



# Case Study of Multistoreyed Commercial Building

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## Case Report

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## Abstract

Internship training is the main need for every engineering student. The purpose of the internship training is to apply theoretical knowledge into practical work. The period of the training is 3 months. Internship training was given to me by ANANYA SHELTERS at KNG PUDHUR SITE, COIMBATORE. The construction has been constructed in the respective site where I had undergone my internship. The total area of the site is 1930 Sq.Ft. The plinth area of the structure is 2331 Sq.Ft. Chapter one is about the vision & mission statement, organization profile and service management. Chapter two is about the training experience and contains the project summary, duties involved, and problems encountered. Chapter three deals with the conclusion of the report. In spite of every care taken, it is possible that some errors might have been left unnoticed and the author welcomes constructive criticism for improving the report.

**Keywords:** Grouping; Positioning; Orientation; 3D Annex

## Introduction

This report is an internship training report submitted in partial fulfillment of the requirement for the degree of Bachelor of Engineering as per the norms of autonomous. The author visited the site for construction of Commercial Building at ANANYA SHELTERS at COIMBATORE. In their training period and attained technical knowledge during the course, after which they were able to compile the report. The report consists of a brief study description of work in construction. The author puts his best to elaborate the actual site condition and problem faced at the site and the tactics used to deal with them. In this report, the objective was to introduce whenever necessary material which embodies the most recent methods. The about discusses the summary of the training and provides the training schedule.

## Modern Plans Adopted

**Architectural Planning:** Generally, the architectural

planning has been done based on the area and needs of the client. It is essential for the planner to consider the following,

- Size, shape and location of the plot.
- Specific requirements of the occupants.

## Detailed Plan

A plan is the arrangement (grouping, positioning and orientation) of different rooms of a house on a horizontal plane is drawing sheet. A plan drawn in building drawing is not simply the top view seen from the top the building. The building is from the top. A projection of the portion on the building on a horizontal plane is known as the plan.

## Construction Processes – An Overview

- During the internship period, we were assigned to visit site locations wherein the project is ongoing. Initially, the tasks performed at Nana Nani Homes – Phase 3 Annex II & Phase 5 projects were observed. We also participated

in conversations with engineering managers when Phase 6 was at the initiation stage.

- The Organizational hierarchy and the nature of work carried out for a project is keenly examined for further processing. The hierarchy of positions in descending order are as follows:

**At Head Office:** Managing director, Technical Director, Manager, Executive Director, Project Manager, Engineering Section containing Planning engineers, Quantity Surveying engineers, Purchase department & the Design section. Other Functional divisions include: The Accounts section, Marketing department, Operations and the shuttle service department. The Manufacturing unit of all kinds of materials is situated in the Head Office.

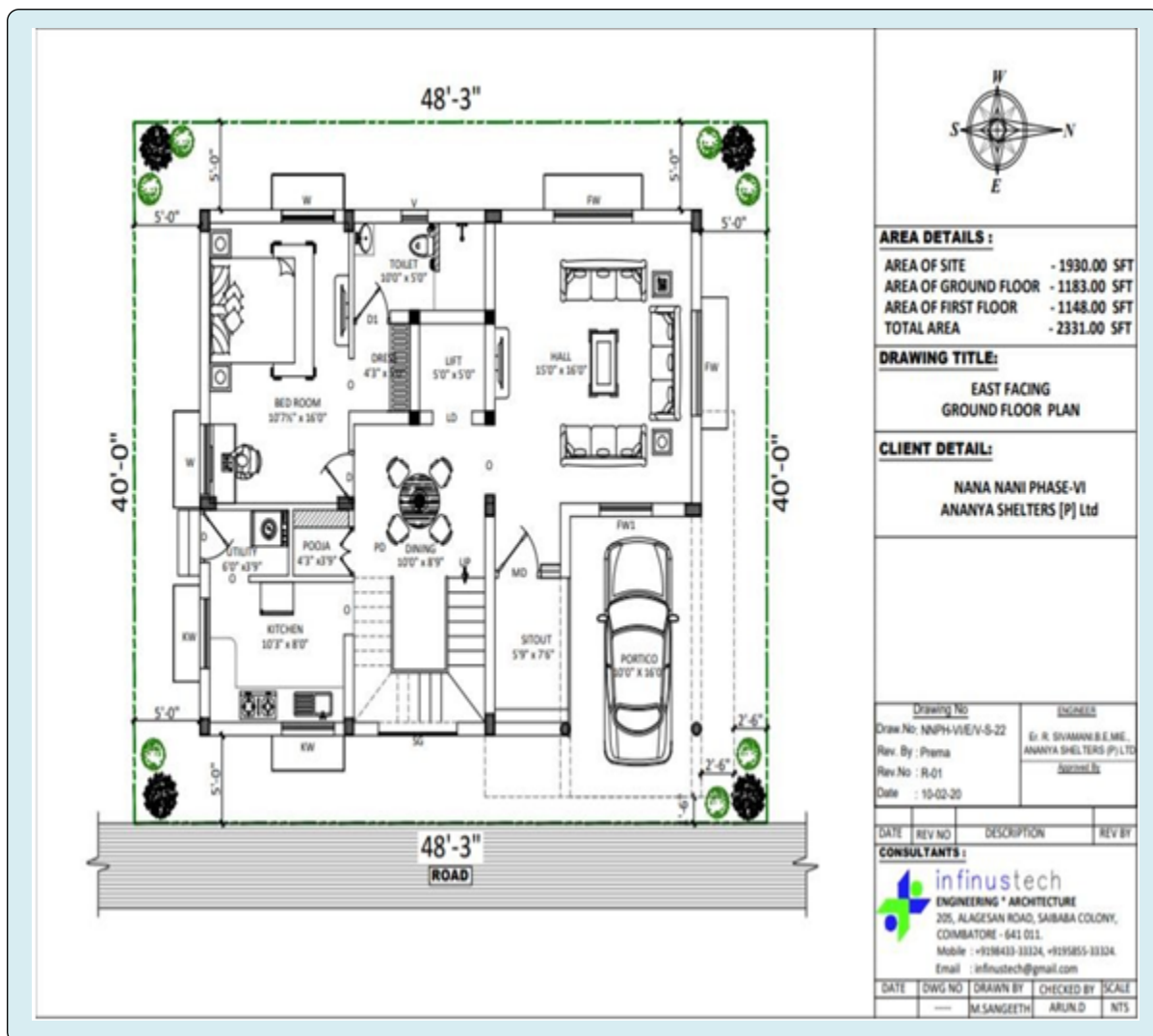
**At Site Office:** Technical Director, Executive Director, Project

