

NOGOR-HAAT
REIMAGINING AN URBAN MARKETPLACE AS THE
NEIGHBORHOOD SQUARE

Seminar II

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Abstract

With flourishing time, thriving technology and ever growing demand the rural fabric of Bangladesh is transforming into urban districts faster than we can comprehend and accommodate the traditional integral functions of Haat-bazaars into our neighborhoods. A city begins with people living together, forming a neighborhood and developing a community. In rural context "haat-bazaar" have been the focus of cultural and physical fabric of a village and other public functions grow surrounding it to create a community. In urban neighborhoods these bazaars exist out of need but fail to adapt to urban scale, demand and context. Thus it loses the traditional features of openness and spontaneity since it has no guidelines on adapting into an urban system. Consequently, bazaars faces traditional identity crisis and it no longer remains the center of a community as it once used to be.

Townhall is an old neighborhood node in Mohammadpur where the elements of the neighborhood center such as, ward Councilor office, bazaar, market, mosque, library, playground, park etc exist but faces structural vulnerability, political dispute, lack of integration, safety and security. In 2004 Dhaka north city corporation has decided to renovate 13 markets that were built in 1950's and are structurally failing, posing threat to the users. Townhall supermarket in Mohammadpur, is one of the markets which are to be demolished and rebuilt as a multi storied modern market. However, this site has the potential to be more than a mere market but the center of the neighborhood community if the different functions are thoroughly analyzed and integrated.

The aim is to redevelop the area by rejuvenating the functions, preserving and connecting the open spaces; thus creating a vibrant neighborhood square where the community market/bazaar would be at the center. The prime objective was to preserve the informal characteristics of a traditional bazaar bringing a systematic balance into the different types of formal and semi-formal markets and municipal functions. The necessity of an urban square to hold outdoor public events and festivities and have been considered a top priority as the city demands more open spaces that can hold activities created by the urban built programs.

CHAPTER 1

1 INTRODUCTION

1.1 PROJECT BRIEF:

Dhaka City Corporation (DCC) owns 36 markets in the capital. In 2004 DCC decided to renovate 13 markets that were built in 1950's and are structurally failing, posing threat to users. Townhall Bazar in Mohammadpur, is one of the supermarkets which are to be demolished and rebuilt as a multi storied modern market. Established in the 1950's, the two storied supermarket contains kachaa bazaar, market, and ward councilor office along with other mixed use shops and offices. It faces Shaheed park central Mosque along with Shaheed park field. The Total study area is 5.5 acre.

Client: Dhaka North City Corporation (DNCC)

Site Location: Townhall, Mohammadpur, Dhaka

Site Area: 5.5 Acres

Existing Function: Bazar, Market, ward councilor office, offices, mosque. Library, play field.

User group: inhabitants of local and surrounding neighborhoods

1.2 PROJECT INTRODUCTION:

Civic architecture is governmental building at the center of the community to serve the community people of the village, town or city. It may contain single or multiple public functions with civic plaza and sometimes becomes the symbol of the town. As the idea of civic identity cultivated its' physical manifestation reflected in ancient Greek Agora and Roman Forum. They had administrative function enclosed and public functions surged towards the city with courtyards and shaded arcades. The agora and forums became such a popular identity of civic buildings that later in European and American civic buildings kept following

the traditional architecture. With colonization and western influence Indian subcontinent built their civic building with western notion and styles of architecture having no relation with the local identity. Under similar tradition Town hall super market was established in 1950 in Mohammadpur, a residential town of Dhaka metropolitan city.

Town hall super market, as the name suggests the building is implied to be a town hall with a super market serving the local neighborhood serving both socially and politically. Supposedly, it is an ideal place for people gathering and social interaction. However, the identity of a place is not defined by only its name but also by its use. To understand and evaluate Townhall supermarket's use and identity we must analyze the functional, political and social identity of the site.

1.2.1 Town Hall:

Town hall is a municipal building used for the local government where meetings are held at which a politician or public official answers questions from members of the public.

The main function of a Town Hall is town hall meetings where the government interacts with each other and with the public.

1.2.2 Super market:

According to oxford dictionary, a super market a large retail market that sells food and other household goods and that is usually operated on a self-service basis.

After Townhall building was established it functioned as a market not as the official civic building a Town hall is supposed to be. During 1970-71 kacha bazaar which is an open air food market was added. Later shops and various offices added to the market. Townhall developed as a mixed use formal and informal marketplace. The function of market is not only trading and commercial benefit but it also creates opportunities for interactions and gathering thus transforming into a public space.

Mohammadpur area was planned during 1955's with prominent grid pattern with play fields scattered through the streets. The area had been a muslim populated community with many mosques situated closely to one another. During 1980's Shaheed park central mosque was built next to Town hall. The mosque became a landmark for the area with active gathering place for not only regular mosque goers but also for the young people. Gradually the mosque developed and built madrasa above the mosque and supermarket in the ground floor.

"In the Islamic city planning, the *suq* (market) is placed near the central mosque for the purpose of the economy and social integration" (Mortada, 2003; Omer, 2005).

With the field, mosque, bazaar, market and Townhall the site becomes a prominent node for the Mohammadpur area. However none of the functions are working properly due to unplanned and unchecked development.

As a result, it demands a solution for the neighborhood with thorough study, research, survey of the site to understand the existing political, economic, physical, social setting; a solution with design and development which would renew the identity of Town Hall area.

1.3 Problem statement:

As widely as it is used the building is failing both in form and function.

A. Identity crisis

The Townhall contains the city council office and it should work as a town hall should. However, due to unplanned functional structure the office is unable to perform as a civic building which should promote public gathering and discussion. Even though the name of the area is Town hall the function of the site is mainly market both open and indoor. The site is known to people around the city as a bazaar not as Townhall. People do not ask twice about why the site is named Town hall and the use is not. One of the reasons for it is that the local

people do not know the functions, nature and social implication of a building called town hall. As western cities and towns, town halls are not built in Bangladesh.

As the name suggests the site functions properly as neither town hall nor supermarket. A big portion of it is bazaar and multifunctional cluster of small shops. In the circumstances the site begs the question of what it is and it should be.

B. Structural vulnerability

The building was built 60 years ago the structural condition is deteriorating putting hundreds of people in risk. The building fabric reflects the degradation both internally and externally with washed out plaster of the slab revealing the steel reinforcement ex to environmental decay.

Ventilation and lack of natural light is another significant problem. The ground floor markets inside have no system for natural light entry and the whole space gives an impression of being underground. Lack of windows creates a huge problem for ventilation. Poor Mechanical ventilation have been installed to improve the situation but it has very little effect. Instead of addressing this issue the government had attempted a restoration work in 2011

C. Political dispute

The whole site is owned by the government however, most of shops and markets are led by leaseholders. Even if the government has development and redesign plans the local leaseholders do not trust the government and are not allowing them to demolish the building.

D. Underutilized open space

There are several open spaces waiting to be utilized however at the moment they are not open to public. Some are open but not accessible and safe for everyone.

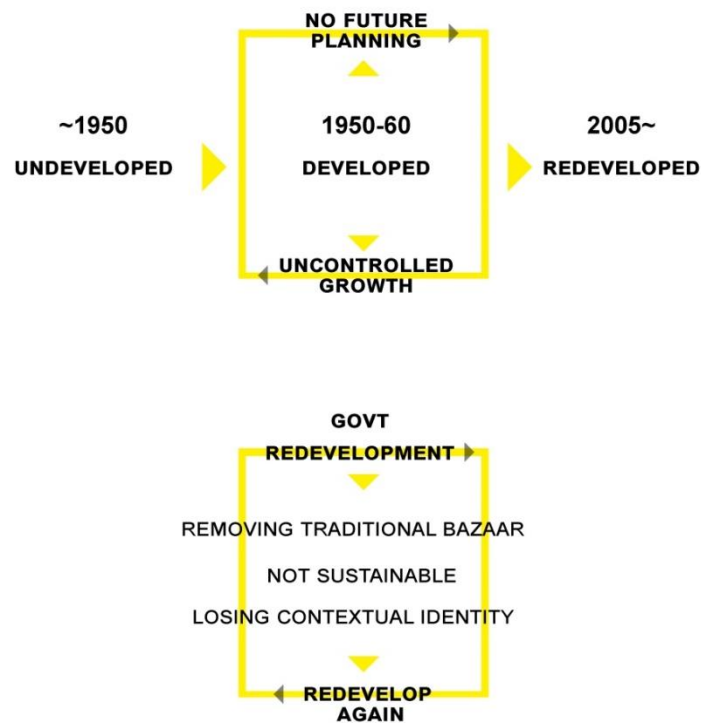
There is a huge opportunity for a connected neighborhood parks and open spaces.

1.4 Project Rational:

The stated problems of the site demand a solution.

Since the government wishes to rebuild the supermarkets it is vital that this particular site has to deal with severe consideration as the site is named Town hall and it has DCC ward commissioner office.

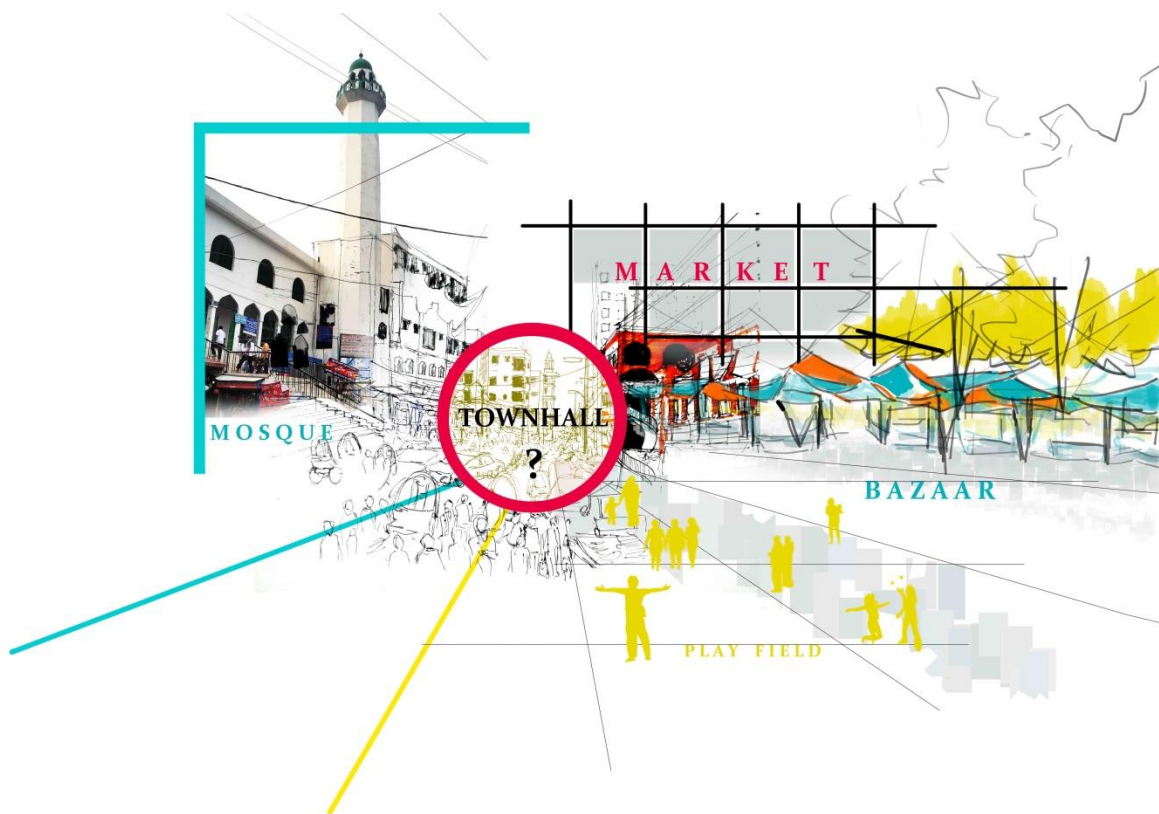
A design solution considering the site at macro and micro level with prediction of the future population growth, urbanization, economic opportunities and social ramifications of the site is crucial.



1.5 Scope of The Project:

- A unique site to study the co-existence of Town hall and Bazaar together situated in Dhaka and potential emergence of a new 'Town hall-market' typology suited for local context and climate.

- A scope to study the functions of bazaar (traditional open air market) and supermarket (modern indoor markets) work together.
- Designing a framework built for multifunctional public programs which could be used as a model in similar functional typology
- It has the potential to grow as a public gathering place for the neighborhood by linking open spaces.
- Great potential for community service by providing local needs and demands and a public space that would hold the community



1.6 Thesis statement:

To redevelop and redesign the area of Townhall by forming a unified marketplace with linked neighborhood squares which serves the neighborhood community

1.7 Aims and Objective:

The aim is to renew the area by rejuvenating the functions of town hall and marketplace with redesign and redevelopment, connecting them with public spaces that an urban neighborhood desperately demands

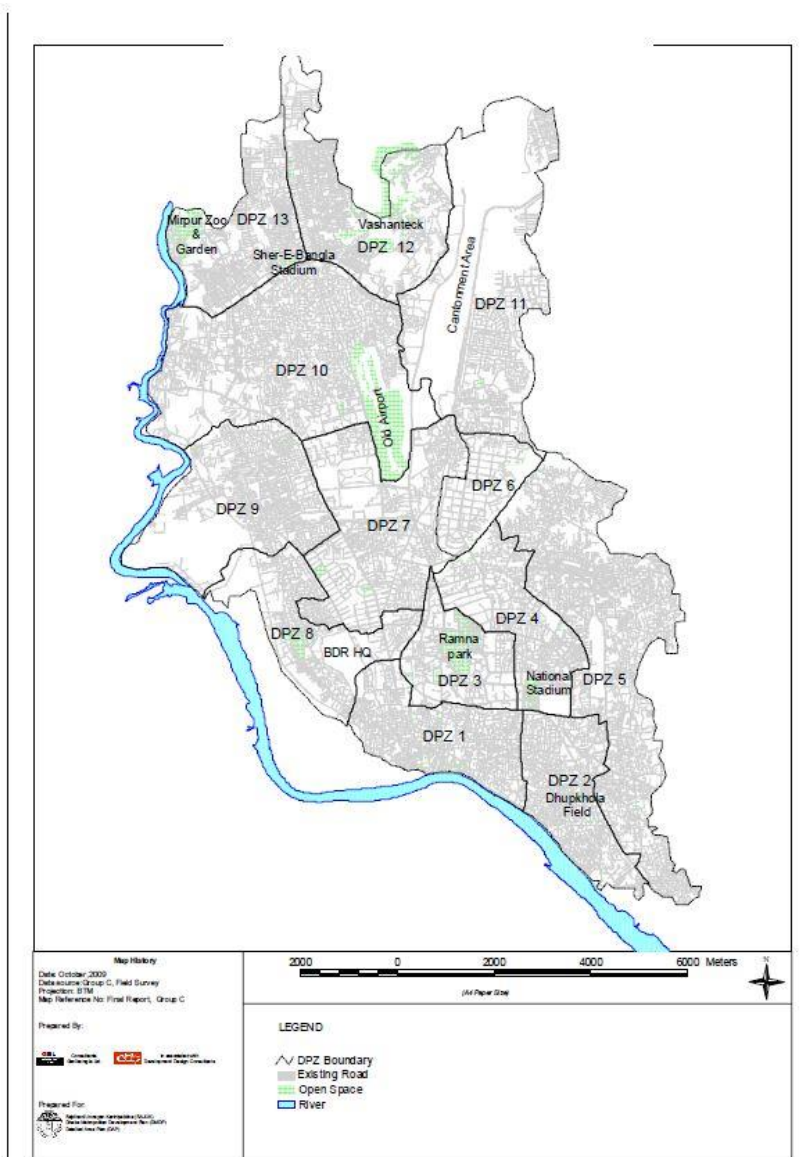
Objective:

- Study the existing functional relation between bazaars, public markets and offices to understand the traditional bazaar morphology
- Study the characteristics of public functions, public space and where the characteristics are stronger than other places and how they affect each other.
- Finding a design layout/framework of how multiple public functions of the site should coexist
- Reinstating the function of Town hall in the site; studying the Town hall morphology that reflects the town and goes best with the site in context
- Opening the access and vista to the open spaces

CHAPTER 2

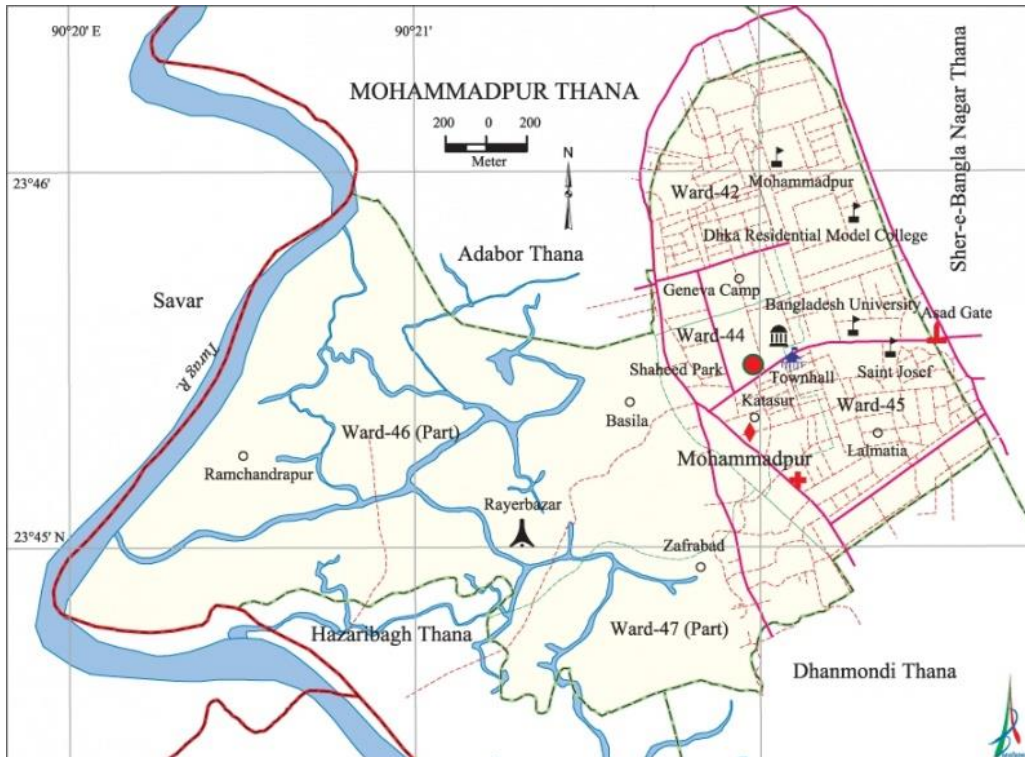
2 LITERATURE REVIEW

Dhaka consists 36 wards, with total 3957302 population (Dhaka North City Corporation). The wards are urbanized area, some planned and some were unplanned and developed organically. Mohammadpur was planned during 1950's with grid pattern. It consists of



Source: Dhaka structure plan

2.1 “**Mohammadpur Thana** (Dhaka metropolitan) area 7.44 sq km, located in between 23°44' and 23°46' north latitudes and in between 90°19' and 90°22' east longitudes. It is bounded by ADABAR THANA on the north, DHANMONDI and HAZARIBAGH thanas and SAVAR upazila on the south, SHER-E-BANGLA NAGAR thana on the east, Savar upazila on the west.”(Bangladesh Bureau of Statistics, 2011)

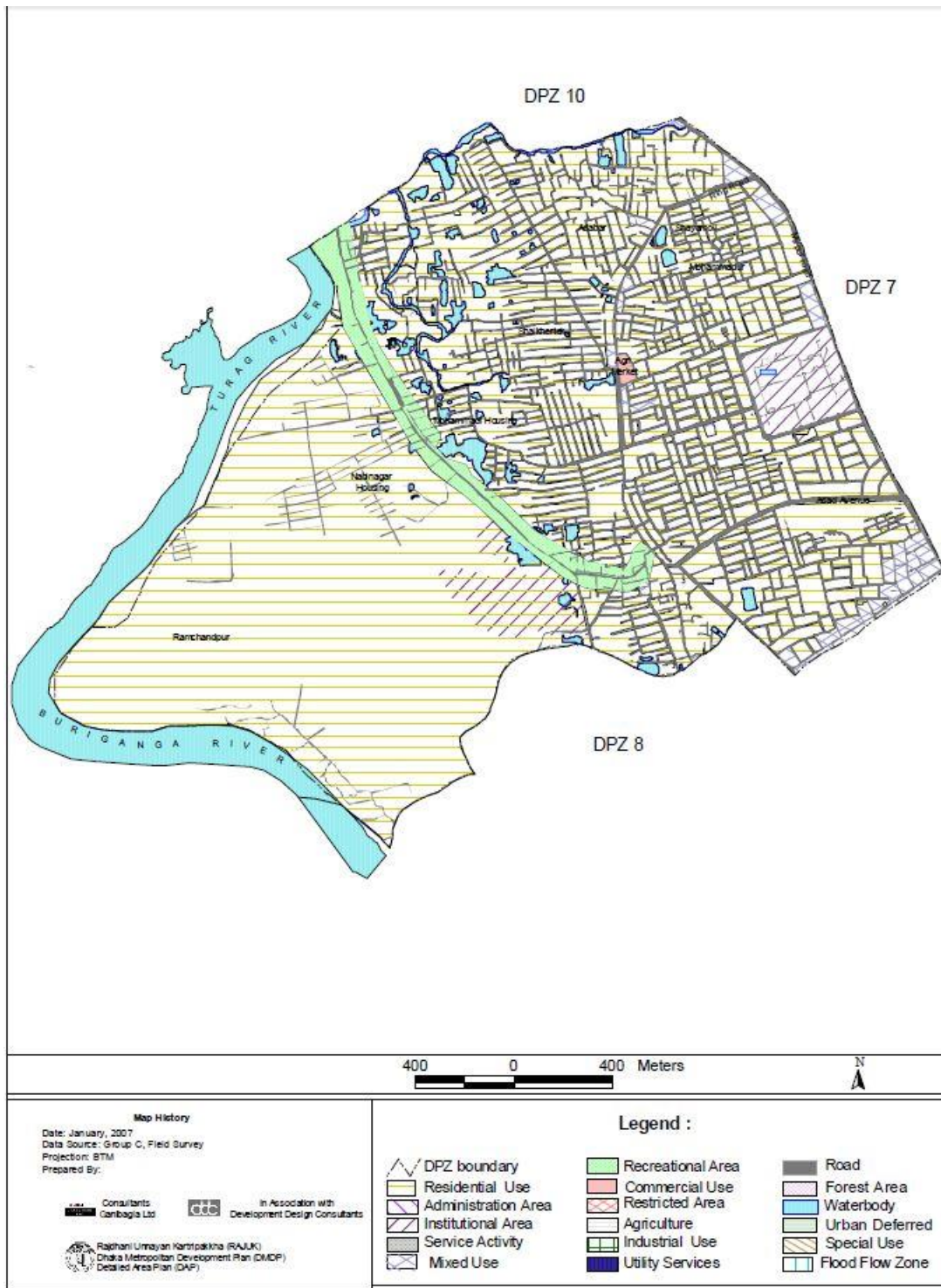


(BBS,2011).

