

Landscape Planning of Pondok Tahfidz with Islamic Garden Concept in Durin Simbelang A Village, Pancur Batu

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ABSTRACT

Pancur Batu is one of the districts in Deli Serdang, with the majority of the population being Muslim. But from a large number of the Muslim population, the facilities to channel the spiritual needs of Muslims are relatively few. There are fewer mosques than churches, and schools that teach Islamic knowledge, such as Madrasahs and tahfidz houses, are also relatively few. This research aims to design the landscape of the tahfidz hut area as a place to channel the spiritual needs of Muslims which contain open space, a tahfidz Qur'an building, a place of Muslim worship (Mosque), a coaching area for tahfidz Qur'an students and Muslim visitors. Islamic garden is a concept adopted from the depiction of the beauty of heaven in the Qur'an towards a landscape character. The research method used in this research is the site inventory method, then comparative studies of similar projects, literature studies, and data analysis techniques. The results of this research are in the form of working drawings that include basic concepts, design concepts, and development concepts. The output of landscape planning of Tahfidz boarding school consists of a site plan and illustration drawing. The result of Islamic garden-based landscape planning is to plan a landscape that can be enjoyed optimally and can have a good influence on humans and has sharia rules or restrictions on elements, characters, and activities in Islamic gardens that aim not to associate with Allah SWT.

Keywords: Islamic garden, landscape planning, tahfidz.



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1 Introduction

Deli Serdang is a regency in the province of Sumatera Utara, Indonesia. Deli Serdang regency has the largest population by regency in Sumatera Utara province, with most of the population faith in Islam. Among the many residents of Deli Serdang Regency who adhere to Islam, there is one sub-district with an almost equal number of Muslims and Christians, Pancur Batu District. The majority of the population of Pancur Batu District adheres to Islam, followed by Christianity in second place [1].

However, the number of worship places for a large population of Muslim people is relatively small compared to Christian houses of worship. There are few facilities to distribute spiritual needs for Muslims and Islamic schools, such as Madrasahs and Tahfidz boarding schools. Based on the Statistics of Deli Serdang Regency, Pancur Batu district, in 2022, the number of Muslim worship houses in Pancur Batu district is 95 buildings, including 58 mosques and 37 mushola (prayer rooms).

Indonesia is country that has the largest Muslim population in the world but of the majority Muslim population in Indonesia [2], many are not able to read the Qur'an. Among many Muslims in Indonesia, only 35 percent, or the equivalent of 80 million Muslims, can read the Qur'an [3]. The memorization of the

Qur'an, or the Tahfidz Quran, in Indonesia is also relatively small compared to other Islamic countries. Memorizing the Qur'an is highly recommended by the Prophet Muhammad because, in addition to conservation, memorizing the verses is a commendable job, and a noble deed [4]. The word Al-Qur'an means: The holy book of Muslims which contains the words of Allah SWT revealed to the prophet Muhammad SAW by intermediary Angel Gabriel to be read, understood, and practiced as a guide or life guide for humankind. The definition above concludes that Tahfidz Al-Qur'an is an activity of remembering, memorizing, understanding as well, and maintaining the holy verses of the Qur'an perfectly [5]. Therefore, it is necessary to build a tahfidz boarding school as a means for Muslims to memorize the Qur'an, especially in Pancur Batu District, which has a majority Muslim population but few houses of worship and schools that teach Islamic knowledge, especially tahfidz boarding schools.

Islam is a religion revealed by Allah SWT as a religion of rahmatan lil 'alamin, which has regulated all aspects of life as a whole, including in the realm of architecture [6]. An Islamic garden is a garden form that is heavily inspired by the depiction of paradise in the verses of the Quran and the hadiths of the Prophet Muhammad SAW [7]. A good landscape design can enhance the positive emotional effects of humans in it. This is due to the feeling of freedom brought about by the external environment, where limited behaviors can be more expressed outside the room. Such as running, shouting, choosing a rest area, sitting, and so on [8]. Therefore, Islamic Garden has criteria as a good garden because there is goodness following what is in the Qur'an and Hadiths. The Islamic garden character also provides a garden that is safe, comfortable, lovely, and has no ugliness in it.

