

Keraniganj Riverfront Development

BY

Sumaiya Rufida Islam

08308008

SEMINAR II

Department of Architecture

BRAC University

Content

Chapter-1: Background of the project

- project brief
- project introduction
- aims and objective of the project
- program

Chapter-2: site analysis

- Introduction:
- Topography:
- Land Use pattern:
- Road Network:
- history and culture:
- S.W.O.T analysis

Chapter-3: literature review

- Definition of Redeployment
- Definition of Urban renewal
- Hypothesis on development of old Dhaka and Keraniganj

Chapter-4: Case study:

Melbourne Dock land

- Introduction
- Information of the project
- Program
- Strategic plan
- Project Analysis

Western Case Study

- Diller Scofidio + Renfro -Aberdeen City Garden Project
- Bernard Tscumi- Parc de la villette

Continental Case study

- Nishad Bagh- Kashmir
- Shalimar Bagh-Kashmir

Chapter-5: Program Derive

Chapter-6: Design Development

Old Dhaka street pattern

Water body

Internal Road network

Detailing of sports center

Chapter-7: Design Phase

Master plan

Detail of Sports center

Chapter-8: Conclusion

Chapter-9: Reference



Chapter -1

Back ground of the project:

1.1 Project Brief:

Old Dhaka stands with its glorious history by keeping the pride of Dhaka. Keraniganj the other side of the river Buriganga is the part of new Dhaka projecting the future of Dhaka. Both of the two areas are dealing with over population, congested and unhealthy settlement. Lack of open space for breathing is one of them. Scarcity of land or for high land value open space is almost extinct from this area. In this point Keraniganj river front development can be a conjunction space for people of this area and the whole Dhaka for breath.

1.2 Project Introduction: Dhaka is the city of people, color, vibrating culture and tradition. The history of Dhaka started back four hundred years ago. It started by the river of Buriganga today now where is Buckland bund. Interestingly the growth of Dhaka happen towards the north and south side remain unscathed by the urbanization till 1980s (Farzana Raihan and Nowrine Kaiser). After independence Dhaka becomes the capital and center of the all economical activity. People from all over the country started migrated to Dhaka for employment. To hold on such increasing huge population Dhaka started to expand. But this expansion was only north facing until early 1980s it also started to expand toward the south part of Buriganga River.

Keraniganj, Jinjira are the initially urbanized area of south facing development. But this development initiate as a new industrial area. This is turned as a mixed use housing and small scale industrial area. It became a potential area for employment for low income people. People from all over the country came here for work. Soon it becomes densely populated with migrated people. But this sudden urban settlement grows spontaneously without any proper guideline. Even the city grows in modern time it has Lack of urban planning, proper building code and dense population make this new urbanized area vulnerable and so a new urban crisis emerge on this area.

The population density of southern part is highest in the country. Most of the structures stand shoulder to shoulder without the minimum of open space necessary for light and air. The area seems very dense in terms of population and buildings. This area has open spaces but most of it under the authority of real state business class for future development. So these land are more or less empty which is also encouraging crime here.

On the other hand, other side of the river is Buckland bund where history of Dhaka begins. Area surrounded the Buckland bund has its own tradition and culture practicing through hundreds of years. Inhabitants are living here for generations. The area has gone through with lots of phases of history. First Mughal invaded the land at 1600Ad and founded the city to take control over rivers of Bangladesh. They made fortress and other public services to control the city for example Lal Bagh Kella. And as the time runs Armenian came to flourish their business and religion they also contributed by making churches (Armenian churches) and other facilities. Soon after British came they make Dhaka is the capital of Bongo province on 1905. New govern contribute a lot. This the time Dhaka actually flourishes as a city. They made bund to protect the city and made institutes and office to run the new province (Wikipedia). All these phases gave Dhaka a shape, fabric and a context of the city.

Even though old Dhaka has its history, tradition and social structure it also tied by lot of problem.

Narrow Street is insufficient for traffic control. That is why traffic congestion is become a synonyms for old Dhaka. Streets designed for palanquins, horse carriage, elephants and foot traffic are now being used by push carts, rickshaws, cars, trucks and pedestrians. Public transport is underdeveloped and mal administered. Traffic jam in old Dhaka is a way of life. The narrow, torturous roads and alleys are further constricted by public stand pipes, hawkers and spillover of business on to the streets. Pavements are Absent. (Dr. Qazi Azizul Mowla, 2008)

The residential density of old Dhaka is highest in the country. If the number of the people working in the area is included the gross density will be much higher. A conservative estimate of person room ratio was 7.5 in the residential quarters of old Dhaka (SFYP, 1990). Most of the structures stand shoulder to shoulder without the minimum of open space necessary for light and air. The area seems very dense in terms of population and buildings but it is more apparent than real. The average FAR in Chawk was found to be only 0.9. Old Dhaka lacks in open spaces and parks. There are less than 17 acres of open space for over 10 lac people. These too are being impinged upon by hawkers and unscrupulous group or individuals. (Dr. Qazi Azizul Mowla, 2008)

Old buildings in dilapidated conditions and very bad state of repair are still in use. New extensions of up to four / five stories over old foundations of one to two stories are frequent. Deaths from building collapsing are known to occur. Old Dhaka is replete with buildings of architectural beauty, historical, religious and cultural significance. "They are eloquent testimony to our history, culture and tradition. In more ways than one these buildings are 'images' of the past with which people still identify old Dhaka. But sadly enough much has been lost and if the present condition persists many of these structures will be lost forever" (IABNL, 1989).

"The models of indigenous cities have their own problems too. Congestion, pollution and traffic chaos may have been synonymous with old neighborhoods but it would be wrong to blame the physical form or the built environment of the place. The culprit is the unhealthy densification and an over taxed infrastructure and not the spatial configuration" (Doshi,1995)



Present Old Dhaka



Present Days Keraniganj

1.3 Aim and objective of the project:

- Create a green space for people of old Dhaka, Keraniganj and also for whole Dhaka
- Connect old and new Dhaka by a common civic space
- Create a good a healthy environment
- Create entertainment area by keeping in mind about the health of the people.

1.4 Program:

The following programs have been derived from research on spaces under existing Redevelopment project around the world.

- Community gathering area
- Sports centre for the people of Keraniganj
- Cultural hub by embracing the Burignaga River front
- Aquatic Garden
- Natural wood land , grass land and green area
- Exhibition Area,

- Cafeteria,
- retail Shops,
- club facilities

Chapter-2

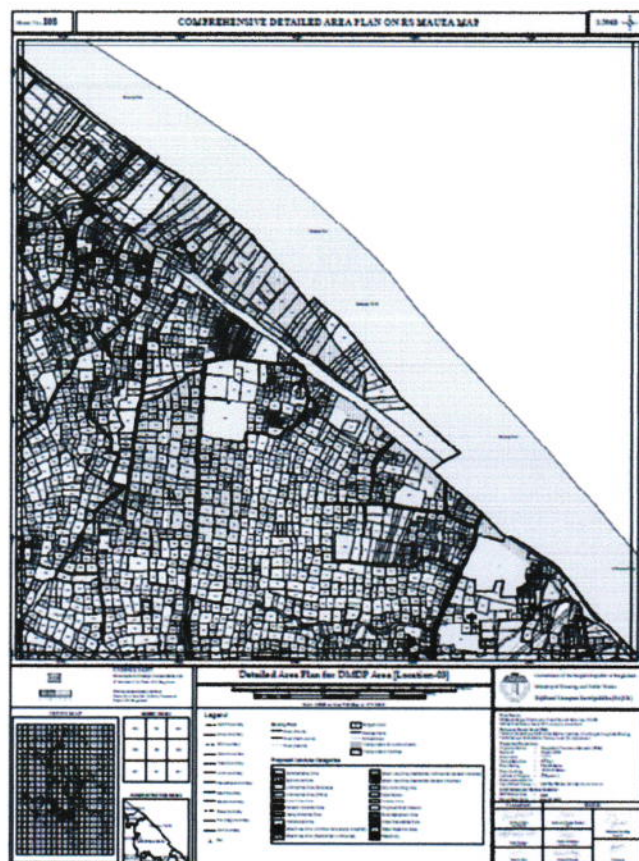
Site appraisal:

2.1 Introduction:

The site is surrounded by Buriganga River in two side and by a canal by other side and by its position it is working as a threshold for old Dhaka and new settlement of the southern Dhaka. And in it is also denoted as open space in Detail Area Plan. So it is a proper space for Becoming a public Area by its position and also by its character.



G thw





Area: $.5 \times 650 \times 250 = 81250$ meter square
 $= 20.077312$ acre

Figure: 2.1(Site location)

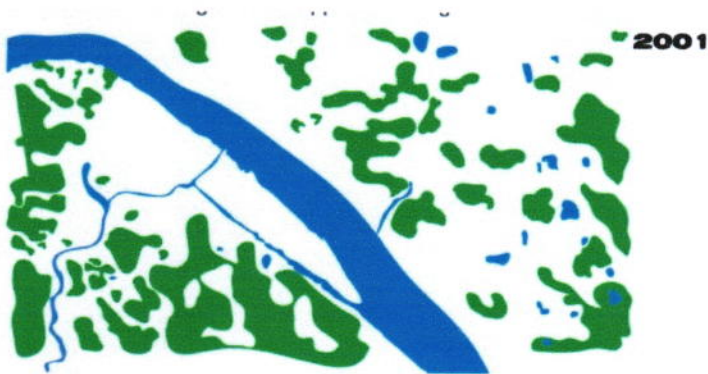
Site is the both side of the Buriganga River where old and new city gets alienated. This is also the main site force for the development of these areas. Figure-2.1 is showing the location of the site. Below site picture





2.2 Topography:

From the Figure-2.2(1) the most influencing physical object in the site is the River Buriganga. However it is also the major reason behind the establishment of these settlements. Mobilization on this area is mainly occurring through the river. So settlement of the both side highly depend on this river. To understand the site context In the Figure-2.2(1) shows that how is the Course of the river Buriganga changing through time.



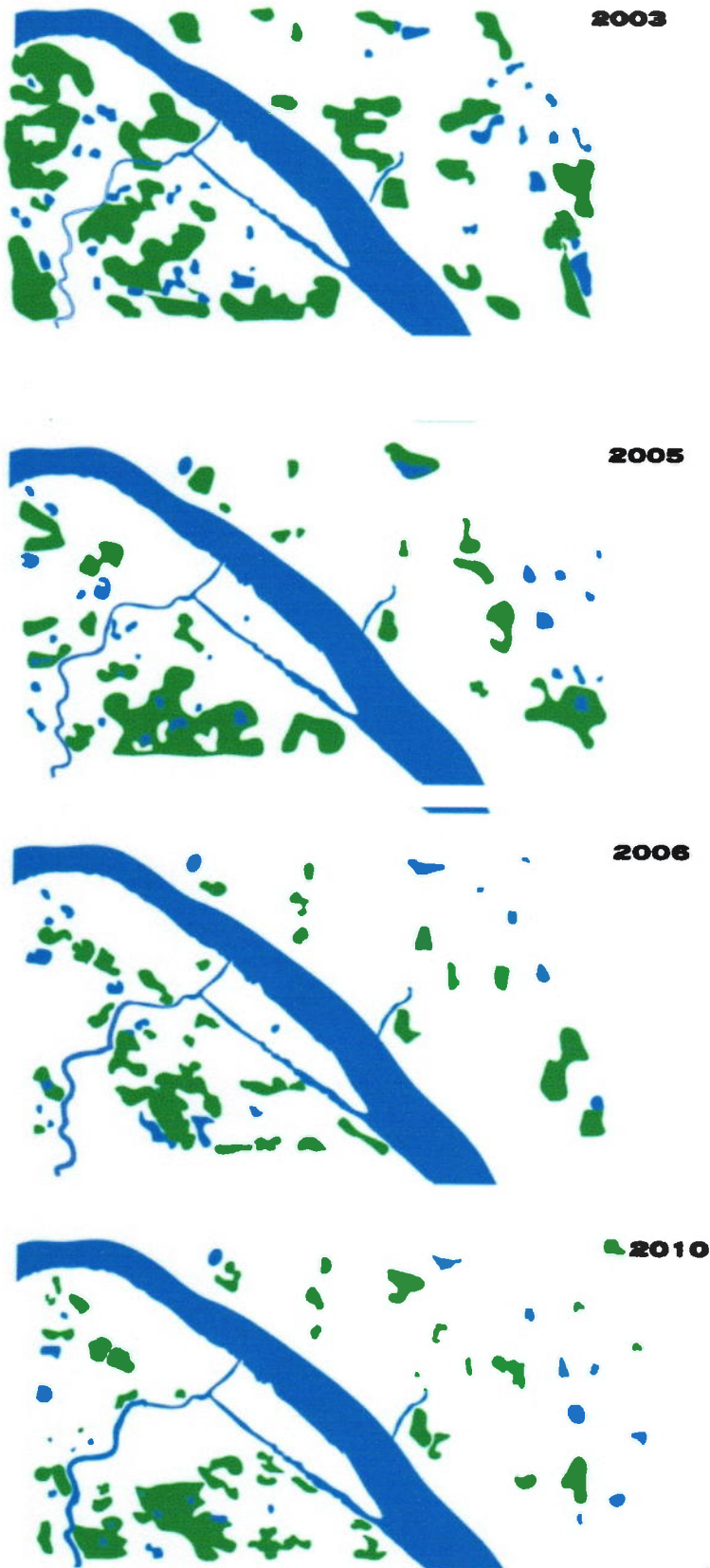


Figure: 2.2(1)

(TIMELINE The gradual disappearance of green surfaces and water bodies throughout the last the decade)

In figure-2.2(1), shows that course of the River Buriganga are not dramatically changing over the period of time but green space is precariously deducting because of the aggression of the urbanization. And from the time line it is became obvious that preservation of the open and green space is how important.

In figure-2.2(2) shows the contour map shows the high and low land of the area,

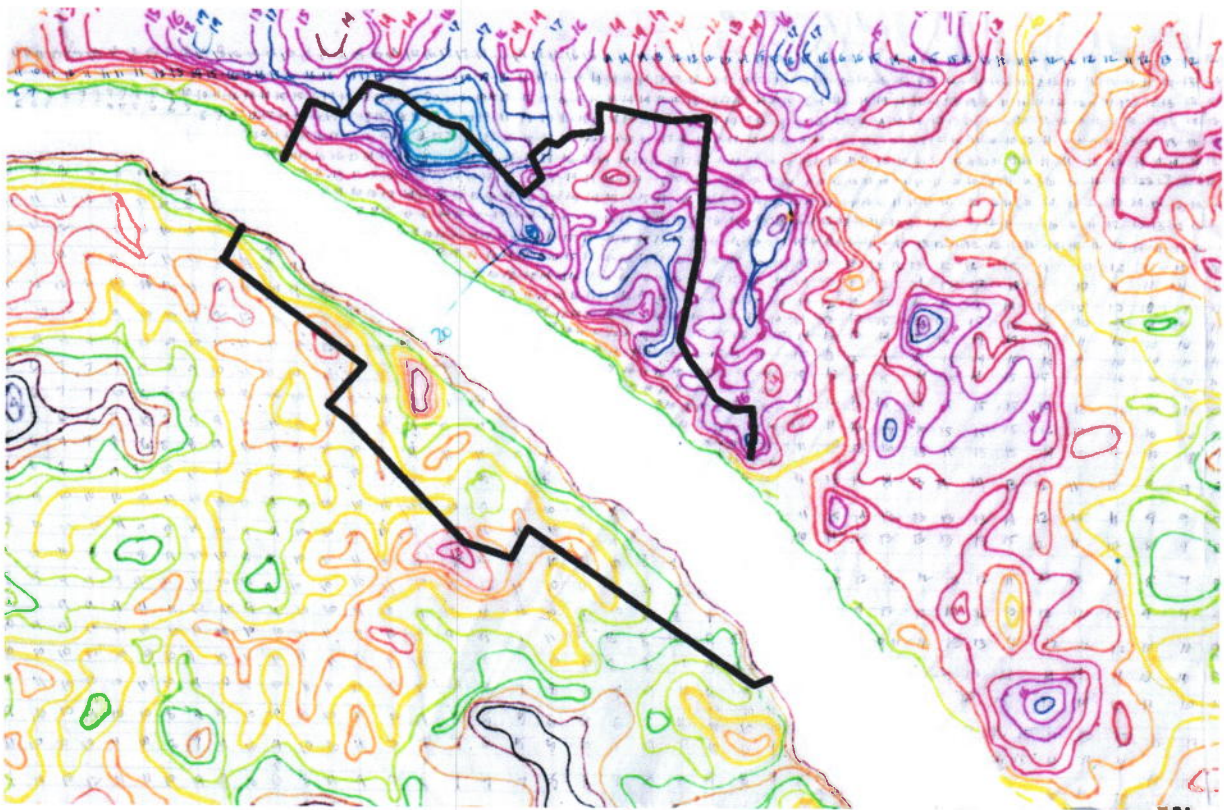


Figure-2.2(3) (Contour map)

Contour map shows the hight from
see level



2.3: Land Use pattern:

On figure-2.4 red lines means the high land rarely affected by the flooding. The yellow lines means lands which are flooded during rain or monsoon but generally dry on the other season and green lines determine the wet land which contains round the year but not that deep.



To understand the settlement pattern of the site in figure-2.5 shows the land use map of the site

Figure-2.3 (1) (Land use map)

From the land use map we can figure out a pattern of these areas. From the map we can see that in both part of Dhaka a very commercial zone (in map the areas which are designated in blue color) ascertain bank of the river on average 17% of structures (Dr. Qazi Azizul Mowla, 2008). Then in older part of Dhaka comes a mixed use zone (designated in yellow color), then comes residential area (designated in orange color) on an average 70% of the structures (Dr. Qazi Azizul Mowla, 2008). Very few open and green spaces sprayed as dots (designated in green color). There are less than 17 acres of open space for over 10 lac people. (Dr. Qazi Azizul Mowla, 2008). On the other hand on the other side of the river where Dhaka is generating we see from the map dominance of industrialization (area designated in violet color). Surrounding the industrial area commercial area emerges to balance the necessity. And surrounding it mixed use residential and commercial structure come into sight for the worker of this area. Diagram shows in figure-2.5 is the critical pattern of using land in Figure-2.5

From figure-2.5 the land use pattern of the site can be derive into the section below in figure-2.7

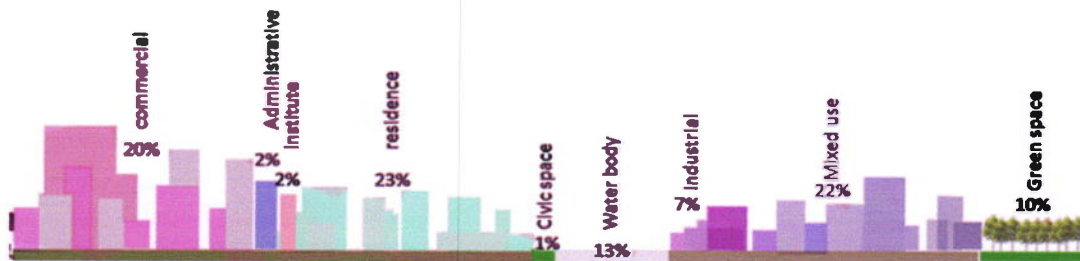


Figure-2.3(2)

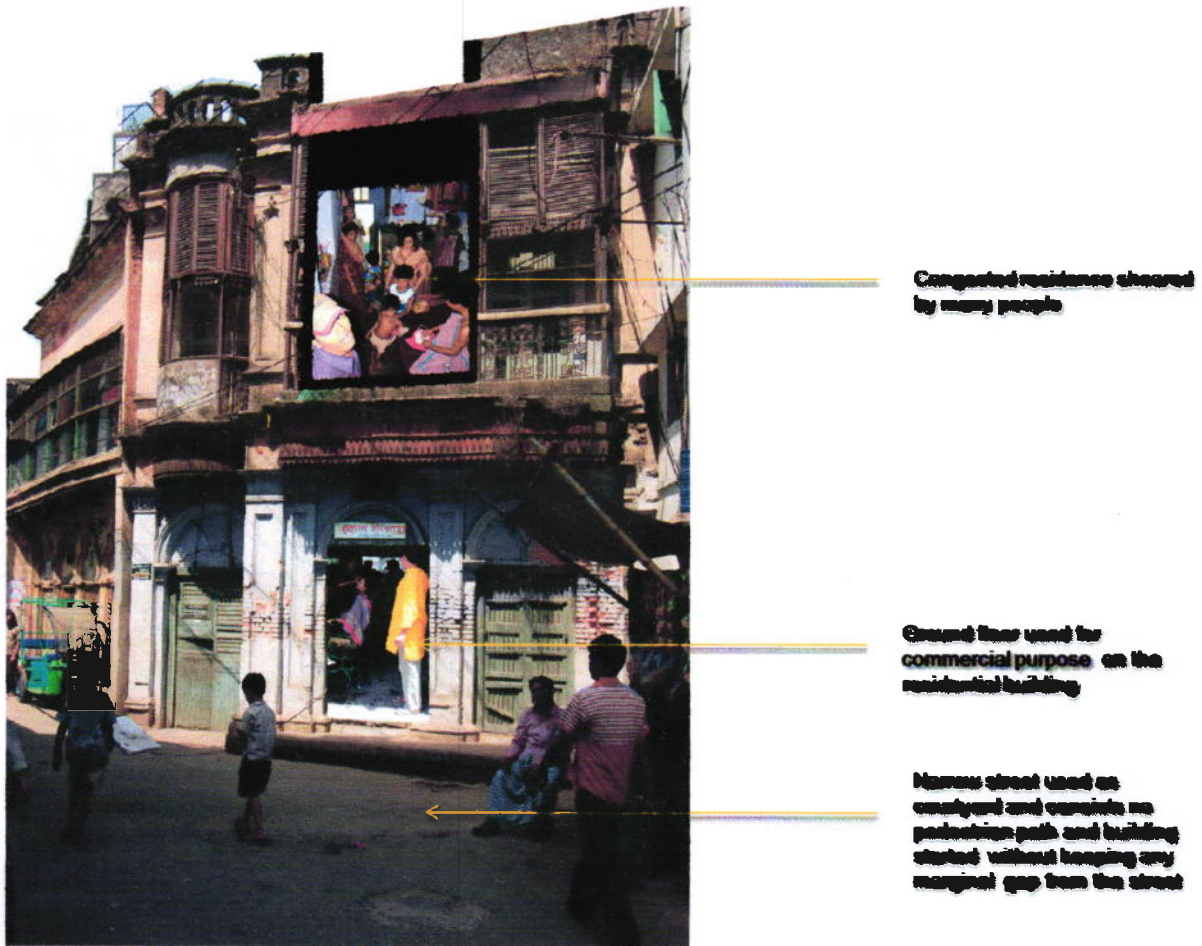
On the basis of the figure-2.5, 2.6 and 2.7 it can state that in old Dhaka generating energy is commercial area and residential area are equilibriums to need of the user of commercial area. But as it is a historic and old city the formation of the city is becomes much complex. But in the other side of the river it can easily found that the generation of the city is based on industry. That helps to evolve the commercial and residential areas. Because of the unplanned urbanization, there are no significant public amenities.

