



Revitalizing the former Tobacco ripening area PTPN II (Designing Deli Tobacco Museum and Hostel)

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Abstract. The PTPN II Medan area, located on Jalan Pertempuran, is an Industrial Reserve Area with the potential to be preserved. The lack of effort to protect and preserve historical areas is one factor causing the lack of public knowledge about historical areas in Medan City. In this design, the former tobacco ripening warehouse is revitalized with the Adaptive Reuse concept. The old warehouse building will be re-functioned as the Deli Tobacco Museum to revive the building's historical value. However, there was a consideration of the need for location and respect; besides the Museum building, there were also other building design functions, one of which was the Hostel. The research method used is qualitative. Qualitative methods, namely, 1) data collection. 2) Design Analysis. 3) Design Concept. Concepts can be created through user needs, environment, analyzes, and studies that have been carried out, problems, and solutions found. Procurement of the Deli Tobacco Museum and Hostel is a solution to increase the community's knowledge and interest to learn about the history that has existed in Medan. The Museum and Dormitory building is designed with a more modern appearance. Still, it maintains the historical values in the area to educate museum visitors about the important part of Medan City that is needed and believed to be able to repair and revive the area and improve the city's economy and tourism industry.

Keyword: adaptive reuse, hostel, museum, revitalization, tobacco

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1 Introduction

The PTPN II Medan area is ever used as a Deli Tobacco processing area, where it is one of the best tobacco-producing areas in Indonesia to Europe. However, in the region's current condition no longer used for processing tobacco, only the former tobacco processing warehouse remains. This region itself has good potentials that should preserve to restore historical stories ever in the region. A cultural heritage building or environment is a cultural wealth that has a history that can give identity characteristics to a city [1]. Preservation of historical values and events that have occurred in the past must be memorized as a learning asset for the people in a city, so the

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Museum Design becomes a tool that can revive historical values that have begun to oblivious. The museum is a community institution that is tasked with collecting, preserving/caring for, as well as presenting and preserving the cultural heritage of the community for study, research, and fun or entertainment [2]. In addition to the Museum, there are supporting building functions, namely Hostel. The Museum's function arises because of consideration of the community interest to visit the Museum is still very lacking in contrast, Hostel arises because of the consideration of location needs and as a form of respect for the presence of visitors who need lodging facilities.

The design of the Deli Tobacco Museum and Hostel aims to provide a forum for education for local people and foreign tourists, as well as to open up people's insights to maintain the existing historical value in an area.

This PTPN II tobacco ripening warehouse is 120mm long and 33m wide. Most of the buildings use wooden structures. This PTPN II tobacco ripening warehouse is 120mm long and 33m wide. Most of the warehouse buildings use wood material (Figure 1).



Figure 1 PTPN II Tobacco Extraction Warehouse

The parts of the warehouse building are a strong characteristic of the building itself. These characteristics can be seen in terms of the facade, structure, and inner space. The function of this warehouse building is as a place for drying tobacco. Therefore the shape is adapted to the warehouse function (Figures 2 and 3).



Figure 2 The facade of former PTPN II tobacco ripening warehouse

The Manager's house at this location is one of the buildings that are still in existence today.



Figure 3 Rumah Manajer dan Gudang Eks PTPN II

2 Literatur Review

Deli Tobacco Museum and Hostel are a medium for local and foreign communities to get to know and appreciate the history. Deli Tobacco Museum and Hostel serve as a means of education and a convenient and environmentally friendly tourism tool intended not only for local visitors but also for tourists from all over the world, students, historians, and others.

Revitalization is a series of efforts to restructure the condition of an area and buildings that have potential and strategic value by restoring the vitality of an area that has experienced a decline. Director of Museum of the Directorate General of History and Antiquities, Ministry of Culture and Tourism, Intan Mardiana, said that during 2011, 39 museums in the country had been revitalized. Museums have many functions, not only in the cultural field but also intersect with the economic, political, social, and other fields [3]. Therefore, efforts are needed to restore the vitality of the area to be able to support urban planning so that it can make a positive contribution to the internal and externalities of the city area. Policies and strategies are also needed to develop urban areas (old cities, terrain, and strategies) so that on the one, hand its historical value remains the other hand, its economic value develops [4]. The regional arrangement and revitalization program carried out by the Directorate General of Urban Planning and Rural Administration, which began in 2001, has encouraged local governments to organize and preserve urban areas. Physically there has been a change, but economically, socially, and culturally cannot be ignored, will take longer [5].

