ARCHITECTURAL DESIGN FINAL STUDIO
DESIGN REPORT

Design of Eco-Tourism Area Development at Soge Beach: A Community-Centric Approach for Sustainable Economic Growth

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Advantages and Novelty

The design of ecotourism in the Soge Beach area with a community centric approach aims to promote local economic growth. This initiative focuses on developing existing facilities for tourists in the Soge Beach area, considering that the current facilities are still limited and inadequate. Through this development, it is expected that the number of tourist visits to Soge Beach will increase, providing positive impacts for the local community, especially traders, through increased sales of goods and services, which in turn will contribute to the economic growth of the surrounding residents.

Furthermore, this design is also expected to create job opportunities for local residents, which will enhance the economic well-being of the area. This design will serve as a platform for local commodities that have marketable value but have not been fully utilized due to the lack of visitors. With well-planned ecotourism, it is hoped to provide dual benefits, both for tourists who receive better facilities and for the local community who experience economic and welfare improvements.

Therefore, the design of the ecotourism area at Soge Beach is expected to bring significant positive impacts for both tourists and the surrounding community.

Declaration of Originality

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I also understand that plagiarism is a serious violation of academic ethics and copyright law. I take full responsibility for the originality of this design and am ready to accept the consequences that may arise if it is proven that this design is not original or violates the copyright of others.

Sincerely and earnestly,

Abid Hanif Dhiya Ulhaq Sandhiya

Lembar Pengesahan

Studio Akhir Desain Arsitektur yang Berjudul :
Final Archhitecture Design Studio Entitled

Perancangan Kawasan Ekowisata Pantai Soge: Pendekatan Berpusat pada Masyarakat untuk Pertumbuhan Ekonomi Berkelanjutan

Design of Eco-Tourism Area Development at Soge Beach: A Community-Centric Approach for Sustainable Economic Growth

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Originality

Writer	Year	Tittle	Institution	Equality	Difference
Iqbal Abdul Aziz Zain	2022	Arah Penataan Dan Pengembangan Konsep Waterfront City Pada Objek Wisata Pantai Soge Pacitan	UIN Sunan Ampel Surabaya	• Site Location • Site Review • Development case	• Approach • Output
Lathifah Nur Fathiyya	2021	Perancangan Pusat Kuliner Seafood Di Pantai Sigandu Kabupaten Batang Penekanan Pada Konsep Opened Kitchen	Universites Islam Indonesia	• Location in the Beach Area • Development of Facilities for Tourists • Focus on Local Economic Development	• Main Focus of Design • Design Concept • Facility Type • Social Impact
Achmad Rifqi	2020	Perancangan Resort di di Kawasan Wisata Air Terjun Montel Colo Dawe Kabupaten Kudus dengan Pendekatan Arsitektur Ekologis	Universites Islam Indonesia	• Eco-Friendly Approach • Local Economic Development Goals • Focus on Natural Beauty • Improvement of Tourist Facilities	• Location and Natural Context • Architectural Approach • Facility Type
Gisella Ulrich	2021	**Perancangan Wisata Bahari Pada Kawasan Pelabuhan Kamal Madura Melalui Pendekatan Arsitektur Simbiosis**	Universites Islam Indonesia	• Environmental Sustainability • Economic Benefits • Natural Attraction	• Project Scale and Complexity • Management of the environment • Social Approach

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Chapter 1 : Introduction

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1.1 Tittle

Design of Eco-Tourism Area Development at Soge Beach: A Community-Centric Approach for Sustainable Economic Growth

1.1.1 Definition of Title

Design of Eco-Tourism Area Development

The design of an ecotourism area located at Soge Beach, Sidomulyo, Ngadirojo District, Pacitan Regency, East Java, with the aim of improving and providing a sustainable tourism experience for visitors.

at Soge Beach

Soge Beach is a beach destination located in Sidomulyo, Ngadirojo District, Pacitan Regency, East Java. Unfortunately, the facilities available at this beach have not fully met the needs of tourists, so there is a need for sustainable design to maximize the potential of the area.

A Community-Centric Approach for Sustainable Economic Growth

A community-centered approach to sustainable economic growth emphasizes active participation and local needs. It involves design that considers social, and economic values, with the aim of creating sustainable tourism development.

1.2 Design Background

1.2.1 Soge beach potential

Soge Beach, which is located in Sidomulyo, Ngadirojo District, Pacitan Regency, East Java, has great potential as a tourist destination. However, until now there are still non-architectural problems that need attention, especially regarding the lack of adequate facilities for visitors who want to stop by and enjoy the atmosphere at this beach. This is shown by data in "Ngadirojo Regency in Figures 2022", that the number of accommodation facilities by village/sub-district is still very minimal. Environmentally, the area around the beach is still natural, thus adding value to the tourist experience. However, architecturally, building facilities capable of accommodating the potential of Soge Beach are still lacking. Evidence of this can be seen in the many semi-permanent local merchant buildings, as well as several conventional accommodations. Although there are already some supporting facilities such as filling stations, it should be noted that Soge Beach has a potential tsunami disaster risk. Therefore, it is necessary to consider selecting a site that has sufficient height to reduce the risk of impact from such disasters. In addition, there are shortcomings in terms of security and geology, where the area is prone to landslides. As a preventive measure, it is necessary to construct a specially designed building to minimize the risk of landslides and secure the surrounding environment.

In future designs, integration between the need for better facilities to support tourist activities, nature conservation efforts, and disaster risk mitigation should be considered. By considering these aspects, a good design can increase the attractiveness of Soge Beach as a sustainable and safe ecotourism destination for visitors.

1.2.2 Ecotourism Paradigm at Soge Beach

The Soge Beach area, which still maintains its naturalness and provides a natural tourist experience, clearly shows extraordinary ecotourism potential. Environmental sustainability is a central element in the attraction for tourists who want an authentic and preserved natural experience. Therefore, the concept of eco tourism is considered the main basis for designing and developing tourist areas on Soge Beach. By adopting the concept of eco tourism, the design of the tourist area at Soge Beach not only focuses on increasing visitor comfort, but also pays attention to preserving the sustainability of the natural ecosystem. These steps include the development of environmentally friendly facilities, as well as the integration of design concepts that minimize negative impacts on the surrounding environment.

As an ecotourism destination, Soge Beach will become a model for environmental conservation and

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educational efforts. By creating harmony between natural beauty and positive visitor experiences, this tourist area can become an inspiring example for similar destinations in various locations.

1.2.3 Empowering Local Communities

The "A Community-Centric for Sustainable Economic Growth" approach is very suitable to be applied in the Soge Beach area, considering the potential it has is very good and land access is easy to reach, but unfortunately, this area is still relatively empty of visitors. By implementing this approach, it is hoped that it can provide a significant boost in improving the welfare of local communities through providing economic benefits. The importance of this approach lies in its ability to empower local communities, provide a more active role in managing Soge Beach's tourism potential, and create a positive economic impact. With community involvement.

One of the big advantages of implementing this approach is that it can create sustainable local business opportunities. Micro and small businesses can be empowered to develop products and services that suit the uniqueness of Soge Beach, thereby creating a strong local economic ecosystem. In this way, this area is not only an attractive tourist destination, but also a source of inspiration and income for the local community. Apart from that, the "A Community-Centric for Sustainable Economic Growth" approach also has the potential to overcome the problem of low number of visitors at Soge Beach by involving the community in promotional and marketing activities. This direct involvement can create greater awareness at local and regional levels, increasing Soge Beach's appeal as a sustainable ecotourism destination.

In other words, through the "A Community-Centric for Sustainable Economic Growth" approach, it is hoped that the Soge Beach area can become a successful example in combining sustainable economic growth with environmental preservation, while providing economic benefits to the local community.

1.3 Architectural Problem Statements and Goals

1.3.1 Common Issues

How to design an ecotourism area at Soge Beach, Sidomulyo, Ngadirojo District, Pacitan Regency, East Java, with a community-centered approach to achieve sustainable economic growth in the context of architecture?

1.3.2 Specific Issues

Lack of Adequate Tourist Facilities Issue: The lack of adequate facilities for visitors such as restaurants, proper resting places, places of worship, service spaces such as toilets and changing rooms, playgrounds, and places to enjoy the view from Soge Beach itself are quite significant obstacles. This of course requires careful design planning to be able to meet the needs of facilities that can be accommodated in the Soge Beach area. Apart from that, a structured management system is needed to ensure that the management of facilities and services runs efficiently and adequately, so that it can provide a positive experience to every visitor who comes. **Designing the needs of tourist facilities by selecting space placement, circulation of visitor movement and visitor safety** will be the key to overcoming these challenges and making Soge Beach a more friendly and complete tourist destination. How to design tourist facilities that can meet the needs of visitors and at the same time support local economic growth?

1.3.3 Disaster Risk Management and Environmental Security Issue

Soge Beach has a potential tsunami disaster risk, and is prone to landslides. With the potential for tsunami and landslide disasters, it is very important to involve serious mitigation efforts related to these two potentials. Choosing the right location can be one step to reduce the impact of the tsunami disaster. For example, choosing a location in the highlands can

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be one step to reduce the impact of the tsunami disaster. For example, **choosing a location in the highlands can effectively minimize the impact of a tsunami disaster.** However, challenges arise in terms of construction design in the selected tourist areas, considering the potential for landslides.

In this context, selecting a location in the highlands needs to be balanced with the risk of landslides that may occur. Therefore, **mature site construction architecture is needed in tourist areas**. This design must consider mitigating the risk of landslides by integrating technology and construction methods that are able to overcome this potential danger. Efforts such as soil containment structures, safe topographic management, and the use of **appropriate construction materials can be part of this mitigation strategy.** In this way, it is hoped that the tourist area at Soge Beach can become a safer and more sustainable destination. How to design an ecotourism area by considering site selection that is safe from potential natural disasters, as well as building construction that can minimize the risk of landslides, so as to provide maximum safety for visitors and maintain environmental sustainability?

1.3.4 Goals and Objectives

Objectives

The realization design of an ecotourism area at Soge Beach, Sidomulyo, Ngadirojo District, Pacitan Regency, East Java, with a community-centered approach to achieve sustainable economic growth through architectural aspects.

Development of Adequate Tourism Facilities

Main Target :
Improving the quality and quantity of tourist facilities at Soge Beach to meet visitor needs.

Steps :

- Design and implement infrastructure such as restaurants, rest areas, places of worship, toilets, changing rooms, playgrounds and Soge Beach viewing areas.
- Preparing a thorough design plan to ensure the facilities built are in accordance with the needs and accommodation of the visitors.
- Provide a well-maintained facility management system to ensure efficient and adequate management, so that visitors can have a positive experience.

Disaster Risk Management and Environmental Security

Main Target :
Reducing the risk of tsunami and landslide disasters, as well as ensuring maximum safety for visitors and environmental sustainability.

Steps :

- Evaluate and select a safe location by considering the risk of natural disasters such as tsunamis and landslides.
- Design construction structures that explain landslide risk mitigation with appropriate technology and construction methods.
- Integrating security infrastructure such as land retaining structures and safe topographical arrangements to reduce the risk of landslides.
- Develop security policies and provide clear appeals to visitors, as well as holding security training.
- By achieving these targets, it is hoped that Soge Beach can become a more friendly, complete, safe and sustainable tourist destination, providing a positive impact on local economic growth and paying attention to environmental sustainability.

1.3.5 Benefit

The development of an Ecotourism Area at Soge Beach, Pacitan, East Java, with a Community-Centered Approach for Sustainable Economic Growth provides a number of significant benefits. First, the existence of this design can provide a significant boost in improving the welfare of local communities.

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Through community empowerment, they can be actively involved in managing tourism potential on Soge Beach, create a positive economic impact, and experience direct benefits from sustainable economic growth.

Second, this design opens up sustainable local business opportunities. By empowering micro and small businesses to develop products and services that suit the uniqueness of Soge Beach, a strong local economic ecosystem can be created. This not only creates an attractive tourist destination but also becomes a source of inspiration and income for local communities, reducing dependence on certain economic sectors.

Apart from that, this design also has the potential to overcome the challenge of the low number of visitors at Soge Beach. Involving the public directly in promotional and marketing activities can create greater awareness at local and regional levels. In this way, the attractiveness of Soge Beach as a sustainable ecotourism destination can increase, making a positive contribution to tourism growth in the area.

Overall, designing the Ecotourism Area Development at Soge Beach with a Community-Centered Approach not only designs an attractive ecotourism destination but also opens up real opportunities for sustainable and inclusive economic growth for local communities.

1.3.6 Scope of Limitation

Visitor and Worker Facilities

Including transit areas, parking areas, service counters, dining rooms, places of worship, service facilities such as toilets and changing rooms, play areas, as well as places to enjoy beach views, are crucial components in the design. However, it needs to be acknowledged that in arranging and managing these various facilities, there are certain limitations that must be overcome. For example, limited physical space constraints may be a limiting factor in providing adequate and optimal facilities for visitors, while the needs and dynamic development of worker facilities, such as storage rooms, service rooms, changing rooms, and administration, also require special attention.

Zoning

as a critical aspect in design, indicating certain limitations that need to be taken into account. The process of classifying residential areas and tourist attractions that only function as temporary stops, such as villas and glamping, represents an important stage in identifying the functional boundaries and uses of areas. However, while zoning provides structure and clarity to land use, the limitations of this approach lie in the complexity of user needs and preferences that can vary over time.

Site Construction Planning

By choosing a site located in a cliff area, the complexity and challenges in dealing with sloping land contours that are prone to landslides become the main focus. Therefore, there is a need for careful planning and design as part of a risk mitigation strategy, with the main aim of minimizing the potential for construction to collapse in built areas due to landslides.

1.4 Design Method

1.4.1 Primary Data

Primary data

The method of collecting information is by direct observation and conducting surveys in the field. The main data collected involves information regarding the location of the site on Soge Beach, which is then the basis for designing an ecotourism concept in the area. This primary data collection process was carried out carefully to gain an in-depth understanding of the geographical, ecological and demographic characteristics of the area. Thus, this primary data provides a strong foundation for ecotourism design, ensuring that every element and aspect involved in the design can be accurately understood based on the reality on the ground.

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1.4.2 Secondary Data

Secondary data

As information obtained from various sources such as the government, research institutions, scientific literature, industry reports, or the results of previous research by other parties, has a diversity of sources that can provide a variety of perspectives and rich context. The main advantage of using secondary data is that it is time and cost efficient, considering that researchers do not need to involve the data collection process from the start.

The benefits of this secondary data are further manifested in supporting the design of ecotourism designs at Soge Beach, Pacitan, East Java. By integrating information from various sources, ecotourism designs can be designed on a strong and diverse basis. Secondary data provides a knowledge base that involves social, economic and environmental context, allowing for more in-depth design. Thus, the adoption of secondary data not only speeds up the design process but also enriches understanding of the complex dynamics that exist around Soge Beach.

1.4.3 Design Approach Method

Reflects a deep understanding of the importance of integrating ecological, social and economic aspects in tourism development. An approach oriented towards community participation and local welfare is key in designing strategies that focus not only on economic potential, but also on environmental stewardship and empowerment of local communities.

The concept demonstrates sensitivity to the complexity of the relationship between tourism, environment, and community, and emphasizes the need to create mutually beneficial synergies among the three. As global awareness of sustainability increases, this approach can provide valuable guidance for achieving sustainable tourism goals.

One relevant reference to support this concept can be found in a study by Bramwell and Lane (2011) that discusses "Tourism Collaboration and Partnerships: Politics, Practice, and Sustainability." This research discusses how collaboration and partnerships between various stakeholders, including local communities, can be the key to success in developing sustainable tourism.

A **Community-Centric Approach for Sustainable Economic Growth** in architecture refers to an approach to the design and development of physical spaces that emphasizes the involvement and well-being of local communities. This approach prioritizes the active participation of the community in the process of planning, building, and managing architectural projects. The focus is not only on achieving economic growth, but also on community empowerment, preserving local culture, and improving quality of life.

References that can support the understanding of A Community-Centric Approach for Sustainable Economic Growth in the context of architecture can be found in related research and literature. One relevant reference is the book "Community-Based Urban Development: Evolving Urban Paradigms in Singapore and Seoul" by **Im Sik Cho and Belinda Yuen** (2018).

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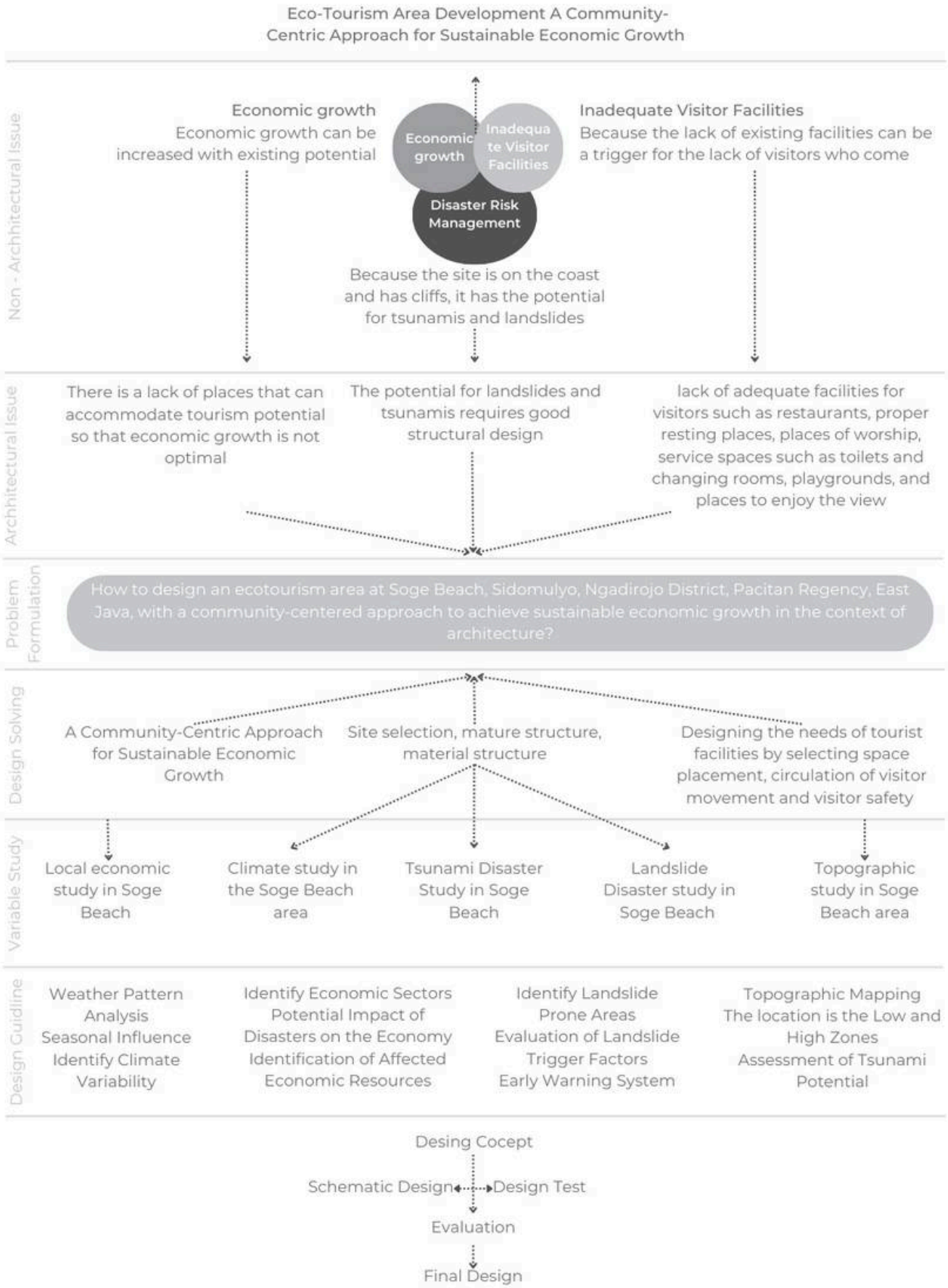
1.5 Initial Overview of Design Methods



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1.6 Precedent

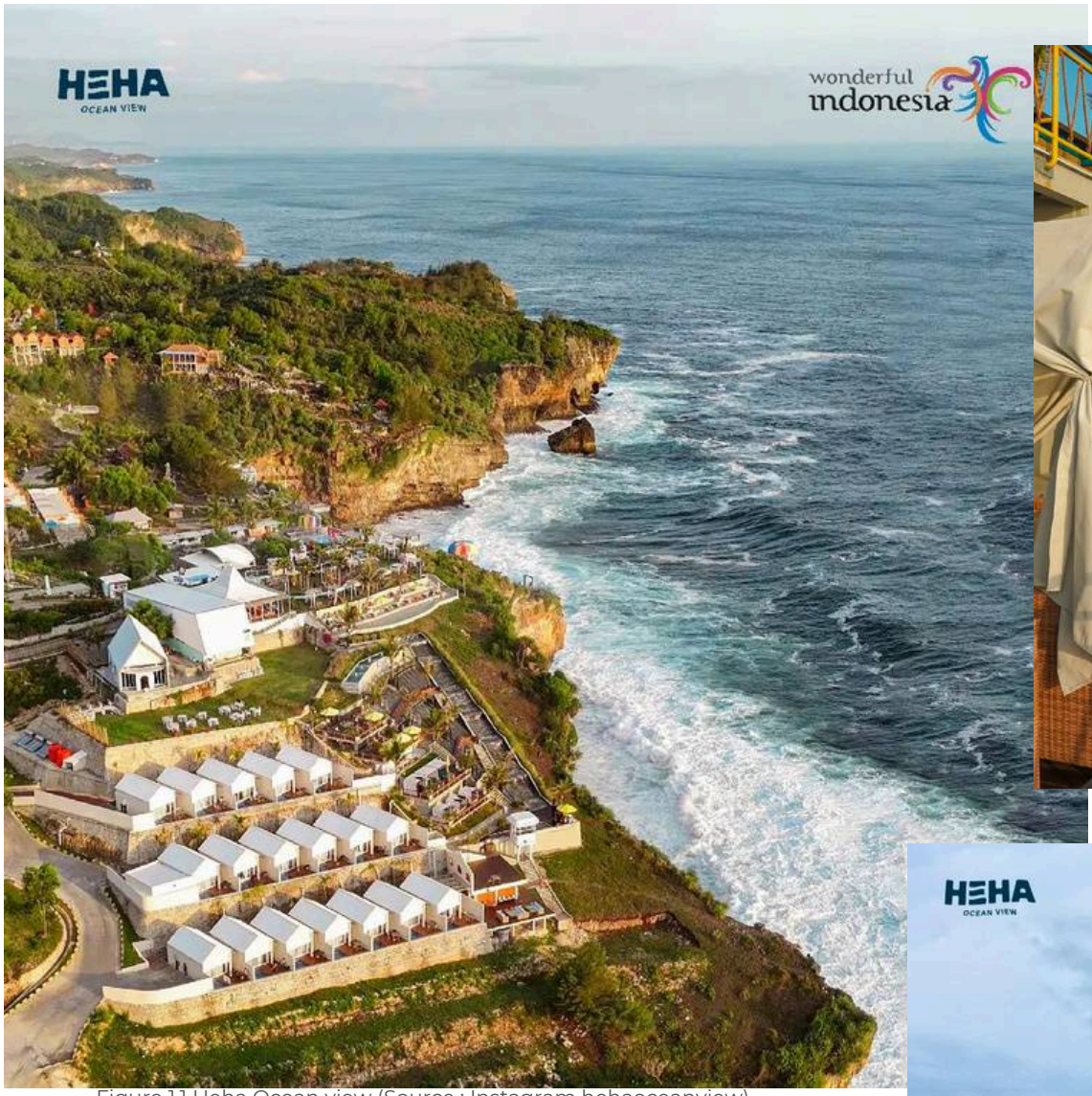

Figure 1.1 Heha Ocean view (Source : Instagram hehaoceanview)

Figure 1.2 Heha Ocean Pergola Block(Source : Instagram hehaoceanview)

Heha Ocean View

Heha Ocean View in Jogjakarta is an interesting precedent that addresses architectural aspects and land transformation. The project attracts attention because the Heha group generally selects locations that are initially deserted and then develops them into lively and thriving areas. This transformation includes architectural considerations in adapting what was once a vacant lot into a destination of interest to many people. This involves choosing building designs and layouts that suit the characteristics of the land and create visual appeal for visitors.

Figure 1.3 Heha Ocean view (Source : Instagram hehaoceanview)

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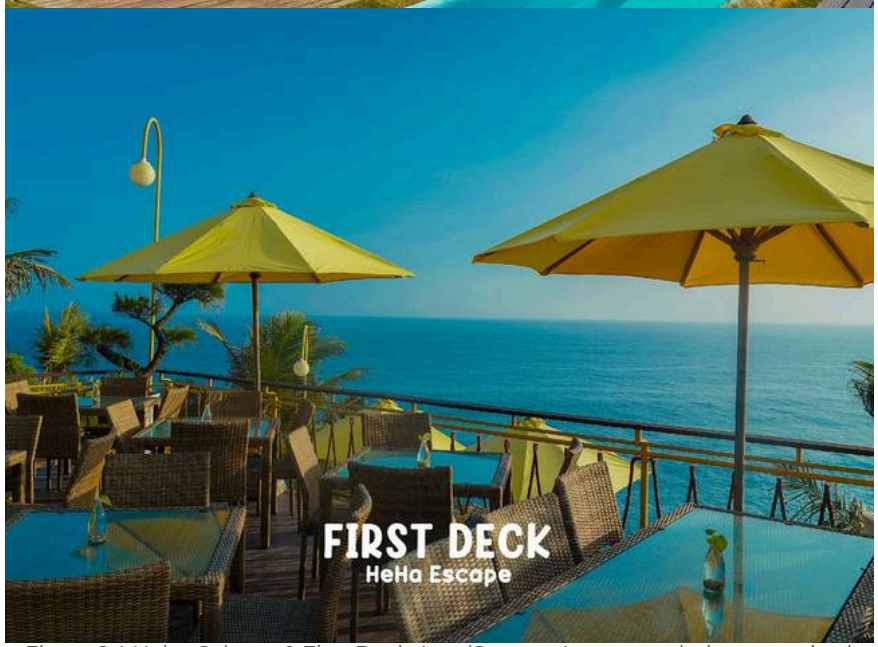

Figure 1.4 Heha Cabana & First Deck Area(Source : Instagram hehaoceanview)

Heha Ocean View in Jogjakarta is an interesting precedent that addresses architectural aspects and land transformation. The project attracts attention because the Heha group generally selects locations that are initially deserted and then develops them into lively and thriving areas. This transformation includes architectural considerations in adapting what was once a vacant lot into a destination of interest to many people. This involves choosing building designs and layouts that suit the characteristics of the land and create visual appeal for visitors.

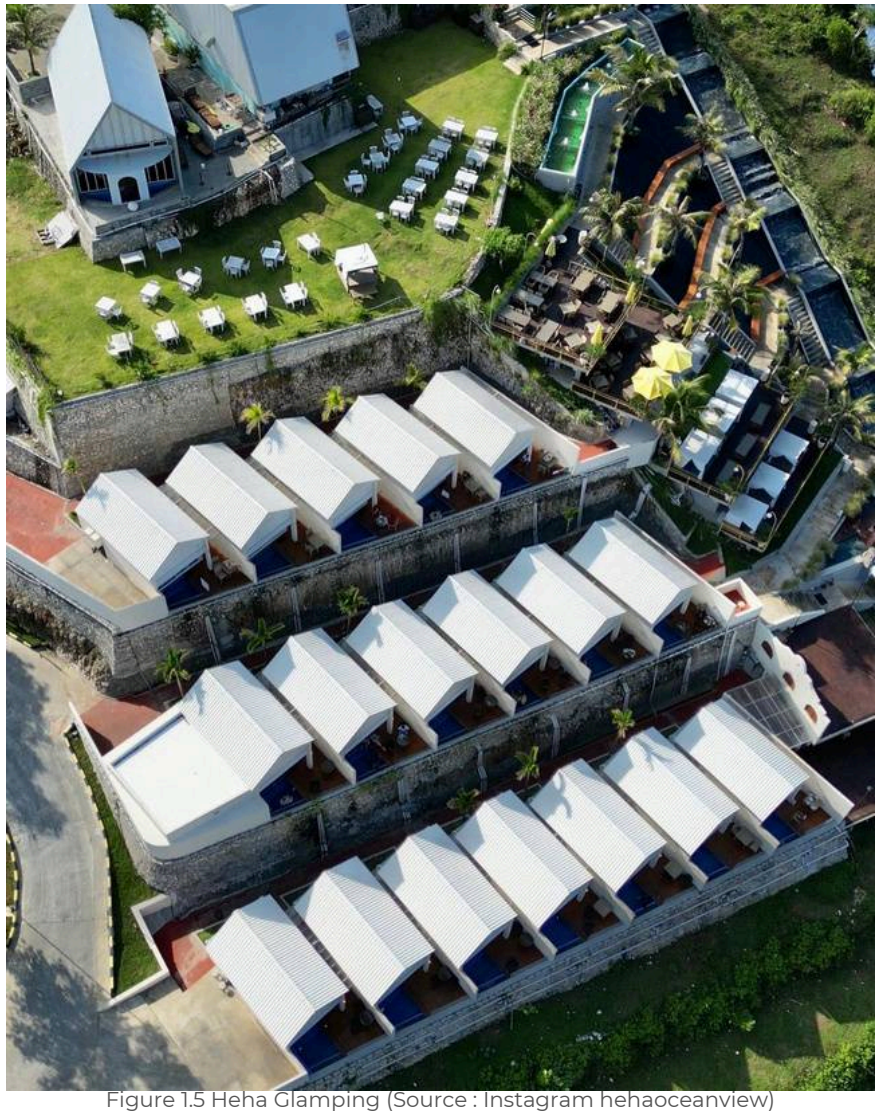

Figure 1.5 Heha Glamping (Source : Instagram hehaoceanview)

The successful transformation of Heha Ocean View from a deserted site to a vibrant destination also raises important questions about the contribution of architecture to the attractiveness and sustainability of a site. A deep understanding of the characteristics of the land, an emphasis on sustainable design, and the ability to create visually appealing experiences are architectural elements that can be key to a successful transformation like this.

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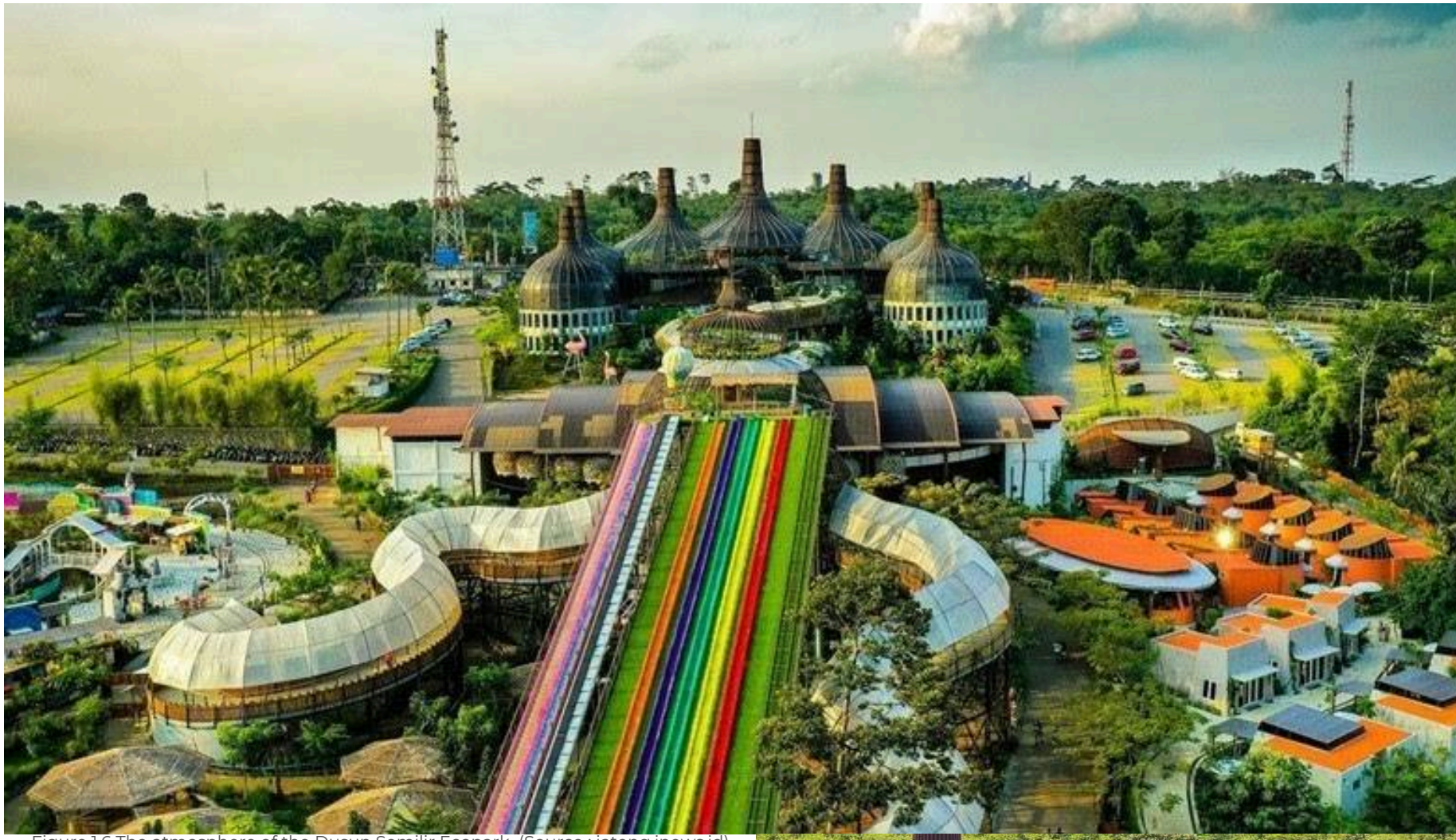

Figure 1.6 The atmosphere of the Dusun Semilir Ecopark (Source : jateng.inews.id)

Dusun Semilir Ecopark

Dusun Semilir Ecopark located in Bawen, Semarang Regency, is an important example in the context of ecotourism destinations. Ecotourism, in general, emphasizes the design of buildings and facilities that are environmentally friendly, creating harmony with the surrounding nature. Dusun Semilir, as a destination that adopts this concept, allows the design of buildings and infrastructure by utilizing recycled materials or renewable energy sources. The selection of sustainable construction materials and environmentally friendly technologies can be an important aspect in integrating sustainability in the architectural field.

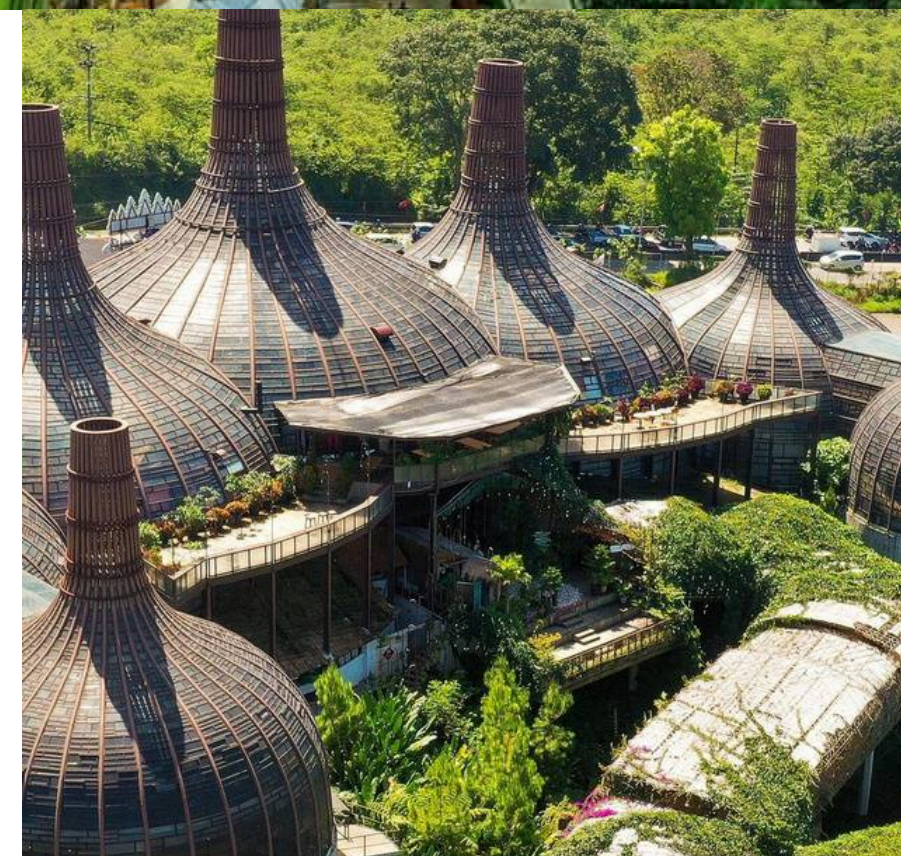

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Figure 1.7 Art Performance (Source : Instagram dusunsemilir)

Dusun Semilir Ecopark, located in Bawen, Semarang Regency, is an important example in the context of ecotourism destinations. Ecotourism, in general, emphasizes the design of buildings and facilities that are environmentally friendly, creating harmony with the surrounding nature. Dusun Semilir, as a destination that adopts this concept, allows the design of buildings and infrastructure by utilizing recycled materials or renewable energy sources. The selection of sustainable construction materials and environmentally friendly technologies can be an important aspect in integrating sustainability in the architectural field.

The tourism experience in Semilir Hamlet may also involve local culinary elements. The use of local products and regional culinary offerings are not only part of the business aspect, but also promote the economic sustainability of the local community. Thus, Semilir Hamlet is not just an ordinary tourist destination, but the embodiment of a comprehensive effort in integrating sustainability in the architectural, local cultural, and economic aspects of the local community.

Figure 1.7 The Atmosphere Dusun Semilir
(Source : Instagram dusunsemilir)

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02

Chapter 2 : Design Study

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2.1 Preliminary Design of Study

2.1.1 Topographic study in Soge Beach area

Figure 2.1 Selected Areas (Source : Google Maps 2024)

Ngadirojo District is located to the east of the capital city of Pacitan, with a distance of around 40 km and an area of 9,590.54 Ha. The regional division includes lowland (33%), sloping (9%), ringing (38%), and steep/mountainous (20%). The administration consists of 18 villages, such as Sidomulyo Village, Hadiwarno Village, Tanjungpuro Village, and others.

This area has a height of between 10-750m above sea level. The climate is influenced by the lowlands, with average rainfall of 2,742 mm/year and temperatures between 22-26 degrees Celsius. The river that crosses this area is used for irrigating rice fields and fishing.

The population reached 49,344 people as of September 2011, consisting of 24,169 men and 25,175 women. Supporting infrastructure, such as the Southern Cross Road (JLS), helps economic growth and reduces isolation in other areas. Ngadirojo's potential includes the tourism sector (Taman Ria, Segoro Anakan, Jendral Sudirman Monument) and home industry (Center for Batik Craftsmen, Emping Mlinjo Craftsmen, Banana Chips Center, and others).

Bogoharjo Village is a Batik center, while Nogosari, Cangkring, and Tanjunglor Villages are known for typical Pacitan culinary delights such as Mlinjo Emping Craftsmen and Banana Chips Centers.

Bodag and Cangkring villages are the producing areas for the Kolong Klithek Center. Apart from that, Coconut Sugar and Palm Sugar centers are in the villages of Wonosobo, Wonoasri, Wonokarto, Sidomulyo and Hadiwarno.

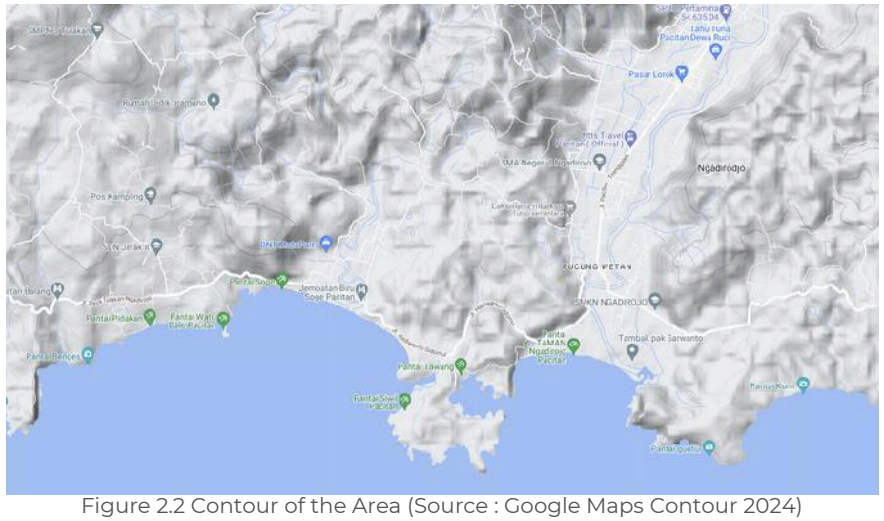

Figure 2.2 Contour of the Area (Source : Google Maps Contour 2024)

Contoured coastal land topography refers to the characteristics of the shape and slope of land in coastal areas. The following are several characteristics that can be found in the contoured topography of coastal land:

Sand Dunes or Dune

The presence of sand dunes or dunes is a characteristic feature of coastal land topography. Sand dunes can form due to winds carrying sand from the beach and piling it up to form a contoured structure.

Estuary and Meander River

The topography of coastal land is often associated with estuaries, where fresh water from rivers meets sea water. Meandering or meandering rivers can form distinctive patterns in coastal areas.

Cliff and Sand Cliff Formations

Some coastal areas have cliff formations formed due to sea or river erosion. In other places, there are sand cliffs that form interesting contour structures.

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Lagune area

Lagunes are calm, shallow waters separated from the sea by sand islands or sandbars. Lagunes are often present in contoured coastal land topography.

The Pattern is Influenced by Waves

Coastal landforms can reflect the influence of ocean waves and wave patterns, such as sandbars or regular sedimentation patterns.

2.1.2 Climate study in the Soge Beach area

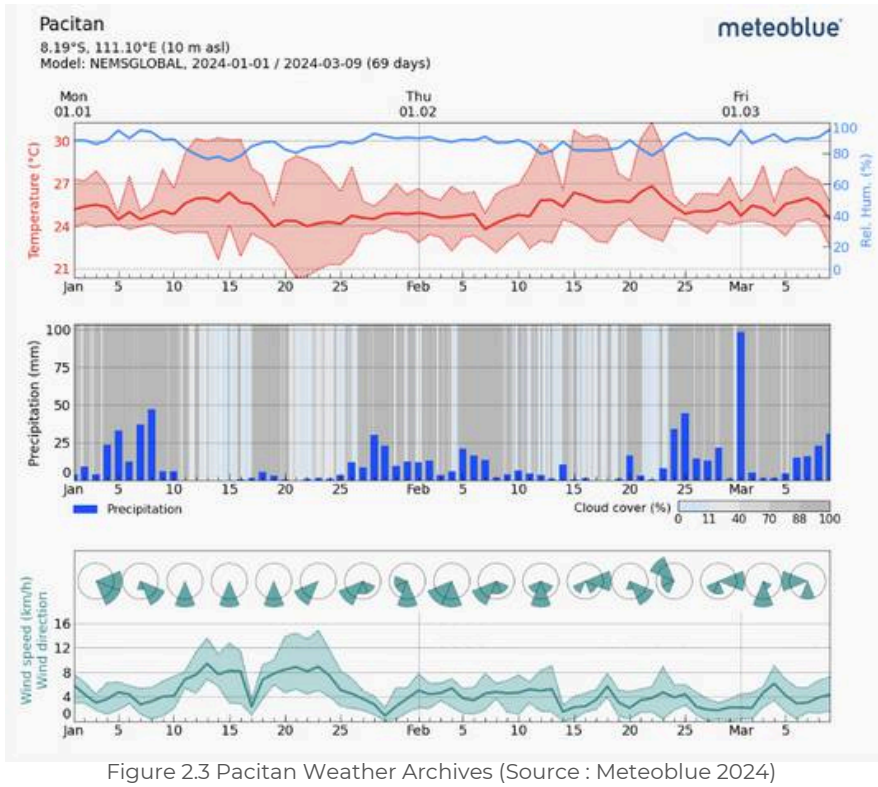

Figure 2.3 Pacitan Weather Archives (Source : Meteoblue 2024)

The collected data includes information related to air temperature, rainfall, wind speed and wind direction, which comprehensively provides an overview of climate conditions in a particular area. This data is not just a collection of numbers, but is a crucial analytical basis for understanding the climate characteristics and environmental dynamics in the area. Analysis of these variables helps identify climate patterns, seasonal changes and potential impacts on various aspects of life, so that they can become the basis for informed decision making in various sectors, such as agriculture to natural resource management.

