

## **BAB II**

### **INTERNSHIP AT PT. ADHI KARYA**

#### **2.1 Project Overview**

PT. ADHI KARYA is located at Pantai Indah Kapuk 2 Street, RT1/RW16, Kapuk Muara, Penjaringan District, North Jakarta, DKI Jakarta 14460. The office is situated in the Mediterania Niaga II Commercial Building, spanning four floors.



**FIGURE 2.1 Front Side of Office PT. Adhi Karya**

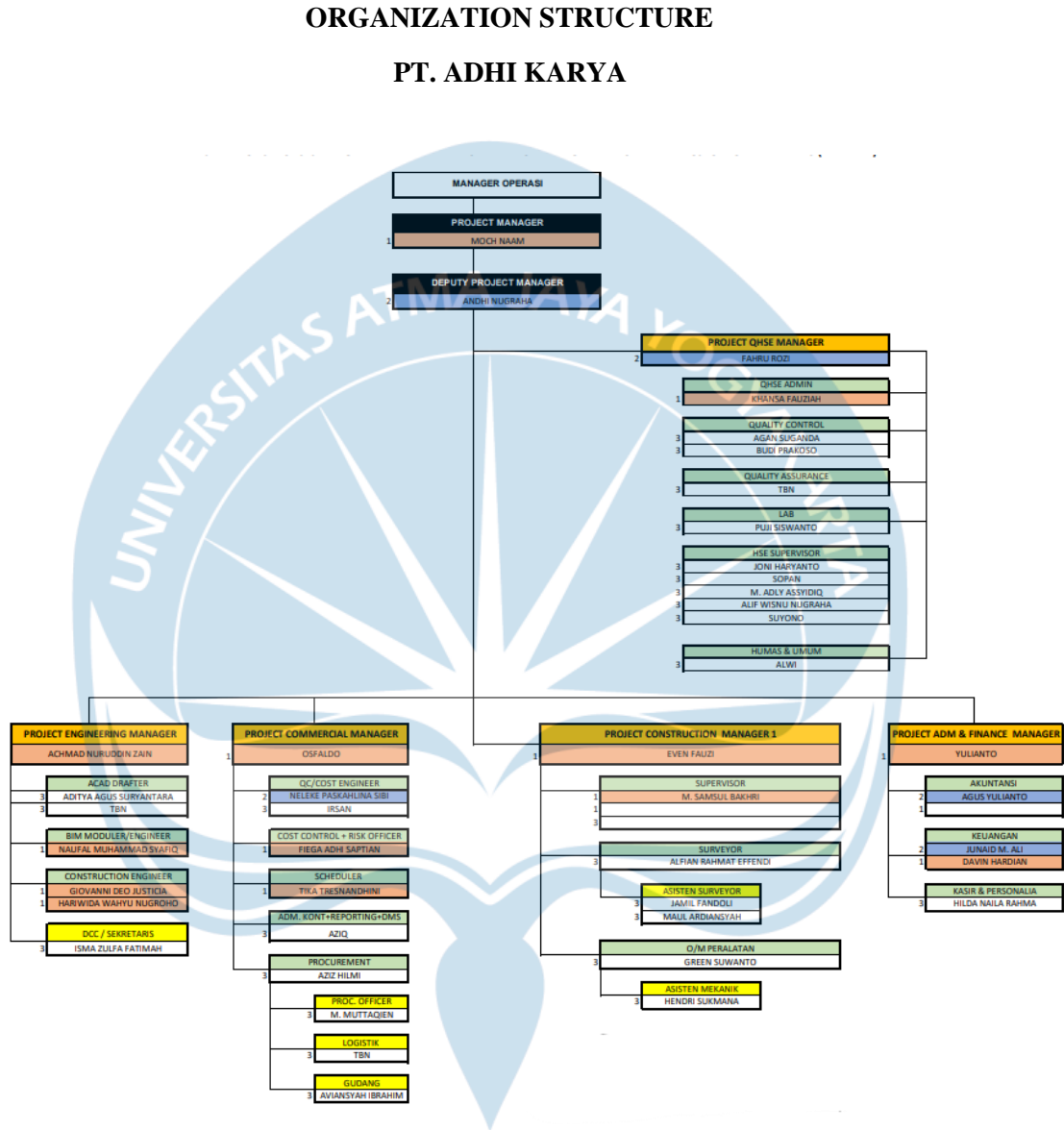
*Source: Google Maps, 2023*

PT. ADHI KARYA is collaborating with PT. HUTAMA KARYA (ADHI-HUTAMA KSO) on the Wastewater Pipeline Network Construction Project for Jakarta Sewerage Development Project Zone 1 Package 6 (Area 2-2) in DKI Jakarta Province. The project has a contract value of Rp 620.772 billion.

Due the environmental constraints, the project includes 48 spans in North Jakarta, with a total jacking length of 6722.5 meters. In addition, the project includes 12 Diversion Chambers.

## 2.2 Company Management

PT. Adhi Karya has a company organizational structure shown in Figure 2.3, as follows:



**FIGURE 2.2 Company Organization Structure**

*Source: Company Profile PT. Adhi Karya 2023*

## 2.3 Implementation of Internship

### 2.3.1 Description of Activity

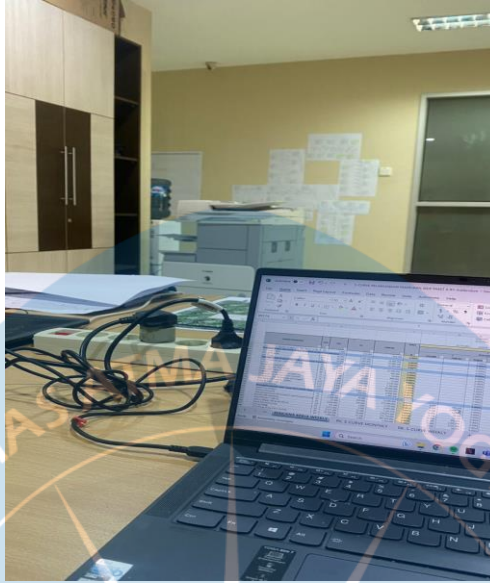
The work will be done at the PT office from September 12, 2023 to January 3, 2024. Adhi Karya. The activities carried out during the internship at PT. Adhi Karya are indicated in **Table 2.1**, and **Figure 2.3** depicts the office setting during the internship at PT. Adhi Karya.

