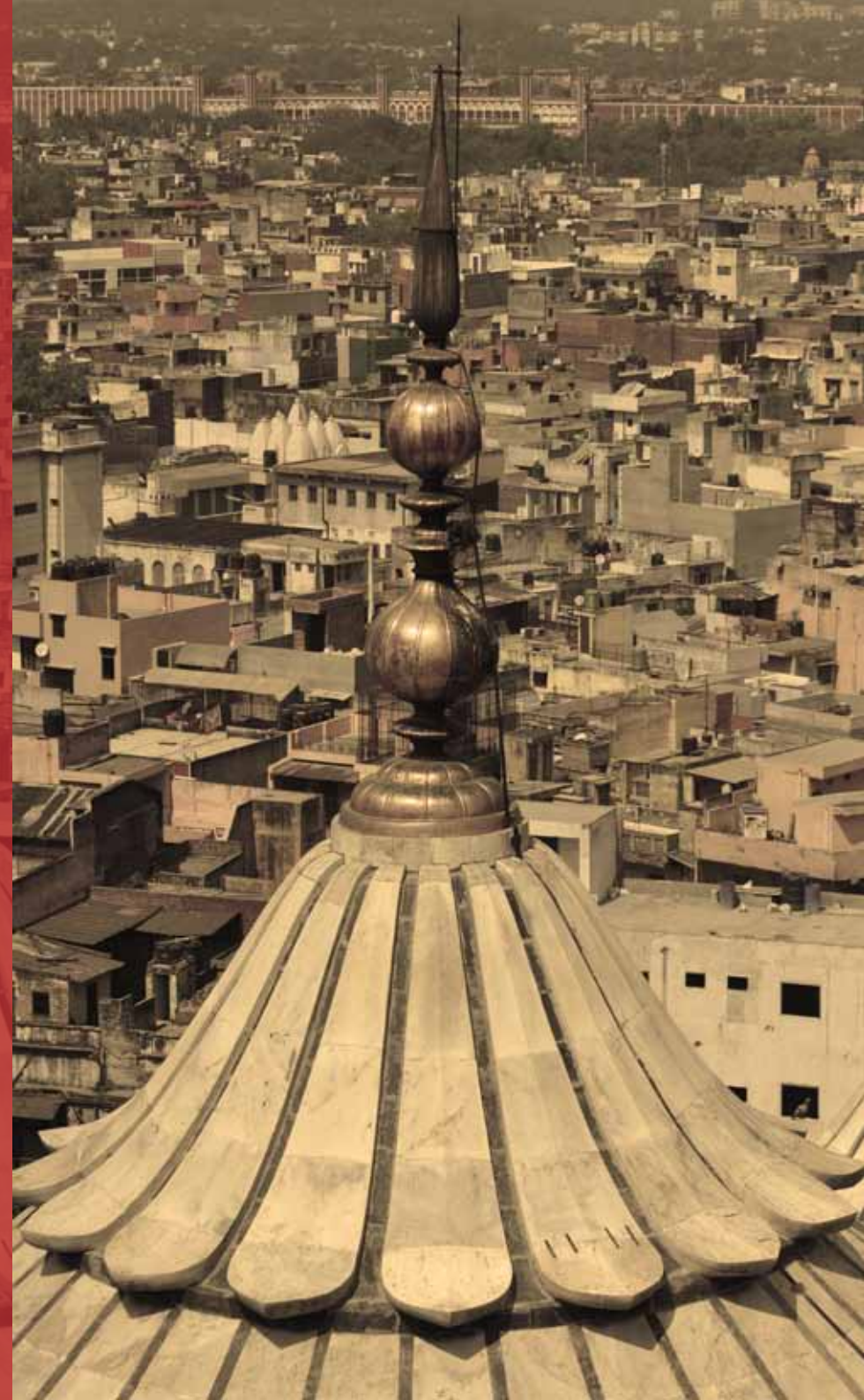




CITY LEVEL PROJECTS

REJUVENATION OF SHAHJAHANABAD





(An ISO 9001 : 2008 Certified Organisation)

Delhi Urban Art Commission

The Delhi Urban Art Commission was set up by an Act of Parliament in 1973 to “advise the Government of India in the matter of preserving, developing and maintaining the aesthetic quality of urban and environmental design within Delhi and to provide advice and guidance to any local body in respect of any project of building operations or engineering operations or any development proposal which affects or is like to affect the skyline or the aesthetic quality of the surroundings or any public amenity provided therein”.



(An ISO 9001 :2008 Certified Organisation)

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DELHI URBAN ART COMMISSION with gratitude duly acknowledges the valuable contributions of the following in making this report:

Organisations / Others

Ministry of Urban Development

Delhi Development Authority

Government of National Capital Territory of Delhi

North Delhi Municipal Corporation

East Delhi Municipal Corporation

South Delhi Municipal Corporation

New Delhi Municipal Council

Geospatial Delhi Limited

Delhi Metro Rail Corporation

Delhi Urban Shelter Improvement Board

BSES Rajdhani Power Limited

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RWA's and Area Councillors

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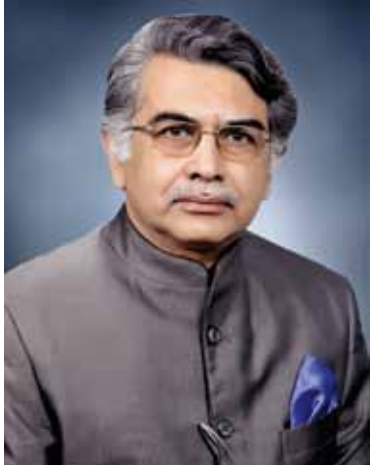
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Preface



The city of Delhi, capital of this vast land of diversities, is a city laden with layers of history, a place where civilizations have lived, prospered and perished over centuries. The modern city today, built over and around a rich tapestry of heritage, presents an opportunity at every turn, to allow for coexistence of the past, present and the future. In order to understand this multidimensional urban spectrum and attempt to plan the future, various city level studies have been initiated by the DUAC. I hope that these studies will help the planners of modern day Delhi to carefully articulate urban space, structure, form and environment and sensitively address future requirements.

I convey my thanks to all the Consultants and Members of the Commission who have tirelessly worked on this research project to bring out this document. I also take this opportunity to place on record my sincere appreciation of the efforts of Secretary and other staff of DUAC for providing the necessary administrative support to make this happen.

I fondly hope that the authorities of the local, state and national government take these studies seriously and implement, in right earnest, the suggestions given herein.

October, 2017

Sd/-
Prof. Dr. P.S.N. Rao
Chairman, DUAC

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Summary

Historically, every city started as a small agglomeration along or around a water body and over the years it grew in size and value, into a unique settlement, rich with stories and culture. The evolution of Delhi is similar. What is different however, is that based on evidence found, it is not one, but seven historic cities, that have merged to finally form the megalopolis that we now know as Delhi.

“SHAHJAHANABAD” is one such city of Delhi which withstood the test of time and development. Till date, it holds a diverse population and a pulsating economy within its walls. The Mughal Emperor Shah Jahan laid the foundation of this city in 1639, thereby founding the Seventh city of Delhi. It was designed with forts, mansions, markets, religious buildings and magnificent gardens and became a self-sufficient fortified sanctuary for royalty, nobility and commoners alike. However, with time and ensuing political upheavals, the city fell prey to neglect, consequently degenerating the quality of life it once provided. With the British Siege, “Shahjahanabad” became the “Old City” of Delhi and the focus shifted to newer settlements further southwest. A shift of land use from predominantly residential to trade and commerce can be observed, establishing Old Delhi as one of Asia’s largest wholesale markets. Further increase in population and deteriorating infrastructure have created slum-like conditions in the city.

However, despite years of plunder and neglect, its magnificent scale is breathtaking. Apart from the grandeur of what remains of its architectural splendour, the city also showcases an array of traditional art, craft, beliefs and practices. Various layers of markets, food stalls, and cultural stops make it an everlasting fete. Today, the city features an unaccounted built heritage, glistening bazaars, interesting and complex built forms and an extravagant culture, with the potential to become a global tourist destination.

Thus, this study aims at **Transforming Shahjahanabad into a positive active space for “Public Interactions”**. The motive of the project is to improve the quality of experience of visitors to Shahjahanabad, and at the same time by using its heritage tourism potential, rejuvenate the city for its residents. While basing our analysis on data collected from secondary sources, the project was developed with the intention of proposing strategies as preliminary actions that could initiate redevelopment before a large-scale, complete development scheme for the area is created. With a minimum intervention approach towards recommendations, our scope of work was to develop and enhance public spaces and experiences. The objectives of this study are to:

1. Infuse life into the walled city
2. To use the heritage, crafts and culinary experiences of Shahjahanabad to make it a global tourist destination
3. Improve the quality of public spaces

The development strategy for designing alternatives was to concentrate on Heritage, Tourism and Development as the key guiding parameters. Tourist-oriented proposals were devised keeping in mind upgrading and uplifting the built environment that visitors would experience. Routes have been identified and interactive activities created along these routes to make it a memorable experience, while visitors get an opportunity to glimpse the tangible and intangible heritage of the Old City. At the same time developing open public spaces, creating windows for revenue generation and enhancing services was also looked into, so as to facilitate and ease a person’s visit to the area, as well as improve the quality of space for its residents. Recommendations were proposed to create a sense of ownership and pride amongst all stakeholders, while increasing the financial and experiential value of the city.

About the Area of Study

The area under study is that which falls within the fortification (line of fortification) built by Shah Jahan in the construction of the city of Shahjahanabad.

Also, known as “Walled City” or “Old City” of Delhi.

It was once filled with mansions of the nobility and members of the royal court, along with elegant mosques and gardens. Today, despite having become extremely crowded and dilapidated, it still serves as the symbolic heart of metropolitan Delhi.

It is surrounded by:

- Dense commercial areas of Sadar Bazaar and Paharganj on the west
- Predominantly Institutional Area of Civil Lines on the North
- Part of New Delhi towards the south and
- Open areas such as Raj Ghat and Shakti Sthal with the riverbank and river beyond towards the east



Key Map

1.1 Cities of Delhi

Geographically, the narrow flat neck of land, known as Delhi, formed the northern gateway to the Gangetic Plain and the Southern Peninsula, thereby establishing it as the most important seat of power. Thus, the building and destruction of the city periodically was an recurring feature in the history of Delhi. Physical evidence of seven such cities remain within parks and habitation in modern Delhi.

It is said that the first city to have been established was Indraprastha, built by the Pandavas during the age of the Mahabharata. Even though the site has been identified as the one where Purana Qila is located, no such archeological evidence is available.

The earliest remains, dating back to the 8th century are that of **LAL KOT** built by Anangpal II of the Tomar Dynasty of Rajasthan. This is situated in present day Mehrauli. Earlier Anangpal I built a fortification around a village and the Surajkund reservoir.

The ruins of **QILA RAI PITHORA** built by Prithviraj Chauhan in 1108 can be seen beyond the area of Lal Kot.

Mehrauli remained an important city for the Asian Turks who later invaded India and established the Delhi Sultanate in the subcontinent under the leadership of Qutub-ud-din Aibak, a slave and a general in the army of Mohammad Ghori. He started building the famous Qutub Minar, which was completed after his death by his successor Iltutmish.

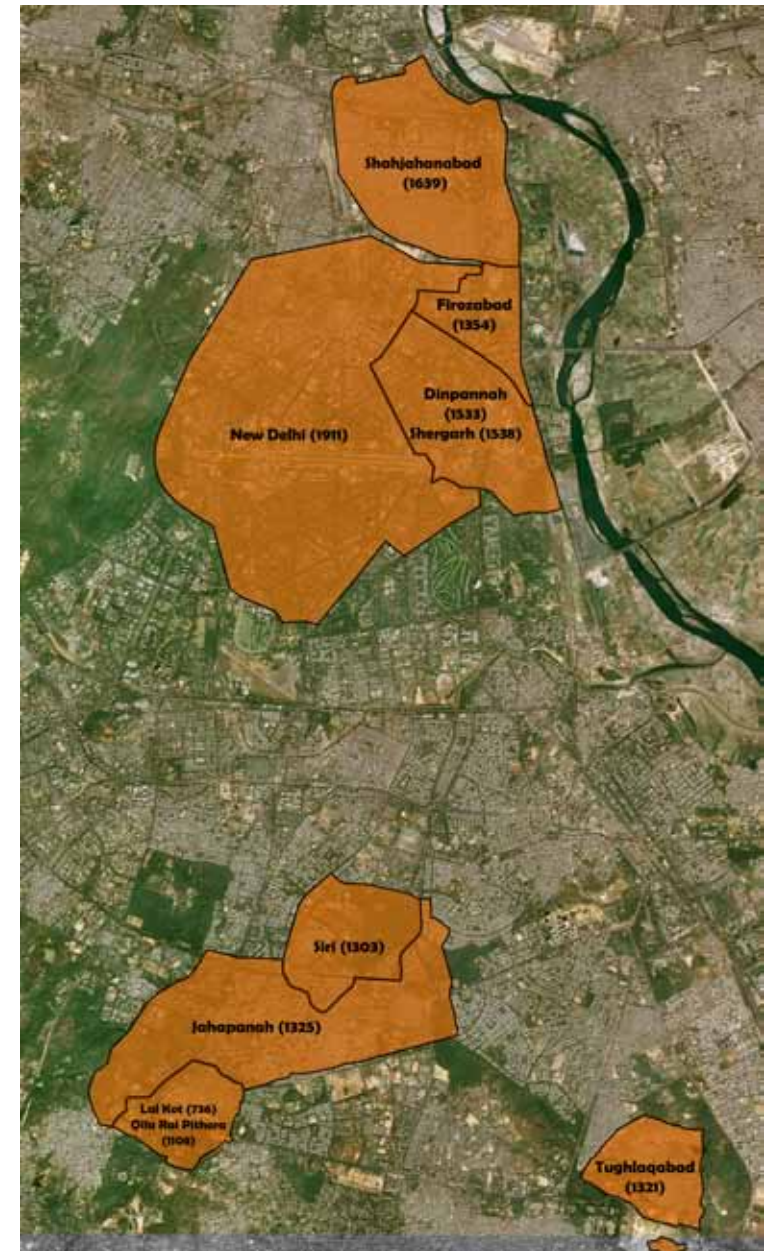
To increase defence against continuous Mongol invasions Allaudin Khilji, the second ruler of the succeeding Khilji dynasty, built the fortification of **SIRI** thereby founding a new capital city in 1303.

Ghiyas-ud-din Tughlaq, founder of the Tughlaq dynasty, also took precautions against Mongol invasion and founded the fortified city of **TUGHLAQABAD**, further south of Siri.

In 1325, Mohammad Tughlaq moved back to the city of Siri, but to accommodate the growing population, he fortified the area between Qila Rai Pithora and Siri to form **JAHAPANAH**, parts of which can be seen in Begumpur and Jahanpanah Forest near Greater Kailash II

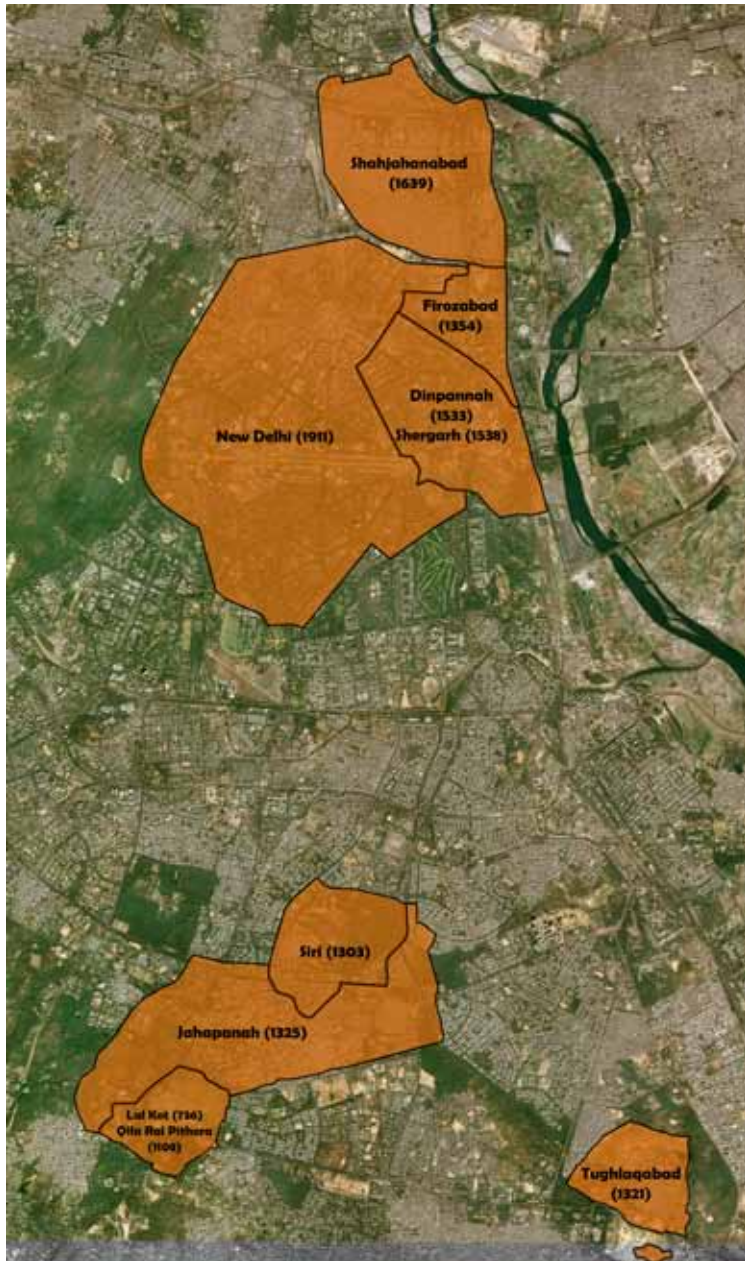
With the Mongol threat receding, Firoz Shah Tughlaq built the city of **FIROZABAD** in 1354, closer to the river. The remains of Firoz Shah Kotla survive as evidence of this city.

Before the downfall of the Delhi Sultanate, the Sayyids and Lodis, whose territories were much reduced, concentrated more on building elaborate mausoleums and gardens rather than grand fortified cities. In the 16th century, with the invasion of Babur, Mughal rule was established in India.



Cities of Delhi

Base Map Source: Google Earth. Information Source: *Delhi Ancient History*, edited by Upinder Singh; *Shahjahanabad The Sovereign City in Mughal India 1639–1739*, Stephen P. Blake



Cities of Delhi

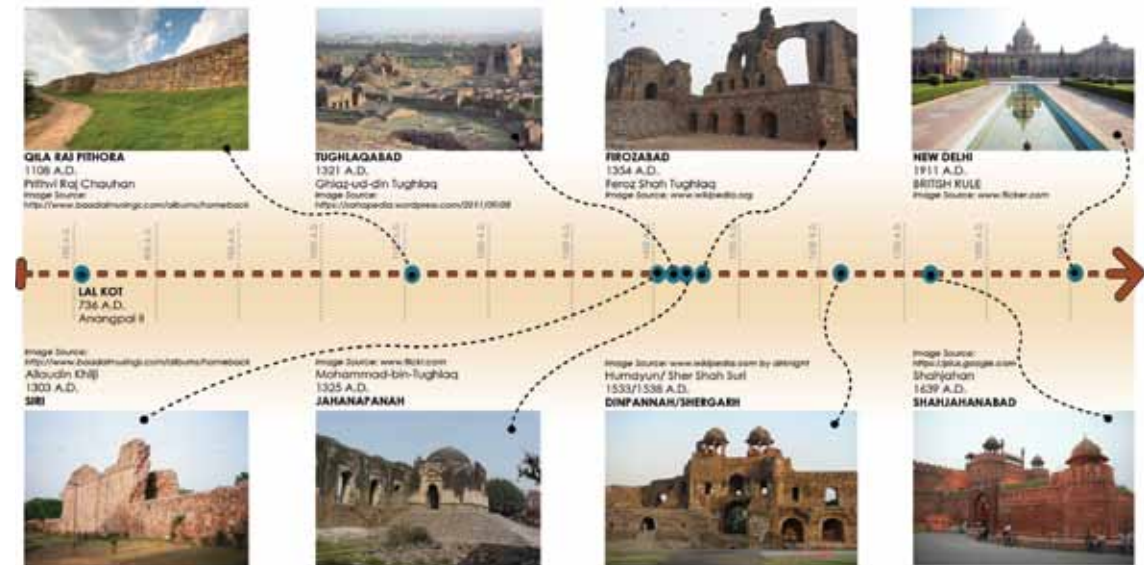
Base Map Source: Google Earth. Information Source: *Delhi Ancient History*, edited by Upinder Singh; *Shahjahanabad The Sovereign City in Mughal India 1639–1739*, Stephen P. Blake

In 1533, Humayun the second Mughal emperor, founded the city of **DINPANNAH** to the north of Nizamuddin which is believed to be the site of Indraprastha. Interrupting his rule, Sher Shah Suri built **SHERGARH** around 1538 by adding to the existing city.

After a brief shift of the capital to Agra in 1639, Shah Jahan, the fifth Mughal Emperor returned to Delhi to establish his capital, thereby laying the foundations for the grand city of **SHAHJAHANABAD** (present day Old Delhi). It was built north of all the existing cities of Delhi, but much closer to the river.

After the British Siege of Delhi in 1857, the city fell into the hands of new rulers, who ruled from Calcutta before shifting their capital to Delhi in 1911. However, during this period Delhi was still used for holding imperial ceremonies and experienced many physical, spatial and cultural changes. In the durbar of 1911, it was announced that Delhi would be the new imperial capital. Construction of **New Delhi** began in 1912, and it was inaugurated in 1931.

These historical cities have henceforth guided the framework of development in Delhi to bring it to its present form.



1.2 Building Shahjahanabad



a) Availability of high lands near river and natural protection by mountain ranges made this site suitable for new development. Existing features at the site were the Kalan Masjid (1387, Feroz Shah) and Salimgarh Fort (1546, Salim Shah Suri).



b) An 8 km long mud wall was built. The construction of the Red Fort began in 1639 and was completed in 1648. By 1650 the wall was fortified.



c) In 1650 Nawab Fatehpuri Begum, one of Shah Jahan's wives, commissioned the construction of Fatehpuri Masjid, as a mosque for the poor. Haуз Qasi was built as a reservoir for the city.



d) From 1644 to 1658 Jama Masjid, the grand mosque for royalty, was built. It was connected to the fort by a short but important street that was mainly used for imperial processions.



e) Chandni Chowk was a tree-lined avenue with shops, residences and public amenities such as a kotwali, mosques and caravan sarais, located along it. A central water canal flowed through the centre.



f) Present day Phawara Chowk (1870s) became a prominent square. Faiz Bazaar was another important commercial street and Daryaganj was a harbour for ships carrying goods.



g) Connections to the fort, masjid and the gates became commercial streets, such as Dariba Kalan (gold, silver), Kinari Bazaar (gilt, sequins), Khari Baoli (spice), Kutra Neel (fabrics) etc.



h) The areas within, developed organically into khatras (alleys of shops and houses) and kunchas (houses arranged around courts), divided according to the occupation of the residents.



i) Gurudwara Sisganj was built in 1783 by Baghel Singh to commemorate the site of the martyrdom of the ninth Sikh guru, Guru Tegh Bahadur. Sunehri Masjid was built for noblemen and merchants.



j) Near Ajmeri Gate is the tomb of Ghazi-ud-Din Khan, one of Aurangzeb's noblemen. Attached was a madrasa and between 1825 to 1842 it housed the famous Delhi College. Today, it is the Anglo Arabic School.



The City of Delhi before Siege of 1857

Source: www.wikipedia.com The Illustrated London News Jan 16, 1858 . Scan provided by Prof. Emerita Frances Pritchett, Columbia



k) Chandni Chowk and Faiz Bazaar bifurcated the city into 3 distinct parts. 1) Organic growth of residential areas to the south 2) Planned colony of Daryaganj and 3) Royal residences to the north.



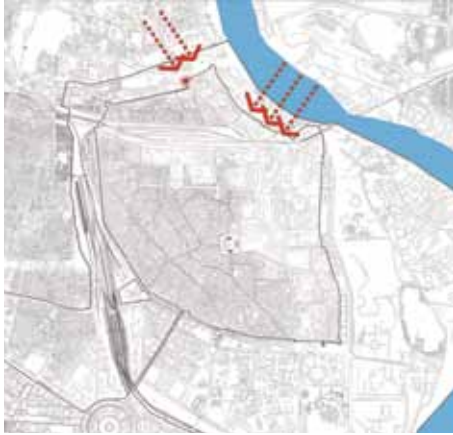
l) By 1857 the city had grown into a self-sufficient urban hub of culture and commerce with issues of overcrowding and neglect.

Base Map Source: William McKenzie Map, 1857

In the course of its existence Shahjahanabad saw many invasions, the most famous being that of Nadir Shah of Persia, which led to the death of thousands and widespread destruction of properties. After this, in the 18th century, Delhi underwent a cultural and intellectual renaissance.

Thereafter began the gradual decline of Mughal power in Delhi, with the final blow being dealt by the Mutiny of 1857. The later Mughal Emperors had fraternized with the British and had tried to integrate the new foreign culture into their own. However this angered the mutineers even further and drove them to carry out blind killings of the British during the Mutiny in Delhi in May 1857. Consequently, the growing political power of the British was now not limited to trade alone, and after the Mutiny was quelled, they overthrew the last Mughal Emperor and took over Delhi to establish it as a part of the Empire, thus forcing Shahjahanabad to undergo innumerable physical and cultural changes.

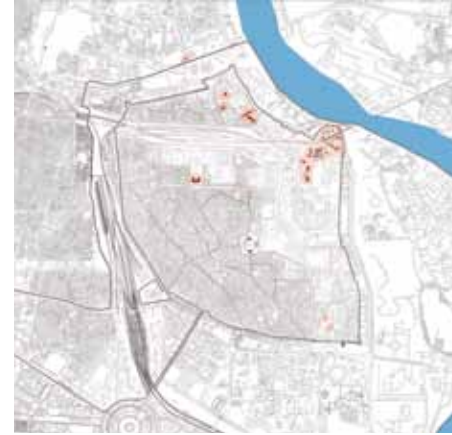
1.3 Under British Rule



a) 1857 saw the siege of the walled city by the British followed by the Mutiny which started around the areas of Kashmere Gate and Calcutta Gate. The mutineers came from across the river and from the northern ridge.



b) Three Durbars were held in 1877, 1903 and 1911 for which many prominent buildings within the Red Fort and walls were demolished and new structures erected to house festivities following the coronation ceremony.



c) Barracks were built within the fort and in Daryaganj. Shahjahanabad was colonially retrofitted with a clock tower (1950s), a Town Hall (1863) and other structures along Chandni Chowk and Kashmere Gate.



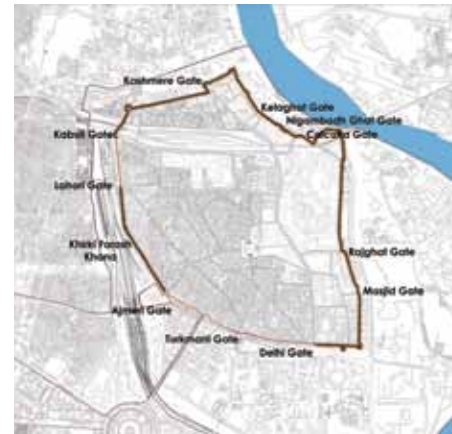
d) The railway was introduced in 1864–65 which ran through Salimgarh Fort and cut across the northern areas of the city. The Old Delhi Railway station and Queen's Way (the road in front of it) was constructed to welcome visitors.



