

UNIVERSITI TEKNOLOGI MARA FACULTY OF CIVIL ENGINEERING

INDUSTRIAL TRAINING REPORT

MUHAMAD AZHAR BIN SA'ARI (2016750251)

BAHAGIAN CPAB DAN PENGURUSAN KORPORAT(PMO),JKR TERENGGANU, TINGKAT 9,WISMA NEGERI,KUALA TERENGGANU

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Abstract

The industrial training program is an integral component of the curriculum program for diploma student offered by Uitm. Industrial training program are compulsory for all students to improve their technical knowledge and skills as well as to adapt to the work environment and complete their study.

The main aim of the industrial training program is to provide opportunities for students to undergo industrial training in the engineering, technology and management sectors to enhance professional skills and interpersonal skills as a professional as well as to provide working experience in the industry by applying civil engineering disciplines into practice in the field related to designing, constructing, human resources planning, engineering management, cost preparation, entrepreneurship, consultancy and research.

The student that undergoes industrial training, are also trained in aspects of workplace safety and health, as well as ethics in the industry. Students are allowed to directly be involved in the management, planning, budget preparation, documentation, supervision, and maintenance of a project, which depends on their availability in the industry. Students are also involved in complex engineering problems and workplace constraints that will benefit them by improving their mental and physical wellness.

Acknowledgement

The opportunity to be part of the Bahagian CPAB & Pengurusan Korporat ,JKR Terengganu during my intership was a great chance for me to learn and gain as many input as I can in order to prepare myself to face the working reality. Therefore, I consider myself lucky and I also very grateful to meet so many wonderful people and professionals who

A deepest gratitude and special thanks to all the staffs at Bahagian CPAB & Pengurusan Korporat. Although they were very busy with the tasks, willing to spend me their time and gave me a warm welcome since the first day and keep pouring their knowledge in order to help me with the internship until my last day.

I am also using this opportunity to express my deepest thanks to Ir. Ali bin Ismail, Senior civil engineer also carrying out duty as the department head, Mrs. Siti Fairuz, civil engineer and also my industry supervisor. Both two person who in spite of being extraordinary busy and have a huge responsibility but still guide me and willingly gave me the chance to experience their part of works. I learn a lot from them.

Also a special gratitude to Mr. Mohd Firdaus Bin Mohd akhbar, Coordinator for Industrial Training, Faculty of Civil Engineering and all the lecturers whom had guide us from choosing the intership placement, CIDB card until we completed our intership. A deepest thanks also to Ir. Ts. Dr. Rengga Rao from Uitm Shah Alam as my faculty supervisor who willing to travel and spend time to evaluate me during the intership.

I will appreciate this opportunity and strive by using all the skills and knowledge gained from them in the best possible way.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

In this chapter, student had include all the information regarding the organisation background in detail including their logo description. The work flow and the nature of business also writed in details

In addition, the organisation's product also listed in the chapter as well as the market strength details.

1.2 Background of the company

1.2.1 JKR Malaysia

In 1858, the Chief Engineer of the Straits Settlements was established. At that time, Singapore was the main detention centre for prisoners from the British colonies across the Far East. The British relied on soldiers to fill engineers and doctors. A military team officer will be stationed to head public works in every area. It is in this regard that Major McNair has come to Singapore to fill the post.

In 1867, the Straits Settlements became the 'Crown Colony' and simultaneously the position of the Singaporean Jabatan Kerja Raya (JKR) Authority was converted to the Jurisdictional Colonies of the Straits Settlements. However, the date cannot be said to be the beginning of JKR because basically the works are only concentrated in Singapore alone. Only after five years later in 1872, a new department named JKR Straits Settlements was established.

This is the starting point of JKR as an organization in Malaysia. Major J.F.A. McNair, who previously served as an Executive Engineer and Prisoner Superintendent and the Colonies of the Straits Settlements in 1867 was the first person to lead the JKR organization in 1872 with Captain Shatterthwaite as First Assistant Engineer at the State level of Penang.

1.2.2 JKR Terengganu

Jabatan Kerja Raya Terengganu was established in 1921 which was formerly known as the Public Work Department (PWD). At the beginning of its establishment, it was located at Jalan Balik Bukit, Kuala Terengganu and was administered by Mr. W. D. Ladlow as Director beginning in 1921. In 1979, headquarters JKR Terengganu moved to Level 9 – 12, Wisma Negeri, Kuala Terengganu. For Mechanical and Electrical Branches are located at Jalan Bukit Kecil, Kuala Terengganu.

JKR Terengganu now comprises several sections including Administration & Finance Department, CPAB & Corporate Department, Road Department, Building Department, Architects Department, Quantity Surveying Department, Pasukan Projek Persekutuan Terengganu Department, Education & Higher Education Department, Mechanical Engineering Department and Electrical Engineering Department.

In addition, JKR Terengganu has seven (7) District Engineer Offices namely JKR Kuala Terengganu, JKR Kemaman, JKR Besut, JKR Dungun, JKR Setiu, JKR Marang, JKR Hulu Terengganu and one (1) Unit Management Project KETENGAH.