**Tabel 2.1 Activities di PT. Adhi Karya**

*Source: Logbook MBKM T.A. 2023/2024*

<b>Date</b>	<b>Activity</b>
12 September 2023 – 20 September 2023	Working on the August Quality Control report
21 September 2023 – 28 September 2023	Working on the August Quality Control report revision
29 September 2023 – 10 October 2023	Carry out concrete quality testing Collecting data on test results
11 October 2023 – 5 November 2023	Working on the September Quality Control report Working on the September Quality Control report revision
6 November 2023 – 15 November 2023	Assist in compiling and checking monthly data organized by type
16 November 2023 – 30 November 2023	Working on the October Quality Control report
1 December 2023 – 8 December 2023	Working on the October Quality Control report revision
9 December 2023 – 14 Desember 2023	Read and understand the Jet Grouting method used in efforts to strengthen the soil
15 December 2023 – 24 December 2023	Checking and compiling overall Quality Control data owned
25 December 2023 – 26 December 2023	Christmas Holidays 2023
27 December 2023 – 30 December 2023	Check the guidebook on Risk Management
31 December 2023 – 1 January 2024	New Year Holidays
2 January 2024 – 4 January 2024	Discuss and chat with staff

The following is documentation of the workplace condition at PT. Adhi Karya:



**FIGURE 2.3 Office Situation PT. Adhi Karya**

*Source: personal document, December 2023*

### **2.3.2 Observations During The Internship**

Several observations were made during the internship at PT. Adhi Karya about the technical and non-technical components of the working environment:

- a. Technical Observations (Related to Internship Activities):
  - Pak Rudi, PT. Adhi Karya's Project Manager: frequently enquired about the interns' progress. He also went over essential ideas in reinforcement calculations. Pak Rudi also checked up on his employees' development on a regular basis.
  - Quality Control at PT. Adhi Karya, Pak Agan and Pak Budi: They displayed strong communication skills and assisted in teaching various calculating principles and reinforcement techniques. During the internship, they also worked as assistant mentors.
- b. Non-Technical Observations (Supporting the Internship Activities):
  - Office Work Support Facilities: Computer desks, restrooms, eating tables, and the workspace were always well-organized, tidy, and clean.
  - Recreational Facilities: The existence of a ping pong table provides personnel with a recreational outlet during their downtime.

These observations highlight the positive and supportive working environment at PT. Adhi Karya, emphasizing not only technical guidance but also the provision of well-maintained facilities for a conducive work atmosphere.

### 2.3.3 Onsite Visit



**FIGURE 2.4 Onsite Visit**

*Source: personal document, October 2023*

On November 20, 2023, a tour to the project site was conducted. The visit to this project was intended to track developments and identify issues that arose. Observations indicate that this initiative is making progress *Jet Grouting* is a ground improvement method used to stabilize and strengthen soils. Through a succession of closely spaced jets, high-pressure grout—a combination of water, cement, and occasionally additives—is injected into the earth. As the grout is injected, the jets are lifted and lowered, rotating to create a zone or column of treated soil.

A ground improvement method that may be applied to decrease permeability, regulate ground settlement, and strengthen and stiffen the soil. The development of sustainable ground improvement techniques, forecasting the diameter of jet grouting columns, and examining the lateral behavior of stacked rafts in improved soft clay with the use of the jet grouting method have been the main areas of recent study. This process increases strength, decreases permeability, and improves stability, and is frequently used to remediate weak or

loose soils. Jet grouting has several applications, such as controlling groundwater, retaining soil, and supporting excavations.

## 2.4 The Connection between Conversion Courses and the Implementation of Internships

1. In-depth firsthand experience with the implementation of ideas and theories acquired in the precast concrete course is the link between the internship and the precast concrete course. Pupils may see the real-world implementation of the material selection, quality testing, molding, and quality control steps in the precast concrete production process. Furthermore, internships can help students gain a deeper grasp of practical aspects of the precast concrete production industry, such as operating heavy equipment and enforcing safety and environmental regulations.



**FIGURE 2.5 Concrete SCG FA**

*Source: Personal document, November 2023*

- 2 The application of acquired concepts like the usage of BIM software, 3D modeling, and interdisciplinary coordination practically is the link between the internship and the BIM course. Engage directly in building projects utilizing BIM technique, get an understanding of data integration, and maximize team cooperation throughout the internship.
- 3 An internship in applied soil mechanics involves applying the principles of the subject matter that have been studied in real-world scenarios, particularly in relation to stabilizing and improving soil through the use of jet grouting. It also directly relates the application of soil mechanics theory in terms of choosing injection parameters, comprehending local soil conditions, and assessing the efficacy of jet grouting outcomes.





**FIGURE 2.6 Jet Grouting**

*Source: Personal Document, November 2023*

4. The internship relates to courses on construction methods and heavy equipment; specifically, it involves the practical application of heavy equipment, like injection drills and jet grouting, which call for specialized skills. It also involves choosing the right heavy equipment for the job, organizing logistics, planning and arranging schedules, and keeping an eye on how well the heavy equipment is operating.



**FIGURE 2.6 Heavy Equipment**

*Source: Personal Document, October 2023*