

## **The Principle of Waterfront Design as a Basic of Development Taman Hiburan Pantai (THP) Kenjeran Surabaya**

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### **Abstract**

Taman Hiburan Pantai (THP) Kenjeran Surabaya is a beach resort which is managed by the Municipal Government of Surabaya. Currently, there are two new facilities namely Dancing Fountain and Suroboyo Bridge. Those facilities are developed due to the wider range of area that THP Kenjeran has. Thus, it is important to present two dominant facilities and change the orientation of panoramic panorama of the open sea into a panoramic view of Suroboyo Bridge. As an air ridge area, THP Kenjeran has a great natural potential to be developed. Through qualitative and descriptive research, observation and analyzed was done according to research design principle. The results obtained are improvements to site design, development of building visualization which refers locality and landscape arrangement that balances hardscape and softscape.

*Keywords: water edge design, panoramic change, taman hiburan pantai (THP) Kenjeran.*

### **1. Introduction**

Along with the inauguration of Suroboyo Bridge and Dancing Fountain Kenjeran Beach area has a new value. The bridge which was originally created to overcome the traffic jam has impacted the tourism of Surabaya city, ([dprd.surabaya.go.id](http://dprd.surabaya.go.id), 2016). The development of coastal areas needs to be more concerned to bring a good impact on tourism as well as to be more valuable to the environment.

As a coastal area, the development of Kenjeran Beach area needs to pay attention to the principles of the development of the waterfront area so that the natural potential that has been conferred can be optimally enjoyed. One of the locations which are potential to be an icon in development of this beach resort is the Taman Hiburan Pantai (THP) Kenjeran.

According to its history, Taman Hiburan Pantai (THP) Kenjeran was built in 1968. Along with its existence, this place has already equipped with several facilities that support the comfort of visitors. The development of Taman Hiburan Pantai (THP) Kenjeran has been through several stages (Y. Afidah, 2014).

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The concept of THP Kenjeran experiencing a change from a simple coastal tourism and dried fish market become a Kenjeran THP that accommodates many activities. The construction process that occurred makes the THP Kenjeran function become less optimal in serving the visitors so as cannot optimize the development as an attractive waterfront area. In addition to that, there are many potential benefits of waterfront areas which are not well accommodated thus leads to the visitor needs that cannot serve optimally.

Considering those issues, it is necessary to study the current condition of Kenjeran Beach Amusement Park, in connection with the existence of two new facilities that attract tourists to come to this place. The result of this study will be beneficial to optimize the arrangement of the area based on water edge design principles.

## 2. Literature Review

Principles of waterfront design by Hussein and Rosemary (2000) mentions several elements of design as follows:

- a. *Site Planning*, as an element that provides space for interaction between waters with the site.
- b. Services along the waterfront to maintain the continuity of activities between the waters and the banks.
- c. Infrastructure that accommodate the activities on the edge of the water does not disrupt the waters.
- d. Preservation, considering the banks of the river is the area that became the forerunner of a city.
- e. Visual from the aesthetics of buildings and environment is easier to understand by the laity as a benchmark of their comfort in the tour activities.
- f. Street scape and Landscape

Waterfront can be more attractive, comfortable and fun when the arrangement of streetscape and landscape in accordance with the activities on the water edge.

- g. Access and Transportation

The ease of accessibility and affordable transportation is important not only for visitors from the direction of the highway but also the use of transportation as well as its access from and waters to its banks.

- h. Land Use and Facilities

The setting land on the edge of the water to maintain the life of the beach itself.

On the other hand Inskeep (1991), provides some insight of the important factors in urban tourism is the character and quality of urban environment which include:

- a. Visual quality and form of the architectural character and style
- b. Condition of outer space or garden or landscape
- c. View and vista
- d. Traffic conditions and pedestrian ways
- e. Environmental hygiene and garbage
- f. Environmental conditions: air, water and noise pollution
- g. Climatic conditions: heat, rain
- h. Level of public security

Some policies related to the arrangement of waterfront areas are as follows:

1. Law No. 1 of 2014 on Amendment to Law no. 27 of 2007, on Coastal Area Management and Small Islands, mentions the coastal border at least 100 meters.