Another notable point in here mixed use building, in a mixed use building a same building is using in many different purposes. The most common example in there is most of the residence's ground floor used as a commercial use.

Mixed use houses are one of the most interesting features of old Dhaka. In old Dhaka most people are involved income generation activity like business. For that reason commercial and residential activity becomes very integrated in old Dhaka.

In old Dhaka roads are also the part of the social activity. Roads are less formal than the other part of Dhaka. People use road as their courtyard. In figure-2.3(3) shows that character. And for scarcity of land roads are also playing as open space. It plays as playground for the children and chilling area for the old people. Even not the part of old Dhaka, Keraniganj has also consists on these characters.

In old Dhaka houses are shared by many people. They utilize minimum space in maximum use. Rooms are often in smaller size than the ideal size but still able to fulfill the requirement of the people because of the shearing nature of the community.



Overcrowded residences shared by many people

Ground floor used for commercial purpose on the residential building

Narrow street used as courtyard and remains no pedestrian path and building started without keeping any marginal gap from the street

Figure-2.3(3)

2.4: Road Network:

Roads in old Dhaka just not use for vehicular access but also use for social and cultural purpose. But narrow roads are not sufficient to serve this huge population. As a result the old Dhaka always has to deal with unbearable traffic jam. This cost time and fortune. Similar situation is also analysis in also keraniganj. Narrow streets and building are standing without keep any pedestrian street or any space from the road. In figure-2.4(1) is figure ground map showing the road network and ground relation in old Dhaka and keraniganj



Narrow street is one of the significant characteristics of this part of Dhaka. The street pattern is same both in old Dhaka and Keraniganj

Streets are always occupied with rickshaw and almost impossible to access for other vehicles. Moreover there is no pedestrian access so people also walk in the street. Which cause huge traffic jam all the time.

Because of no formal pedestrian access half of the street is being occupied with pedestrian. vehicle can only use the half of the street. Whereas width of the street is not enough for proper accessibility.

Because of no parking place vans and rickshaw are parked on the street which also occupied the street which create obstruction in transportation





Figure-2.4(1)

In figure-2.4(1) showing that the old city keep awake during night time. Active commercial work is done on that time. Night is also the time for social gathering. After long day of working people gather and chill and street also provide them that space. For no suitable civic space people choose street as their gathering space.

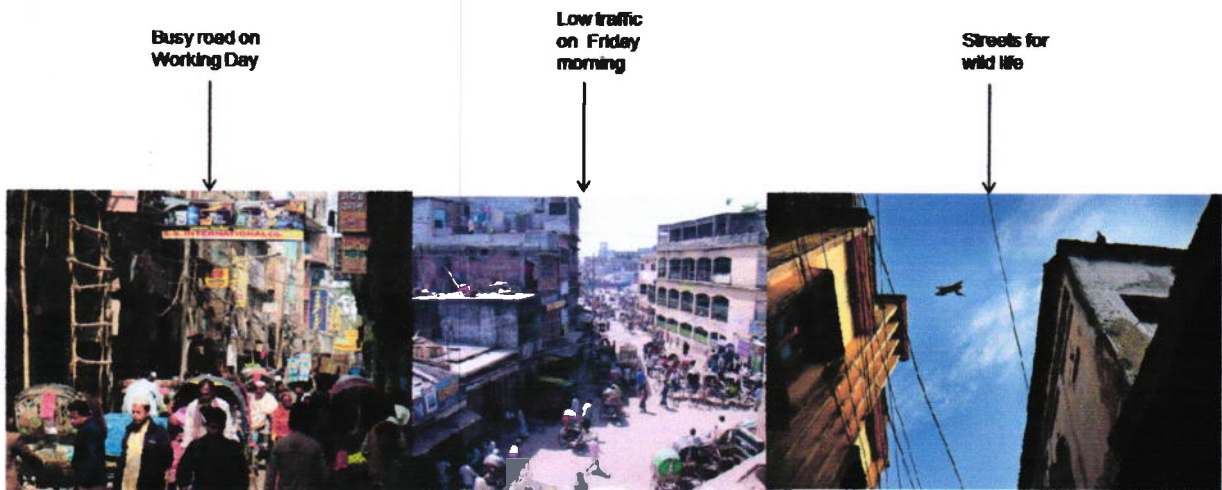


Figure-2.4(2)

Streets are very busy at working day but it seems to less occupied in the weekend. In the figure-2.4(2) from left busy street of old dhaka at working day on a afternoon. Then a street with less traffic on the Friday morning. Even in this cruel urbanization wild life is still not extinct. In the last picture a monkey crossing road by jumping from one roof to another roof.

History of old Dhaka carries with its roads too. The city never grows in very much planned way. Some time partially planned during phases of time but more likely city grows spontaneously. The spontaneous growth of the city also observed in the road pattern of the old Dhaka. Roads are not very regular shape mostly in organic pattern. In keraniganj formal roads are also spontaneously generated because of lack of plan. In figure -2.4(1) figure ground map showing the road pattern of the area and also road and ground ratio.



Figure-2.4(3) figure ground map

The figure ground map shows us the road network and ground ratio. From the figure one thing is valid that in old Dhaka the number of road is sufficient but still not enough to meet up the necessity may be because when most of these roads are made by not keeping in mind the future. In next page, figure -2.4(5) shows the division of the roads after analysis there length and importance in use.

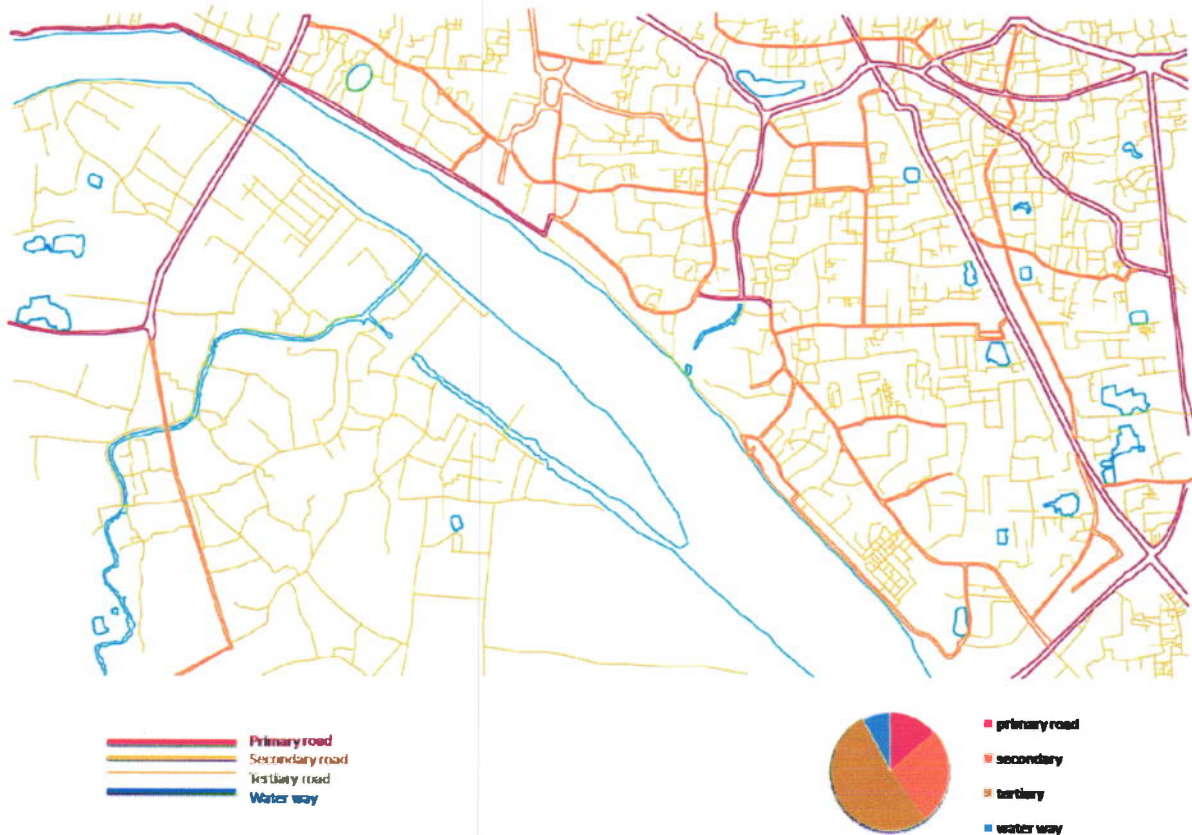
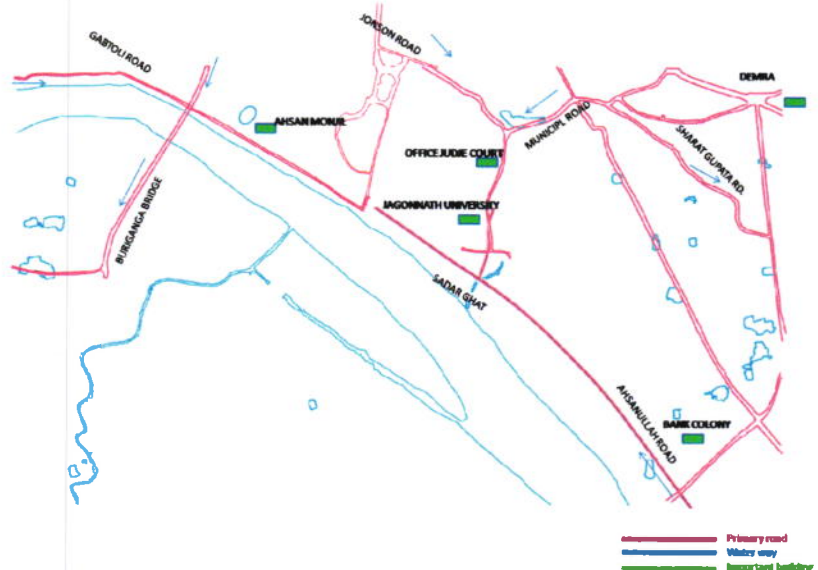


Figure-2.4(4) (division of Road network)

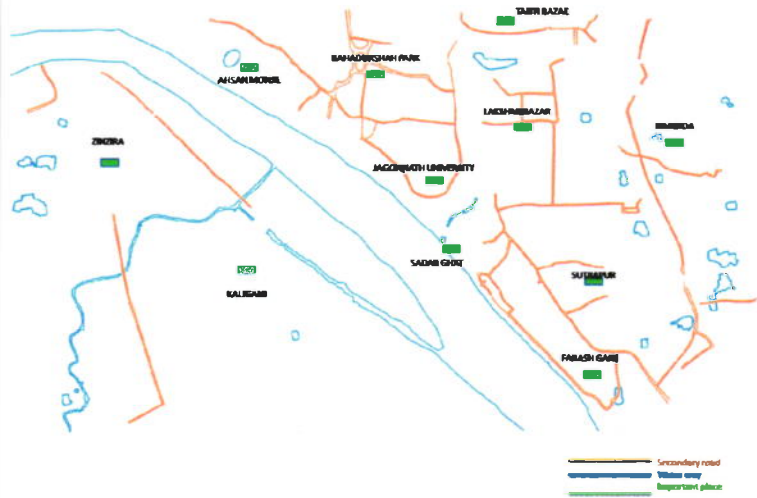
Primary Roads or Arterials:

The roads which are connect the area to the whole Dhaka. These roads are wider than other roads. In old Dhaka all type of vehicle are allowed in primary roads from rickshaw to heavy weight trucks. That is why these roads are always occupied with traffic jam. In the left figure shows the primary roads of the area



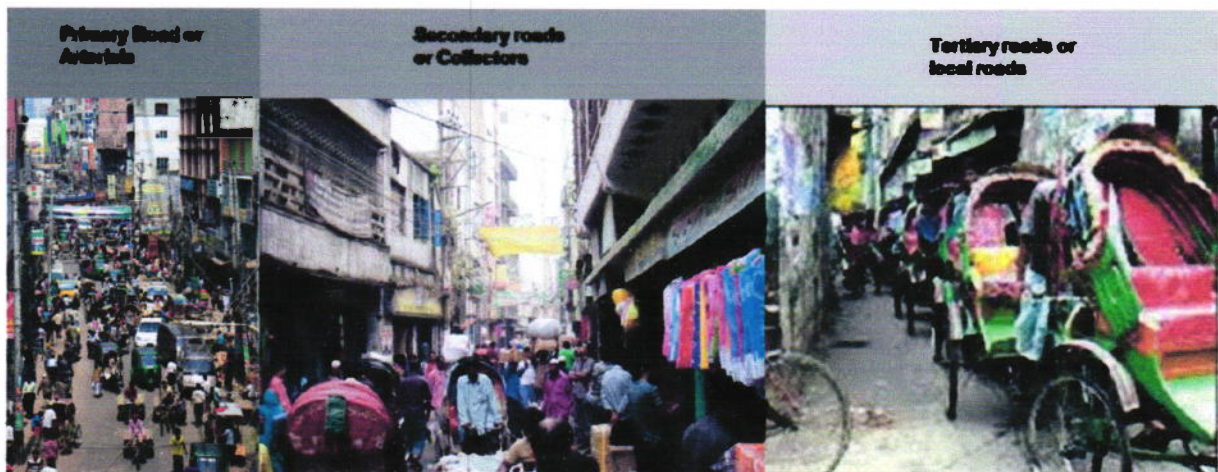
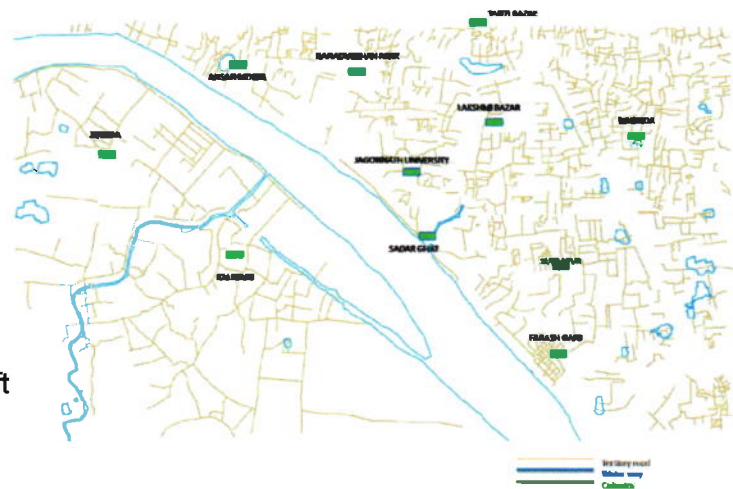
Secondary roads or Collectors:

Secondary roads are act as a collectors. It collects the traffic from the tertiary roads and takes it to the primary roads. It join one place to another with in a territory. These roads are much narrower than primary roads. In the secondary road all type veichel excluding intercity bus and truck are allowed. In the left figure shows the secondary roads of the area.



Tertiary roads or Local roads:

Roads which are collect the traffic from door to door and discharge it to the secondary roads. These roads are very narrow. Some roads are even about two feet wide. Only accessible vehicle is rickshaw. In some roads even rickshaw cannot access because of narrowness. In left figure shows the tertiary roads.





Another means of transportation in these area is water way. The distinguishing feature of internal travel in Bangladesh is the presence of a well-developed and well-used system of water transport. Rivers and streams outstretch roads in total distance, making water transport an essential of daily life. Buriganga river serves whole Dhaka. Sadarghat is the main water port of Dhaka. The famous Sham bazaar is the one of the major whole sale bazaar for Dhaka which is based on Buriganga river based transport system. People living in the Bank of Buriganga cross every day the river by boat because of low cost.

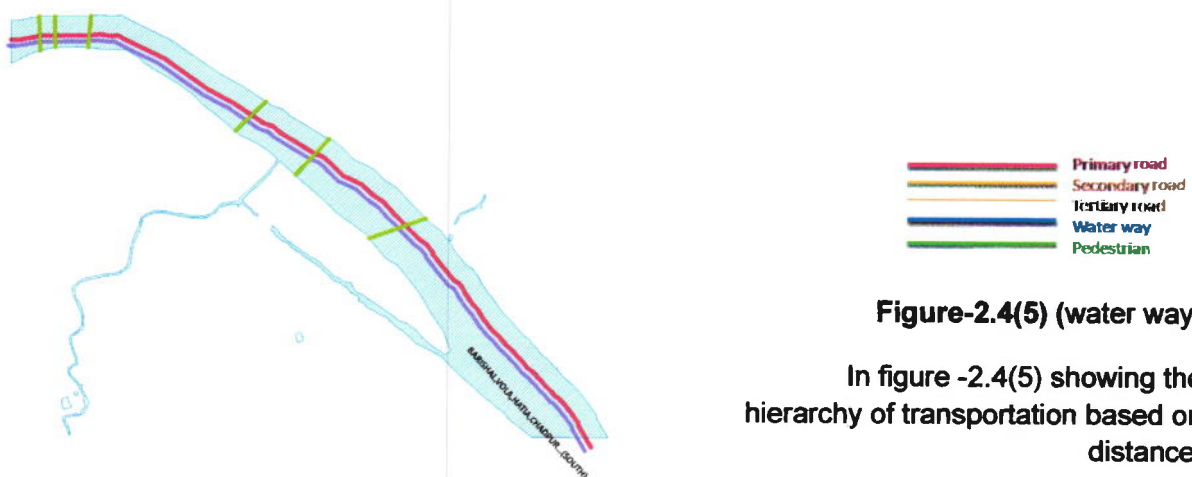
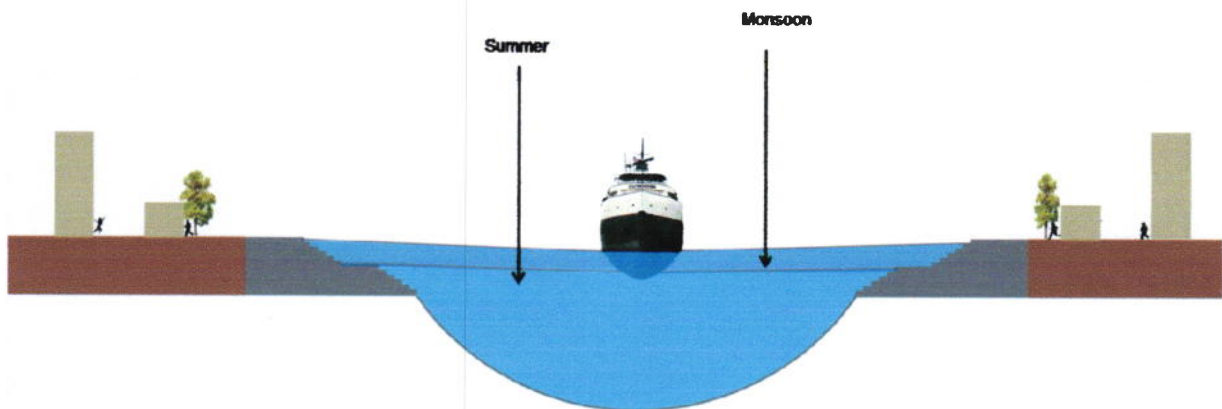


Figure-2.4(5) (water way)

In figure -2.4(5) showing the hierarchy of transportation based on distance.



