

PRISONERS REHABILITATIVE CENTER

Wala'a Bakheet¹, Haitham Hussain², Rahma Doheim³

^{1,2,3}College of Architecture and Design, Effat University, Qasr Khuzam St., Kilo. 2, Old Mecca Road. P.O.BOX 34689, Jeddah 21478, Saudi Arabia

E-mail: [1wabaket@effatuniversity.edu.sa](mailto:wabaket@effatuniversity.edu.sa), [2hahusseini@effatuniversity.edu.sa](mailto:hahusseini@effatuniversity.edu.sa), [3rdoheim@effatuniversity.edu.sa](mailto:rdoheim@effatuniversity.edu.sa)

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Abstract

Prisoners have the right to live a normal life after serving prison sentences. These prisoners should therefore go to the rehabilitation center in order to be prepared for the community and a normal life stage before they are released. Thus, this work presents the development of Prisoners Rehabilitative Center at Jeddah, Saudi Arabia. For this work, three case studies related to prison architecture have been analysed. Hence, based on the analysed case studies, for the proposed rehabilitation center, the estimated area is 10035.5 m². Furthermore, the rehabilitation center is comprised of several departments, which are housing, education, sports and outdoor, health unit, administration, laundry, food service, master control center, and intake and release center. In addition, two sites were proposed for the development of the rehabilitation center. Site evaluation analysis using a weighting factor (WF) was conducted for both sites to determine the most appropriate site. Thus, based on the site evaluation analysis, site 2 exhibited the highest evaluation score of 41 compared to site 1 with evaluation score of 31. Hence, site 2 was selected as the development site. The rehabilitation center is designed for prisoners to be rehabilitated from different aspects, such as psychological, social and educational. The Rehabilitation Center is expected to strengthen the process of rehabilitating prisoners in Saudi Arabia and facilitate integration between prisoners and society.

Keywords-- rehabilitation center, prisoners, criminal, Saudi Arabia

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INTRODUCTION

Every year, an enormous number of ex-detainees return home after serving prison sentences for committing criminal offences [1]. These marginalized groups of prisoners have the right to live a normal life after being punished. In order to give prisoners the right to live a normal life after their jail sentence, they should go for rehabilitation process in order to be prepared for the community before they are released [2].

Prisoners are identified as a person legally sentenced to prison as a punishment for a crime or while awaiting trial. The main concept of prisons is to restrict the freedom of prisoners and prevent them from exercising their rights in the community [3].

Studies have reported that most prisoners have severe depression while in prison [4,5]. This can lead to a long-term mental disorder involving a breakdown of thought, emotion and behavior. In addition, the majority of prisoners who spent a quiet period of time on banishments have resulted in two main issues: psychological issues and adaptation issues [4,5]. On the other hand, the issue facing the community is that they fear that once prisoners are released from their punishment in prison, they may harm the community because of their mental stress and disorder [6].

Thus, in order to reduce prisoners from re-committing to criminal acts and to address the psychological and adaptation issues among prisoners, they need to be sent to rehabilitation centres [7].

Rehabilitation is a process of recovery that prisoners should pursue in order to facilitate the process of adaptation to normal life in the social community after their time in prison [8]. The rehabilitation process comprises of a number of types, including mental health treatment, psychological rehabilitation, social healing, and spiritual redemption [8].

Crime statistics in Saudi Arabia in particular, the Makkah Province and Jazan have been considered to be the highest crime

rate in recent times [9]. They are subject to imprisonment on the basis of the offenses committed and are sent for rehabilitation at the end of their prison term. Hence, there is a need to develop rehabilitation centers to enhance the lifestyle status of marginalized groups, especially prisoners, and groups suffering social stigma with the community in Saudi Arabia. Therefore, this work presents the development of Prisoners Rehabilitative Center at Jeddah, Saudi Arabia.

