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A STUDY ON LANDSCAPE FOR PARALYMPIC VILLAGE AT UPM, SERDANG,  
SELANGOR DARUL EHSAN

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This thesis is submitted in partial fulfillment of the Bachelor of Landscape Architecture.

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**TESTIMONIAL**

This is to clarify that the thesis has been read and verified by:

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This thesis is submitted in partial fulfillment of the Bachelor (Hons) Landscape Architecture, KAED, IIUM.

I declare that this thesis is my original work and any reference from other writer has been acknowledged in this research.

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October 2003

## **Acknowledgment**

*In the name of Allah, Most Gracious, Most Merciful*

*Assalamualaikum w.b.t.*

I would like to take this opportunity to thank the people who were involved directly or indirectly in my research studies.

Firstly, I would like to thank my supervisor, Madam Mazlina Mansor for her expert guidance in the topic studied. Thank you also to the course coordinator, Br. Mohd Ramzi Mohd Hussain and Madam Amira Mohyuddin for their continuous support and encouragement.

I would like to acknowledge the help of the staff of Malaysian Paralympic Council, Mr. Rajan who helped me in finding information on the disabled people and Paralympic village it self.

I wish to express my gratitude to my friends, who have found the time to discuss with each other and giving suggestions to improve the work.

Last but not least to my parents and siblings who always inspire me to achieve the success in my studies. To all of them, I can only thank them by praying for their success in this life and in the Hereafter.

## **Abstract**

There are many disabled people all over the world. They have right to have same thing like the normal people such as involved in sports. The suitable sports for disabled people can be involved in Paralympic Games, FESPIC (Far East and South Pacific Games for Disabled) Games, Paralympiad, Asean Para Games and so on. While having their games they will be gathered in one place called Paralympic Village. In Paralympic village, the facilities should be suitable to all users especially the disabled athletes. The surrounding area should conducive and convenience to the athletes to do their own activities. The area should provide spaces for them to rest and training for the events. There are several guidelines and standards have been formulated which must be followed by the planner and the designers especially for the accessibility and the safety of the users. It's important to make the users of the Paralympic village enjoy the environment and have sweet memories while in our country.

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Title

Testimonial

Acknowledgement

Abstract

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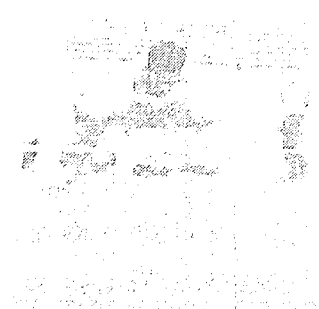
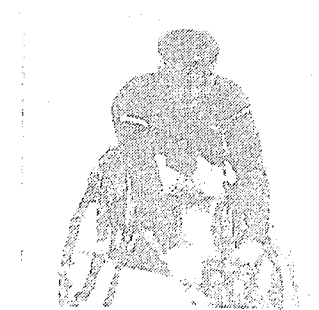
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# CHAPTER 1: INTRODUCTION

## **1.0 INTRODUCTION**

The Paralympic Games Village is a place where sports delegations from many countries stay during an event. Basically, the Paralympic Village consists of Accommodation zone, International Zone for services and parkland for training and resting. The Games village's surroundings should have the landscape that allows athletes to use the areas as a place for training and resting. This can be achieved by following several guidelines and standards for the disabled and in turn, designing an appropriate place for them. The area should also be a place where they can rejuvenate their energy and release their tension. In simple words; a place for training and rest.

### **1.1 BRIEF**

#### **1.11 Goals**

To introduce a Paralympic Games Village, which is conducive and convenient for disabled athletes, yet it is also usable for the physically able people.

#### **1.12 Objectives**

- i) To develop areas such as a place for social gathering, cultural activities and economics activities.
- ii) To provide varieties of spaces that can be developed as parks for users
- iii) To identify the needs and the requirements for the disabled.

## 1.13 Issues

Malaysia will be the host for FESPIC Games in 2006. Therefore, we need a place to accommodate the delegations from other countries. The site should be located next to the place where the events happen. The area also should be conducive, convenient and comfortable for the users especially for those who are physically disabled and mentally disabled.