Based on the above problems regarding the lack of facilities that can accommodate the activities of Muslims to worship and study Islam in Pancur Batu District, it is necessary to design an area that can accommodate various activities of Muslims with tahfidz school buildings, Islamic parks, houses of worship, and coaching areas for tahfidz students and Muslims around Pancur Batu District.

Islamic Garden according to Al-Qur'an and Hadiths

Art is beauty. It can appear in various forms and ways. Whatever the structure and method, as long as the direction leads humans to noble values, it is Islamic art [9]. The original law of garden planning and design in Islamic teachings is permissible as long as it does not contain forbidden things. The main limitations of these illegal things are things that associate fellowship with Allah SWT and do not benefit humans and nature. In addition, some elements and characters are prohibited from being used in Islamic gardens, such as statues, gold and silver materials, excessive things or activities, and especially the prohibition of associating fellowship with Allah SWT in any form [10]. The Sharia boundaries regarding character elements and activities in Islamic gardens are described in Table 1. Garden elements and designs in the Qur'an and hadith are described in Table 2.

Table 1 Shariah restrictions on character elements and activities in Islamic gardens [10]

Criteria	Sub-criteria	Search Results	
		Al-Qur'an	Hadiths
Prohibited Elements	Taking shapes that are similar to humans and animals, for example, a sculpture	1	62
	Using gold and silver materials	-	9
Prohibited Characters	Mixing good and bad	4	3
	Showing luxury and extravagance	4	10
Prohibited Activities	Associating partners with Allah SWT	55	91
	Neglecting the <i>sunnatullah</i>	2	-
	Destruction/vandalism	1	3
	Approaching fornication	3	40
	Eliminating benefits (waste)	2	5

Table 2 Garden elements and design in the Qur'an and hadiths [10]

Criteria	Sub-criteria	Keywords	Search Results		
			Al-Qur'an	Hadiths	
<i>(softscape)</i>	Water	River	40	33	
		Water	14	6	
	Vegetation and fruits	Fruit	22	11	
		Three	8	28	
Animal	Bird	-	10		
<i>(hardscape)</i>	Garden buildings	Place	11	7	
		Palace	1	22	
		House	2	43	
	Doors	Door	2	62	
		Pillow	2	-	
	Other Hard Elements	Rugs	3	2	
		Cots	9	-	
		Glass	5	7	
		Trophy	4	-	
		Plate	1	-	
		Vessel	1	5	
	Design elements	Colors	Green	4	7
			Gold	5	22
Silver			3	17	
White			1	5	
Red			-	2	
Sound		Sound	2	1	
		Hear	4	11	
Scent		Musk	1	16	
		Fragrant	-	11	
		Smell	-	12	

2 Methodology

2.1 Location and Size of Research Area

The planning area of the Tahfidz boarding school is located in Gang Buntu, Namorih Street, Durin Simbelang A Village, Pancur Batu District, Deli Serdang Regency, Sumatera Utara Province. The land or site area can be calculated through the Google Earth application by directly inventorying the site and determining the endpoints of the land. This area has a land area of approximately 12,510 m². The site location is described in Figure 1.