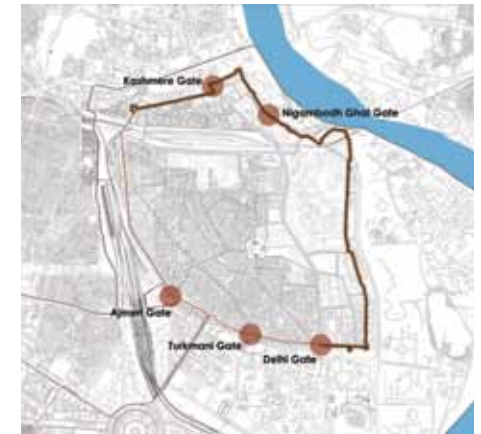
e) The road that formed the north and south axis of the walled city (now Netaji Subhash Road) was cleared for processions and vehicles.



f) In 1913–14 the wall between Kabuli Gate and Lahori Gate was demolished to build Naya Bazaar and Shradhanand Marg, and also to create space for the growing population.



g) In 1930, again part of the wall between Ajmeri Gate and Delhi Gate was demolished. Following this further demolition was done to accommodate the growing population.



h) At present only 5 out of 13 gates and a part of the wall between Delhi and Kabuli Gate to the east of the Red Fort remain as evidence of the grandeur of the city.

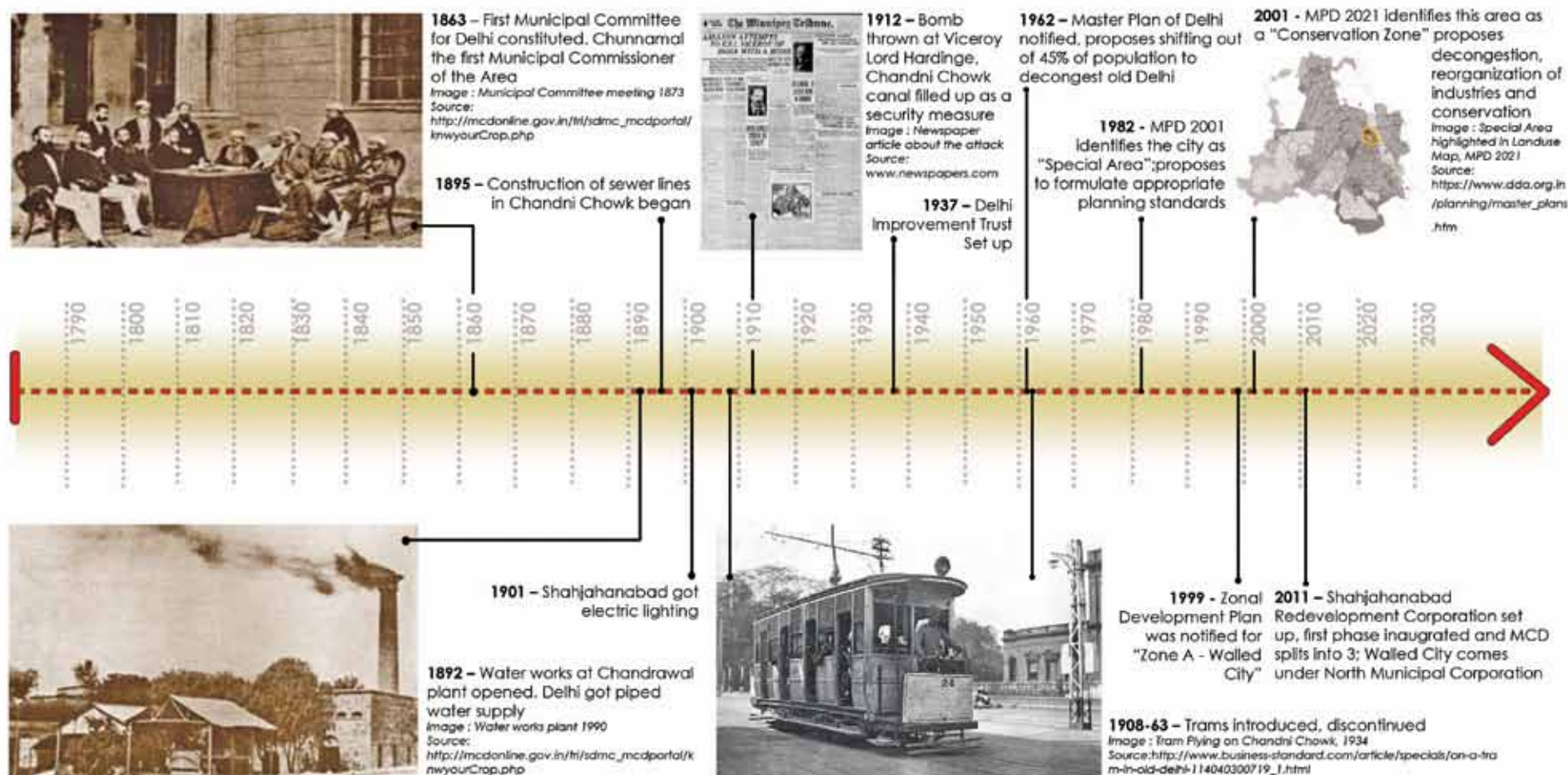
1.4 Present Day Shahjahanabad

What Followed?

Following British Rule, Delhi underwent major reforms with respect to politics, culture, way of life and urban form. Legislative bodies with representatives of the local population were formed to control development and regulate the deteriorating city. Infrastructure upgradation became the top priority of the authorities. A number of roads were built to connect newer parts of Delhi to the older parts of the city and the ease of mobility was a major concern.

Housing in the new imperial capital complex was limited to high officials leading to over-densification of Old Delhi. Proximity to the railway station and ease of access for goods and passengers, further intensified the problem. Even though infrastructure was continuously upgraded, the services were inadequate because of rapid population growth, which Delhi witnessed post Independence.

This led to the need for a new perspective on Old Delhi. Therefore major sections in the Master Plans were dedicated to the Old City. A chronological account of events which led to the present structure of Shahjahanabad is given below.



A. Legislative Set Up

The Legislative set up for Heritage Management in Shahjahanabad can be studied in two parts as given below.

I. For “Core Area” other than Identified Heritage Monuments and Buildings:

a) NODAL AGENCY FOR IMPLEMENTATION

Master Plan, 2021 identifies the Municipal Corporation of Delhi, North, as the nodal agency for planning, implementation and execution of any renewal or redevelopment schemes within Shahjahanabad.

b) AGENCIES INVOLVED IN PLANNING FOR HERITAGE CONSERVATION AND MANAGEMENT

The Delhi Development Authority monitors and administers development within Shahjahanabad.

It is authorized to provide guidelines and regulations for Shahjahanabad’s redevelopment through notified documents such as Master Plans, Zonal Plans, Local Area Plans, Redevelopment Schemes or Action Plans and Building Bye-laws

The Shahjahanabad Redevelopment Corporation founded by the Government to promote heritage conservation in the area through capacity building camps, awareness drives, organizing heritage walks and similar events, building a data centre and advising and planning for redevelopment programs.

Identified Documentation Resource Centre for National Mission for Monuments and Antiquities under ASI.

c) OTHER BODIES INVOLVED IN CLEARANCES AND ADVISORY

DUAC, HCC, DMRC, Other trusts related to eminent religious buildings within the core and NGOs.

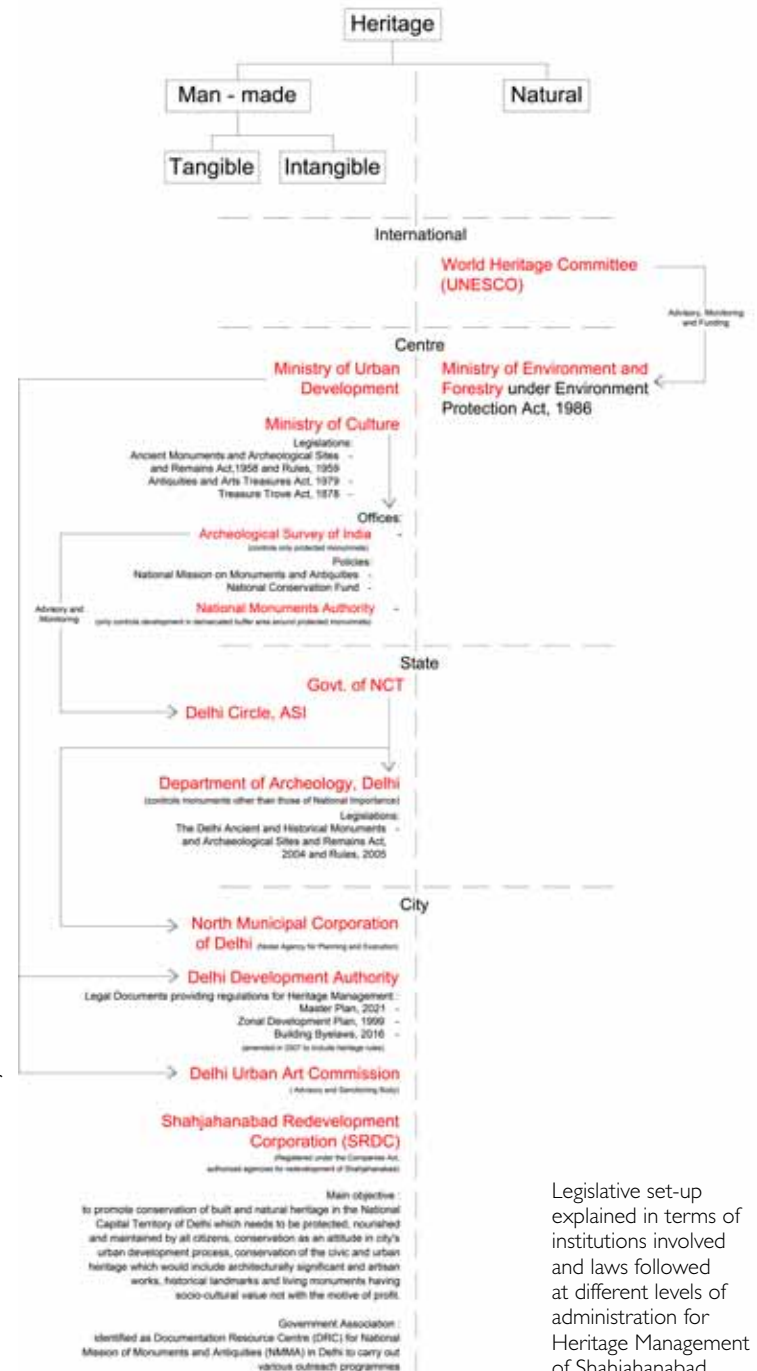
2. FOR IDENTIFIED HERITAGE MONUMENTS AND BUILDINGS:

a) Archeological Survey of India (ASI): responsible under the Ancient Monuments and Archeological Sites and Remains Act, 1956 for notifying and protecting buildings or sites of national importance.

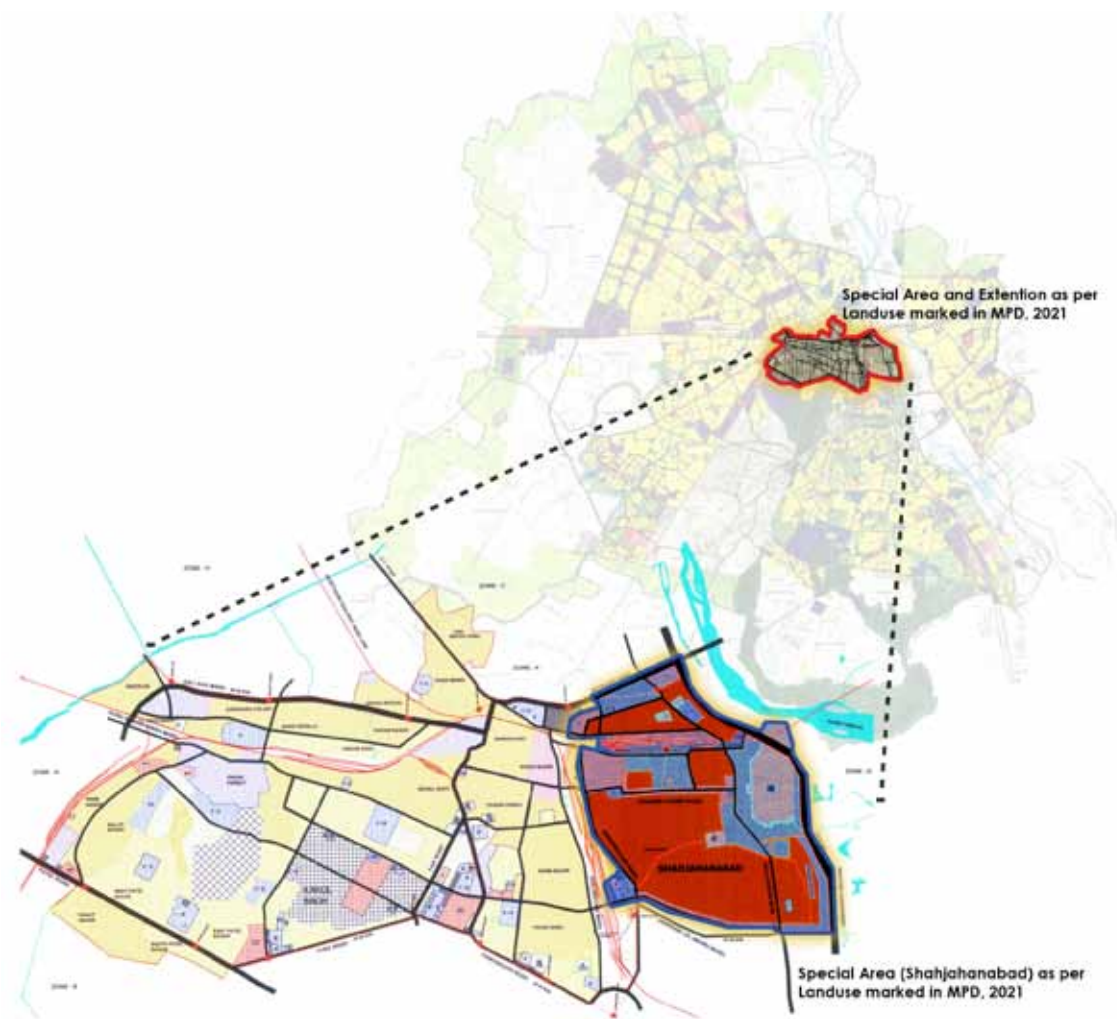
b) National Monuments Authority (NMA): responsible for controlling development in the buffer zones around identified monuments.

c) Department of Archeology, Delhi (since 1978): responsible under the Delhi Ancient Monuments and Archeological Sites and Remains Act, 2004 for notifying and protecting buildings or sites of heritage value other than those of national importance.

Documents which govern the legislative provisions for Heritage Management of Shahjahanabad are: Master Plan 2021, Zonal Development Plan, 1999 and Building Bye-laws amended in 2007 to incorporate heritage regulations.



Legislative set-up explained in terms of institutions involved and laws followed at different levels of administration for Heritage Management of Shahjahanabad



Land Use within Special Area and Extension as Identified in the Master Plan Delhi, 2021

Proposed Land use MPD, 2021 Map Source: www.dda.org/planning

Proposed Land use of Special Area and Extension, MPD, 2021 Map Source: www.dda.org/planning

B. Master Plan (Highlights)

The first Master Plan of Delhi, 1962, identified that Shahjahanabad needed a major thrust in urban renewal and redevelopment. It proposed decongesting the area by shifting 45% of the population out. In MPD 2001, it was identified as a “Special Area” and the need was felt to formulate appropriate planning standards for the area.

In MPD 2021, Shahjahanabad was identified as a “Conservation Zone”. The most important part of the Special Area is the traditional City of Shahjahanabad, part of which is a core business district. This area was seen as prone to commercialization, particularly with improved accessibility due to the MRTS. The Plan proposes to regulate and shift noxious and hazardous wholesale trades and industrial activity from this area. Traditional areas in the Walled City need special treatment to conserve its heritage value while retaining its residential character. Redevelopment of katras is to be taken up on a priority basis. Proposals for Shahjahanabad under the Master Plan should be studied under two heads as follows:

- Proposals for redevelopment in general
- Proposals for redevelopment in context to Shahjahanabad

Proposals for redevelopment in general

Redevelopment of Existing Urban Areas

- Optimum utilization of existing urban land
- To re-organize/pool properties provision of social infrastructure through transferable development rights/accommodation reservation
- Reduce space standards for unplanned area
- Flexible concept for mixed-use zones in special areas
- Schemes to be prepared by local body/landowners/residents.

Source: MPD 2021 (2015, p. 3-9)

Special Areas Redevelopment Strategy

- Low-rise, high density developments accommodating residential, commercial (both retail and wholesale) and industrial uses
- Permitted variety of uses as per mixed-use regulation
- Required open spaces and parking to be provided as per norms
- Eliminate risk generating structures
- Redevelopment to ensure all modern amenities and services

Source: MPD 2021 (2015, p. 3-10, 3-11)

Proposals for redevelopment in context to Shahjahanabad

Special Areas Redevelopment Strategy

- To shift noxious and hazardous wholesale trade and industrial activity from this area
- Conserve heritage value
- Government owned katras to be taken on as a priority and promote privately owned katras for redevelopment
- Areas surrendered for public facilities and heritage value to be used as tradable FAR
- Strengthen linkages between Metro stations and residential areas and provide common facilities
- Road width/widening to be dictated by fire and disaster management criteria
- Roads of 30 m to 50 m length to be minimum 3 m wide, roads more than 50 m in length to be minimum 4.5 m wide
- To play a role in providing housing
- Development of areas with heritage value to be in consultation with archaeological norms
- Concerned municipal body to be the nodal agency which will prepare a Special Area Redevelopment Scheme for traditional areas within a given time frame
- Objective for the redevelopment scheme to be in situ improvements which help improve the architectural character, layout and revitalize trade and commerce
- To ensure permissibility of mixed-use zoning of property or within premise level is compatible to residential areas

Source: MPD 2021 (2015, p. 3-11; 2015, p. 4-5)

Wholesale Trade

- Remove all unauthorized encroachments for better traffic movement
- Wholesale activity to be stopped in the walled city and its extension by using incentives and disincentives

Incentives

- The liaison offices of traders/agents to continue in the present location

- Development of alternate markets for wholesale trade and warehousing
- These new markets should have access from national highways, arterial networks and connectivity with MRTS
- Incentives such as Transferable Development Rights (TDR) and reduced taxes to enable start up/expanding of activity in the new markets

Disincentives

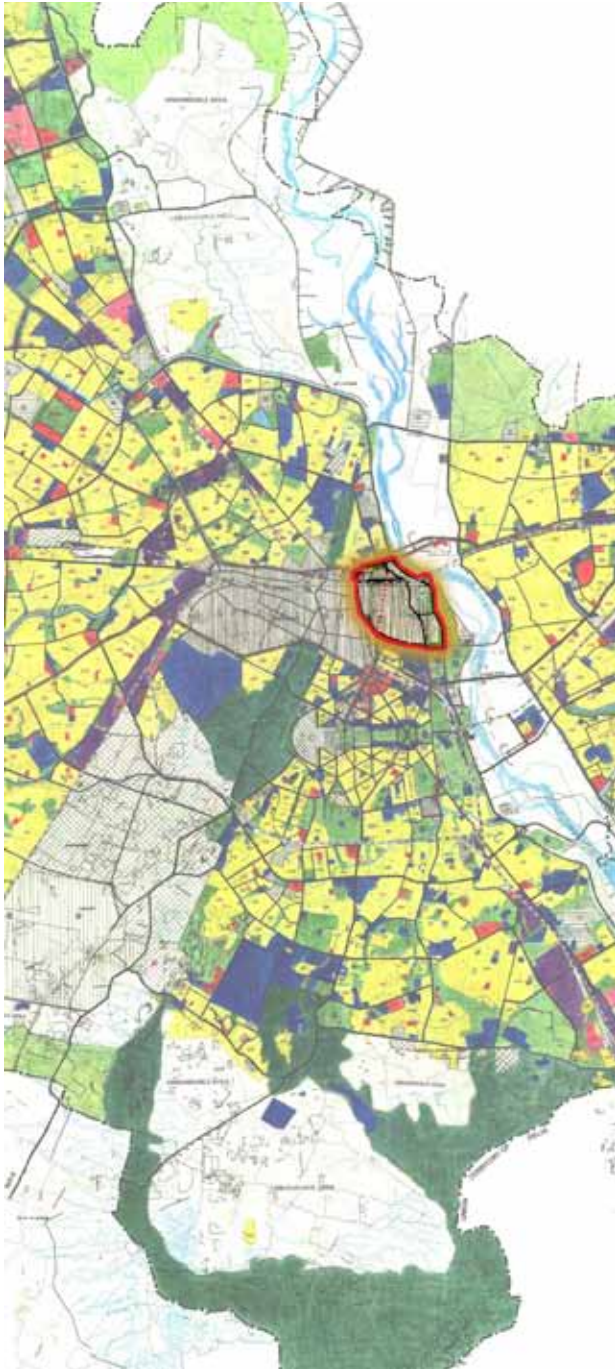
- Restriction on the entry of heavy goods vehicles in the special area
- Storage of hazardous/inflammable commodities such as paper, plastic/PVC, chemicals, petroleum and its products, to be discouraged
- Restriction on storage/warehousing of bulky commodities like foodgrains, fruit and vegetables, dairy, poultry/fish, iron and steel, and building materials
- Non-renewable trade licenses for warehousing trade in nonconforming areas

Source: MPD 2021 (2015, p. 6-1)

Connectivity

- Medium capacity mass transit to be considered on selected routes
- Restrict use of private modes of transportation and provision for parking
- Manage additional traffic at Metro stations
- Need-based traffic circulation scheme
- Improve major road stretches and intersections
- Remove encroachments
- Heavy vehicles to be banned in the Walled City and light commercial to be allowed only at night

Source: MPD 2021 (2015, p. 12-13)



Proposals for redevelopment in context to Shahjahanabad

Special Area Regulations

- Redevelopment scheme to be prepared by concerned municipal body within three years
- Special area building regulations will be prepared by the authority in consultation with the local body within a period of three years and notified with the approval of the central government

Source: MPD 2021 (2015, p. 16-2, 16-3)

Mixed-Use Regulations

The following are not allowed under mixed-use

- Hazardous material handling trade (retail/wholesale)
- Repair/workshops of automobiles, tyre re-soling, retreading, and battery charging
- Warehousing/storage
- Junk shops (except paper and glass waste)
- Liquor shops
- Printing, dyeing and varnishing
- Any other activity notified from time -to- time by the government

Activities not included above

- Business of finished marble products
- Retail of sand and gravel, cement (material to be stacked only in the plot premises)
- Repair shops for automobiles will be allowed on plots abutting mixed-use streets or commercial streets of 30 m ROW or more

Source: MPD 2021 (2015, p. 15-7)

- Mixed-use streets to be minimum of 9 m ROW
- Streets less than 6 m ROW notified as mixed-use streets or as commercial streets will be declared as pedestrian shopping streets (PSS) where motorized transport will not be allowed

Source: MPD 2021 (2015, p. 15 -4)

Permissible Uses: SHAHJAHANABAD

- Public/semi-public uses will be retained in their present locations and additional sites could be indicated in the scheme
- Owners can register with the local body within six months and submit a certificate of structural safety by qualified engineers
- Special area should be prepared by the local body with in three years of approval of the Master Plan Delhi, 2021

Source: MPD 2021 (2015, p. 16-3)

Land use of areas surrounding Shahjahanabad Special Area, as identified in the Master Plan Delhi, 2021

Proposed Land use MPD, 2021 Map Source: www.dda.org/planning

C. Zonal Development Plan (Highlights)

A Zonal Development Plan for the Walled City was prepared in 1999 by the Delhi Development Authority. The plan considered the "Walled City" to comprise 15 sub-zones of Zone A and one sub-zone of Zone C. It was taken up separately because of its special historical and architectural character and urban form.

The area under consideration was of 569.0 ha with a population of 2,35,160 persons (2001, projected as per MPD 2001). Surprisingly, the population has been reducing over the years due to growing wholesale trade in this area. Even though the average gross density in this area is 596 ppha, the net residential density in some areas is as high as 4400 ppha.

The walled city has been demarcated as an Urban Renewal Area under MPD 2001 based on which recommendations have been given in ZDP 1999 for noxious industries and hazardous trades, redevelopment of katras and Evacuee Properties, development of open space and planning for control zones around important monuments. These can be studied under different heads as discussed below.

Walled City Urban Renewal Scheme

- Hazardous industries to be shut and new compatible uses to be added in the scheme
- Public and semi-public spaces to be retained at the same location
- No warehousing to be allowed in the Walled City
- Phool Mandi to be developed as a park
- The Town Hall and the adjacent area to be converted into a public recreational space
- ASI monument prescient conservation plan to be carefully examined

Source: ZDP (A&C) (1999, p.6, 7)

Building Control

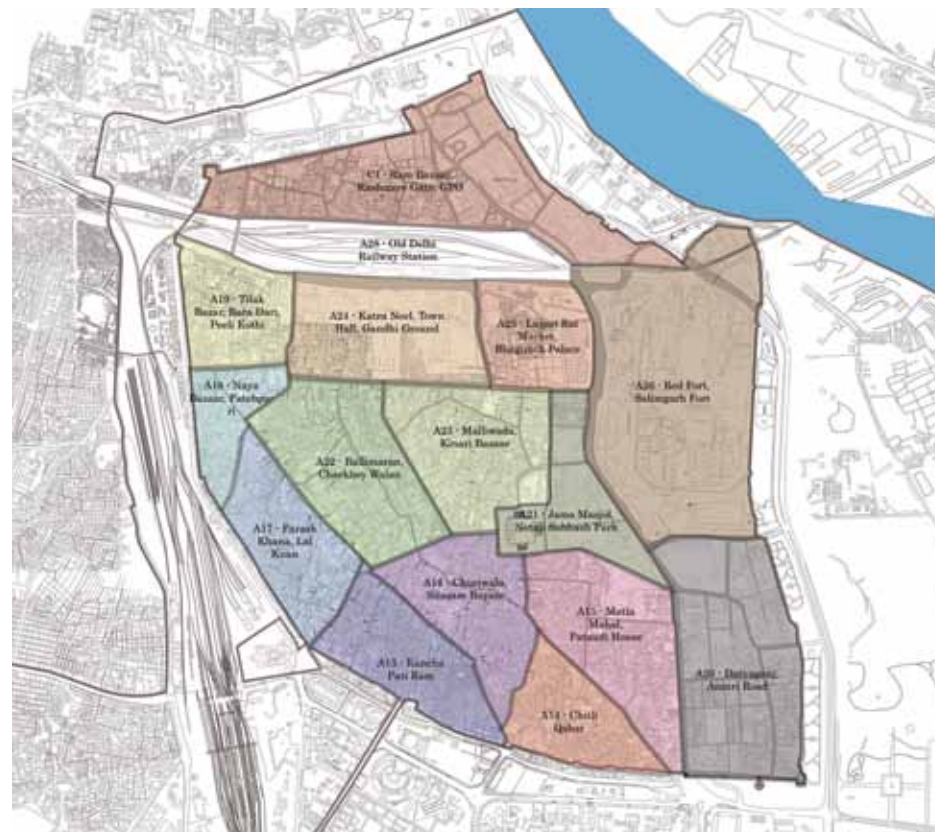
- Maximum FAR and ground coverage to be same as of residential plots
- Construction to be in the same style
- Minimum road width to be 4.5 m, where no space for set back is available
- Lajpat Rai Market: single storey to be retained along Chandni Chowk
- Construction to be based on available approved layout plans

Source: ZDP (A&C) (1999, p.7)

Urban Design Scheme

- All important streets and junctions to be identified
- Heritage building surroundings to be examined and considered in scheme
- After clearance from DUAC, MCD will sanction changes to listed buildings

Source: ZDP (A&C) (1999, p.7, 8)



Sub-zone as per ZDP for Walled City, 1999

Redevelopment of Katras and Evacuee Katras

- Government owned katras in dangerous condition: to be taken up for redevelopment by the government
- Government owned katras in non-dangerous condition: to form co-operative societies and provide leasehold rights for development or to be linked with co-operative society with HUDCO etc.
- Privately owned: suggestions to prepare a scheme to give right to ownership by forming co-operative societies after acquisition

Source: ZDP (A&C) (1999, p.8)



Historical premises within control zones

- Control over volume and façade treatment in the adjoining buildings
 - Streetscaping and landscaping
 - Provision of property design approach/access
 - Use of buildings materials in harmony with the originally used in repair/upkeep of monuments
- Source: ZDP (A&C) (1999, p.11)

ASI controls

- Protected monuments up to 100 m: prohibited area (no-construction zone)
 - Protected monuments next 200 m: protected area (controlled construction with permission)
 - Unprotected monuments cared for by property owners will be conserved.
- Source: ZDP (A&C) (1999, p.11)

Recommendations for preparation of Urban Renewal Scheme

- To increase green open spaces by utilizing evacuee properties
 - Identified six underground parking linked with Park & Ride or Park & Walk system
 - To make provision for Remote Line Unit
- Source: ZDP (A&C) (1999, p.12)

Conversion charges and other penalties

From residential to commercial to be fixed and recovered by DDA/Local Body based on the following:

- Current market price
 - Cost of provision of parking and social infrastructure
- Source: ZDP (A&C) (1999, p.19)

Delineated proposed areas of conservation
Information Source: ZDP (A&C) (1999, p.10), www.dda.org/planning



Identified Mixed-use Streets
Information Source: ZDP (A&C) (1999)



Identified Open Spaces
Information Source: ZDP (A&C) (1999)



Proposed Transport Facilities Information
Source: ZDP (A&C) (1999)

New areas for public and semi-public facilities

- Evacuee property under private hold together can amalgamate to facilitate public and semi-public uses
- 9 pockets identified for specific purpose after detailed survey and analysis, such as community halls, libraries, dispensaries, fire stations, police stations, vocational schools and training centres, night shelters etc.
- Streets identified in the ZDP for mixed-use
- Mixed-use streets would have commercial on the ground floor up to one property depth and existing commercial activities on upper floors

Source: ZDP (A&C) (1999, p.17, 18)

D. Building Bye-laws (Highlights)

The building bye laws sketches out the **levels of intervention that could be achieved in buildings with varying historic significance and requirements of upgradation** by setting them into different grades as shown below. However this is limited to buildings listed in the MPD, 2021 or by other institutions.