## 1.14 Background of the site

The proposed Paralympic Village is located within University Putra Malaysia (UPM), Serdang, Selangor Darul Ehsan which is a 10 minute drive from the Bukit Jalil National Sports Complex and approximately 20 minutes travel time from the Kuala Lumpur city center.

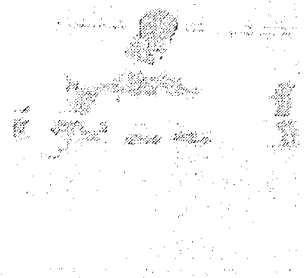
It is located on the south-eastern side of the University Putra Malaysia Campus. The proposed development will be able to accommodate a population of 10,000 athletes and officials to any games such as Commonwealth Games and Asean Games.

The site will be developed into two phases; which is Phase 1 and Phase 2. The initial stage will be to cater for FESPIC games 2006. This will involve around 5,000 athletes and officials. The

development will consist of the International Zone, Multipurpose Hall and Accommodation for 5,000 persons including a Dining Hall.

1.15 The users/ client

The proposed Paralympic Villages is prepared for Ministry of Youth and Sports and Malaysia Paralympic Council. The disable athletes and officials will use the site during an event and also for training.



## **CHAPTER 2: ABOUT PARALYMPIC**

## **2.0 PARALYMPIC**

### **2.1 What is Paralympic?**

The term Paralympic was first referred to the word paraplegics. A Paraplegic is a person who has lost the use their legs. Since the modern Paralympics include athletes with a wide variety of disabilities, the prefix para is now interpreted to mean parallel. This means that the Games for disabled athletes are parallel to the structure of the regular Olympic Games, but has a modified schedule.

### **2.2 The History**

The Paralympic Games originated in Aylesbury, England where Games for People with Spinal Injuries were held in 1948. The games were originated to coincide with the London Olympic Games. The competition was organized by Dr. Ludwig Guttman, who originally planned them as a part of rehabilitation programme for people with spinal injuries. The programme, which began during World War II, was encouraged by the British government and sustained by the large number of war casualties.

The first Paralympic Games were held in Rome in 1960. A total of 23 countries and 400 athletes took part in the games. Since then, the Olympics and the Paralympic games have almost always moved across the globe side by side together by being held in the same city, or in the same country, every four years.

Since 1982, the international Coordinating Committee (ICC) has organized the Paralympics. The single body negotiates and liaises with its member federations, the International Olympic Committee and other international organisations to organize the Paralympic game.

### 2.3 The Sports for Disabled

No.	Types of Sports	Categories
1.	Athletics	Wheelchair Amputees Cerebral palsy Visually impaired Intellectually Disabled
2.	Swimming	Wheelchair Amputees Cerebral palsy Visually impaired Intellectually Disabled
3.	Power lifting	Wheelchair Amputees Cerebral palsy
4.	Archery	Wheelchair Amputees Cerebral palsy
5.	Table tennis	Wheelchair Amputees Cerebral palsy
6.	Wheelchair tennis	Wheelchair Amputees
7.	Shooting	Wheelchair Amputees

8.	Fencing	Wheelchair Amputees
9.	Boccia	Cerebral palsy
10.	Badminton	Amputees
11.	Cycling	Amputees Visually impaired
12.	Judo	Visually impaired
13.	Lawn bowls	Wheelchair Amputees Cerebral palsy Visually impaired
14.	Equestrian	Wheelchair Amputees Cerebral palsy Visually impaired Intellectually disabled
15.	Wheelchair dance	Wheelchair
16.	Tenpin bowling	Visually impaired
17.	Goal ball	Visually impaired
18.	Volleyball (sit)	Wheelchair Amputees Cerebral palsy
19.	Basketball	Wheelchair Amputees
20.	Soccer	Cerebral palsy Intellectually Disabled

#### 2.4 A study on Disabled people

According to Essential English Dictionary, disable person means a person if it injures or affects them so severely physically or mentally that their way of life is seriously restricted.



Disabilities can be classified into two main groups; physical disabilities and mental disabilities.

- i) Physically disability – people on wheel chairs, blind people, people with hearing impairments, etc
- ii) Mental disability – person who are disabled due to their mental system such as Down syndrome, spastic, etc.

