ABSTRACT

DENSITY OF MIXED WITH COMPACTION VARIATION AC-WC ON SUBTLE GRADATION

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This study was conducted to determine the effect of variations in the compaction of the characteristics of the asphalt layer using the Marshall method which refers to the building specifications of bina marga 2010. In the Marshall plan establishes parameters for the number of compaction of heavy traffic conditions compaction test specimen as 2x75 compaction with the cavity boundary mixture of 3.5- 5.5%. While on the asphalt concrete layer is studied Asphalt Concrete Wearing Course (AC-WC) subtle gradations lower limit.

After the results of the testing materials testing both asphalt and aggregate meets the standards and then do the manufacture asphalt mixture specimen. From the analysis of the value obtained after calculating the optimum asphalt content lower limit of 6.8%. Then used in mixing asphalt content for the variation of the collision is 2x50, 2x55, 2x60, 2x65, 2x70, 2x75, 2x80, and 2x85. After it was examined Marshall.

From the test results on compaction Marshall 2x50, 2x55, 2x60, 2x65, and 2x70. Does not meet the Marshall parameter value because Marshall Quotient (MQ) does not enter the specifications. While the value of voids In The Mix (VIM) in the collision 2x50, 2x55, 2x60, 2x65, and 2x70 are also not included in the specification. Only on compaction of 2x75, 2x80 and 2x85 that meet the parameters of Marshall.

Keywords: Compaction, Asphalt Concrete - Wearing Course (AC-WC) Subtle Gradation, Marshall Parameters, Bina Marga Specifications 2010.