

The Design Concept of Road Median Based on Lampung Culture

Widi Dwi Satria¹, Eduwin Eko Franjaya², Rabita Akbari Sitompul³

^{1,3}Study Program of Architecture, Institut Teknologi Sumatera

²Study Program of Landscape Architecture, Institut Teknologi Sumatera

Email: widi.satria@ar.itera.ac.id

INFORMASI ARTIKEL

Abstract: *The road median is a supporting feature in the road environment, where it can be used as a landscape design medium to construct an image of the city and express a certain aesthetic experience in addition to serving as a traffic barrier. To have a value and message transmitted in a design, the road median requires a mature concept. Sultan Agung Street is a major thoroughfare in the city of Bandar Lampung, with a large volume of traffic. The government has not completely regulated the two-lane roadways with a median road on Sultan Agung Street. The road median of Sultan Agung Street, which is positioned in a prominent location Bandar Lampung's city, should be able to convey local culture. However, based on the existing state of the road median, no median layout or design that depicts Lampung culture has been discovered. The goal of this research was to examine and determine the Lampung culture notion that may be used to Sultan Agung Street's median. The descriptive qualitative research approach was utilized to identify the size of the site and the cultural themes that will be converted into design concepts by collecting field data. The study's findings are presented in the form of thoughts and sketches for the physical architecture of Sultan Agung Street's median, which incorporates local cultural philosophy. The tapis motif, the construction of the siger, as well as the idea of sailing ships and Lampung ethnic dances are all incorporated into the design.*

Keywords: *Bandar Lampung, Culture, Motif, Road Median*

Abstrak: Median jalan merupakan elemen pendukung dalam lingkungan jalan yang dapat digunakan sebagai media desain lanskap untuk membangun citra kota serta mengekspresikan pengalaman estetika tertentu, selain berfungsi sebagai pembatas lalu lintas. Agar memiliki nilai dan pesan yang tersampaikan dalam sebuah desain, median jalan memerlukan konsep yang matang. Jalan Sultan Agung merupakan salah satu jalan utama di Kota Bandar Lampung dengan volume lalu lintas yang tinggi. Pemerintah belum sepenuhnya mengatur jalan dua lajur dengan median di Jalan Sultan Agung. Sebagai median jalan yang terletak di lokasi strategis di Kota Bandar Lampung, seharusnya median ini mampu merepresentasikan budaya lokal. Namun, berdasarkan kondisi yang ada saat ini, belum ditemukan tata letak atau desain median jalan yang mencerminkan budaya Lampung. Penelitian ini bertujuan untuk mengkaji dan menentukan konsep budaya Lampung yang dapat diterapkan pada median Jalan Sultan Agung. Pendekatan penelitian kualitatif deskriptif digunakan untuk mengidentifikasi ukuran lokasi serta tema budaya yang akan dikembangkan menjadi konsep desain melalui pengumpulan data lapangan. Hasil penelitian disajikan dalam bentuk gagasan dan sketsa arsitektur fisik median Jalan Sultan Agung yang mengintegrasikan filosofi budaya lokal. Motif tapis, konstruksi siger, serta konsep kapal layar dan tarian etnik Lampung diterapkan dalam desain tersebut.

Kata Kunci: Bandar Lampung, Budaya, Motif, Median Jalan

Article history:

Received; 2024-08-17

Revised; 2024-08-20

Accepted; 2024-09-25

INTRODUCTION

An open space is a specific location that can be used by the community for a variety of activities (Harjanti & Anggraini, 2020). A distinct area or an area with a certain area can be considered open space. The road median is a type of open space utilization in which an area is used as a lane barrier for a road. It is vital to use a unique approach to creating the road median so that its constituent pieces can provide significant character and qualities. The road's median can be used to translate a concept or trait that existing in Lampung into a tangible design that can subsequently become a city icon or image. The use of cultural features in the road median design is thought to indicate a value of local wisdom (Yamashkin & Yamashkin, 2019). The site's location on the main route through Bandar Lampung city makes it a key location for demonstrating Lampung's unique cultural qualities and strong philosophical principles. The significance of having a strong concept when constructing a road median so that it can become a municipal landmark and provide aesthetic appeal (Agus et al., 2015). The median road is still considered part of the green open space, and this aspect can be valuable as a form of the city's image in an area because it has a unique attraction due to the design (Widharto et al., 2015). A city will have its own impression according to the characteristics of the area (Darmawan, 2019). The median road design concept that will be used to the sultan agung street median must be able to leave an imprint on the hearts of people, both those who are driving and those who are active surrounding sultan agung road. The design concept that has a harmonious unity between the development of contemporary design and the philosophical past of culture, especially Lampung culture, will give an exclusivity to this area. The application of cultural elements in road median design can become city branding for an area. City branding can be a means of continuously promoting Lampung culture to the community (Mujahid et al., 2022).

