

# CHAPTER I

## INTRODUCTION

### 1.1 BACKGROUND

The geographical position of Cirebon City is quite strategic, which is a border city between West Java and Central Java provinces, which makes Cirebon City a Transit City that is able to attract tourists, because this is also what makes Cirebon City has a stand-alone culture. The richness of culture, language, and art owned by different characteristics with other cities makes the tourism potential of Cirebon City.

In Cirebon City there are also several palaces that are an important part of the early history of the establishment of Cirebon City. The variety of cultures that develop in this city certainly cannot be separated from the existence of the palace that always supports the continuity of cultural and artistic activities in Cirebon City, some activities related to culture that are still carried out in Cirebon City, such as Kirab Budaya, Coastal Arts and Culture Festival, Nusantara Palace Festival, Gotrasawala Festival, in addition to its culture Cirebon City is also known for its Arts, The famous ones of this city are batik, sintren, and Cirebon mask dance. In the city of Cirebon there are also many art studios, recorded as many as 141 art studios registered by the Disporbudpar of Cirebon city.

Based on some of the considerations that have been stated above in the preparation of this final project, I took the title "**ANALYSIS AND DESIGN STRUCTURE OF CULTURE CENTER BUILDING IN CIREBON CITY**" which aims to concentrate artistic and cultural activities in the city of Cirebon and its surroundings by constructing a ten-story building whose structure is planned to be able to bear various loads that occur during the proper period of the building structure. In

addition, the calculation is also based on the latest SNI regulation SNI 2847-2019 regarding structural concrete requirements and minimum loads for building planning and the latest echo rules of SNI 1726-2019.

## **1.2 PROBLEM FOCUS**

In this study, design and analyze the construction of the Analysis and Design of the Culture Center Building in Cirebon City using the regulations of SNI 1726:2019, SNI 2847:2019, SNI 1727:2020.

## **1.3 FORMULATION OF PROBLEM**

Based on the description above, the following problems can be identified:

1. How is the Cirebon Culture Center designed using a concrete structure?
2. How to plan the dimensions of slabs, beams, columns, and foundations?
3. How to analyze using ETABS Program?
4. How to calculate the Cirebon Culture Center Building Budget Plan?

## **1.4 RESEARCH PURPOSES**

### **1.4.1 Theoretical Aspect**

This research is expected to add to the mindset of students in studying, observing, and understanding problems related to the field of civil engineering, especially in the field of planning the construction of high-rise buildings.

### **1.4.2 Practical Aspect**

This activity can be input for the Government if it has a plan to build a culture center building in Cirebon on building infrastructure in the hope that the problems in the building can be

resolved properly. In this case, it is also hoped that the government is aware or sensitive to the environment and surrounding culture so that the existing culture can be preserved from generation to generation with the existence of a cultural building as a historical reminder for the future.

### **1.5 SCOPE OF PROBLEM**

In a thesis entitled "ANALYSIS AND DESIGN STRUCTURE OF CULTURE CENTER BUILDING IN CIREBON CITY" will explain the problems that exist in the study area, so that solutions are sought for these problems. Therefore, it is necessary to have a writing limit aimed at the preparation of the thesis, the limitations of the problem raised are as follows:

1. Only planning and designing the construction of the Culture Center Building in accordance with SNI 2847:2019 Reinforced concrete and SNI 1727:2020 Loading.
2. Planning the structure only for the construction area of the Cirebon Cultural Center Building.
3. Not planning electrical installation.
4. Visualize through 2D and 3D depiction.
5. Only analyze the main structure (Column, Beam, Slab, Foundation).
6. Analyzing the Budget Plan (RAB) part of the building structure.
7. Does not calculate RAB for architectural or sanitary work.

## **1.6 SYSTEMATIC WRITING**

### **CHAPTER I INTRODUCTION**

This chapter will explain the background, the focus of the problem, the formulation of the problem, the research objectives, the usefulness of the research, and the systematics of writing.

### **CHAPTER II BASIC THEORY**

A collection of research supporting theories obtained from books, journals or information from electronic media (internet).

### **CHAPTER III RESEARCH METHOD**

This chapter will discuss research methods, types and sources of data, data collection methods, and research locations.

### **CHAPTER IV DISCUSSION AND RESEARCH RESULTS**

The chapter will discuss the results of research that has been carried out based on the results of observations and solutions to problems during the study.

### **CHAPTER V CLOSING**

Will discuss the conclusions and suggestions from the research results.