BURIGANGA RIVER



Change of water level in different season

2.5: history and culture:

Puran Dhaka, more commonly referred to as Old Dhaka, is the original part of the bustling Dhaka Metropolitan City which serves as the capital of Bangladesh. Old Dhaka dates back to the 7th century, when the area was under the control of the Buddhist kingdom of Kamarupa which ruled for almost 800 years between 350 and 1140 CE. Age-old traditions and a sense of community among the residents of Puran Dhaka have remained particularly strong as the rest of the city continues to modernize. Many agree that the customs of the residents of this ancient settlement are different from general Bengali culture and to explore the streets of Old Dhaka is to take a journey back in time.

Control of Old Dhaka passed to the Hindu Sena dynasty in the 9th century and it is likely that the name of the town was taken from the 12th century temple dedicated to the Goddess Dhakeshwari by Ballal Sena. The Sultanate of Bengal succeeded the Sena Empire, with a succession of governors from the Delhi Sultanate controlling the city before the Mughals took power in 1608. It was at this time that the city was proclaimed as the capital of the province (subah) Bangalah, and the population grew significantly resulting in housing developments and townships.

Consisting of eight metropolitan districts – Lalbagh, Hazaribagh, Chowkbazar, Bangsal, Gendaria, Kotwali, Wari and Sutrapur – Old Dhaka has a number of vibrant market centers well worth exploring. These include Shankhari Bazar, Lakshmi Bazar, Tanti Bazar, Kumartuli, Patuatuli, Goal Nagar and Bania Nagar. The historic center is also the venue for many of the colorful festivals celebrated by Bengalis, with arguably the most famous being Poush Sankranti and the annual kite flying festival.

Many of the houses along the narrow roads and alleyways of Old Dhaka include workshops where men and woman work at various crafts to make a living, and visiting tourists may want to consider supporting local trade at the local markets. Attractions in Old Dhaka include Lalbagh Fort, the Pink Palace, Khan Mohammed Mridha's mosque, Ruplal House, the Armenian Church, and Tara Masjid in Bangsal. While not necessarily seen as a tourist attraction, Sadarghat ferry terminal in Old Dhaka offers an interesting view of daily life as more than 30,000 passengers use the terminal each day and the ebb and flow of people, bicycles and rickshaws is endless. Whether you are there to delve into history, or enjoy a cultural festival, a visit to Old Dhaka is sure to be a memorable experience.

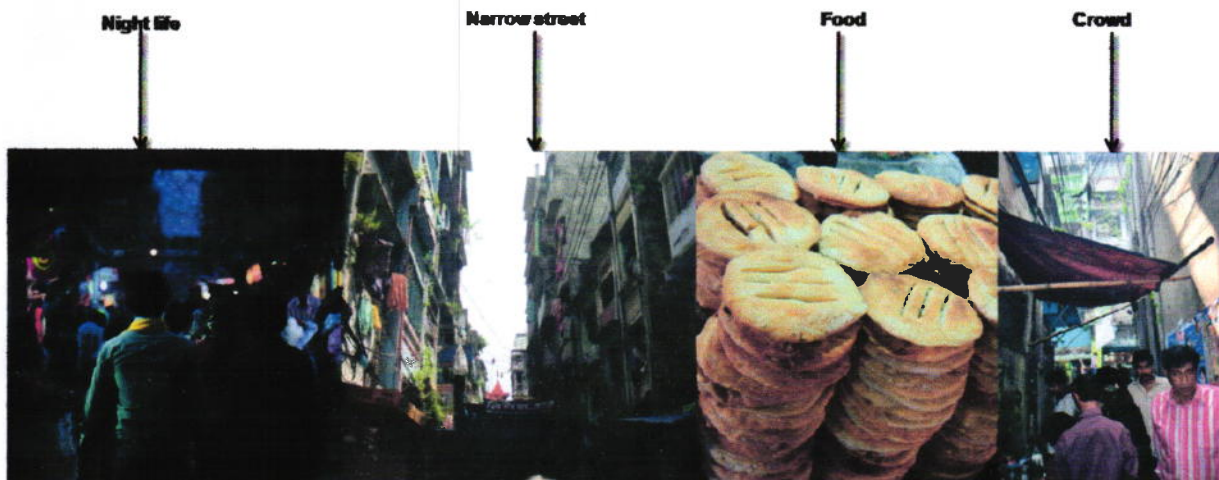


Figure: 2.5(1) Culture of Old Dhaka



Figure: 2.5(2) Festivals of Old Dhaka

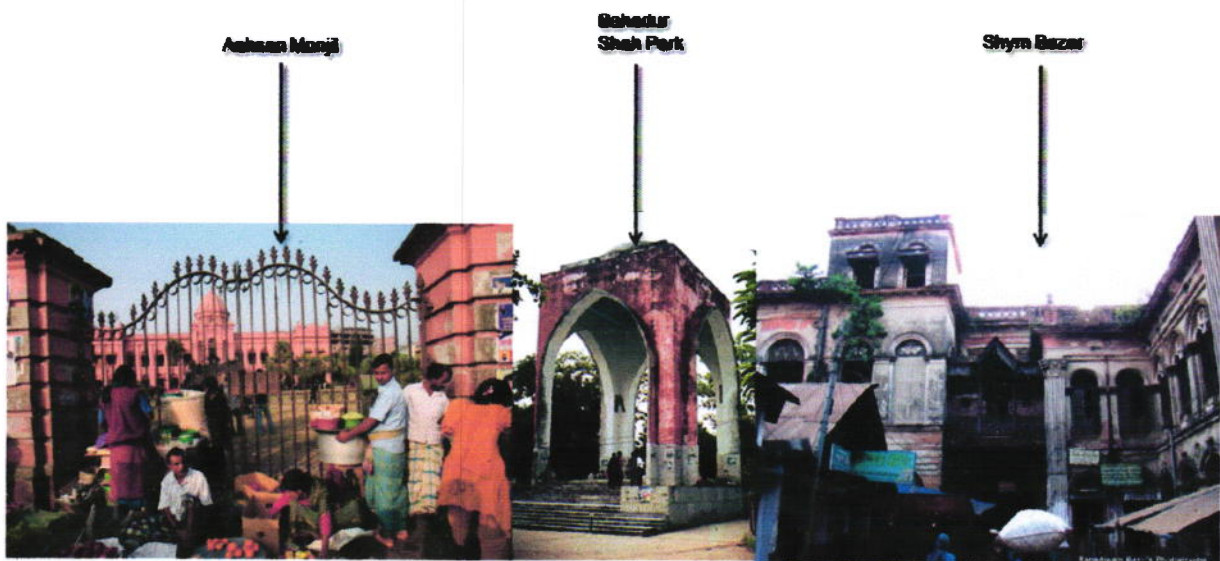


Figure: 2.5(3) Historical Old Dhaka

Culture of Keraniganj is not as vibrant as old Dhaka. It is originally an industrial area. The formation of the city arises from the need of the cheap industrial product. It is industrial zone on the peripheral of the city. But it dramatically take the shape of city because huge amount of people migrating here for living. But as it is a new born city. Still it don't able to take a shape culture but influence of old Dhaka dominating here. In Figure: 2.5(4) the characteristics of this area is shown.

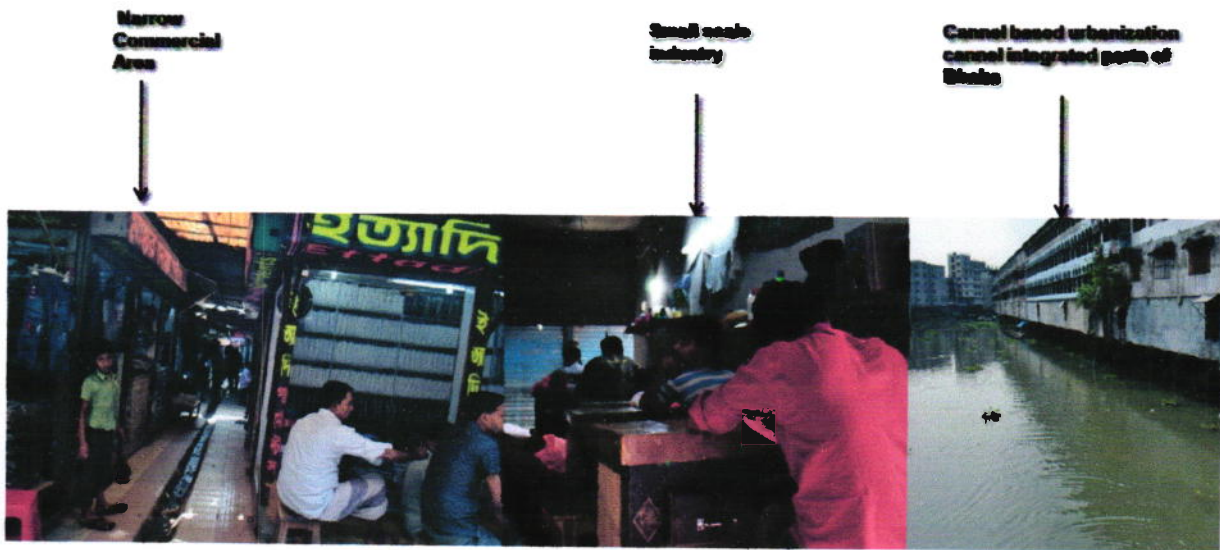


Figure-2.5(4) culture in Keraniganj

Strength, Weakness, Opportunity and Threat (S.W.O.T) Analysis:

Strength:

- Diversified culture
- History
- River and cannel

Weakness:

- Dense Population
- Very minimum open space
- Narrow street
- Dense building
- Pollution of buriganga

Opportunity:

- Vibrant city
- Tourist spot

Threat:

- Unhealthy for living

Chapter-3

Literature Review:

Redevelopment:

Variations on redevelopment include:

- Urban infill on vacant parcels that have no existing activity but were previously developed, especially on Brownfield land, such as the redevelopment of an industrial site into a mixed-use development.
- constructing with a denser land usage, such as the redevelopment of a block of townhouses into a large apartment building.
- Adaptive reuse, where older structures which have outlived their uses are converted into new ones, such as an industrial mill into housing lofts.

Redevelopment projects can be small or large ranging from a single building to entire new neighborhoods or "new town in town" projects.

Urban renewal

is a program of land redevelopment in areas of moderate to high density urban land use. Renewal has had both successes and failures. Its modern incarnation began in the late 19th century in developed nations and experienced an intense phase in the late 1940s – under the rubric of reconstruction. The process has had a major impact on many urban landscapes, and has played an important role in the history and demographics of cities around the world.

Urban renewal involves the relocation of businesses, the demolition of structures, the relocation of people, and the use of eminent domain (government purchase of property for public purpose) as a legal instrument to take private property for city-initiated development projects. This process is also carried out in rural areas, referred to as village renewal, though may not be exactly the same in practice.

In some cases, renewal may result in urban sprawl and less congestion when areas of cities receive freeways and expressways.

Urban renewal has been seen by proponents as an economic engine and a reform mechanism, and by critics as a mechanism for control. It may enhance existing communities, and in some cases result in the demolition of neighborhoods.

Many cities link the revitalization of the central business district and gentrification of residential neighborhoods to earlier urban renewal programs. Over time, urban renewal evolved into a

policy based less on destruction and more on renovation and investment, and today is an integral part of many local governments, often combined with [small](#) and [big business](#) incentives.

According to Farzana Raihan and Nowrine Kaiser

“As Dhaka city is expanding day by day proper land use planning is an urgent need for its peripheral areas like Keraniganj Thana. Rapid land use change has taken place in many regions Keraniganj Thana over the past two decades due to accelerated industrialization and urbanization. The study was conducted to investigate the land-use pattern change of the Keraniganj Thana at Dhaka district over a period of 10 years (1997-2006) by using remote sensing and Geographical Information System (GIS) technologies. The images were processed using ERDAS Imagine 8.4. Both supervised and unsupervised approaches were applied and ground control points were collected using a GPS. Maps were prepared using GIS software. The paper presents the data, methods for land use change detection and results from land cover change detection. The attributes of classified image of 1997 showed only 3487.73 acres of built-up areas, but in 2006 a rapid increase of built-up areas were found and it was around 4137.05 acres. Urbanization in this area have been mostly unplanned, chaotic and irregular which have led to alarming land, water, air and noise pollution resulting in much deterioration of environment.”

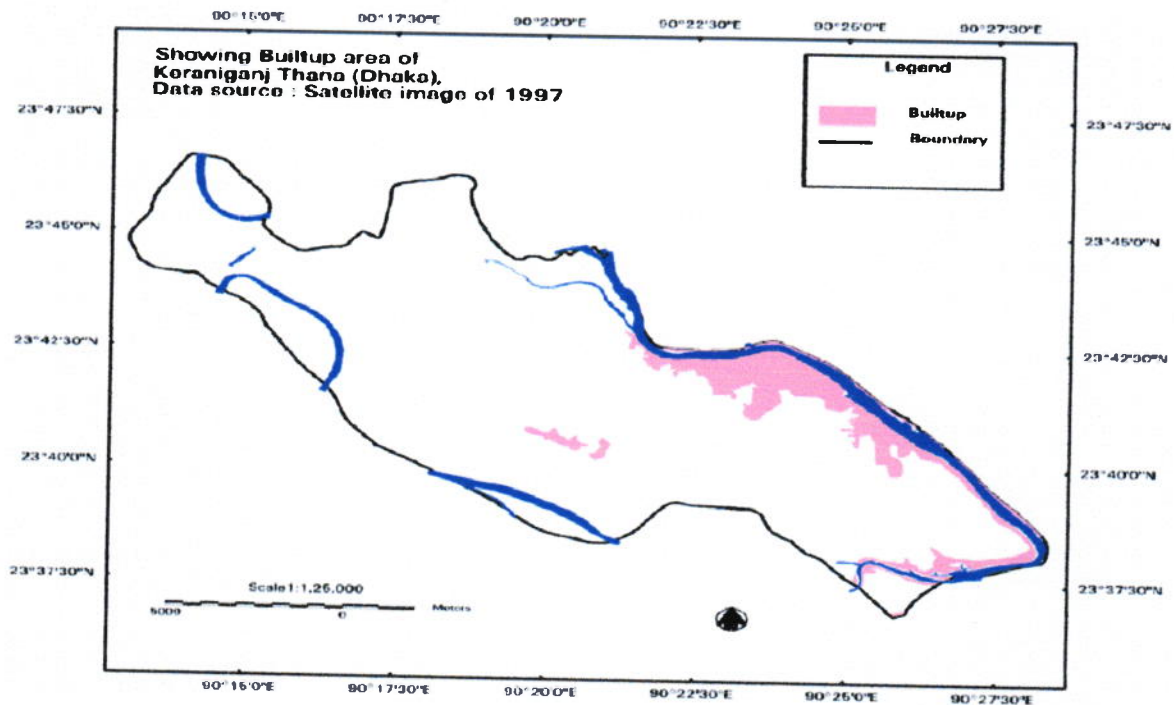


Figure 2. Built-Up Area of Keraniganj Thana, 1997

Figure 2. Built-Up Area of Keraniganj Thana, 1997

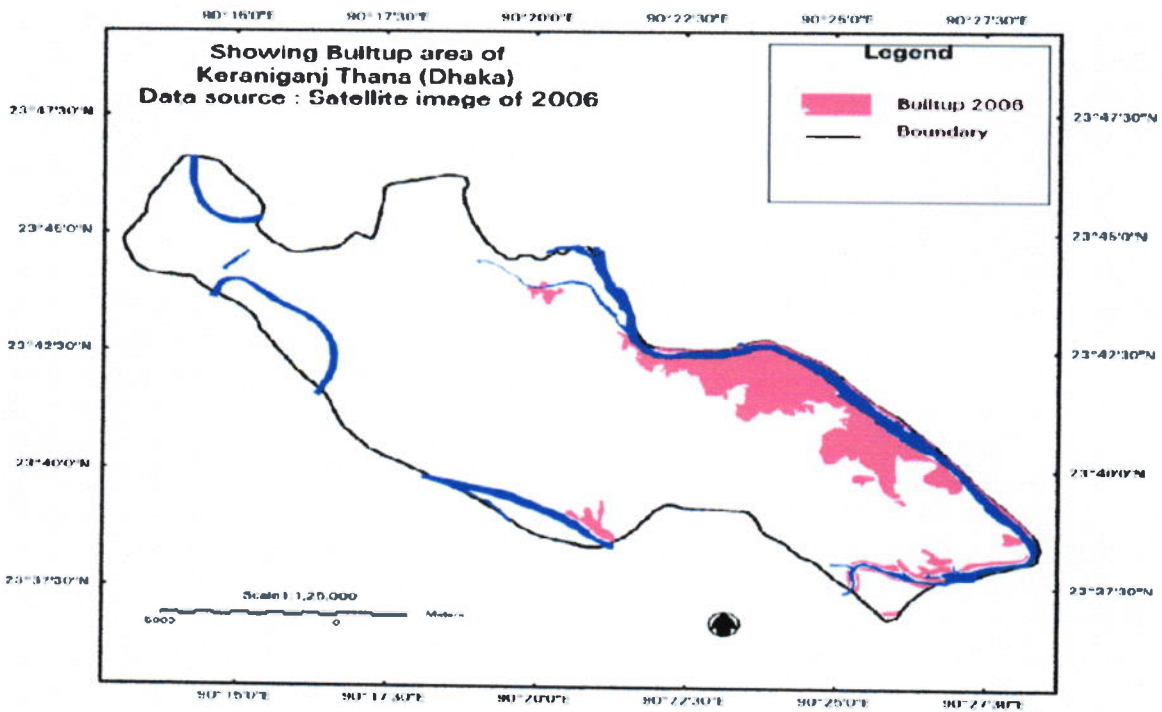


Figure 3. Built-Up Area of Keraniganj, 2006

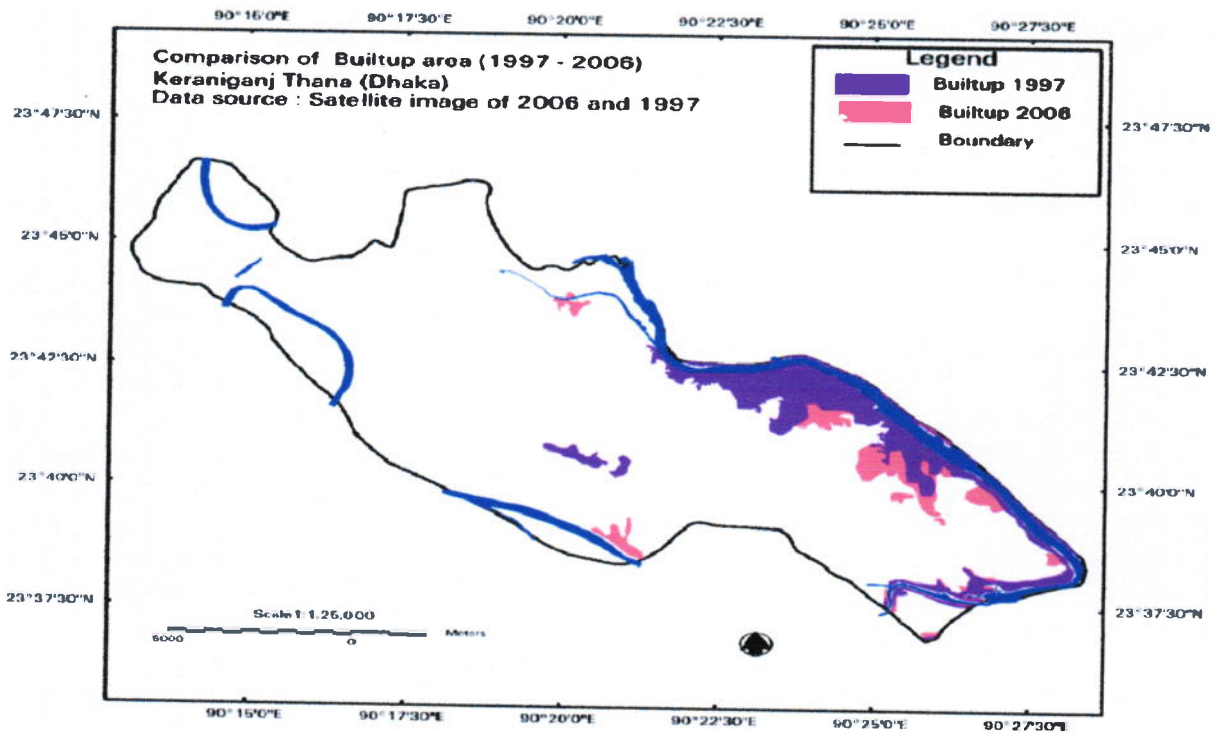


Figure 4. Shows the Changing Scenario of Built-Up Area of Keraniganj between 1997 and 2006

According to Prof. Dr. Farida Nilufar

The fundamental morphological characteristics of Dhaka city is described here from a historical perspective. Since its establishment, Dhaka represents domination of an organic spatial character in general. Here in Dhaka, two dominant urban patterns are conspicuous within the successive stages of growth; they are the historical core or 'old Dhaka' and the later development towards the north, known as 'new Dhaka'. Besides, a few planned additions are also featured in this city. Thus, this study identifies that four major spatial patterns are co-existent in Dhaka; they are indigenous and informal developments; colonial and planned interventions. The essential morphological characteristics of these patterns, which are prevalent in Dhaka, are described here. Major discussion concentrates on the global spatial structure of the organic city and investigates the dynamics of its growth and the characteristics of morphological transformations through the ages. It analyzes the axial maps of Dhaka and determines from 'integration' analysis [based on the method of Space Syntax as developed in UCL, London, 1984] that the spatial structure of the organic city has been shaping an urban core which coincides with the functional centers of the city in different historical stages. Thus the spatial dynamics of Dhaka and its core corresponds to a social history which remains as the underlying force behind the spontaneous formation of its morphological structure.