2. Guidelines for the Arrangement of Urban Edges of Coastal Zones, Directorate General of Human Settlements, 2016, for tourism areas provide guidance as follows:
  - a. Has a slope of the soil that allows built without negatively impacting the environment and has a stable soil structure.
  - b. Has facilities and infrastructure
  - c. The road network refers to the applicable urban road geometric planning.
  - d. Development of artificial objects by taking into account the visual aspect and the environment with the environment.
  - e. Supported with adequate landscape
3. Guidelines for the Management of Buildings and Environment of the Water Edge of DitjenCiptaKarya, 2000 (IsfaSastrawati, 2003), states:
  - a. Maximum building density 25%
  - b. Maximum building height 15 m
  - c. The orientation of the building faces the water's edge by considering the position of the sun and the wind.
  - d. The shape and design of buildings in accordance with the conditions of the water edge.
  - e. Buildings that can be developed in waterfront borders are parks, recreation rooms and sports facilities.
  - f. Buildings within the border are limited to buildings of worship, guard buildings, toilets, buildings without walls with a maximum area of 50m<sup>2</sup> / unit.
  - g. There is no massive fencing of more than 1m or using live plants.

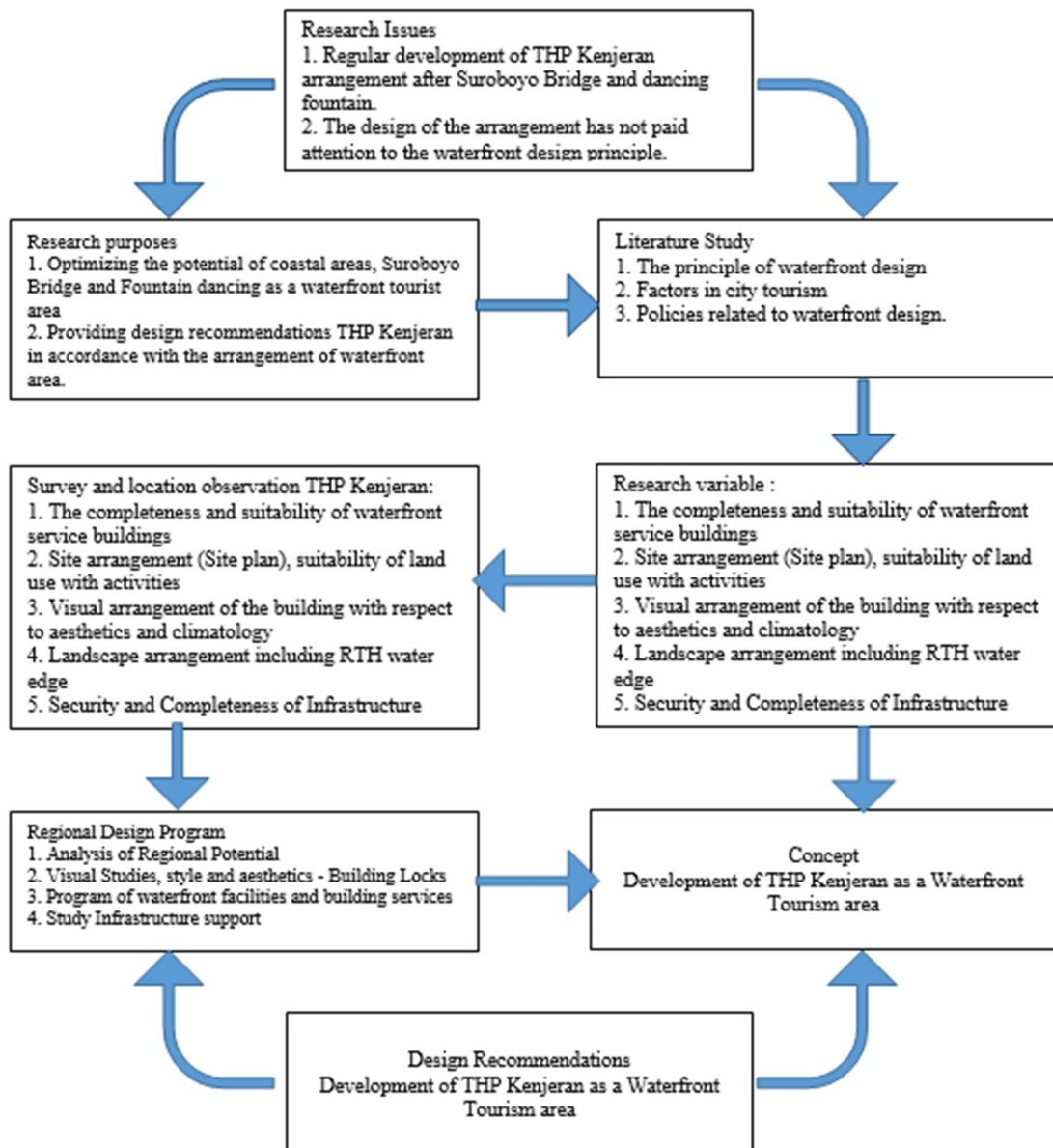
From some of the literature review, the research variables are obtained as follows:

1. The completeness and suitability of waterfront service buildings
2. The arrangement of site (Site plan), suitability of land use with activities
3. Visual arrangement of the building with respect to aesthetics and climatology
4. Landscape arrangement including RTH water edge
5. Security and Completeness of Infrastructure

### 3. Research Method

The research method that used is Descriptive Qualitative. The research flow will consist of four stages.

The first step is finding the problem and the objectives of the study. The second step is doing a survey and exploration of the Taman Hiburan Pantai (THP) Kenjeran to find all the technical issues. The next step is conducting a literature review as the basis of primary and secondary data and find the research variables. After that, we needs to create a regional program and analyze the suitability of the solution to the problem based on the research variables. The results of the draft development design are tested in the focus group discussion (FGD) with the local community to obtain new input. FGD results form the basis of making design recommendations to serve as a model of waterfront design development for the tourist area at the Taman Hiburan Pantai (THP) Kenjeran Surabaya.



*Figure 1 Research Method*

#### 4. Result and Discussion

The result of survey and observation in the THP Kenjeran are as follows:

- 1) The completeness and suitability of waterfront service buildings. The facilities that equipped THP Kenjeran until now:
  - a. Office of the manager as well as the entrance ticket sales
  - b. Place to sell the Surabaya local food
  - c. Souvenir booth as a place of selling beach crafts
  - d. Dried fish and crackers market
  - e. Stage on the water
  - f. Stage on the beach
  - g. Gazebo beach

- h. Gazebos and docks boat on water
- i. Outdoor children's playground
- j. Mosque / Mosque
- k. Common Toilet
- l. The Dancing fountains
- m. Suroboyo Bridge



**Figure 2 THP Kenjeran Facilities**

- a) Gate, b) Pendopo, c) Souvenir Market and Dried Fish, d) Playground, e) Middle dock,
- f) Beachside dock, g) The Dancing Fountains, h) Suroboyo bridge

2) The suitability of the site arrangement (site plan) towards the land use and activities. The condition of arrangement THP Kenjeran existing current is as follows figure 3

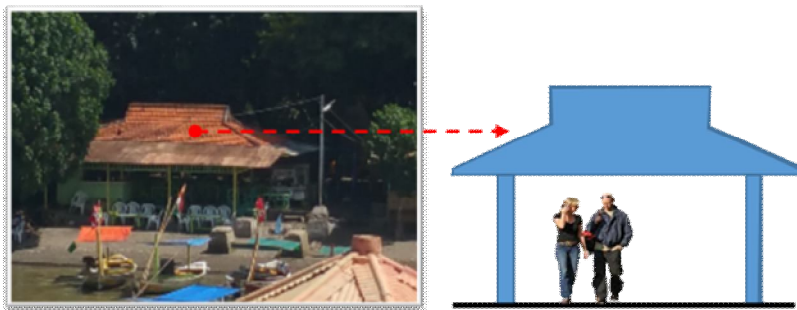


**Figure 3 Existing Arrangement of THP Kenjeran Buildings and Facilities**

- 3) Visual arrangement of buildings with respect to aesthetics and climatology. The visual façade of the buildings in THP Kenjeran do not have a particular style. The forms which are used are close to vernacular style. The wall material is brick while the sloping roof is using a shield or saddle roof. Some shelter uses concrete and wood as the column.



“pelana” roof pattern on market buildings



“joglo” roof pattern on the food seller stand

**Figure 4 Visual Display Pattern of Buildings**

- 4) Landscape arrangement including the green open space in the water edge. Currently, there is no garden light in the THP Kenjeran landscape. The only signage found is the one pointing the toilet. The majority of the plant characteristics are shade plants. The pedestrian ways are using uneven paving as seen in figure 5



*Figure 5 Landscape Arrangement Pattern of THP Kenjeran*

5) Security and Completeness of Infrastructure



*Figure 6 Infrastructure of THP Kenjeran*

The results of the analysis of the condition of THP Kenjeran which is in accordance with waterfront design principles are as follows:

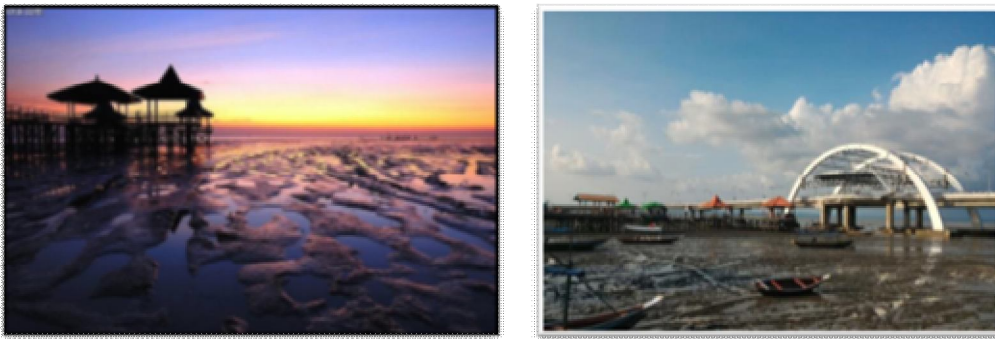
1. The completeness and suitability of waterfront service buildings: In accordance with the guidance of the Manpower and Environmental Management Guidelines of the Water Edge of the Directorate General of Human Settlements, 2000, a number of types of facilities and

facilities provided by the THP Kenjeran are considered to be sufficient to meet the completeness requirements.

2. The suitability of the site plan (site arrangement) towards the land use and activities.
  - a. The parking area is placed on the side of the site. This place is already suitable for the requirements and demands of its placement which is easy to reach and visible from the street.
  - b. The office of the building managers and ticketing are placed on the side directly connected to the parking area. The placement of ticketing and managing buildings is already appropriate.
  - c. Right after the ticketing place, a pendopo is placed as a recipient space unifying the north and the south path.
  - d. The booth of the food vendors, souvenirs, and dried fish are spread from the north to the southern path without any particular grouping. The placement of a food vendor along the beach is considered to be inappropriate since it may disturb people's activity in enjoying the beach view. Besides, the view of the open sea has been covered by the Suroboyo bridge which are located in the coastal border area.
  - e. The play area spreads from north to south following the form of the site and jumbled with the shopping place.
3. Visual arrangement of the building with respect to aesthetics and climatology. The building characteristic in THP Kenjeran is very simple in shape. The arrangement of the buildings seems not well designed. Some additional buildings are just being attached to the main building.
4. Landscape arrangement including green open space in the water edge. THP Landscaping is also considered to be not well designed. It gives the impression of dirty and chaotic condition.
5. Security and Completeness of Infrastructure

As a tourism area that has just equipped with new facilities namely dancing fountain and Suroboyo Bridge, the THP Kenjeran should improve the condition of its area.

The view and the point of interest has changed from the scenery of the sea to the panorama of dancing fountain and Suroboyo Bridge.



*Figure 7 Changing The Panoramic Atmosphere of The Beach*



Some action can be done to improve the condition of the THP Kenjeran are as follows:

1. The waterfront should be equipped with more representative building to improve its services.
2. The site arrangement and suitability with the land use and activity
  - a. The view orientation should be adjust to the dancing fountain and the Suroboyo bridge instead of to the beach panorama
  - b. Providing new buildings as a means of enjoying new panoramas. The placement and arrangement of the building should be in accordance with the Water Edge Setting Act, that Beach border is 50-100m
  - c. Providing a good access to connect THP Kenjeran and Suroboyo Bridge to promote interaction between those two places.
  - d. The building should be design in accordance with the activities. The condition should be improve and maintain to give the impression of security as well as neat and comfortable.
3. Visual arrangement of the building with respect to aesthetics and climatology.  
Provides a more attractive and natural shape of building with a weather-resistant building materials. Designing the building arrangement with a sequence to provide visual comfort, as well as introducing the identity of localities of the Kenjeran area through the shape and the material used in the building.
4. Landscape and the green open space in the water edge.  
Landscape can be optimized by providing a unified atmosphere. Landscape elements, play ground, plant species, pedestrian ways can be designed to support each other.
5. Security and Completeness of Infrastructure.  
The provision of infrastructure should be in accordance with the circulation path and the landscape arrangement so that the maintenance process will be easier.

