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SAMTSE MUNICIPALITY  
"Towards Quality Infrastructure"

User guide and Manual for  
**ECO-PARK AND ITS  
FACILITIES**

Written and compiled by:  
Samtse DE&HSS

**Title:** User guide and Manual for **ECO-PARK AND ITS FACILITIES**

**Prepared by:** Samste Dzongkhag Engineering and Human Settlement Sector

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## 1. INTRODUCTION

### **User Guide and Manual for the Eco-Park Samtse Public Swimming Pool**

This user guide and manual apply to the public swimming pool at Eco-Park Samtse, catering to both adults and children. Our primary goal is to create a safe, enjoyable, and pleasant environment for all pool users. This involves the responsible use of the swimming pool and the provision of equipment necessary for its safe operation and maintenance, ensuring the health, safety, and well-being of all users.

### **General Regulations and Standards for Pool Operation**

The guidelines outlined in the General Regulations and the Standard for the Operation of Swimming Pools serve as the approved methods for disinfecting public swimming pools. These prescribed requirements are in place to guarantee that the water in the public pool is treated effectively, preventing any potential illnesses or discomfort for our valued patrons.

### **Maintenance and Inspection Guidelines**

This guideline specifies the inspection and routine maintenance requirements for the pool plant, equipment, and surroundings. These measures are essential to maintaining the quality of the pool water, ensuring a safe and enjoyable experience for everyone



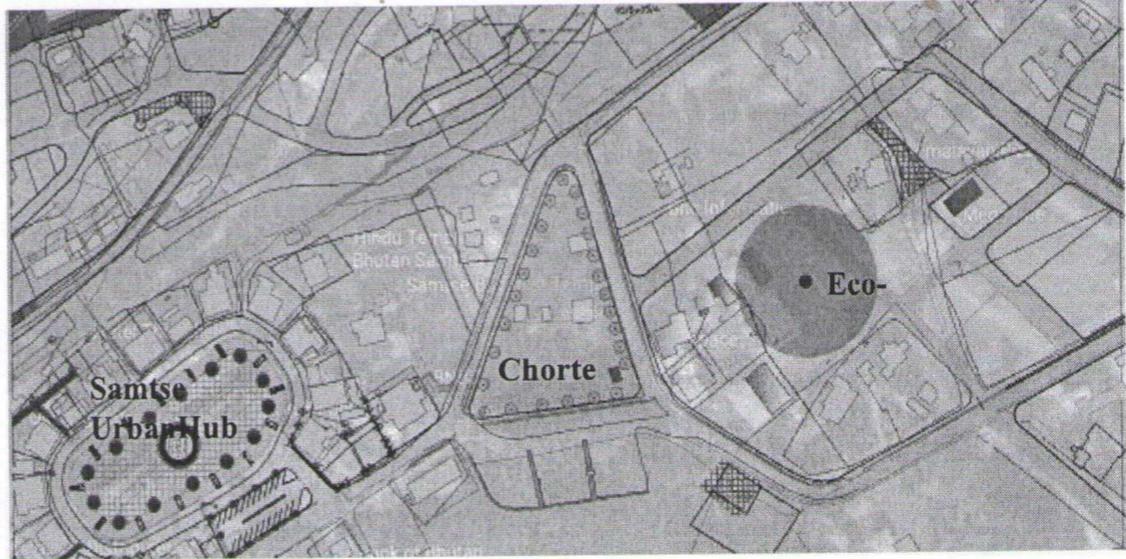
## 2. LOCATION, AND AMENITIES

### 2.1 Location

The eco-park accommodating the swimming pools is located in the core town area above the Duduel Chorten.

