

**DESIGN OF PUBLIC MARKET FOR THE MUNICIPALITY  
OF MENDEZ, CAVITE**

**Undergraduate Design Project  
Submitted to the Faculty of  
College of Engineering and Information Technology  
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

**OLDAN, NOEL P., SALANDANAN ROBERT D., Design of Public Market for the Municipality of Mendez, Cavite.** Undergraduate Design Project. Bachelor of Science in Civil Engineering. Cavite State University. April 2005. Adviser: Engr. Allan Rowell V. Alonalon.

The Design of Public Market for the Municipality of Mendez, Cavite was conducted at Mendez, Cavite from June 2004, to April 2005. It was evaluated in March 2005 at the Audio Visual Room, Department of Civil Engineering, College of Engineering and Information Technology.

The structure was analyzed for combined lateral, seismic and vertical loads. The design of structural members was based on the Structural Aid Analysis and Design (STAAD III) output, the specifications set by the National Structural Code of the Philippines (NSCP, 2001), American Concrete Institute (ACI) Code and the Codes and Specification for Ultimate Stress Design. All horizontal floor girders were wide flange sections. All columns were design W 12 sections (wide flange) of various weights per foot, which were spliced in every floor. All the connections were been bolted and moment resisting.

The general objective of the proposed project was to analyze, design and developed a Public Market for the Municipality of Mendez, Cavite. The detailed architectural plans were provided through various research and study. All structural plans were based from the result of actual computation in which all structural members were checked for strength, stability and economy. The study also aimed to developed alternative ways on how to control built up of traffic during market days. The standard



specifications for the entire proposed project were based on the requirements as specified in the scope of works and other existing codes in the Philippines.

The study revealed that the variation of loadings on the structural member produces section that was different from each other. Structural members adopted were the largest along those particular sections to avoid differences in sections. The cost estimates were computed based on the architectural and structural plans and the required scope of works. All material costs were based on the present price in the local market.



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