3. Urban Spatial Patterns in Dhaka

Today's Dhaka represents a composite form developed through ages. Its fundamental organic spatial homogeneity is interrupted at times by the patches of grid patterns. It is observed that there are five distinctive and co-existent urban arrangements are prevalent in Dhaka. These can also be marked as ecological units, which are i] the old city ii] Civil Lines iii] New Indigenous or Informal communities; iv] the Planned Schemes and v] the Squatters' Clusters. The squatters' clusters are mostly transient in nature. However, the spatial pattern of the other four ecological types is discussed here. [Fig. 2 & 3]

3. 1 Indigenous Historic Structure

Its organic character of the historic part is particularly distinctive with the densely built-up areas in comparison to the looseness of the later developments. Thus, like most Indian towns, the historical spatial structure of old Dhaka remains as the relic of the past. The pattern that exists in the old city is the winding and intricate street network and the walls defining the houses. The streets in the historic part were narrow. They were continuously twisted in and out, and were tortuous to an extreme degree in some places. The dead-end passages sometimes cut deep inside the urban block presenting a series of sharp turns. These were found indiscriminately along both the thoroughfares and the alleys. This pattern is more persistent in old city. However, a few long lines passed through the residential areas, which gave rise to another type of urban pattern e.g. Shankhari Bazaar Road, Tanti Bazaar Road. These were mainly the commercial interfaces of the city; and such areas have no lanes and by lanes as the access are from single bazaar streets. These streets are defined by closely spaced buildings in contrast to the former pattern where buildings are loosely spaced. Thus two distinct urban patterns exist in the old city. [Khan, 1982] However, the urban blocks of the latter type took more usual form of an accumulation of burgage plots whilst that of the former were divided by the dominant system of

land holdings into smaller rectangular areas or segments. [Fig.3a]

2.2. Colonial Interventions - Civil lines

A general grid pattern with broad traversing streets and rectangular blocks was proposed for the modernization of the historic city of Dhaka by Dr. Henry Charles Cutcliff, a British reformer. A radical engineering approach was needed in order to drive the broad straight streets through the crowded confusion of the city quarters. Although the scheme was not adopted in its entirety, it seems that all the later improvement of Dhaka was essentially based upon it. [Ahmed, 1986: 182] In a later period Patrick Geddes was sensitive in dealing with historic areas and emphasized the ameliorative change through 'conservative surgery'. [Geddes, 1917] Therefore, except in the northern extension of the historic core in and around Ramna area representing an orthogonal grid, the remaining historic city appears as 'organic'. [Fig: 2]

Fig 2: Colonial Spatial Patterns



Fig 2: Colonial Spatial Patterns

Consequently, the colonial city of Dhaka is not that visible as their intervention was limited within the linear 'civil line' development along a few streets and the grid pattern of the 'Paltan' [Cantonment]. Gupta claims that 'whereas the presidency towns were wholly planned on the grid in Europe, contemporary British Indian towns had only small sections planned, and subsequent growth was by accretion, in an ad hoc manner, by taking in adjacent villages'. [Gupta, 1991: 596] However, the civil lines in the sub-continental cities were laid out as the British Precinct in the mid nineteenth century. Minto Road, Hare Road, Bailey Road, and Park Road are such developments in Dhaka outside the historic core. Their arrangement represents a formal and spacious one which is totally different in look from the dense development of the previous time. These were like Victorian suburbs characterized by low-density, horizontal development and broad tree lined roads giving access to a system of large compounds containing spacious single *Bungalows* in each plot. However, such pattern is being extinguished from the present urban form of Dhaka.

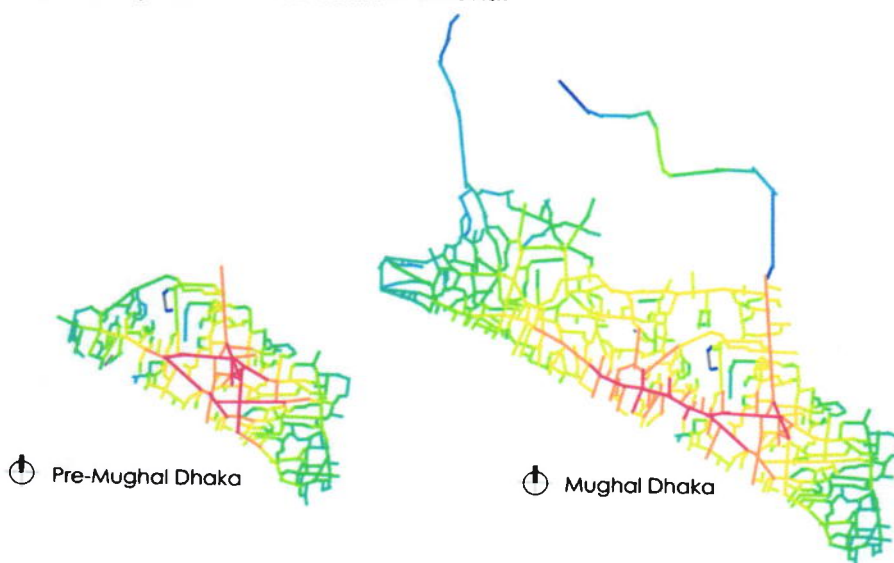


Fig 4: Global Integration core of pre-Mughal and Mughal Dhaka

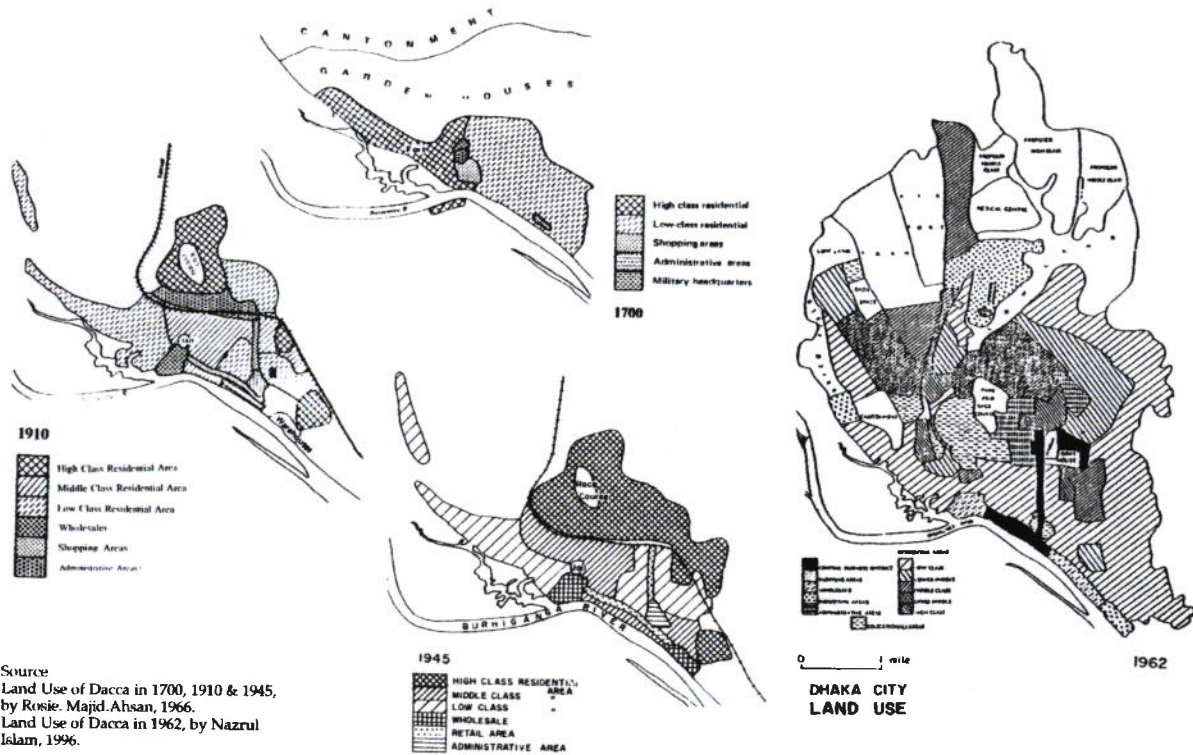
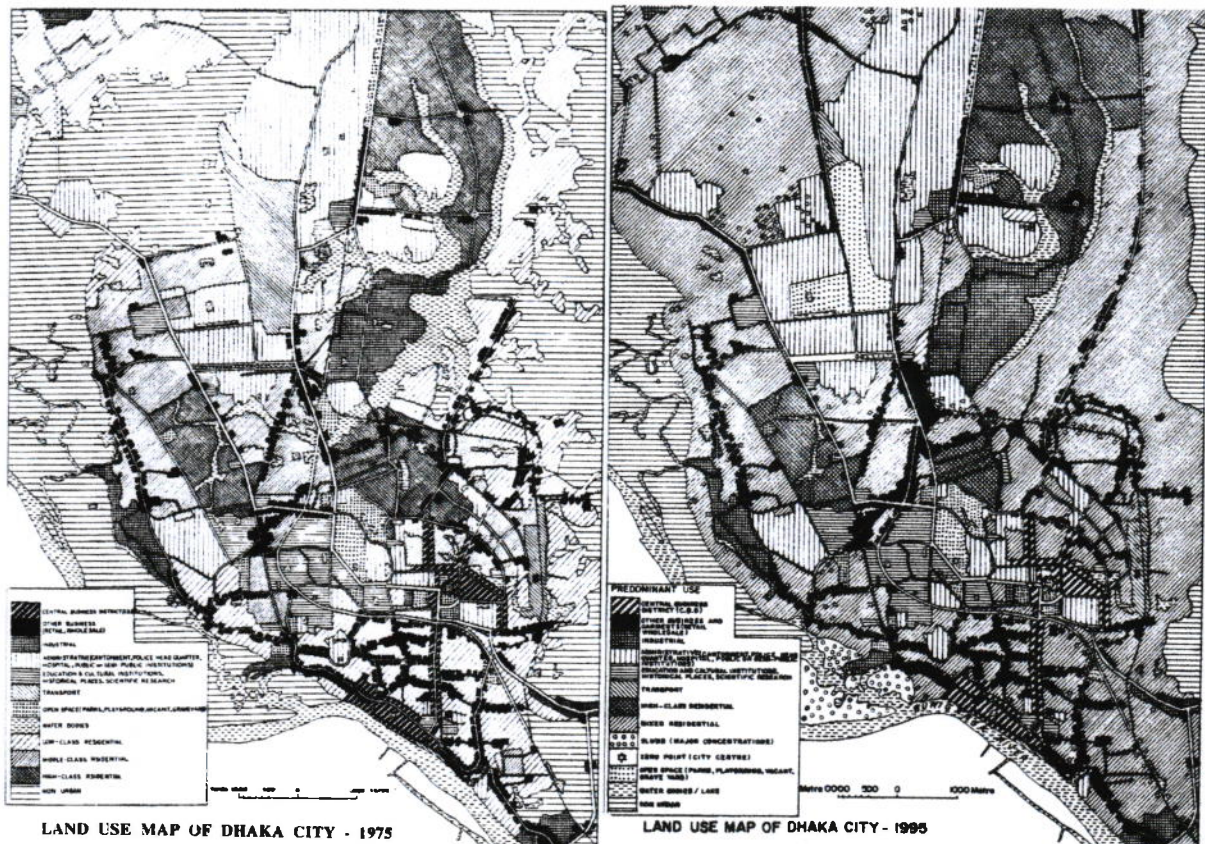


Fig 5: Land use Maps of Dhaka [1700 - 1962]



Fig 6: Rennell's Map of Dhaka [1859] and Global Integration [R=n] in 1859



According to Dr. Qazi Azizul Mowla-

Due to the deplorable condition of Old Dhaka, experts and general people assert the need for action to improve its living environment. But there is an absence of clear policy or direction to be followed. The critical question of redevelopment as to 'how' 'where' and 'to what purpose' remains unresolved. The more common indigenous pattern reflects uncontrolled growth, with mixed land use and smaller but more numerous foci of activity. Indigenous and contemporary typologies are the result of two different types of evolutionary process and stages. Physical and social structure needs proper evaluation and the proposed redevelopment strategy must recognize both Physical and social structure as a complementary issue. An appropriate strategy for redevelopment of the area based on two trends of development at work in Dhaka's urban morphology is the subject matter of present redevelopment analysis.

Nature of Redevelopment for Dhaka

To the satisfaction of 'physical determinants' and the consternation of 'conservationists', some recommendations of the Master Plan are being implemented in old Dhaka. Most officials and politicians are firmly wedded to the belief that physical ordering is the panacea to all urban ills. A 'good' environment (if ever the judgement is value free) is no doubt, an asset but by no means the only necessary for a good life. "... physical environment alone, has little effect on human behaviour or welfare. Can we seriously expect that the position of a wall is going to make us happy rather than unhappy (Alexander, 1971)?" The problems of old Dhaka are rooted in social, economic, political and administrative complexity. They can hardly be corrected by 'surface scratching' in the name of physical ordering. Programmes and projects for development must be

framed "... keeping the needs of the ultimate client in mind, prescriptions that violate the social, cultural, political and organizational traditions ... simply will not work (Mowla, 1999)."

Unfortunately most literature on urban redevelopment in Bangladesh advocates physical solution only. Little is the realization that it is the so called 'unplanned' environment that has an innate character and strength similar to that found by Fonseca in old Delhi. The excitement and life found in old Dhaka are to a great extent to the cheerful chaos randomly built into it. The fact that old Dhaka still serves vital social and economic functions, tells of the vitality and strength of the culture that produced it (Mowla, 2006). Culture, society, economics, politics and the circumstances make the cities different from one another. Eastern cities have to be understood and evaluated in terms different from those used in western cultures. There is more to a city than the eye can see or ear can hear. The dynamic elements of movement, hierarchy of spaces, activities, culture and life styles are as integral to the composition of the city as are the physical elements. Cities can not be studied in a preconceived notion of adequacy and standard. Time, culture and context have to be recognized. How else the difference in morphology of occidental, Middle eastern or oriental cities can be explained? Cities are not only physical but social, cultural, economic and political entities as well. It is in this sense that Christopher Alexander (1971) has equated city planning to 'design of culture.' Old Dhaka has its own culture, tradition, and problems – all peculiarly of its own. Its transformation into the illusive and not too clear phenomenon called 'modern' is as unrealistic as the attainment of utopia. How do we improve and retain the services, activities and structure that give life and character to the community and at the same time control them sufficiently to maintain the social fabric of the environment? A rigid 'Master Plan' or 'Urban Renewal' programme cannot serve the purpose or urban design in which change and growth are essential determinants of order. Urban Design cannot be 'form' alone. Social and cultural commitment must precede the design process without concern for technique or shapes through which the community may finally be translated into physical entity. Environments are a product of a dynamic order. Technology with its accompanying complexities, increasing knowledge and lagging wisdom cast great doubt on our ability to comprehend the density of a community in prospect. In the face of such dynamism, can we synthesize all the dimensions of change, predict, and design the future? Perhaps there are planners and urban designers who lay claim to a clearer vision of future. Such confidence, however, has failed to produce 'desirable' results. Poul Rudolph's comments quoted in Mowla (1990) says it all that "the 20th century has not built great cities (not even workable ones) but the idea of recreating the monuments of the past will not solve any problem at all – not even aesthetic ones." Master plans for future have let us down. Evidences are not hard to come by. The Jahangirnagar Planning Review, Vol. 6, June 2008 36 adverse effect of master plan for Aleppo in Syria are well documented as being disruptive of the community fabric and linked with the past. Contextually speaking 'physical' solutions to the problems rooted in the dynamics of sociocultural growth can only bring misery and hardship to the community. They seem efficient in prospect but prove inefficient in retrospect. The social, economic and human costs of such actions are much too expensive to be ignored: "... for the people involved, urban renewal is no rosy dream. It is hairraising, long drawn out nightmare, disrupting home and community.... (Bryton & Barron, quoted in Mowla, 1990)." Urban (re)development cannot be premised on the assumption that communities of urban poor are cancerous growth on social body. The problem lies in poverty and inadequacy. Physical environment is important but less pressing than job security, work satisfaction, adequate income, family life, avoidance of social isolation, peace of mind or social mobility. Social, economic and urban planning or design are different aspects of the same story. If retention of community is our goal; link with the past our desire, and sympathy to the existing character our tool; resource constraints our guideline only then can old Dhaka can practically reassert itself in the word and spirit as a city precinct, truly acceptable, humane and proud of its heritage.

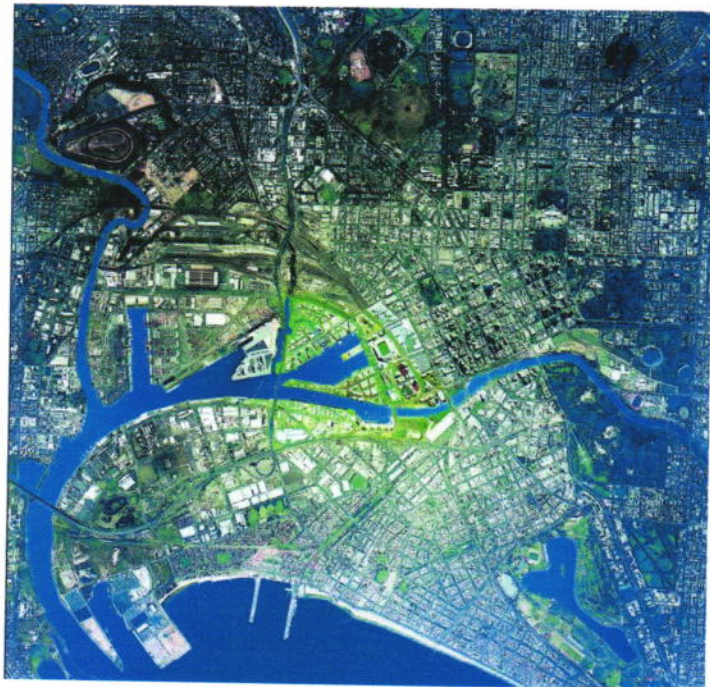
Chapter-4

Case Study:

Melbourne Docklands

4.1 Introduction

Melbourne Docklands is one of Melbourne's newest communities, changing the face of the traditional CBD and enhancing Melbourne's connection with its waterfront. It is one of Australia's largest urban renewal projects. As it enters its second decade of development, it is rapidly making the transition from a construction project to a community. This \$12 billion development comprises 200 hectares of land and water. This vibrant destination is being developed in stages with a vision to create a sustainable, mixed-use area of public waterfront space where people can live, work and visit.



