## **CHAPTER I**

#### **INTRODUCTION**

#### 1.1 Background

The global advancement of civil engineering has witnessed substantial progress and sustained improvement. This trend is also reflected in the evolution of civil engineering in Indonesia. Consequently, there arises an imperative for Indonesia to cultivate a workforce that is not only proficient but also qualified and competitive. Numerous educational institutions have contributed to this demand by producing graduates well-versed in both theoretical principles and practical applications in the field of civil engineering. One of these institutions is Universitas Atma Jaya Yogyakarta.

Universitas Atma Jaya Yogyakarta is guided by a vision and mission that emphasize the cultivation of students embodying excellence, humanism, and integrity, ensuring their competence in societal contexts. The university actively facilitates students in engaging directly with communities through avenues such as internships. Internships, integral to the practical application of acquired knowledge and theories, demand students not only to further develop their academic insights but also to bring innovative skills and knowledge to the realm of civil engineering.

A noteworthy case is the involvement of PT. Putra Mataram Perkasa, a construction company currently undertaking the establishment of a factory in Bantul, Yogyakarta. This construction is related to the development of the PT Busana Remaja Argacipta production plant located in Bantul, specifically Klodran and Jongulangan in the Special Region of Yogyakarta. The project is spearheaded by PT Putra Mataram Perkasa, with strategic oversight from Manager and Designer Hastu Nugroho, ST. The objective of this construction initiative is to establish a production facility for the utilization of PT. Busana Remaja Argacipta.

The structure is erected utilizing the technique of heavy steel, wherein it serves as the primary load-bearing framework. Subsequently, upon the completion of this structure, it will be integrated with a new building to form a cohesive architectural entity. However, owing to budgetary constraints, the construction is executed incrementally. The purpose of this edifice is to streamline and fortify the operational processes within the factory, particularly in response to the recent fire incident that impacted the production facility. The construction project is undertaken by PT Putra Mataram Perkasa, with a targeted completion date set for February 2024. The total floor area of the constructed building encompasses 9,432 square meters. The project timeline is structured to span 496 working days, with an associated contract value of Rp7,700,000,000.

## **1.2 Problems Identification**

**Problems:** The structural integrity of the edifice is imperative, particularly considering the anticipated imposition of substantial loads associated with heavy machinery. Nonetheless, a degree of uncertainty pervades regarding the capacity of the structure to effectively endure the gravitational forces exerted by such weighty mechanical installations.

**LIMITATIONS:** The limitation in making this report is that the author is not given a calculation of the structure and Cost Budget Plan of the building

## 1.3 Scope

## **1.3.1 Internship Scope:**

- 1. Fulfilling the lessons in the University as graduation achievement
- 2. Implementing the theory and all the lessons in university that already learn.
- 3. Implementing the human resources management techniques.
- 4. Get more knowledge that didn't teach in the university.

### 1.3.2 Research Scope

- 1. There is a cooperation between Internship program with the university.
- 2. Get an experience to talk with the native owner and the local worker using different language. (English, Indonesia, and Java)

# 1.4 Purpose

The purpose of doing this internship in PT. PUTRA MATARAM PERKASA:

- 1. To know all the risk as we work as a civil engineering.
- 2. Gain works experience as a field supervisor.
- 3. Getting more knowledge so we can have a chance to work in a big company.

# 1..5 Benefit

# **1.5.1 General Benefit:**

- 1. Give the college students to gain more experience for work in the field.
- 2. PT. PUTRA MATARAM PERKASA can make more competent people that work in civil engineering.
- 3. Getting criticism and suggestions from an internship student.
- 4. Getting experience working in PT. PUTRA MATARAM PERKASA.
- 5. Student can implement the theory in the field directly.
- 6. Creating more competent fresh graduate in civil engineering

# 1.5.2 Research Benefit

- 1. Introduce an international civil engineering program to Indonesia including the world.
- 2. Will be able to work as a partner with PT. PUTRA MATARAM PERKASA.