1.2.3 Location



Figure 1.2.3.1 shows building of Wisma Negeri



Figure 1.2.3.2 shows location of JKR from maps

1.2.4 Logo JKR



Figure 3 shows JKR official logo

Description

- In general, the displayed logo reflects the diversity of work areas entrusted to the
- Starting from the bottom, the black curved lines symbolize the work of providing clean water and describing JKR is a dynamic organization.
- The black arch-shaped lines show a symbol of work on construction and maintenance of the bridge and reflects JKR as an organization entrusted as the country's leading driver to carry out engineering work.
- The black straight line on the arch-shaped line symbolizes the involvement of the national road network.
- The fourteen lines located above the straight line symbolize the involvement of building works covering 14 states and federal territories in Malaysia.

Colour

- Yellow represents the maturity of the JKR brand as one of the oldest organization created and reflects mature image in achieving its objective.
- Black represents the quality unity of branches in the JKR organization entrusted to implement development projects.

Grey represents the inherent values of human capital in providing services.

Organizational Structure

1.3.1 Organizational Structure of JKR Terengganu

CARTA ORGANISASI JKR TERENGGANU 2019

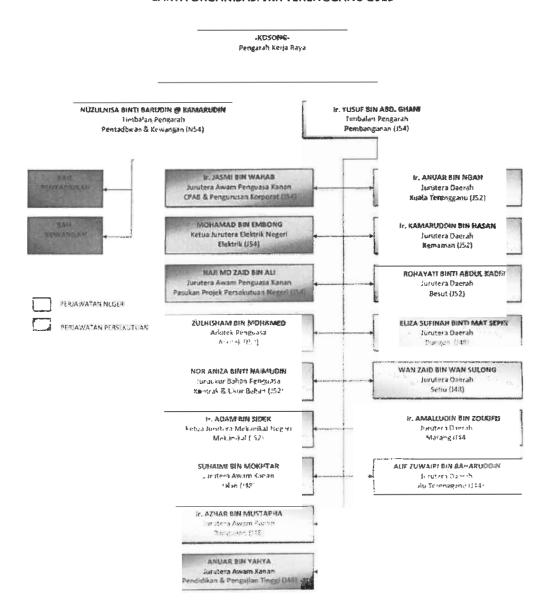


Figure 1.3.1.1 shows Organizational Chart of JKR Terengganu

1.3.2 Organization Chart of department CPAB & Bahagian Pengurusan Korporat



Figure 1.3.2.1 shows Organization Chart for CPAB & Bahagian Pengurusan Korporat

1.3 Nature Of Business

JKR is the acronym of Jabatan Kerja Raya. JKR has been built up since 1872 and fills in as a specialized organization to the Legislature of Malaysia. JKR is in charge of arranging, outlining and development of framework undertakings, for example, streets, slants, government structures, air terminals, harbors, breakwaters, and related designing resources. JKR additionally as administration of framework upkeep and specialized warning administrations to governments at elected, state and area levels.

As a key advisor to the Terengganu State Government, the target of the JKR is to present a venture that meets the quality, time, and cost set.

CPAB

- Manage and coordinate the integrated management system (CMS)
- --Planning of the human resource needs of the Department and the relevant organizational structure
- Developing and managing regulated management and effective information technology as input to management.
- Plan, coordinate and implement courses, seminars and workshops to improve the performance and competency of members on an ongoing basis.
- Promote the use of ICT among members of PWDS towards improving the efficiency and effectiveness of the official business of the Department.
- Manage, operate and provide service information technology support, resources and documentation
- Secretariat of the appointment of a consultant.

1.4.1 Vision

"To Be A World-Class Service Provider and A Center Of Excellence in Asset Management, Project Management and Engineering for The Development of Innovative, Creative and Innovative Human Capital Infrastructure and Technology."

1.4.2 Mission

To contribute to development of the country by:

- Help our customers realize the basic goals and deliver services through collaboration as a strategic partner.
- Evaluate our processes and systems to deliver consistent service outcomes.
- Providing an effective and innovative asset and project management service.
- Strengthen existing engineering competencies.
- Develop new human capital and competence.
- Prioritize integrity in providing services.
- Building a harmonious relationship with the community.
- Preserve the environment in service delivery.

1.5 ProductsList of projects that already finish and still ongoing:

| FEDERAL PROJECTS | | | | |
|------------------|-------------------------------|----------------|------------|------------|
| No. | Project Name | Cost of the | Project | Project |
| | | Project (RM) | Started | Finish |
| 1 | Pembinaan Pejabat Jabatan | 17,547,733.11 | 15.9.2015 | 11.9.2017 |
| | Audit Negara, Negeri | | | |
| | Terengganu | | | |
| 2 | Cadangan Pembinaan | 156,147,010.00 | 12.10.2015 | 8.10.2017 |
| | Politeknik Hulu Terengganu | | | |
| | (Reka & Bina) | | | |
| 3 | Membina Blok Psikiatrik HSNZ | 49,745,363.70 | 4.3.2016 | 3.8.2018 |
| | Kuala Terengganu | | | |
| 4 | Pembinaan Kompleks Pejabat | 38,078,565.39 | 4.10.2016 | 3.4.22019 |
| | Suruhanjaya Pencegahan | | | |
| | Rasuhan Malaysia (SPRM) | | | |
| | Terengganu. | | | |
| 5 | Membina dan Menyiapkan | 19,716,00.00 | 22.12.2016 | 21.12.2018 |
| | Klinik Kesihatan (Jenis 3) | | | |
| | dengan Kuaters (2F/2G) Manir, | | | |
| | Kuala Terengganu, Terengganu. | | | |
| 6 | Membina dan Menyiapkan | 25,150,477.96 | 9.3.2017 | 8.9.2019 |
| | Klinik Kesihatan (Jenis 3) | | | |
| | dengan Kuarters (2F/2G) | | | |
| | Chendering, Kuala Terengganu. | | | |
| 7 | Cadangan Pembinaan Stor | 22,631,000.00 | 23.11.2017 | 20.11.2019 |
| | Utama Farmasi HSNZ | | | |
| 8 | Pembinaan Politeknik Besut | 169,732,500.00 | 3.10.2017 | 11.1.2021 |

