

Restoration of Public Facilities and Regulation of Gebang Lor Corridor, Surabaya

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Abstract: Basically, public facilities aim to improve people's welfare. Often, public facilities are not in accordance with standards and conditions, especially in the corridors of a city. Corridors are spaces that are used as roads or access from a room to another. Corridors in Surabaya generally have various business activities and services that support the lives of surrounding communities and migrants. In addition to migrants as workers in Surabaya in general are students who live around the corridor near the campus. The high activity is not balanced with the availability of public facilities, such as the limited width of the road, not having parking lots, public open spaces, green open spaces, pedestrian paths and so on. This has led to unfavorable environmental conditions for the community and has made the corridor less organized both in function and form. Then it is necessary to develop public facilities in the corridor. This research uses descriptive qualitative context method. The context of this study is related to the characteristics of the region forming in the elements of urban design, which explains the phenomenology of a corridor that is related to a specific social and economic context. This analysis is conducted to determine the potential and problems that exist in the corridor. The results of the study are structuring the corridor related to the circulation of motorized vehicles, parking lots and building functions. In addition, there is also the development of public facilities in the form of providing pedestrian paths, public open spaces and reintegrating green spaces to improve environmental functions and improve economic, social and cultural conditions in the community.


1 INTRODUCTION


City design generally pay more attention to urban physical forms. The forms of urban design can be reflected as building facades, road network forms, and other elements that influence the shape of urban areas (Eko Budihardjo, 1999). The shape of the city is connected with symbolic elements and reflects the life of the people, so that the form of the city itself becomes the center of attention of individuals, who see the city as a manifestation of certain ideological principles. There are problems that are specifically related directly to the design elements of the city starting from the functional problems of the area due to uncontrolled development of land use, the development of city physical development, violations

of building height provisions, violations of building border lines, multifunctional building issues, lack of replaced green open spaces by a mass of buildings that are so dense and there are still many more problems facing a city. The economic growth of the city which cannot be dammed by population growth (over urbanization) in business and trade makes the city of Surabaya also have to provide integrity between traders and the trade district for them. The Gebang Lor Corridor, located in the Gebang Putih district of Surabaya, is one of the corridors that are crowded and visited by the community, especially students from several campuses in Surabaya 2 such as the Sepuluh Nopember Institute of Technology, Surabaya State Electronic Polytechnic, and so on. The development of Gebang Lor is widely used by residents of the

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surrounding area and outside investors to benefit through their efforts. For this reason, an in-depth study is needed regarding the characteristics, potentials and problems that exist in the design elements of the city along the Gebang Lor corridor.

2 THEORITICAL REVIEW

Everything changes in a city are the result of the development of the human population in the region. Increasing human needs make a shift in human life that not only lives but also to survive and not depend on nature. Humans as social beings cannot live alone therefore they form a growing population and have their own goals. The study material for the theory of primary Urban Design is closely related to the problem of the population formed by the Gebang Lor community and used in this study there are 2 (two), among others:

1. Trancik (1986) explains 3 (three) main theories of urban design to find out an area, namely Figure ground, Linkage, and Place
2. In his book *The Urban Design Process*, Shirvani (1985) mentions the realm of urban design includes spaces between buildings, spaces created for the community that are related to the physical quality of the environment. In addition, Shirvani also determined 8 (eight) physical elements in City Design, namely Land Use, Building Form and Massing, Circulation and parking (Circulation and parking), Open space, Pedestrian ways, Activity support, Signage, and Preservation, refer to historical structures and places that are economically and culturally important.

The secondary theory is also according to Trancik (1986) in the book *Finding Lost Space*, which is the activity of entering a function or quality of a certain space significantly whose results expect to enhance space quality and social quality and have implications that extend to the surrounding area. The principles in Urban Catalys according to Donn Logan and Wayne Attoe in *The Concept of Urban Catalyst* are:

1. New elements modify the surrounding elements.
2. The existing elements are enhanced or changed in a positive way.
3. Catalytic reactions do not damage the context.
4. The positive catalytic reaction is the same.
5. The design of the catalyst is very strategic.