Basically, a museum is a place to display objects or objects that have value. The main role and function of the museum are as an educational institution. The challenge is how what is conveyed in a museum exhibition can be easily understood by the wider community [6]. Therefore, this exhibition is important to stimulate visitors not only in the sense of sight, but also for others, such as hearing, touch, smell, and even taste, so that visitors can enjoy the atmosphere and absorb everything there is. Information or message be delivered [7].

The concept used in this design is Adaptive Reuse. Adaptive Reuse, according to Burchell and Listokin (1981), is defined as a revitalization strategy, which is an essential aspect of this

adaptive reuse project, namely the use of land or buildings that are considered unsuitable for the type of building or location. Therefore the current potential value will be maximized together with space. Reuse of buildings can include purely aesthetic modifications made to the building while maintaining its structure and character [8].

In the book, *Old Buildings, New Forms*, Françoise.A.Bollack categorizes adaptive Reuse into five categories, namely (Figure 4):

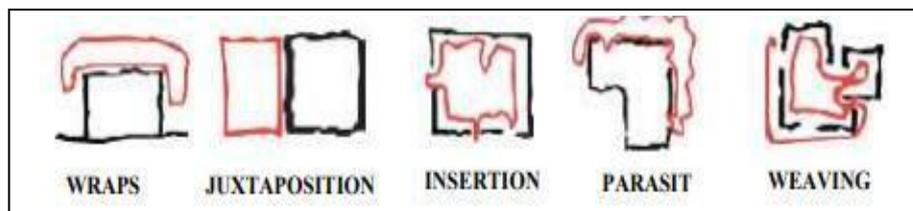


Figure 4 Category adaptive reuse

"Bollack believes that all of these approaches are valid, provided the result is beautiful and useful. The old building, the new form, is about "the creative possibilities of preservation" Françoise.A.Bollack [9].

3 Methodology

The method used in the location selection process is the method of collecting data obtained from the results of the site survey (Figure 5).

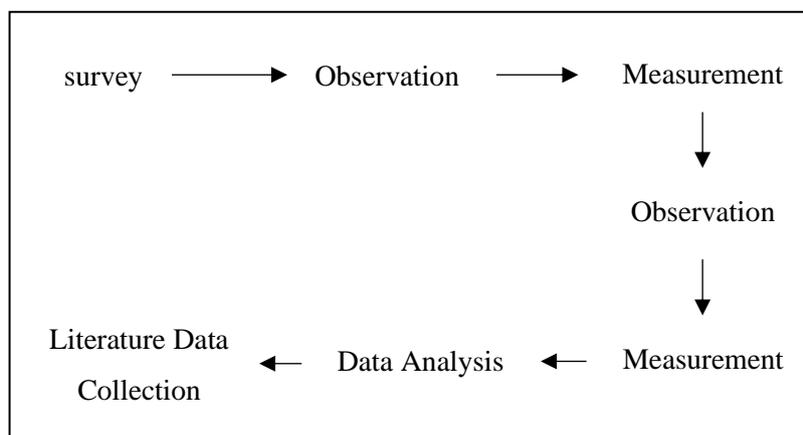


Figure 5 Schematic Penelitian

Design Problem Solving Method

The research method used is qualitative. Determine a design concept through the background and problems that occur, both from inside or outside the design location. Qualitative methods, namely, 1) observing data. 2) Design Analysis. 3) Design Concept [10].

4 Result and Discussion

Project Description

Museum and Hostel aim to make the Museum a forum that can facilitate educational needs for the learning process. Museum and Hostel are also one of the efforts to preserve a historical area. The lack of preservation is one of the factors causing the lack of public knowledge about historic areas in Medan.