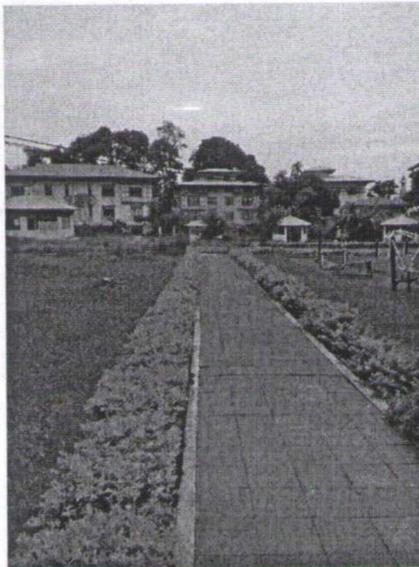
The park has an area of 7963.94sqm with various amenities in and around the site.

The site is accessed by the mainroad from the south and also subsidiary roads from the north-end side of the site.



### 2.2 Other amenities in the park

- Two swimming pools for the children with an approximate area of 38 sqm each.
- One Pool for the adults with an area of around 290 sqm.
- Changing rooms for male and female.
- Cafeteria with an area of 100sqm.
- Area for children play/park (Outdoor Gym)
- There is proper water storage and drainage facilities.
- Gazebos for the bathers.



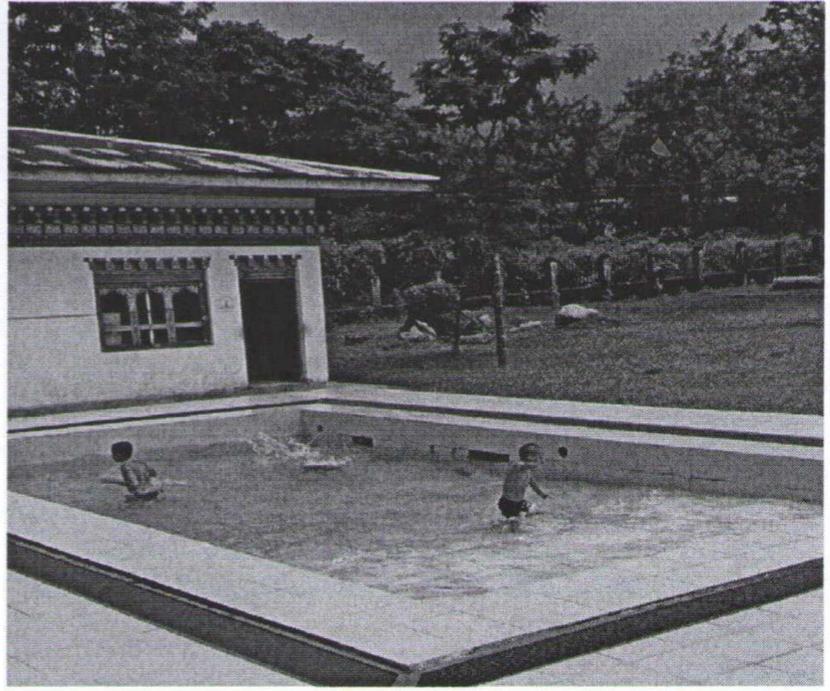
Entrance View of the Park



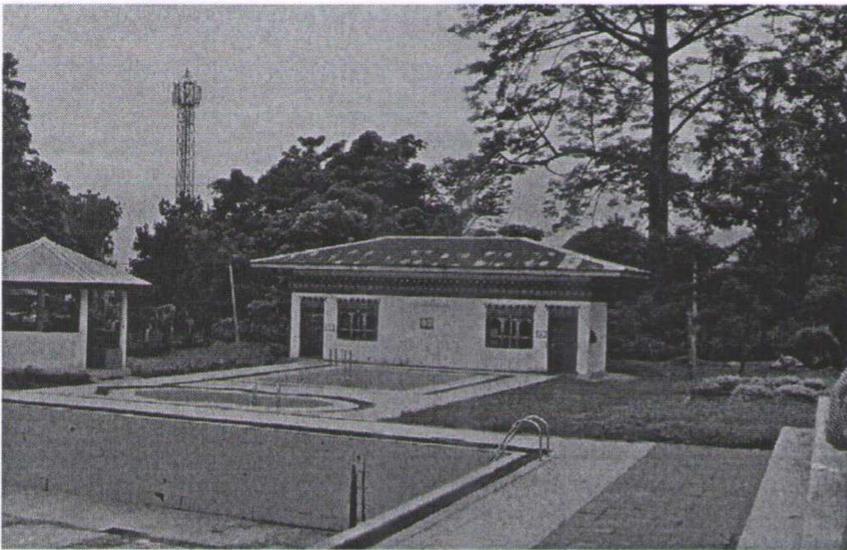
Children Park (Outdoor Gym)



