DESIGN OF DRAINAGE SYSTEM OF POBLACION, SAN ANDRES, ROMBLON

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APPROVAL SHEET

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ABSTRACT

This study was conducted to design a drainage system of Poblacion, San Andres, Romblon. The researchers believed that the establishment and development of a future drainage system will curb flooding problems and will benefit both residential and commercial establishments.

The researchers used a total station in order to determine the elevation of the land used. Moreover, the Manning's formula was used to get the theoretical rate flow while the actual flow rate was computed by summing up all the equivalent Discharge Fixtures Unit and the maximum rain flow rate from 2014-2019. Camera, compass, field notebook, and Global Positioning System as the primary materials in order to gather the needed data.

Based from the result, barangay Poblacion had a discharge of 5.448 cubic meter per second. The researchers designed a model that combines a drainage flow model with an overland-flow inundation model. As computed by the researchers the total cost of the said study is Fourteen million forty thousand six

hundred sixty nine pesos and ninety eight cents (₱14,040,669.98). The area where stagnant water is present, designing a drainage with a proper elevation is needed in order for the rain to flow and avoid over flowing of the water discharge. Also, this study will set as basis in the construction of a drainage system in the town of San Andres, Romblon. Furthermore, it is also highly recommended that the residential and commercial should have their proper pipeline connecting to the drainage that contains only liquid waste.