The PTPN II Medan area is the Deli Tobacco Plantation Industrial Estate, located on Jalan Fighting, Jl. Maryland Raya, Kelurahan Helvetia Timur, and Medan Helvetia District. Geographically, the Deli Serdang regency between (3°54'-3°83') North Latitude (98°72'-98°86') East Longitude, which is part of the region cross position in the West Pacific Trench area with an area of 2,497.72 Km². The land topography of both paddy and land is flat and flat with a slope of less than 5% and alluvial soil type, soil conditions in Helvetia Kec. Labuhan Deli Kab. Deli has the form of a plateau region so that there is never a flood. Tropical climates with rainfall of 30 mm/yr and temperatures of 25 oC to 33 oC. The project site has an overall area of around 7.4 Ha, with relatively flat contours.

The Deli Serdang Regency Spatial Plan 2010-2030 directs space in the Deli Serdang Regency in a harmonious, harmonious, balanced, efficient, effective, cultured, and sustainable manner advancing society [11].

The design of the Deli Tobacco Museum and Hostel aims to provide an educational forum for local people and foreign tourists, as well as open people's horizons to maintain the historical value that exists in an area. This is also the plan for the Mebidangro development program by the city government [12]. The project location condition is the former PTPN II tobacco ripening land, which has not been used anymore, where former PTPN II tobacco ripening land belongs to the State (Figure 6).

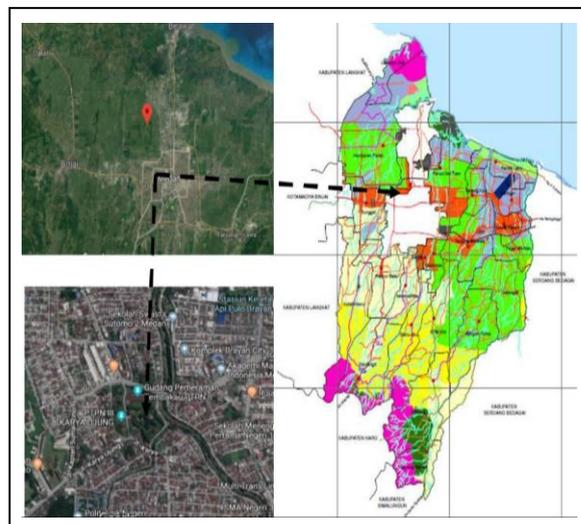


Figure 6 peta lokasi perancangan

Basic Concept

The project land's existing function is abandoned land, but there are still some old buildings, one of which is the main building, the Tobacco Curing warehouse. This condition is a consideration for creating designs with new functions while maintaining the old building, which is wrapped with a more modern look and keeping the environment as natural as possible.

The application of the Adaptive Reuse concept on the consideration that the use of the land or building for use is no longer suitable in the type of building or location. Therefore, the potential value will be maximized by adapting space. The Reuse of a building can include pure aesthetic modifications made for the building while maintaining structure and character [13].

Zoning Concept of Outer Space

Museums and hostels are planned to face the area so that the museums and hostels are integrated with the area's facilities. The public zone, a plaza, amphitheater, and several outdoor seating functions as a gathering point for visitors and a maximized open space for visitors [14].

The area between 3 roads that are always passed by vehicles, so access in and out is distinguished to avoid congestion. Vehicle entry access from the Battle Road and exit access are on the Karya Road. The car park enters from the Battle road while the motorcycle parking enters from the jasmine road.

There is a supporting function for zoning the outdoor space, namely the plaza/sitting room outdoor learning area / as an area of discussion and leisure. There are also water elements in the area, amphitheater, dock, and the former stage house where the residence of PTPN II manager who is now functioning as a restaurant indoor & outdoor. There is also a promenade area because there is a river right next to the area. The plaza is also given a variety of street furniture in the form of garden lights, seating, trash (Figure 7).



Figure 7 Outer Zone

Period and Orientation

The museum building mass is taken from the existing building mass, namely the former Tobacco Deli ripening warehouse. In contrast, the Hostel building mass is taken from the square shape, which is the dominant form. The original building shape was modified with a new shape to produce a more modern look (Figure 8).