Swimming pool I for children



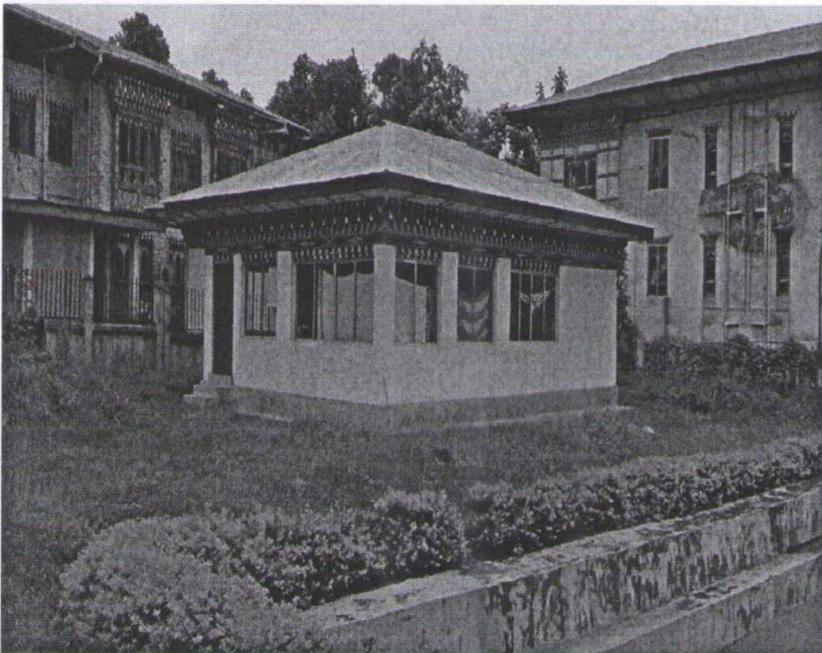
Swimming pool II for children



Change rooms



Swimming pool for adults



Canteen/Cafeteria



Gazebo around the pool

A handwritten signature in blue ink, located at the bottom right of the page.

### 3. POOL DETAILS

#### 3.1 Volume of the Bigger Pool for Adults

##### Shallow End Dimension

12.1m x 5.4m which is 1m deep which is the shallow end of the pool.

$$V=L \times W \times D; V=12.1 \times 5.4 \times 1$$

$$V=65.34 \text{ cu.m}$$

##### Middle Part (slant)

12.1m x 7.231 m which is 1.335m deep on average.

$$V=L \times W \times D; V=12.1 \times 7.231 \times 1.335$$

$$V=116.8 \text{ cu.m}$$

##### Deep End

12.1m x 11.4m which is 1.67m deep which is the deep end of the pool.

$$V=L \times W \times D; V=12.1 \times 11.4 \times 1.67$$

$$V=230.3598 \text{ cu.m}$$

Total volume of the pool:

$$65.34 + 116.8 + 230.3598 =$$

$$412.1598 \text{ cu.m}$$

#### 3.2 Volume of the Smaller

##### Circular Pool for Children:

$$\text{Volume} = \pi \times r \times r \times D$$

$$= 3.14 \times 2 \times 2 \times 0.6$$

$$= 7.5 \text{ cu.m}$$

#### 3.3 Volume of the Smaller Rectangular Pool for Children:

##### Shallow End

4.65m x 1.7m which is 0.6m deep which is the shallow end of the pool.

$$V=L \times W \times D; V=4.65 \times 1.7 \times 0.6$$

$$V=4.743 \text{ cu.m}$$

##### Middle Part (slant)

4.65m x 2.474m which is 0.9m deep on average.

$$V=L \times W \times D; V=4.65 \times 2.474 \times 0.9$$

$$V=10.35 \text{ cu.m}$$

##### Deep End

4.65m x 4.24m which is 1.2m deep which is the deep end of the pool.

