

Original Research Article

Rethinking Old Dhaka Jail into Urban Open and Social Interaction Space for People

ABSTRACT

Urban open space is essential in an urban area. It helps to improve the general health and well-being of the residents. Dhaka is one of the fastest-growing cities globally but the numbers of urban open spaces in this city are decreasing day by day. Old Dhaka is the oldest and most densely populated part in the city of Dhaka. Here, people don't have minimum urban open space for social interaction and for creating a neighborhood. Old Dhaka Central Jail is an abandoned jail that is situated in the chawkbazar area of old Dhaka; the jail is currently identified as a "Brown Field" in this area. Though the space is abandoned, the jail also has some historical structures and significance. This paper tried to find out the way to convert the jail area into an urban open space for people to interact socially. For this a broad field survey and observation survey is done to develop morphological analysis and done a literature study to develop some strategies for spatial framework. The goal of this paper is not only creating open spaces but also proposing a process of preserving historic structures. The design has been conceptualized in a process that also solves many problems of the surrounding area.

Keywords: Social Interaction, urban open space, Old Dhaka Central jail, Historic Structures, Neighborhood

1. INTRODUCTION

Bangladesh is in the 8th position in population in the world with 167.4 million people [1]. After liberation, the Urban-rural population increased alternatively. People need playing, recreation, and cultural program for enjoyment and that's why open spaces are essential in an urban area. Dhaka is Bangladesh's capital city, with a population of 22.4 million[2] it is 300 square kilometers, with 23,234 people living per square kilometer and that makes it one of the highest-densely populated cities in the world [3]. The city of Dhaka has a massive lack of urban open spaces and open field. According to World Health Organization, there should be 9 square meters of urban open space for each resident in an ideal city but Dhaka has only 1 square meter. It has been perceived that Dhaka city needs 1300 playgrounds but has only 250 [4]. Due to this lack of urban open spaces, people cannot have the space to socially interact with each other and build a neighborhood. Old and New Dhaka are the two parts of the city and Old Dhaka Central jail is an abandoned jail situated in the Old Dhaka chakbazar area. Chakbazar is a high-density' urban mixed-use development area where people live for jobs, business, and other activities. In old Dhaka, all the buildings are congested and on top of that, there are fewer open and green spaces for people to socialize. This paper intends to find out how to convert the old Dhaka central Jail into a green and urban open space so that people can breathe fresh air and interact with others. Moreover, this paper will also help to improve the business quality of this area. Old Dhaka Central Jail has a historical value in the Bangladesh which is while doing this paper the historical significance of the jail has been kept in mind.

2. METHODOLOGY

The study is based on field survey and some literature study as source of data. A morphological study is done through a field survey. Old Dhaka land use pattern and existing open spaces has been has been studied. The condition of the existing open spaces surrounding the study area and connection of road network has been identified. The pedestrian movement around the site also being surveyed. A literature study has been done to understand the importance of urban open space and understand the process to create a social interaction space. A survey was done in the site to sort out the historical building inside the site, which should be preserved. Through survey and literature study, the researcher proposed some recommendations to create a design.

Location of Site area: Old Dhaka Central jail is situated in the heart of Old Dhaka under Kotwali thana Ward no. 63, 64, and 67. It is near the famous chawkbazar of old Dhaka.



Figure 01: Location of the study area
Source: Google map (modified by author)

3. LITERATURE REVIEWS

3.1 Urban Open Spaces

Urban open space means the place in an urban settlement with less structure and more green space, and it is accessible to people[5]. The places are open for public entry. Sometimes town open areas can be owned by private organizations. [6]. Urban open space gives excess to people so that they can increase their social interaction and it also provides scope for various plants to grow [7]. Majority of urban people's social and physical activities always occur in these urban open spaces. [8]. The parks and open field outside the city don't consider as urban open space. Urban squares, piazzas, plazas and streets are also considered as urban open spaces in planning. [9] Urban open space can be labeled as an ecological balancer [10].