| STATE PROJECTS | | | | | | | | |
|----------------|--|--------------------------|---------------------------------|-------------------|--|--|--|--|
| No. | Project Name | Cost of the Project (RM) | Project Started | Project Finish | | | | |
| 1 | Cadangan Pembangunan Projek Jambatan di atas Sungai Terengganu ke Pulau Sekati, Kuala Terengganu. | 242,000,000.00 | Already finish on 28.5.17 | | | | | |
| 2 | Cadangan Merekabentuk, Membina dan Menyiapkan Double Road Frontage Fasa 2 dari Pasar Payang ke Taman Shahbandar, Kuala Terengganu. | 159,000,000.00 | 30.12.2012 | 20.9.2017 | | | | |
| 3 | Merekebentuk, Membina dan Menyiapkan Hotel Kerajaan Negeri Terengganu di Pulau Poh, Tasik Kenyir, Hulu Terengganu. | 100,000,000.00 | 1.7.2015 | 30.6.2018 | | | | |

Table 1.5 shows list of projects that Pasukan Projek Persekutuan Terengganu handling

1.6 MARKET STRENGTH

Jkr's client usually comes from government, both state and federal government. Fund from the federal government for federal project and for the state project, the fund is from the state government.

1.7 CONCLUSION

JKR is a technical organization with very convincing history and great professionals that led the organization and recognized by the government especially for planning, design, construction, maintenance management infrastructure projects and technical advisory services to the Government. Therefore, the ability and expertise of our staff at all levels and departments, of the implementing and management.

CHAPTER 2:TRAINING ATTENDED (WEEKLY SUMMARY BASED ON LOGBOOK)

2.1 INTRODUCTION

This chapter is a summary of the entire weekly activities done throughout the industrial training. Based on the activities that are being written in the log book are briefly described in the section that covers the duties given by the supervisor. Therefore, the division explained briefly the activities and duties of the students carried out during industrial training in 8 weeks period.

All the activities carried out are explained from week to week to conclude the work done in one week while facilitating the checking process. Working days in a week is not necessarily the same every week as there are public holidays.

2.2 EXPOSURE

1.1. Summary of Training Report

All work and activities that have been carried out on a daily have been recorded in the logbook training industry. A summary of the work and activities that have been performed are as follows:-

i. First week (14 July 2019 – 18 July 2019)

- a. Report for the duty and identify the scope and tasks at CPAB and Corporate Department.
- b. Learn about Gerbang Nilai stage four that is at construction stage.
- c. Update the dateline and physical progress for state and federal project.
- d. Provide a list of the project in construction for state project for monitoring report.
- e. Learn about *sistem kawal dan lapor (SKALA)* that used to monitor the progress of state and federal project in Malaysia.
- f. Provide the certificates for district engineer and contractor for the completed project

ii. Second week (21 July 2019 – 25 July 2019)

- a. Update the date of physical progress for projects that are scheduled to be completed within 3 months
- b. Prepare the slide of the projects exceed 20% for Mesyuarat pemantauan.
- c. Update the project progress pictures, financial report for projects that are scheduled to be completed within 3 months.
- d. Asks for feedback about project progress pictures from district engineer.
- e. Attend the Mesyuarat Pemantauan Bil 7/2019.

iii. Third week (28 July 2019 – 01 August 2019)

- a. Learn about construction procedures and site supervision.
- b. Prepare the certificates for district engineer and contractor for the completed project.
- c. Learn about document control procedures.
- d. Provide audit reports in the SPB.

iv. Fourth week (04 August 2019 – 08 August 2019)

- a. Attend the site meeting at Kuala Nerus.
- b. Attend the site visit at Kuala Nerus.
- c. Attend the internal audit at JKR Daerah Marang.
- d. Provide the audit report in SPB for JKR Daerah Marang.
- e. Rewrite opportunity for improvement (OFI) to new form.

v. Fifth week (11 August 2019 – 15 August 2019)

- a. Eid Aidiladha
- b. Make a correction of Mesyuarat Pemantauan Bil 8/2019's letter.
- c. Faculty Supervisor visit by Ir.Ts.Dr. Rengga Rao from Uitm Shah Alam.
- d. Provide the appointment letter of Head of Project Team (HOPT)

vi. Sixth week (18 August 2019 – 22 August 2019)

