DESAIN PERENCANAAN TEKNIS SISTEM DISTRIBUSI AIR BERSIH (Studi Kasus: Kecamatan Bangsri, Kabupaten Jepara)

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ABSTRACT

Bangsri is a sub-region of Jepara region, which located at North West of the region. Bangsri is central of public services for surrounding area. Public services facilities both economic and social growth rapidly and change characteristic of the area into rural-urban fringe. Besides of spatial growth, population in this area grows 2, 31% annually. In this moment, Jepara PDAM has served 8% people of total Bangsri sub-region population. Clean water necessity in the area is high. Nowadays, only one village from 12 villages has covered by pipelines system of PDAM. Water resources identification study in this area could find alternative from deep well resources. Two deep well resources are PAT (groundwater drilling), each well have flow 15 liter/second. PAT well is potential resources for clean water. So that, need detail study to plan water distribution system to serve people necessity of clean water and also maximizing of PAT resources with pipelines network. Based on the survey in the area, peoples interest for clean water distribution system as high 65%. In this Detail Engineering Design makes some decisions for effectiveness water resources and priority of cover area with high necessity in 2018. Detail engineering design of expanding clean water network in Bangsri will be held in two separated network system. Design I (Krasak System) have Length pipe 13, 6 km and design II (Kedung Leper System) Length pipe is 9, 5 km. Distribution storage tank using grounded reservoir model for both system. Total investment for establish clean water network system in Bangsri Sub region is IDR Rp. 2.139.461.906,00

Keyword: Detail Engineering Design, Clean Water Distribution System, Ground water drilling