

## **THE DEVELOPMENT OF W.R. SUPRATMAN MEMORIAL AND THE SURROUNDING AREA SUPPORTING SURABAYA TOURISM**

### **SANDI RIFANU<sup>1</sup>**

Urban Design, Department of Architecture,  
Institut Teknologi Sepuluh Nopember.  
Surabaya, Indonesia  
[sandirifanu@gmail.com](mailto:sandirifanu@gmail.com)

### **DR. ING. Ir. BAMBANG SOEMARDIONO<sup>2</sup>**

Lecturer of Urban Design,  
Department of Architecture,  
Institut Teknologi Sepuluh Nopember.  
Surabaya, Indonesia  
[bbsoem@arch.its.ac.id](mailto:bbsoem@arch.its.ac.id)

### **Ir. MUHAMMAD FAQIH, M.SA, Ph.D<sup>3</sup>**

Senior Lecturer,  
Department of Architecture,  
Institut Teknologi Sepuluh Nopember.  
Surabaya, Indonesia  
[faqihl@arch.its.ac.id](mailto:faqihl@arch.its.ac.id)

**Abstract**

W.R. Supratman memorial is a historic heritage by a large public cemetery, kapas cemetery. The whole area is not only a large green open space but also covers shopping area, government building, pedestrian way vendor and other public activity. The memorial is located between commercial area kembang jepun and recreation facility Kenjeran. It also a direct path to Suramadu bridge, connects java island and Madura island. The site position and its activities are potential factor to be developed to support Surabaya tourism. This study aims to explore the potential factors and uncover problems to improve the role of the area as an sustainable urban landscape. The method applied are survey, walkthrough analysis and mapping analysis. The result is design criteria to improve the memorial, its surrounding area and propos design ideas of the area as sustainable urban landscape.

**Keywords:** Green open space, , Mapping, Memorial , Tourism, Walkthrough

## 1. INTRODUCTION

### 1.1 Background of Research

Jalan Kenjeran as a subject of the present study consists of two protruding areas, Kapas public cemetery and W.R. Supratman memorial. Kapas public cemetery placed in Jalan Kenjeran functions as urban green open space, government facility as well as trading facility. Meanwhile, W.R. Supratman memorial is considered as node triggering the quality of the area. Besides, the cemetery area connects North and East Surabaya as well. The significant problems emerged in this area are the high number of undisciplined street vendors, malfunction of the pedestrian way, and the untidy visual look of the cemetery itself due to the placement of the garbage bin as well. The state of Kapas public cemetery is less efficient since the plot tombs are not well-maintained, less facility, less community empowerment and the visual effect of the cemetery tends to be creepy.

At the same time, several problems emerged in W.R. Supratman memorial are the lack of direction signs and massive fences which restricts visitors' activities. This memorial is likely to be far away from the crowd of Surabaya. If the problems are not immediately overcome it will lead to the ignorance of young generation to the historical sites. The research sites plays pivotal role on the quality of urban life. Therefore, it requires developing Kapas public cemetery and memorial parks which functions as lungs of the city and watering infiltration area.

The limitation of the study concerns to the improvement of the physical aspect. The physical aspect of W.R. Supratman memorial is able to be developed as Surabaya city tour since the area connects the old city in North Surabaya and littoral in East Surabaya. Besides, this area is close to Suramadu Bridge which connects to Madura Island. The present study is conducted into two stages; finding the potential and problems of the area and finding design criteria for physical area development as Surabaya city tour supporting.

### 1.2 Study Area

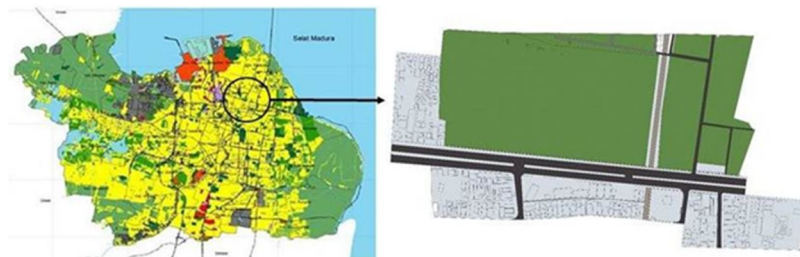


Figure 1. Map of Surabaya., 2. Map w.r. Supratman cemetery area

Source : RDTRK of Surabaya

The area is located on Jalan Kenjeran, Surabaya, East Java. Kapas public cemetery is 9ha width. Administratively, this area divides into East side which includes in Rangkah area and Development unit of Dharmahusada and West side which includes in Simokerto area and Development unit of Tunjungan.

