Application of Behavioral Architecture in The Land Arrangement of class IIA women Penitentiary Institution in Sidoarjo

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Abstract. Penitentiary Institution is a place to carry out coaching for the residents inside. According to the Law, the coaching process of women penitentiary residents must be inside the institution. The existence of a special prison for women can be a solution for empowering and fostering inmates, especially women so that they can be organized and systematic. Using the theme of behavioral architecture, which discusses human relations with the surrounding environment, of course, the psychology of penitentiary residents as human beings must be considered.Class IIA Women Penitentiary in Sidoarjo apply the theme of Behavioral Architecture and use the Security concept to provide a design appearance that gives a strong impression and is able to influence coaching activities both directly and indirectly. The design of the land arrangement uses the concept security applied in layered fences, layered doors, and guard posts.

Keywords: Penitentiary, Women, Sidoarjo City, Behavioral Architecture, Humane.

1. Introduction

Based on Law of the Republic of Indonesia number 12 of 1995 concerning penitentiary institution [1]. Correctional Institutions are places for carrying out development of Prisoners and Correctional Students. In correctional institutions, especially female prisoners, you will certainly encounter many problems. The problems that occur in correctional institutions are usually related to psychological problems such as lack of privacy, especially for female prisoners. This is due to the prison's excess capacity and the lack of clear partitions between the residences of female and male prisoners. Another problem is the lack of supporting facilities such as halls or places of worship. Initially, the buildings at the Sidoarjo prison only prioritized functional aspects, without thinking about how inmates would behave. For example, a room that should be filled with several people is actually filled with many prisoners, which causes many deviant behaviors to emerge. Then observations were made on all the things that influenced the behavior of the prisoners so that the current new prison was formed which was based on behavioral aspects as the main component in the preparation and construction of the building. So it becomes optimal to carry out coaching [2]. The prison design aims to realize building standardization in accordance with the law.

2. Theoretical Framework

2.1 Behavioral Architecture

Behavioral architecture is an architecture that applies behavioral considerations in design. Behavioral architecture is an architecture that discusses the relationship between human behavior and its environment [3]. The principles of the behavioral architecture theme that must be considered in applying the behavioral architecture theme according to Carol Simon Weisten and Thomas G David [4] are,

1. Able to communicate with humans and the environment
2. Accommodating residents' activities comfortably and pleasantly.
3. Pay attention to the condition and behavior of the user.

Behavioral architecture is an architecture that in its application always includes behavioral considerations in its design, the relationship between behavior and architectural design as a physical environment, namely that architectural design can be a facilitator of behavior or vice versa as an obstacle to behavior.[5] Behavioral architecture is a design concept based on observations of human activity. Design can support or hinder behavior [6].

2.2 Behavior Setting

According to (Laurens, 2007) defines Behavioral Setting as a stable combination of activities, places, and criteria with elaboration, among others, there is an activity that is repeated and has a pattern (standing pattern of behavior), is in a certain environmental order (circumjacent milieu) refers on the physical and temporal boundaries of a setting related to space-time, forming a similar relationship between milieu and behavior (synapomorphy), and carried out at a certain period. Behavior setting can be interpreted simply as an interaction between an activity and a specific place (Setiawan, Haryadi B, 2014: 27) and can be interpreted as a social system on a small scale consisting of humans and physical objects strung together to form certain activities in time. and certain places (Kopec, Dak, 2010: 22) The term behavior setting is described in two terms (Setiawan, Haryadi B, 2014: 28) whose linkages form a certain behavior setting, namely the system of settings and the system of activity[7].

2.3 Functions of Penitentiary Institutions

Based on law N0. 12 OF 2012 the functions of *Penitentiary Institutions* include: Service, Development, Community Guidance, Care, Security and Monitoring[8]. Where it is clearly stated that punishment is an effort to make prisoners aware to regret their actions and act better and more correctly in society. Of course, it clearly conveys that aspects of prisoner behavior need to be better educated and this is realized one way by building prisons that are able to ensure that prisoner behavior is no longer bad and can be even better than before.