Ward Name	Area in Acre	Population		Projected Population		Density		
		1991	2001	2010	2015	2001	2010	2015
42	192	21125	58068	76808	89720	302	400	467
43	411	29137	78006	103180	120526	190	251	293
44	150	40746	41922	55451	64773	279	370	432
45	344	21963	46817	61926	72336	136	180	210
46	1195	31837	63549	84058	98188	53	70	82
Total	2292	144808	288362	381423	445543	126	166	194

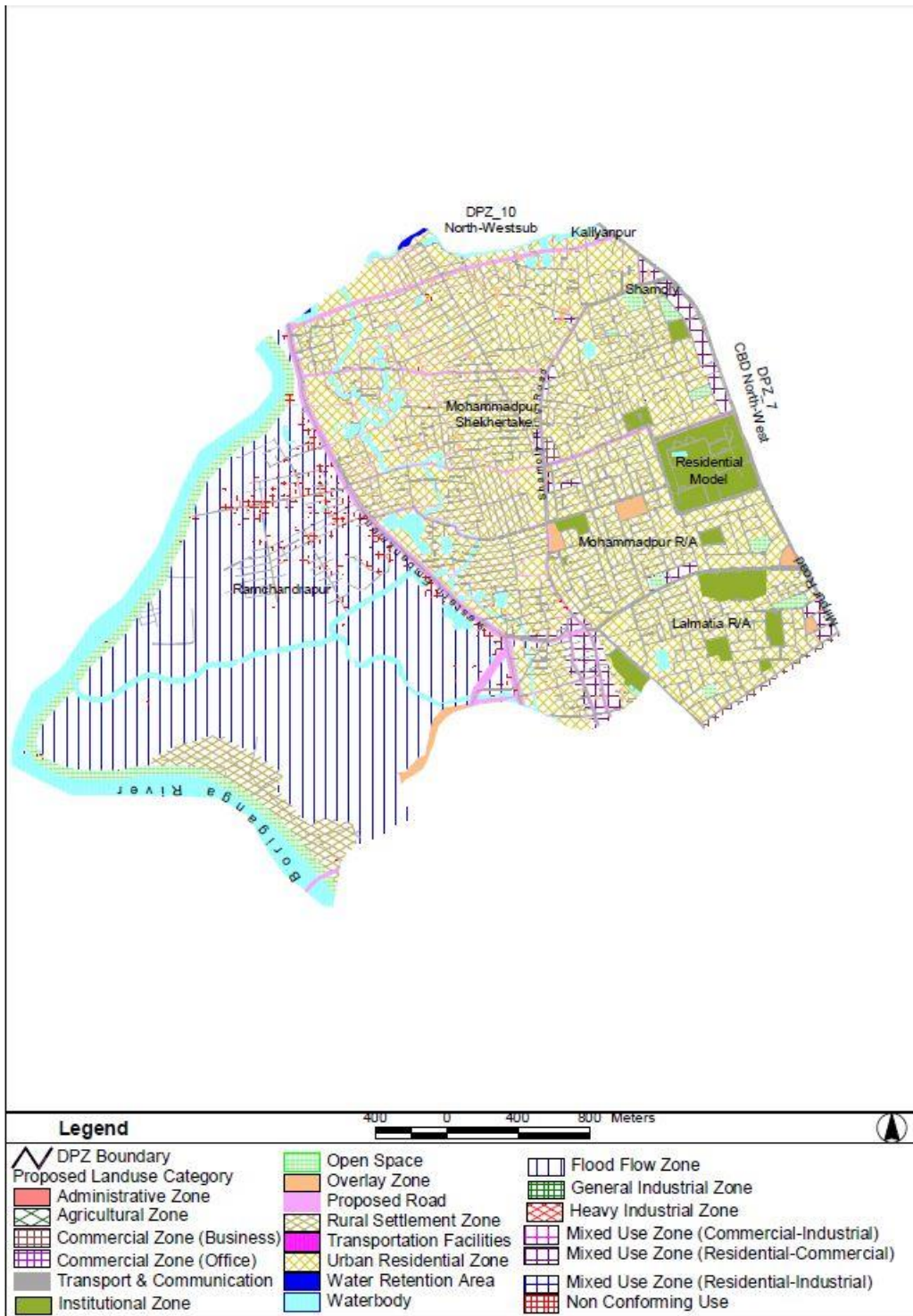
Source: BBS, 2001 and projection based on it

The existing detail area map of Mohammadpur



Source: Final Report .Preparation of Detailed Area Plan (DAP) for DMDP Area: Group-C, RAJUK

The proposed detail area map of Mohammadpur



Source: Final Report .Preparation of Detailed Area Plan (DAP) for DMDP Area:
Group-C, RAJUK

2.1.1 Neighborhood

Ward no 31 consists of several neighborhoods. The neighborhoods here are formed through streets with 4-5 storied buildings facing each other sharing the immediate street. The sense of neighborhood is established by the children who regularly play in the streets.

Neighborhood definition

Successful cities are made with successful neighborhoods. Neighborhoods should be compact, safe, with environmental and psychological comfortable environment for the dwellers.

the neighborhood community is developed when the users have common urban amenities, facilities and place to share.

Community facilities serve the basic needs of residents and are essential to the liveability and investment potential of the City. With respect to neighborhood and community design, they can provide a focus for activity and, by doing so, contribute to the definition of each neighborhood or community's character. Policies in the Framework Element provide the opportunity to locate community facilities in a manner that reinforces or defines the character of the communities or neighborhoods in which they are located. Given current fiscal constraints, facilities could be shared and financed/developed by non-traditional means.

The townhall bazaar is used by several neighborhoods from both mohammadpur and lalmatia areas. The community is knit through the town hall area with its several civic and cultural functions. The most common ones are bazaar and Shaheed park mosque.

2.2 Islamic city morphology

As the Townhall site consists commercial, religious functions alongside public space, other cities and towns with similar concentration of typology of building

functions have been reviewed. Traditional Islamic cities have similar religious and commercial practices and social behavior.

2.2.1 Bazaar and mosque

Mosque and bazaar are both Islamic component closely related to each other. Mosque (religious space) and Bazaar (economic space) were the two main urban elements for the formation and direction the growth of the city, similar to other Islamic cities(Arefian, Estaji, Jabbari, Koledova, Fatemi, 2015). Whereas mosque is spiritual, religious and social establishment, bazaar is at the same time social, commercial, cultural entity. Bazaar is created out of need of the community. It is part of social, cultural and economical activity and characteristic of urban dwellers in cities. "the boundaries of the property and hence, any social-political system, the production of the Bazaar space as its expression at the level of the community's endorsement is given (Harvey, 2005).

In the Islamic city planning, the *suq* (market) is placed near the central mosque for the purpose of the economy and social integration (Mortada, 2003; Omer, 2005). The bazaar organically grew around the old meydan and the Friday mosque (Pourjafar et al., 2014).

Bazaar means a marketplace or assemblage of shops where miscellaneous goods and services are displayed to buy and sell [K. Pirnia, "Islamic Architecture of Iran", Elm-o- Sanat Publications, Tehran, Iran, 1990.].

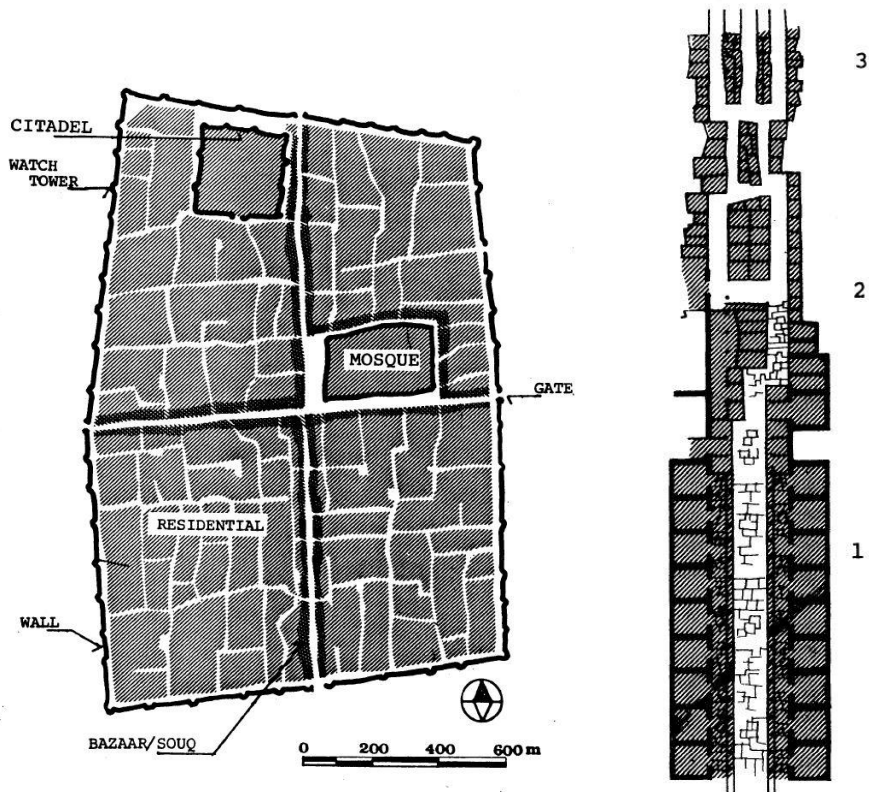


Figure:1
 DIAGRAM OF THE ISLAMIC CITY, based on plan
 of Kandahar (1880).

Figure:2
 THE TRANSFORMATION OF A MAIN STREET IN HELLENISTIC BERRHOEA INTO THE
 SOUQ/BAZAAR OF ALEPPO: (1) Hellenistic paved way with colonnades and larg shops behind
 them, (2) the shops occupy colonnades, (3) the paved way is occupied by shops and dwellings.
 Source : The Spread of Islam, Rogers 1976.

By taking a quick glance at the broad region of the Islamic world, we find the fact that all of the traditional Islamic cities are very similar in their general composition and planning so it is difficult to differentiate them or to identify their locations, from their pictures or plans. In spite of the climatical differences among the wide world of the Islamic culture and the variety of people and their customs and languages, all believers of this religion have settled in a similar manner (TAHERI,1980, URBAN ELEMENTS OF TRADITIONAL ISLAMIC CITIES).

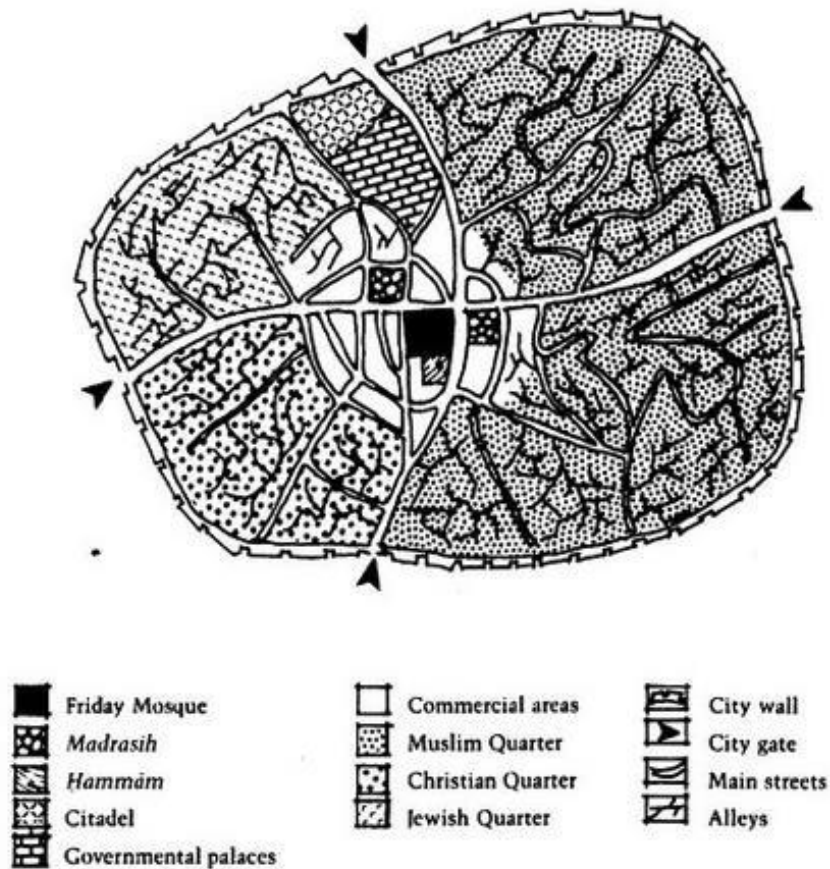


Figure 3. A schematic model of Islamic city (Kheirabadi, 2000).

In Islamic cities, Bazaar has been the main axis and economic of the city, that various goods manufacturing and distribution centers and warehouses were replaced in monetary exchanges (Kiani, 2008).

2.2.1.1 Iranian city morphology

ISFAHAN BAZAAR:

Isfahan an Iranian city have been chosen to study since Isfahan city's old functions are very similar with Townhall's functions.

By the 11th century, after selecting Isfahan as the capital of Saljuqi period, the old square had become the center of the city and old square become such an important urban space, that is a big difference in that particular era. It had a castle, bazaar (Figure 2), and mosque and residential. There were some

peripheral markets along the main streets radiating from the old square from at least that time (Sarraf,2010). Despite the sudden expansion of the city, the Isfahan bazaar was kept as the main urban structures for the new visionary city. Isfahan bazaar remains one of the best examples of the Eastern bazaars, in terms of character, size and architecture.(Isfahan School of urban design: a morphological perspective,2015). Its (Isfahan city) dual function as an emporium and as a capital manifested in Bazaars and in the courtly buildings that gave Isfahan the reputation of an oriental Versailles (Jayyusi et al., 2008).



Fig. 4 : VIEW OF COVERED BAZAAR OF ISFAHAN, Iran. Source : Isfahan, Architectural Review, May 1976.

Figure 5. Pre-planned urban expansions in Isfahan (source: Habibi, 2008).

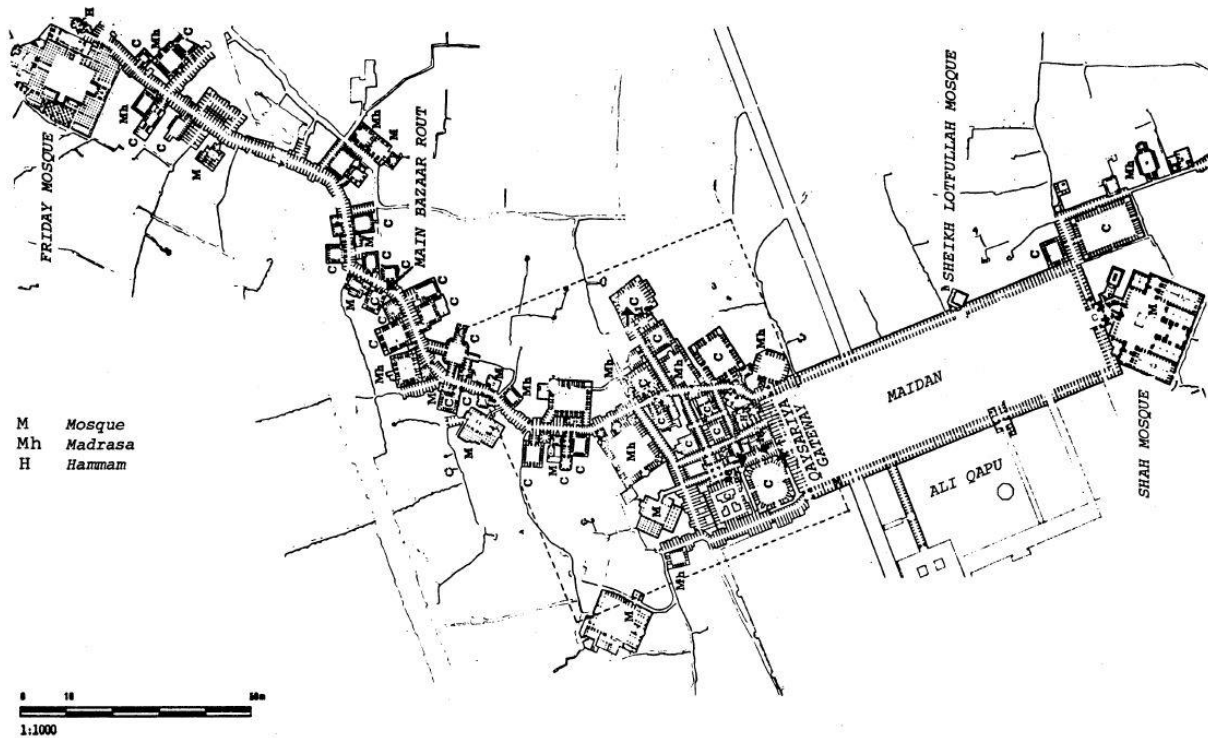


Figure: 6 PLAN OF BAZAAR OF ISFAHAN FROM THE FRIDAY MOSQUE TO THE MAIDAN, Iran.

Source : Isfahan, Architectural Review, May 1976.

The main mosque of Islamic city was usually located near a large plaza (Meydan), main routes were connected the main meydan to the city gates. Commercial spaces were usually located on the sides of those routes near the city centre and around the main Meydan (Kheirabadi, 2000).

Source: International Journal on "Technical and Physical Problems of Engineering" (IJTPE), Iss. 9, Vol. 3, No. 4, Dec. 2011

.According to the concept of center point define it moves in time and creates the line (Bakhtiar, 1973.). And also passage ways were in fact branches of the linear bazaar which connected the city centre to neighborhood centre [Karimi, 1997, Ramezani, Hamidi,2010].

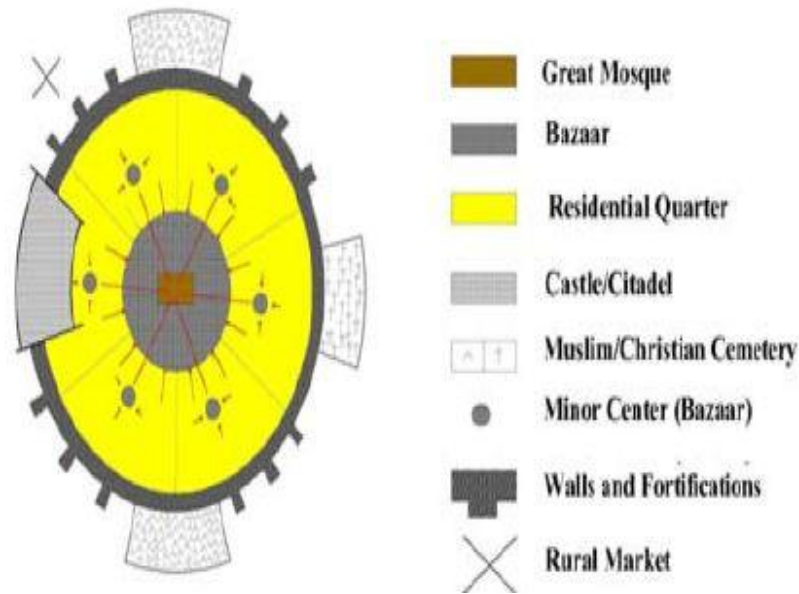


Figure 11. Iranian traditional cities source [E. Ehlers, W. Floor, "Urban Change in Iran, 1920-1941", Iranian Studies, Taylor and Francis Ltd., On Behalf of International Society for Iranian Studies 26, No. 3/4, pp. 251-275, Summer 1993]

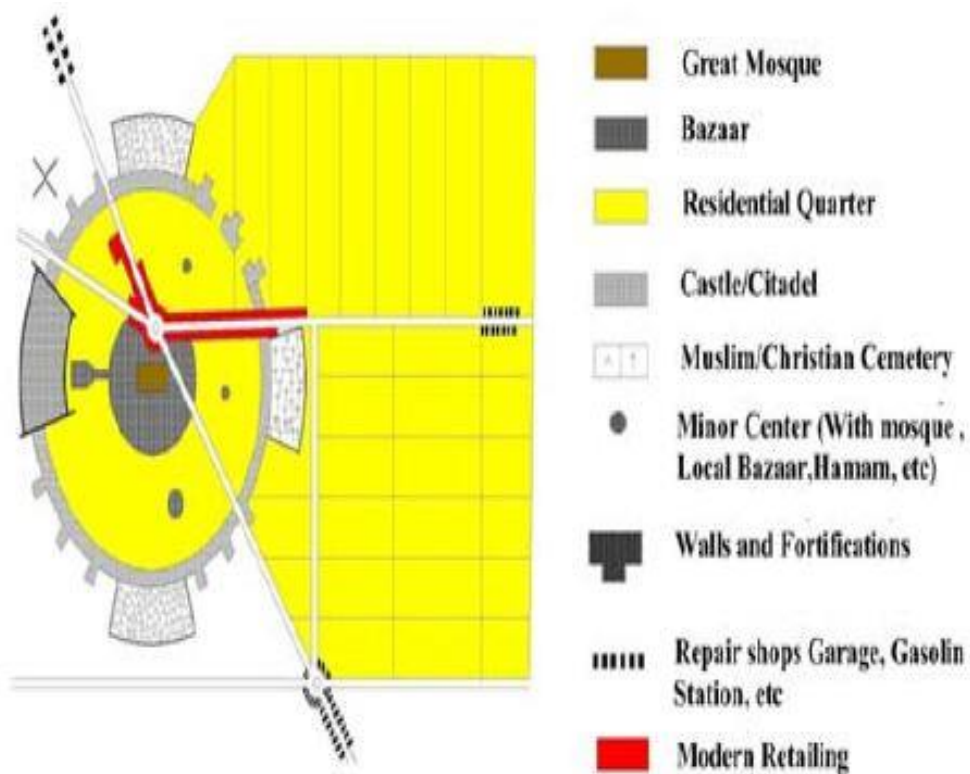


Figure 12: E. Ehlers, "Cities: IV. Modern Urbanization and Modernization in Persia", Encyclopaedia Iranica, Vol. 5.6, pp. 623-29, 1991.

