UNIVERSITI TEKNOLOGI MARA

DEPARTMENT OF BUILDING

FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING

UNIVERSITI TEKNOLOGI MARA

(PERAK)

FEBRUARY 2022

FINISHES WORK AT WATER FEATURES ROUNDABOUT

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It is recommended that the report of this practical training provided

By

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be accepted in partial fulfillment of requirement has for obtaining Diploma in Building.

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JANUARY 2022

STUDENT'S DECLARATION

I hereby declare that the practical report entitled "Finishes work at Water Features Roundabout" is a record of an original work done by me under the supervision of Mr. Amir bin Adam, prepared during practical session from 23rd August 2021 until 7th January 2022 and this practical report is submitted in partial fulfilment of the requirements for BGN310 and recognised as a partial fulfilment of the Diploma in Building criteria.

…….

Name : Muhammad Nur Aiman Hakimi Bin Mohd Hanafiah

UiTM ID No : 2019296988

Date : 10/01/2022

ACKNOWLEDGEMENT

First and foremost, thank to Allah s.w.t for providing me with the strength, patience, and determination to complete this report and industrial practical training in this semester, despite the fact that the Covid-19 pandemic is still raging in our country, wreaking havoc on people's health, the construction industry, and education. A special thanks to my supervisor at Gabungan Strategik Berhad, En. Amir Bin Adam, who served as a infrastructure person in charge for the company, and provided me with guidance while on site. A big thanks to Pn. Nurul Syifa Binti Awaluddin, En. Hazahar Bin Mohd Saudi, Pn. Sakinaton Kamilah Binti Azmi, Pn Siti Nur Robiatun Adayiah Binti Shaikh Abdullah for allowing me to complete my internship at Gabungan Strategik Berhad and for providing me with a wealth of fresh construction expertise and experience.

Apart from that, I'd want to show my gratitude and appreciation to Pn Siti Nur Robiatun Adayiah Binti Shaikh Abdullah for providing me with direction and cooperation at the office throughout my internship, as well as for assisting me in providing the knowledge that required to complete the tasks and assignments assigned to me. After that, I'd want to use this occasion to express my gratitude to all of the workers and labourers at Gabungan Strategik Berhad for accepting me to perform an internship and providing me with great positive vibe and new knowledge during my internship.

Last but not least, not forget also to thankyou to Sir Wan Akmal, my supervising lecturer, for providing me and my friends with assistance and tips throughout my internship, as well as information for the assignments that were assigned to us. A big shoutout to my friends for assisting me in any way they could with any issues that arose throughout my internship.

ABSTRACT

Industrial training give many benefits for the students to gain working experience. The students will be given 20 weeks to complete their industrial training during semester 5 diploma in building. I had be choosen to do my industrial training at Gabungan Strategik Berhad and will be supervised by landscape supervisor, Encik Amir bin Adam and Puan Syifa Binti Awaluddin. Observation and supervision of workers are the ways utilised to accomplish this. This is done when the employees are at work. Reviewing documents and interviewing supervisors and subcontractors are also methods for completing the report's goal. Finally, there are different types of finishes at water features roundabout, each with its own purpose and function in completing the landscape in Pusat Pentadbiran Sultan Ahmad Shah.

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CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

For diploma's student in Building course should take part and involved in industrial practical training during semester 5. It will give the students to gain more knowledge and experiences in real situation at construction industry as Builders before graduate. Landscape design, often known as landscape architecture or landscaping, is the process of arranging and changing aspects in a landscape, city, or garden. It entails the creation of urban and rural landscapes through the planning, design, and management of open spaces.

Landscape design can be used in a wide range of projects.For example, parks and green areas to gardens, sports facilities, and big estates including housing developments, business parks, universities, and hospital complexes. It could be used to regenerate or enhance places like brownfields or contaminated sites, as well as as part of a biodiversity offsetting scheme to assist balance habitat loss caused by new construction.

The goal of this report is to identify the finishes used in Landscape for Project Pembangunan Pusat Sultan Ahmad Shah, as well as the different types of finishes employed for the landscape. The method and kinds utilised change depending on the type of construction. There are two types of landscape such as softscape and hardscape that applied in this project, but I'd like to concentrate more to hardscape on roundabout at this project such as water features on roundabout.