2.4 Architectural Studies

Several reviews of correctional institution buildings based on the Decree of the Minister of Justice and Human Rights of the Republic of Indonesia concerning Building Patterns for Correctional Technical Implementation Units (Justice and Human Rights RI.No.M.01.PL.01 01 of 2003). [9] include:

a. Location that is easily accessible by means of transportation (public), telecommunications (telephone), lighting (electricity), health (Hospital) and easy access to clean water.
b. Close to the Police, Court, Prosecutor's Office, Regional Office of the Department of Justice and Human Rights, Detention Center/Prison/Bapas/Rupbasan and other related agencies.
c. Road/transportation of fire engines or other vehicles in order to deal with emergencies at the Correctional UPT.
d. Deaign standards and space standards of class IIA Women's Penitentiary

3. Methods

This type of research uses qualitative research with descriptive methods because it wants to describe the Class IIA Sidoarjo Penitentiary Institutions in terms of meaning, function and eligibility requirements. In general, qualitative research is designed to provide real experiences and capture the meaning of what occurs in the field where the researcher has direct interaction with the object being studied. Meanwhile, descriptive methods are used to describe the analysis of the data obtained. Data collection techniques used in qualitative research include conducting literature studies, observations, in-depth interviews and documentation. Observations were carried out in 2 places, namely the Class IIA Sidoarjo Penitentiary Institutions and the Class I Surabaya Penitentiary Institutions in Porong. Meanwhile, interviews were conducted with representatives of both prison parties. Because this applies the Behavioral Architectural Theme and uses the land arrangement concept of "SAFETY".

4. Result and Discussion

4.1 Site Location Description

The location is in the city of Sidoarjo, precisely in the Blurukidul area, Sidoarjo District (around Jl. Lingkar Timur). This area was chosen because it is far from the hustle and bustle of the city, which is good for coaching and is also close to the Police and Courts, making the legal process and supervision easier. The area to be designed is 2.1 Ha.[10] (as seen in figure 1)

Fig. 1 Site Plan Drawing

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Around the land there are buildings in the form of houses of local residents. This existed long before the location was determined, but this location was still determined/chosen based on its proximity to security facilities, namely the Kodim and Polres, which of course would be safer in terms of location and the land was chosen because it was located far from the hustle and bustle of the city makes prisoners more comfortable and influences their behavior to be even better.

4.2 Land Arrangement Plan

From the land arrangement concept "SECURITY" is applied to the layered fence surrounding the prison building. Apart from that, there are several posts whose function is to monitor the activities of inmates, such as: door post (porter), main guard post, block guard post and upper guard post.The field was created in the middle to be used as a central gathering point for various activities and was created in the middle to facilitate supervision from various sides and angles.. (as seen in figure 2)

Fig. 2 Site Plan

To support activities within the Class IIA Sidoarjo Penitentiary Institutions, there are several buildings which have various types of space provided, namely: Office Buildings, Residential Block Buildings, Study Class and Library Buildings, Multipurpose Buildings / Halls, Worship Buildings, Visitation Building, Public Kitchen Building, Polyclinic Building, Workshop and Company Unit Building, and Supporting Building.

4.3 Layered fence

The layered fence was created to protect the surrounding community and also to keep the Correctional Inmates (*Warga Binaan Pemasyarakatan*) from being able to get out easily. (as seen in figure 3)