## 2.5 Type of Users

There are several types of people who will use the area. They are:

- i. Wheel chair users
- ii. Amputees
- iii. Mental handicap
- iv. Blind and Partially sight
- v. Cerebral palsy
- vi. Physically able

Below is table of Types of Users

Type of Users	Disabilities	Method of Movements and communications
Physically able	-	Normal
Amputee	Mobility impairment Movement limitation	Walker Crutches
Blind Partially sight	Visual impairment: 25% vision loss 50% vision loss 75% vision loss 100% vision loss	Cane Guiding blocks Braille

Mental handicap	Less of balance Imbalance thinking Communication problem	Supervisor Iconography
Wheelchair	Mobility impairment Movement limitation	Attendant propelled wheel chair Powered wheelchair Self-propelled wheelchair

## 2.6 Needs of Disabled person

Below is table of Design solution:

Disorder	Implications for Design	Design Solution
Blind Partially sight	Loss sight	Safe materials Plants selections for texture, scent and safety Acoustic
Mental handicap	Reduced mobility Less of balance	Unimpeded access Non-hazardous materials and plants No sudden changes to familiar surroundings Secure, attractive Non-slip surface
Ambulant people	Limited mobility	Secure Non-slip surface

		Handrails Frequent resting point Choice of route length
wheelchair	Limited mobility Depended on wheelchair to move	Unimpeded access Secure Non-slip surface

## 2.7 Anthropometrics

Figures 2.7.1 to Figure 2.7.4 illustrate the anthropometrics of disabled people. For blind people they need canes and guiding blocks to help them to walk. Cane helps them to recognise the pattern of the guiding blocks whether there are safe or not to continue the journey. The line pattern tells them to walk and the circle pattern to warn them (Refer Figure 2.7.2).