- a. Site visit at pharmacy's main store of Hospital Sultanah Nur Zahirah, Kuala Terengganu.
- b. Provide the list of project state for JKTNg meeting.
- c. Provide the list of the project state for Mesyuarat Pemantauan Bil 8/2019.
- d. Attend *Mesyuarat Aset Alih* for staff of CPAB and Corporate Management Department.
- e. Attend CPAB and Corporate Management Department's meeting.

vii. Seventh week (25 August 2019 – 29 August 2019)

- a. Attend Inspection at Klinik Kesihatan Manir.
- b. Attend the Mesyuarat Pemantauan Bil 8/2019.
- c. Attend a programme of *Pemantapan Media Sosial* for CPAB and Corporate Management Department.
- d. Prepare minute meeting of Mesyuarat Pemantauan Bil 8/2019.
- e. Prepare list of project cost over than twenty billion and letter of appointment of HOPT...

viii. Eighth week (01 September 2019 – 05 September 2019)

- a. National Day.
- b. Islamic New Year.
- c. Learn about as-built drawing of Cadangan Kerja-kerja Menambun Tanah bagi Penempatan Semula Nelayan di Kawasan Benting Lintang, Mukim Tembila, Besut.
- d. Prepare the letter of Risk and Contract Management course.
- e. Housekeeping for Ekosistem Kondusif Sektor Awam (EKSA).

2.3 CONCLUSION

Work procedures are summarised on weekly basis and for more details of the work done can be referred through a daily log book filled by students and endorsed by the industry supervisor.

This weekly job summary is provided to see the results of the activities that were done by the student. All activities are described and noted in the chapter were truly done by the student.

CHAPTER 3: TECHNICAL REPORT

3.1 Introduction

3.1 SISTEM KAWAL DAN LAPOR (SKALA)

The control and reporting system (SKALA) used by the Jabatan Kerja Raya Malaysia is an online project monitoring site. This system is one of the ways to record or generate project implementation report by following current progress. The objective of this system is to generate project reports in real-time and cost in real-time for performance and monitoring purposes. By using this system all information on JKR projects can be referenced through this system.

This indirectly makes it easier and easier for employees to obtain current information on project progress and to serve as a reference. In addition, using this system we can keep track of the progress of the project underway.

i. User Log In Process

To enter into the control and reporting system (SKALA), the user must be a JKR's officer and must sign up for the first time. The user will need to enter their identification number and password.



Figure 3.1.1: Log in process

ii. Click on LAPORAN

After the user success to log in into the control and reporting system, the users need to click on report to see the report of the project.

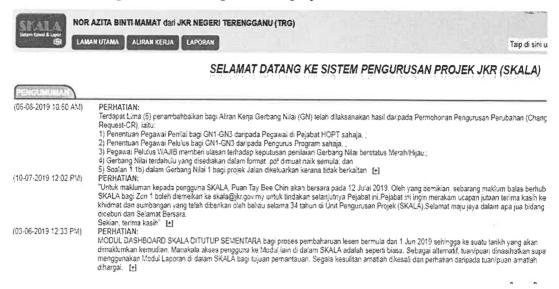


Figure 3.1.2: Click on report process.

iii. Click on Pembinaan.

After click on report, the user needs to click on *Pembinaan* to see the project report in construction stage.



Figure 3.1.3: click on Pembinaan process.

iv. Click on Seliatapak.

The figure below shows the click on *seliatapak* process that should user click to see the progress report project in construction stage.



Figure 3.1.4: click on seliatapak process.

v. Choose the selected project either federal or state based on district.

The figure below shows the list of district project either federal or state project. The user needs to identify the project before click on the next process.

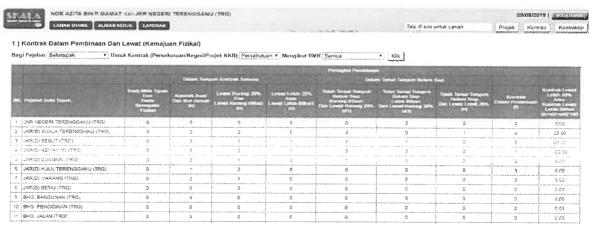


Figure 3.1.5: List of project based on district either federal or state project.

vi. Refer to information and detail of the project.

The figure below shows the project details of the project selected. For example federal project at district of Kuala Terengganu is Universiti Sultan Zainal Abidin (Unisza) – 'Pembinaan Bangunan Pentadbiran Kampus Gong Badak'. The user can check the progress report and detail of the project.

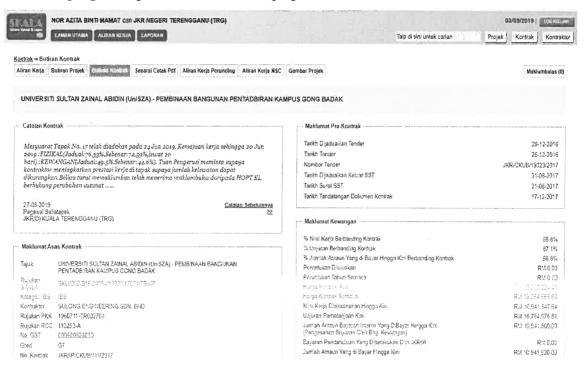


Figure 3.1.6: Contract details of the project selected.

