CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

Methodology will explain about the research that conducted and explain the study is carried out where explanation about how to collect the data that recording of number of register of vehicles that entering and departure of Giant Hypermarket parking, characteristics and how to control in the context of Giant Parking’s planning. This part also will give the clear point of view about the research and clearly shows how the objective of this research achieved. At the early stage, the data and the literature review were been collected from the previous study. The discussion between was crucial in order to improve and gain the knowledge and information regarding the scope of the research. Below is a chart flow of the research methodology. Furthermore, according to The Advanced Learner’s Dictionary of Current English stated that research methodology is a systematic way to solve the problems of research.

Actually, the data collection at parking is very important and the most important in the flow of traffics and to estimate scenario during peak hour, daily, holidays and weekends. So, from the data collection we can predict the real situation at Giant parking during peak hour, weekends, weekdays and others that depend on non-salary week and salary week. For example, traffic congestion and demands of parking at there.

Besides that, from parking of data collection are obtain we can know about demands and supply of parking at Giant Hypermarket, Kuantan is enough or not. Duration of parking, parking turn over (PTO), occupancy of parking and accumulation of parking also can be obtained from data collection. Next, concept of time to take data collection should also be taken seriously. Hence, collection of data should be taken
starting on open time of Giant Hypermarket which is 09:00 until all the vehicles out from parking which is 01:00.

Furthermore, parking demands cannot be obtained without concept of time to take the collection of data. For individual, time of shopping at Giant Hypermarket, Kuantan is assumed 12 hours. So, demands of the parking is during the time operation of Giant Hypermarket but the number of parking are needed is should be shown that to know when is demands during peak hour and peak days.

Lastly, the results are obtained from the analysis are done could be used or taken as reference by responsible party to take the control action to solve or reduce the parking issue and factors about characteristics of parking at Giant Hypermarket and other shopping complex. Hence, from this study and researched, all the variation of facilities are prefer by customer or nearest residential of Giant Hypermarket, Kuantan will be available to released.

3.1 CASE STUDY

Giant Hypermarket, Kuantan is the hypermarket which starting operation in early morning which is 09:00 am until 23:00 pm during weekdays but they will be extend their operation until 23:30 pm during weekends.

However, to complete my research by the collecting data of recording register number of vehicles of customers should be starting before 09:00 0’clock in the morning until all the vehicles are out from Giant Hypermarket parking which is around 01:00 am. To record register number of vehicles, a person will be at entrance and other person will be at exit.

Besides that, to complete the research of supply and demand of parking facilities at Giant Hypermarket, Kuantan where to know when demand are occur, hence data collections are collect during non-salary week and salary week. For non-salary week which is early month only 2 days are collect for data which are a weekday and a weekend. Next, for salary week 4 days are taken which are 2 days for weekdays and 2 days for weekends.
3.2  FLOWCHART OF PROJECT METHODOLOGY

Figure 3.1 shows a project methodology which also involving how to collected the data and analysis. Then, make the conclusion for these research and constructing the recommendation that to obtained the objectives of research.

Figure 3.1: Flow Chart of Methodology