Three types of bazaar morphology have been found in Iran,

- 1) Bazaar with connecting the gates
- 2) Bazaar as the major street of the city
- 3) Bazaar as the linear element in urban fabric, Assari et al,2011

Dhaka's neighborhood informal bazaars act as the linear element in urban fabric. These bazaars are flexible and spontaneous. In both Iranian and Bangladeshi bazaars the mix land use is complex and the lack of space for parking is always a problem. Townhall bazaar is socially sustainable however not environmentally.

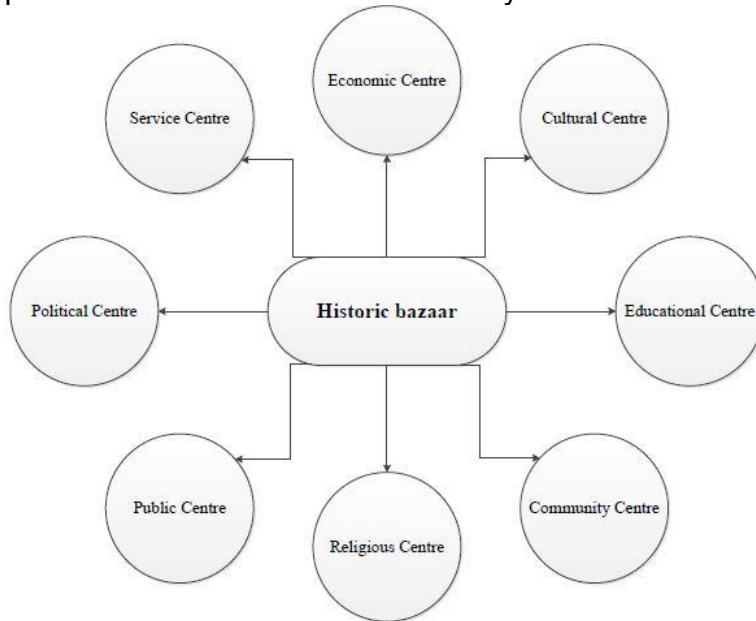


Figure 12: Values and functions of the historic bazaars in Iran (Source: Ebrahimi, Rahimian, Loron, **IMPACTS OF URBAN PASSAGES ON FORMATION OF IRANIAN BAZAARS: Case Study of the Historic Bazaar of Tabriz,2013**).

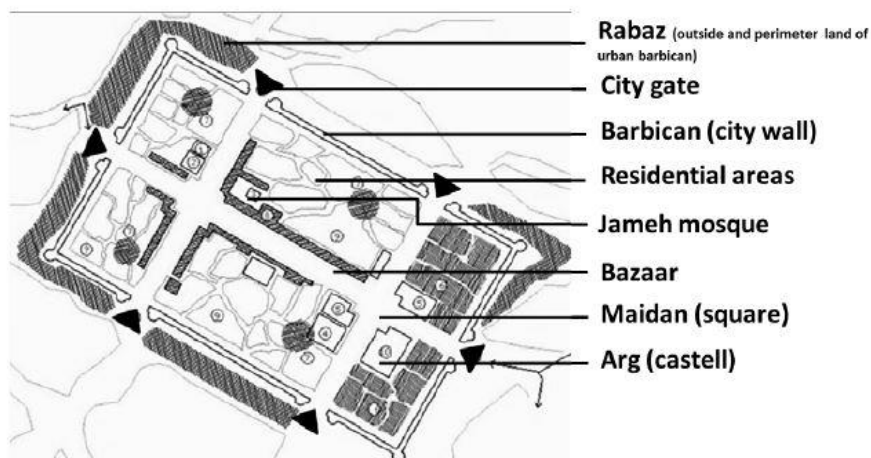


Figure 13, Traditional structure of Iranian Cities(source, ibrahimi et al, 2013)

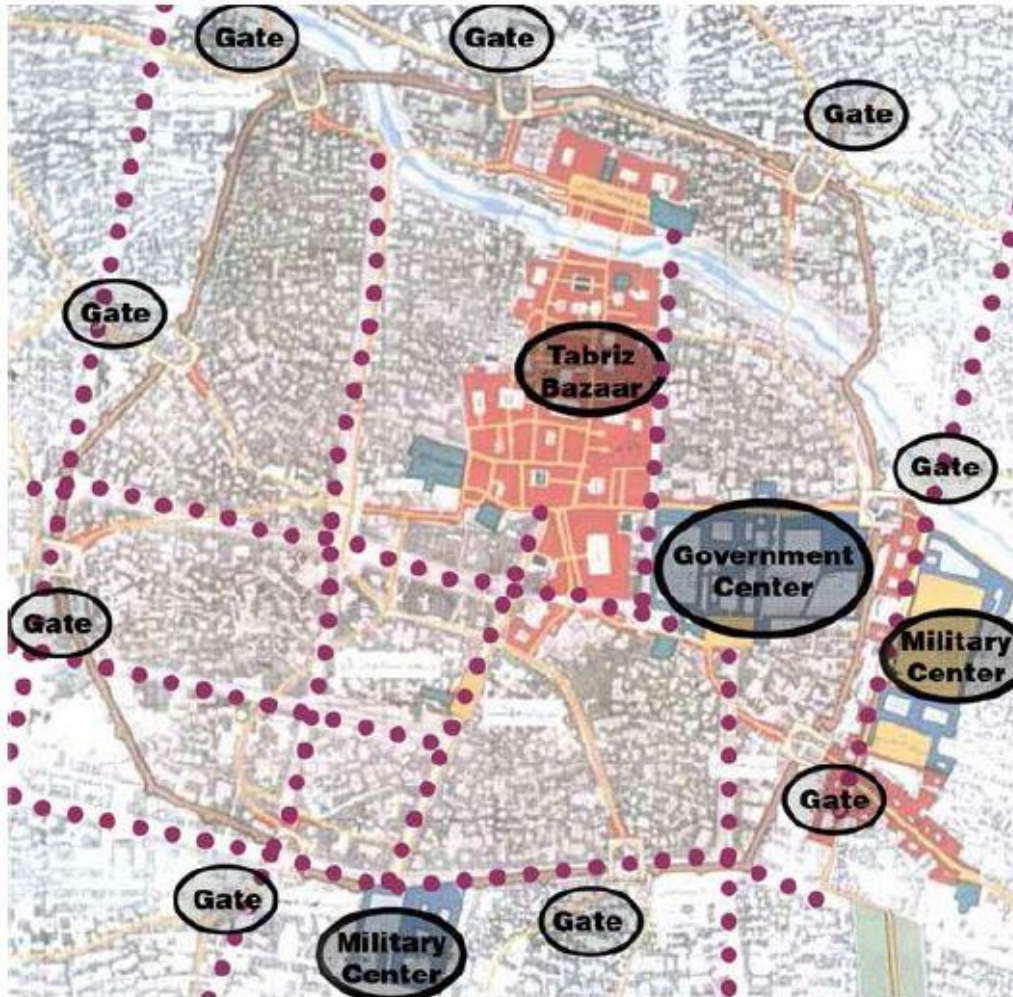


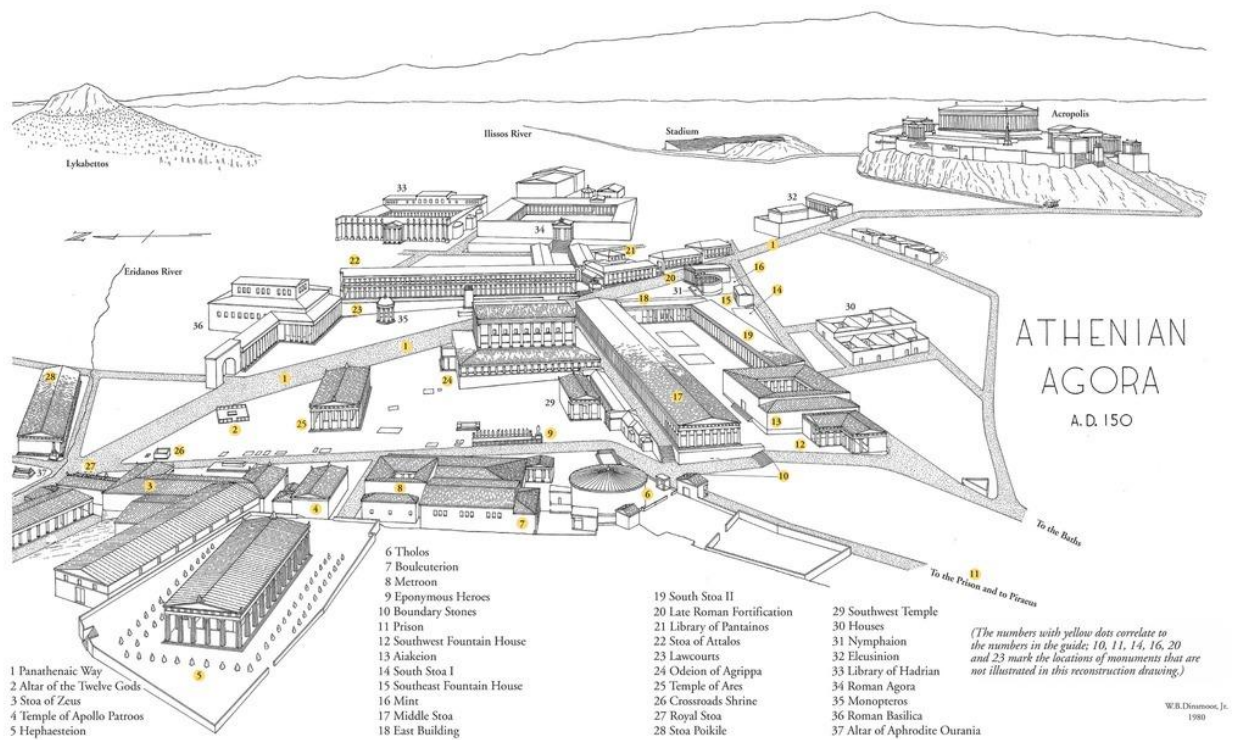
Figure 14
 Comparison of the traditional urban entrance pathways, city centres and city gates with the new city pathways in Tabriz (Source: Naghsh e Jahan Consultant Engineers; Analysis: Authors)

In economic theory, "the emergence of cities is considered to be a result of the trade", the city, the commercial routes to the truckers deal with this market segment, the route to arrive (Shokuie, 2004). Polanyi (1957) defined, 'the market is the locus of exchange'.

Urban markets in skeletal tissue for human intertwined, that economic, social and cultural relations of a society can be fitted and modern trading Bazaars, emerging as a phenomenon in developing countries is added (Kiani, 2008).

2.2.2 Origins and culture of Market in western countries:

In the west the concept of Bazaar is not new. The traditional customs of trade and interaction have been practices since the ancient times. There was no Greek city without an acropolis, a theater or a market(Bill,1998). There market was called agora and it closely associated with civic buildings and functions. The most common assembly place was the pnyx, an open air podium where the citizens met to consider and discuss affairs of state. The agora or marketplace the center of urban activity, was irregular in form(Gallion,1950). Since the ancient times, markets stretched in front of Assembly hall or town hall. Accessible from the agora square, but not facing upon it, were the assembly halls(ecclesiasteron), council hall(boueuterion), and council chamber(prytaneum)



Source: Agathe.gr

2.3 Public Market: A venue where organized groups of vendors gather on a regular Basis in a common location to market food products for which they are

directly responsible. The larger scope of high risk, ready to eat food. (PUBLIC MARKET GUIDELINES,2001)

With time and evolution of a city the bazaar goes through changes too. Sometimes the traditional old ways of bazaar can not cope with the growth and demand of the dwellers. The place becomes disorganized and problems arise. Structural vitality is also important. However, in the process of redevelopment, the intrinsic cultural qualities of the markets have the tendency to fade as the markets become more modernized than their previous state (Kim, Lee, & Ahn, 2004; Vural Arslan, 2015). In order to, modernize and renovate the old structures of market or bazaar the bazaars are rebuilt and often lose their intrinsic identity. Change is an inevitable part of urbanization, which affects the rise and fall of markets (Fava, Guàrdia, & Oyón, 2010; Hanachi & Yadollahi, 2011; Kim, Lee, & Ahn, 2004; Tangires, 2008). In Asia, market vendors contribute from 10 to 35 percent of the growth of the informal sector (United Nations Task Team, 2015).

In bagladesh retail markets grow spontaneously due to lack of control and lagging rules.

Retail sellers are usually immigrants from rural areas who come to Dhaka in search of work. It is easy to work in retail sector as no educational qualification or license is required. Among various types of occupational patterns in the informal sector, retailing activities as an entry point are attractive to immigrant groups, since they provide the opportunity of self employment with minimal capital investment and technical constraints (Paddison,et.al., 1990). The spatial changes in the former one reflect the penetration of western consumer values; where as the informal sector represents a potential solution to unemployment in developing countries (Mortuza; 1987).

In dhaka New market is the oldest and designed public market which functions successfully even today serving a large number of people of all class. After New

market, other retail markets chadnichawk and Hawkers market have been built. However, they were no planned for market. Which is why they lack the appeal of New market.

- Dhaka New Market



- Chadnickawk Market



- Hawkers Location



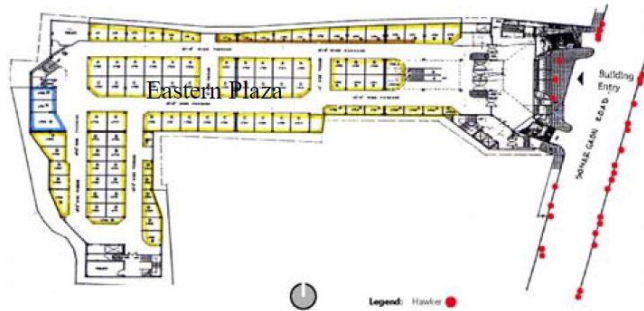
- Gausis Market



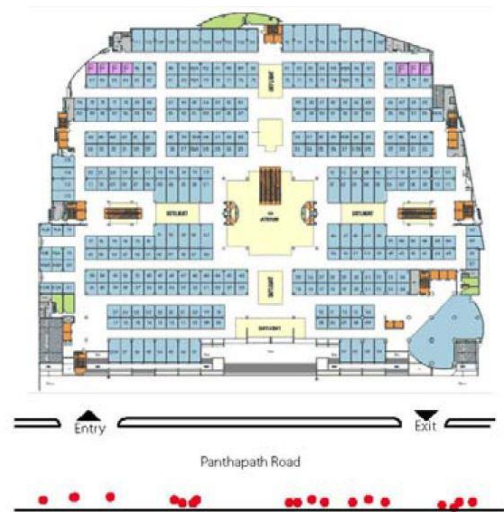
- New Super Market

Spontaneous Retail Developments Showing Hawkers' accumulation and variety of tenant mix within the buildings.

In the late 1990 modern supermarkets have been built with artificial ventilation and circulation system as they were not government planned. These markets attracted customers but lack the open traditional qualities of a public market.



• Eastern Plaza Shopping Center



Basundhara City Shopping Complex

2.4 Town Square

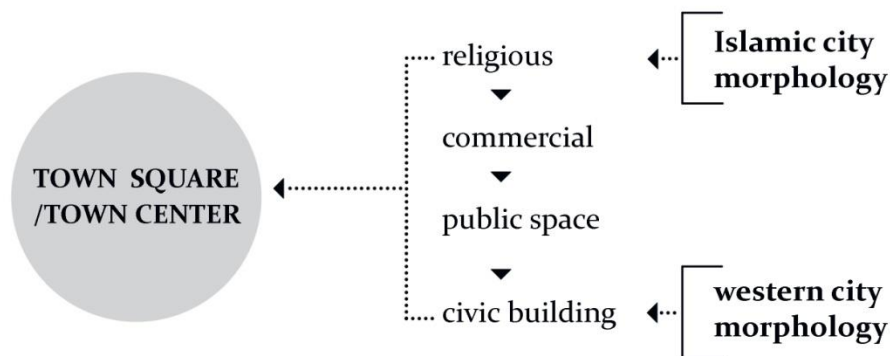


Figure: Studying the morphology of cities and towns and the functional concentration of town center

Source: author

Combining Asian and western city morphology we can come to the conclusion that civic, commercial, religious and public spaces all create a town center or square which holds and knits these functions together.

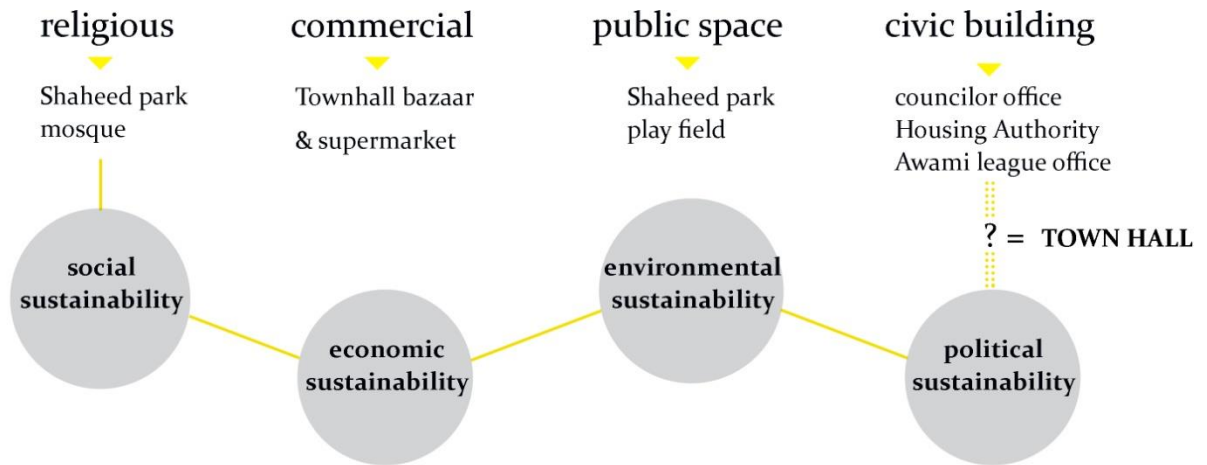


Figure: Functionality and sustainability

Source: author

In a town center civic, commercial, religious, and civic space exists to complement each other functions. In the study site Townhall all of the functions exist except the govt offices.

There are separate entities of building for each functions, however the civic functions such as the councilor office, housing authority, political party offices were built on top of the functions. A separate functional space is needed for the government offices.

There is a possibility that these functions could be provided their separate identity using the site name. Even though the site is called Townhall however, the functions of a proper Town hall do not work here. If the existing civic functions could be part of a Town hall then a pace could be provided for the govt authorities and public interaction as well. However, the validity of a Town hall is questionable in the site since it is western philosophy and is not practiced here. In this scenario A town hall could be established considering political, social context and size and scale of the project site area

Chapter3

3 Site analysis:

3.1 Location and Demographic

Town hall are stands at the middle of asad avenue and Mohammadpur bus stand. It is also the front and gateway to Mohammadpur with its landmark shaheed park moqsue and townhall building. Azam road and sher shah suri road intersects at the middle of the mosque and market. This part of Mohammadpur has been called ward no 42 however, recently the warn number has changed and it is now ward no 31.





SITE AREA: TOWNHALL bazar+ super market (550 FT X 230 FT = 126,500 SFT)
 shaheed park field+ mosque (400 FT X 260 FT = 104,000 SFT)
 empty field (187 FT X 150 FT = 28,050 SFT) TOTAL 258,550 sft / 5.9 acre approx

Ward Name	Area in Acre	Population		Projected Population		Density		
		1991	2001	2010	2015	2001	2010	2015
42	192	21125	58068	76808	89720	302	400	467
43	411	29137	78006	103180	120526	190	251	293
44	150	40746	41922	55451	64773	279	370	432
45	344	21963	46817	61926	72336	136	180	210
46	1195	31837	63549	84058	98188	53	70	82
Total	2292	144808	288362	381423	445543	126	166	194

Source: BBS, 2001 and projection based on it

3.2 climate and natural environment

The area is noisy with traffic. The traffic is generally created by schools and bus stand.