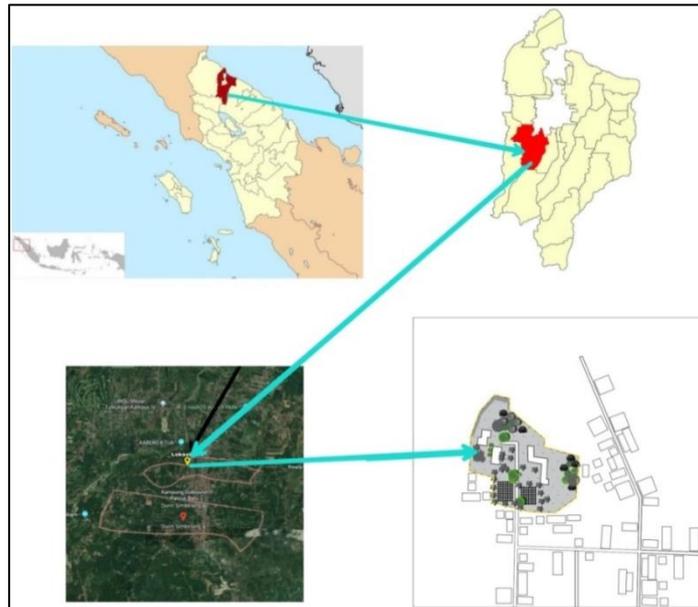


Figure 1 Site Location

(Source: Google earth and personal documents)

2.2 Research Methods

The research method used in the landscape planning of tahfidz houses in Pancur Batu district. The first thing to do in planning and designing a site is the process of data collection or inventory. To support research, information is needed from two types of data, namely primary data and secondary data. The data collected can be in the form of physical and biophysical aspects; the data obtained from this inventory stage is used in the analysis stage to determine the potential constraints on the site. The data inventory process can be done through field observations, literature studies, and comparative studies of projects and similar themes. Field observation determines the site's condition directly, including physical and biophysical conditions, landscape character and the surrounding environment, and activities carried out by users on the site. From the literature study results, secondary data was obtained as support that was not received from field observations. Literature studies were obtained from scientific journals, books, articles, print media, the Internet, and the Qur'an and hadiths. Then comparative studies with similar themes and projects supporting the writing and planning process are obtained from books, journals, and the Internet. This research refers to the design stages starting from the site selection stage, inventory, analysis/synthesis, and concept to produce the final result in the form of a digitally presented site plan and the overall perspective image.

3 Results and Discussion

3.1 Inventories

The results of the physical data inventory are described in Table 3, and biophysical and cultural data are illustrated in Figure 2.

Table 3 Physical Attributes Inventory Results

No	Data Type	Results
1	Topography	Pancur Batu district itself is in a lowland area with an altitude of ± 45 meters above sea level. The site is included in the flat topography category of around 0-3%
2	Hydrology	Drainage on the site that is formed naturally (natural drainage) on each side of Gang Buntu street, starting from the fall of rainwater with a high volume in the site area, then with a land slope of 0-3% causing run off that sends water to

No	Data Type	Results
		the road in the middle of the site.
3	Soil	The type of soil found on this site is an alluvial soil type, more precisely an alluvial rice field soil type, because the site location is near the Cikala River in Pancur Batu District, the area is also close to rice fields and oil palm plantation areas owned by local residents.
4	Microclimate	In 2021 there was an average of 7.5 rainy days per month with an average rainfall volume of 238 mm. The average temperature is 22.7 °C with an average humidity of 79.3%, and an average wind speed of 2.3 km/h [11].