A water feature is one or more elements from a variety of fountains, pools, ponds, rills, artificial waterfalls, and streams used in landscape architecture and garden design. So at PPSAS, they applied water fountain for the water features on roundabout. I made this decision to choose finishes at water feature roundabout because none of this had been completed when I arrived for my internship. During my 6 months of practical training, I saw and learned a lot during my inspections and observations.

1.2 Objective

i) To investigate the installation/application of finishes landscape in water feature roundabout

ii) To investigate the advantages of finishes for water features roundabout

iii) To determine the problems occurred and solutions taken to solve the problems

1.3 Scope of study

The scope of study is conducted at Project Pembangunan Pusat Sultan Ahmad Shah. The purpose for the report is to identify the finishes used in Landscape for Project Pembangunan Pusat Sultan Ahmad Shah's roundabout, as well as the different types of finishes employed for the landscape. The method and kinds utilised change depending on the type of construction. In terms of the construction project for which the author did internship, the PPSAS project was to create an office for government employees or SUK Pahang, which is located in Kota Sas Kuantan, Pahang. Machineries and materials was complete in this site and will be used by the subcontractor to start the work following engineering and architecture plan.

1.4 Method of study

i) Interview session

Asking questions and conducting interviews with people who have a lot of expertise in charge of completing that activity is one of the finest ways to obtain knowledge and data. There is no need to prepare a list or a form for this type of interview because it is simple and spontaneous. Depending on what we want to know, questions can be posed throughout the activity or during any work. We can ask various of questions to our supervisors, which for myself is En Amir Bin Adam and Puan Nurul Syifa Binti Awaluddin. Through their responses, they had assisted me in gaining a great deal of knowledge.

ii) Observation

Observation is advantageous since it allows us to monitor and watch the strategies used by employees and workers to complete jobs. The supervisor or staff taught me and took me to places where work was still being done. Because the deadline is so short, supervisors are particularly tight in pressuring subcontractor to complete their works, which puts a lot of strain on all employees and supervisors. Daily inspections from consultant and main contractor are required to monitor the progress of each project.

iii) Document reviews

Drawings and plans from the company are required to determine the position of the work for building, mechanical and electrical systems, and infrastructure. The work from subcontractors must based on drawing and plan that had given by consultant and main contractor. It is important to all workers to understand the drawing and plan so they will follow the specs that had given by JKR.

CHAPTER 2.0

COMPANY BACKGROUND

2.1 Introduction of Company

Gabungan Strategik Sdn Bhd (GSSB) was incooperated on 1st September 1999. In 2010, Gabungan Strategik Sdn Bhd, Motibina Sdn Bhd, Pembinaan Megah Ikhlas and AQRS The Building Company Sdn Bhd merged and in July 2012, become a public listed company on Bursa Malaysia and is presently known as Gabungan AQRS Bhd.

Gabungan AQRS nhd (GAQRS) is set to enter the construction industry on a massive scale as it faces globalization and the competitive challenges of the 21st century. Heading the Governments call of encouraging Strategic Partnership or Smart Partnership. Gabungan Strategik Sdn Bhd has been successful in combining technical expertise and professionalism in its equity holding and management. This is to ensure its participation in the construction industry produces individuals with vast experience whilst giving their best performance.

Apart from its professional management and technical expertise, The company also practices a work culture that emphasizes on quality in the delivery of all projects,, be it government or private projects, Coupled with the spirit and determination to be a successful 21st century contractor, They are confident that Gabungan Strategik Sdn Bhd will eventually emerge as a company that the country and people proud of.

Kreatif Sinar Gabungan Sdn Bhd (hereinafter called KSGSB) has been appointed as developer as well as a main contractor for “Projek Pembinaan Pusat Pentadbiran Sultan Ahmad Shah (PPSAS”). KSGSB was registered with Pusat Khidmat Kontraktor (PKK) Class ‘A’ and Construction Industry Development Board (CIDB) Grade ‘G7”. The Company has also been applied with ISO 9001:2008 Quality Management System under the scope of “Provision of Services in Buildings and Civil Engineering Works”.