6. A product that is better than the amount of ingredients.
7. The catalyst can still be identified.

An urban catalyst or Urban Catalyst is a new urban rebuilding strategy consisting of a series of projects that encourage and guide urban development. Past rebuilding efforts, such as urban reforms and large-scale rebuilding projects. Sometimes Urban Catalyst also often endangers the vitality of the city center. The difference between catalytic cities and this redevelopment strategy is that catalytic redevelopment with a holistic approach, not a clean approach, is to revitalize urban structures because many cities consider catalysis as a means of revitalization. Among the most well-known catalytic projects are sports stadiums and arenas, but not all catalytic projects must be designed on this large scale, nor do all cities have the potential to successfully maintain the city's development, according to Cermetrius Lynell Bohannon in *The Urban Catalyst Concep* (2004) . Some important points in carrying out this Urban Catalyst design are:

1. Creating pedestrian traffic is the most important way for a project to drive development.
2. Development needs to be well designed and connected with the environment visually and physically.
3. An interesting development in pedestrian traffic can function as an ease even if pedestrians do not enter it.
4. The character of development that is integrated with its ability to complete its context can help make facilities that spur development.
5. The project must be relevant to its location.

In this study, not all urban elements above are used to analyze the whole. Some of them are modified, adapted to the conditions of the surrounding environment. In a city component can not be separated from structuring theory, where structuring a corridor is an important thing that needs to be addressed in this research problem. The arrangement itself has a better nature and can make an area or corridor a comfort and in accordance with its constituent elements. According to Pingkan (2013) explaining the arrangement of the area or area is one of the social engineering efforts held in an area and carried out simultaneously with efforts to create a comprehensive system related to activities that take place in the region, taking into account environmental quality. This is expected to present a new order that can give hope for a higher quality of life. The process

and results of regional structuring are efforts to educate the behavior of the surrounding community and educate the users of the area to be in accordance with the objectives of the regional arrangement. Regional arrangement has the purpose:

1. Developing the social life of the local community.
2. Improve the economy of the local community
2. Develop environmental quality and preserve the environment (social, economic and environmental).

The previous research (Difi at al, 2016) which discussed public facilities in the form of skywalk located in Cihampelas, Bandung, can affect air quality which can turn into healthy air and this can be considered by the government in the construction of public facilities. While in this study discussing public facilities used as structuring the corridor with the establishment of skywalk and other supporting aspects as a means for the community around the corridor based on the Urban Catalyst concept. The Skywalk is expected to be able to accommodate various activities in a single forum to increase economic growth.

3 RESEARCH METHODS

This study uses a descriptive qualitative method of context, which explains the phenomenology of a corridor related to the specific economic context of trade. The research method is carried out in three stages, the first stage of data collection which aims to find relevant data with discussions through various references or existing documents by direct observation of the object of research and interviews with parties involved both formally and informally. The second stage of data compilation is to compile the collected data then classified according to type. The third stage is by analyzing the data comparatively where comparing the collected data with a particular reference or theory then analyzing the problem that occurs in the case study.

4 RESULTS AND DISCUSSION

4.1 Research Sites

The The location of the city corridor which will be used as a case study is located on Jalan Gebang Lor, Gebang Putih Village, Sukolilo, Surabaya. This

corridor segment is located on the outskirts of Surabaya with a corridor of ± 465 meters.