CASE STUDIES

This study examined three case studies. The details of each case study are presented as follows:

- a. Holmsheidi Prison
- b. Mas d' Enric Penitentiary Prison
- c. Jeddah Reform

Holmsheidi Prison

Holmsheidi Prison is located at Rykjavik, Iceland (Figure 1). This building was designed by ARKÍS Architects. The total area of this building is 3595 m² and the total site area 37400 m². The building has 56 cells in it. The jail design is based on 3 essential aspects. First, the main guard station is a single cylindrical design illuminated by sunlight from the sky that surrounds the building. The vaulted ceiling and security post emerge from the roof like a flat sphere, distinguishing the buildings jagged edges.

The second set of components is the inner courtyards that shape the nucleus of each prison cell. The courtyards let the sunshine in the prison cells, enabling the opportunity to spend time outside and in some cases; the inmates have a glimpse of the gardens.

The third set of core aspects is a protrusion from each nucleus. The protrusions have the dual function of providing visibility and sunlight to each inmate, thus restricting the field of vision for each cell. The prison, through its transparency, creates a positive atmosphere. The facilities of this building includes offices, housing facilities, sport facilities, educational area, social area, service area and visitor area.



Figure 1. Holmsheidi Prison

Mas d’ Enric Penitentiary Prison

Masd’ Enric Penitentiary Prison is located at Catalonia, Spain (Figure 2) This building was designed by A i B architects and Estudi PSP architects. The total area of the building is 74130 m². This building has 500 cells in it. The buildings of Mas d’ Enric Penitentiary were situated in the surrounding forest, low-lying and colored green. The building contains the surrounding topography, whereby each unit has a view of the forest and offers breezy courtyards with a view to providing a non-oppressive atmosphere. Furthermore, locality removes the remaining gap around the building structure. It also provides for operational versatility when creating outdoor spaces in the shape of gardens at various scales Topographic adjustment provides a friendly alignment with the landscape. This provides spatial diversity and enabling for the lack of internal fencing. The field in view of the mountains is achieved by the enunciation of the soil level. Viewpoints of the surrounding forests enhance the environment in the cells and in the gardens. The respective courtyard surrounds the edge of the facility, allowing the prisoners a view of the woods, and the prison cells are positioned in front of the trees. The facilities of this building includes administration offices, housing facilities, sport facilities, social areas, educational areas, service areas, visitor areas and outdoor garden area. The ground floor is divided into zones of buildings, each zone is centered by a courtyard. The educational areas are located near the cells and the other part is in a separate zone building. In addition, the visitor area is located in a private zone near the administration area at the entrance. The different zones of buildings with a green distributor area help prisoners to communicate more and interact with each other.



Figure 2. Masd’ Enric Penitentiary Prison

Jeddah Reformn

Jeddah Reform is located at Jeddah, Saudi Arabia (Figure 3). This place is managed by the government of Saudi Arabia. The site is located in the middle of the desert, far from the city. Many streets, such as the main street and the service street, surround the place. On the basis of the analysis, it appears that the reformer is in the same prison area, the reformer is on the front near the main street, and service streets surround the prison on the back. There is a sewing factory in this building, which was fully equipped with a number of inmates. They are officially employed by the Ministry of Labor and Social Development. They

work every day from 7:30 a.m. to 5:00 p.m. Each of them produces between 40 and 60 t-shirts and pants a day, providing self-sufficient clothing for guests without the need to bring suppliers, and this corresponds to Vision 2030, where the raw materials were supplied to them and everyone benefited from practicing the profession after the release. Prisoners are also provided with a full range of correctional health services. There is a reception center where a social and psychological specialist and a general prisoner are available to study the guest’s condition from all sides before being sent to prison units. Furthermore, there is education facilities within this building which provides education services to the prisoners.



Figure 3. Jeddah Reform Building

PROGRAM ASSUMPTION AND SPACE DETAILS

In this work, for the proposed Prisoners Rehabilitative Center, the estimated area is 10035.5 m². The rehabilitation center is comprised of few departments, which are housing, education, sports and outdoor, health unit, administration, laundry, food service, master control center, and intake and release area. The details of measurement for each department is shown in Table 1.