Since involved in the construction industry, the Company has successfully completed engineering works, road and bridges, earthworks, house and residential buildings, commercial buildings, schools, factories and landscaping works valued more than hundreds millions. Based on its experiences, the Company has taken initiatives in combining professionals and skilled employees to develop a strong organization in facing future challenges.

2.2 Company profile

Company's name	: Gabungan Strategik Sdn Berhad
Director	: Dato Azizan Jaafar
Established	: 1st September 1999
Company Address	: Gabungan AQRS Berhad (201001028608) (912527-A) G-58, Block G, Jalan teknologi 3/9,Bistari 'De' Kota, Kota Damansara, PJU5, 47810 Petaling Jaya, Selangor
Tel No	60361418181
Email	: enquiries@gbg.com.my

Corporate Logo

Figure 2.2.1 Company logo

i) Vision

Gabungan AQRS Berhad ("**GBG**") is moving forward to be one of the leading construction companies with the expertise in the construction of infrastructures and purpose-built buildings. We would continue to refine our expertise and grow, in line with the country's infrastructure development, which continues to be enhanced as the country moves to be a fully-developed nation.

ii) Mission

- Instilling a professional organisation culture with employees that are highly committed, rightly experienced and efficient; formulas for us to deliver quality projects to our clients

- Ensuring that we would be able to attract top industry talents, leading to a high quality client base, whilst creating value to our stakeholders and shareholders