	Grade I	Grade II	Grade III
Definition	This comprises buildings and precincts of national or historic importance, embodying excellence in architectural style, design, technology and material usage and/or aesthetics; they may be associated with a great historic event, personality, movement or institution. They have been, and are the prime landmark of the region. All natural sites shall fall within Grade I	Grade II (A&B) comprises buildings of regional and local importance, possessing special architectural or aesthetic merits, or of cultural or historical significance, though of a lower scale than Grade I. They are landmarks which contribute to the image and identity of the region. They may be the work of master craftsman or may be models of proportion and ornamentation or designed to suit a particular climate	This comprises buildings and precincts of importance for the townscape that evoke architectural, sociological or aesthetic interest though not as much as in Grade II. These contribute to the character of the locality and can be representative of the lifestyle of a particular community or region and may also be distinguished by setting or special character of the façade and uniformity of height, width and scale
Objective	Careful preservation	Intelligent conservation	Intelligent conservation on a lesser scale and special protection to unique features and attributes
Scope for Changes	No intervention shall be permitted either on the exterior or the interior, unless it is necessary in strengthening or prolonging the life of the building, precinct or any feature. For this purpose, absolutely essential and minimum changes may be allowed provided that the changes conform to the original	Grade IIA: Internal changes and adaptive re-use may be and at large be allowed but subject to strict scrutiny. Care would be taken to ensure the conservation of all special aspects for which it is included in the grade list Grade IIB: In addition to the above, extension or additional building in the same plot may be permitted in certain cases provided it is in harmony with the existing height and façade	Internal changes and adaptive re-use may by and large be allowed. Changes can include extensions and additional buildings in the same plot, provided they are in harmony with and should be such that they do not detract from the existing heritage building/precinct
Procedure	Development permissions for the changes would be given on the advice of the Heritage Conservation Committee	Development permissions for the changes would be given on the advice of the Heritage Conservation Committee	Development permissions for the changes would be given on the advice of the Heritage Conservation Committee
Vistas/Surrounding Development	All development in areas surrounding Heritage Grade I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade I	All development in areas surrounding Heritage Grade I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade I	All development in areas surrounding Heritage Grade I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade I

E. Schemes for Redevelopment

To understand the complexity of problems in the Shahjahanabad area, it is important that we assess the frequency and objectives of some of the previous studies done for redevelopment. Since these studies were conducted for segregated pockets, our project would consider linking them, such that the benefits of these studies is reaped for this area as a whole.



PROJECT 4: Redevelopment of Begum ka Bagh (2002)

Agencies involved: DUAC and SPA (Urban Design)

Status: Study

Objective: To restore the importance of Begum ka Bagh as a destination, and not merely as a transportation node. Simultaneously, the development respects the historicity of the site and will recreate the essence of a singular public open space to be used by all. Alongside is a proposal to better traffic movement on major roads in front of the railway station, including entry/exit planning in order to reduce congestion.

PROJECT 1: Redevelopment of Jama Masjid Precinct (2010)



Agencies involved: SRDC, MCD and Pradeep Sachdeva Design Associates

Status: In process for clearance and implementation

Objectives:

- Identifiable urban form for the precinct
- Contemporary environment befitting the heritage of this precinct
- Open up visual and physical links
- Create democratic multi-use civic space and streetscapes
- Development of a new physical plan, incorporating modifications in land use, built fabric, movement networks, parking, urban infrastructure services, rationalization of spaces for commercial and other uses.

PROJECT 5: Conservation and Development Guidelines around Protected Monuments: Ajmeri Gate (2006)

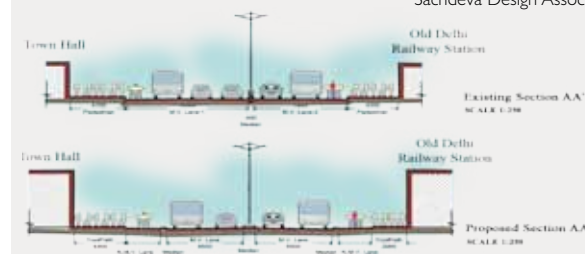
Agencies involved: DUAC and TVB

Status: Study

Objective: Devising a development plan that identifies Core Zone and Buffer Zone with different levels of controls guided by the specificity of context. Thus, the blanket ASI rule to be done away with.

PROJECT 2: Shahjahanabad Streetscaping: SP Mukherjee Marg (2010)

Source: Reports by Pradeep Sachdeva Design Associates



Agencies involved: SRDC, MCD and Pradeep Sachdeva Design Associates

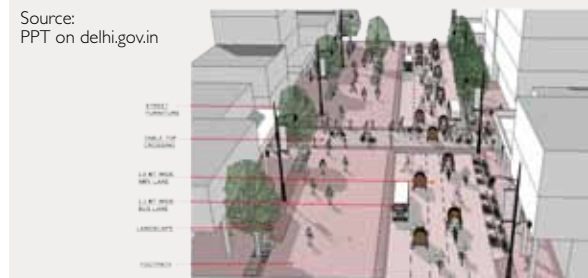
Status: Report submitted

Objectives:

- Easing out congestion by means of segregated and controlled traffic movement
- Design for a pedestrian-friendly environment
- Facilitating access to the Old Railway Station

PROJECT 3: Chandni Chowk Redevelopment Plan Red Fort To Fatehpuri Masjid Road Stretch (2011)

Source: PPT on delhi.gov.in



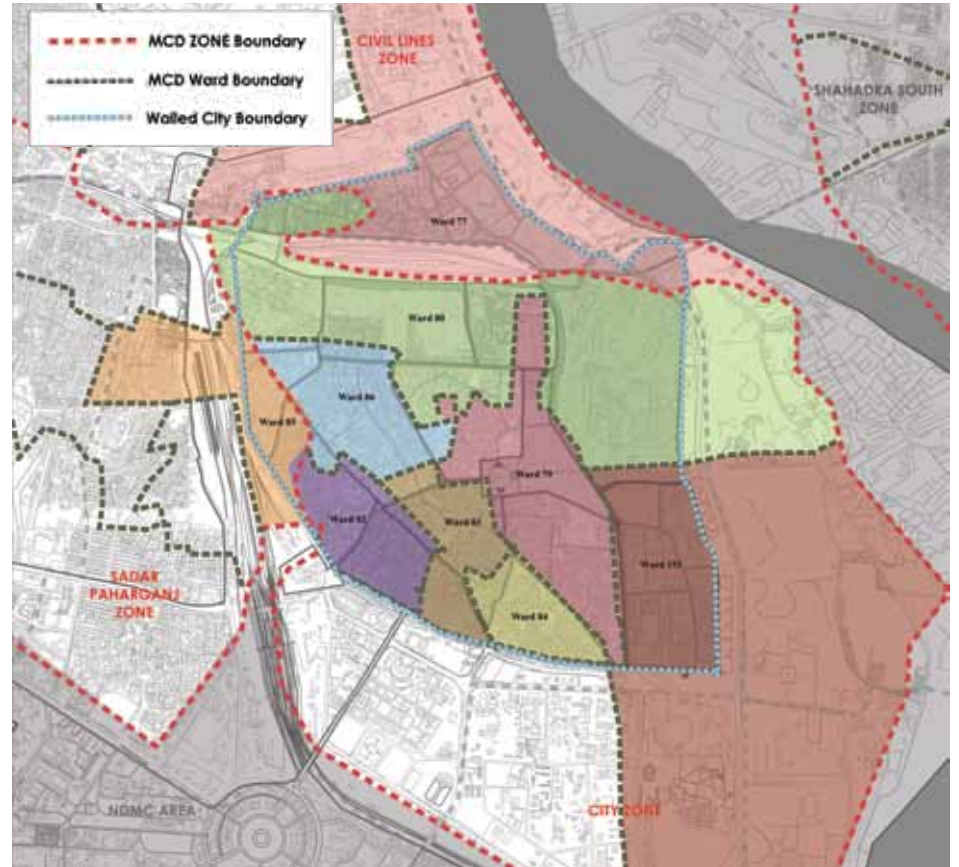
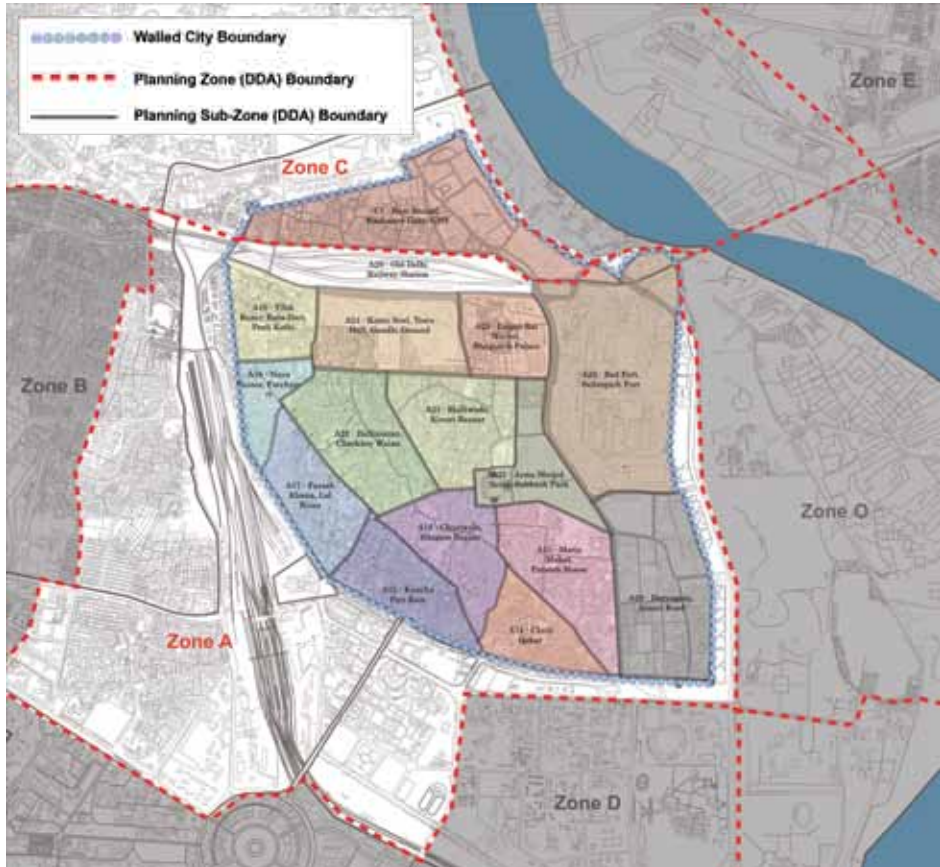
Agencies involved: CSIR, MCD and Abhimanyu Dalal Architects

Status: Report submitted

Objectives:

- Create an unique culturally significant destination and public urban space
- Creating a pedestrian and user-friendly public transport system
- Restating physical, visual and historic linkages

2.1 Legislative Boundaries



Planning Zones

For planning purposes DDA has divided Delhi into 15 'Planning Zones'. Shahjahanabad falls under two zones – Zone A and C.

As per the Zonal Development Plan (1999) also prepared by the DDA, the Walled City has been divided into:

- 15 sub-zones of Zone A
- One sub-zone of Zone C

The Walled City has been taken up separately because of its special character:

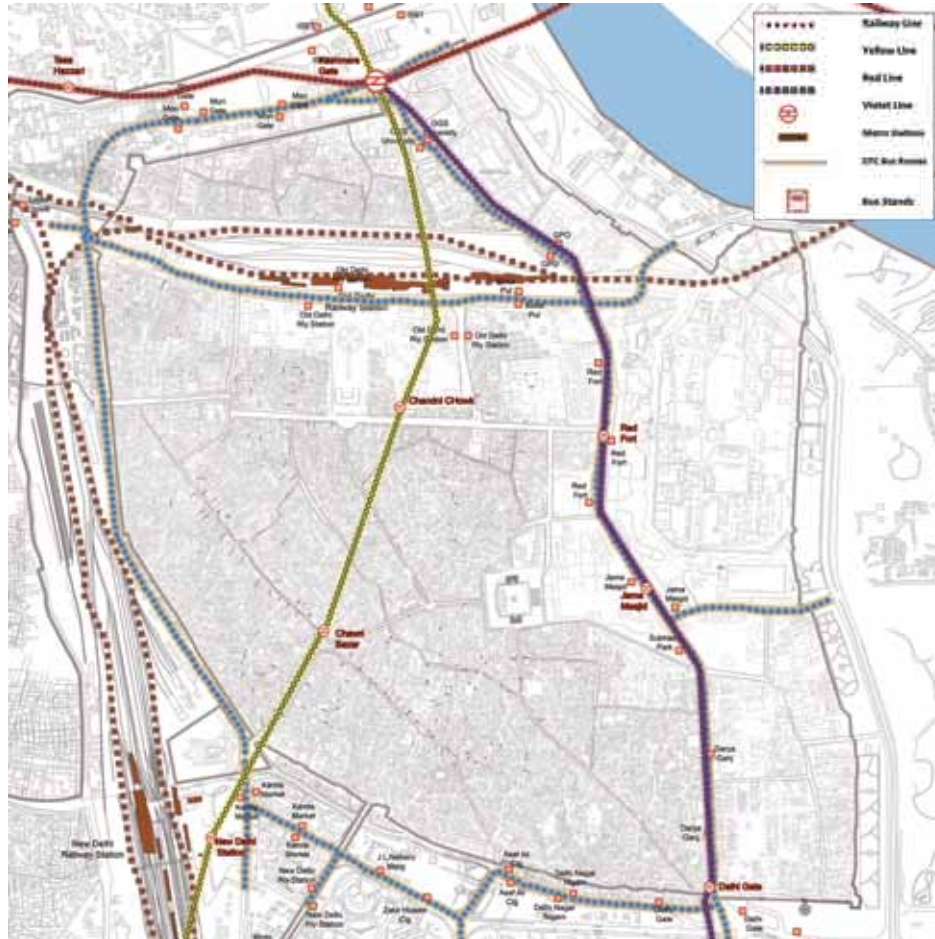
MCD Zones

For the purpose of execution and maintenance the MCD has divided areas of Delhi under its jurisdiction into 12 zones which are further divided into wards.

Shahjahanabad falls under three zones as shown below:

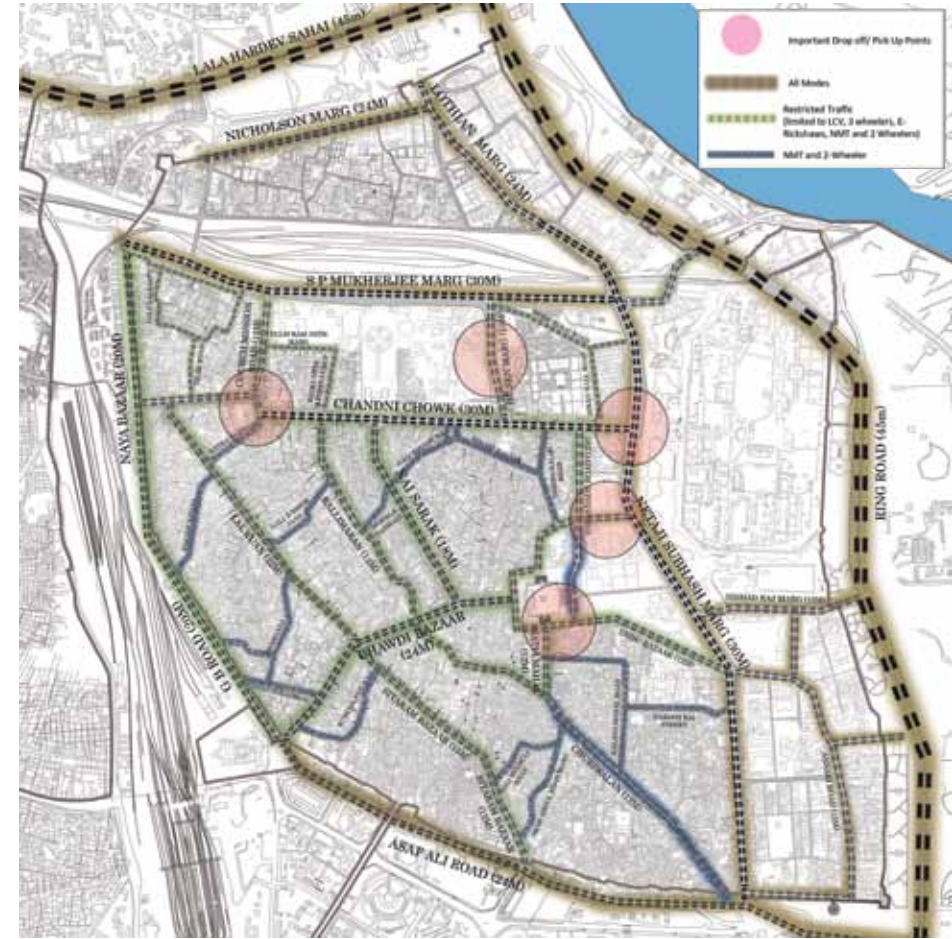
- Civil Lines Zone – Kashmere Gate Area: 1 Ward (77)
- Sadar Paharganj Zone – Farsh Khana Area and G.B. Road: 2 wards (76 and 85)
- City Zone – Rest of the Walled City including Daryaganj and Red Fort: 8 wards (79, 80, 81, 82, 83, 84, 86, 153)

2.2 Connectivity



Connectivity by Mass and Public Transit Modes

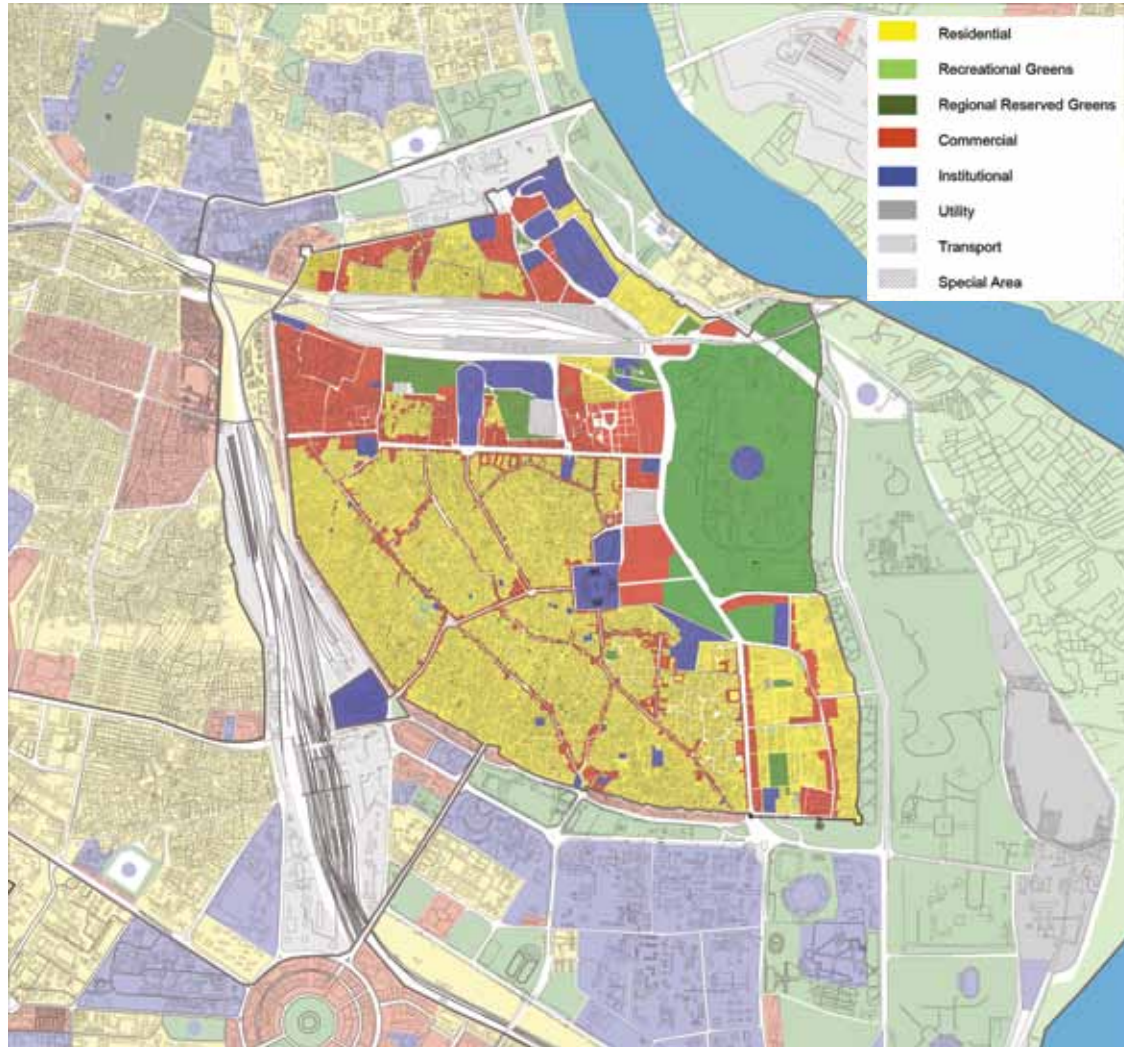
- The Walled City is well-connected by both the Red and Yellow Lines of the Metro. The extension of the Violet Line will form the Heritage Loop with stations at Delhi Gate, Jama Masjid and Red Fort, terminating at Kashmere Gate
- Both passenger and freight movement is facilitated from the Walled City because of its proximity to Old Delhi and New Delhi Railway Stations
- DTC Bus Routes connect the Walled City mostly on the periphery



Connectivity by Road

- Collector road widths vary from 15–18 m
- Width of galis can vary from 6–9 m, some of them are as narrow as 2 m. Thus these form physical barriers for traffic to enter the core areas and form a predominantly pedestrian movement path
- Traffic within the core is restricted to non-motorized vehicles, E-Rickshaws, two-wheelers and cycles. Animal-drawn carts are also used
- Most frequented drop-off/pick-up points are around Jama Masjid and Red Fort

2.3 Land Use



Key Plan



Indicative land use of Special Area Extension (excluding Walled City)

Residential areas within “Special Area Extension” which comprise the areas of Paharganj, Sadar Bazaar, Motia Khan etc. have mixed-use conditions, with the ground floor being used for commercial activities and upper floors as residential. Pockets

such as Sadar Bazar, Narain Market, Motia Khan are being used for wholesale activities.



Land use as per MPD 2021:

The Walled City Area has been marked as a Special Area in MPD 2021. Land use of the surrounding areas are mainly in the form of:

- Recreational Greens
- Institutions
- Public and Semi-public Facilities
- Commercial

Indicative Land use within the Walled City

Within the core of the Walled City, residential areas have mixed-use development owing to the organic nature of its growth.

Following older development patterns, major streets connecting landmarks have developed into commercial corridors for wholesale trade and warehousing. Public/Semi-public facilities are a bare minimum.

Information Source: www.dda.org/planning and Recd Survey

The pattern of development observed within the Walled City is organic in nature and mainly guided by 3 interrelated core aspects – street pattern, activity and congestion on streets.



- Space requirements of different activities determine that they be located along streets of a particular width. The width of these streets also accommodate activities of similar character
- Along the main collector roads, ground floors of buildings are used for commercial purposes and upper floors are used as warehouses or godowns
- Along wider local streets (12 m–9 m wide), ground floors of buildings are used for commercial purposes and upper floors are used as warehouses or godowns or residences
- Along galis (6 m–2 m wide) the ground floors of buildings are used as warehouses and godowns and upper floors are used as residences or the entire building is used as a residence
- Congestion due to different activities tends to be limited to particular parts or types of streets due to street width constraints and vice versa. Streets and activities around streets with a history of being highly congested are designed with higher space requirement thresholds

2.4 Pattern of Development



Road Hierarchy

- Arterial / Sub-arterial Road
- Collector Road
- Secondary/Local Streets/Galis



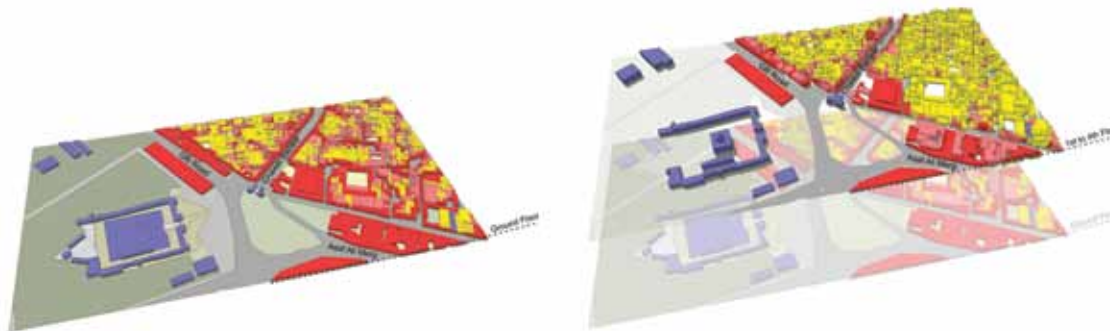
Road Width

- 2-6m (Gali) / 12-15m (Secondary/ Local Streets)
- 15 - 24m (Collector Road)
- 45 - 30m (Arterial/Sub-arterial Road)



Level of Congestion

- Critically Congested (Delay time – 15-10 mins)
- Highly Congested (Delay time – 5 - 7 mins)
- Moderately Congested (Delay time – 2 mins)



Building Use - Ground Floor

Predominant building use along different streets

- Arterial/sub-arterial/collector roads - Commercial
- Secondary/local streets (9 - 15m)- Commercial
- Gali (2 - 9m)- Storage and warehousing

Building Use - Other Higher Floors

Predominant building use along different streets

- Arterial/sub-arterial/collector roads - Commercial
- Secondary/local streets (9 - 15m)- Storage and warehousing
- Gali (2 - 9m)- Residential

Commercial Storage and Warehousing Residential Institutional/Heritage Green/Open Spaces Road

Key Plan

2.5 Sub-Zones



Sub-zone: C-I Areas: Ram Bazaar, Kashmere Gate and GPO

- This area is predominantly a wholesale market for automobile spare parts, electrical and electronic items and small scale machines
- In contrast to the rest of Shahjahanabad, the architectural character of this zone is colonial in nature and houses innumerable examples of early colonial architecture, as this area was developed during the early years of British rule in Delhi
- Roads within Ram Bazaar area vary from 6 m–9 m in width. Sub-arterial roads are 18–24 m wide
- Plotted housing development with main roads demonstrate mixed-use



Dara Shikoh Library

Source: <http://www.ummid.com/news/2015/February/03.02.2015/dara-shikoh-neglected-library.html>



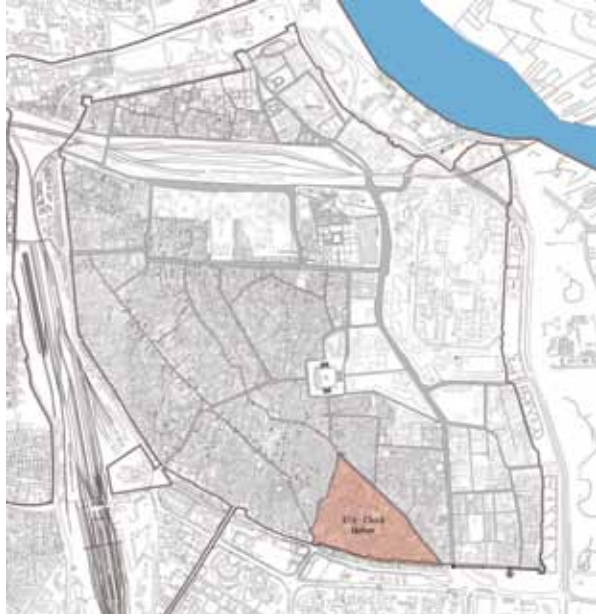
Sub-zone: A-13 Area: Kuncha Pati Ram

- This area is famous for the havelis of Kashmiri migrants (1800 to mid 1900). Ajmeri Gate, Turkmani Gate and Kalan Masjid (1378, which is the oldest mosque within the Walled City) are located in this zone. This area represents the earliest phase of the Walled City to be developed, dating back to the Tughlaq Era. Consequently, it also happens to be the most densely populated
- Market is known for accessories and sequins
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development



Kalan Masjid

Source: https://www.tripadvisor.in/LocationPhotoDirectLink-g304551-d5537047-i85122608-Walks_2_Remember-New_Delhi_National_Capital_Territory_of_Delhi.html



Sub-zone:A-14
Area: Chitli Qabar

- This is one of the most densely populated zones and the street has general retail stores
- There are a number of hotels, inns and other non-hierarchical commercial spaces like the Delhi Stock Exchange and Delite Cinema along Asaf Ali Marg
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development in the core, but it's edge is defined by a colonnaded structure which was added later by the British to connect the Old Delhi Railway Station to New Delhi



Turkaman Gate



Sub-zone:A-15
Areas: Matia Mahal and Pataudi House

- This area is known for its eateries, Urdu Bazaar (hub for Urdu books) and shops selling products for the weekly informal market. The main street of Matia Mahal is a food lover's paradise and special markets are held during the festivals of Eid and Diwali. There are high-end retail shops, hotels and inns along Netaji Subhash Marg
- Public amenities such as a hospital, masjid etc are located around Pataudi House
- Roads vary from 4 m–6 m in width and 7–9 m along the periphery
- Typical katra and kuncha type of mixed-use development.



