

**URBAN REJUVENATION OF A HISTORIC
NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
At Bagbazar, Kolkata, West Bengal**

An Urban Design Thesis Report

***Submitted in partial fulfilment of the requirements for
The Post- Graduation degree of Master of Architecture (Urban Design)
Under the Faculty of Engineering and Technology
Jadavpur University, Kolkata***

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Thanking you!

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Date: 19-06-2024

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A detailed architectural sketch of a street scene, likely in Kolkata, India. The sketch shows a wide street with a tram on the left and a building with a large arched entrance on the right. The style is a fine-line drawing with some shading. The text '01' is overlaid on the right side of the image.

01

INTRODUCTION

— Anirul — 21
Kolkata — ..

1.1 ABSTRACT

The urban design thesis delves into the process of preserving and revitalising the historical and cultural heritage of Bagbazar, one of the oldest neighbourhoods of Kolkata, located in the heart of the city, and explores the many potentials and problems that exist or may come up with restoring the urban fabric of Bagbazar, which is popularly known for its colonial architecture, traditional neighbourhood layouts, and rich cultural legacy.

This research intends to use tools such as historical analysis, using urban design parameters, community involvement, etc. to understand and thereby offer long-term solutions for Bagbazar's deteriorating heritage quality. The research endeavours to achieve a balance between preservation of the traditional qualities and current urban demands by concentrating on the integration of modern facilities, adaptive reuse of old and dilapidated buildings, and urban conservation, thus increasing the overall liveability of the public realm, by enhancing the overall connectivity of the area with the Hooghly River. In addition to this, the thesis also aims to create a useful manual for community stakeholders, legislators, and urban planners engaged in heritage-led urban regeneration projects.

This thesis aims to understand general concepts relating to historic neighbourhoods worldwide, by studying similar case examples, and comparing them with the case in hand, thus promoting a better comprehension of the interactions among tangible and intangible heritage, and urban development. The ultimate goal of the research is to pave the way to Bagbazar's sustainable future, protecting its age-old legacy for future generations and satisfying the existing challenges of an ever-changing urban environment.

1.2 BACKGROUND

Urban historic/ heritage neighborhoods around the world are increasingly recognized for their cultural, historical, and architectural significance. Cities like Paris, Rome, and Kyoto have managed to preserve their heritage areas through stringent regulations and active conservation efforts. However, many other cities face challenges in maintaining their heritage due to rapid urbanization, population pressure, and economic development. For instance, in 2019, UNESCO reported that approximately 30% of World Heritage Sites were threatened by urbanization and infrastructure development. The Historic Centre of Vienna and the Old City of Jerusalem are examples where modern development pressures clash with conservation efforts, leading to potential delisting from UNESCO's World Heritage Sites.

In India, heritage neighborhoods such as those in Varanasi, Jaipur, and Mumbai's Fort area represent the rich cultural tapestry of the country. However, they face numerous challenges, including neglect, unauthorized constructions, and lack of maintenance. The 2019 report by the Indian National Trust for Art and Cultural Heritage (INTACH) highlighted that nearly 60% of heritage buildings in Indian cities are in a state of decay. Heritage tourism is a significant economic driver. For example, according to the World Travel & Tourism Council (WTTC), heritage tourism contributed approximately \$300 billion to the global economy in 2019. In India, the Ministry of Tourism reported that heritage tourism generated around \$20 billion in revenue the same year. The degradation of heritage sites can lead to a decline in tourism, resulting in economic losses for local communities dependent on this sector.

Heritage sites serve as a repository of a community's history and identity. The loss of these sites can lead to a weakening of cultural identity and social cohesion. The disappearance of heritage buildings erases the tangible links to history, making it difficult for future generations to connect with their cultural roots. In Varanasi, for example, the demolition of old ghats and havelis has led to a significant loss of cultural landscapes, affecting the city's historic fabric. Heritage conservation is intrinsically linked to sustainable urban development. Traditional buildings often employ environmentally friendly materials and passive cooling techniques. Their loss means not only the disappearance of architectural heritage but also the loss of sustainable practices. A study by the University of York in 2020 found that conserving heritage buildings can reduce carbon emissions by up to 16% compared to new constructions due to the reuse of existing materials.

Urbanization Pressures: According to the United Nations, by 2050, nearly 68% of the world's population will live in urban areas, up from 55% in 2018. This rapid urbanization puts immense pressure on heritage neighborhoods, often leading to their neglect or demolition to make way for new developments.

Economic Impact: The loss of heritage tourism can be quantified economically. For example, UNESCO estimated that the economic impact of losing heritage status can result in a 25-30% decrease in tourism revenue.

Cultural Loss: Surveys by the World Monuments Fund show that 70% of respondents believe that heritage sites are vital for maintaining cultural identity, and their loss can lead to a diminished sense of community and identity.

Heritage neighborhoods include areas with historical and/or cultural significance, often characterized by **distinctive architecture, traditional practices, and a sense of community that reflects the cultural heritage of a particular region**. These neighborhoods typically have **historical landmarks, traditional buildings, and a unique atmosphere** that may attract residents and visitors alike.



FIGURE 1 : Clive Street, Old Kolkata

[Source: Kolkata's Clive Street – The Wall Street of the East (getbengal.com)]



FIGURE 2 : Modern Streets in Kolkata, after years of juxtaposition of various elements

[Source: www.arcgis.com]

- | | |
|--|--|
| <ul style="list-style-type: none">• Maintained a similar fabric• Easily identifiable buildings, adorned with decorative elements on the facade• Places of importance were built at a higher level than rest of the built forms• Movements mostly involved bullock carts, horses, walking etc. | <ul style="list-style-type: none">• Altering the skyline and eroding the area's previously historical character• driven by the demand for prime real estate, can lead to gentrification• abandonment of traditional dwellings, more contemporary housing options• Invasion of informal activities |
|--|--|

TABLE 1: 'Now' vs 'then' perspective of Indian Neighbourhoods

1.3 DEFINITIONS

1.3.1 URBAN REJUVENATION :

1.3.1.1 Urban

- The word '**urban**' is often be used in the context of 'urbanism' which relates to the theories and design behind city development. [Source: designingbuildings.co.uk]
- An **urban area** is the region surrounding a city. Most inhabitants of urban areas have non-agricultural jobs. Urban areas are very developed, meaning there is a density of human structures, such as houses, commercial buildings, roads, bridges, and railways. [Source: www.nationalgeographic.org]
- An **urban setting** can be defined broadly based on population density, concentration of administrative bodies and infrastructure and a diverse set of livelihood and income generation activities. They are usually characterized by the presence of administrative structures such as government offices and courts and a relative concentration of services such as hospitals and financial institutions such as banks. [Source: www.wvi.org (World Vision International)]



FIGURE 3 : Examples of URBAN areas in India

[Source: www.climatepolicyinitiative.org]

1.3.1.2 Rejuvenation

- **Rejuvenation** is the act of making something newly fresh or full of energy. To rejuvenate is to bring renewed life to something old by giving it new vitality, and rejuvenation is the process of freshening something up or reviving it. [Source: www.vocabulary.com]
- **Rejuvenation** (or Regeneration), as simply explained in biology, is the ability of a living organism to grow a portion of its body that has been injured or lost. [Source: (PDF) URBAN REJUVENATION CONCEPT – A STRATEGY FOR PROMOTING SUSTAINABLE CITY DEVELOPMENT. https://www.researchgate.net/publication/236681127_URBAN_REJUVENATION_CONCEPT_-_A_STRATEGY_FOR_PROMOTING_SUSTAINABLE_CITY_DEVELOPMENT]

1.3.1.3 Urban Rejuvenation/ Regeneration

- **Urban Rejuvenation** and **Urban Regeneration** are interchangeable terms, which can be defined as creating new urban structure in poor quality neighborhoods with comprehensive urban interventions for physical and social improvements. [Source: *What Is Urban Redevelopment, Development And Conservation* (urbandesignlab.in)]
- Possesses notable features of positive and practical interventionist activities. It is wide and all encompassing, dwelling on major issues as responses to economic, social, environmental and political circumstances. It is a mean of determining policies and action designed to improve the condition of urban areas and developing the institutional structures necessary to support the preparation of specific proposals. [Source: URBAN REJUVENATION CONCEPT – A STRATEGY FOR PROMOTING SUSTAINABLE CITY DEVELOPMENT. https://www.researchgate.net/publication/236681127_URBAN_REJUVENATION_CONCEPT_-_A_STRATEGY_FOR_PROMOTING_SUSTAINABLE_CITY_DEVELOPMENT]
- In developed nations with a long history of urbanization, adaptive reuse of buildings and urban neighborhoods is frequent. Many cities in developing nations are prioritizing this new trend of urban rejuvenation, which supports tourism. The development of urban areas to ensure infrastructural expansion, tourism marketing, and improved quality of life may fall under this process. [Source: www.clearias.com]

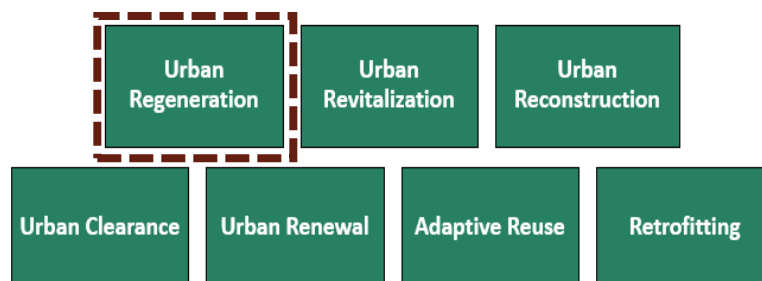


FIGURE 4 : Urban Redevelopment and its associated terms

[Source: *What Is Urban Redevelopment, Development And Conservation* (urbandesignlab.in)]

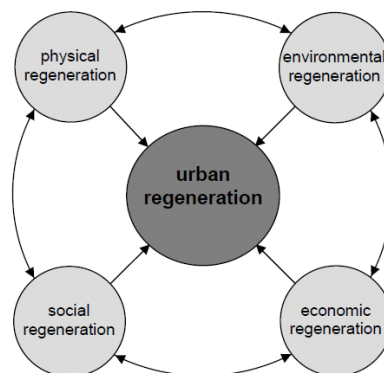


FIGURE 5 : Concept of Urban Regeneration

[Source: 1: *The Concept of Urban Regeneration* | Download Scientific Diagram (researchgate.net)]

1.3.2 HISTORIC NEIGHBOURHOOD:

1.3.2.1 Historic

- Can be defined as a word (*adjective*) that is used to describe something that is so important that it is likely to be remembered, connected with studying or representing things from the past. [Source HISTORIC | English meaning - Cambridge Dictionary]]
- **Historic/ Heritage**, in this context, refers to the cultural, historical, natural, and tangible or intangible assets that are inherited from previous generations and preserved for future generations. These assets are of significant value to a society, community, or nation because they provide insights into the past, shape the present, and contribute to a sense of identity and continuity. [Source: designingbuildings.co.uk]

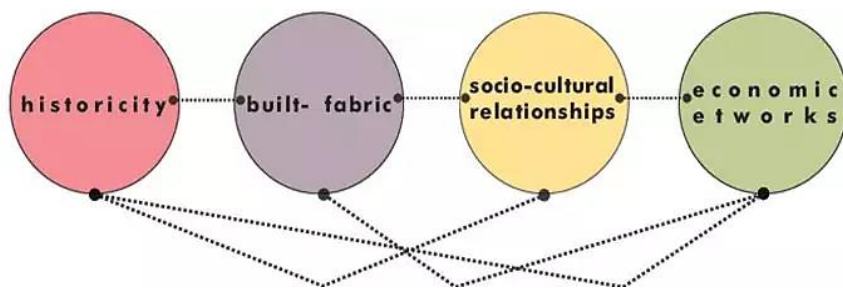


FIGURE 6 : Interconnections between various heads of historic core in Indian cities

[Source: Udaipur | The need for Revival and Rejuvenation of Heritage (udaipurtimes.com)]]

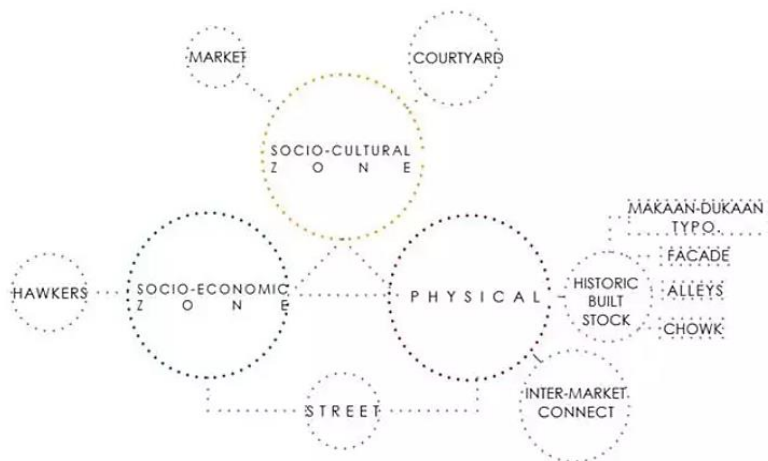


FIGURE 7 : Various urban markers of Heritage in the Historic Core

[Source: Studio 3, Kalbadehi Group, KRVIA]]

1.3.2 HISTORIC NEIGHBOURHOOD:

1.3.2.3 Historic Neighbourhood

- It is an area that contains buildings, places, or groups of buildings that have historical, cultural, or social significance. It is a section of a city which contains older buildings considered valuable for historical or architectural reasons. [Source: Wikipedia]
- **Indian historic/ heritage neighbourhoods** usually constitute the oldest parts of the cities and are therefore easily identifiable. They are typically characterized by traditional houses, streetscapes, water systems, living communities and their associated traditional livelihoods and social practices and so forth.
- A **historic neighborhood/ district** cannot and should not be defined based on the age of its structures, typology of built form, administrative boundaries, or even the presence of heritage buildings, sites or monuments. [Source: Historic districts for all - India: a social and human approach for sustainable revitalization; brochure for local authorities; 2010 (niua.org)]



FIGURE 10 : Examples of Historic Neighbourhoods in India

[Source: (tripadvisor.in)]

Design Combine Architects & Designers | Cochin India]

1.3.3 CORE AREA IN A CITY:

1.3.3.1 Core Area

- Most important or a particular part of a piece of land, place or a country. [Source: CORE AREA collocation | meaning and examples of use (cambridge.org)]
- Also known as the central business district (CBD) or downtown area, is the central and typically the most densely developed part of a city. It is often considered the heart of the city and serves as its economic, commercial, cultural, and administrative hub. [Source: designingbuildings.co.uk]
- Region in an urban area that has a predominance of buildings with an age of 50 years and older and in which little or no recent “greenfield” (unimproved) development has occurred. [Source: www.lawinsider.com]

URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY : Case Application at Bagbazar, Kolkata, West Bengal

FIG. 4: SCHEMATIC REPRESENTATION OF FUTURE URBAN FORM CONCEPT FOR DETROIT

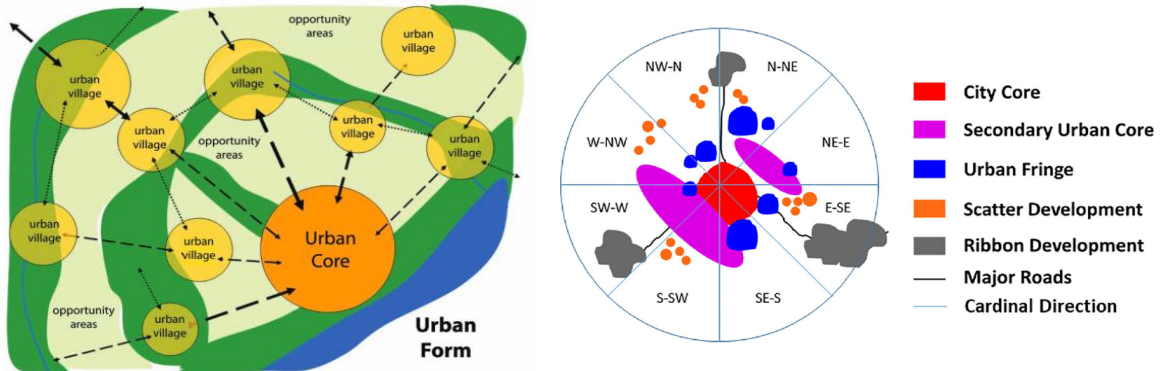


FIGURE 11 : Schematic diagrams showing representations of Urban Core Areas

[Source: detroitography.files.wordpress.com
www12.statcan.gc.ca]

1.3.3.2 City

- A **City**, relatively permanent and highly organized center of population, of greater size or importance than a town or village. The name city is given to certain urban communities by virtue of some legal or conventional distinction that can vary between regions or nations.

[Source: City | Definition & History | Britannica]

- There is no universal definition of a city; each country has its own definition. However, there are some parameters which are found in definitions of most countries, which can be listed as:

- Minimum population of 5,000 persons
- Population density of at least 400 persons per square kilometer
- 75% of the male population engaged in non-agriculture work

[Source: Nagrika - What is a City?]

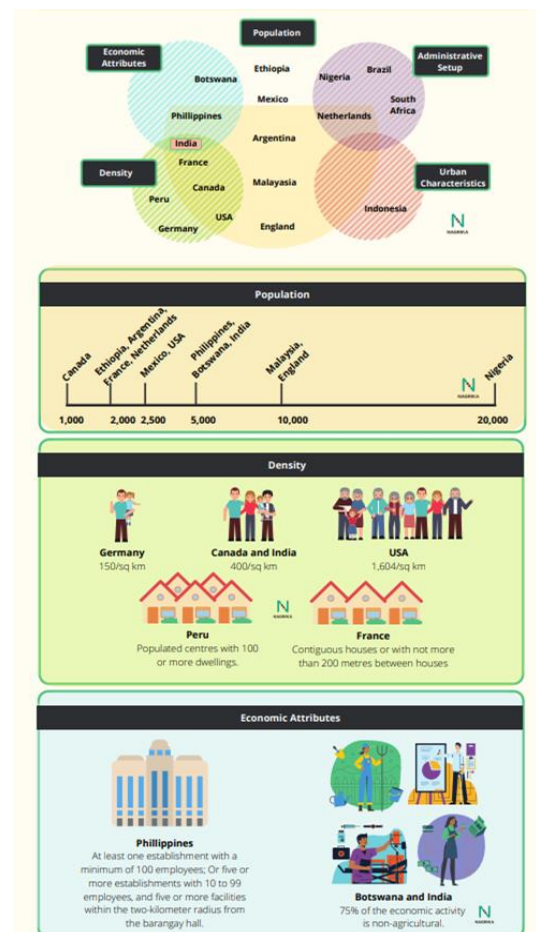


FIGURE 12 : Definition of 'A City', across different countries

[Source: Nagrika - What is a City?]

1.3.4 KOLKATA, BAGBAZAR:

1.3.4.1 Kolkata – Introduction

Formerly known as Calcutta, is a **major city located in the eastern part of India**, specifically in the state of West Bengal. It is one of the country's largest and most historically significant cities.

A **city of eastern India** and the capital of West Bengal, on the Hooghly River in the Ganges delta. **Founded c. 1690 as a British East India Company trading post**, it was the capital of British India from 1772-1912.

The city's former name, **Calcutta**, is an Anglicized version of the **Bengali** name **Kalikata**. According to some, **Kalikata** is derived from the Bengali word **Kalikshetra**, meaning **“Ground of (the goddess) Kali.”** Some say the city's name derives from the location of its original settlement on the bank of a canal (*khal*). A third opinion traces it to the Bengali words for lime (calcium oxide; *kali*) and burnt shell (*kata*), since the area was noted for the manufacture of shell lime.

■ City Facts:

- i. **Area in kilometres :** 1480 sq. km., (205 sq. km. is within Corporation Area).
- ii. **Population :** A growing population of 45,80,544 according to 2001 Census.
- iii. **Density of Population :** 24.760/ sq. km.
- iv. **Ratio of Population :** Male - 1000; Female - 956;
- v. **Position :** 7th biggest city of India in area and population. [Source: *The Evolving Urban Form: Kolkata: 50 Mile City* | Newgeography.com]

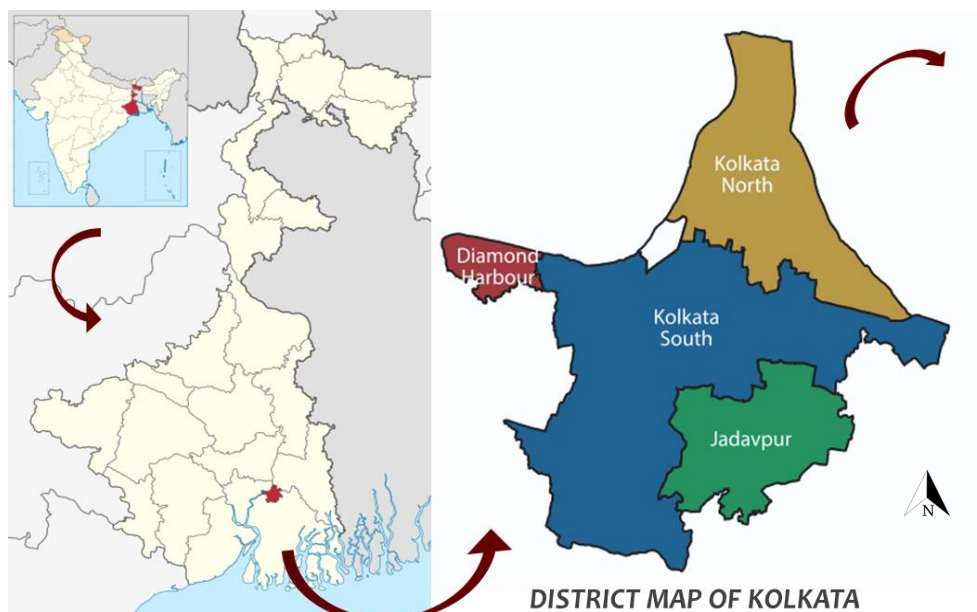


FIGURE 13 : Maps showing the location of Kolkata

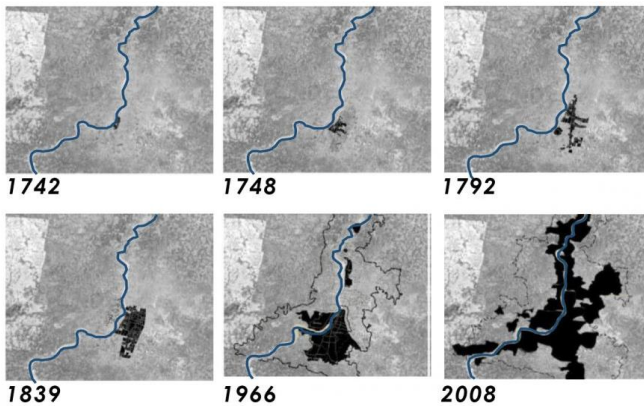
[Source: Google]

1.3.4.2 Kolkata- Evolution

During the colonial era, ancient Kolkata, then known as Calcutta, emerged as a prominent center of British India, serving as the capital from 1772 to 1911. The city's layout, originally characterized by narrow, winding lanes and traditional Bengali-style houses, began to change with British colonial rule, leading to the construction of grand colonial buildings, wide boulevards, and planned neighborhoods.



FIGURE 14 : Antique Map of Kolkata, 1757
[Source: Mapping Bengal - CALCUTTA 1757]



The three villages of Sutanuti, Gobindapur, and Kolikatta coalesced into a colonial city. The initial development is along the east bank of the Hooghly River, scattered around tank square. The city started to grow over the historic centre and along the western side of the Hooghly River. Jute industries began to dot the western part of the river. Increased traffic across the river later led to construction of the old Howrah bridge in 1874.

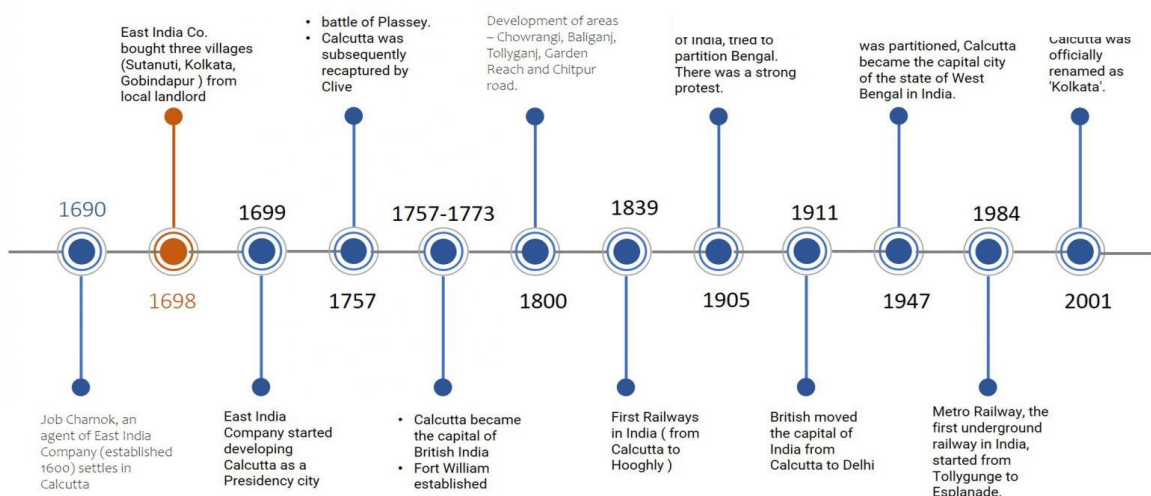


FIGURE 15 : Chronology of Spatial Transformation of Kolkata

[Source: *The Evolving Urban Form: Kolkata: 50 Mile City* | Newgeography.com]

1.3.4.3 Kolkata- Urban Agglomeration

- Kolkata is the third largest urban agglomeration and the third largest city in India. As a growing metropolitan city (almost likely to other cities around the globe) in a developing country, Kolkata **confronts with considerable urban pollution** in terms of **air-water and noise, traffic congestion, poverty, overpopulation** as well as numerous socio-economic nuisances.
- Since the last quarter of the twentieth century, India has been witnessing **predominantly outward expansion of most large megacities in the form of sprawl**, and peripheries have been engulfing many small towns and villages rather than accommodating the migrants from rural areas in the city core.
- Amidst this transformation, the **condition of people living in peripheral areas becomes precarious which is explained by ‘degenerated periphery’**. Moreover, KMA has huge number of slum population which is more than 33% of the total urban population. **The mixed nature of urban land uses comprising of residential and commercial as well as industrial character is found in slums of the urban agglomeration.**

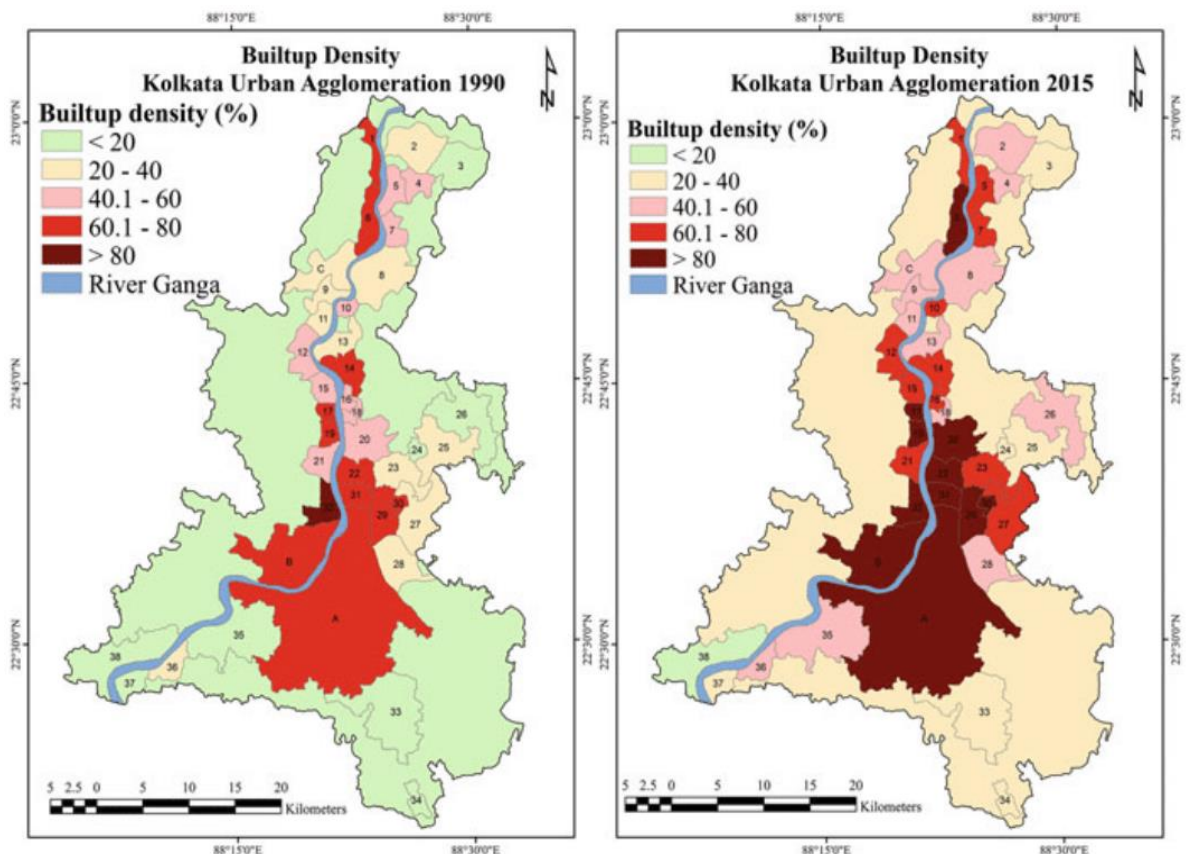


FIGURE 16 : Built-up area density in Kolkata urban agglomeration in 1990 and 2015

[Source: (PDF) Analysing Urban Sprawl and Spatial Expansion of Kolkata Urban Agglomeration Using Geospatial Approach (researchgate.net)]

1.3.4.4 Kolkata- Climate

- Kolkata experiences a **tropical wet-and-dry climate**, characterized by **hot and humid summers, a monsoon season, and mild winters**. Summers, from March to June, see temperatures soaring above 30°C (86°F), often accompanied by high humidity. The monsoon season, from June to September, brings heavy rainfall and occasional thunderstorms, significantly influencing the city's weather patterns and water levels. Winters, from November to February, are relatively mild and pleasant, with temperatures ranging between 12°C (54°F) and 25°C (77°F). This seasonal variability shapes the daily life and urban environment of Kolkata, impacting everything from infrastructure to daily activities.

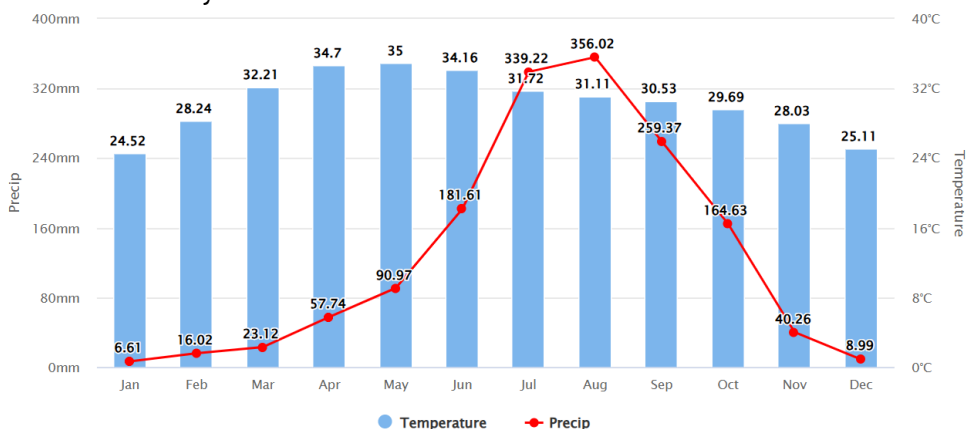


FIGURE 17 : Graph showing mean monthly temperature and precipitation in recent years.