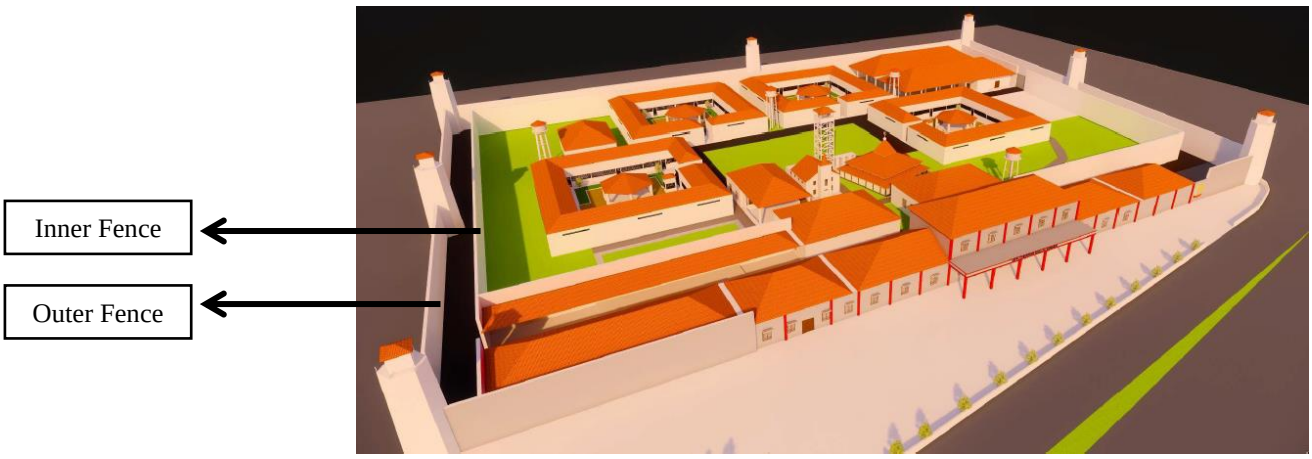

Fig. 3 Exterior

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4.4 Detention Block

The land arrangement concept in the detention block building was created to surround an open area for activities within the detention block. This concept makes it easier for guards to monitor all areas. This detention block is divided into 9 residential rooms and a shared kitchen and is divided into a grid. (as seen in figure 4)

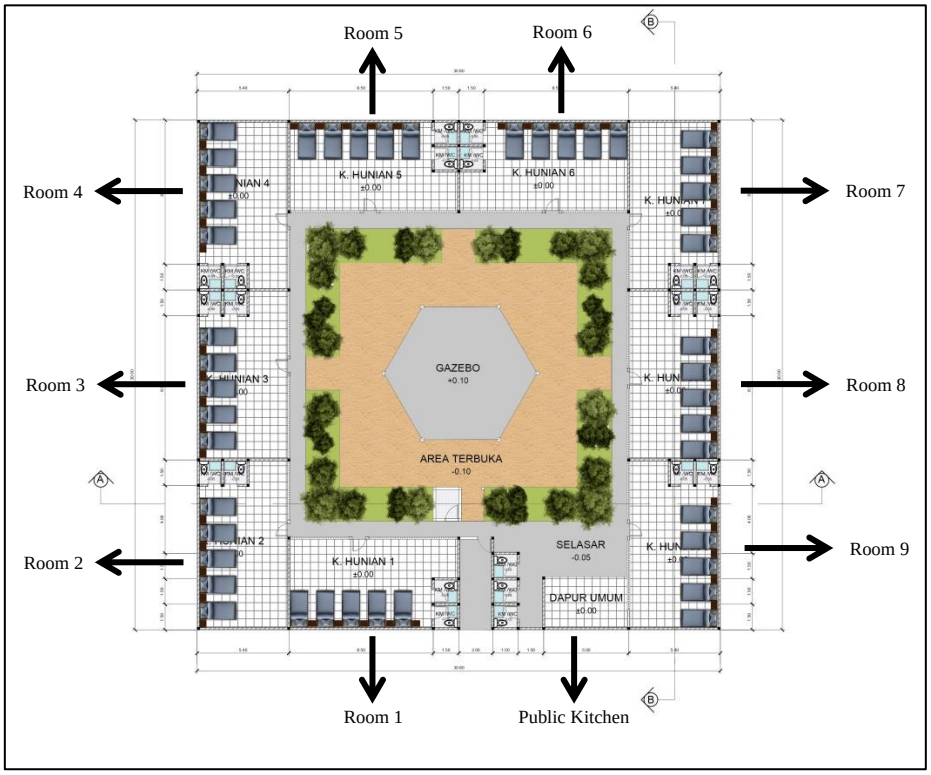

Fig. 4 Detention Block

4.5 Detention Block Door

This detention block door functions for circulation in and out of the detention room. This door was also created to serve as a reminder for Correctional Inmates (*Warga Binaan Pemasyarakatan*) to become fully human, realize their mistakes, improve themselves, and not repeat criminal acts. (as seen in figure 5)