3.2 Social Interaction Space

Social interaction is significant for urban residents to create a neighborhood[11][12]. Both paid and unpaid services can be used in Social interaction space. The market, exhibition space, community hall, restaurant, and street market are among the paid services of the social interaction spaces: field, park, and plaza fall under the unpaid services [13]. The social interaction process can differ from person to person in different ages. The young generation interacts with their friend through playing in field, hanging out in the park, market or in the restaurant. Whether the middle-aged and older people interact with their friends by hanging out in the park, market, and older people interact with their friends by hanging out in gardens, markets or restaurants.

3.3 PRINCIPLE OF CREATING SOCIAL INTERACTION SPACE

Social interaction tradition changes in a rapidly changing world. So it is tough to set a fixed principle for creating social interaction space. But due to everyday habits, people use some common spaces to maintain social interaction among them. Public spaces play an essential role in social interaction among the society and create a friendly environment in the neighborhoods [14]. Social interaction spaces can be residential neighborhood spaces, open urban spaces, and other civic spaces. It has to serve all people of different ages. This space can be used by local communities and by people from other communities too [15]. The social interaction space would be a combination of spaces that are combined of paid and unpaid services. Some business facilities should be provided here to maintain the space. There should be a certain percentage of paid and unpaid area. The unpaid area will be more than the paid area [13]. There should be facilities for people of every age and the design should be according to their physical and psychological condition [16]. Water areas, Small urban pockets, and streets should be designed as social interaction spaces[17][18]. The social interaction space should also uphold the historical and cultural value of the area.

3.4 HISTORICAL BACK GROUND OF OLD DHAKA CENTRAL JAIL

The site has a great historical heritage. It is older than the Lalbagh Quella and considers the oldest fort in Dhaka. It was an Afghan fort but there is no recorded document to prove that. Mughals used the fort as an administrative building before the Lalbagh Quella was constructed [19]. In the british period the fort was converted to jail. There are the existence of historic buildings, such as the cells of the great four leaders of bangladesh and the cells of Sheikh Mujibur Rahman. Some buildings are 228 years old and have a historical value; there are buildings from the colonial period, the Pakistan period, and the Bangladesh period [20][21].

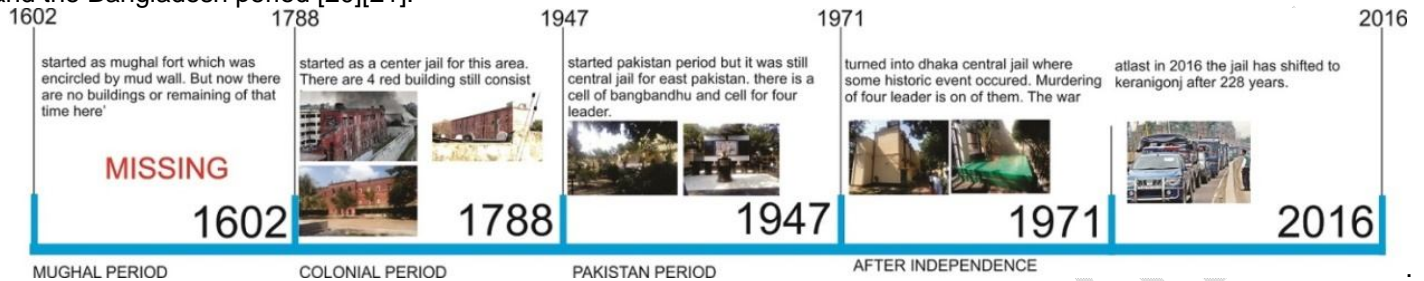


Figure 02: Historical Development in Old Dhaka central jail
Source: by Author

4. RESULTS AND DISCUSSION

4.1 Morphological study of the area

4.1.1: Land use, Open spaces and height of buildings around the site area

The survey shows that the residential and the mixed-use buildings surround the Old Dhaka central jail area. Ninety percent of the roadside buildings are mixed-use development (Figure 03), but the buildings which are not near the road belong to the residential development. The building heights of this area are mostly three to five floors among them very few buildings are more than seven floors (Figure 04). There are 11 open spaces in Old Dhaka within 0.5km radius around the study area (Figure 05). This open spaces are only 3-5% of the total surveyed area.