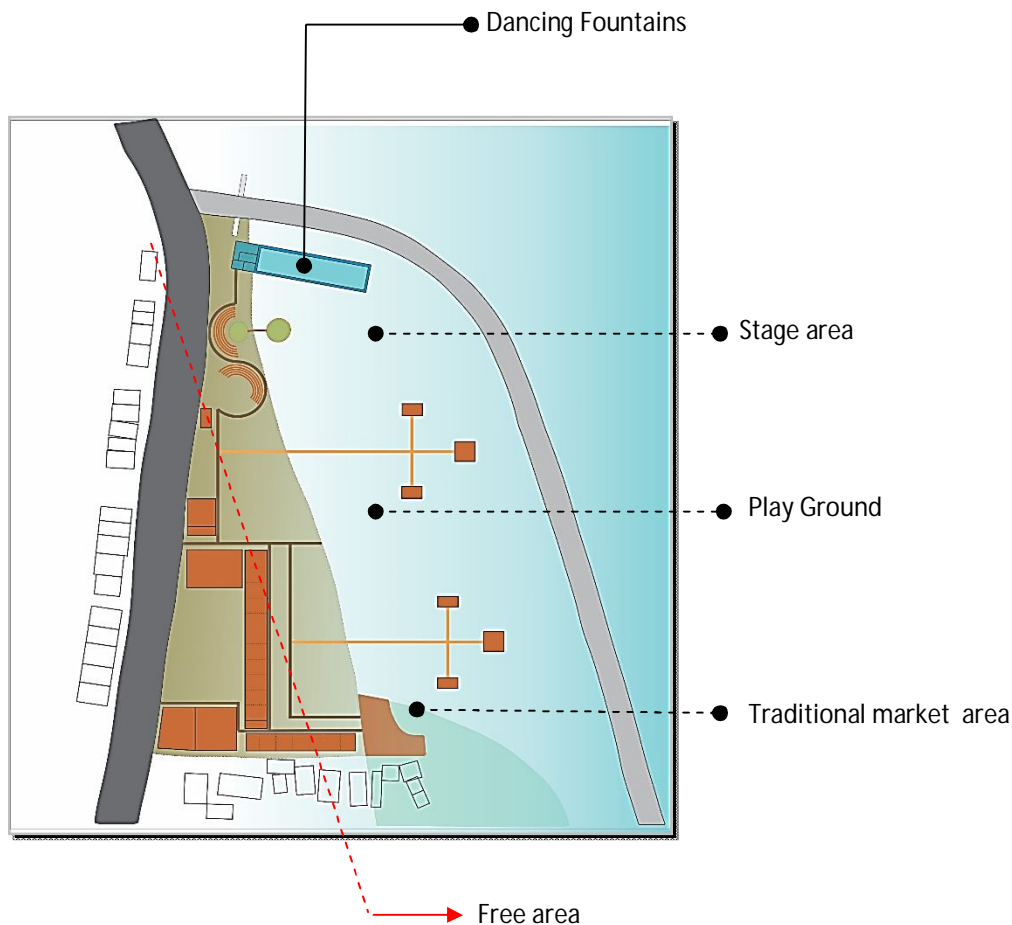
## 5. Conclusion

The development of THP Kenjeran using the waterfront design principle is emphasizing the correction of zonification of the building placement within the site. Visual improvements of the building aesthetics need to be done to provide a more pleasant tourist atmosphere. Optimizing the landscape as a waterfront area can be done by optimizing the landscape elements and balancing the hardscape and softscape. The infrastructure provision should be improve in accordance to the building arrangement so that the place can be optimally functioned.

### a. Site Setup

The concept is built in accordance with the potential of the local region to optimize the beach as the main point of interest. The change of orientation to promote interaction between the water and the edge should become the priority of the arrangement. The adjacent area or meeting point between the water and the beach should become a free area of the building that can be optimized to enjoy it freely.

The second potential view is the dancing fountain. This dance fountain show is performed only once a week or in special events in Surabaya, yet this does not reduce the importance of dancing fountains as an element that has the capability of becoming the additional point of interest. Thus, the north side area which is the closest area to the dancing fountain can be the suitable area for the show zone.



*Figure 8 Block Plan According to Concept*

b. Building Visualization

All of the building should be designed to optimize the potential of the beach as the orientation of the building. The restaurant can be taken as an example. The restaurant consists of 3 floors; 1st floor is the place for the seller, 2nd floor is designed to be an open dining area such as pendopo; while the rooftop can be functioned as a best place to see the beautiful scenery of the sea.



*Figure 9 Visualization of Culinary Building*

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