2.3 Company Organisation Chart

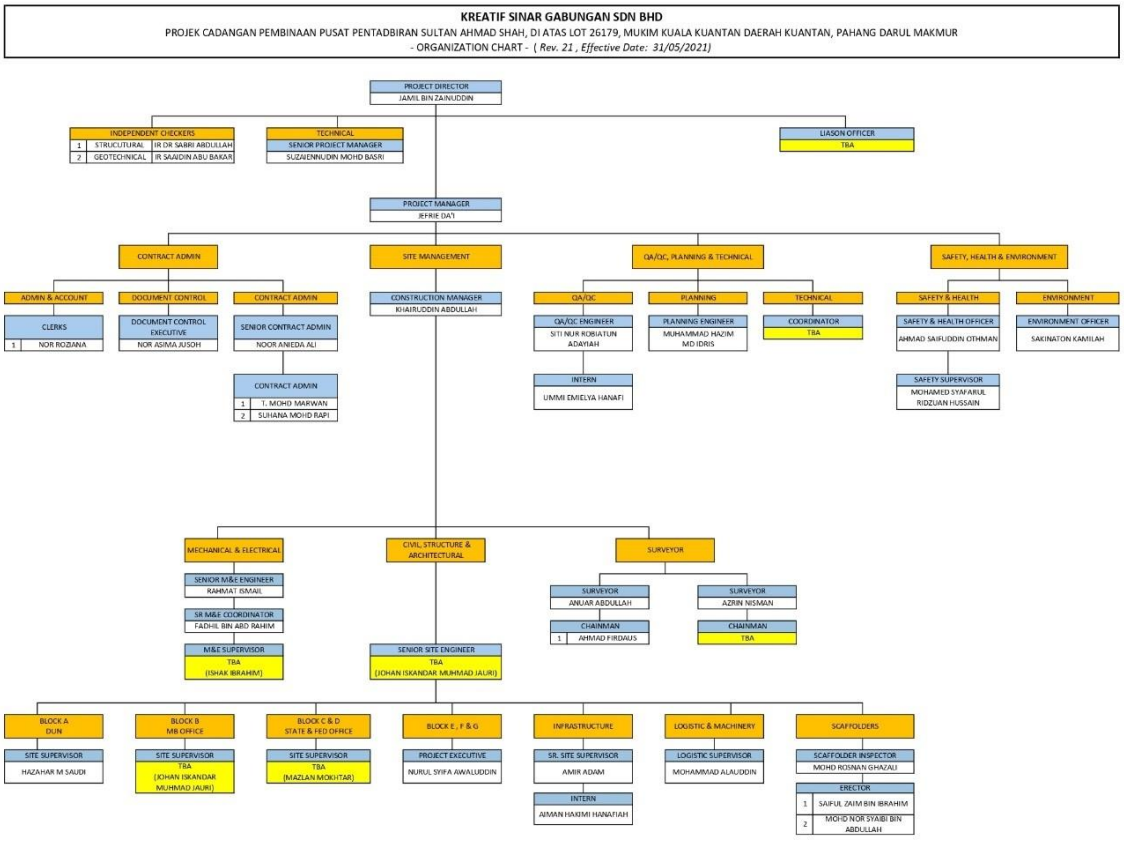

Figure 2.3.1 Company organisation chart

2.4 List of Project

2.4.1 Complete Projects

No.	Project Title	Project Value (RM)	Start Date	Completi-on Date	Project Duration	Client
1.	Klang Valley Mass Rapid Transit (KVMRT) Package V1	RM303,437,279.17	19 September 2012	29 Septembe r 2016	4 years 10 days	MMC gamuda (KVMRT) PDP Sdn Bhd
2.	Tropicana Metropark Pandora	RM172,990,539.32	28 November 2013	30 December 2016	3 Years 1 month 2 days	Tropicana Corporation Bhd
3.	Permas Centro, 3-Storey Shop Lots	RM 51,000.00	15 July 2013	15 October 2014	1 Years 3 month	Crystal Aspects Sdn Bhd
4.	Petronas Basecampt at Sipitang	Rm 51,000.00	28 November 2013	30 December 2016	3 years 1 month 2 days	Petronas Chemicals Fertiliser Sabah Sdn Bhd
5.	Klang Valley Mass Rapid Transit (KVMRT) Carpark	RM 21,011,263.62	29 July 2013	30 November 2015	2 years 4 month 1 days	MMC gamuda (KVMRT) PDP Sdn Bhd

Table 2.4.1.1 Complete Projects by Gabungan Strategik Sdn Berhad

No.	Project Title	Project Value (RM)	Start Date	Completi-on Date	Project Duration	Client
6.	Upgrading Of Jalan Rantau- Sg Gandut	RM 141,000,000.00	30 July 2012	29 December 2014	2 years 4month 29 days	JKR
7.	SMK Sri Puncak Jalil	RM 40,500,000.00	13 September 2011	30 September 2015	4 years 17 days	Ministry of Education Malaysia
8.	Bukit Tengah Depot For PLBKE	RM 29,200,000.00	5 April 2011	28 April 2014	2 years 23 days	MMC gamuda JV Sdn Bhd
9.	IBS Construction for 9 Schools at KL,Perak,Kedah	RM 50,680,458.48	29 April 2011	16 December 2014	3 years 7 month 16 days	Ministry of Education Malaysia
10.	Reconstruction Of Police Training Centre (PULAPOL)	RM 70,669,751.07	7 April 2011	31 December 2012	1 years 7 month 24 days	Pembinaan BLT Sdn Bhd
11.	Kem Pasifik For Military Army Forces	RM 32,925,483.16	20 April 2005	31 December 2007	2 years 7 month 11 days	Usahasama SPNB-LTAT Sdn Bhd

Table 2.4.1.2 Complete Projects by Gabungan Strategik Sdn Berhad

2.4.2 Projects in Progress

No.	Project Title	Project Value (RM)	Start Date	Completi-on Date	Project Duration	Client
1.	Sungai Besi-Ulu Kelang Elevated Expressway	RM692,391,399.89	29 August 2016	N/A	N/A	Tumpike Synergy Sdn Bhd
2.	Klang Valley Light Rail Transit (KVLRT-3)	RM 709,800,000	5 October 2017	N/A	N/A	MRCB George Kent Sdn Bhd
3.	Pusat Pentadbiran Sultan Ahmad Shah (PPSAS)	RM 360,978,545.00	27 December 2016	N/A	N/A	Pahang State JKR
4.	The Peak 41-Storey Apartment	RM 257,580,817.80	3 September	N/A	N/A	Gabungan AQRS Berhad
5.	Sungai Besi-Ulu Kelang SUKE Plaza Toll	RM60,220,869,97	25 June 2018	N/A	N/A	Tumpike Synergy Sdn Bhd
6.	18-Storey E'island Lake Haven	RM250,000,000.00	December 2019	N/A	N/A	Gabungan AQRS Berhad