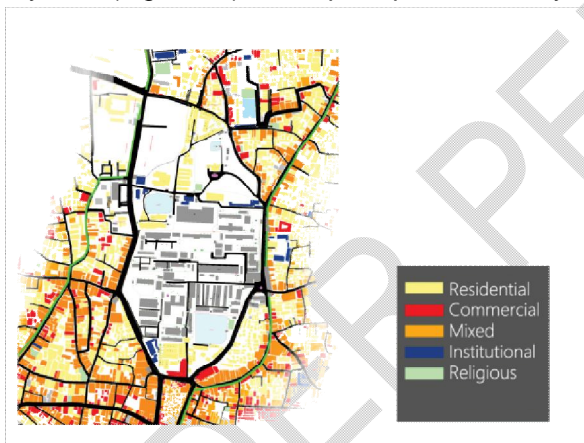


Figure 03: Land Use Pattern
Source: by Author

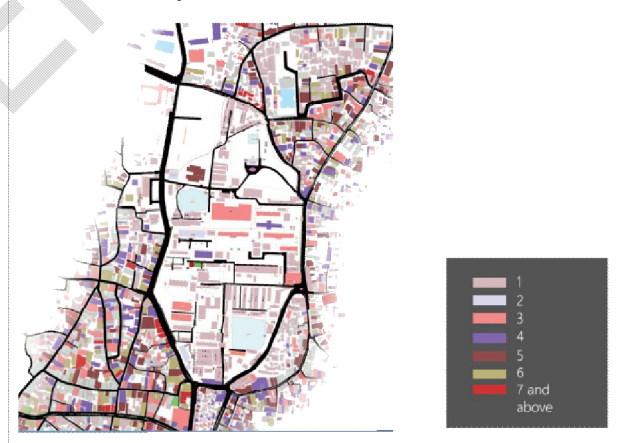


Figure 04: Bulding Hieghts
Source: by Author



Figure 05: Open Spaces around Old Dhaka Central Jail
Source: Google map and survey(modified by Author)

4.1.2: Node points around the site, pedestrian movement and transportation pattern

From the survey, it can be observed that various parts of the Old Dhaka are connected to the jail area road. It is easily accessible from different areas for multiple people. The Lalbagh Fort is also close to this site. Some important node points around the site connect the old Dhaka central jail with separate areas of old Dhaka. It is also in the center of various historic sites of old Dhaka. A Transportation countdown is down in 3 node points around the site in different time. The node points are Chankharpul Node, Bakshi Bazar Node and ChawkBazarNode (Figure 06).

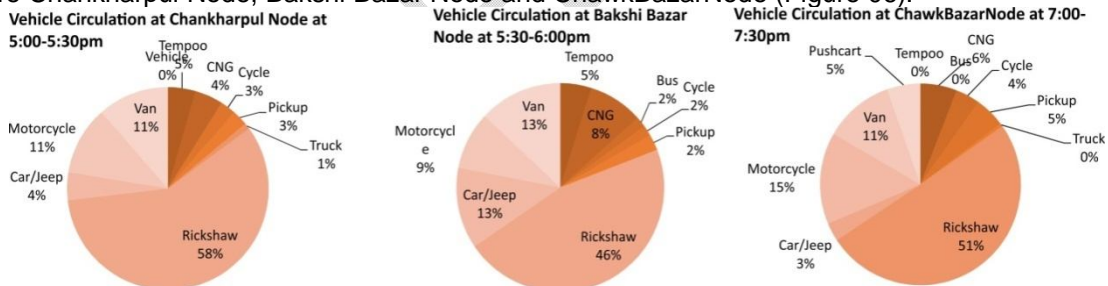


Figure 06: Transport Countdown (by Author)



Figure 07: Connectivity with site (by Author)

In the pedestrian movement, it has been seen that most of the people want to walk from one node point to another but they have to walk around the site and there is a lack of pedestrian path, which make people take rickshaw and increase the traffic load in surrounding road(Figure 09).