## 2. LITERATURE REVIEW

To deal with conflicts presents in memorial area, it is employed sustainable urban landscape approach. This approach has similar aim to the sustainable urban development which aims at achieving stable condition of physical and social systems by accommodating present requirement without sacrificing future generation capability. According to Linehan, et al., (1998) the decision making activity on landscape should considers ecological, cultural, and economic functions so that the important resource for the next generation is reserved. Human proposes and changes the landscape due to economic, social or ecological objections so that landscape is considered as a physical planning unit. Sustainable urban landscape requires the landscape structure should support the required ecological, social, and economic processes, thus, it contributes to the next generation, such as a landscape is changing over times without losing its main resources (Linehan, et al., 1998). Dinep and Schweb (2010) in Sustainable Site Design formulate certain criteria in developing sustainable urban landscape. Those criteria are connectivity, meaning, purpose, efficiency and stewardship.

Tibbald (1992) postulates public space as a city product where the public has both physical and visual access. Furthermore, public space is considered as urban sharing space for people who do not know each other, no sibling relationship, friends, and colleagues as well. According to Stephen Carr, et al., (1992) there are three main qualities in public space; responsive, democratic, and meaningful. These principles, then, is able to be reconsidered to design W.R. Supratman memorial as a public space.

People's visual perception on the city generally in terms of urban planning structure, mass of the buildings, and landscape elements as well, will determine the related city character. People's visual perception is closely related to political, economic, social, cultural and historical aspects of the city. A visual quality is related to psychological and physical phenomena (Cullen, 1975). Psychological phenomena associates with physical appearance of an area which emerging emotional feeling related to the meaning emerged by an object or area to the observer. Meanwhile, physical phenomena associates with the environment structuring and setting as well as visual correlation which is closely related to the correlation occurred among the elements in an area. Cullen (1975) in Townscape postulates that there are several elements which creates visual quality of the city so that the community would be able to enjoy their environment emotionally both by means of psychological and physical feeling. Those element are serial vision, place, content, and function.