It faces a park which has been an achievement of government. They designed narrow small park for the neighborhood which is used very much by the school students and housewives.



3.3 Existing built enviroment:



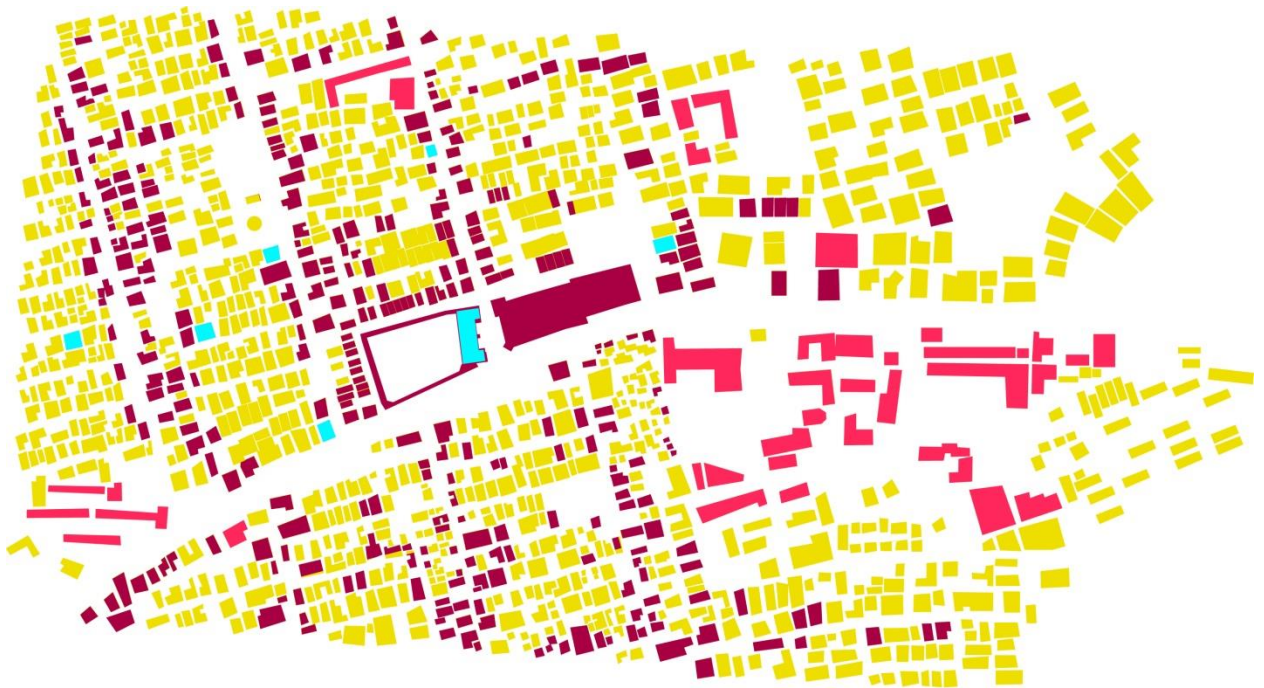
Full site mapping



Solid void



Road mapping



- residential
- mix commercial
- educational institute
- religious structure

LAND USE MAP



LAND USE MAP





GREEN MAP

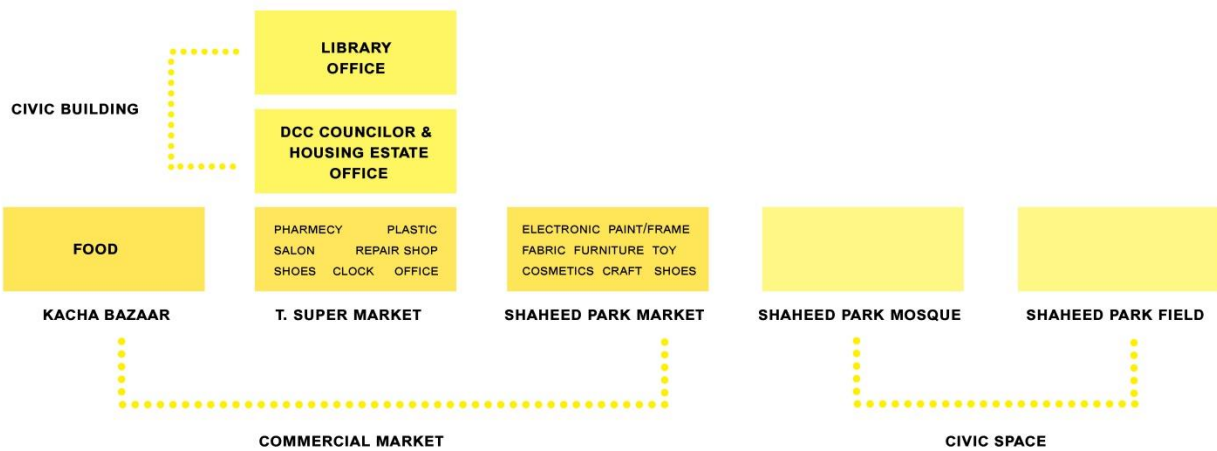


Height and Landuse map

3.4 existing function analysis



EXISTING FUNCTION

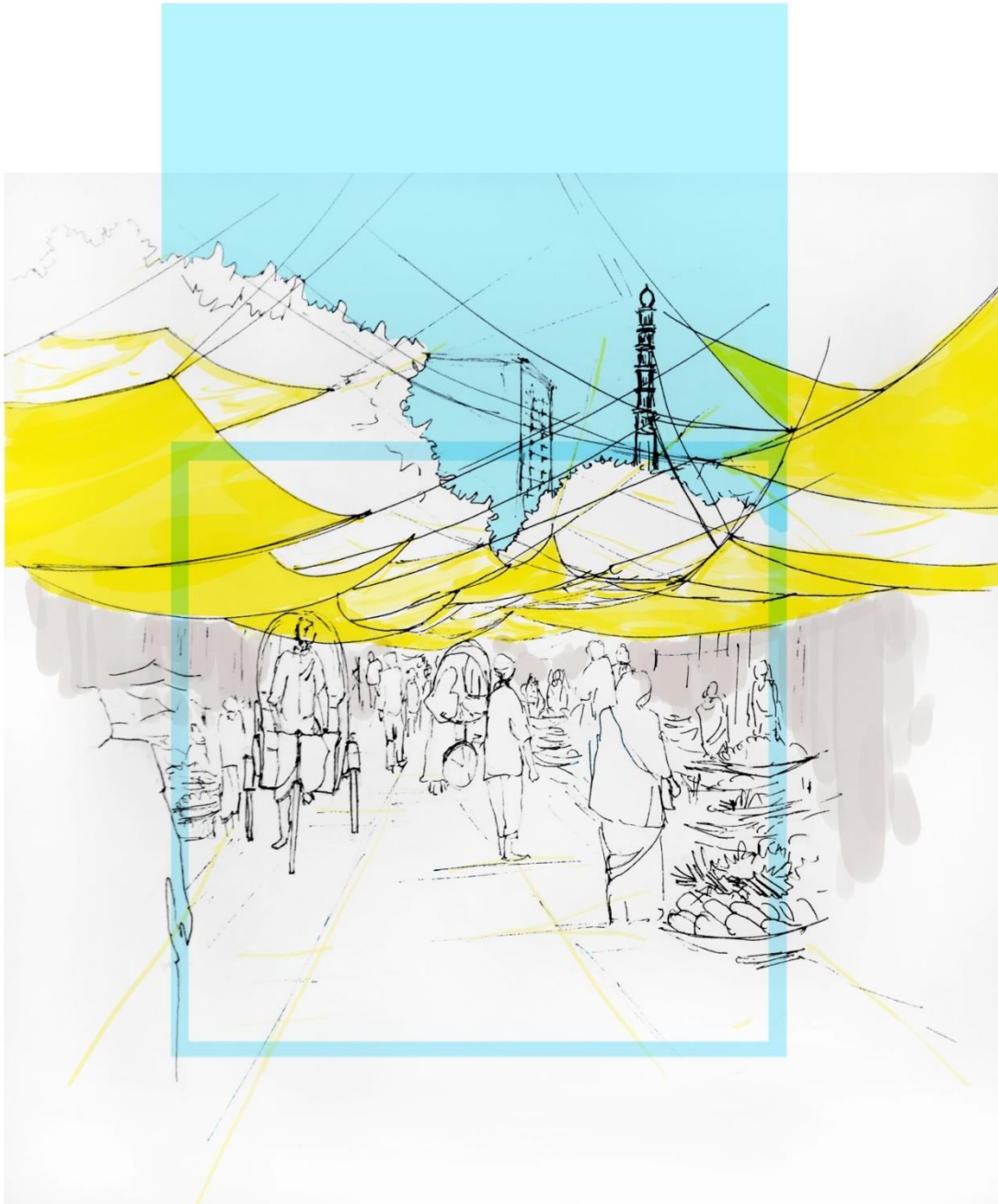


Townhall consists a multiple function and subfunctions under that. Initially this place was meant to be a supermarket only but with time functions added sometime with demand and sometimes for revenue regardless of consequence.

The markets, mosque, DCC civic offices and the open space all make townhall a diverse and vibrant place for user purpose.

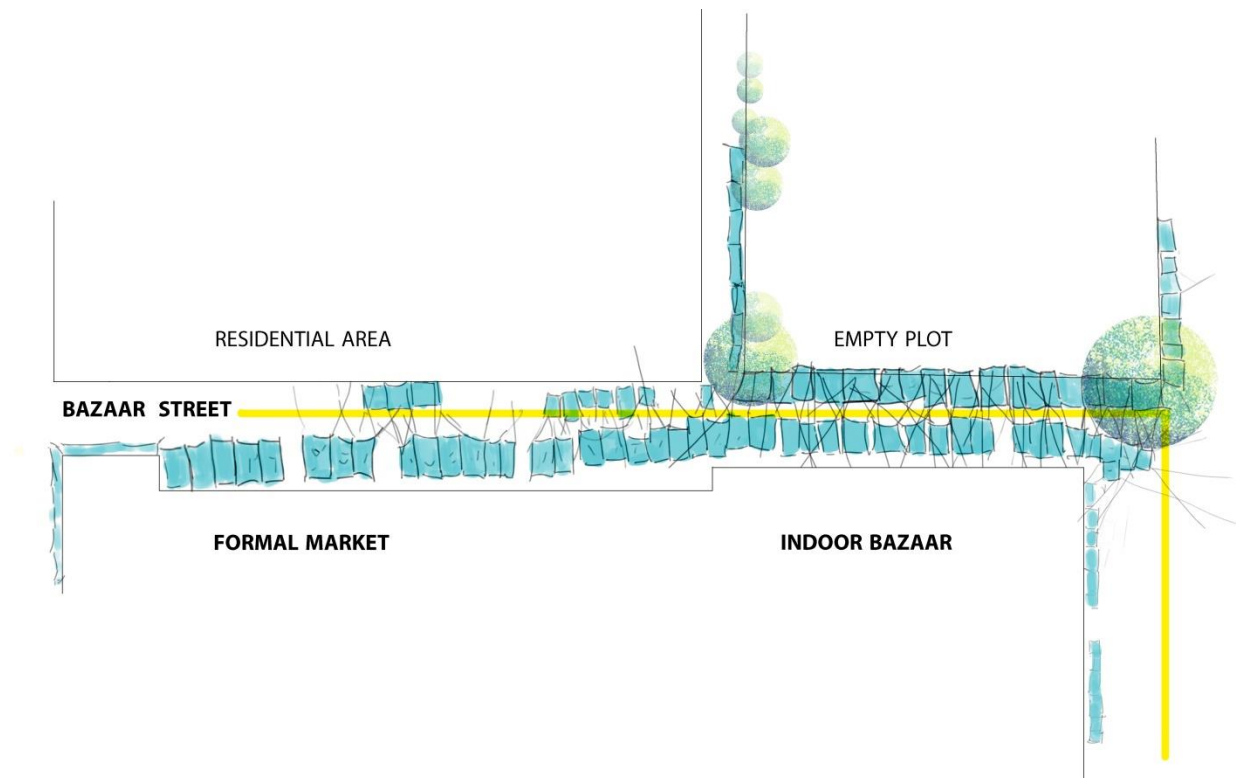
3.4.1 Markets (formal & informal):

3.4.1.1 The Informal market (BAZAAR):



The informal part of traditional market is known as bazaar. It is an open air market with few parts inside the building. The main bazaar street is 500 feet long and the width varies from 25 feet to 10 feet in places. It stretches east to west

while facing residential neighborhood on north and townhall supermarket on south side. Besides using as bazaar circulation, This street s used for walking and passing by the neighborhoods. The adjacent residences have shops or stores on the ground floor which becomes a part and façade of the bazaar. Similarly the market on south has grocery shops and poultry shops facing the bazaar.



Source: author

Physical characteristics:

The stalls are made of a polythene as roof tied to each other and surrounding buildings. The ropes keep from large vehicle to pas through bazaar street. Often bamboo poles supports the roof. Strings of ropes allow light bulbs to hang. Each stall have more than one light bulbs as they do not require to pay the bills. The sellers site under the polythenes on a tool or wooden made bed like structures.

They surround themselves with circular strawmade and plastic baskets, full of fruits and vegetable.



Source: author

As there are no designated place for dumping waste the vendors just keep dumping the waste in front of their stall making walking very hard for the passerby or customers. The waste is cleaned by Dhaka city corporations

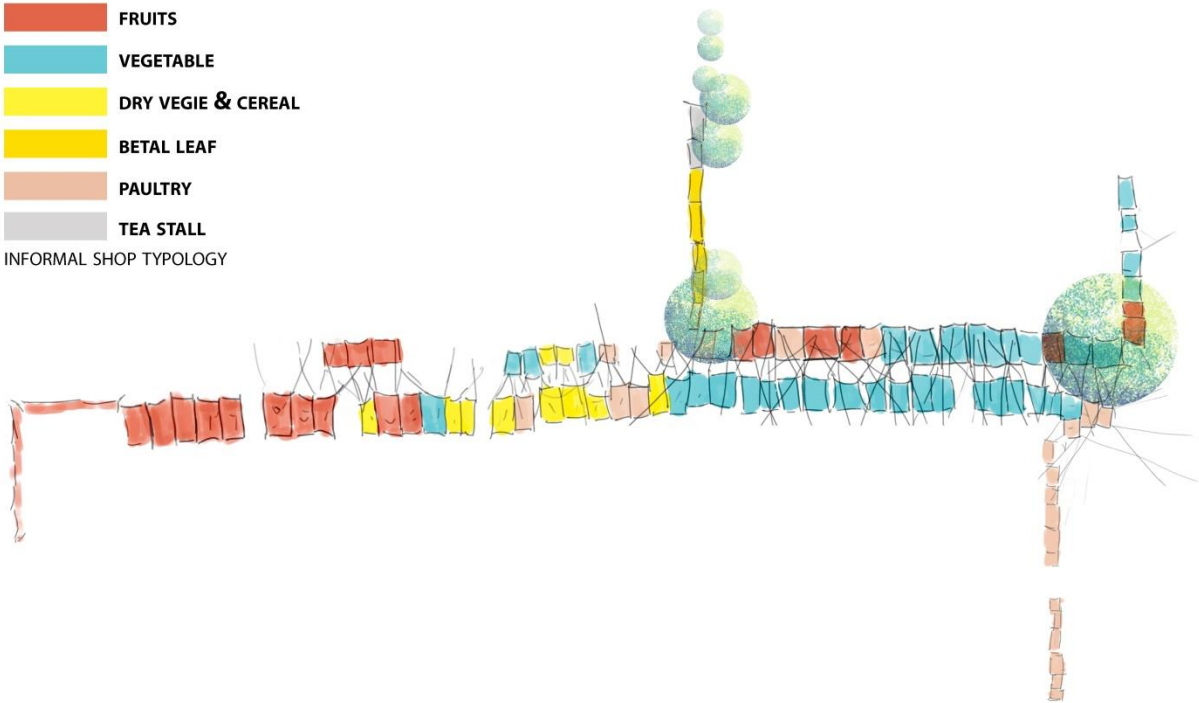
authorities every morning after 7 am which again creates inconvenience and obstacles for pedestrians.

On rainy season the plastic canopies can hardly keep the products dry and they can not channel the rain water properly due to which the bazaar becomes heavily wet, dirty and muddy.

The light bulbs keeps the bazaar always lit and vibrant at night and provides a sense of safety to the neighborhood.

Typology:

- FRUITS
 - VEGETABLE
 - DRY VEGIE & CEREAL
 - BETAL LEAF
 - PAULTRY
 - TEA STALL
- INFORMAL SHOP TYPOLOGY



Bazaar stall typology

Source: author

There are basically 6 types of vendors in the open part of the bazaar. Starting from east side the fruit sellers sits right next to the old building. The ssellers who sits next to the building sells Mostly apples, oranges, pemogranede, mango, dates. The need t stack their product and need height. These stalls are dry.

Besde these stals other types of fruit sellers take the place. Dry veggies such as onion, potator, wheat sellers occupy with large sacks of produce.

The structural features differs lightly depending on the type of food they sell.



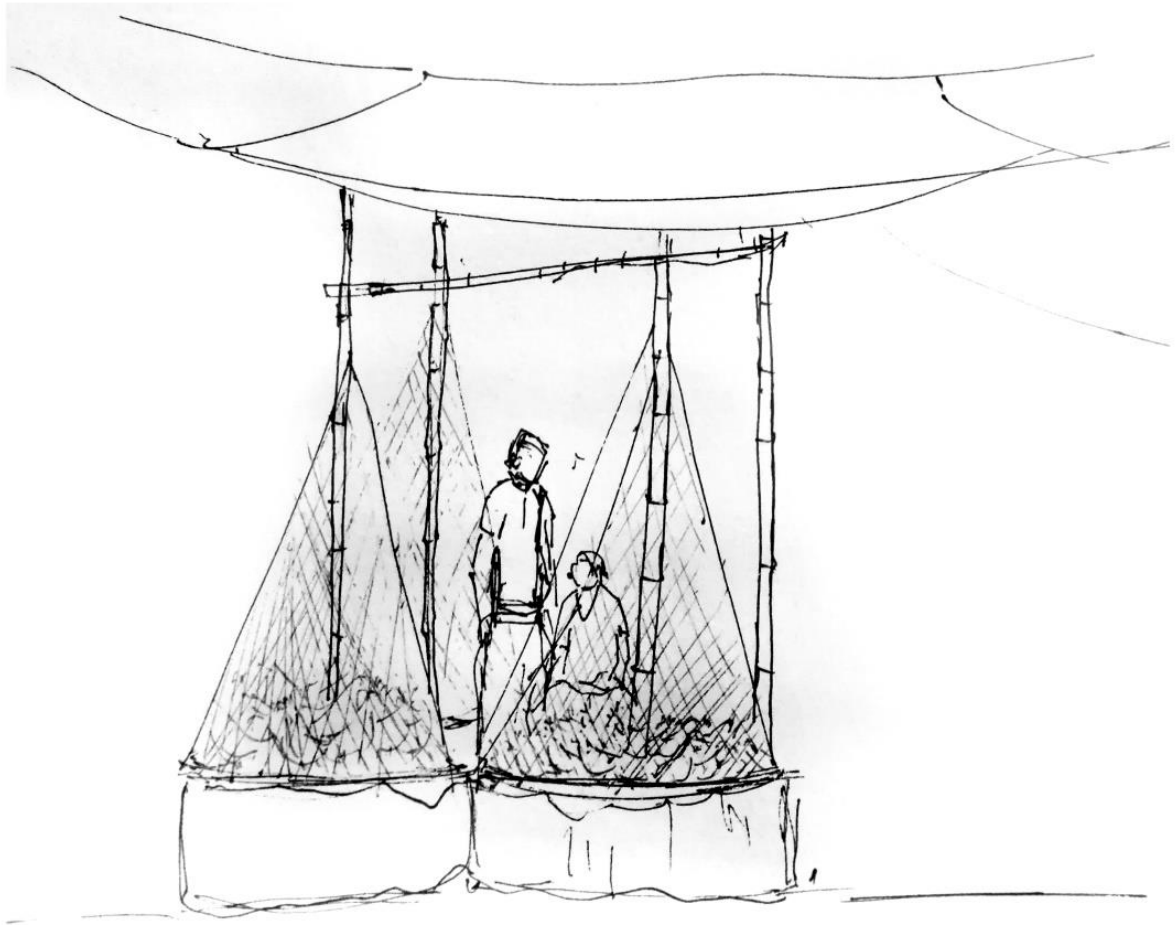
Vegetable seller.

Source: author

A vegetables seller has to collect his product from karwaan bazaar in early morning and arrange his stall for the day. He uses mainly tukri or straw round baskets to keep the veggies and keep the basket on top of bricks to gain height from the ground. If he can afford he buys a wood bench like structure called chouki.

He does not need to hang any thing beside the light bulbs. It is noticeable that the vendors keep lights turned on even during the day.

The chicken poultry seller however, needs different structure to keep his chicks. He will need bamboo two vertical posts supporting horizontal post. The horizontal posts will hold the net like fences on the baskets carrying the chickens. Chickens need good amount of natural light and air to be healthy and so the nets are kept to allow light but keep the chickens inside.



Poultry chicken seller.

Source: author



Betal leaf seller.

