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## Design of Mini-Dam for Water Distribution Network

Solloso, Marlon C.

College of Engineering& Information Technology, Surigao del Norte State University, Surigao City, Philippines marlonsolloso@yahoo.com

Abstract: The objective of this research endeavor is to offer assistance to Brgy. Banbanon, San Francisco, Surigao del Norte, through the proposal of a Level II water distribution mini-dam. This proposed infrastructure aims to address the community's water storage needs and ensure a sustainable supply for an extended duration. The design process encompasses various methods, including conducting surveys to gather data from the water source, utilizing computer software for topographic mapping of the region, and adhering to engineering and hydraulic principles when meeting design criteria. The assessment of water quality yielded results that indicated unsuitability for domestic use. However, despite this challenge, the design itself fulfilled the requisite criteria. It is crucial to recognize that for the expansion of the project into a Level III water distribution system, the local area of Brgy. Banbanon should implement a water treatment process to ensure safe and potable water quality for residents.

Keywords: distribution, network, mini-dam, design

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