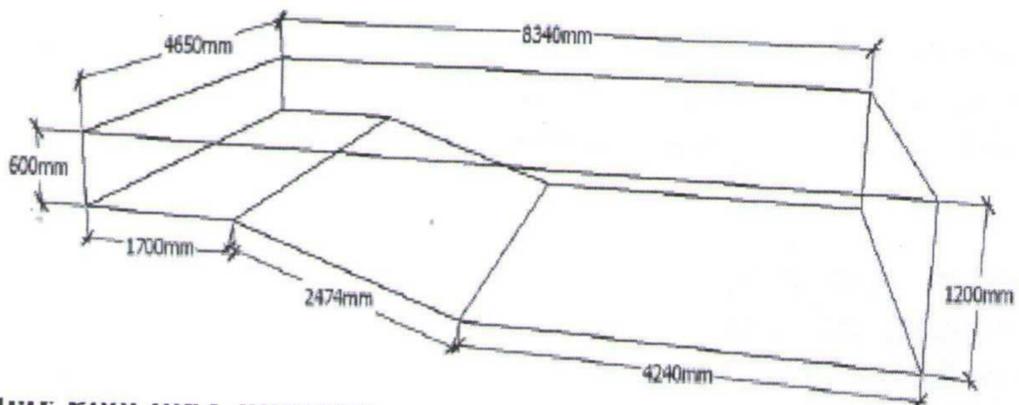
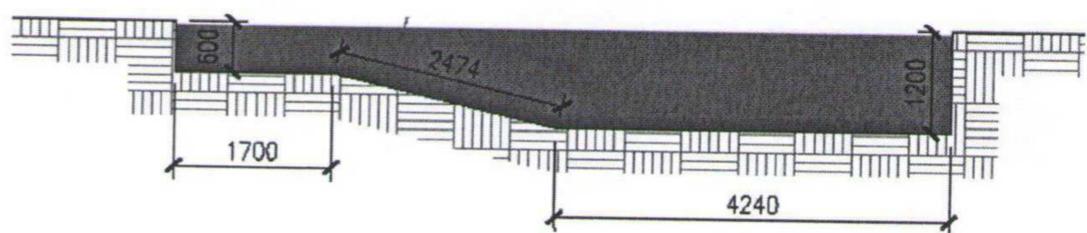
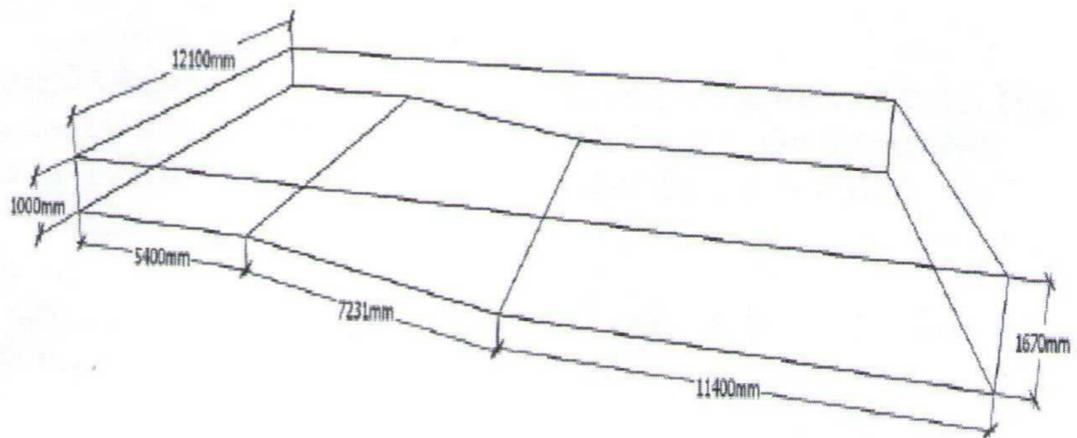
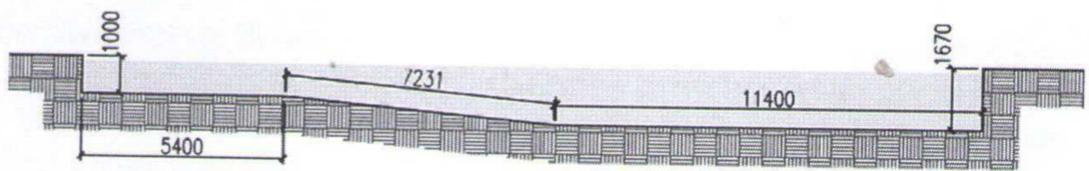
$$V=L \times W \times D; V=4.65 \times 4.24 \times 1.2$$