Table 2.4.2.1 Projects in Progress by Gabungan Strategik Sdn Berhad

CHAPTER 3.0

FINISHES WORK AT WATER FEATURE ROUNDABOUT

3.1 INTRODUCTION TO CASE STUDY

A case study is a research approach that entails a close, in-depth, and extensive examination of a study subject and its surrounding context. They can be made as a result of a research process. A case study aids in the comprehension of a difficult problem or object. Through past research, it might broaden experience or contribute to existing knowledge. Their contextual analysis focuses on a small set of events or conditions and their relationships. The case study has been used by students for many years and in a variety of areas. It has been widely employed in the social sciences as a qualitative research approach to explore current real-life circumstances, and it has served as a foundation for the application of concepts and procedures.

The case study report is about the Pusat Pentadbiran Sultan Ahmad Shah (PPSAS), which is currently under construction. Cadangan Pembangunan Pusat Pentadbiran Sultan Ahmad Shah in Kota SAS is the name of the project. The project was have 7 block which is block A, block B, block C, block D, block E, block F which is office for the people who work under government and SUK in Pahang and block G for the guard house. Outsite the building also have like outdoor gym, bicycle track, Public Parking, Pond, Public toilet, water feature roundabout and so many infrastructure work that ongoing in the project. JKR Pahang is the project's owner, and the client is SUK in Pahang. Kreatif Sinaran Gabungan Sdn Bhd is the project's contractor. The contract value is RM 360,978,545.00. The project began on 27 December 2016, and was expected to end on 2021, approximately five years later. Unfortunately, due to management and contractor challenges, the project has received four extensions of time (EOT), extending the project's lifespan until May 2022. Other partners involved in this project include Pengarah Kerja Raya Negeri Pahang(JKR) as superintendent officer, include the main contractor and the consultant lead by GDP Architects, as illustrated in Figure 3.1. On the signboard, every company involved in the project will be listed.

Figure 3.1.1 Project Signboard

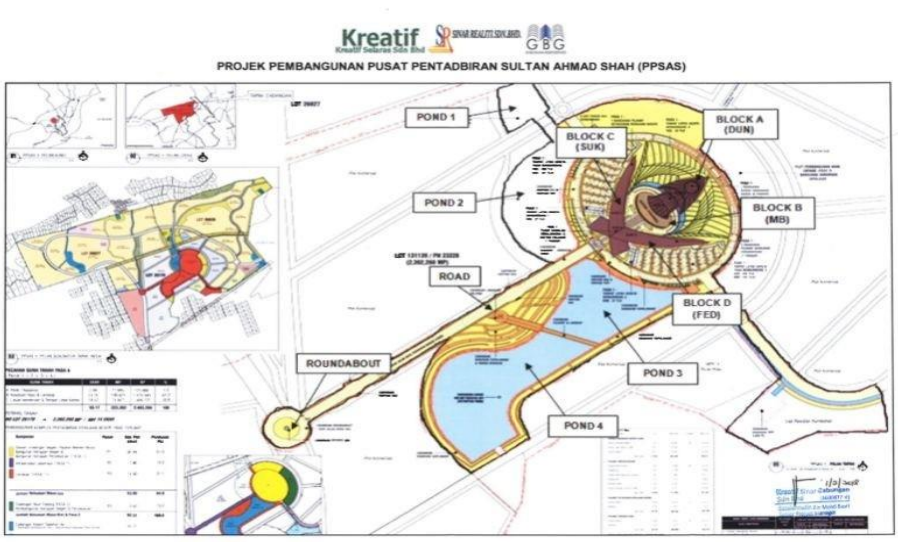

Figure 3.1.2 Site Layout Plan

The focus of my research is on landscape work which is water features roundabout that has mostly been completed, such as concrete, waterproofing work, and plastering work. So this is front view of PPSAS building in figure 3.1.3 and In figure 3.1.4 is a perspective for water feature roundabout.