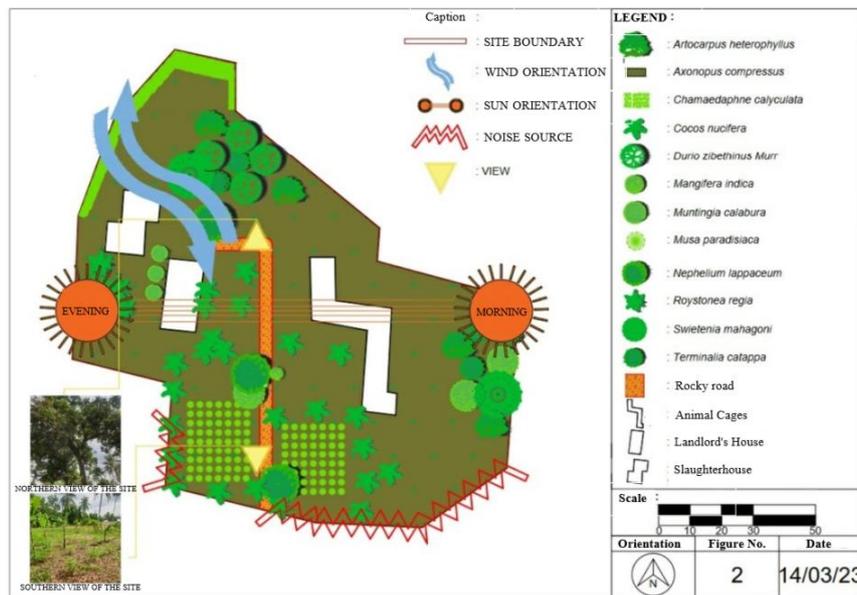


Figure 2 Inventory Map
(Source: Personal documents, 2023)

3.2 Analysis and Synthesis

Physical Attributes

The land slope reaches 3% with flat contours. However, this land slope category can cause problems related to hydrology and drainage systems on the site, significantly if the soil type in this land slope category can absorb less water well. In addition to affecting the hydrology and drainage systems on the site, this land slope category also affects the visual aspects of the site. Contoured land has its charm, one of which is the view [12]. The flat land slope category tends to create a monotonous visual impression of the landscape, especially if the site is significant. One of the efforts that can be made to reduce visual monotony on a flat site can be handled by changing the spatial atmosphere. A spatial atmosphere can be formed through landform changes and the addition of other elements, such as vegetation, walls, and buildings. With an average temperature of 22.7 °C and an average humidity of 79.3%, the THI value of 21.7 is obtained, which indicates that the site is relatively comfortable for users to do activities in it. Comfortable conditions are in the THI value range of 21 - 24 °C. Moderate conditions are in the THI value range of 25 - 27 °C, and for the THI value range above > 27 °C it is stated as an uncomfortable condition [13]. It is necessary to organize and build a clear drainage system on the site, such as an artificial surface drainage system used to drain runoff water and puddles on the surface.

Biophysical Attributes

Existing vegetation is scattered wildly and not organized, except for plantation plants. There are 12 types of plants on the site: land cover vegetation, plantation plants, shrubs, and the rest is shade vegetation. The selection of functional, aesthetic, and appropriate plant species according to the needs of the site needs to be applied. Plants that flower, bear fruit, and emit a pleasant aroma can improve the area's quality while inviting animals such as birds and butterflies as an ecological function.

Cultural Attributes

On the site, no view attracts attention. Arguably the idea from around the site could be more attractive. The site is surrounded by reasonably lush vegetation, making the view on the site filled with green plants and shrubs in the north. The southern tread is filled with banana plantations; the middle footprint is a house and cattle pens. The livestock enclosure in the middle of the site takes up a lot of space, which makes it a wrong view of the site. It is necessary to rebuild the cattle shed in the middle of the site to the north to minimize the wrong idea and use aromatic plants to reduce bad smells. Completeness and safety of utilities need to be built, such as lights, piping systems, and so on, according to standards.

Application of Landscape Elements Based on the Qur'an and Hadiths

The application of landscape elements to the site is described in Table 4.

Table 4 Application of Landscape Elements

No	Criteria	Subcriteria	Implementation
1	Softscape	Water	Fountain, water park around the fountain
		Vegetation and fruits	Shade vegetation such as <i>Filicium decipiens</i> , <i>Mangifera indica</i> , <i>Phoenix sylvestris</i> , etc.
		Animal	Birds in their habitats, cows as farm animals, goats as farm animals, and cultivated honeybees.
2	Hardscape	Garden buildings	Chairs and tables for tahfidz Al-Qur'an with umbrellas on them
		Doors	Main gate
		Other hard elements	Garden bench with suitable design and material
3	Design elements	Color	Green from shade vegetation, red from border vegetation <i>Syzygium myrtifolium</i> , and <i>Alpinia purpurata</i> .
		Sound	Fountains, and water park around the fountains, animals
		Scent	Plantation of <i>Pterocarpus indicus</i> and <i>Saraca asoca</i>