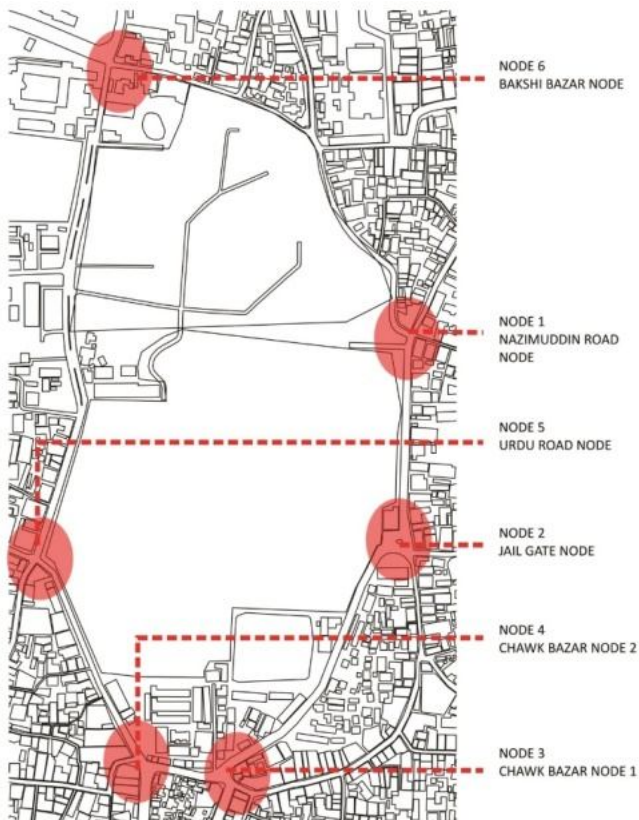


Figure 08

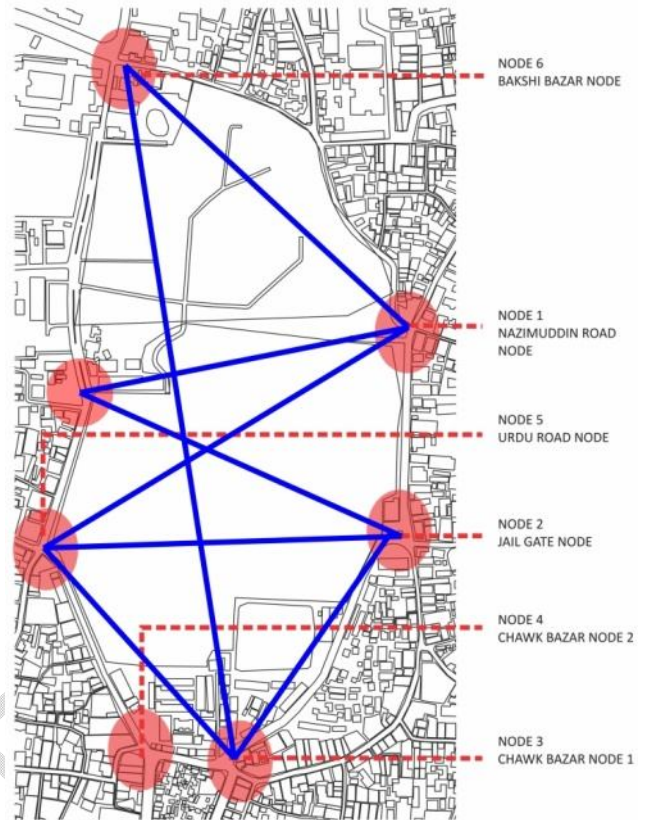


Figure 09

Figure 08: Node points around the site (by Author)

Figure 09: Pedestrian connection needed between node points around the site (by Author)

4.1.3: Building selection for preservation:

Dhaka's central jail area is 18 acres and with additional facilities, the area is around 38 acres. In other functions, there is a bungalow of DIG of the prison with 3 acres and a pond, prison school, prison guest house, training center, and staff quarters for jail guards and from the point of view of this paper, all will be shifted.