3.1.3 Front view of building

3.1.4 Perspective water feature roundabout

3.2 Subtopic (Based on Objective 1)

3.2.1 Plastering

- Surface Preparations

- For direct application of plaster, clean the surface and remove any dust, contaminated materials on plaster bases and substrates, as well as loose material and substances that may obstruct the process. Form ties and other obstructions must be removed or trimmed down to the solid base's surface.
- Cover joints with 200mm wide galvanised steel lathing as specified and approved, fixed with corrosion resistant fasteners at not more than 600mm centres along both edges, apply mesh over electro-mechanical embedded conduits where rendering is to be continued without break across joints between dissimilar solid backgrounds in the same plane.
- Apply a thick splash coat to concrete and concrete masonry surfaces that are intended for direct plastering. Dash coat covers the entire surface to be plastered and creates a rough surface with sharp protrusions ranging from 3.0mm to 5.0mm. Mix of Dash-Coat: 2 parts Portland cement, 3 parts fine sand, 1 part bonding agent, 3 parts clean water, combined to a mushy-paste consistency, must be left untroweled, undisturbed, and damp cured for at least 24 hours after application and before plastering.
- To ensure correct rodding of plaster to true surfaces, install interim grounds and screeds. Check each corner for straightness and grout to keep the external corner beads in place while the inside position is secured with corrosion-resistant screws.
- Before starting plasteringwork, dampen the areas that will be plastered with clean water by spraying them with water.

- Application of plastering

- All plaster must be mixed 1:5 (1 part cement, 5 parts sand) in a mechanical mixer with enough water to achieve a workable consistency. Mix the fibre 0.6 kg/m3 of the mortar or plaster with some water first (30 percent). After all of the materials, including the remaining mixing water, have been added, the plaster should be stirred for a few minutes further to ensure uniform fibre dispersion. Plaster that has not been used within 1.5 hours after the start of the mixing process should be destroyed.
- The second coat must be applied with enough material and pressure to ensure that the dash coat is completely covered.
- With a rod or straightedge, bring the surface of the second layer to a true, even plane, filling surface flaws in place with plaster.
- The applied plaster should be smoothed out as much as possible

Figure 3.2.1.1 Plastering Works by workers

3.2.2 Method Installation for Water proofing

At water feature roundabout they used waterproofing so that it will not be leaking. The type of waterproofing that was used was Formdex Uniflex. Formdex Uniflex is a cementious, two component, Polymer modified, flexible waterproofing and protective membrane which is fully compatible with all masonry structures, it seamless, liquid applied, efflorescence free and can be applied in both horizontal and vertical surfaces.

- Surface preparation

- All new concrete shall be cured for a minimum of 14 days, whereas newly plasterd brickwall shall be cured for a minimum of 7 days before Formdex Uniflex waterproofing can be applied
- All surfaces to be waterproofed by Formdex Uniflex system shall be cleaned using suitable means to remove dirt, grease, moss, moulds, etc. Where necessary, detergent shall be used to remove stains and similar. A suitable fungicide solution shall be used to remove algae/fungus.
- Cracks – hairlaine and fine cracks can be ignored as Formdex Uniflex can easily bridge these cracks
- Other cracks that are subjected to minimal movement shall be raked out where necessary.These cracks shall be repaired with suitable non shrink mortar by main Contractor.
- Where cracks are found to be structural, a structural consultant or engineer shall be consulted and the structure assessed.

Figure 3.2.2.1 Surface preparation

- Formdex Uniflex System Application

- Priming (Not required)
- Mixing – Material must be thoroughly mixed in correct proportions. By volume, the ratio is 3 part of powder and 2 parts of liquid. By weight, The ration is also 3 parts of powder to 2 parts of liquid. Measure out the materials into suitable container, adding powder to liquid and thoroughly mix at low speed with a mechanical mixer for at least three minutes. Mixed material has a pot life of 60 minutes.

- Application

- Apply by brush 1 coat of Formdex Uniflex @ 1.0kg/m2 directly onto r.c. slab and turning up 300 high onto existing water feature roundabout and 1800 mm high on new erected wall.
- Whilst Formdex Uniflex is still wet, pat in 200mm girth fibreglass mat reinforcement at floor/wall joint. Immediately apply second coat ensuring fibreglass is fully embedded
- Likewise at all floor trap areas apply 1 coat Formdex Uniflex @1.0kg/m2 directly onto floor slab surrounding pipe outlets, Turning down 50 mm into pipe sleeve. Whilst Formdex Uniflex is still wet, pat in fibreglass mat reinforcement at circumference joint between pipe sleeve and concrete slab. Immediately apply second coat Formdex Uniflex ensuringfibreglass mat is fully embedded
- Proceed to apply first coat of Formdex Uniflex @1.0kg/m2 to entire floor slab. Leave until it dry and apply second coat by repeating the same process at 1st.