Urban form of Matia Mahal



Sub-zone:A-16
Areas: Churiwalan and Sitaram Bazaar

- This area is known for its jewellery/accessories shops, food outlets and catering service providers. Churiwalan, traditionally known for its bangle sellers, is now a wholesale market for automobile spare parts
- The tomb of Razia Sultana which now is an ASI enlisted monument is located here. This area is the oldest parts of the Walled City which was developed even before Shahjahanabad
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed- use development



Razia Sultana's Tomb

Source: http://www.wikiwand.com/en/Razia_Sultana



Sub-zone:A-17
Areas: Farash Khana and Lal Kuan

- Farash Khana is a slum located near Naya Bazar
- Lal Kuan is famous for shops selling kites; the market is also frequented for a number of well-known spice and sweet shops. This street becomes especially vibrant with kite shops and street food stalls selling sweets and savoury items during the festivals of Janmashami, Raksha Bandhan, Ugadi and 15th August. Apart from these, there are shops that sell automobile parts, machines and other hardware products
- Roads within the area vary from 4 m–6 m in width.
- Typical katra and kuncha type of mixed-use development.



Lal Kuan Market



Sub-zone: A-18
Areas: Naya Bazaar, Fatehpuri

- Naya Bazaar is known for shops selling food items and grains, and a market that sells optical items along Ballimaran and Gadodia
- The market is an extension of the Spice Market (built around the 1920s by a local merchant)
- Fatehpuri Masjid (1650; built by Fatehpuri Begum, ShahJahan's wife) is located here. This area houses inexpensive accommodation such as dharamshalas and lodges for visitors
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development.



Entrance to Fatehpuri Masjid



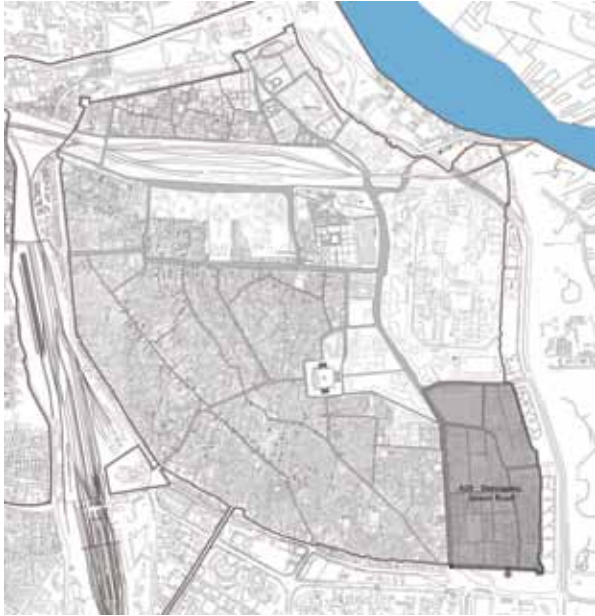
Sub-zone: A-19
Areas: Tilak Bazaar, Bara Dari, Peeli Kothi

- Traditionally an area for leather industries; it is now a wholesale market for chemical products, small-scale manufacturing units, dyes, chemicals, and spices. The Khari Baoli Market is one of Asia's largest spice markets attracting tourists with culinary interests from all over the world
- The presence of certain hazardous industries and trading houses in this area is a concern and plans to relocate them are under way
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development



Khari Baoli Main Street

Source: https://en.wikipedia.org/wiki/Khari_Baoli



Sub-zone: A-20
Area: Daryaganj

- Historically this was the dockside of the Walled City, populated by European settlers and Christian families. Later army barracks came up in the area. Now, mostly a residential area
- It is known for its printing presses and publishing houses. Apart from the oldest book stores and Mandi, Daryaganj's Sunday book market along Netaji Subhash Marg attracts thousands of local visitors
- Roads vary from 12 m–15 m in width
- Plotted housing development with houses arranged around green spaces and mixed-use development along collector roads. The buildings in Daryaganj are examples of Art Deco architecture



Ansari Road, Daryaganj



Sub-zone: A-21
Areas: Jama Masjid, Netaji Subhash Place

- The entire precinct falls under the control zone as per ZDP and comprises:
- Jama Masjid and Meena Bazaar
- Parade Ground Parking
- Netaji Subhash Park, Urdu Park and Entertainment Park
- Jain Mandir (Bird Hospital)
- New Lajpat Rai Market for electronics and other general goods
- The commercial setup is a mix of regularized and informal markets. New Lajpat Rai Market is famous for electronic goods. Meena Bazar is known for bicycle parts, blankets, machines and hardware, as well as a vibrant and variant market for general goods



Jama Masjid



Sub-zone: A-22
Areas: Ballimaran and Charkhe Walan

- The house of Mirza Ghalib is a famous landmark in this area. Historically it was a colony of boatmen. Churiwalan was famous for the production of glass bangles and a few shops in this area still sell bangles and other accessories
- Apart from specialized optical, wooden and leather goods, the area is also known for books and stationery along Nai Sarak.
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development



Shops in Ballimaran

Source: <http://delhimagic.blogspot.in/2012/08/mystery-shop-in-ballimaran.html>



Sub-zone: A-23
Areas: Malliwada, Kinari Bazaar

- Historically, barbers lived in this area and it was called Naiwada. This area has developed into a market for sequins, lace and gilt work, dress materials and festive clothes. Chawri Bazaar is a market for paper products. It is also famous for traditional sweet shops
- Sisganj Gurudwara is located in this area. The residential area has a collection of the grandest and oldest Hindu Havelis and a Jain Mandir with intricate carvings and murals
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development



Kinari Bazaar



Sub-zone: A-24
Areas: Katra Neel, Town Hall, Gandhi Ground

- This is famous for its wholesale fabric market and eateries
- The Town Hall, Ramjas School, Lala Hardayal Singh Library and gardens such as Kachcha Bagh, Diwar Park, Gandhi Ground etc are also within this area
- Roads within the commercial area vary from 4 m–6 m in width. However, those set around the Town Hall are 15 m wide and designed with avenues of trees and continuous pathways
- Typical katra and kuncha type of mixed-use development. This area houses old and famous Havelis, Shivalayas and a series of godowns



Town Hall, Chandni Chowk



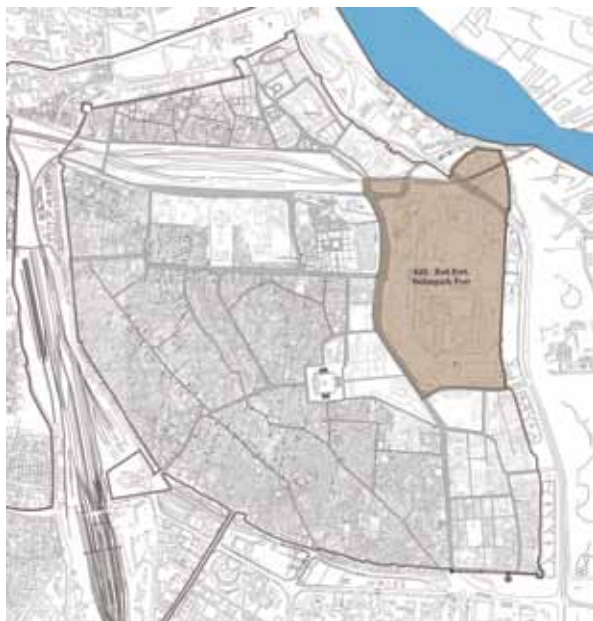
Sub-zone: A-25
Areas: Lajpat Rai Market, Bhagirath Palace

- Bhagirath Palace was formerly the palace of Begum Samru
- The famous Fountain Chowk is also located at the edge of this sub-zone
- This area has a wholesale market for electronic and electrical goods. This market is a must visit during the festivals of Diwali and Dusherra when it is bustling with shops selling electronic and manual lighting devices and fixtures
- Roads within the area vary from 4 m–6 m in width
- Typical katra and kuncha type of mixed-use development. A planned Railway Colony also exists on SP Mukherjee Marg



Jama Masjid

Source: <http://www.supdelhi.com/the-most-affordable-electronic-markets-in-new-delhi/>



Sub-zone: A-26
Areas: Red Fort and Salimgarh Fort

- The entire precinct falls under the control zone in Zonal Development Plan
- The Red Fort is a UNESCO World Heritage Site. Also within this zone is Sunehri Masjid, which is an ASI listed monument. Salimgarh is under army control and houses a war memorial
- The Red Fort used to hold festivities during various durbars held in Delhi and as a result many changes have been made to the structures post the 1857 siege. Barracks and officers quarters were constructed in both the Red Fort and Salimgarh Fort compounds. The most significant change was the puncturing of the fort walls for the railway line and the construction of the arched bridge between the two forts



Lahori Gate, Red Fort

Source: <http://www.sxc.hu/photo/265265>

Structures within the Red Fort Campus	
Lahori Gate	Retained as Original
Delhi Gate	Retained as Original
Water Gate	Blocked
Chatta Chowk	Retained as Original
Naubat Khana	Retained as Original
Diwan-i-Khas	Retained as Original
Nahr-i-Behisht	Partially blocked
Mumtaz Mahal	Retained as Original
Rang Mahal	Retained as Original
Khas Mahal	Retained as Original
Diwan-i-Aam	Retained as Original
Hamam	Modified
Baoli with Zafar Mahal	Modified but Zafar Mahal is being restored
Moti Masjid	Retained as Original
Hira Masjid	Retained as Original
Shahi Burj	Retained as Original
Hayat Bagh Baksh	Modified
Princes' Quarters	Retained as Original

3.1 Accessibility



Circulation by Metro

The advent of the Metro has helped Chandni Chowk develop into a destination. It is by far the easiest and most hassle-free mode of transportation to the core of Shahjahanabad. In 2004 this was the first section of the yellow line that was developed by DMRC and has been extended ever since, increasing connectivity to Shahjahanabad to almost 15 to 22 km around it.

The Walled City is well connected by both the Red and Yellow Lines of the Metro. Main nodes on Chandni Chowk and Chawri Bazaar serve as access points.

New Heritage Line (an extension of the Violet Line) will increase connectivity to the monuments within the Walled City namely Red Fort and Jama Masjid.



Circulation by Rail

The railways were introduced in Delhi in 1864 for trains coming from Calcutta. The Old Delhi Railway Station was opened for public use only after 1903 and New Delhi Railway station in 1931.

Due to its proximity to Old Delhi and New Delhi Railway Stations, there are facilities for both passenger and freight movement in the Walled City. A large quantity of freight movement takes place to and from Old Delhi Railway Station. Therefore Shahjahanabad grew as a wholesale and commercial hub.

Accessibility to the stations have been improved by integration with nearby Metro stations (New Delhi and Kashmere Gate) and the bus terminal (Kashmere Gate).



Circulation by Bus

Buses were introduced in 1948, and continue to be the most popular means of transportation for intra-city travel. DTC bus routes connect the Walled City, but ply mostly along the periphery, since they cannot access the core due to physical limitations.

Inter-city connectivity to Shahjahanabad is facilitated by its proximity to the Kashmere Gate ISBT. It has been in operation since 1976 and now caters to buses from seven states: Haryana, Jammu and Kashmir, Punjab, Himachal Pradesh, Uttar Pradesh, Rajasthan and Uttarakhand.

The RRTS (Rapid Rail Transit System) is also scheduled to open soon with a station at Kashmere Gate, thus creating a mega mass transit hub.



Circulation by Road

A few motorable roads were made within the boundaries of Shahjahanabad for the durbars during the British Period. These are the oldest in the area. Motorized vehicle movement is restricted within the core area, and is limited to Chandni Chowk Road, Chawri Bazaar Road and Urdu Bazaar Road.

Other major streets which serve as main collector roads within the Walled City are: Nai Sarak, Ballimaran Road, Churiwalan Road, Lal Kuan Road etc. These have non-motorized vehicular and pedestrian movement only. However; these collector roads, being major commercial streets, are choked with light commercial vehicles throughout the day and use up space for loading and unloading goods.



- 45 m streets for all modes of traffic on Ring Road and Lala Hardev Singh Marg
- 30 m streets for all modes of traffic on Netaji Subhash Marg and S P Mukherjee Marg
- 30 m streets for restricted traffic in Chandni Chowk



- 20 m streets for restricted traffic on Naya Bazaar, G B Road
- 18 m streets for restricted traffic on Nai Sadak



- 24 m streets for all modes of traffic on Nicholson Road, Lothian Road, Asaf Ali Marg
- 24 m streets for restricted traffic in Chawri Bazaar



- 15 m streets for all modes of traffic on Nishad Raj Marg, and Ansari Road
- 15 m streets for restricted traffic on Sitaram Bazaar and H C Sen Marg
- 12 m streets with restricted traffic on Church Mission Road, Lal Kuan, Ballimaran, Matia Mahal, Urdu Bazaar, Esplanade Road and Churiwalan

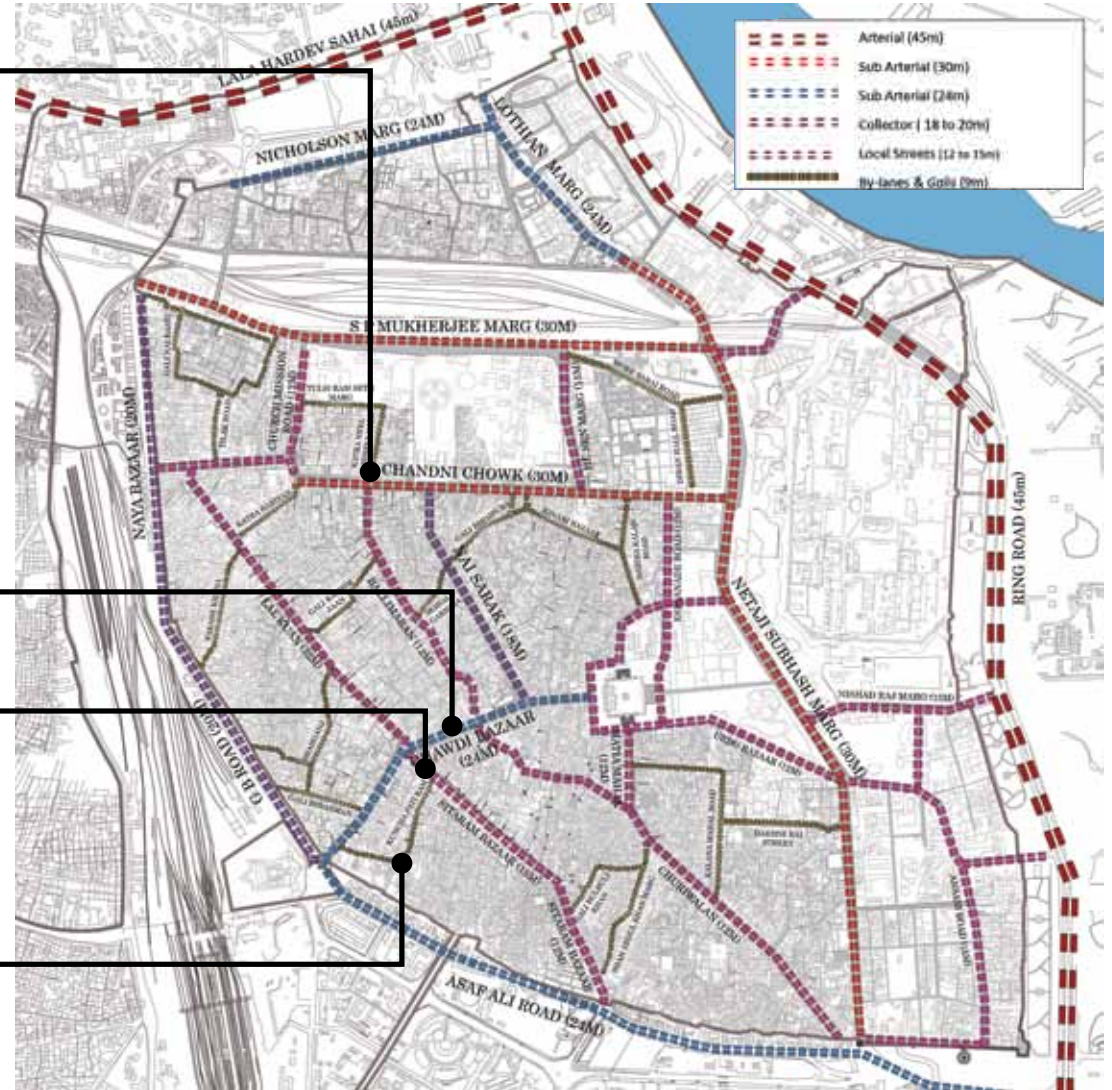
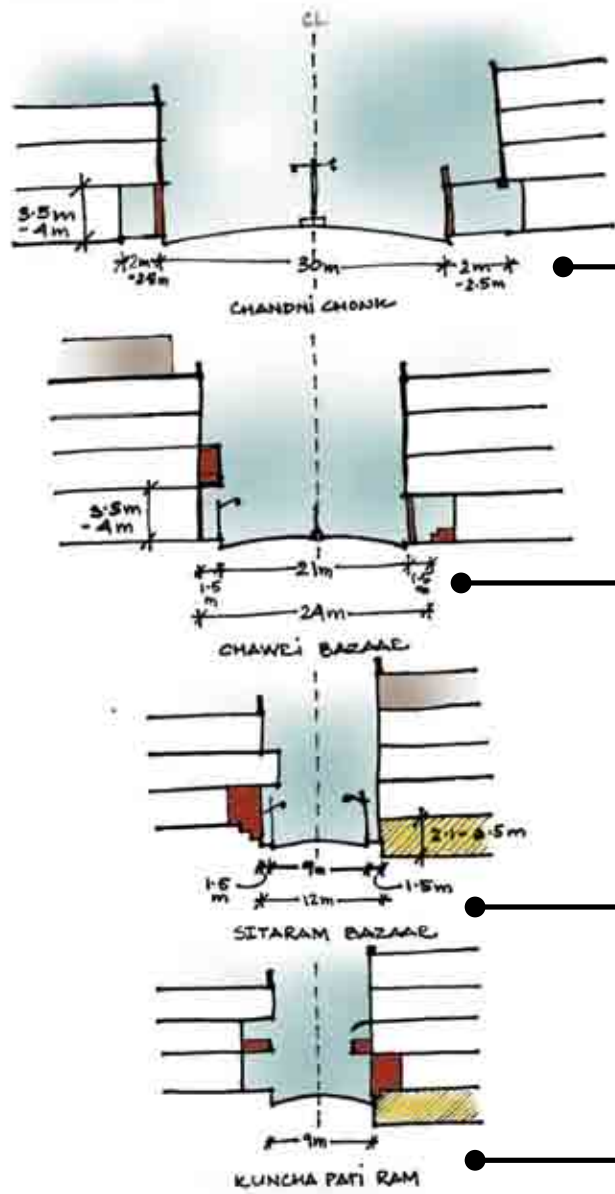


- The below mentioned streets are the most frequented local streets or galis; 6–9 m in width and limited to non-motorized traffic and two-wheelers only.

- Gali Nai Basti
- Tilak Road
- Tulsi Ram Seth Marg
- Katra Neel/Krishna Gali
- More Sarai Baoli
- Diwan Hall Road
- Dariba Kalan Road
- Gali Bhojpura
- Kinari Bazaar
- Mohalla Gharara
- Gali Khaseem Jaan
- Katra Bariyan
- Farash Khana
- Shahganj
- Gali Bidarman
- Kuncha Pati Ram
- Gali Bulbuli Khan
- Shah Abdul Khan Marg
- Kalana Mahal Road
- Dakhni Raj Street

Built form surrounding the roads

The built form along wider streets demonstrate colonnaded walkways which allow space for visitors to window shop and access shops. Overhanging structures along the narrow streets encroach upon the air space and block views. A large number of of basements, used for parking and as storehouses are another feature along local narrower streets.





Access Points to Shahjahanabad

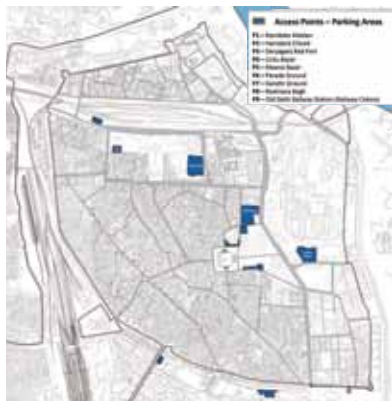
Entry/Exit Points: Access points to the Walled City are located where historic gates to the City once stood. Characteristically these areas are:

- Points where wider planned roads meet the narrow streets or kunchas of the Walled City
- Points where arterial roads meet the collector streets within the Walled City
- Points where major arterial roads continue into the walled city

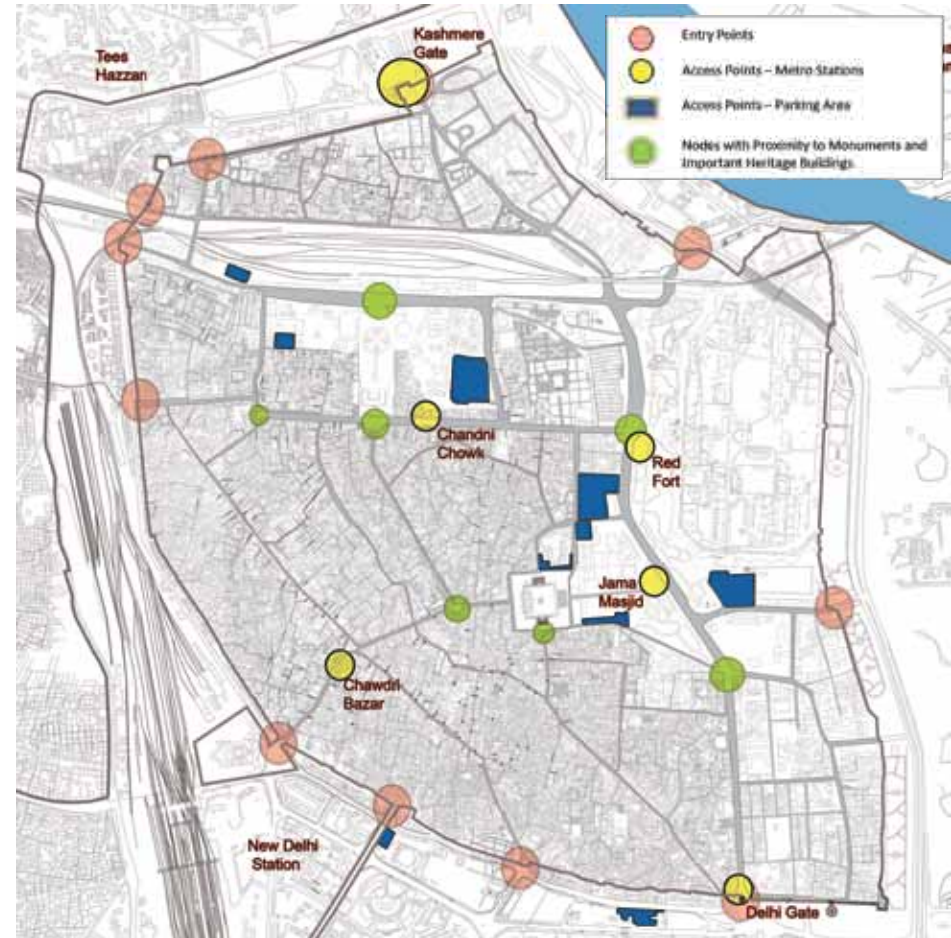


Important Intersections: Within the City these are the points of transition between different areas/katras of the Walled City. Historically these were points of public gatherings and commercial activities, most of which are in close proximity to the monuments.

Most of them are located within 5–10 minutes walking distance from each other, creating interesting walking routes throughout the commercial areas and heritage precincts.



Parking Zones: These have been located just outside the crowded residential core to accommodate the vehicles of shop owners and residents which are parked for long hours, as well as short term parking by day visitors. Red Fort has a separate visitor's parking. The three MCD parking lots (partly utilizing basements) have a capacity of almost 1000 cars each. However, they do not cater to heavy passenger or para transit vehicles.



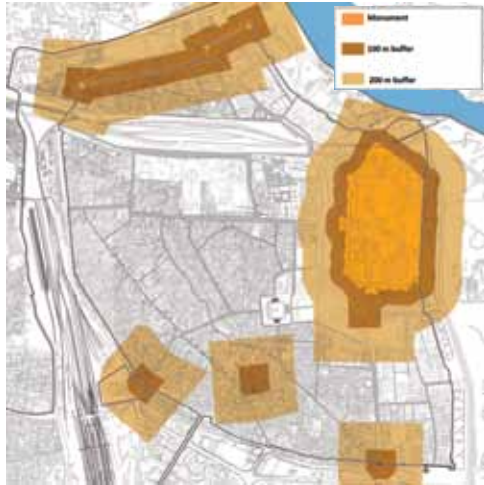
Key Observations:

The proximity and availability of mass transit options to reach the core of the Old City is a potential that should be tapped to facilitate the development of this area as a tourist hub.

The roads need restructuring and decongestion plans to upgrade them to meet present day requirements while retaining their historic character.

Access nodes need to be accentuated and parking to be upgraded in terms of capacity and facilities so that they function as reception plazas instead of drop off zones alone.