[Source: Kolkata, West Bengal, IN Climate Zone, Monthly Averages, Historical Weather Data (weatherandclimate.com)]

1.3.4.5 Kolkata- Pollution

Kolkata faces significant pollution challenges, with air quality often falling into the "poor" to "very poor" categories according to the Air Quality Index (AQI). Recent data shows that particulate matter (PM_{2.5} and PM₁₀) levels frequently exceed the safe limits set by the World Health Organization (WHO). Water pollution is another concern, with many water bodies contaminated by industrial effluents and untreated sewage, posing health risks to residents.

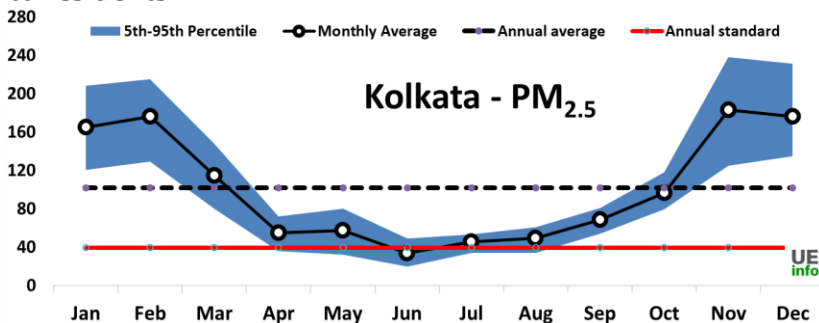


FIGURE 18 : Graph showing Air Pollution levels in urban Kolkata

[Source: Air Quality Analysis for Kolkata (Calcutta), India - UrbanEmissions.Info]

1.3.4.5 Bagbazar

Bagbazar comprises the whole of ward 7 and parts of ward 8 (highlighted above) of Borough I, under Kolkata Municipal Corporation. Also popularly known as the ‘ghat neighborhood of Kolkata’, is one of the oldest neighborhoods of North Kolkata, flanked by Hooghly River on one side. Its strategic location makes it one of the majorly saturated neighborhood in present times, with hardly any space left for newer developments.

Bagbazar, like many other areas in Kolkata, saw significant changes during the colonial period (17th-19th century). **Two of the oldest roads in North Kolkata**, i.e., the Bagbazar Street (previously known as Old Powder Mill Road)and the Maratha Ditch Lane, run through this area. Bagbazar has been known for its *jatra* (Bengali folk theatre) performances. The area is still a cultural center where people gather for entertainment and religious festivities. **Given its proximity to the Hooghly River**, Bagbazar has always had commercial significance, as trade activities along with the presence of markets, have shaped the economic life of the neighborhood. [Source: *Evolution of Bagbazar Street Through Visibility Graph Analysis (1746–2020)* | SpringerLink]



FIGURE 19 : Maps showing the location of the neighbourhood of Bagbazar in Kolkata
[Source: Google]

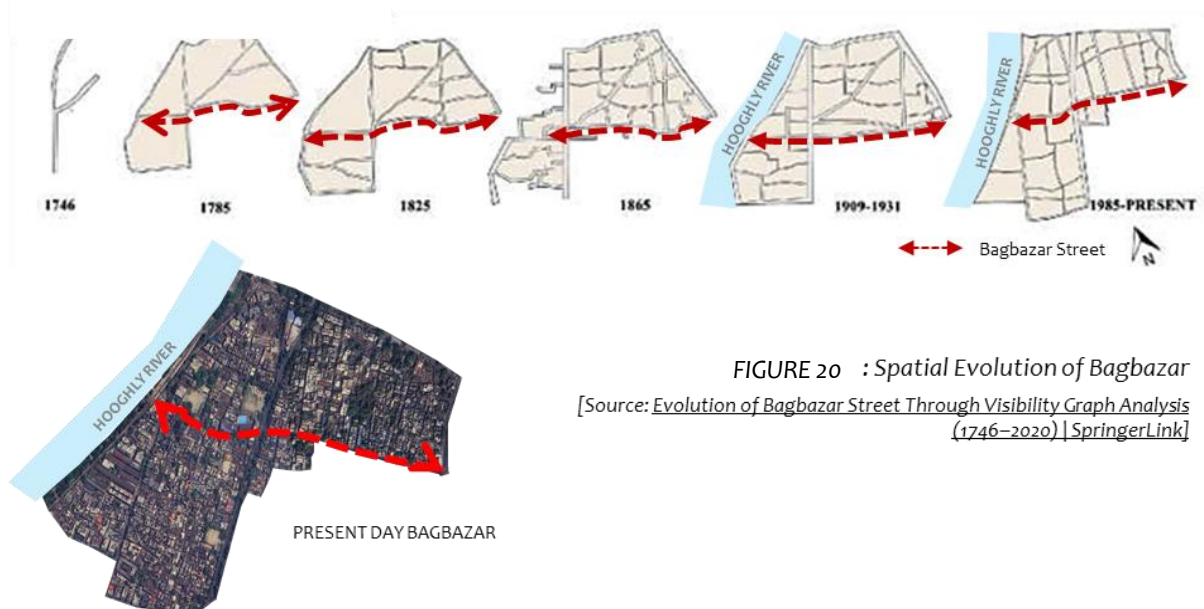


FIGURE 20 : Spatial Evolution of Bagbazar
[Source: *Evolution of Bagbazar Street Through Visibility Graph Analysis (1746–2020)* | SpringerLink]

URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
Case Application at Bagbazar, Kolkata, West Bengal

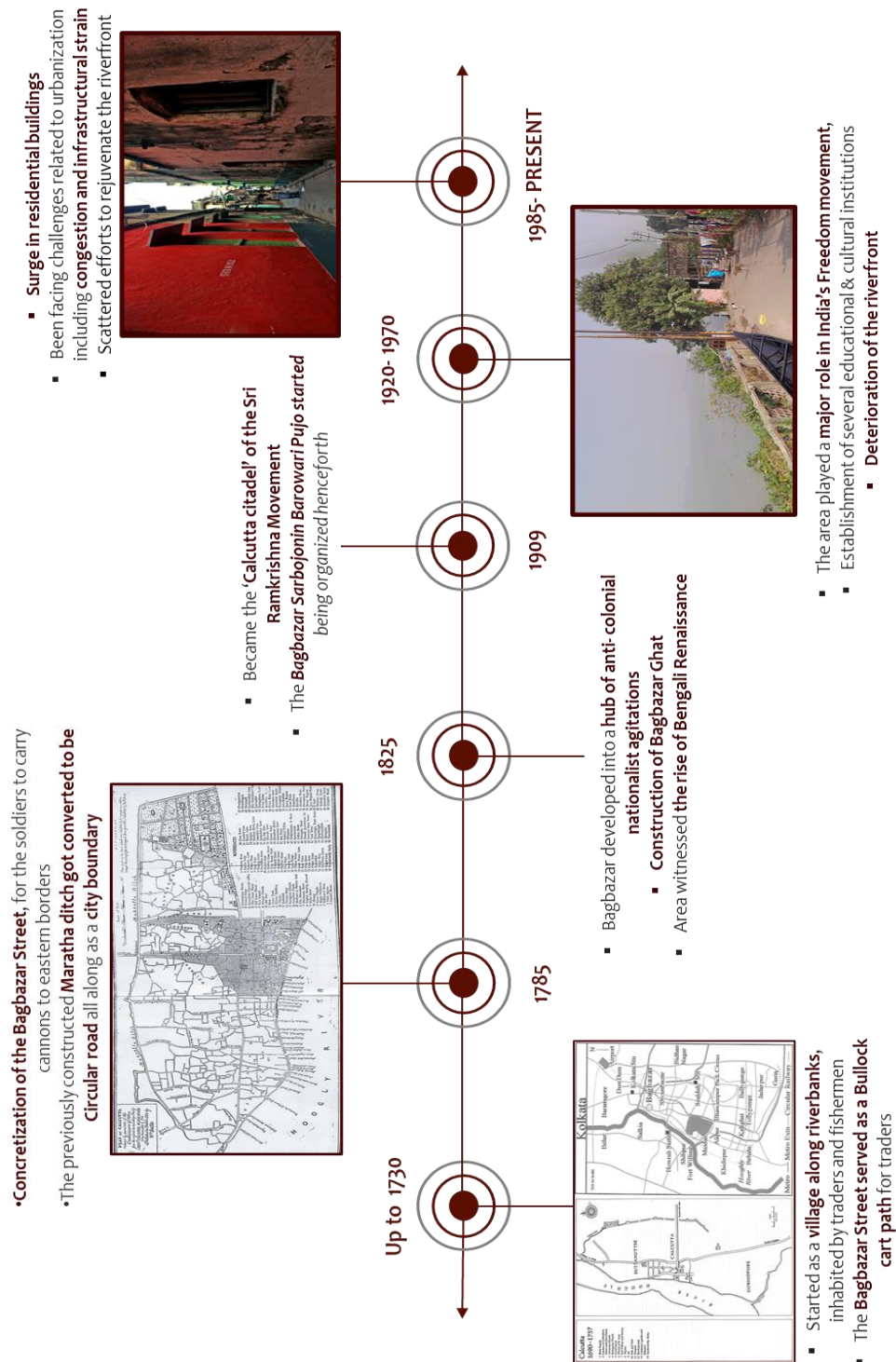


TABLE 3: The Timeline of Evolution of Bagbazar

[Source: Author]

1.3.5 URBAN REJUVENATION, HISTORIC NEIGHBOURHOODS, CORE AREA OF A CITY, KOLKATA, BAGBAZAR:

The terms 'URBAN REJUVENATION,' 'HISTORIC NEIGHBORHOODS,' 'CORE AREA OF A CITY,' 'KOLKATA,' and 'BAGBAZAR' are intrinsically connected.

- URBAN REJUVENATION typically focuses on the revitalization of cities to enhance their livability, functionality, and aesthetic appeal.
- This concept is particularly significant when applied to HISTORIC NEIGHBORHOODS, which are rich in cultural and architectural heritage but often face challenges such as decay, neglect, and incompatible development.
- The CORE AREAS of CITIES, where these historic neighborhoods are typically located, are pivotal to its urban fabric and identity.
- The choice of KOLKATA, and specifically BAGBAZAR, over other cities or neighborhoods is justified by its rich colonial history, unique cultural fabric, and the pressing need for sustainable preservation strategies that balance heritage conservation with modern urban demands.

Thus, the culmination of these terms creates a comprehensive framework for exploring the multifaceted dimensions of Urban Rejuvenation in a context that is both historically rich and contemporarily relevant. By combining these elements, this thesis aims to provide a comprehensive analysis of how Urban Rejuvenation can be effectively implemented in historic neighborhoods, using Bagbazar as a Case Study.



FIGURE 22 : Combination of the terms forming the topic of thesis

[Source: Author]

1.4 JUSTIFICATIONS

1.4.1 IMPORTANCE OF URBAN HERITAGE

Urban heritage holds immense significance as it embodies the historical, cultural, and architectural legacy of a city, serving as a tangible link between the past and present. It encompasses **buildings, streetscapes, public spaces, and landmarks that collectively narrate the story of a city's development, reflecting the diverse influences that have shaped its identity over time.**

Preserving urban heritage is crucial not only for maintaining cultural continuity and fostering a sense of place but also for promoting tourism and economic vitality.

Heritage sites often act as focal points for community pride and engagement, enhancing social cohesion by providing a shared sense of history and belonging.

■ Is Urban Heritage going through a loss?

More often than not, urban heritage in any bustling cities across the world show various signs of its loss of character, both externally and internally. Identifying the **loss of urban heritage** involves observing several key indicators that signify deterioration or neglect. **Visible signs such as structural damage, decay, and lack of maintenance in historic buildings and public spaces are primary indicators.** Additionally, the **encroachment of unauthorized constructions and modern developments that disregard historical context can signal heritage loss.** Changes in land use that undermine the original character of heritage sites, such as the conversion of cultural landmarks into commercial entities without preserving their historical essence, also contribute to this decline. **A decrease in community engagement and diminishing cultural activities that once thrived in these spaces are further signs.** Moreover, monitoring statistics related to tourism can reveal declining interest in heritage areas, indicating a loss of cultural and historical value.

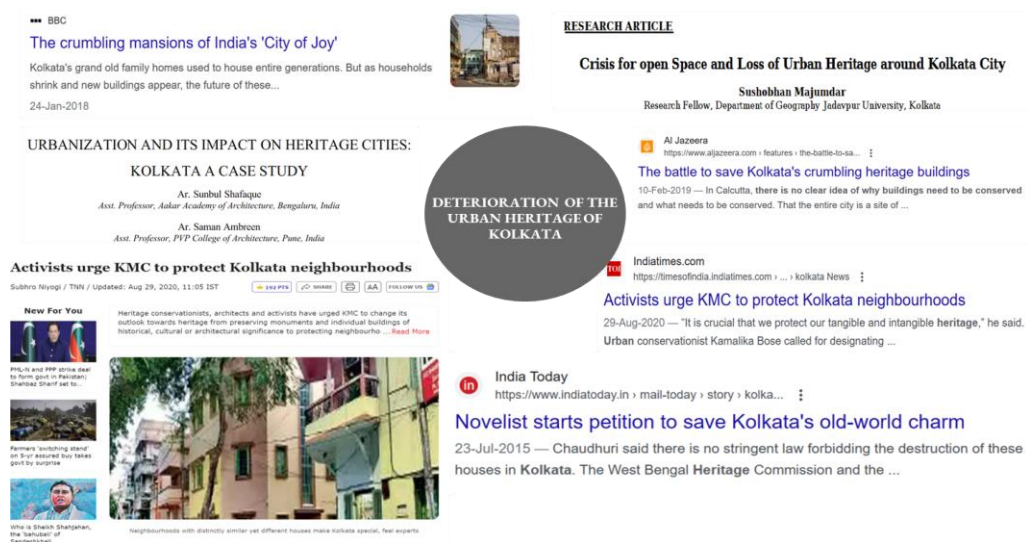


FIGURE 23 : The Loss of Urban Heritage in Kolkata, as Reported by Various Media Outlets
[Source: Various]

1.4.2 REASONS BEHIND LOSS OF URBAN HERITAGE

Most of the historic areas in the cities have been neglected in the process of urban development and growth. Degenerated environments, dilapidated physical infrastructure, gentrification and poor economic conditions are some of the major characteristics of several heritage precincts in the urban centers, across the world.

- **Rapid Urbanization and Development Pressure**

- i. As cities expand, there is a high demand for new infrastructure, residential complexes, and commercial buildings. This often leads to the demolition or alteration of historic structures to make way for modern developments.
- ii. High land values in urban centers create financial incentives for property owners to replace old buildings with new, more profitable constructions.

- **Neglect and Lack of Maintenance**

- i. Many historic buildings and areas suffer from a lack of funds for regular maintenance and conservation, leading to gradual decay and deterioration.
- ii. In cases where ownership is disputed or fragmented, coordinated maintenance efforts are challenging, resulting in neglect.

- **Inadequate Legal Protection and Enforcement**

- i. In some regions, heritage protection laws are either weak or poorly enforced, allowing for the unauthorized alteration or demolition of historic sites.
- ii. Insufficient financial incentives for preservation can discourage property owners from investing in the upkeep of historic buildings.

- **Cultural Shifts and Changing Priorities**

- i. As societies modernize, there is often a shift in aesthetic and functional preferences, with a tendency to favor contemporary designs over traditional ones.
- ii. The decline in traditional construction and restoration skills can make it difficult to properly maintain and restore historic structures.

- **Economic Factors**

- i. Economic downturns can lead to a decrease in tourism revenue, which is often used to fund heritage conservation efforts.
- ii. In areas with high levels of poverty, immediate economic needs may take precedence over heritage preservation.

- **Urban Planning Policies**

- i. Inadequate or poorly planned zoning regulations can lead to the inappropriate development of areas surrounding historic sites, negatively impacting their context and value.
- ii. Large-scale infrastructure projects, such as road expansions and public transportation developments, can result in the displacement or destruction of historic areas.

[Source: GP-IN4 HERITAGE.pdf (citiesalliance.org)]

1.4.3 JUSTIFICATIONS FOR URBAN HERITAGE PRESERVATION

The urban heritage often has a position “in between.” On one hand, it is constantly changing and under the threat of being destroyed due to the nature of urban development, and on the other hand, it is protected and conserved because of its historical values. Heritage structures are often regarded as a passive setting to the broader scope of the growing modern city. **Preserving urban heritage helps local industries develop and provides income opportunities for citizens.**

Preserving urban heritage is crucial for various reasons, spanning cultural, economic, and environmental aspects. It maintains the cultural identity of communities by connecting them to their history and traditions. Additionally, it boosts tourism and local economies, creates educational opportunities, and fosters a sense of place and community pride. Furthermore, heritage preservation contributes to environmental sustainability by promoting adaptive reuse and reducing carbon emissions. It also **enhances property values, encourages economic growth, and celebrates cultural diversity and inclusivity.**

Urban heritage is an ‘expression of the ways of living developed by a community, passed on from generation to generation’. In addition to buildings, the definition of heritage spans places, customs, practices, values, and artefacts. In the past decades, heritage, in both its tangible and intangible forms, has been gradually recognized for its potential contributions towards the achievement of sustainability.

[Source: Assessing the performance of urban heritage conservation projects – influencing factors, aspects and priority weights | *Built Heritage* | (springeropen.com)]
Why Preserving Urban Heritage Makes Economic Sense | *Asian Development Blog* (adb.org)

kolkata online . in
<https://www.kolkataonline.in/city-guide/north-kolk...>

Essence and Nostalgia of North Kolkata

North Kolkata in the north of Kolkata is a locality which has old mansions, narrow bylanes, great sweet and snacks shops and other attractions.

NORTH KOLKATA

North Kolkata: Where adda is the oxygen and the glue

A cup of tea and a place to sit - Uttorer Adda is one everlasting constant in a world of change.

ROSDA PHOTOGRAPHY | PUBLISHED 10.12.19 10:51 AM



PART OF THE CITY THAT
BOASTS OF RICH CULTURE
AND HISTORY

Get Bengal
<https://www.getbengal.com/details/around-450-yea...>

Around 450-year-old Haldarbari Pujo of North Kolkata

02-Oct-2019 — Sandhipuja is a special time at Haldarbari. It is believed this is the time when Goddess Durga slained Mahishasura. She is worshipped during ...

Get Bengal

Bagbazar rises to the first ever Rosogolla Utsav

Here is some sweet first to the New Year! If you mix the extravagance of rosogolla with that of a piece of vintage Kolkata, you produce one...

06-Jan-2019



Although the cafes and restaurants of south Kolkata have gained many fans across the city, it is the small, old joints in north Kolkata that have attained legendary status

Shreya Cheema
May 18, 2023

03 Min Read

The City of Joy recently found a spot in *Eater's* list of "World's Best Food Destinations," and deservedly so. Although the cafes and restaurants located in the more happening hubs of south Kolkata have gained many fans across the city, the small, old joints crowding the narrow sleepy lanes and busy streets of north Kolkata have attained legendary status. Ask anyone in Kolkata, and they'll tell you so, not without a generous dollop of nostalgia. Despite the crumbling facade and cramped spaces, these food joints continue to serve as spaces where each day's happenings are exchanged as adda.

To truly understand why Kolkata, of all places in the country, made it to the sacred list, you must visit one or all of these classic, old-school joints.



FIGURE 24 : Media Reports on the various aspects of Intangible Heritage of Kolkata

[Source: Various]

1.5 EXISTING THEORIES

1.5.1 URBAN HERITAGE CONSERVATION INITIATIVES BY GLOBAL ORGANISATIONS

- HOW DOES **UNESCO** WORK TO SAFEGUARD HERITAGE?
 - Encouraging safeguarding through its normative tools.
 - Leading emergency safeguarding efforts
 - Monitoring heritage in the face of global challenges
 - Promoting reconciliation through heritage safeguarding
 - Strengthening the links between heritage and education
 - Prioritizing cities.
 - Building stakeholder capacity [Source: [info_sheet_heritage.pdf \(unesco.org\)](#)]
- **UNESCO's involvement goes beyond designating these sites; it includes preservation, conservation, and promotion efforts:**
 - **Conservation:** UNESCO works closely with local authorities and organizations to develop and implement conservation strategies for these natural heritage sites. This includes protecting endangered species, preserving ecosystems, and combating poaching and habitat destruction.
 - **Promotion and Awareness:** UNESCO helps in promoting these natural heritage sites, both nationally and internationally. This raises awareness about the importance of preserving these areas and encourages responsible tourism.
 - **Capacity Building:** UNESCO assists in capacity building by providing training and resources to local communities, enabling them to actively participate in conservation efforts. [Source: [The Role of UNESCO in Preserving Natural Heritage in India | School Dekho | Best School near me | Indias first school search portal | Dekho Phir Chuno](#)]
- **“Historic districts** must not become isolated from the rest of the urban area. Local projects must be supported and integrated into an overall urban development plan to make sure the historic district does not become an element of spatial or social segregation in the region.”
- The challenges for historic districts in 21st century Indian cities: **Poverty, migration and social exclusion, Inadequate housing, poor infrastructure, and a deteriorating living environment, Land tenure, ownership and tenancy, Weak urban governance and conflicting interests.** [Source: [HISTORIC DISTRICTS FOR ALL - INDIA A SOCIAL AND HUMAN APPROACH FOR SUSTAINABLE REVITALISATION | Brochure for Local Authorities | UNESCO](#)]

1.5.2 URBAN HERITAGE CONSERVATION INITIATIVES BY INDIAN ORGANISATIONS

- **INTACH** (Indian National Trust for Art and Cultural Heritage)
 - In a globalising world, where visual spaces are rapidly becoming homogenized, it is necessary to retain the specific visual identity of a place created by the presence of unprotected architectural heritage and sites. [Source: [INTACH](#)]

The visual cacophony created by advertisement boards, signage, hanging electric cables, air conditioning units, dish antennas, etc. must be carefully controlled to enhance the visual character of the architectural heritage and site. Additions of street furniture, pavement material, lighting, signage, etc. can add to the experience and appreciation of the heritage. Elements, methods and devices that can be employed, to protect the heritage character of an area-

- i. Adaptive re-use
- ii. Restoration/ Replication/ Rebuilding
- iii. Local material and traditional technology
- iv. Integrated conservation and Sustainability [Source: *INTACH*]

▪ **Heritage City Development and Augmentation Yojana (HRIDAY), Jawaharlal Nehru Urban Renewal Mission (JNNURM), and Atal Mission for Renewal and Urban Transformation (AMRUT) are some of the major central initiatives, that are meant to upgrade existing urban fabric.**

1) **Heritage City Development and Augmentation Yojana (HRIDAY) was launched in January 2001.** The aim of the scheme is to:

- **Preserve and revitalize** urban planning, economic growth, and heritage conservation in an inclusive manner to preserve the heritage character of each City.
- To undertake **strategic and planned development of heritage cities** aiming at the improvement in overall quality of life with a specific focus on **sanitation, security, tourism, heritage revitalization, and livelihoods retaining the city's cultural identity.**

[Source: <https://pib.gov.in/PressReleaseSelfFramePage.aspx?PRID=1795154>]

2) **Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched on December 3rd, 2005.**

The scheme promotes integrated urban planning processes that incorporate **heritage conservation principles, pedestrian-friendly design, and mixed land-use strategies** to enhance urban fabric while preserving heritage assets. Community participation is emphasized, ensuring that rejuvenation efforts are culturally sensitive and socially inclusive.

- It consists of two sub missions – **"Urban Infrastructure & Governance", and "Basic Services to the Urban Poor"**.
- The primary objective is to create economically productive, efficient, equitable and responsive cities. In line with this objective, the Mission focuses on: Integrated development of infrastructure services; Securing linkage between asset creation and maintenance for long-run project sustainability; Accelerating the flow of investment into urban infrastructure services; Planned development of cities including the peri-urban areas, outgrowths, and urban corridors; Renewal and re-development of inner city areas; and Universalization of urban services so as to ensure their availability to the urban poor. [Source: *JNNURM_Projects_SP.pdf (jaipurmc.org)*]

3) Rajiv Awas Yojana (RAY)-

- Through its multifaceted approach, RAY focuses on providing affordable housing, basic infrastructure, and essential services to marginalized communities residing in slums and informal settlements within historic urban areas. By addressing the housing needs of the urban poor, the scheme mitigates social exclusion and improves their quality of life. Additionally, RAY emphasizes the conservation and revitalization of historic neighborhoods, promoting heritage-sensitive urban development strategies that preserve architectural heritage while enhancing urban livability. The scheme also prioritizes community participation and empowerment, ensuring that residents have a voice in decision-making processes related to their housing and neighborhood development. [Source: RAYGuidelines.pdf(mohua.gov.in)]

4) Some Newer initiatives by Indian Bodies -

- The Ministry of Housing and Urban Affairs launched two key initiatives to take India's Urban Rejuvenation journey to the next level, namely:
 - 'City Finance Rankings' was launched to evaluate, recognize, and reward ULBs on basis of their strength across key financial parameters.
 - 'City Beauty Competition' aims to encourage and recognize the transformational efforts made by cities and wards in India to create beautiful, innovative, and inclusive public spaces. Wards and public places of cities would be judged against the five broad pillars:
 - Accessibility
 - Amenities
 - activities
 - aesthetics
 - Ecology



FIGURE 25 : 'City Beautiful Competition' Poster

[Source: 1Mission Overview English(1).pdf (mohua.gov.in)]

1.5.3 THE CHALLENGES FACED BY HISTORIC DISTRICTS/ NEIGHBOURHOODS IN INDIA-

A brochure 34 for local authorities published by UNESCO for all historic neighborhoods in India points out the following challenges:

- Poverty, Migration and Social Exclusion** - Historic areas represent a source of economic and residential opportunity for the urban poor. Old city areas are melting pots of diverse groups of people with different social, cultural and religious backgrounds.

- **Inadequate Housing, Poor Infrastructure and a Deteriorating Living Environment** - Many city centers are facing the problem of a deteriorating physical environment. Historical districts are often turned into slums, which lack the most basic amenities.
- **Land Tenure, Ownership and Tenancy** - The issue of land tenure is often extremely complex in historic districts. Many historic districts are dotted with decaying buildings and ill-maintained properties. Sometimes if the building is left abandoned it is encroached upon by other squatters.
- **Communities Confront Gentrification** - In the context of community development one important consideration has been, 'gentrification', a process involving the rehabilitation of a neighborhood by upgrading existing housing and other building stock, often resulting in higher real estate values and therefore, the displacement of poorer people, and hence this process often has negative connotations among urban planners. [Source: Development in the Context of Urban Conservation: Examining the Interrelationship between Architectural Heritage and Intangible Culture in Historic Settlements. | bhavin shukla - Academia.edu]

1.5.4 TYPES OF URBAN HERITAGE-

- UNESCO has categorized heritage into three types, namely- **Natural Heritage, Cultural Heritage, and Built Heritage.**
- a) **NATURAL HERITAGE**- One of the most significant component of Urban heritage is related to its natural features such as wetlands, forests, thickets, prairie, streams, valleys, seashore and meadows.
- b) **CULTURAL HERITAGE**- includes tangible culture and intangible culture. Tangible cultures includes buildings, monuments, landscapes, books, works of art, and artifacts and intangible culture includes folklore, traditions, language, and knowledge.
- c) **BUILT HERITAGE** Built-environment refers to any 'man-made structure' which has significant human value especially in historical and architecture.

There are several forces that are continuously challenging the existence of urban heritages, including factors like growth of urbanization, Urban Heritage and Industrialization, Modernization, etc. [Source: Unit-2.pdf (egyankosh.ac.in)]

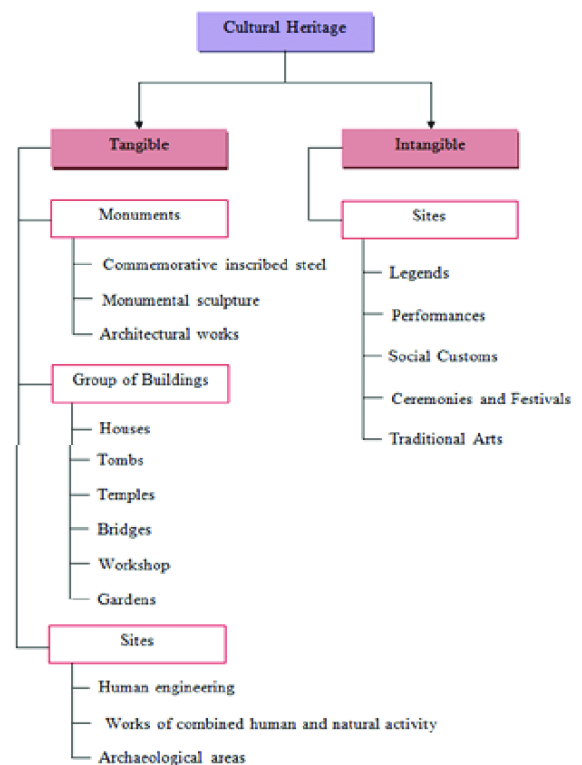


FIGURE 26 : Categories of Cultural Heritage :
Tangible & Intangible

[SOURCE: Classification of Cultural Heritage from Sun, 2010 |
Download Scientific Diagram (researchgate.net)]

1.6 AIM

To develop a holistic intervention strategy for a traditional neighborhood, with a focus on preserving and reinforcing its historic urban identity, while addressing issues that may bridge the gap between tradition and modernization.

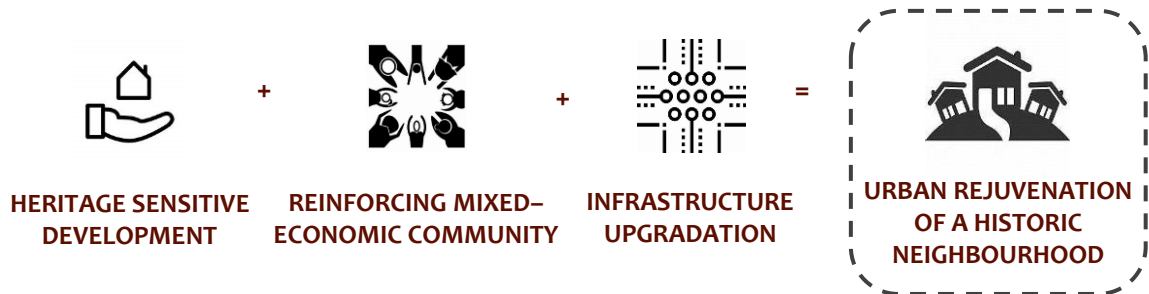


FIGURE 27 : Graphical representation of the aspects of Urban Rejuvenation of a Historic Neighbourhood
[SOURCE: Author]

1.7 OBJECTIVES

- To conduct a study on Bagbazar's historical and cultural evolution, over the years.
- To assess mixed-economic areas for current conditions, challenges, and opportunities.
- To re-establish the lost connection between the city and the River Hooghly.
- To upgrade and activate the physical environment of the waterfront.
- To establish and promote the industry of heritage tourism through design.
- To develop a pedestrian-friendly design concept, by making connectivity and mobility improvements within the neighbourhood.

1.8 SCOPE & LIMITATION

1.8.1 SCOPE

- To develop strategies in favor of preserving the historical/ cultural landmarks in Bagbazar and promoting their importance as heritage assets.
- To identify opportunities to enhance public spaces, such as parks and other recreational areas, through diverse placemaking techniques.
- To promote a pedestrian-friendly environment with pathways that promote walkability, within the neighborhood.

1.8.2 LIMITATIONS

- Focus will remain on the neighbourhood aspect of the delineated area, which is a part of a much broader context.
- The study has been made based on a few assumptions wherever necessary, due to lack of availability of data.