Source: author

The betal leaf seller need very high stool to sit and keep his leaves as they might get be attacked by other insects. The seller needs to spray water on top th leaves to keeps them fresh and have gallons of water infront of the stall. As a result the place becomes wet and dirty again.

He also needs many shelves to keep his dirrent spices and flavor powders to keep.

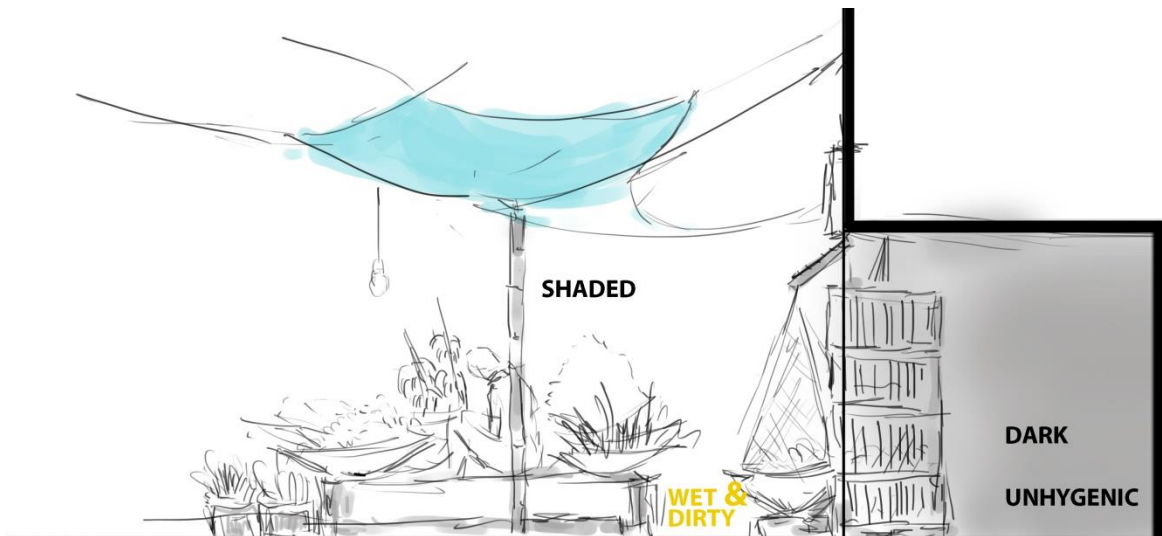


Tea Stall: at the edge of the bazaar tea stalls line up with people hanging out

Environment:



EDGE:



OUTDOOR VEGETABLE STALL

POULTRY STORES

Source:author

Semi outdoor corridors are occupied by shops. There are no colonade shaded area near the bazaar. The semi outdoor space is the stall between street indoor market.

3.4.1.1 Formal market:

There are two seperate markets in townhall

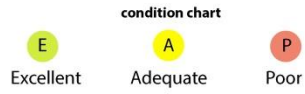
1.townhall super market (ground floor and first floor}

2.Shaheed park masjid market

Typology:

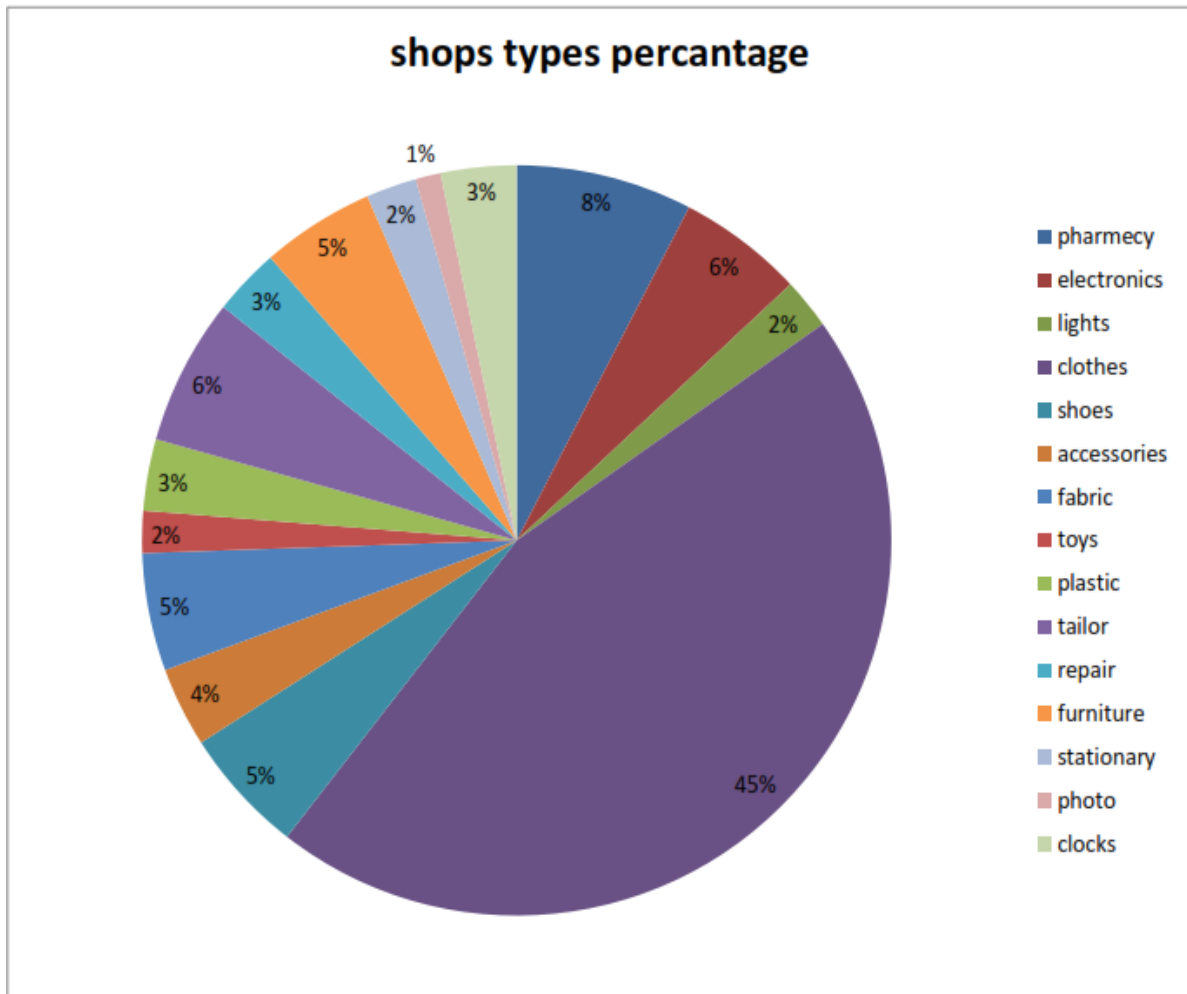
Formal shops(shaded or permanently built)

1. Clothes
2. Wood furniture
3. Paintshop/repair shops
4. Stationary
5. Pharmecy
6. Stationary
7. Plastic accessories
8. Cosmetics
9. Shoe,bags,glasses
10. Electronics
11. Clock and watch
12. Newspaper
13. Toys
14. Tailor
15. Salon
16. Confectionary
17. Hotel and juice bar
18. Music and gameroom
19. Godown

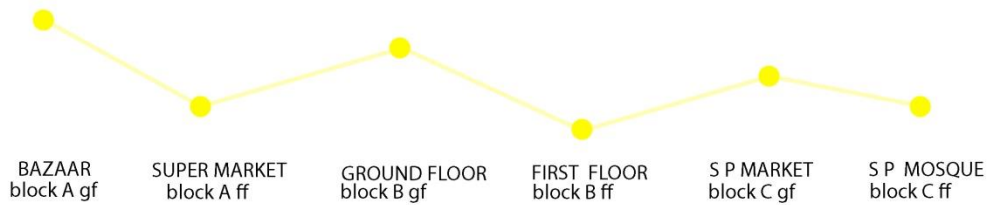


merits / demerits

program/place	access to product	circulation	visual connectivity	safety & security	service	ventilation	light	breathing space	sensory experience	attractiveness /inviting	social interaction
BAZAAR block A gf	A	P	E	A	P	A	E	A	P	E	E
SUPER MARKET block A ff	P	A	P	A	P	A	P	P	A	P	A
SPONTANEOUS MARKET block B gf	A	P	P	P	P	P	P	P	P	P	A
OFFICE block B ff	A	A	P	A	P	P	P	P	P	P	P
S.P MARKET block C gf	A	A	P	A	A	P	P	P	A	P	A
S.P MOSQUE block C ff	A	A	A	E	A	A	A	A	A	A	E



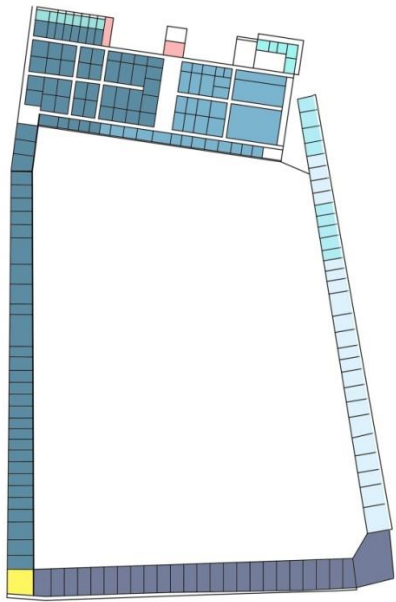
PLACE	VISITS					PROXIMITY	PURPOSE
	everyday	2-4 times a week	once a week	once a month	once 3 months		
BAZAAR block A gf	✓					100 metre radius	SHOP
		✓				100-300m radius	
			✓			300 metre radius	
				✓		0.5 km radius	
SUPER MARKET block A ff				✓		300 metre radius	SHOP/MEDICAL
					✓	0.5 km radius	
GROUND FLOOR block B gf	✓					100 metre radius	ACROSS ACCESS SHOP, EAT, GOSSIP
		✓				100-300m radius	
			✓			300 metre radius	
FIRST FLOOR block B ff					✓	300 metre radius	WORK
S P MARKET block C gf		✓				100 metre radius	SHOP
			✓			100-300m radius	
				✓		100-300m radius	
S P MOSQUE block C ff	✓					100 metre radius	PRAY
			✓			100 metre radius	



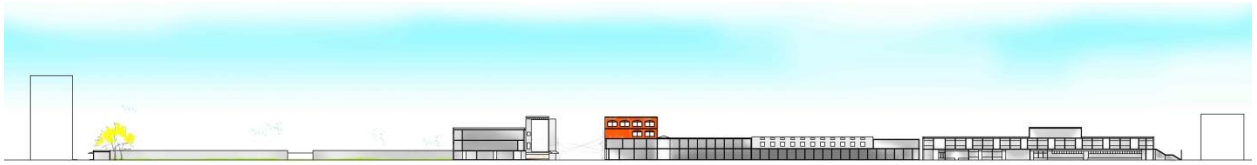
popularity chart of programs



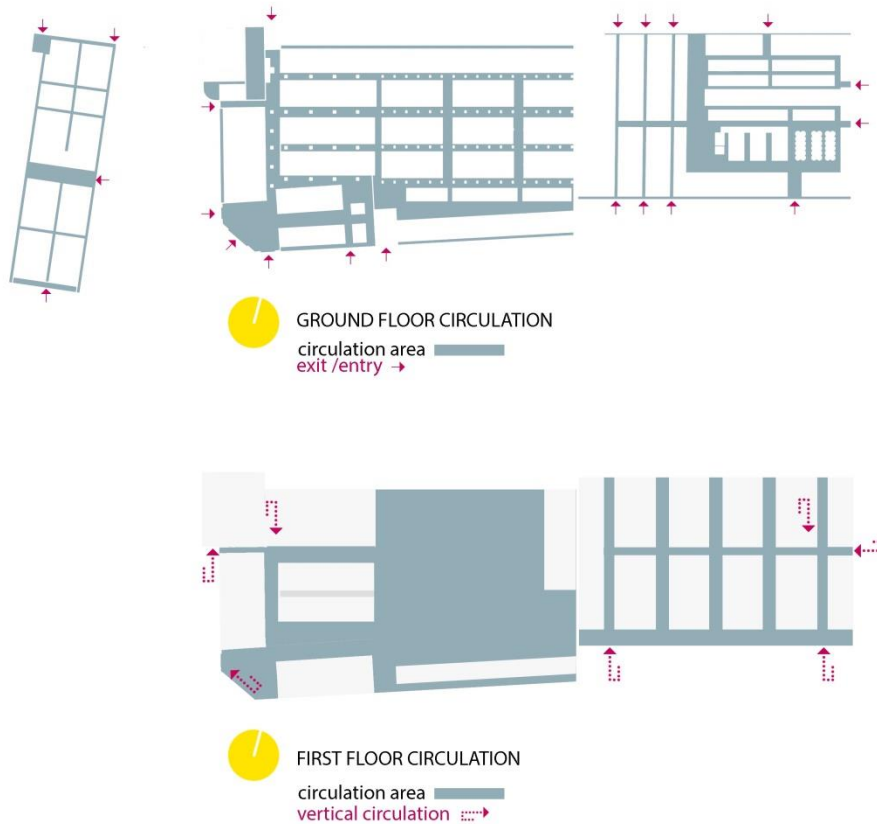
popularity heirarchy of programs



permanent/indoor market layout



East west longitudinal section



The interior spatial environment :

As the structure is failing the interior space of the ground floor is very risky and declared restricted by the government engineers. However, lack of negotiations and substitute placement of shops are not discussed so shop owners do business here despite the risks. The building's slab has lost its plaster and the reinforcement steel is showing to be rusty. No initiative to restore the building have been taken recently since the government wishes to rebuild the market anyway.

The building design was inspired by colonial style architecture with three pediments at entry points and covered façade with minimal or no punches at all. As a result, the inside is always dark and gloomy requiring lighting 24 hours. The ground floor is not popular among outside customers and only known to adjacent neighborhood residents.



Access

Similar to other DCC market the townhall supermarket on 1st floor is accessed by three stairs. However, the access to the stair is blocked by illegal vendors, cars, shops etc. shops grow wherever they can even below the staircase.



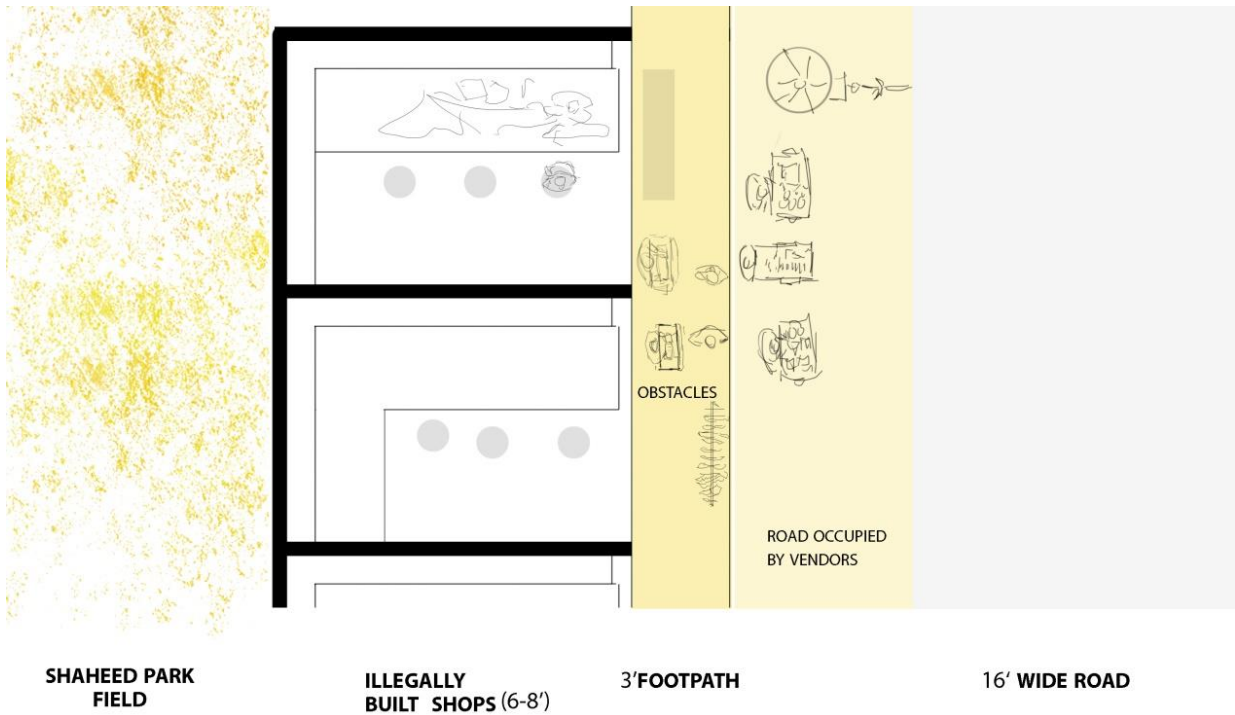
The entry to ground floor is dirty, dark and crowded with clock shops which is uninviting and unattractive.

Visibility:

As seen in the picture the supermarket is completely blocked with wall and the shops and inside can not be seen. Despite having a large number of shops upstairs nobody takes the attempt



Edge:

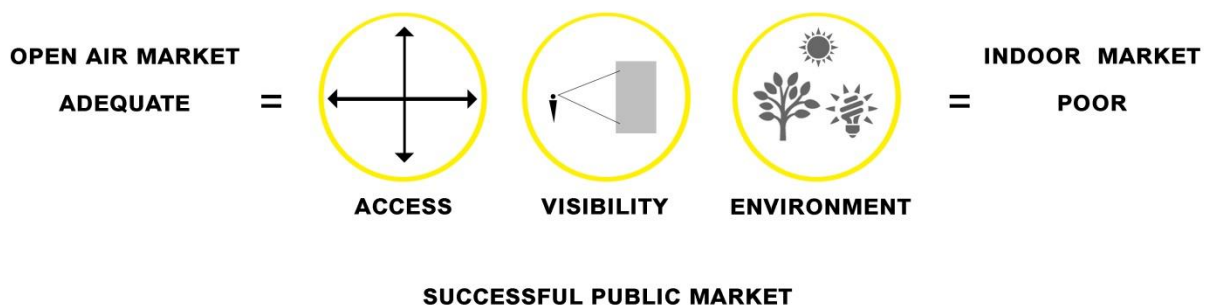


Field edge surrounded with shops

Source: author

The edge of field and market is an example of how unplanned built structure can make an open space non-existent for the public. The pedestrian footpath is completely blocked by vendors, street tailor, fabric display etc. the cloth shops have occupied the footpath making it difficult to walk.

Informal vs formal market



The bazaar or open air market grows from need and demand with nothing extra. Due to their open nature and street quality bazaar has visibility, access and open

environment. Whereas, indoor market are dark and smelly, with cramped access routes and absolutely not visible from outside which does not draw in customers. Which is why, despite maintenance problems informal market much more successful than indoor markets.

3.4.2 GOVERNEMNT OFFICES

1. DNCC WARD COUNCILOR
2. FEMALE COUNCILOR OFFCE
3. DR. M A WAJED MIA MEMORY LIBRARY
4. AWAMI LEAGUE OFFICE
5. HOUSING ESTATE OFFICE
6. LIBERATION WAR UNION COUNCIL
7. TOWNHALL SHOP PWNERS COMMITTEE/BONIK SHOMITTEE



The site initially did not have DCC ward councilor office. In 2011 the 31 no ward councilor office was established in here on the 1st floor above the townhall market. The office is mechanically ventilated with 15 owrkers including The councilor and secretary's office. The housing estate office ahs been added recently on the same floor.

On the 2nd floor the awami league political party's office is situated which generate unsafe and insecure environment on the terrace. The awami league offices were established scatteredly with multiple rooms built on different times on top of the other. People do not go upstairs due to the illicit activities such as drug addiction

On third floor a library and female councilor office is also being established. The construction manager said that the work progresses very slowly as the govt keep delaying and changing plans and material details.

On the terrace street children play in the afternoon however local residents do not use or let their children use the terrace although it is legally accessible to everyone.

Different types of offices also function on the 1st floor. The offices are mainly lawyers, registry, holding companies, photo studio, dentist chambers.



The terrace is unused by the public which has great potential to be a plaza and outdoor market extension. The terrace is covered at all side with wall as it was built political party and they did not want people to see their activities.

3.4.3 Shaheed park jame Mosque:



Shaheed park mosque

Source: author

Shaheed park central jame mosque works as a landmark for townhall, people know this mosque not by its name but by the staircase. The staircase one unique character of this mosque is very successful at drawing public in to the mosque and market. The stair not only work as circulation ofr the mosque but also as a public space as in evening pious muslim gather here, sit on stairs, have food from the food kiosks. During Friday people gather in large number for jummah

prayer and makes the place vibrant. Vendors with various religious products come to sell from morning to evening.