Information and Project Details through SKALA

The control and reporting system (SKALA) is a method that enables staff of JKR to obtain information and project data. Examples of project information that can be identified through this system are workflow projects, contract details and progress photos. There are two examples of project details where staff often to find information:-

a) Workflow project

In this section based on figure 4.7, the basic information of the project that staff can be taken is:-

- Site receipt date.
- Project registration date.
- Project category.
- Project scope.
- Client's office.
- Implementation method.
- Type of acquisition.

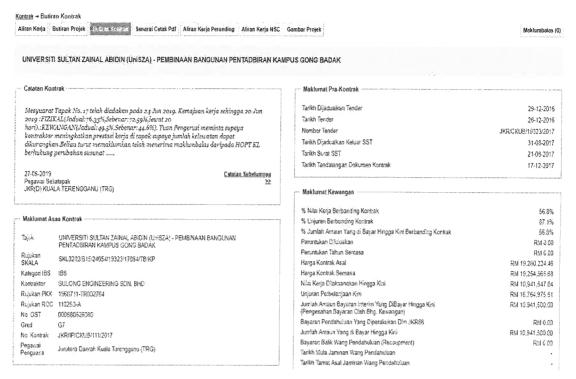


Figure 3.1.8: Contract details of the project.

i. Pre-Contract Information

Pre-contract information is the information of the tenders such as tender's date, tender's number, date of issue of letter of acceptance (SST) and date of signature of contract document.

ii. Basic Contract Information

The basic information of the contract is the basic information of the project such as project title, SKALA reference, IBS category, contractor, PKK, ROC reference, GST's number, grade, contract number and executive officer.

iii. Financial Information

Financial information is a financial progress that is measured in the form of 'Ringgit Malaysia'. It is based on the financial progress planned on the site. The financial progress is inclusive of the approved provisions, the original contract price, current contract price, value of work executed, the total interim payment amount paid to date, advance payment is recommended in JKR66 and others. The costs stated in this financial information will change to the amount of the costs incurred.

iv. Work Information

Work information is the information on physical progress of the project included a percentage of physical work schedules, a percentage of actual physical work, site-owned date, original completion date and current date of completion. The physical progress indicated is based on the progress of the project based on critical path method (CPM). Once monitored, the JKR's engineers will key in the data in the system (SKALA).

v. Others Information

The others information stated in this section are the details of the payment and monthly payment projection. For example, it is about an extension of time (EOT) and supplementary agreement (SA). Construction contracts generally allow the completion period of the project to be extended or delay which is not due to contractor's offences. As such, the completion date will be extended to the new period based on the contractor which is estimated by them to complete the project.

3.2 PROJECT MONITORING MEETING.

Project monitoring is defined as a process which is performed to track the progress of project execution so that potential problems can be identified well in time for the taking of the corrective actions for the purpose of controlling the execution of the project. It is a continuing function during project implementation which provides management of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. It provides information and ensures the use of such information by management to assess project effects – both intentional and unintentional – and their impact. It aims at determining whether or not the intended project goals and objectives are being on the track.

Project monitoring can also be defined as the ongoing process by which management gets regular feedback on the progress being made towards achieving the goals and objectives of the project. It focuses on reviewing of progress against achieving of goals. In other words, monitoring is not only concerned with the taking of the actions but is also concerned with making the progress towards achievement of the results. In the more limited approach, monitoring can focus on tracking project with regards to the use of the resources. In the broader approach, monitoring also involves tracking strategies and actions being taken by management, and figuring out what new strategies and actions need to be taken to ensure progress towards the project objectives.

3.2.1 Financial Performance Report.

The financial progress report is the financial provision of projects from the federal or state. Each provision is divided into development expenditure reports and management expenses reports. This report will record all project spend to be discussed in the monitoring meeting.

3.2.2 Paperwork Progress Report

Paperwork Progress Report is a report on the monitoring of contract administration which includes the provision of contract documents, application for approval of work provisioning, job allocation instructions, contract price adjustments and completion of projects, which involves extension of time (EOT), sick project, certificate of completion and compliance and certificate of completion. In addition, monitoring of any work changes to be completed before the completion certificate is done. Through this report, officers will be able to know the scores for each project.

3.2.3 List of the Project Completed 3 Months.

The monitoring is based on physical progress of the project includes physical progress of the schedule and actual physical progress. In addition, monitoring is also made to the average number of financial projects by calculating the price differences of the work value which is performed at the current contract price. Further divide the value by the amount of months for the outstanding payment based on the latest payment date with the completion date of the project. Physical progress discussed in monitoring meetings is the latest progress percentage.