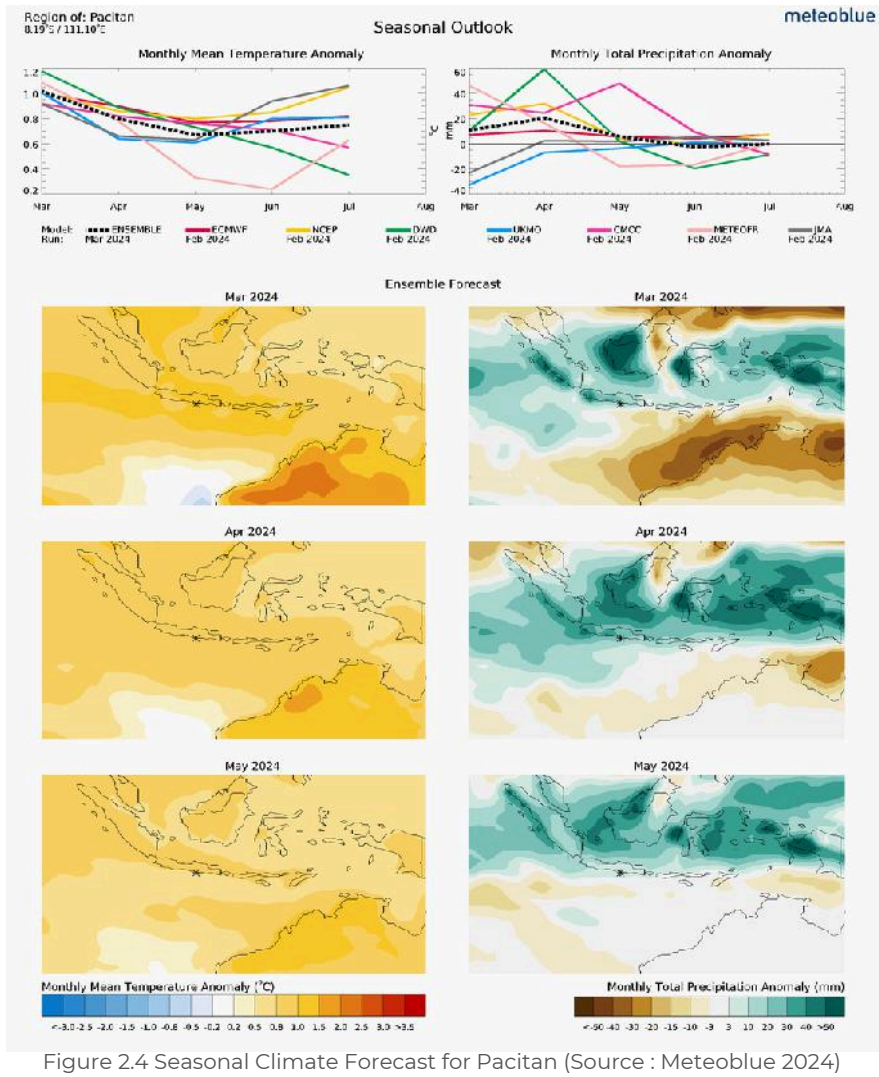

Figure 2.4 Seasonal Climate Forecast for Pacitan (Source : Meteoblue 2024)

Seasonal climate climate for the Pacitan region includes information regarding changes in monthly average temperature and rainfall over the next six month period, which is presented at the top. This forecast applies to areas 100 km x 100 km or larger.

In the context of seasonal forecasts, we can understand climate characteristics such as average values or anomalies for a whole month. This anomaly refers to the difference in temperature and rainfall from the climatological average value, where negative temperature and rainfall anomalies indicate cooler and drier conditions compared to average conditions.

Although climatological information provides a general overview, it has limitations in providing specific weather forecasts. The positive assumption of a temperature anomaly of +1 degree does not

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guarantee that every hour during the month will be warmer by 1 degree; conversely, daily temperatures may vary. Seasonal weather forecasting for a given day is considered technically impossible, mainly because daily weather forecasts are influenced by meso- or micro-scale events.

Since seasonal forecasts vary in brightness, a combined approach of multiple forecast results by major centers and institutions around the world is used to obtain more reliable trends. These models are calculated by several centers, including the European Center for Medium-Range Weather Forecasts (ECMWF), National Center for Environmental Prediction (NCEP/NOAA), German Weather Service (DWD), UK-MetOffice (UKMO), MeteoFrance (METEOFR), Japan Meteorological Agency (JMA), and the Euro-Mediterranean Climate Change Center (CMCC). Although these centers update their forecasts on a monthly basis, the non-uniformity of update timing requires evaluation of each center's performance. Therefore, using Super-Ensemble is a solution to get a more consistent and reliable picture.

2.1.3 Local economic study in Soge Beach

Jenis Tanaman *Kind of Plants*	2021
(1)	(2)
Bawang Merah	2,07
Bayam	8,00
Buncis	-
Cabai Keriting	0,06
Cabai Rawit	4,10
Jamur Lainnya	-
Jamur Tiram	49,00
Kacang Panjang	5,00
Kangkung	3,50
Labu Siam	-
Mentimun	3,50
Petsai/Sawi	-
Semangka	0,10

Figure 2.5 Harvest Areas of seasonal Vegetable and Fruit (Source : Agricultural Statistic for Horticulture SPH-SBS)

In 2021, data on the harvest areas of seasonal vegetable and fruit crops, with details by crop type, in Ngadirojo Sub-district are presented in statistical information. The source of this data comes from the Horticultural Agricultural Statistics SPH-SBS/BPS-Statistics Indonesia, which details agricultural statistical data related to horticulture, including the harvest area of vegetable and fruit crops in the Ngadirojo Sub-district area.

Jenis Tanaman *Kind of Plants*	2021
(1)	(2)
Jahe	305 000,00
Jeruk Nipis	-
Kapulaga	-
Kencur	87 500,00
Kunyit	93 500,00
Laos/Lengkuas	220 000,00
Lempuyang	8 600,00
Lidah Buaya	-
Mahkota Dewa	-
Mengkudu/Pace	-
Sambiloto	-
Serai	-
Temuireng	725,00
Temukunci	700,00
Temulawak	38 500,00

Figure 2.6 Data on the Production of Biopharmaca Plants in Ngadirojo (Source : Agricultural Statistic for Horticulture SPH-SBS)

In 2021, information on the production of biopharmaca plants in Ngadirojo Sub-district, broken down by plant type, has been disclosed by presenting data in kilograms. This data is obtained from a reliable source, namely the Horticultural Agricultural Statistics SPH-TBF/BPS-Statistik Indonesia, which in detail describes agricultural statistical data, especially focusing on the production of biopharmaca plants in the Ngadirojo Sub-district area.

Through this detailed data, an understanding of the various types of biopharmaca plants produced in Ngadirojo Subdistrict in that year becomes clearer.

https://pacitankab.bps.go.id

Jenis Tanaman *Kind of Plants*	2021
(1)	(2)
Alpukat	24,50
Belimbing	31,40
Duku/Langsat/Kokosan	2,50
Durian	81,00
Jambu Air	93,50
Jambu Biji	334,50
Jeruk Pamelo	0,00
Jeruk Siam/Keprok	360,00
Mangga	3 900,00
Melinjo	190,80
Nangka/Cempedak	322,50
Pepaya	558,30
Petai	22,65
Pisang	64 924,30
Rambutan	2,25
Salak	1,50
Sawo	46,00
Sirsak	522,00
Sukun	26,55

Figure 2.7 The Annual Production of Fruits and Vegetables (Source : Agricultural Statistic for Horticulture SPH-SBS)

In 2021, there is detailed information on the annual production of fruits and vegetables in Ngadirojo Sub-district, separated by crop type, and this data is presented in quintals. The data is obtained from a reliable source, namely the Horticultural Agriculture Statistics SPH-BST/BPS-Badan Pusat Statistik, providing an accurate picture of the production of various types of fruit and vegetable crops in the Ngadirojo sub-district area.

The detailed data covers the production of various crops, enriching the understanding of the contribution of each crop to the total production in the sub-district. This detailed data not only provides an overview of horticultural agricultural activities in Ngadirojo Sub-district but also provides a solid basis for in-depth analysis of trends and potential development of the agricultural sector over a one-year period.

Desa/Kelurahan *Village/Kelurahan*	Hotel *Hotel*	Penginapan *Inn*
(1)	(2)	(3)
Sidomulyo	-	3
Hadiwarno	-	-
Tanjungpuro	-	-
Hadiluwih	-	-
Pagerejo	-	-
Wiyoro	1	-
Ngadirojo	-	-
Bogoharjo	-	-
Cokrokembang	-	-
Bodag	-	-
Tanjunglor	-	-
Nogosari	-	-
Cangkring	-	-
Wonodadi Kulon	-	-
Wonodadi Wetan	-	-
Wonokarto	-	-
Wonosobo	-	-
Wonoasri	-	-
Kecamatan Ngadirojo	1	3

Figure 2.8 The Annual Production of Fruits and Vegetables (Source : Agricultural Statistic for Horticulture SPH-SBS)

The number of lodging facilities in Ngadirojo Sub-district in 2021, broken down by village and type of lodging, can be found in the data source "Village Potential Data Collection (Podes) 2021" organized by the Central Bureau of Statistics (BPS). This information not only provides an explanation of the number of lodging facilities, but also provides a deeper understanding of the variety of types of lodging available in each village or kelurahan in the Ngadirojo Sub-district area during the year.

As such, this data is important in supporting tourism and infrastructure development and development planning at the local level. This detailed information provides a solid foundation for analyzing and understanding the extent of the diversity of lodging facilities in Ngadirojo Sub-district, allowing stakeholders and other interested parties to make more informed and strategic decisions.

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Desa/Kelurahan *Village/Kelurahan*	Kelompok Pertokoan *Shopping Complexs*	Pasar dengan Bangunan Permanen *Markets in Permanent Building*	Pasar dengan Bangunan Semi Permanen *Market in Semi Permanent Building*
(1)	(2)	(3)	(4)
Sidomulyo	-	-	-
Hadiwarno	-	1	1
Tanjungpuro	-		-
Hadiluwih	1		-
Pagerejo	1		-
Wiyoro	5	1	1
Ngadirojo	2	-	-
Bogoharjo	-	-	-
Cokrokembang	-	-	-
Bodag	-	-	-
Tanjunglor	-	-	-
Nogosari	-	-	-
Cangkring	-	-	-
Wonodadi Kulon	1	-	-
Wonodadi Wetan	-	1	-
Wonokarto	-	-	1
Wonosobo	-	-	-
Wonoasri	-	-	-
Kecamatan Ngadirojo	**10**	**3**	**3**

Figure 2.9 The Number Trading facilities in Ngadirojo (Source : htpps://pacitankab.bps.go.id.)

The number of trading facilities in Ngadirojo Sub-district in 2021, detailed by village and type of trading facility, can be found in the data presented on the official website of the Central Bureau of Statistics (BPS) of Pacitan District, htpps://pacitankab.bps.go.id. Through this data source, we can understand the extent of the diversity and availability of trade facilities in each village or kelurahan in Kecamatan Ngadirojo during the year.

This data provides an important basis for evaluating and planning economic development and trade infrastructure at the local level. The presentation of this detailed information provides a more comprehensive picture, allowing interested parties and decision-makers to conduct a more in-depth analysis of trade conditions in Ngadirojo Sub-district.

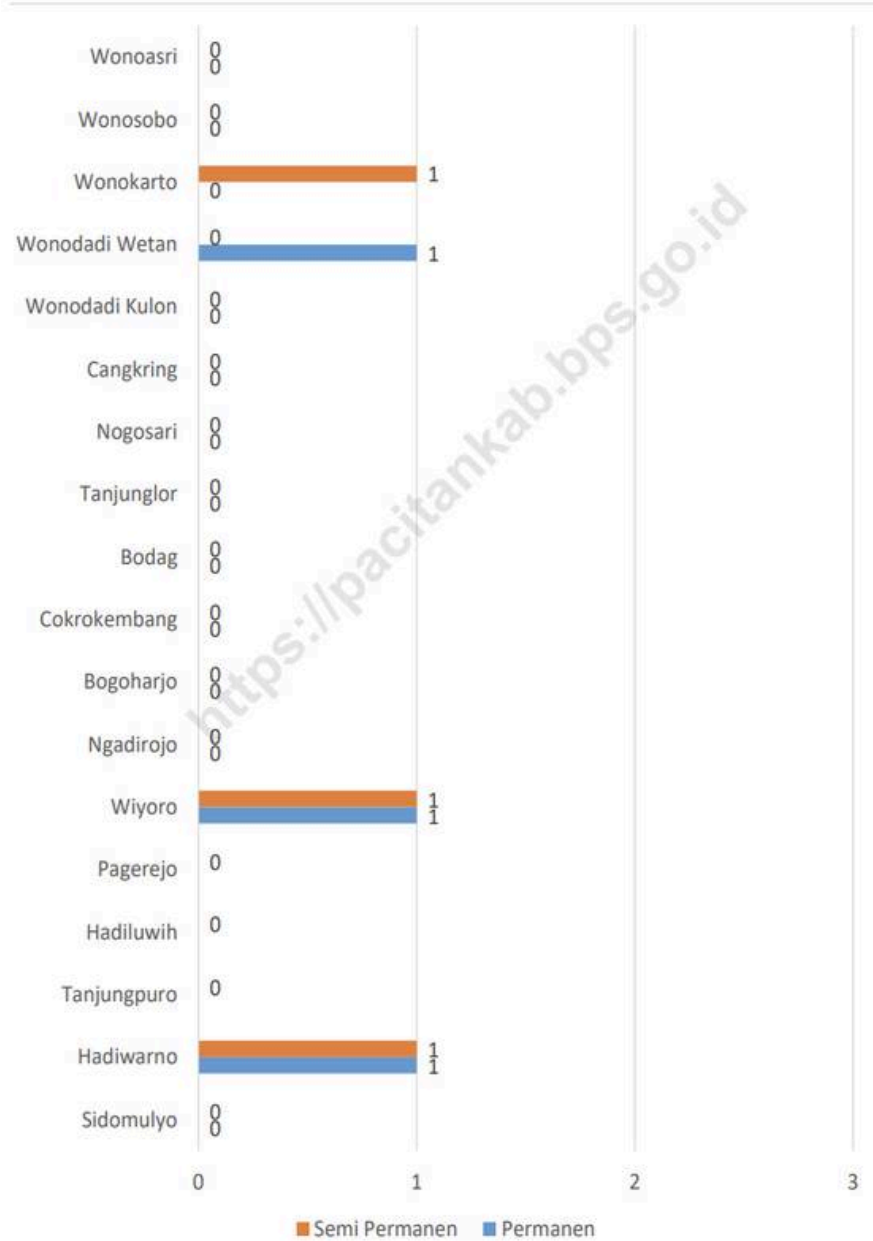

Figure 2.10 The Number of Markets in Ngadirojo (Source : htpps://pacitankab.bps.go.id.)

Based on 2021 data, information on the number of markets spread across villages in Ngadirojo Sub-district can be accessed through the official website of the Pacitan District Statistics Agency, htpps://pacitankab.bps.go.id. This data provides a detailed picture of how many markets exist in each village or kelurahan within the Ngadirojo sub-district, presenting a comprehensive view of market infrastructure at the local level.

The importance of collecting and sharing this information is to support an understanding of the market structure at the sub-district level, providing a

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solid basis for development planning and economic development in the region. The data provides an indication of the extent to which markets are diverse and available to support the economic activities of local communities.

With the transparency of data through the official website of BPS Kabupaten Pacitan, the community, local government and interested parties can access relevant information to support better and strategic decision-making related to economic development and infrastructure in Kecamatan Ngadirojo.

2.1.4 Landslide Disaster study in Soge Beach

Figure 2.11 Landslide Prone Areas in Pacitan (Source : pdfs.semanticscholar.org 2019)

The Pacitan Regency area in East Java is in the spotlight because it has the potential for four main types of disasters, namely Tsunamis, Earthquakes, Floods and Landslides. Of these four disasters, there are two potential disasters that have occurred frequently and are likely to hit again, namely Floods and Landslides. The threat of these two disasters is the main focus because Pacitan Regency is generally located in the lowlands and forms a basin. In addition, the natural characteristics of Pacitan Regency, which includes water, lowland and hilly areas, with 85% of the area in the form of mountains and hills, 10% undulating (water), and 5% plains, are important factors that influence the high incidence of both types of disasters (Kardoyo 2013).

Landslides often occur due to the geographical position of Pacitan Regency on hilly slopes and the type of lithosol (clay) soil that dissolves easily when exposed to water. Therefore, when entering the rainy season, several areas such as Tegalombo, Tulakan, Pringkuku, Kebonagung, and areas close to hilly slopes are encouraged to always increase their vigilance. The potential for landslides, whether on a small, medium or large scale, could endanger local residents. Therefore, preventive measures and community preparedness are needed to reduce the impact and risk of this potential disaster.

Disaster management in Pacitan Regency requires an in-depth approach involving structural design and architectural concepts that are appropriate to the characteristics of the region and the types of disasters that may occur. Below are some suggestions for mitigation based on the data provided :

Design of Evacuation Buildings and Disaster Management Centers

Design evacuation buildings that can accommodate a significant number of residents by considering comfort and safety aspects.

Building a disaster management center equipped with advanced technology to monitor and provide quick responses to potential disasters.

Community Education and Preparedness

Integrate elements of disaster education in architectural design and urban planning to increase public awareness of disaster risks.

Include public spaces that can be used for disaster preparedness education and training.

Use of Environmentally Friendly Materials

Choose construction materials that are environmentally friendly and resistant to environmental stress that may occur during a disaster.

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Natural Landscape Considerations

Utilize natural landscapes, such as hilly vegetation, as natural protection against landslides by avoiding significant changes in vegetation. This approach must involve collaboration between governments, architects, engineers and local communities to ensure effective and sustainable implementation. "Apart from that, regular counseling and training is needed to increase community awareness and preparedness in facing potential disasters.

2.1.5 Tsunami Disaster Study in Soge Beach

Figure 2.12 Tsunani Disaster Impact (Source : www.ecowatch.com

Based on Law no. 24 of 2007, the disaster spectrum covers various aspects, and intense collaboration between disaster institutions at both the central and regional levels is a necessity. The four stages of disaster management, involving preparedness, emergency response, post-emergency, and prevention and mitigation, must be implemented simultaneously with community participation. The prevention and mitigation stages are steps that can actively involve the community through a Community Based Disaster Management approach, which is more effective than formal state agencies.

Even though disaster management involves the community, formal institutions still have an important role as a manifestation of the state's presence in critical situations. There are victims, both human and property, in every disaster is a fact, but it needs to be understood that before a disaster strikes, there are always signs.

East Java, including Pacitan Regency, is one of the provinces and districts/cities that has the potential for disasters, especially tsunamis. The 2010-2014 disaster map compiled by BNPB shows that Pacitan is included in the list of areas prone to tsunami disasters. The southern coastal area of Pacitan, especially the six main sub-districts, is the focus because it is located on the Grindulu fault line, a fault line that is prone to tsunami disasters. This fault line is a potential earthquake propagation area that could occur due to the collision of the continental plate on the island of Java and the oceanic plate in the southern seas. Therefore, the understanding, skills and skills of communities in disaster-prone areas are very necessary to prepare anticipatory steps in facing potential disasters.

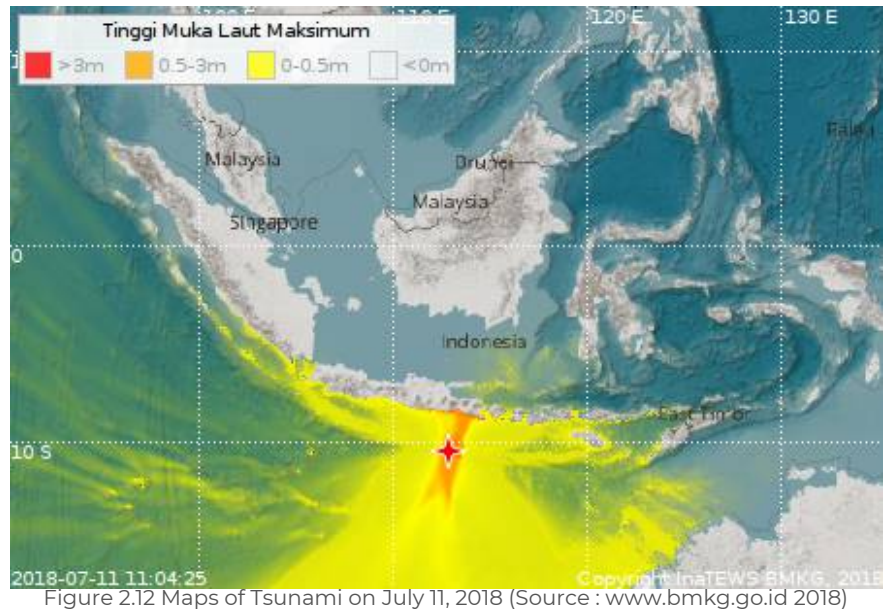

Figure 2.12 Maps of Tsunami on July 11, 2018 (Source : www.bmkg.go.id 2018)

The tsunami on July 11, 2018 in the Kepanjen-Malang area of East Java was triggered by an earthquake with a magnitude of 7.8. At that time, around 11:04:25 a.m., this earthquake occurred with its epicenter located about 261 km southeast of Kepanjen-Malang. Indonesia Tsunami Early Warning notified that the tsunami early warning associated with the earthquake had ended. This information is the result of monitoring and evaluation of the Indonesian Tsunami Early Warning System.

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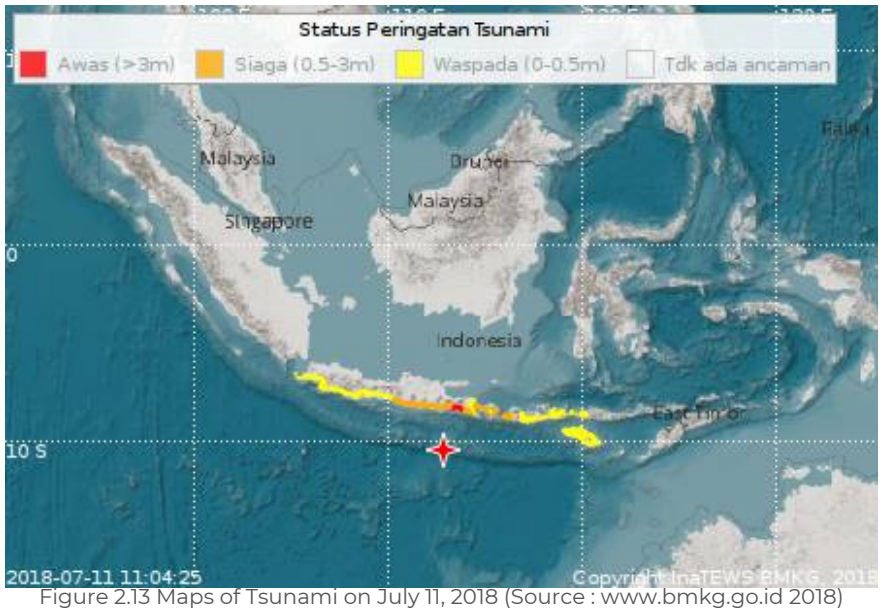

Figure 2.13 Maps of Tsunami on July 11, 2018 (Source : www.bmkg.go.id 2018)

Of course, the success of the early warning system is a crucial step in maintaining public safety after an earthquake that has the potential to trigger a tsunami. At that time, the public is asked to remain vigilant and comply with evacuation instructions set by the authorities. These early warnings provide additional time for residents in affected areas to evacuate to safer areas, thereby reducing the potential catastrophic impact of a tsunami. This information is expected to serve as a basis for related parties and communities to take more effective mitigation measures in the future.

Solving problems in designing ecotourism designs that minimize the potential for tsunami disasters in coastal areas requires a comprehensive approach and considering safety factors and environmental sustainability. Here are some aspects to pay attention to:

Safe Location Selection
Identify and select a location that is safe from tsunami risk. Avoid areas with a high potential for being affected by a tsunami. Use mapping and modeling technology to determine elevation and potential risks.

Tsunami Resistant Architecture
Design buildings with structures that can withstand water pressure and strong lateral forces. Use materials that are resistant to corrosion caused by sea water. Building infrastructure with adequate elevation to avoid inundation of sea water.

Evacuation and Safe Passage
Design an effective evacuation system and easily accessible emergency routes. Provide elevated shelters that can be quickly accessed by visitors and local residents.

Early Warning System
Integrate an efficient and integrated tsunami early warning system with security systems in building and infrastructure design. Provide clear and easily accessible information regarding evacuation procedures and safe route maps.

Coastal Ecosystem Restoration
Prioritize the restoration of coastal ecosystems which can function as a natural tool to reduce tsunami energy. Plant coastal vegetation that can reduce sea water speed and tsunami damage.

Public Education and Awareness
Disseminate knowledge about tsunami dangers and evacuation steps to local communities and visitors.
Develop educational programs at ecotourism centers to increase awareness of disaster risks and preventive measures.

2.1.6 Number of Visitors

Based on data provided by the Pacitan Regency Central Bureau of Statistics, it was recorded that the number of visitors to Soge Beach in 2019 reached **54,985 people**. This figure shows the high interest of tourists in this tourist destination, which is known for its natural beauty. In addition, the data also reveals that there are 10 workers directly involved in operations at the location.

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2.2 Site Analysis

2.2.1 Site Location

Figure 2.14 Indonesian map (Source : Google Maps 2024)

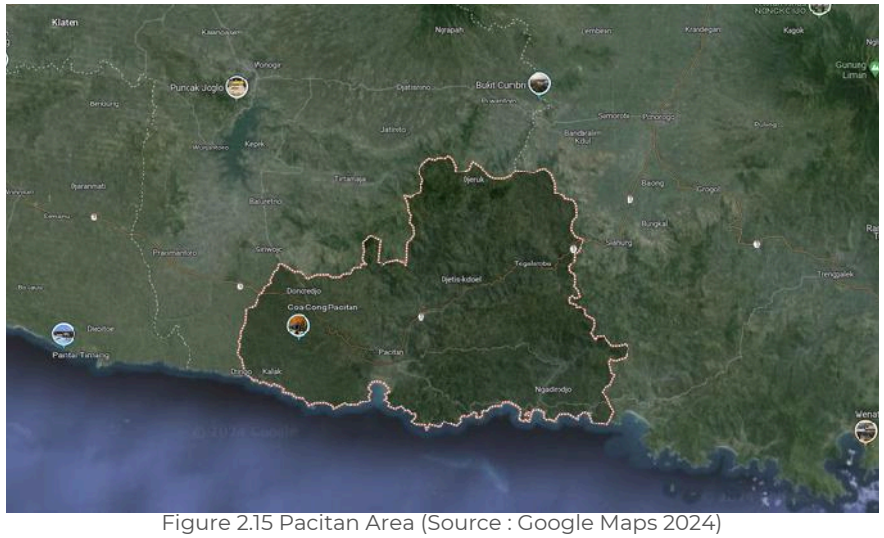

Figure 2.15 Pacitan Area (Source : Google Maps 2024)

Indonesia, known as the country with the largest number of islands in the world, has a very diverse natural wealth. As a tropical country, Indonesia is blessed with amazing biodiversity, including dense rainforests, active volcanoes and dazzling coral reefs. Indonesia's natural beauty makes it one of the world's top tourist destinations.

One of the areas that offers outstanding natural beauty is Pacitan, located in East Java province. Pacitan has a variety of stunning natural attractions, including exotic beaches, amazing natural caves, and breathtaking natural scenery. Every year, many tourists come to enjoy the beauty and uniqueness of Pacitan's nature.

Pacitan is an ideal tourist destination because of its natural beauty and unspoiled nature. Pacitan's natural beauty offers a different tourist experience from other places, with various natural attractions that can be enjoyed by local and international tourists. Various cultural festivals and local events that are often held also add to Pacitan's appeal as a tourist destination. With all its natural beauty, Pacitan is not only attractive to nature lovers and adventurers, but also to those who seek tranquility and unspoiled beauty.

Pacitan is a district located in East Java Province, Indonesia, with an area of around 1,389.87 km². This district consists of 12 sub-districts, each of which has its own uniqueness and charm. Pacitan has very interesting tourism potential, especially in terms of nature and beautiful beaches, making it one of the leading tourist destinations in East Java.

This district is famous for its stunning beaches, such as Teleng Ria Beach, Klayar Beach, Soge Beach and Buyutan Beach. These beaches offer soft white sand, clear sea water and waves suitable for various activities such as surfing, swimming or just enjoying the view.

With its unspoiled natural beauty and various interesting tourist attractions, Pacitan is an attractive destination for tourists looking for a different and enchanting holiday experience. Apart from beaches, Pacitan also has amazing caves and mountains which are suitable for trekking and nature exploration activities. The existence of forests that are still maintained also adds to the beauty and natural value of this region. Pacitan continues to develop as a tourist destination that must be visited. This district is not only attractive to nature lovers and adventurers, but also to those seeking tranquility.

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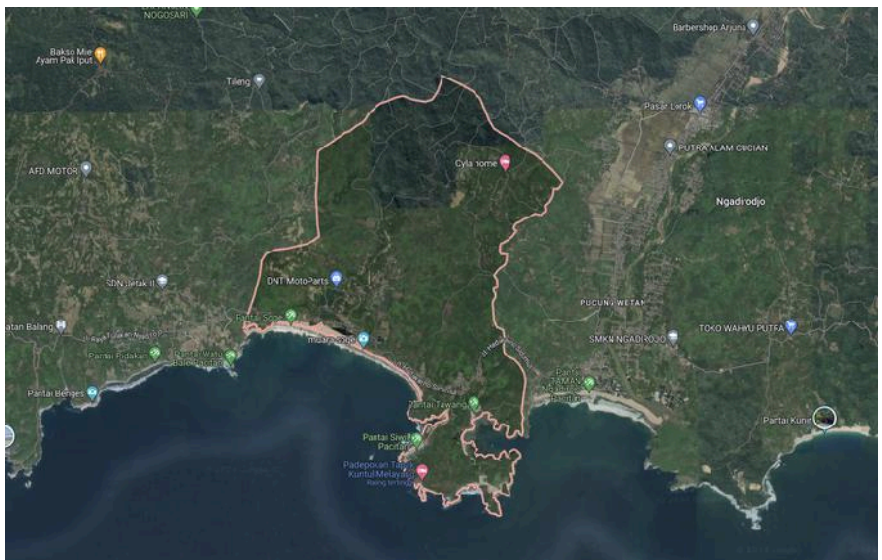

Figure 2.16 Sidomulyo Area (Source : Google Maps 2024)

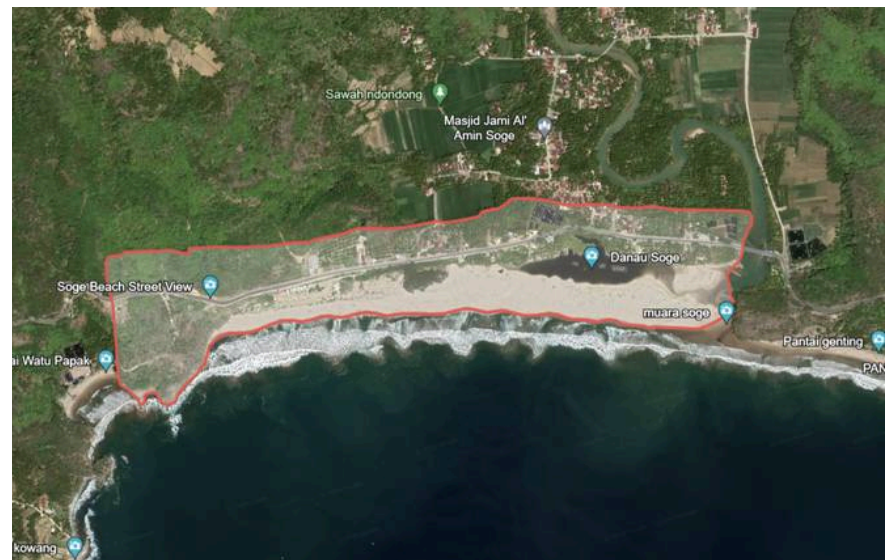

Figure 2.17 Soge Beach Area (Source : Google Maps 2024)

Site Location :
Soge beach, Dondong, Sidomulyo, Ngadirojo sub-district, Pacitan district, East Java

Climate :
Tropical

Above Sea Level :
Around 1-9 Mdpl

Enterence Location and Type :
Public road with crossroad

Sidomulyo is a village located in Ngadirojo sub-district, Pacitan district, East Java, known for its natural beauty and community life full of local traditions. The village can be accessed easily by road from the sub-district center as well as from Pacitan city, with improved road infrastructure. The charming scenery of hills, rice fields and rivers makes Sidomulyo an ideal place for outdoor activities such as trekking and camping.

The people of Sidomulyo mostly work in the agriculture and fisheries sectors, growing rice, vegetables and various types of secondary crops, as well as raising fish in small ponds. With its natural beauty and rich culture, Sidomulyo has great potential as a tourist destination. Efforts to improve infrastructure and public facilities by the village and local governments, tourist facilities, are ongoing to support the growth of this village as an attractive tourist destination in Pacitan Regency.

The decision to choose this location is based on appealing visual considerations, aiming to provide an extraordinary experience for visitors with a stunning direct view of the beach. By selecting this location, it is hoped that the surrounding natural beauty can be preserved and explored as a sustainable ecotourism attraction.

Furthermore, meticulous planning and design are required to ensure that development at this location not only respects the environment but also optimizes ecotourism benefits while minimizing potential negative impacts on local environmental sustainability. These steps include choosing environmentally friendly building materials, proper waste management, and implementing green technologies to reduce carbon footprint.

Sustainable development also requires active involvement from the local community and other stakeholders. This involvement is crucial to ensure that ecotourism presence not only provides economic benefits but also positive social and cultural impacts for the local population. With such approach, it is hoped that this location can become a successful example of responsible ecotourism development that has a positive impact on the environment and surrounding communities.

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2.2.2 Characteristics of the Site

Figure 2.18 Contours of The Site (Source : Google Earth 2024)

Soge Beach in Pacitan is a standout tourist destination that showcases the beauty of nature. Located in Sidomulyo, Ngadirojo Subdistrict, Pacitan Regency, East Java, this beach's strategic location provides easy access for visitors interested in enjoying the natural charm of the coastline. The ease of access via the Ngadirojo - Sudimoro highway makes this beach easily reachable, making it an attractive option for tourists wanting to experience stunning natural beauty. Assessing this location is a crucial first step in planning the development of the Soge Beach area.

Soge Beach offers captivating scenery with its long coastline and clean white sand. The waves at this beach are relatively calm, making it an ideal spot for swimming and various other beach activities. The unique topography of Soge Beach is further enhanced by the presence of several hills around it, providing beautiful views and adding appeal for visitors seeking a different kind of tourist experience.

The tourism potential of Soge Beach is immense, and with proper management, this area can develop into one of Pacitan's main attractions. Developing infrastructure and supporting facilities, as well as effective promotion, can attract more tourists to come and enjoy the beauty of Soge Beach.

2.2.3 Site Accessibility

Figure 2.19 Location Access (Source : Snazzy Maps 2024)

- Jalur Lintas Selatan (JJLS)
- Local Road
- The sea
- River

Land access to Soge beach is very easy to reach, with a wide and smooth path being a significant plus for this destination. The wide lanes make traveling to the beach easy, providing comfort for visitors. Another plus is the smoothness of the road which can enhance the travel experience, making it a desirable option for those looking for a comfortable and accessible vacation spot.

Aside from the convenience of access, Soge beach also offers a serene and quiet experience. The road leading to this destination is not only wide and smooth, but also quiet, creating a peaceful atmosphere away from the hustle and bustle of the city. This adds to the appeal of Soge beach as a suitable recreational spot for those who want to enjoy the serenity of the beach without being disturbed by the hustle and bustle of traffic or crowds.

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2.2.4 View from Site

Figure 2.20 View From the Cliff Road (Source : Google Maps 2024)

With stunning scenery along the main highway, the potential to develop tourism facilities and attract investment in infrastructure improvements is promising. The natural beauty displayed along the way is a strong foundation for developing Soge beach as an alluring tourist destination that provides an extraordinary experience for every visitor.

Figure 2.21 Partial Beach View (Source : Google Maps 2024)

The stunning natural scenery along the road to Soge Beach significantly enhances its appeal as a tourist destination. With its beautiful beach views, clean white sand, and calm waves, Soge Beach has all the elements to offer an extraordinary experience for every visitor. Furthermore, the development of excellent tourism facilities will allow visitors to enjoy various beach activities, such as swimming, surfing, and appreciating the natural surroundings.

2.2.5 Site Regulation

The spatial planning of the coastal reclamation area must fulfill the related elements (Department of Public Works, Directorate General of Spatial Planning, 2008: 13).

The spatial structure planning for the coastal reclamation area is prepared by taking into account:

1. Regional spatial axes that utilize coastal or water elements as the regional axis/axis line visually or conceptually.
2. The spatial structure of the area that passes along the edge of the coastline and the mainland must be maintained as a public area that can be easily enjoyed by the general public, where the Coastal Boundary Line (hereinafter referred to as GSP) can be used as necessary for open space.
3. The spatial structure pattern of the area that passes through the water or coastal space is made as natural as possible (straight linear or curved linear) while maintaining the morphology and elements of the existing coastal space.

Based on BUPATI PACITAN REGULATION
NUMBER 47 YEAR 2015 Paragraph 4
Land Use Intensity in the Beach Recreation Zone
Article 15
The intensity of land utilization in the beach recreation zone includes:
1. Basic Building Coefficient (KDB) maximum **30%;**
2. Building Floor Coefficient (KLB) maximum **60%**;
3. Green Area Coefficient (KDH) minimum **40%**; and
4. Maximum building floor of 2 floors.

Building Setback Line (GSB)
is the width of the road : **2 + 1**
section five
Article 16

1. (6) The boundary line of a river that is affected by the tides is set at at least 100 meters calculated from the bank of the river at the time of the tide, and determined by the arrangement of sanitation infrastructure and facilities in the area of coverage area

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2.2.6 Site Selection

Figure 2.22 Site Selection (Source : Google Earth 2024)

The red section of the map shows the site I selected as a potential location for the ecotourism project, which covers an area of 9.900,5 m². The site is located on top of a cliff and offers a direct view of the stunning Soge Beach. My decision to select this location was based on attractive visual considerations, where visitors can enjoy a direct panorama to the beautiful beach, creating a great experience for them.

In choosing this location, I have high hopes that the surrounding natural beauty can be wisely preserved and explored as a major attraction in the development of sustainable ecotourism. This requires careful planning and design to ensure that any development in this location is done with due regard to the principles of environmental sustainability. It is also important to optimize the ecotourism benefits that this site can generate, while minimizing potential negative impacts on the local environment.

The development of this project includes the use of environmentally friendly technologies, the selection of sustainable materials, and development that respects the character of the natural surroundings. As such, this ecotourism project is expected to be a good example of combining natural beauty with environmentally responsible development.

2.2.7 Site Boundaries

Figure 2.23 Site Size (Source : Google Earth 2024)

A : 17.779 Cm
B : 14.336 Cm
C : 14.601 Cm

Site boundaries are a very important foundation in the planning of ecotourism objects at Soge Beach. By paying attention to the boundaries to be developed, it can plan each step of development in more detail, from the layout of buildings to the arrangement of open space, in accordance with the vision and development goals to be achieved.

It is also important to understand the site boundaries to facilitate the permitting process and compliance with applicable regulations. By having a good understanding of the boundaries, it is possible to apply for permits and follow regulations appropriately and efficiently. This is crucial in ensuring that the development of ecotourism objects at Soge Beach is carried out in accordance with applicable legal and environmental provisions, maintaining a balance between attractive development and environmental sustainability. Therefore, site boundaries are not only a physical guide, but also a strong foundation in directing the overall development strategy.

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2.2.8 Land Use

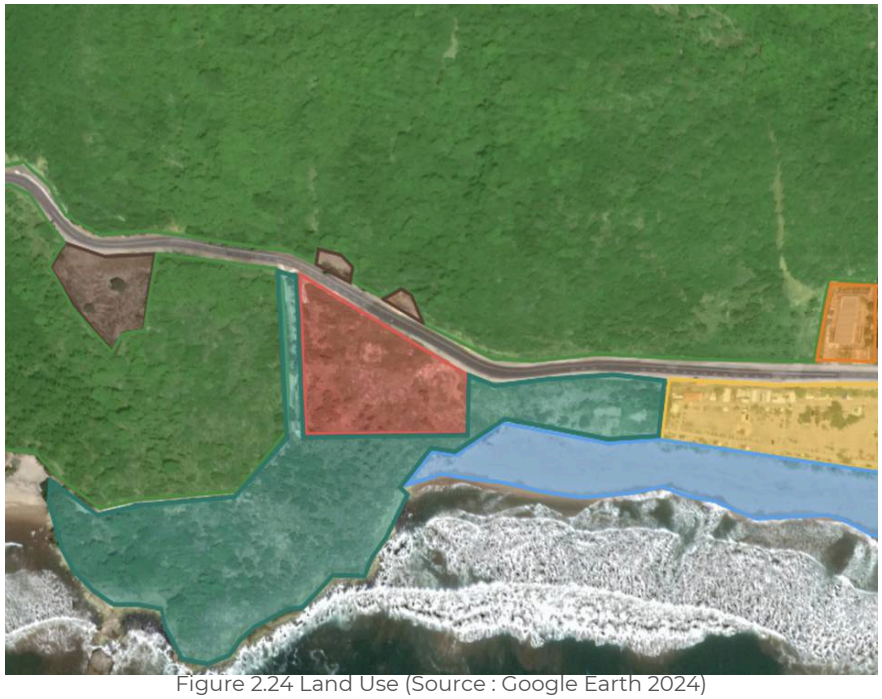

Figure 2.24 Land Use (Source : Google Earth 2024)

- Green land
- Agriladang
- Beach Area
- Vacant Land
- Commercial Area (Gas Station)
- Beach Commercial Area
- Selected Site

Land use in architectural design is an important concept that involves managing and regulating land use according to the needs and characteristics of the area. This includes the identification of different types of land use, such as residential, commercial, industrial, and green open spaces, and the analysis of the physical and environmental characteristics of each type of land use. The spatial arrangement of different types of land use is also a concern, including spatial planning that regulates the location and relationship between parts of the area.

Land use in architectural design involves managing and regulating land use according to the needs and characteristics of the area. This includes the identification of land use types, such as residential, commercial, industrial, and green open space, as well as the analysis of the physical and environmental characteristics of each land use type. The spatial arrangement of different types of land use is also important, including spatial planning that regulates the location and relationship between parts of the area.

2.2.9 Site Surroundings

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2.2.10 Existing Local Economy

Figure 2.25 View Local store 1 (Source : Google Maps 2024)

Figure 2.26 View Local store 2 (Source : Google Maps 2024)

Figure 2.27 View Local store 3 (Source : Google Maps 2024)

Figure 2.28 View Local store 4 (Source : Google Maps 2024)

Figure 2.29 View Local store 5 (Source : Google Maps 2024)

Figure 2.30 View Local store 6 (Source : Google Maps 2024)

Figure 2.31 View Local store 7 (Source : Google Maps 2024)

Figure 2.32 View Local store 8 (Source : Google Maps 2024)

Figure 2.33 View Local store 9 (Source : Google Maps 2024)

Figure 2.34 Lodging and Restaurants 1
(Source : Google Maps 2024)

Figure 2.35 Lodging and Restaurants 2
(Source : Google Maps 2024)

Figure 2.36 Lodging and Restaurants 3
(Source : Google Maps 2024)

Figure 2.37 Gas Station (Source : Google Maps 2024)

Figure 2.38 Motorcycle Repair Shop (Source : Google Maps 2024)

Figure 2.39 convenience store (Source : Google Maps 2024)

The image above is a data set showing some of the local shops and existing buildings around the site. The data includes various types of businesses such as gas stations, grocery stores, hotels, inns, and restaurants. The presence of these businesses has the potential to have a significant impact on the local economy.

The presence of a gas station can provide easy access and increase mobility, while the presence of grocery stalls, hotels, inns, and restaurants can create local jobs and contribute to the income of the surrounding community. As such, this data provides an important basis for planning the development of the site and considering the potential for collaboration with existing businesses in the vicinity.

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2.3 Pacitan Climate Data

2.3.1 Air Temperature

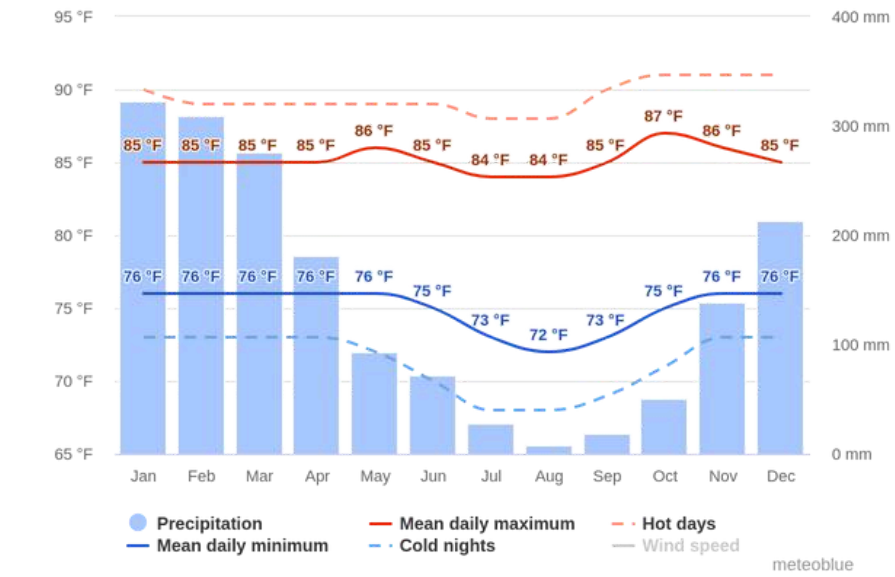

Figure 2.40 Air Temperature in Pacitan (Source : Meteoblue)

The “average daily maximum” (thick red line) reflects the average monthly maximum temperature in Pacitan. Similarly, the “average daily minimum” (solid blue line) reflects the average minimum temperature. The red and blue dashed lines show the hottest day and coldest night on average each month for the past 30 years. This information is useful for planning vacations, estimating average temperatures, and preparing for hotter or colder days.

2.3.2 Sunlight Intensity

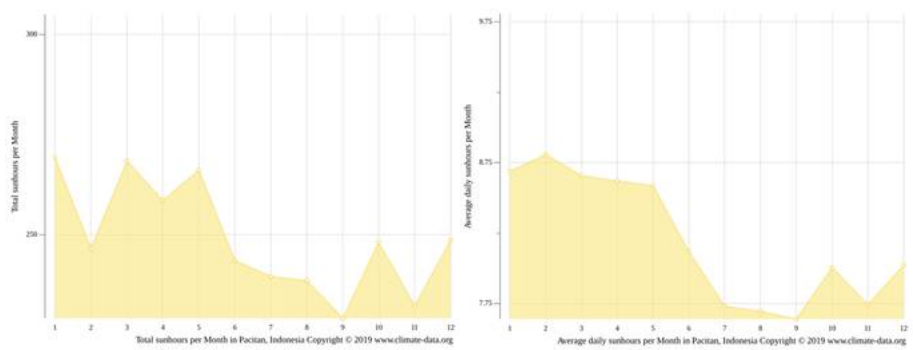

Figure 2.42 Sunlight Intensity in Pacitan (Source : Meteoblue)

On average, Pacitan has the highest number of daily sunshine hours during February, which is around 8.69 hours per day, with a cumulative total of 269.33 hours. On the other hand, the lowest average daily sunshine hours occurred in January, with an average of 7.64 hours per day and an accumulated total of 229.2 hours. Overall, Pacitan recorded a total of 2,989.49 hours of light throughout the year, with a monthly average of approximately 98.32 hours of sunshine.