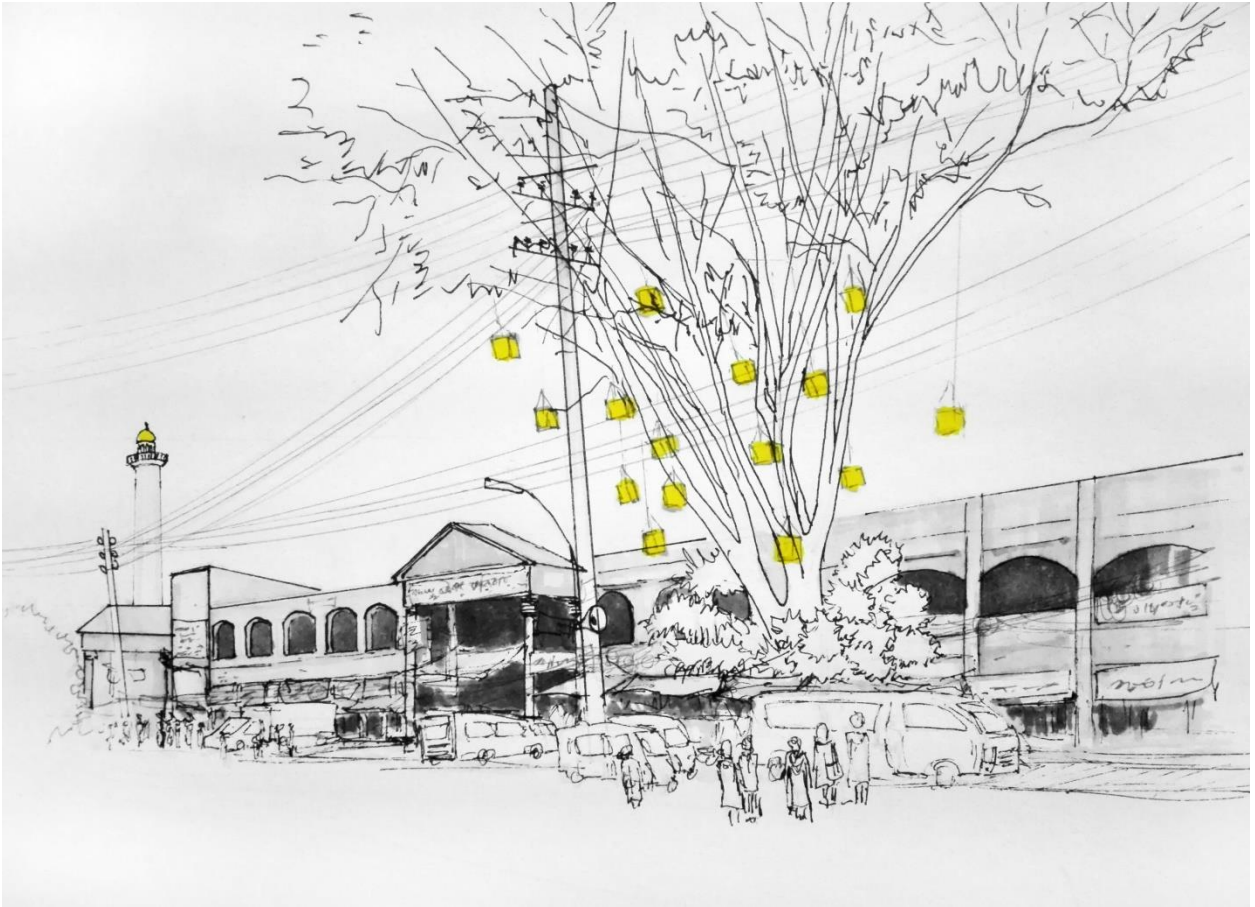
The mosque is on the first floor and market is below the mosque. It is because the market was built in 1988 before the mosque which is built in 2000. Recently floor are being erected on top the mosques. From 2013 to 2017 2 floor have been added to the mosque working as offices instead of more space for prayer.

3.4.4 Shaheed park field:

This 7400square feet field is surrounded with shops without DCC's consent. The shops keep the field invisile to the people and renders its use less by locals. The field is occasionally used for islamic mahafeel or lecture by scholars. During aftrtenoon mostly the madrasa students play in this field



3.4.5 open and unbuilt space



The open space in front of the market is used in many ways. The unbuilt space at the west and south side is used for meeting and lecture such as political conference(shobha), islamic waaj mahafil and cultural functions, which tells us that a large gathering space is absolutely necessary for townhall. This space could be a open spaces, plaza, hall for townhall. It could be a potential town square as the place already has the elements for town center for the neighborhood.



Source: author



Source: author

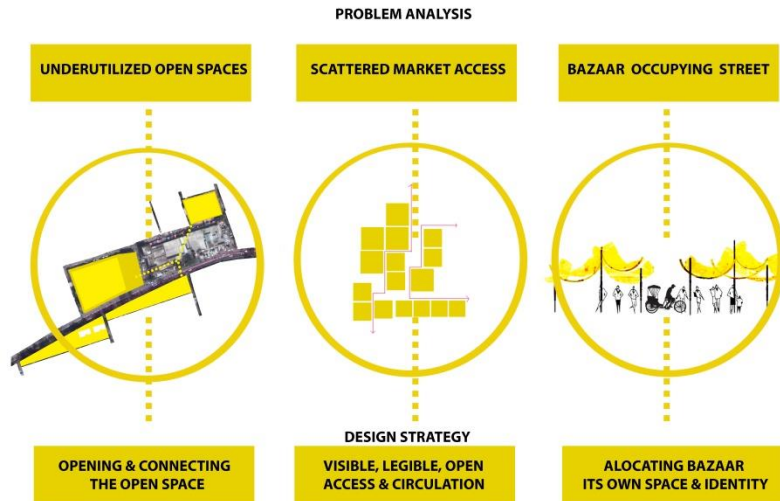
The very little open spaces are occupied by vendors and fruit seller. People also park their bikes and auto rickshaws in here. A large amount of open space is used by rental cars and taxis.

The very little sitting space under the tree is used by people a lot reflecting how much public space is needed here.

Chapter4

4 Problem analysis and design strategies:

4.1 Problem analysis and summary:



Studying the existing situation three major problems have been identified and possible solutions have been considered.

d. Underutilized open spaces:

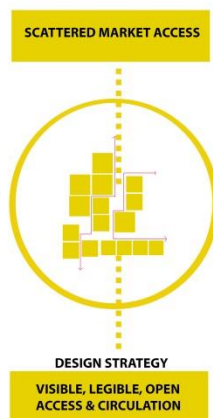


The site has three open spaces which are all fenced and not visible from the street. For various reasons these sites are not being used to their full potential and the presence of open spaces can not be felt.

Design considerations included opening up these sites and allowing public access. By providing functions to these places the sites have been activated and utilized.

e. Scattered market access

As seen in the previous site surveys the markets and shops are very dark and ill ventilated. The access to the market is dark, dirty and unattractive. As a matter of fact, it can not attract quality customers specially female customers.



EASY ACCESS AND ORGANIZED MARKETS



DARK DIRTY DISORIENTED UNORGANIZED

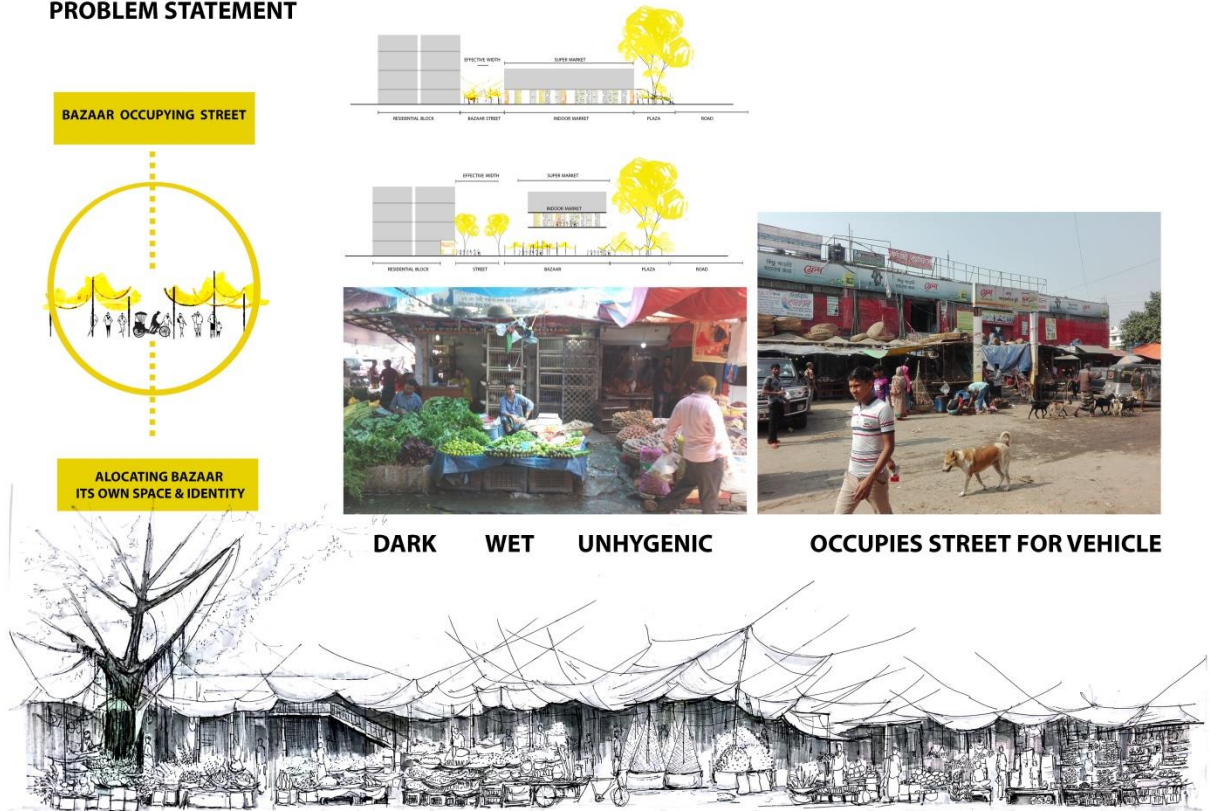


a. Scattered market access

Allowing the informal bazaar vendors inside the site was top priority as traditionally they are neglected and left to tend for themselves beside the street. They have to make their own adjustments to protect themselves from sun and rain. This is why, by bringing them inside the street is

uninterrupted and free for public use at the same time the bazaar goes will easily shop under shade and specified space.

PROBLEM STATEMENT



4.2 interpretation and concept

With the existing programs and activities the site is already a neighborhood center all it needs is public spaces to breathe and hold events.

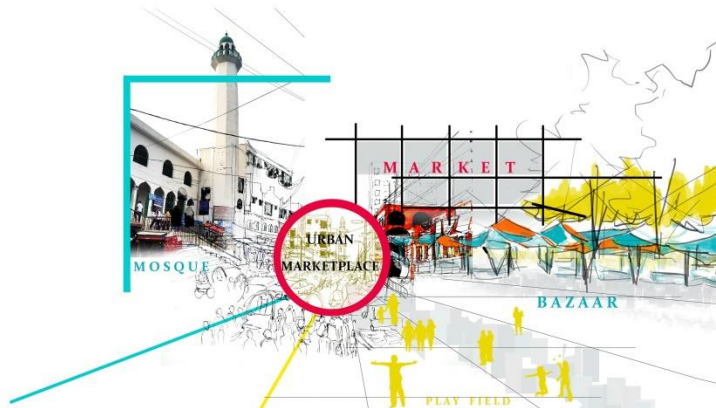
Combining the three open space and linking with the site, this place can hold recreational events, political events, religious lectures and government services anytime thus becoming the neighborhood square the area truly needs.



ALREADY EXISTANT PUBLIC ACTIVITES

EXISTING EVENTS

- | | |
|--------------------|-------------|
| RELIGIOUS LECTURES | FESTIVAL |
| POLITICAL SEMINAR | FLEA MARKET |
| CONCERT | FOOD CARTS |



A VIBRANT NEIGHBORHOOD SQAURE



ENHANCING NEIGHBORHOOD CONNECTIVITY

EXCHANGE INTERACTION SHARING

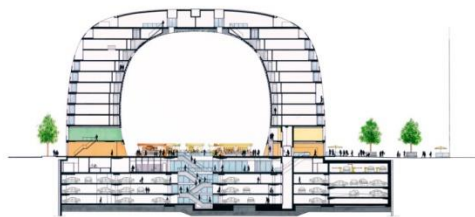


Chapter 5

5 case studies

5.1 Rotterdam Market Hall

- ❖ Architects: MVRDV
- ❖ Location: Rotterdam, The Netherlands
- ❖ Project Year: 2014



© Daria Scagliola+Stijn Brakkee, source: archdaily.com



Rotterdam has a new icon: Markt hall Rotterdam. At a historical location at the Binnenrotte, next to Blaak Station and the largest weekly open air fresh food and hardware market in Rotterdam, the first covered market of the Netherlands was realized. Markthall includes a huge market floor on the ground floor under an

arch of apartments. Its shape, its colourful interior and the height turns Markt hall into an unique spectacle. Unique is not only its shape and size, but especially the way the different functions are combined. The combination of an apartment building covering a fresh food market with food shops, restaurants, a supermarket.

Markt hall was a success already before being realized: it is a new and fresh icon which already has attracted large quantities of international press and visitors. The centrally located building is rooted in the city's history, located parallel to the late medieval 'Laurenskerk' (Laurens church) and at the location of the former dike along the river Rotte. This river was diverted at the end of the 19th century in favour of a train line viaduct leading to the south bank of the river Maas. In the 1990's this trajectory was rebuilt as an underground tunnel and the current oblong square emerged which offers room for the open air fresh food market twice a week. The 1950's buildings on either side of the old highline suddenly faced the new square with their backsides and have been replaced ever since.



5.2 Santa catarina market:

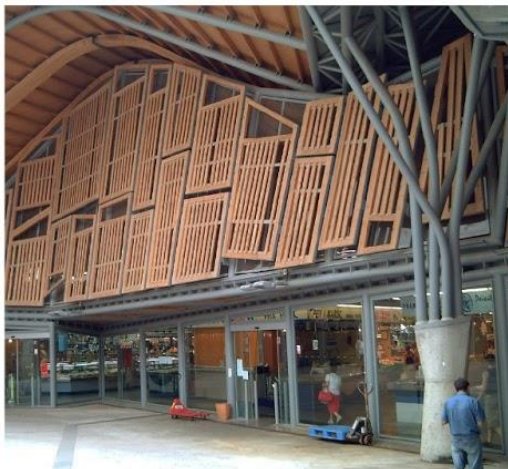
- ❖ Architects: MVRDV
- ❖ Location: Barcelona, Spain
- ❖ Project Year: 2014



The shape of the colorful roof, made with Spanish hexagonal tiles designed by Tomi Comella, is said to represent the waves of the Mediterranean Sea.



Its color symbolizes the fruits and vegetables sold at the market, as well as a field of flowers. This “field of flowers” creates a view for the markets surrounding neighborhood, bringing light and brightness to its otherwise dim and narrow streets.

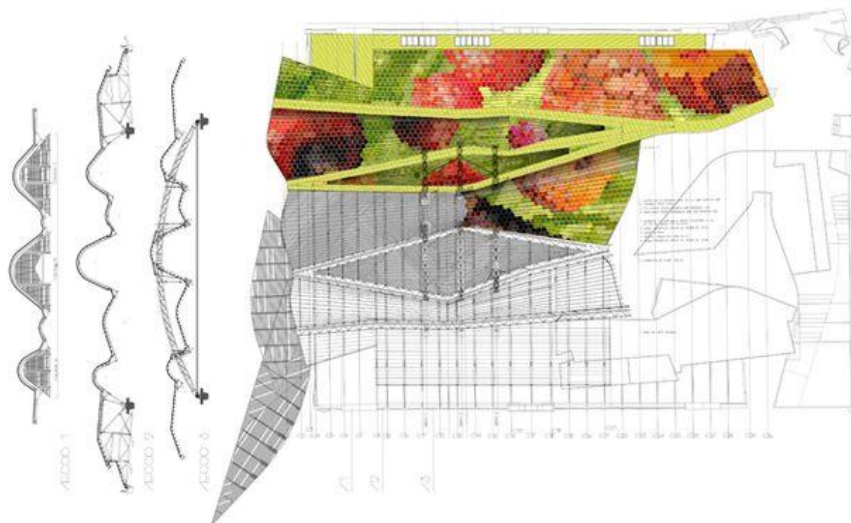
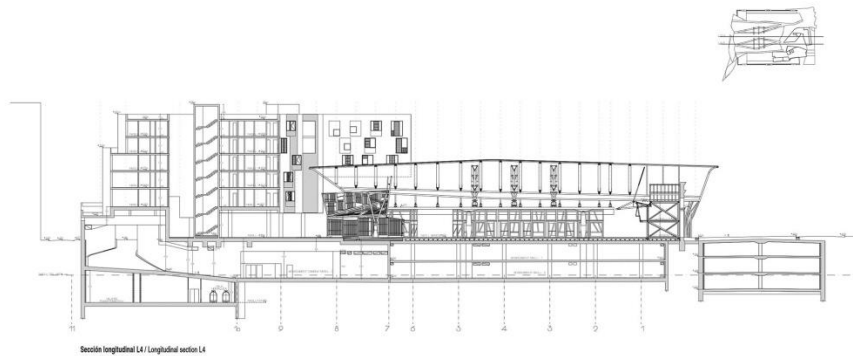
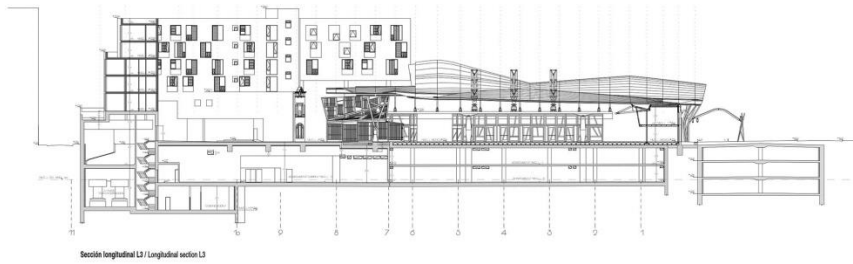


Miralles drew inspiration from his surroundings & nature; the back exterior facade of the market is an allusion to the crates that the vendors used to transport their fruits and vegetables. The seemingly haphazard



placement of the wood panels mimic stacked crates.

Therefore new buildings cover the existing ones. They mix up; they blend in order to make the best qualities of that place appear. So it is logic to use terms like conglomeration, hybrid, etc... Terms that tries to go beyond the black and white dichotomy.



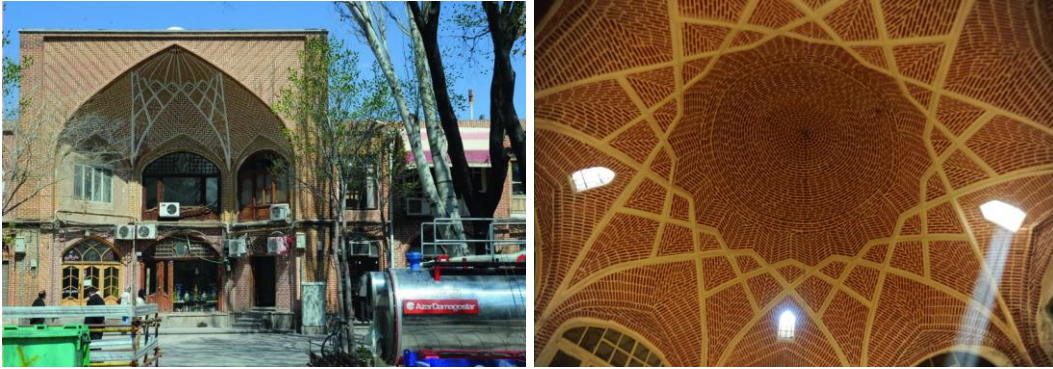
5.3 Tabriz bazar

Architects: Iran Cultural Heritage, Handicrafts and Tourism

Organisation of East Azerbaijan , Hassan Ghorayshi, architect

❖ **Location:** Tabriz, Iran

❖ **Project Year:** 1990-1996



The bazaar is 230 years old, and was demolished in earthquake in 1780. Iran's Cultural Heritage, Handicrafts and Tourism Organisation (ICHTO) and the traders decided to restore it in the mid-1990s. The master plan was developed through a bottom up process.

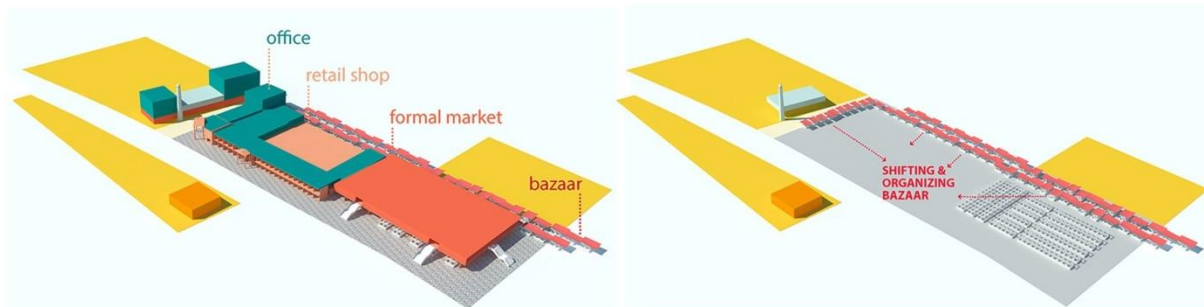
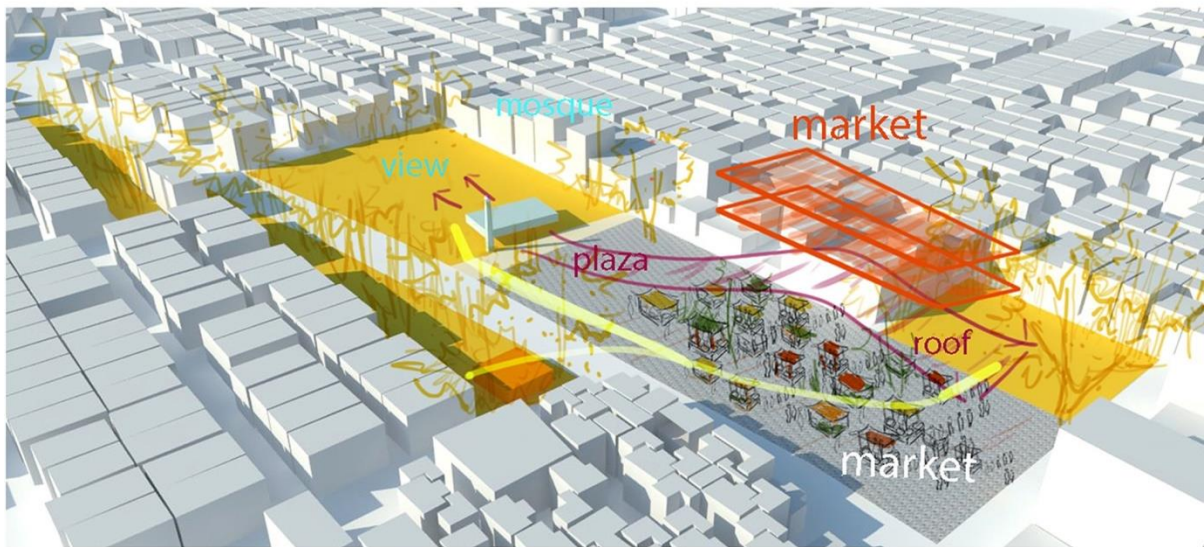
Brick is used for the walls, arches, columns well as flooring. It is the symbol of Tabriz bazaar. It offers excellent thermal protection during winter and summer.