The main function of the road median is as a barrier for a road to create security for road users (Sunaryo & Kusumawati, 2020). Apart from being a barrier, the median of the road is also commonly used as a public space that is commonly used by the community for social interaction (Agus et al., 2015). The median of the road can also be used as a place of transition for people who want to cross the road. The road median is also often used as a means of promoting a product by utilizing billboard poles placed in the median of the road. The city's supporting infrastructure is also placed in the median of the road such as street lamps. The Median Road, in addition to functioning to regulate traffic, dividers, barriers, and vehicle speed regulators, also functions as an open public space for social interaction in the community, such as a crossing for pedestrians (Harjanti & Anggraini, 2020). As a city develops, the Median Road Park becomes an important part of managing traffic and road safety. The Median Road Park is a part of the road that cannot be passed by vehicles, it can be a road marking or an elevated part of the road. The Median Road Park serves to improve traffic safety on roads or at crossroads through flow separation (Paskibragustian et al., 2021). The rapid development of landscape design in a green open space makes the median road an option to apply the application of cultural elements in its design planners. The design

of the median road can be in the form of a sculpture, a simple building, or a vegetation arrangement. Vegetation is a supporting element that has an important role in strengthening visual beauty in road median planning (Permatasari et al., 2019). Organized road medians will become city infrastructure that strengthens the city's image (Rohana et al., 2023).

The purpose of this study is to analyze and plan a concept of a median park on Sultan Agung Street by incorporating cultural elements in it in order to provide a cultural nuance that is applied to the median road so that it can be visually seen by the public. Cultural elements are a potential that can be used as an identity in landscape planning (Franjaya et al., 2023). The issue of cultural locality has become something of a renewal in road median design because of the minimal application of cultural values in the design of a city's road medians. The application of cultural elements to the concept of road median design also aims to introduce to the wider community the characteristics of Lampung culture so that they do not become extinct over time. The application of cultural elements to the road median design concept is expected to become an icon and identity for landscape design on the road median that has never existed before.

METHODOLOGY

The research method used in this research is qualitative research by providing design drawing suggestions based on previously identified problems. The cultural history approach is applied to the theme of designing the median of Jalan Sultan Agung to raise the issue of locality which has been largely ignored in every aspect of design in Bandar Lampung. The research output is in the form of a design drawing in the form of a design proposal based on the background of the problem that exists at the location of the research object. The research method includes several explanations including the place and time of research, data collection, and research stages.

Time and location of the research

The location of this research is in Indonesia, Bandar Lampung Province, precisely on Sultan Agung Street Bandar Lampung City, starting after the Sultan Agung fly over to the median end beside the Bumi Kedaton Mall. The length of the existing site to be designed has a size of approximately 100m. In research observations, the median of Sultan Agung street will be designed in an area adjacent to the Bumi Kedaton Mall. The research was carried out from March to August 2023.