2.3.3 Rainfall

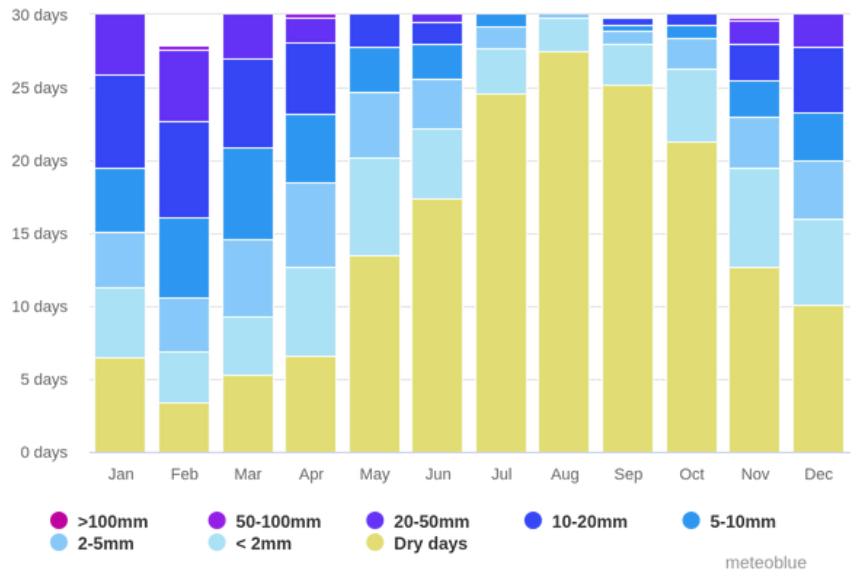

Figure 2.41 Rainfall in Pacitan (Source : Meteoblue)

From the graphical and tabular data above, it can be seen that the month with the highest rainfall intensity is February, while the month with the lowest intensity is August. This difference gives a clear picture of the rainfall pattern during the year in Pacitan.

2.3.4 Wind Rose and Wind Velocity

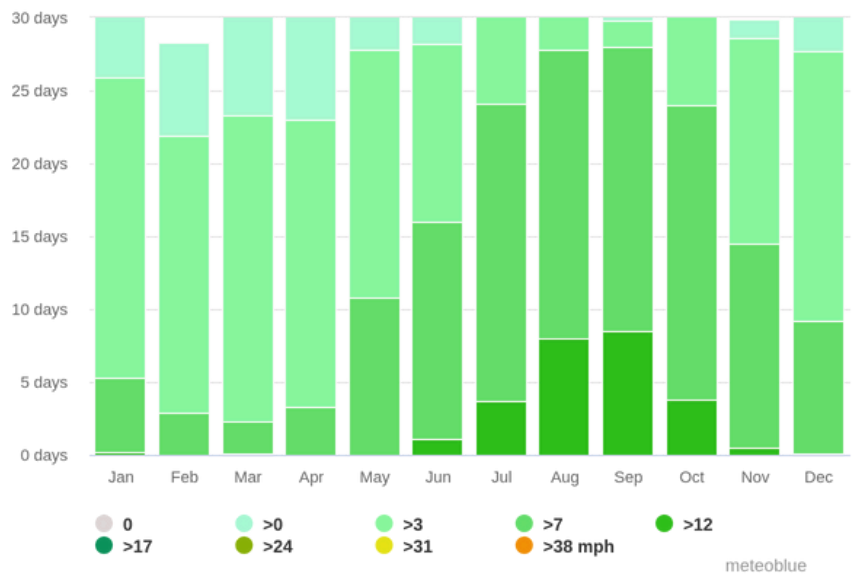

Figure 2.43 Wind Velocity (Source : Meteoblue)

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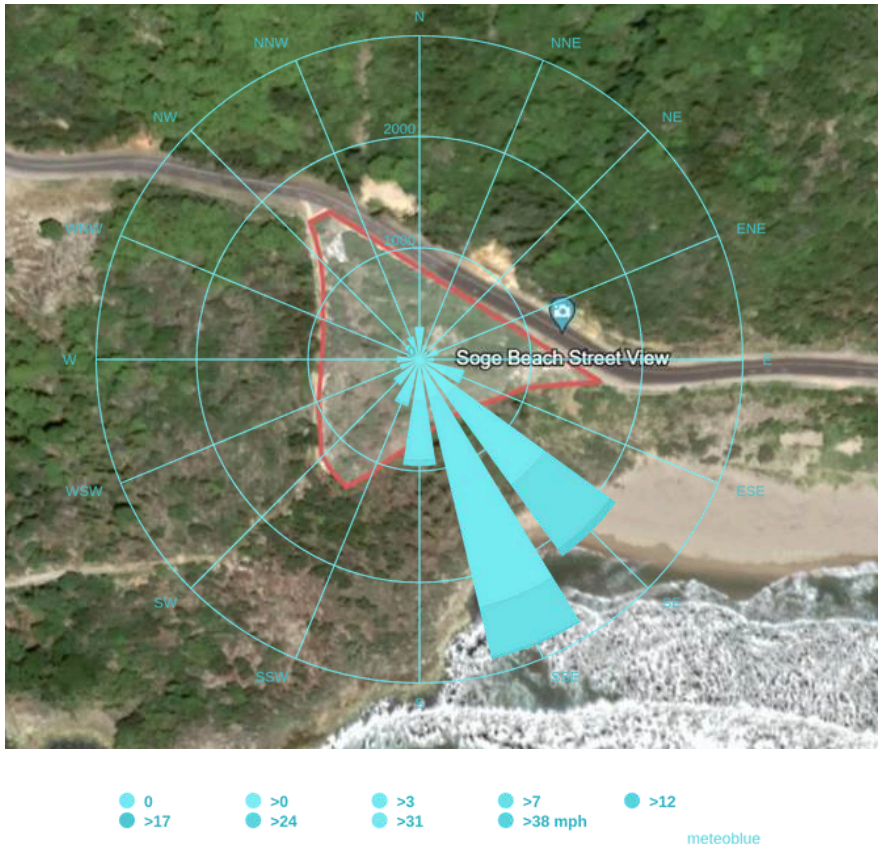

Figure 2.44 Wind Rose (Source : Meteoblue)

In building design, the use of windrose charts is crucial. This tool helps determine the optimal orientation of a structure based on the prevailing wind patterns at the site. By analyzing these patterns, architects can ensure that buildings are positioned to take advantage of natural ventilation, thereby reducing the need for mechanical cooling systems. This strategic placement maximizes energy capture and efficiency, contributing to the sustainability of the building.

The microclimate data provided by windrose charts also plays a significant role in enhancing visitor comfort and minimizing the environmental impact of the structure. Understanding local wind and weather conditions allows for better design decisions that improve thermal comfort and reduce energy consumption.

2.3.5 Sun Chart

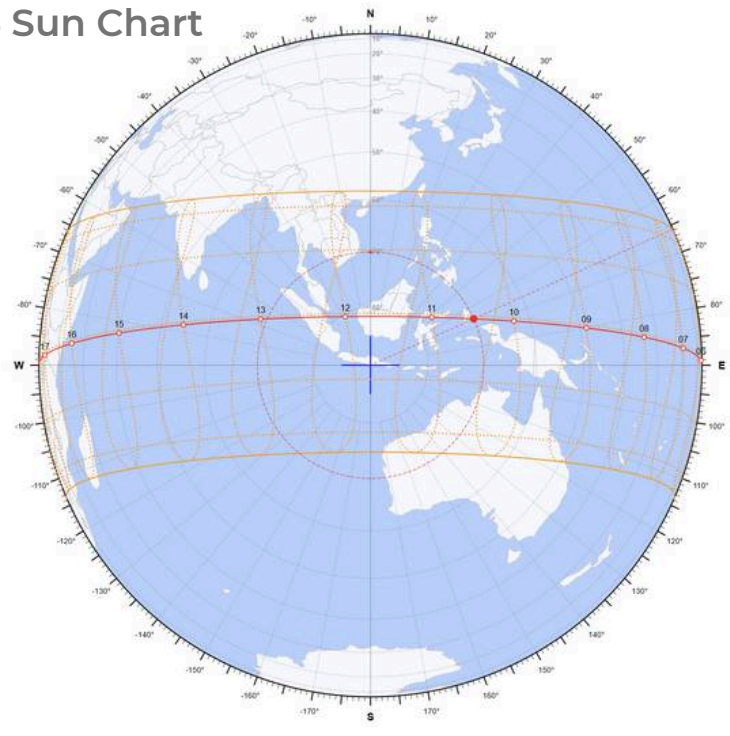

Figure 2.45 Sun Path (Source : Meteoblue)

By understanding the path of the sun, planners can determine the optimal orientation for the building to be constructed on the site. A good orientation will consider maximum daylight ingress, efficient air circulation arrangements and overall energy savings. Therefore, the sun path is not only a benchmark for building orientation, but also plays a key role in supporting environmentally friendly and sustainable design.

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03

Chapter 3 : Design Concept

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3.1 Community Participation

3.1.1 Interview

Figure 3.1 Respondent Bu Ratmi (Source : Authors 2024)

Some of the points I asked him were:

1. **For MSME traders in this area, is there a particular manager?**
Answer: For traders like Ibu Ratmi who operates in the restaurant and accommodation sector, the business is only managed by one person without involving other parties in the management. This shows that Mrs. Ratmi manages individually in running her business, from operational management to strategic decision making, without any involvement from external parties in managing her business.

2. Is there a traders' association in the Soge beach area?
Answer: Businesses in the restaurant and accommodation sector along the Soge coast do not have a specific association that officially organizes or coordinates their activities. This shows that business actors in this sector tend to operate independently without any formal forum to gather or accommodate common interests. Despite this, they remain active in running their respective businesses and trying to meet the needs of visitors who come to Soge beach.

3. What days is this place usually busy with visitors?
Answer: Tourist attractions in the Soge beach area tend to be busy on weekends and also during big holidays such as red dates.

4. Is this place relatively quiet or busy?
Answer: The Soge beach area is relatively quiet, especially when compared to other beaches which are more crowded with tourists. Even so, it is not uncommon for people to stop by this beach, at least 1 or 2 people come to enjoy its natural beauty or just relax for a while. This condition can be caused by several factors, such as the location of the beach which may not be very well known and also the access is quite far from the city center. However, the presence of those who stop by at Soge beach still brings life and activity to the area, adding to the impression of the diversity of visitors who come to this beach.

5. Why is this place so quiet?
Answer: People who visit Soge beach usually only stop for a while because there are minimal visitor facilities at the beach. Even though this beach has attractive natural beauty, limited facilities such as rest areas, toilets or comfortable places to eat mean that visitors tend to only stop for a moment to enjoy the surrounding views. This limited infrastructure also affects the duration of visits, where visitors prefer to stop for a while and then continue their journey to another place that may have more complete facilities.

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Key Points

1. Management of Individual Businesses

- Business Owner: Mrs. Ratmi, a trader in the restaurant and accommodation sector.
- Management Method: Her business is managed individually without involving others. This includes operational management and strategic decision-making.
- Implications: Individual management shows the owner's full responsibility for all aspects of the business.

2. Absence of Formal Associations

- Business Sector: Restaurants and accommodations along the Soge coastline.
- Activity Coordination: There is no specific association officially coordinating business activities in this sector.
- Operations: Business operators operate independently without a formal forum to accommodate common interests, but they remain active in running their businesses.

3. Tourist Density

- Peak Times: Tourist spots in the Soge beach area tend to be crowded during weekends and major holidays.
-

4. Visitation Levels and Location

- Visitor Density: Soge Beach is relatively quiet compared to other beaches that are more frequented by tourists.
- Influencing Factors: Factors influencing this condition include the beach's lesser-known location and its distance from the city center.
- Visitor Activities: Despite being quiet, there are still visitors who stop by to enjoy the natural beauty or relax for a while.

5. Visit Duration and Facilities

- Stay Duration: Visitors usually stop briefly due to limited visitor facilities.
- Facility Limitations: Limitations such as lack of rest areas, toilets, or comfortable dining places affect visit duration.
- Infrastructure Influence: Limited infrastructure makes visitors prefer short stops before continuing their journey to other places with more comprehensive facilities.

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Figure 3.2 Respondent Cak Rus La (Source : Authors 2024)

Some of the points I asked him were:

1. How long has he been selling here ?
Answer: I have been selling in this place for a long time, since when I married my wife who also happens to come from this area. With the support of my wife and closeness to the surrounding community, I can continue to develop little by little.

2. Where is he originally from?
Answer: I'm originally from Lamongan

3. For food and drink traders like this, is there a community?

Answer: For food and drink traders on Soge Beach, there is a well-organized community, led by Mr. Swarno as community leader. This community is an important forum for traders to share experiences, marketing strategies, and support each other in facing various challenges that may arise in their business. The presence of this community not only strengthens solidarity among traders, but also has the potential to improve the experience of visitors who come to this beach by providing a variety of culinary choices.

4. For food and beverage traders like this, is there any particular management intervention?
Answer: Personally, I am not involved in other people's interference in running this business, because I choose to manage it myself. I believe that by running a business independently, I have complete freedom and control over the strategy, decisions and operational management of this business.

5. Do sales tend to be quiet or busy?
Answer: It could be said that this place tends to be quiet, especially because the density of visitors only occurs on weekends. This may be caused by factors such as work and daily routines which limit time for vacations or spending time at tourist attractions, so that only at certain times such as weekends does this place experience a significant increase in visits. Even so, these characteristics do not reduce the attractiveness or potential of this place as a tourist destination, because it still attracts the interest of visitors at certain times and provides different experiences depending on different visiting situations.

6. Why does he think it's quiet?
Answer: The facilities available at this place are somewhat incomplete, especially when compared to other tourist destinations which already have more

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Key Points

1. Management of Individual Businesses

- Business Owner: Cak Rus la a trader in the Soge Beach.
- Management Method: Her business is managed individually without involving others.
- Implications: Cak Rus La runs the business independently without the intervention of others, believing that this provides complete freedom and control over strategies, decisions, and management of business operations.

2. Absence of Formal Associations

- At Soge Beach there is a well-organized community of traders, led by Pak Swarno as a community leader.
- This community serves as a platform for traders to share experiences, marketing strategies, and support each other in facing various business challenges.

3. Tourist Density

- Peak Times: Tourist spots in the Soge beach area tend to be crowded during weekends and major holidays.
- The place tends to be quiet, especially on weekdays.
- Factors such as work and daily routines limit visitors' time for vacation, but on weekends the place experiences a significant increase in visits.
- Although quiet, the place still has potential as a tourist destination with different attractions depending on the visiting situation.

4. Visitation Levels and Location

- Visitor Density: Soge Beach is relatively quiet compared to other beaches that are more frequented by tourists.
- Influencing Factors: Factors influencing this condition include the beach's lesser-known location and its distance from the city center.
- Visitor Activities: Despite being quiet, there are still visitors who stop by to enjoy the natural beauty or relax for a while.

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3.1.2 SDGs

Sustainable Development Goals (SDGs) are a global agenda initiated by the United Nations (UN) to achieve a better and more sustainable future for all humanity. The SDGs include 17 interrelated goals and 169 more specific targets, designed to address complex global challenges, from poverty and hunger to climate change and inequality.

The SDGs goals cover various aspects of life, from social, economic, to environmental. Some examples of SDGs goals include ending poverty in all its forms everywhere, eradicating hunger, ensuring health and well-being, ensuring quality education, achieving gender equality, providing clean water and sanitation, and taking action to address climate change. Each goal has measurable indicators to monitor progress.

The SDGs were launched in 2015 as the successor to the Millennium Development Goals (MDGs). Compared to the MDGs, the SDGs have a broader and more ambitious scope, and involve all UN member countries. The SDGs also emphasize the importance of partnerships and collaboration between governments, the private sector, civil society, and academia in achieving their goals.

One of the main characteristics of the SDGs is their interconnected nature. This means that achieving one goal will have an impact on achieving other goals. For example, increasing access to clean energy will contribute to poverty reduction and improved health, as well as reducing greenhouse gas emissions.

The implementation of the SDGs at the national level is the responsibility of each country. Each country is expected to integrate the SDGs into its national development planning. The government, together with various other stakeholders, needs to develop policies, programs, and projects that support the achievement of the SDGs.

The SDGs are a long-term agenda that requires commitment and continuous efforts from all parties. Although much progress has been made, many challenges remain to be overcome. Climate change, the COVID-19 pandemic, and armed conflict have hampered efforts to achieve the SDGs. Therefore, it is important for us to continue to strive and work together to achieve these noble goals.

Figure 3.3 sDGS logo (Source : mavink.com)

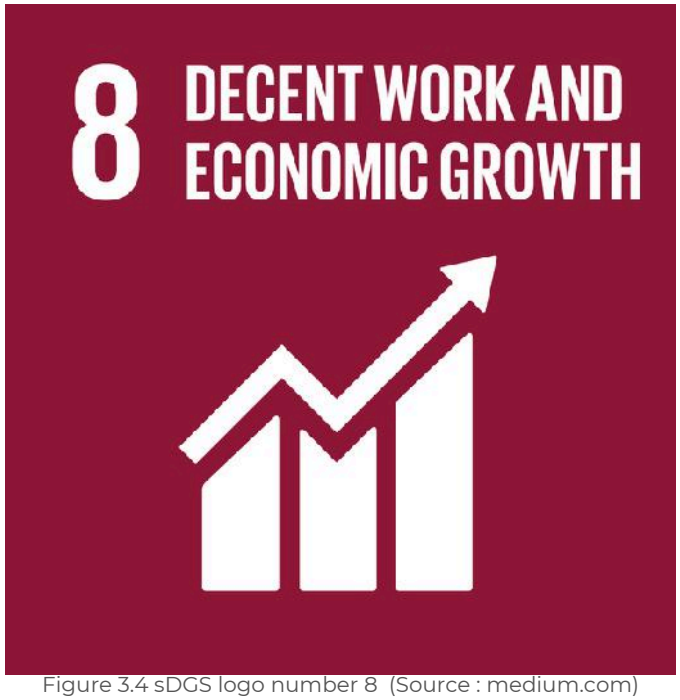


Figure 3.4 sDGS logo number 8 (Source : medium.com)

SDGs goal **number 8. Decent Work and Economic Growth.**

This design uses the theory of SDGs goal number 8. Decent Work and Economic Growth, with a focus on several important points:

(8.3.1) Proportion of Informal Employment in the Non-agricultural Sector.

(8.5.2) Open Unemployment Rate by Gender and Age Group.

(8.9.1) Proportion and Growth Rate of Tourism Contribution to GDP.

(8.9.1.(a))Number of International Tourists.

(8.9.1.(c))Amount of Foreign Exchange in the Tourism Sector.

By integrating these SDGs points, it is hoped that this design can provide a comprehensive picture of the conditions of employment, unemployment and tourism in Indonesia, as well as become a basis for formulating effective policies in achieving sustainable and inclusive economic development.

Figure 3.5 sDGS logo number 11 (Source : medium.com)

Goal **11 of the SDGs** is to make cities and settlements inclusive, safe, resilient and sustainable. In order to achieve the goal of sustainable cities and settlements by 2030, the RAN SDGs have set 10 national targets. These targets include integrated urban development, urban infrastructure and services, and disaster and climate change risks in urban areas. Efforts to achieve these targets are outlined in policies, programs and activities to be carried out by the government and non-governmental organizations.

11.2.1 Proportion of population with convenient access to public transport, disaggregated by sex, age group and persons with disabilities.

11.5.1.(c) Number of weather and climate and disaster early warning systems.

11.5.2 Direct economic losses from disasters to GDP, including disaster damage to critical infrastructure and disruption to basic services.

11.b.2* Local disaster risk reduction (DRR) strategy document.

1. Providing Safe and Inclusive Public Spaces and Green Open Spaces (Point 11.7)

- Analysis of Public Space Needs.
- Greening and Tree Planting.
- Procurement of Supporting Facilities.
- Community Participation.

2. Supporting Economic, Social, and Environmental Relations between Urban, Suburban, and Rural Areas (Point 11.a)

- Inter-Regional Collaboration.
- Strengthening Local Markets.

3. Improving Weather and Disaster Early Warning Systems (Point 11.5.1.(c))

- Installation of Early Warning Technology.
- Collaboration with BMKG.
- Improving Communication Infrastructure.

4. Reducing Direct Economic Losses Due to Disasters (Point 11.5.2)

- Disaster Risk Mapping.
- Infrastructure Design that can Minimize the Consequences of Disasters.
- Business Continuity Plan.

5. Preparation of Regional Level Disaster Risk Reduction (DRR) Strategy Documents (Point 11.b.2)

- DRR Integration in Tourism Planning.

3.1.3 Contradiction

If : create a tourist facility design with a beautiful beach view.
Then : the distance between the beach and the design should not be too far.
But : a close distance to the beach can increase the risk of a tsunami disaster if a tsunami occurs at some point, even though there has been no history of a tsunami in that place, but still a beach with high waves could potentially cause a tsunami disaster.

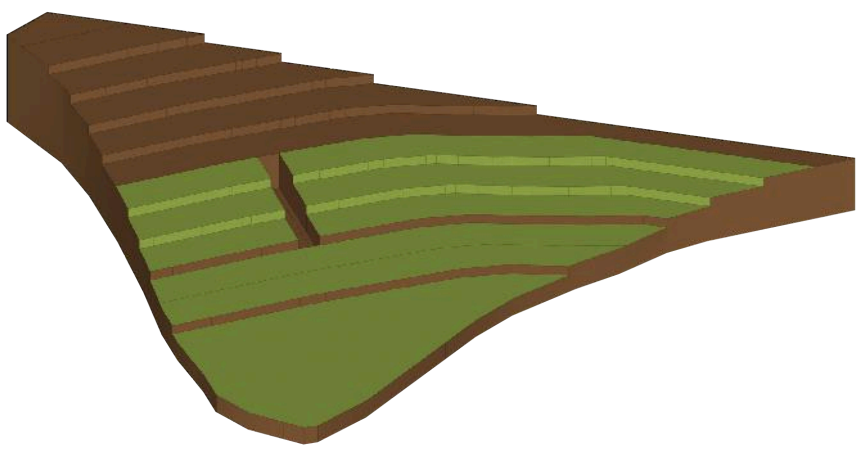


Figure 3.6 Cut and Fill System of The Site (Source : Authors 2024)

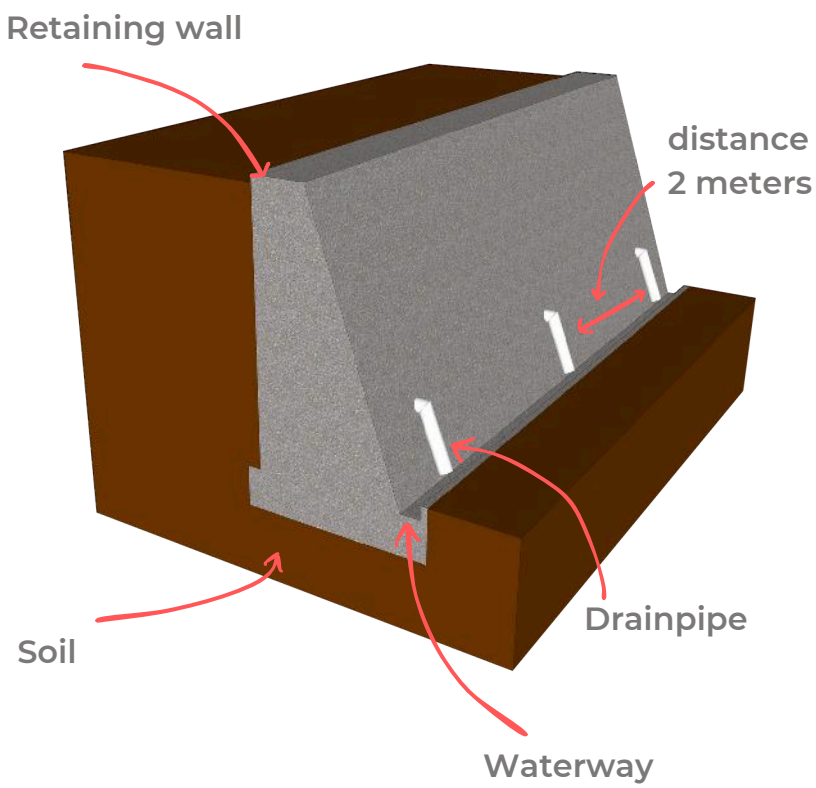
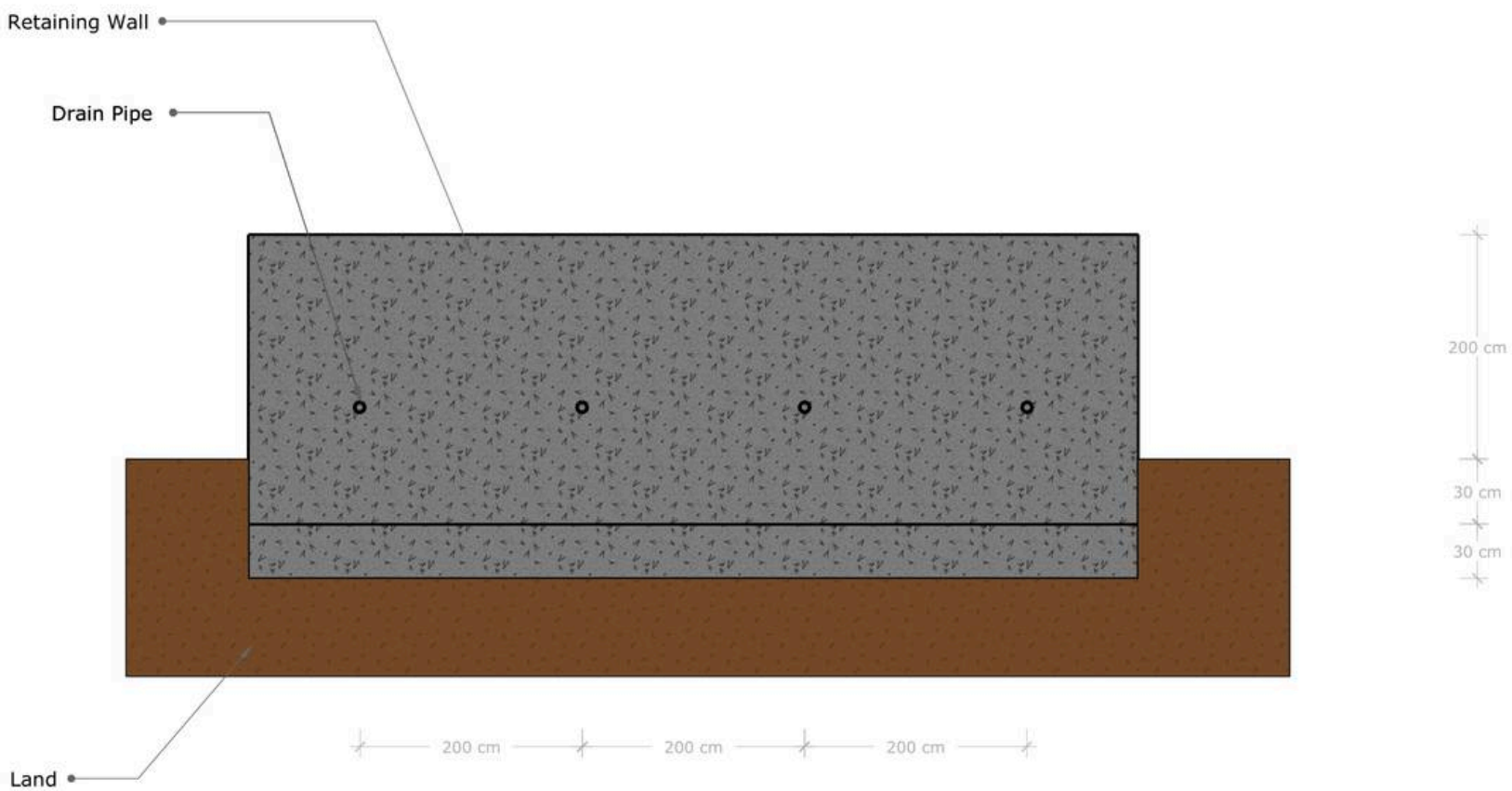


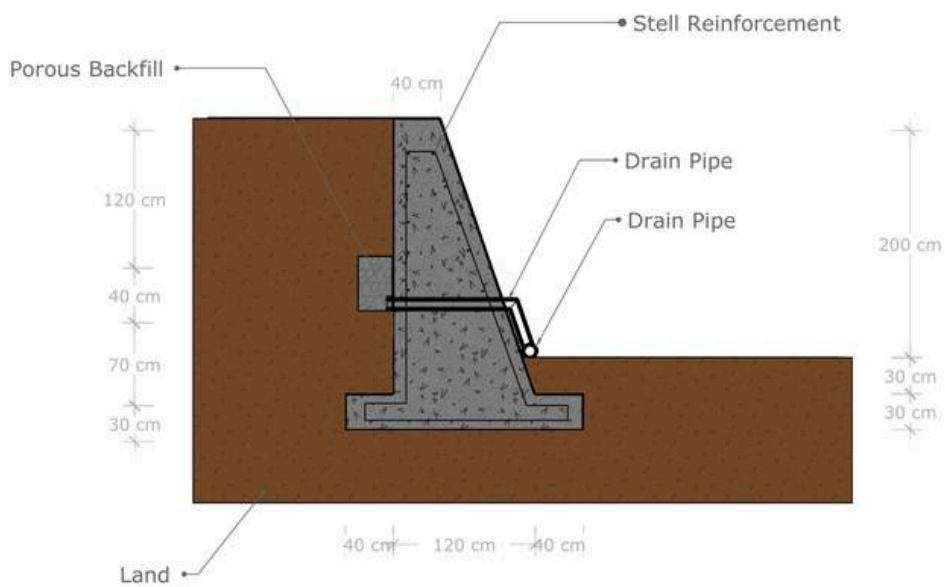
Figure 3.7 Retaining Wall System of Ths Site (Source : Authors 2024)

To overcome this, the selection of a site on a high cliff with a cut and fill system that is not far from the beach is a design solution, but the design of the cliff with a cut and fill system can give rise to a new contradiction, namely landslides, with the selection of good construction, landslides can be minimized, the use of retaining wall structures or retaining walls has a crucial role in various construction projects. First, this wall functions as a defense against soil erosion. By holding the soil in place, the retaining wall prevents landslides or landslides, especially in areas with steep slopes. In addition, this wall also protects the surrounding building structure from damage due to soil movement. Second, retaining walls provide flexibility in utilizing land. With retaining walls, land with uneven contours can be transformed into flat and functional areas.

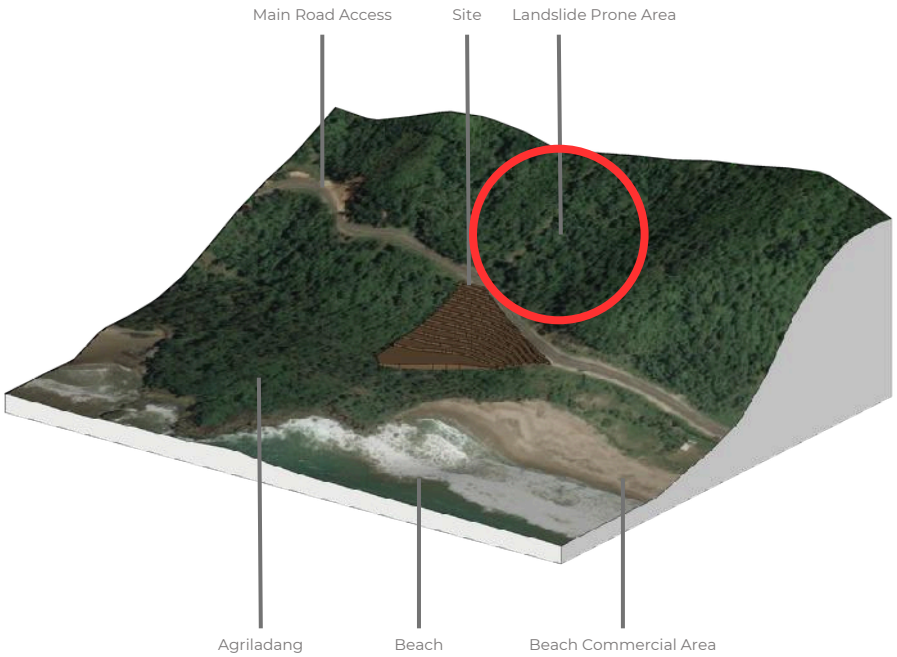
In order for the life of the retaining wall or retaining wall to be longer, a good drainage system is needed. This system functions to channel rainwater effectively so that it does not stagnate and damage the retaining wall structure. Installation of drainage channels every 2 meters on the retaining wall is highly recommended. This channel will channel water smoothly so that it is not trapped behind the retaining wall and causes pressure that can damage the foundation. In addition, the use of quality materials for retaining walls and drainage channels is also very important to ensure long-term durability. Thus, the retaining wall can function optimally and maintain the beauty and safety of the surrounding environment.

Detail Reaing Wall





Out-Site Design Suggestions



The location of the site adjacent to a cliff that has the potential for landslides is a condition that needs attention. Moreover, if the cliff is directly adjacent to the highway, the risk will be even greater. This condition directly threatens the safety of road users passing through the area.

Seeing the potential dangers that lurk, this problem cannot be considered trivial and is the government's responsibility to ensure traffic safety. The government has an obligation to take preventive measures to reduce the risk of landslides that can have fatal impacts on road users.

As an effort to overcome this problem, this input proposes a design suggestion for landslide disaster mitigation. This design is designed to reduce the risk of landslides and maintain slope stability.

The main objective of the proposed cliff design is to ensure the safety and smoothness of traffic on the highway. By reducing the risk of landslides and maintaining slope stability, it is hoped that it can create a safe and comfortable environment for all road users passing through the area.etaining wall prevents landslides or landslides, especially in areas with steep slopes. In addition, this wall also protects the surrounding building structure from damage due to soil movement. Second, retaining walls provide flexibility in utilizing land. With retaining walls, land with uneven contours can be transformed into flat and functional areas.

Figure 3.8 Slope reinforcement method with vegetation (Source : Authors 2024)

The First Solution with the slope reinforcement method with vegetation. is a technique that utilizes plants to increase slope stability. The working principles include:

Plant Roots:
Plant roots that penetrate the soil function like natural anchors, binding soil particles so that the soil becomes stronger and resistant to shear forces.
Water Absorption:
Plants absorb rainwater through their roots, reducing the water content in the soil, thereby reducing the pore water pressure that can trigger landslides.
Erosion Protection:
Plant leaves and stems protect the soil surface from erosion due to rain or wind.
Soil Structure Improvement:
Plant roots help improve soil structure, increase porosity, and enrich organic matter content.

Vegetation Types

Ground Cover Vegetation:
Grass:
Strong and drought-resistant grass types such as vetiver grass are very effective in binding soil.
Ground Cover Plants:
Plants such as legumes or nuts can improve soil quality and prevent erosion.

Slope Reinforcing Vegetation:
Trees:
Trees with deep and strong roots such as sengon or mahogany trees are very effective in stabilizing slopes.
Shrubs:
Shrubs help slow the flow of surface water and protect the soil from erosion.

Advantages of the Vegetation Method
Cost Effective: The implementation cost is relatively cheap compared to other slope reinforcement methods.
Environmentally Friendly: This method is very environmentally friendly and does not have a negative impact on the environment.
Aesthetics: Plants can enhance the beauty of the environment.
Sustainable: The effectiveness of this method will continue to increase along with plant growth.

Disadvantages of the Vegetation Method
Time Required: It takes quite a long time to see significant results from this method.
Maintenance: Requires routine maintenance such as watering, fertilizing, and weed control.
Limitations: Not effective for very steep slopes or very critical soil conditions.
Disaster Damage: Plants can be damaged by natural disasters such as floods or fires.
Application of the Vegetation Method
The vegetation method can be applied to various types of slopes, both natural slopes and artificial slopes. Some examples of its application include:
Road slope stabilization: Planting grass or shrubs on the shoulder of the road to prevent landslides.
Riverbank protection: Planting trees on riverbanks to prevent erosion.
Rehabilitation of ex-mining land: Planting ground cover plants and trees to restore land function.

Figure 3.9 Slope reinforcement method with Soil Nailing (Source : www.galerisipil indonesia 2022)

The second solution is to use soil nailing. It is one of the popular geotechnical engineering methods used to stabilize land slopes or underground structures. This method involves planting steel rods (nails) into the soil at a certain angle to increase the shear strength and cohesion of the soil.

Soil Nailing Working Principle

Strength Increase: Soil nails function as anchors that hold the soil from moving.

Pressure Distribution: The soil load is distributed to the soil nails, reducing pressure on the back of the retaining wall.

Stability Increase: With the presence of soil nails, the soil becomes more stable and resistant to forces that can cause landslides.
Example of Soil Nailing Image

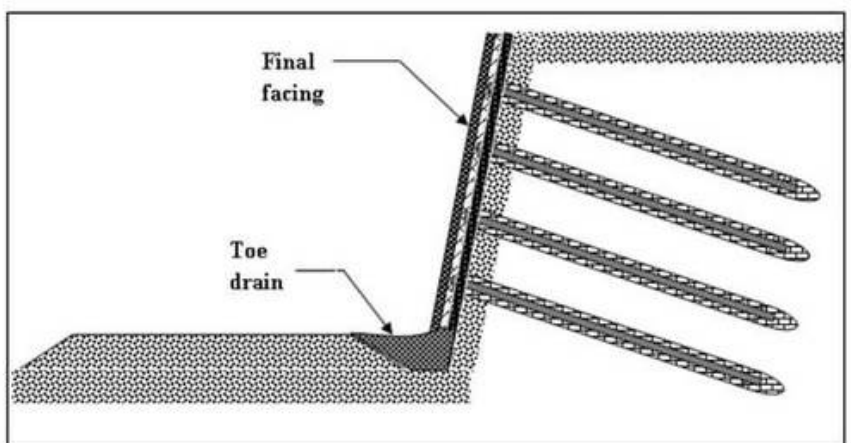


Figure 3.10 Soil Nailing Installing (Source : www.galerisipil Indonesia 2022)

The image above shows the process of installing soil nails on a slope. The steel rods are seen planted at a certain angle and coated with concrete to increase adhesion to the soil.

Application of Soil Nailing

Soil nailing is widely applied to various construction projects, such as:

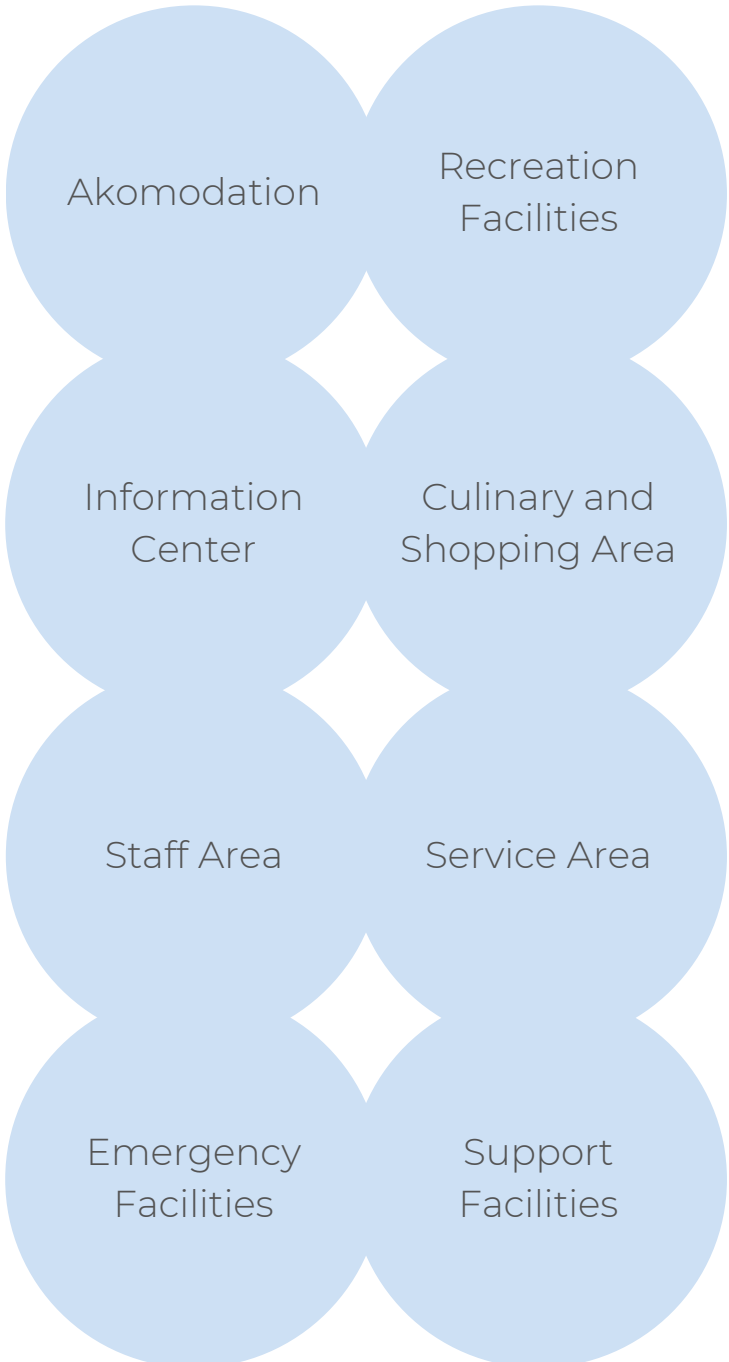
Slope stabilization: Strengthening steep or unstable slopes to prevent landslides.
Tunnel work: Holding tunnel walls from collapsing.
Basement work: Holds the basement wall from being pushed by the soil behind it.
Retaining wall work: Increases the stability of the retaining wall.

Advantages of Using Soil Nailing
Flexible: Can be applied to various types of soil and field conditions.
Efficient: The implementation process is relatively fast and easy.
Minimal environmental disturbance: Does not require a large space for implementation.
Can be combined with other methods: Can be combined with retaining walls or vegetation to increase effectiveness.

Disadvantages of Soil Nailing
Cost: Implementation costs can be quite high, especially for large-scale projects.
Skills: Requires experienced experts for planning and implementation.

3.2 Site Plan Design Concept

3.2.1 Room Programing



Accommodation :
- Glamping Area

Recreation Facilities :
- Beachfront Scenic Spot
- Exhibition Space
- Beachfront Bar
- BBQ/Picnic Area

Information Center :
- Reseptionist

Culinary and Shopping Area :
- Souvenir Stalls
- Food & Beverage Stalls
- Cafetaria

Staff Area :
- Changing Rooms
- Lockers
- Meeting Room
- Security Control Room
- Maintenance Room
- Employee Restroom

Support Facilities :
- Parking Area
- Place of Worship
- Public Restroom
- Backup Electricity Generator
- Shipping and Loading Dock

3.2.2 Space Requirements Analysis

Staff :

Staff areas

Staff areas are special areas for employees at tourist attractions that are not accessed by general visitors. These areas usually consist of break rooms, locker rooms, changing rooms, and dining areas. In the break room, staff can rest during their free time, with facilities such as chairs, tables, and entertainment. The locker room provides lockable lockers for the safe storage of personal belongings.

In addition, there are also changing rooms that allow staff to change, especially if they have to wear a certain uniform. These rooms are usually equipped with mirrors and hangers. The staff area also includes administrative offices, where managers and supervisors organize daily schedules and tasks. Basic facilities such as toilets and showers are provided for the personal needs of the staff.

Storage areas are used to store daily operational equipment such as cleaning tools and promotional materials. The main purpose of the staff travel area is to ensure that employees have a comfortable and safe place to get ready, rest, and perform administrative tasks. This allows them to provide the best service to visitors.

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Trader :

Trader

Food/culinary and souvenir vendors in tourist areas play an important role in enriching the visitor experience. They provide a variety of food, drinks, and items that can be purchased as souvenirs or mementos. Their presence not only fulfills the basic needs of tourists but also adds value and attractiveness to a tourist destination.

Souvenir vendors provide items that can be used as souvenirs or mementos, such as handicrafts, clothing, and other local products. These souvenirs often reflect local culture and traditions, so they can serve as an effective promotional medium. Tourists who bring back souvenirs help introduce and spread information about the uniqueness of the region's culture.

Food vendors offer a variety of culinary options ranging from local to national foods, giving visitors the opportunity to enjoy a variety of flavors. The presence of regional culinary specialties is also an attraction in itself, enriching the cultural experience of tourists. In addition, the availability of food in tourist attractions increases visitor comfort and satisfaction because there is no need to look for food outside the tourist area.

The presence of food/culinary and souvenir vendors also contributes to local economic empowerment. They create jobs and increase the income of local communities, which is important for sustainable economic development in tourist areas. Thus, these vendors not only enhance the tourist experience, but also support the welfare of local communities.

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Temporary Visitor :

Temporary Visitor

Day-trippers are those who visit tourist destinations for a short period of time, usually just a few hours to a day, without staying overnight. They tend to do limited activities such as visiting the main attractions, taking pictures, and enjoying local food before returning home or continuing their journey. Day-trippers have high mobility and usually use private vehicles or public transportation. Their presence can have a positive impact on the local economy, especially for the food, beverage, and souvenir sectors, although their economic contribution is smaller than that of overnight tourists. However, the presence of day-trippers can also lead to increased density and crowds in tourist destinations, especially on holidays or weekends.