CHAPTER 6

6 FORM DEVELOPMENT:

initial idea was to layer the different types of shopping vertically. Keeping the most informal markets on the ground and gradually putting semi formal shops in the upper floors the ground is left to the public and completely informal connecting the field and mosque on the other side of the road.



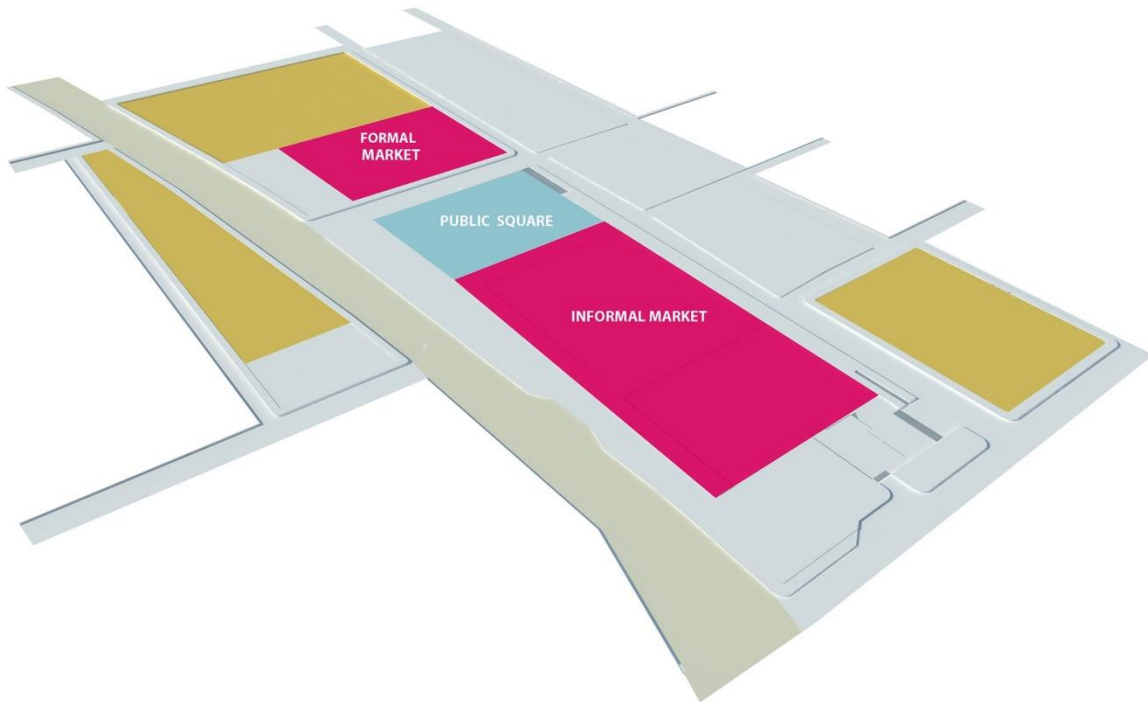
6.1 existing programmatic morphology:

Existing programs include offices with the markets which is not ideal nor convenient for the users.

The functions grew on top of the other spontaneously without any planning.

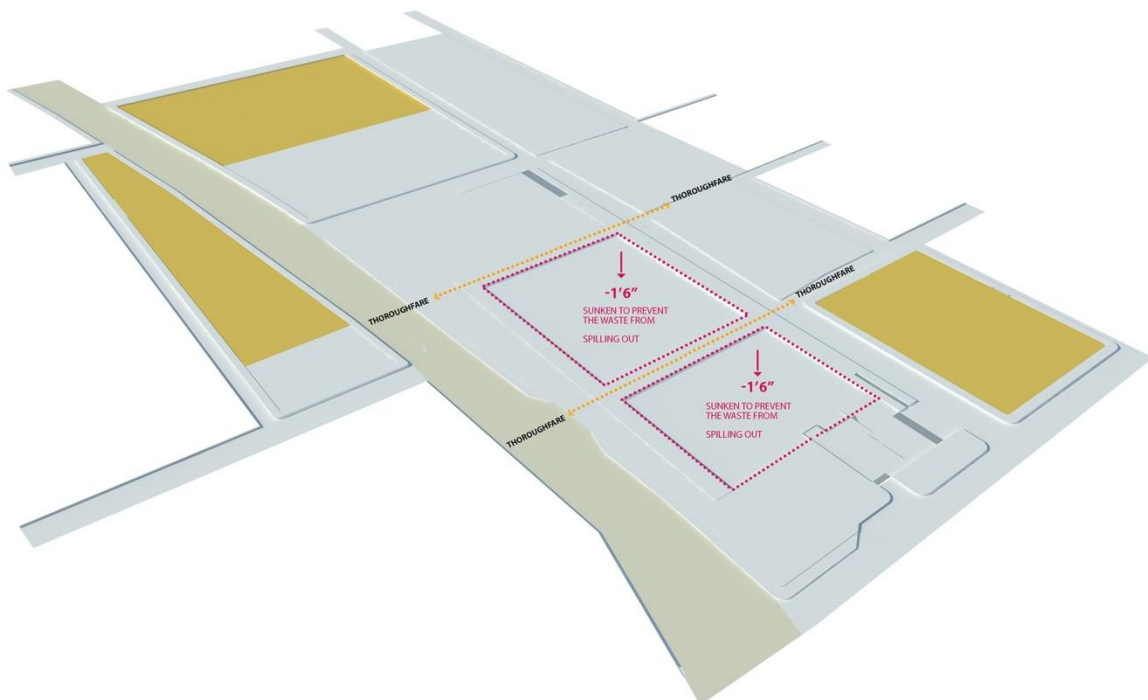
As the existing market has no place for the bazaar, the bazaar stands on the street blocking human and vehicular traffic. The project's aim was to give the bazaar a place of its own, and permanent shaded area where vendors could sit and people could shop without blocking the street.

6.2 zoning the ground floor:

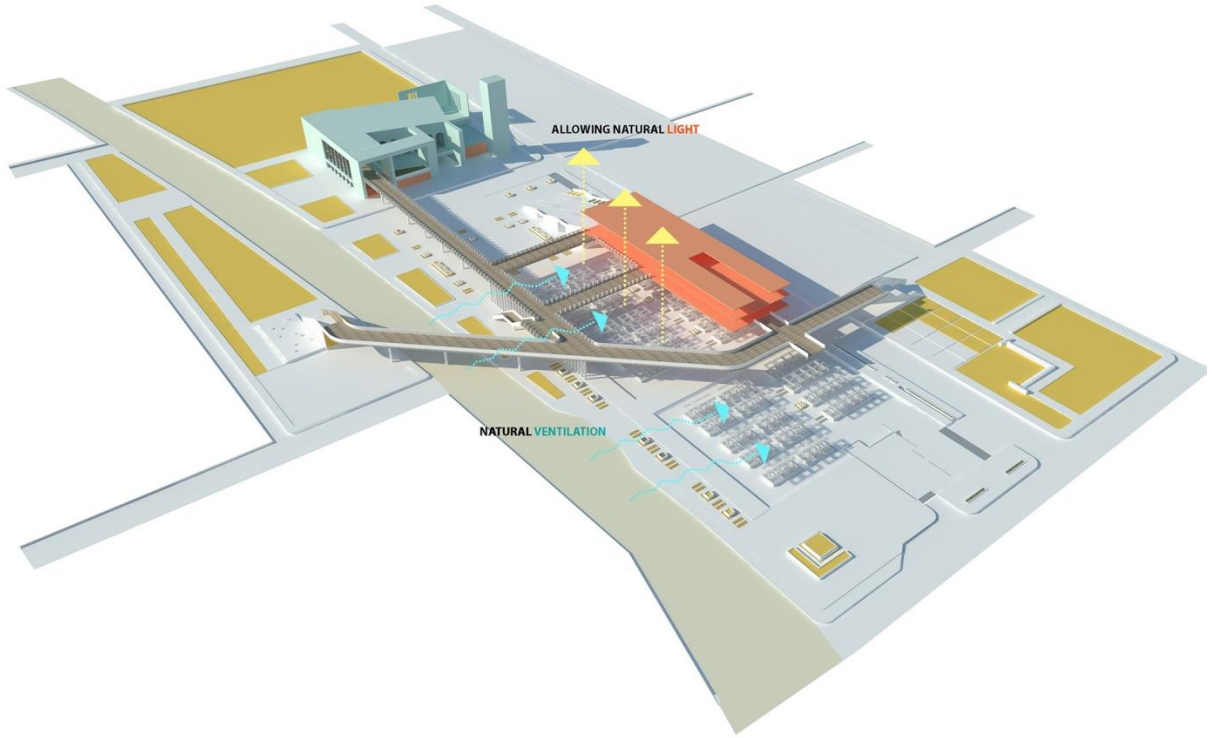


6.3 sunken plaza for the bazaar:

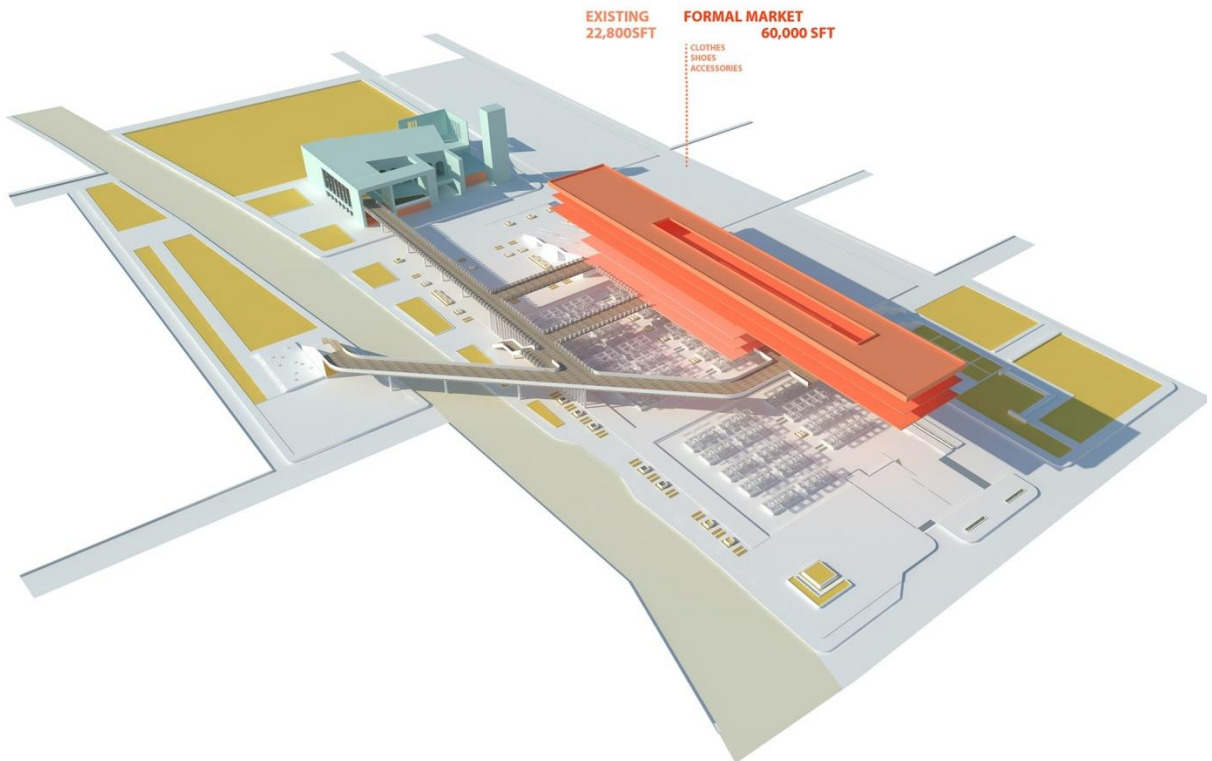
the bazaar area has been suppressed 1'-6" from ground level to keep the waste and dirt spreading outside. it would also allow waste from spilling out on the ground level.



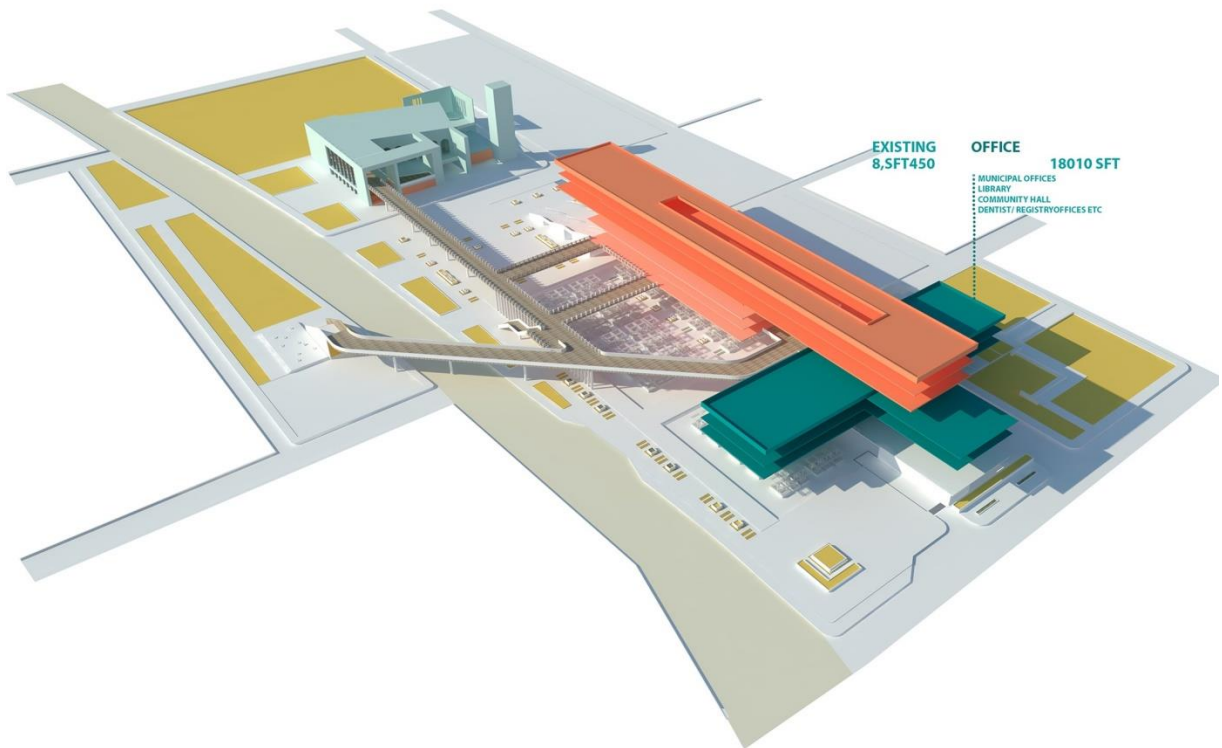
6.7 Adding retail markets



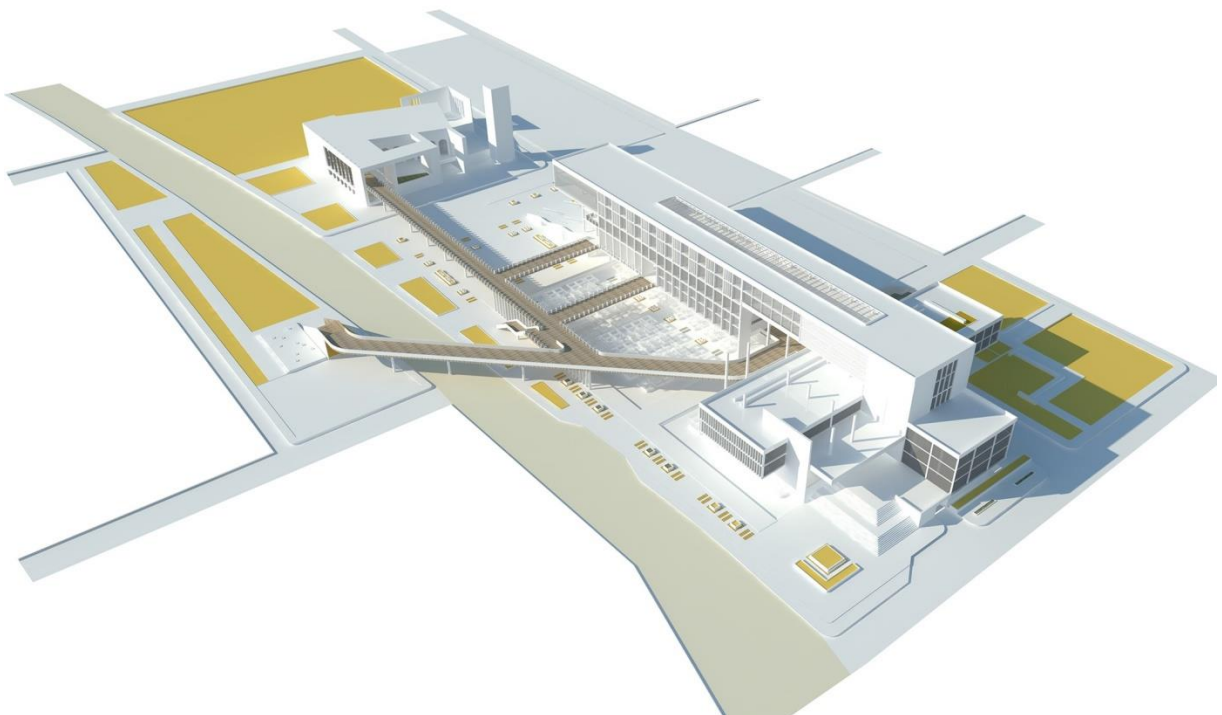
6.8 Adding formal markets



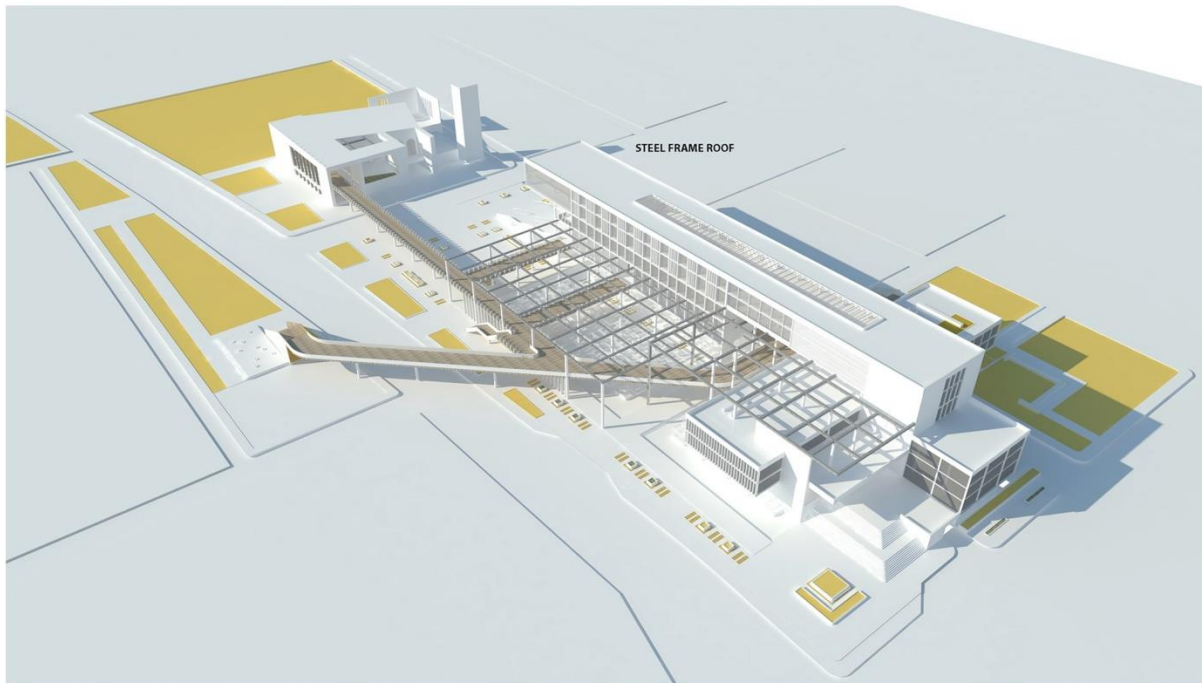
6.9 Adding office, multipurpose, library



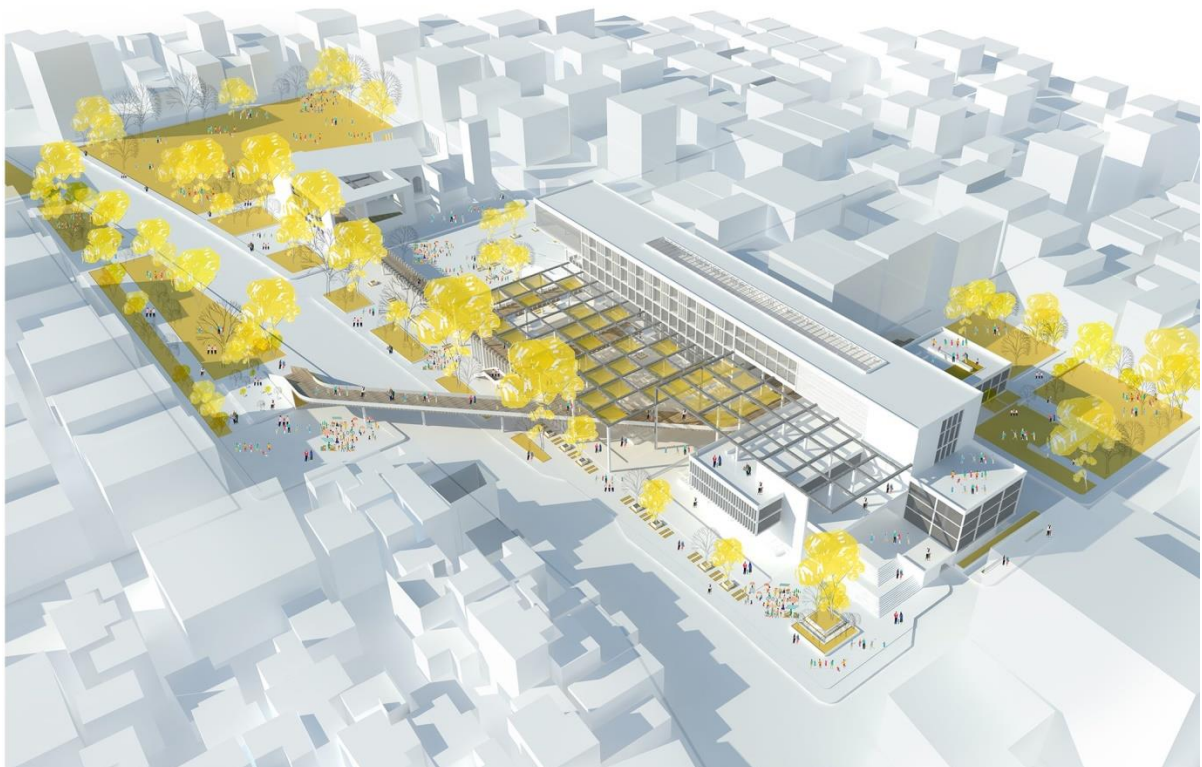
6.10 Facade and fenestration



6.11 Adding steel framework



6.12 Adding canopy



6.13 canopy options:

Patented built-in wind protection extends the life of the canopies longer than any other shade system on the market

- canopies can last over 10 years with proper care!