Table 1. Space details

Department	Area (m ²)
Housing	3911.15
Education	1784.8
Sports and outdoor	2310.35
Health unit	273.7
Administration	228
Laundry	230
Food service	667
Master control center	172.5
Intake and release	458
Total	10035.5

PROPOSED SITE

Proposed site: Site 1

For site 1 (Figure 4), this site is located on a main street Al-Hirjah. This site has an area of 39000 m²

Proposed site: Site 2

For site 2 (Figure 5), this is located in Al-Ghulah district that is located on a main street Asfan. The site has an area of 40000 m².

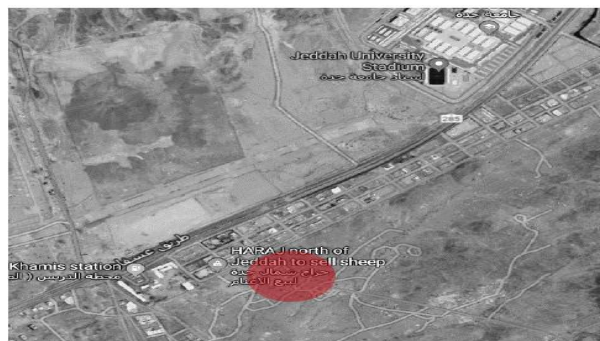


Figure 4. Site 1

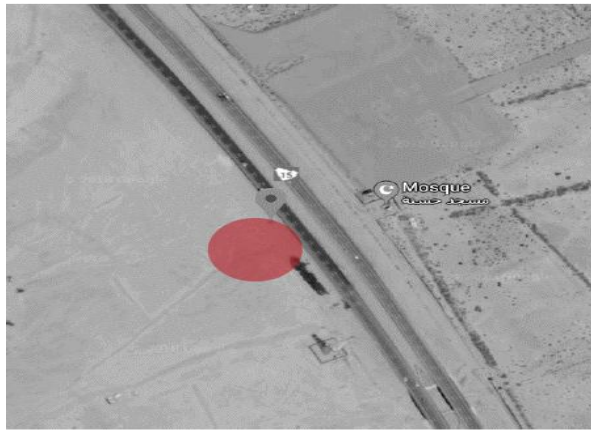


Figure 5. Site 2

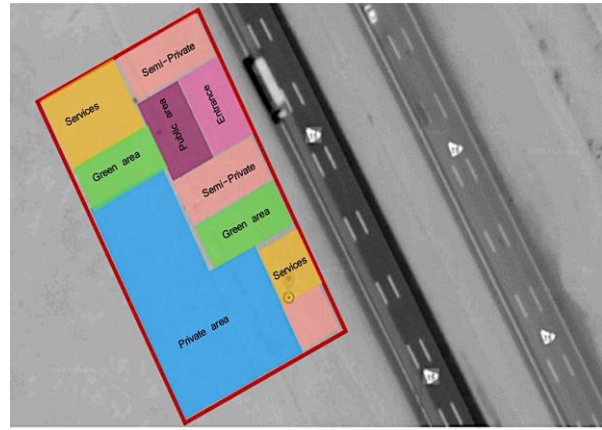


Figure 6. Zoning of site

SITE EVALUATION AND ANALYSIS

For this work, 2 sites were suggested for constructing the rehabilitation center. Thus, these two sites were subjected to site evaluation analysis to select the most suitable site. The site evaluation was carried out based on few criteria's, which are accessibility, security, future development plans, surroundings and utilities. For each criteria, weighting factors (WF) were used for evaluation, where where 1 = not very important, 2 = somewhat important, 3 = important, 4= very important and 5= essential. Table 2 presents the outcome of the site evaluation analysis. Based on Table 2, it is observed that site 2 had the highest score of 41 compared to site 1 which had a score of 33. Thus, site 2 was selected as the proposed development site. The site is accessible through two main streets, Asfan and Huda Al-Sham, preceded by an arterial street called Al-Hijrah, which leads to the location of the site. The road has a smooth car moving the traffic flow to the site. This helps to access the site easily and securely. In addition, the two prisons, Breman Prison and Dhahban Prison, which are located in Jeddah, are near the site and do not cross the middle main streets of Jeddah, and this gives more security on the way from the jails to the site. Likewise, the site is situated in an empty area where there are no buildings or landscapes. This helps in case the prisoners get away from the center and do not have a place to hide.