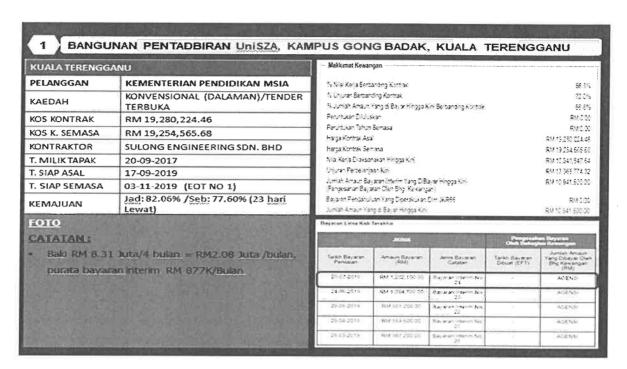


Figure 3.2.3.1: Slide of federal project.

| DAERAH HULU TI | RENGGANU | - Maklanat Kewangan | | | |
|---|--|--|---------------------|---|--|
| PELANGGAN KAEDAH | SETIUSAHA KERAJAAN NEGERI KONVENSIONAL (DALAMAN)/RUNDINGAN TERUS | IN No. Ampa Semboring Kormany "Uniques Surbanding Kormany "I Jamin America (Sembor Ingres Kim Bertanding Kormany Penatrikan Dania Semborina Penatrikan Tenan Semborina Hargo Korman, America No. A Prof. Companyon (America) No. A Prof. Companyon (America) No. A Prof. Companyon (America) | | 67: 90: 56:2 68:2 68:25,45:00 68:25,45:00 78:25,45:45,750 58:45,751;41:5 84:25,751;41:5 84:25,751;41:5 | |
| KOS KONTRAK | RM 25,480,000.00 | | | | |
| KOS K. SEMASA | RM 24,416,767,94 | | | | |
| KONTRAKTOR | MSI VISION SDN. BHD. | | | | |
| T. MILIK TAPAK | 21-11-2016 | | | | |
| T. SIAP ASAL | 20-11-2019 | Unjoise Perdelenain Kin. | | | |
| T. SIAP SEMASA | 20-11-2019 | Authan Rhaun Ballaran Interim Yang DiBayar Hingga Kin Bayaran Pendah Aliah Yang Dipropilihan Dim (HRD) Authan Rhaun Yang di Bayar Hingga Kin | | RW 12,261 455 | |
| KEMAJUAN | 1ad: 96.63%/Seb: 50.20% (348 hari Lewat) | | | RM 0 RM (2.364.438 | |
| Feno | | Bayacan Lima Kali Faraktir | | | |
| • Baki RM12.15 tuta/4bulan = RM 3.03 tuta/ | | Teran Stylene Superatival | Amon September (St. | -million Gran | |
| bulan, purata bayaran interim RM327K/bulan • Mohon SO/WSO ambil tindakan EOT/Amaran PKTS | | 31-07-2013 | RM 145,600 00 | Eautron Interni No 35 | |
| | | 304201 | RW18470000 | Basano reane No 34 | |
| | | 35-35-2019 | \$8172,007.00 | Eayaran (moren No.33) | |
| | | 29-64-2019 | RW 750 100 00 | 54-Jarum Intern No. 32 | |
| | | 3142342015 | EM 467 000 00 | Bavaran Intarim No. 11 | |

Figure 3.2.3.2: Slide of state project.

3.2.4 Late and Sick Project Report.

Late and sick project reports are inclusive of projects in the construction and handover stages. At the construction stage, more monitoring of project delays in physical progress, contract documents and no interim payments. In addition, at the handover stage, more monitoring of the statement of final account (SOFA), issuance of certificate of making good Defects (CMGD), and the final account payment. Figure 4.12 shows the summary of late and sick project for federal and state project and figure 4.13 and figure 4.14 shows differentiate of late and sick project federal and state based on month. Besides, figure 4.15 shows the list of late and sick project for federal and state project. Figure 4.16 and figure 4.17 shows the slide of late and sick project for federal and state use in monitoring meeting.

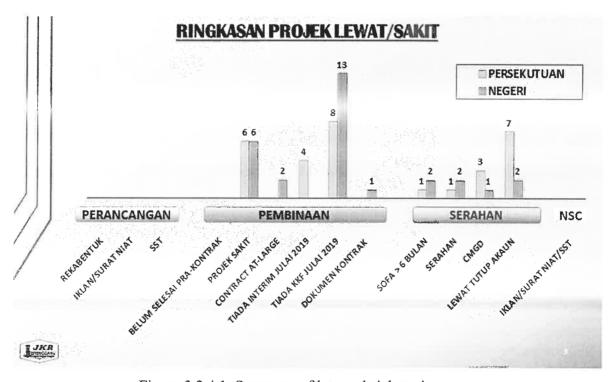


Figure 3.2.4.1: Summary of late and sick project.

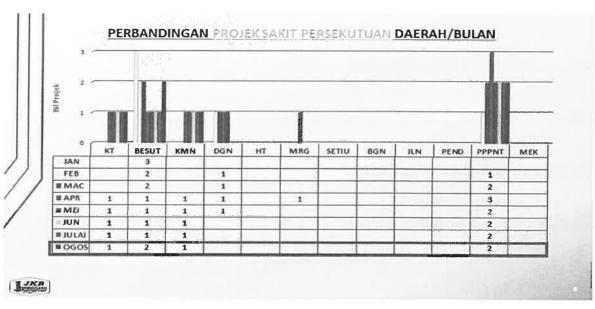


Figure 3.2.4.2: Differentiate of federal project based on month.