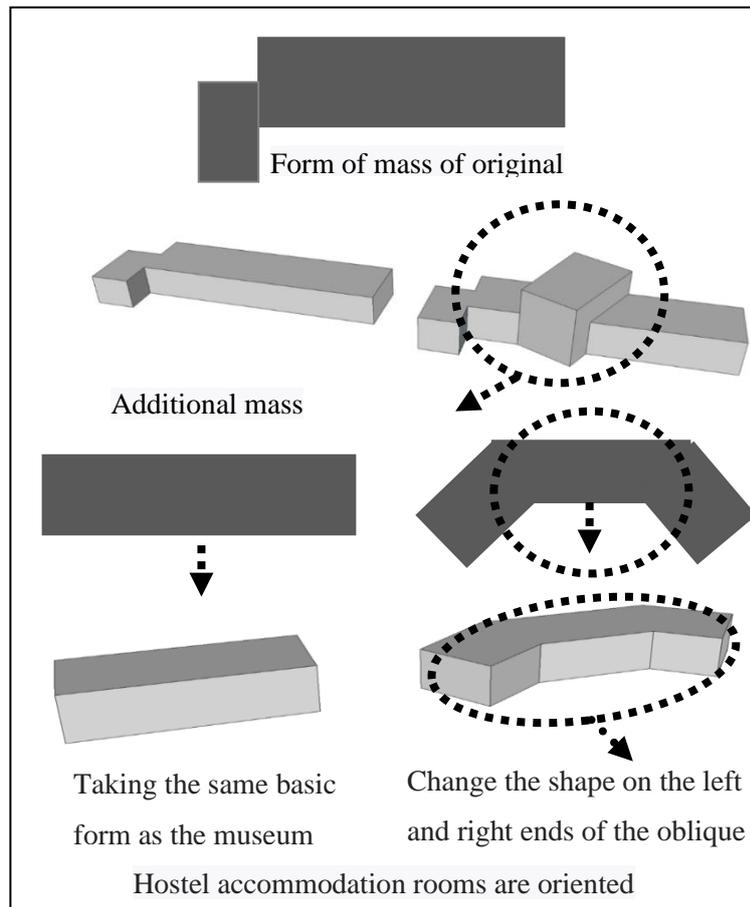


Figure 8 Period and Orientation

Achievements and Circulation

The entrance to this building consists of 2, namely for pedestrians and access using vehicles. Vehicle entrance access is different from building exit access, entrance access for four-wheeled vehicles entering from the Battle road, and exit from the Karya road. For access to two-wheeled vehicles entering and exiting Melati road. This is made by access to reduce congestion on three existing roads. While pedestrian access is carried out from the battle road, and some use trees and other vegetation around the parking access as shade in the area. Meanwhile, pedestrian access is carried out from the battle road, and some use trees and other vegetation around the parking access as shade for the area three access to the PTPN II area (Figure 9).

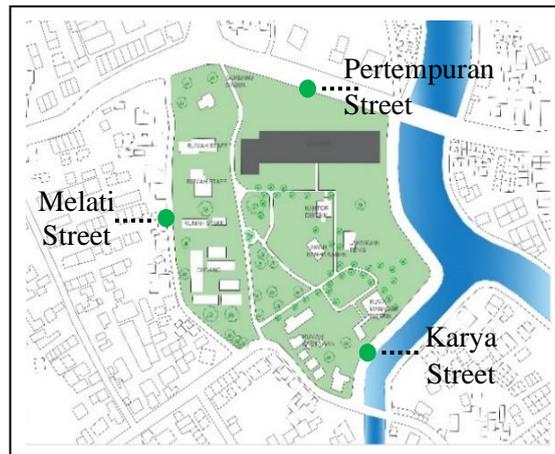


Figure 9 Achievement and Circulation

Vegetation Concept

In the area, several trees have existed and are still being maintained. However, there are additional types of vegetation. Apart from being a buffer, this vegetation also functions to absorb pollution and noise from the building road's front and side. The types of vegetation used benefit buildings. Ashoka functions to reduce pollution and absorb dust. Oil palm functions to absorb 200 liters of water per day, Ketapang functions as a shade tree and easy maintenance. Trees exist throughout the PTPN II area (Figure 10).