Figure 1. Road median design location

Source: Google Earth, 2023

Collecting Data

The data collected in this study include road median physical data, social conditions, land use and also the government. Biophysical data include vegetation types, soil contours, visual conditions at the site, traffic conditions. Other supporting data in the form of secondary data obtained from the internet and literature studies related to the planning and design of road medians. Social data is in the form of public opinion regarding the current median of Sultan Agung's road and hopes for the future. Data related to land use includes land use maps and their designations and changes. Data from the local government is in the form of a regional spatial plan that becomes a reference for the development of the region concerned. This data was obtained from the official website of the City Government of Bandar Lampung, the Department of Human Settlements. There are several data that will be collected including main data and complementary data which are commonly referred to as primary data and secondary data. The method of collection, primary data is obtained by observing directly in the field and measuring with a meter, shooting and collecting data directly on the site. Secondary data was obtained through the internet, reference books and related agencies related to the median planning of the sultan agung road. The equipment and materials used in this study consisted of digital cameras, administrative maps, notebooks, computers with SketchUp software. shooting and data collection directly on site. Secondary data was obtained through the internet, reference books and related agencies related to the median planning of the sultan agung road. The equipment and materials used in this study consisted of digital cameras, administrative maps, notebooks, computers with SketchUp software. shooting and data collection directly on site. Secondary data was obtained through the internet, reference books and related agencies related to the median planning of the sultan agung road. The equipment and materials used in this study consisted of digital cameras, administrative maps, notebooks, computers with SketchUp software.



Figure 2. Road median design location

Source: Personal Documentation, 2023

Research Stages

Landscape planning is a dynamic, quantitative, and repeatable conceptual process based on specific demands and objectives. Landscape planning in the form of a middle road is a method of determining a design that conforms to site conditions and the surrounding environment. This study will go through several steps of the technique, including:

a. Preparation

The preparation stage is a starting point in formulating goals and looking for options and ideas that are suitable for implementation. At this stage, more observations will be made regarding the object of research that will be designed.

b. Inventory

Inventory is the process of collecting data on the initial condition of the site and culture. The primary data inventory process is obtained from direct field observations in order to determine the phenomena and conditions of the existing site through measurements. Secondary data was obtained from books and papers that were relevant to the research topic and Lampung culture.

c. Analysis

The analysis in this study emphasizes on several potentials that can be raised. At this stage, details related to site identification and environmental conditions will be carried out. In addition to site conditions and the surrounding environment, an analysis was also carried out regarding the selection of Lampung cultural elements that were suitable to be applied to the median design of Sultan Agung Street. analysis related to site conditions, surrounding environment, and cultural elements that have been obtained will be combined into a single unit in order to obtain a design proposal which will later be contained in the design concept.

d. Draft

The concept is a stage in giving conclusions related to the data analysis that has been carried out. The concept stage will discuss the application and design ideas that have continuity between the data that have been analysed.

e. 3D Visualization

3D visualization is the final stage in providing a three-dimensional picture of the design plan that will be carried out. Presentation of 3D visualization is produced by software, namely SketchUp.

RESULT AND DISCUSSION

Inventory

The results of the inventory from this study include the condition of the research site which is in the centre of the crowd right next to the Bumi Kedaton Mall. The median of the road is overgrown by several trees and street lamps and billboard poles. The contour of the tread is quite even and flat with grass overgrown on it. Access to the location of the site is in a busy area close to shopping centres and shop kiosks. The road median has not been fully processed and further action is needed in its processing. From the aspect of culture and local wisdom, the people of Lampung are cultured and have cultural riches that are still firmly held (Franjaya, 2020). The community consists of two very famous tribes, namely the pepadun and the saibatin. Aspects of the life of the people of Lampung have quite a lot of variations, not only from customs but also from the philosophy commonly known as Pi'il Pesenggiri. Pi'il comes from Arabic which means behaviour, while pesenggiri means high morals (Habibi & Kusdarini, 2020). The people of Lampung have a rich and diverse culture, not only seen in traditional clothing and houses but also in all aspects of life. From the language aspect, there are Lampung scripts that can be used as inspiration in designing road medians. The boat motif on traditional cloth can be a design inspiration in realizing a geometric formation. In the architecture of traditional Lampung buildings, it is also found the application of boat designs in the form of the design of the ends of the floor beams on the aristocratic slow (Putri et al., 2013). The application of color is also interesting to apply to the median design of the road to emphasize the geometric shapes created. There are 3 colours that are possible to apply where this color is often found in traditional ceremonial umbrella decorations in Lampung. The colours that are generally used are red, yellow, and white.