Melbourne Docklands is continually evolving and already offers world class sporting events, entertainment, shopping, harbor side dining and spectacular public art. It is a place for locals to live, work, and visit and a popular tourist destination.

At completion, Melbourne Docklands is expected to become:

- a home for 17,000
- a workplace for 40,000 people in a wide variety of employment
- a tourist destination for approximately 20 million people per year



From one of Victoria's first ports to an industrial wasteland in the 1990s, Docklands today is being transformed into a modern residential, commercial and visitor destination in the heart of Melbourne. Over the last 18 months, Places Victoria and the City of Melbourne have met with

thousands of people to plan for the future of Docklands. This exercise, together with ongoing development, has culminated in the release of the **Docklands Community and Place Plan**, which sets out clear directions and actions for Docklands over the next 10 years and beyond, ensuring the delivery of priority community and place projects for Docklands' evolving community.

4.2 Information

The 2011/12 year saw Docklands experience the most development in its 12 year history with more than \$2.4 billion worth of private development (commercial and residential) under construction across 16 projects, totalling approximately 350,000m² Gross Floor Area, including approximately 1,500 apartments.

As this 190 hectare site – the same size as the original central business district, including 44 hectares of water – transforms into a modern residential, commercial and visitor destination, it is playing an increasingly important role in the growth of Melbourne as a global city, helping secure it as the world's most liveable city in 2011.

It is expected that by 2025 the area will have attracted a further \$9 billion worth of private investment, with the number of residents anticipated to nearly triple from 7,000 today to 20,000, and with the number of workers anticipated to double to more than 60,000.

As at June 2012, the vision for Docklands is well on the way to being realised with:

- \$ 8.5 billion of development completed or under construction (over 50 per cent of development has occurred in Docklands to date)
- Over 5,400 dwellings built or under construction
- More than 7,000 residents
- More than 29,000 workers
- Docklands continues to attract millions of visitors annually

	2001	2006	By Dec 2012	2025
Residents	658	3,936	8,000	20,000
Workers	600	6,000	30,000	60,000+

Docklands build out (forecast at completion):

- Commercial = 44%
- Residential = 44%
- Retail = 7%
- Hotel = 1%
- Other = 4%

Projected development value by project end 2025: \$17.5 billion

- Residential: Approximately 12,000 dwellings housing approximately 20,000 residents;
- Commercial: 60,000 workers

The area now known as Docklands was once a hunting and meeting place for local Aboriginal people before it became one of Victoria's first and busiest ports. The last 10 years has seen Docklands transform from a disused and derelict part of the city into a new harbourside destination and key drawcard for business, residents and visitors.

Following consultation with Melbourne's community and key stakeholders, the State Government made a commitment to redevelop Docklands in 1995.

Construction commenced in Docklands in 1997 with the building of a new stadium, which triggered the construction of other key infrastructure that would ultimately see Docklands become part of the central city. In 2000, construction of Docklands' first homes started in Yarra's Edge and NewQuay, making way for more than 7,000 residents who now call the area home.

To date Docklands has attracted more than \$8.5 billion worth of private investment, with many major corporations, including NAB, ANZ, AXA, Channel 7, Channel 9, the Australian Taxation Office, Myer, Melbourne Water and Fairfax relocating to Docklands, and bringing with them close to 29,000 workers each day. This is evidence of the strong Victorian economy and the Government's success in opening up prime real estate right on the city's doorstep.

Docklands has an established reputation for leadership in environmentally sustainable commercial buildings, water sensitive urban design and a substantial public art program.

Millions of visitors come to the area each year to see a game or event at Etihad Stadium, to share in the waterfront festivities, or to discover Docklands' many and varied restaurants, cafes and bars and retail stores.

While Docklands continues to transform into a modern residential, commercial and visitor destination, this 190 hectare site – the same size as the original central business district, including 44 hectares of water – plays an increasingly important role in the growth of Melbourne as a global city, helping secure it as the world's most liveable city in 2011.

As Docklands entered its second decade of development, the time was right to engage with the broader community and key stakeholders to objectively examine all aspects of one of Australia's largest urban renewal projects.

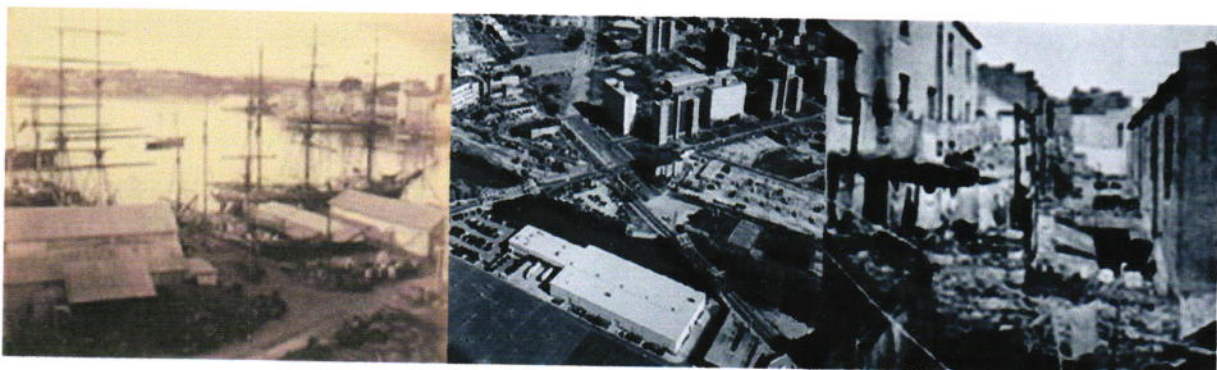
In 2010, the City of Melbourne and Places Victoria (successor to VicUrban) embarked on a community engagement program to determine and test the community priorities for development during Docklands' second decade.

The community's input, together with in-depth planning and design studies, helped shape the shared vision for Docklands' future, to create a place for people; a place where liveability is a priority, made possible by quality community infrastructure, welcoming open spaces, interactive street frontages and a vibrant waterfront destination for recreation and leisure.

Drawing together ideas from the community, lessons from the first decade and future sustainability measures, this document sets out clear directions and actions for Docklands over the next 10 years and beyond. It also signals a longer-term evolution for growth in the coming decades. As Docklands' population increases (to an expected 60,000+ workers and 20,000 residents by 2025), joint planning together with neighboring future growth areas, such as Fishermans Bend, E-Gate and North Melbourne, will help to consolidate Docklands' future as a thriving community.

As Docklands continues to evolve, the Docklands Community and Place Plan will be a key reference document, informing the Urban Design Framework and the Melbourne Planning Scheme. It will ensure the shared vision; key directions and community priorities are embedded in the future planning for Docklands and integrated with the Future Melbourne Community Plan, the Council Plan and Annual Budget, and Places Victoria's Corporate Plan and Business Plan for Docklands. The Docklands Community and Place Plan outlines those projects that Places Victoria and the City of Melbourne are committed to delivering or partnering to deliver over the next 10 years and beyond, ensuring the delivery of priority community and place projects. Above all, this document aims to inspire partnerships with the community and attract new partnerships for key growth projects.

To view a summary of the community infrastructure projects to be delivered in Docklands over the next 10 years and beyond, including funding partners and anticipated delivery periods, view the Docklands Community and place Plan – A Guide.



Melbourne Docklands Before the redevelopment



Melbourne Docklands Before the redevelopment

Community feedback strongly reinforces the importance of community services and facilities, and the delivery of more comfortable, functional and intimate public spaces and amenities. Of greatest importance to the community are priorities that encourage community interaction and everyday activities, while ensuring Docklands develops its own diverse and rich characteristics as a harbour-side destination.

The top six community priorities as identified by the community during consultation are:

- enhanced public spaces throughout Docklands, including Docklands Park, by providing more outdoor seating, shelters, drinking fountains, barbeques, picnic tables, rest areas and viewing platforms
- the Docklands Library and Community Centre
- a public primary school in or very near Docklands, co-located with appropriate community services
- business networks in key local centres in Docklands to promote local businesses and enterprises
- smaller, sheltered and more intimate public spaces that encourage interaction, and
- waterside attractions including seafood, farmers' and night markets, and cultural destinations and attractions.

some of The Important community Infra structured Projects to be delivered over the short medium and long term for term for docklands include

4.3 Program:

Existing:

- 1 The Hub @ Docklands (temporary building)

- 2 The Harbour Family & Children's Centre
- 3 Medibank Icehouse
- 4 Kangan Institute
- 5 Etihad Stadium
- 6 Public Berths (various locations)
- 7 Sea Light Water Pavillion (temporary installation)
- 8 Community Garden at Victoria Harbour
- 9 Melbourne City Sports
- 10 Multi-Use Space (eg. markets and event spaces)
- 11 Southern Star Observation Wheel

Proposed:

- 12 Fox Classic Car Collection
- 13 Garden Shelter
- 14 Running and Walking Tracks
- 15 Facilities to Support Recreational Fishing
- 16 Temporary Markets
- 17 Harbour Esplanade Redevelopment
- 18 Water Based Artworks (installation)
- 19 Floating (barge) Stage for Events
- 20 Community Recreational Swimming Pool
- 21 Community Boating Hub at Victoria Harbour
- 22 Docklands Library and Community Centre
- 23 Neighbourhood Community Centre at Yarra's Edge
- 24 Pedestrian Routes
- 25 Spaces for Community and Creative Enterprises
- 26 Outdoor Multi-Purpose Courts
- 27 Park Improvements
- 28 Water Ferries
- 29 Improved Way-Finding Signage
- 30 Aboriginal Heritage Trail
- 31 Maritime Heritage Trail
- 32 Community and Sporting Facility
in North-West Docklands
- 33 Potential School Site
(subject to feasibility by DEECD)
- 34 Exhibition Venue
- 35 Public Viewing Platform at Victoria Harbour
Control Tower
- 36 Place of Worship
- 37 The Jim Stynes Bridge – Pedestrian and
Cyclist Underpass Link
- 38 The Glass House (temporary activation)

4.4 Strategic directions:

The nine strategic directions outlined below (pages 24 to 45) are grouped under the three themes: Capturing the essence of Melbourne; Embracing Melbourne's waterfront; and Creating a 21st century city. There is a high level of interconnectedness between each of the strategic directions, reinforcing the commitment to a holistic outcome for Docklands.

Capturing the essence of Melbourne

01 | a Place for community and every day activities:

as docklands' residential and worker Population continues To grow and Evolve, The delivery of flexible and responsive community facilities and services Is critical To Ensure an Inclusive and healthy lifestyle for all and To continue To attract and support more diverse households To The area.

Community priorities

01 Deliver a Docklands library and community centre for all ages

02 Partner to deliver a public primary school in or very near Docklands, co-located with appropriate community services

03 Deliver a civic hub at Victoria Harbour that provides social and recreational opportunities for the local community

04 Continue to facilitate the delivery of childcare services to support a growing residential and working community

05 Deliver maternal and child health services

06 Partner to deliver a neighborhood community space in Yarra's Edge

07 Partner to deliver a place of worship in Docklands

08 Deliver an online venue information service that provides community groups and event organisers with easily accessible information regarding available venues and sites for hire

09 Partner to deliver outdoor and indoor high-quality community sports and recreation facilities, whilst exploring community use of existing buildings and facilities

10 Deliver a park in north-west Docklands, providing a range of active recreational activities

11 Deliver productive landscapes in appropriate locations

12 Facilitate the delivery of primary healthcare facilities and services in Docklands

13 Deliver free wireless internet within community facilities

14 Deliver larger event spaces (eg. Harbor Esplanade).

02 | cultural vitality and creativity:

Docklands will offer iTs resident, worker and visitor Population a range of Platforms and facilities To Promote cultural vitality and creativity Including opportunities for Performance and Exhibitions; studios' and workplaces for artists; and facilities where community groups can Participate In cultural activities.

Community priorities

01 Partner to deliver open and enclosed activity and event spaces, including a theatrette or performance venue

02 Partner to deliver significant cultural destinations and attractions to Harbour Esplanade and Central Pier

03 Partner to deliver long-term tenancies for arts and cultural organizations

04 Partner to deliver short-term artist-run initiatives and other creative initiatives by Melbourne's creative communities

05 Deliver high quality cultural and arts programs in Docklands

06 Partner to deliver clusters of affordable studios, workplaces for artists and creative industries

07 Deliver the 'Pavilions Program', a Docklands Art Fund initiative, to encourage outdoor community activities

08 Partner to deliver a series of outstanding international public art events; an initiative of the Docklands Art Fund

03 | diverse, comfortable and active Public spaces:

docklands will Provide a well distributed and well-lined network of Parks, squares and waterfront spaces To support a diverse array of Experiences and Uses, appropriate To The local context and To The wider network of Public spaces In Melbourne. streets, laneways, Intimate spaces and Promenades will Play a significant role In capturing The Essence of Melbournian docklands.

Community priorities

01 Facilitate and deliver smaller, sheltered and more intimate public spaces that encourage interaction

02 Ensure new buildings, public open spaces and infrastructure enhance and complement the distinctive characteristics of Docklands

03 Partner to deliver play spaces in Docklands that cater for different age groups

04 Deliver a variety of jogging and walking routes across Docklands

05 Increase tree canopy cover as well as the quality and quantity of green spaces

06 Reduce the 'urban heat island effect' by developing public spaces that foster more comfortable thermal conditions

07 Deliver enhanced and safe public spaces throughout Docklands

Embracing Melbourne's waterfront

04 | A water front heritage:

From a meeting place for Aboriginal communities, through to a thriving port for early settlers, Docklands has many fascinating layers of history that give it a unique place in Victoria's Story. As Docklands flourishes into a business, residential and visitor destination, it's important that its waterfront heritage is preserved, integrated, celebrated and made accessible to the broader community.

Community priorities

- 01 Continue to protect heritage listed buildings and facilitate appropriate adaptation to new uses, including community use and access where possible
- 02 Partner to deliver 'living heritage' programs and opportunities for community participation in heritage experiences
- 03 Partner to investigate the reintroduction of heritage buildings for new uses along Harbour Esplanade
- 04 Deliver a community boating hub in Docklands to accommodate longstanding community boating organizations
- 05 Deliver place names that celebrate the rich history of Docklands, (e.g. Batman's Hill)
- 06 Partner to document, deliver and promote information about Docklands' history and heritage
- 07 Continue to facilitate the delivery of public art that celebrates Docklands' history
- 08 Deliver the Docklands Aboriginal Heritage Trail, a Docklands Arts Fund initiative that celebrates Aboriginal and Torres Strait Islander heritage and other stories
- 09 Partner to deliver heritage trails throughout Docklands (eg. maritime)
- 10 Continue to accommodate recreation activities that have long occurred in the

area, such as fishing

11 Facilitate the development of berths for heritage vessels, including the Alma Doepel, which offer community and educational programs and encourage potential links to Polly Woodside and Mission to Seafarers.

05 | Harbor destination:

Surrounded by more than 40 hectares of water and linked to prominent waterways such as the Yarra River, Moonee Ponds Creek and Victoria Harbour, there is an opportunity for Docklands to increase its prominence as a waterside destination, offering recreational and event opportunities that attract a wide cross-section of people, everyday of the year.

Community priorities

01 Partner to develop Harbour Esplanade and Central Pier as a significant public destination of regional importance, with maritime attractions such as seafood markets, and public and commercial boating

02 Facilitate the delivery of regular attractions adjacent to the water, including farmers' markets and night markets

03 Partner to deliver a range of affordable and accessible recreational activities and community events on and near the water, including boat-for-hire operations

04 Facilitate the delivery of community recreational swimming opportunities in and near the harbor

05 Partner to deliver water-based events, street events and attractions

06 Ensure major Melbourne events and festivals are presented in Docklands

07 Partner to promote Docklands to domestic and international visitor markets

08 Deliver and promote information, products and publications about unique and everyday waterfront experiences

09 Deliver improved way-finding signage, visitor information and services

10 Facilitate the delivery of a marine precinct that includes space for commercial service providers, a regulatory centre and a facility for servicing and maintenance

11 Facilitate the diversification of commercial boating operations in Docklands

06 | Connected Docklands:

It is essential to ensure that Docklands can cope with the substantial growth that is yet to occur in the area. It is also vital for there to be better integration with the central city, as well as improved access, mobility and connectivity to and from, and around Docklands. This requires the expansion of transport networks and implementation of sustainable travel practices.

Community priorities

01 Partner to deliver pedestrian connections over Victoria Harbour and the Yarra River to better connect the precincts

02 Facilitate the delivery of a range of transport options and improved access for Docklands, including better links to surrounding suburbs and new links to Fisherman's Bend

03 Facilitate and promote the use of sustainable transport to, from, and within Docklands

04 Facilitate the delivery of increased tram and bus services between Docklands and surrounding suburbs

05 Partner to deliver better pedestrian facilities and improve areas in the public realm along pedestrian routes from the central city to Docklands' waterfront

06 Deliver continuous, safe and dedicated cycle paths throughout Docklands and to surrounding suburbs

07 Partner to deliver sustainable water transport options, such as water ferries and water taxis

08 Implement incentives to encourage more

sustainable transport use in Docklands.

Creating a 21st Century City:

07 | an eco Docklands:

Sustainable building design and practices have been central to Docklands' development in recent years. Docklands is currently home to the largest number of Green Star accredited office developments within an Australian commercial precinct. Over the past 10 years, Docklands has built a reputation for its environmental commitment and is well placed to become a world leader in sustainable practices.

Community priorities

01 Maintain and exceed the current high standard of environmental sustainability in commercial buildings and the public realm, and achieve high standards in new and existing residential and public buildings

02 Partner to deliver a centre of excellence in Docklands, focused on knowledge about climate change and leadership in sustainable living and urban development

03 Partner to deliver precinct-wide energy, water and waste initiatives

04 Maximise the environmental benefits of greening the environment to enhance liveability of the public realm and improve health and wellbeing

05 Deliver sustainable landscapes with sensory appeal that produce a sustainable and comfortable micro climate

06 Deliver improved water quality in Victoria Harbour to enable more water-based recreation, with the possibility of swimming

07 Promote sustainable buildings, services and systems

08 Promote the benefits of compact city living.

08 | Thriving business Community:

Having already attracted many prominent businesses and corporations to the precinct, Docklands is fast becoming a major commercial hub in Australia. As development in Docklands continues through its second decade, the local services and shopping to meet its everyday needs. There will also be increased opportunities for distinctive retail outlets, restaurants and food businesses, and other visitor attractions.

Community Priorities

01 Support business networks in key local centres in Docklands to promote local businesses and enterprises

02 Support community and creative enterprises and micro businesses in appropriate locations to provide a greater retail and service variety, and to activate the area and enhance streets and laneways

03 Facilitate the start-up or relocation to Docklands of small or specialty businesses and services

04 Partner to deliver 'pop-up' retail in appropriate locations.

09 | Diverse residential Community:

Home to an estimated 20,000 residents by 2025, Docklands will redefine inner city living in Melbourne. By generating more housing options to accommodate a diverse range of households and incomes, Docklands will be accessible for people at all stages of life, creating a strong, harmonious and inclusive community.