3.2 Historical Context

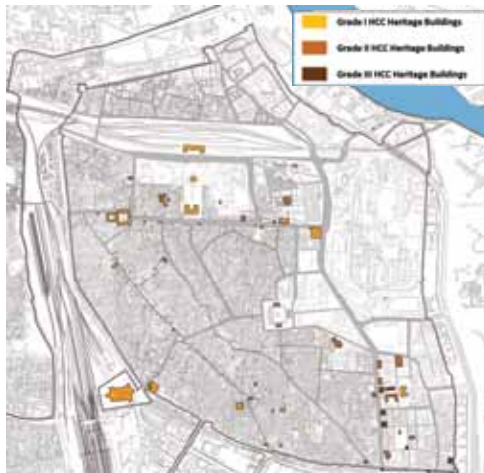


ASI listed buildings:

Within the Walled City ASI has recognized 41 monuments in its list. These are:

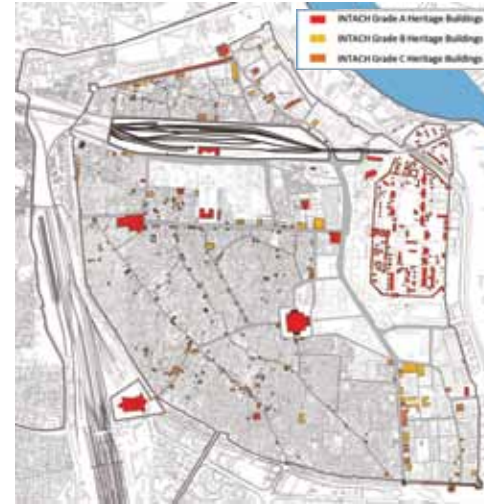
- Buildings within Red Fort • (36 buildings)
- Sunehri Masjid
- Delhi Gate
- Razia Sultana's Tomb
- Ajmeri Gate
- Kashmere Gate and the City Wall

For notified heritage structures under ASI, a prohibited area is to be declared up to 100 m from the protected limits and a regulated area, upto 200 m.



HCC/MCD listed buildings:

MCD has also identified buildings of local or regional significance apart from the ones listed by ASI. HCC of Delhi till date follows the same list. Based on the architectural and historical value, these buildings have been classified under different grades and the building bye laws govern the levels of intervention allowed for each. For example, no intervention is allowed in Grade I buildings without permission, but consideration is allowed for grade 3 buildings.



INTACH listed heritage buildings, gateways and havelis:

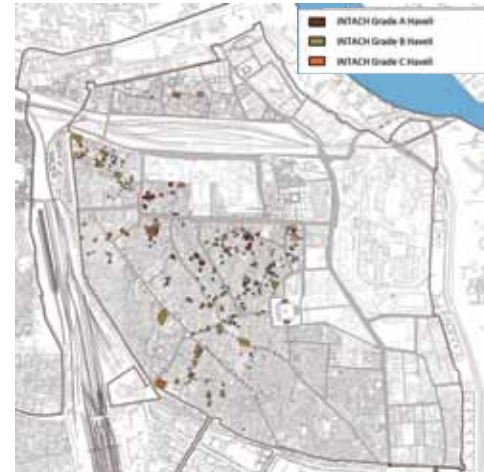
INTACH had prepared an inventory of all heritage monuments including buildings in use and gateways of national, regional and local significance.

These buildings were categorized into different grades based on their age, state of preservation, and architectural, archeological and historical significance.

The inventory also throws light on the original and present use of these buildings. As a result we have buildings such as schools, dharamshalas, gateways, shivalayas and havelis featuring in the list.

As per the inventory, Jama Masjid, Fatehpuri Masjid and the Town Hall fall under Grade I buildings which are the prime landmarks of the city and need to be kept under a permanent state of preservation.

Havelis form an important component of heritage within the Walled City and have been given due consideration. Some famous havelis listed are: Chunnamal ki Haveli, Mirza Ghalib's Haveli and Zeenat Mahal.



Heritage Precincts based on different architectural styles:

Heritage precincts of distinct architectural styles can be identified based on lists prepared by various organizations:

Tughlaq Era: *Important Example – Kalan Masjid*

Tapering walls, conical corners, no ornamentation, simple stucco mouldings, shallow domes and rubble masonry.

Mughal Era: *Important Example – Red Fort, Jama Masjid*

Pointed/ornamental/double/bulbous domes, recessed archways inside rectangular frontons, cusped arches, tall and slender minarets/turrets and chhatris, located amidst gardens, symmetrical, balanced and delicate detailing in design, use of gold, silver and semi-precious stones for inlay work in interiors and calligraphy on exteriors.

Late Mughal Era: *Important Example – Havelis of Kinari Bazaar*

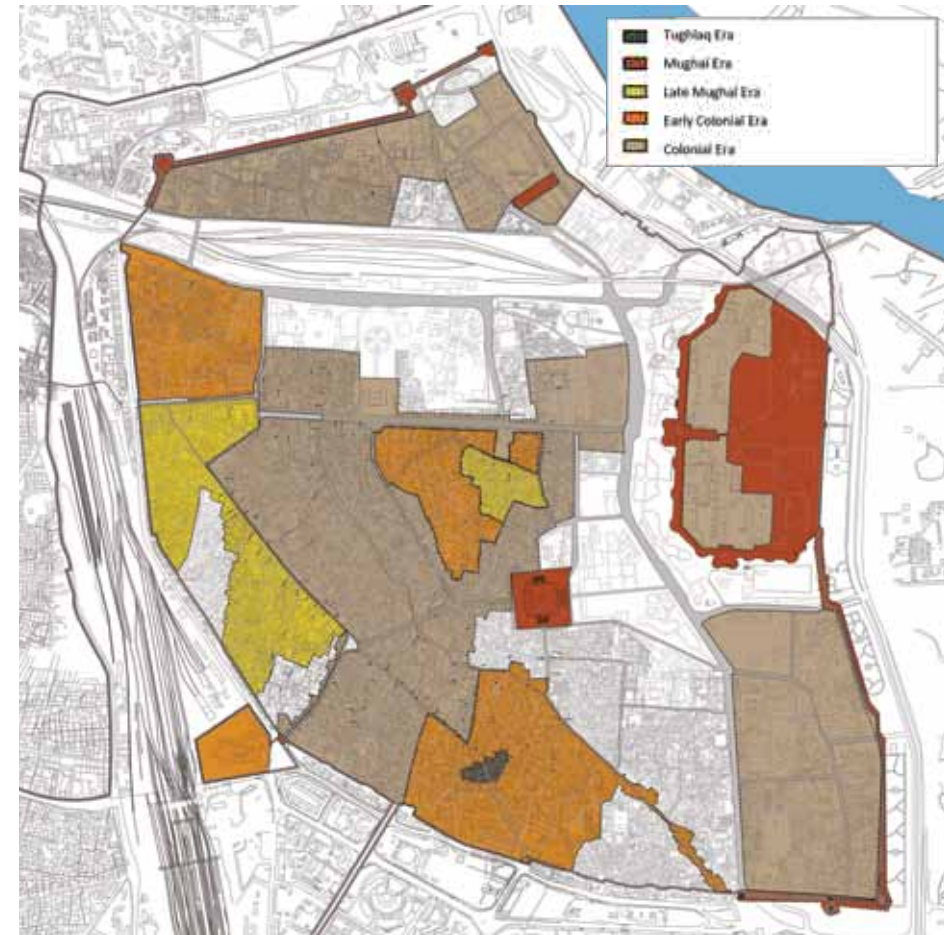
Subtle use of colonial construction elements and design features, elongated domes, floral ornamental work both on the exteriors and interiors in the form of paintings or stucco, high plinths to accommodate basements, pointed/cusped arches supported on stone pilasters, shift from jharokhas to colonnaded balconies, stone panels/plaster over brick walls.

Early Colonial Era: *Important Example – Havelis in Khari Baoli, Anglo Arabic School*

Light ornamentation, geometric motifs and floral ornamentation on plaster mouldings/stucco, high plinths to accommodate basements, recessed semicircular/segmented arches, balconies supported on ornate brackets, stone panels /plaster over brick walls and timber for posts and louvres.

Colonial Era: *Important Example – Houses in Daryaganj, St. James Church, Structures inside Red Fort Complex, Town Hall*

Ironwork in pillars, railings staircases, window grills, ornamental stucco work, brick masonry with plaster; semicircular arches with elaborate entablature, motifs in the form of figures (apart from floral, wreath and vine type patterns). Some houses demonstrate simple circular geometric designs; use of glass in window panes and etched glass.



Key Observations:

- The entire area can be divided into distinct interest zones based on different architectural styles of monuments and havelis; these can be developed as tourist destinations.

Heritage Buildings and Monuments



Red Fort (1639–48)
ASI protected monument
UNESCO world heritage site
Source:<https://commons.wikimedia.org/wiki>



Jama Masjid (1656)
MCD Grade I
INTACH Grade A
Source:<https://upload.wikimedia.org>



Fatehpuri Masjid (1650)
MCD Grade I
INTACH Grade A
Source:<http://upload.wikimedia.org>



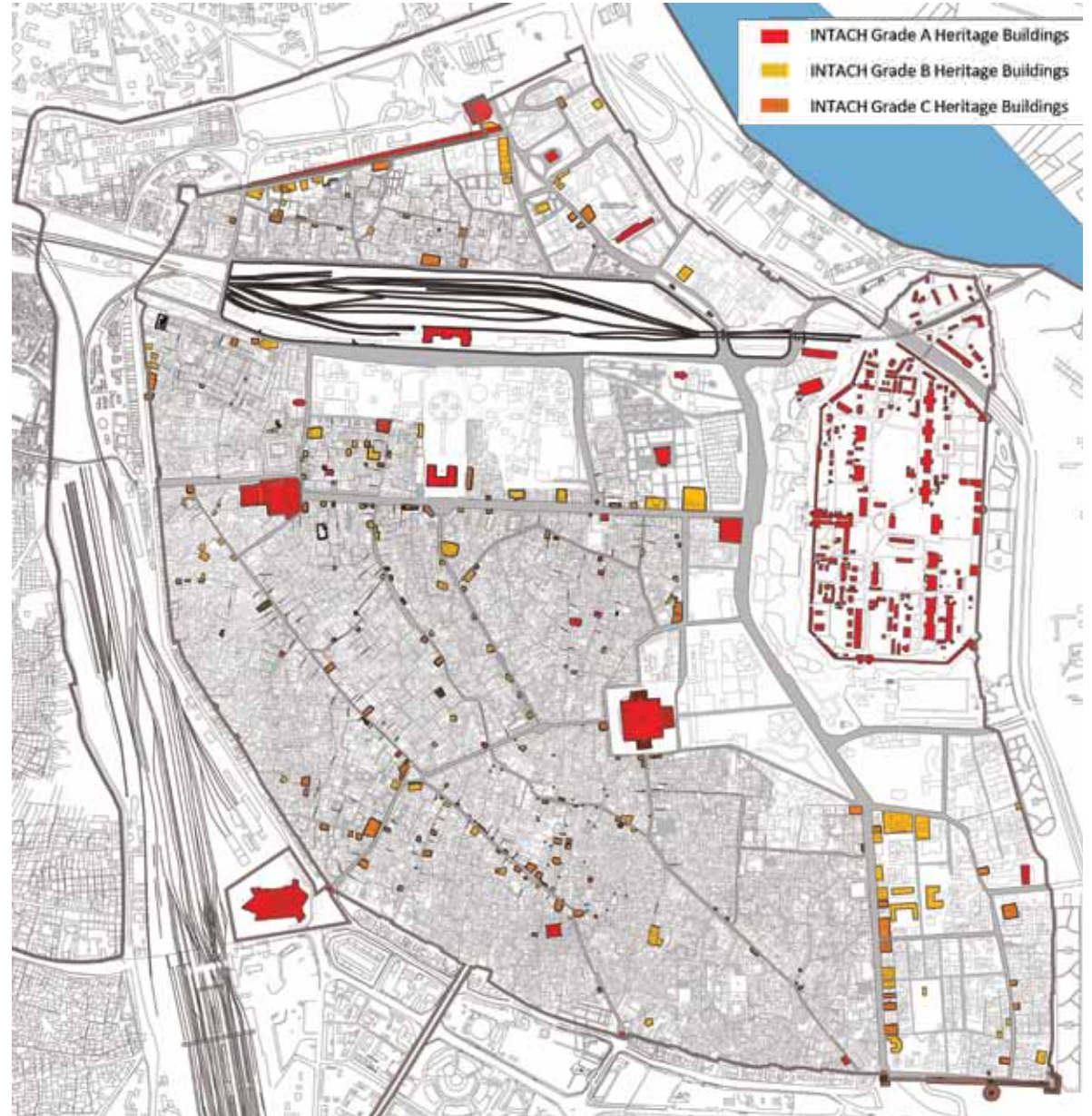
Town Hall (1860-63)
MCD Grade I
INTACH Grade A
Source:<http://www.skyscrapercity.com>



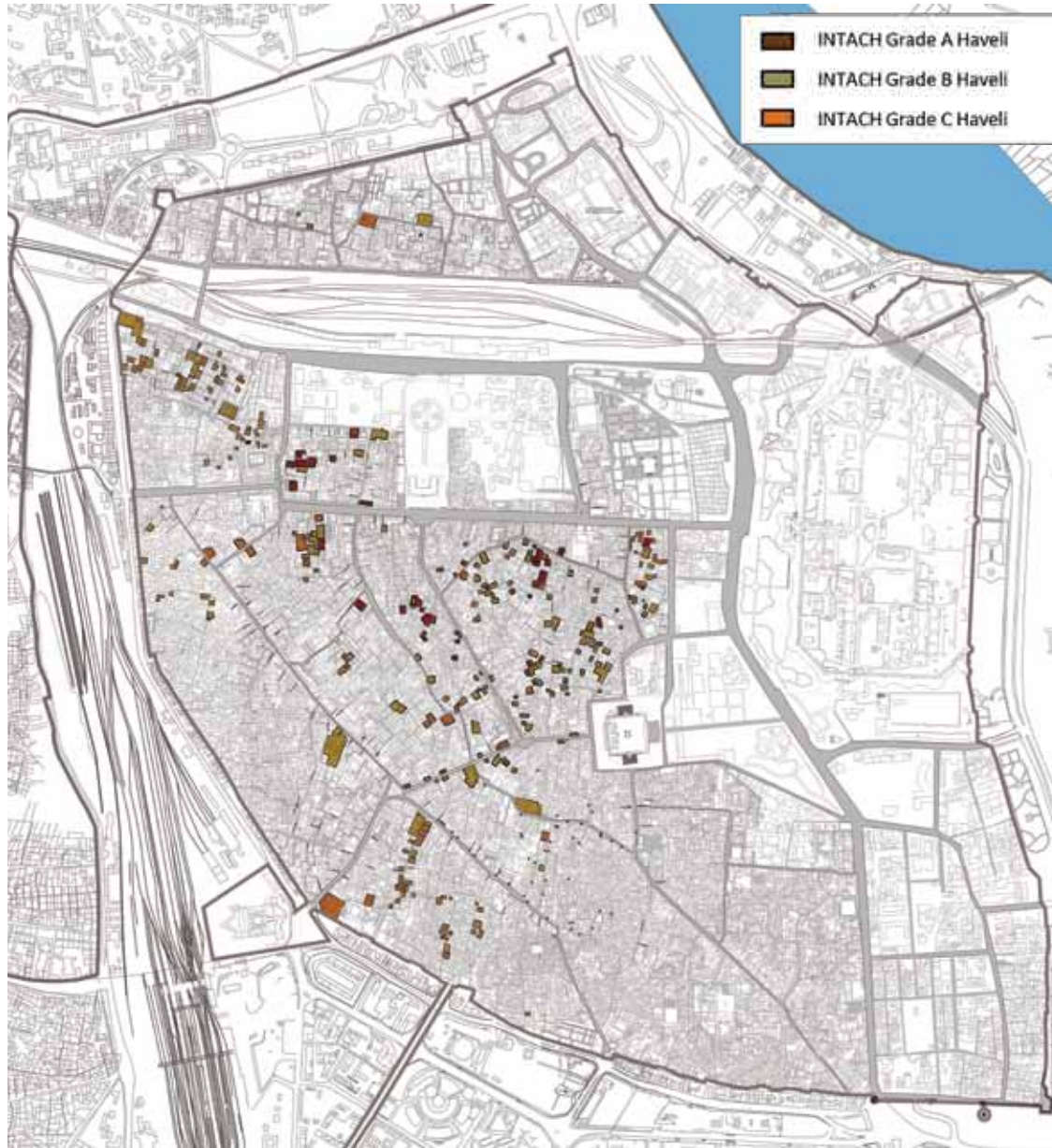
Old Delhi Railway Station (1900-03)
MCD Grade I
INTACH Grade A
Source:travellinganimal.files.wordpress.com



Anglo Arabic School (1696)
MCD Grade I
INTACH Grade A
Source:dh1rvgokacch.cloudfront.net



Havelis, Gateways and other Public Buildings



Chunnamal ki Haveli,
Chandni Chowk
Early Colonial era, INTACH Grade A
Source: <https://3.bp.blogspot.com/>



Mirza Ghalib's Haveli,
Gali Qasim Jaan
Late Mughal era, INTACH Grade A
Source: <https://upload.wikimedia.org/>



Gateway to Zeenat Mahal,
Lal Kuan,
Late Mughal era, INTACH Grade B
Source: <https://dustedoff.files.wordpress.com>



Haveli,
Kuncha Pati Ram
Colonial era, INTACH Grade B
Picture Credit: Abhishek Gaurav

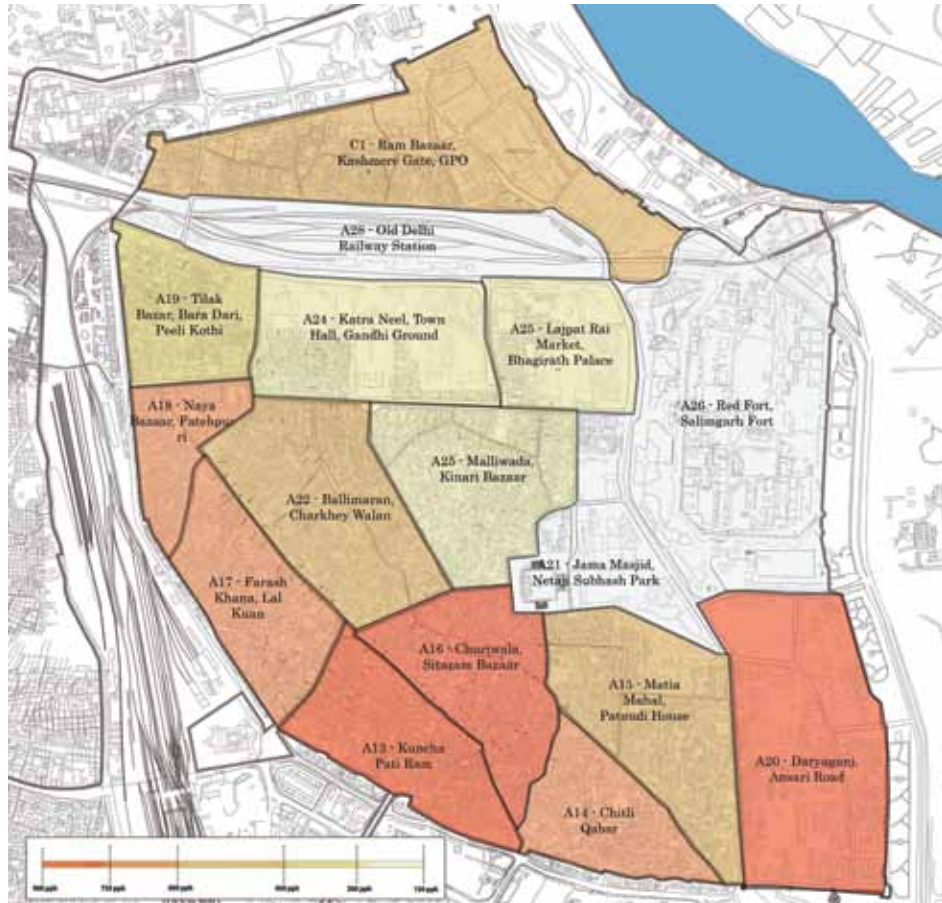


Anand Aushdhalaya,
Dharampura
Colonial era, INTACH Grade A
Picture Credit: Sulabh Goel



Temple and School,
Katra Neel
Late Mughal era, INTACH Grade A
Picture Credit: Sulabh Goel

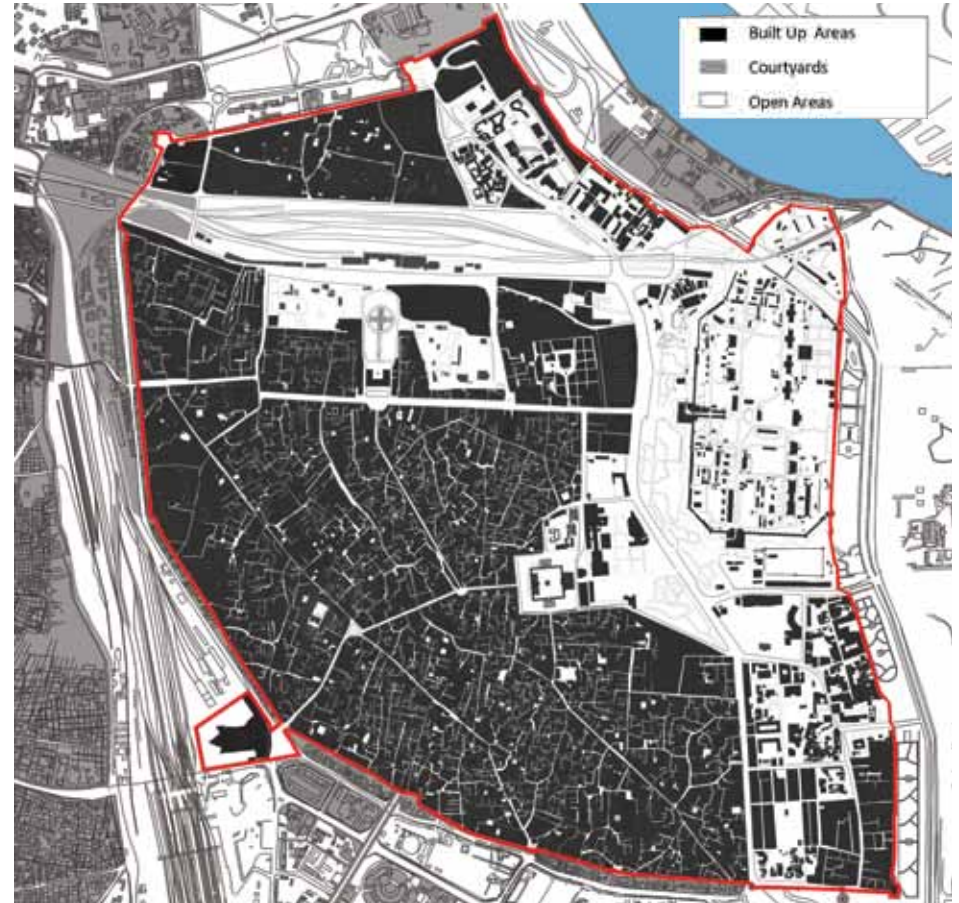
3.3 Quality of Space



Density Study (Residential Population)

Where residential density is considered, the areas of Kuncha Pati Ram and Sitaram Bazaar are by far the most densely populated areas, with gross densities as high as 852 persons per hectare.

General observation shows that the sub-zones located at the periphery of the city, along the line of the walls, are the ones with higher densities. These areas typically demonstrate narrower street patterns, smaller property sizes and less maintained built forms. Availability of open spaces is almost negligible.



Mass and Void Study

The eastern side of the Walled City exhibits open spaces in the form of buffer zones, parks and gardens around Red Fort, Jama Masjid and the Town Hall.

An organized mass void ratio is seen in Daryaganj as it was perhaps the only planned part of the settlement.

The edge of the wall is most densely built with a dearth of open space. In the core of the settlement, available open spaces are in the form of courts, courtyards or chowks. It is noted that historical open spaces such as Begum ka Bagh around the Town Hall have now been encroached upon and reduced in size.

