

**DESAIN DETAIL SISTEM DISTRIBUSI AIR BERSIH KECAMATAN WELAHAN,
KABUPATEN JEPARA**

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ABSTRACT

Welahan is one of sub-region of Jepara region, which has important function for the region. Welahan sub-region located at outside border of Jepara region on the southern next to Demak Region. One of some potentiality of this sub-region is economical potency for increasing social welfare for locals. Welahan population is growth rapidly 1,55 % annually. Clean water supply is being needed for domestic and non-domestic necessity. Nowadays only 3,46 % Welahan population have been coverage by PDAM water supply network. In fact, some village in Welahan sub-region really need clean water supply network. Water resources identification study from PDAM Jepara finds 2 alternative water resources. Both of them are deep well water resources. So that, design of water supply system is needed to meet between people demand and water resources. Detail Engineering Design of water supply system for welahan sub-region arrange based on water resources capability. In this engineering design at least 5 villages with highest necessity will be covered by the new design. The Detail Engineering Design arranges in 3 separated systems, 2 systems totally separated with existing and one will be extended from existing system. Each of them have distribution length pipe 2,014 km, 26,146 km and 3,22 km. Distribution storage tank use elevated model and combine with pomp pressure for sufficient pressure in water flow rate

Keyword: detail design, water supply system, deep well