1.9 METHODOLOGY

In order to approach the case, the methodical approach that has been followed-
The flowchart here demonstrates the plan of action adopted from ideation to realization
of this urban design thesis. The overall steps involved can be stated as follows-

- Formulation of an urban design thesis problem
- Identification of a suitable site
- Survey (Questionnaire, Visual)
- Primary Data Collection and Documentation (On site)
- Secondary Data Collection (Authenticated literary sources)
- Analysis of the data and inferences drawn
- Design Implementation

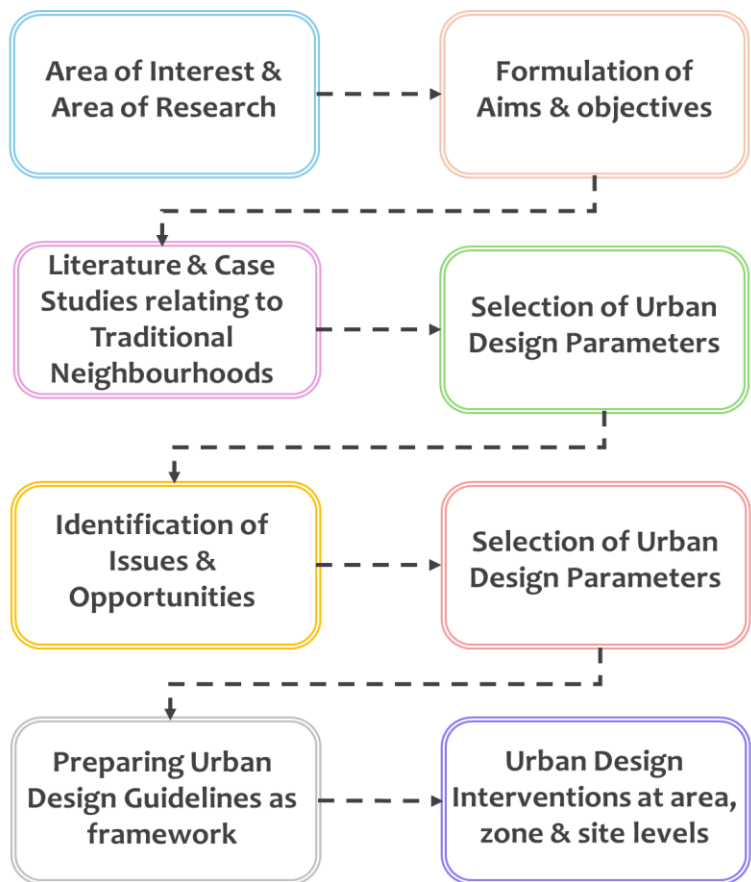


TABLE 2: Steps undertaken for the completion of thesis work

[SOURCE: Author]

A detailed architectural sketch of a street scene, likely in Kolkata, India. The sketch shows a wide street with a tram on the left and a building with a large arched entrance on the right. The drawing is done in a loose, expressive style with visible lines and shading. The text '02' is overlaid on the right side of the image.

02

CASE EXAMPLES

— Anirul — 21
Kolkata — ..

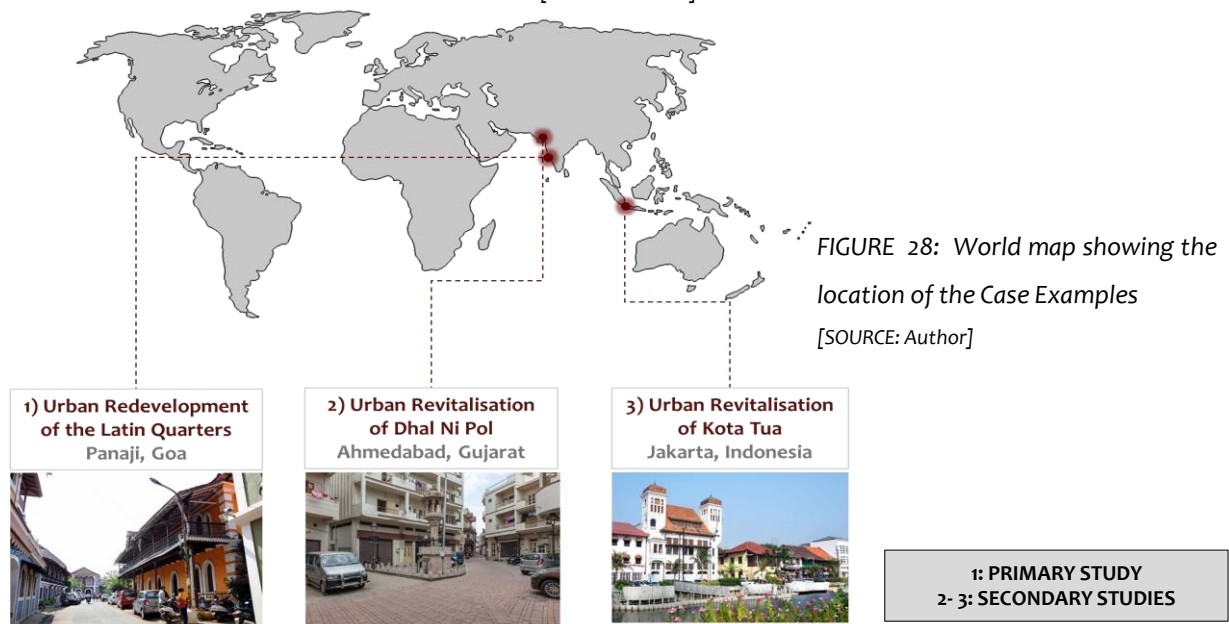
2.1 SELECTION OF CASE EXAMPLES

Criteria for selecting the case examples with respect to the site(Bagbazar):

- Similar texture and pattern
- Traditional mixed- use neighbourhoods
- Strong influence of cultural heritage and identity
- Local interventions aimed at people
- Enhancing the overall public realm
- Creating a sense of place
- Improving visual aesthetics
- Contextual fit of modern elements

1) LATIN QUARTERS, GOA	2) DHAL NI POL, GUJARAT	3) KOTA TUA, INDONESIA
<div><input type="checkbox"/> AREA SIMILARITIES-</div> <div><ul style="list-style-type: none">▪ Colonial architecture▪ Traditional mixed-use neighbourhoods▪ Strong influence of cultural heritage and identity</div> <div><div><input type="checkbox"/> PROJECT GOALS –</div><div><ul style="list-style-type: none">▪ Proximity to a river▪ Preservation of local identity</div></div> <div><ul style="list-style-type: none">▪ Infrastructure Improvement▪ Community focused urban design▪ Promoting tourism opportunities</div>	<div><input type="checkbox"/> AREA SIMILARITIES-</div> <div><ul style="list-style-type: none">▪ Traditional mixed use-neighbourhood setting▪ Historic urban heritage▪ Strong influence of cultural heritage and identity</div> <div><div><input type="checkbox"/> PROJECT GOALS –</div><div><ul style="list-style-type: none">▪ Preservation of local identity▪ Community centric design▪ Promoting tourism and environmental sustainability▪ Overall upgradation of public infrastructure▪ Pedestrian friendly design</div></div>	<div><input type="checkbox"/> AREA SIMILARITIES-</div> <div><ul style="list-style-type: none">▪ Mixed – Use neighbourhoods▪ Proximity to a canal▪ Decay of Urban Heritage</div> <div><div><input type="checkbox"/> PROJECT GOALS –</div><div><ul style="list-style-type: none">▪ Public space enhancement▪ Urban Renewal▪ Adaptive reuse of historic structures▪ Pedestrianisation of streets▪ Economic Revitalisation</div></div>

TABLE 4: Characteristic features of the Case Examples
[SOURCE: Author]



2.2 LATIN QUARTERS, PANAJI, GOA, INDIA

2.2.1 DESCRIPTION

The project was pitched as a government scheme with the aim to **upgrade the street and open spaces of the neighborhood, thus ensuring a better quality of life to residents**, and perhaps provide opportunities for the local economy to prosper.

Project Details :

Project boundary – 13.5 acres

Duration of project– 2010-2014

Development body – Charles Correa Foundation (CCF)

Design Initiatives :

- Efforts to conserve the colonial-era buildings showcasing Portuguese architecture that characterize the Latin Quarters by restoring and maintaining historic structures.
- Improvement of streetscape to beautify the public spaces, by repaving sidewalks, installing street furniture, planting trees, upgrading lighting and signage, etc.
- Implementation of zoning regulations and heritage preservation guidelines to protect the architectural integrity and character.
- Promotion of tourism through development of tourism infrastructure. [SOURCE: 01_10_newsletter-2.0-3.pdf(charlescorreafoundation.org)]

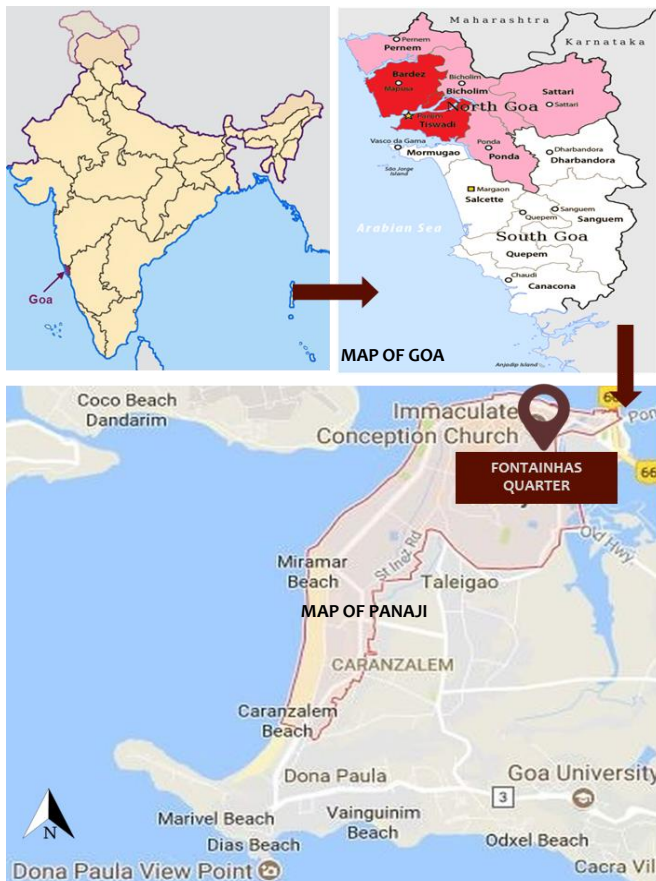


FIGURE 29: Maps showing the location of the Latin Quarters in the capital city of Goa, India
[SOURCE: Google]

URBAN REJUVENTATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY : Case Application at Bagbazar, Kolkata, West Bengal

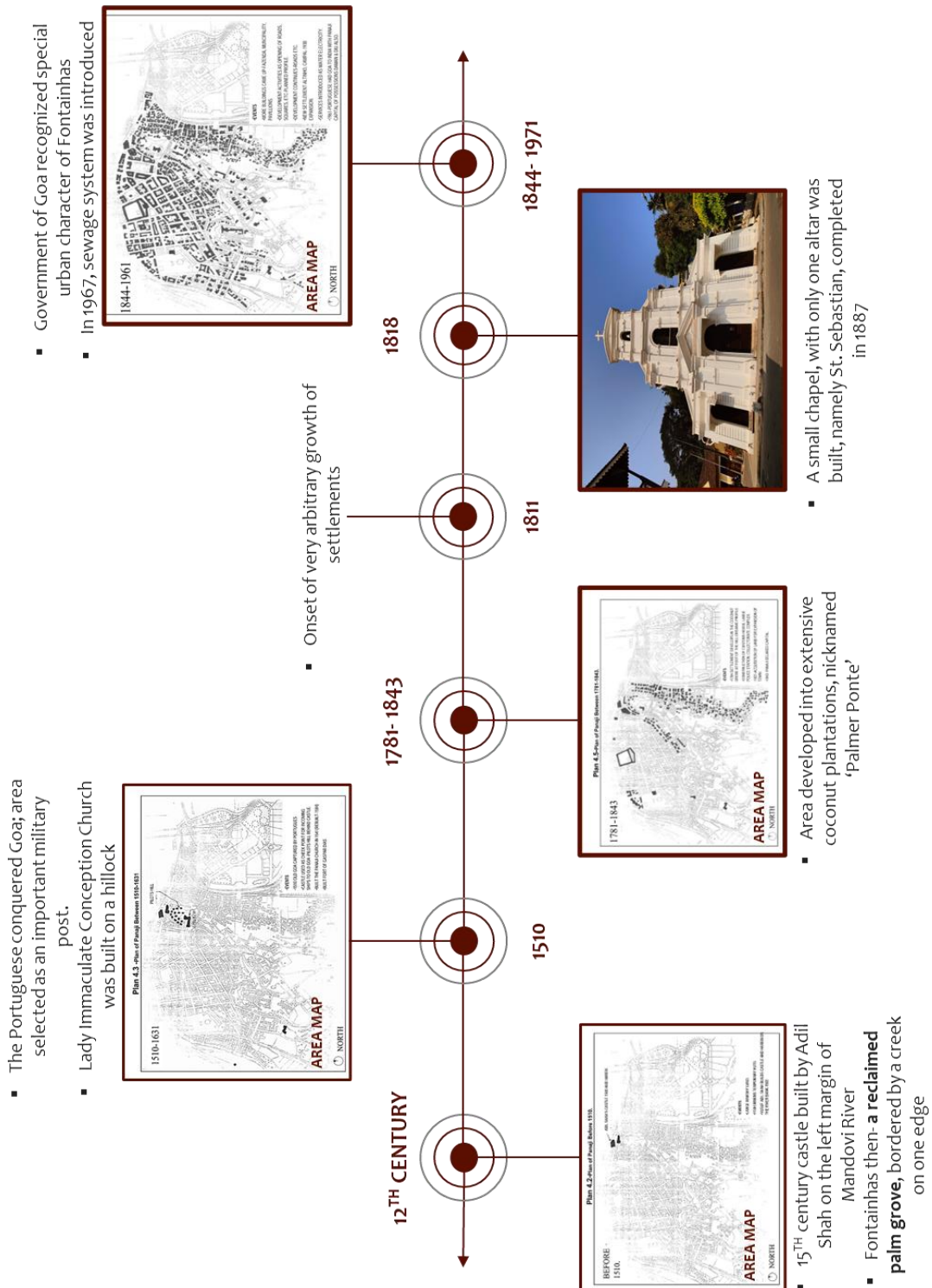


TABLE 5: Timeline showing the Evolution Of the Latin Quarters In Panaji, Over The Years

[SOURCE: Author]

2.2.2 SURVEY AND ANALYSIS

2.2.2.1 URBAN SPACE AND FORM



- Predominantly residential with some commercial establishments, such as cafes, art galleries, and boutique shops
- The Portuguese influence is strongly manifested in the area in the **Indo-Portuguese style of architecture**.
- With the **narrow colourful facades decorated with pilasters, cornices and moldings**, Fontainhas has been considered and protected by law as a Heritage Conservation area.
- The basic material used for construction of the houses was **taipa (wetted mud)**, reinforced with **bamboo netting and cocunut husk**, while the walls were plastered with a lime and cane jaggery mixture.
- Most of the residential buildings have front **open spaces like courtyards and gardens** enhancing the urban aesthetic and microclimate. [Source: A Case Study of Fontainhas Area | www.ijmer.com]

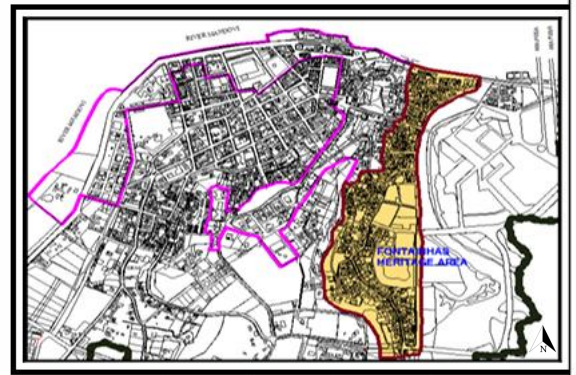


FIGURE 30: Map highlighting the Latin Quarters (Fontainhas), Panaji, Goa [SOURCE: www.ijmer.com]

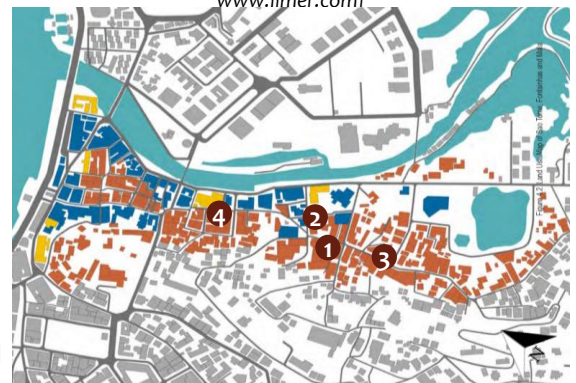


FIGURE 31: Landuse Map highlighting the Latin Quarters (Fontainhas), in Panaji, Goa [SOURCE: A Case Study of Fontainhas Area | www.ijmer.com]

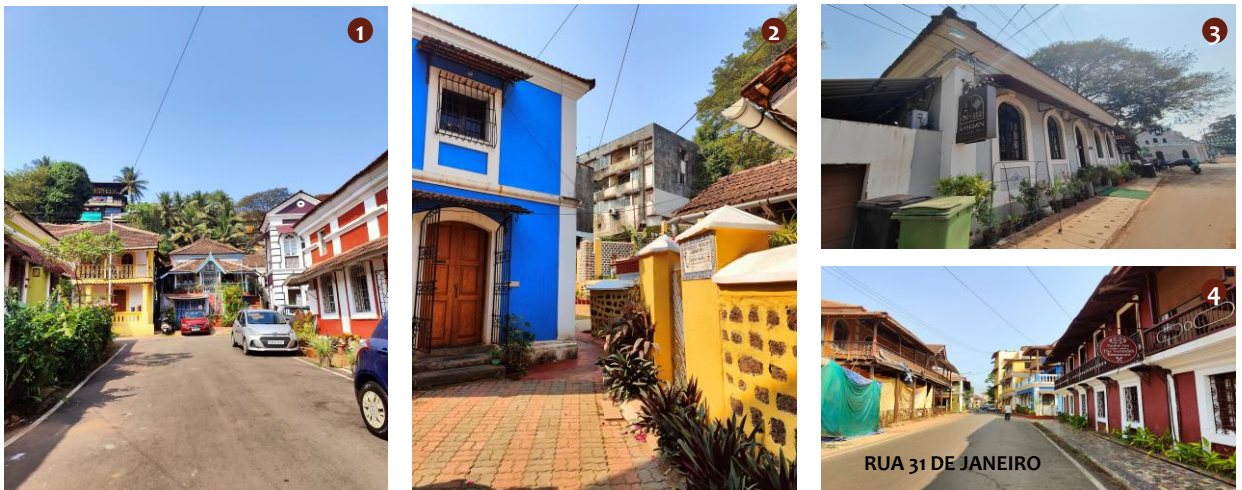


FIGURE 32: Existing built structures in the Latin Quarters, Panaji
[SOURCE: Author]

2.2.2 SURVEY AND ANALYSIS

2.2.2.2 EDGES

A) WATER EDGE:

- **Located along the Mandovi River**, providing scenic views and a unique waterfront character.
- Historically **used for trade and transportation**, now a key area for **recreational activities**.

Revitalization Initiatives: Enhancement of the riverfront promenade, creation of pedestrian walkways and a bridge, seating areas, and green spaces to improve public access and enjoyment.

B) WALL EDGE:

- A **small percentage of residential buildings have low- height walls** defining property boundaries and contributing to the area's historic charm.
- Often **adorned with murals and traditional artwork**, reflecting the cultural heritage.

Revitalization Initiatives: Incorporating art installations and lighting to highlight architectural details and enhance nighttime aesthetics.

C) STREET EDGE:

- **Narrow, winding streets** with a mix of residential and commercial frontages.
- Buildings with **balconies and verandas directly opening onto the streets**, promoting interaction.

Revitalization Initiatives: Improvement of streetscapes with better paving, street furniture, and landscaping to enhance walkability and visual appeal.

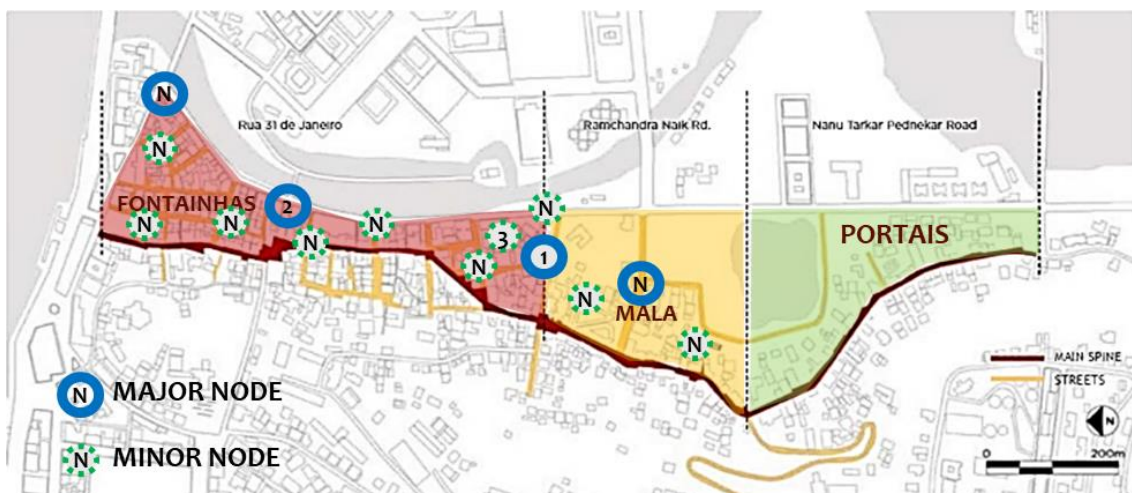


FIGURE 33: Maps showing the major Nodes & Edges of the Latin Quarters in the capital city of Goa, India
[SOURCE: A Case Study of Fontainhas Area | www.ijmer.com]

2.2.2 SURVEY AND ANALYSIS

2.2.2.3 MOVEMENT



- Fontainhas is **organized in a linear profile**, along the primary spine of Rua 31 de Janeiro. It has houses lined up along its stretch as it narrows organically, adding **elements of surprise to the visitor**. The main spine becomes Ramachandra Naik Road, as it enters Mala.
- **This spine was initially created as a pedestrian pathway, but now suffers from vehicular congestion disturbing the street life.**
- Secondary lanes and alleys providing access to residential areas and local businesses.
- **Lack of designated parking areas** in the neighborhood is a cause of roadblocks in some areas, especially during tourist seasons.
- **Historic pathways often flanked by heritage buildings**, contributing to the area's unique charm

Revitalization Initiatives : Implementation of traffic calming measures, expanded sidewalks, and pedestrian crossings to prioritize pedestrian movement and improve the overall experience.

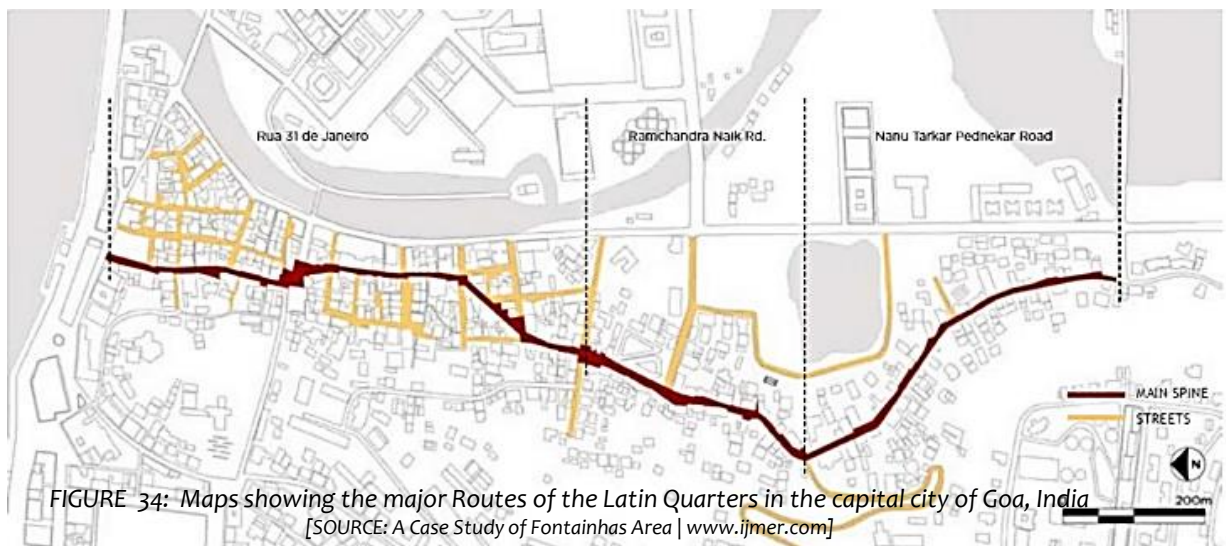


FIGURE 34: Maps showing the major Routes of the Latin Quarters in the capital city of Goa, India

[SOURCE: A Case Study of Fontainhas Area | www.ijmer.com]



FIGURE 35: RIO DE OUREM IN PATTO



FIGURE 36: RUA 31 DE JANEIRO



FIGURE 37: INTERNAL STREETS
[SOURCE: Author]

2.2.2 SURVEY AND ANALYSIS

2.2.2.4 ACTIVITIES



A) MAGNETS & GENERATORS

- **St. Sebastian Chapel** and various heritage buildings **serve as cultural and historical magnets.**
- Key public spaces like Panaji Municipal Market attract both locals and tourists.
- Other magnets include several boutique hotels, cafes and restaurants that lie within the neighbourhood.

Revitalization Initiatives: Restoration and enhancement of landmark buildings like the St. Sebastian Chapel, to preserve their historical significance and attract visitors.

B) MAJOR & MINOR NODES

- **Major intersections such as the junction of 31st January Road and Rua de Ourem**, serving as key navigational nodes.
- **Squares like Azad Maidan** act as gathering points for **social interaction** and community events like fairs and exhibitions.
- **Lack of well- defined nodes** lead to overlapping of different activity zones during peak tourist seasons.

Revitalization Initiatives: Creation of interactive spaces and public art installations at key nodes to engage the community and visitors.

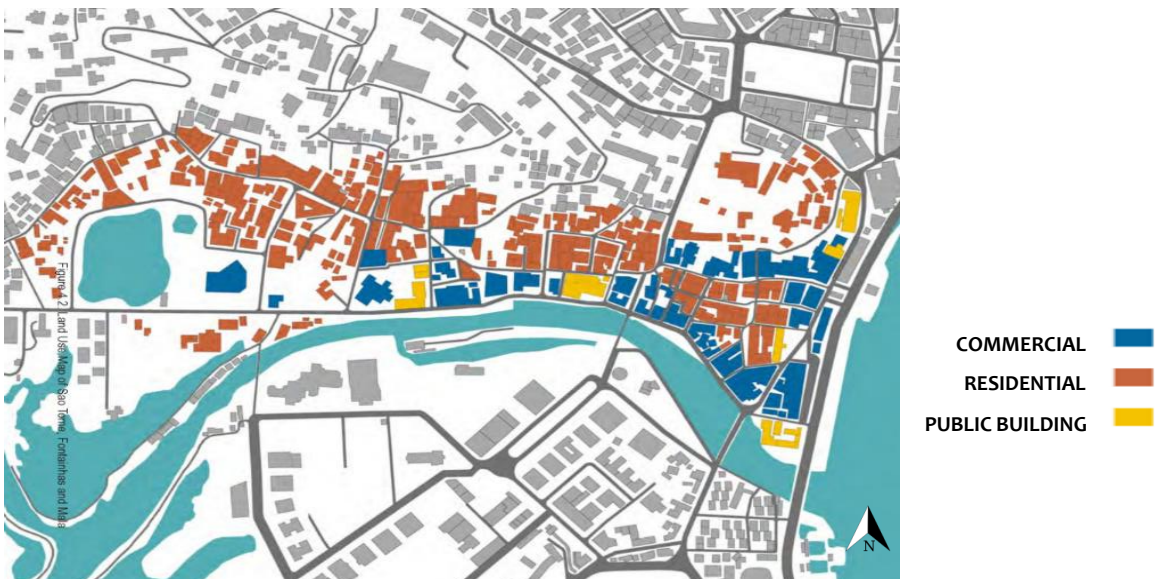


FIGURE 38: Maps showing the Landuse Activities of the Latin Quarters in the capital city of Goa, India
[SOURCE: A Case Study of Fontainhas Area | www.ijmer.com]

2.2.2 SURVEY AND ANALYSIS

2.2.2.5 VISUAL CHARACTER



A) VIEWS & VISTAS

- **Picturesque streetscapes** featuring vibrant, colorful Portuguese-style houses
- **Panoramic views of the Mandovi River** and the surrounding landscape

Revitalization Initiatives: Preservation of key view corridors to maintain unobstructed scenic vistas, along with enhancement of streetscapes with careful restoration of building facades and improvements to street furniture.

B) LANDMARKS

- **St. Sebastian Chapel, the Fontainhas Heritage Hotel,** and other significant colonial-era buildings

Revitalization Initiatives: Restoration of building facades to ensure their structural integrity and aesthetic appeal. And installation of informative signage and plaques to educate visitors about the historical significance of landmarks and easy wayfinding.



FIGURE 39: Map highlighting some of the major and minor Landmarks of the Latin Quarters in the capital city of Goa, India
[SOURCE: A Case Study of Fontainhas Area | www.ijmer.com]



PEDESTRIAN BRIDGE



THE ICONIC STAIRCASE IN MALA



RESTAURANT

FIGURE 40: Examples of major and minor Landmarks of the Latin Quarters in the capital city of Goa, India
[SOURCE: Author]

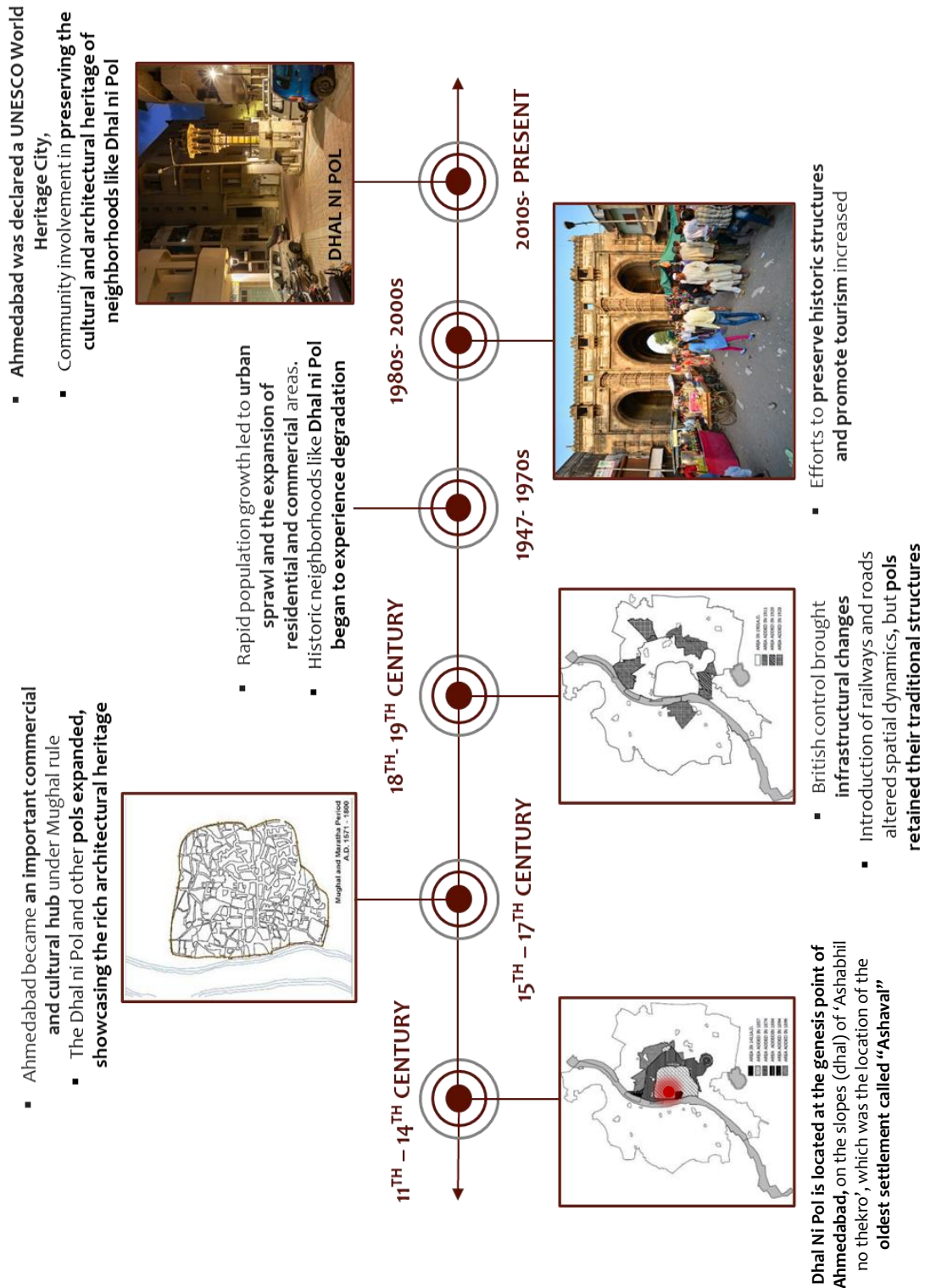


TABLE 6: Timeline showing the evolution of Dhal Ni pol inside the walled city of Ahmedabad, over the years

[SOURCE: Author]

[SOURCE: Author]

2.3.2 SURVEY AND ANALYSIS

2.3.2.1 URBAN SPACE AND FORM



A) LAND- USE PATTERN:

- A **predominantly residential neighbourhood precinct**, with commercial spaces at the ground level, including shops, markets, etc.