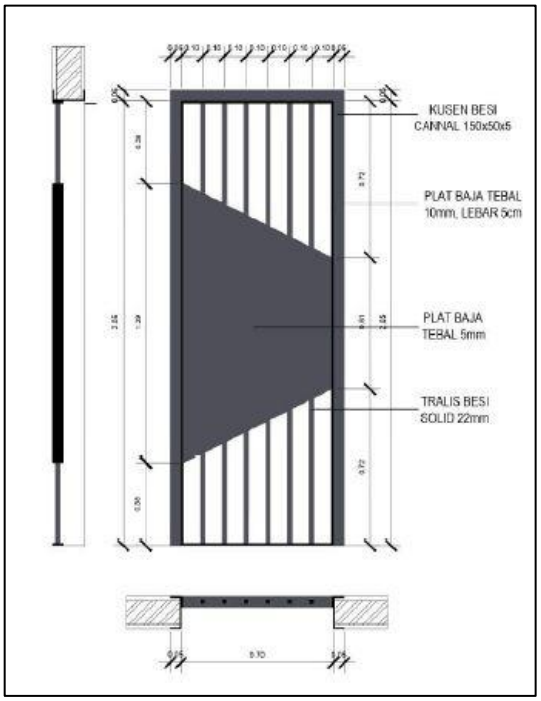

Fig. 5 Detention Block Door

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4.6 Main Door of The Penitentiary

The Main Door of The Penitentiary is a little unique because it is only 140cm high and is made 30cm above the ground. When we enter this door we have to bow slightly, this teaches polite behavior when we enter. (as seen in figure 6)

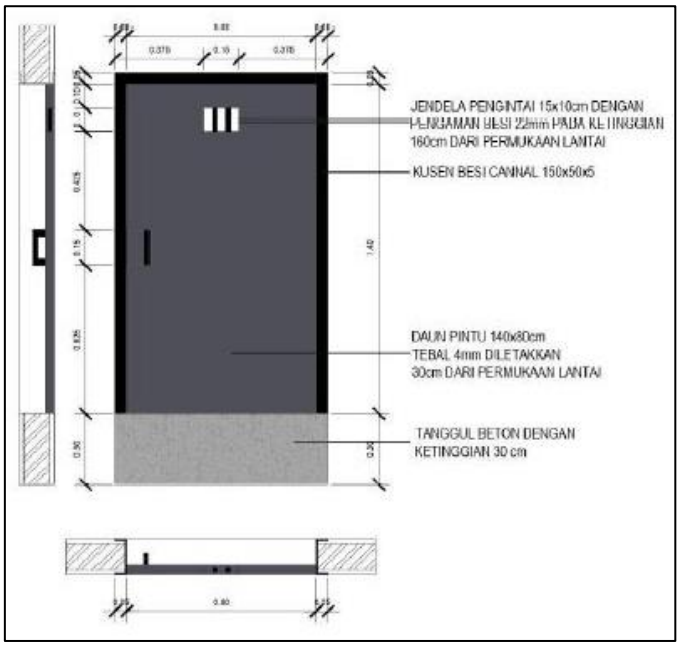

Fig. 5 Main Door of The Penitentiary

5. Conclusion

Penitentiary Institutions as a place to carry out development that prioritizes humanity in terms of architecture. land arrangement processing uses the concept of "Security" and uses the theme of behavioral architecture. By achieving psychological comfort, a feeling of joy and calm in behavior will be created. Psychologically pleasing can arise from open space which is a human demand or desire to be able to socialize.

The design is made wider and more open in order to reduce undesirable things due to friction between prisoners due to the narrowness of the prison room, which is also supported by tighter security while maintaining security aspects and limited existing land.

The behavioral architecture in the land structure is intended as an effort to restore the behavior of prisoners who initially found it difficult to accept all the rules in society. Usually prisoners have their own pace and become more organized and can readjust to existing rules in society after they are released, this is the main purpose of a prison being established.

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