3.3 Concept

Basic Concept

In this research, the concept of an Islamic garden based on the Qur'an and Hadith is a reference used as a limitation in landscape planning on the site. Based on the results of a comparative study of similar projects, the basic concept of Educational Dynamical Ecological Natural (EDEN) is suitable for implementation on my research site. Comparative analysis of similar projects with the title EDEN Based Islamic Garden Design Planning at Pondok Pesantren Tahfidz Qur'an Lampung Da'wah Council [14]. EDEN is an educational, dynamic, ecological, and natural-based park concept tailored to users' needs. The word Eden is listed in QS.

Al-Baqarah and QS. Al-Kahf mentioned one of the names of the Garden of Heaven. The Islamic concept is represented through the words "Islamic" and "EDEN." In other words, EDEN is a symbol of an Islamic garden that represents eternal pleasure on earth, according to Göker et al [14].

Design Concept

The landscape design concept used is the hexagon line from forming a honeycomb (Figure 4), one of the coaching areas that will be created on the site. The behavior of unique bees, obedient to the rules and disciplined in looking for the needs of their lives, are expressed explicitly in the Qur'an. With this capital in mind, bees have emerged as living creatures that provide many benefits, not only to themselves but also to humans [15]. The hexagon line is also the initial formation of Islamic Geometrical Patterns, precisely on the Six-point Geometrical Pattern (Figure 3). These geometric lines are realized in design patterns developed as landscape elements, such as soft and hardscapes.

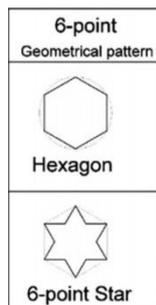


Figure 3 Six-point Geometrical Pattern
(Source: researchgate.net)



Figure 4 Hexagon Line on the Honeycomb
(Source: telisik.id)

3.4 Development Concept

The development concept is a concept that describes the design development on the site in detail from the basic idea and design concept. The development concept refers to the design theme expressed in the basic concept. The development concept consists of space concept, circulation concept, vegetation concept, as well as facilities and utility concept. The whole idea is combined in one spatial image called a block plan before being processed into a site plan.

Room Concept

In determining the concept of the room, various considerations are made, namely concerns in supporting the basic idea, comfort and safety of visitors, the needs of visitors on the site, order and review of the functions of the various rooms on the site. The concept of the room in the landscape planning of this pondok tahfidz consists of a welcome area, education zone, support zone, buffer zone, and recreation zone. The relationship between Rooms on the Site is described in Table 5.

Table 5. Relationship between Rooms on the Site

No	Zone	Facilities	Explanations
1	Welcome area	-Parking area -Main gate -Entrance road -Guard post	Welcome area has several functions, namely as a vehicle parking area, a good image giver on the site, and a court outside the parking area that is useful for providing security and comfort for visitors, namely as a barrier to vehicle circulation with pedestrian circulation from the main gate of the site.
2	Education zone	-The tahfidz boarding school building	The education zone has a function as a learning space

No	Zone	Facilities	Explanations
		-Management building -Halal slaughterhouse -Animal cages -Honey bee cultivation area -Qur'an hafidz chairs and tables	where activities are in the form of teaching and memorizing the Qur'an, a coaching area for the general public such as visitors, especially students of tahidz Al-Qur'an.
3	Support zone	-Culinary area -Culinary area chairs and tables	The support zone has a function as a culinary place that can support the needs of users on the site, as well as the sale of animal products such as honey and halal food ingredients.
4	Buffer zone	- Buffer vegetation	The buffer zone has a function as a buffer on the site to provide a comfortable microclimate for the needs of visitors and provide a harmonious viewshed on the site.
5	Recreation zone	-Mosque area -The center area of the site as a road that unites with the development area -Park -Qur'an hafidz chairs and tables -Garden chairs	The recreation zone has a function as a place to calm down and relax, in the sense that the mosque as a palace and the garden in front of the mosque as a beautiful view to calm down from the busy world, and taking a walk in the park or walking around the site area becomes a relaxing activity in the recreation zone.