Revitalization Initiatives: Encouragement of adaptive reuse of buildings to maintain mixed-use functionality while preserving historical integrity.

B) OPEN SPACES:

- A **densely packed neighbourhood, with shared courtyards** within residential blocks that serve as areas for social interaction and other activities.
- Community **open spaces include internal pedestrian streets and the chowks**

C) ARCHITECTURAL CHARACTER:

- **Traditional pol houses** characterized by **ornate wooden facades, intricate carvings**, and distinct vernacular architecture.
- **Narrow, winding lanes** that create a unique and **intimate urban fabric**.

Revitalization Initiatives: Preservation and restoration of historic pol houses to maintain architectural heritage. Also, formulation and implementation of guidelines for new constructions to ensure they blend seamlessly with the existing historic character

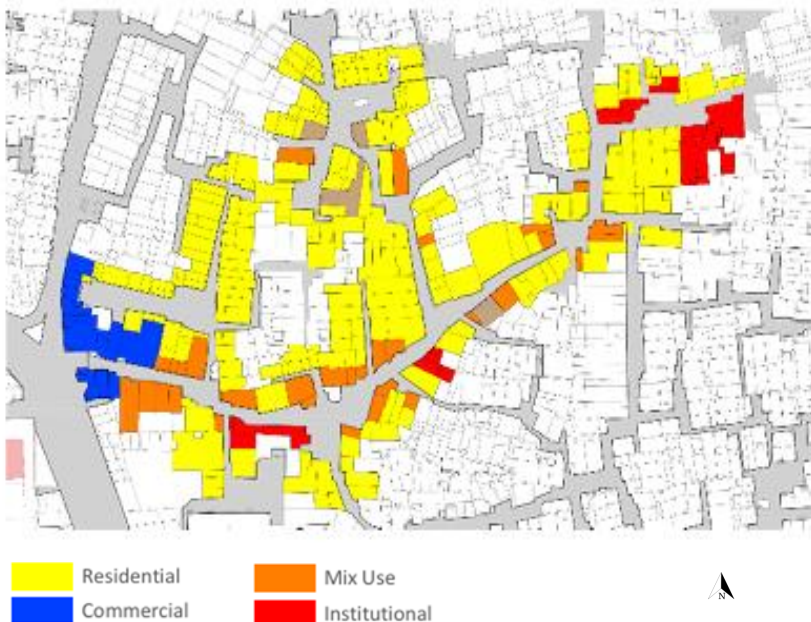


FIGURE 42: Map showing the Building Uses in Dhal Ni Pol Ahmedabad, Gujarat [SOURCE: Revitalization of Dhal ni Pol| MHT]

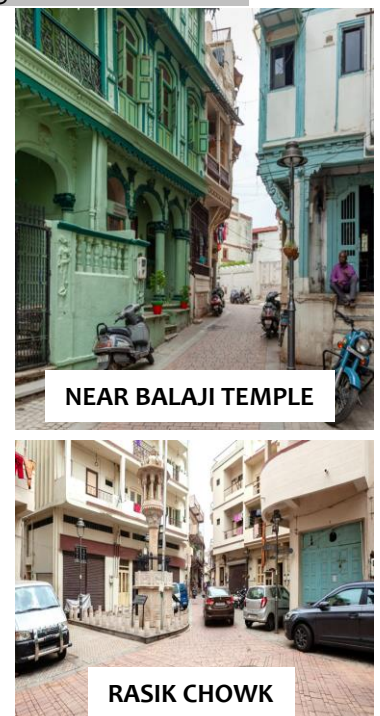
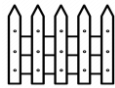


FIGURE 43: Pictures highlighting the Architectural Features of Dhal Ni Pol, post Revitalisation [SOURCE: Revitalization of Dhal ni Pol| MHT]

2.3.2 SURVEY AND ANALYSIS

2.3.2.2 EDGE



B) WALL EDGE :

- **Continuous wall edges forming a distinct boundary** that defines the narrow lanes and courtyards
- Walls **adorned traditional artwork**, reflecting the local cultural heritage.

Revitalization Initiatives: Restoration and beautification (using graffiti, art installations, etc.) of damaged or deteriorating facades to preserve historical details and structural integrity.

C) STREET EDGE :

- Intimate, **pedestrian-friendly streets lined with pol houses**, creating a cohesive urban fabric.
- **Active street edges with shops, markets, and community spaces** contributing to vibrant street life.

Revitalization Initiatives: Upgrading street surfaces and improving drainage to enhance accessibility and reduce waterlogging. Installing street lighting and signage, and other street furniture to improve navigation while maintaining the historic ambiance.



FIGURE 44: Map highlighting the street and the Built Edges in Dhal Ni Pol Ahmedabad, Gujarat [SOURCE: Revitalization of Dhal ni Pol| MHT]

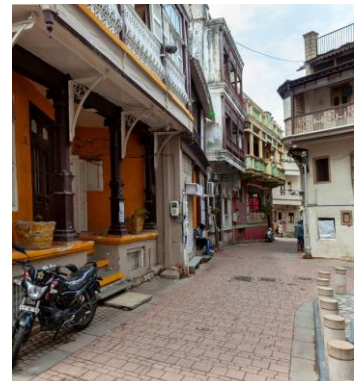


FIGURE 45: Pictures showing views of the Street and the Built Edges in Dhal Ni Pol Ahmedabad, Gujarat, post Revitalisation [SOURCE: Revitalization of Dhal ni Pol| MHT]

2.3.2 SURVEY AND ANALYSIS

2.3.2.3 MOVEMENT



- **Characterized by winding, narrow lanes** that connect various parts of the neighbourhood.
- **Intimate pathways that facilitate pedestrian movement** and fosters community interaction.

Revitalization Initiatives : Resurfacing of lanes to improve pedestrian access and comfort; Introduction of signage and wayfinding systems to guide residents and visitors through the labyrinthine pathways; Beautification efforts such as adding street art, planters, and benches to make routes more appealing and usable; Encouragement of pedestrian-only zones in key areas to promote a walkable environment.

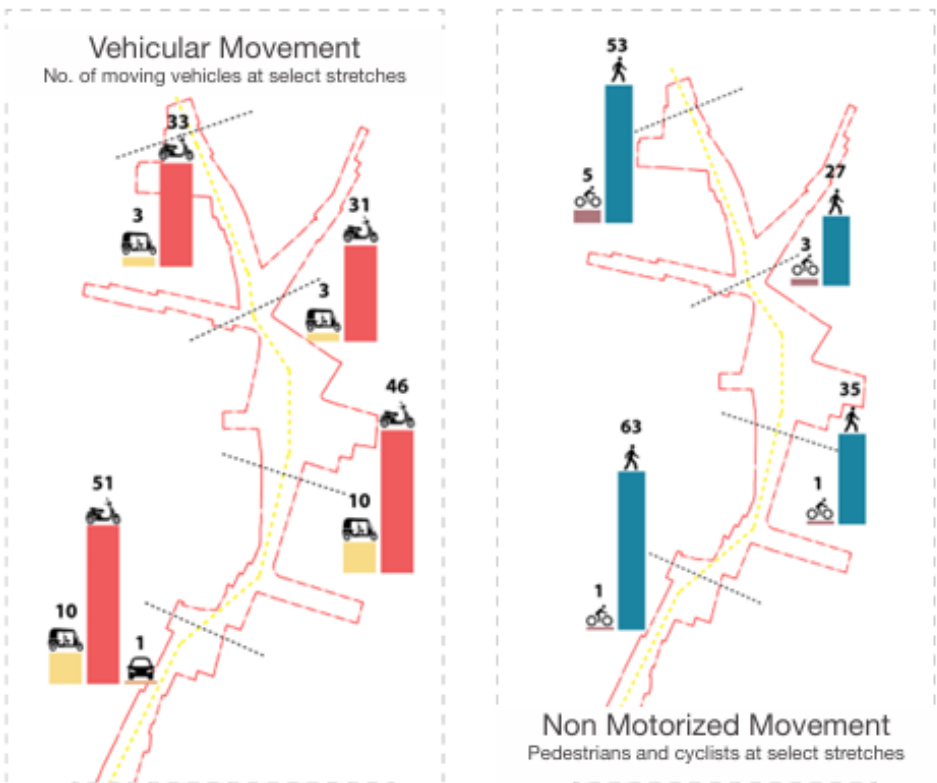


FIGURE 46: Map showing the Types of Movement in Dhal Ni Pol Ahmedabad, Gujarat, at different times of the day [SOURCE: Revitalization of Dhal ni Pol| MHT]

2.3.2 SURVEY AND ANALYSIS

2.3.2.4 ACTIVITIES



A) MAGNETS & GENERATORS

- **Temples such as Kalupur Swaminarayan Mandir** and markets like **Ratan Pol Market** act as cultural and economic magnets.
- These landmarks attract both residents and visitors, contributing to the vibrancy of the neighbourhood.

Revitalization Initiatives: Introduction of cleanliness drives and waste management systems to improve the overall environment and attractiveness of these areas.

B) MAJOR & MINOR NODES

- A **major node** includes the famous **Central Chabutro Square**, serving as a focal point for community gatherings and events.
- Minor nodes like **street intersections and public squares** also contribute to the neighborhood's social fabric

Revitalization Initiatives: Restoration and beautification of squares and nodes through landscaping,, and lighting enhancements; Segregating different activity zones on the inner pedestrian streets, like vending zones, or streets parking zones etc. to reduce unnecessary overlapping of activities.

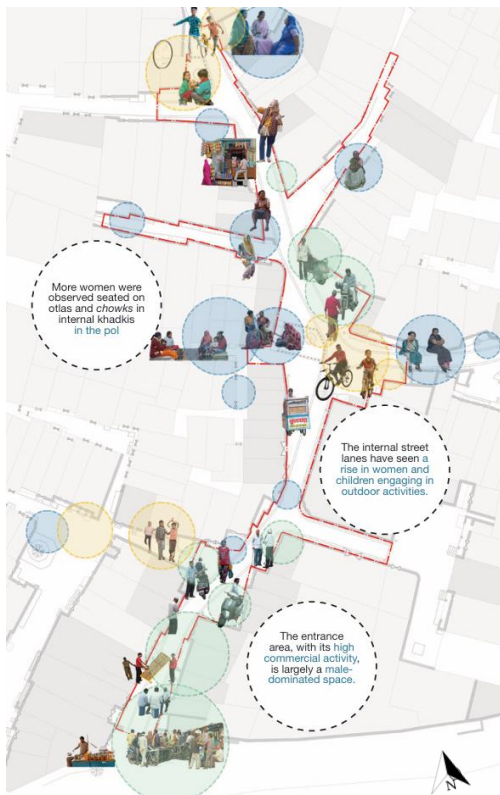


FIGURE 47: Pictures showing the Types of Activities in Dhal Ni Pol Ahmedabad, Gujarat, at different times of the day
[SOURCE: Revitalization of Dhal ni Pol| MHT]

FIGURE 48: Maps highlighting the Types of Activities in Dhal Ni Pol Ahmedabad, Gujarat, at different times of the day
[SOURCE: Revitalization of Dhal ni Pol| MHT]

2.3.2 SURVEY AND ANALYSIS

2.3.2.5 VISUAL CHARACTER



A) VIEWS & VISTAS

- **Vistas of narrow, winding lanes** that create an intimate and picturesque urban environment.
- **Panoramic views of the Mandovi River** and the surrounding landscape

Revitalization Initiatives: Preservation of historic buildings and streetscapes to maintain the neighborhood's visual charm; Enhancement of views by clearing obstructed sightlines and improving streetscape aesthetics.

B) LANDMARKS

- Landmarks such as temples, chowks (squares) and *chabutaras* (bird feeding platforms) add to the neighborhood's character.
- Architectural features like ornate doorways and carved facades serve as iconic landmarks.

Revitalization Initiatives: Restoration and adaptive reuse of historic buildings to ensure their preservation and visibility.



FIGURE 49: Map showing the proposed revitalization plan Dhal Ni Pol
[SOURCE: Revitalization of Dhal ni Pol| MHT]



ENTRANCE GATE



RASIK CHOWK

FIGURE 50: Pictures highlighting the Architectural Features and major Landmarks of Dhal Ni Pol, post Revitalisation [SOURCE: Revitalization of Dhal ni Pol| MHT]

2.4 KOTA TUA, JAKARTA, INDONESIA

2.4.1 DESCRIPTION

The city government of Jakarta has developed a comprehensive urban plan to revitalize the historic neighborhood of Kota Tua in an **inclusive and participatory way**. A key objective of the **revitalization plan is to increase tourism** to Kota Tua. Another key objective of the plan is the **creation of high-quality public spaces**, including the **redevelopment of the existing historic squares**. A further objective has been the **improvement of the accessibility of Kota Tua**, which was identified as crucial for the successful implementation of the project.

Project Details :

Project boundary – 321 acres

Duration of project– Ongoing since 2014

Development body –Government Bodies, Private Sector, Community / Citizen Group

Design Initiatives :

- Enhancing pedestrianization of the overall area by prohibiting motorcycles and cars from entering the core zone
- Connecting all streets to the local square, known as- Fatahillah Square in a pedestrian-friendly manner
- Parking space and street vendor regulation by designating spaces and improving facilities
- Implementation of family -friendly facilities such as a library and graffiti wall
- Implementation of a transit- oriented approach
- Revitalization of the existing canal front [SOURCE: Analytical study of Kota Tua, Jakarta - UNESCO Digital Library ; Revitalizing cultural heritage in Jakarta's Kota Tua neighbourhood (metropolis.org); 22_cultural_heritage_jakarta.pdf (uclg.org)]

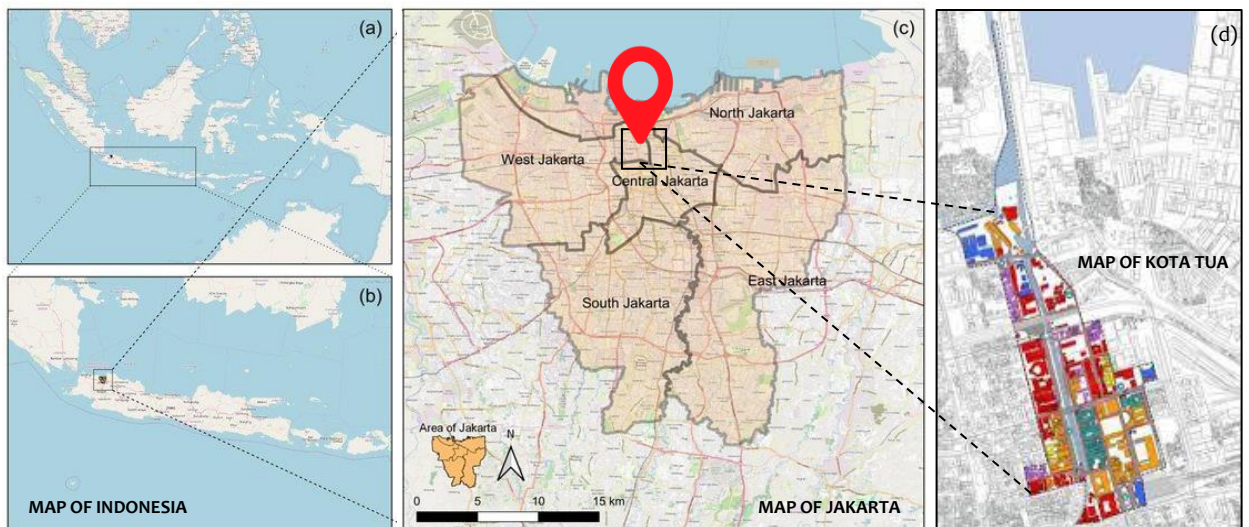


FIGURE 51: Maps showing the location of the Kota Tua Neighbourhood, in Jakarta, Indonesia

[SOURCE: 22_cultural_heritage_jakarta.pdf (uclg.org)]

URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
Case Application at Bagbazar, Kolkata, West Bengal

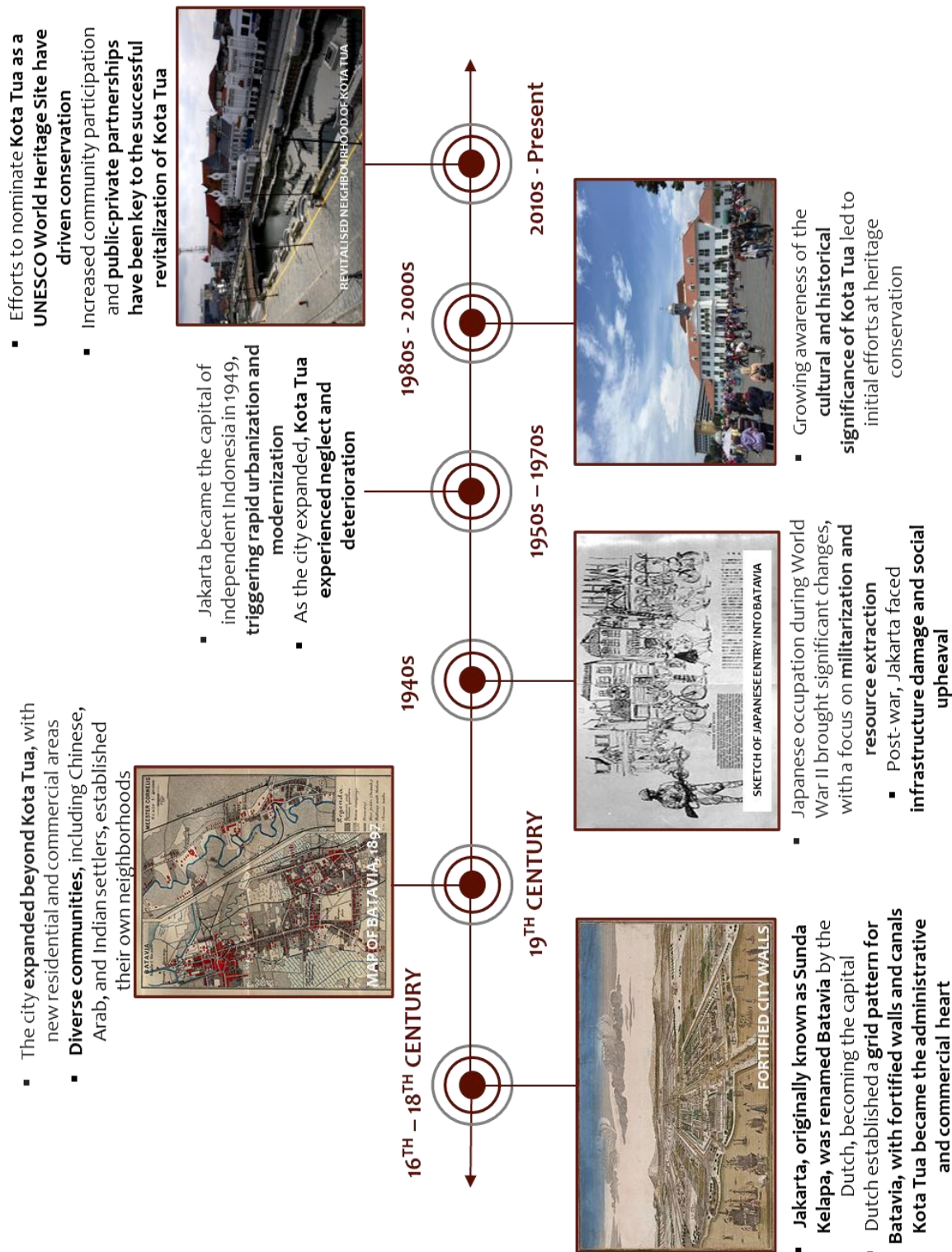


TABLE 7: Timeline showing the evolution of Kota Tua Neighbourhood, in Jakarta, Indonesia, over the years

[SOURCE: Author]

2.4.2 SURVEY AND ANALYSIS

2.4.2.1 URBAN SPACE AND FORM



A) LAND- USE PATTERN:

- **Historic buildings** in the neighbourhood, repurposed for **commercial, cultural, and tourism-related activities**.
- Combination of museums, galleries, cafes, and shops attracting both locals and tourists.

Revitalization Initiatives: Adaptive reuse of historic buildings to accommodate contemporary functions while preserving heritage.

B) OPEN SPACES:

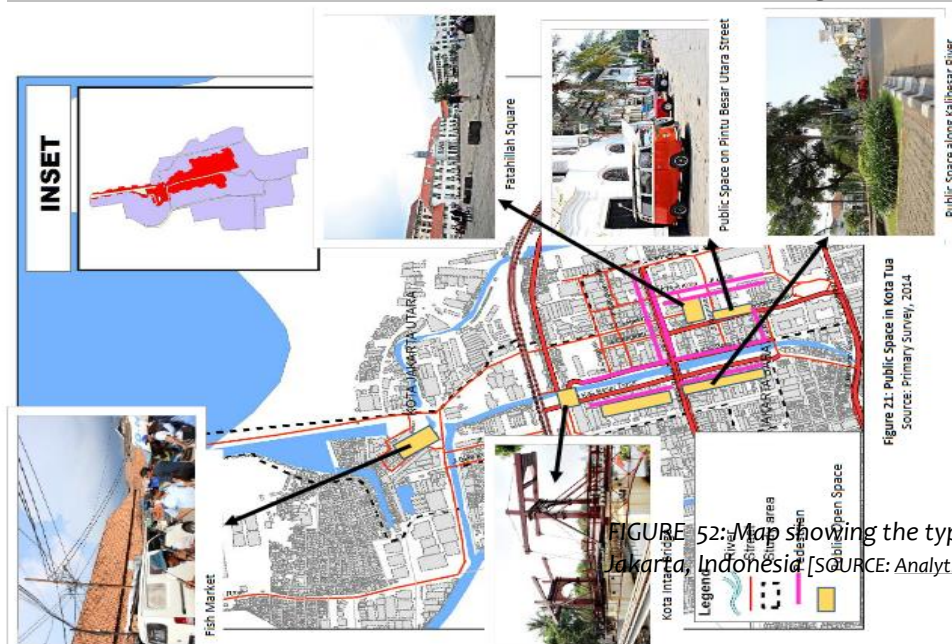
- Existence of a **huge central open space serving as a public square, the Fatahillah Square**, and acts as focal point for public activities and events.
- The **existing canal front, the Kali Besar canal**, acts as another inviting open space for the communal activities

Revitalization initiatives: Restoration and beautification of Fatahillah Square to create a more inviting and functional public space. Introduction of landscaping, seating areas, and lighting to enhance usability and aesthetics, along the canal front.

C) ARCHITECTURAL CHARACTER:

- Presence of **well-preserved colonial buildings** with distinctive architectural styles, showcasing colonial Dutch architectural styles.
- **Iconic structures such as the Jakarta History Museum and Wayang Museum reflecting Dutch influence.**

Revitalization Initiatives: Implementation of heritage conservation guidelines to maintain the historical and architectural character of the neighborhood.



[FIGURE 52: Map showing the types of spaces in Kota Tua, Jakarta, Indonesia] [SOURCE: Analytical study of Kota Tua, Jakarta - UNESCO Digital Library]

2.4.2 SURVEY AND ANALYSIS

2.4.2.3 MOVEMENT



- The historical street pattern, forming dense network of narrow, winding streets reflecting the colonial-era urban layout.
- Lack of adequate parking options still heavily impact the pedestrians of the area.

Revitalization Initiatives : Conversion of key streets into pedestrian-only zones to enhance walkability and reduce vehicular congestion; Installation of street furniture, reflective of the historic style; Integration of green spaces and small parks along the routes to provide resting spots and enhance the urban greenery; Development of pathways connecting major heritage sites, public spaces, and transportation hubs to ensure easy access and a seamless everyday experience.

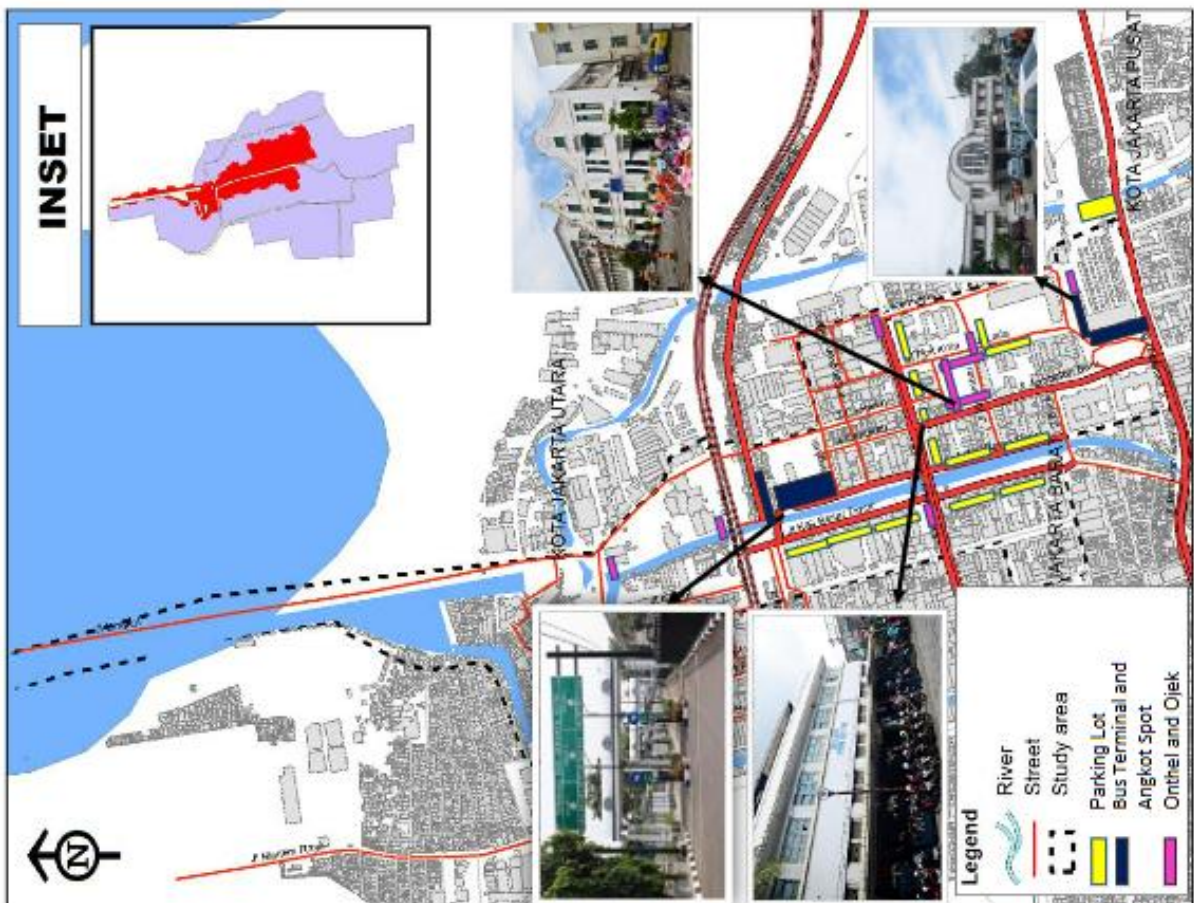


FIGURE 53: Map showing the Major Routes and Transportation hubs in Kota Tua, Jakarta, Indonesia [SOURCE: Analytical study of Kota Tua, Jakarta - UNESCO Digital Library]

2.4.2 SURVEY AND ANALYSIS

2.4.2.4 ACTIVITIES



A) MAGNETS & GENERATORS

- Attractions like **Fatahillah Square, Jakarta History Museum, and the Wayang Museum** serve as **cultural magnets** drawing both tourists and locals alike.
- **Local markets, cafes, and art galleries** that attract both day-to-day visitors and tourists.

Revitalization Initiatives: Repurposing old buildings for new uses such as boutique hotels, restaurants, and community centers to boost economic activity

B) MAJOR & MINOR NODES

- **The Fatahillah Square acts as a major node**, serving as a central hub for social and cultural gatherings.
- **Minor nodes include smaller intersections** and community gathering spots within residential areas.

Revitalization Initiatives: Creation of interactive spaces and public art installations at key nodes to engage the community and visitors; Improved signage and maps to help navigate through the neighborhood, connecting minor nodes with major nodes.