In the jail, there are four red buildings (Padma, Meghna, Jamuna, and medical building), which are a symbol of the colonial period, the jail of Bangabandhu is the symbol of Pakistan period and independence, the four leader jail is the symbol of the dark history of Bangladesh, the gallows is also essential which showcase the justice of Bangladesh's judicial system. These buildings can be reused for different functions.

The other structures can be removed from the site to create more open spaces for the people.

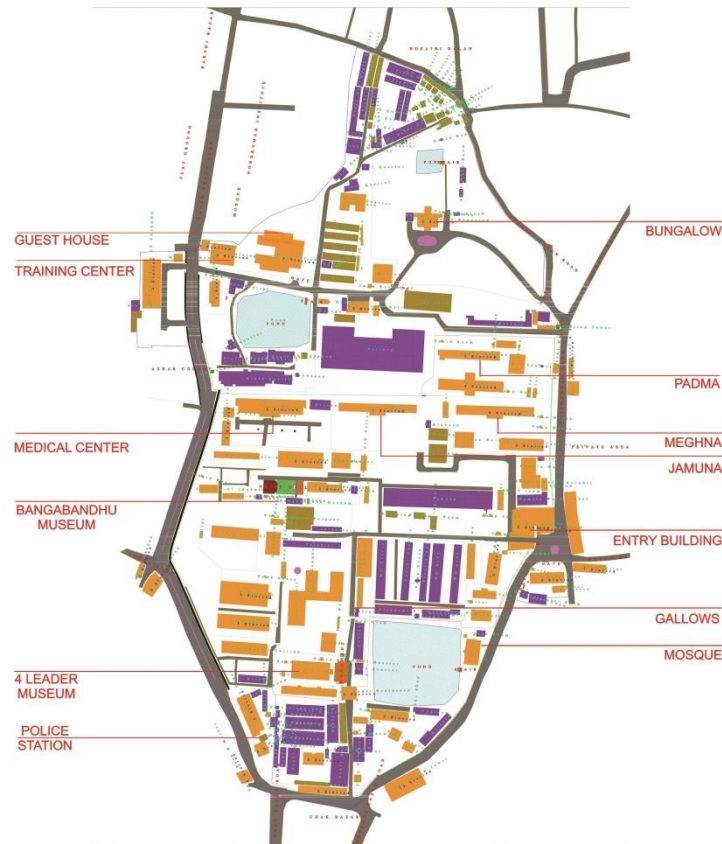


Figure 10: Existing Buildings (by Author)

4.2: FINDING FROM MORPHOLOGICAL STUDY

The above study shows there are a lot of scopes to work on this site. From the morphological research, we can see that the Old Dhaka central jail area is in the center of the residential area of old Dhaka. Its surrounding roads also connect the heritage buildings, a tourist attraction. This area also has historical buildings and incidents. The site is now working as an urban lost space after the jail has been relocated from this area. Which is hampering the area's adjacent business, and there is also less connectivity among the node points. Using this area, this connection of node points through pedestrian should be made.

4.3: CRITICAL OBSERVATION OF THEORETICAL STUDY:

The theoretical study shows the importance of social interaction in urban life, how to use urban open spaces into an interaction spaces. an social interaction can be also an income generating space and it also shows social interaction is important to create a community which develop the urban life. The study reveals tha for the different age groups the process of social interaction is different also the space can be both open or inside a building. In the theoritcal study the historical importance of old dhaka central jail has ben studied and among all the building which buildings are the important part in the history and should be preserved had be analysed.