Figure 3.2.2.2 Installation waterproofing Formdex Uniflex Application

- Ponding test

- Block up all pipe openings and fill the area to be ponded with average 25mm high of water
- Leave minimum of 24 hours and then check soffit of the slabs for any signs of leakage.
- If leaks are observed, drain off water and make good defects and repeat ponding test until no leaks are observed
- Once the treated areas has passed the ponding test, protective screed shall be laid over the waterproofing.

Figure 3.2.2.3Ponding test

3.3 Subtopic (Based on Objective 2)

3.3.1 Advantage for plastering work

There so many benefits if do the plastering works. Firstly, plastering gives existing drywall a strong and long-lasting finish. When water escapes from the cement mixture, a chemical reaction happens. This reaction increases the bond, which contributes to the strength of the plastered walls. Other than that, its hard to produce surface cracking, resulting in a flawless finish. After that, Plastering is pollution-free, and even when exposed for lengthy periods of time, it produces less dust on its surface. Plastering also has a decorative quality to it. It gives walls a consistent and uniform finish, allowing the builder to experiment with different designs and textures. Futhermore, Plastering is a simple and rapid procedure that allows any restoration project to be completed on time. When it comes to installation, plaster is far cleaner. Drywall must be cut to fit the specific shape of the area, and the material produces a fine dust that settles and is difficult to clean. Plaster is put wet over “blueboard” and then cures in place. There is no dust and no mess as a result of this. It does not require sanding after installation, as drywall does, reducing dust and mess.

Figure 3.3.1.1 Example photo of plastering

3.3.2 Advantage for install Waterproofing

There are also many advantage for installing waterproofing in many structure. Concrete waterproofing is an important aspect of construction, particularly for high-rise structures. In fact, proper waterproofing coating is partially responsible for the structure's soundness. The building is vulnerable to water damage if done incorrectly, posing a risk to the property as well as the health and safety of everyone inside. Proper waterproofing solutions will help to avoid potential hazards and prevent water damage to your property. Waterproofing the balcony or roof is required across Sydney. Allowing water damage to remain can be costly and dangerous, especially in houses or companies with many levels and residents. Firstly, waterproofing can strengthens the structure because it can extends the life of your structure by reducing the number of points where water and moisture can enter via the ceiling, walls, and floor. The structure can avoid damage such as rust, rotting, corrosion, and degeneration if these sections are effectively protected from water penetration. Next, waterproofing is important not only for structural integrity but also for health reasons. Fungus or mould grows as a result of moisture build-up in the ceiling and walls. Allergies, asthma, and a compromised immune system are all possible side effects of these microorganisms. Critical issues can occur if they are not addressed or prevented. Futhermore, waterproofing will provides a healthy environment. Waterproofing systems aid in the creation of a clean living and working environment. It protects both the property and the people who live there. Water is necessary for life, but its presence in places where it should not be can be harmful. A building that is prone to water damage is also prone to other flaws, and one mishap might have long-term consequences.

3.4 Subtopic (Based on objective 3)

3.4.1 To determine the problems occurred and solutions taken to solve the problems for Plastering

For the last objective for this report is the trainee must determine the problems occurred and find a way to take a solutions for the problems. Plaster is a common building material used all over the world. It's simple to work with, and it's also simple to fix. However, the plaster will eventually start to exhibit symptoms of wear and tear or other problems.

One of the problems for plastering is the plastered surface can be blistering. Blistering is the bulging of small spots of plaster beyond the plastered surface caused by late slaking (adding water to lime) of lime particles in the plaster. The most common source of this flaw is uneven plaster mixing. This problems can be avoided by ensuring that the cement and the components required to make plaster are mixed properly.