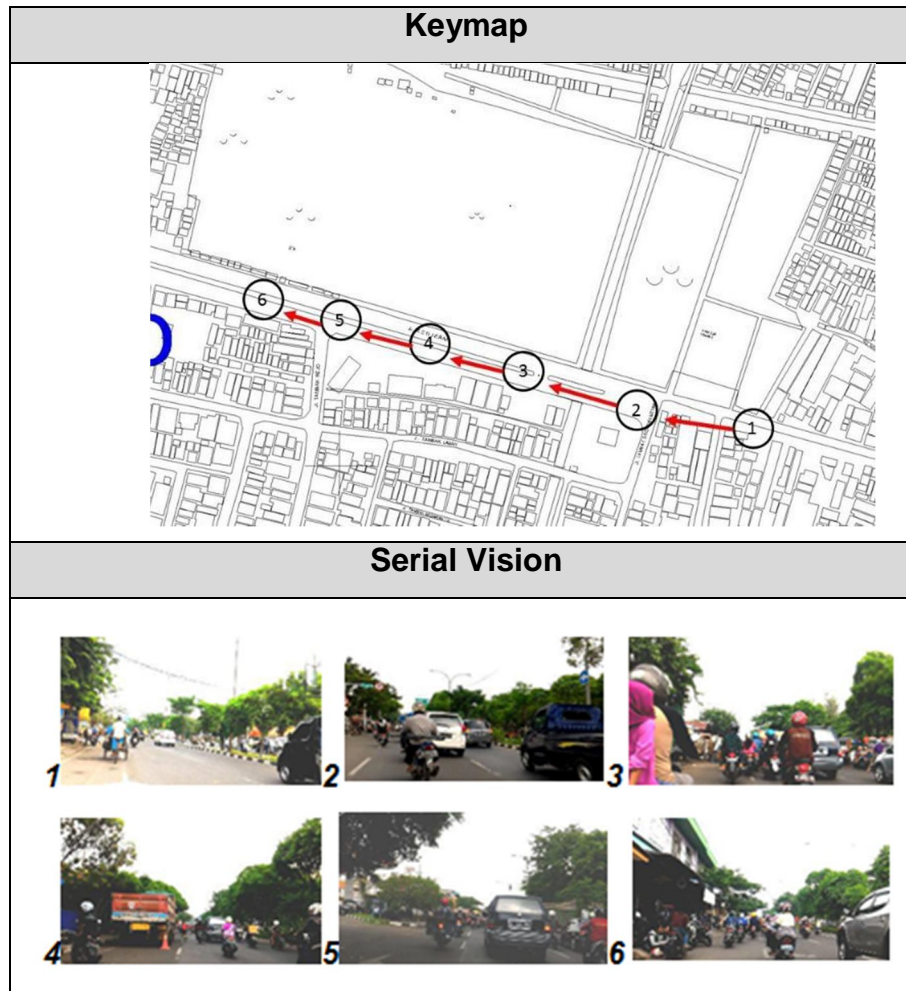
## 3. DISCUSSION

### 3.1 Walkthrough Analysis

Urban design toolkit (2006) describes that walkthrough analysis is an understanding on street internal state by evaluating the quality of the city and design. Such technique is conducted by walkthrough the city and record the observation along the way. This analysis technique provides the description of urban design problems and determines the design required. According to (2008) in walkthrough research requires 4C criteria to assess street internal quality, including conspicuous, comfortable, convenient, and convivial.

Table 1. Serial Vision









Source: RDTRK of Surabaya &amp; Personal Documentation

**Serial view of Kapas public cemetery area:**

1. This picture indicates the starting point for entering the area marked by similar fences in the cemetery area.
2. The street median and pedestrian way filled with evenly vegetation along the Jalan Kenjeran. At the graveside, there are many motorists against the direction to across to the different way.
3. It seems so crowded due to the U-turn sign. Besides, the garbage dump makes the looks of the cemetery even worse.
4. Pedestrian way in this picture is in good function. Meanwhile, the roadside is used to park trucks.
5. The traffic light is exist in this picture, in rush hour the traffic occurred in this point due to the different road volume in Jalan Kenjeran and Tambak Rejo. The pedestrians have to walk a long way to the crossing point so that many of them prefer not to use the crossing facility.
6. This area is a trading area both goods and services. The shop located in the side of the road immediately adjacent with the pedestrian way so that many of the shop use the pedestrian way as storefront merchandise.

Table 2. Street View &amp; \$C\$ Analysis

Source: RDTRK of Surabaya &amp; Google Street View

Keymap	Street View	
	   	  
4C Aspect	Analysis	
Conspicuous	The research area have pedestrian way, but it has less lighting in the night. The main lighting is only from road median so that that there are several spot has no light. Besides, there is no signage and visibility in several spot, this segment decrease the pedestrian safety.	
Comfortable	The pedestrian way is 1,1 m width which is enough for 2 pedestrians. It already meet the criteria of standard pedestrian way based on public work service standard. The pedestrian volume in this pedestrian way segment is $\leq 23$ people/meter/minute, so that it cannot accommodate all pedestrians, especially, the pilgrims. The ornaments of the pedestrian way is only located in the side of cemetery.	
Convenient	Walking is the first choice for most visitors since it considered more efficient and affordable. In rush hour, walking will be faster than any other vehicles in this segment. The weakness of the segment is lack of crossing facility which makes the pedestrian cannot deal with crossing activity.	
Convivial	Walking can be fun since it enables the pedestrian to interact with others. The hospitality in pedestrian way is distracted by the street vendors and people who parks their vehicle there. Those make the pedestrian prefers walking in roadside as an alternative.	