Adapts to existing structures or use our attractive and durable aluminum or vinyl shade structures

Modular retractable canopies cover small odd-shaped, or LARGE areas - spans up to 24'! (no pitch required)

Choose from over 40 decorator awning fabrics (guaranteed not to fade)

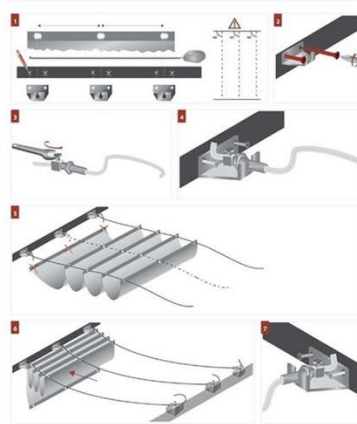


RETRACTABLE TEFLON SHADES

Roman Style Retractable Shades



Slide the roof closed to create a shady retreat, open it to let in the sun or gaze at the stars.



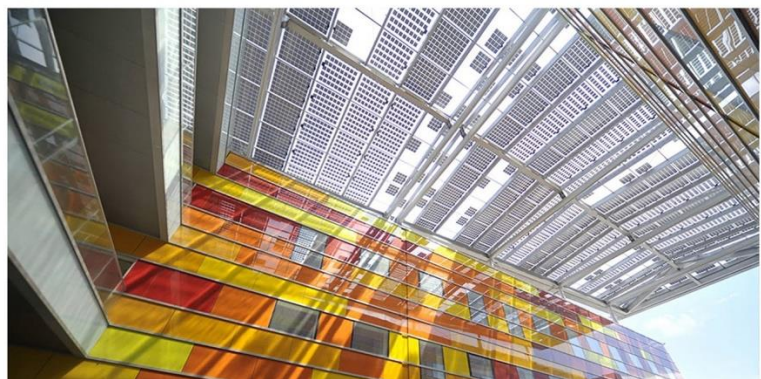
CLOSE TO TRADITIONAL STYLE

Building-integrated photovoltaics (BIPV) are photovoltaic materials that are used to replace conventional building materials in parts of the building envelope such as the roof, skylights, or facades.

BUILDING INTEGRATED SOLAR PV- BIPV



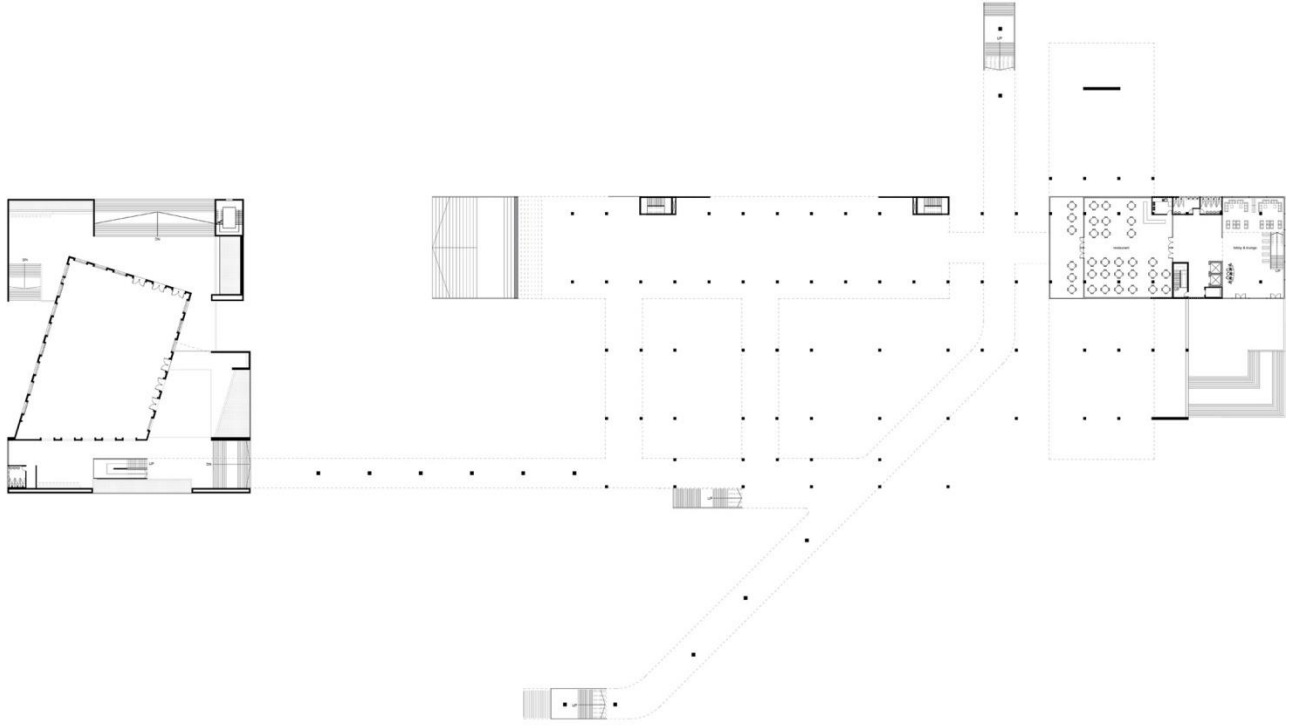
The term building-applied photovoltaics (BAPV) is sometimes used to refer to photovoltaics that are a retrofit – integrated into the building after construction is complete. Most building-integrated installations are actually BAPV. Some manufacturers and builders differentiate new construction BIPV from BAPV



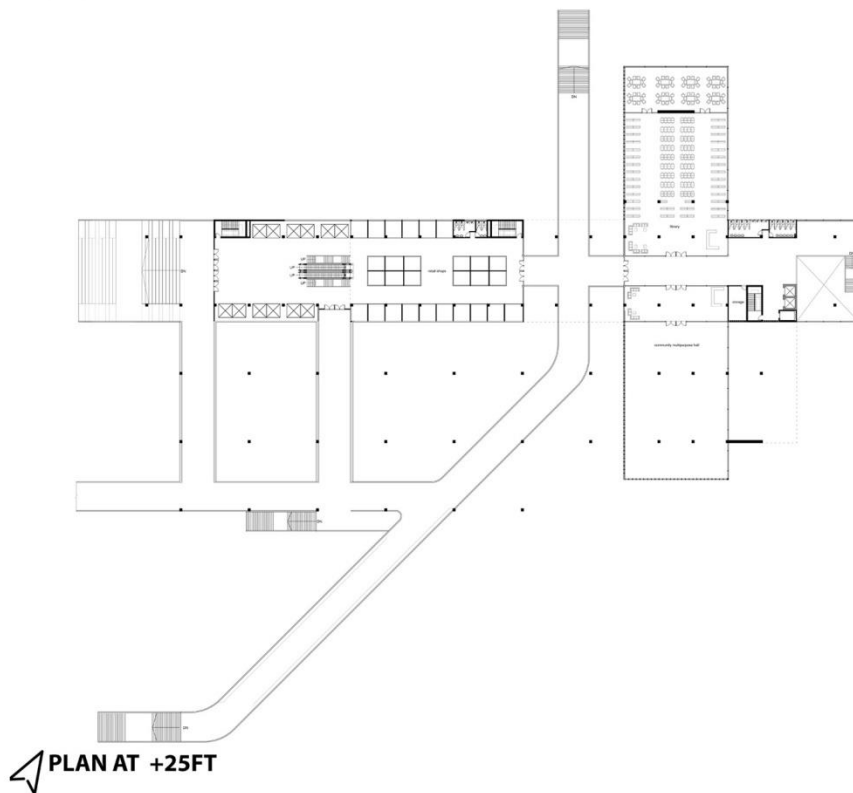
Chapter 7
7 Design drawings
7.1 Plans



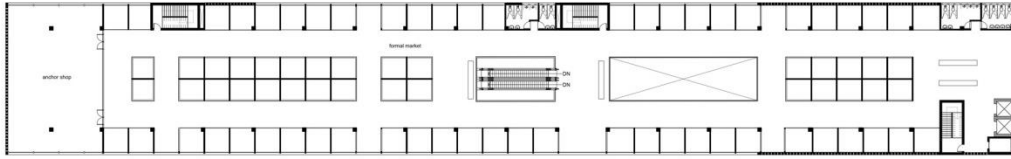
GROUND FLOOR MASTER PLAN



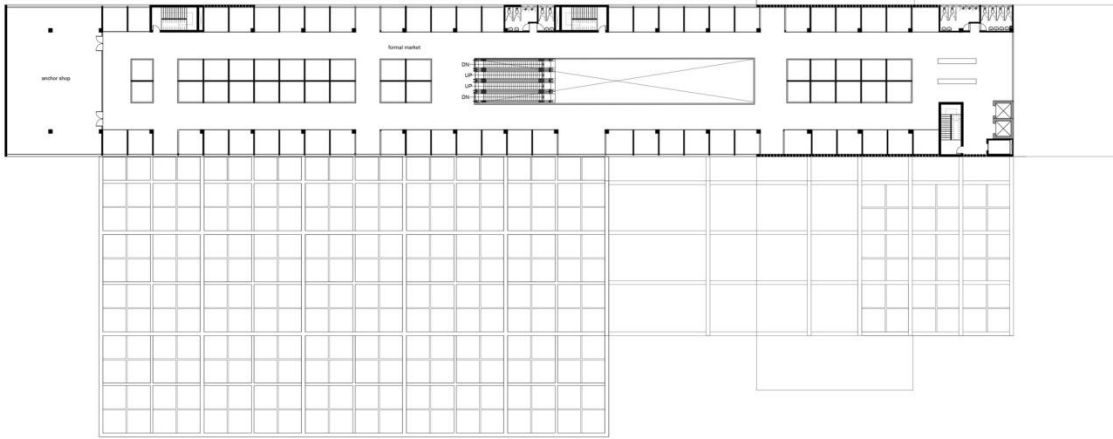
PLAN AT +15 FT



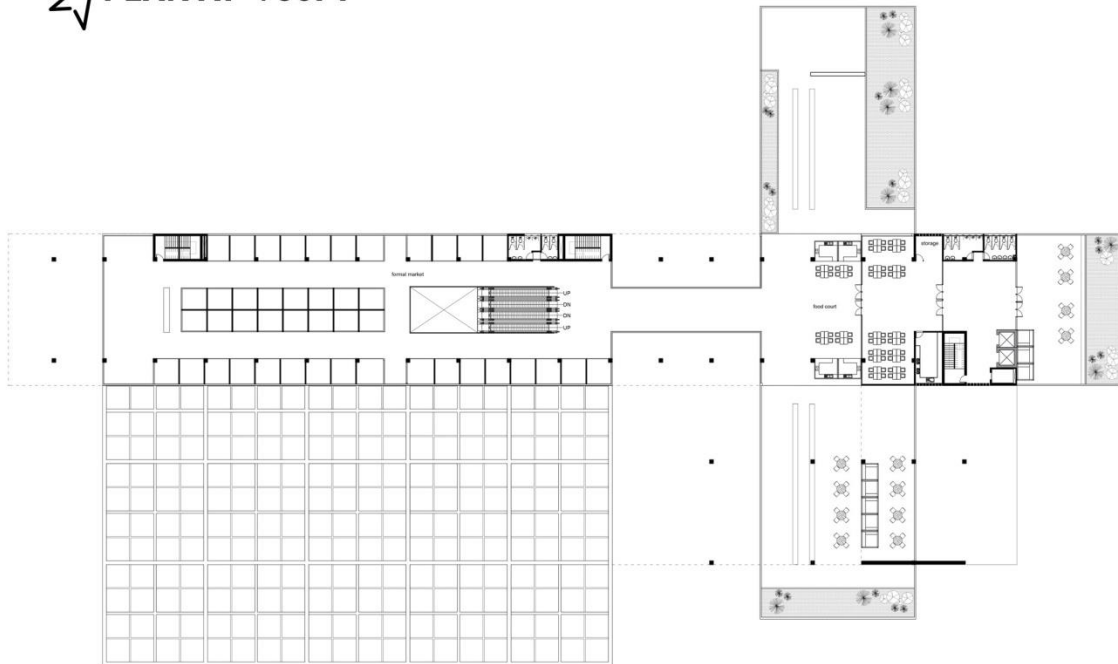
PLAN AT +25 FT



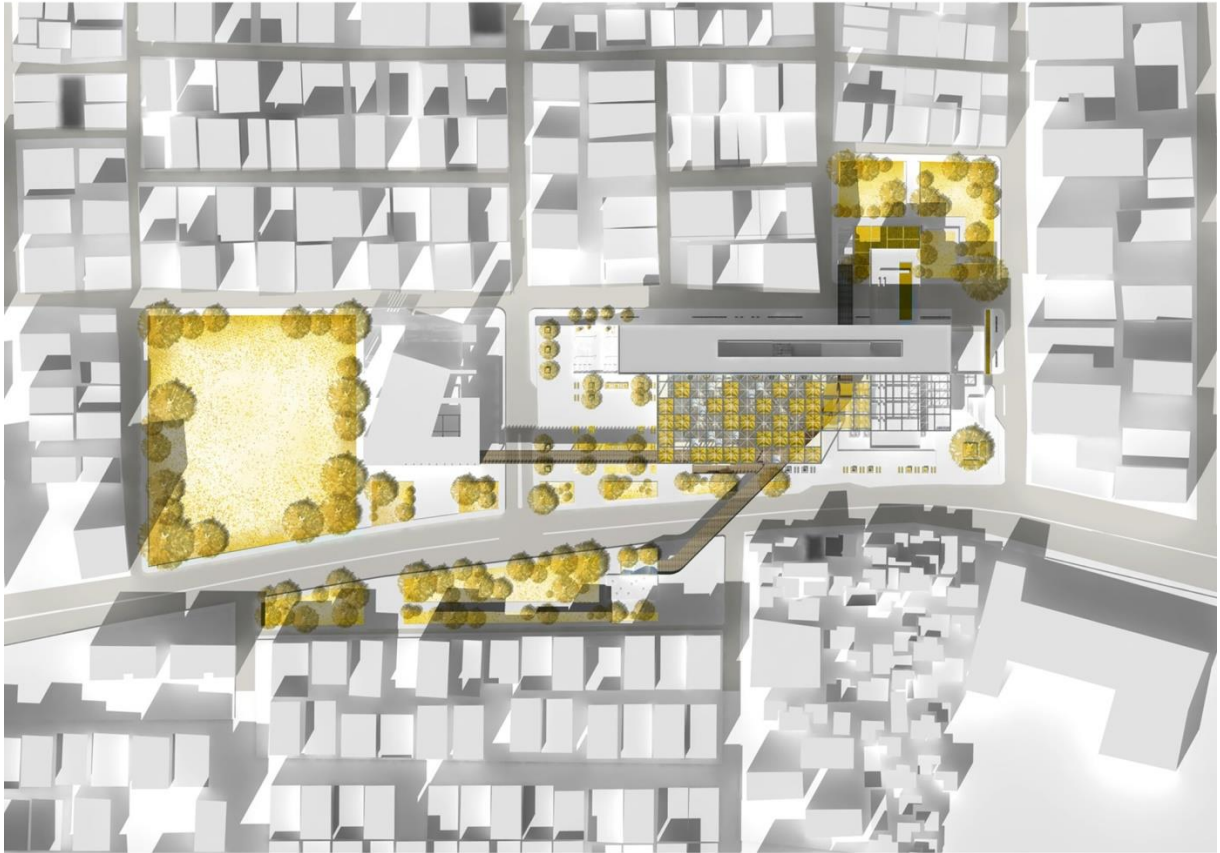
PLAN AT +70FT



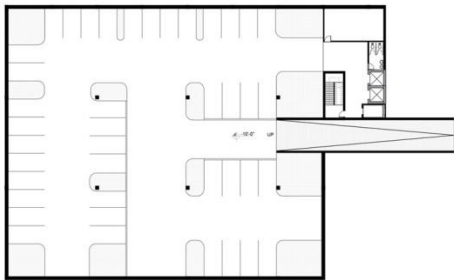
PLAN AT +60FT



PLAN AT +50FT



 **ROOF PLAN**



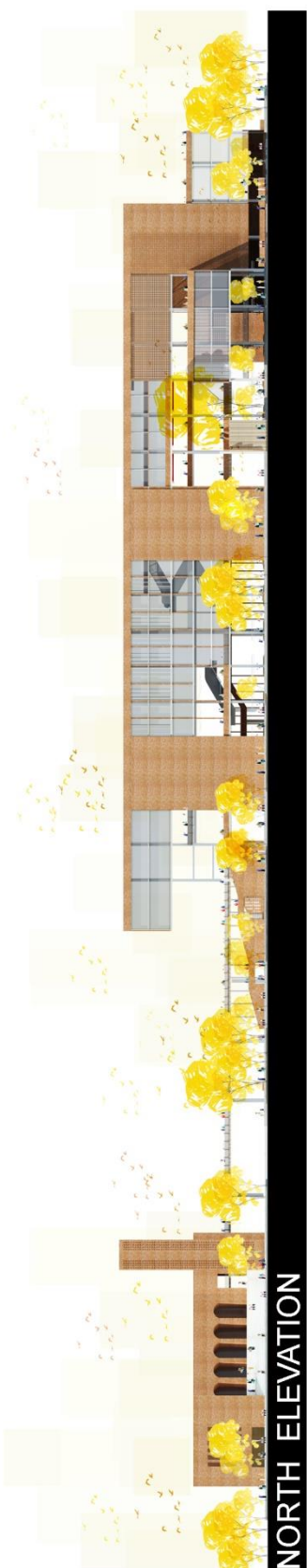
 **BASEMENT FLOOR PLAN**



SECTION BB'



FRONT ELEVATION



NORTH ELEVATION



SECTION AA'

7.3 Space visualization





Conclusion

One may argue that in order to adapt with the rapid urbanization our traditional bazar has to be modernized too. However, this process is complex needing vast analysis on migration, employment, technology, transportation, space allotment etc. Which is why the adaptation of informal markets have to be slow and careful working on a single issue one at a time. Markets have always been a public active function that is very hard to control. It tends to grow and spread at law enforcement and control is weak. Even though the name of the site is Town hall with study and local interviews, it has been found that the western concept of Town hall which includes vast municipal, educational, administrative functions would not work here if imposed forcefully.

In this particular site, preserving and layering the markets are a big challenge and task if we want to bring the government and the local employers work together. However, it can be possible with open communication between government and local inhabitants and workers. Thus a vibrant neighborhood with active open spaces and lively public market can truly be designed and implemented.

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