

# UNIVERSITAS INTERNASIONAL BATAM

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Faculty of Civil Engineering and Planning  
Civil Engineering Study Program  
Odd Semester 2019/2020

## ANALYSIS OF LASTON AC-WC STABILITY OF K-250 QUALITY CONCRETE WASTE UTILIZATION AS COARSE AGGREGATE

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### ABSTRACT

The construction of the highway is generally in the form of asphalt and aggregate mixing which is then referred to as flexible pavement. Asphalt Concrete layer (AC) is the surface layer of the structure of the highway that provides comfort in driving also serves to withstand the loads of repetitive traffic due to passing vehicles.

Concrete waste is very easy to find in road demolition and laboratory test results waste. The purpose of this study is to analyze whether the use of K-250 quality concrete waste from laboratory test results waste in the form of cube waste used as coarse aggregate in AC-WC pavement mixing fulfill in *Bina Marga* specifications.

From the results of calculations and laboratory tests, the results show that K-250 quality concrete waste as a substitute for coarse aggregate meets the minimum requirements of 2018 Highways. In the optimum asphalt content (KOA) of 7.03%, the results of MQ 555,845, VMA value is 17.98, VIM value is 3.08 which all the results have fulfilled in the 2018 *Bina Marga* requirements. The conclusion from the results of laboratory testing is that the K-250 quality concrete waste can be used as an alternative to coarse aggregate.

**Keywords:** *Flexible pavement, AC-WC pavement, Waste concrete.*