Figure 1. Map of A. City of Surabaya, B. District of Sukolilo and C. Corridor of Gebang Lor

Source:

https://id.wikipedia.org/wiki/Berkas:Peta_Kota_Surabaya.jpg, <http://lokonesia.com/peta-kecamatan-sukolilo-surabayatimur/> & <https://www.google.com/maps/@-7.2812919,112.7875164,17.74z>

4.2 Analysis

The following are some elements of the city design that will be explained in the Gebang Lor corridor area related to the characteristics, potential and problems that exist in each component, including:

1. Land Use



Figure 2. Gebang Lor Corridor Land Use Map

Source: <http://petaperuntukan.surabaya.go.id/cktr-map/>

Based on the Land Use map downloaded from the Surabaya city c-Map site. In the Gebang Lor corridor it is generally a trading area and commercial services, while the types of businesses include printing, photocopying, food stalls, coffee shops, and so on. The following are the existing conditions of the Gebang Lor corridor.

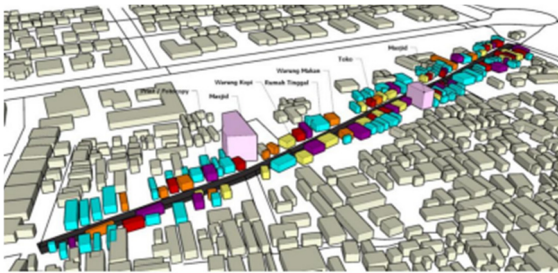


Figure 3. 3D Visual of Gebang Lor Existing
Source : Personal Documentation



Figure 4. Kondisi Koridor Gebang Lor
Source : Personal Documentation

From the above explanation, it can be seen the potential that develops and the problems that occur in the object of the case study according to the issues that develop according to the background. • The potential that exists in the land use element is in the area of trade and commercial services, because almost all of the corridors of Gebang Lor are filled with various businesses. This has a positive impact on economic improvement for the surrounding community. • Problems that occur are in trade and settlement areas, public parking is a difficult thing for business owners to provide due to the limited available land. This is also caused by uncontrolled land use, as well as existing building line regulations tend to be ignored. In addition, in this region there are also no green open spaces and public open spaces.

2. Building Form

In structuring a city, forms and relationships between masses such as building height, distance between buildings, building facades need to be known when looking at building elements. a. Building Height There are 3 (three) types of building height in the Gebang Lor corridor area as follows:

- 1) The height of a 3-storey building is in the mosque building and several boarding houses with a building height of more than 12 meters.
- 2) The height of a 2-storey building, which is part of a shop and a house with a building height of 8-10 meters.
- 3) The height of the building is 1 storey, which is in shop buildings, houses, boarding houses, stalls, and workshops with a building height of 4-6 meters.

from the photo above it can be seen that the height of the building is quite diverse. This caused the building facades to be diverse and unique. In addition, with the elevation of the building bervariasi also gives a tone to the corridor.

3. Distance of Building

Being in a densely populated area, making the distance of buildings in the Gebang Lor corridor less attention. Next is Figurean related to the distance of buildings in the Gebang Lor corridor.



Figure 6. Distance of Building at Gebang Lor
Source : Personal Documentation

From the photo above, it can be seen that the distance of buildings in this area is very minimal. Generally, buildings in this area coincide with each other, so that this area looks slum.

4. Circulation and Parking

a. Circulation

The circulation path of the Gebang Lor corridor is a 2-way route, so it can be accessed from the main ITS roundabout or from Jl. White Gebang and Jl. Manyar Kerta Adi. The width of the road in this corridor is 6-8 meters, here are the conditions of the existing circulation in the corridor of Gebang Lor.



Figure 7. Circulation at Gebang Lor
Source : Personal Documentation

From the existing conditions, it can be seen that the circulation path for 2 (two) directions is very inadequate, especially if there are vehicles parked on the roadside that can disrupt existing circulation flows.

b. Parking

In the Gebang Lor corridor, it does not have a specially planned parking element, so generally vehicle parking is only placed on the highway in front of the building directly.



Figure 8. Condition of Parking and Circulation
Source : Personal Documentation

Judging from these conditions, that the parking element is needed to support business activities, but with the limited available land causes this element can inhibit the flow of circulation in the region.