2. Analysis

The decreasing use of Lampung cultural elements in city infrastructure design is a significant basis for providing suggestions regarding the incorporation of Lampung cultural aspects. The road median of Jalan Sultan Agung holds potential as a medium for showcasing Lampung's cultural values, given its status as the main road and business center in the heart of Bandar Lampung. In terms of physical and environmental aspects, the road median of Jalan Sultan Agung is strategically located on the city's main road and is adjacent to Bumi Kedaton Mall. Road medians have the potential to convey an image of the city of Bandar Lampung through the design of the median on Jalan Sultan Agung. In terms of land topography, this area features flat terrain covered with grass. The surrounding land use consists of shopping centers and residential areas. It is a bustling area, constantly filled with motorized vehicle activity passing through the road median. Commercially, the road median currently features advertising poles, the income from which is managed by the government. Culturally, the geometric formation of the tapis jung laden motif is combined with the shape of the Lampung siger, which symbolizes honor for the people of Lampung. The transformation of the jung sarat and siger motifs will be made flexible to mimic the rhythm of the typical Lampung dance named sigeh pengunten dance, a form of respect and welcome for guests. This combined

transformation will create a sculpture placed in the middle of the road median, arranged rhythmically as if forming a moving geometry resembling a dance. The sculpture will be integrated with vegetation for aesthetic purposes. Regarding vegetation planning, several plants will be used as supporting elements in the designed sculpture, incorporating three primary colors: red, yellow, and white. From the vegetation analysis, several suitable plants have been identified, including red heuchera, yellow broccoli, and white peace lilies. However, not all areas will feature these plants, as their structure is limited to low bushes. Therefore, for ornamental plants, we will incorporate the colors of Lampung culture, utilizing plants with red, yellow, and white flowers.

3. Concept

The concept used in the Sultan Agung street median design is a cultural icon. The concept of cultural icons is also in keeping with the government’s goal of exposing Lampung culture to the rest of the world. This design concept will affect the image of the city that previously did not have an identity and visual uniqueness to become something more valuable and iconic. The design concept that has been determined will affect the visual experience for both motorists who pass through Sultan Agung Street and people who move around the median road. This design concept will have a lot to do with the philosophical values of Lampung culture itself. For the physical formation of the design concept of the median road itself, it prioritizes the simplistic aspect. The geometric formation itself will take several forms or patterns from the tapis jung sarat motif and the tapis liwet silung motif. The two patterns on the filter cloth will be transformed into a simple physical form which will later become a sculpture on the median road. The basic formation that is formed from the combination of the filter patterns will later be incorporated into the philosophical elements of Lampung customs, namely the dance movement pattern that can be seen in (Figure 3) and the siger formation which has different height levels (Figure 4). The element of dance that is included in the design will affect the shape of the sculpture which seems to dance to the rhythm. Meanwhile, the element of siger formation will affect the setting of the height distance of the sculpture.

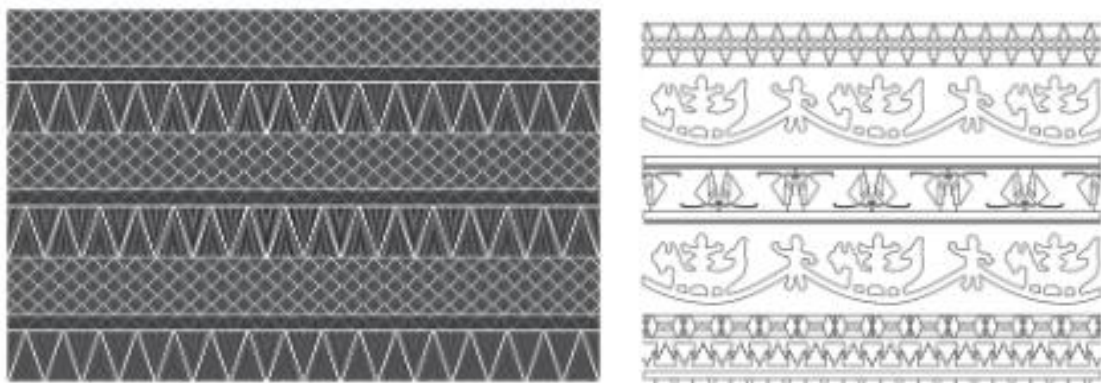


Figure 3. Jung Sarat's & Liwet Silung Motive

Source: Irawan, 2017



Figure 4. Lampung traditional dance and siger formation

Source: <https://www.saibumi.com/artikel-113179-wajib-tahu-5-tari-tradisional-lampung-yang-sering-dijumpai.html>

(Accessed: 12 August 2023).