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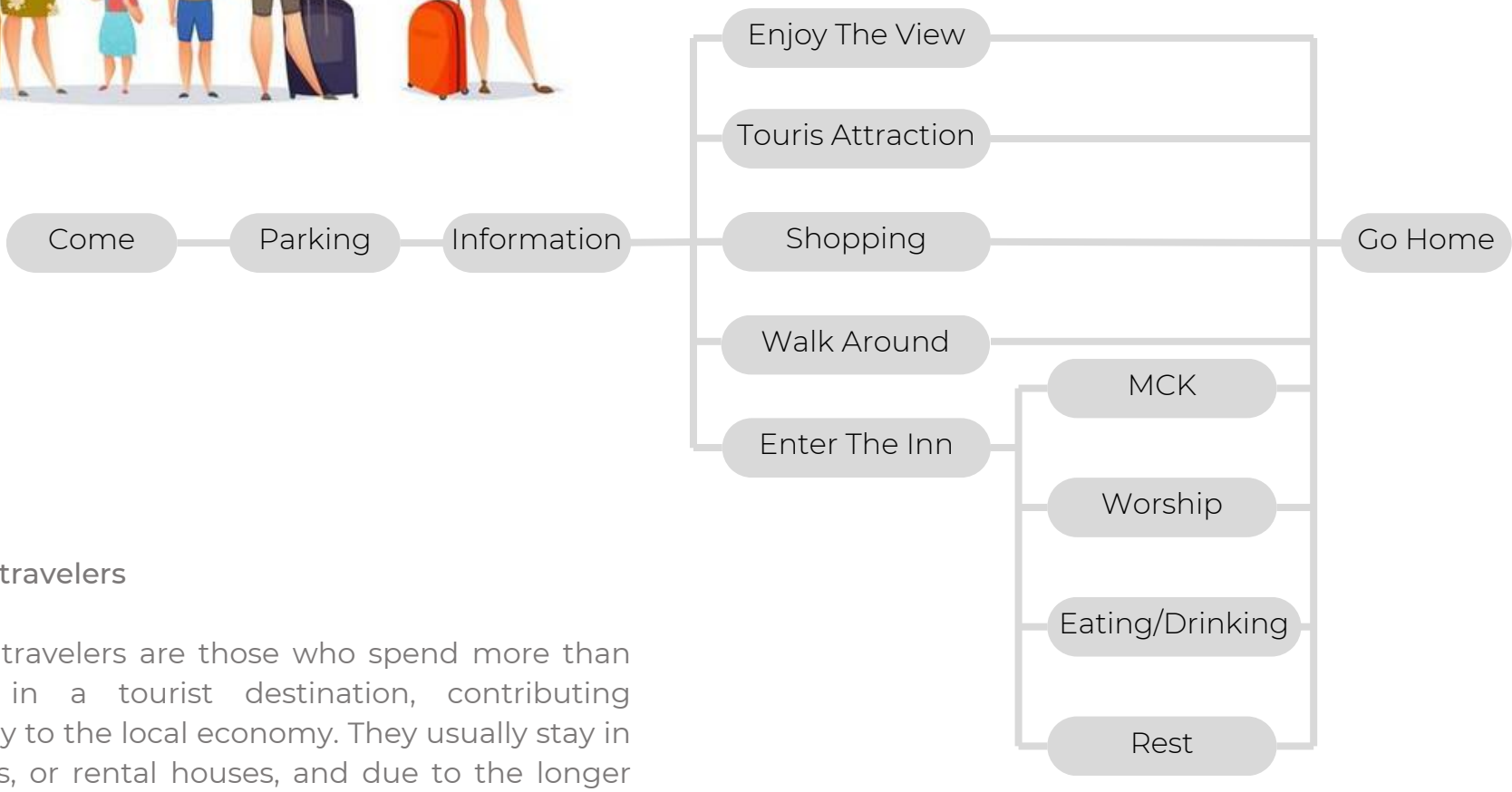
Visitor Stay Overnight :



Overnight travelers

Overnight travelers are those who spend more than one day in a tourist destination, contributing significantly to the local economy. They usually stay in hotels, inns, or rental houses, and due to the longer duration of their visit, they can enjoy a variety of activities such as visiting various attractions, trying local cuisine, taking tours, and enjoying nightlife. Their presence increases employment opportunities in the hospitality, restaurant, transportation, and other tourism services sectors, and encourages good resource management to ensure sustainability and quality of services.

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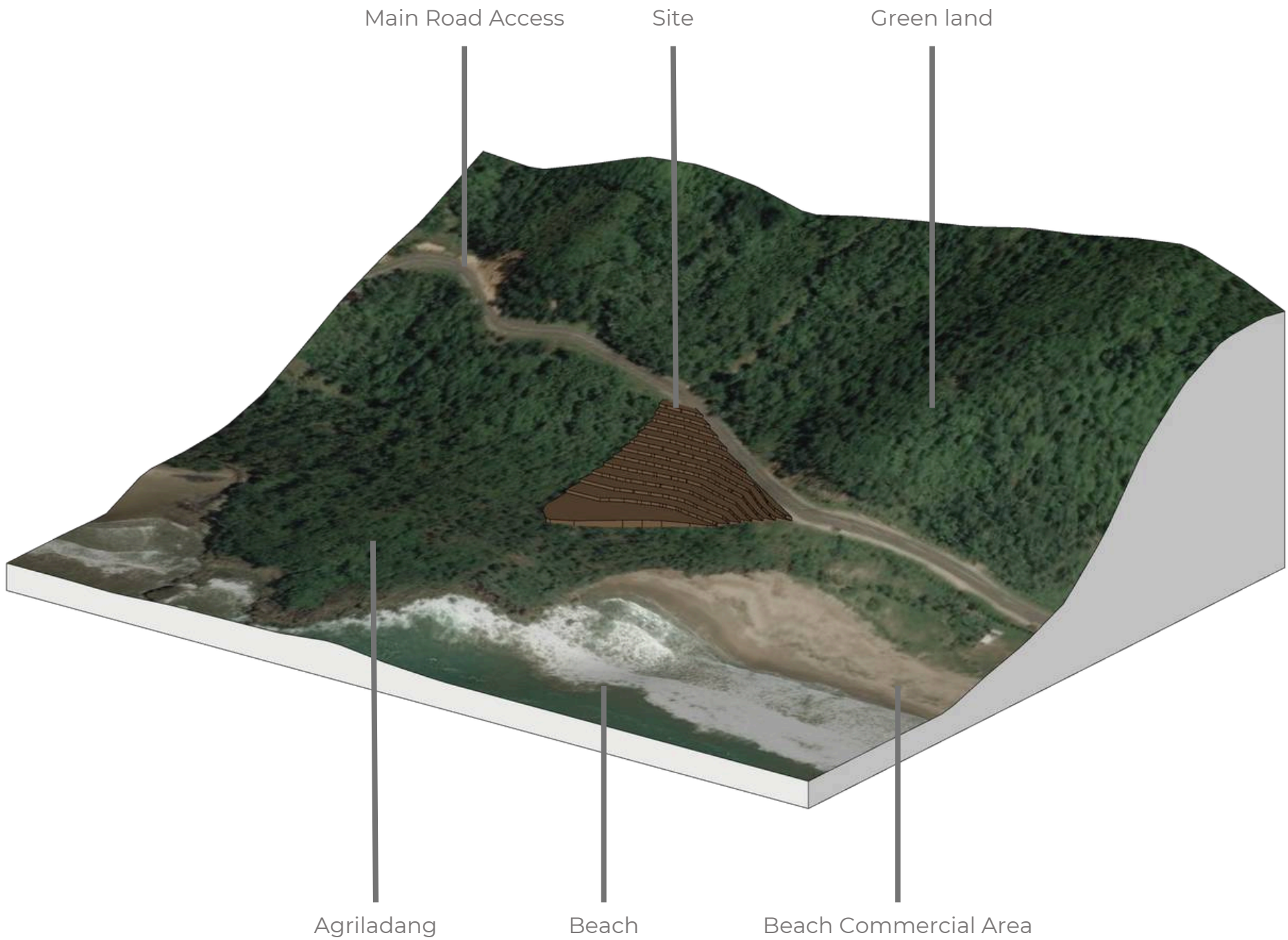
3.2.3 3D Axonometry Site



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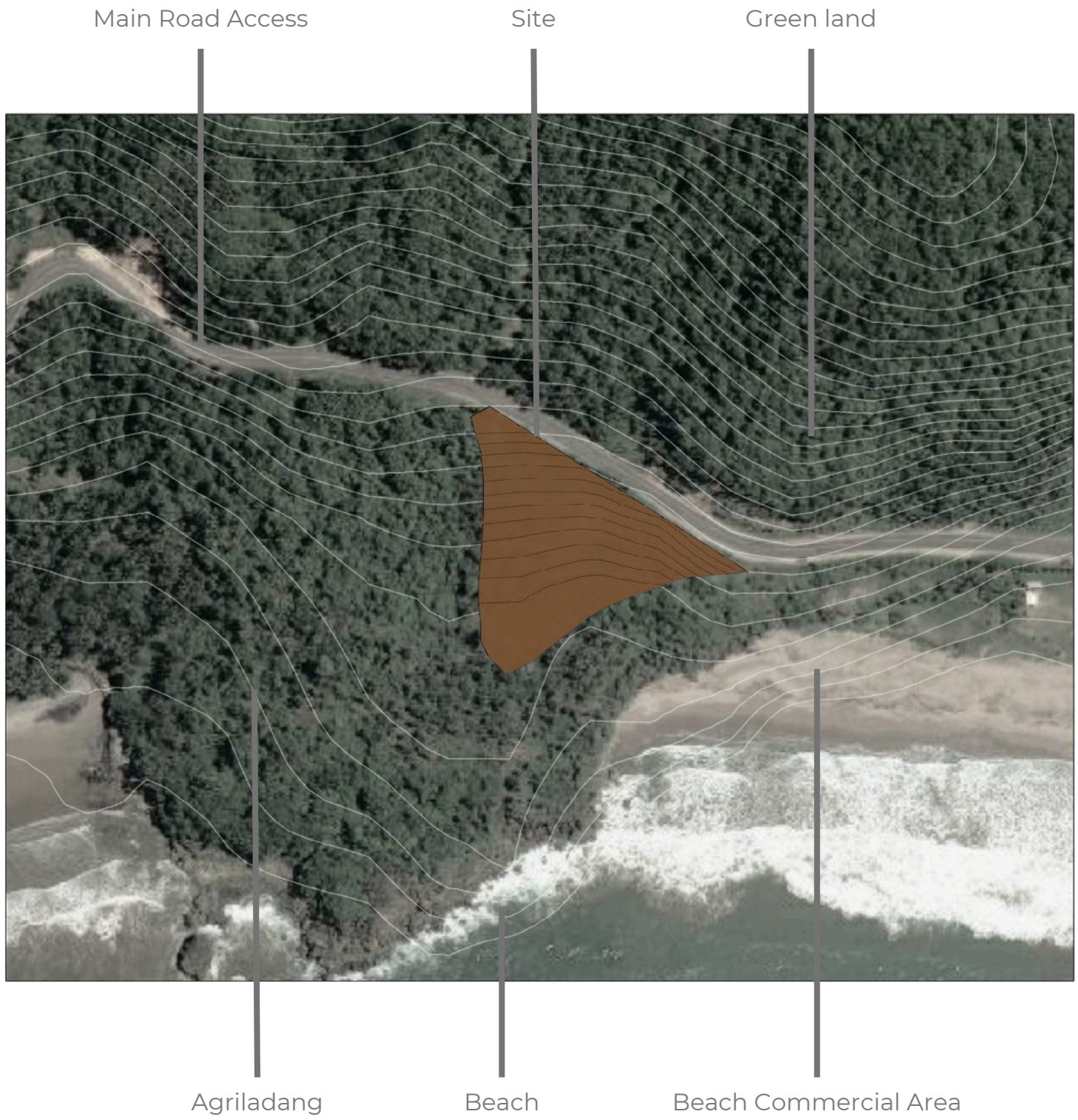
3.2.4 Existing Condition on Site Location



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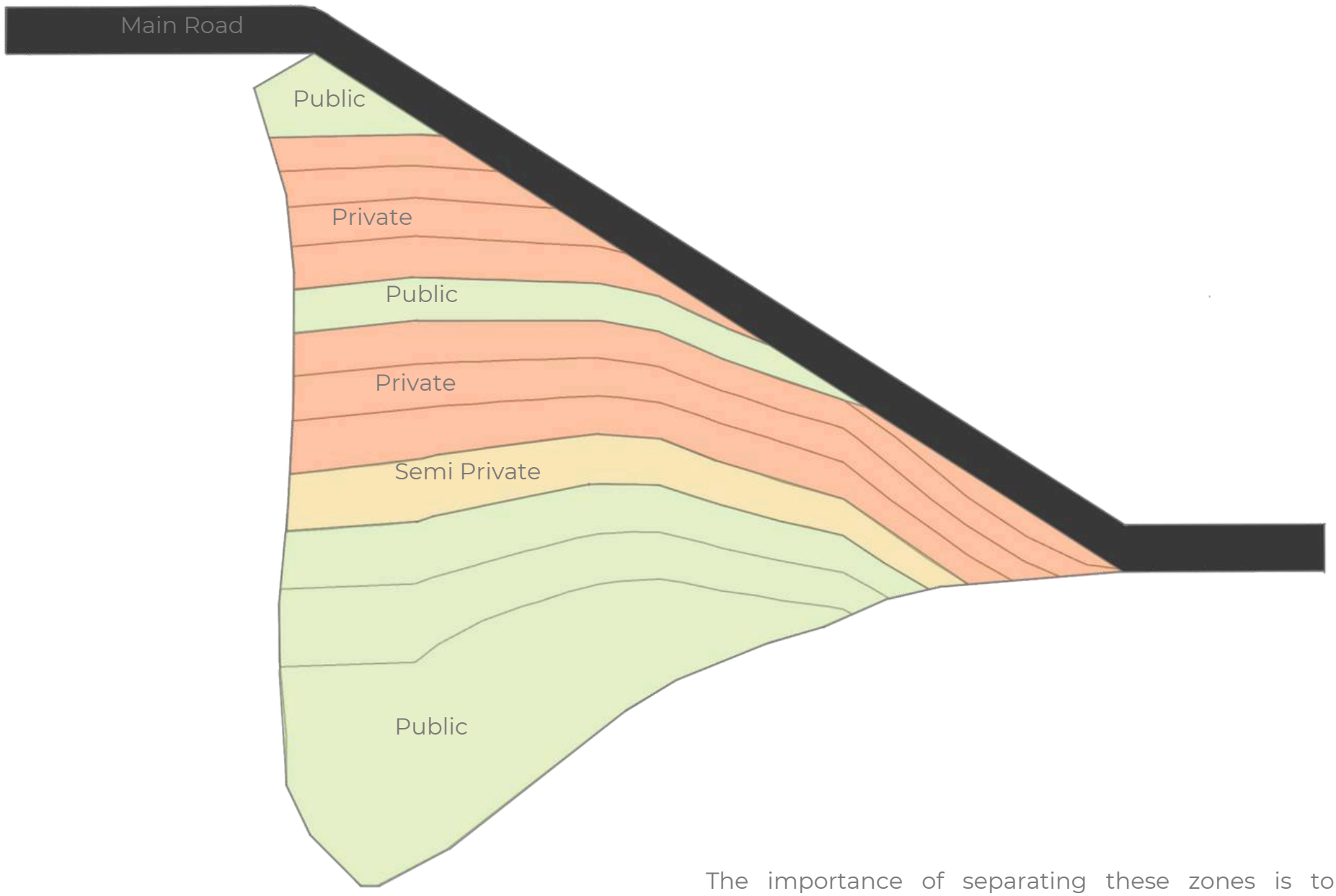
3.2.5 Zoning



Public

Semi Private

Private

The importance of separating these zones is to provide an optimal experience according to the needs and preferences of visitors in each area. The residential zone is a comfortable and calming space, where visitors can enjoy time without rushing. In contrast, the zone for short-term visitors, marked in red, is designed with faster and more efficient circulation, allowing those who only stop for a short time to still enjoy the beauty of Soge Beach with optimal comfort.

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3.2.6 Space arrangement

Public :

- Drop off
- Infromation Center
- Reseptionist
- Lounge
- Laundry Facilities
- Cafe
- Culinary & Shopping Area
- Beachfront Scenic Spot
- Beachfront Bar
- Exhibition Space
- Public Parking
- Place of Worship
- Pulic Restroom

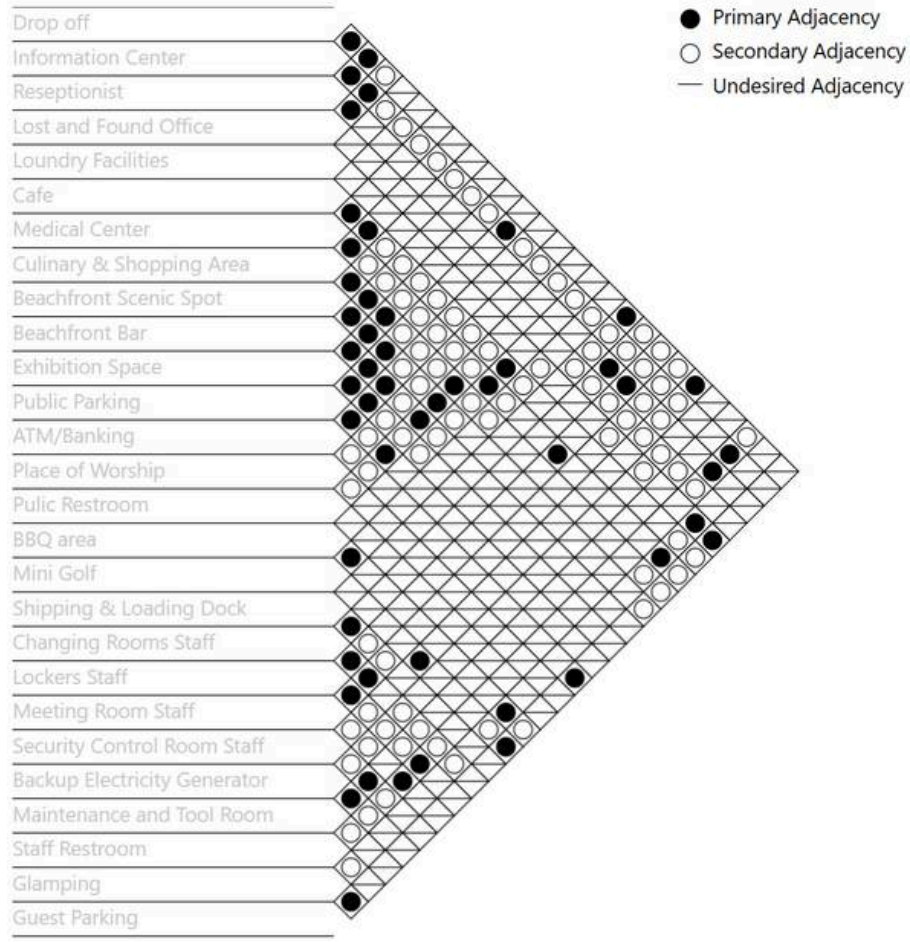
Semi Private :

- BBQ area
- Mini Golf

Private :

- Shipping & Loading Dock
- Lockers Staff
- Meeting Room Staff
- Security Control Room Staff
- Maintenance and Tool Room Staff
- Staff Restroom
- Glamping

3.2.7 Room Adjacency Diagram



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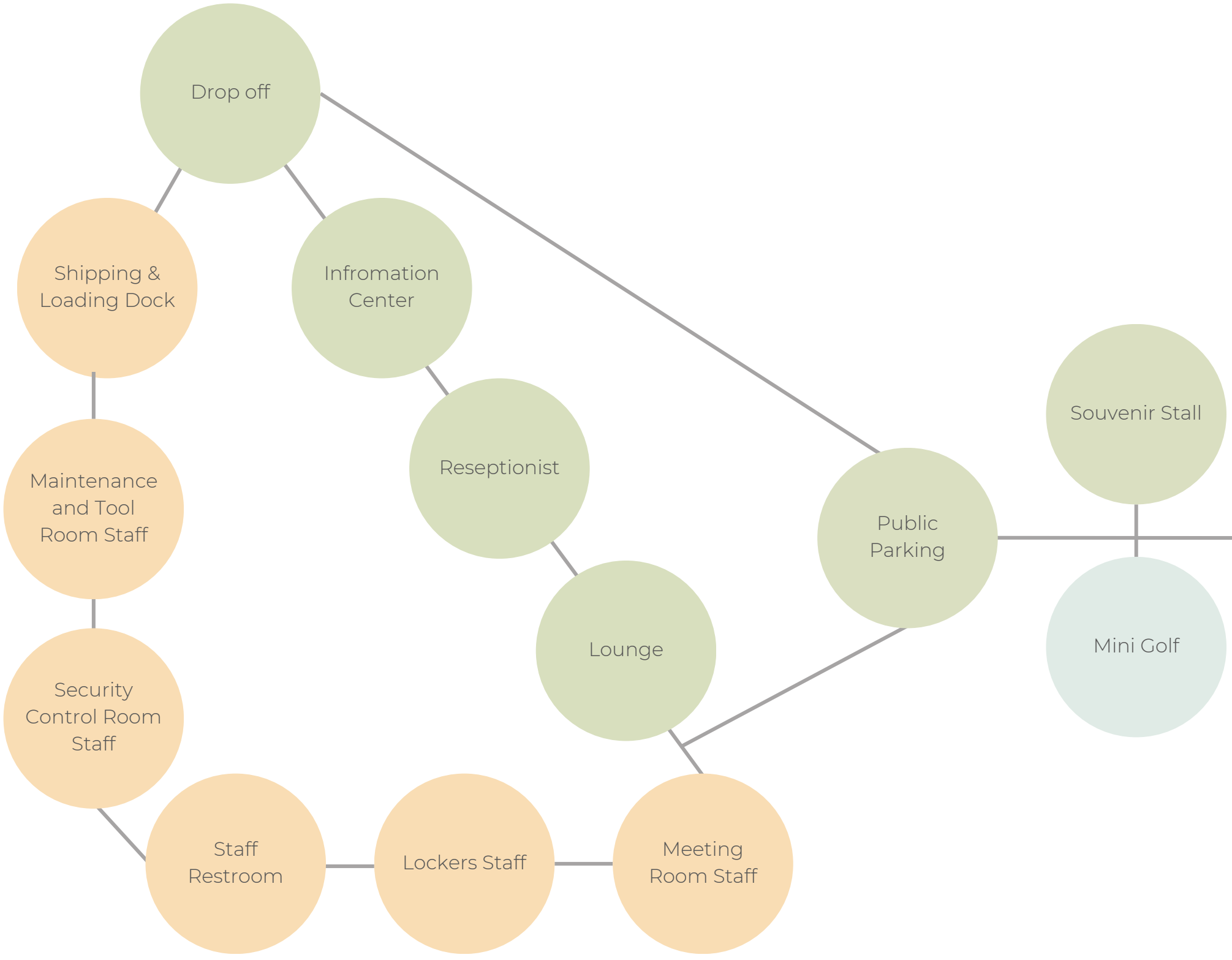
3.2.8 Bubble Diagram



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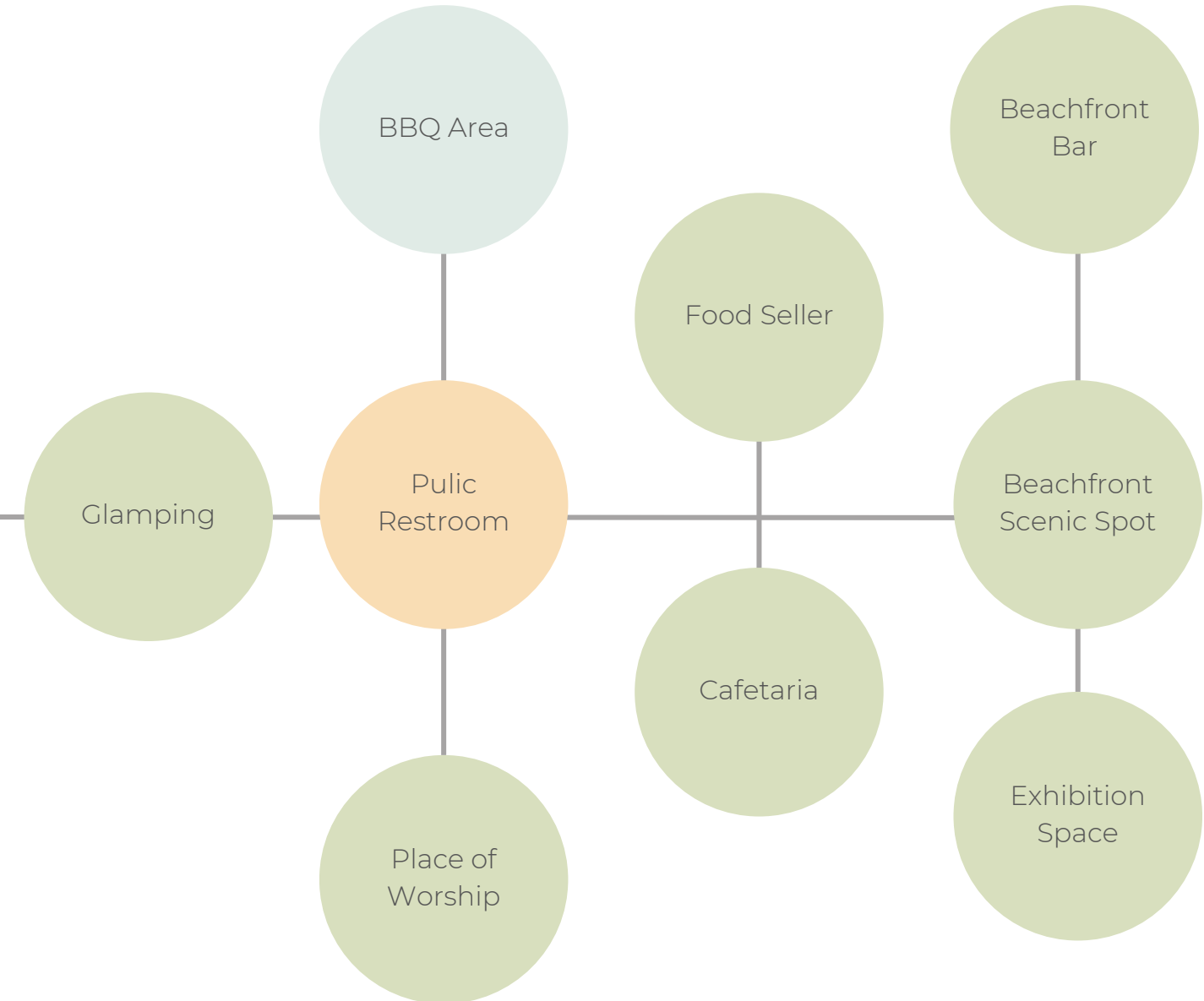

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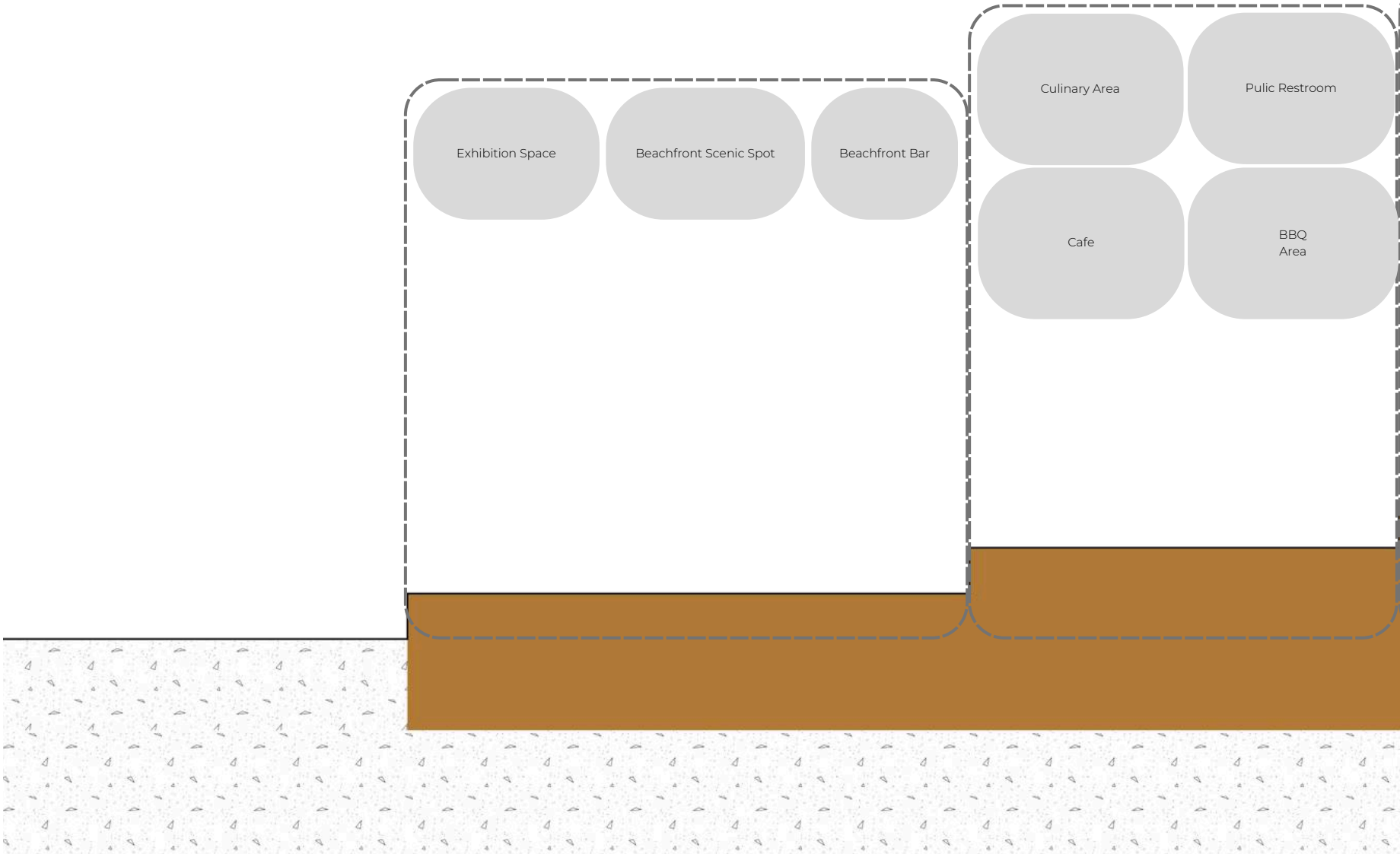
3.2.9 Space Arrangement Section



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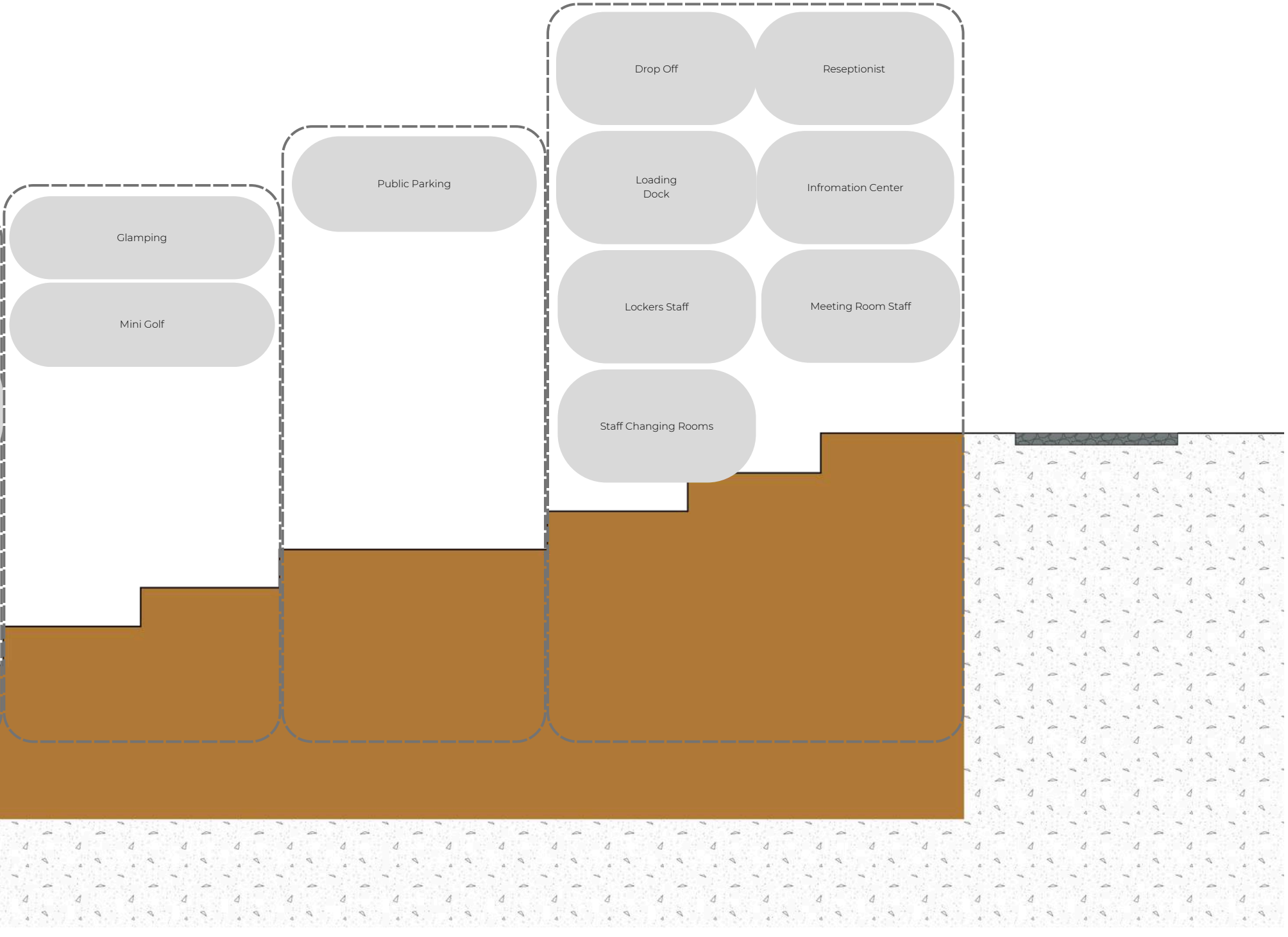

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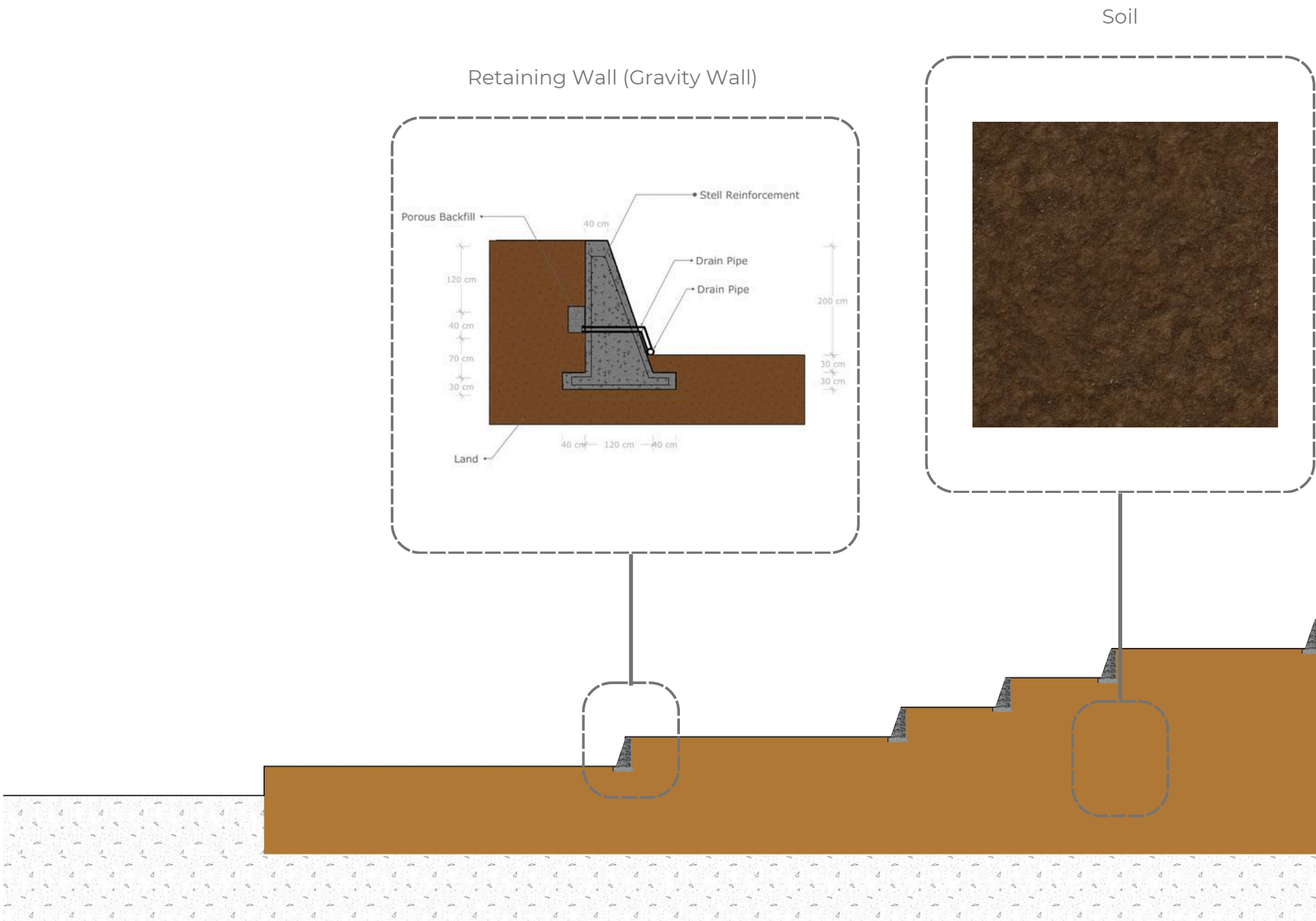
3.2.10 Structure and Surrounding Pieces



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Highway

Vegetation

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3.2.11 Dimensions and Space Requirement

Anthropometry

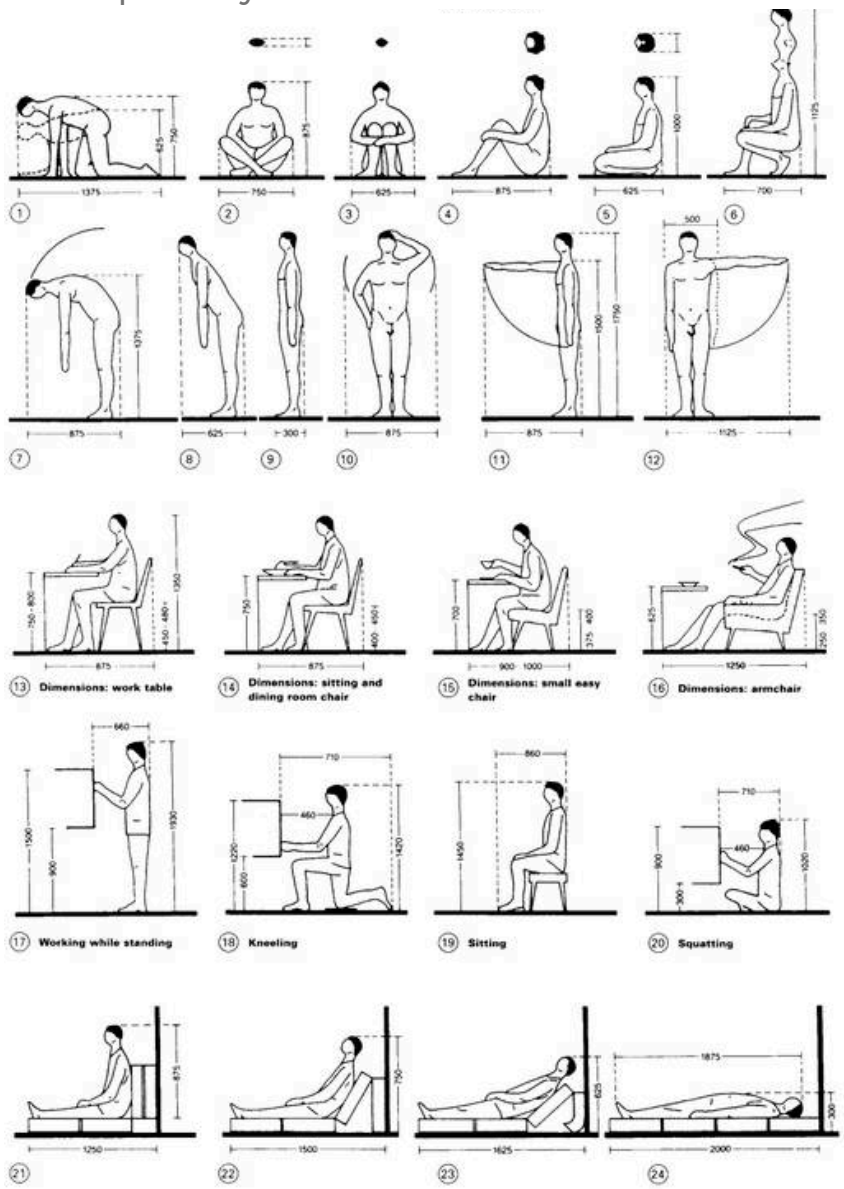

Figure 3.11 Body measurements (Source : Data Arsitek Jilid 3)

In architecture, dimensions refer to the measurements and proportions of spaces designed to fulfill both functional and aesthetic requirements. These measurements are essential for determining how comfortably a space can be used by its occupants. Space requirements involve the necessary amount and type of space to support various human activities.

Anthropometry, the study of human body measurements and proportions, is used in architecture to ensure that spaces are designed to accommodate human activities safely and comfortably. For example, the height of ceilings, the width of doors, and the size of furniture should all take into account human body dimensions to avoid discomfort and accidents.

Utilizing anthropometric data in architectural design helps in creating spaces that are inclusive and efficient. This involves designing public spaces that are accessible to everyone, including those with special needs, and creating private spaces that offer maximum comfort. Therefore, understanding dimensions and space requirements based on body measurements is crucial for developing environments that are both harmonious and functional for users.