5. Open Space

In the Gebang Lor corridor, there is no element of green open space or public open space. This is due to the high occupancy needs that can no longer be accommodated by this region. Even though the need for this element is very important, because there are many activities in this region.

6. Pedestrian Ways

In the Gebang Lor corridor, there are no pedestrian elements. This is caused by limited available land and no planning in this area.

7. Activity Support

The following are some of the types of supporting activities found in the corridor of Gebang Lor.

a. Food stalls

Food stalls located in the corridor of Gebang Lor are generally simple stalls that provide a menu of East Javanese specialties and some typical Padang food. The condition of the building used is in the form of permanent and semi-permanent buildings. The following is the distribution point of the food stalls located in the corridor of Gebang Lor.

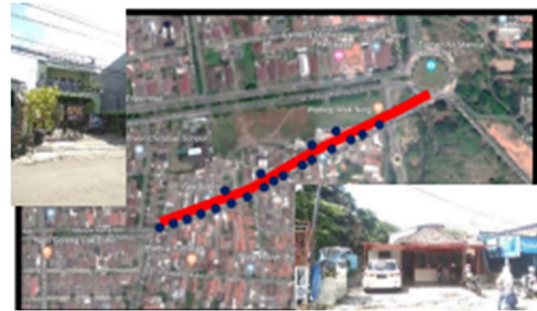


Figure 9. Points of Food Stalls
Source : Personal Documentation

From the photo above, you can see the spread of food stalls in the corridor of Gebang Lor. It can be seen that the stalls are scattered in several points and are generally not side by side.

b. Printing and Fotocopy Business

Gebang Lor Corridor which is located with several large campuses makes a new business opportunity in the form of printing and photocopying. The following is the distribution point of the printing and photocopying business in the corridor of Gebang Lor.



Figure 10. Points of Distribution of Printing Business and Photocopy Source : Personal Documentation

From the photo above, it can be seen the distribution of printing and photocopying businesses in the corridor of Gebang Lor. It can be seen that these businesses are quite widely available and spread over several points and some of them are close together.

c. Coffee Shop and Cafeteria

It is known as an area close to several large campuses, so in addition to printing and photocopying businesses, there are also many coffee shops and cafeterias. The following is the distribution point of the coffee shop and cafeteria in the corridor of Gebang Lor.

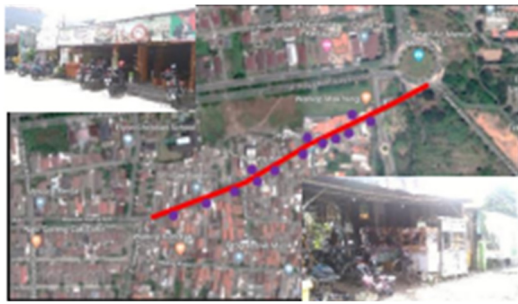


Figure 11. Pointss of Coffe Shop and Cafetarians
Source: Personal Documentation

From the photo above, it can be seen the distribution of coffee shops and cafeterias in the corridor of Gebang Lor. It is seen that scattered at several points, generally small stalls with permanent buildings.

7. Signage

In the Gebang Lor corridor, elements in the form of a signage are located in two areas, namely located in the entrance and exit of this corridor. The following is a marker system found in the Gebang Lor corridor.



Figure 12. Signage at Gebang Lor
Source: Personal Documentation

From the photo, the signage elements used are different. The most prominent on the marker system elements located on the west side. This is because it is the main gate for this region and a barrier to other regions.

8. Preservation and Conservation

In the Gebang Lor corridor, there is no element of preservation and conservation. This is because this area is a trading area and commercial services and settlements.