PEDESTRIAN ACTIVITIES IN- THE FATAHILLAH SQ=UARE AND NEAR THE CANALFRONT

FIGURE 54: Predominant Activities in the revitalized sector of Kota Tua, Jakarta, Indonesia
[SOURCE: Analytical study of Kota Tua, Jakarta - UNESCO Digital Library]

2.5 COMPARATIVE ANALYSIS OF THE CASE EXAMPLES






PARAMETERS	REDEVELOPMENT OF THE LATIN QUARTERS PANAJI, GOA	REVITALISATION OF DHAL NI POL AHMEDABAD, GUJARAT	REVITALISATION OF KOTA TUA JAKARTA, INDONESIA
 <p>URBAN SPACE & FORM</p>	<ul style="list-style-type: none"> Traditional built forms that are mostly single/ double storeyed in typicality Imbalance between built forms and open spaces Intermittent open spaces with no hierarchy 	<ul style="list-style-type: none"> Medium height traditional built forms Hierarchy of open spaces A predominantly residential neighbourhood Somewhat balance between built- open ratio 	<ul style="list-style-type: none"> Preservation of cultural heritage, maintaining the historical urban form while adapting to modern needs Designated open spaces like public squares, skate parks, etc Fragmented urban spaces causing uneven development Imbalance between built- open ratio
 <p>EDGE</p>	<ul style="list-style-type: none"> Well defined built edges Beautified water edge No plantations or pavements define the street edges 	<ul style="list-style-type: none"> Well defined built edges Streets edges are in proper conditions, defined by pavements & street furniture No plantations along the street edges 	<ul style="list-style-type: none"> Attractive built- edges using solutions like public art and graffiti walls Activated canal front Lack of green buffers Inadequate or discontinued sidewalks
 <p>MOVEMENT</p>	<ul style="list-style-type: none"> Discontinuous pavements that hamper walkability Lack of designated parking spaces, causing roadblocks No proper segregation for vehicular & pedestrian pathways 	<ul style="list-style-type: none"> Vehicular movement restricted at entrance gate, making the area predominantly pedestrian Well distinguished movement vs non- movement area Designated parking spaces 	<ul style="list-style-type: none"> Well-connected pedestrian streets that lead up to the central square Improved vehicular connectivity with new bus- stations, and TOD approach with MRT connections Vehicle restriction for pedestrianising the streets, causes congestions near the periphery
 <p>ACTIVITIES</p>	<ul style="list-style-type: none"> Lack of well-defined nodes promotes disorderly activities Many places of interests serve as magnets Daytime activities more than night Very different activity patterns during tourist and off seasons 	<ul style="list-style-type: none"> The existing open spaces like chowks & khanchos need to be activated Well- defined nodes causing ease of movement Designated spaces for vending activities The heritage buildings act as magnets to visitors and residents alike 	<ul style="list-style-type: none"> The existing and newly improved public square along with the landmarks located on its periphery act as major magnets Unregulated vendor activities near the central square Inadequate parking spaces
 <p>VISUAL CHARACTER</p>	<ul style="list-style-type: none"> Uniformity in façade treatments, built styles & heights of buildings Well defined vistas that enhance tourist experience Insufficient wayfinding measures up to the landmarks Change in urban character as one moves between the three neighbourhoods, from residential to institutional to commercial Insufficient street lighting causing dull night skyline 	<ul style="list-style-type: none"> Restored facades of buildings leading to create an improved identity and sense of place Properly implemented wayfinding measures Homogeneous urban character throughout the neighbourhood 	<ul style="list-style-type: none"> Inconsistency in the restored facades of heritage buildings Unregulated hawkers and vehicles cause restricted views detracting the visual appeal Monotonous views along the canal edge with no element of surprise

TABLE 8: Comparative analysis of the Case Examples
[SOURCE: Author]

2.6 URBAN DESIGN PARAMETERS FOR SITE STUDY

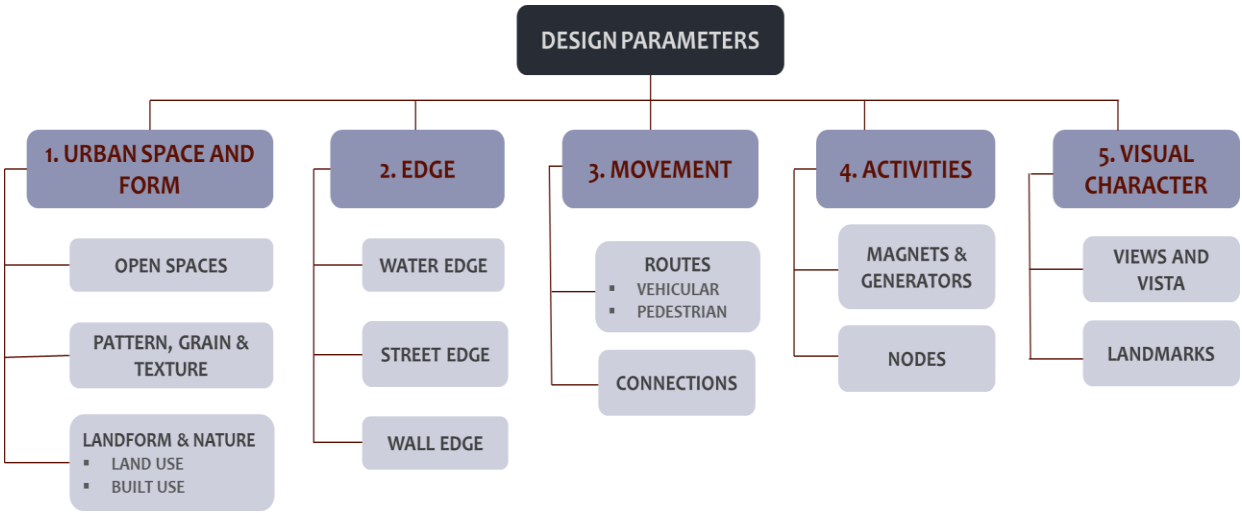


TABLE 9: Urban Design Parameters for Site Study
[SOURCE: Author]

As per Clarence Perry, the Neighbourhood is ideally based on principles such as self-sufficiency and interconnectedness, pedestrian- friendly design, hierarchy of roads, and parks and green spaces. The above-mentioned parameters have been derived from these stated principles, and after analyzing the basis of interventions carried out in the respective case examples .

A detailed architectural sketch in a light blue-grey tone serves as the background. It depicts a perspective view of a street lined with classical-style buildings. On the left, a building features a prominent arched doorway and a balcony. On the right, a long building with multiple windows and a flat roof is visible. A tram or trolley is sketched on the street in the distance. The overall style is that of a fine-lined architectural drawing.

03

CASE APPLICATION

— Anshul — 21
Kolkata — ..

3.1 AREA LEVEL STUDY

3.1.1 SELECTION

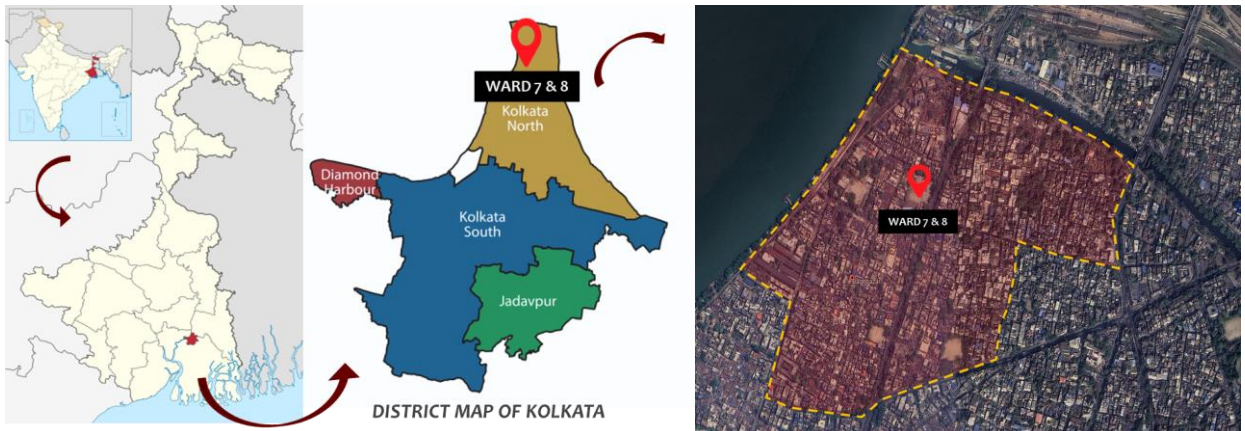
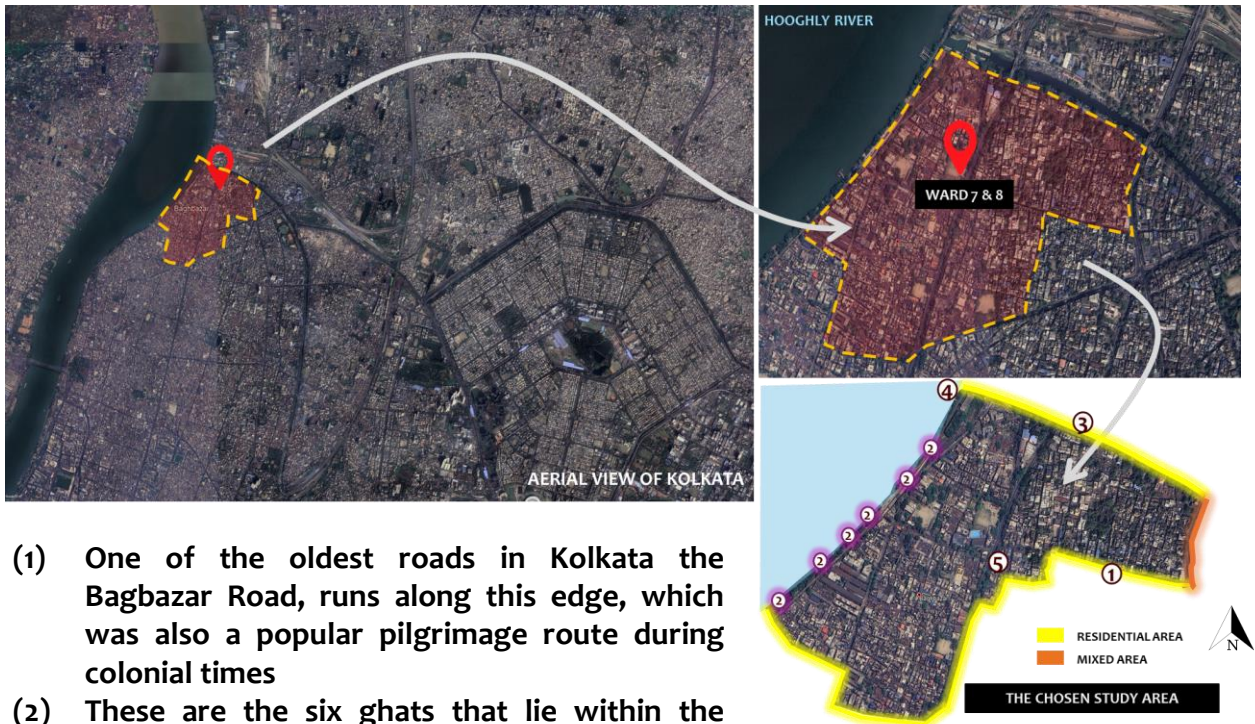


FIGURE 55: Maps showing the location of the Bagbazar Neighbourhood
[SOURCE: Google]



- (1) One of the oldest roads in Kolkata the Bagbazar Road, runs along this edge, which was also a popular pilgrimage route during colonial times
- (2) These are the six ghats that lie within the region
- (3) The Galiff Street that runs along this edge, is the home to Asia's largest weekly pet market
- (4) The Circular Canal merges with the Hooghly River at this point.

Despite its historical significance, Bagbazar has faced neglect and decay over the years, presenting a compelling case for urban rejuvenation efforts.

FIGURE 56: Maps showing the selected area for study in Bagbazar [SOURCE: Google]

The government and local authorities have lately shown interest in revitalizing the area, with ongoing works, providing a conducive environment for studying urban rejuvenation policies and their implementation.

3.1.2 DELINEATION OF THE AREA



FIGURE 57: Map of the area (Bagbazar) highlighting its main features [SOURCE: Author]

 AIRPORT Takes about 25 mins and 10 km via Dum Dum Road Netaji Subhash Chandra Bose (CCU) International Airport	 MAJOR ROADS Barrackpore Trunk Road, Rabindra Sarani, Kshirode Vidyavinode Avenue, also known as Girish Avenue.	 RAILWAY STATION The Circular Railway line runs through the area. Takes about 15 mins to reach Chitpur Railway Station, and about 20 mins to reach Sealdah Railway Station.
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TABLE 9: The Major Transportation Infrastructures, connecting Bagbazar [SOURCE: Author]



FIGURE 58: Kolkata International Airport, The BT Road, The Kolkata (Chitpur) Railway Station [SOURCE: Google]

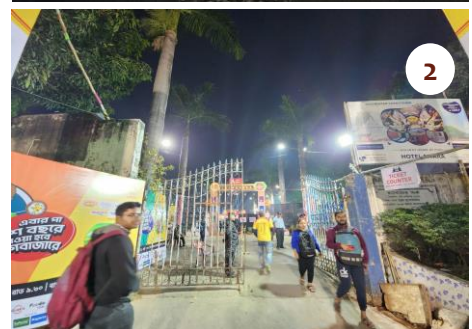
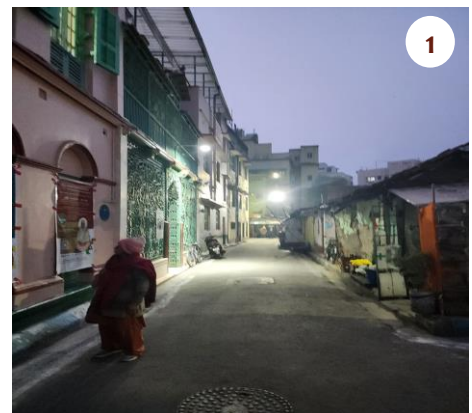
3.1.3 DESCRIPTION



FIGURE 59: Map of the area (Bagbazar) highlighting its main features [SOURCE: Author]

- The area is dotted with several places of heritage significance, such as : Sarada Mayer Bari, Basubati, Mayer Ghat, Girish Bhavan, among many others.
- Durga Pujo being a significant example of intangible heritage in the city, several pujo grounds are located within the area, that also have a heritage significance of their own. Examples include, Baghbazar Sarbojonin Durgotsav ground, Sater Palli Sarbojonin Durgotsav ground, Tal Betal Durga Pujo, Naba Bagbazar Sarbojonin Durga Pujo etc. among others.
- Educational buildings within this stretch include- Women's College Calcutta, Maharaja Cossimbazar Polytechnic Institute, Baghbazar Multipurpose Girls' School, Bagbazar Sarada Prathamik Bidyalaya, among others.

FIGURE 60: Mayer Bari, Bagbazar; Figure 10: Bagbazar Sarbojonin Durga Pujo Ground (from up) [SOURCE: Author]



3.1.4 SURVEY AND ANALYSIS

3.1.4.1 LAND USE

- Most of the neighbourhood has **predominantly residential land use**, having both densely packed residences, as well-planned housing societies.
- The **northern and western edges showcase industrial and commercial activities**, owing to the presence of several warehouses and godowns.
- The green areas, wherever present, consist of planned neighbourhood parks.

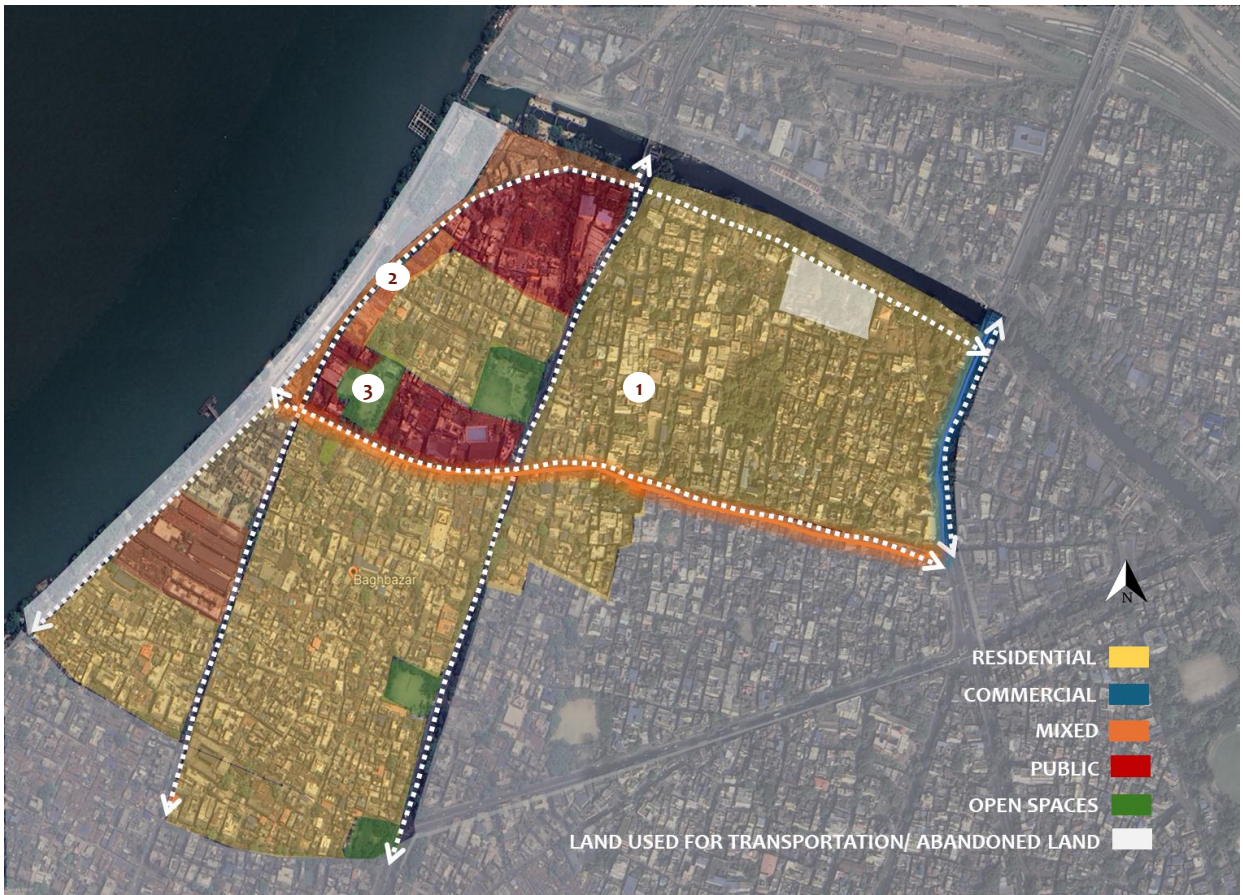


FIGURE 61: Landuse Map of the study area of Bagbazar [SOURCE: Author]

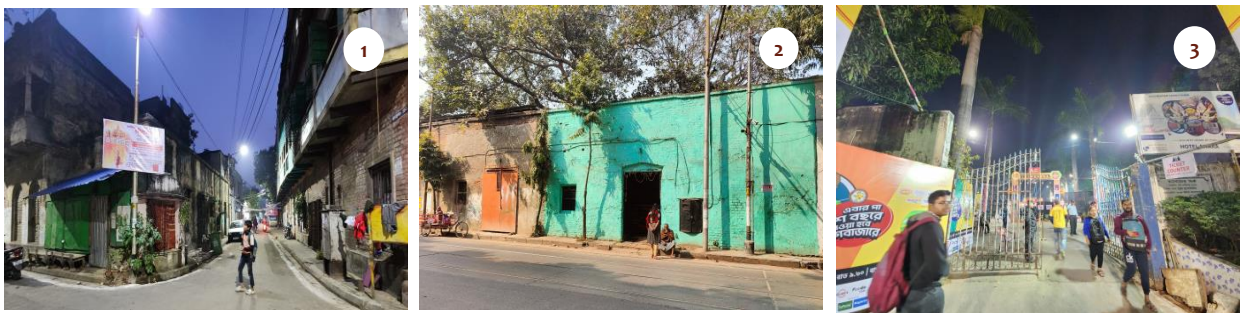


FIGURE 62: Low- height residences, Bagbazar; Figure 11: Warehouses along Rabindra Sarani;
Figure 10: Bagbazar Sarbojini Durga Pujo Ground (from left) [SOURCE: Author]

3.1.4 SURVEY AND ANALYSIS

3.1.4.2 BUILT AND OPEN SPACES

- The built forms in the area are **very densely placed, and mostly organised with some haphazard and scattered pockets** along the internal streets.
- The relatively **newer constructions are more regularized and evenly placed**, which include the housing societies and the apartment buildings.
- The **organic or haphazard pockets are mostly squatter settlements** and small residences that have developed along the canal edges, and at some other areas.
- The **built vs open ratio shows stark contrast, owing to scarcity of open spaces**, except for the few planned parks, and the vacant stretch near the riverfront.



FIGURE 63: Map showing the existing built fabric of Bgabazar [SOURCE: Author]

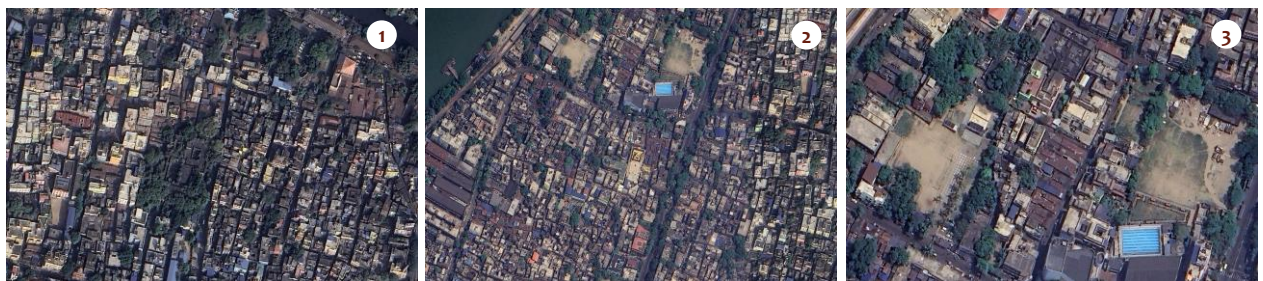


FIGURE 64: Dense built fabric, Bagbazar; Figure 11: Organised built forms, Bagbazar;
Figure 10: Defined Open Spaces (from left) [SOURCE: Author]

3.1.4 SURVEY AND ANALYSIS

3.1.4.3 ROAD NETWORK & NODES

The main roads that delineate the study area, include-

- **The Barrackpur Trunk Road** (4-lane State Highway), running along the eastern edge
- **The Bagbazar Street** serves as the main spine of the neighbourhood,
- **The Rabindra Sarani**, which was also active as the tram route, previously
- **The Galiff Street**, also known as the Mahatma Sisir Kumar Sarani, running along the northern edge
- **The KV Avenue, also known as the Girish Avenue** acting as another important vehicular route for the area
- **The Circular Railway Line**, runs through the area, as shown

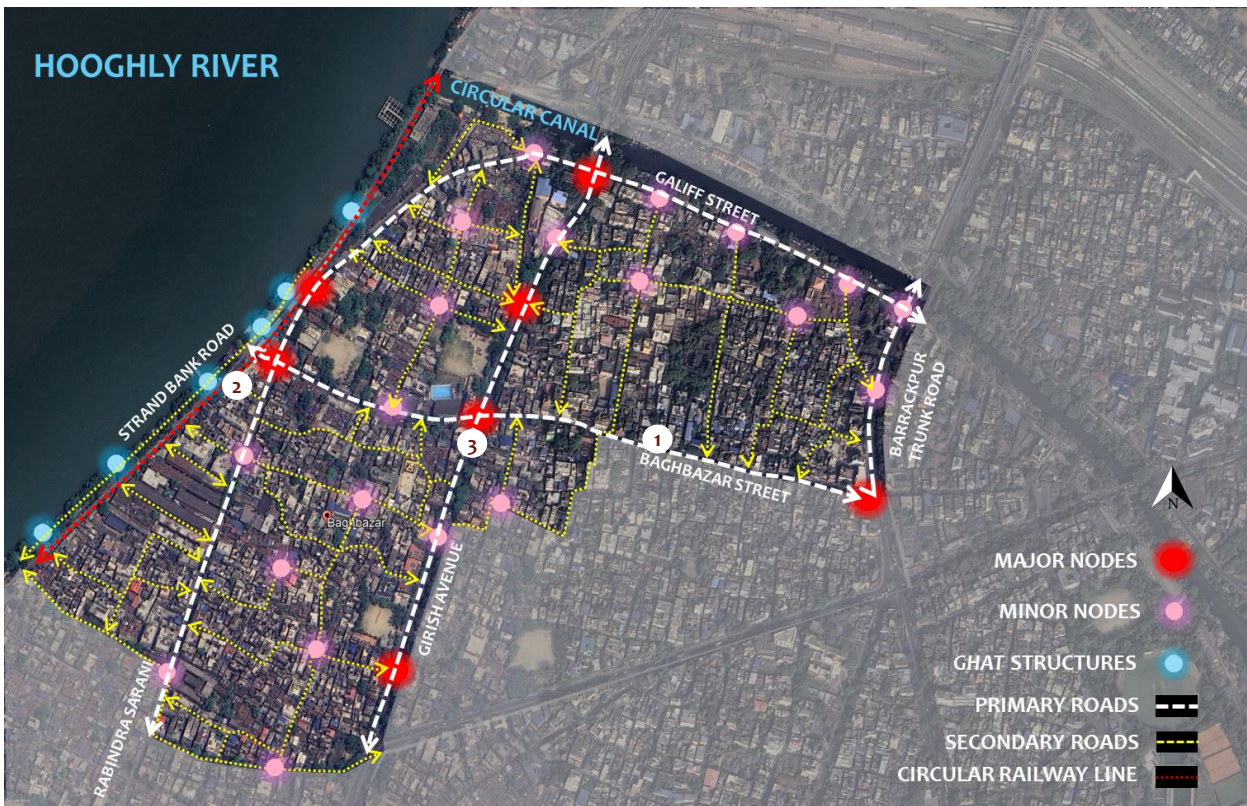


FIGURE 65: Map showing the existing Road Network and the major and minor Nodes [SOURCE: Author]



FIGURE 66: The Bagbazar Street; Figure 11: The Bagbazar Jetty Ghat;;
Figure 10: A major traffic node at the Bagbazar crossing (from left) [SOURCE: Author]

3.1.4 SURVEY AND ANALYSIS

3.1.4.4 LANDMARKS

For a historic neighbourhood like Bagbazar, both the **tangible and intangible heritage landmarks** play crucial roles in preserving its cultural identity and enhancing community pride.

TANGIBLE HERITAGE	INTANGIBLE HERITAGE
Sarada Mayer Bari Udbodan House Ramkrishna Mission Basubati Sister Nivedita's House Girish Bhavan	Bagbazar Sarbojonin Durgotsav Tal Betal Durga Pujo Jagat Mukherjee Park Durga Pujo Bagbazar Polli Durga Pujo Bagbazar Haldar Bari Pujo Naba Bagbazar Durga Pujo

TABLE 10: Existing Tangible and Intangible Heritage within the area [SOURCE: Author]

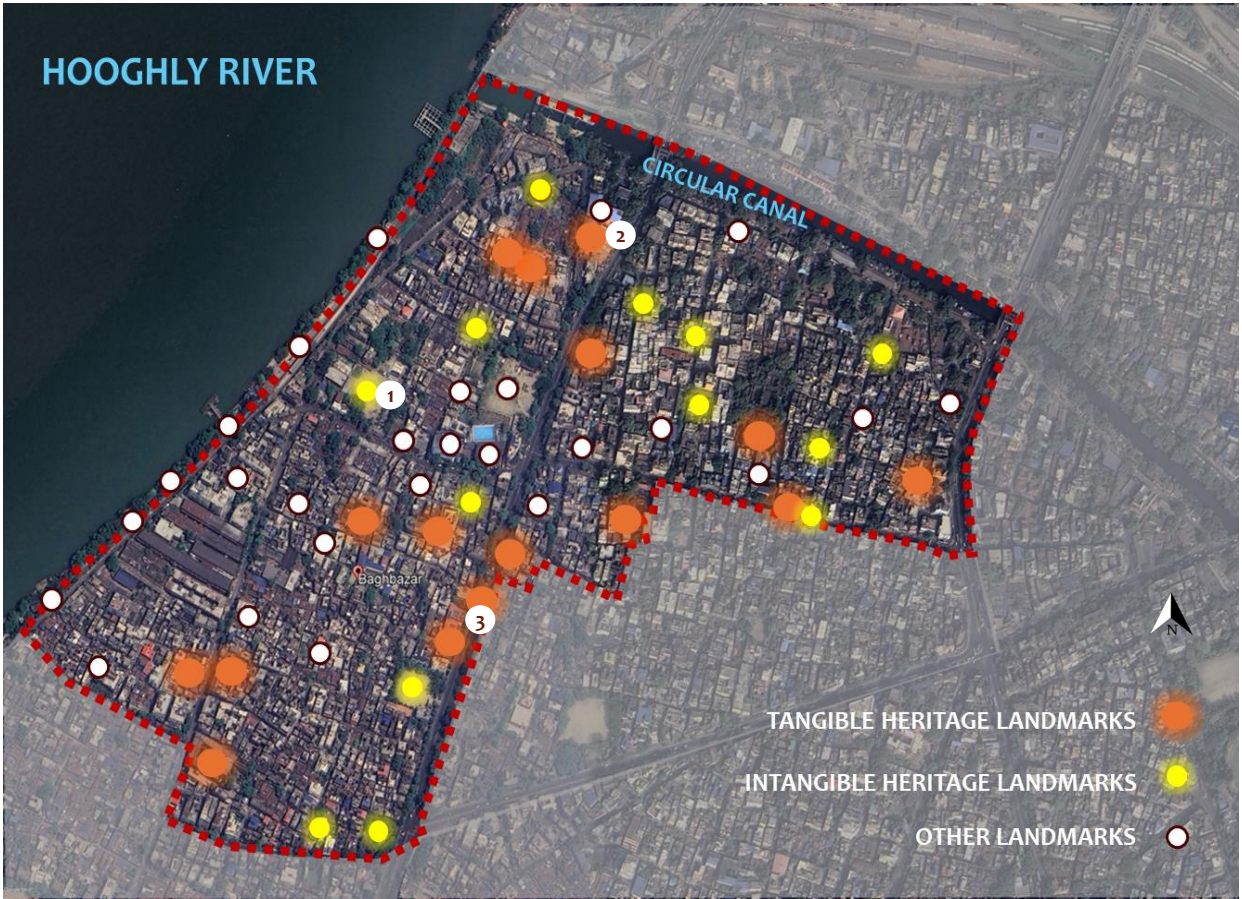


FIGURE 67 : Map showing the existing Heritage structures within Bagbazar [SOURCE: Author]



FIGURE 68: The Bagbazar Sarbojonin Durgotsav; Figure 11: The Udbodan House,;
Figure 10: The Girish Bhavan (from left) [SOURCE: Author]

3.1.5 INFERENCES

3.1.5.1 EDGES AND NODES

- Because the northern edge of the delineated area accommodates many people from the EWS community, the aesthetic quality of the area differs from the rest of the neighborhood.
- The minor nodes are mostly cluttered with unorganized activities, making the respective crossings more congested.
- Because the northern edge of the delineated area accommodates many people from the EWS community, the aesthetic quality of the area differs from the rest of the neighborhood.
- The minor nodes are mostly cluttered with unorganized activities, making the respective crossings more congested.

3.1.5.2 ROUTES AND PATHWAYS

- The pedestrian pathways, wherever present are in dilapidated condition, rarely utilized and majorly encroached need upgradation.
- Unorganized commercial activities on the stretch of Galiff street, should be regularized with means of design interventions.
- Adequate street furniture like light posts, bollards and dustbins should be implemented wherever possible.
- Lack of dedicated spaces for car parking leads to on road encroachments.
- Some secondary streets showcases a lot of on- street activities by the residents, which need to be regularized.

3.3.5.3 OPEN SPACES

- The open areas in Bagbazar, including neighborhood parks and the waterfront, suffer from neglect and lack of maintenance. Overgrown vegetation, litter, and deteriorating infrastructure diminish their usability and aesthetic appeal, making them unwelcoming for residents and visitors.
- Many open spaces are underutilized due to poor design, lack of amenities, and limited accessibility. The streets and waterfront areas, which could serve as vibrant public spaces, are often occupied by industrial activities or encroachments, hindering their potential as community assets.

3.3.5.4 LANDMARKS

- Places surrounding important landmarks should be upgraded, to ensure accessibility of the structures and thus proper usage.
- Heritage residential landmarks should be identified and assigned proper usage through adaptive reuse.

3.2 ZONAL LEVEL STUDY

3.2.1 SELECTION OF THE ZONES



3.2.2 DELINEATION OF ZONE- I



FIGURE : Map showing the two selected zones
[SOURCE: Author]



FIGURE : Map showing ZONE 1
[SOURCE: Author]

- This zone **contains two large enclosed parks**, with the potential to be integrated with the adjoining neighbourhood, rather than remaining inaccessible pieces of land.

- This zone is in **close proximity to the Hooghly River**, with the river forming a natural edge on the western side. There is a need to re-establish the lost connection of the zone to the river.
- This zone has many layers and characteristics exhibiting a **wide range of activities and functional utilities**.
- It is more **diverse in terms of land use**, featuring extensive stretches of industrial and commercial areas.
- A significant pocket of land is **inhabited by slums, surrounded by heritage buildings**, leading to unsanitary conditions that make the area inaccessible and unfit for public use. There are existing government proposals for the revitalisation of the area.