Types of Open Spaces



Public open spaces associated to heritage buildings: Used for fairs, assembly, parking, parks, lawns and gardens

Fair outside Red Fort
Source: <https://dillifood.wordpress.com>



General Public Open Spaces: Used for local/informal markets, assembly, parking

Informal Market outside Jama Masjid
Picture Credit: Abhishek Gaurav



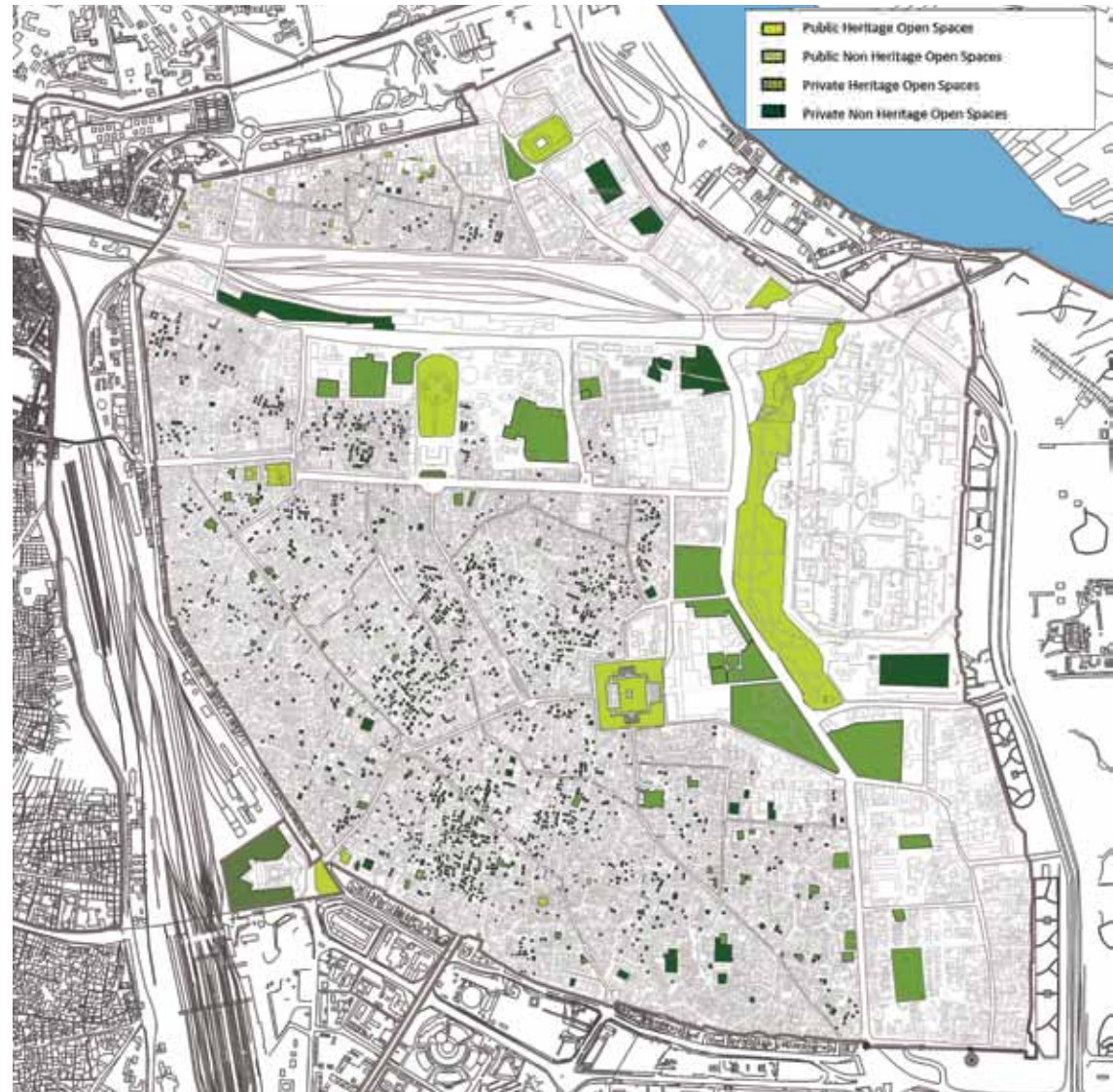
Private Open Spaces Associated with Heritage Building: Used for assembly, as playgrounds, lawns and gardens, courtyards of havelis

Playground of Anglo Arabic School
Source: <http://angloarabic.co.in/playground>



General Private Open Spaces: Used as courtyards, dump yards, assembly space or courts of religious structures, grounds and lawns, parking and storage

Courtyard being used for religious purposes
Picture Credits: Abhishek Gaurav



Key Observations:

Dearth of interactive open space within the core of the city is detrimental in terms of tourism development

The streets and squares have the potential to be developed as public spaces. Private courtyards could also be innovatively used for public purposes



Congestion Conditions

Congestion– 2:30 am to 9:00 am:

- 5:00 am onwards moderate congestion is observed as loading/unloading starts at Khari Baoli, Naya Bazaar, Chawri Bazar etc.
- From 5:00 am onwards along Matia Mahal and Chitli Qabar following morning prayers; people are seen gathering for breakfast



Congestion– 9:00 am to 9:30 pm:

- High congestion is observed along commercial streets selling specialized goods such as hardware, spices and food grains, paper and electronics
- Nodes (Hauz Qazi and Bharshbullah Chowk) are extremely crowded due to on-street parking of commercial vehicles



Congestion– 9:30 pm to 2:30 am:

- Areas with food outlets that are open till late at night, attract visitors leading to moderately crowded streets
- Congestion on the Ring Road increases during this time as heavy goods vehicles that are permitted to pass through the city, take this route



Congestion– Fridays and Afternoon

Prayers (12:30 pm to 1:30 pm):

- Apart from the usual congestion that is observed throughout the day, areas around Jama Masjid, Lal Kuan, Charkhey Walan, Ballimaran and Chitli Qabar become extremely crowded during afternoon prayers and particularly on Fridays due the presence of Islamic religious structures



Congestion–Sundays:

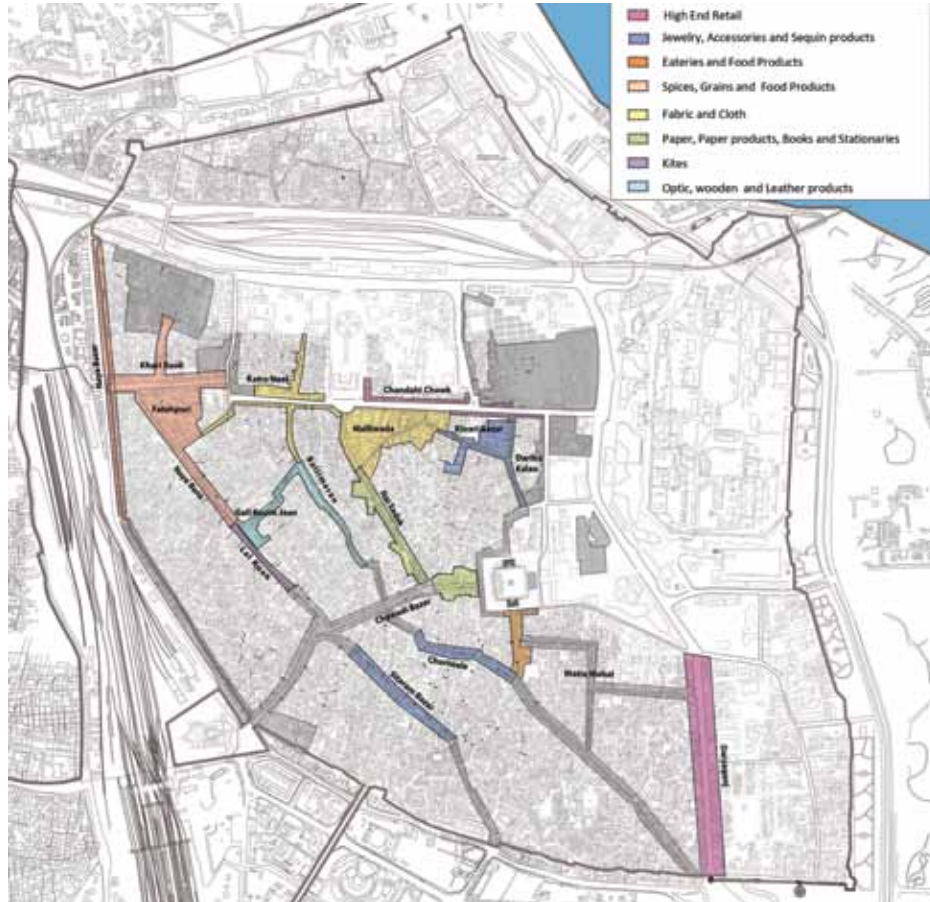
- Since markets are shut on Sundays in the Walled City, crowd and NMT/pedestrian movement is moderately high along the Red Fort–Nai Sarak–Jama Masjid loop due to visitors visiting landmarks
- Daryaganj has a number of activities apart from general retail on Sundays such as the Mandi and the Weekly Book Market

Key Observations:

- A variety of activities along the streets create interesting experiences and these should not be changed. These need to be incorporated into the design for redevelopment of the core
- On-street parking, loading/unloading activities and temporary stacking of goods on streets are the main cause of congestion on the streets
- Few of the narrower streets pose physical limitations, and become congested during peak hours
- Since activities cannot be reorganized or relocated time-based traffic management plan should be considered to decongest the area

Circulation of Emergency vehicles need to be facilitated

3.4 Significant Activity



Special markets that attract tourists

These markets attract tourists from all over and are introduced to the intangible heritage of the city – traditional crafts and skills of different genres and fields of expertise

- Fatehpuri, Khari Baoli, and Naya Bazaar: Spices, grains and food products
- Katra Neel and Malliwada: Fabric and cloth
- Chandni Chowk and Daryaganj: High-end retail and eateries
- Kinari Bazaar and Dariba Kalan: Jewellery and sequin products
- Sitaram Bazaar and Churiwala: Accessories
- Matia Mahal: Eateries
- Lal Kaun: Kites
- Ballmaran: Opticals, wooden and leather goods



Spice market at Khari Baoli
Source: <http://www.thebetterindia.com/12299/>



Cloth market at Katra Neel
Source: <https://www.flickr.com/photos/acmpix/7167919051>



Ribbon shops in Kinari Bazaar
Picture Credit: Abhishek Gaurav



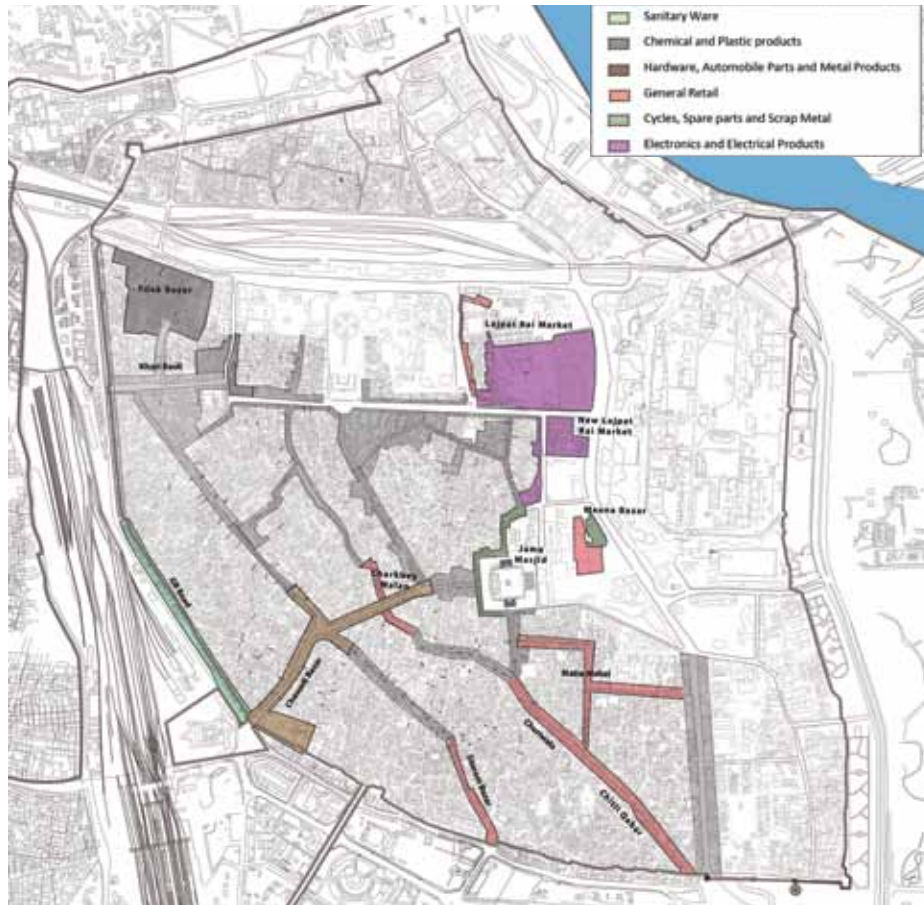
Sliver jewellery store in Dariba Kalan
Source: <https://bb.in/delhi/dariba-kalan-silver-old-delhi>



Book browsing on Nai Sarak
Source: <https://blog.fabhotels.com/delhi/markets>



Food galore at Matia Mahal bazaar
Source: <http://www.livemint.com/Leisure/>



Old Lajpat Rai Market
Source: <http://www.sodelhi.com/malls-markets>



Informal market outside Jama Masjid
Picture Credit: Sulabh Goel



Automobile part shops around Jama Masjid
Picture Credit: Abhishek Gaurav



Hardware shops in Chawri Bazaar
Picture Credits: Priyadarshini Ghosh

Wholesale Utility Goods Market:

Old Delhi is one of Asia's largest wholesale markets for specialized utility goods. Trade and transactions are conducted, not just at the local level, but also at a regional and national scale. Therefore, the market sees a constant flow of people and vehicles throughout the day.

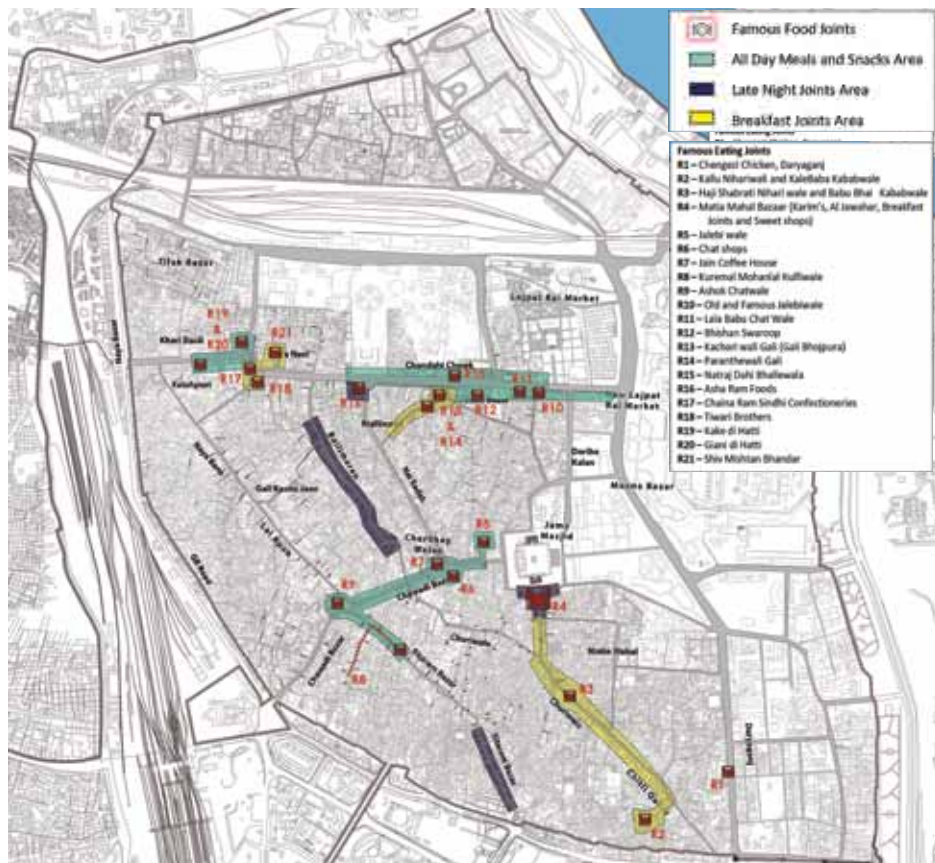
- Tilak Bazaar and Khari Baoli: Chemicals and plastic products
- Lajpat Rai Market: Electronics and electrical goods
- Jama Masjid and Meena Bazaar: Cycles, spare parts and scrap metal
- Matia Mahal, Sitaram Bazaar and Chitli Qabar: Genral retail shops
- Chawri Bazaar: Hardware, automobile parts and metal products
- GB Road: Sanitaryware



Sanitaryware shops on Grastin Bastion Road
Source: <http://cooltravelandtours.com/garstin-bastion>



Chitli Qabar market near Turkman Gate
Picture Credits: Priyadarshini Ghosh



Culinary Experiences

The food culture of the Old City is much celebrated. The aroma of sweet and savoury items sold in traditional eateries enhances the experience of tourists. Every food sold here has an unique story – be it the history, the skill and technique involved, or the ingredients. Culinary zones can be delineated based on the type of product being sold and time of services.

- **Breakfast – Non-vegetarian food:** Chitli Qabar and Matia Mahal ; **Vegetarian food:** Malliwada (Paranthewali and Kachoriwali Gali), Khari Baoli, around Fatehpuri Masjid
- **All Day Meals, Sweetmeats, Snacks and Street Food:** Chandni Chowk, Khari Baoli, around Fatehpuri Masjid, Sitaram Bazaar, Chawri Bazaar, Dharampura
- **Late Night Meals – non-vegetarian food:** Matia Mahal, Ballimaran, Sitaram Bazaar, near Turkmani Gate; **vegetarian food:** Chandni Chowk near the Town Hall, Khari Baoli, around Fatehpuri Masjid



Kallu Nihariwala
Source: <https://yumraj.com/2015/01/17/kallu-nihariwale/>



Fruit sandwich at Jain Coffee House
Source: <https://mydarlingalebi.wordpress.com/2014/07/19/>



Chat at Bishan Swaroop
Source: <http://cookinginpajamas.blogspot.in/2015/05/>



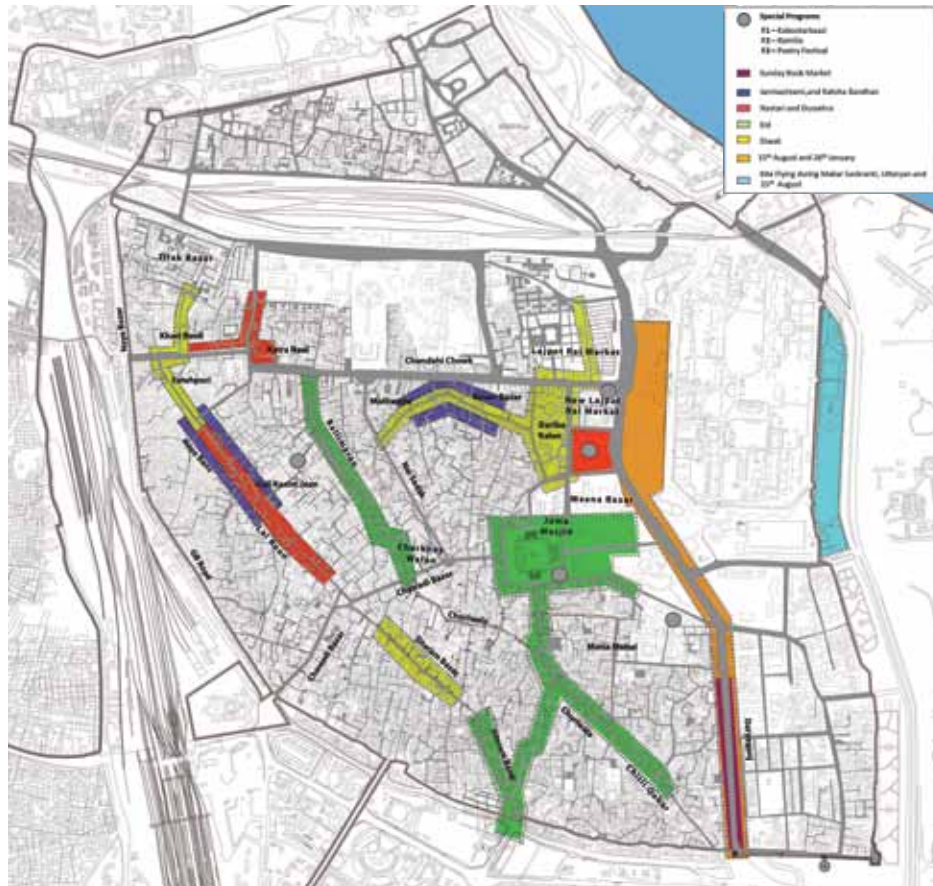
Kulfi at Kuremal Mohanlal Kulfi
Source: <http://www.onthegrid.city/new-delhi/old-delhi/>



Crowd at lunchtime at Kake di Hatti
Source: <https://yumraj.com/2013/03/23/kake-di-hatti>



Eateries at Paranthewali Gali
Source: <http://olddelhiheritage.in/2014/03/>



Festival Specific Activity Zone

During festivals the streets are transformed into fetes with lights, decorations, music, food stalls and shops selling specialized goods. Different zones become active during festivals depending upon the goods being sold and the preferences of communities residing in these zones, as discussed below:

Eid: Jama Masjid, Meena Bazaar, Matia Mahal, Chitli Qabar, Ballimaran

Diwali: Lajpat Rai Market and its extension, Kinari Bazaar, Malliwada, Sitaram Bazaar, Khari Baoli, Dariba Kalan, Dharampura

Dussehra: Lal Kuan, Katra Neel, Parade Ground

Many special events take place at various locations of the city from time to time, such as: kite flying at the Red Fort greens, poetry competitions in Mirza Ghalib's Haveli, pigeon flying competitions etc.



Ramzan festivities in Old Delhi
Source: <http://delhi-fun-dos.com/tag/ramadan-special/>



Eid-ul-Fitr being celebrated at Jama Masjid
Source: <http://dailyworld.in/eid-ul-fitr-celebrated-in-delhi/>



Shops in Khari Baoli selling sweets for Diwali
Source: <https://eatanddust.com/tag/old-delhi-street-food/>



Decorations for sale at Kinari Bazaar
Source: <http://buriedshiva.com.au/indiablog/>



Pigeon keeping is a popular sport
Source: <https://www.youtube.com/watch?v=zYy6FgGWrTs>



Dussehra celebrations at Ram Lila Maidan
Source: <https://worldbeneaththefeet.com/2014/10/04/>

3.5 Physical Infrastructure

Water Supply:

This area first received piped water supply during the 1890s. However the Zonal Development Plan, 1999 says it would be desirable to make these connections compulsory for all properties.

Sewerage and Sanitation:

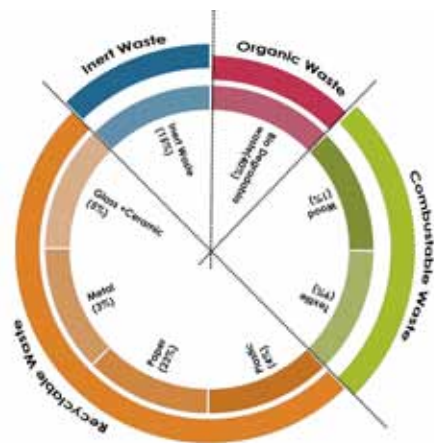
- This area was covered with an inlaid sewerage line in late 1800s. However the Zonal Development Plan, 1999 says it would be desirable to make these connections compulsory for all **properties**
- Subsidy Schemes for sanitation i.e. conversion of dry latrines to water borne are to be enforced
- The sewer lines need augmentation

Solid Waste:

- Shahjahanabad has an area of 569 ha with a high density (approx. 439 pph). The total waste generated is 125 TPD.
- The total cost of transporting waste to landfill sites by the local body is estimated to be Rs 87,500 per day (700 x 125 tons) i.e. Rs 26.25 lakhs per month.

The area has enormous economic activities in the market as well as the on ribbon corridor roads which generates huge waste, as discussed below:

- Organic waste (40%)
- Recyclable waste comprising glass, ceramic, metal, paper and plastic (39%)
- Combustible waste comprising textile and wood (10%)
- Inert waste (15%)



Based on the land use type, the waste generated differs as explained below:

- Residential areas: Biodegradable, paper and plastic, textile, glass, sanitary waste.
- Commercial and mixed-use streets: Biodegradable waste, plastic, paper, textile, glass, sanitary, bio medical, inert
- Roads/Street areas: dust, paper and plastic etc
- Green areas: Biodegradable waste, paper and plastic
- Public and Semi-public use: Biodegradable waste, organic waste, flowers and perishable items waste, recyclable



Location of Sanitary Landfill Site for disposal of waste from Shahjahanabad

Information Source: Master Plan 2021

Key Observations:

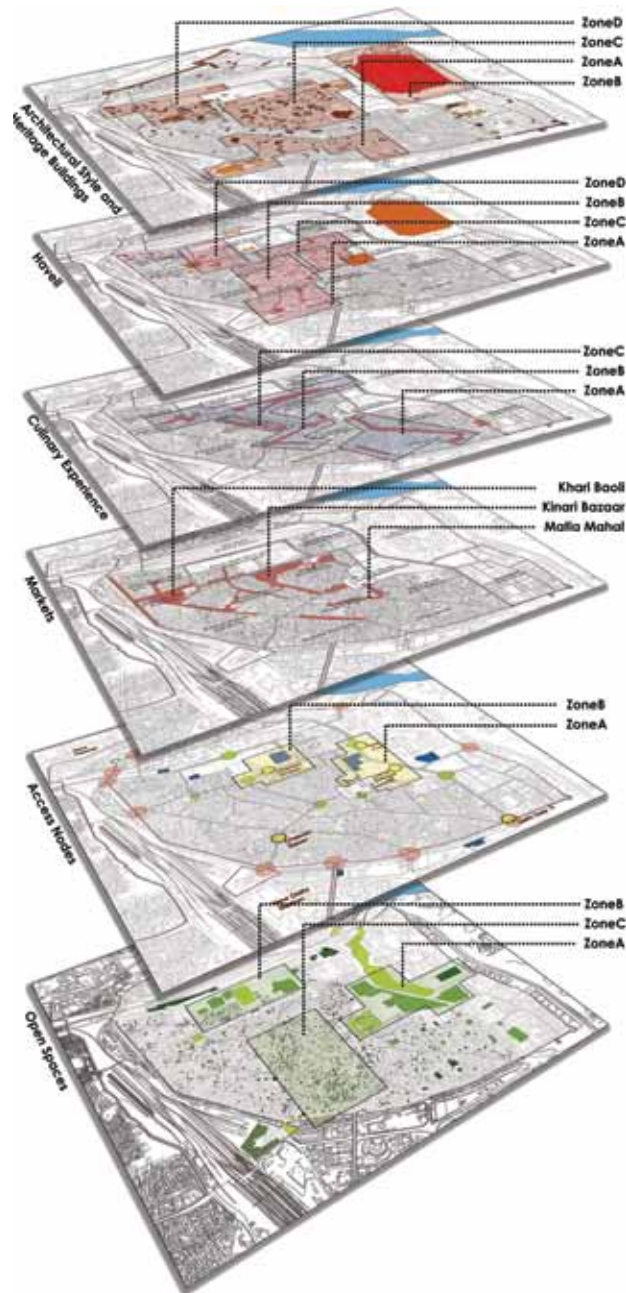
No segregation of waste at source

100% is not covered for door-to-door waste collection; nor is it collected daily

Overflowing waste encroaches on to pedestrian paths and creates unhygienic conditions at roadside dumping areas

Dhalaos are poorly designed with no space for sorting, segregation or a separate area for storage of waste

3.6 Assessment and Inferences



Zones of Interest based on:



Architectural styles of various periods and heritage buildings

Zone A: Oldest Area that dates back to the Tughlaq era with Kashmiri havelis, Kalan Masjid, Razia Sultana's Tomb, Nawab Iradutman Khan's Tomb and Masjid Mubarak Mahal

Zone B: A mix of Colonial and Mughal architecture seen in the the Red Fort Campus

Zone C: Includes Jama Masjid, which is one of the finest examples of Mughal architecture and the Town Hall which is in complete contrast with its colonial design. This zone is a mix of Islamic, Hindu and Colonial architecture, with some of the oldest and grandest havelis belonging to the Late Mughal era

Zone D: Fatehpuri Masjid, Old Delhi Railway Station, Gateway of Gali Teliwalan, gateways to other galis and katras, and Colonial Havelis



Havelis

Zone A: Kuncha Pati Ram Haveli Cluster (Kashmiri haveli building style)

Zone B: Haveli cluster of Ballimaran area (Islamic Haveli building style), Mirza Ghalib's Haveli

Zone C: Haveli cluster of Kinari Bazaar, Malliwada, Dharampura and Dariba Kalan, Naughara Mansion (oldest and grandest havelis of the Late Mughal Era) as well as an exquisite Jain temple; a mix of Hindu and Islamic architecture)

Zone D: Havelis of Katra Neel, Tilak Bazaar and Naya Bans, Peeli Kothi, Chunnamal ki Haveli (haveli design showing the colonial influence)



Culinary experiences

Zone A: Exquisite Mughlai cuisine can be experienced throughout the day from breakfast to midnight

Zone B: Jain and Punjabi vegetarian cuisine with an array of sweets, savoury snacks and drinks at old and traditional food outlets in the area. A series of street food kiosks add to the overall experience

Zone C: Late night street food market



Markets that attract tourists

Commercial streets pertaining to specialized goods such as cloth, fabric, jewellery, spices, wood and leather products form a zone of interest for visitors interested in shopping; particularly Kinari Bazaar, Sitaram Bazaar, Nai Sarak, Ballimaran, Khari Baoli and Lal Kuan



Access Points

Zone A: Metro (to be built) – Jama Masjid and Red Fort; parking lots – Jama Masjid and Parade Ground

Zone B: Metro (In use) – Chandni Chowk; parking lots – Gandhi Ground (Town Hall)



Open Spaces

Zone A: Large open areas are available near Red Fort and Jama Masjid which can be used to create interesting spillover spaces and multi-modal intersections for tourists and residents

Zone B: Public spaces around the Town Hall are well distributed, but need visual and physical connectivity such that they can be used for recreational as well as transport service based use, given their proximity to Old Delhi Railway Station, Metro Station and Kashmere Gate ISBT (which is proposed to be developed into a multi-modal transit hub)

Zone C: Courtyards of havelis of heritage value have the potential to be interconnected by means of alleyways; they can be used for public purposes such as resting areas, art galleries, open walk-in workshops etc.