Manager, Planning Engineer, Quantity & Cost Estimator and Site Engineers.

- We were engaged in all the departments during the internship and studied the process that is adopted, the project scope, stakeholder engagement throughout.
- Based on our observations, the manual reports followed on a regular basis by the company will be attached.

Apart from the site visit, we have done a detailed quantity estimation for a real time project – Phase 6 Block A from scratch. Block A is an apartment block which was the only approved plan out of 16 apartment blocks in Phase 6. The Block consists of 4 floors with 4 flats on each floor. Finally, our detailed quantity estimation was approved by the company recently during the COVID lockdown.

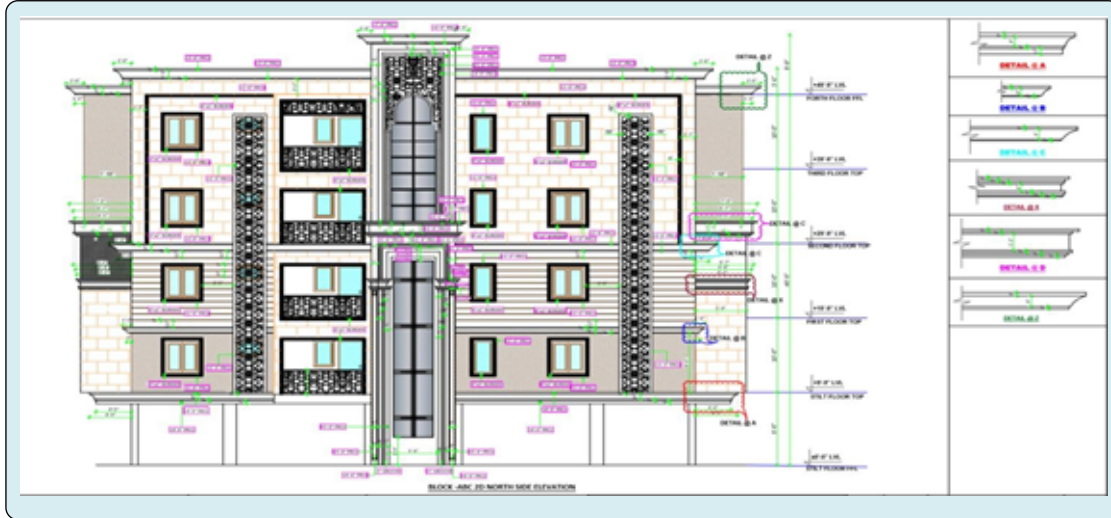
### Working Plan:



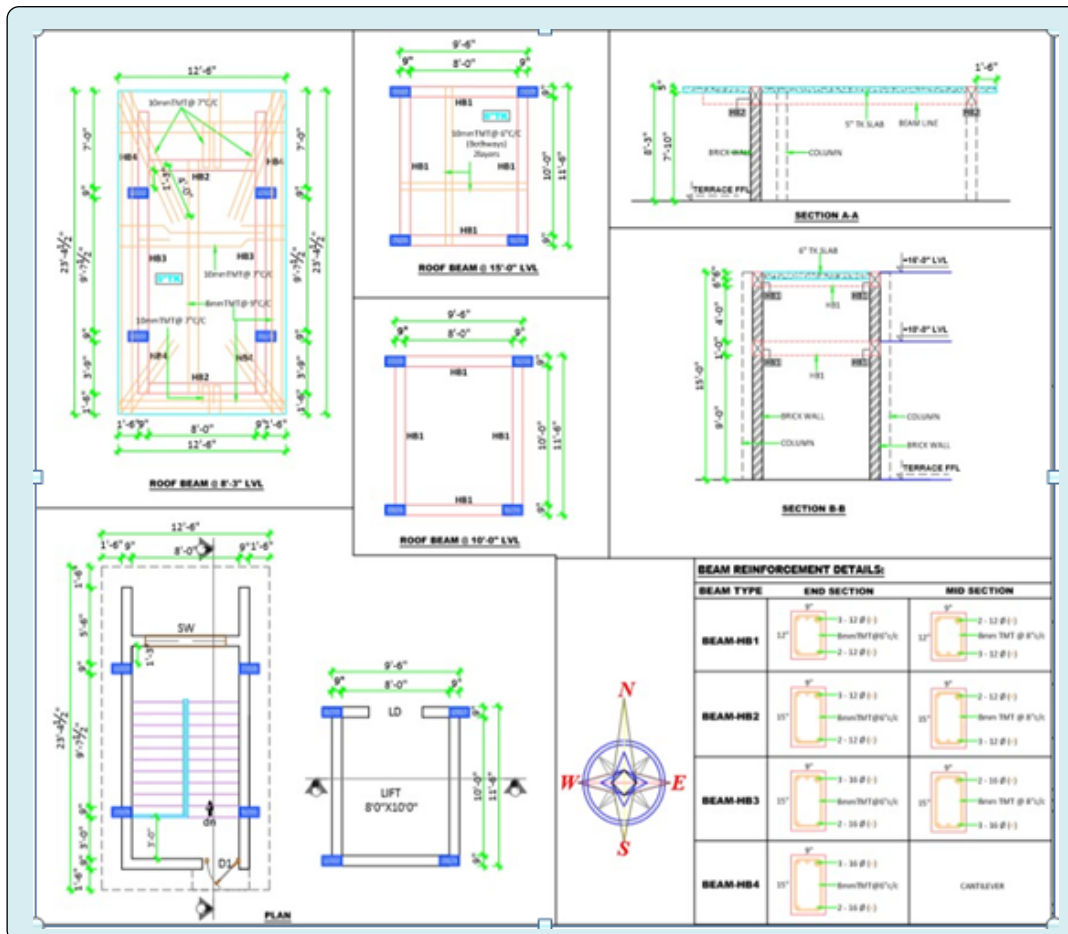
**Elevation**

Elevation is the appearance of the building of the building above the ground level in vertical plane. Generally, the front elevation is drawn, but in some cases, the side elevation of the building, imagine standing in front of it. Whatever portion of

the building is visible above ground level, take its first angle projection on a vertical plane behind the building. It will be elevation of the building in building drawing is not simply the top view seen from the top the building.



**Structural Drawings**



COLUMN / FOOTING REINFORCEMENT DETAILS:						
COLUMN TYPE	COLUMN SIZE	GRIDS	COLUMN REINFORCEMENT	FOOTING SIZE (L X B X D) & REINFORCEMENT	MIX	Total No. of Columns
C1	9'x15"	A4,A8,H1,H5		6'0" x 5'0" x 1'6" 10mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	04
C2	9'x15"	A2',A6',H2,H6		7'6" x 5'6" x 1'9" 10mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	04
C3	9'x18"	C8,D8,E1,E5,F1,F5		7'6" x 5'6" x 2'0" 10mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	06
C4	9'x21"	B1,B5,D1,D5,E4,E8,F4,F8		9'6" x 5'6" x 2'0" 12mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	08
C5	9'x24"	D6,E3,E7		9'9" x 5'9" x 2'0" 12mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	03
C6	9'x24"	B6,G3,G7		9'9" x 5'9" x 2'0" 12mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	03
C7	9'x21"	C7,D7,E2,E6,F2,F6		9'6" x 5'6" x 2'0" 12mmØ TMT @ 5" c/c (Both ways)	M20 (1:1½:3)	06
C8	9'x24"	C3,D3		10'6" x 5'6" x 2'3" 12mmØ TMT @ 4" c/c (Both ways)	M20 (1:1½:3)	02
C9	9'x27"	B2,D2 C4,D4		11'0" x 10'0" x 2'3" 12mmØ TMT @ 4" c/c (Both ways)	M20 (1:1½:3)	04
TOTAL NO. OF COLUMNS						40

3D Modelling



Figure 1: 3D view of building.

## Conclusion

The Internship training was useful to gain knowledge about the following aspects:

- Prepare the plan of Residential building of the project in Auto CAD 2021 software.
- Create a 3D model of Residential building of the project by using the Sketchup 2018 pro.
- Thus, the Internship training period was very informative and constructive and gave a lot of practical knowledge.

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