FIGURE : Strand Bank Road; FIGURE 10: KV Avenue
[SOURCE: Author]

3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.1 URBAN SPACE & FORM : Figure Ground

The ratio of open: built is 35 : 65, implying that most of the area on the ground is made up of built spaces. The major open spaces are in the form of parks, near the southern edge, and the vacant stretches of land near the riverfront.

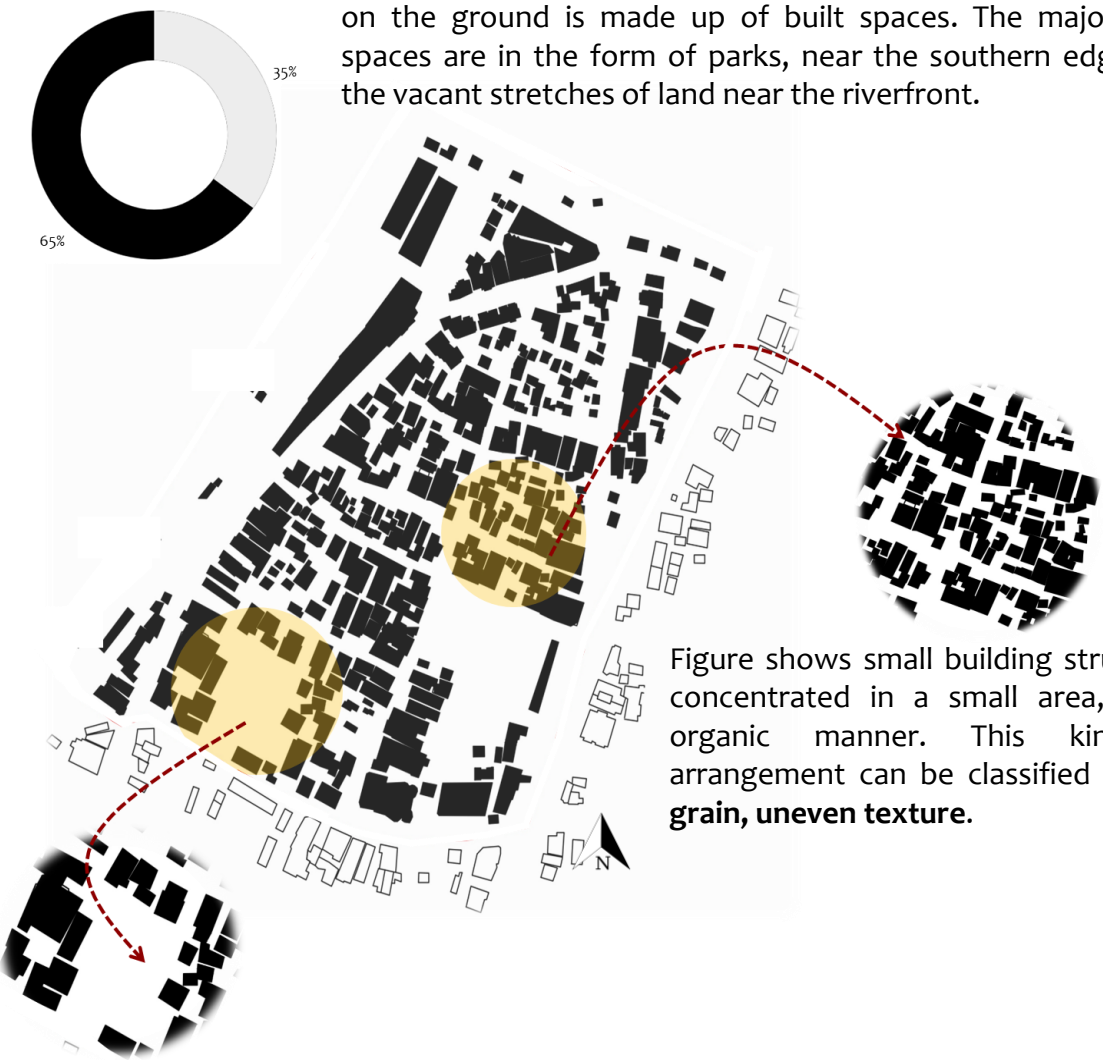


Figure shows small building structures concentrated in a small area, in an organic manner. This kind of arrangement can be classified as **fine grain, uneven texture**.

Figure shows the large open area, surrounded by comparatively bigger built forms, spread along a larger area, meaning coarse grain even texture.

FIGURE : Figure -Ground map – ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.2 URBAN SPACE & FORM: Types of Open Spaces

Open spaces in this zone include enclosed parks, private greens, vacant or abandoned lands, and stretches of underutilised land at the riverfront.

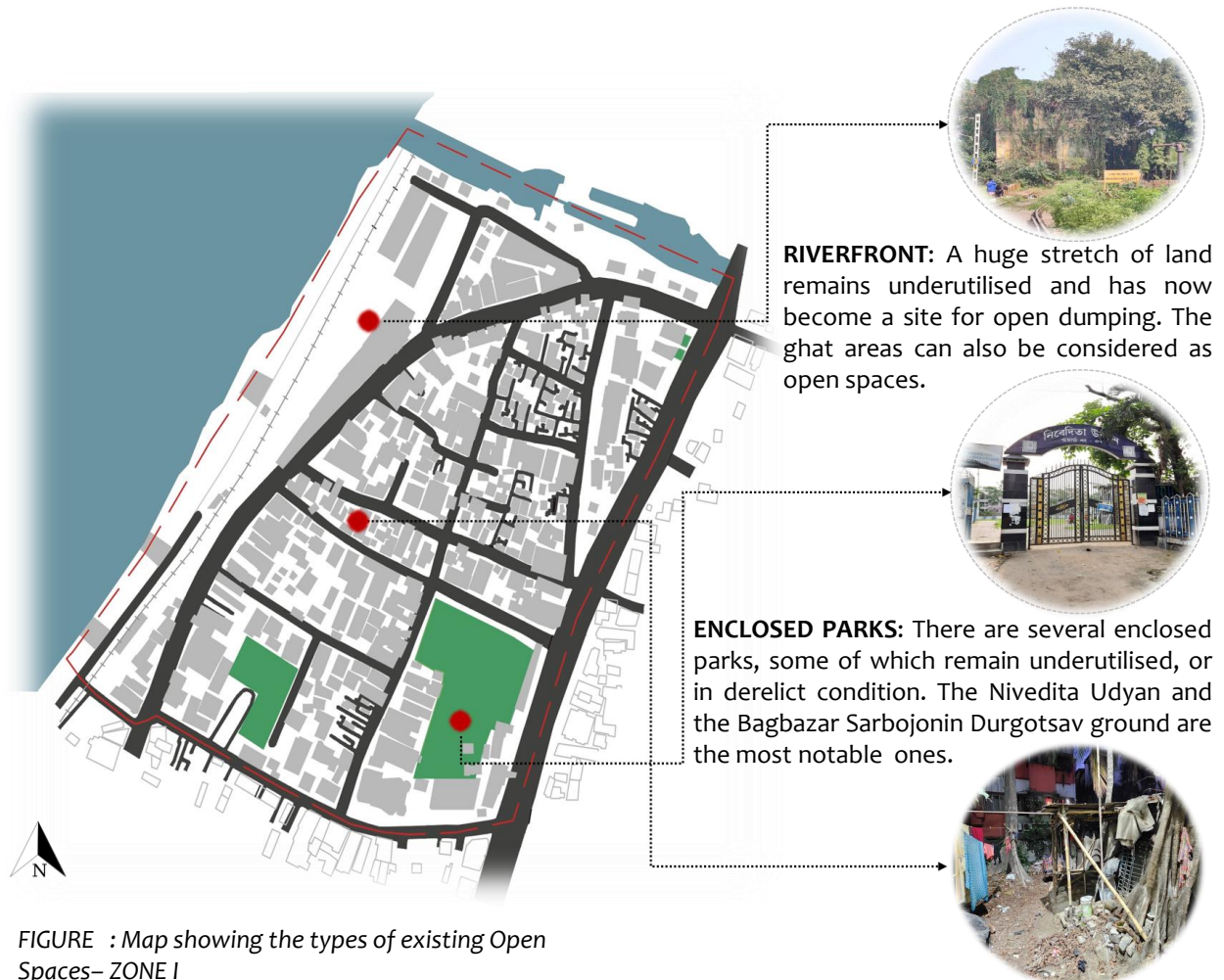


FIGURE : Map showing the types of existing Open Spaces– ZONE I
[SOURCE: Author]

VACANT LAND: These can be found in the interstitial spaces along the streets, some of which have even become sites for squatter settlements.

FIGURE : Examples of different types of Open Spaces– ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.3 URBAN SPACE & FORM: Building Age

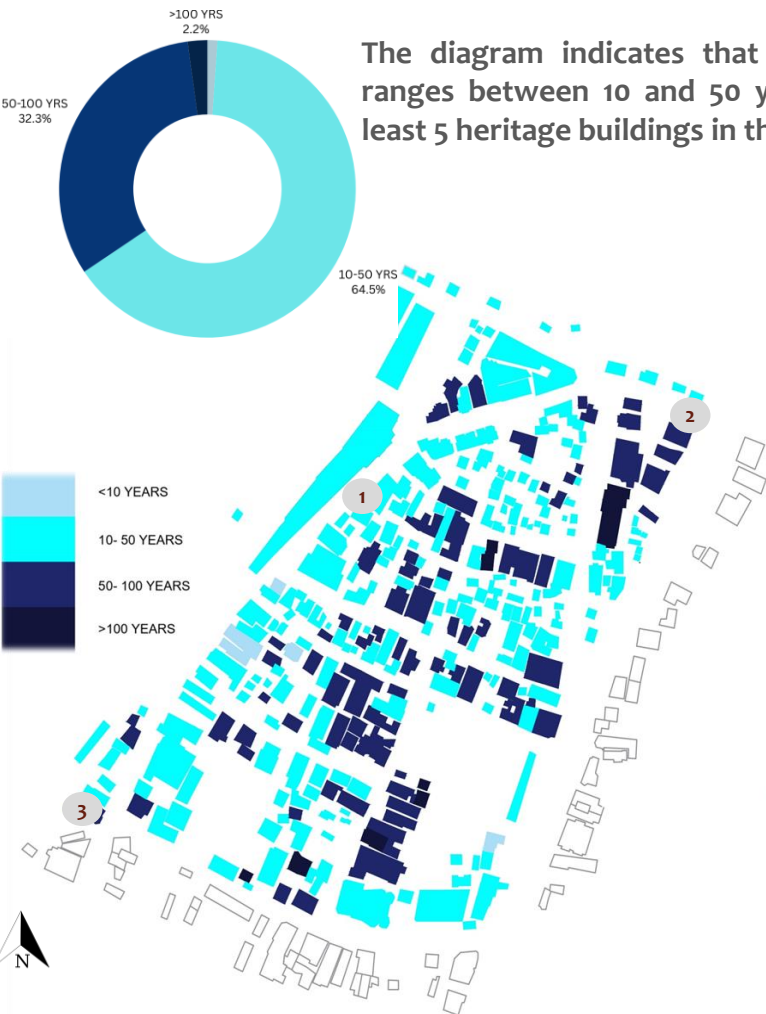


FIGURE : Examples of differing Building Age– ZONE I
[SOURCE: Author]

FIGURE : Map showing the Building Ages of existing structures– ZONE I
[SOURCE: Author]

	Most of these buildings are apartments, that have come up along the peripheries, or along Rabindra Sarani, probably due to visual appeal of the waterfront
	These mostly include the offices, hospitals, or other public buildings in the area, such as the Girish Mancha, The Sanjeevani Hospital, etc., exhibiting modernist facades reflective of their functional uses.
	These include heritage buildings in the area, such as the Sarada Maayer Bari, Ramkrishna Mission, The Udbodhan House, etc. which have been renovated and maintained over the years.
	These include residential structures, along the internal streets boasting decorative facades with neo- classical elements such as wrought iron grilles, ornate windows, extended verandahs, etc.

TABLE 11: Characteristics of buildings of different Ages– ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.4 URBAN SPACE & FORM: Building Height

The diagram depicts that the average height of buildings falls under the range of medium height (2-3 storeys), with a few exceptions.



FIGURE : Map showing the Building Heights of existing structures– ZONE I
[SOURCE: Author]

	These include some of the public buildings in the area, like Sanjeevani Hospital, Girish Mancha, etc.
	These medium height buildings houses or apartment buildings that lie along the internal streets, rather than on the periphery
	These mostly include the neighbourhood retail shops or the squatter settlements, along the internal streets
	Examples include neighbourhood parks, open grounds, vacant plots, etc.

TABLE 12: Types of buildings of different Heights– ZONE I [SOURCE: Author]

FIGURE : Examples of differing Building Heights– ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.5 URBAN SPACE & FORM: Building Condition

The diagram depicts that the average height of buildings falls under the range of medium height (2-3 storeys), with a few exceptions.



FIGURE : Map showing the different Building Conditions of existing structures– ZONE I [SOURCE: Author]

	New buildings have a trend to emerge along the primary routes
	Some of the inhabited residences and graded heritage buildings have been restored and repaired
	Some buildings that are still in use usually with a connecting pathway and on edge, have been partially repaired and restored.
	Slums have developed along the circular canal, and near the enclosed park area, and places that have high walls as edges.

TABLE 13: Types of differing built conditions - ZONE I [SOURCE: Author]



FIGURE : Examples of differing Building Conditions– ZONE I [SOURCE: Author]



KEY PLAN

3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.6 URBAN SPACE & FORM: Built Uses

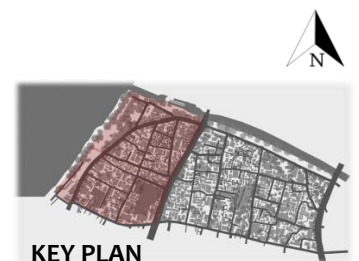


FIGURE : Built Use Map of Ground Floor – ZONE I
[SOURCE: Author]



FIGURE : Built Use Map of First Floor – ZONE I
[SOURCE: Author]

- Residential built- use include both multi- storeyed apartments, as well as smaller dwellings that mostly lie along the internal streets.
- Mixed use developments, with commercial on the ground floor and residential on the upper floors, can be seen along the primary routes.
- Industrial estate under WBSIDCL covers large parts of these zone, which has several warehouses and godowns.



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.6 URBAN SPACE & FORM: Built Uses



FIGURE : Built Use Map of Second Floor – ZONE I
[SOURCE: Author]

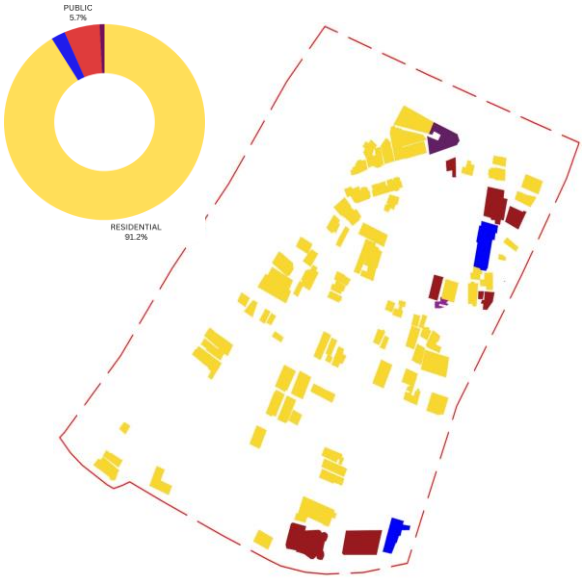
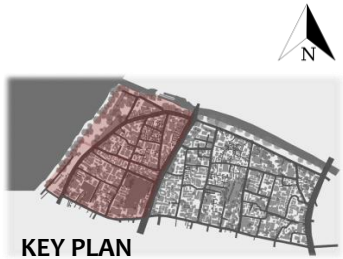


FIGURE : Built Use Map of Third Floor – ZONE I
[SOURCE: Author]

- Small scale retail establishments can be found scattered in and around the area, especially along the intersection nodes.
- Examples of public buildings include famous landmarks like Girish Mancha, Paschimbanga Jatra Academy, etc. Several big and small temples can be found dotted along the stretch, as this area is known to have a rich religious influence.



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.7 Edge Conditions- WATER EDGE

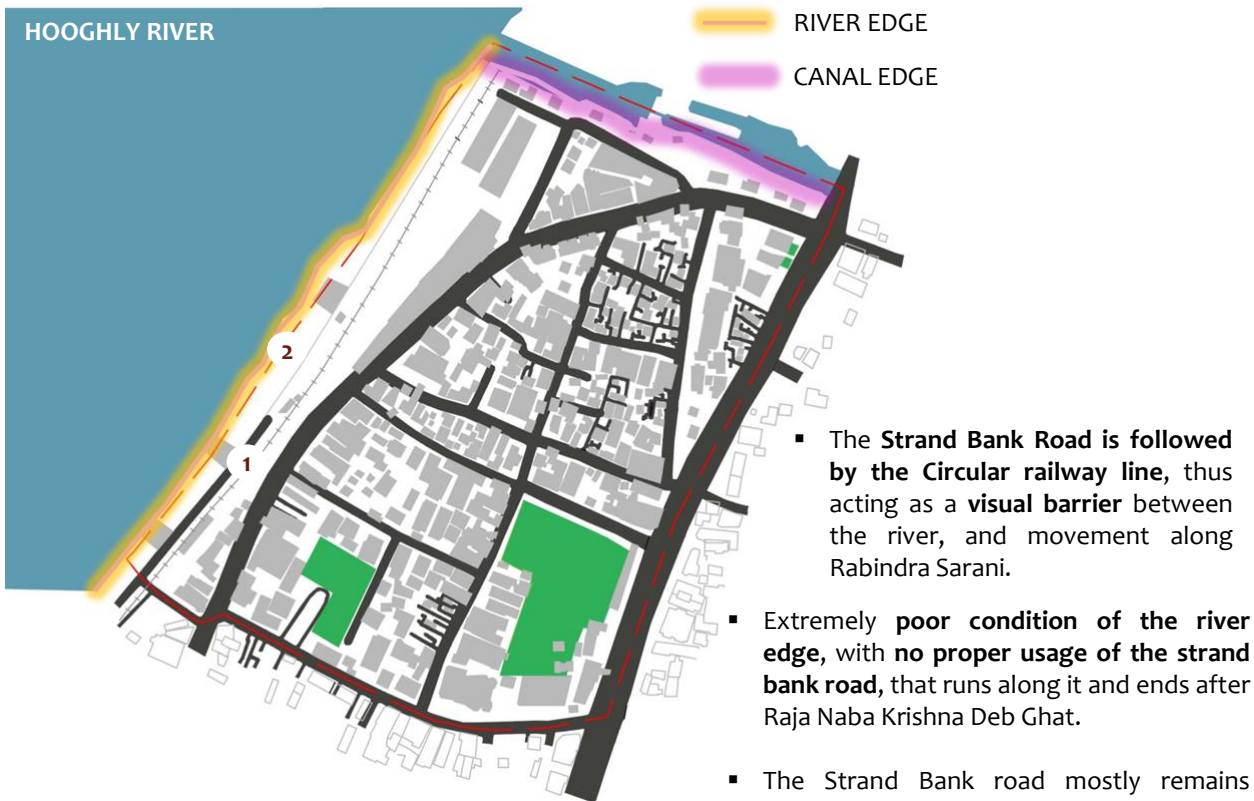


FIGURE : Map highlighting the prominent Water Edges– ZONE I
[SOURCE: Author]



FIGURE 9: Prominent Water Edges– ZONE I
[SOURCE: Author]

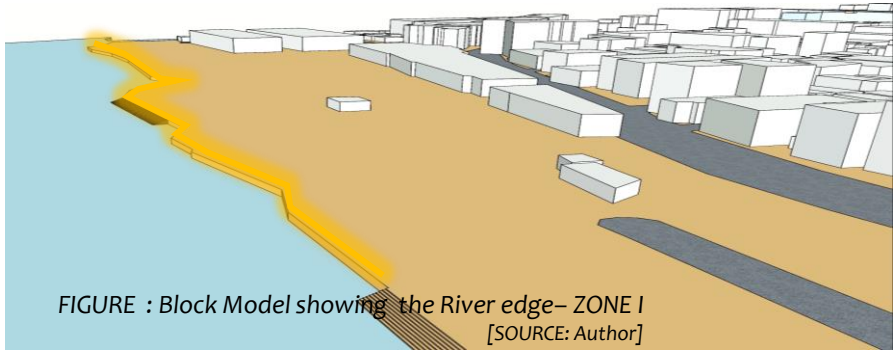
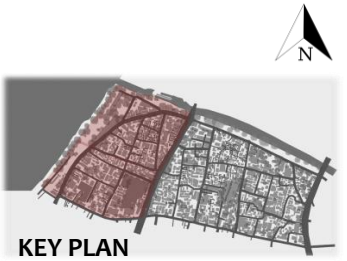


FIGURE : Block Model showing the River edge– ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.7 Edge Conditions- ROADS & STREET EDGES



FIGURE : Map highlighting the prominent Street Edges– ZONE I
[SOURCE: Author]

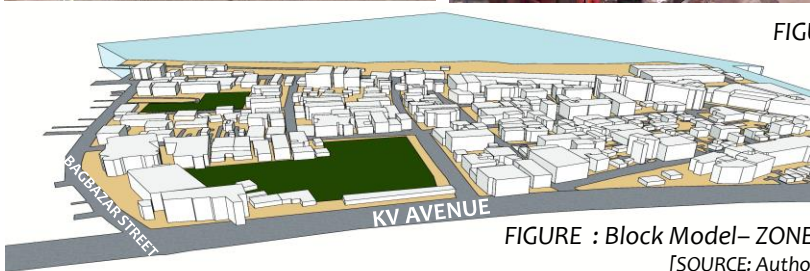


FIGURE : Block Model– ZONE I
[SOURCE: Author]

The pavements of **most streets** have been **encroached upon by squatters**, leaving hardly any space for pedestrians.

- The **exterior façade of old buildings** create a **street façade** defining the historicity of the area.
- New developments **following the multi- storied apartments** breaks the **connectivity of the street façade** in some areas.
- **Ground floors** of most buildings along **Kshirode Vidhyavinode Avenue, and Bagbazar Street** are **commercial**.
- The **internal street edges** are defined by the **form of the buildings**, whether **meandering or straight**.

FIGURE : Prominent Street Edges– ZONE I
[SOURCE: Author]



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.7 Edge Conditions- WALL EDGES

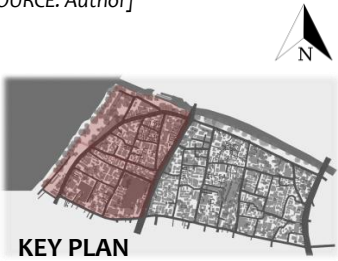


- **Continuous wall edges** at several locations, especially the enclosed park structures, act as visual barriers, thus isolating spaces, and **promoting the growth of squatter settlements** and slums.
- The wall edge of the warehouses **completely cuts off visual connectivity** of the river, with movement along Rabindra Sarani.

FIGURE : Map highlighting the prominent Wall Edges– ZONE I
[SOURCE: Author]



FIGURE : Different types of Wall Edges– ZONE I
[SOURCE: Author]



KEY PLAN

3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.8 Movement- ROUTES & PATHWAYS

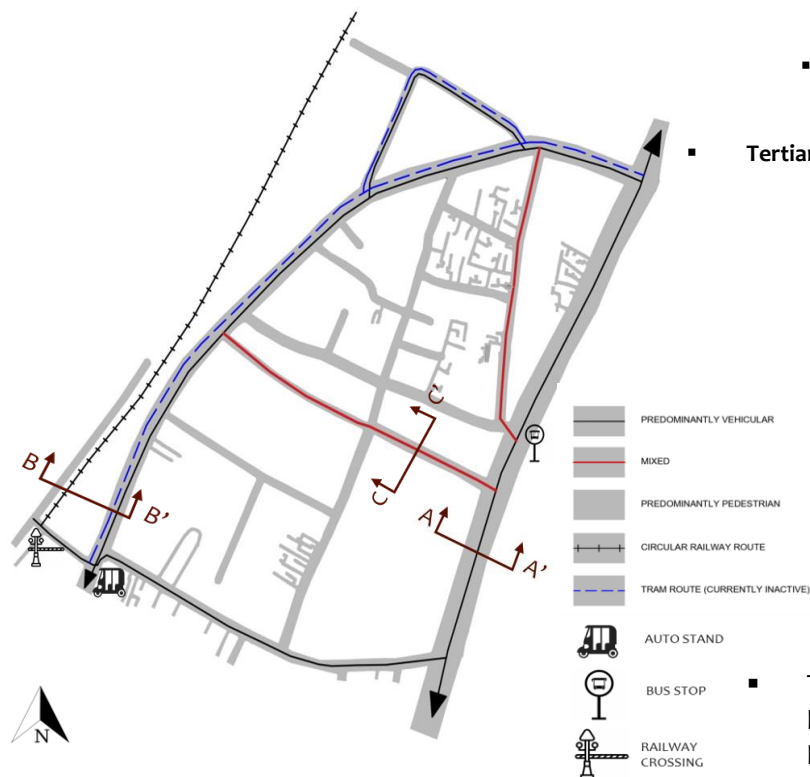


FIGURE 9: Map highlighting the prominent Routes– ZONE I
[SOURCE: Author]

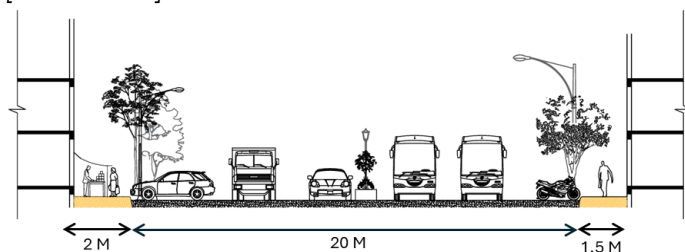


FIGURE : Section A-A' Through Kshirode Vidyavinode Avenue
(Primary Road) [SOURCE: Author]

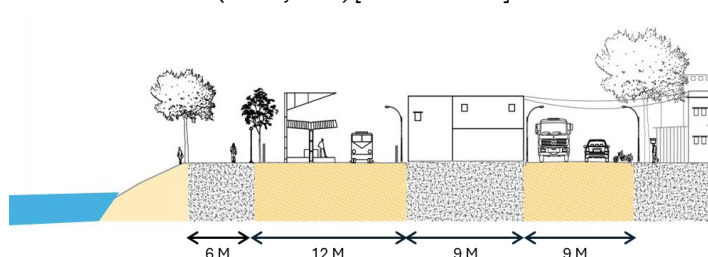


FIGURE : Section B-B' Through Strand Bank Road and Rabindra Sarani
(Primary Roads) [SOURCE: Author]

- The hierarchy of roads is as follows:
 - Primary roads = 10 – 20 m wide
 - Secondary roads = 5- 10 m wide
- Tertiary roads or collector streets = <10 m wide

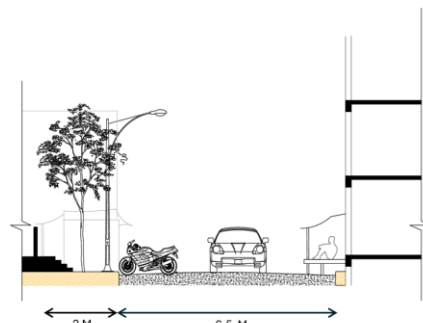


FIGURE : Section C-C' Through Annada Neogi
Road (Secondary Roads)
[SOURCE: Author]

- The **primary roads** include **Kshirode Vidyavinode Avenue**, the **Rabindra Sarani** and the **Bagbazar Street**, running along the outer peripheries of this zone. The width generally ranges from 10- 20 meter.
- The **secondary roads** are the ones which are internal streets that allow both pedestrian and vehicular movement. These range between 6-8 meters.



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.8 Movement- ROUTES AND PATHWAYS

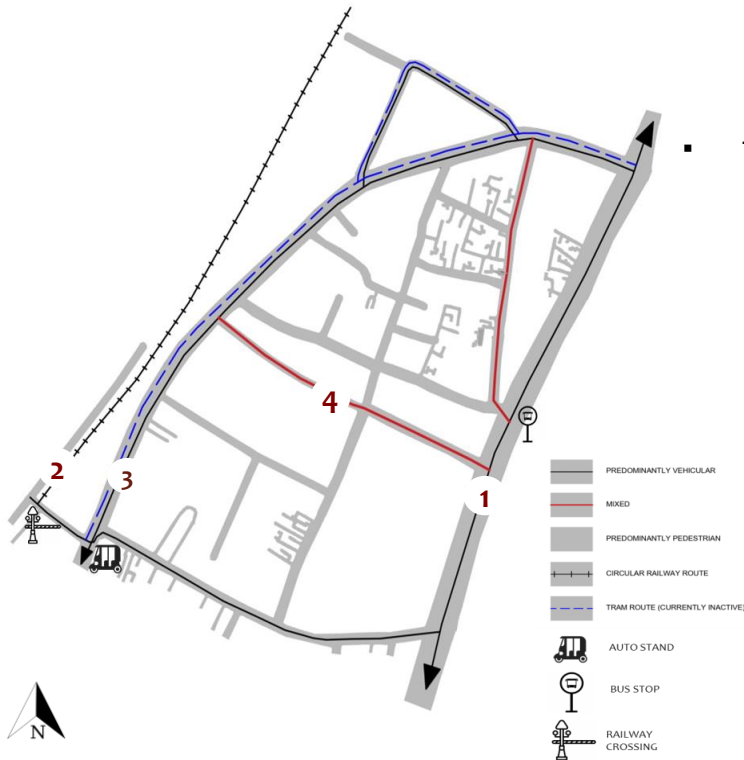


FIGURE 9: Map highlighting the prominent Routes- ZONE I
[SOURCE: Author]



FIGURE : Kshirode Vidyavinode Avenue (Primary Roads) [SOURCE: Author]



FIGURE : Strand Bank Road; Figure 11: Rabindra Sarani (Primary Road)
[SOURCE: Author]

- The hierarchy of roads is as follows:
 - Primary roads = 10 – 20 m wide
 - Secondary roads = 5- 10 m wide
- Tertiary roads or collector streets = <10 m wide



FIGURE : Annada Neogi Lane (Secondary Road)
[SOURCE: Author]

- The **tertiary streets or alleyways** are the internal streets that are predominantly pedestrian streets, with width ranging between 4-6 meters. These are also used for different domestic activities by the local people.
- **Pavements generally have an average width of 2 meters.**
- The Mohit Moitra Sarani that runs along the river edge, at the northern corner, has on- street parking.
- The **Bagbazar Street is also the route for procession** during Durga Pujo immersions.



