COMPARATIVE ANALYSIS OF THE FLEXIBLE PAVEMENT CONSTRUCTION AND THE RIGID PAVEMENT CONSTRUCTION ON THE TRANS ROAD OF AMBAWANG – TAYAN, WEST KALIMANTAN VIEWED FROM ECONOMIC ASPECTS

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ABSTRACT

It is a bypass road that connects Pontianak City and Sanggau. The construction of this road can shorten the traveling distance from Pontianak City and Sanggau city relative to the vehicles that pass the existing old-road. So that, West Kalimantan Province Government plans to construct the new bypass road of Ambawang-Tayan with total length is 31.50 km.

In this final project, will discuss to compares the flexible pavement construction with the rigid pavement construction, from the economy analysis aspects. The discussed studies, among others, are: Calculating the thickness of the flexible and rigid pavement constructions; calculating the cost of the flexible and rigid pavement constructions, including the costs of construction, cost of periodic and routine maintenance (for the flexible pavements) and routine maintenance (rigid pavement); Calculating BOK for the flexible and rigid pavements, using ND Lea Consultant method; Analyzing economic feasibility with BCR calculation.

From the calculation, the construction cost on the rigid pavement is Rp 189,112,210,732.25 more expensive than the flexible pavement that is Rp 126,458,233,338.79. While on the maintenance cost, during of the life plan obtained for rigid pavement is Rp 12,528,407,156.37 less expensive than the flexible pavement is Rp 80,375,325,800.45. Comparative economic analysis with the BCR, obtained $B/C = 4.6456 > 1$ and $B-C = 18,931,641,023.82 > 0$, so that the good alternative is to use of the rigid pavement.

“Halaman ini sengaja dikosongkan”