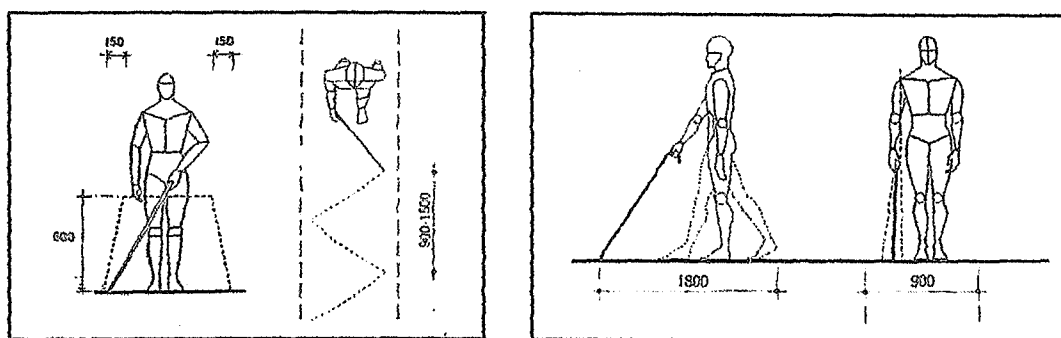


Fig. 2.7.1: Blind

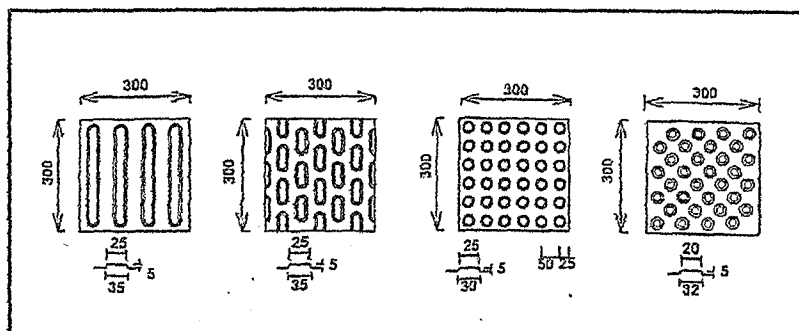


Fig. 2.7.2: Guiding blocks

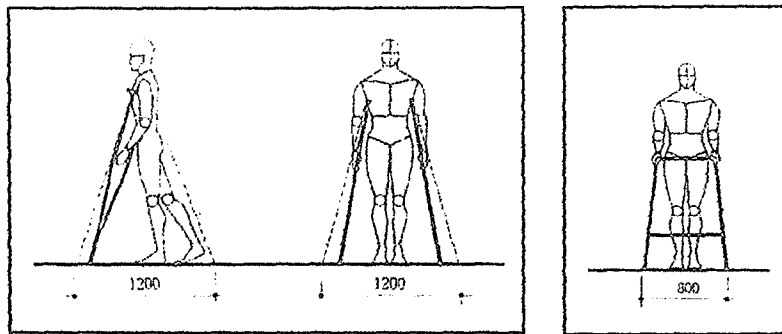


Fig. 2.7.3: ambulant people

For ambulant disabled people (Figure 2.7.3), it is necessary to consider those users functioning with crutches, walkers and canes. All these aids become, in essence, a functional part of their individual's body. Accordingly, both aid and user should in almost every instance be viewed as a single entity. For design purposes it is useful to know something not only of the anthropometry involved, but of the total spatial considerations.

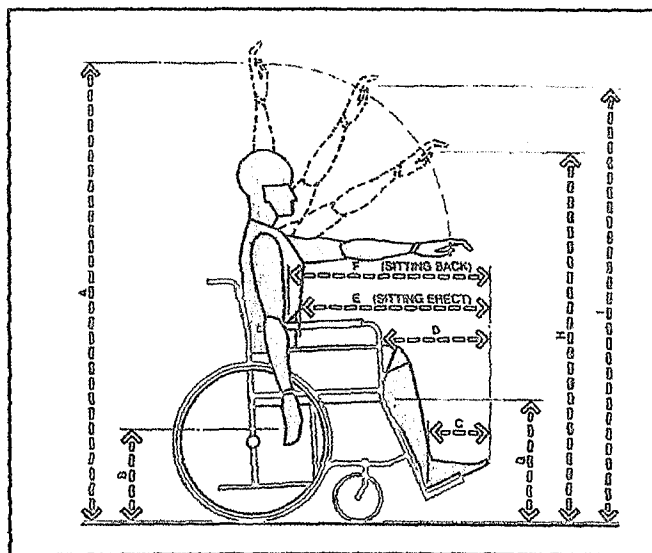
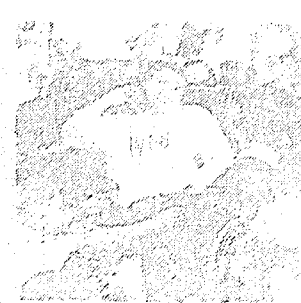
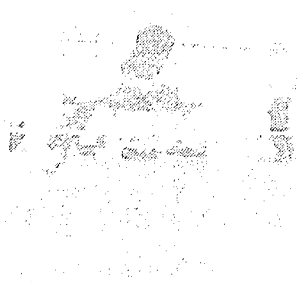
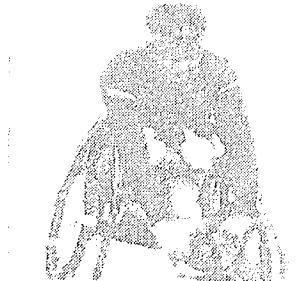
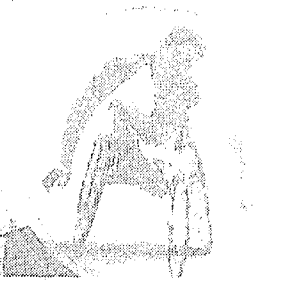


Fig. 2.7.4: Wheel chair users

The side view of the chair bound users (Figure 2.7.4), showing user and chair, indicates some of the more critical anthropometric

measurements for both men and women. All reach dimensions are based on 2.5 percentile data to accommodate those users with smaller body sizes. It is recommended that since the female body size is smaller than the male, the female dimensions be used for the design of all reach situations.



## **CHAPTER 3: REFERENCE STUDY**

### 3.0 THE PARALYMPIC VILLAGE AT UTAH

Utah was the host for the Salt Lake Paralympics 2002 held on the 7th to 16th March 2002 located at the Salt Lake City. The Paralympics Village at the University of Utah campus consists of more than 1000 athletes. Most of the 45- acre compound is located within the historic Fort Douglas area. The Paralympic Opening and Closing Ceremonies also take place at the University of Utah campus in the Rice-Eccless Stadium. All the services within the village will be comparable to services offered during the Olympic Games.