Community Priorities

01 Partner with developers to deliver diverse housing and tenure options in Docklands including housing for low-to-moderate income households and housing for families

02 Partner to deliver affordable housing co-located with appropriate community facilities for specific target groups.

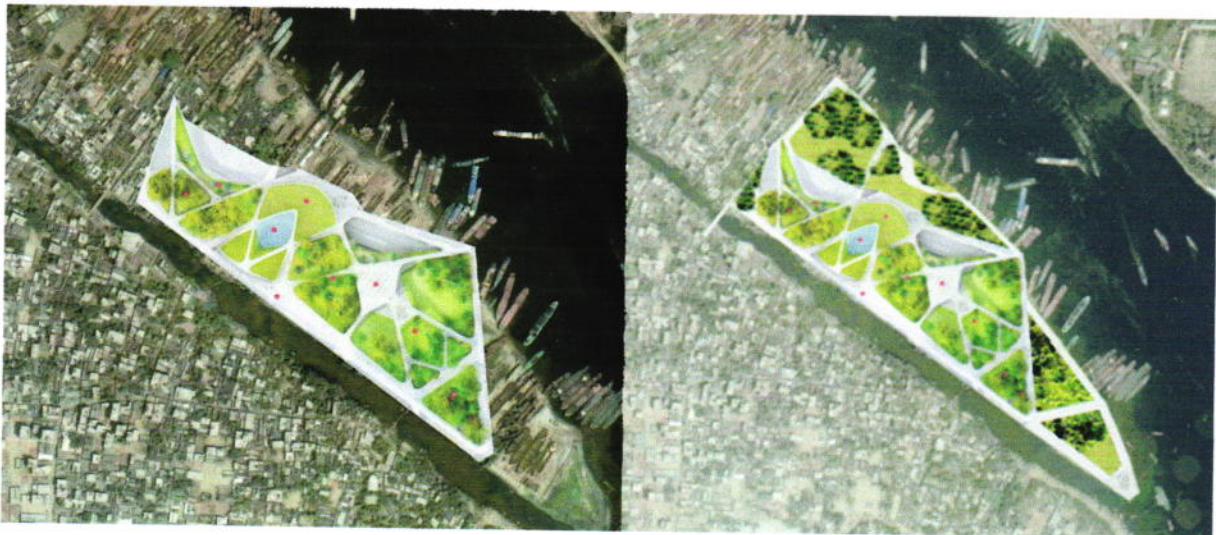
4.5: Project Analysis:

Despite massive public and private investment in the renewal of Melbourne and Adelaide's waterfronts many suggest they are not working. There are serious questions as to whether they

deliver good planning; well designed environments; social equity and engaged citizenry; are good investments; have an image which meshes with reality; offer local employment options and quality amenity. This is despite concerted master planning and dedicated authorities overseeing their development. These limitations have real implications for those who live in but also plan these sites and for metropolitan and state governments who have made significant capital and symbolic investments in them. Not only are these sites the focus of huge capital investments but the future of whole cities are bound to the re-imagining of their waterfronts as cosmopolitan hubs, to their physical regeneration, to their revitalisation as centres of employment and for significant population return to the inner and middle city and into high rise living. Planning iterations for these two sites have been subject to partial documentation but what is needed is a more systematic assessment of their often poor planning and better alternatives.

Western Case Study

Diller Scofidio + Renfro -Aberdeen City Garden Project

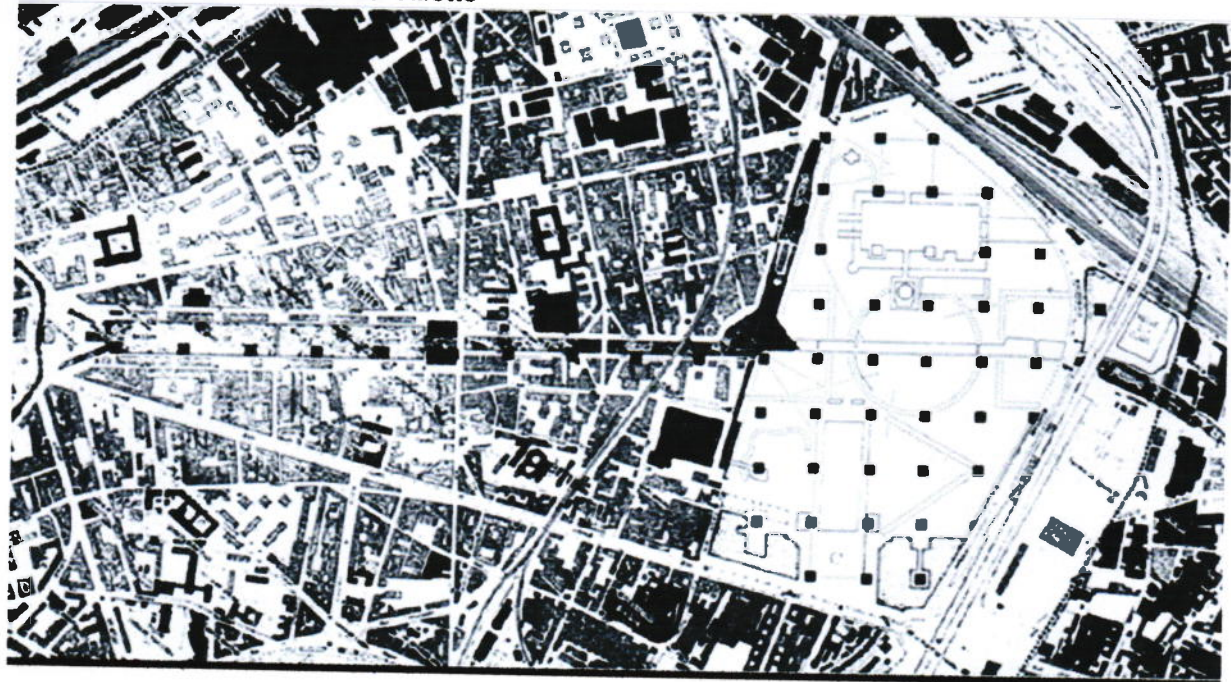


To understand the function and the space Quality of an Urban Park try to Super impose the Aberdeen City Garden Project Completion's first prize in the Site.

Diller Scofidio + Renfro -Aberdeen City Garden Project



Bernard Tschumi-Parc De La Villette



From the Above Planning from two western Park analysis the fact road network in the park is influenced from the city. And so functions are also derive from the city need.



Space Quality in an Urban Park

Case Study: In Continent



Shalimar Bagh - Kashmir

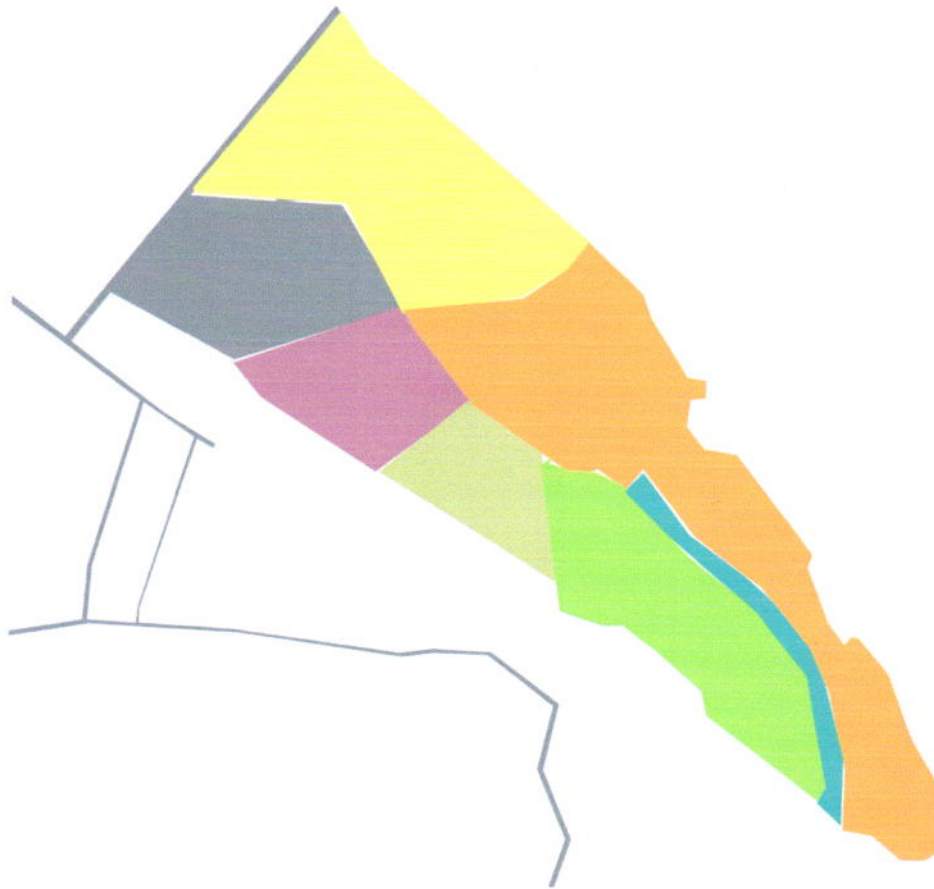
In the hundreds years of history in our continent the urban and man made park always have a significant water body though the natural water body is attached with the park. It is like that artificial water body creates a special romanticism in the parks atmosphere.






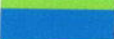



Another amazing man made park created by Mhughals are Nishad Bagh. Magnificent mix of and water body

Program Development

Chapter-5



legend	
	Sports center
	Cultural Hub
	Community gathering Area
	Sculpture Garden
	Grass Land
	Wood Land
	Aquatic Garden

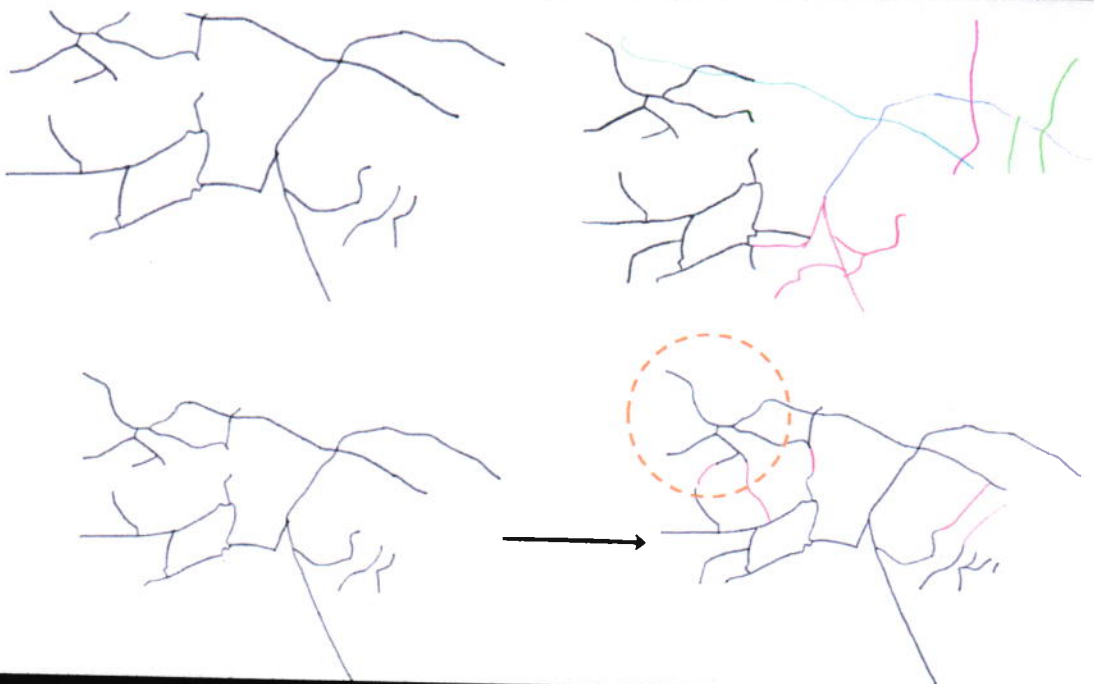
Detail: Sports Center

Program	Area
Multipurpose Hall	
Main hall	118'x50'
Green Room	17'x40'
Other Service (stair, wash room, lobby)	100'x 16'
Cafeteria	
Main room	106'x50'
Kitchen	32'x50'
Service (Lobby, Wash room, Staff room)	30'x50'
Outdoor games	
Basket Ball	1 court 85'x46'
Lawn Tennis	2 court 3x(33'x77')
Badminton	3 court 4x (44'x20')
Lobby	70'x70'
Outdoor Game Service	2x60'x25'
Swimming pool lobby	28'x33'
Swimming pool Service	2x28'x17'
Semi outdoor Café	87'x50'
Indoor Games Room	210'x80'
Game Machine	
Table tennis	
Pool table	
Bowling	
Chess	
Carem Board	
Indoor Games Service	50'x17'
Fitness center	111'x60'
Administrative office	51'x17'
Lobby and other circulation space	280 sq-ft
Total Area	56323 sq-ft

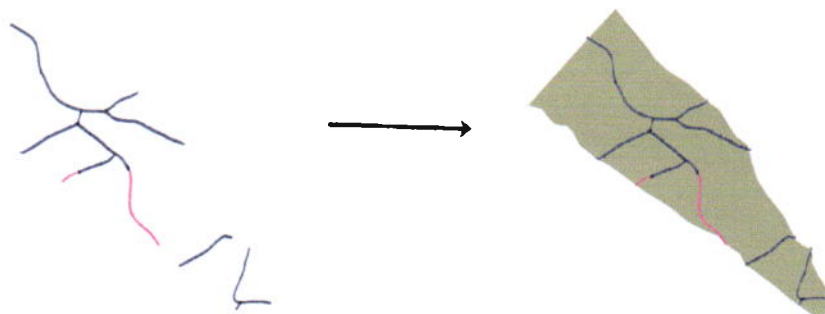
Chapter-6

Design Development Phase:

To develop Road network in site Taking influence from old city pattern

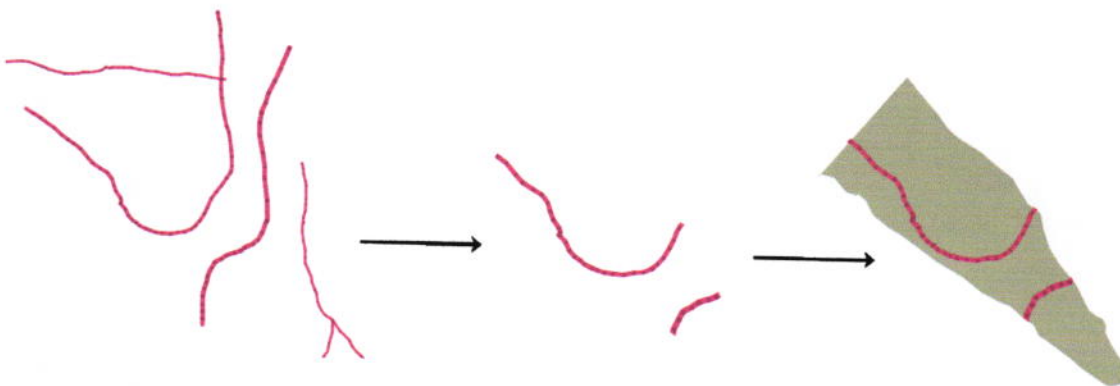
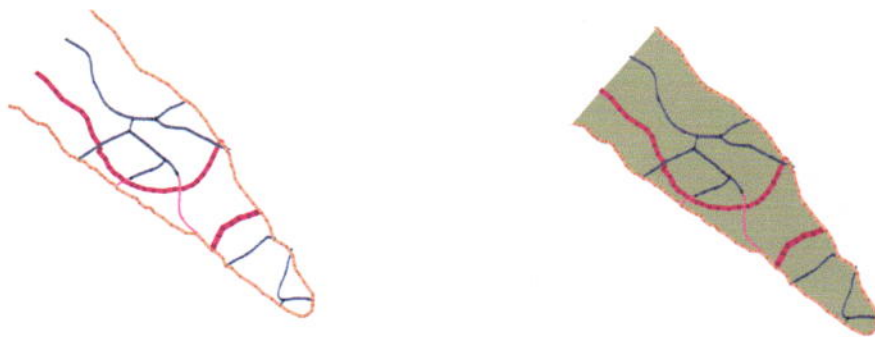


Taking the character into the design to evolve communication network in the site

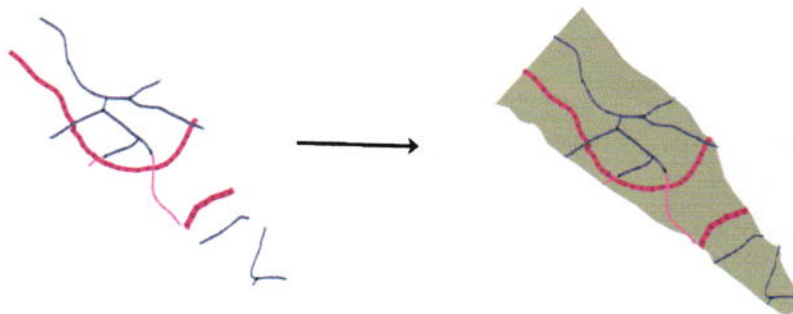




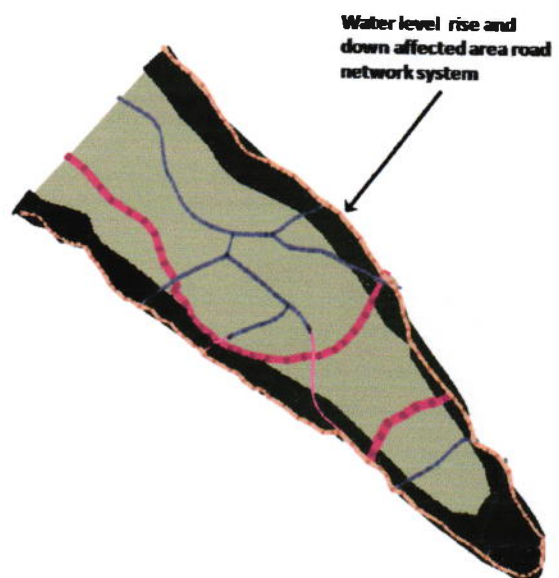
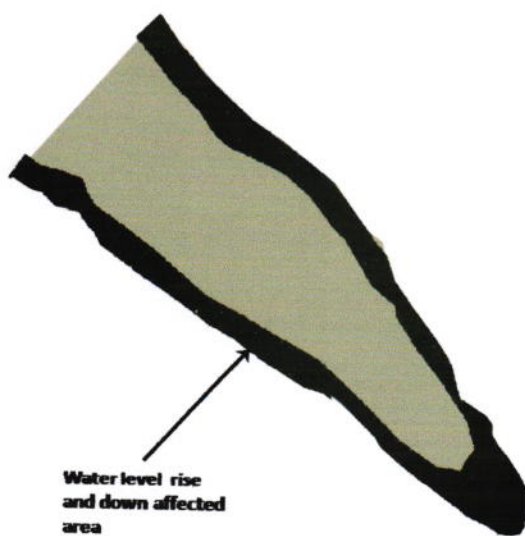
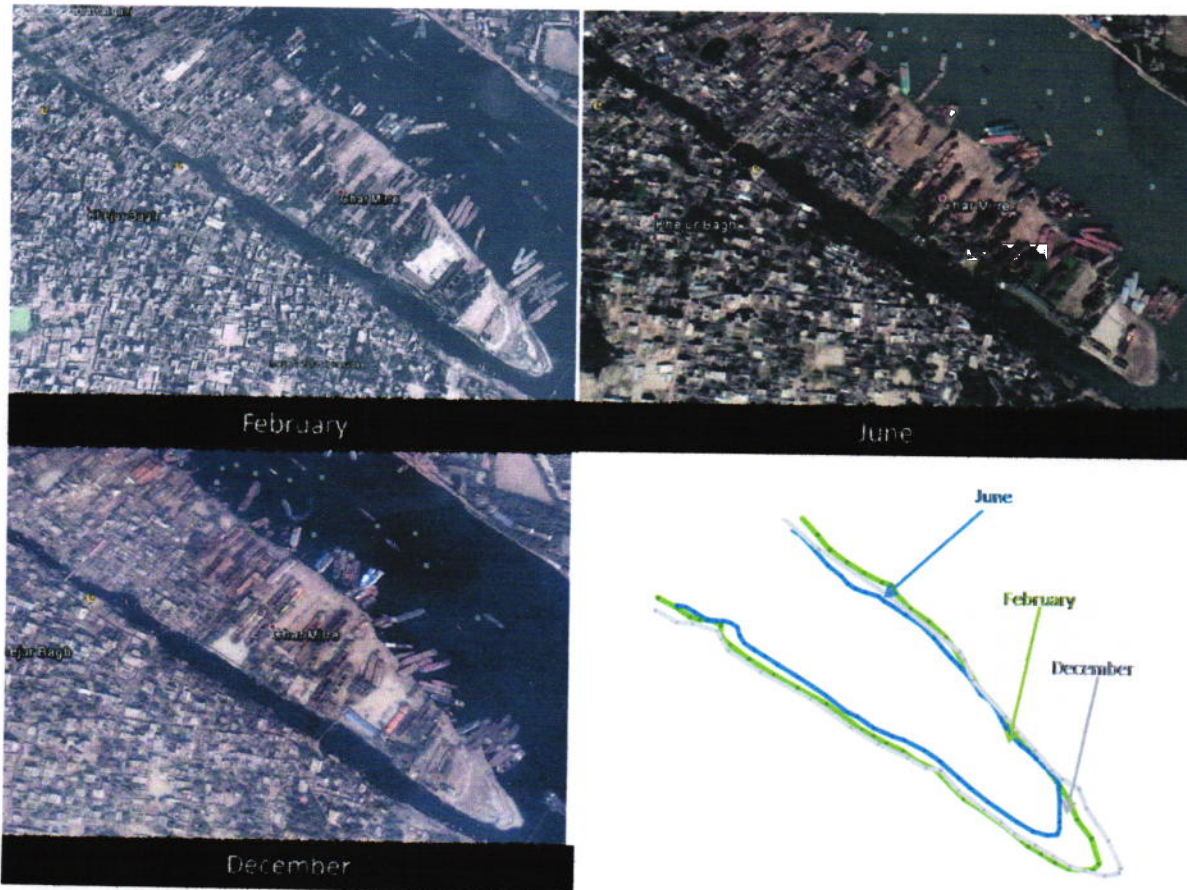
Taking the character into the design to evolve communication network in the site

