ABSTRACT

THE EFFECT OF RAIN WATER DISCHARGE OF CLAY BASED INFILTRATION WELL FIELD PERMEABILITY TEST RESULTS

By

HAFIDZ RANDI JULI HANDITA

The flow of water through the pores of the soil can be used to estimate the amount of water seepage in the soil, or relating to the infiltration well all of which will be affected by seepage force. The seepage flow through the dam body and passing subgrade required to determine the amount of water lost. In this study determines the permeability coefficient values obtained with the modified tool, which will further the determination of infiltration well.

The soil samples were tested in this study are derived from clay Bhayangkara Housing, Urban Banyan Jaya, District Kemiling, Bandar Lampung. This study was conducted to determine the amount of infiltration well that will be created with the value of the field permeability test results with tools that have been modified. Based on the examination of the physical properties of the original soil, classify soil samples in group argillaceous soil, while USCS classified as clay soil samples and belong to a group ML

The results of the analysis and calculation, the permeability coefficient obtained pitch 1.7820 x - 2.8128 x cm / s. Research conducted in the laboratory for comparison, obtained 0.8342 x 10-7 - 1.9700 x 10-7. This indicates that the value of the coefficient of permeability between field and laboratory is not too much difference. The coefficient of permeability is used to determine the effective infiltration well. In making the effective infiltration well are numbered 3 pieces with a diameter of 1.5 meters and a depth of 3 meters.

Keywords: clay, permeability, infiltration well