

**PROGRAM OF QUANTITY SURVEYING**  
**DEPARTMENT OF BUILT ENVIRONMENT STUDIES AND TECHNOLOGY**  
**FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING**  
**UNIVERSITI TEKNOLOGI MARA**  
**PERAK BRANCH**

**ACCESSIBILITY FOR PERSONS WITH  
DISABILITIES (PWDs) IN WATER PARKS IN  
MALAYSIA**

Dissertation submitted in partial fulfilment of the requirement for  
the award of Bachelor of Quantity Surveying (Honours)

**PREPARED BY: YUSAIRI ADILA BINTI MOHD YUSRI**

**(2019689644)**

**SEMESTER: MARCH 2021 – AUGUST 2021**

## **ABSTRACT**

Waterpark needs to ensure a better accessibility for persons with disabilities (PWDs) in fulfilling the requirement of the Malaysian Standard Code of Practice on Universal Design and accessibility in the built environment. However, there are many problems that faced by disabled people in access the water parks including the facilities inside the water parks. For example, the required area is designed with limited consideration for disabled people. Thus, the aim of this study is to outline the criteria of accessibility of PWDs in waterparks. Three research objectives were identified (1) to identify the awareness level on the importance of facilities to be provided for PWDs, (2) to determine the types of barriers for the PWDs to access the waterparks and (3) to advocate the recommendation of facilities that should be provided in waterparks. The methodology used in this research is the quantitative method where the online questionnaire survey was done and been distributed to disabled persons, their families, and friends. There are 350 sets of questionnaires have been distributed via google form to the targeted respondents which are the disabled persons, their family and friends, who used to accompany them to the waterparks. The expected finding is to obtain the facilities which can be the barriers breaker for the PWDs in the waterpark, and generate awareness for the local authorities to consider and improve the good design of the new building facilities and infrastructure for disabled people.

## **ACKNOWLEDGEMENT**

*In the name of Allah, the Most Benevolent and Most Merciful  
Praise to Allah and peace be upon Prophet Muhammad, his  
companies and followers of his audience.*

First, I want to express my highest honour to Allah S.W.T for His guidance, blessing and giving me the strength and courageous in performing my responsibilities as a student and complete this dissertation. I would like to have this opportunity to express my deepest appreciation to the persons and all parties who responded to the survey and also offered their guide, support, and contribute ideas for me in preparing this dissertation. A special thanks are given to my supervisor for the insightful supervision, encouragement, and creative suggestions that lead me to the completion of this dissertation. I would like to thank my parents and families, for always support me and for the encouragement given to me when I really needed it. Finally, I would like to thank my friends who doing this paper too and always there with me when I am having some problems regarding to this paper. They also always encourage and support me in completing this paper.

Thank you.

# TABLE OF CONTENTS

<b>ABSTRACT</b> .....	i
<b>ACKNOWLEDGEMENT</b> .....	ii
<b>LIST OF FIGURES</b> .....	vi
<b>LIST OF TABLES</b> .....	vii
<b>LIST OF ABBREVIATION</b> .....	viii
<b>CHAPTER 1</b> .....	1
<b>INTRODUCTION</b> .....	1
<b>1.1 BACKGROUND OF RESEARCH</b> .....	1
<b>1.2 PROBLEM STATEMENT</b> .....	4
1.2.1 Access to the facilities is limited.....	4
1.2.2 Poor quality materials .....	5
1.2.3 Weak enforcement by relevant authorities .....	5
<b>1.3 RESEARCH QUESTIONS</b> .....	7
<b>1.4 AIM OF RESEARCH</b> .....	7
<b>1.5 RESEARCH OBJECTIVES</b> .....	7
<b>1.6 SCOPE OF RESEARCH</b> .....	7
<b>1.7 SUMMARY OF CHAPTER</b> .....	8
<b>CHAPTER 2</b> .....	9
<b>LITERATURE REVIEW</b> .....	9
<b>2.1 INTRODUCTION</b> .....	9
<b>2.2 WATERPARK</b> .....	14
<b>2.3 PROBLEMS FACED BY PWDs</b> .....	15
2.3.1 Introduction.....	15
2.3.2 Design of Opening .....	16
2.3.3 Ramp and Threshold .....	16
2.3.4 Handrails.....	17
2.3.5 Signages .....	18
2.3.6 Floor Finishes & Tactile Paving.....	19

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND OF RESEARCH

In Malaysia, the Person with Disabilities Act 2008 (Act 685) defines persons with disabilities (PWDs) as those who have long term physical, mental, sensory, or intellectual sensory impairments such as visual, hearing or speech impairment. This would create difficulties that would prevent them from fully or effectively participating in society. PWDs are people who are unable to conduct a wide variety of typical activities, such as other people, due to physical or cognitive limitations. Persons with disabilities have the right to use public transportation, services and structures, education, recreation, and work, among other things.

PWDs consist of many categories such as for whom the MS caters are wheelchair users (any kind of chair, whether accompanied or not), crutch users (including in practice arm amputees), blind people (including those with low vision) and deaf people (including the hard of hearing). The Department of Social Welfare has released the latest statistics of the registered person with disabilities (PWD) in 2018 was 486,878 persons. PWDs in Learning disability category recorded the highest numbers which was 35.4 per cent, and then physical category (34.7%), followed by and visually impaired category (8.9 per cent). Speech category has recorded the lowest registration of 0.5 per cent.

Besides, the actual amount might be bigger as the registration with the authority is voluntary. Because of the inaccessible environment, people with disabilities have less opportunities to participate in activities than people without impairments. The government's policies and regulations do not provide for the