

**DESIGN AND ANALYSIS OF A PROPOSED  
MULTIPURPOSE BUILDING IN KAYQUIT,  
INDANG, CAVITE**

**Design Project**

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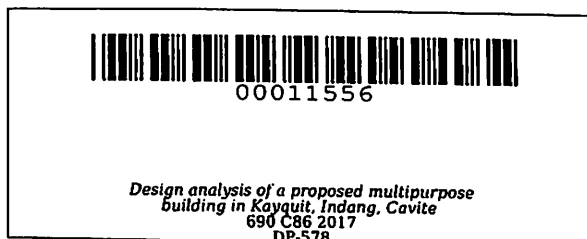
**May 2017**



# **DESIGN AND ANALYSIS OF A PROPOSED MULTIPURPOSE BUILDING IN KAYQUIT, INDANG CAVITE**

**Undergraduate Design Project  
Submitted to the Faculty of the  
College of Engineering and Information Technology  
Cavite State University  
Indang, Cavite**

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



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May 2017**

## **ABSTRACT**

**CREENCIA, MELVIN L. and IGNACIO, WINTHEL JOHN D. Design and Analysis of a Proposed Multipurpose Building in Kayquit, Indang, Cavite.** Undergraduate Design Project. Bachelor of Science in Civil Engineering. Cavite State University, Indang, Cavite. May 2017. Adviser: Engr. Rico C. Asuncion.

The study entitled “Design and Analysis of a Proposed Multipurpose Building in Kayquit, Indang, Cavite” was conducted from October 2016 to April 2017 at Cavite State University – Main Campus to provide a development plan of Kayquit Elementary School, provide a structural analysis of the multipurpose building, an architectural and structural design, electrical and plumbing layout of the building, cost estimate of the school building excluding electrical and plumbing estimates, and a tarpaulin showing general information of the study.

The study aimed to provide a structural and architectural plan of a multipurpose school building at Kayquit Elementary School. The proposed structure has a floor area of 839 square meters. The study included architectural and structural plan as well as electrical and plumbing layout. The architectural plan, electrical and plumbing layout were drawn by using Computer Aided Drafting Device (CADD) and Sketch Up Software. The analysis of structural members was obtained with the aid of Structural Aided Analysis and Design (STAAD) software. The computations and gathered data of the structural members of the proposed structure were found safe and economical.

The authors recommend a more comprehensive study of the proposed design of the multipurpose school building by using different materials and methods that could be used.

## TABLE OF CONTENTS

	Page
<b>APPROVAL SHEET</b> .....	ii
<b>BIOGRAPHICAL DATA</b> .....	iii
<b>ACKNOWLEDGEMENT</b> .....	v
<b>ABTRACT</b> .....	xi
<b>LIST OF APPENDIX TABLES</b> .....	xv
<b>LIST OF FIGURES</b> .....	xvi
<b>LIST OF APPENDICES</b> .....	xviii
<b>INTRODUCTION</b> .....	1
Statement of the Problem.....	3
Objectives of the Study.....	4
Significance of the Study.....	4
Time and Place of the Study.....	5
Scope and Limitation of the Study.....	5
Definition of terms in the Study.....	6
<b>REVIEW OF RELATED LITERATURE</b> .....	8
<b>METHODOLOGY</b> .....	16
Data Gathering.....	16
Site Investigation.....	16
Structural Design and Analysis.....	16
Design of Purlins with sagrods.....	16

Design of sagrods.....	18
Design of Truss.....	19
Design of Columns.....	20
Design of Beam.....	26
Design of Slab.....	34
Design of Footing.....	38
Design of Stairs and Landings.....	43
Cost Estimate of the Project.....	44
Earthworks.....	45
Forms, Scaffoldings and Staging.....	45
Concrete Works.....	45
Masonry Works.....	45
Steel Works.....	46
Miscellaneous Works.....	46
<b>RESULTS AND DISCUSSION.....</b>	<b>47</b>
Data Gathering.....	47
Site Investigation.....	47
Structural Design and Analysis.....	47
<b>SUMMARY, CONCLUSION, AND RECCOMENDATION.....</b>	<b>53</b>
Summary.....	53
Conclusion.....	54
Recommendation.....	55
<b>REFERENCES.....</b>	<b>56</b>