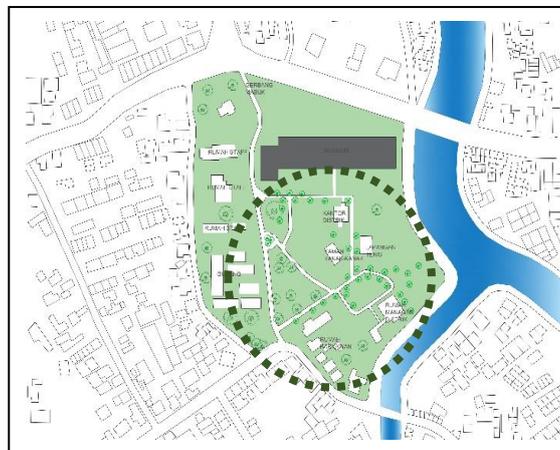


Figure 10 Vegetation Concept

Division of outer space

Museum :

A museum is an institution, a place for storing, preserving, securing, and utilizing human and natural, cultural objects in the framework of helping to protect and preserve the nation's cultural wealth [15]. The concept of spatial planning in the Museum building manifests the transformation of the previous thought towards the spaces in the Museum. These thoughts are applied sequentially into the building's spatial planning following the stages of the historical storyline that will be explained. By the Deli Tobacco storyline, spatial planning will make

visitors indirectly feel the Deli Tobacco process by itself. Spatial planning is adapted to existing activities the museum building's front view (Figure 11).



Figure 11 Space Grouping museum

These activities are divided into three zones. Namely, the central zone, the support zone, the management and service zone, but the management zone be divided from inside the Museum building. The management zone is separated so that the spaces in the building are adequately maximized, properly because the Museum building is a former Tobacco Deli storage warehouse that is reused as an educational container in the form of a Museum on Deli Tobacco so that the existing space will be maximized for everything about Deli Tobacco.

Hostel :

The concept of spatial planning in the hostel is adjusted to the needs of visitors. Hostels become a resting place for visitors after visitors enjoy the existing tours in the area. Spatial planning adjusted to existing activities. These activities are divided into three zones, the central zone, the support zone, the management, and the service zone (Figure 12).



Figure 12 Space Grouping hostel

Interior Concepts

R. Audio Visual is a space used for educational needs for visitors. This room is conditioned not far from the entrance of the museum building. This is to make it easier for visitors to enter this room before exploring the exhibition hall. Visualization can be in the form of film/video playback using a screen or screen connected to a player or computer equipment. It can also use

the screen and focus of the projector connected to a computer device or by providing a White Board when in an emergency (emergency). The visual space displays the digital story of the journey of Deli Tobacco (Figure 13).



Figure 13 Visual Space

R. The exhibition is an important part that must exist in a Museum. Exhibition space, as part of a museum refers to the museum building's function and shape. The scale of exhibit items is into 3, namely, small scale, human scale, museum building scale. The scale of the collection object determines the distance of view and space for visitors and, in the end, will determine the location of exhibit collection objects and the circulation of visitors.

For the design of the Museum itself, there is one room, which is the meeting point of all the existing rooms. This room is also the orientation of the visitor's eye, wherein this room visitors will be satisfied to enjoy the atmosphere inside the Museum or outside the Museum, namely the tobacco process exhibition room (Figure 14 and 15).



Gambar 14 Exhibition hall interior (side 1)



Gambar 15 Exhibition hall interior (side 2)

The exhibition room floor should use a hard floor with floor covering material with a simple pattern, flat, and a little line, not sparkling (matte), and does not cause shadow effects. In general, floor colors that are not conspicuous or contrast with the furniture exhibits are displayed. The exhibition room walls should also have standard wall materials because they will be the background for the placement of information panels. Showroom ceilings are recommended to use fireproof materials, and the colors are not striped to give the impression of not being the orientation of the eyes of visitors. The ceiling must be clean from various installations, primarily electrical. The ceiling height can be planned according to the scale and magnitude of the desired collection of exhibited items and information panels.

A support zone is a zone whose activities are activities that support the main activities. Activities in this zone include reading activities where the library is available in the Museum, buying and selling, renting, and a cafe (Figures 16 and 17).