Circulation Concept

The division between pedestrian circulation and vehicle circulation aims to provide security, comfort, and convenience for visitors on the site to avoid accidents. Vehicle circulation is only in the welcome area zone, while pedestrian circulation is in the welcome area, core, and support zones.

Vegetation Concept

The concept of vegetation applied to the site refers to the needs of visitors and the basis of this research, namely the Islamic garden. The idea of vegetation in this plan is divided into three: display vegetation, shade, and barrier. The Islamic garden is based on the Quran, which describes paradise as identical to a shady garden with branching trees and abundant shade and fruit. As the Qur'an mentions, "Surely the pious are under a shade and near a spring of water" (QS 77:41).

Facilities and Utilities Concept

The concept of facilities and utilities in this design refers to the basis of this research, namely the Islamic garden and visitors' needs. This design's concept of facilities and utilities consists of fountains on flowing water, parking areas, culinary, garden chairs, and table chairs for hafiz Al-Qur'an memorization. Islamic gardens are identical to the game of water elements in it. Therefore the fountain on the site becomes a point of interest in front of the mosque area.

Block Plan

The concepts of room, circulation, vegetation, facilities, and utilities have been described in the development concept and can be described as a block plan. Block plans are illustrated in Figure 5.

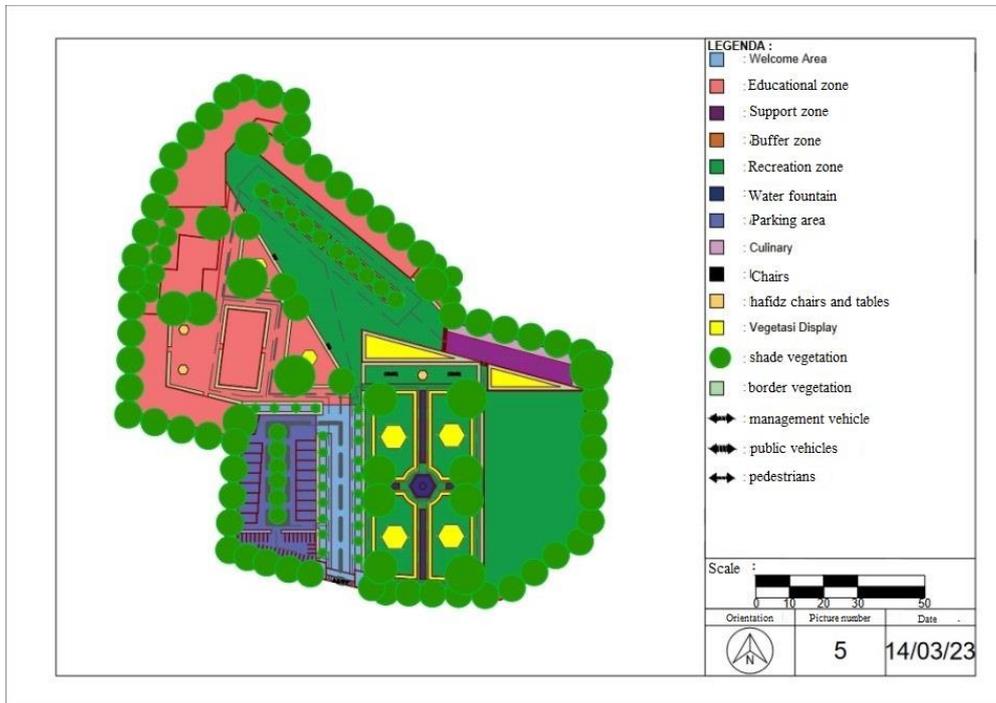


Figure 5 Block Plan
(Source: Personal documents, 2023)

3.5 Site Plan

The Site Plan or Master Plan is the final result of the landscape planning of the Tahfidz boarding school in Durin Simbelang A Village, containing a summary of the development concepts described above. The site plan for landscape planning is illustrated in Figure 6. The final result in an overall perspective image is depicted in Figure 7 and Figure 8.

