A COMPARISON BETWEEN THE PREVIOUS OPTIMUM 5% AND THE PRESENT RESULT OF THE ASPHALT LEVEL TOWARD THE BOTTOM-ASH USE ON ACWC MIXTURE AS THE FINE AGGREGATE PARTIAL SUBSTITUTION

Student Name : Fery Rumario

Number ID : 4103201307

Supervisor : Lizar, MT

ABSTRACT

Bottom-Ash is palm shell or coarse dust left over from burning and grinding, containing mostly oxides and silica. The researcher aims to use Bottom-Ash as a partial replacement for sand in the ACWC mixture. The research parameters refer to the 2018 Binamarga specifications. The research basis for the Asphalt Content Plan is 5,5%, 7%, 8.5%, 10%, the difference in weight of natural sand and bottom-ash sand. From the marshall test of Planned Asphalt Content, it is obtained that the maximum asphalt content is 10% with a bottom-ash utilization of 28%. Then a comparison was made of the previous 5% Optimum Asphalt Content and the current 10%. It turned out that all marshall parameter values met the specifications, it's just that the VIM and VFA parameter values still did not fully meet the specifications. However, in the current study, the Optimum Asphalt Content was 10%, the VFA value was successful in meeting the specifications for bottom-ash variations of 20% and 22%

Keywords: *AC WC, Marshall Characteristics, Bottom Ash Palm*