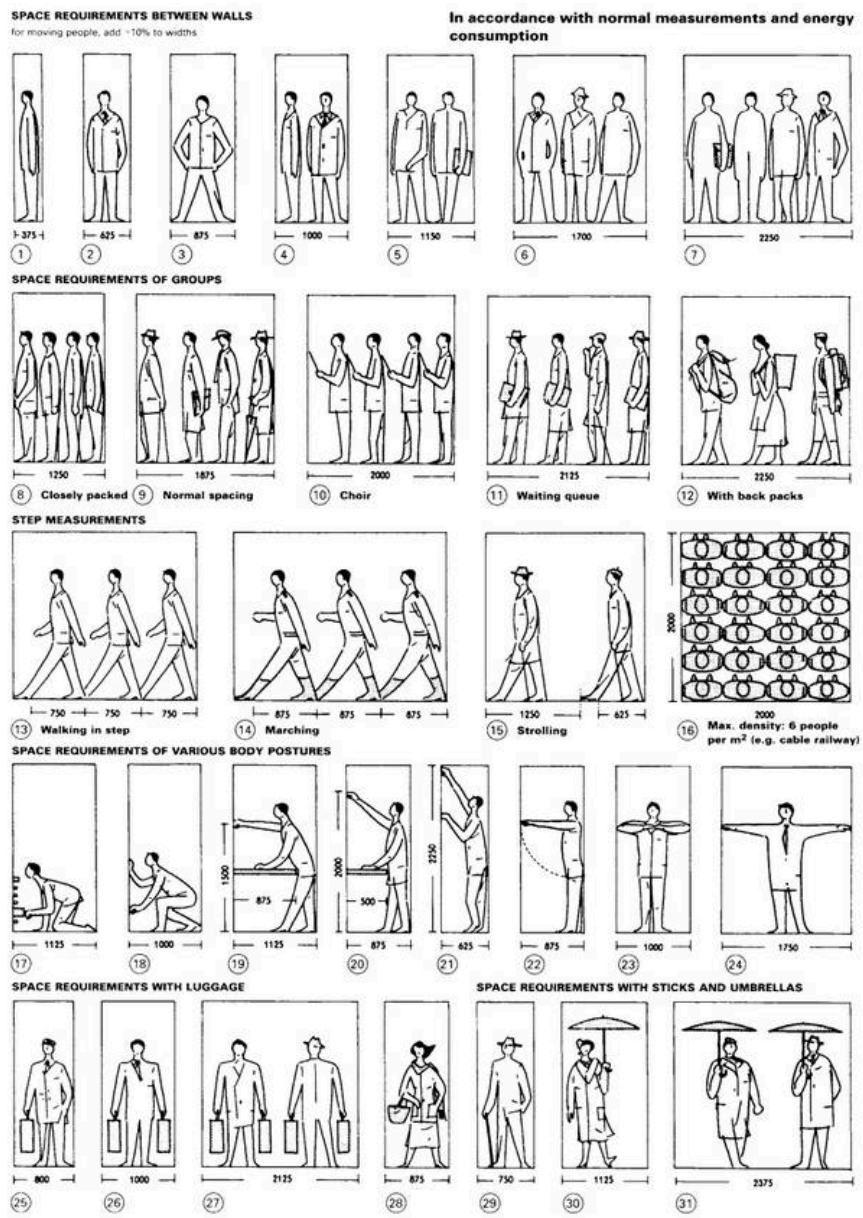

Figure 3.12 Space Requirement in Group (Source : Data Arsitek Jilid 3)

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Bicycle Parking Standart

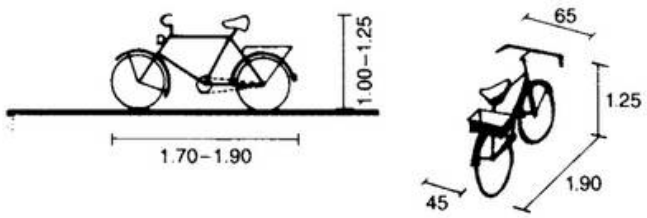

Figure 3.13 Bicycle Size (Source : Data Arsitek Jilid 3)

Motorcycle Parking Standart

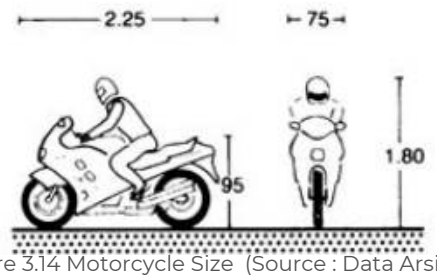

Figure 3.14 Motorcycle Size (Source : Data Arsitek Jilid 3)

Car Parking Standart

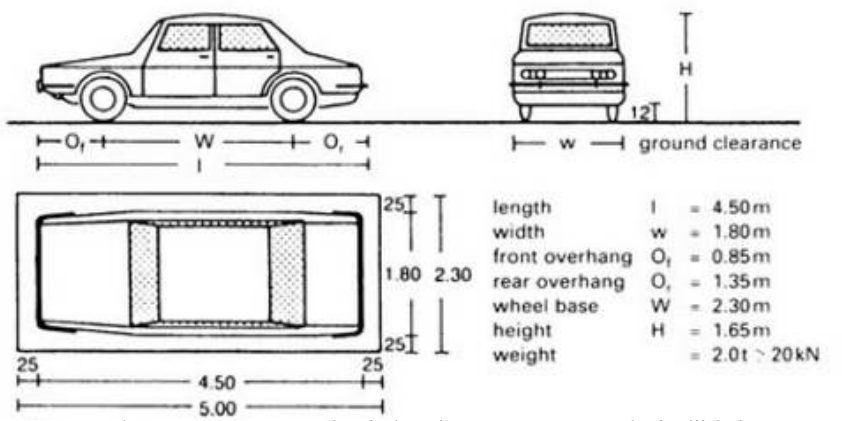

Figure 3.15 Car Standard Size (Source : Data Arsitek Jilid 3)

Car Turning Radius

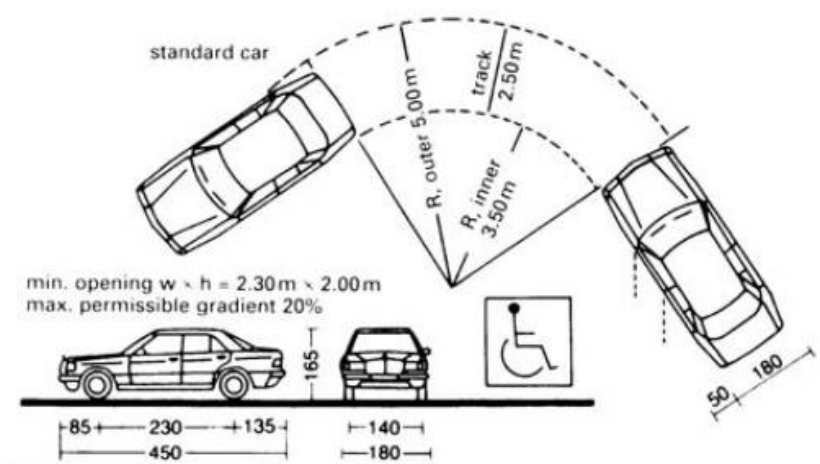

Figure 3.16 Car Turning Radius (Source : Data Arsitek Jilid 3)

Car Parking Type

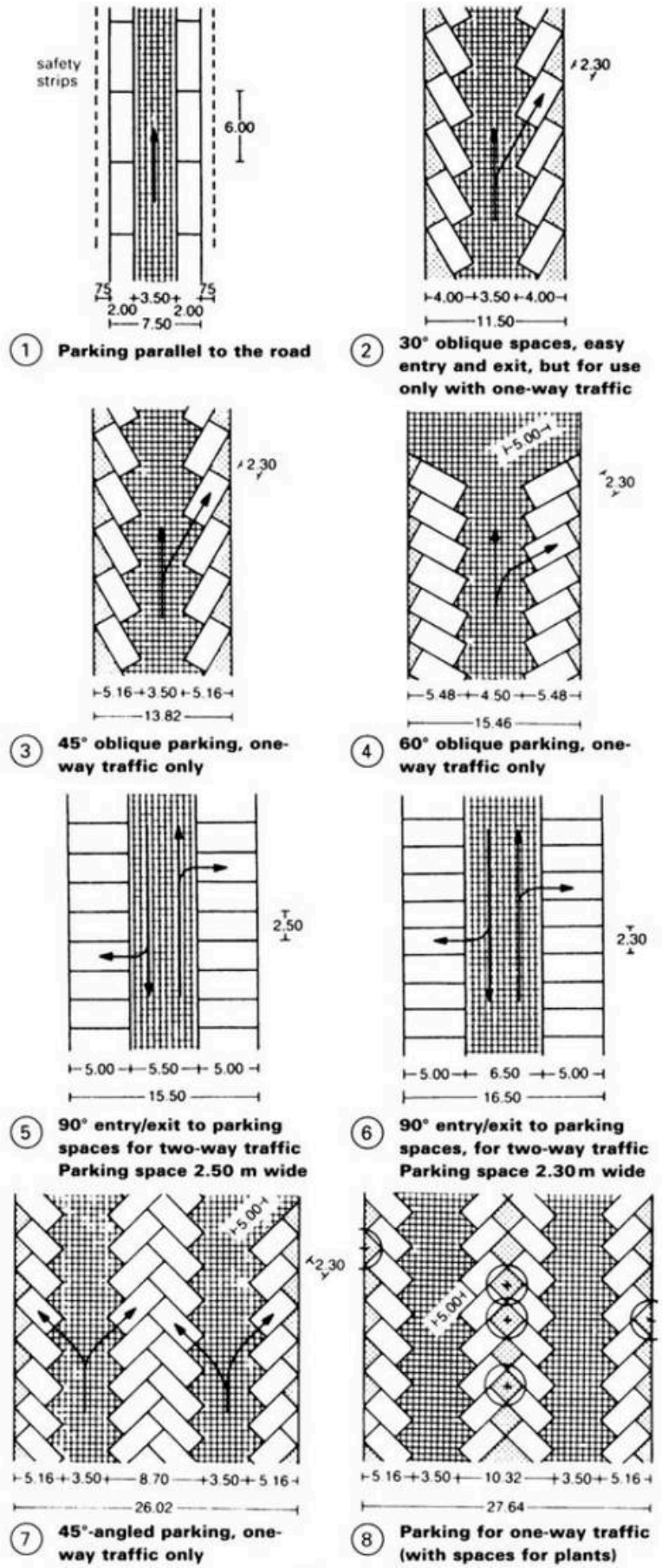

Figure 3.17 Car Parking Type (Source : Data Arsitek Jilid 3)

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Loading Dock Standart

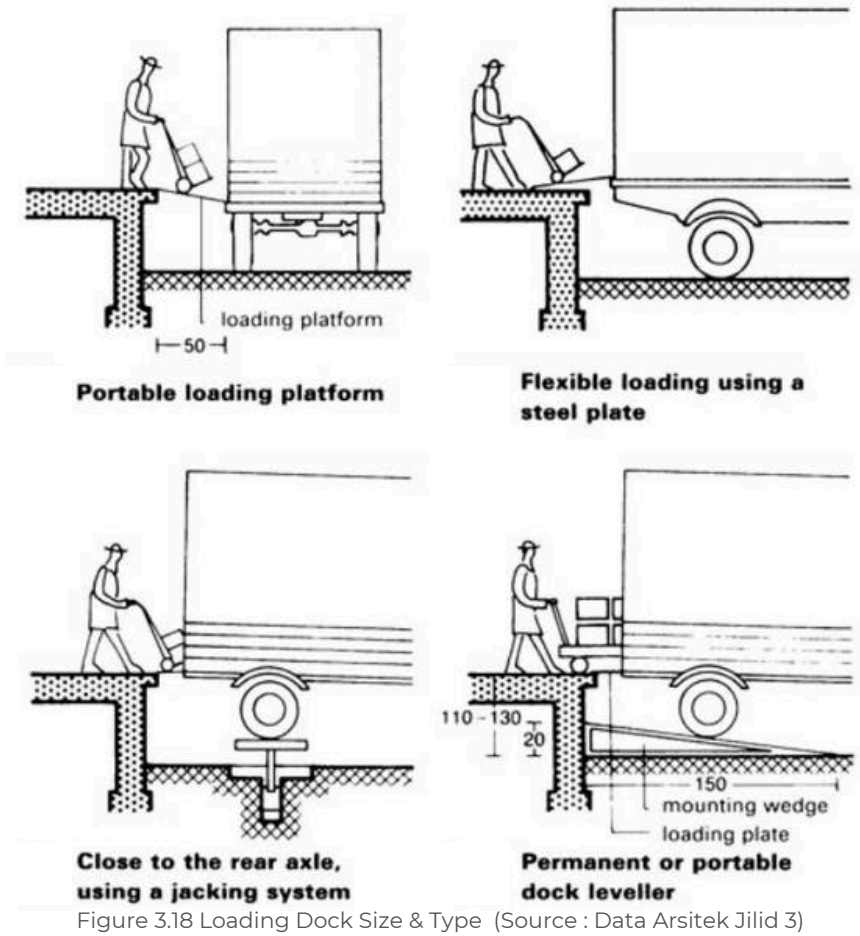

Figure 3.18 Loading Dock Size & Type (Source : Data Arsitek Jilid 3)

Loading docks are important areas in industrial facilities, warehouses, and commercial buildings. To ensure that the loading dock functions optimally, the dimensions of the area need to be well considered. The width of truck lanes usually ranges from 3.5 to 4 meters, and the length is between 10 to 12 meters, with an additional space of about 1.5 meters between lanes for safety. The height of the loading dock platform is usually between 1.1 to 1.3 meters from the ground, adjusted to the height of the truck bed. Some docks are equipped with dock levelers to adjust the platform height. In addition to dimensions, the loading dock area should provide sufficient space for vehicle maneuvering, with a minimum turning radius of about 15 meters, as well as additional space for waiting vehicles to avoid congestion.

Glamping Size Standart

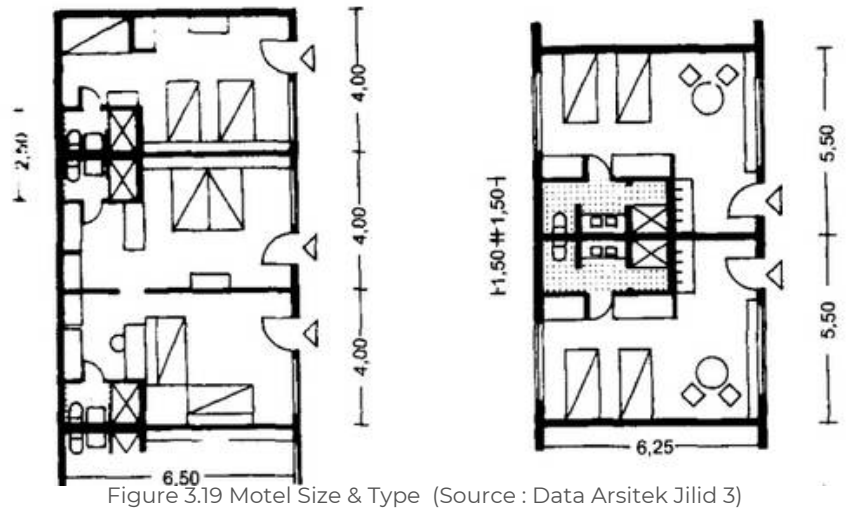

Figure 3.19 Motel Size & Type (Source : Data Arsitek Jilid 3)

These standardized sizes provide a clear guide on how a glamping space can be designed to provide maximum comfort for guests. Typically, each glamping unit is around 20 to 30 square meters, similar to a motel room. This size is chosen to ensure that each unit has enough space to accommodate basic amenities such as a bed, a bathroom, and a comfortable seating area. Thus, guests can enjoy a camping experience that still provides the comfort of a motel stay.

The size and design standards adopted from motels also ensure that each glamping unit is easily accessible and provides enough space for movement. This includes strategic placement of doors and windows to ensure good ventilation and optimal natural lighting. In addition, the exterior design of the glamping units also considers aesthetics and harmony with the surrounding environment, so that each unit is not only comfortable to live in, but also blends in with nature. By following these standards, architects can create glamping facilities that are not only visually appealing but also meet the standards of comfort and functionality expected by guests.

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Ramp Size & Standart

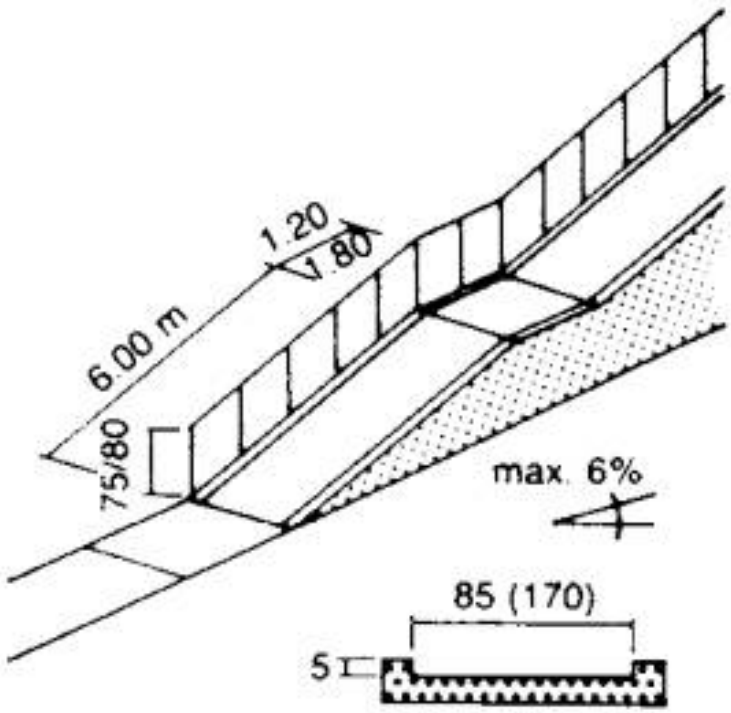

Figure 3.20 Ramp Size & Standart (Source : Data Arsitek Jilid 3)

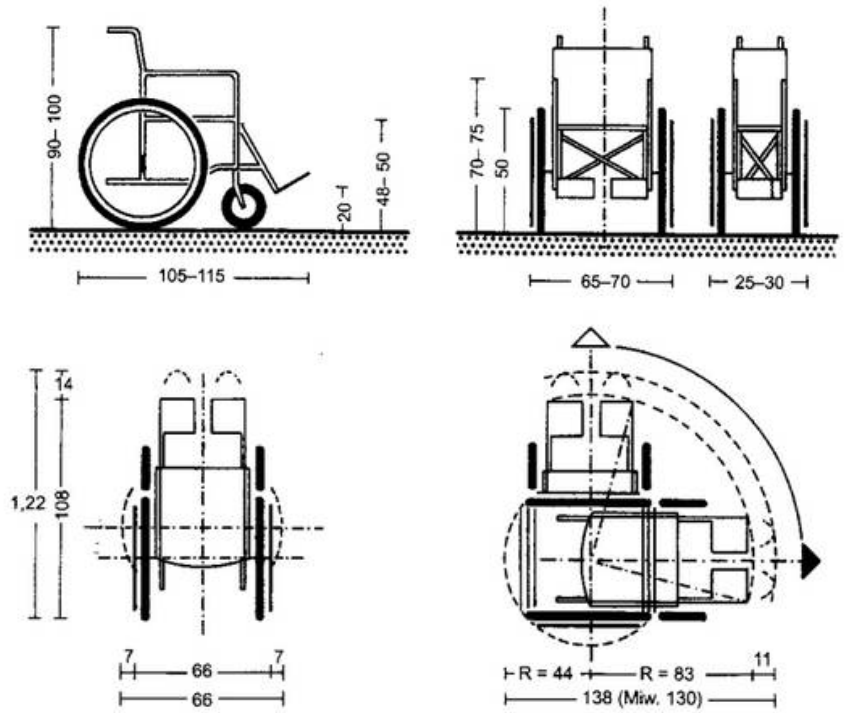

Figure 3.21 Difable Size & Standart (Source : Data Arsitek Jilid 3)

Ramps and access needs for the disabled are closely related in the design of circulation access in a tourist area. Therefore, it is important to collect accurate data to understand the specific access needs of people with disabilities. This data includes various aspects such as adequate ramp width, appropriate slope, and safe and non-slip surface materials. In addition, the design should consider the availability of handrails and clear visual signs to facilitate navigation. By having the right data, designers can ensure that each access element is designed to meet the needs of people with disabilities, so that they can enjoy the facilities and tourist experience safely and comfortably, just like other visitors.

Cafetaria Size & Standart

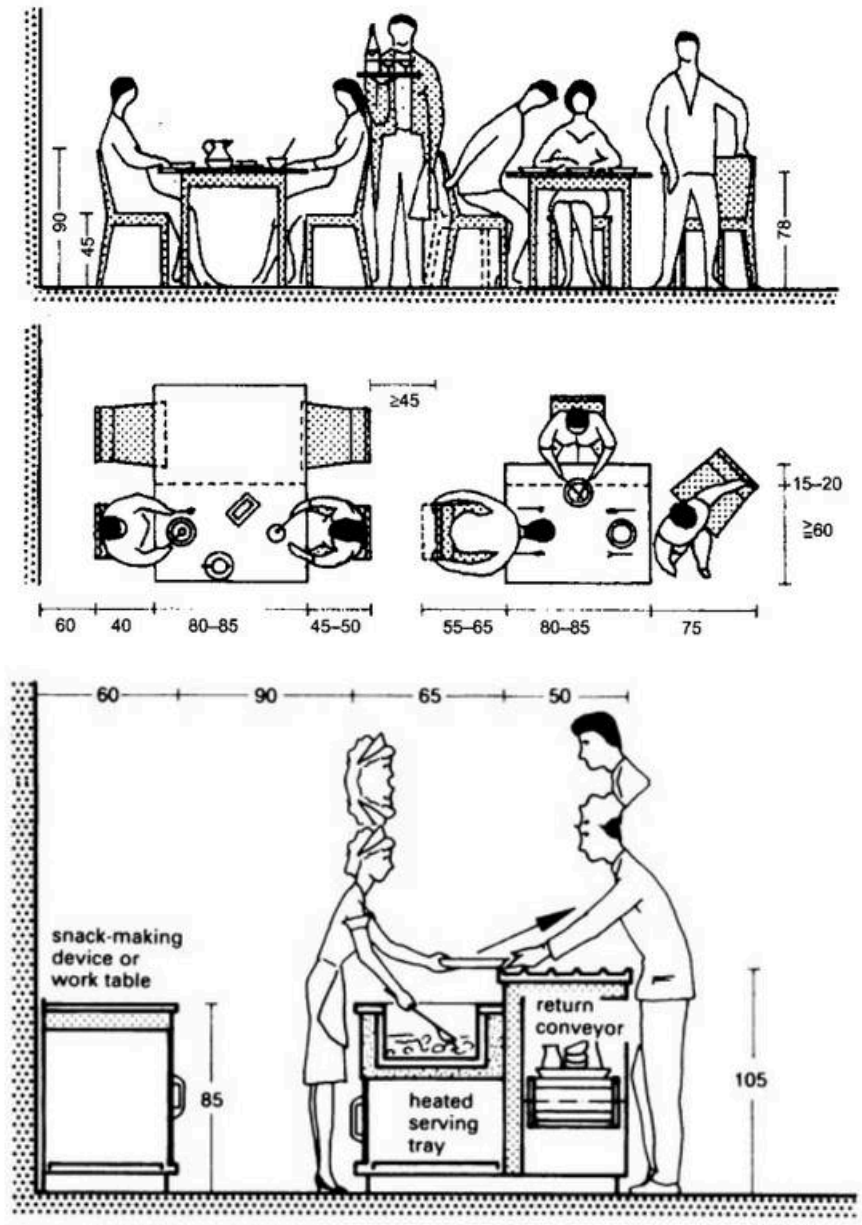

Figure 3.22 Cafetaria Size & Standart (Source : Data Arsitek Jilid 3)

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Resto Size & Standart

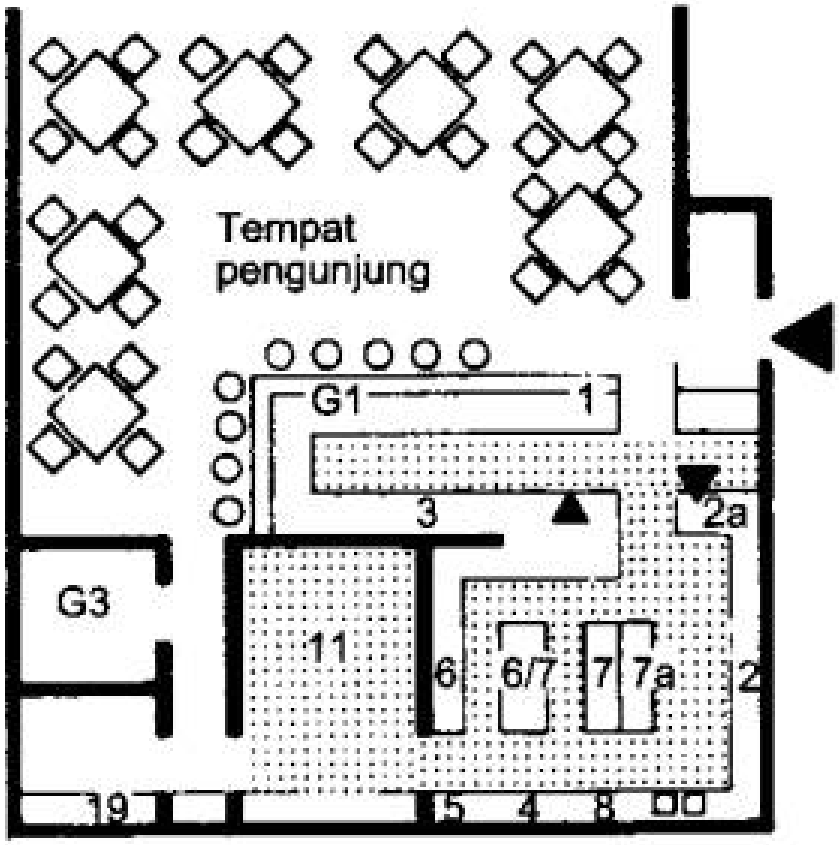

Figure 3.23 Resto Size & Standart (Source : Data Arsitek Jilid 3)

- 1 Food and drink takeaway
- 2. Dishwasher
- 2a. Dish return station
- 3. Beverage rack with mixing machine, grill, food holder, etc.
- 4. Oven in a small cabinet for cakes
- 5. Food warehouse
- 6. Sauce/meat roasting station
- 6/7. Stove, Intermediate food
- 7a. High-capacity water boiler and steamer
- 6/7b. Food processor and minyman
- 8. Pan and frying pan washing station
- 11. Warehouse, empty packaging area, office: in lieu of cold room, refrigerator and freezer (Restaurant reference standard) 11.
- 19. Employee restroom
- G1. Showcase also for food
- G3. Guest toilet/dressing room*

Exhibition Stage Standart

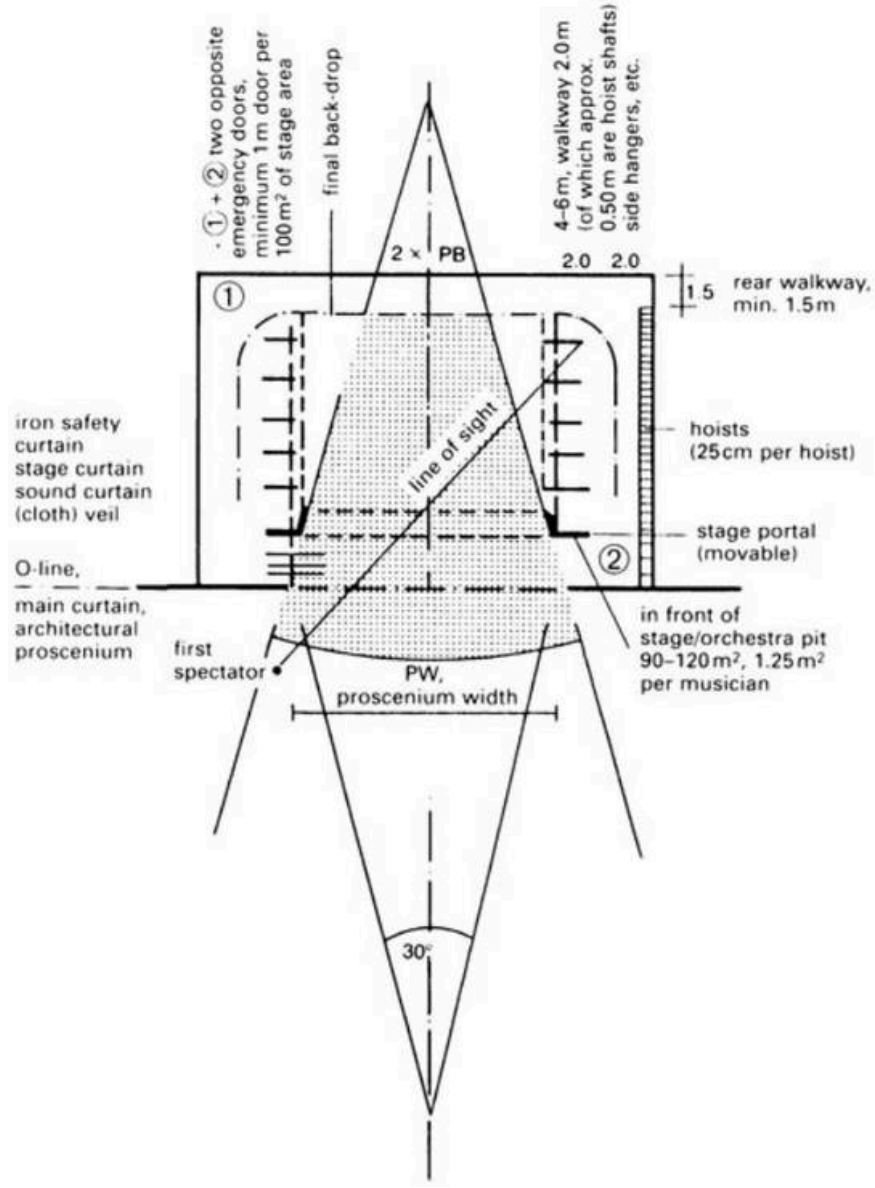

Figure 3.24 Exhibition Stage Standart (Source : Data Arsitek Jilid 3)

Stage space standards in architecture are determined to ensure that the area can meet the functional, technical and aesthetic needs of different types of performances. According to the architect's data, the stage space should be of adequate size to accommodate all the activities that take place on stage. The length, width, and height of the stage space need to be designed to accommodate the decorations, stage equipment, and movement of the performers. General standards state that a stage space should ideally be at least 12 meters wide, 8 meters deep, and have a ceiling height of around 7 to 9 meters.

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Mini Golf Course Size & Standart

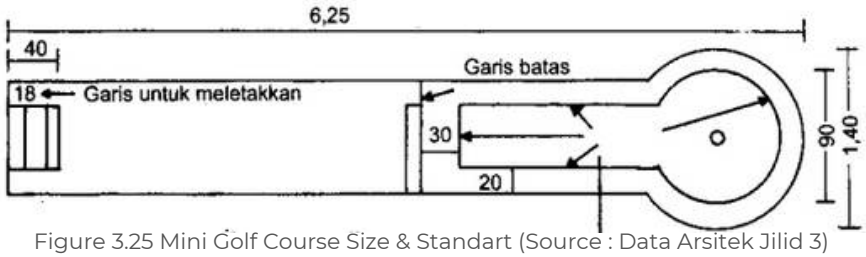


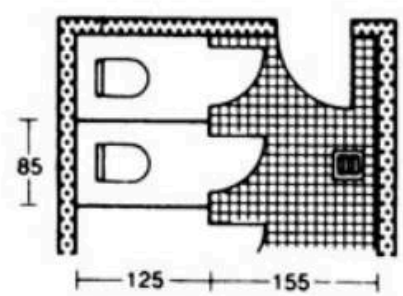
Figure 3.25 Mini Golf Course Size & Standart (Source : Data Arsitek Jilid 3)

Mini golf course sizes are based on standards that ensure the game is fun and challenging for all players. Each hole on a mini golf course is usually between 6.5 to 15 meters long and between 1 to 2.5 meters wide, providing enough space for obstacles and interesting game elements such as tunnels, bridges and sharp turns.

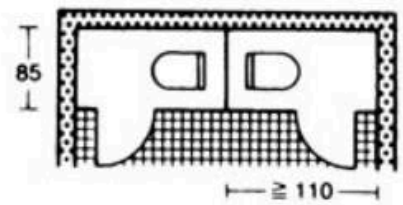
The distance between holes is important to ensure a smooth flow of play and prevent the buildup of players. Usually, the minimum distance between each hole is about 2 to 3 meters, including the area for players to wait for their turn. The surface of the mini golf course is generally made of artificial turf or other materials that allow the golf ball to roll smoothly. These materials are designed to be durable and easy to maintain, ensuring the course remains in good condition for a long period of time.

In addition to size and material, mini golf course design also considers obstacles and decorations that add challenge and visual appeal. Obstacles such as small hills, water pools, statues, or other artificial structures add to the excitement of the game. By considering all these factors, architects can design a mini golf course that meets size standards, provides a fun and challenging playing experience, and considers accessibility and safety for players of different ages and abilities.

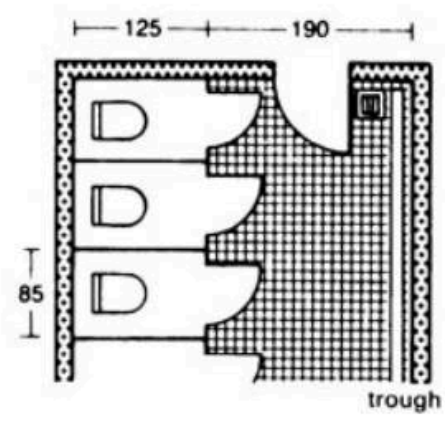
Toilet Size & Standart



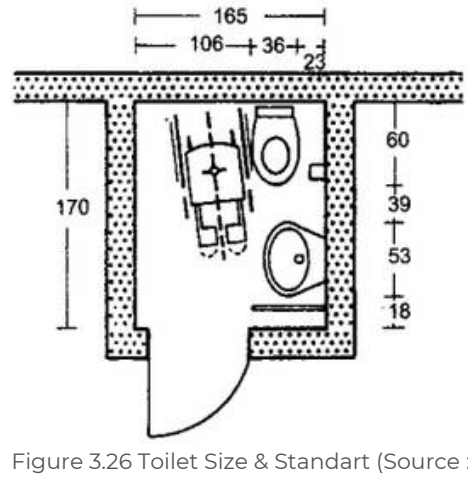
Public Toilet Type 1



Public Toilet Type 2



Public Toilet Type 3



Difable Toilet

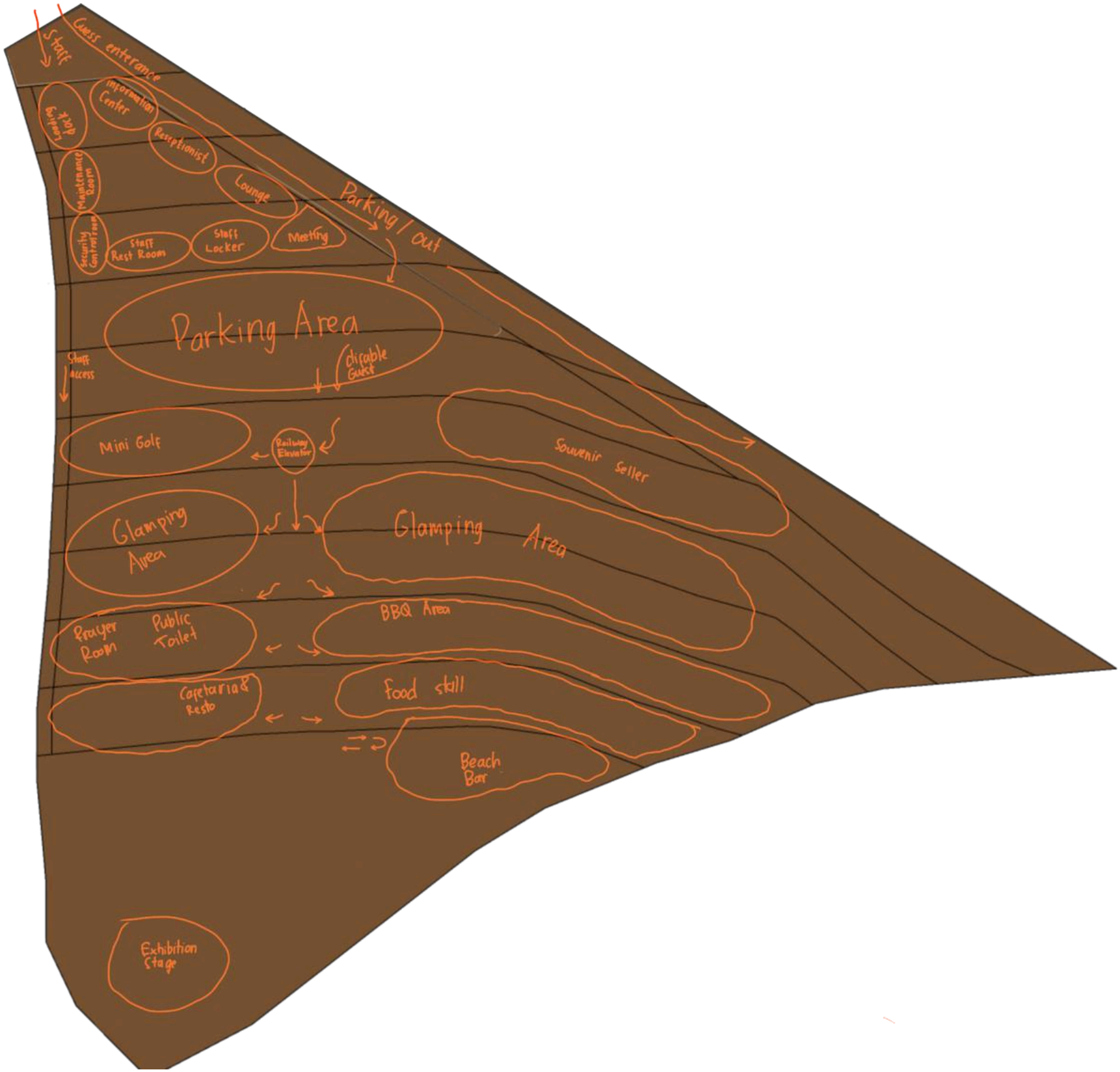
Figure 3.26 Toilet Size & Standart (Source : Data Arsitek Jilid 3)

3.3 Property Size

Space Need	Standart (m^2)	Capacity	Area (m^2)
Information Center	0.9/Person	2 workers, maximum 20 guests	27
Reseptionist	0.9/Person	2 worker, Maximum 20 Guest	38
Lounge	0.54/Person	Maximum 20 Guest	50
Meeting Room	1.5/Person	Max 30 Person	55
Staff Locker	0.6/Person	Max 50 Person	30
Staff Rest Room	0.6/Person	Max 50 Person	30
Security control Room	0.6/Person	2 Worker, Tools	20
Maintenance Room	-	2 Worker, Tools	17
Loading dock	18	1 truck, 2 Worker	37
Car Parking	9	25 car, Acces, Green Space	960
Motorcyle Parking	2.5	10 Motorcyle, Acces	220
Mini Golf	9.1	5 Person	110
Souvenir Stall	4	14 Seller, 35 Guest	294
Glamping	26	4 Guest	46
Prayer Room	1.5	15	25
Public Toilet	1.4	15	32
Toilet difable	3.1	1	7.5
BBQ area	3.75	50	385
Cafetaria	12.1	2 worker, 20 Guest	100
Food Stall	4	14 Seller, 35 Guest	259
Beach Bar	-	4 Worker, 20 Guest	75
Exhibition Stage	0.9/Person	20 Person, 50 Guest	115
Ramp	0.74/Person	-	54
Beach Scenic Spot Package	0.9/Person	14	56

3.4 Exploration of Building Function Concept

3.4.1 Overview of Building Functions



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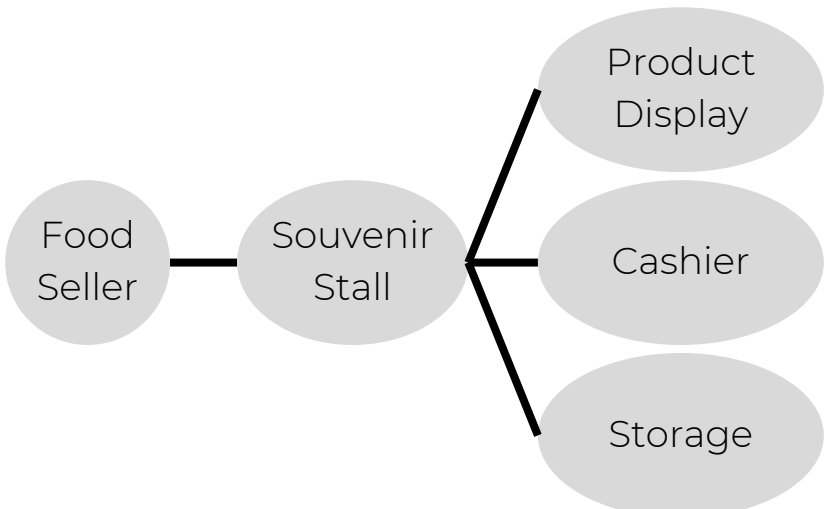
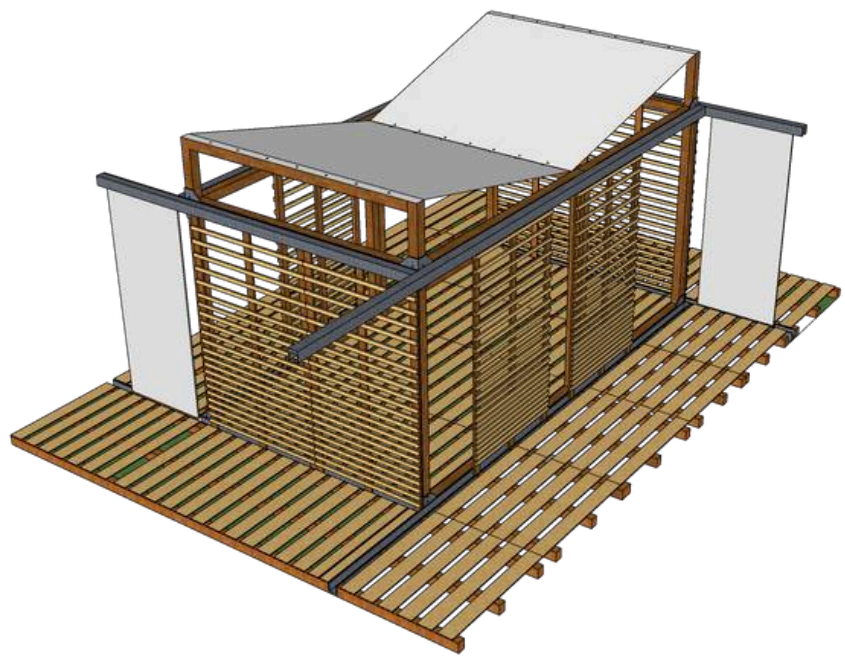
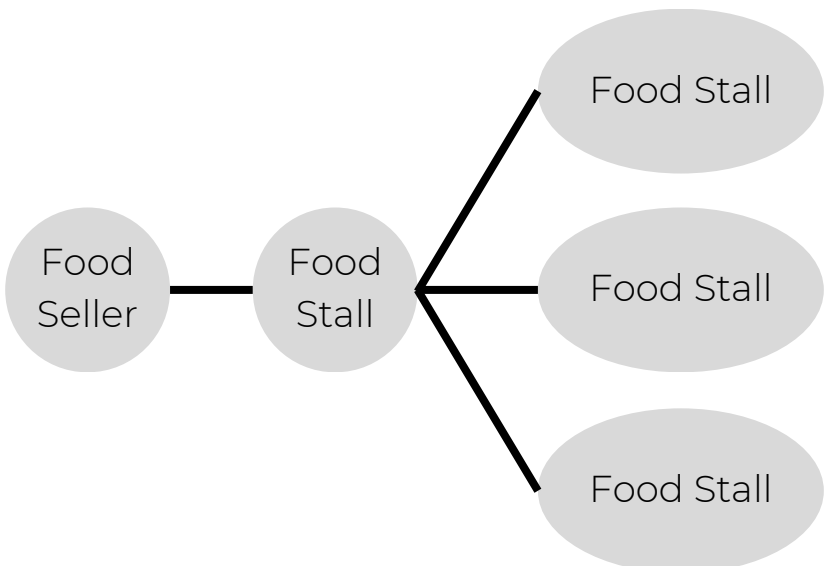
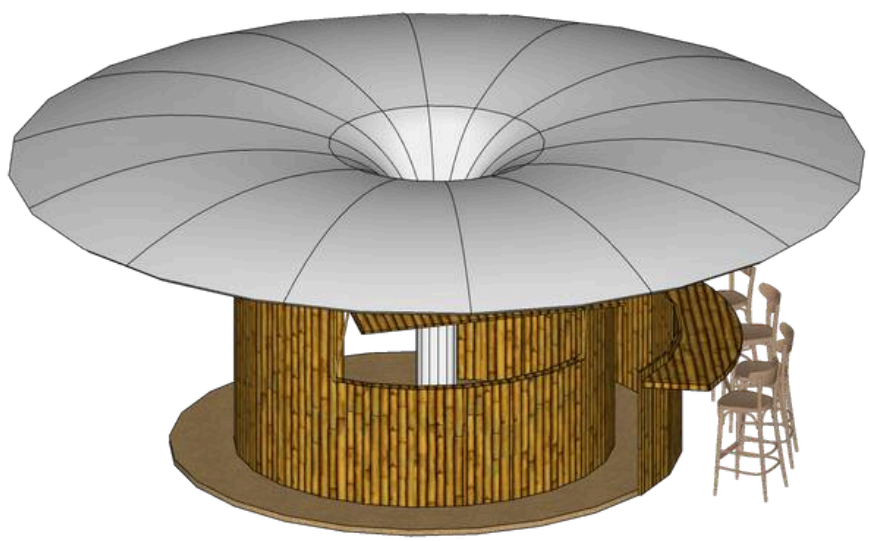
3.4.2 Stall Functional Requirements Analysis





Souvenir Stall





Food Stall

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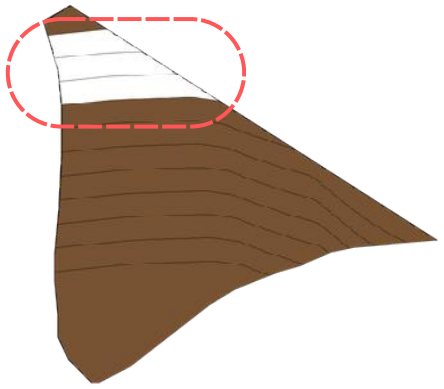
04

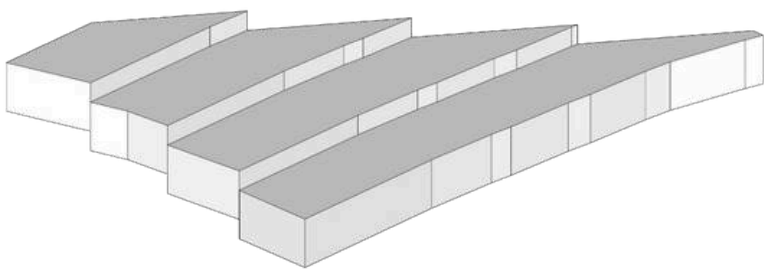
Chapter 4 : Design Response & Schematic

4.1 Building Transformation

4.1.1 Office Staff



Position on Site



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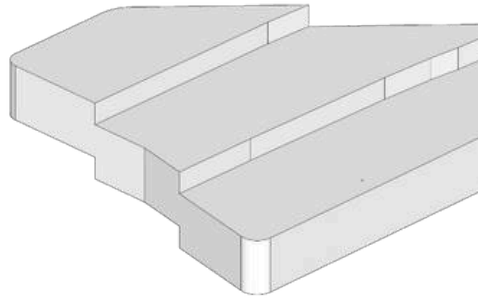
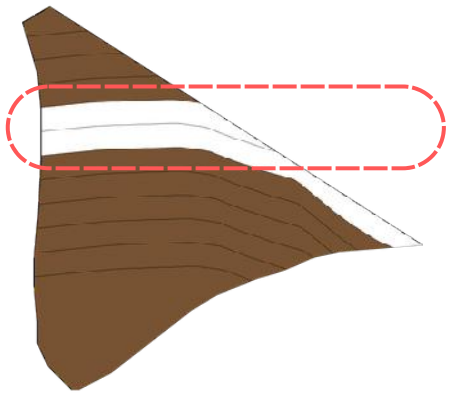


simplify

4.1.2 Parking Area



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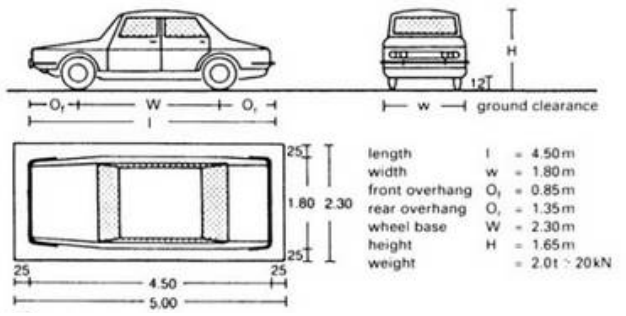
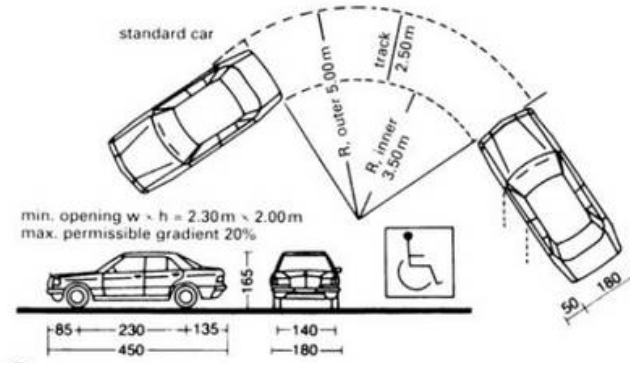
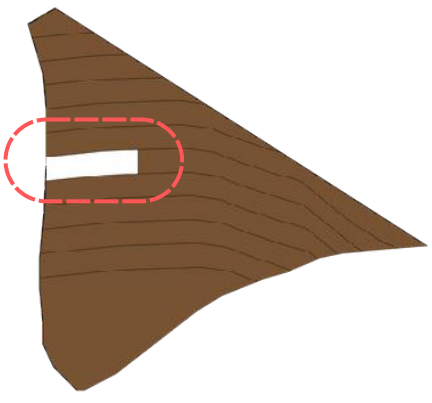