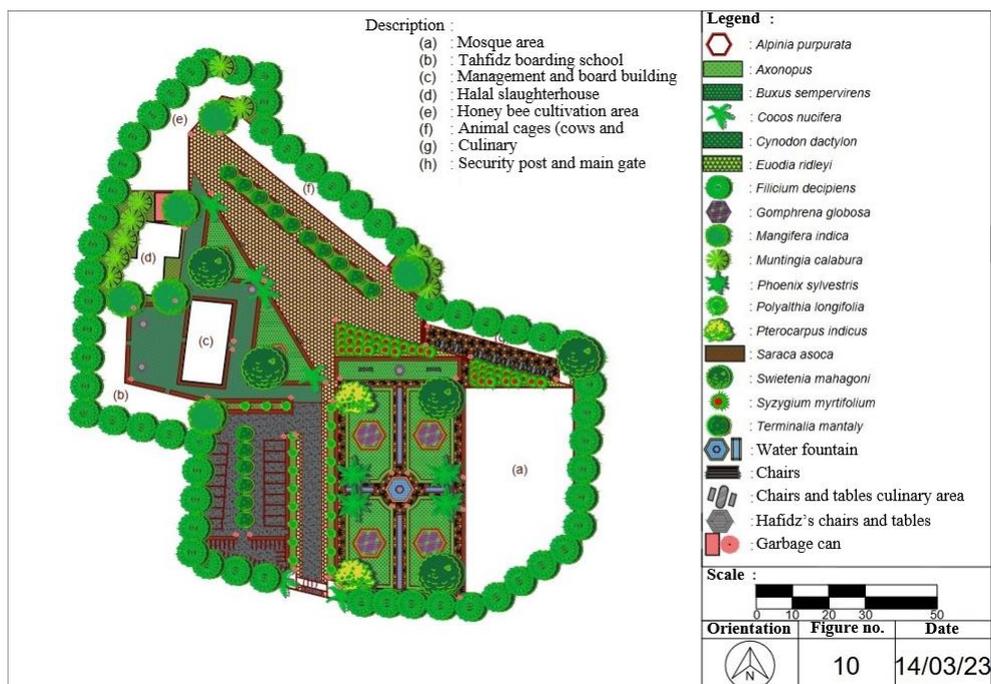


Figure 6 Site Plan
(Source: Personal documents, 2023)



Figure 7 Perspective 1
(Source: Personal documents, 2023)



Figure 7 Perspective 2
(Source: Personal documents, 2023)

4 Conclusion

Islamic gardens, based on the content of the Qur'an and hadith, are not focused on physical formation alone but more on the value and functional aspects of parks that do not conflict with Islamic teachings. Garden planning is included in muamalah so that legally, the main fiqh rule is that all matters related to garden planning, design, and management are permitted as long as they do not touch forbidden things and bring more harm. The landscape planning of the tahfidz hut uses the basic concept of Educational Dynamical Ecological Natural (EDEN). In contrast, the proposed design concept is the hexagon line from the formation of a honeycomb which is the initial formation of Islamic Geometrical Patterns, precisely on the Six-point Geometrical Pattern. It uses a development concept that refers to the design theme described in the basic idea of the Qur'an and Hadith.

This research can be a consideration and reference in planning the Pondok Tahfidz area based on existing problems in the Pancur Batu district for the local government. It can be implemented in planning landscapes with the concept of Islamic gardens by landowners who want to build Pondok tahfidz areas. By referring to this research, it is hoped that it can solve existing problems to create a beautiful, safe, and comfortable landscape that does not contain things forbidden by Allah SWT based on the Qur'an and hadith.

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6 Conflict of Interest

All authors have no conflict of interest in the publication of this article.

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