In terms of climate, there is an average temperature in summer and in winter. Most of the year, temperatures are high; therefore, some treatments should be used to minimize heat and to keep the environment healthy for prisoners. Furthermore, November is the wettest month (with the highest rainfall). June is the driest month (with the lowest rainfall). The month with the most rainy days is January. The months with the lowest rainy days are February, May, June, July, August, September and October. In addition, the month with the highest relative humidity is September (67%). The month with the lowest relative humidity is July (53%). The proposed zoning of the site is shown in Figure 6.

Table 2. Site evaluation

Criteria	Weighting factors (WF)	Site 1	Site 2
Accessibility	2	4	4
Security	5	15	20
Future development plans	3	9	9
Surroundings	3	3	6
Utilities	2	2	2
Total	-	33	41

PROJECT DESIGN

The rehabilitation center is designed for prisoner in order to rehabilitate them from different aspects, such as psychological, social and educational. It is also a place for the community to have a social interaction with marginalized groups. The rehabilitation center is designed with the following zones: educational zone, social zone, physiological and psychological zone, and economic zone. The education zone consists of classes that teach offenders a number of subjects that will help them expand their knowledge, such as mathematics, religious and computer science. In addition, having a library space within the project will improve their knowledge. The social zone will link indoor and outdoor sports activities that will increase the social aspects of prisoners, in addition to food court areas that will increase social interaction between prisoners and the community. The physiological and psychological area has a counseling clinic that provides psychological rehabilitation and provides sports facilities to create a better lifestyle for offenders. The economic zone has retail stores run by prisoners and used by the community of prisoners. In terms of facilities, the observation tower and master control area monitors and controls all building communications, security and security systems, entrance and exit routes, and movement within the facility, and often coordinates emergency management at an early stage. Thus, this area is designed with secured area and raised floor heights help limit views into the control room. The intake / release department receives and processes incoming prisoner and releases outgoing prisoners. The housing department is designed to accommodate the individual security, sleeping, hygiene, privacy and routine personal needs of the main or general inmate population. The health care department is designed to accommodate the health care needs of inmates, including medical and dental examinations, tests, distribution of medications, sick call, medical records, and storage. The program / service department is designed to meet the needs of prisoners in areas such as recreation, education, counseling, training, library and religious services. Food service zone is designed to accommodate the receipt and storage of food and food supplies; the preparation, delivery, and consumption of meals; cleanup after food preparation and meals; and removal of refuse. The administration and the public sector are designed to organize and manage the day-to-day business of the facility, facilitate public access to the facility and respond to the public's need for information and services. The storage area is designed to keep different types of supplies, equipment and spare parts safe and secure. The mechanical service area is designed to provide heat, ventilation and air conditioning; water and waste lines; and main and emergency power supplies. The overall structure of the building is designed to allow the penetration of natural lighting and natural air ventilation. Figure 7 to Figure 10 shows the architecture design of the rehabilitation center.



Figure 7. Overview of Prisoners Rehabilitative Center



Figure 8. Topview of Prisoners Rehabilitative Center



Figure 9. Front view of main building

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CONCLUSION

In this work, the development of Prisoners Rehabilitative Center at Jeddah, Saudi Arabia is presented. The estimated area for the rehabilitative center is 10035.5 m² and it is comprised of several departments such as housing, education, sports and outdoor, health unit, administration, laundry, food service, master health control center, and intake and release area. The rehabilitation center is expected to introduce a new approach to rehabilitation in Saudi Arabia and enhance integration between prisoners and society.

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