In order to maintain the concept of sustainability in the design, the sculpture material will be made using aluminium material with the consideration that aluminium material has a high level of elasticity, is easy to shape, can be disassembled and is lightweight. Aluminium material is also easily available in the market at a fairly affordable price. Maintenance is also quite easy because the aluminium material has a fairly good material strength against mechanical stress. Aluminium is also the main material in LEED certified buildings and buildings with sustainability. LEED / Leadership in Energy and Environmental Design, can be defined as Leading in Energy and Environmental Design.



Figure 5. aluminum and led strip

Source: Pinterest, 2023



Figure 6. vegetation plan

Source: Google, 2023

The idea behind planned landscaping is to employ low-maintenance species. The first plant is the le kwan yee, which will be employed as a vine in

the sculpture to create a sense of oneness between the aluminum and natural elements. The following plants are employed to enhance the visual impression by showing the traditional Lampung hues of red, yellow, and white. Red heuchera, yellow broccoli, and white peace lilies are among these plants. The plants are organized in a tuffaceous pattern to blend in with the sculpture design, which includes cultural themes. The sculpture geometry is also given a typical Lampung color to strengthen the authentic impression inherent in Lampung culture. The sculpture geometry is also given a typical Lampung color to strengthen the authentic impression inherent in Lampung culture from the play of yellow and red colors that dominate, as seen in Figure 7.



Figure 7. Typical colors of Lampung province

Source: <https://albadr.blog/logo-provinsi-sederhana/logo-sumatera/> (Accessed: 12 August 2023).

4 3D Visualization of the design concept



Figure 8. Design Concept of Road Median

Source: Personal Analysis, 2023

Figure 8 shows an overview of the design of the median of Jalan Sultan Agung, where it can be seen in the picture that there is a sculpture formed from a combination of siger geometry, jung sarat motifs, and liwet silung. In arranging the location of the sculpture, there are modifications to the arrangement by rotating the sculpture parts so that the shape of the sculpture

looks as if it is dancing. The application of the siger form can be seen from the number of sculpture poles, which total 9, where the siger pepadun has 9 crowns with different height levels for each pole according to the shape of the siger. The dynamic formation is adapted to the busy environmental conditions of the site and requires a dynamic visual appearance. The sculptures on the road median are colored according to Lampung's typical colors, namely red, yellow, and white. There is also vegetation at the base of the sculpture, which ties the sculpture and site into one unit. The sculpture formation is decorated with vines that surround the sculpture. There are also decorative shrubs to complement the aesthetics of the sculpture design on the median of Jalan Sultan Agung. At night, the rhythmic arrangement of the sculptures will appear alive with LED strip lights on the entire geometric surface of the sculptures. The use of waterproof steel material was chosen so that it is easy to dismantle and repair at a later date. The transformation of cultural elements applied to the sculpture design is made more contemporary with the philosophical meaning behind it.

CONCLUSION

The decreasing application of Lampung cultural elements in city infrastructure design presents an opportunity to integrate Lampung's cultural values into urban spaces. The median of Jalan Sultan Agung in Bandar Lampung, being a central and bustling area, is ideal for showcasing these cultural aspects. This project aims to transform the median into a cultural icon, aligning with the government's goal of promoting Lampung culture globally. The design concept incorporates elements of Lampung's cultural heritage, specifically the tapis jung sarat and tapis liwet silung motifs. These motifs, simplified into geometric forms, will be sculpted into the median, resembling a dance in motion. The sculpture's height levels will be varied, reminiscent of the siger, Lampung's traditional crown, symbolizing honor. To ensure sustainability, the sculpture will be made from aluminum, known for its elasticity, ease of shaping, and lightweight properties. Aluminum is also readily available and affordable, making maintenance cost-effective. Additionally, the landscaping plan includes low-maintenance plants, such as le kwan yee vines and red, yellow, and white flowering plants, enhancing the cultural theme. Overall, the design concept of the Sultan Agung street median aims to create a visually striking and culturally significant landmark that reflects Lampung's rich heritage and values.

