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IGATION AND IMPROVEMENT OF SEWERAGE SYSTEM IN CAVITE STATE UNIVERSITY (PHASE II)

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INVESTIGATION AND IMPROVEMENT OF SEWERAGE SYSTEM IN CAVITE STATE UNIVERSITY (PHASE II)

An Undergraduate Design Project Submitted to the Faculty of the Cavite State University Indang, Cavite

In partial fulfillment of the requirements for the degree of Bachelor of Science in Civil Engineering



Investigation and improvement of sewerage system in Cavite State University (Phase 624.16 D56 2000 DP-19

JOEMAR M. DIGMA March 2000

ABSTRACT

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This design project was conducted in Cavite State University (Phase II) to investigate the existing sewerage and drainage in Cavite State University; provide proper design and recommendation for the improvement of the sewerage system; give an appropriate recommendation to enhance sanitary condition of the university; and to provide the estimated cost of the proposed design.

The design project covered approximately 1.35 hectares. The design involves a storm sewer and sanitary sewer. Storm sewer design, facilitate the Physical Science, the Engineering and the whole Animal Science Department Area including the animal farm Cross Drain was installed with a 300 mm diameter pipe to avoid overflow on the road pavement. Pipe varied from 300 to 900 mm diameter, which was computed using the Rational Method. Sanitary sewer lines were installed generally in the whole area. A diameter of 200 mm diameter was used for the main line. There was a treatment plant installed in the area for treating wastes especially those from laboratory rooms.

Estimate provides the total cost for materials and cost of labor. An increase in total price was deserved in using ATLANTA SPIRAL pipes over concrete pipes.

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INTRODUCTION

Through the years, modern advances have greatly improved methods for waste disposal and treatment. Facilities such as sewer system and treatment chambers are now the basic necessity of a community.

Sewage systems are facilities used for collecting, treating, and disposing of sewage. In cities and town, sewerage system is designed to serve the entire communities. Sewage from individual buildings flows into collecting sewers, which carry the waste to a central plant for treatment and disposal. (NEW STANDARD ENCYCLOPEDIA, Vol. 15).

Sewerage as a noun may mean the structures, devices, equipment, and appurtenances intended for the collection, transportation, and pumping of sewage and