Car Size Standart

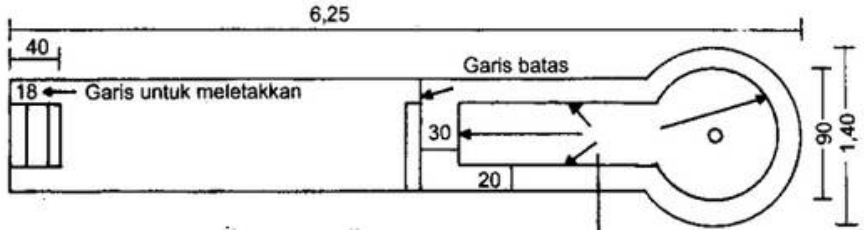


Car Size Standart

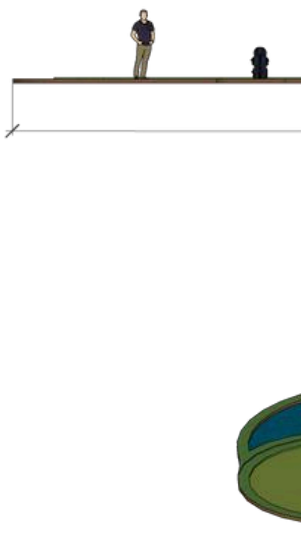
4.1.3 Mini Golf Area

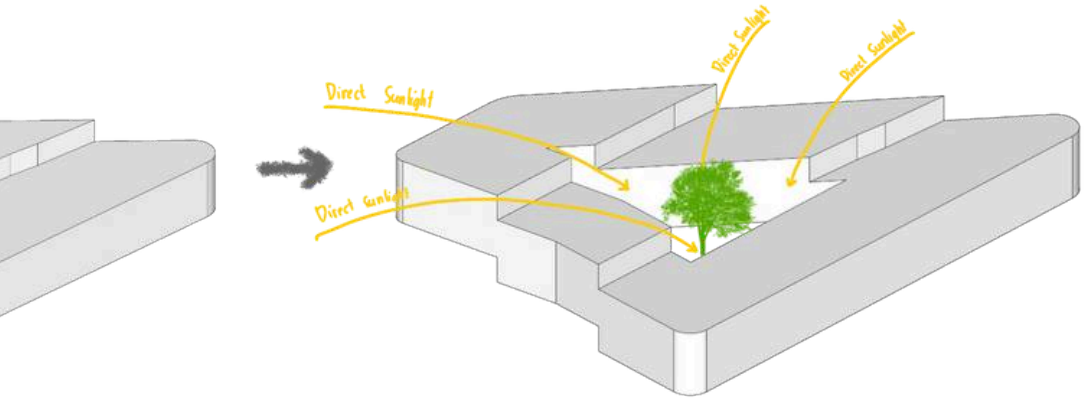


Position on Site



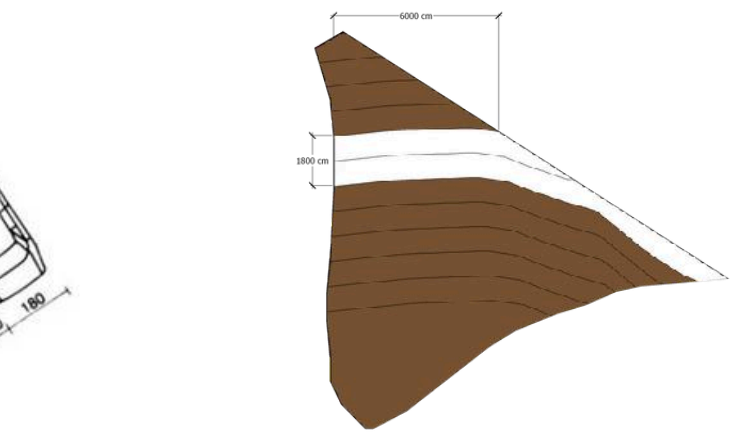
Mini Gold Size Standart



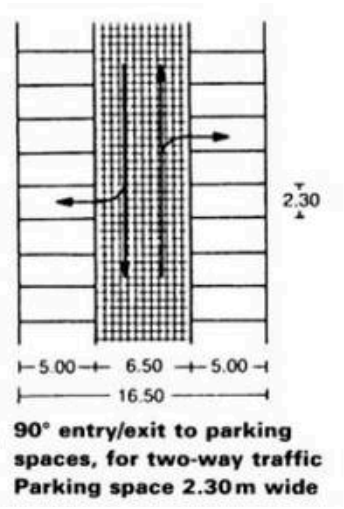


Improvement

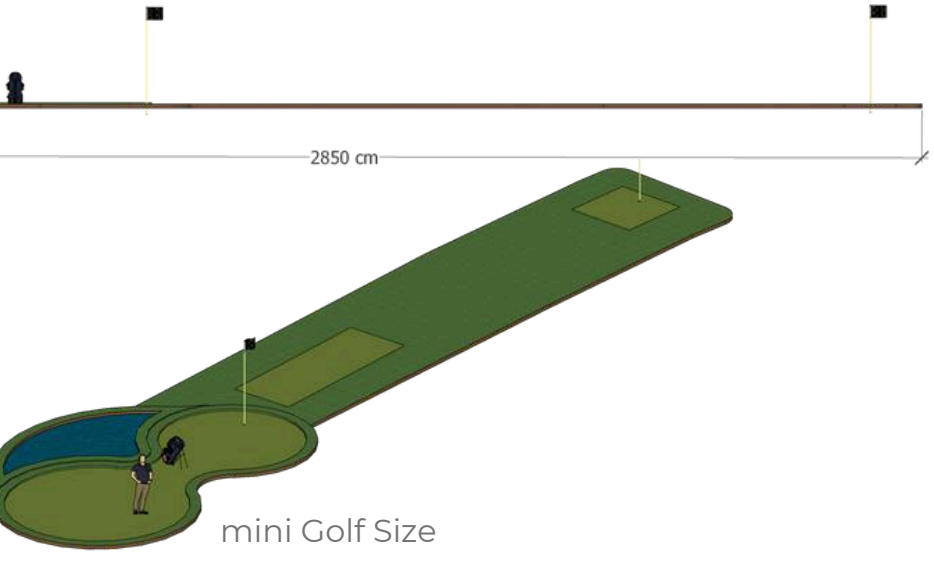
Making a hole in the middle of the building is intended to minimize the use of lights during the day, by making a hole in the middle of the building envelope, direct sunlight can enter from various sides of the building, in addition to making the hole in the building envelope is for green area, so that the resulting air circulation is healthier compared to without the green area in the middle of the building.



Car Parking Area Dimensions



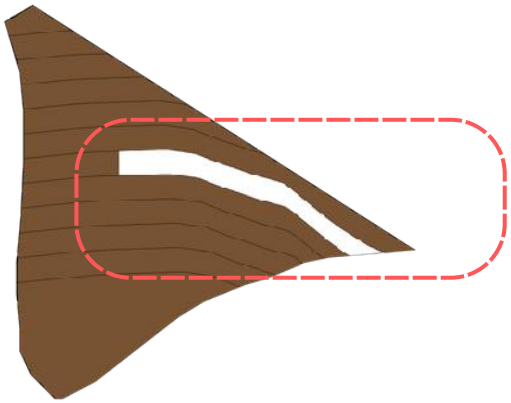
The placement of the parking lot in the middle is intended to reduce traffic jams that occur when visitors are too full. This applies because before entering the parking lot, visitors pass through the information center first. If the parking lot is full, visitors can immediately leave without having to park first, then if there is still parking available. empty, visitors are directed to the parking lot.



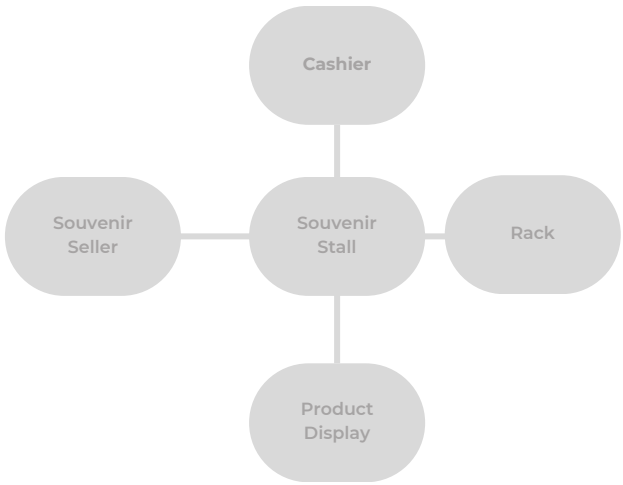
mini Golf Size

Mini golf courses are designed to specific standards to ensure a fun and challenging game. Holes measuring 6.5-15 meters by 1-2.5 meters wide offer space for obstacles such as tunnels, bridges and corners, while the distance between holes (2-3 meters) keeps the game running smoothly. The surface is usually made of synthetic grass which is durable and easy to maintain. In addition to size and materials, mini golf course designs also pay attention to boundaries and attractive decorations to add to the fun, all to create an inclusive and fun playing experience for players of all ages and abilities.

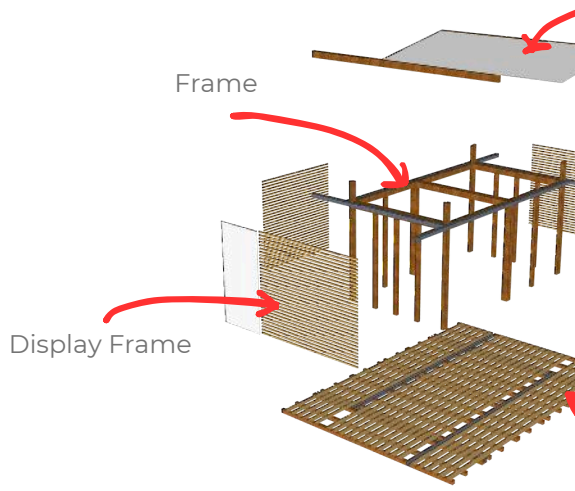
4.1.4. Souvenir Stall



Position on Site

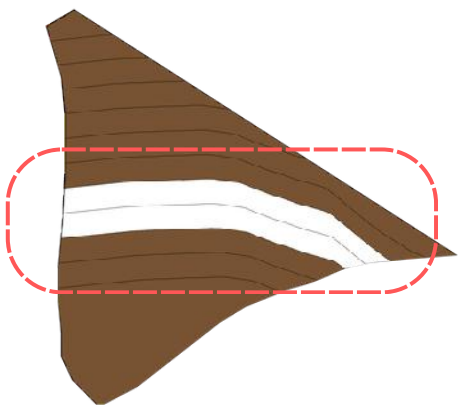


Seller Needs Analysis

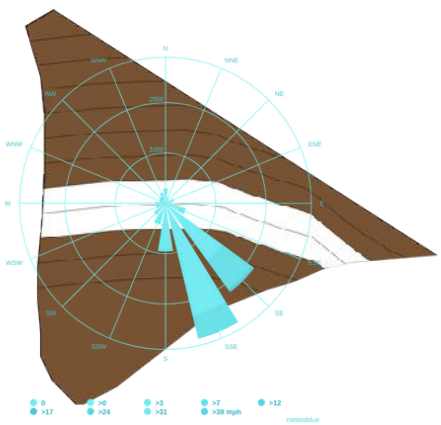


Souvenir Stall Part

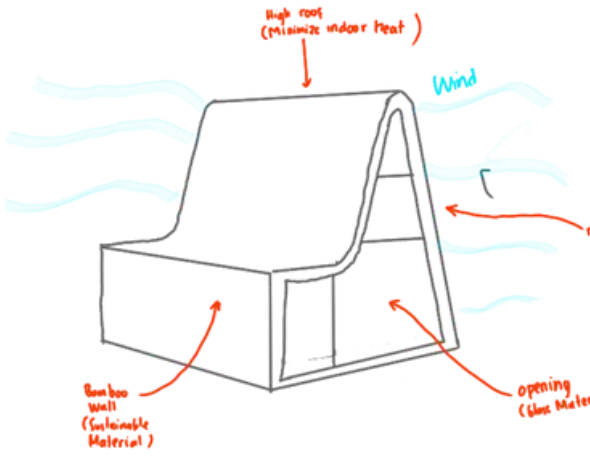
4.1.5. GlampingArea



Position on Site

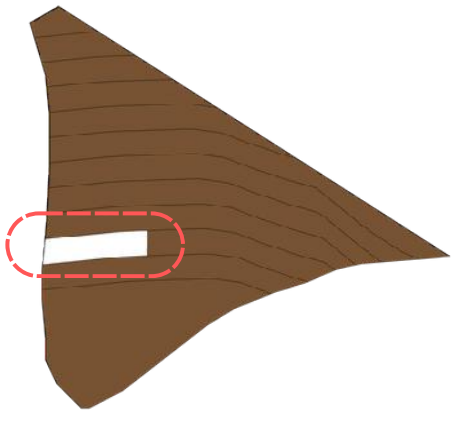


Wind Velocity

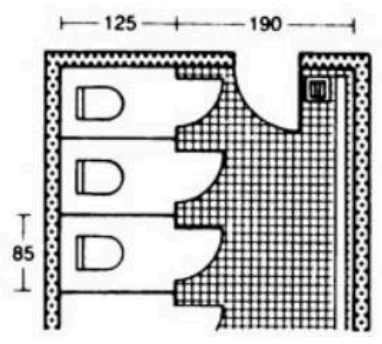


Basic Shape

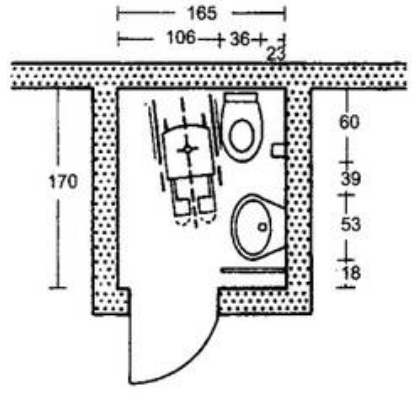
4.1.6. Mushola & Public Toilet



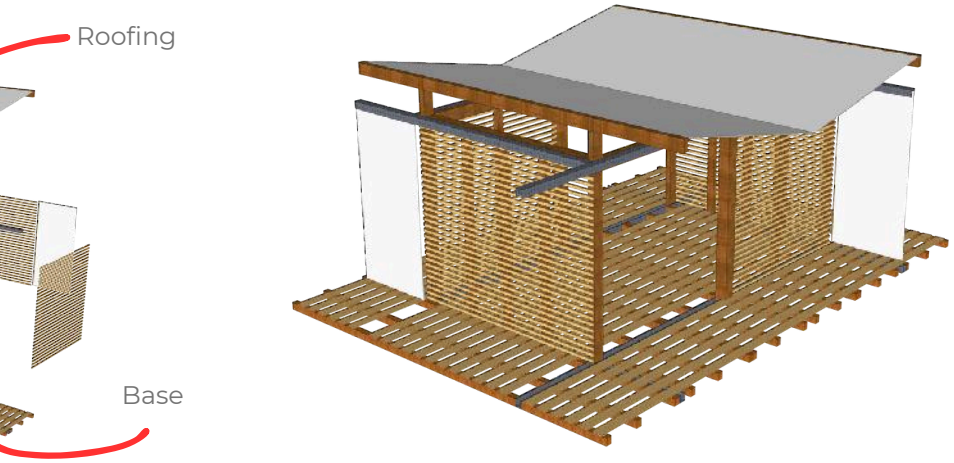
Position on Site



Toilet Size Standart

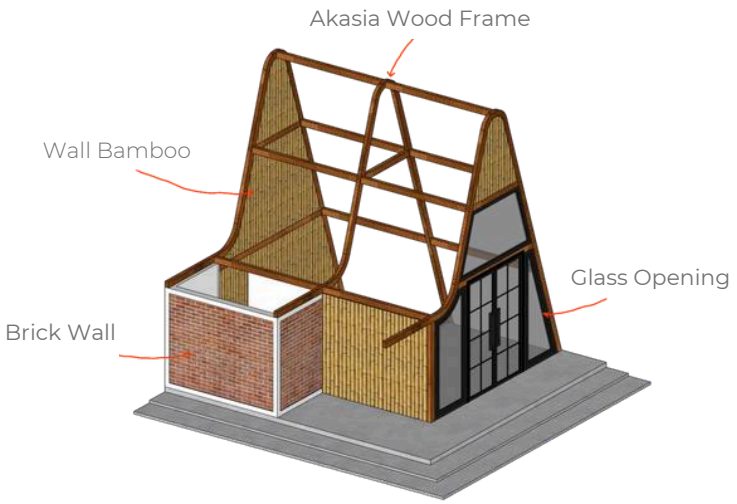


Difable Toilet Size Standart



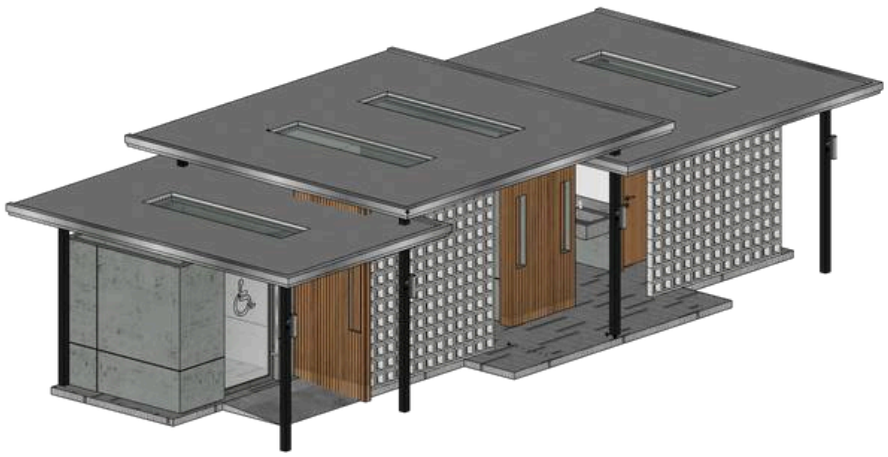
Souvenoir Stall

Analyzing the needs of souvenir sellers is a crucial first step in designing an ideal stall. This analysis aims to understand the types of souvenirs they sell as well as the functionality of the stall. By understanding these needs, the designed stall can be optimized to help souvenir sellers display and sell their products more effectively, thereby increasing their satisfaction and maximizing their business profits. Placing a souvenir stall near the parking area is the right strategy to increase sales opportunities and provide convenience for visitors. The reason is, the strategic location of this stall allows visitors to easily find and buy the souvenirs they want before they leave the tourist attraction.



Building Material

The design of this triangular glamping in Pacitan is influenced by several factors such as wind direction, sun direction, and efforts to minimize room heat. Environmentally friendly materials such as bamboo, local acacia wood and red brick are used. Acacia wood was chosen to minimize the carbon footprint and support the local economy. This design combines comfort, environmental friendliness and economy.



Public Toilet

The need for toilets is very important in a tourist area. Public toilet facilities of appropriate standards must be available to accommodate the needs of visitors who come. This toilet uses standard sizes based on architect data.

4.2 Schematic

CODE	NOTES
MR	Main Road
A	Information Center, Loading dock
B	Resepticnist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
E	Mini Golf
F	Souvenir Seller
G	Glamping
H	Cafetaria, Pray room, Toilet
I	BBQ Area
J	Food Seller
K	Beach Bar
L	Beach Front Scenic Spot
M	Exhibition Space

N

Situation

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512152

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

Situation

SCALE

1 : 1000

NOTE

SCORE

CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
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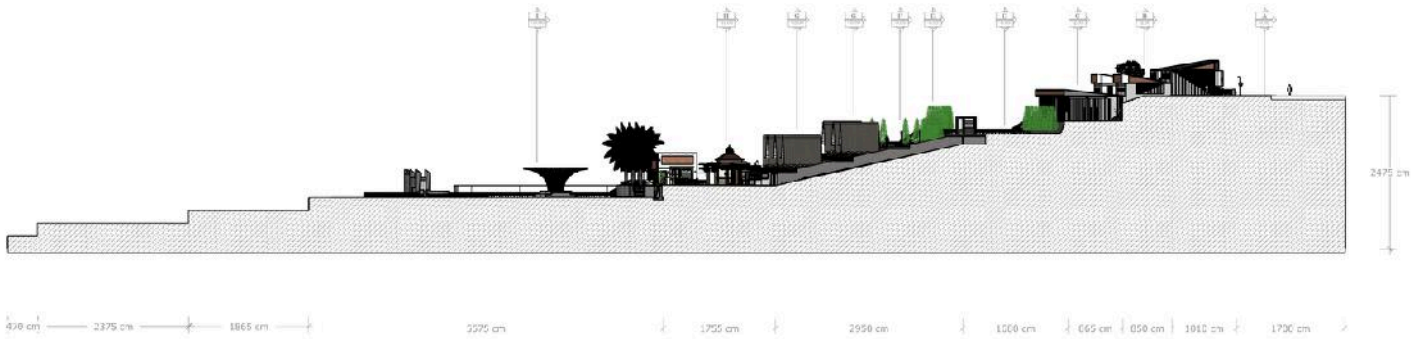
H	Cafetaria, Play room Toilet
I	BBQ Area



Situation Section A-A
Scale 1:500

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Situation Section A-A

SCALE

1:500

NOTE

SCORE

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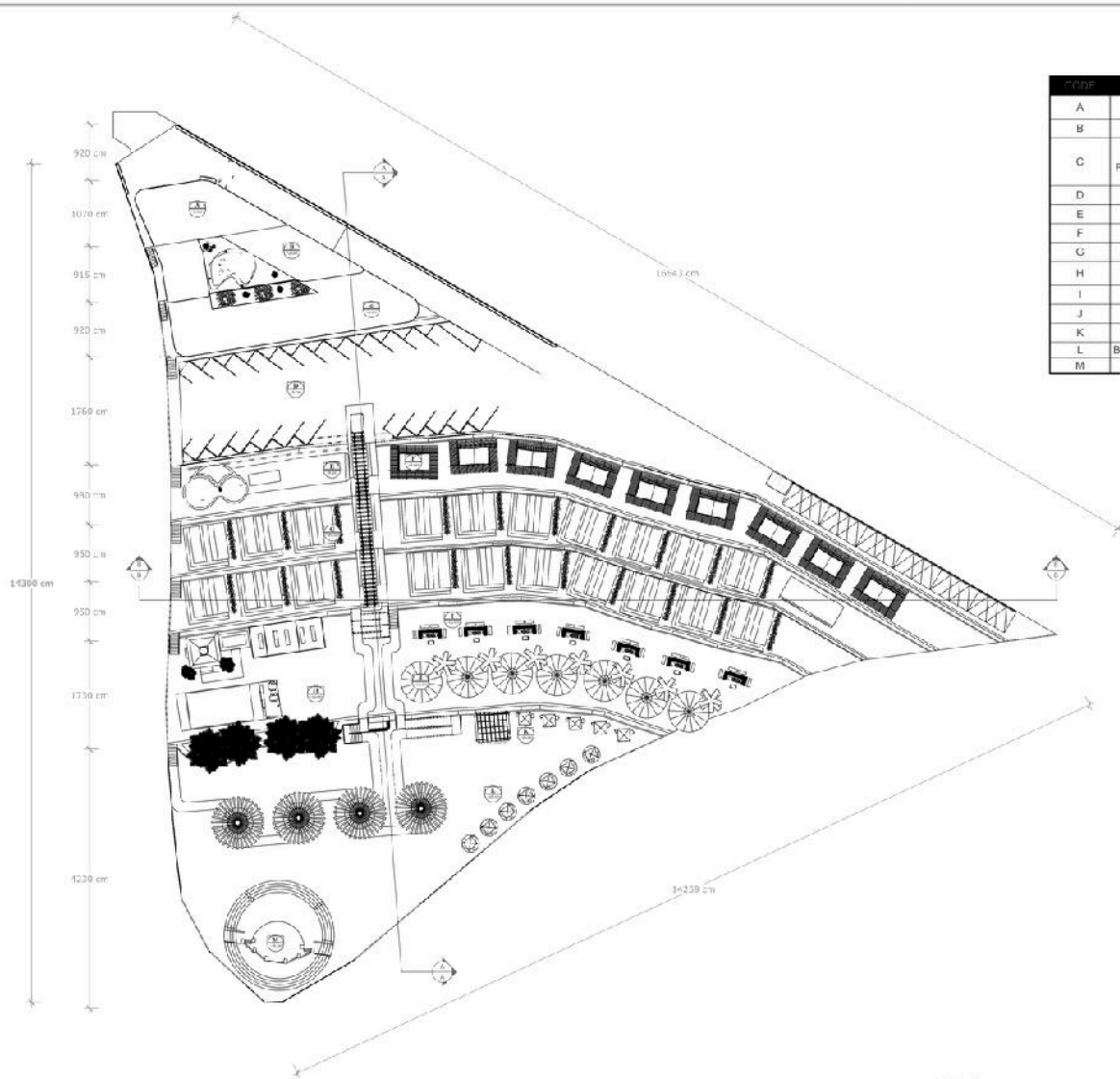
PROJECT TITLE	Los Marise Paradise
DRAWN BY	Abid Hanif Dhiya U.S.
STUDENT ID	20512162
LECTURER	Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT	
TITLE	Situation Section B-B
SCALE	1:500
NOTE	
SCORE	



CODE	NOTES
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ASSISTANT

TITLE

Site Plan

SCALE

1:500

NOTE

SCORE

CODE	NOTES
A	Information Center, Loading dock
B	Receptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
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H	Cafetaria, Play room Toilet
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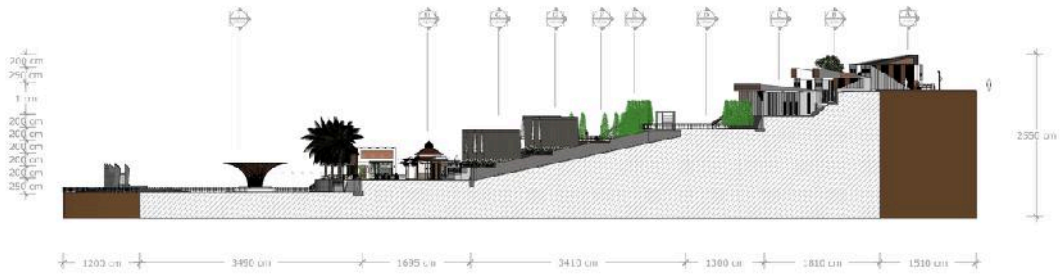

Site Plan Section A-A
Scale 1:500

Faculty of Civil Engineering and Planning

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Site Plan Section A-A

SCALE

1:500

NOTE

SCORE

Site Plan Section B-B
Scale 1:500

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TITLE
Site Plan Section B-B
SCALE
1:500
NOTE
SCORE

3D Axonometry Office

Faculty of Civil Engineering and Planning

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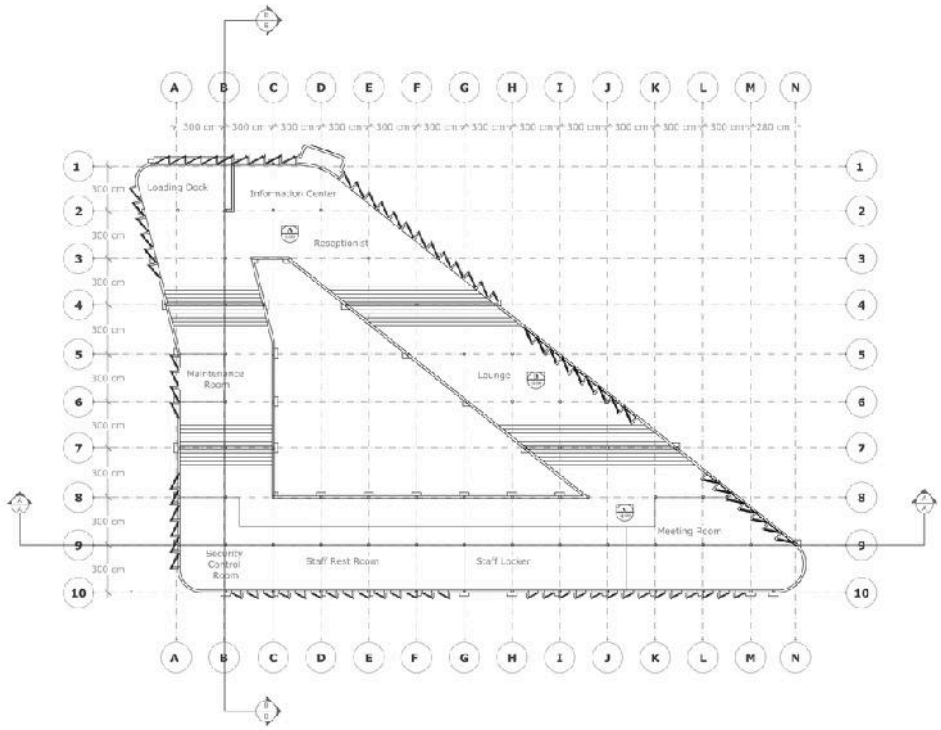
TITLE
3D Axonometry Office
SCALE
1 :100
NOTE
SCORE



N

Office Floor Plan
Scale 1:500

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
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Los Marise Paradise
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Abid Hanif Dhiya U.S.
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LECTURER
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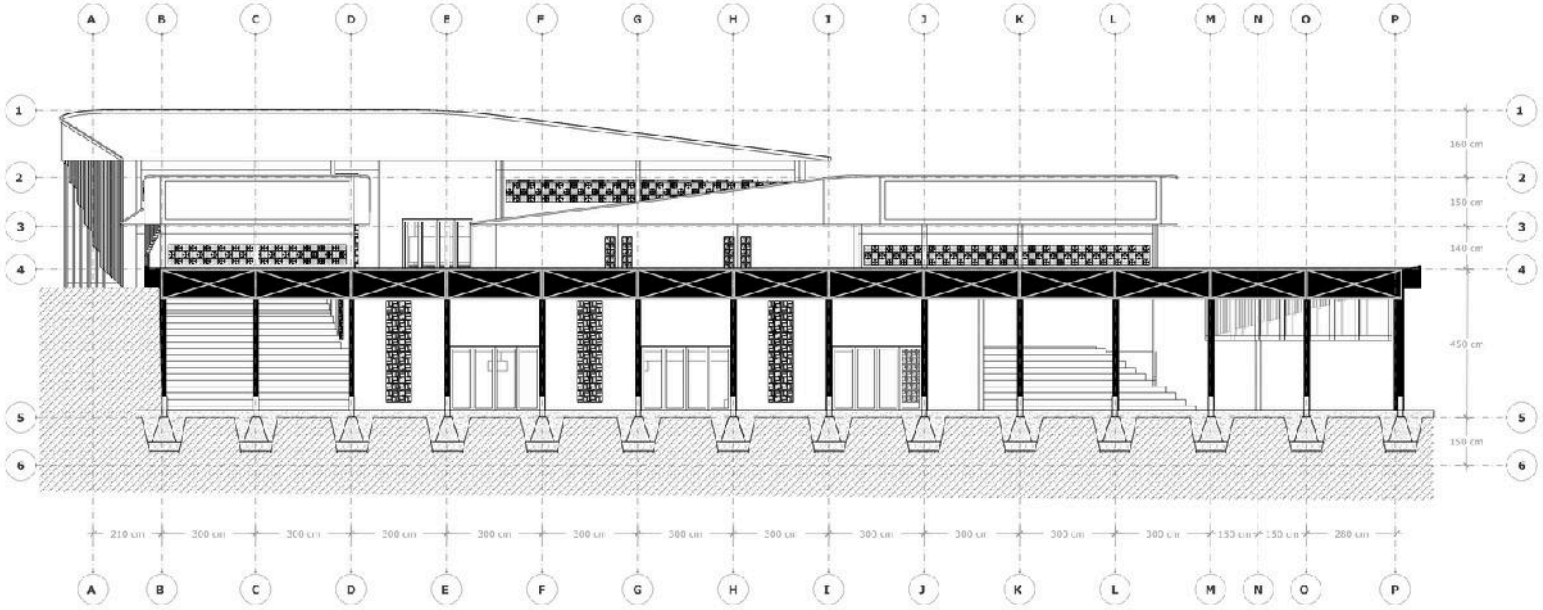
ASSISTANT
TITLE
Office Floor Plan
SCALE
1:500
NOTE
SCORE



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ASSISTANT

TITLE

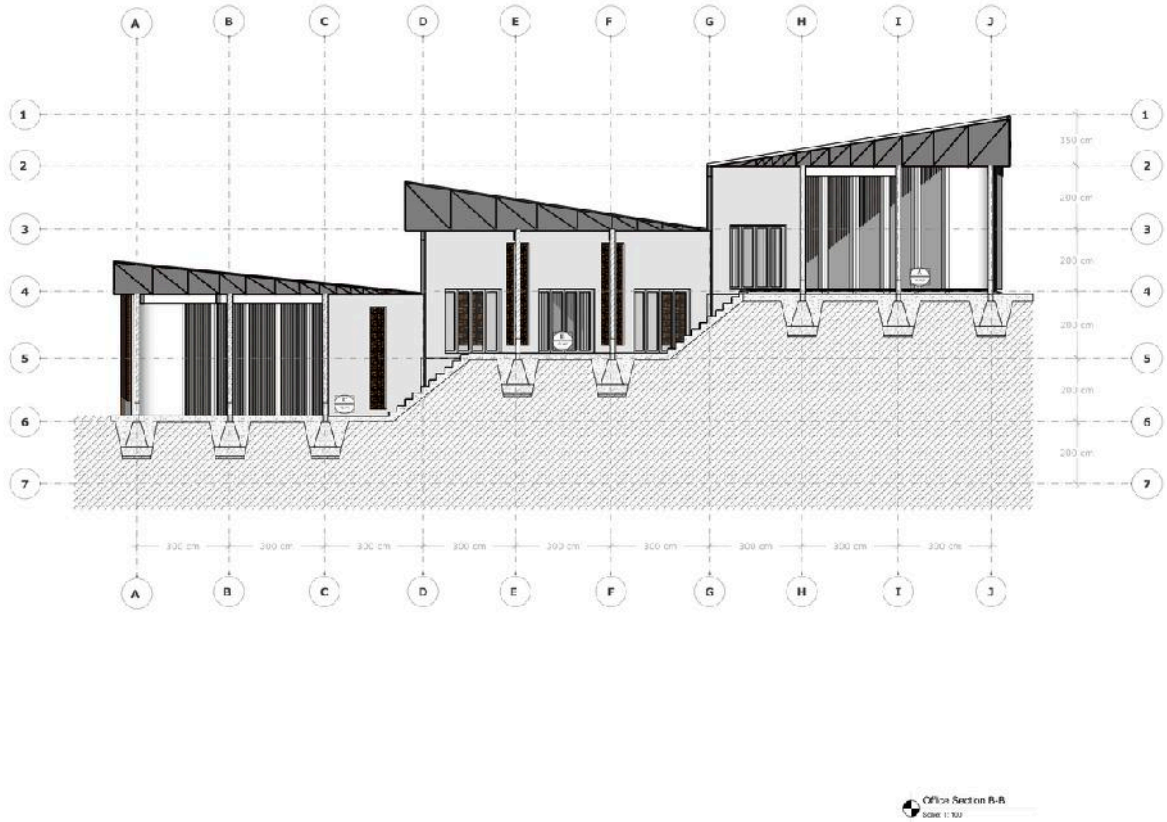
Office Section A-A

SCALE

1 :100

NOTE

SCORE



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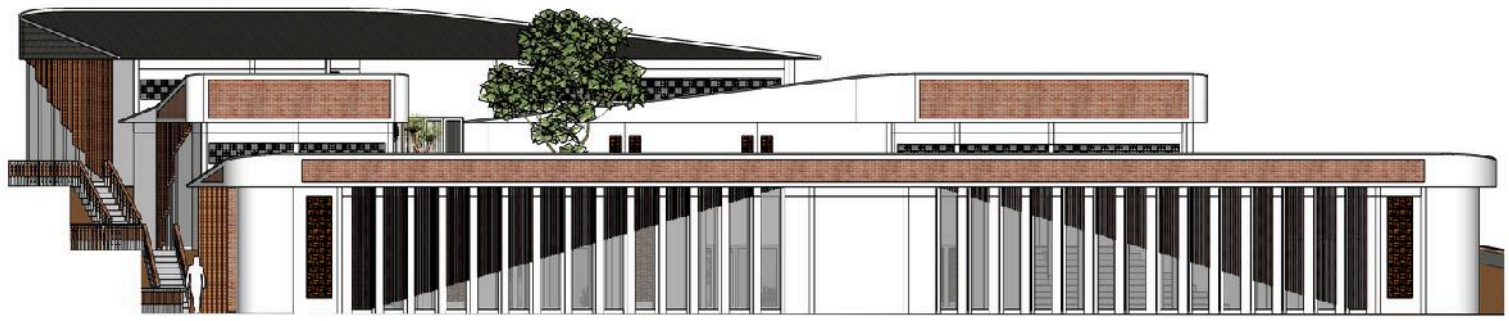
DRAWN BY	Abid Hanif Dhiya U.S.
STUDENT ID	20512162
LECTURER	Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT	
TITLE	Office Section B-B
SCALE	1:100
NOTE	
SCORE	

Front View Office



Rear View Office

Faculty of Civil Engineering and Planning

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PROJECT TITLE

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STUDENT ID

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LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

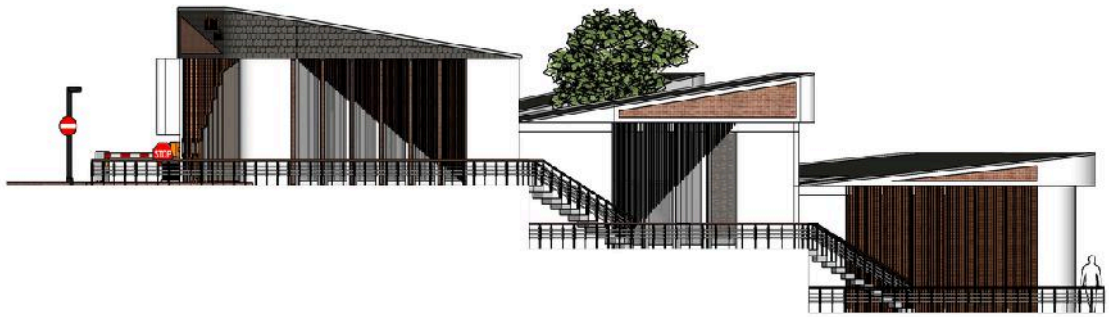
Front View Office &
Rear View Office

SCALE

1:500

NOTE

SCORE



Right View Office
Scale 1:100

Left View Office
Scale 1:100

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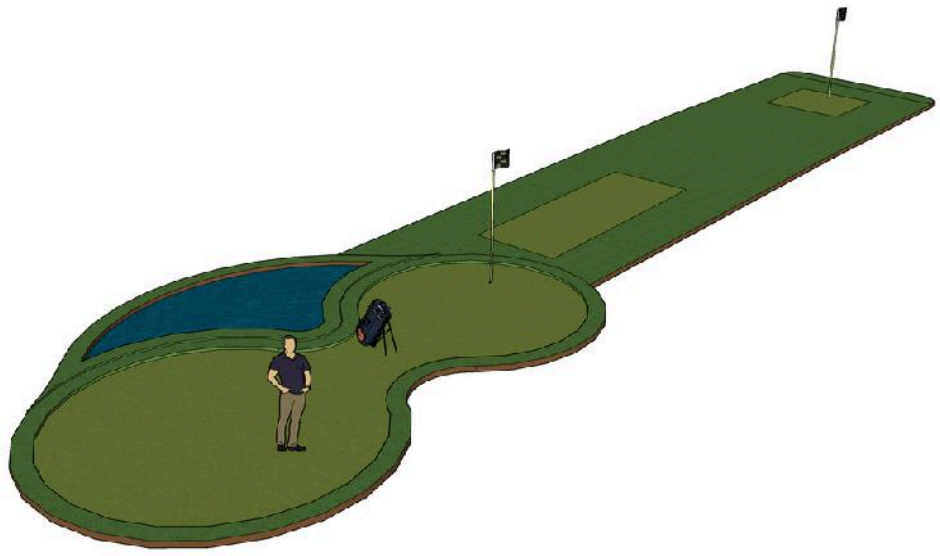
ASSISTANT
TITLE
Right View Office & Left View Office
SCALE
1:100
NOTE
SCORE



3D Axonometry Mini Golf

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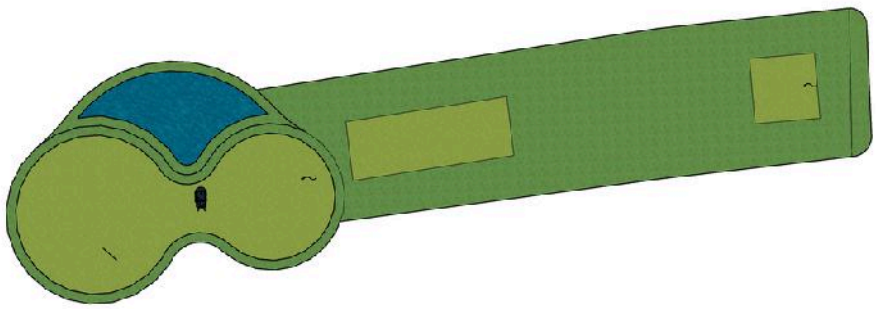

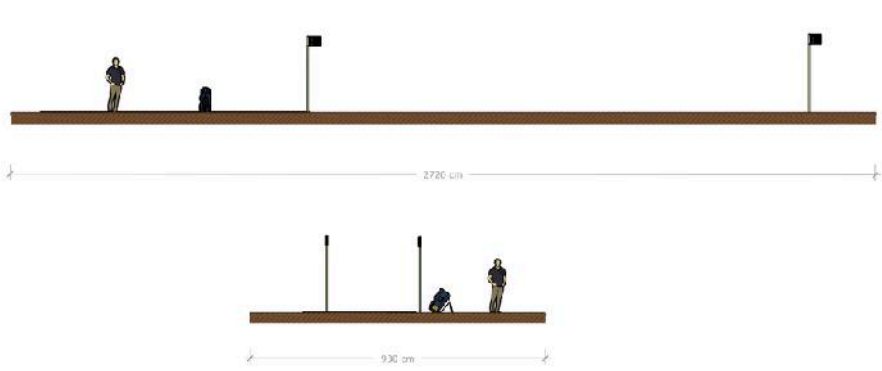

Mini Golf Plan
Scale 1 : 100

Faculty of Civil Engineering and Planning

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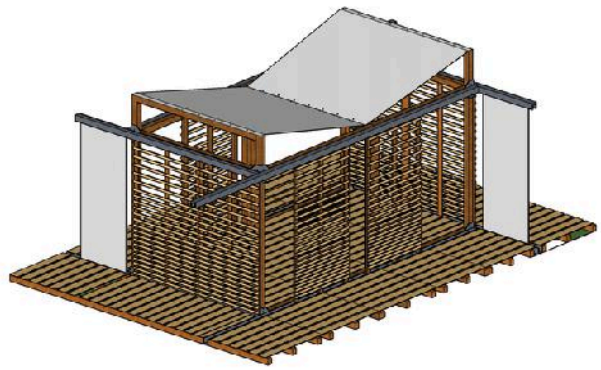
ASSISTANT
TITLE
Mini Golf Plan
SCALE
1 :100
NOTE
SCORE



3D Axonometry Souvenir Stall
Scale: 1:50

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3D Axonometry Souvenir Stall
SCALE
1:50
NOTE
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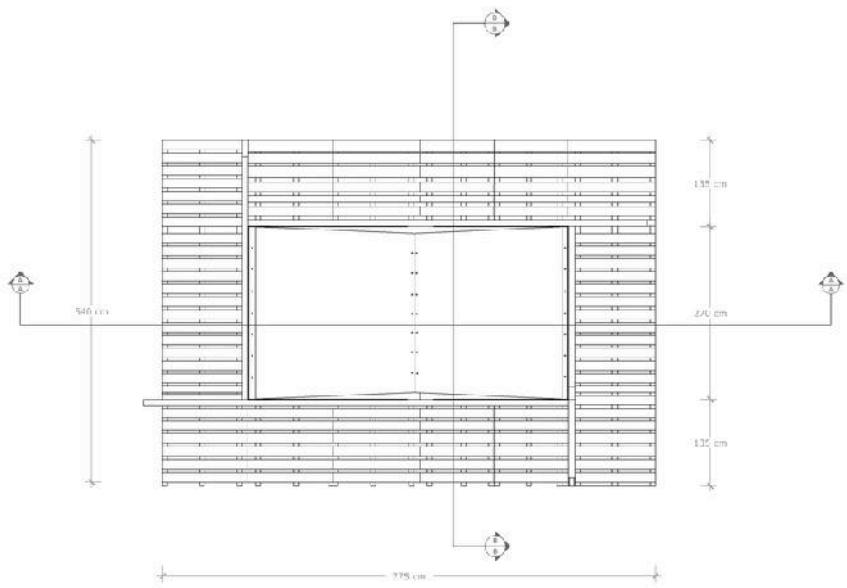