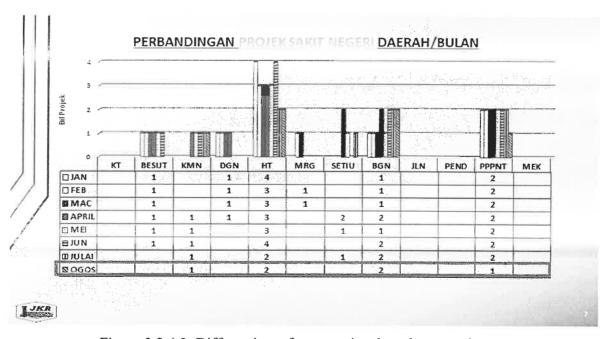


Figure 3.2.4.3: Differentiate of state project based on month.

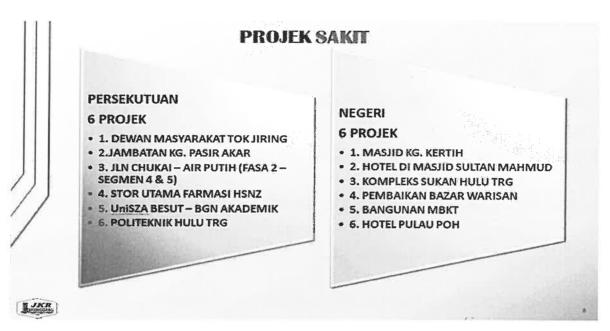


Figure 3.2.4.4: List of late and sick project.

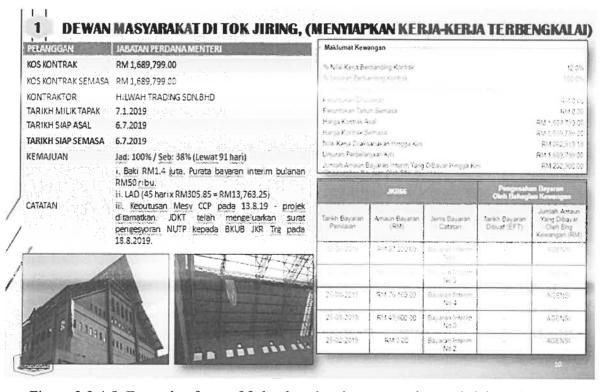


Figure 3.2.4.5: Example of one of federal project in category late and sick project

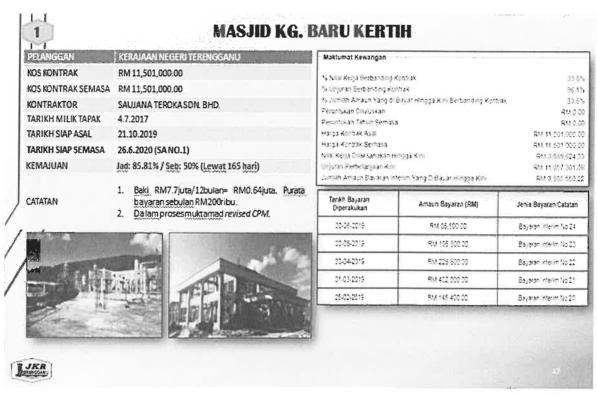


Figure 3.2.4.6: Example one of state project in category late and sick project.

3.2.5 Project Planning Report

This report aims to monitor the procurement stages of the project, including the preparation of tender documents, advertisement dates and issuance of accepted letter of acceptance.

3.2.6 Tenaga Nasional Berhad (TNB) sub-station

TNB's sub-station report is to ensure that TNB's sub-station building is completed at least six months from the completion date. This is because TNB's client charter sets out the electricity supply to be supplied within six months after the time of TNB's substation is delivered by contractor to TNB.

3.2 Problem Encountered And How To Overcome It

Motivation behind the temporary job is to uncover the understudies into genuine working life to gain learning that is for all intents and purposes being utilized as a part of everyday life. Not all information that has been adapted so far when me in diploma program is utilized specifically with regards to work. There are-still much to learn. Learning-process incorporate understanding occupation necessity and finishing assignment given on time. One of the target for the Industrial Training is to apply the information that was picked up and learned all through the examinations in UiTM in future working life.

3.2.1 Understanding Job Requirement (SKALA)

Since first day of attachment at JKR Terengganu as a trainee, student able to acquired variety knowledge not restricted only to Civil and Structural, but other field as well. During industrial training in JKR Terengganu, student was assigned to CPAB department which responsible in monitoring all projects. SKALA is being used by JKR to monitor project progress. Student had a difficulty to complete the given task because of the steps and term that being used. To overcome the problems, student had attend consult with the engineer face to face besides the self learning.

3.2.2 Complete The Task Given

During completing and update the progress report in SKALA, not all the project were completely update by the engineer in the SKALA. If the projects progress did not updated, student will not be able to prepare the actual progress to be present in monitoring meeting. So, as to overcome this problem, student had to called out the engineer during the site meeting. If the engineer did not responde quickly, student had to monitor the project himself and consult with the contractor.

3.3 Experience Gained

Involving in site meeting also good opportunity to author as student can know the progression of the project within that month and the real risk that may happen at site because Safety and Health Officer will be presenting Occupational Safety and Health Report. Issues from clients and communities will be arise from time to time to act. Furthermore, contractor will be presenting problems that encountered during construction work to be discussed and resolved immediately. This will make sure that the project will be run well and smoothly. Also, the flow of the project also can be clearly seen by the student besides learning new terms that being used in engineering field.