$$V=23.66 \text{ cu.m}$$

Total volume of the pool:

$$4.743 + 10.35 + 23.66 =$$

$$38.75 \text{ cu.m}$$



## 4 AUTOMATIC DISINFECTION, PH ANALYSIS AND CONTROL

### **Water Quality Control for Public Swimming Pools**

The water supply to our public swimming pools is sourced from the same drinking water supply provided to the Samtse town area. We have implemented a continuous monitoring and control system to ensure the safety and quality of the water while the pool is open for public use.

### **pH Analysis and Monitoring**

pH analysis is conducted concurrently with the monitoring of the town's drinking water supply. The results of these tests are diligently compiled and submitted on a monthly basis to the Dzongkhag Administration. This essential task is carried out by the Lab Technician at Samtse Hospital.

### **Chlorination for Daily Water Safety**

To maintain a consistently safe water supply, chlorination is performed daily at its source. This proactive measure ensures the ongoing safety and well-being of our pool users.

## 5 WATER REPLACEMENT

The pool should be filled during the night before it is scheduled to open, and it must be checked for cleanliness and water clarity. The responsible officer on duty should also ensure that the water is adequately filled according to the specified requirements. Additionally, on a weekly basis, the pool water should be completely replaced with fresh water in preparation for the next day."

## 6 OPERATION AND ROUTINE MAINTENANCE

Daily operational checks of the pool facility are essential to ensure safe and healthy swimming conditions for bathers. These checks encompass not only monitoring water quality but also inspecting the physical facilities and pool equipment. Daily attention must also be dedicated to bather supervision and environmental conditions.

Regularly observe the conditions of surfaces, including checking all decks, coping, steps, and pool surfaces for standing water and potential algae growth. Ensure that non-slip surfaces are consistently maintained. Be vigilant for cracks, breaks, and tripping hazards in walking surfaces. Any plans for necessary repairs should be documented and arranged.

## 7. PHYSICAL FACILITY

- 7.1 Regularly inspect the inlet and overflow system to ensure they are operational and in good repair.
- 7.2 Check ladders, steps, handrails, and diving boards for signs of looseness due to usage. Tighten and secure them as needed.
- 7.3 Maintain pool rule signs to inform users of their requirements for safe usage. Ensure these signs are consistently posted.
- 7.4 Keep an eye on the operational status of electrical lighting fixtures and replace bulbs as necessary.
- 7.5 Monitor the pool for the presence of air bubbles, as they may indicate leaks in the lines. If needed, bleed air from the filter. Additionally, service suction water lines or "O" rings on connections if they require attention.

