CAPTER III  
DESIGN METHOD

3.1. The Design Method

3.1.1. Data Collection

In the data collection will be explained about the data collection process. In this case data collection is done in several stages of the survey, observation, and literature review.

3.1.1.1. Survey

The survey was conducted to obtain information from a person's understanding of the zoo. In surveys conducted by interview.

- Interviews

Interviews were conducted to various parties of the first is the manager of the Surabaya Zoo. Direct interviews with managers of the KBS is to obtain clear information about the zoo because the manager is the person directly involved with the zoo. Both are people around / my friends, this is done in order to gain an understanding of the zoo community, and how important the role of zoos in society.

3.1.1.2. Observation

Observations made by observing without tools or by tools, which directly observe the state zoo. Observations made by several phases, namely the observation of objects, observations of natural conditions, a video documentary.

- Observation of the object

This process is done by observing the physical condition or non-physical. Observations are physically carried out to find out how the real state of the
KBS, which ultimately will help in the design process by seeing how far the KBS needs to be redesigned. Observations are non-physical is performed to determine how the atmosphere in the KBS is, in this sense is emphasized.

- **Observations on the natural conditions**
  Not only the observation of the object, but the observation of the natural conditions should also be made. Observation was conducted to determine the role of zoos to natural conditions, how important is the existence of the zoo for nature, especially on the survival of wild animals and protected. This process is done by looking at the increasingly fragile natural conditions that affect the survival of wild animals. Also look at the condition of the city of Surabaya gas emissions that contribute to the environment is bad for human survival.

- **Video dokumenter Video documentary**
  The information obtained from the zoo to see the videos documentary about zoos and animals that exist on earth. These videos provide repertoire of knowledge about zoos and animals living in it so it helps in the design process going forward.

3.1.1.3. Literature review

Literature review done by gathering data based on the literature of books, journals, documents, media, etc. The books used were books about the zoo, and there is a link about the zoo. It is intended to get clear information about the zoo.
3.1.1.4. **Comparative Study**

Comparative study carried out by looking and comparing with similar objects. Comparative study conducted at the Batu Secret Zoo and Perth Zoo. This process is done to provide information on the advantages and disadvantages of the object which is used as a comparison. At the end of the strengths of the object will be considered in the design process, so the result will be better designed.

From the above observations are expected to be used as insight towards the object and also as a material consideration in the design process, so that what is expected to be achieved and implemented.

3.2. **Analysis**

In the design process there are things done in advance, in order to facilitate the course design. The thing to do is process analysis. In the analysis process is divided into some form of regional analysis, site analysis, function analysis, activity analysis, user analysis, space analysis, structural analysis and utility. In the analysis process the first thing to do is look at / analyze the initial conditions of the zoo, this is done in order to determine the extent of process re-design done so much easier the design process.

3.2.1. **Analysis of Regions**

This process is conducted to obtain preliminary information about the area that serve as objects of design. How the condition of existing object region. The purpose of this analysis is to see and know the conditions around, what the potential and shortcomings of the design area can be processed better.
3.2.2. **Site analysis**

The analysis was conducted to determine the condition of the design objects, knowing the advantages and disadvantages of the Site. Thus, in the design process easier, because it knew in advance about the potential that exists.

3.2.3. **Functions Analysis**

Function analysis is performed to determine the role of the design of the selected object. So by knowing the function of the object, the process of designing can be done easily by dividing the masses according to function.

3.2.4. **Analysis of Activities**

Analysis of activities carried out to determine what activities will have on the design object. So the future can determine what buildings are provided, facilities offered. So that the object design can meet the convenience and security of its users.

3.2.5. **Analysis of User**

The analysis was conducted to find out about anyone who will use the object. So that from the information obtained, it can consider what should be provided to meet the needs and comfort for users.

3.2.6. **Analysis of Space**

Space analysis done to determine what are the spaces that will be provided on the object. The relationship between space will also be exposed further to the placement of spaces in accordance with the relationships between spaces.
3.2.7. **Analysis of Structures and Utilities**

Important to know what system will be used in accordance with the theme and concept. Not only that utility systems should also be considered, because with the utility system allows for the creation of a whole building functions and activities and facilitate user convenience. In this case the utility system will be presented further in particular utility system footprint.

3.3. **Concept / Synthesis**

In the process of designing the object using some concepts of the concept tread design, the concept of space, the concept of shape and appearance.

3.3.1. **Site Concept**

Site concept there are some points to consider the circulation of the tread, the arrangement of the mass at the site, placement entrance, vegetation.

3.3.2. **Concept of Space**

On the concept of space there are several points to consider is the room setup, the relationship between space, the atmosphere of space, comfort room.

3.3.3. **Concept Shape and Views**

On the concept of shape and views of things to be considered is the basic form of buildings, structures, materials used, finishing the building.
3.4. Scheme Design

**Phenomena**
- The natural environment is increasingly damaged
- Population of animals that became extinct
- The level of cleanliness and comfort at less KBS
- The condition of buildings and stables are not fit for use
- Order a less attractive landscaping

**Problems**
1. How to re-design of the Surabaya Zoo with the theme of Green Architecture?
2. How to re-design of the Surabaya Zoo in accordance with the existing potentials in the Surabaya Zoo?
3. How to re-design of the Surabaya Zoo comfortable and safe for visitors and can increase revenue?

**Goal**
1. Making the Surabaya Zoo themed green architecture
2. Making the Surabaya Zoo in accordance with the potential that existed at the Surabaya Zoo.
3. Making the Surabaya Zoo as a city park that is cheap, safe and comfortable and can increase revenue.

**IDEAS**
Title: Redesign Surabaya Zoo
Theme: Green Architecture

**SECONDARY DATA**
- Studies Library
- Comparative Study

**DATA COLLECTION**

**PRIMARY DATA**
- Survey Locations
- Observation

**DESIGN ANALYSIS**

**SITE ANALYSIS**

**ANALYSIS OF SPACE**

**ANALYSIS SHAPE AND VIEW**

**DESIGN CONCEPT**
- Concept Site
- Concept of Space
- Concept Forms and Views

**PREDESIGN**

**DESIGN**

Figure 3.1: Scheme design
Source: Analysis result, 2010)