3.3 Conclusion

Overall, there are many things that student able to learn and experienced in a short period of time. Student could see clearly how the project starts and end .Being able to experience a working life really helps student in knowing the scope of work for civil engineers.

CHAPTER 4: CONCLUSION

4.1 Introduction

This chapter explains the overall assessment of the organization by the student. This covers the overall view of the Organization, hope, recommendations and information on the organization and also the knowledges and skills gained. This overall view gives students the opportunity to better identify the entire internal and external organizations. Through this assessment, students will be able to assist the organisation by providing creative recommendations and ideas so that the organisation can improve the quality of its employees and to increase the level of excellence in its standing organization.

4.2 Lesson Learned

Many of the lesson and skills I had earned during the 8 weeks for industrial training at CPAB and Corporate Management Department at JKR Terengganu. I have been exposed to real working life to directly increase my discipline in adapting to each organization's rules. In addition, I can add and broaden technical knowledge and skills when given the opportunity to do their own work-to-work by the organisation thus increasing their interest in the field. In addition, through the assignments given, I can cultivate teamwork, trust, responsibility, hardworking and self-confidence.

4.3 Knowledge Gained

During 8 weeks of internship, there are so many knowledge and input that I had gained from the organization. I learn a lot about SKALA JKR that being used by all the JKR in Malaysia. The control and report system (SKALA) used by Jabatan Kerja Raya (JKR) officials is a highly systematic and structured system to store data and all information on project reports. In addition, the system used is safe to be kept and used from being compromised by external parties.

I also learn how the project get handled and engagement between all department and units in order to complete the projects. Quantity surveyor, Building department, Mechanical and Electrical units and also road department need to work together by following the flow of the order of the project.

I can also find out and be familiar with safety regulations in the industry by participating in site visits. The exposure gained throughout the industry training has trained my thoughts to become more mature.

4.4 Suitability Of Organization

JKR is a technical organization recognized by the government especially for planning, design, construction, maintenance management infrastructure projects and technical advisory services to the Government. Therefore, the ability and expertise of our staff at all levels and departments, of the implementing and management.

The Jabatan Kerja Raya (JKR) is responsible for realizing the government's aspiration to improve the quality of infrastructure and public infrastructure facilities such as roads, buildings and bridges. JKR Terengganu is a department under the administration of the Terengganu State Government responsible for projects for the State and Federal Government. It is a department that provides technical expertise to the State Government and other government agencies.

The organization is very suitable for the engineering students to undergo their internship during study. Not only for civil engineering students only but all the engineering field such as mechanical, electrical and chemistry engineering.

The environment of working for the internship student also very real just like the permanent staff. I had experienced both site and office working surrounding and it really help me to adapt the real working style as engineer.

4.5 Limitations and recommendations

Being a part CPAB and Corporate management department exposed to student how team work and communication is an important essence in real working environment. Taking parts in site meeting and discussion every month had indirectly assists student in acquire new knowledge and experiences other than scope of study. Whilst all the staffs are warm welcoming to share their knowledge, skills, and experiences. It also an excellent opportunity for author in applying and relate it during learning progress.

However, the organization seems not too sure about the role and task that should be given to student. Due to that, proper training module for trainee which its content covers all basic details of lesson to be learnt is also one of a great recommendation to be taken by JKR Terengganu. Student really hope that JKR Terengganu need to improve on implementation of Occupational Safety and Health practice among employees.

Then, the placement of two employees, namely senior and junior in each division need to be implemented so that the knowledge transfer process can be done between them. Senior workers with many experiences can teach employees – new workers to carry out important work to be done in each section.

In a nut shell, as JKR Terengganu provide a good platform for information and engineering knowledge, it is benefits students to equip themselves the skills to apply it. The lesson learned, working environment exposed and experiences gained are also good essences to be in JKR Terengganu and as a student, it is a perfect learning experience that should be continue from time to time.

REFERENCES

- Advisers, M. L., (2012). Occupational Safety and Health Act and Regulations (20th ed). Kuala Lumpur: MDC Publishers Sdn. Bhd.
- 2. Advisers, M. L., (2012). Factories and Machinery Act and Regulations (7th ed). Kuala Lumpur: MDC Publisher Sdn. Bhd.
- 3. Jabatan Kerja Raya Malaysia. (n.d.). Retrieved March 23, 2018, from https://www.jkr.gov.my/
- 4. Jabatan Kerja Raya Terengganu. (n.d.). Retrieved March 23, 2018 from http://www.jkr.terengganu.gov.my/v2/
- SKALA-SPK
 Skala.jkr.gov.my/main.php

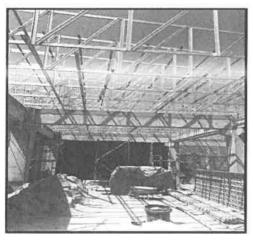
APPENDICES



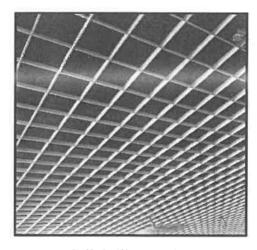
Ground Slab Formwork



Fire Fighting Installation



Trusses Work



Cell Ceiling Design