5. RECOMMENDATION:

- Select the structures for preservation: Some structures should be removed from the site to create more open spaces. Among all the structures, the four red buildings, Bangabandhu jail museum, four leader jail museum, and gallows might kept for historical purposes. Some newly made buildings are in good condition and can be reused. Some buildings are newly made are in good condition which can be reused for different functions. Other than these, all the structures should be removed from here. (Fig-11)
- Connect Node Points: The jail area is in the center of the old Dhaka residential area. We should connect the jail area's node points through pedestrian and bicycle lanes. This will help people to move easily to the surrounding area and the business of the surrounding area will improve due to large movement of people. (Fig-11 & Fig-12)
- The Landscape Pattern: The connecting pedestrian inside the area will be designed as the Mughal landscape pattern because in the area there are structures resembling colonial, Pakistan and Bangladesh period and the

only left-out period is the Mughal period. In the Mughal design, landscape plays a prominent role and there is a common pattern in it. Establishing the Mughal landscape will also separate the open spaces which can be used as different functions. (Fig-13)

- Structures in use: Among the existing buildings some will be preserved just as they are now. The bangbandhu (Fig-15) and 4 leaders (Fig-16) museums will be preserved and the area of these museums will be surrounded by coconut trees. This trees will set apart these museum from other buildings as the coconut trees will only be planted there. The three colonial buildings in line will be converted to a jail museum (Fig 17) as there are the oldest one. Another one will turn into a cultural center. The DIG bungalow will be a library and the other structures will be converted to a restaurant, Guest House, Sport Complex, office of the area and Gym complex. Two new buildings which are newly proposed will be a community center and another will be a primary school which is needed in the area.
- Proposed Street Market: The central pedestrian road of the proposed solution is designed in such a way that it will act as a plaza and there will be a street market. This will encourage a large amount of people to go there and as a result the business will flourish. (Fig-18)
- Urban Pockets: The node points are the entry point of this area. In every entry point, the researcher proposed to create urban pockets. There will be TONGS or a tea stall and a small plaza in that area. A TONG is a place where middle age to old people spent their time. The plaza will be used for the adjacent local communities for arranging their programs like exhibitions, small gathering, etc.(Fig-19)

Segregating open spaces: Due to the pattern of the Mughal landscape, all the green spaces is square-shaped. Some of the green spaces are used as an open field for local people to play and the other green spaces will be flower gardens. There is a big open field near the sports complex for arranging small football tournaments.

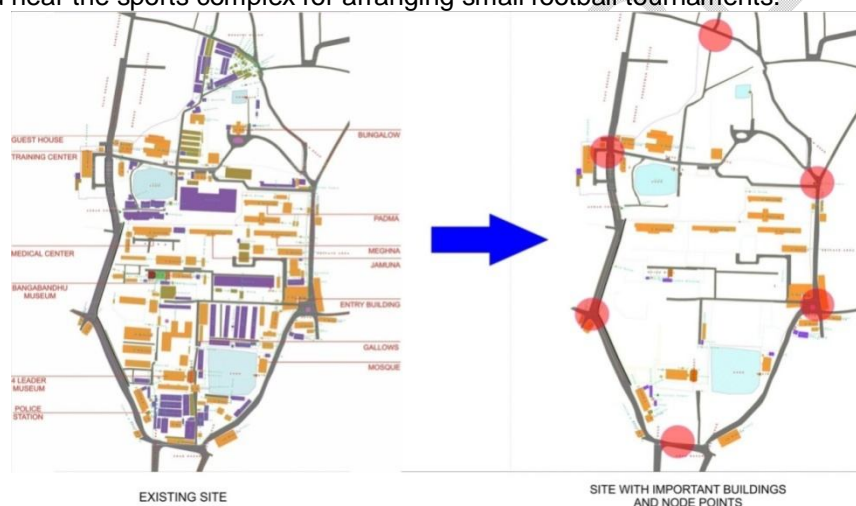


Figure 11: Vacant the land and identify node points (by Author)

