid pavement changes to flexible pavement in several parts. In Sta. 96+850, Sta. 96+900, and Sta.97+100 included in Plered – Darangdan.

Annual average daily traffic in 2005 is 154941 vehicles/day/2 destinations. Design years used 20 years during pavement performance. CBR design value 6%. There are pavement thicknesses differences resulted from both AASHTO 1993 and AUSTRROAD 1992. Based on AASHTO 1993, it obtained the thickness value of surface course is 15 cm, base course 31 cm, and subbase course 35 cm. For AUSTRROADS 1992, the surface is 22 cm and base thickness 50 cm.