UNIVERSITI TEKNOLOGI MARA

ECS 356 CIVIL ENGINEERING DESIGN PROJECT

CADANGAN MEMBINA RUMAH BANGLO 2 TINGKAT DI LOT 10, JALAN PADI MAHSURI 2/6, BANDAR BARUNUDA, 81200, JOHOR BAHRU.

> CADANGAN PEMBINAAN PAIP GANTRI DI KAWASAN SUNGAI MERSING, MERSING, JOHOR.

DE' GLOBE CONSULT

DIPLOMA MARCH 2017

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1.0 ACKNOWLEDGEMENT

Praise to Allah SWT for his blessings, finally we have completed our Final Year Project report for reinforced concrete and steel design. First and foremost, we would like to express our gratitude to Sir Mohd Firdaus bin Mohd Akhbar who acts as my lecturer that have deliver and taught us many things regarding to the process for this design project.

We would also precise my appreciation to Sir Syed Muhammad bin Syed Yahya who is my studio lecturer. He have been guide and support us during our design progress by giving us useful knowledge and correcting out all the errors so that our works will give out an excellent result. Not to forget to other lecturers who made this all possible by teaching us from the basic of civil engineering to the advance knowledge of this course. We are thankful for that because without any knowledge given to us earlier, we will not be able to do anything due to the lack of information about how civil engineering works.

We would also like to thank the Faculty of Civil Engineering of Universiti Teknologi Mara (UiTM) Kampus Pasir Gudang for giving us opportunities for us to apply our knowledge, skills and values for this project. Indeed, this is golden opportunity to most students as they will be exposed to the real working environment, also gain knowledge and experiences.

Nevertheless, we also wish to thank our parents and family for give us their supports in order to help us out on completing our design project especially when it comes to financial support and keep on praying on our success. Also to our fellow friends who have been giving us their support and are helping together in order to complete our design project.

As a conclusion, this report may not be able to finish if all of them are not there or if we had not received any help from them as we are completing our assessment. There are lot of things that we have learned here and it is very useful for us to be an innovative civil engineer in the future.

2.0 INTRODUCTION

DE' GLOBE CONSULT is an engineering company that is specialise in civil and structure consultancy. The name of our company represent our objective which is to be known throughout the globe as the consultant engineering company that provide the best service and consultancy throughout the years. Our company is located at No 89, Jalan Sutera Tanjung 8/3, Taman Sutera Utama, 81300 Johor Bahru, Johor.

De' Globe Consult was established and incorporated in Malaysia by our founder, Ahmad Amsyar bin Aizulkamal who is also a General Manager follows by Muhammad Faizan bin Razali (Manager), Noor Aisyah binti Hassim (Senior Engineer), Nur Shazlina binti Md Zain (Consultant) and Nurul Afriena binti Azmi Murad (Civil & Structure Engineer). This company is mainly for bumiputera. However, our company are still open for non bumiputera. This company provides a very good customer consultancy as our priority. We will also consider the time, cost and quality of our product and excellence engineering and construction solution exceeding our clients expectations.

In this project, we designed reinforced concrete structure and steel structure which is commonly used in construction in Malaysia. A bungalow is designed as our reinforced concrete structure while steel structure for pipeline system. Code practices that we used to refer to design this project are Eurocode 2: Design of Concrete Structure, Eurocode 3: Design of Steel Structure and other references shown in the appendices.

It was a newly company that was develop and starting to create our company's name widely by experience of our key management, professional and all level of our staff. The wide knowledge of our company's member also be the reason of our client to give a trust on us and choose our services.

De' Globe Consult are expert in design of structural element. In order to achieve the clients' needs we will always make sure that our staff must fulfil the criteria of being able to use AutoCAD and Esteem software which major use to design the structural element in designing. Not to mention, the knowledge and experience that they gain throughout their lives in order to provide excellent services for the clients in achieving the expectation and objectives.

3.0 PROJECT OBJECTIVES

- a) As successful leadership among our company and the clients.
- b) Provide a fresh perspective and make recommendations for the company's improvement.
- c) The qualification and quantitative of the projects achieve the clients demand.
- d) To increase employees productivity.
- e) To prepare structural drawing of reinforced concrete structure and steel structure by using AUTOCAD and ESTEEM software.

PROJECT 1:

- 1. To design reinforced concrete structure which is a bungalow.
- 11. To design structural element based from the architectural drawing.
- 111. To produce structural drawing with the dimensions.

PROJECT 2:

- 1. To design steel structure and which is pipeline system.
- 11. To design structural element based from the architectural drawing.
- 111. To produce structural drawing with the dimensions.