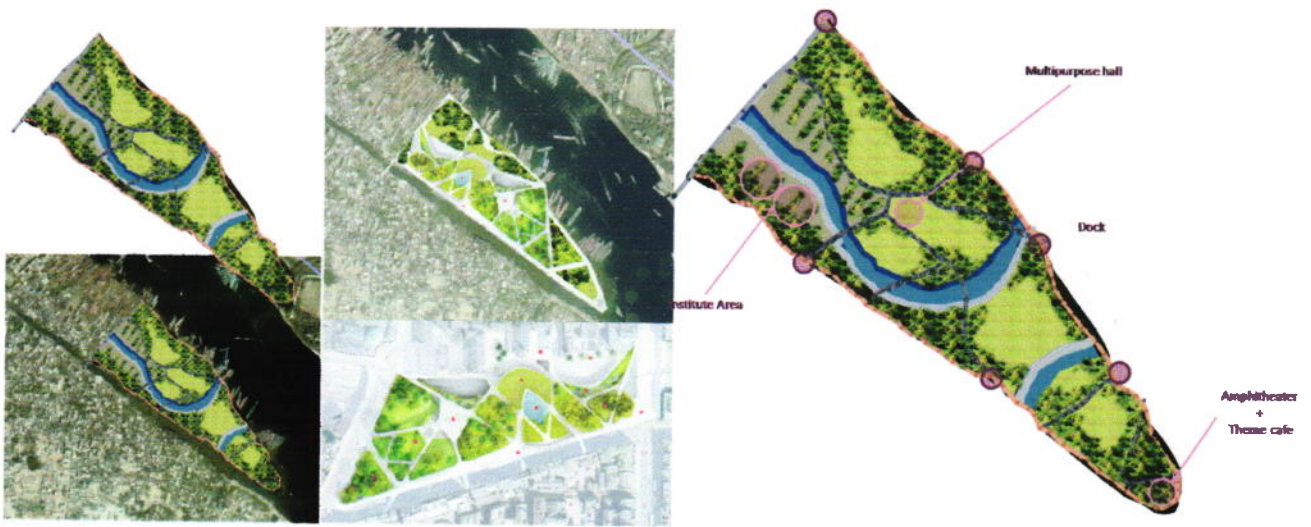


Taking the character into the design to evolve communication network in the site

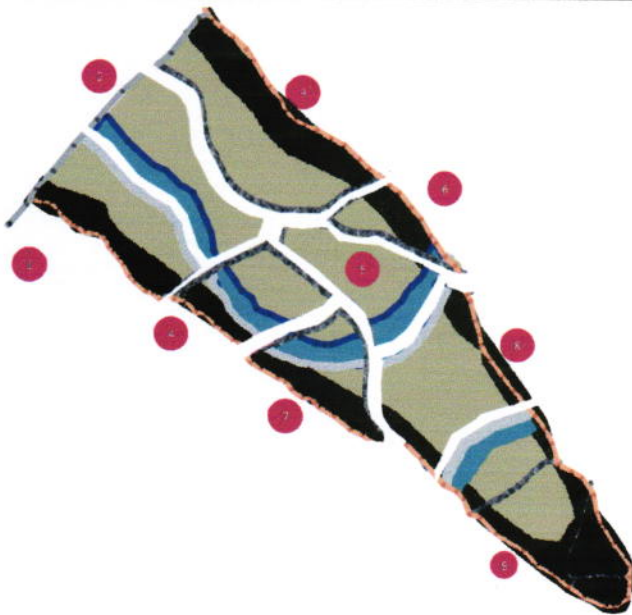


Water affected area and dry area through the year from the satellite image





Designing Water Body



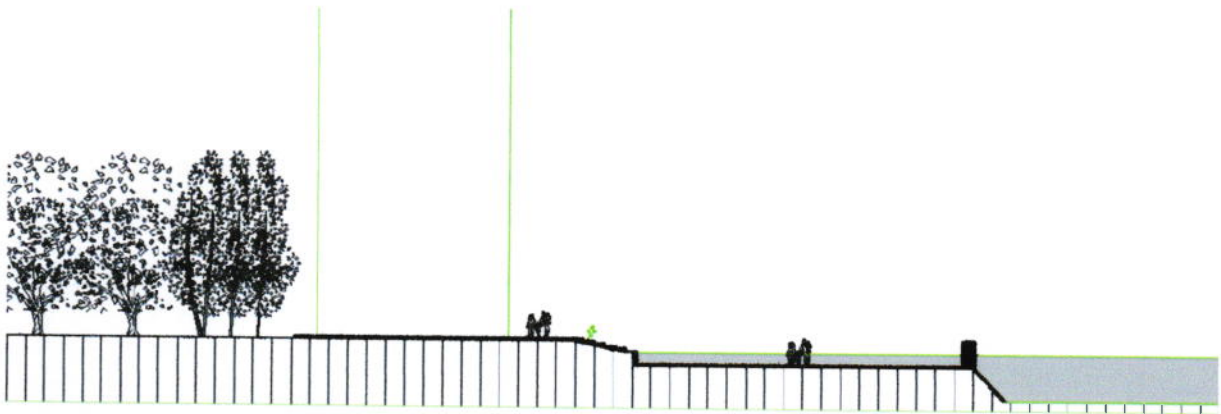
Then divide the site into segment for dividing the functions and seek new opportunity





Designing Water Body

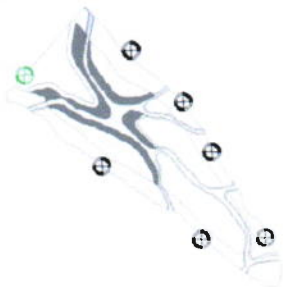




Conceptual relation of water and land mass

Another process approached to draw road network was using Voronoi diagram

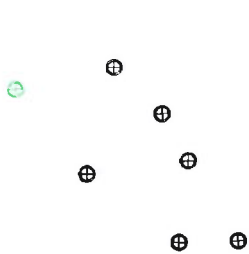
- In mathematics, a **Voronoi diagram** is a way of **dividing space into a number of regions**. A set of **points** (called **seeds, sites, or generators**) is specified beforehand and **for each seed there will be a corresponding region consisting of all points closer to that seed than to any other**. The regions are called **Voronoi cells**. It is **dual to the Delaunay triangulation**.



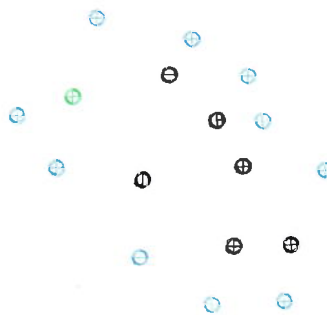
Boating Hub on the site



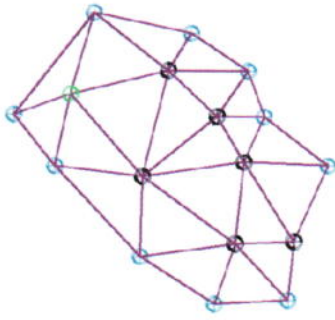
Points for generate the route



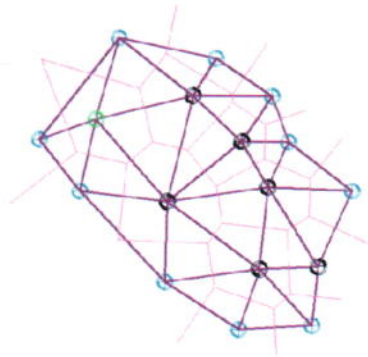
Boating hub point (acting seed)



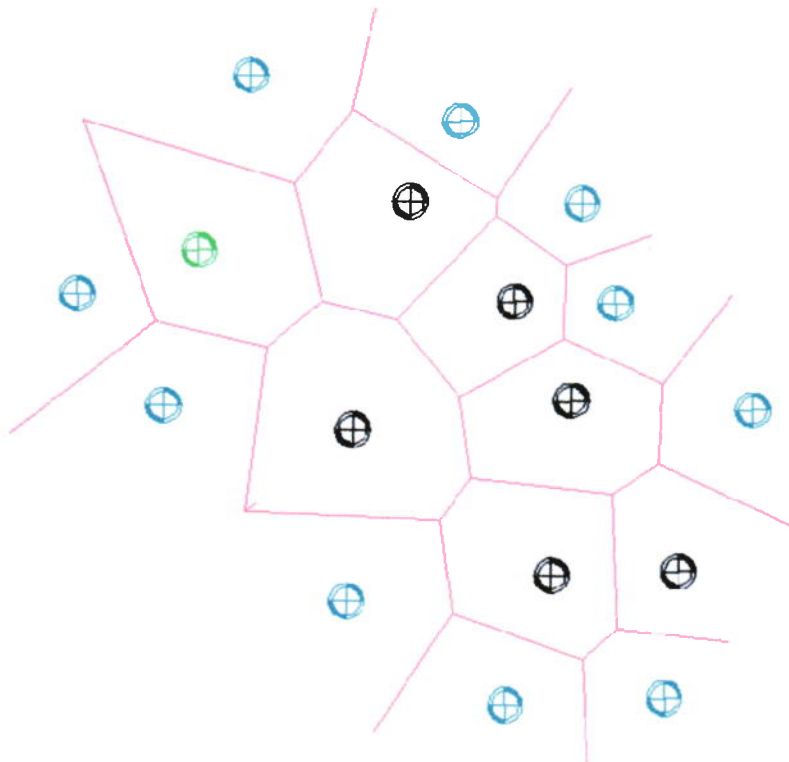
Boating hub point with extra random point



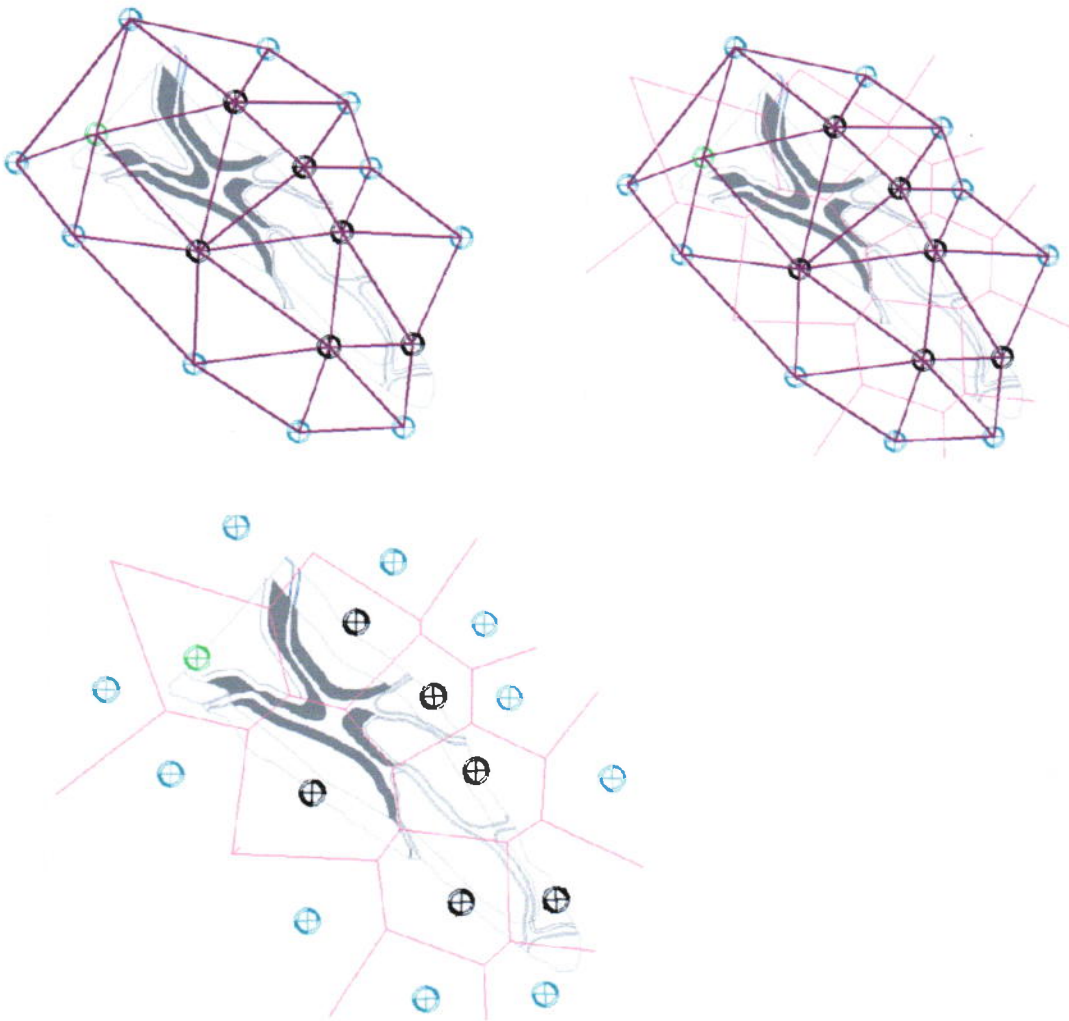
Delaunay Triangulation



Delaunay Triangulation + Voronoi cells



Voronoi cells

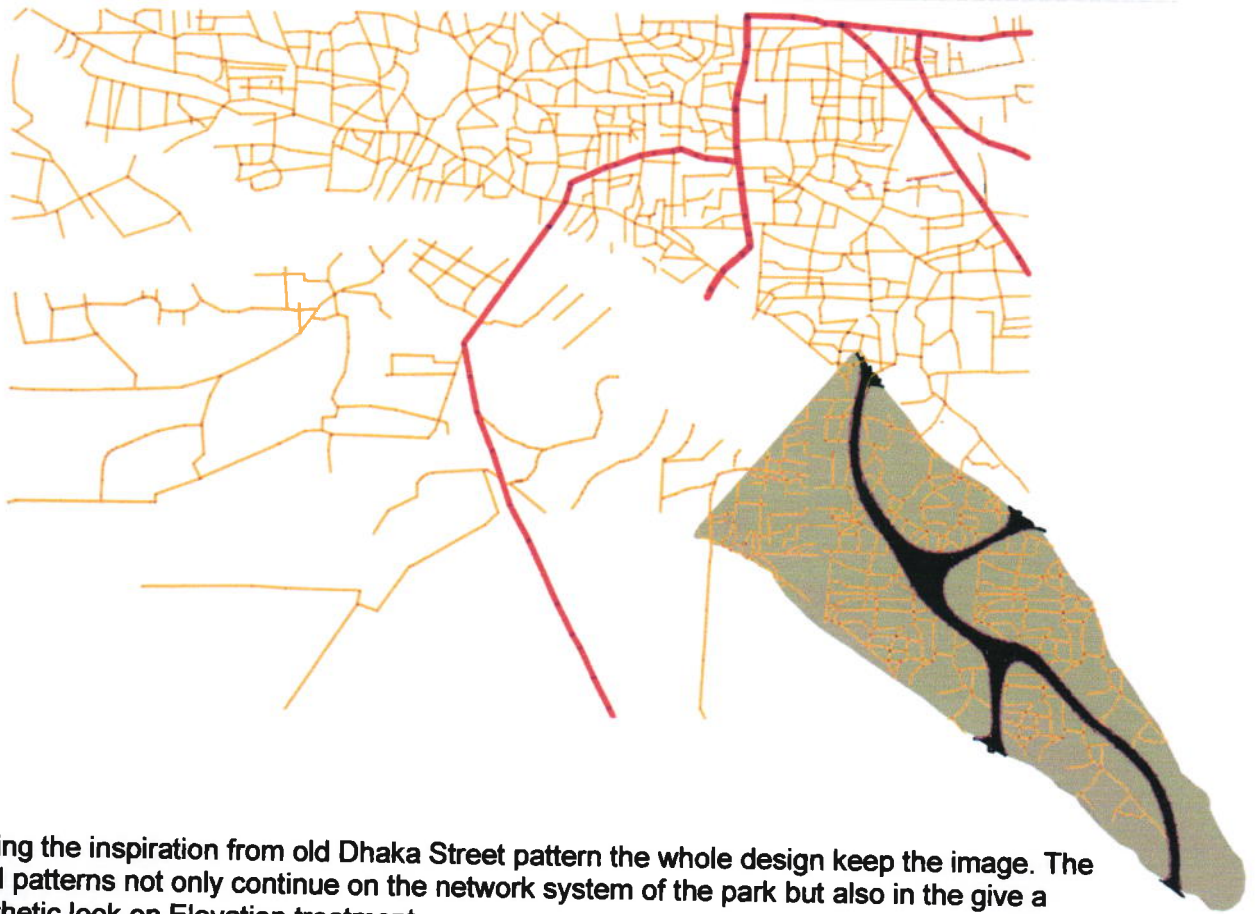


To generate the road network system another geometry were adopted on planning that was voronoi cell. Connecting the boating hub and than keep the functions of the center of the cell

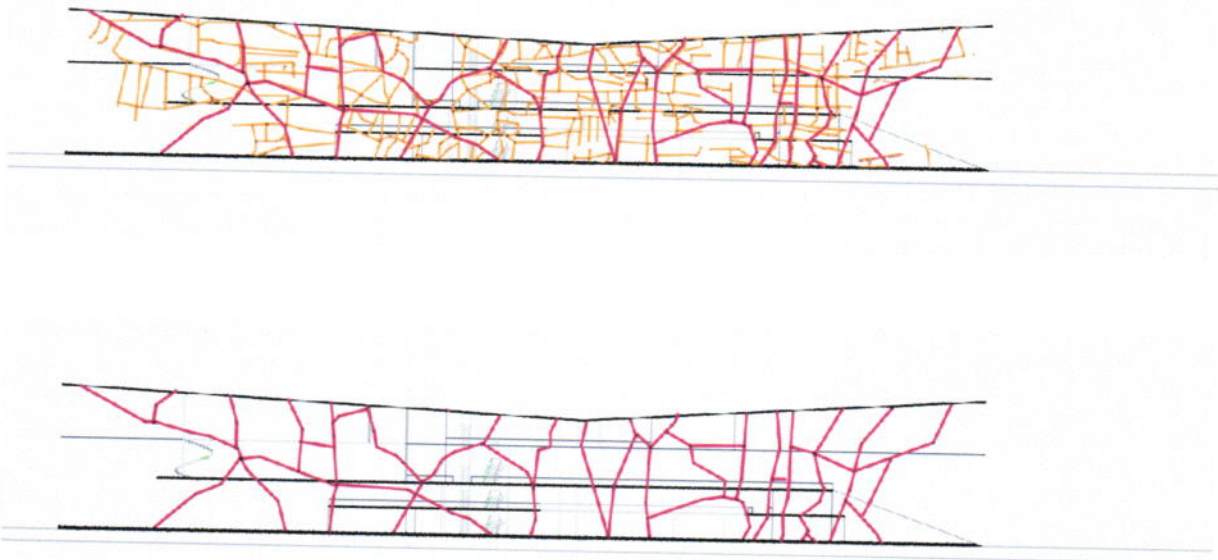
Phase 2.

Different faces of the Design





Taking the inspiration from old Dhaka Street pattern the whole design keep the image. The road patterns not only continue on the network system of the park but also in the give a aesthetic look on Elevation treatment.