## 8. TOILETS, SHOWERS AND CHANGEROOMS

Toilets, showers, changing rooms, and associated fixtures should be kept in good condition. They should be thoroughly cleaned as often as necessary to maintain cleanliness at all times. The swimming pool in-charge/facility operator should encourage users to shower before entering the pool area to promote hygiene.

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**9. FOOD/CANTEEN SERVICE**

It is important to prohibit individuals from entering the pool or its immediate vicinity while consuming food or beverages. Additionally, the use of glass containers should be discouraged.



## 10. HEALTH AND SAFETY IN SWIMMING POOL

Any individual using the pool facilities shall adhere to the regulations of the public pool in order to maintain the health and safety precautions.



### REGULATIONS FOR THE USE OF THE PUBLIC POOL.

- IT IS VERY IMPORTANT THERE IS AN ADULT GUARDIAN/PARENT ACCOMPANYING THEIR CHILD WITHOUT WHICH THE CHILD WILL NOT BE ALLOWED TO SWIM.
- ALL THE PARENTS/GUARDIANS ARE REQUESTED TO KEEP VIGIL OVER THEIR CHILD ESPECIALLY INSIDE THE SWIMMING POOL AND SHALL BE SOLELY RESPONSIBLE FOR THEIR CHILD'S OWN SAFETY.
- PROPER & APPROPRIATE SWIMMING OUTFITS MUST BE WORN WITHOUT WHICH YOU MAY BE DISALLOWED.
- ANY ANIMALS OR PETS ARE PROHIBITED IN THE POOL PREMISES.
- PLEASE DO NOT LITTER AND THE MANAGEMENT EXPECT EACH AND EVERY ONE TO TAKE BACK YOUR OWN WASTES AND DISPOSE APPROPRIATELY.
- KINDLY RENDER YOUR CO-OPERATION TO THE MANAGEMENT WHERE REQUIRED.
- RUNNING, SHOUTING OR ANY NOTORIOUS BEHAVIOUR IN THE POOL AND ITS PREMISES SHALL BE REMOVED BY THE MANAGEMENT.



## 11. FINANCES

The fees collected shall be deposited into the Municipal's Certificate of Deposit (CD) account. These funds will be utilized, when necessary, for the timely maintenance of the pool and other amenities within the eco-park

## 12. OPERATION

- 12.1 The park shall be outsourced through an open tendering process.
- 12.2 Revenue generated shall be deposited into the Municipal Certificate of Deposit (CD) account.
- 12.3 The private operator shall be responsible for the operation and maintenance of the park.
- 12.4 The private operator shall cover any utility service charges or fees.
- 12.5 Proper handover and takeover procedures, along with entry and exit conditions and records, must be executed.
- 12.6 The pool shall have a separate water supply from the source.
- 12.7 The operator shall be responsible for providing furniture in the cafeteria; it will not be provided by the Dzongkhag Administration.
- 12.8 Routine checks and inspections by the Dzongkhag Administration (Managing Authority) regarding the pool's functioning shall be carried out.
- 12.9 Any infrastructures installed or repaired shall become the property of the Dzongkhag Administration.
- 12.10 Prior approval from the Dzongkhag Administration should be sought for any alterations, repairs, or maintenance of the facilities.
- 12.11 The private operator shall furnish the facilities at their own cost and shall remain their property

## 13. REQUIREMENTS FOR THE PARK:

- 13.1A lifeguard, aged between 18 and 45 years, with expertise in swimming, shall be on duty at the swimming pools.
- 13.2A caretaker/gardener shall be responsible for maintaining the eco-park and performing gardening tasks.
- 13.3 Basic first aid kits should be readily available.

## 14. OTHER REQUIREMENTS FOR THE PARK:

- 14.1 Prior to operation, it is essential to perform maintenance on existing infrastructure.
- 14.2 Install a water recycling system to minimize water wastage.
- 14.3 Replace a few outdoor gym parts as needed.



Chief Dzongkhag Engineer  
DE&HSS  
Dzongkhag Administration  
Samtse : Bhutan