REFERENCES

- Agus, N. D. A., Nurlaelih, E. E., & Sitawati. (2015). Evaluasi Pemilihan Jenis dan Penataan Tanaman Median Jalan Kota Malang. *Jurnal Produksi Tanaman*, 3(4), 269–277.
- Darmawan, I. (2019). Model Peningkatan Tata Lingkungan Masjid Cagar Budaya Sebagai Penguat Identitas dan Citra Kawasan. *Jurnal Arsitektur Dan Perencanaan (JUARA)*, 2(1), 44–61. <https://doi.org/10.31101/juara.v2i1.783>

- Franjaya, E. E. (2020). Perencanaan dan Desain Lanskap Embung Mekar Sari Kabupaten Tulang Bawang Barat berbasis budaya Lampung. *Jurnal Arsitektur*, 10(2), 79. <https://doi.org/10.36448/jaubl.v10i2.1438>
- Franjaya, E. E., Sitompul, R. A., Satria, W. D., Wijaya, P. W., & Hesty, R. S. (2023). Budaya Pepadun dan Saibatin dalam Rencana Pengembangan Taman di Kota Bandar Lampung. *Jurnal Pembangunan Wilayah Dan Kota*, 19(1), 15–32. <https://doi.org/10.14710/pwk.v19i1.40539>
- Habibi, R. K., & Kusdarini, E. (2020). Kearifan Lokal Masyarakat dalam Melestarikan Tradisi Pernikahan Pepadun di Lampung Utara. *JURNAL ANTROPOLOGI: ISU-ISU SOSIAL BUDAYA*, 01(June), 60–69.
- Harjanti, I. M., & Anggraini, P. (2020). Green Open Space Functions in Kauman Area, Semarang City, Indonesia. *Journal of Architectural Design and Urbanism*, 3(1), 1–9. <https://doi.org/10.14710/jadu.v3i1.7164>
- Mujahid, L. Muh. A., Ekawati, S. A., & Husna, I. Al. (2022). Pengaruh City Branding Terhadap Keputusan Berkunjung Pada Kawasan Wisata di Toraja. *Jurnal Arsitektur Dan Perencanaan (JUARA)*, 5(2), 15–24. <https://doi.org/10.31101/juara.v5i2.2427>
- Paskibragustian, A., Thamrin, T., & Wulandari, S. (2021). Strategi pengelolaan taman median jalan di Kota Pekanbaru. *Jurnal Zona*, 4(1), 1–7. <https://doi.org/10.52364/jz.v4i1.27>
- Permatasari, D., Heddy, Y. B. S., & Fajriani, S. (2019). Evaluasi Kesesuaian Jenis Tanaman Berdasarkan Syarat Ekologi Pada Jalur Hijau Median Jalan Untuk Mendukung Tema Taman Kota Malang Sebagai Kota Bunga. *Produksi Tanaman*, 7(4), 631–636.
- Putri, Y. Y., Gunawan, A., & Arifin, N. H. S. (2013). Kajian Lanskap Permukiman Tradisional Masyarakat Lampung Saibatin di Pekon Kenali, Lampung Barat. *Jurnal Permukiman*, 8(3), 153–167.
- Rohana, Zainuddin, S., & Hamkah. (2023). Karakteristik Jalur Pedestrian yang Berwawasan Lingkungan di Kawasan Pusat Bisnis Terpadu Kota Makassar. 6(2), 9–22.
- Sunaryo, & Kusumawati, N. R. (2020). Evaluasi pembangunan median jalan. *Jurnal Teknologi Transportasi Dan Logistik*, 1(1), 11–14. <https://jurnal.poltradabali.ac.id/jttl/article/download/2/2>
- Widharto, S. D., Muchlis, N., Laksono, S. H., & Setijanti, P. (2015). Design concept for green public space in kampung. August. <https://doi.org/10.3846/20297955.2015.1048838>
- Yamashkin, A. A., & Yamashkin, S. A. (2019). Concept of The Spatial-Temporal Design of Cultural Landscape. *International Journal of Civil Engineering and Technology (IJCIET)*, 10(02), 1168–1180.