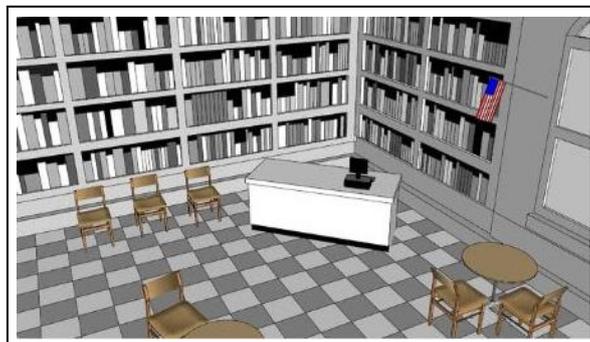


Figure 16 Interior Library



Figure 17 Interior Retail

The concept of spatial planning in Hostel is customized to the needs of visitors. Hostels become a resting place for visitors after visitors enjoy the existing tours in the area. Spatial planning to the existing activities into three zones, namely, the central zone, the support zone, and the service zone. There is an accommodation room in the main room consisting of three parts: a private dormitory, a Male dormitory, and a female dormitory (Figure 18, 19, and 20).



Figure 18 Privat dormitory room



Figure 19 Male dormitory room



Figure 20 Female dormitory room

Exterior Concept Spaces with a square base pattern. By concentrating the gathering point on a square building located in the middle of the old building. There is a ramp in the building of the Museum that can see the area's atmosphere from inside the building with a higher level. All visitors feel the museum space that blends with the outside space.

Structure and Construction Systems Museum this museum building is an old building that already has a Structure / Construction System is from its physical strength. The column structure in this building uses wood on the foundation of this building using a palm foundation. The column structure in this building uses wood material, and the foundation of this building uses a palm foundation. The original material of this building is real wood. The original structure of the roof in this building is wood, while the cover material is tile. However, because the building will be re-functioned and the walls are made of permanent bricks, while the existing wooden column structure is covered with concrete to strengthen it. For fixed roof structures using existing structures. The additional mass of the structure used is concrete for the roof using a space frame with a metal roof covering, and the material used as a wall is glass.

Hostel: In this building, using a concrete column while the foundation of this building uses a palm foundation. Materials building materials used are brick, gypsum, and structural materials used are concrete. The roof structure used is a combination of reinforced concrete structures. The cover material chosen for this building is a concrete plate. However, to make the Museum more modern, technology is presented to support information about the history of the tobacco museum, including infrared sensors and lighting systems (Figures 21 and 22).



Figure 21 Pemasangan Sensor Infra Red dan Gerak



Figure 22 Pemasangan Sensor Cahaya

5 Conclusion

Revitalization of PTPN II Tobacco Formation Area by Deli Museum and Deli Tobacco Hostel located on Jalan Desa Helvetia Kec. Labuhan Deli Kab. Deli Serdang North Sumatra to be a means of education as well as a convenient and environmentally friendly tourism tool intended not only for local visitors but also for tourists from all over the world, students, historians, and others as well as a medium for local and foreign communities to get to know and appreciate the history of the past. This Museum's design is also strengthened by other building functions, namely the hostel, where a hostel is a place for visitors who come from out of town or abroad to stay.

This area in the Deli Serdang area, which is part of Mebidangro. Medan city is currently improving itself to become an ideal city through Mebidangro (Medan-Binjai-Deli Serdang-Karo district), which be expected to revive existing activities in the city center to achieve the goals of the national strategic area. One of the Mebidangro area's plans is the arrangement of the Deli

tobacco area, which functions as an urban green open space, artificial tourism, and the Mebidangro urban trademark [8].

The design of the Museum, combined with Massa's addition at the midpoint of the old building, is designed with a new feel but does not leave the existing building characteristics. The museum building still retains the old building along with the details that are in the building. The hostel building itself to adapt to the old building's context in the area by maintaining its characteristics through shape and color.

Revitalization is the theme of the design of the deli tobacco hostel and Museum because of the Reuse of a building that aims to restore a historic area with potentials. Adaptive Reuse is the approach to designing these museums and hostels because of the use of old buildings with new functions to have a history that will never be forgotten by efforts to maintain existing relics.

Acknowledgement

This research is about revitalizing this deli tobacco museum and hostel by reusing a building that aims to restore a historic area. The author would like to thank the Department of Architecture, the University of North Sumatra, for the author's guidance in writing this research.

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