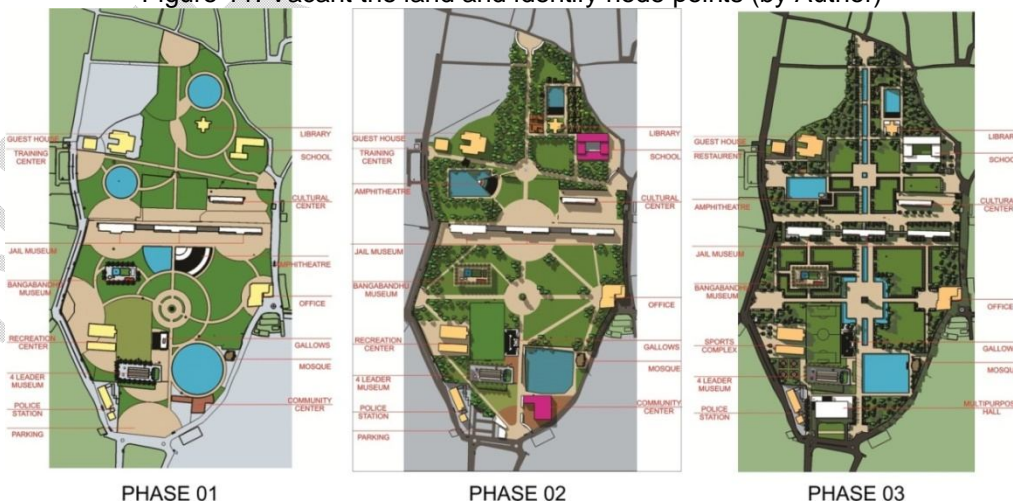


Figure 12: Connect the node points with different landscape pattern (by Author)