Secondly, plaster de-bonding. When a plaster is detached from the wall, it is called de-bonding. It might be owing to a dusty, oily or dry substrate, or it could be due to an excessively thick plaster layer, insufficient substrate preparation, or a dusty, oily, or dry substrate. The solutions for this problems is when During the plastering process, we must keep the following factors in mind to avoid de-bonding of the plaster. Before plastering, clean the substrate of dust and oil.Allow the substrate to dry to the proper moisture level. If necessary, a bonding chemical should be used.

Thirdly, Cracks on plaster surface. The crack is one of the most prevalent problems you'll come into in plastering. Cracks in the plastered surface can take a variety of shapes. Such as, crazing is a spider web like network of small cracks. They're usually extremely small and don't go all the way through the plaster. It occurs when there is an excess of fine content in the sand or when the plaster is placed to a dry base, when the base absorbs water and particles collect on the surface, crazing occurs. Separation crack also usually appears at the intersection of two distinct materials, such as at the intersection of RCC and brickwork. It happens as a result of differential thermal movement.

Figure 3.4.1.1 Example of crazing(spiderweb) and cracks at rest pod at site

To solve this problems is ensure optimal workability in terms of handling and application, ensure that water is added to mortar by a skilled mason rather than by inexperienced labour. It can be avoided by properly curing the plaster and allowing it to dry slowly. Cracks can be avoided by paying attention to workers and material quality issues.

Last but not least, for the problems that always happened when do the plastering works is Efflorescence on plastered surface When a freshly built wall dries out, the soluble salts rise to the surface and take the shape of a whitish crystalline substance. This is referred to as efflorescence. When soluble salts are present in plaster-making materials as well as building materials such as bricks, sand, and cement, efflorescence develops on the surface. Soluble salts may be present in the water used in building. It has a negative impact on paint adhesion to the wall surface and generates additional issues. So the solutions for the problems is all used materials in wall construction should be salt-free.Assuring that the surface is clear of dampness.

3.4.2 To determine the problems occurred and solutions taken to solve the problems for waterproofing works

Waterproofing works also have their big problems. Waterproofing is an important part of a building's protection and value preservation. Waterproofing failure can result in cracks, mould, and structural flaws such as concrete tumours. Waterproofing failure can result in safety hazards, a considerable decrease in the value, and unfitness for habitation. Fortunately, if they detect waterproofing problems sooner rather than later, it can fix them.

One of the problems when do the waterproofing works is poor waterproofing works. Waterproofing failure caused by poor workmanship, particularly faulty installation methodology, can result in leakage difficulties. When waterproofing difficult areas, professional help is required. Poor workmanship also includes incorrect product specifications when the incorrect product is utilised, as well as insufficient substrate preparation prior to the application of the waterproofing membrane. The solutions for the problems is to deal with waterproofing professionals, they will give the best chance of getting a fantastic remedial-waterproofing result. Instead of attempting to remedy the problem, hire a professional waterproofing firm to examine the property and perform the necessary repairs. Waterproofing professionals can help to choose the best products for the job and apply the waterproofing membrane correctly.

Other than that, lack of maintanence for waterproofing also givebig impact and easy to get the problems. Ongoing maintenance, such as checkups and remedial waterproofing, allows you to discover problems early and avoid serious problems like concrete cancer. Even minor leaks and cracks should be addressed immediately, since water damage can quickly worsen, causing serious issues.

CHAPTER 4.0

CONCLUSION

In conclusion, I have gained a lot of knowledge and more experiences regarding the construction industry as a result of my course studies and additional knowledge gained during my internship at Gabungan Sdn Bhd. I believe I am now in a position to apply and improve the talents I have acquired during my undergraduate education. During my internship, I was exposed to the reality of the construction works and became a part of it because of my industrial training. According to my observations, faults and subsequent failures must be deal with great specifications in order to excel in the project's construction work and paperwork. This is necessary in order to avoid having to repeat the process. Finishing work on the job site is almost identical to the theory taught in lectures. However, there are also instances where people adapt to the situation and complete the work in their own unique method. It is more accurate than lectures because we can see what they are doing and it is clearer in the eyes of the beholder when they see the process in front of them. For example, waterproofing works needs to be completed, and I need to watch the employeesand supervise them. Therefore I'll note down the ways while they work. Finally, the investigation's influence is to find all of the different sorts of finishes, methods, and purposes that can ensure that future finishing work and progress in the building construction industries meet the highest standards.

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