

**DESIGN OF A THREE-STOREY REINFORCED CONCRETE
MUNICIPAL BUILDING FOR INDANG, CAVITE**

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



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ABSTRACT

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The capacity of the Structural Aided Analysis and Design (STAAD Pro) computer software to perform analysis was presented. The scope of the problem was limited to the plan and design of a three – storey municipal building. Different loads like lateral, vertical and seismic were used to analyze the structure. The seismic analysis and other parameters were based on the specifications of the National Structural Code of the Philippines (NSCP). The Ultimate Strength Design (USD) method was adopted for the design and checking of the structure.

The main objectives of the study were to be able to analyze and design a reinforced concrete building, determine the estimated cost of materials and present a scaled model.

The study showed difference in loadings on the structural members produced a section that was different from each other. In order to manage the difference and to have uniformity, the structural members with the biggest section was adopted. In general, safety, economy and aesthetic aspects were the factors considered for the design.

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