Souvenir Stall Plan
Scale 1:50

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Souvenir Stall Plan
SCALE
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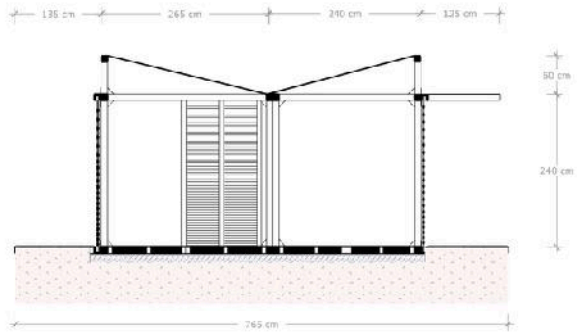
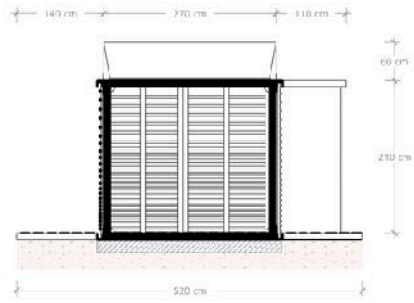


Souvenir Stall Section A-A
Scale 1:50



Souvenir Stall Section B-B
Scale 1:50

Faculty of Civil Engineering and Planning

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Los Marise Paradise
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LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Souvenir Stall Section A-A & Souvenir Stall Section B-B
SCALE
1:50
NOTE
SCORE

3D Axonometry Glamping
Scale: 1:50

Faculty of Civil Engineering and Planning

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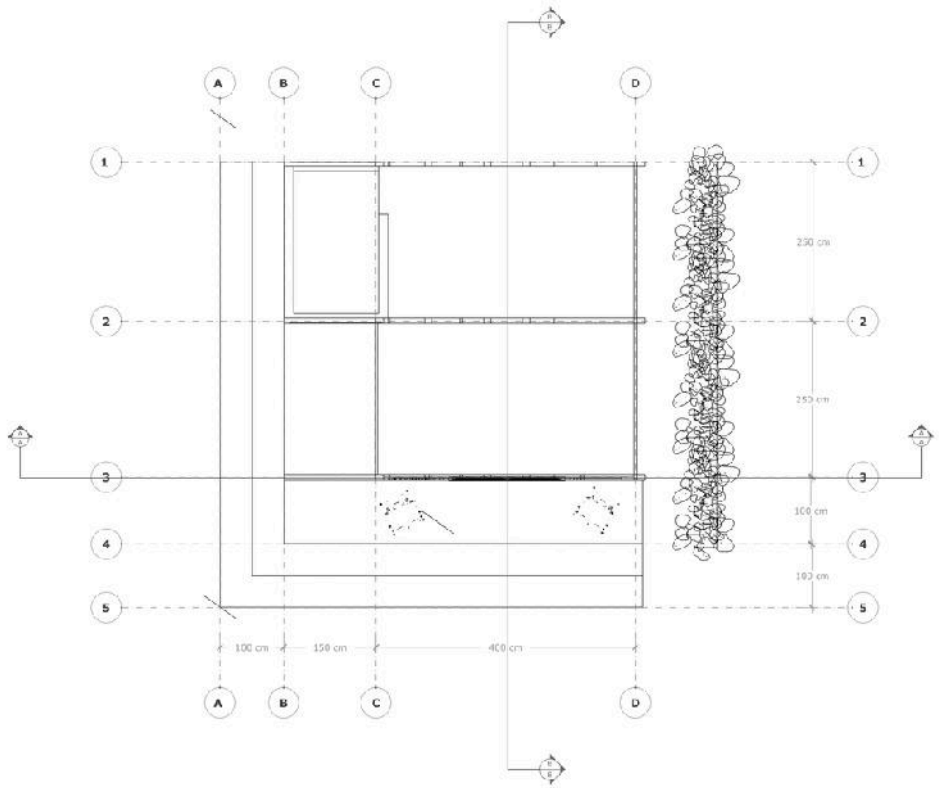
ASSISTANT
TITLE
3D Axonometry Glamping
SCALE
1:50
NOTE
SCORE



Faculty of Civil Engineering and Planning

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STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

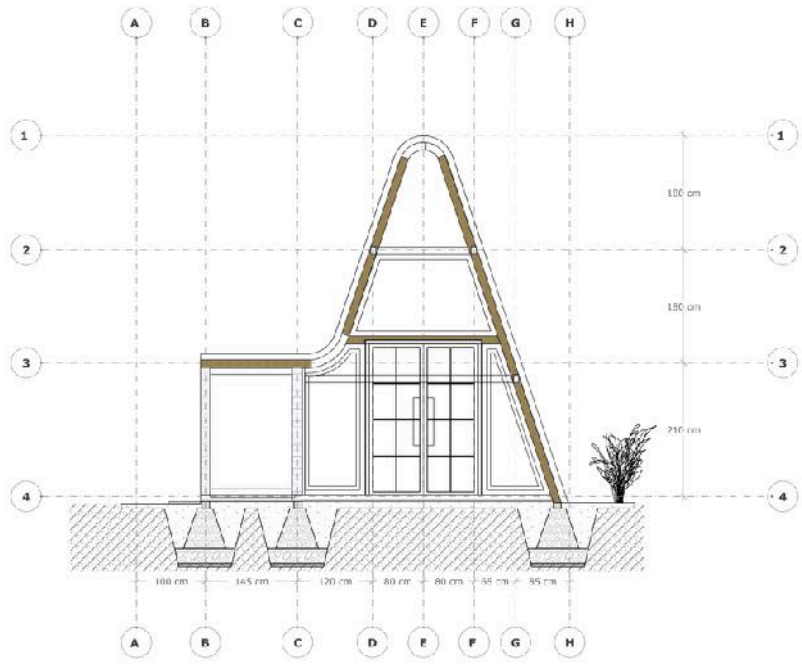
Glamping Floor Plan

SCALE

1 :50

NOTE

SCORE



Glamping Section A-A
Scale 1:50

Faculty of Civil Engineering and Planning

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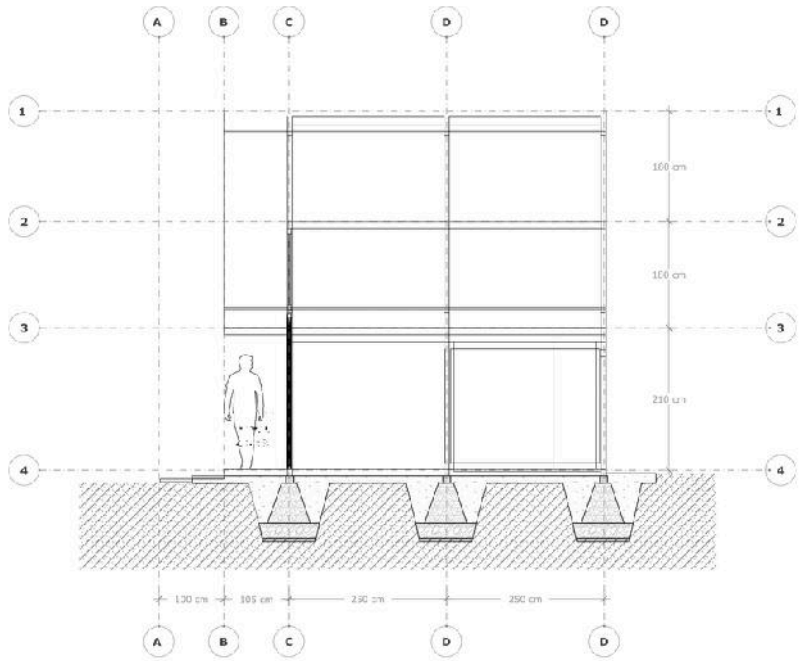
Glamping Section A-A
SCALE
1:50
NOTE
SCORE



Glamping Section B-B

Faculty of Civil Engineering and Planning

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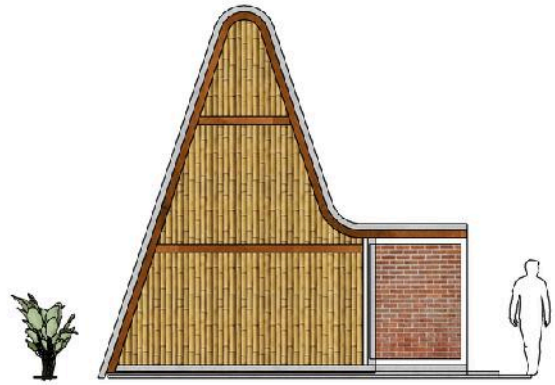
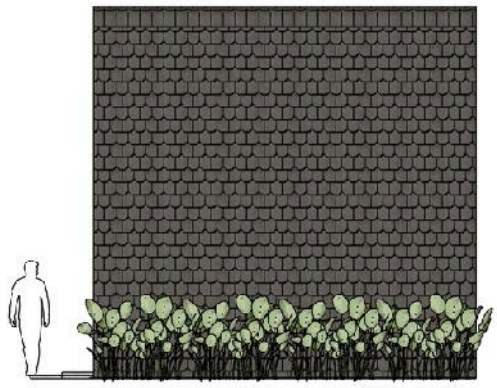
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Glamping Section B-B
SCALE
1 :50
NOTE
SCORE

Front View Glamping



Rear View Office



Right View Glamping

Left View Glamping

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

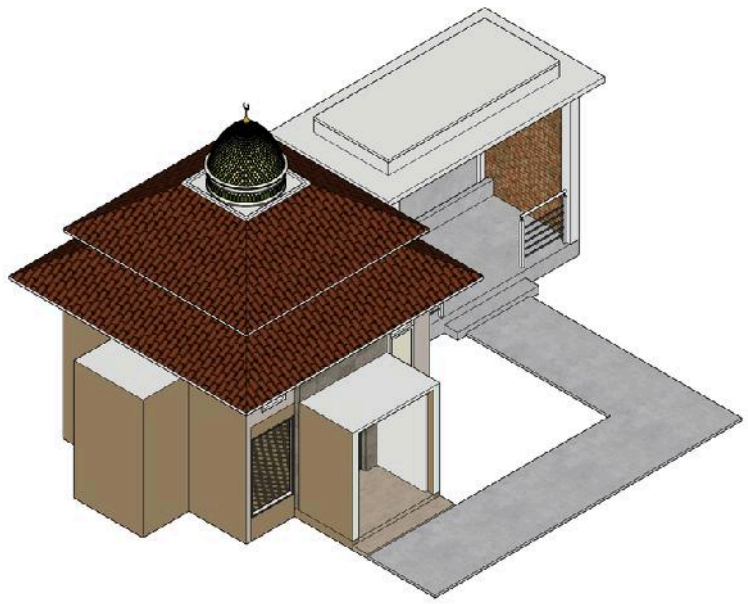
Elevation Glamping

SCALE

1 :50

NOTE

SCORE



3D Axonometry Pray Room
Scale: 1:50

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
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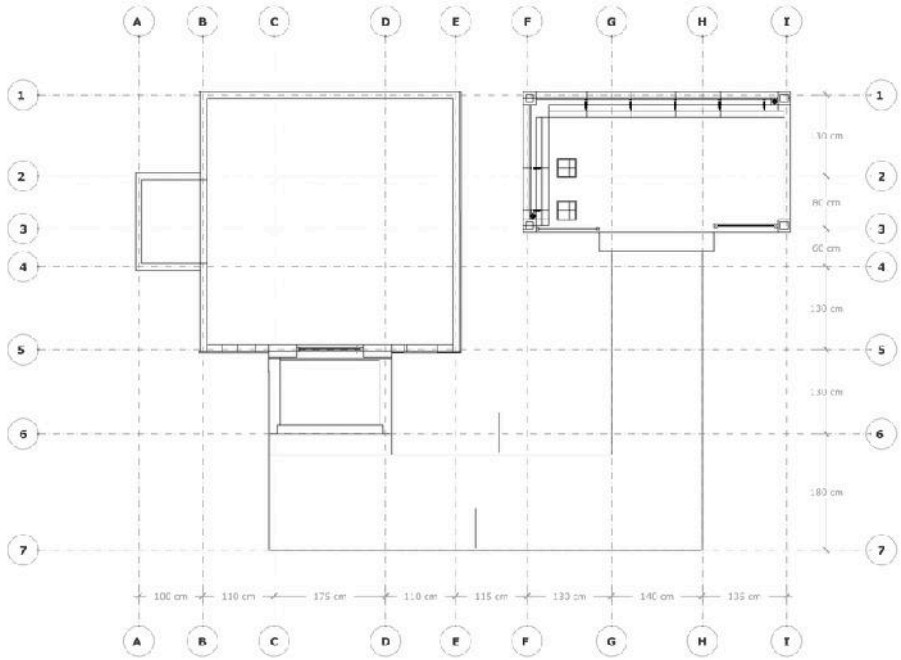
ASSISTANT
TITLE
3D Axonometry Pray Room
SCALE
1:50
NOTE
SCORE



N

Left View Glamping
Scale 1:50

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

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LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

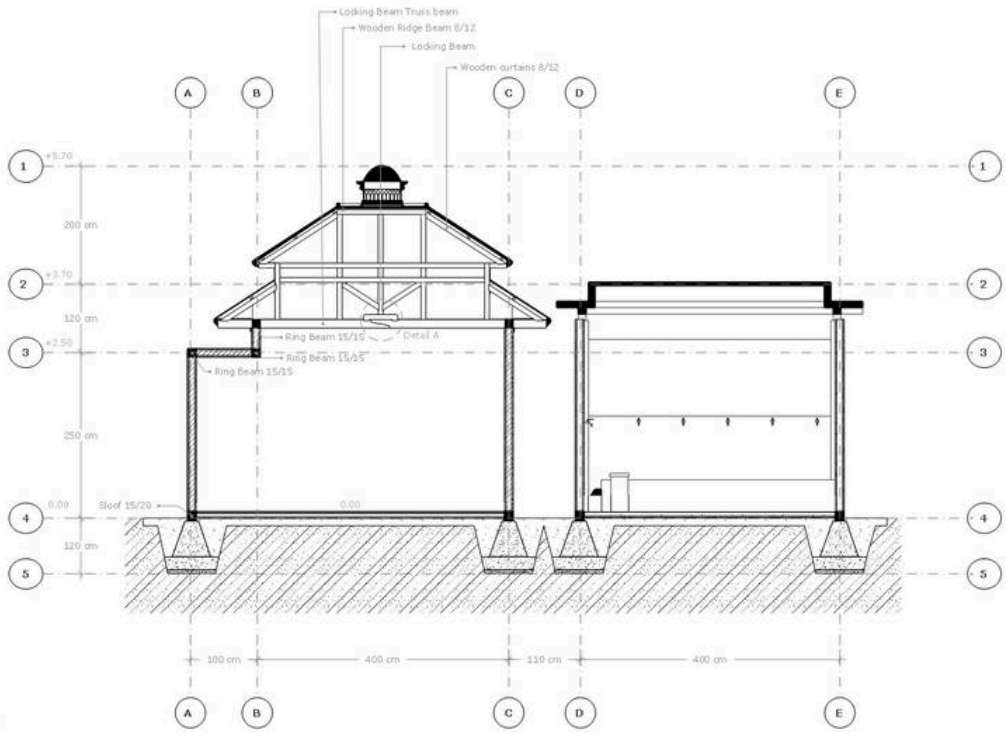
Left View Glamping

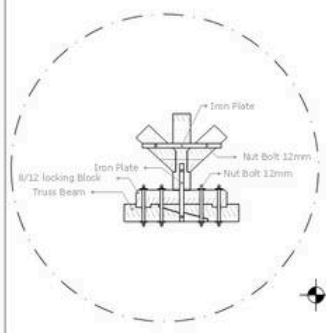
SCALE

1 :50

NOTE

SCORE





Detail A

Pray Room Section A-A

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

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Los Marise Paradise

DRAWN BY

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STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

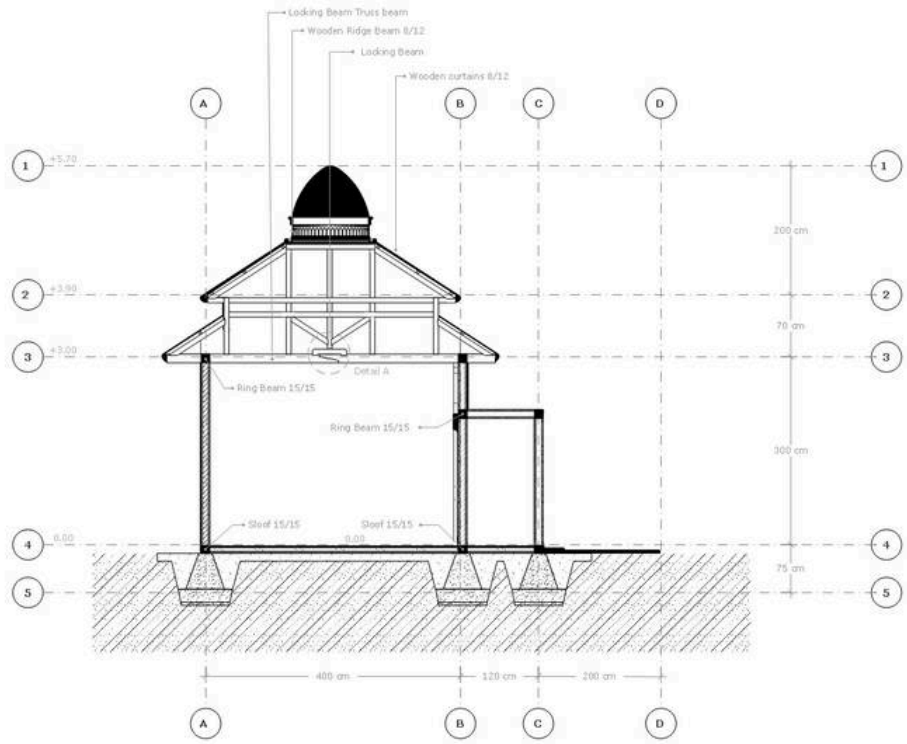
Pray Room Section A-A

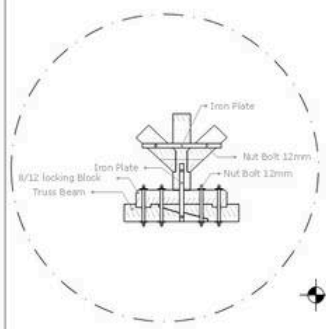
SCALE

1:50

NOTE

SCORE





Detail A

Pray Room Section B-B

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

Pray Room Section B-B

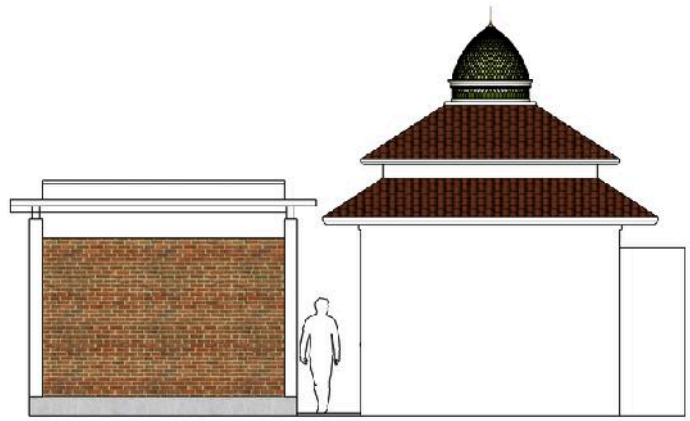
SCALE

1:50

NOTE

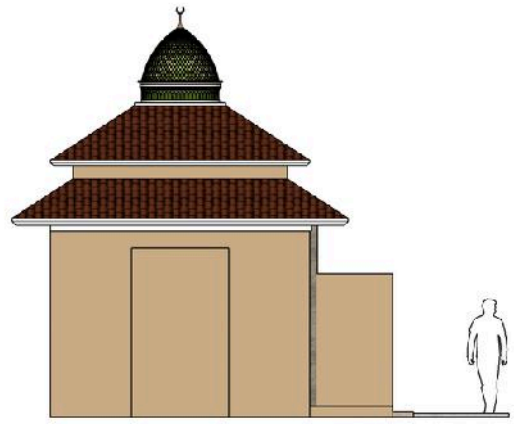
SCORE

Front View Pray Room



Rear View Pray Room

Right View Pray Room



Left View Glamping

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512152

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

Elevation Pray Room

SCALE

1 :50

NOTE

SCORE

3D Axonometry Cafetaria
Scale: 1:50

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

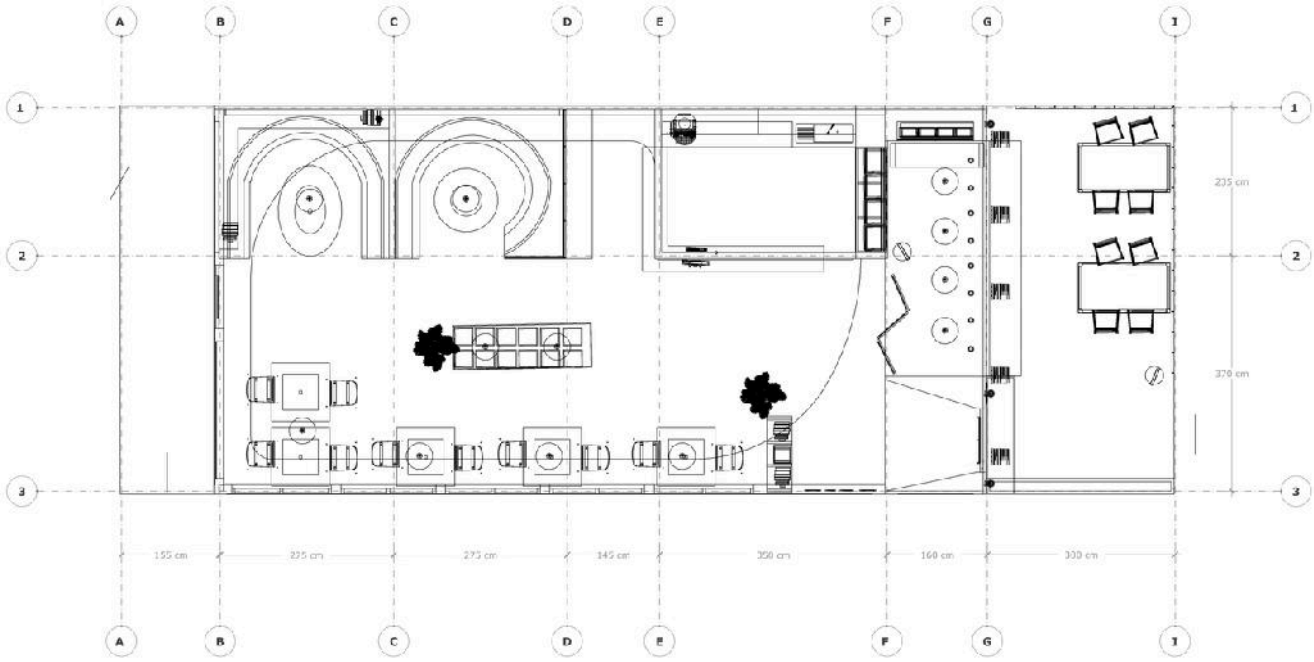
3D Axonometry Cafetaria

SCALE

1 :50

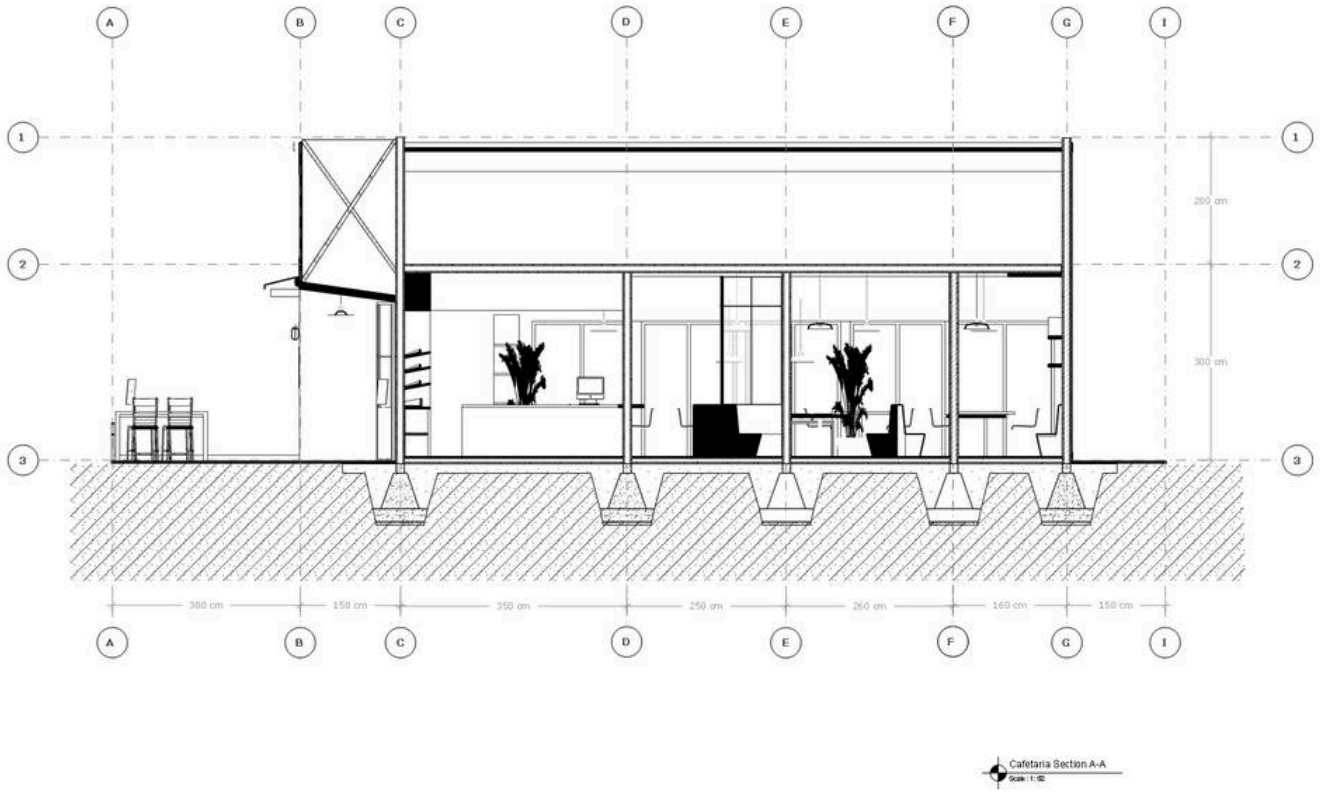
NOTE

SCORE



Faculty of Civil Engineering and Planning

SUBJECT	Final Architectural Design Studio
PROJECT TITLE	Los Marise Paradise
DRAWN BY	Abid Hanif Dhiya U.S.
STUDENT ID	20512162
LECTURER	Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT	
TITLE	Cafetaria Plan
SCALE	1:50
NOTE	
SCORE	



Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

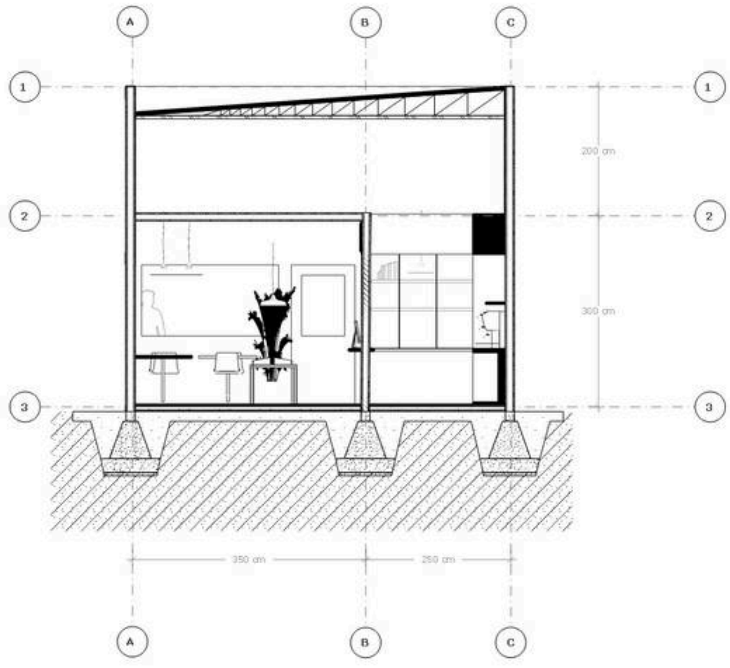
Cafetaria Section A-A

SCALE

1 :50

NOTE

SCORE



Cafetaria Section B-B

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

Cafetaria Section B-B

SCALE

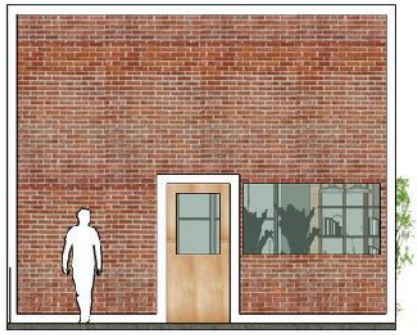
1 :50

NOTE

SCORE

Cafetaria Right View

Cafetaria Front View



Cafetaria Left View

3D Axonometry Cafetaria

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marisa Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

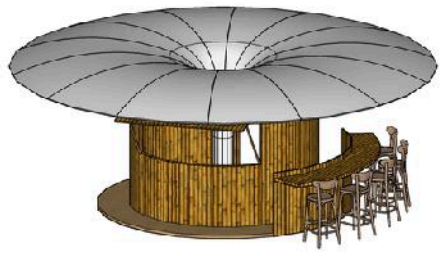
Elevation Cafetaria

SCALE

1 :50

NOTE

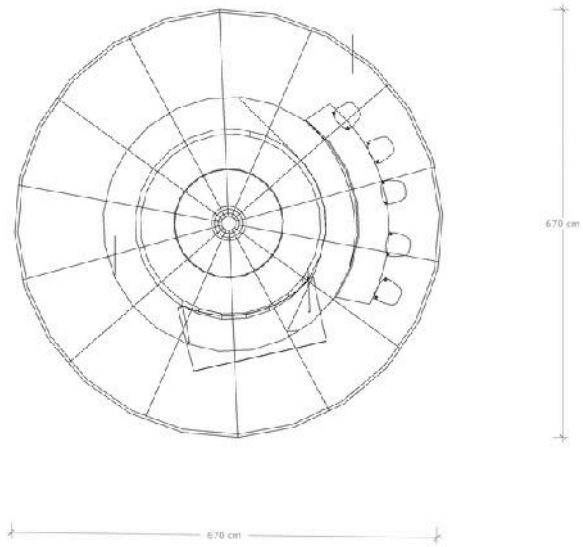
SCORE



Front Stall 3D Axonometry
Scale: 1:50

Faculty of Civil Engineering and Planning

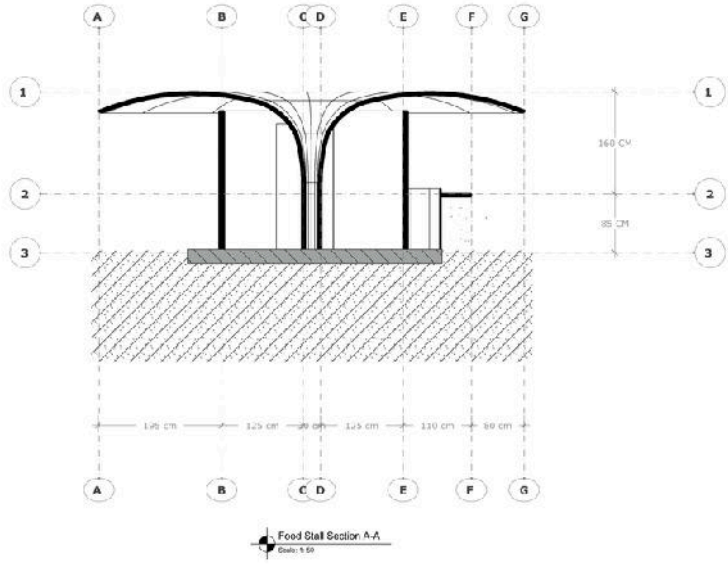
SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Food Stall 3D Axonometry
SCALE
1:50
NOTE
SCORE



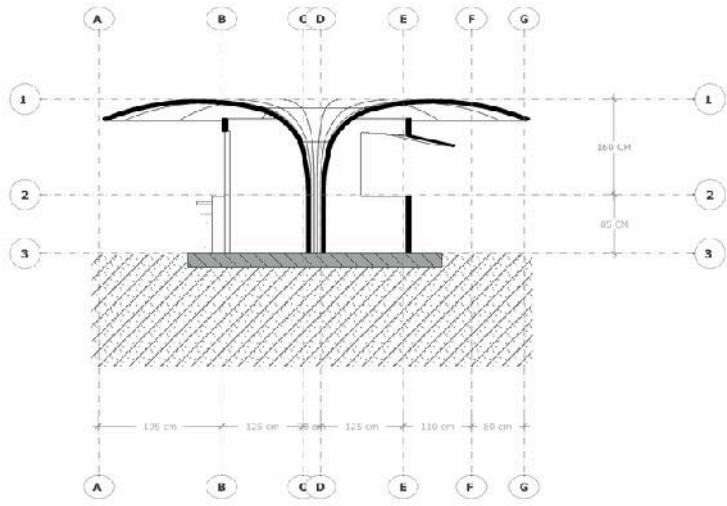
Front Stall Plan
Scale: 1:50

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Food Stall Plan
SCALE
1 :50
NOTE
SCORE



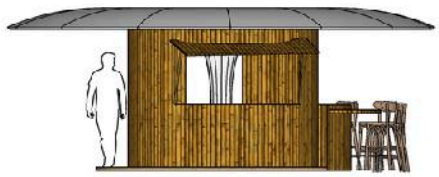
Food Stall Section A-A



Food Stall Section B-B

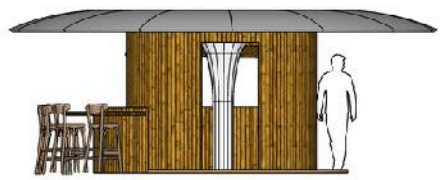
Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Food Stall Section
SCALE
1:50
NOTE
SCORE

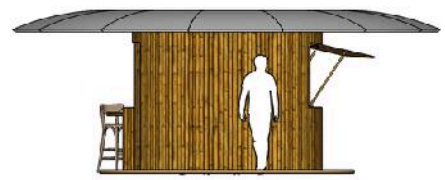


Food Stall Front View

Food Stall Rear View



Food Stall Right View



Food Stall Left View

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

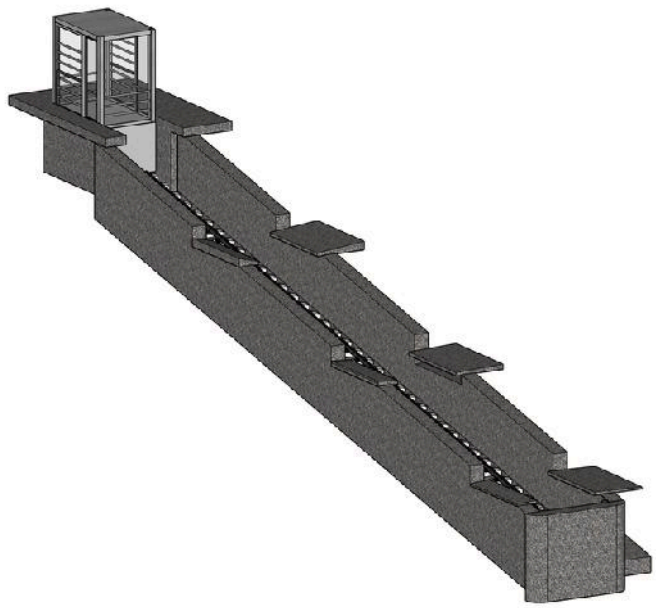
Food Stall Front View

SCALE

1 :50

NOTE

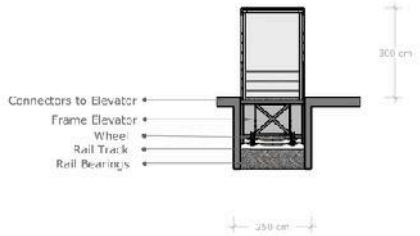
SCORE



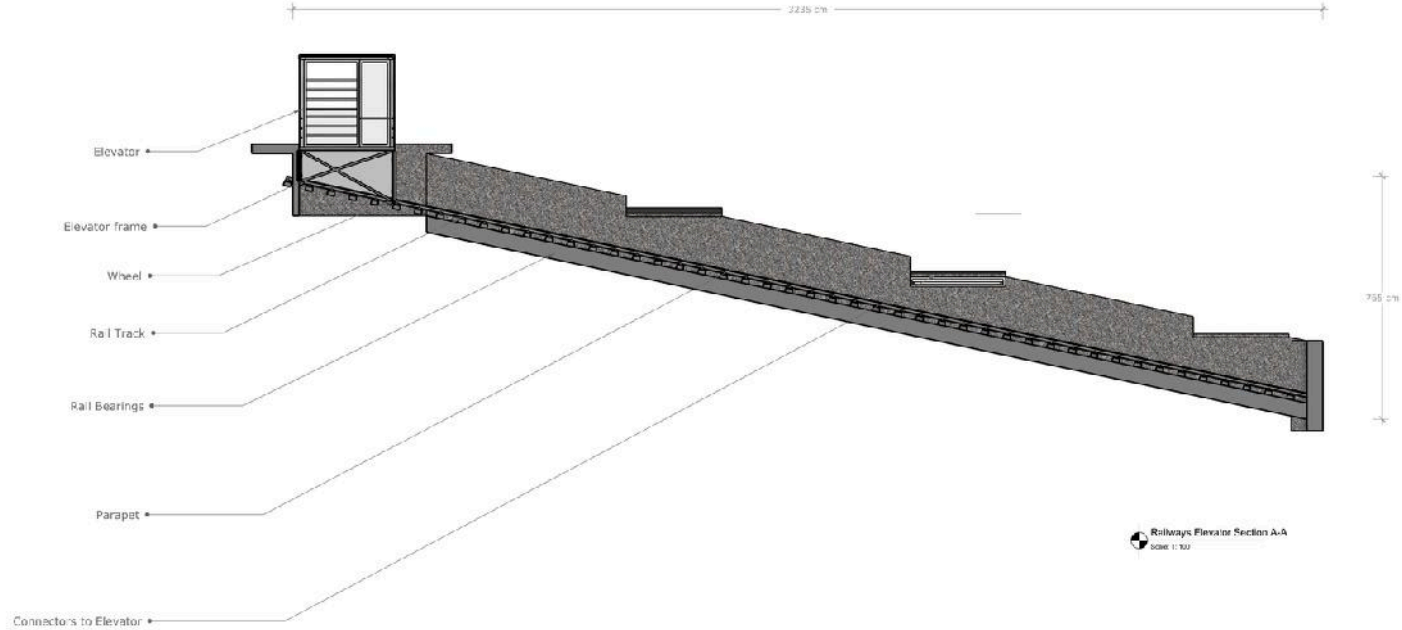
3D Axonometry Railways Elevator
Scale 1:100

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
3D Axonometry Railways Elevator
SCALE
1:100
NOTE
SCORE



Railways Elevator Section B-B
Scale 1: 100



Railways Elevator Section A-A
Scale 1: 100

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

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Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

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LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

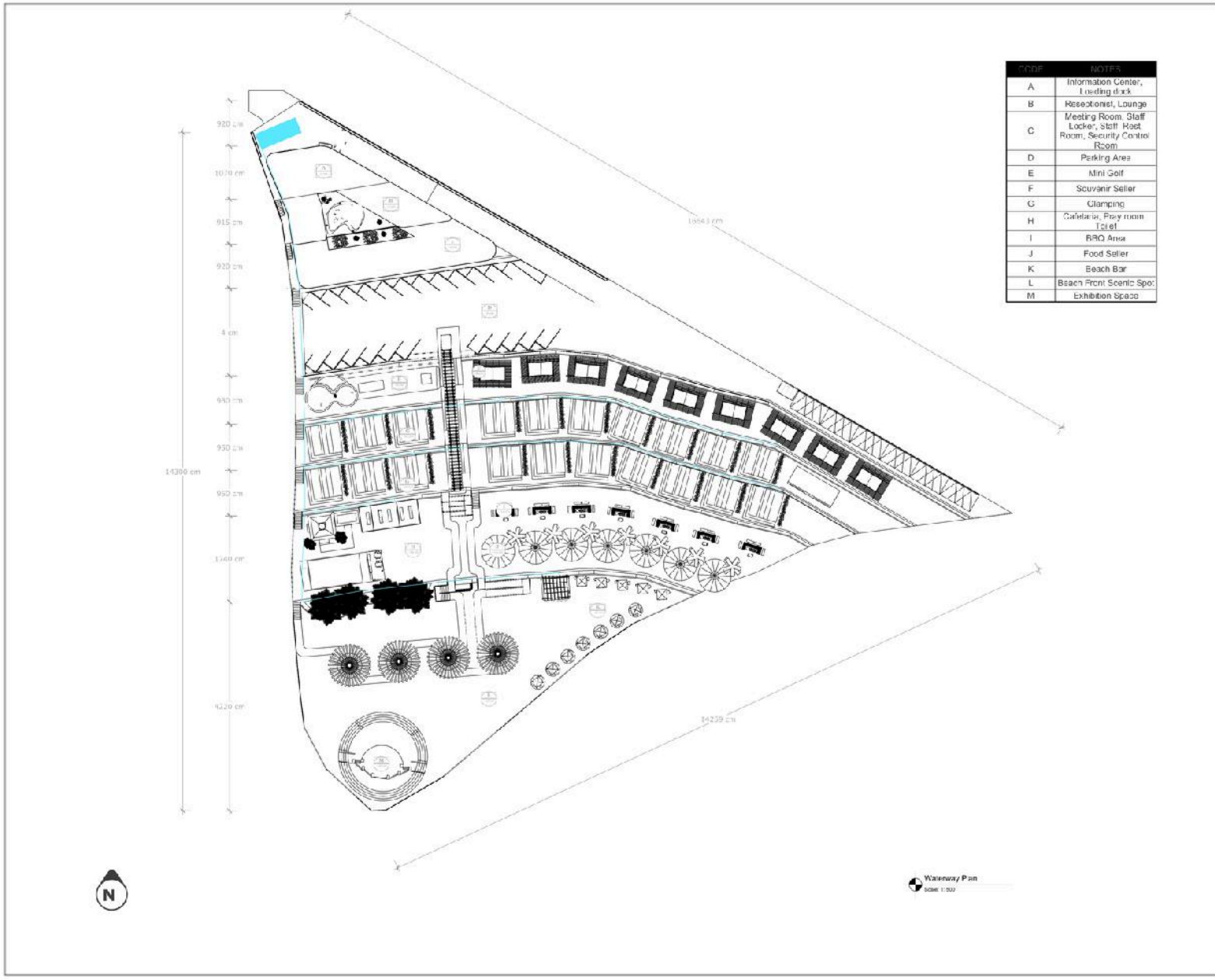
Railways Elevator Section

SCALE

1 :100

NOTE

SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
E	Mini Golf
F	Souvenir Seller
G	Glamping
H	Cafetaria, Play room Toilet
I	BBQ Area
J	Food Seller
K	Beach Bar
L	Beach Front Scenic Spot
M	Exhibition Space

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

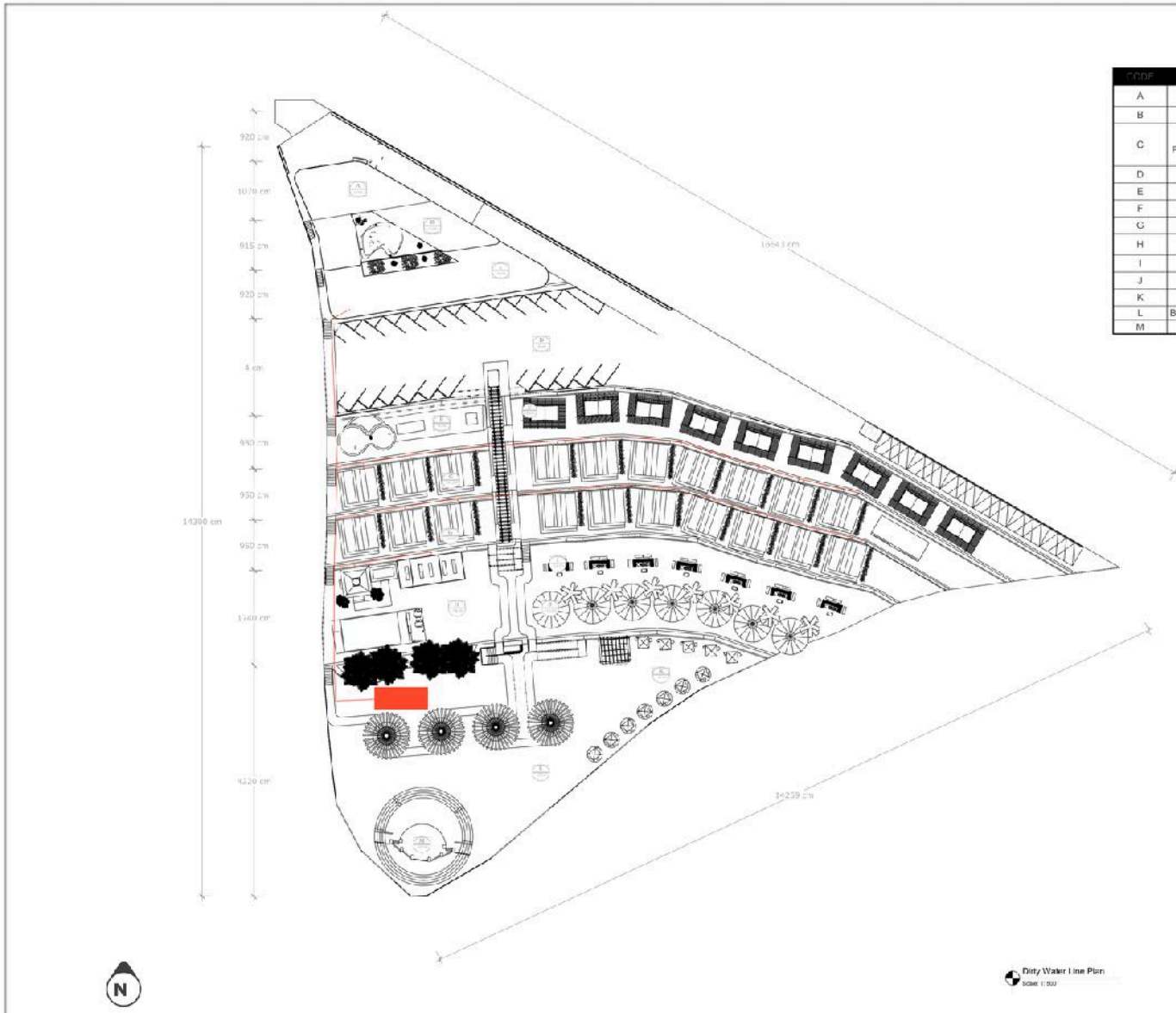
Waterway Plan

SCALE

1:500

NOTE

SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
E	Mini Golf
F	Souvenir Seller
G	Glamping
H	Cafetaria, Play room Toilet
I	BBQ Area
J	Food Seller
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L	Beach Front Scenic Spot
M	Exhibition Space