### 3.2 Mapping

In Urban design Toolkit (2006) describes that mapping is a graphics technique to record and analyze physical characteristic and structural pattern of certain area. This is also called as behavior analysis technique. It is employed to understand how the physical state of urban design affects to the activity and behavior of the people by observing the city. This observation is able to support the development and change the existing design in such city

Table 3. Landscape Elements

Source: RDTRK of Surabaya &amp; Personal Documentation

Hardscape	Softscape	Street Furniture
		

**Softscape**

The softscape distribution in Kapas public cemetery area is evenly distributed in pedestrian way, median and Kapas public cemetery as well. The vegetation is approximately 70% which means more than half of the Kapas public cemetery. Not only trees but also bushes which make the visual look of Kapas cemetery green. Trees in the pedestrian way are beneficial for the pedestrian as shade, while the trees in street median are able to add green element in the area.

**Hardscape**

Hardscape is hard element in Kapas cemetery area consisting of street and pedestrian way. Pedestrian way in the side of W.R. Supratman memorial has no ornament and it is functioned as trading area. Meanwhile, the pedestrian way in the side of Kapas public cemetery already has ornaments along the east and west sides. Ornaments is considered as important element to create similar visual in an area and impress the pedestrians. The hardscape forms in Kapas public cemetery are the concrete gravestones. 80% of the cemetery is covered with gravestones, this decreases rainwater infiltration.

**Street Furniture**

Street furniture in this area is not sufficiently provided. The standard public seat in pedestrian way is 10 m, while there is no seat in the cemetery area, so that the people use the fence as seats. Besides, disposal bin is an important element to be provided as well. The placement of the disposal bins should based on the main place of the street vendors.

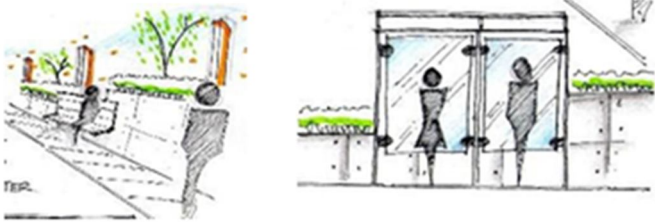
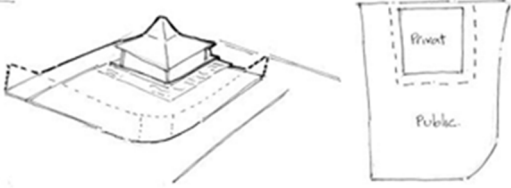
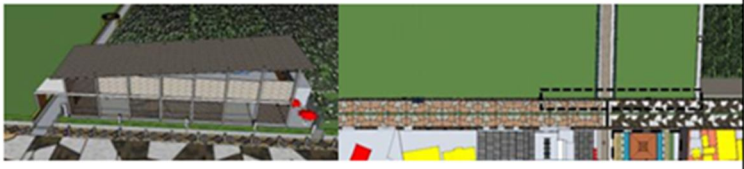


**4. RESULT****4.1 Potential and Problem**

The potential of W.R. Supratman memorial in serial vision as area vocal point is the cemetery building of W.R. Supratman characterizing by Joglo roof. The characteristic of an area can be seen from the street median, fences, and the pedestrian way in this area. The vegetation distribution is able to increase visual element as well as have role as lungs of the city. The present of the vendor would be beneficial as a potential by accommodating the vendors' activities.


