ABSTRACT

HYDROLOGY ANALYSIS OF THE WEIR BODY AND THE POOL OF ENERGY DAMPER IN IRRIGATION PLANNING AT BATAM INTERNATIONAL UNIVERSITY

Andri Prakusumo Dewo
NPM: 1611053

Batam is one of the cities that is rapidly developing among the cities in Indonesia. One of the needs of natural resources that is needed by the growing city is a source of clean water that is used to fulfill the needs of water in the agriculture, institutions and of course the community sector.

In Batam, there is a dam as source of clean water, it's the Sei Ladi Dam. To be able to flow through the clean water from this dam, it needs the main building (Weir). The main building should be designed according to the size of the river that will be flowed by water from the dam. To be able to facilitate the need for this water source, the author plans to design the body of Weir and a pool of energy damper hydraulically that can be used at Batam International University as the internship implementation.

The author designed the weir hydraulically based on SNI No. 03-2401-1991, the Standard of Irrigation Planning criteria of Main Building Planning (02) and Building (04). The hydraulic design of the weir body and the pool of energy damper are already compliant to the standard.

Keywords: Clean Water Source, Energy Damper pool, Hydraulic Analysis, Weir