SWOT Analysis:

- **Strength:** Varied layers of tangible and intangible heritage attract a large number of tourists
- **Weakness:** Unaccounted economic development
- **Opportunities:** Proximity to major transport hubs such as railway stations, Metro station and bus terminals, as well as a well-knit circulation pattern within the Walled City limits
- **Threats:** Increase in wholesale trade along with uncontrolled development of built structures

Based on the study of different formative layers of Shahjahanabad the Zones of Interest can be perceived as follows along major commercial spines and around landmark monuments

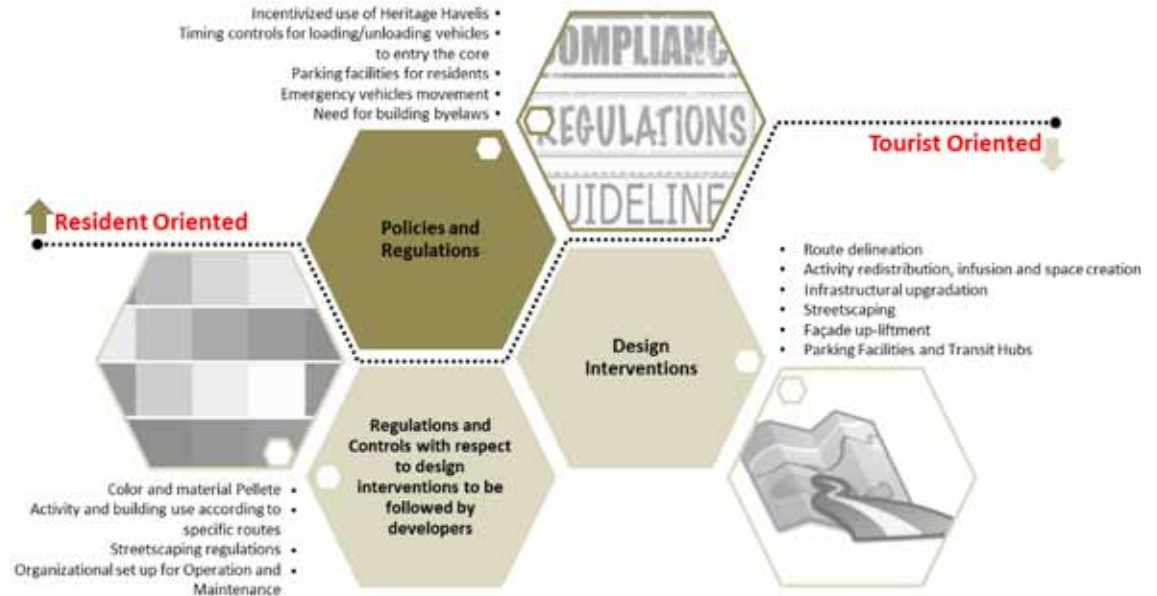
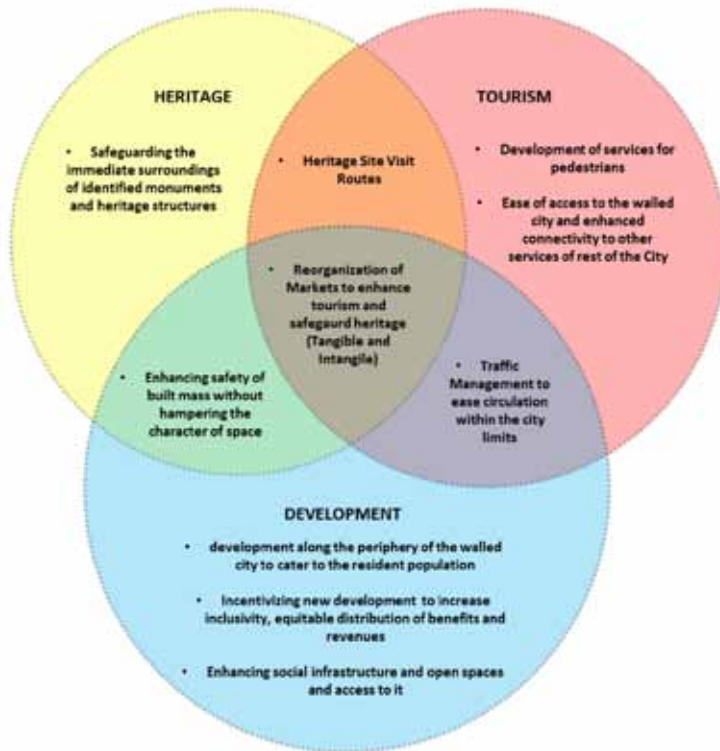


4.1 Development Strategies

Our objective would be to tap the potential of the existing intangible heritage and develop an urban form to support this heritage. The elements of heritage to be looked into are as follows:

- Oral traditions and expressions, including language
- Performing arts
- Social practices, rituals and festive events
- Trade and commerce
- Traditional craftsmanship

Thus the three aspects that need to be interlinked to form strategies of development are Heritage, Tourism and Development as discussed below:



The proposals are to be designed with the intent of minimal intervention and without drastically changing the existing character of the place. They need to be both resident as well as tourist oriented, as the development for each of these segments are symbiotic to each other's betterment.

Tourist oriented proposals shall be more to do with redesigning spaces, face-lifts to the buildings, streetscaping and activity distribution with the purpose of developing tourism related infrastructure. In order to facilitate implementation of the proposals, regulations and controls that need to be followed shall also be suggested.

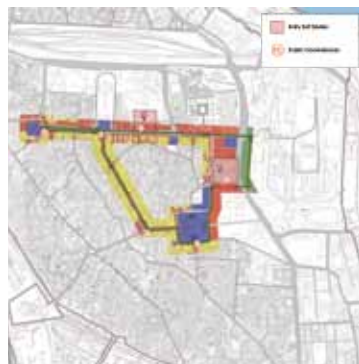
Resident oriented proposals will be designed to ease circulation within the core, develop public spaces, upgrade infrastructure and manage space. Suggestions have also made to increase the fiscal value of the properties by means of heritage listing, adaptive reuse etc.

The overall action plan will be to develop tourist circuits to connect major monuments within the city such as Jama Masjid, Red Fort, Town Hall, Fatehpuri Masjid and Ajmeri Gate. Additional lateral connectors will be developed to take tourists through areas that are rich in havelis, historical market areas etc. Additionally open areas and public spaces are to be created within particular zones or katras for the redevelopment of congested residential areas.

4.2 Generating an Experience

Route Delineation and Activity Distribution

To generate a memorable experience for visitors with various requirements, **routes will be delineated and various activities will be infused** along these routes. The purpose is to create an **interesting, informative and interactive ambience for tourists** visiting Shahjahanabad.



Activity Delineation –

Entry Exit nodes:

- Parking for all modes of transport including both public and private vehicles could be developed as small inter-modal transit nodes
- Entrance plaza for people to assemble before the starting the walk

Basic Route:

Red Fort and Jama Masjid are the most visited monuments within the City. The basic route would cover these, taking visitors through Nai Sarak, which offers a varied shopping experience and Matia Mahal, famous for its eateries. The length of this route is 3.25 km; being the shortest route to be laid out which can be covered in 2.5 hrs approximately, with 1 hour of walking time and 1.5 hours of viewing time.

Access Points: Parking – Parade Ground, Metro – Chandni Chowk

Places of Interests:

- Heritage Buildings: Jama Masjid, Fatehpuri Mosque, Town Hall (Viewing of Old Delhi Railway Station), Sisganj Gurudwara, Bhagirath Palace, Jain Mandir, Red Fort (ASI Grade-A Monument)
- Markets: Matia Mahal (food outlets), paper market, Nai Sarak (books stationery, cloth and fabric), Chandni Chowk (food outlets and high-end retail)
- Help desks/reception kiosks providing visitors with information regarding history, routes, important landmarks, activities within the area, location of resource centres, visitor's facilities, special needs facilities etc.

Public conveniences:

- Blocks would have facilities such as toilets, drinking water fountains, snack bars etc. with universal design for greater accessibility



Route Details

Extensive Route:

Offers a compilation of important built heritage (havelis, tombs and masjids) including the oldest areas within the Walled City, along with a peek into major commercial streets within the core. The length of this route is 6.5 km that would take 5 hours approximately – 2 hours of walking time and 3 hours of viewing time, and can be developed into a full day tour. Another option is to divide this route into 2 segments as described below:

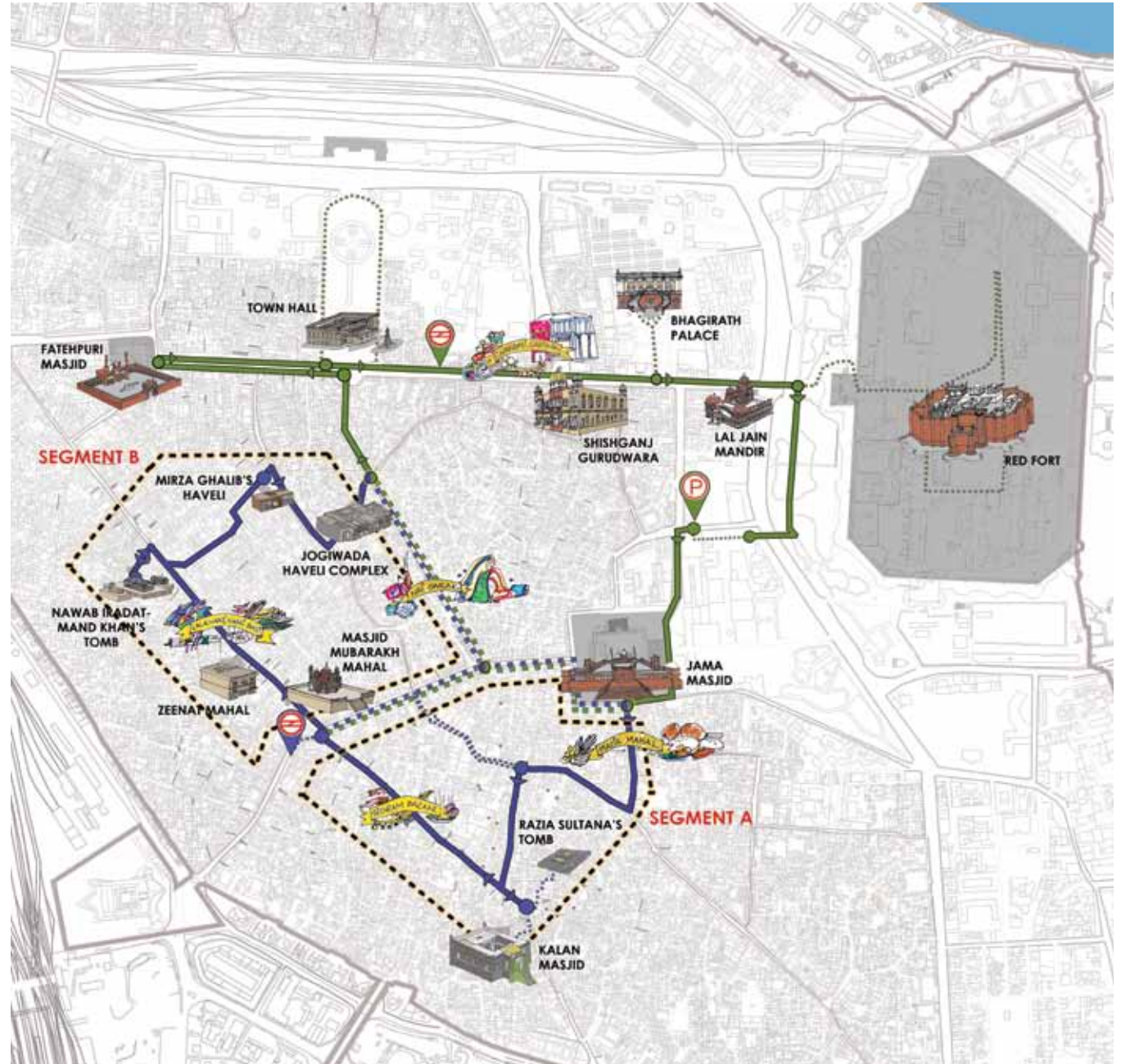
- **Segment A:** 1.3 km (glimpses of the oldest structures within the wall)
- **Segment B:** 1.2 km (a walk through interesting bazaars and a taste of haveli lifestyle)

Access Points:

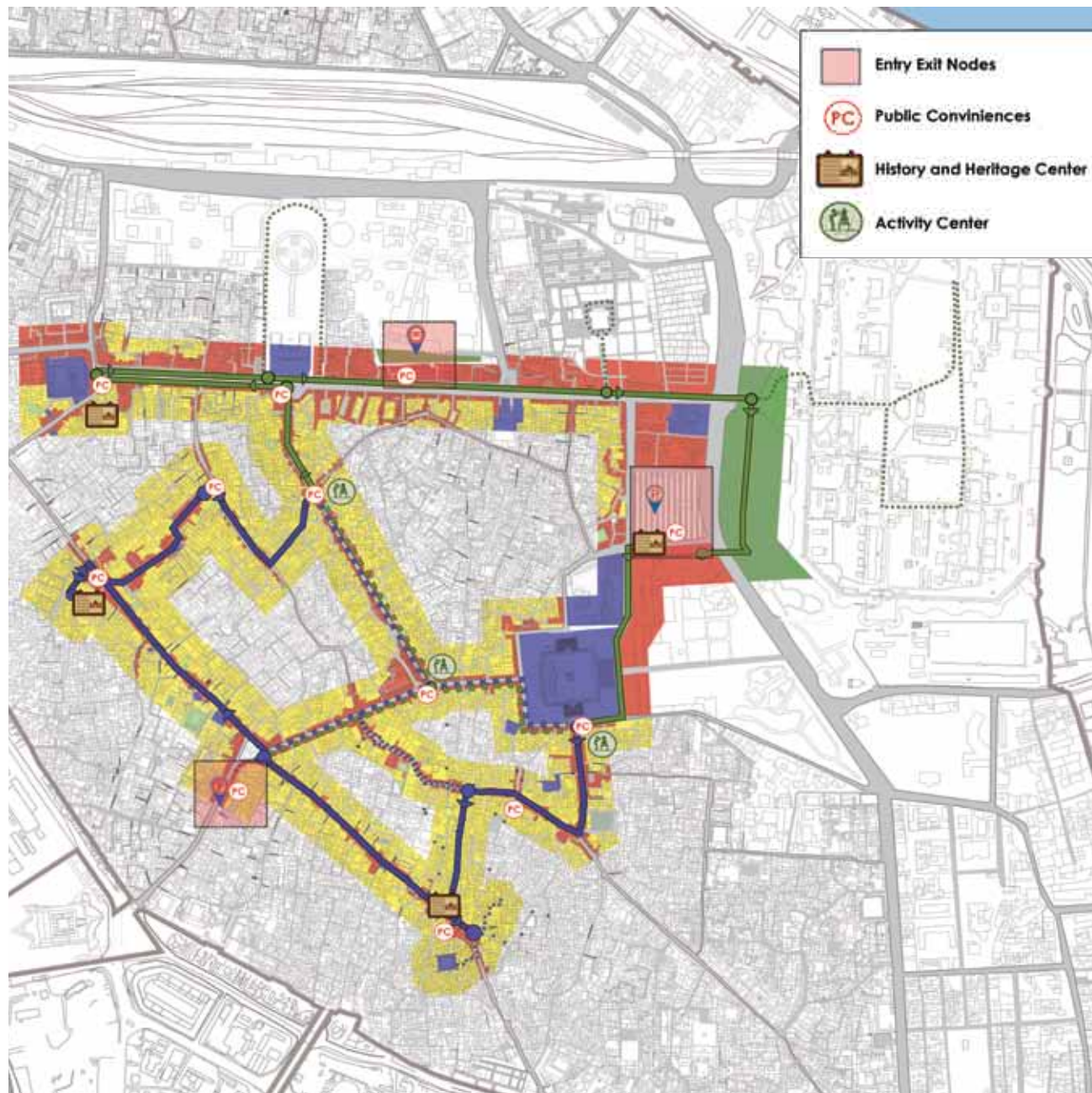
- Parking – Parade Ground
- Metro – Chandni Chowk, Chawri Bazaar

Places of Interests:

- **Heritage Buildings:** Jama Masjid, Fatehpuri Mosque, Town Hall (viewing of Old Delhi Railway Station), Sisganj Gurudwara, Bhagirath Palace, Lal Jain Mandir, Red Fort (ASI Grade-A Monument)
- **Segment A:** Khankha Masjid, Razia Sultana's Grave, Kalan Masjid, Segment B: Masjid Mubarak Begum, Zeenat Mahal, Nawab Iradutmund Khan's Tomb, Mirza Ghalib's Haveli, Jogiwada Haveli Complex
- **Markets:** Matia Mahal (food outlets), Sitaram Bazaar and Lal Kuan Bazaar, Ballimaran and Jogiwara, Nai Sarak (books stationery, cloth and fabric), Chandni Chowk (food outlets and retail)



Associated Activities



Extensive Route:

Offers a more interactive experience to visitors and thus requires a more informative and active approach towards associated activities. It was found desirable to locate History and Heritage Centres and Activity Centres along this route



History and Heritage Centres:

Location: These can be located near important entry/exit nodes or at precincts with a distinct character or interesting stories to recount
 These centres will be developed as mini-museums which would introduce visitors to the characteristics of the precinct they are about to visit
 They will also have interactive information kiosks, guide training centres etc.



Activity Centres:

Location: These can be located at junctions with dense activity related to a particular skill, trade, art or craft

- These nodes would be developed as workshops or vocational training centres for traditional skills, art and craft or for other related fields, such as:
- Cookery classes
- Jewellery making workshops
- Vernacular or ancient architecture or construction workshops
- Photography workshops
- Pottery classes
- Theme-based painting and craft classes
- The activity centres can also be used for screening documentaries or short movies, conducting studies or group discussions/activities related to the intangible heritage of the Old City

Route Details

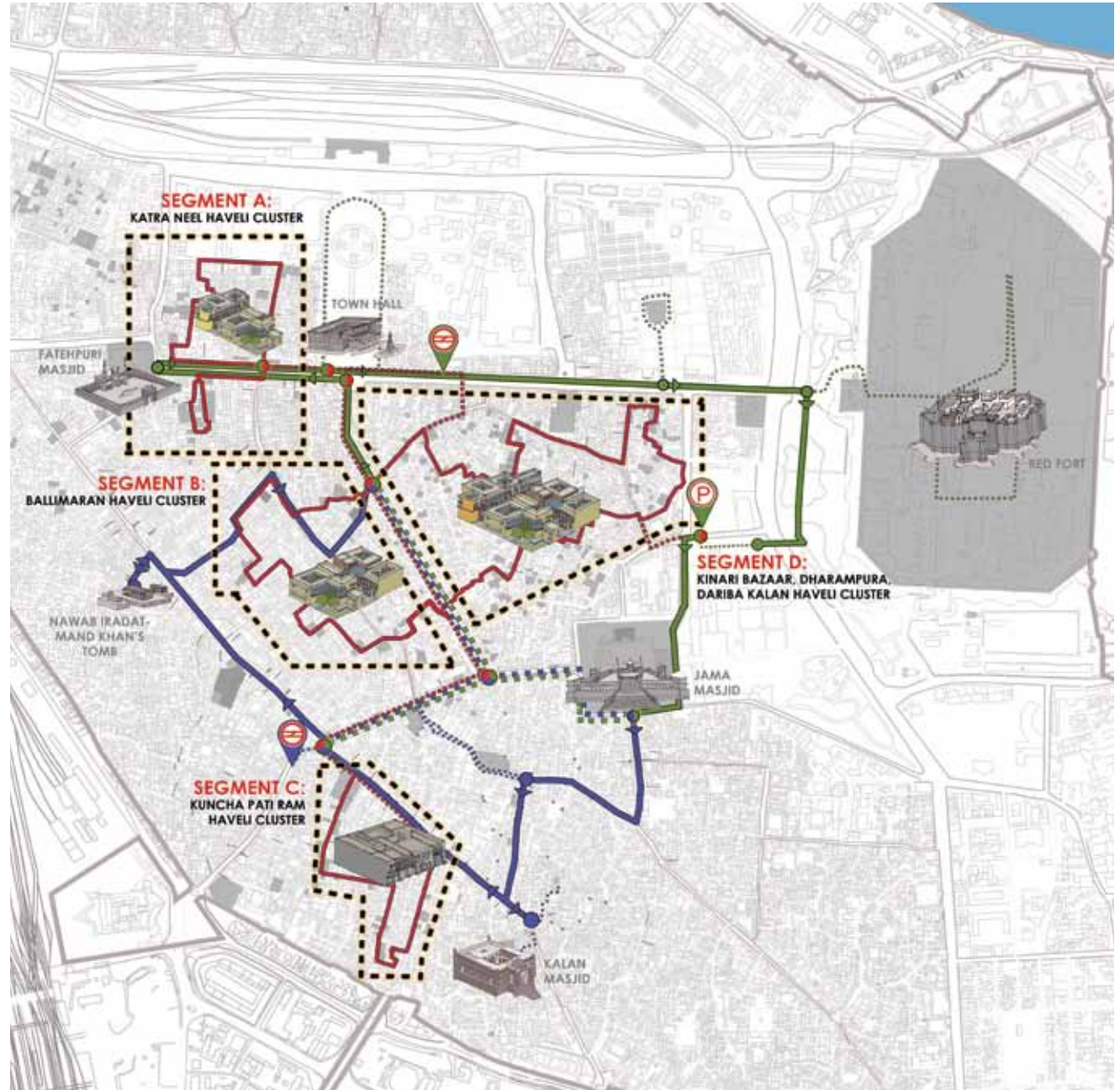
Haveli Route:

Offers a compilation of specialized routes which would take visitors through different haveli precincts. This route, apart from other landmarks covered in the extensive route, will also showcase the traditional haveli building culture.

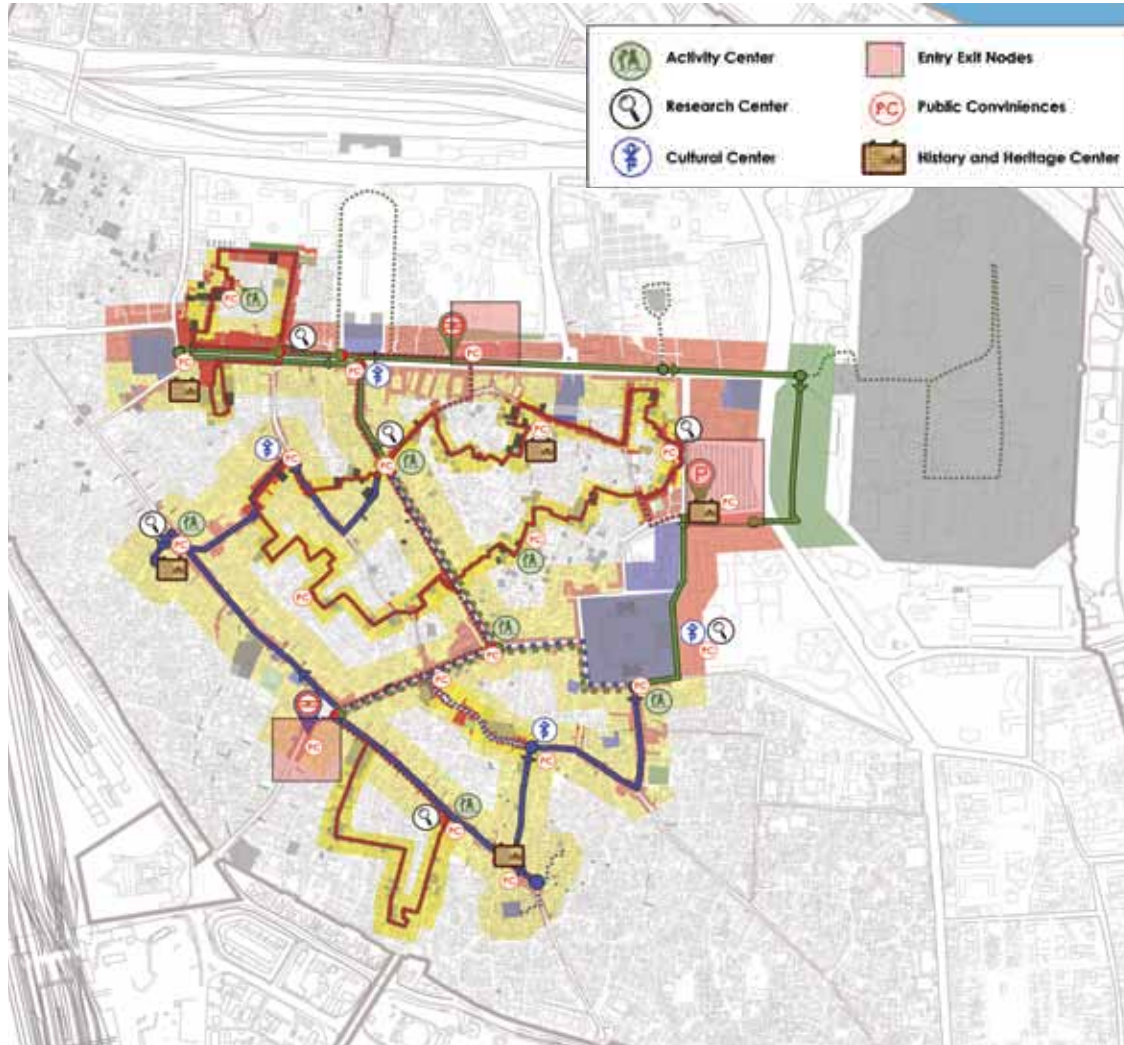
Depending on distinct architectural styles, four segments have been delineated and can be chosen for detailed guided tours. Each of these routes can be completed in a time span of 1 to 2 hours. These segments are:

- **Segment A:** This 1.2 km long route covers Katra Neel, Haveli Haider Quli and Kuncha Ghasiram – areas which reveal colonial elements in their design as they belong to the late Mughal and early Colonial eras
- **Segment B:** This route is 1.4 km long and covers the areas of Charkhe Walan and Ballimaran, where the famous haveli of Mirza Ghalib is located. This area showcases modest havelis of the early colonial and colonial eras
- **Segment C:** This segment is the shortest, with a 1 km walk and covers Gali Kuncha Pati Ram. This demonstrates intricate carving and mural work inspired by Kashmiri building elements
- **Segment D:** This 1.99 km walk will take visitors through Kinari Bazaar, Dharampura and Dariba Kalan which have some of the oldest and grandest havelis in the city, built on the lines of Hindu architecture. This area also boasts of beautiful Jain temples and adjoining haveli complexes, as seen in Naughara Mansions in Kinari Bazaar

Access Points: Parking – Parade Ground, Metro Station – Chandni Chowk, Chawri Bazaar



Associated Activities



Haveli Route:

Visitors with a special interest in this subject could opt for this route. Therefore the route should have centres of study and practice. Apart from History and Heritage Centres and Activity Centres, this route should also have Research Centres and Cultural Centres along it.



Research Centres

Location: These can be located near the main starting points of specialized 'haveli loops' or near important landmarks which are associated with study and learning such as madrasas, masjids etc.

