CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Universiti Malaysia Pahang (UMP) starts with Universiti Teknologi Malaysia Campus Pahang (UTM-KCP) operating in Bandar Indera Mahkota, Kuantan since 1999. On the instruction of the Ministry of Education, UTM-KCP has taken over by KUKTEM on 1st of May in 2002 and academic session started with taking a total of 307 students on May 30, 2002. To accommodate the growing number of students, KUKTEM has moved to a more strategic and conducive location in Bandar MEC, Gambang on 24 April 2003. The campus is located approximately 30 kilometres from Kuantan has an area of 126 acres² and is located near the East Coast Highway. After 5 years of operation, KUKTEM upgraded to Universiti Malaysia Pahang (UMP) from 1st February 2007, however, the program of study does not change according to the goal of achieving its objective of 10,000 to 15,000 students.

Statistics of the UMP population for year 2015 is 7210 people for students and 1800 people for staffs. The number of students who reside in campus is 6350 people for both gender of students and the rest outsider. The selected students qualify residing in the campus accordance with the number of merits obtained by students and highest priority is given to first year students. To encourage university to be more developed in line with the vision to become a world-class technology university and mission technology in a culture of creativity and innovation, is need to do some improvement within campus especially its walkways, by introducing sustainable routing within campus as well as making campus as sustainable campus is needed. A sustainable
campus is defined as a campus characterized by its operations, social and economy, which promote the long term survival of the environment and our own social structures (Mohdet al. (2011).

UMP Campus have been designed to be equipped with adequate facilities for teaching and learning, however, the existing physical and spatial environment does not fulfil the functional needs of the sustainable campus community. Thus, they are not considered sustainable as teaching, learning and working environment. An important element in ensuring the establishment of sustainable development on campus is encouraging the use of non-motorized transport, such walking and bicycling as a medium of movement among the university community is also known as sustainable transportation. The sustainable transportation does not provide huge environmental implications to society (Jauch et. Al, 2009).

Based on observation, there are many paths commonly used by the students which from Cafeteria 3 to Cariff building, from Residential College 3 to Etim building, from bus stop to Block W, sidewalk alongside the road and from Residential College 3 to Block X, Y and Z as shown in Figure 1. To make a sustainable campus, the most important is to ensure existing path enable safe access for all pedestrian and cyclist. All the current places, the condition is good with the yellow lines but in terms of sustainability, it is lack of accessibility to the facilities area, causing inconvenience to the users particularly during the rainy seasons, when the students’ movement will be scattered to avoid raining.
1.2 PROBLEM STATEMENT

The main reasons this research focusing on the walkways because to provide convenience among the campus community to walking and encourage further use of non-motorized transportation within the campus. In UMP Campus, the number of student registered vehicle is 1063, while the staffs are 1769 people. There are 3 types of mode transportation used by UMP community within campus which are car, motorcycle and bicycle and increased every year. Although, the first year students were prohibited to bring their transport but senior students can bring their transport in spite of some of them reside in the campus. In this study, a sustainable campus integrates green elements and nature to provide healthy environment as well as spaces that support social integration among the community.

A pedestrian is any person who is traveling by walking from origin to the destination and considered as a pedestrian when running, jogging, sitting or lying down in the roadway. Road traffic crashes kill about 1.24 million people each year. More than one fifth of these deaths occur among pedestrians. Road accidents involving pedestrians should not be accepted because it is something that can be avoided. Everything depends on the attitude of drivers, such as speeding, alcohol use by drivers, lack of safe infrastructure for pedestrians and inadequate visibility of pedestrians. Other than the issue of accidents, the issue of sustainability has been around for a long time where, an