Chapter-7

Design phase:



Master Plan



- Sports center
- Community gathering Space
- Sculpture garden
- Cultural Hub
- Wood land
- Aquatic Garden





Environment inside the park

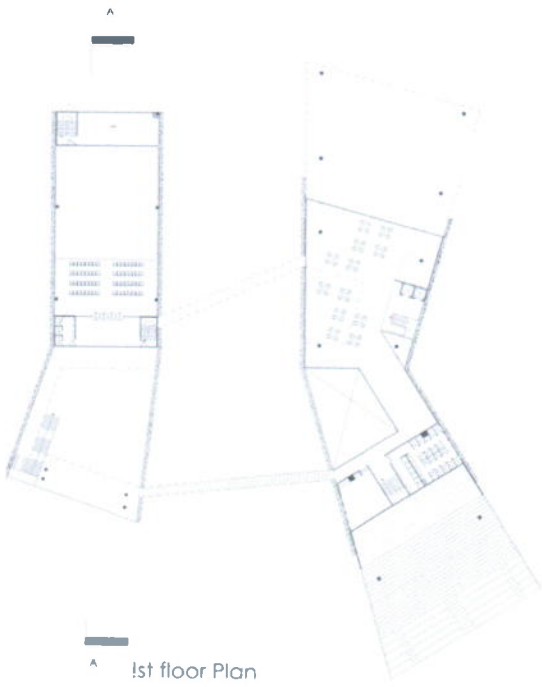




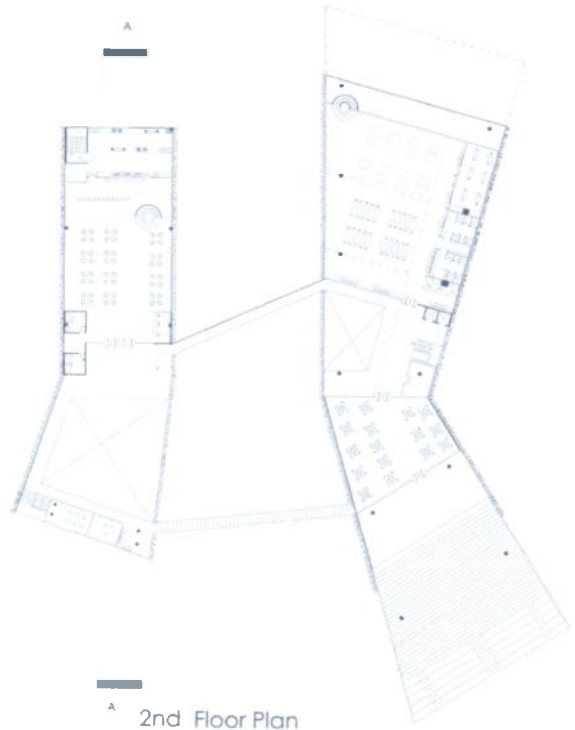
Sports Complex for people of Keraniganj



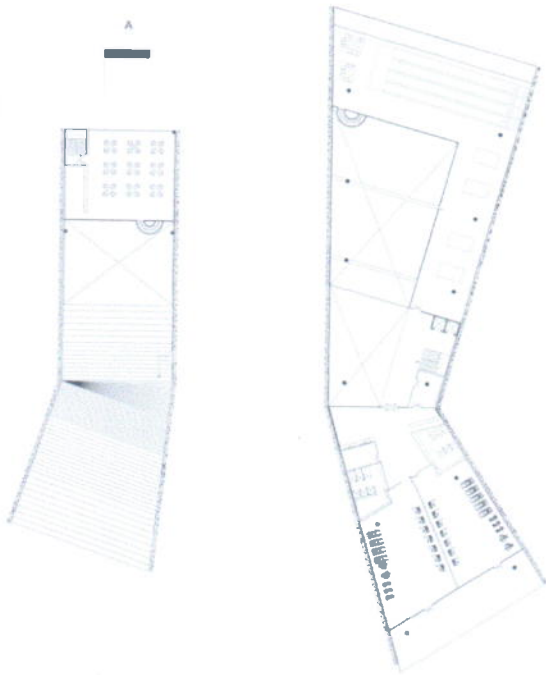
Ground Floor Plan



1st floor Plan

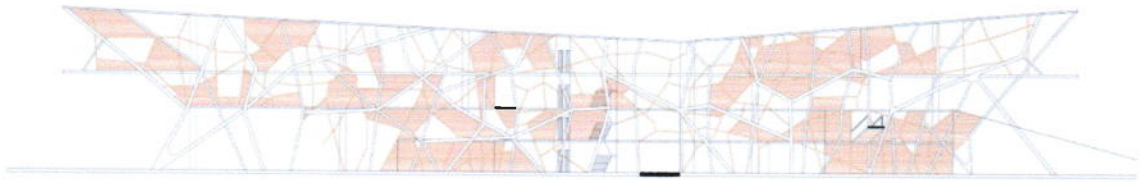


2nd Floor Plan

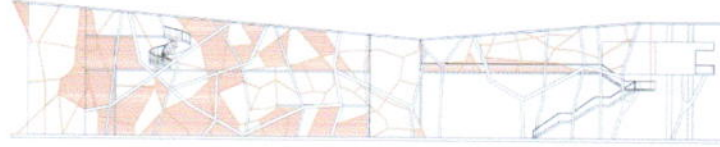


3rd Floor Plan

Scale: 1/4"=1'-0"

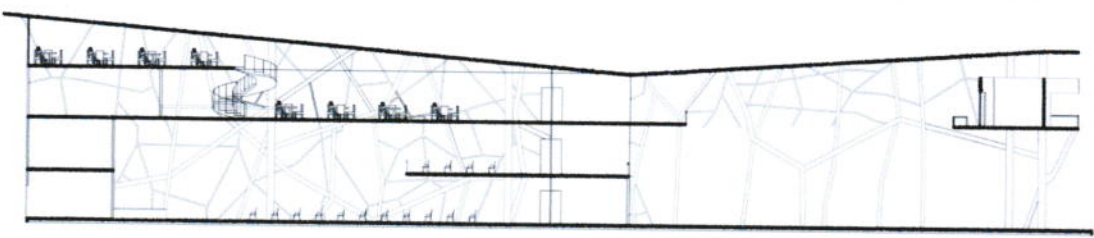


South Elevation



South Elevation

South elevation of Building A and B

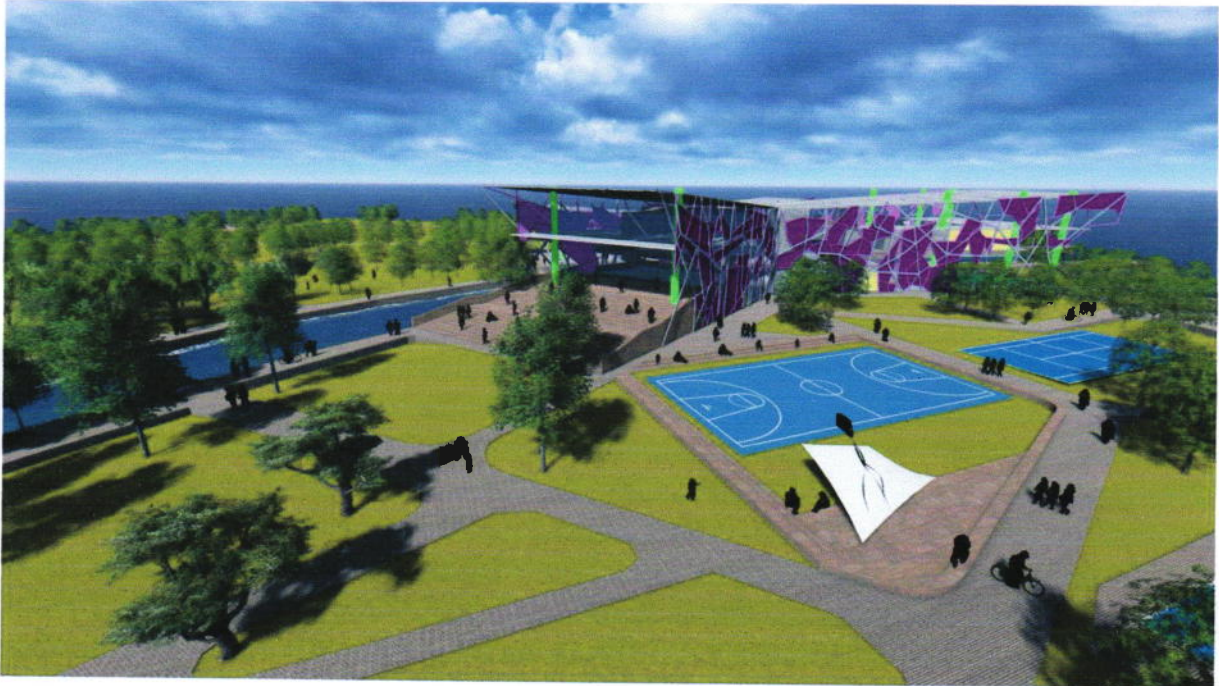


Section A-A

Longitudinal section of Building A







Chapter-8

Conclusion:

The whole Dhaka city is confronted with lot of problems. Scarcity/ Open space is one of the major issues. Dhaka is the city of 13 million people. And open space it still has only fulfill 7% of it demands. In this situation we should figure out spaces which has opportunity to become public open space. Keraniganj Dockyard is high potential area to become a public space. Which just not only help us to Breath but also helps to improve the environment of this area.

Chapter-9

Reference:

- Adelaide Now (2011) <http://www.adelaidenow.com.au/property/mawson-metamorphosis/story-fn682mc9-1226016073848> 'Mawson metamorphosis' (accessed 6 April 2011)
- Austin, P. (2009) 'Global crisis hits Docklands studio', <http://www.theage.com.au/national/global-crisis-hits-docklands-studios>, (accessed 17 March 2010).
- Australian Property Guide (2011), <http://www.homepricingguide.com.au/Research>, (accessed 13 July 2011).
- Bosman, C. (2003) 'A district package: Constituting community- Golden Grove 1984-2002', *Journal of Australian Studies* 76, 17-26.
- Brownill, S. (1990) *Developing London's Docklands: Another Great Planning Disaster?*, London: Paul Chapman Publishing Ltd.
- Day, C. (2008) 'City's suburbs building up', *Portside*, 18 June, p. 7.
- Department of Infrastructure and Transport (2010) *Discussion Paper: Our Cities*, Canberra: Commonwealth of Australia.
- Docklands Authority (1997) *Melbourne Docklands. Melbourne's Millennium Mark*.
- Dodson, J. (2008) 'The wrong place at the wrong time: why the structure of housing markets means urban consolidation cannot equitably solve our planning challenges' Australian Housing Researchers Conference.
- Dovey, K. (2005) *Fluid City: Transforming Melbourne's Waterfront*, Sydney: Routledge.
- Dovey, K. and Sandercock, L. (2002) 'Hype and hope. Imagining Melbourne's docklands', *City* 6 (1), 84-101.
- Fincher, R. (2007) 'Is high-rise housing innovative? Developers' contradictory narratives of high-rise housing in Melbourne', *Urban Studies* 44 (3), 631-649.
- Friedmann, J. (1987) *Planning in the public domain*, Princeton: Princeton University Press.
- Gerrard Brown (2006) *Liveability Report. Capitalising on Melbourne's status as one of the world's most liveable cities*, Melbourne: Report for the Committee for Melbourne.
- Gwyther, G. (2005) 'Paradise planned: Community formation and the master planned estate', *Urban Policy and Research* 23 (1), 57-72.
- Harvey, D. (1992) *The Condition of Postmodernity*, Oxford: Basil Blackwell.
- Healey, P. (1997) *Collaborative planning: Shaping places in fragmented societies* Basingstoke: Macmillan.
- Holden, K. (2010) 'Desperately seeking the soul of Docklands', *Melbourne Age A2*, Saturday October 30, p.3.
- Houston, C. (2009) 'Wheel of misfortune was 'riddled with faults'', *The Age*, June 28, p. 3.

Hoyle, B. (2000) 'Confrontation, consultation, cooperation? Community groups and urban change in Canadian port-city waterfronts', *The Canadian Geographer*, 44(3): 228-243.

Huxley, M. and Kerkin, K. (1988) 'What price the bicentennial? A political economy of Darling Harbour', *Transition*, Spring, pp. 57-64.

Inkster, I. (1991) *The Clever City. Japan, Australia and the Multifunction Polis*, Sydney: Sydney University Press.

Johnson, L. (1994) 'The post modern Australian city', in L. Johnson (Ed.) *Suburban Dreaming* Geelong: DUP, pp. 51-72

www.docklands.com

_____ (2006) 'Style wars: revolution in the suburbs?', *The Australian Geographer* 37 (2), 259-277.

_____ (2010) 'Master planned estates: Pariah or panacea?', *Urban Policy and Research* 28 (4): 375-390.

Kenna, T. (2007) 'Consciously constructing exclusivity in the suburbs? Unpacking a master planned estate development in Western Sydney', *Geographical Research* 45 (3), pp. 300-313.

Kennett, H. (2008) 'Investor revolt', *Portside*, 12 November, p. 1. Land Management Corporation (2009a) 'Investing in the Port Adelaide Region,

<http://www.lmc.sa.gov.au/theport> (accessed March 2009).

Lloyd, T. (2009) 'Orgy of bad development fuelled by long lunch', *The Advertiser*, 12 September, p. 44

Long, C. (1998) 'The Melbourne Docklands redevelopment and the exclusion of the public', in K. Shaw (ed.)

Planning Practice 1998 Melbourne: People's Committee for Melbourne, pp. 48-52.

Long, C., Shaw, K. and Merlo, C. (eds.) (2005) *Suburban fantasies: Melbourne unmasked*, Melbourne: Australian Scholarly Publishing.

Macleod, A. (2010) 'Docklands is different, but that is no reason to write it off', <http://www.theage.com.au/opinion/society-and-culture/docklands> (accessed 17 March 2010).

McGuirk, P. and Dowling, R. (2007) 'Understanding master-planned estates in Australian cities: A framework for research', *Urban Policy and Research* 25 (1), 21-38.

Merrifield, A. (1993) 'The Canary Wharf debacle: from 'TINA' – there is no alternative – to 'THEMBA' – there must be an alternative', *Environment and Planning A*, 25, 1247-1265.

Minnery, J. and Bajracharya, B. (1999) 'Visions, planning processes and outcomes. Master Planned Communities in South East Queensland', *Australian Planner* 36 (1), pp. 33-41.

Newport Quays (2006) *Your harbour...your dream*, Promotional material.

Oakley, S. (2005) 'Working Port or Lifestyle Port: the emerging politics of the Port Adelaide waterfront redevelopment', *Australian Geographical Studies*, 43(3), 319-326.

_____ (2007a) 'Discourses of community in urban waterfront regeneration: the case study of the Port

Adelaide waterfront redevelopment,' Refereed paper at the State of Australian Cities: National Conference 07, The University of South Australia, The University of Adelaide, Flinders University,

Adelaide, 28-30 November 2007, Electronic Proceedings
<http://www.unisa.edu.au/soac2007/program/default.asp>

www.scientific-journals.co.uk

Banglapedia (2006) **Dhaka City Corporation** [Internet] National Encyclopedia of Bangladesh. Available from: <<http://goo.gl/EkpNV>> [Accessed on 15 April 2009].

BBS (2002) **Welcome to Bangladesh Bureau of Statistics** [Internet] Bangladesh Bureau of Statistics. Available from: <<http://goo.gl/FHLpX>> [Accessed 10 August 2012].

Brouwer, H., Valenzuela, C.R., Valencia, L.M., and Sijmons, K. (1990) Rapid assessment of urban growth using GIS-RS techniques. *ITC Journal*, 3, pp. 233-235. Epstein, J., Payne, K., and Kramer, E. (2002)

Techniques for mapping suburban sprawl. *Photogrammetric Engineering Remote Sensing*, 63(9), pp. 913-918.

He, C., Okada, N., Zhang, Q., Shi, P., and Zhang, J. (2006) Modelling urban expansion scenarios by coupling cellular automata model and system dynamic model in Beijing, China. *Appl. Geogr.*, 26(3-4), pp. 323-345

Gastellu-Etchegorry, J.P. (1988) **Remote Sensing with SPOT: An Assessment of SPOT Capability in Indonesia**. Yogyakarta, Gadjah Mada University Press. Imura, H., Chen, J.,

Kaneko, S., and Matsumoto, T. (1999) Analysis of Industrialization, Urbanization and Land use change according to the DPSEER Framework. **Proceedings of NIES Workshop on Information Bases and Modelling for Land Use and Land Cover Changes Studies in East Asia, 25-27 January, Tsukuba, Japan.**

AKAA. 1978. 'Conservation as Cultural Survival', Seminar proceedings of *Architectural Transformation in the Islamic World*, Istanbul, Turkey, 26-28 September 1978, Published by Aga Khan Award for Architecture (AKAA), Singapore.

Alexander, C. 1971. Major Changes in Environment Form Required by Sociological and Psychological Demands, in Mc Quade (ed.), *Cities fit to live in*. New York: Walter.

Doshi, V. B. 1995. 'Architecture and Society', *EARTH*, vol. 2, No. 1, Winter 1995. pp. 6. Bianca, S. 1978. 'Fez: Towards the Rehabilitation of a Great City', *Conservation for Cultural Survival*, Singapore: Concept Media Pte. Ltd.

Bouladon, G. 1967. 'The Transport Gaps', *Science Journal*, April, London: Associated Iliffe Press.

Correa, C. 1984. Restructuring the City: the Case of Bombay, in *Expanding Metropolis Coping with the Urban Growth of Cairo*. Singapore: Concept Media Pte, Ltd.

- Dimitriou, H.T. 1990. Transport and Third World City Development, in H. Dimitriou (ed.), *Transport Planning for Third World Cities*, London: Routledge.
- IABNL. 1989. *News Letter*, Institute of Architects – Bangladesh (IAB), vol. 1989, Dhaka: IAB.
- Khan, I.M. 1985. 'Livability in Old Dhaka: Evolving Residential Pattern in Mahallas', paper presented in the Regional Seminar on Architecture and the Role of Architects in Southern Asia, 1922 December 1985, Dhaka. pp. 7.17.13.
- Mowla, Q. A. 1990. *Study of Urban Development Opportunities for Lalbagh/Kotewali Zone and Urban Design Vision for the land to be vacated by Dhaka Central Jail Located in the Study Area*, Unpublished M Urb Design Dissertation, Hong Kong University, 1990.
- Mowla, Q. A. 1999. 'Contemporary Morphology of Dhaka Lessons from the Context', *Oriental Geographer*, Dhaka, vol. 43(1), 1999, pp. 5166.
- Mowla, Q. A. 2006. 'Memory Association in Place Making – Understanding an Urban Space', *Protibesh* (the Journal of the Dept. of Architecture, BUET), vol. 10(1), 2006, pp. 2332.
- Mumtaz, K. K. 1978. The Walled City of Lahore: Direction of Rehabilitation, in *Conservation for Cultural Survival*, Singapore: Concept Media Pte, Ltd.
- Rashid, H. 1994. 'A basis for Culturally Responsive Environment for Living', *EARTH*, vol. 1, No. 1, September 1994. pp.3.
- SFYP. 1990. *Second Five Year Plan*, Planning Commission, Government of Bangladesh, Dhaka.
- TCPO. 1976. *Redevelopment of Shahjahanabad: The Walled City of Delhi*, The Town and Country Planning Organization (TCPO), Government of India, New Delhi: TCPO.
- Akramuzzaman, Malik [1966], "Morphological Study of the New Town of Dacca City". Unpublished M. A. Dissertation, Department of Geography, Dhaka University.
- Ahmed, Sharif Uddin [1986], *Dacca: A study in Urban History and Development*. London: Curzon Press
- Prof. Dr. Farida Nilufar, *Urban Morphology of Dhaka City: Spatial Dynamics of Growing City and the Urban Core*, Department of Architecture, BUET Email: faridanilufar@yahoo.com
- Dr. Qazi Azizul Mowla, *Redevelopment Strategy for Old Dhaka: An Analytical Debate*, *Jahangirnagar Planning Review* ISSN 17284198 Vol. 6, June 2008, pp. 3338, Jahangirnagar University
- Raihan and Kaiser, *Land Use Changing Scenario at Kerniganj Thana of Dhaka District Using Remote Sensing and GIS*, *Journal of Environment* (2012), Vol. 01, Issue 03, pp. 105-110 ISSN 2049-8373