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.9 Activities- MAGNETS & GENERATORS

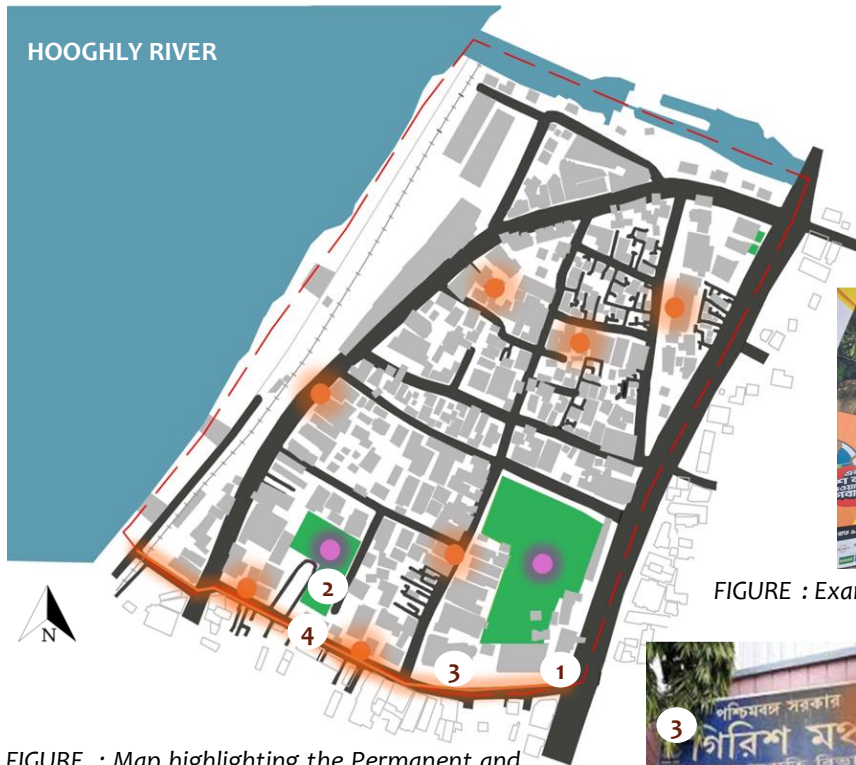


FIGURE : Map highlighting the Permanent and the Seasonal Magnets– ZONE I
[SOURCE: Author]

- PERMANENT MAGNETS
- TEMPORARY/ SEASONAL MAGNETS

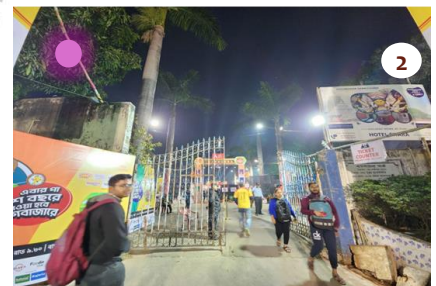
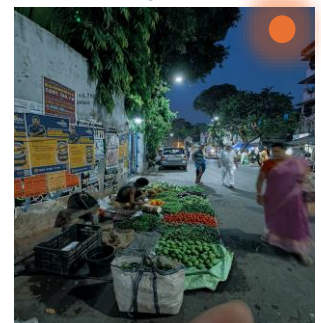


FIGURE : Examples of Seasonal Magnets– ZONE I
[SOURCE: Author]



FIGURE : Examples of Permanent Magnets– ZONE I
[SOURCE: Author]

- The **permanent magnets** within this zone include **public- buildings** such as **schools, places of worship** such as Sarada Maayer Bari , popular theaters such as Girish Mancha and Paschimbanga Jatra Academy, etc.
- **Seasonal magnets** include the likes of very famous Bagbazar Sarbojonin Durgotsav, and other Durga Pujo grounds, during which the later half of the Bagbazar street gets converted into a **pedestrian only route**. Small scale seasonal magnets like temples, may also create obstruction in movement.
- **Spill overs** of both permanent and temporary magnets often create **hindrance** on the regular movement patterns on the roads.
- **Seasonal magnets** often **restrict free movements** due to **undefined nodes** and extremely unhindered and haphazard activities, at different times of the year, such as Durga Pujo and other festivals, food fairs, etc.



KEY PLAN

3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.9 Activities- NODES



ON STREET COMMERCIAL
ACTIVITIES, NEAR MINOR NODES



PEDESTRIAN/ RELIGIOUS
ACTIVITIES NEAR TRAFFIC NODES



SARADA TORAN GATE



LOADING/ UNLOADING ACTIVITIES

FIGURE : Examples of Major and Minor Nodes– ZONE I
[SOURCE: Author]

- Buildings around the node define the edge of the street.
- Congestion around the points of intersection of pedestrian and vehicular traffic.
- Major variance in activities throughout the year around the nodes near important landmarks.



3.2.3 SURVEY AND ANALYSIS – ZONE I

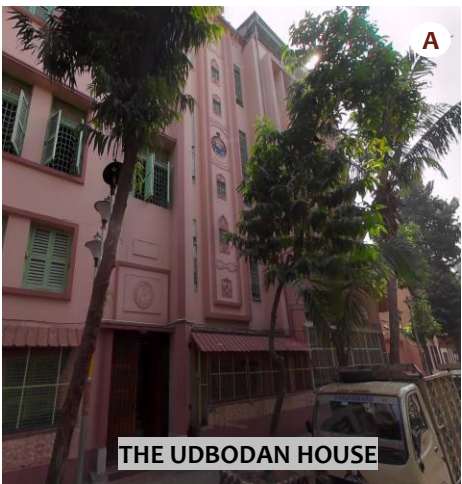
3.2.3.10 Visual Character- LANDMARKS



FIGURE : Map highlighting the Major Landmarks– ZONE I [SOURCE: Author]



RAMKRISHNA MISSION, BAGBAZAR



THE UDBODAN HOUSE



SARADA MAYER BARI

FIGURE : Examples of Major Heritage Landmarks– ZONE I [SOURCE: Author]

- Several places of religious importance, having heritage value are in proximity within the neighbourhood, thus generating desired activity and footfall.
- Surroundings of these landmarks are often occupied by slums and squatter settlements thus creating and overall degradation of the heritage nature.



3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.10 Visual Character- LANDMARKS



NON- GRADED TANGIBLE HERITAGE

- BAGBAZAR SHIMLA BYAAM SAMITI
- MAHA JOGESHWARI ASHRAM
- VIVEKANANDA MISSION

TABLE 15: Non- listed Heritage structures–
ZONE I

[SOURCE: Kolkata Municipal Corporation
‘CAPACITY BUILDING PROGRAMME’ BROCHURE]



FIGURE : Map highlighting the Major Landmarks– ZONE I
[SOURCE: Author]



FIGURE : Examples of Non- Graded Heritage– ZONE I
[SOURCE: Author]

- No designated parking areas near these landmarks, thus creating on-street congestion.
- Lack of any space for public or commercial activity around these points, thus promoting on- street encroachments.



KEY PLAN

3.2.3 SURVEY AND ANALYSIS – ZONE I

3.2.3.10 Visual Character- VIEWS & VISTAS

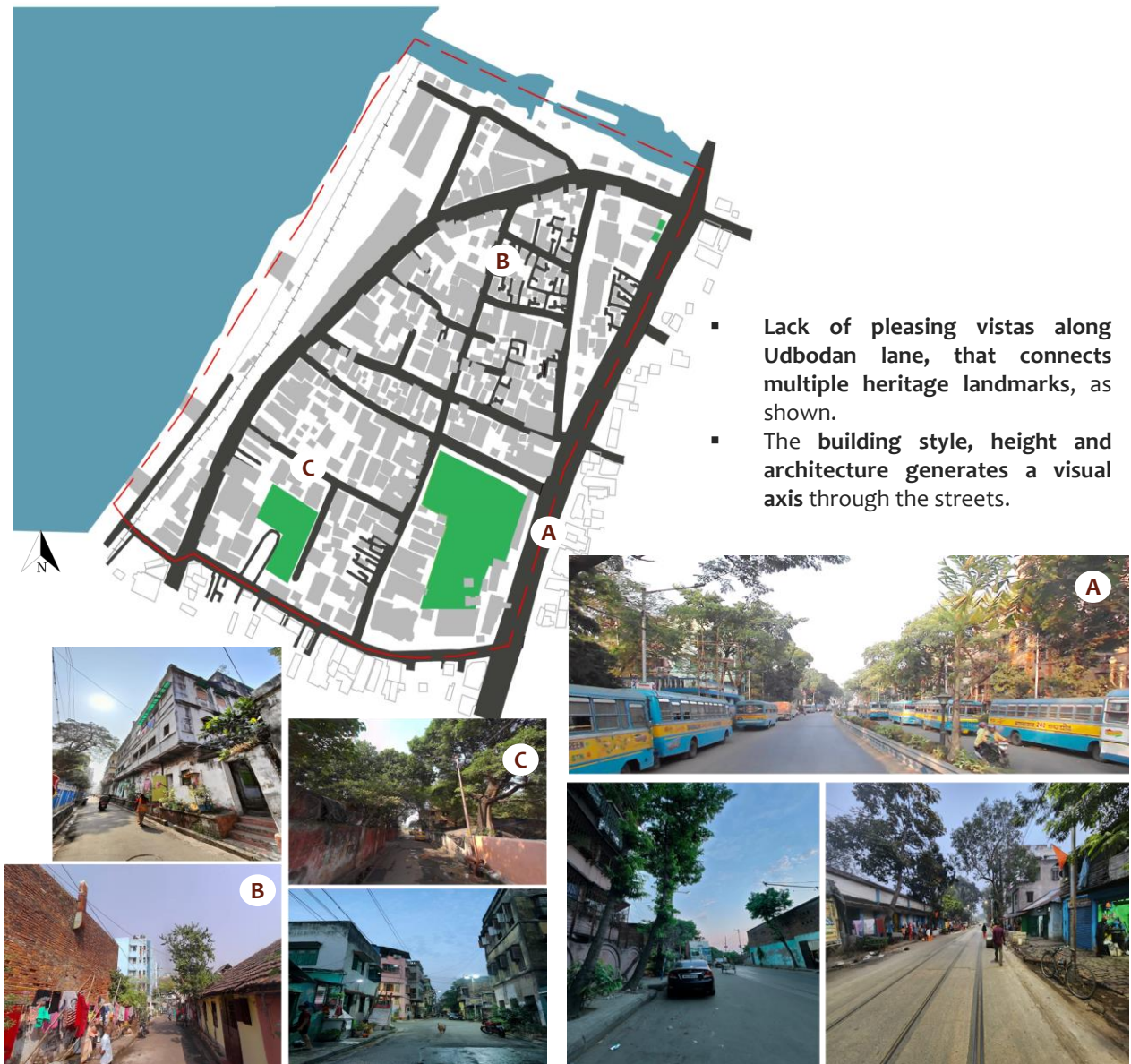


FIGURE : Vistas along Secondary Streets– ZONE I
[SOURCE: Author]

FIGURE : Vistas along Primary Streets– ZONE I
[SOURCE: Author]

- Traditional buildings showcasing ornate detailing generates a unique visual identity for the area.
- The connected buildings maintaining height of sill, lintel and parapet creates a sense of continuity of the visual axis.



KEY PLAN

3.2.4 INFERENCES - ZONE I

PARAMETERS	INFERENCES
FIGURE- GROUND	<ul style="list-style-type: none">▪ Following the existing organic pattern for development.▪ Looking to create open areas, wherever possible, in the internal densely packed neighbourhoods.▪ Enhancing the accessibility to these integrated open areas, to improve the public realm.
OPEN SPACES	<ul style="list-style-type: none">▪ Creating/ upgrading public open spaces following the traditional system.▪ People often use the street as their urban space for neighbourhood addas, or other domestic purposes.▪ People enjoy semi- enclosed areas over separately enclosed areas for evening activities.
BUILDING AGE	<ul style="list-style-type: none">▪ Newer and taller buildings are being erected on sites of previously existing buildings , with little consideration to traditional built-forms, thus causing a loss of the historic architectural character, for the neighbourhood.
BUILDING HEIGHT	<ul style="list-style-type: none">▪ Continuing the low height skyline of the internal neighbourhoods to retain the uniformity of the area.▪ Standardizing building height for upcoming constructions to enable access to sunlight in the old low- height residential buildings.
BUILDING CONDITION	<ul style="list-style-type: none">▪ Examining the condition of the poorly maintained buildings and finding solutions to re-connect them with neighbourhood.▪ Identifying abandoned buildings' condition and assigning new-use to them, or demolishing them to create open spaces, in order to liven up the neighbourhood.
BUILT USE	<ul style="list-style-type: none">▪ Most built- forms are intended to be used for residential purposes.▪ Neighbourhoods are sometimes planned with small pockets of enclosed green areas, that remain underutilized.▪ People prefer open areas to be extensions of the streets, over defined separated areas as open spaces
WATER EDGE	<ul style="list-style-type: none">▪ The lost connection of the neighbourhood with the river edge needs to be established.▪ Accessibility and visual connectivity to water will enhance land value for the nearby residential developments and reinforce, its mixed economy.

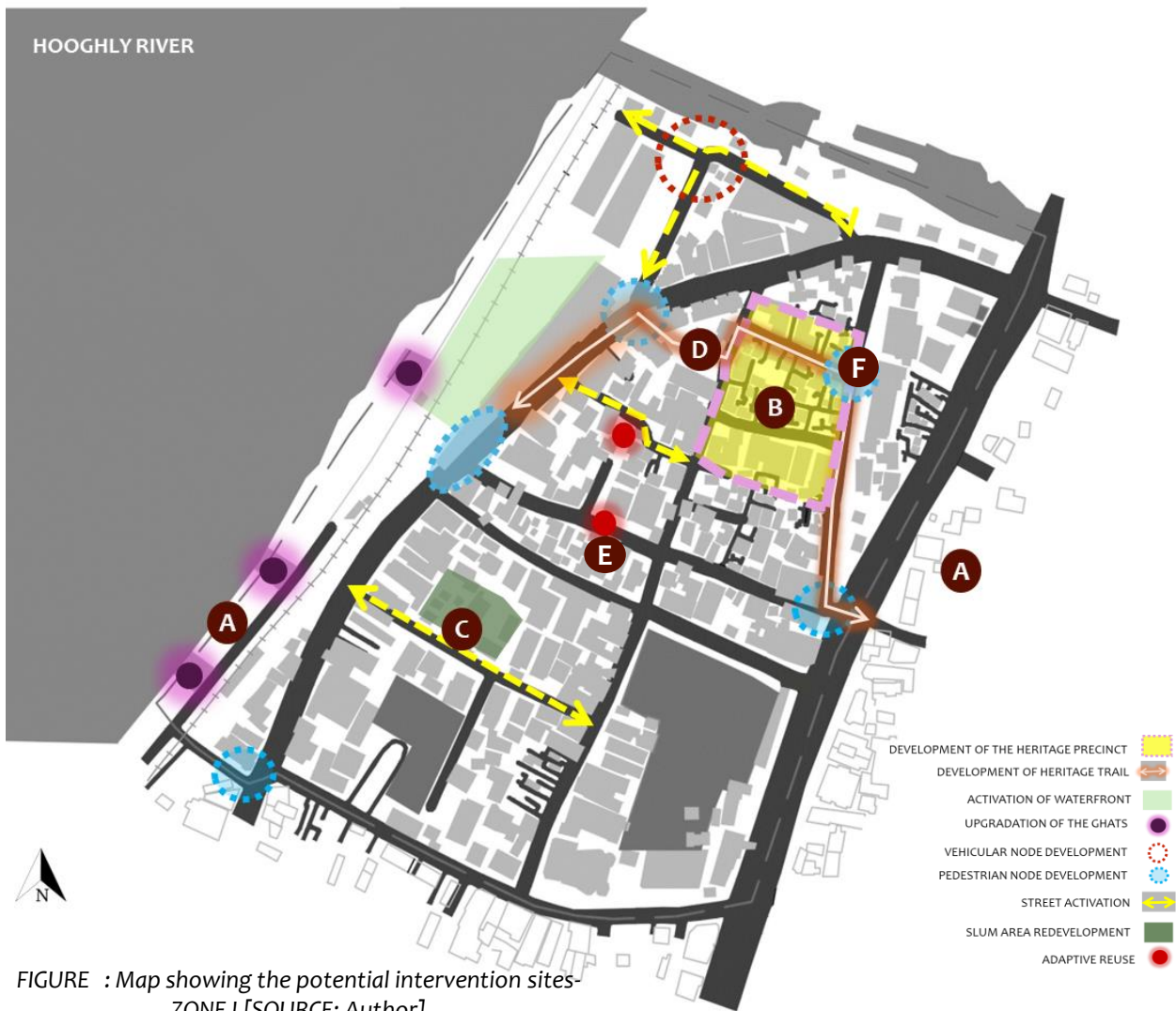
TABLE 16: Inferences I- ZONE I
[SOURCE: Author]

3.2.4 INFERENCES - ZONE I

PARAMETERS	INFERENCES
ROADS & STREET EDGES	<ul style="list-style-type: none"> Activation of streets to be done wherever necessary, to generate activities and enhance the overall livability of the neighbourhood. Strict guidelines need to be formularized to prevent on- street encroachments, to encourage walkability. Redeveloping the historic streets to reinforce the historic identity of the neighbourhood.
WALL EDGES	<ul style="list-style-type: none"> Redesigning the strong edges created by high boundary walls, in order to increase permeability of the adjoining areas. Rethinking the enclosed park areas as semi- open neighbourhood spaces, to integrate with the local way of living.
ROUTES & PATHWAYS	<ul style="list-style-type: none"> Provision of designated parking areas in the internal areas, to discourage on- street parking, wherever necessary. Provision of a well- defined network of pedestrian pathways with convenient connectivity with places of interest.
MAGNETS & GENERATORS	<ul style="list-style-type: none"> Upgradation of the streets, wherever necessary, to facilitate access to the permanent magnets. Designing a well-defined pedestrian pathway as a means to connect the seasonal magnets, i.e., linking the Durga Pujo grounds.
NODES	<ul style="list-style-type: none"> Controlling roadside commercial activities in the internal streets and formalizing them to avoid conflict. Creating well- defined pedestrian nodes around places of importance, to foster pedestrianism. Function and type of activity around the node should be fixed, to avoid conflicts.
LANDMARKS	<ul style="list-style-type: none"> Creation of a public realm, in the form of a heritage plaza, to unify these places of importance, to enhance the overall heritage quality of the neighbourhood. Provision of designated spaces for commercial activity near these points
VIEWS & VISTAS	<ul style="list-style-type: none"> Creation of a new and improved visual axis for the lanes connecting important places of importance. Creation of an aesthetic visual axis along Rabindra Sarani, that runs parallel to the river, to enhance a pedestrian friendly river promenade. Reinforcing design guidelines for the streets that lead upto the riverfront, to re-establish the visual identity of the now- deteriorating neighborhood.

TABLE 17: Inferences II- ZONE I
[SOURCE: Author]

3.2.5 IDENTIFICATION OF THE INTERVENTION SITES - ZONE I



A Ghat activation with necessary infrastructure upgradation

D Developing a heritage trail that would lead up to the river, joining the places of interest in its stretch

B Redevelopment of the Heritage Precinct, and adjoining spaces, after relocating existing squatter settlements

E Adaptive reuse of derelict structures into suitable built uses

C Street activation at the posterior edge of the Bagbazar Sarbojonin Park

F Formalising vehicular and pedestrian intersections by regularising informal roadside stalls and commercial activity

3.2.6 DELINEATION OF ZONE- II



- This zone has the **circular canal acting as a prominent edge on the northern side**, lined by government row houses meant for economically weaker sections.
- This zone is **predominantly residential in nature**, exhibiting the characteristics of a traditional neighbourhood.
- **Galiff Street, which lines the northern edge, hosts a vibrant pet market every Sunday**, creating a sharp contrast in activities compared to other days.



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.1 URBAN SPACE & FORM : Figure Ground

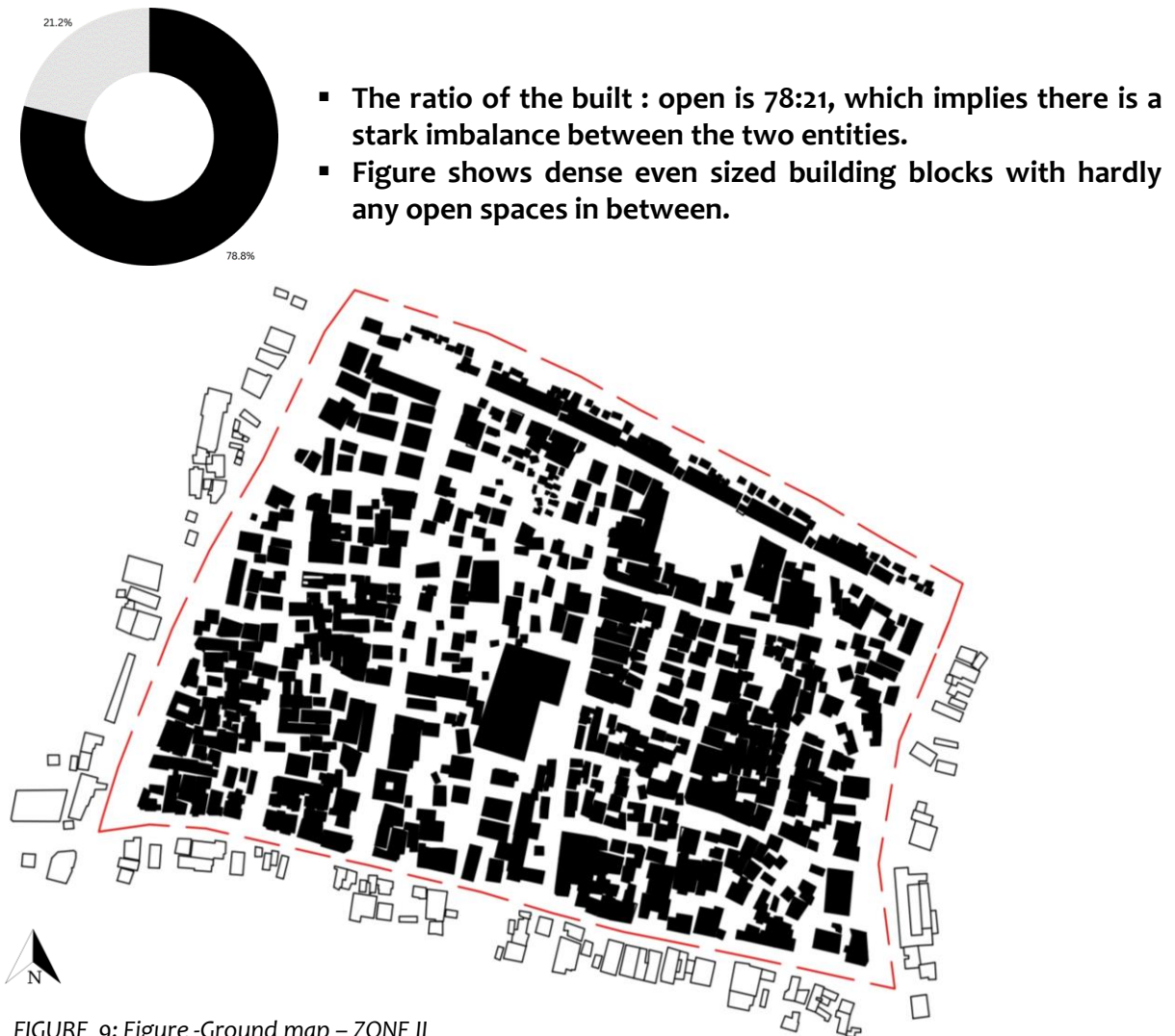
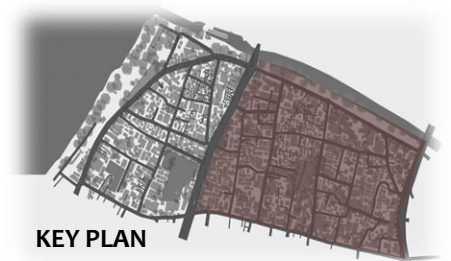


FIGURE 9: Figure-Ground map – ZONE II
[SOURCE: Author]

- **PATTERN** – Organic layout based on a grid- iron pattern.
- **GRAIN**- The obtained figure- ground diagram predominantly has coarseness development of urban fabric.
- **TEXTURE**- The presence of densely packed residential areas, lead to an overall even texture in this zone.



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.2 URBAN SPACE & FORM : Open Spaces

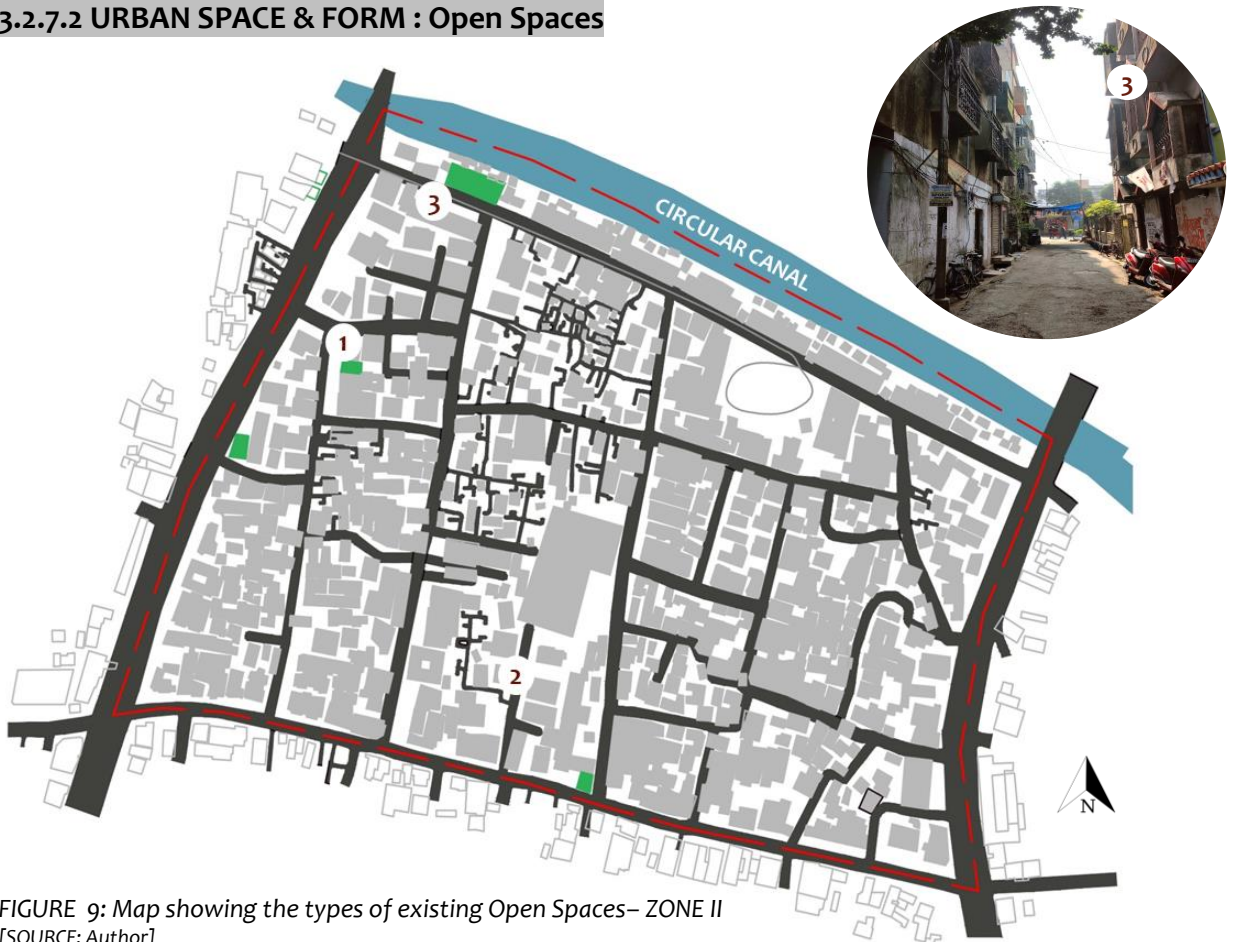


FIGURE 9: Map showing the types of existing Open Spaces– ZONE II
[SOURCE: Author]

- Existing **open spaces include enclosed parks**, that exist as well- defined open spaces often remain underutilized.
- People **use informal shops, street edge and front open space of buildings as their open spaces for spill- over activities.**
- The internal streets are poorly maintained.

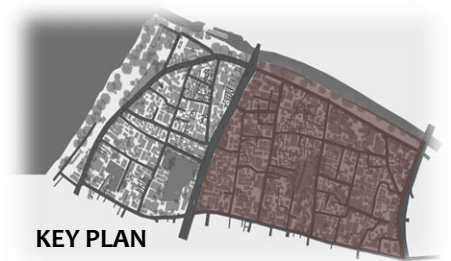


FIGURE 9: Examples of different types of Open Spaces– ZONE II [SOURCE: Author]

3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.3 URBAN SPACE & FORM : Building Age

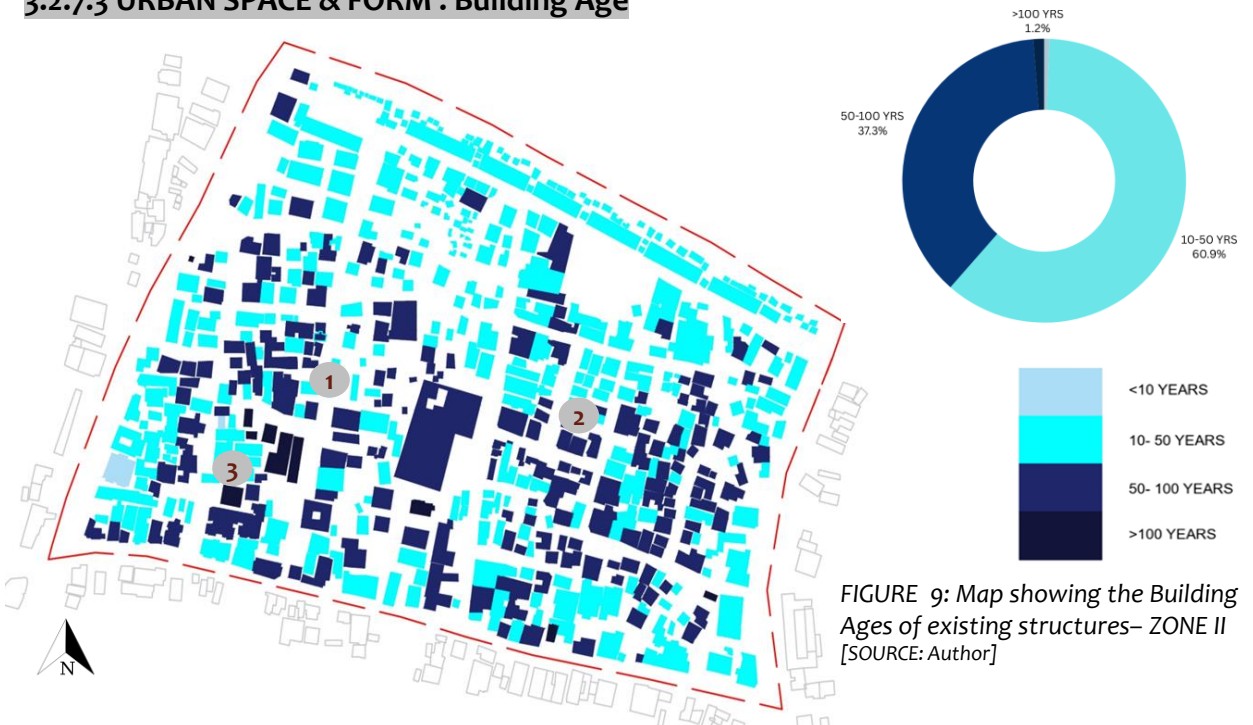


FIGURE 9: Examples of built structures of different Ages– ZONE II [SOURCE: Author]

	Most of these buildings are apartments, that have come up along the peripheries, Blocking the houses in the inner parts
	These mostly include the public buildings in the area, such as the schools, colleges, etc., exhibiting modernist facades reflective of their functional uses.
	These include heritage buildings in the area, such as Basubati, House of Ramprasad Mitra, etc.
	These include residential structures, along the internal streets boasting decorative facades with neo- classical elements such as wrought iron grilles, ornate windows, extended verandahs, etc.

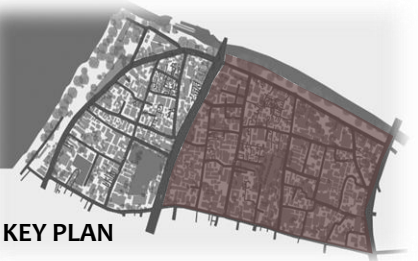


TABLE 18: Characteristics of buildings of different Ages– ZONE II [SOURCE: Author]

3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.4 URBAN SPACE & FORM : Building Height



FIGURE 9: Map showing the Building Heights of existing structures– ZONE II [SOURCE: Author]



MEDIUM HEIGHT RESIDENCES



MONUMENTAL HERITAGE BUILDING



FIGURE 9: Block Model – ZONE II [SOURCE: Author]

FIGURE 9: Examples of Buildings of different built heights– ZONE II [SOURCE: Author]

	These include some of the public buildings in the area, like Maharaj Cossimbazar Institute, Bagbazar Multipurpose Girls' School, and several apartment buildings, etc.
	These medium height buildings houses or apartment buildings that lie along the internal streets,
	These mostly include the neighbourhood retail shops or the squatter settlements, along the internal streets
	Examples include neighbourhood parks, open grounds, vacant plots, etc.



