Abstract

Roads that are in Lamongan - Widang has field conditions with a total pavement width of 14 m (4-lane two-way, each lane 3.5 m) where the surface / layer of asphalt was found to wavy and cracked at some point, the median width 1.5 m, 1.5 m wide road shoulder with the type of road 4 / 2 D and in some sections there is also no channel side of the road (drainage). Under these conditions it is necessary to plan the widening and improvements (overlay) highway Lamongan - Widang STA 22 +400 - 25 +400 STA is to overcome these problems and is one of the treatment plan optimization function of inter-regional transportation infrastructure.

Planning involves the calculation of road upgrading in addition to widening the existing road pavement thickness by using the Planning Highway With Bending Component Analysis method and calculation of SNI 03-1732-1989 thick additional layer (overlay) with Manual Examination Pavement Road With Tool Benkleman Beam and use the Planning Guide Highway Pavement thickness Bending with component Analysis Method,
1987. Analysis of road capacity by using the method of Road Capacity Manual Indonesia (MKJI) (the road out of town), 1997. Geometric control path by using the Indonesian Road Capacity Manual (MKJI) (the road out of town), 1997 and Basic - Basic Geometric Road Planning by Silvia Sukirman. Planning drainage using SNI-03-342-1994 (Procedures for Road Surface Drainage Plan), and the budget plan costs using HSPK (Unit Price Principal Activities)

The results of the highway improvement planning Lamongan - Widang with this 10-year design life, the surface layer obtained using Laston (MS 744) with 5 cm thick. Value of DS (Degree of Saturation) <0.75, but was held to strengthen the structure of the road widening of the side most damaged. Controls the horizontal alignment that produces a horizontal arched geometric alternative. Planning edge channel (drainage) with a trapezoid-shaped stone materials obtained from various channel dimensions. Plan budget for the planning of road upgrading Widang - Gresik - Surabaya Rp 4,400,000,000.00 (Four Million Four Hundred Billion Rupiah). With the construction of highways Lamongan - Widang this, this road is expected to function properly and serve the traffic load is heavy enough age-appropriate planned.

Keyword : Widang-Gresik-Surabaya - (Lamongan - Widang), Widening, Overlay, Drainage.