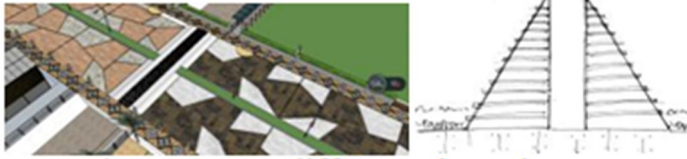
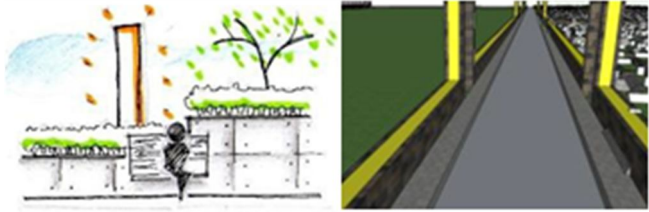
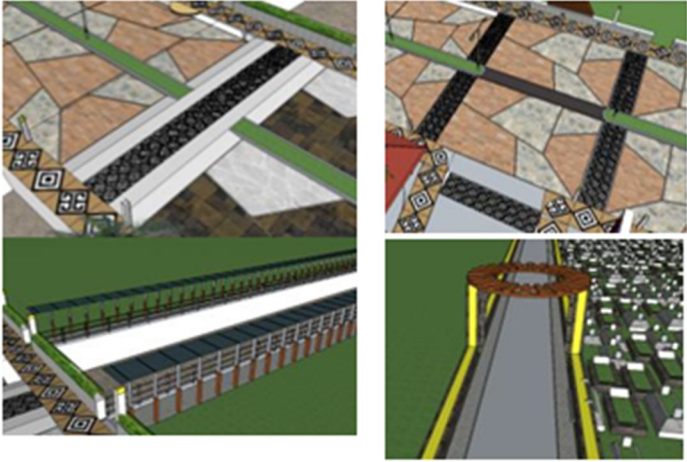
The visual aspect problem is the existence of disposal dump which makes the untidy visual impression, lack of lighting in the Kapas public cemetery creates an impression of sinister and the unevenly distribution of street furniture, such as public seats, disposal bins and shelters. There is no connecting zone which connects street vendors zone and parking lots.

### 4.2 Criteria

Table 4. Design Criteria  
Source: Researcher Identification

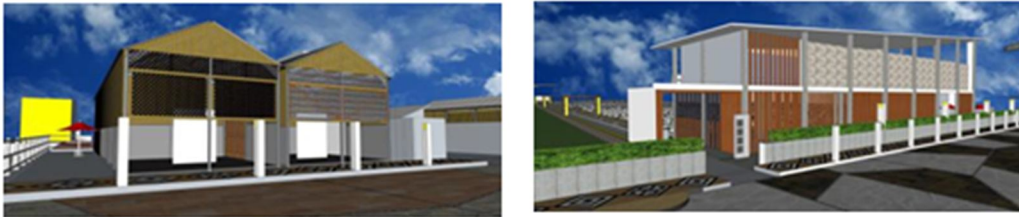
Criteria	Concept
<p>Should provide street furniture as supporting public facility, especially for visitors and people surroundings.</p>	 <p>Street furniture like benches, shelter, and lighting are combined with the fences. The fences are not merely functioned as restraining between the street and cemetery but also for benches and shelter as well.</p>
<p>Should provide public open space for surroundings people interaction.</p>	 <ul style="list-style-type: none"> <li>• Eliminate the barrier that existed at the cemetery of W.R. Supratman.</li> <li>• Provide a clear boundary between the public area to a private area with water element.</li> <li>• Provide seating and lighting in the form of light step so that visitors feel safe and comfortable</li> </ul>
<p>The people should involve in the development of Kapas public cemetery.</p>	 <ul style="list-style-type: none"> <li>• Combining the office area by area merchants and motorcycle parking area.</li> <li>• Car parking area is only found in the main entrance of kapas cemetery .</li> <li>• Motors parking area are deployed at some point in the tomb Cotton office building, in the northern part of the tomb, and on the border with the village tomb</li> </ul> 
<p>Should improve the visual impression in trading zone and dumpster by means of or naments and signage regulation.</p>	 <ul style="list-style-type: none"> <li>• In the trading area, the building is moved backwards one meter</li> </ul>