The results of the observations described to produce the development of public facilities in the form of providing pedestrian pathways as a top priority, public open space, to improve environmental

functions and economic, social and cultural conditions, the establishment of a Skywalk. This can create an interesting visual and physical development and pedestrian traffic that can improve the quality of the 10 Gebang Lor environment. The establishment of the Skywalk can fulfill the seven principles of Urban Catalyst, which present a new element positively and have product quality in its context, namely as the development of the quality of social life in an economically and environmentally sustainable society. The formation of the Skywalk can be designed with eight elements of Shirvani (1985) that focus on seven principles of the Urban Catalyst.

1. Land Use Concept

Arranging zoning areas between public spaces and trade and service developments.



Figure 13. Land Use Concept

The concept of land use makes the skywalk the center of trade and services so that settlement zoning is not disturbed and can be used as a safer and more maximal circulation.

2. Building Form Concept

Making a Skywalk with a height that does not exceed the surrounding buildings and still has a standard scale that suits the surrounding environment.



Figure 14. Building Form Concept
Source : praline-wordpress.com

The concept of a skywalk building that builds up with a height that does not exceed the surrounding buildings, so that it can be used as an intensity view that is in proportion and scale.

3. Parking and Circulation

Concept With the Skywalk design it can improve smooth circulation and provide more organized

parking with certain land acquisition to maximize the Skywalk concept.



Figure 15. Parking and Circulation Concept
Source: bandung merdeka.com, nusantara.medcom.id

The concept of circulation and parking that aims to overcome irregularities in the corridor and provide new jobs for the surrounding community with a more organized parking system.

4. Open Space Concept

Open space can be in the form of skywalk with the intensity of open space can be arranged according to the arrangement of trade and suits that are on the skywalk.



Figure 16. Open Space and Retail Concept
Source : radio PRFM, bandung merdeka.com

The concept of open space in the skywalk with arrangements that are adjacent to the trading area, so as to maximize each space.

5. Pedestrian Ways Concept

The concept of pedestrians being moved to Skywalk can develop local economic, social and cultural qualities.



Figure 17. Pedestrian Ways Concept
Source : Kalimantan-bisnis.com

The concept of the pedestrian path is preferred in the corridor of Gebang Lor with the aim to maximize the

economic, social and cultural sectors of the surrounding environment.

6. Activity Support Concept

Maximizing activities that occur on Gebang Lor road can develop rapidly and quality through the design of the Skywalk.



Figure 18. Activity Support Concept
Source: prfmnews

The concept of activity that is used as a support for skywalk is the trade and service sector that can develop the quality of the skywalk in that environment.

7. Signage Concept

The characteristics of the Gebang Lor road that can be formed with the Skywalk pattern can make this location an investment value that can be characterized by the influence of new elements on the side of a city



Figure 19. Signage Concept
Source: konfrontasi.com, tempatwisataadisingsapore2.blogspot.com

The concept of a marker in the form of identity from an area with a local concept such as an eco-walk with a marker as a shopping center and double helix bridge with a marker as a link to popular places in Singapore.

8. Preservation Concept

Broadly speaking, Skywalk data provides place values of a city and can be a historical one that is formed in the future.



Figure 20. Preservation and Place Values Concept
Source : wisatasingsapore.net

The concept of place value presented to show the progress of the city with its modern style can make the historical changes from a city to modern

5 CONCLUSION AND RECOMMENDATIONS

Conclusions from the description above, it can be concluded that the Gebang Lor corridor is formed by several elements, one of which is a strong forming element in the form of supporting activities in the region. But with the high demand for shelter and trade and services in the corridor, the area does not have enough space to accommodate various activities in the region. The availability of pedestrian elements, green open space and public open space is difficult to fulfil due to limited available land. Whereas in city design, what must be prioritized is the need for humans, not the need for motorized vehicles. Then planning is needed as regional development that can overcome the problems that exist in the corridor. One of the best choices to be realized is the creation of skywalk that functions as a pedestrian pathway, and can be optimized to be used as public open spaces with integrated green open spaces.

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