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

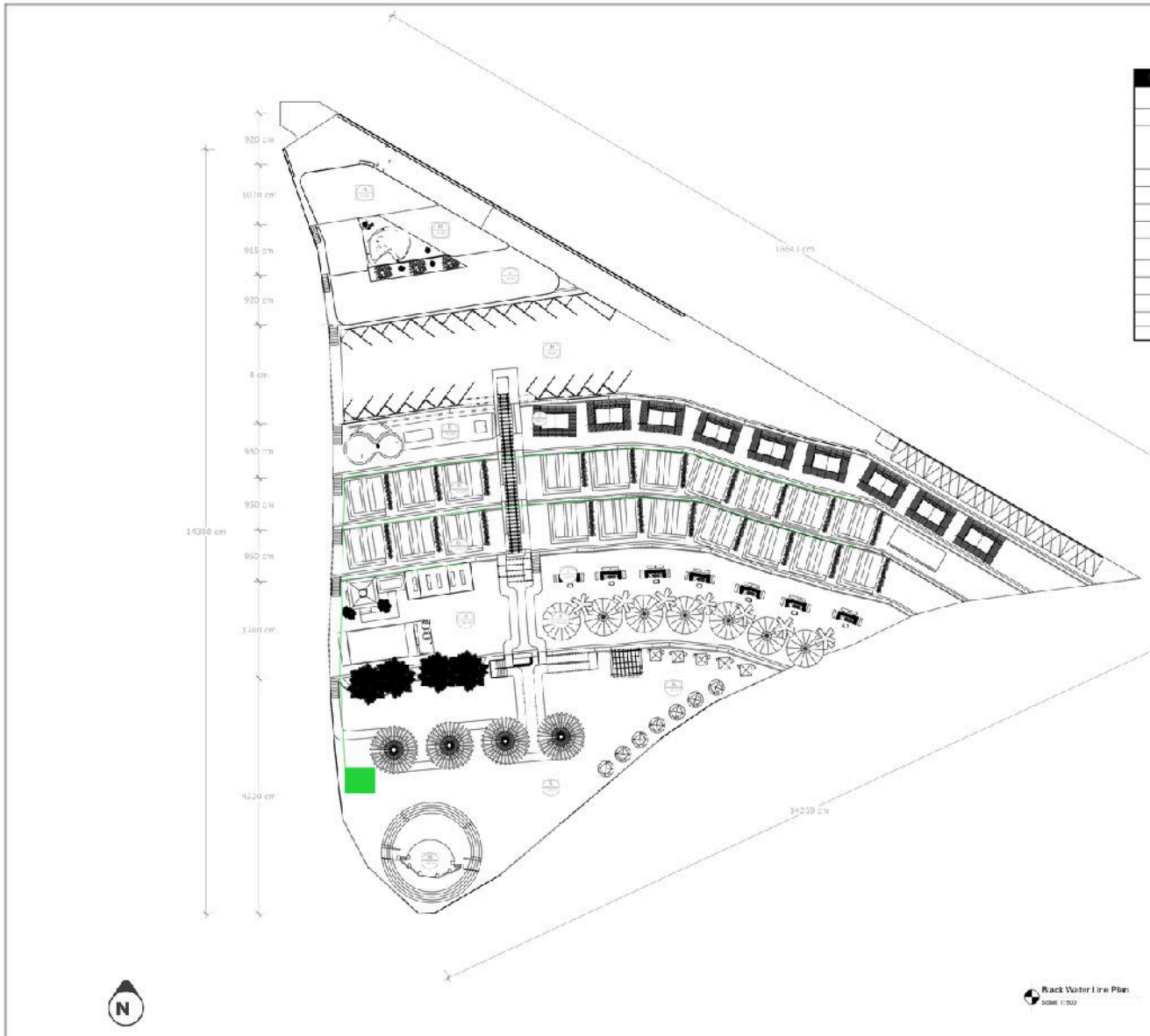
Dirty Water Line Plan

SCALE

1:500

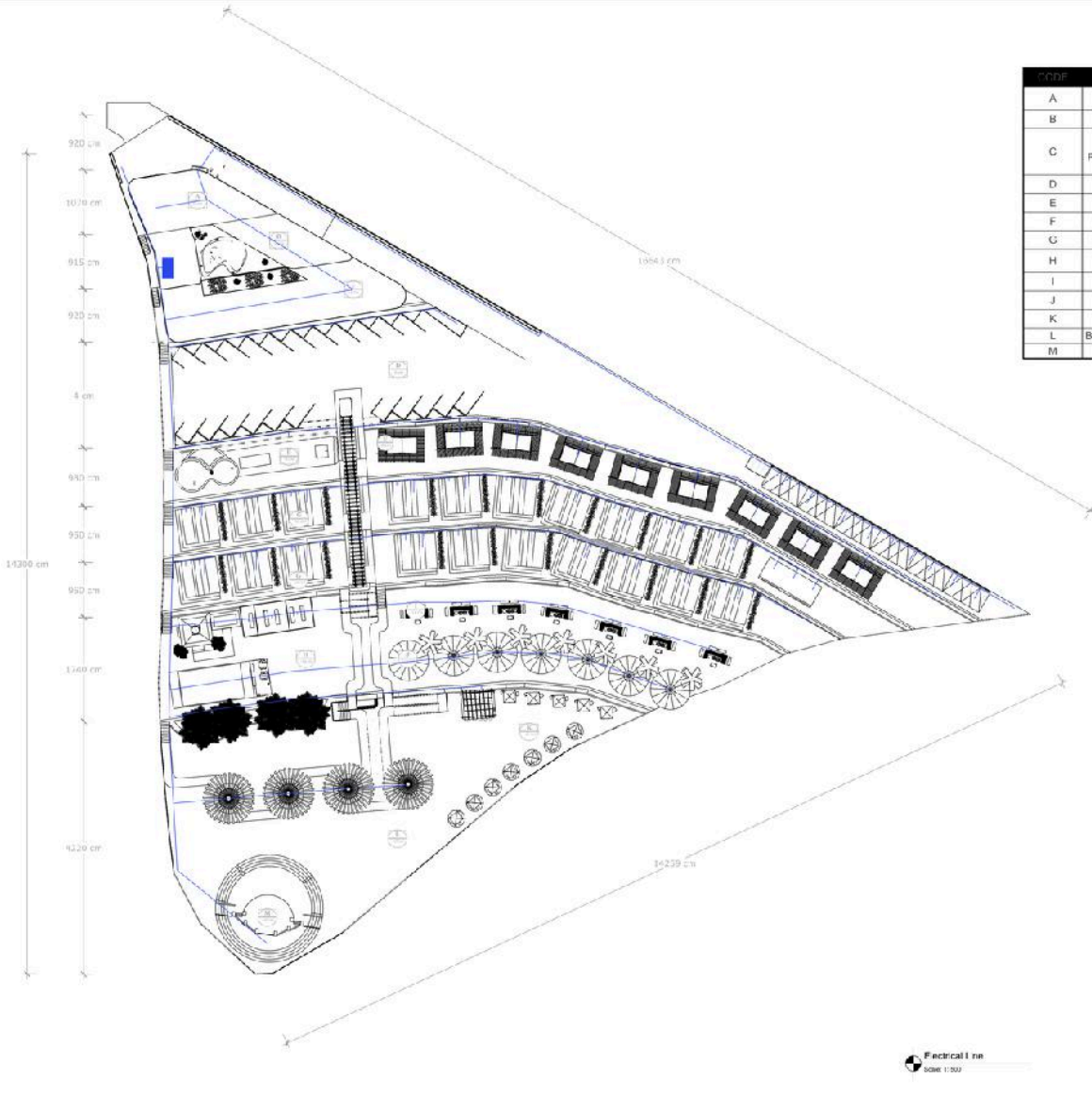
NOTE

SCORE



Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Black Water Line Plan
SCALE
1:500
NOTE
SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
E	Mini Golf
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Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

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Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

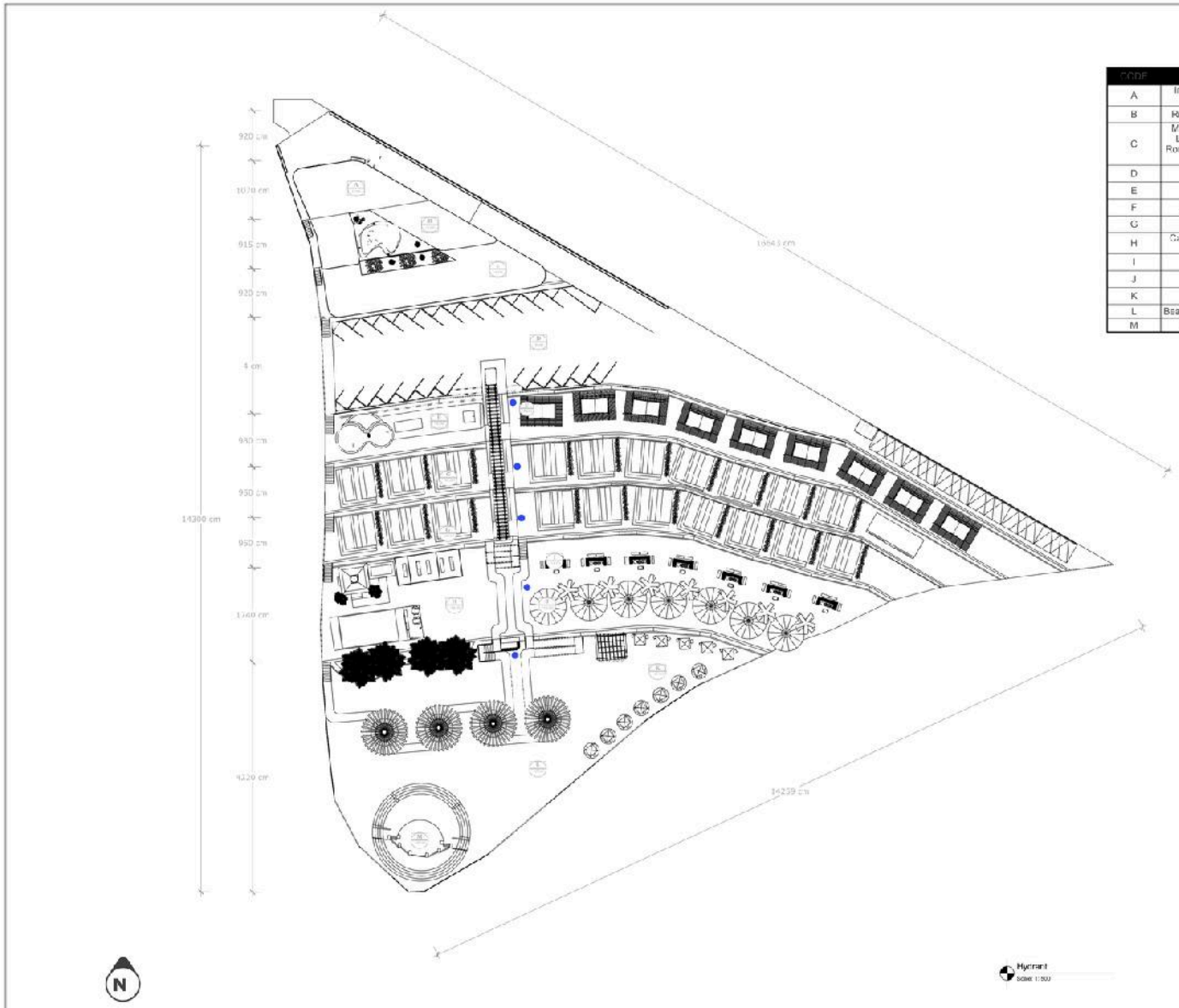
Electrical Line

SCALE

1:500

NOTE

SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
D	Parking Area
E	Mini Golf
F	Souvenir Seller
G	Glamping
H	Cafetaria, Play room Toilet
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L	Beach Front Scenic Spot
M	Exhibition Space

Faculty of Civil Engineering and Planning

SUBJECT

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Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

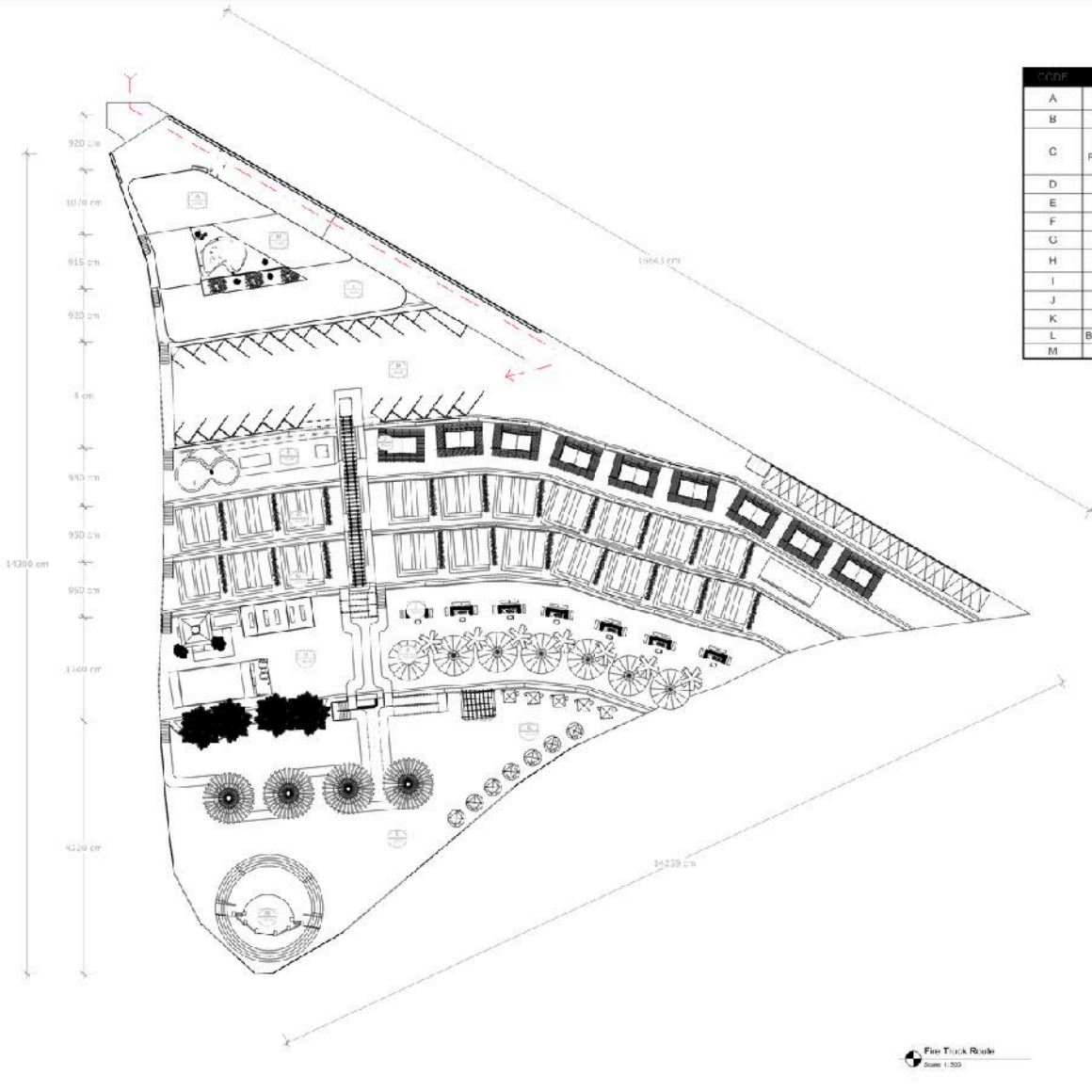
Hydrant

SCALE

1:500

NOTE

SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
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J	Food Seller
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L	Beach Front Scenic Spot
M	Exhibition Space

Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512152

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

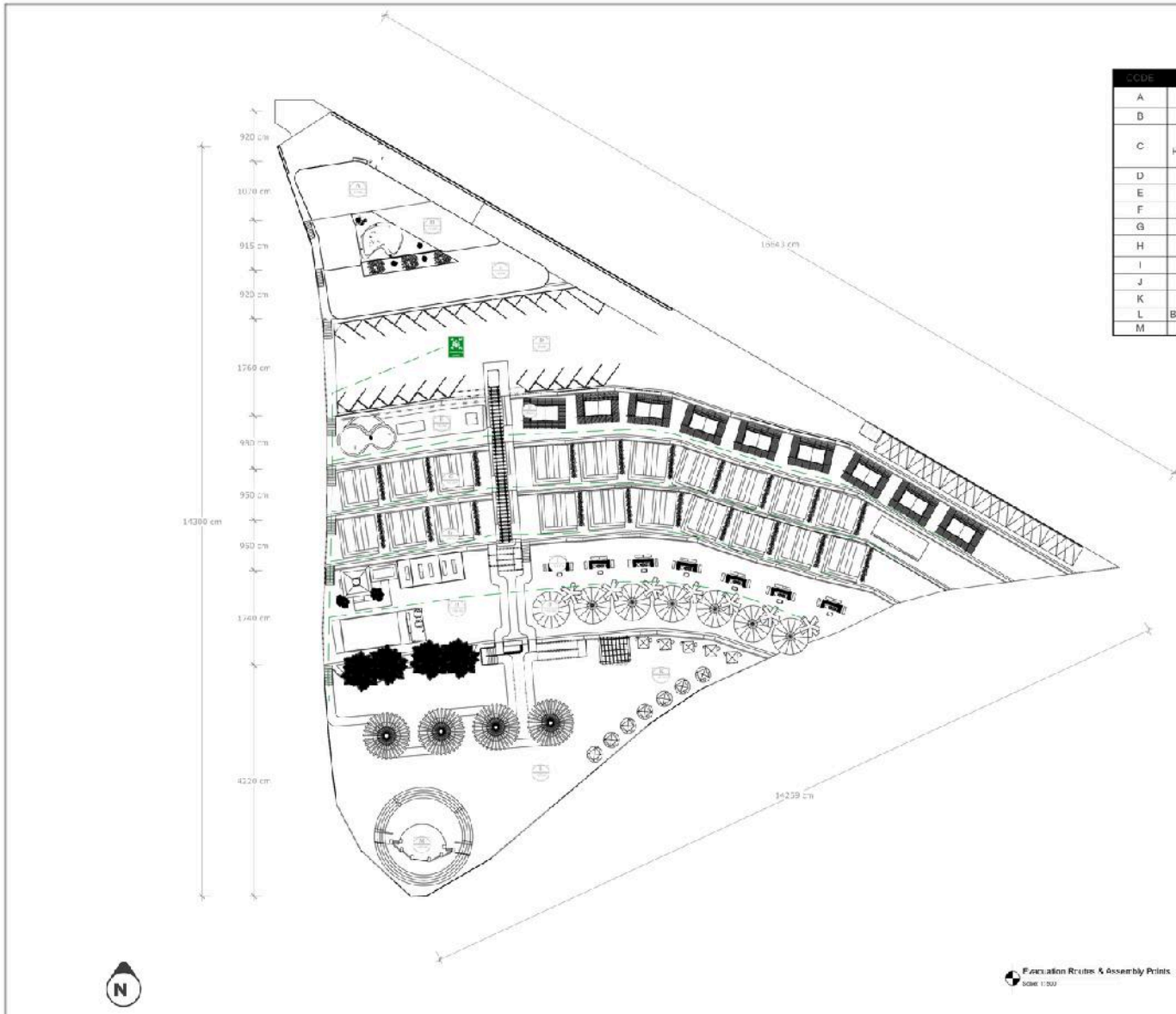
Fire Truck Route

SCALE

1:500

NOTE

SCORE



CODE	NOTES
A	Information Center, Loading dock
B	Reseptionist, Lounge
C	Meeting Room, Staff Locker, Staff Rest Room, Security Control Room
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E	Mini Golf
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G	Glamping
H	Cafetaria, Pray room, Toilet
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Faculty of Civil Engineering and Planning

SUBJECT

Final Architectural Design Studio

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Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

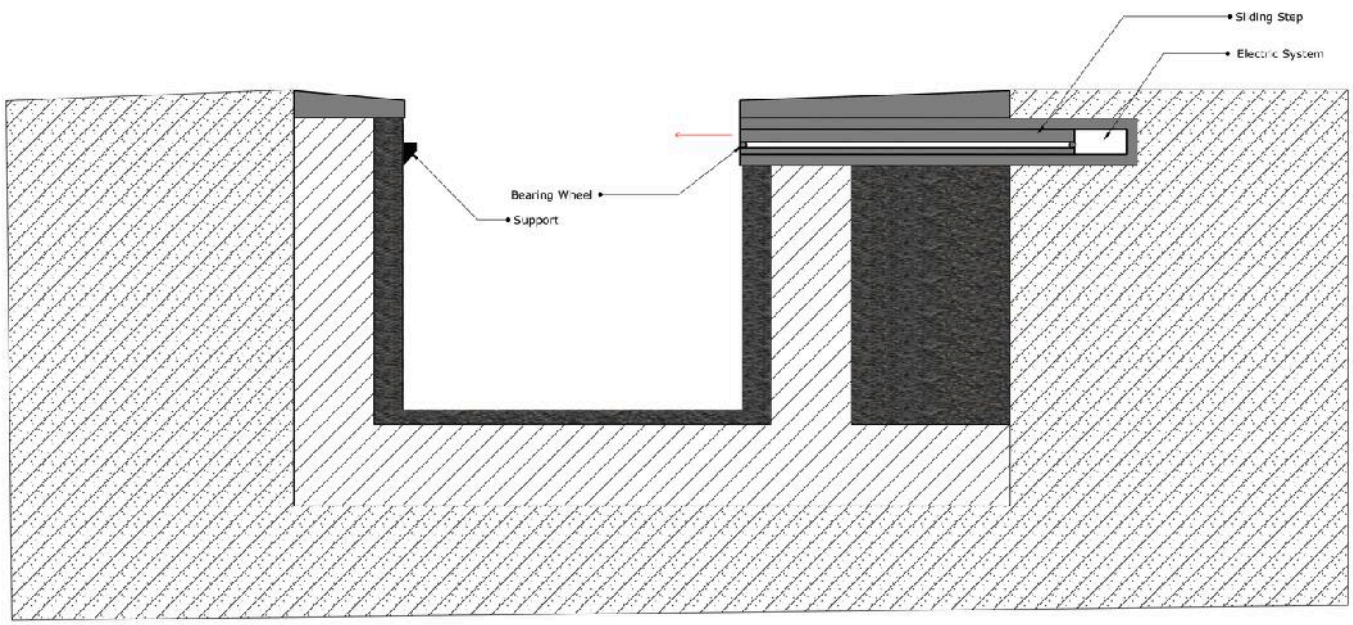
Evacuation Routes & Assembly Points

SCALE

1:500

NOTE

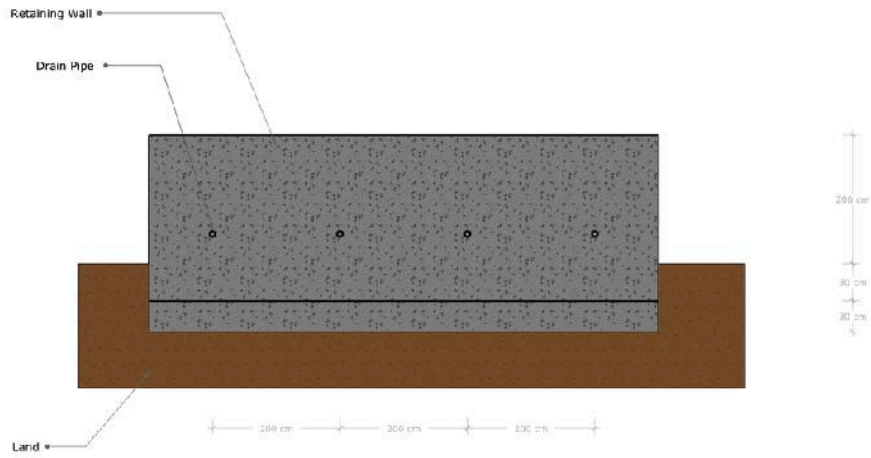
SCORE

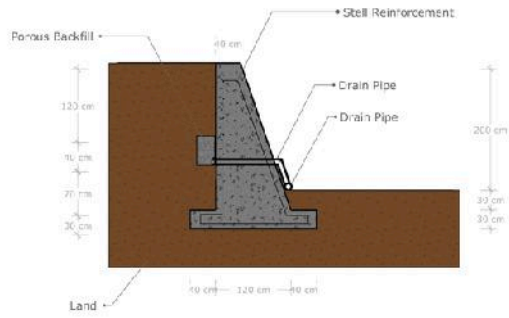


Electrical Sliding Step

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
20512162
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Electrical Sliding Step
SCALE
1 :20
NOTE
SCORE





Detail Retaining Wall
Scale 1:50

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SUBJECT

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PROJECT TITLE

Los Marise Paradise

DRAWN BY

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Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

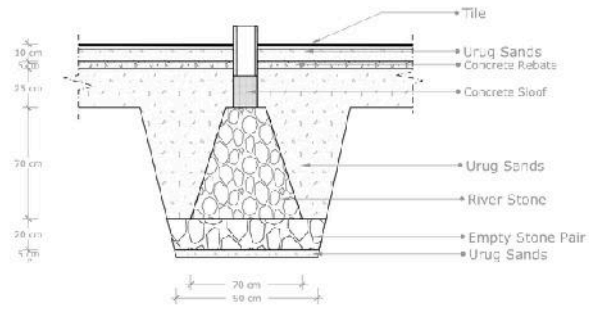
Detail Retaining Wall

SCALE

1 :50

NOTE

SCORE



Foundation Detail

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SUBJECT

Final Architectural Design Studio

PROJECT TITLE

Los Marise Paradise

DRAWN BY

Abid Hanif Dhiya U.S.

STUDENT ID

20512162

LECTURER

Ir. Hanif Budiman., M.T., Ph.D

ASSISTANT

TITLE

Foundation Detail

SCALE

NOTE

SCORE

Rendering 1

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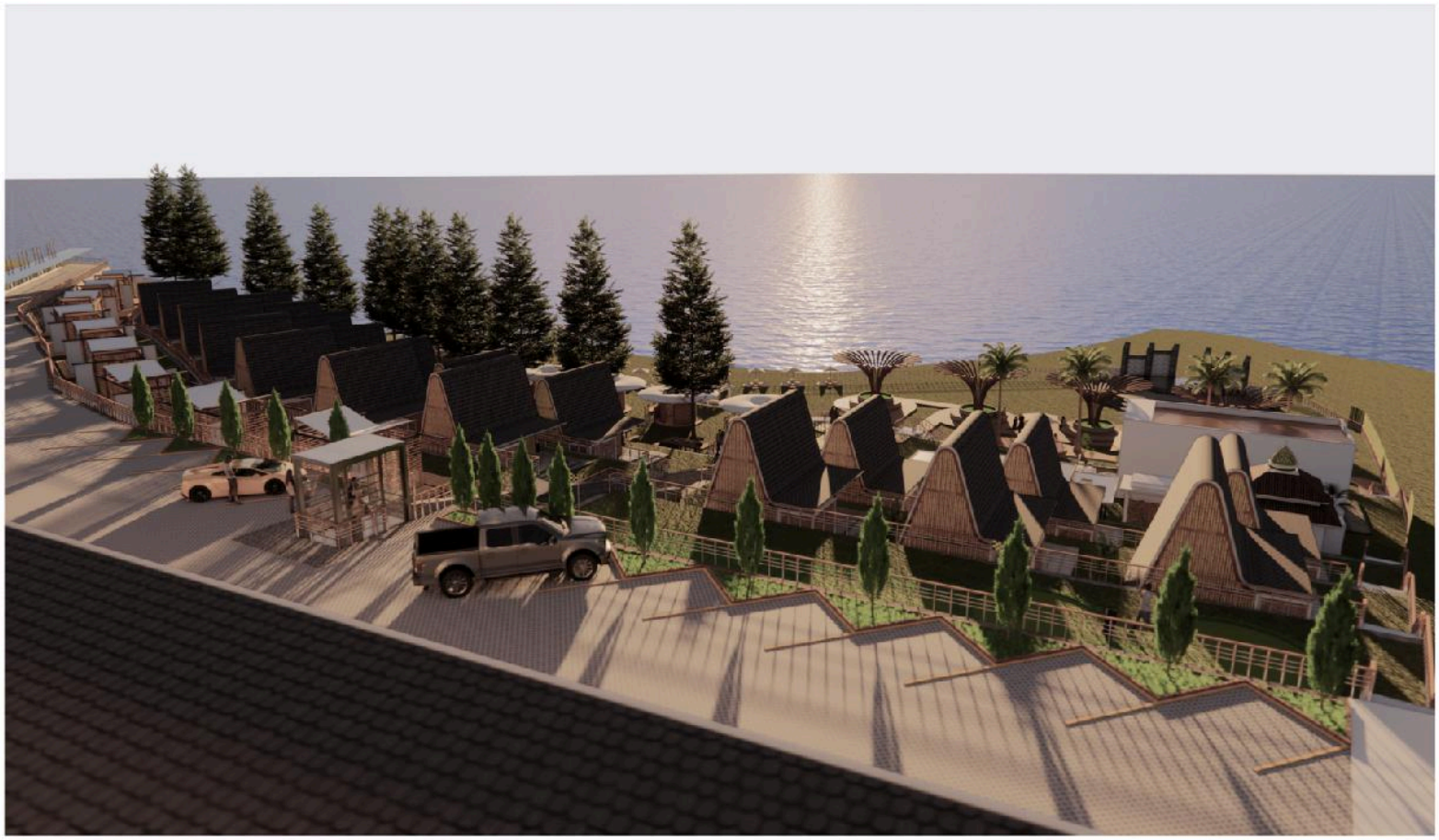
ASSISTANT
TITLE
Rendering 1
SCALE
NOTE
SCORE



Rendering 2

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SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
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20512162
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Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Rendering 2
SCALE
NOTE
SCORE

Rendering 3

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TITLE
Rendering 3
SCALE
NOTE
SCORE

Rendering 4

Faculty of Civil Engineering and Planning

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TITLE
Rendering 4
SCALE
NOTE
SCORE

Rendering 5

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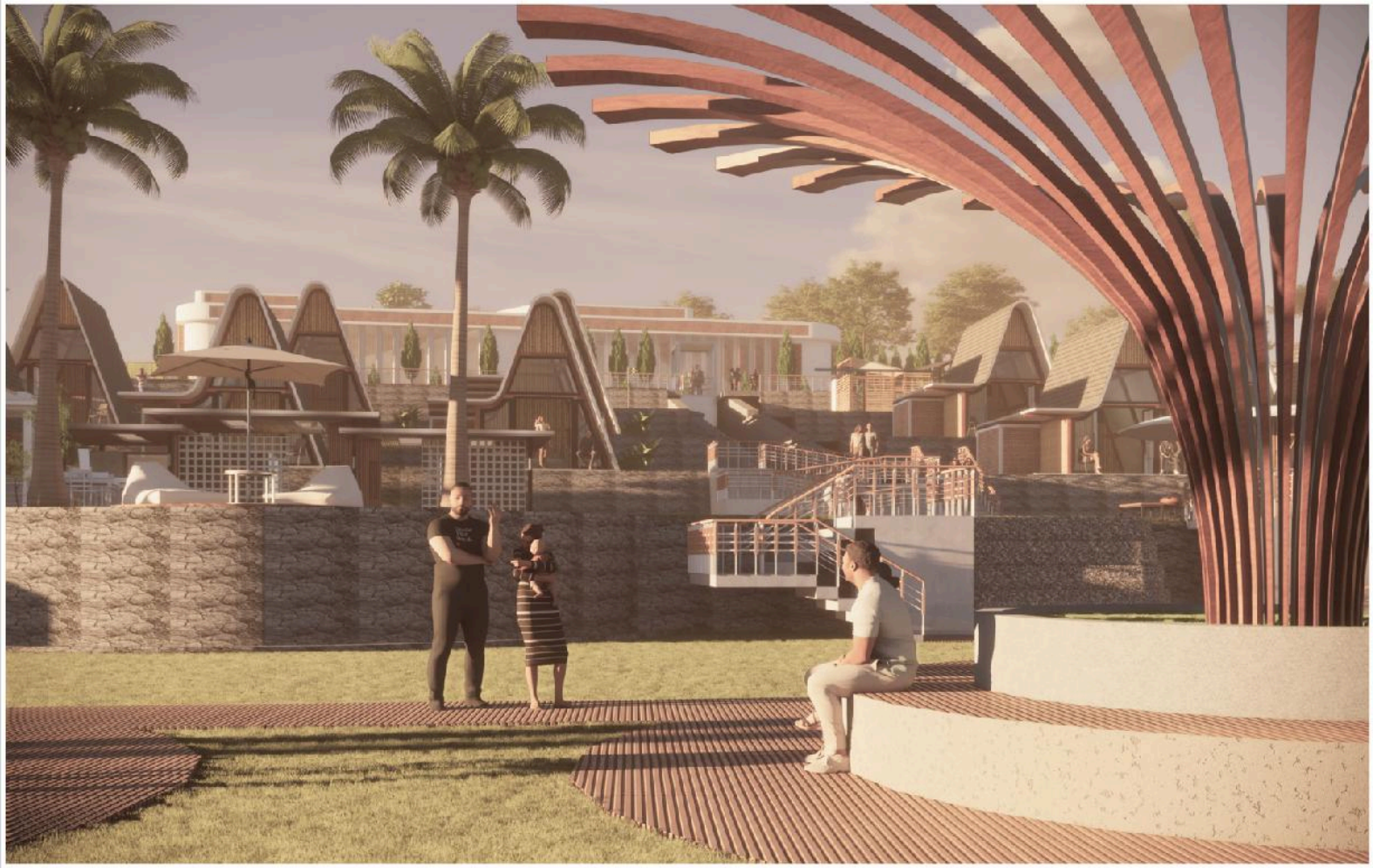
ASSISTANT
TITLE
Rendering 5
SCALE
NOTE
SCORE



Rendering 5

Faculty of Civil Engineering and Planning

SUBJECT
Final Architectural Design Studio
PROJECT TITLE
Los Marise Paradise
DRAWN BY
Abid Hanif Dhiya U.S.
STUDENT ID
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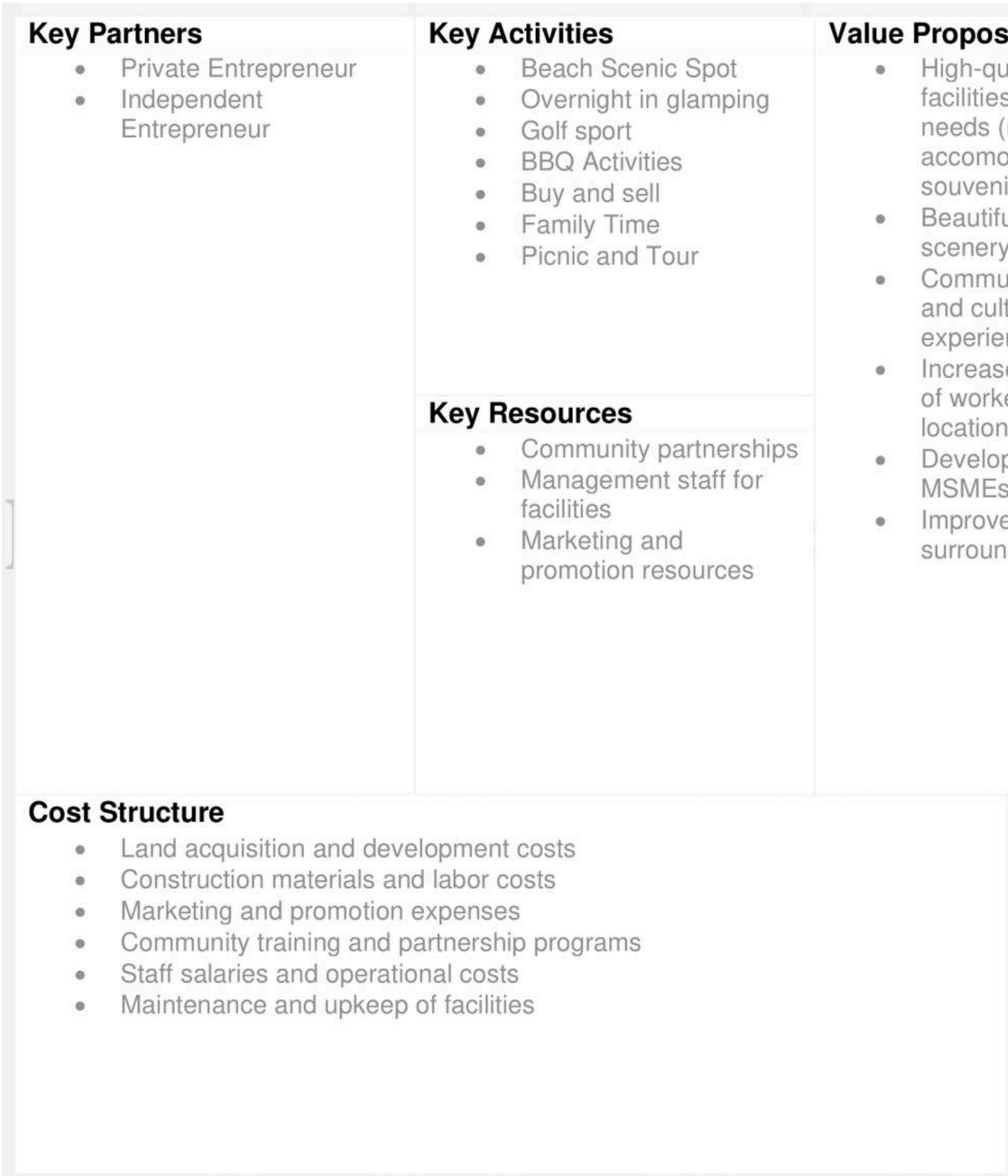
LECTURER
Ir. Hanif Budiman., M.T., Ph.D
ASSISTANT
TITLE
Rendering 6
SCALE
NOTE
SCORE

05

Chapter 5 : Design Test Result

5.1 Bussines Model Canvas



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Value Propositions

- High-quality tourist facilities by visitor needs (restaurants, accomodation, food & souvenir, etc.)
- Beautiful natural scenery of Soge Beach
- Community involvement and cultural experiences
- Increased employment of workers around the location
- Developing existing MSMEs
- Improvement of the surrounding economy

Customer Relationships

- Responsive customer service via online platforms and on site
- Positive and sustainable visitor experience

Channels

- Online travel agent
- Social media marketing
- Promotion of local tourism
- Community partnerships for promotion

Customer Segments

- Local travelers
- Domestic Tourists
- International Tourists (interested in ecotourism)
- Local Community (as participants and beneficiaries)

Revenue Streams

- Entry fee
- Golf
- Stall
- BBQ Area
- Income from restaurants
- Glamping accommodation costs
- Exhibitions
- laundry

5.2 Preliminary Cost Estimate

No		Uraian	vol	sat	KUALITAS RENDAH (LOW AVERAGE) standar	KUALITAS RENDAH (LOW AVERAGE) jumlah harga	KUALITAS MENENGAH (MED.AVERAGE) standar	KUALITAS MENENGAH (MED.AVERAGE) jumlah harga	KUALITAS BAIK (HIGH AVERAGE) standar	KUALITAS BAIK (HIGH AVERAGE) jumlah harga
I	**BANGUNAN (building cost)**									
	A. STANDAR	a. Building Staff	550	m2	Rp 3,000,000.00	Rp 1,650,000,000.00	Rp 3,750,000.00	Rp 2,062,500,000.00	Rp 4,500,000.00	Rp 2,475,000,000.00
		b. Glamping	100	m2	Rp 3,000,000.00	Rp 300,000,000.00	Rp 3,750,000.00	Rp 375,000,000.00	Rp 4,500,000.00	Rp 450,000,000.00
		c. Entire building	1,834	m2	Rp 3,000,000.00	Rp 5,502,000,000.00	Rp 3,750,000.00	Rp 6,877,500,000.00	Rp 4,500,000.00	Rp 8,253,000,000.00
		jumlah luas	**2484**	m2	**Jumlah A**	Rp 7,452,000,000.00		Rp 9,315,000,000.00		Rp 11,178,000,000.00
					Jumlah B	Rp -		Rp -		Rp -
					Jumlah I (A+B)	Rp 7,452,000,000.00		Rp 9,315,000,000.00		Rp 11,178,000,000.00
II	**PERSIAPAN LAHAN (*SITE DEVELOPMENT*)**									
		a Cutting Land	2000	m3	Rp 50,000.00	Rp 100,000,000.00	Rp 50,000.00	Rp 100,000,000.00	Rp 50,000.00	Rp 100,000,000.00
		Filling Land	2000	m3						
		d Retainning wall	697	m3	Rp 450,000.00	Rp 313,650,000.00	Rp 450,000.00	Rp 313,650,000.00	Rp 450,000.00	Rp 313,650,000.00
					Jumlah II	Rp 413,650,000.00		**Rp 413,650,000.00**		**Rp 413,650,000.00**
III	**LANSEKAP**	a Parking Portal	2	u	Rp 3,000,000.00	Rp 6,000,000.00	Rp 3,500,000.00	Rp 7,000,000.00	Rp 4,000,000.00	Rp 8,000,000.00
		b Motorcycle Parking Canopy	135	m2	Rp 2,000,000.00	Rp 270,000,000.00	Rp 2,500,000.00	Rp 337,500,000.00	Rp 3,000,000.00	Rp 405,000,000.00
		c Pavement Parking	2,195	m2	Rp 120,000.00	Rp 263,400,000.00	Rp 120,000.00	Rp 263,400,000.00	Rp 150,000.00	Rp 329,250,000.00
		d Pipe 6 inch	755	m1	Rp 400,000.00	Rp 400,000.00	Rp 400,000.00	Rp 400,000.00	Rp 400,000.00	Rp 400,000.00
		e Garden	221	m2	Rp 100,000.00	Rp 22,100,000.00	Rp 150,000.00	Rp 33,150,000.00	Rp 200,000.00	Rp 44,200,000.00
		f Ramp	60	m2	Rp 600,000.00	Rp 36,000,000.00	Rp 600,000.00	Rp 36,000,000.00	Rp 600,000.00	Rp 36,000,000.00
		g Stairs	50	m2	Rp 400,000.00	Rp 20,000,000.00	Rp 400,000.00	Rp 20,000,000.00	Rp 400,000.00	Rp 20,000,000.00
		h Small Pine Tree	106	u	Rp 150,000.00	Rp 15,900,000.00	Rp 150,000.00	Rp 15,900,000.00	Rp 150,000.00	Rp 15,900,000.00
		i Large Pine Tree	11	u	Rp 500,000.00	Rp 5,500,000.00	Rp 750,000.00	Rp 8,250,000.00	Rp 1,000,000.00	Rp 11,000,000.00
					Jumlah III	Rp 639,300,000.00		**Rp 721,600,000.00**		**Rp 869,750,000.00**
		Total Physical Construction Cost (I+II+III)				Rp 8,504,950,000.00		Rp 10,450,250,000.00		Rp 12,461,400,000.00
	PAJAK/TAX	PPN 10%				Rp 850,495,000.00		Rp 1,045,025,000.00		Rp 1,246,140,000.00
						Rp 9,355,445,000.00		Rp 11,495,275,000.00		Rp 13,707,540,000.00
IV	**JASA PROFESIONAL (professional fee)**									
		a Planning Consultant	7	%		Rp 700,000,000.00		Rp 700,000,000.00		Rp 700,000,000.00
		b UKL/UPL Consultant				Rp 50,000,000.00		Rp 50,000,000.00		Rp 50,000,000.00
V										
	PERIJINAN (administrative cost)									
		Perijinan (ijin lokasi, IMB)	5‰			Rp 42,524,750.00		Rp 52,251,250.00		Rp 62,307,000.00
VI		**TOTAL CONSTRUCTION COST**				**Rp 10,147,969,750.00**		**Rp 12,297,526,250.00**		**Rp 14,519,847,000.00**
		average cost per sq meter				Rp 4,085,334.04		Rp 4,950,694.95		Rp 5,845,349.03

5.3 Payback Period

Ticketing
Max 150 pax (per pax Rp 50.000) x 30 day x 60% = Rp 135.000.000. / Month

Glamping
Rp 800.000 x 30 day x 60% = Rp 14.400.000.00 / Month

Mini Golf
Rp 1.650.000 x 30 day x 60 % = 29.000.000 / Month

BBQ Area
Max 7 pax (Per pax) Rp 400.000 x 30 day x 60 % = Rp 140.000.000 / Month

Cafetaria
Max 100 pax (per pax Rp 50.000) x 30 day x 60 % = Rp. Rp 90.000.000 / Month

Food Stall
7 unit x Rp 500.000 = Rp 3.500.000 / Month

Souvenir Stall
8 unit x Rp 500.00 = Rp 4.500.000 / Month

Beach Bar
Max 100 pax (per pax Rp 100.000 x 30 day x 60 % = Rp 180.000.000 / Month

Beach Scenic Spot
7 unit x Rp 50.000 x 30 x 60% = Rp 6.300.000

Total Monthly Gross Profit = **Rp 602.700.000 -** Employee salaries and maintenance 50% **= Rp 301.350.000**

Net profi**t = Rp. 301.350.000 / Month**

Low Average : Rp 10.147.969.750
Medium Average : Rp 12.297.526.250
High Average :Rp 14.519.847.000

Low Average : 34 Month
Medium Average : 41 Month
High Average :Rp 49 Moth

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