ABSTRACT

DESIGN AND EXPERIMENTATION RAINFALL INFILTRATION WELLS BASED ON FIELD TEST RESULTS PERMEABILITY

By

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Due to the development of housing in Bandar Lampung so rapidly, its specialty in Housing Bhayangkara, Village Beringin Jaya, District Kemiling. The process of absorption of water into the ground is not going well. Runoff rainwater that falls directly flowing into the drainage channel. Infiltration wells serves as a temporary rainwater that falls on the roof of the house, then the rain water will be absorbed by the soil. In this study determines the permeability coefficient values obtained by means of modified with different diameters, which will then be compared and a determination made as catchment wells.

Based on the examination of the physical properties of the original soil, using samples that have been tested in this study, soil samples can be classified in the group of argillaceous soil, while USCS soil samples classified as clay and included in the CL group.

The results of the analysis and calculations performed, the permeability coefficient obtained for the field test tool diameter 2", 3" and 4" as well as the permeability coefficient in laboratory research. The permeability coefficient used to calculate the amount of recharge wells that efsien.

Keywords: clay, permeability, infiltration well