

CHAPTER 1

INTRODUCTION

1.1. Background

Manokwari is one of the oldest government cities in West Papua that supports the Papuan People's Council for administrative functions. Geographically, this district is bordered by the Pacific Ocean to the north, Teluk Wondama Regency to the east, Teluk Bintuni Regency to the south, and Sorong and Sorong Selatan districts to the west. The Manokwari area has a topography of the lowlands, hills and mountains which are rich in natural resources. Manokwari has an area of 14,628 km² with a population of 166,048 spread over 29 districts, 9 sub-districts, and 408 villages. The Papuan People's Council (MRP) is an institution in the Papua province that is equivalent to the Regional People's Representative Council (DPRD). In carrying out its duties, the MRP is supported by the MRP Building as the supporting infrastructure in all activities. Optimum building planning is essential in reducing costs and time in the construction process. The consideration that Papua is still supplying goods from outside, it has impacted high prices for building materials, especially in Manokwari, the location for the construction of the Papuan People's Council Building. The Papuan People's Council is also expected to act as a forum for accommodating the aspirations of the people's ideas. Therefore, The West Papua People's Assembly Building must be completed efficiently to support the work functions of MRP.

The design method used in this report is a literature review with building design and supporting data on land sites obtained from lecturers at the University of Atma Jaya Yogyakarta. Other supporting data that is not yet available through classroom teaching is obtained through internet searches on the official website of Manokwari Regency, West Papua, and other related websites supporting building design. The data is then processed to design an effective and efficient Papuan People's Council Building. The building design in this report includes 3 sections: structural design, geotechnical design, and construction management. All design criteria are based on the Indonesian National Standard (SNI) to ensure the safety of the planned building design.

1.2. Overview of Design

The West Papua People's Assembly building is a facility in supporting the work

functions of The West Papua People's Assembly which has the same function as the Regional People's Representative Council. The West Papua People's Assembly Building consists of 3 floors. The number of users can reach about 150 people. The West Papua People's Assembly Building project is in Manokwari, West Papua.

The location for the construction plan for the West Papua People's Assembly Building can be seen in figure 1.1 (the image taken from the Google maps):

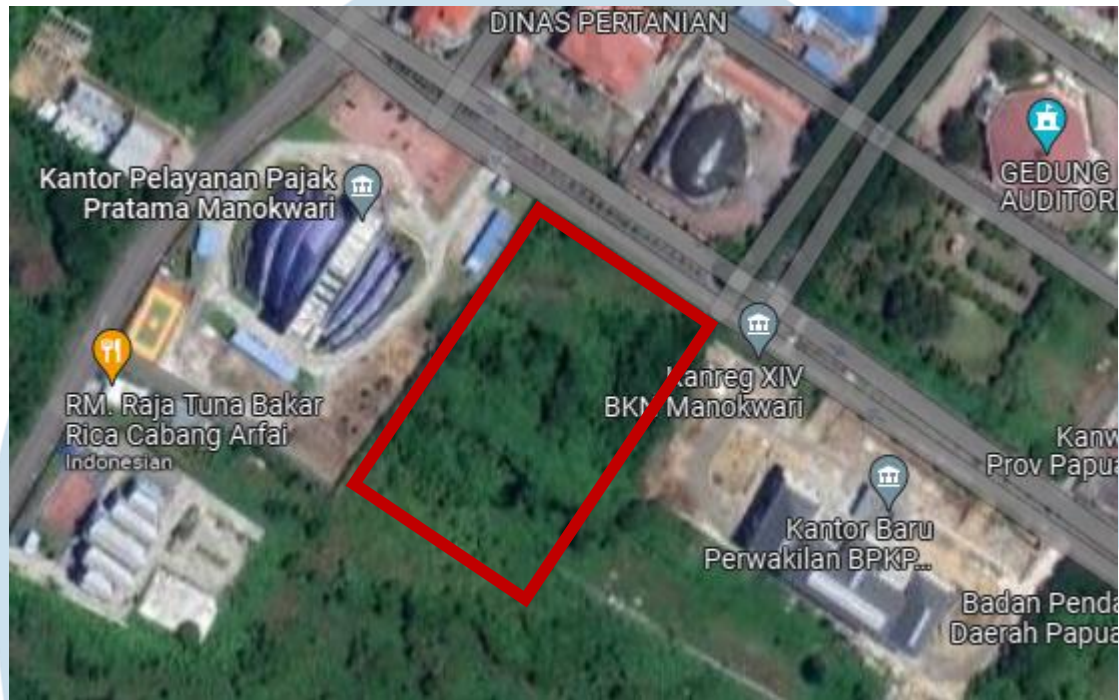


Figure 1.1. West Papua People's Assembly Building Project Location

1.3. Formulation of The Problem

Viewed from the structural, geotechnical and construction management aspects in preparing the report, it produces several problem formulations that are the focus of building project planning, namely as follows:

1. What is the structural planning for The West Papua People's Assembly Building?
2. What is the condition of the land around the location of The West Papua People's Assembly Building?
3. How do you determine the foundation for The West Papua People's Assembly Building?
4. How do you calculate the cost and time required for the construction of The West Papua People's Assembly Building?

1.4. Scope of Problem

The limitations of the problem in this design are as follows:

1. For calculating soil bearing capacity in determining the type of foundation, the data used is bor log data for December 2018.
2. In calculating costs and duration, only part of The West Papua People's Assembly Building is considered.
3. There are changes in architectural design and structure that the writers changes.
4. In designing this building, the writers ignore the planning related to the elevator.
5. There is no maximum limit in calculating costs and time in project planning.

1.5. Research Purposes

The objectives of this Final Infrastructure Design Project are as follows:

1. It knows the structural planning that will be carried out in the construction of The West Papua People's Assembly Building.
2. Get the condition of the land at the construction site of The West Papua People's Assembly Building.
3. It knows the type of foundation used in The West Papua People's Assembly Building construction.
4. Obtain the costs and time required to construct The West Papua People's Assembly Building.

1.6. Research Methods

The method used in this study is to use quantitative research methods, which means that to draw conclusions from existing problems, it is necessary to collect numerical data (numbers).

1.7. Writing System

Systematics in making this Final Infrastructure Design Project is divided into 3 topics: structural design, geotechnical, and construction management. Each description can be written as follows:

Chapter I Preliminary

In this final project, chapter I discusses the introduction, which contains background, general review, problem formulation, research methods, and writing systematics.

Chapter II Design of The Upper Structure

This chapter discusses the structural planning of The West Papua People's Assembly Building.

Chapter III Design of The Bottom Structure

This chapter contains soil conditions at the location of The West Papua People's Assembly Building and the type of foundation to be used.

Chapter IV Cost and Time Management

This chapter contains The Bill of Quantities (BOQ), the duration of the work, and the S-curve for the construction of The West Papua People's Assembly Building.

Chapter V Conclusion

This chapter discusses the conclusions regarding the entire Infrastructure Design Final Project.