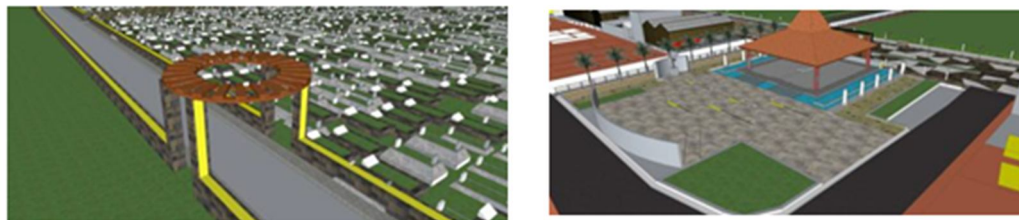
	<p>length, the present building has no transitional space between the building and the pedestrian way. It should be done so that the vendors do not employ pedestrian way to sell their goods and services.</p> <ul style="list-style-type: none"> <li>• The signage regulation is also conducted to create more tidy impression on the trading building.</li> </ul>  <ul style="list-style-type: none"> <li>• In the dumpster area should be given fences so that garbage does not look straight.</li> <li>• Structuring the building located in the area of dumpster needs to be done by arranging the facade of the building.</li> </ul>
<p>Considers fine visual sequences from east to west sides of the Kapas public cemetery by accentuating focal point.</p>	 <ul style="list-style-type: none"> <li>• The pavement difference is made to emerge sense of place to the people passing this area. The material used for road pavement is patterned concrete with various color combinations.</li> </ul>
<p>The cemetery development should consider the night lighting to avoid creepy impression.</p>	 <p>The lightings are also placed in fences with 10m length between each lighting.</p>
<p>Connecting the two sides of the street.</p>	 <ul style="list-style-type: none"> <li>• Adding a ladder crossing the tomb area within 200m.</li> <li>• Provide on a crossing pattern.</li> <li>• Similar visual impression on the grave contained the element of shade at the side of the river and circle element as the bond between blocks of graves in the tomb door.</li> </ul>

## 5. CONCLUSION

To create creative tour in Kapas public cemetery and W.R.Supratman memorial, it should increase the physical improvement to encourage the memorial and meaning strengthen. The physical development of an area includes, first, building the entrance in the area which indicates that the people entering W.R. Supratman memorial. Second, strengthen the focal point by build a large scale entrance in Kapas public cemetery. Third, change the road texture in such areas to be more colorful so that the people will perceive the sense of place. Forth, make W.R. Supratman memorial as a public open space. Last, provides street furniture required by people surroundings. From these five developmental points, it is able to make the research area as a novel thematic tour area in Surabaya.



**Figure 3.** Facade of dumpster building. **4.** Main entrance Kapas cemetery  
Source: Researcher illustration on 2016



**Figure 5.** Fences on the public cemetery. **6.** Cemetery of W.R Supratman  
Source: Researcher illustration on 2016

## 6. BIBLIOGRAPHY

- CARR, Stephen. Et. Al. 1992. Public Space. Gambridge university.
- CULLEN, Gordon.1975. Townscape. London. The architectural press
- DINEP, C & SCWEB, K. 2009. Sustainable site design: criteria, process, and case studies for integrating site and region in landscape design.
- GRANT, J.A and associates. 2008. Glenferrie Road Precinct Walkability Study
- JALALADINI, SIAVASH and OKTAY, DERYA. 2011. Urban public and vitality: a sociospatial analysis in the street of Cypriot towns. *Procedia-social and behavior science* 35 (2012)664-674.
- LINEHAN, And GROSS. 1998. Back to the future, back to basics: the social ecology of landscapes and the future of landscape planning. *Elvesier Science* 42(1998)207-223
- MINISTRY OF THE ENVIRONMENT. 2006. Urban design toolkit. New Zealand. Ministry for the environment
- NIGRO, Yasmini Santi. 2001. *Arsitektur Makam: Keserupaan Tata Ruang antara Kompleks Makam Kesultanan Agungan di Imogiri dan Kraton Yogyakarta*. KILAS Jurnal Arsitektur FTUI vol 3 no.2/2001 ISSN 1411-0970
- TIBBALDS, FRANCIS. 1992. Making people-friendly towns: improving the public environment in towns and cities. Michigan. Longman