The area for the Paralympics Village was planted with approximately 100,000 trees. It also restores the aquatic area by keeping clean the local lakes and streams while adding needed habitats for birds, fish and other wildlife.

The area also has been changed to suit the athletes' environment. The facilities and transportation system has also been improved creating a barrier free environment especially for the disabled people. Figure 3.01 to Figure 3.011 shows the design of the landscape elements that can be found around the Paralympic Village which can benefit the users especially the disabled. Figure 3.01 to Figure 3.015 show the design elements that can be found in the Utah Paralympic Village which have their own characteristic that help users especially disabled athletes to move around and use the facilities in safe conditions and comfortable.



Fig. 3.01: Users at the site

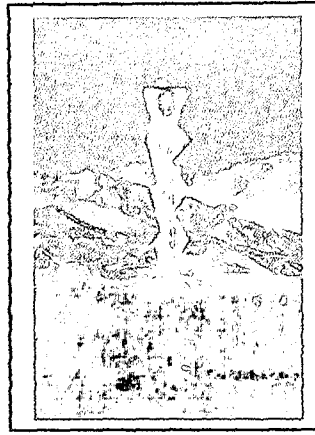


Fig. 3.02: Cauldron at the Rice-Eccless acts as focal point that can be seen from distance.

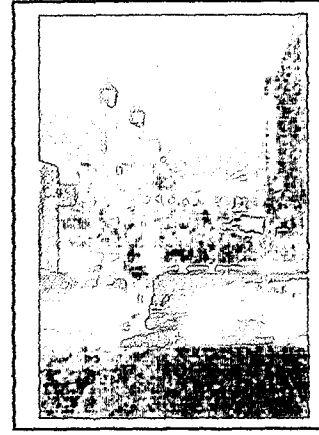


Fig. 3.03: Pathway at Paralympic Village which is clear and wide. It makes users easy to access.

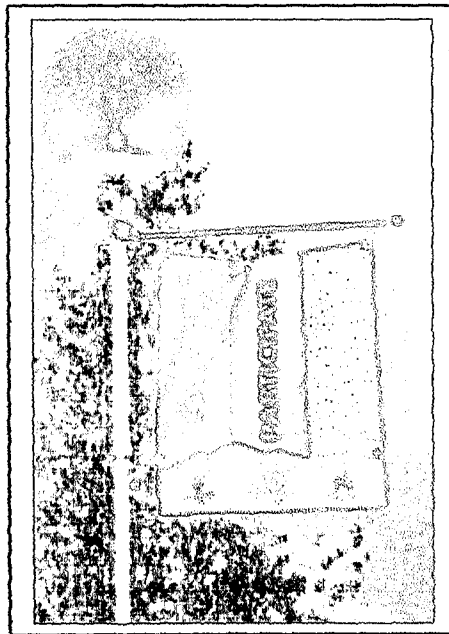


Fig. 3.04: Bunting's hanger joints with the lamp post. The bunting's design also attract the eyes of the users with it colourful design.

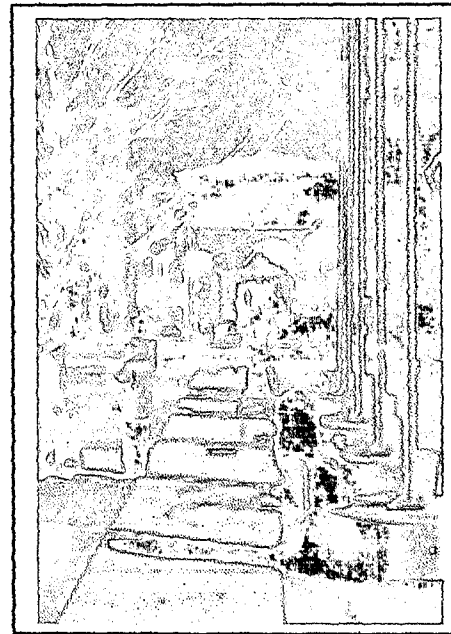


Fig. 3.05: Flagpoles at the Paralympics Village can acts as seating elements. Located next to and same level with the pathway makes users easy to reach them.



Fig. 3.06: Flagpoles and cauldron is the important things that tell the neighbourhood that something happen in the area.



Fig. 3.07: Wide pathway to accommodation zone makes people free to access.