KEY PLAN

TABLE 19: Characteristics of buildings of different Heights– ZONE II [SOURCE: Author]

3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.5 URBAN SPACE & FORM : Building Condition

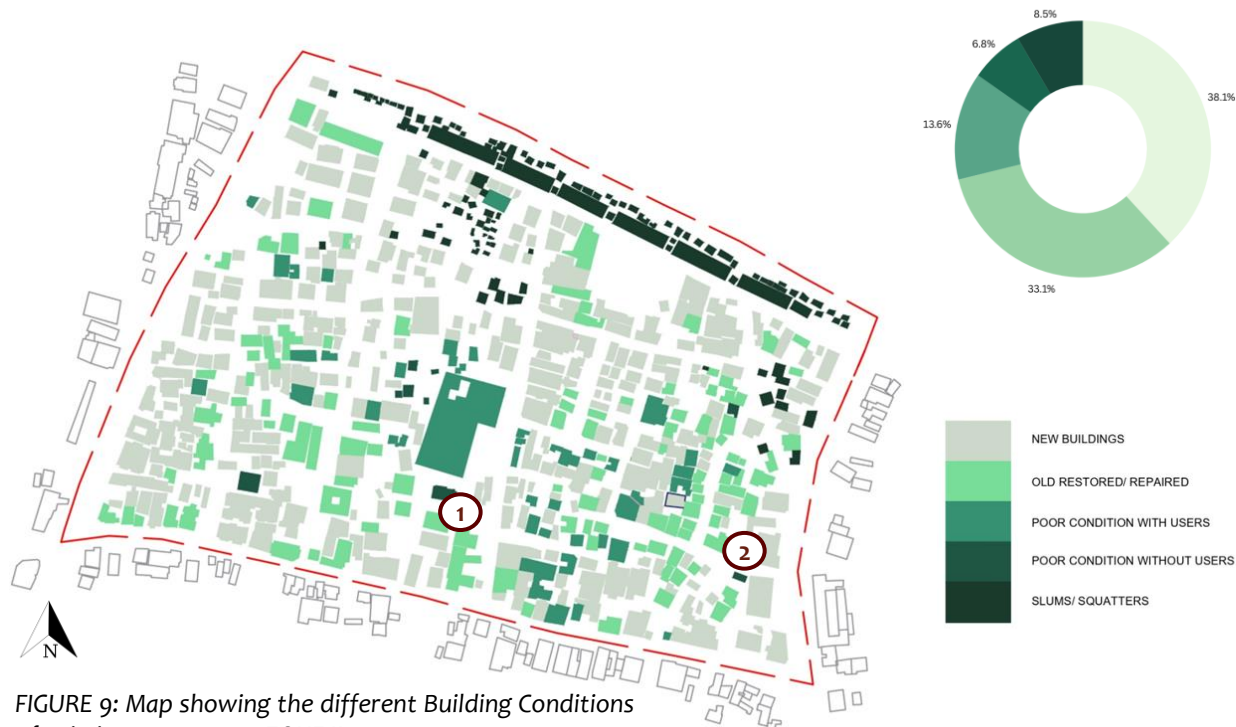


FIGURE 9: Map showing the different Building Conditions of existing structures– ZONE II [SOURCE: Author]



FIGURE 9: Examples of differing Building Conditions– ZONE II [SOURCE: Author]





	New buildings have a trend to emerge along the primary routes
	Some of the inhabited residences have been restored and repaired
	Some buildings that are still in use usually with a connecting pathway and on edge, have been partially repaired and restored.
	Slums have developed along the circular canal, and places that have high walls as edges.

TABLE 13: Types of differing Built Conditions - ZONE II [SOURCE: Author]

- New buildings have a trend to emerge along many internal streets, causing loss of neighbourhood character.
- One of the oldest buildings in this zone (Basubati), which is also a graded Heritage building, but is in extremely derelict condition.



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.6 URBAN SPACE & FORM : Built Use

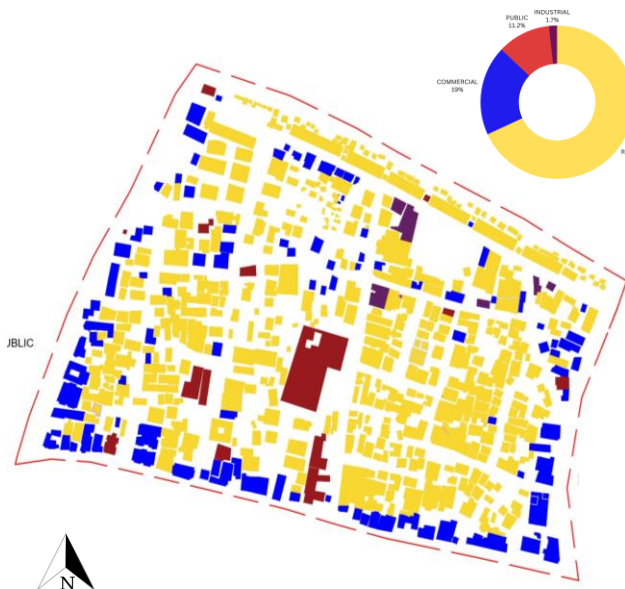


FIGURE 9: Built Use Map of Ground Floor – ZONE II
[SOURCE: Author]

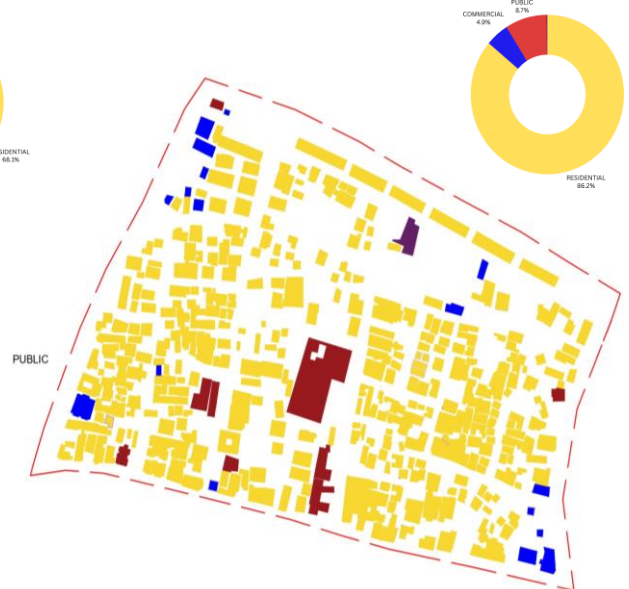
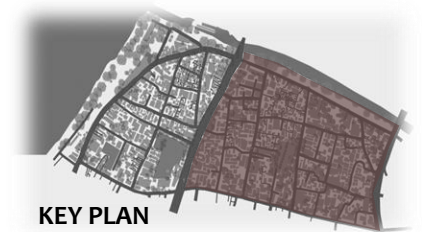


FIGURE 9: Built Use Map of First Floor – ZONE II
[SOURCE: Author]

- Residential built- use include both multi- storeyed apartments, as well as smaller dwellings that mostly lie along the internal streets.
- Mixed use developments, with commercial on the ground floor and residential on the upper floors, can be seen along the primary routes.
- Industrial estate under WBSIDCL covers large parts of these zone, which has several warehouses and godowns.



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.6 URBAN SPACE & FORM : Built Use

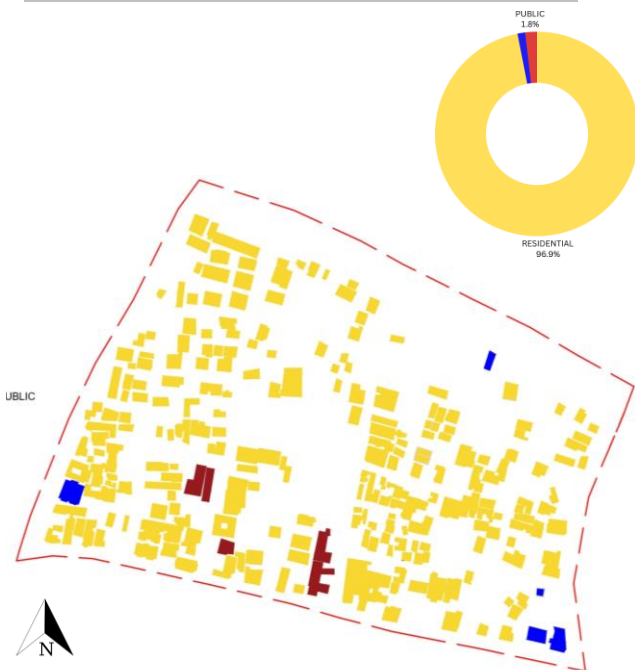


FIGURE 9: Built Use Map of Second Floor – ZONE II
[SOURCE: Author]



FIGURE 9: Built Use Map of Third Floor – ZONE II
[SOURCE: Author]



- Small scale retail establishments can be found scattered in and around the area, especially along the intersection nodes.
- Examples of public buildings include educational buildings like Bagbazar Multipurpose Girls's School, Ramkrishna Student Home and library, small scale places of religious importance, etc.

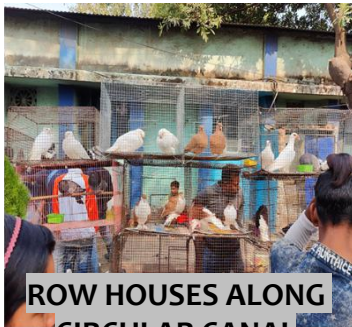


3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.7 Edge Conditions- CANAL, STREET & WALL EDGE



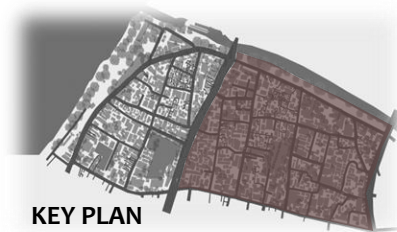
FIGURE 9: Map highlighting the prominent Edges– ZONE II
[SOURCE: Author]



- Continuous wall edges at several locations, especially the enclosed park structures, act as visual barriers, acting as street encroachments and dumping grounds.

Several wall edges in this zone define narrow alleyways creating small transitions spaces between two houses.

FIGURE 9: Prominent Edges– ZONE II
[SOURCE: Author]



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.8 Movement- ROUTES & PATHWAYS

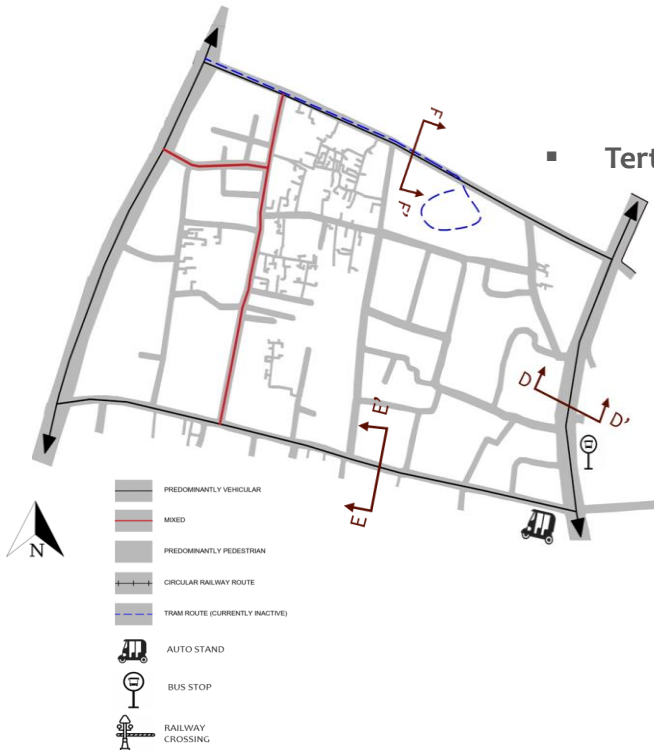


FIGURE 9: Map highlighting the prominent Routes- ZONE II [SOURCE: Author]

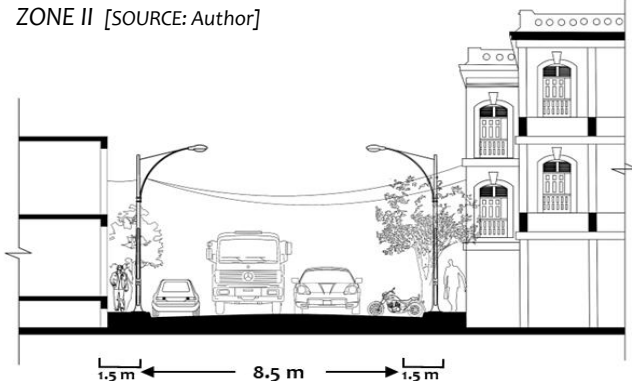


FIGURE 10: Section E-E' Through Bagbazar Street (Primary Road) [SOURCE: Author]

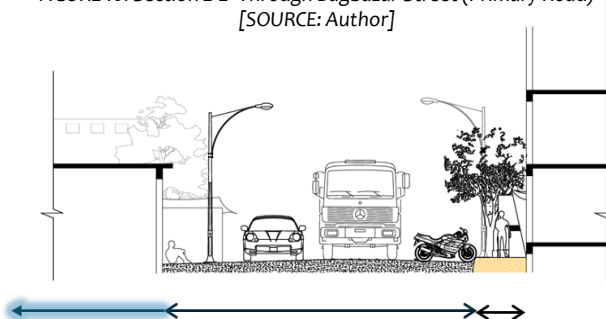


FIGURE 10: Section F-F' Through Galiff Street (Primary Roads) [SOURCE: Author]

- The hierarchy of roads is as follows:
 - Primary roads = 10 – 20 m wide
 - Secondary roads = 5- 10 m wide
 - Tertiary roads or collector streets = <8 m wide

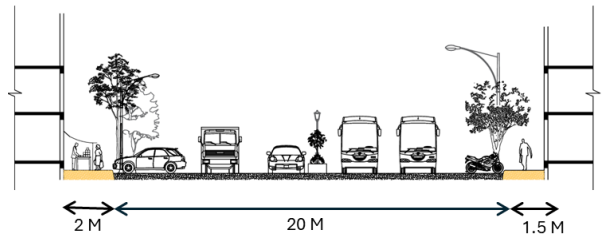


FIGURE 10: Section D-D' Through Barrack Trunk Road (Primary Roads) [SOURCE: Author]

- The primary roads include Barrackpur Trunk Road, the Bagbazar Street and Galiff Street, running along the outer peripheries of this zone. The width generally ranges from 10- 20 meter.
- The secondary roads are the ones which are internal streets that allow both pedestrian and vehicular movement. These range between 6-8 meters.
- The tertiary streets or alleyways are the internal streets that are predominantly pedestrian streets, with width ranging between 4-6 meters. These are also used for different domestic activities by the local people.



3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.8 Movement- ROUTES & PATHWAYS

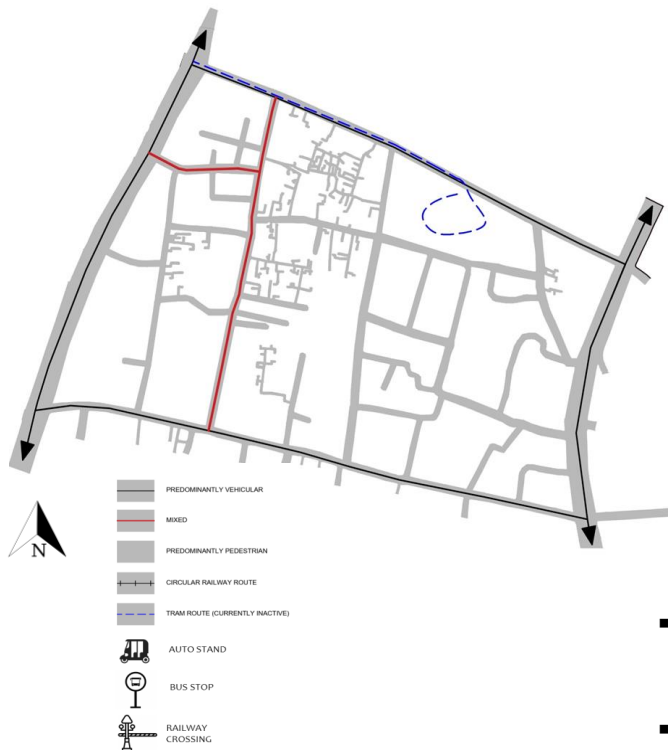


FIGURE 10: Image showing Barrack Trunk Road (Primary Roads)
[SOURCE: Author]

- Pavements generally have an average width of 1.5 meters.
- The Akshay Bose Lane that runs along the eastern edge of the zone, at the northern corner, experiences on- street parking.
- The Bagbazar Street is also the route for procession during Durga Pujo immersions and faces major congestions.



FIGURE 10: Image showing Bagbazar Street (Primary Road) [SOURCE: Author]



FIGURE 10: Image showing Galiff Street (Primary Roads) [SOURCE: Author]



3.2.7 SURVEY AND ANALYSIS – ZONE II

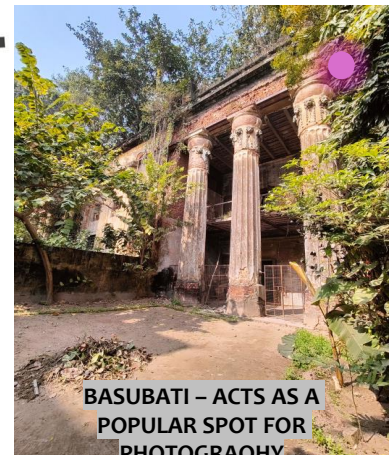
3.2.7.9 Activities- MAGNETS & GENERATORS



COMMERCIAL ACTIVITIES
ALONG BAGBAZAR STREET



BAGBAZAR MULTIPURPOSE
SCHOOL



BASUBATI – ACTS AS A
POPULAR SPOT FOR
PHOTOGRAPHY

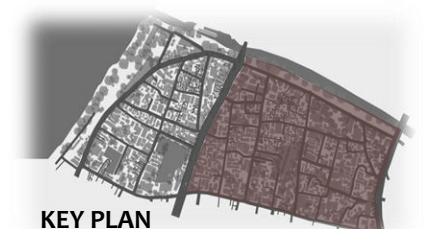
FIGURE 9: Examples of Permanent & Seasonal Magnets– ZONE II
[SOURCE: Author]

FIGURE 9: Map highlighting the Permanent and the Seasonal Magnets– ZONE II
[SOURCE: Author]

PERMANENT MAGNETS

TEMPORARY/ SEASONAL MAGNETS

- The **permanent magnets** within this zone include a **major landmark that is the Basubati**, that lies in derelict condition but is still a popular site for photography enthusiasts.
- **Spill overs of both permanent and temporary magnets often create hindrance** on the regular movement patterns on the roads.
- **Seasonal magnets often restrict free movements due to undefined nodes** and extremely unhindered and haphazard activities, at different times of the year, such as Durga Pujo and other festivals, food fairs, etc.



KEY PLAN

3.2.7 SURVEY AND ANALYSIS – ZONE II

3.2.7.10 Visual Character- LANDMARKS



FIGURE 9: Map highlighting the Major Landmarks– ZONE II
[SOURCE: Author]



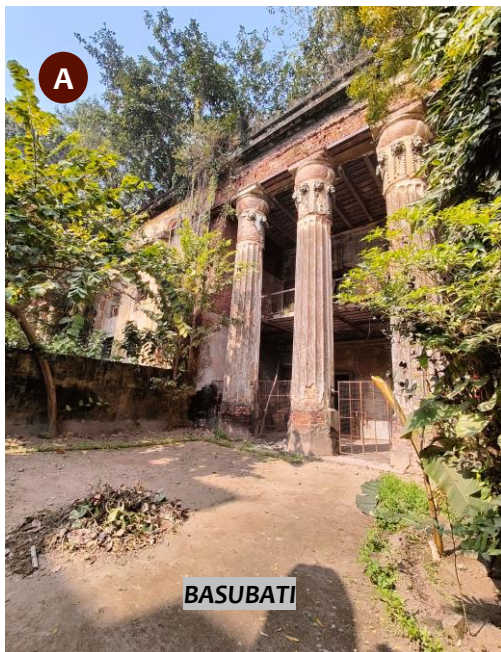
- Several places of religious importance, having heritage value are in proximity within the neighbourhood, thus generating desired activity and footfall.
- No designated parking areas near these landmarks, thus creating on- street congestion.
- Lack of any space for public or commercial activity around these points, thus promoting on- street encroachments.

GRADED TANGIBLE HERITAGE

- BASUBATI
- 'DOCHALA' SHIVA TEMPLE OF JAGATRAM HALDER
- HOUSE OF RAMPRASAD MITRA
- SHIVA TEMPLE OF MITRA FAMILY

TABLE 14: Graded Heritage Structures- ZONE II
[SOURCE: Kolkata Municipal Corporation
'CAPACITY BUILDING PROGRAMME' BROCHURE]

	GRADED TANGIBLE HERITAGE
	NON - GRADED TANGIBLE HERITAGE
	INTANGIBLE HERITAGE



3.2.8 INFERENCES - ZONE II

PARAMETERS	INFERENCES
FIGURE- GROUND	<ul style="list-style-type: none">▪ Following the existing organic pattern for development.▪ Looking to activate open areas, wherever possible, in the internal densely packed neighbourhoods.▪ Enhancing the accessibility to these integrated open areas, to improve the public realm.
OPEN SPACES	<ul style="list-style-type: none">▪ Upgrading existing public open spaces following the traditional system.▪ People enjoy semi- enclosed areas over separately enclosed areas for evening activities.▪ Commercial activities, causing encroachments on both internal streets and pavements cause hindrance in movement
BUILDING AGE & CONDITION	<ul style="list-style-type: none">▪ Newer and taller buildings are being erected on sites of previously existing buildings , with little consideration to traditional built-forms, thus causing a loss of the historic architectural character, for the neighborhood.▪ Identifying abandoned buildings' condition and assigning new-use to them, or demolishing them to create open spaces, to liven up the neighbourhood.
BUILDING HEIGHT	<ul style="list-style-type: none">▪ Continuing the low height skyline of the internal neighbourhoods to retain the uniformity of the area.▪ Standardizing building height for upcoming constructions to enable access to sunlight in the old low- height residential buildings.
BUILT USE	<ul style="list-style-type: none">▪ Most built- forms are intended to be used for residential purposes.▪ Neighbourhoods are sometimes planned with small pockets of enclosed green areas, that remain underutilized.▪ People prefer open areas to be extensions of the streets for leisure activities, over defined separated areas as open spaces.
WATER (Canal), WALL & STREET EDGES	<ul style="list-style-type: none">▪ Redesigning the enclosed parks, as semi- open areas and integrating them with public spaces.▪ Formulating guidelines to prevent street encroachments, wherever necessary.

TABLE 22: Inferences I- ZONE II
[SOURCE: Author]

3.2.8 INFERENCES - ZONE II

PARAMETERS	INFERENCES
ROUTES & PATHWAYS	<ul style="list-style-type: none">▪ Designated parking areas in the internal areas to be provided, to discourage on- street parking, and facilitate pedestrianism.▪ Reinforcing a well- defined network of pedestrian pathways with convenient connectivity with upgraded open areas.
MAGNETS & GENERATORS	<ul style="list-style-type: none">▪ Upgradation of the streets, wherever necessary, to facilitate access to the permanent magnets.▪ Designing a well-defined pedestrian pathway as a means to connect the seasonal magnets, i.e., linking the Durga Pujo grounds.
NODES	<ul style="list-style-type: none">▪ Controlling roadside commercial activities in the internal streets and formalizing them to avoid conflict.▪ Creating well- defined pedestrian nodes around places of importance, to foster pedestrianism.
LANDMARKS	<ul style="list-style-type: none">▪ Reinforcing a pedestrian route connecting places of interest▪ Provision of designated spaces for commercial activity near these points
VIEWS & VISTAS	<ul style="list-style-type: none">▪ Creation of a new and improved visual axis for the lanes connecting important places of importance.

TABLE 23: Inferences II- ZONE II
[SOURCE: Author]

3.2.9 IDENTIFICATION OF THE INTERVENTION SITES - ZONE II

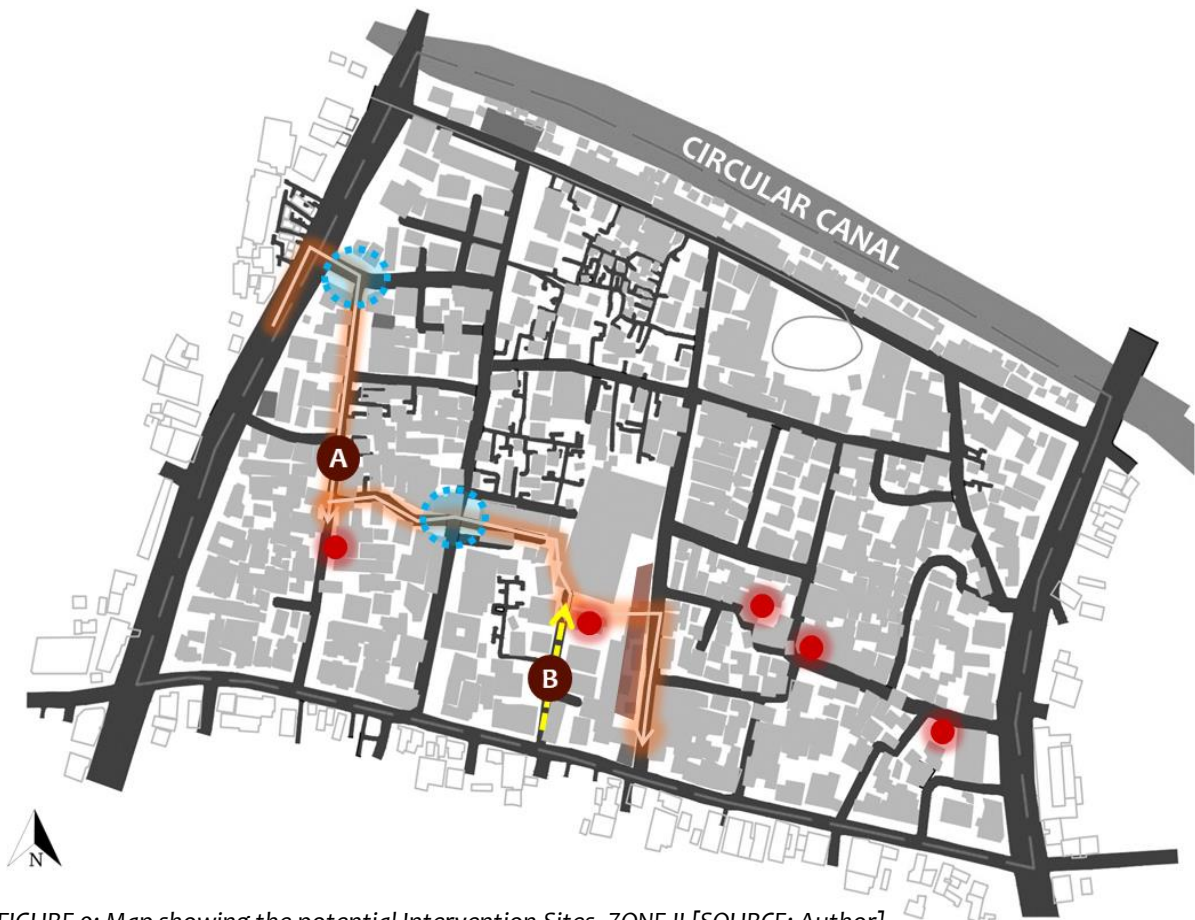


FIGURE 9: Map showing the potential Intervention Sites- ZONE II [SOURCE: Author]

- A**

Continuation of the heritage trail, hereby connecting other places of significance
- B**

Street and other underutilised open areas activation through infrastructure upgradation

- DEVELOPMENT OF HERITAGE TRAIL
- PEDESTRIAN AND VEHICULAR NODE DEVELOPMENT
- PEDESTRIAN NODE DEVELOPMENT
- STREET ACTIVATION
- OPEN AREA DEVELOPMENT
- ADAPTIVE REUSE

04

DESIGN IMPLEMENTATIONS



4.1 URBAN DESIGN GUIDELINES

ZONE I

- Developing the Udbodan Lane as an important axis to highlight the heritage buildings located in its proximity.
- Relocating and providing housing solutions for the slums, in order to create a public plaza unifying all the important heritage landmarks, of similar cultural identity.
- Developing and upgrading pedestrian nodes, at existing points of conflict.
- Redesigning the existing enclosed neighborhood green pockets into semi enclosed public areas and reintegrating them with the adjoining streets.
- Designing permeable boundary solutions to activate the now- desolate streets along the posterior edges of Bagbazar Sarbojonin Park.
- Proposing guidelines for buildings along the street edge and providing provision of small-scale commercial developments, on the ground floors.
- Activating the riverfront and enhancing the ghats as landmarks.
- Provision of designated spaces for parking, near the places of interest.

ZONE II

- Developing the Pashupati Bose Lane and the Nandalal Bose Lane as important axes to highlight the heritage buildings located in its proximity.
- Developing and upgrading pedestrian nodes, at existing points of conflict.
- Redesigning the existing enclosed neighborhood green pockets into semi enclosed public areas and reintegrating them with the adjoining streets.
- Provision of designated spaces for parking, near the places of interest.

4.2 DESIGN SHEETS

URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
Case Application at Bagbazar, Kolkata, West Bengal

URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
Case Application at Bagbazar, Kolkata, West Bengal

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URBAN REJUVENATION OF A HISTORIC NEIGHBOURHOOD IN THE CORE AREA OF A CITY :
Case Application at Bagbazar, Kolkata, West Bengal

A detailed architectural sketch of a street scene, likely in Kolkata, India. The drawing shows a perspective view of a street lined with buildings. On the left, there's a building with a prominent arched doorway and a balcony. On the right, there's a long, low building with a series of arches, possibly a tram station or a market. A tram is visible on the street, and there are some figures of people. The sketch is done in a loose, expressive style with visible lines and shading. The overall tone is sepia or light brown.

05

CONCLUSION

— Anirul — 21
Kolkata — ..

The urban rejuvenation of Bagbazar, a historic neighborhood in the core area of Kolkata, underscores the immense potential inherent in this culturally rich precinct. Through this thesis, we have explored and proposed strategies for revitalizing Bagbazar's unique urban fabric while preserving its historical and cultural essence.

Bagbazar's heritage value is immense, with its numerous heritage structures and traditional Durga Pujo grounds serving as testament to its rich cultural past. These elements not only highlight the architectural and historical significance of the area but also foster a deep sense of community and continuity among its residents. The presence of these cultural landmarks amplifies Bagbazar's potential to be recognized and celebrated as a heritage neighborhood, drawing interest from heritage enthusiasts, tourists, and cultural scholars alike.

Moreover, the findings and proposals presented in this thesis reveal that there is always further scope for rejuvenation in Bagbazar. The ongoing urban challenges, such as infrastructure decay, underutilized public spaces, and safety concerns, can be addressed through continuous and adaptive urban design interventions. By leveraging modern urban planning principles while respecting the neighborhood's historical context, Bagbazar can evolve into a model of sustainable urban rejuvenation.

A detailed architectural sketch in a light blue-grey tone serves as the background. It depicts a perspective view of a street lined with classical-style buildings. On the left, a building features a prominent arched doorway and a balcony. On the right, a long, low building with a series of arched windows or doorways is visible. A tram or trolley is sketched on the street in the distance. The overall style is that of a fine-lined architectural drawing.

06

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