REDESIGN OF RIGID PAVEMENT ON MERR II C ROADS
STA 3+500 - STA 6+450
SURABAYA CITY EAST JAVA PROVINCE

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Abstract

Merr II C roads is an alternative access linking the Toll Waru - Juanda Airport heading north through the path towards Merr II to Kenjeran Suramadu access. It is necessary to support the planning and construction of access roads so that traffic facilities are really serve as an adequate transport infrastructure both in terms of service, security, and safety for road users. To overcome this, the selected alternative rigid pavement using pavement (rigid pavement). The purpose of the selection of the path planning is to seek long-lasting structural model that according to the age of the plan with emphasis on cost savings to calculate pavement thickness with reinforcement and channel edges. In an effort to planning for Highway Merr II C, then in the Final Project is the author took the title "Redesign Of Rigid Pavement On MERR II C Roads STA 3 +500 - 6 +450 STA Surabaya City East Java province." In the analysis of capacity
planning for road widening needs using “Manual Kapasitas Jalan Indonesia (MKJI) 1997”, for pavement thickness design using guidance “Perencanaan Perkerasan Jalan Beton Semen Departemen Permukiman dan Prasarana Wilayah Pd. T-14-2003”, for the planning of roadside channel (drainage) using “Perencanaan Sistem Drainase Permukaan Jalan Departemen PU Pd. T-02-2006-B” and/or RAB using HSPK Surabaya City 2011. Analysis result of road capacity in accordance with 20 years design period (2033) obtained the value of DS = 0.74 with 21 m wide road. Construction analysis use continuously reinforced concrete pavement with 21.5 cm thick plate using concrete tie bone D16 - 150 mm for the longitudinal direction and D16 - 750 mm for the transverse direction. For planned channel dimensions using a square with masonry materials with a finishing time obtained by the following dimensions width (b) = 1.10 m, height surveillance (w) = 0.52 m, (d) = 0.55 m. Needed funds to construct this project is Rp 68,754,639,000,00 (Spelled Out Members Sixty Eight Billion Seven Hundred Fifty Four Million Six Hundred Thirty Nine Thousand Rupiah). From the planning result of road above expected could overcome and serve heavy traffic load according to design period which have been planned.