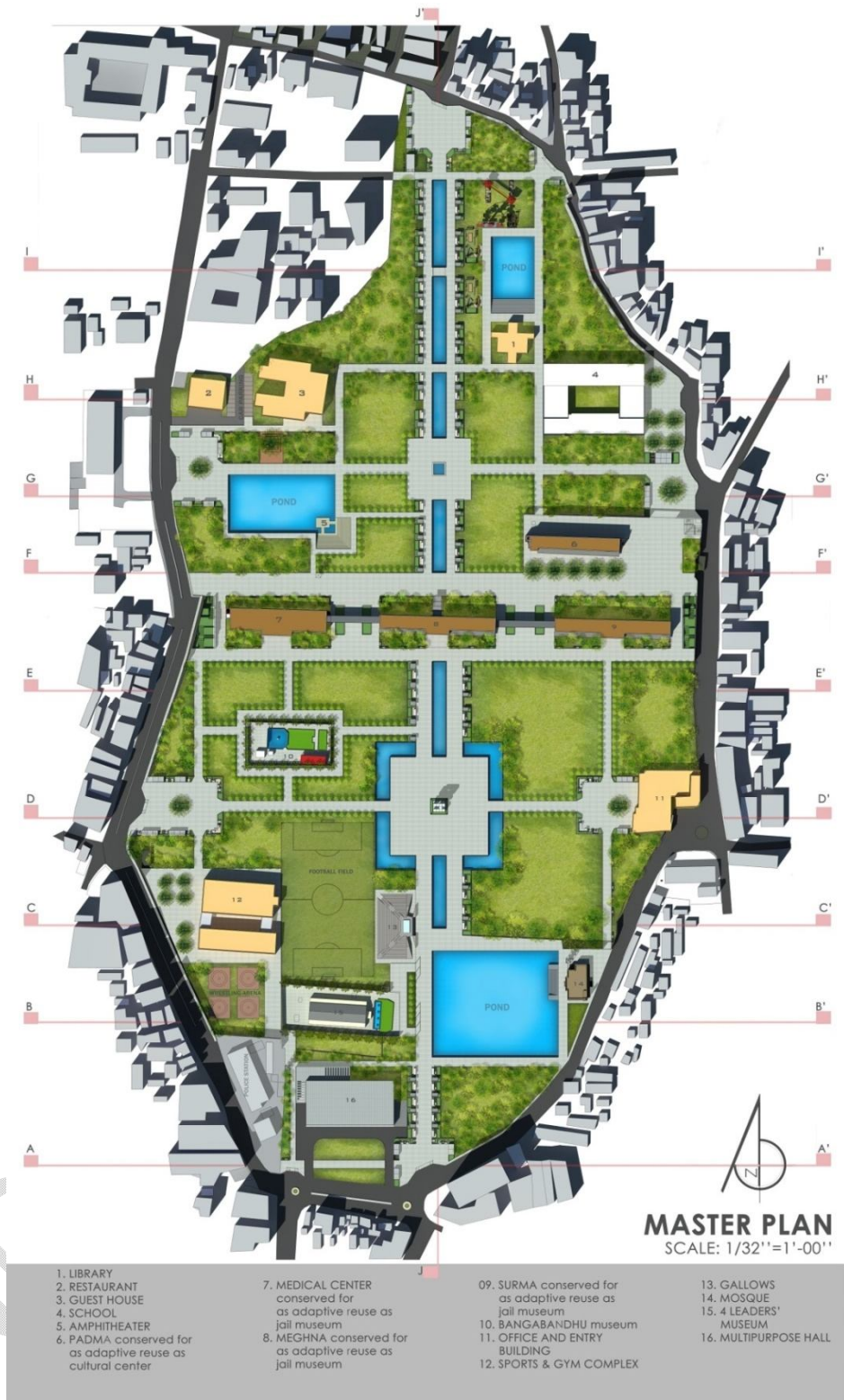


Figure 13: Final proposal with Mughal landscape pattern (by Author)

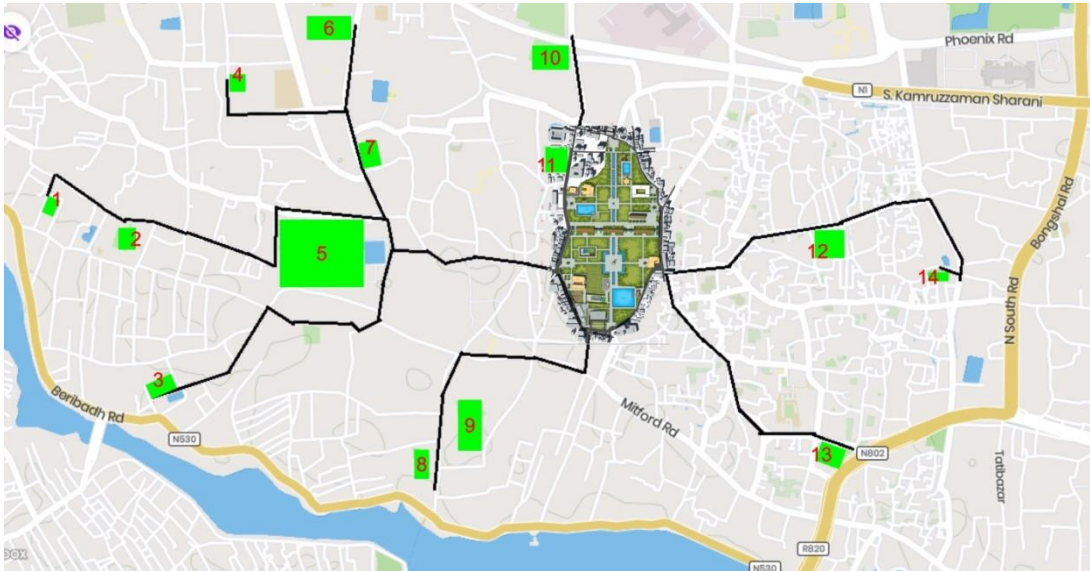


Figure 14: Connection of site with the open spaces of surrounding area. (by Author)



Fig 15: 4 Leader Museum



Fig 16: Bangabandhu Museum



Fig 17: Jail Museum



Fig 18: Street Market



Fig 19: Urban Pockets

6. CONCLUSION

Connecting all the node points through pedestrians will help people to move from one place to another easily. This will solve the traffic problems around the site. Providing only one football field will help the local young generation interact with each other. Urban pockets and tongs are also one of the places for individual's interaction. If we can create an

environment where civilians can interact with each other, it will help to develop the social condition and will decrease the crime rate around this area.

The increasing percentage of green, playgrounds and parks will develop the living condition of Dhaka. There is a street market focused on handicrafts and traditional foods. That design will also develop the economic and living conditions of this area. This design also represents the history and help to improve the social condition.

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