## LIST OF APPENDIX TABLES

Appendix Table		Page
1	Wind load considerations.....	208
2	Seismic considerations.....	208
3	Minimum uniform and concentrated live loads.....	208
4	Minimum design dead loads.....	210
5	Coefficients for negative moments in slabs.....	211
6	Coefficients for dead-load positive moments in slabs.....	211
7	Coefficients for live-load positive moments in slabs.....	212
8	Concrete proportions.....	212
9	Quantity of cement and sand for mortar and plaster in cu. meter.....	212
10	Quantity of cement and sand for CHB mortar per square meter.	213
11	Length of reinforcing bars for CHB in meters.....	213
12	No. 16 G.I. tie wire for CHB reinforcement per square meter...	213
13	Allowable bearing capacity.....	214

## LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Site development plan.....	60
2	Perspective view of the proposed multipurpose building.....	61
3	Ground floor plan.....	62
4	Second floor plan.....	63
5	Third floor plan.....	64
6	Fourth floor plan.....	65
8	Front elevation.....	66
9	Left side elevation.....	67
10	Rear elevation.....	68
11	Right side elevation.....	69
12	Schedule of doors.....	70
13	Schedule of windows.....	71
14	Schedule of trusses.....	73
15	Schedule of beams and columns.....	75
16	Detail of footings.....	76
20	Detail of slab.....	78
21	Foundation plan.....	81
22	Second floor beam plan.....	82
23	Third floor beam plan.....	83
24	Fourth floor beam plan.....	84

25	Roof beam plan.....	85
26	Long span structural frame.....	86
27	Short span structural frame.....	87
28	Ground floor electrical layout.....	89
29	Second floor electrical layout.....	90
30	Third floor electrical layout.....	91
31	Fourth floor electrical layout.....	92
32	Fourth floor electrical layout.....	93
33	Second floor power layout.....	94
34	Third floor power layout.....	95
35	Fourth floor power layout.....	96
36	Ground floor plumbing layout.....	98
37	Second floor plumbing layout.....	99
38	Third floor plumbing layout.....	100
39	Ground floor water supply layout.....	101
40	Second floor water supply layout.....	102
41	Third floor water supply layout.....	103



## LIST OF APPENDICES

Appendix		Page
1	Architectural plans.....	59
2	Structural details .....	72
3	Electrical layout.....	88
4	Plumbing layout .....	97
5	Design computations .....	104
6	Appendix tables.....	207
7	STAAD analysis results.....	211
8	Detailed cost estimate.....	214

# **DESIGN AND ANALYSIS OF A PROPOSED MULTIPURPOSE SCHOOL BUILDING IN KAYQUIT, INDANG CAVITE**

**Creencia, Melvin L.  
Ignacio, Winthel John D.**

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An undergraduate design project submitted to the faculty of the Department of Civil Engineering, College of Engineering and Information Technology, Cavite State University, Indang, Cavite in partial fulfillment of the requirements for the degree Bachelor of Science in Civil Engineering with Contribution No. CEIT-2016-17-2-029. Prepared under the supervision of Engr. Rico C. Asuncion.

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## **INTRODUCTION**

Education is a very important component in man-life. The academic capabilities of a person such as scientific understandings, critical thinking skills, analytic abilities, and decision making skills are determined by the level of education a person achieved. Education gives meaning to every human life, it decides how the future of a person will go as that person ages. A high educational attainment will give a person a better future while a poor educational attainment will definitely result to a poor performing and poor future. The educational background of a person is the basis for a person to inquire for a job position. Without a good educational background, there will be no good position to apply for.

Education is something that is very sensitive. It is affected by many several factor positively and negatively. But most of the time, a negative effect is observed. Here in the Philippines, the educational system is not that good enough to give each and every person,