- These would serve as Research Centres on specialized subjects. They can be developed as built spaces that are let out to organizations that conduct research in areas related to Shahjahanabad and its characteristics.
- These Research Centres would help Activity Centres organize special workshops



Cultural Centres

Location: These can be near landmarks or at junctions, which have the potential to be developed into important public spaces

- These would be special areas which will serve as venues for performing arts such as Qawali sessions, poetry competitions, dance recitals, plays and theatre etc. These areas can be developed as:
- Amphitheatres
- Concert halls
- Street corners developed to accommodate temporary stages
- Plazas
- Local street squares

Route Details

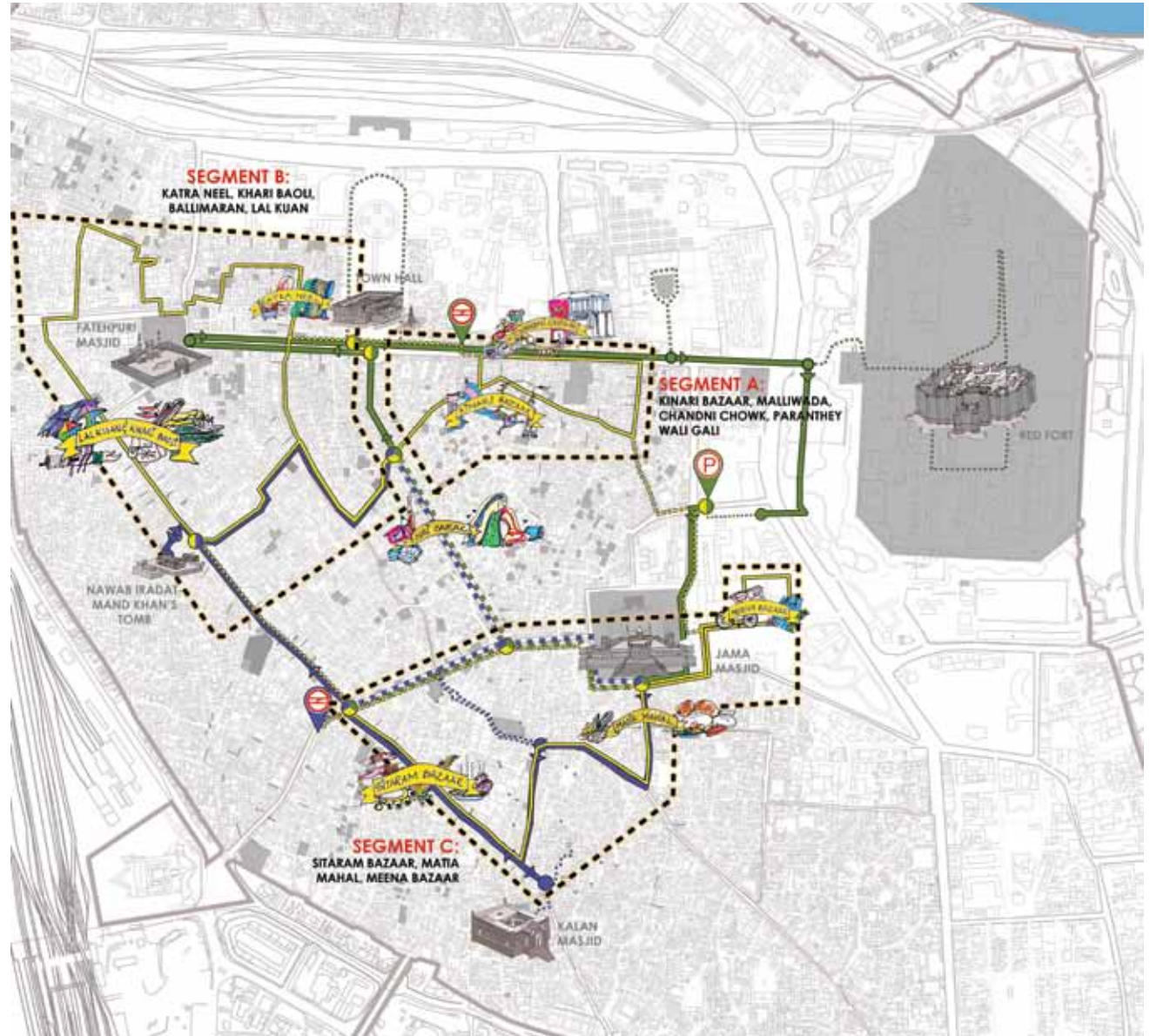
Market Route:

This introduces visitors to the vibrant bazaar culture prevalent since the inception of the city. These specialized routes have been divided into segments to offer an experience of shopping in traditional markets of the city along with the culinary extravagance of famous food outlets. Each of these routes can be covered in an hour; however the allocated time will not be sufficient if one indulges in shopping at every commercial street. These segments are:

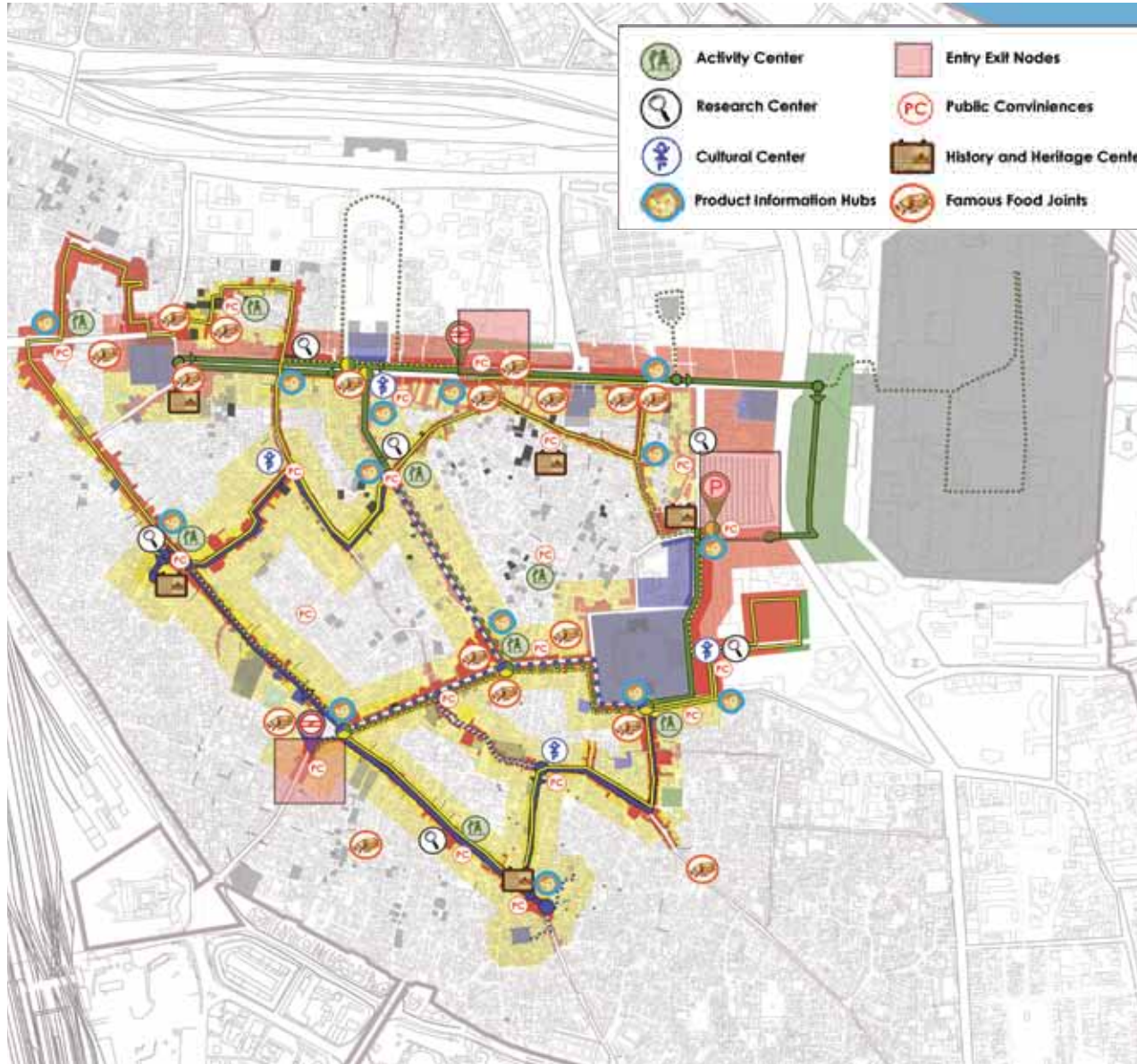
- **Segment A:** This 1.2 km long route covers the areas of Malliwada, Kinari Bazaar and Dariba Kalan (famous for its cloth and jewellery market). There are shops here which specialize in gilt work, lace and border making. Visitors also have an option of trying out the famous sweetmeats and paranthas at Chandni Chowk and Paranthewali Gali
- **Segment B:** This route is 3.1 km long and covers the spice market of Khari Baoli, fabric market of Katra Neel, kite market at Lal Kuan and wooden and leather products in Ballimaran. Traditional food outlets in this area are known to serve lip-smacking vegetarian snacks, kulfis and lassis
- **Segment C:** This segment 2.1 km long takes visitors past the accessories market of Sitaram Bazaar and Meena Bazaar, traditionally known to have been a trade centre for precious stones and metal products. This route also passes through the major non-vegetarian food zone of Matia Mahal where one gets to sample Mughal cuisine

Access Points:

- Parking – Parade Ground
- Metro – Chandni Chowk, Chawri Bazaar



Associated Activities



Market Route:

This is the most interactive route and would generate unguided circulation of visitors. Thus it is important that people are well informed about the streets they are exploring. An interactive guide to food outlets, shops and products would facilitate the movement of visitors in the core and increase accessibility to the core. Product information hubs shall be located at regular intervals.



Product Information Hubs

Location: These can be located at regular intervals along tourist-attracting commercial streets

- Initially to be installed as plaques on walls giving information of products and shops specialising in these products.
- The plaques can later be upgraded to centres promoting online shopping and providing space for direct interaction between retailers and customers.



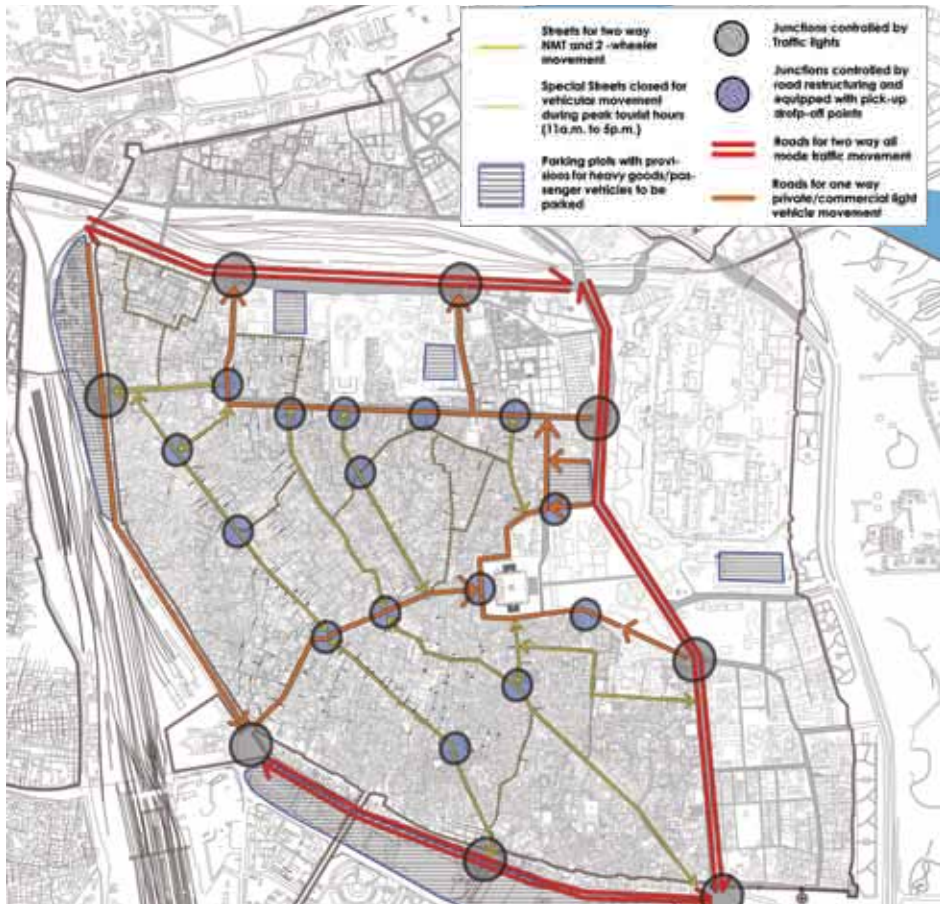
Famous Food Outlets

Location: Near or around traditional food outlets

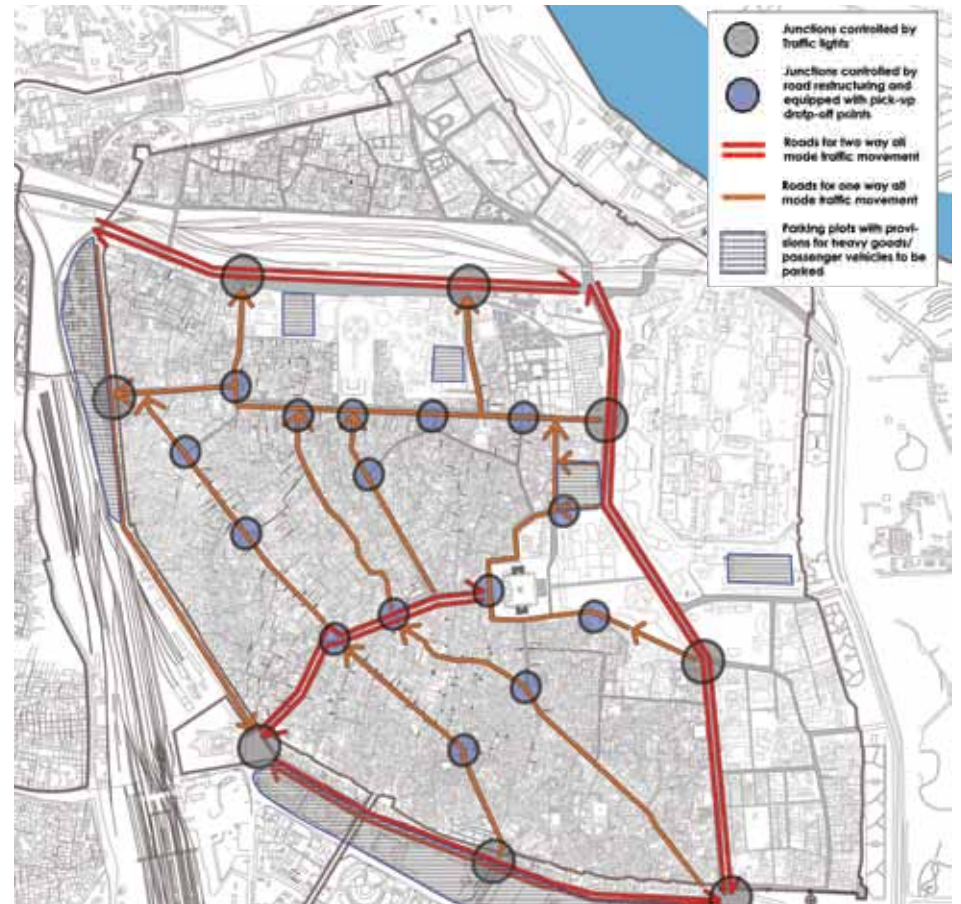
- The areas around traditional and famous food outlets would be demarcated and designed such that they facilitate both eating for customers and operations and maintenance by owners.
- The vicinity of such shops or food areas would be highlighted to direct visitors to closeby food outlets as well as draw their attention to a particular shop
- Plaques or audio-visual sets could be used at these points telling people about the history and other information of food available at the shop and the area
- The built environment can be designed with different paving material, paint or signage

4.3 General Recommendations for Designing Tourist Routes

Traffic Regulation Plan: Mix of commercial and residential activity in the core of the Old City has lead to a complex composition of vehicles with commercial as well as passenger vehicles accessing the main commercial streets throughout the day. Activities such as loading and unloading of goods cannot be stopped. Drop-off or pick-up by inter-para transit vehicles too cannot be hindered. Hence, the situation calls for a traffic regulation plan which has been designed as a unidirectional time-based circulation system. Emergency vehicles should be allowed free passage at all times



Peak Tourist Time Circulation (8 am to 10 pm): It has been observed that there is a sudden influx of visitors in the core area when shops open. This can be regulated by limiting traffic into the core during this time period. To ensure accessibility, one way circulation loops have been created around markets



Off Tourist Time Circulation (10 pm to 8 am): The time after markets close will be utilized to carry out loading/unloading activities. Goods vehicles should also follow the one way circulation system so that clearing of the area is easier as the "No Entry" time period starts in the morning

Waste Management Plan: Intense commercial activity leads to the generation of huge quantities of solid waste which is neither collected or segregated on a regular basis leading to overflowing bins and dhalaos and increasing filth on the already overcrowded streets of the City. Compact urban fabric and high population density guided the Management Plan to be based on a hierarchal collection, transportation and processing system which allows for segregation at source, regular collection and transportation, temporary storage and processing with a scope of resource recovery by means of recycling and composting. Availability of all items required for the operation of this plan shall be the responsibility of the authority in charge of maintenance.



Source : Delhi Urban Art Commission, Solid waste management - CR park, 2017



The Process: All waste shall be disposed after being segregated by individuals at designated Community Collection Points (CCPs). Owners of properties where garbage is left unattended to on streets will be penalized. The CCPs shall be located at intervals of 150 to 200 m, along specified collection routes that collection vans will follow for collection of waste. Authorities shall run street cleaning vehicles at regular intervals to ensure that the streets are cleaned throughout the day. The waste shall be stored temporarily at Recycling Depots, located on the periphery of the city.

Hierarchy of Waste Management System

Proposed Levels in Waste Management:

Waste Collection at Community Level

Community Collection Points:

- Waste bags (every household and shop to prepare segregated bags of garbage) that have to be dumped at Community Collection Points for further collection by authority vans.
- Colour coded bins at a maximum distance of 150 m apart
- Conceptually estimated number of bins – 400 for existing 2.5 lakh population

Waste Transportation and Storage at Neighbourhood Level

High-tech Recycling Depots:

- From these collection points the waste will be taken to high-tech recycling depots located on the periphery of the Old City for further processing
- Conceptually 12 locations for Recycling Depots have been identified.
- Two prototypes can be developed based on the availability of space: i) to be located in parks and ii) to be located along pathways

Resource Recovery at Area Level

High-tech Recycling Depots:

- These may be equipped with Compost Pits where space is available

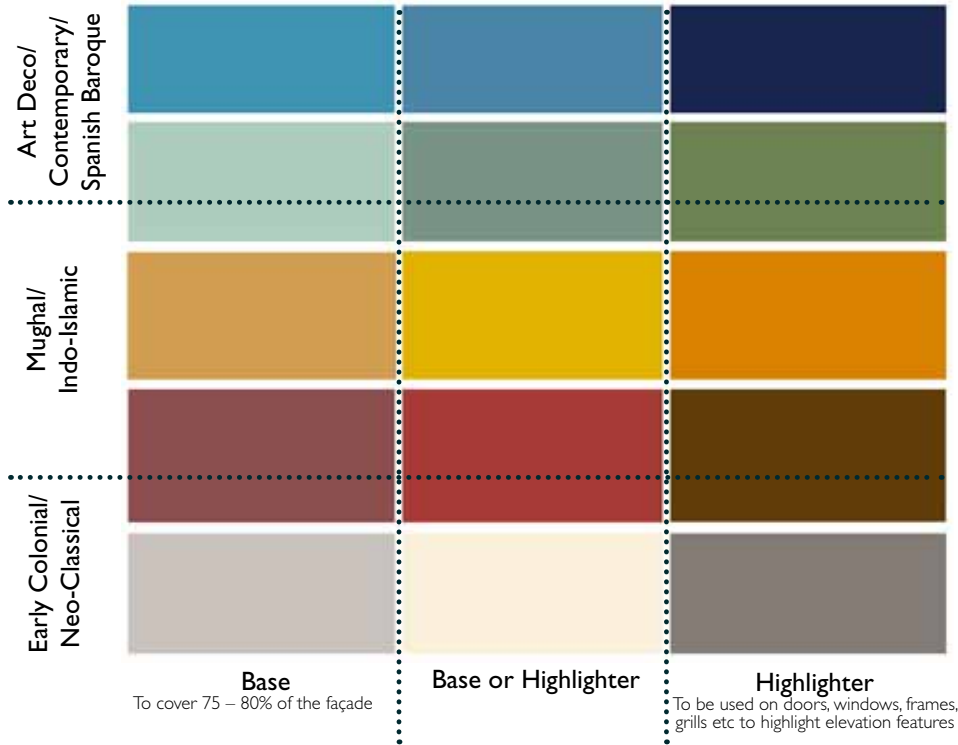
Biogas Plant:

- Restaurants, hotels and culinary zones contribute to organic waste which will be treated in a biogas plant with a capacity of 5 tons/day which can be installed in an open space of 50 sq m.

Colour Theme Palette: To instil homogeneity in the built environment along routes, a palette of colours has been developed that can be used on building façades, paved surfaces, fenestrations and street furniture etc., based on the predominant architectural character of different areas. The palette has been designed keeping in mind the styles of architecture adopted in different eras such as: Mughal, Colonial, Art Deco and Contemporary.

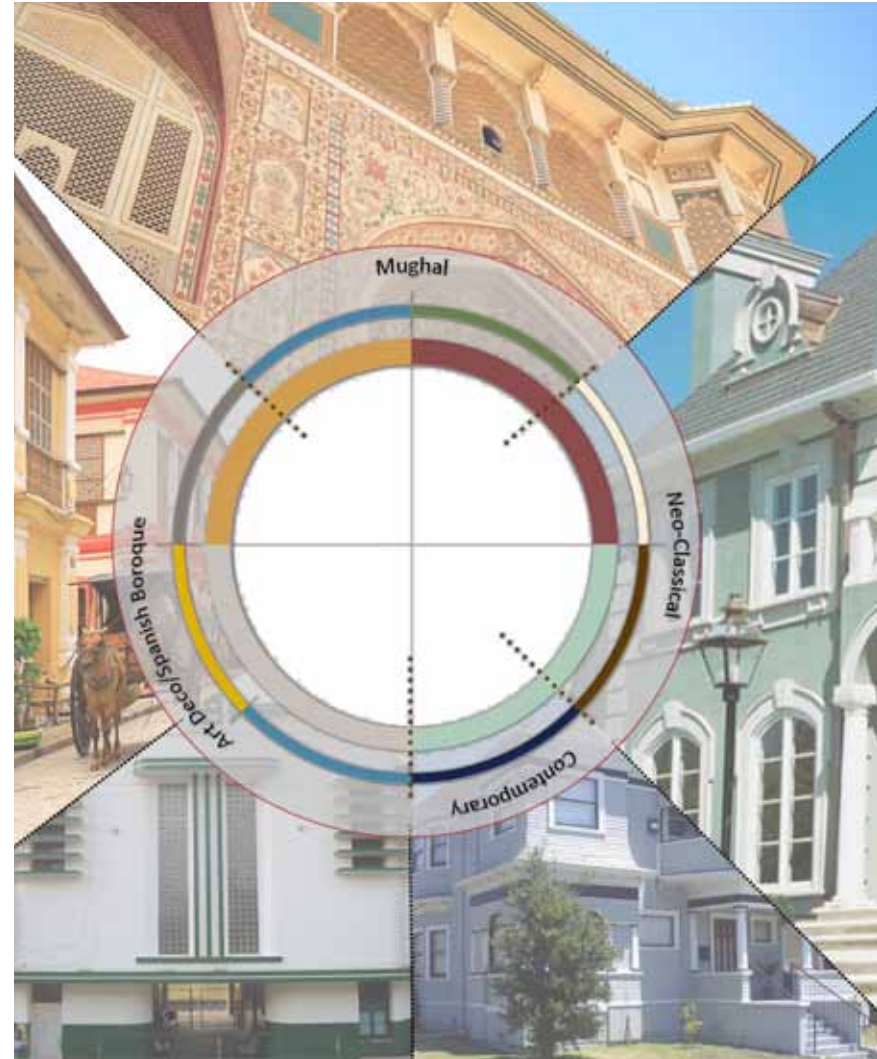
This colour palette is indicative and can be used as a base or as high-lighters in buildings along the tourist routes so that the built environment can be given a harmonious face-lift.

Colours from the palette can be used in different permutations and combinations to create different architectural styles



Rules of use of the palate:

- Building façades should not use more than three colours
- Simple colour schemes to be encouraged
- Black, fluorescent and neon colours should not be used as the primary colour (covering more than eighty percent (80%) of the building façade area)
- Black or dark brown should be restricted to doors and window frames, metal work and security



Material Theme Palette: The built environment around the routes have to be restructured in a manner that they are in harmony with the overall character and feel of the space and to ensure this, elements cannot be designed in stark contrast to the prevalent architectural style of the precincts. Thus a suggested palate has been created which may be followed while redesigning the edges along routes. Options have been given for both vertical and horizontal surfaces considering the need of both permanent and temporary features.



Rules of use of the palette:

- The theme should be kept surreal and earthy, in line with the overall character of the space
- Use of Alu-decor panels with metallic or plastic finish should be avoided
- Apart from building materials, different lighting fixtures may also be used as highlighting elements but should not be aligned in such a way that it disturbs people using the space around such buildings.
- Temporary structures and paving materials should be low maintenance and of adequate strength. Ground cover should preferably be semi-pervious and should not cause hindrance to vehicle or pedestrian movement
- Projections of buildings should be treated similar to, or which is compatible with the overall façade of the building
- Contrast created in textures to highlighted areas should not be overwhelming

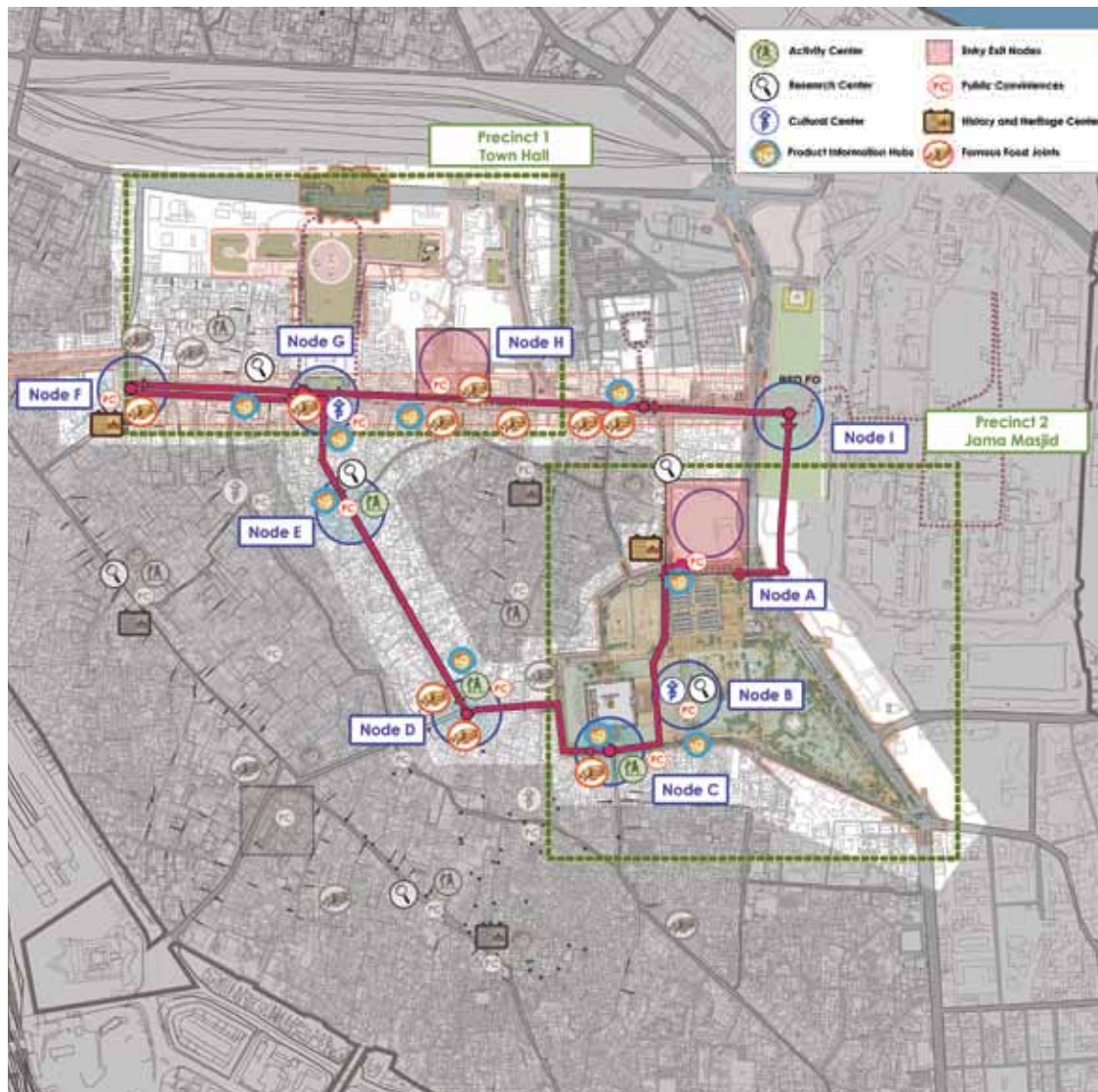


Streetscaping Regulations: Certain rules and regulations need to be followed so that implementation of design themes along the tourist routes becomes easy, homogeneity is maintained and that maintenance becomes easier for the concerned authorities.

Aspects	Desired Design	Limitations
Façade Upgradation	<ul style="list-style-type: none"> • Colour theme to be followed as prescribed 	<ul style="list-style-type: none"> • Use of plastic/fibre/stainless steel to be limited so as to not to disturb the overall character
Landscape	<ul style="list-style-type: none"> • Drought resistant, native and naturalized materials to be used • Self-sustaining and eco-friendly designs (such as in-built biodigester planters etc.) to support vegetation 	<ul style="list-style-type: none"> • Planting big trees or plants should be limited to open spaces and courtyards with considerable distance from buildings
Lighting	<ul style="list-style-type: none"> • Cast concrete, stainless steel or iron poles with pole height supporting both pedestrian and vehicular movement and attached signage to be used; should be painted according to selected theme 	<ul style="list-style-type: none"> • Separate provision for lighting, vehicular carriageway and pedestrian walkway • Flood lighting to cover large spaces or junctions
Sidewalks	<ul style="list-style-type: none"> • Sidewalk to be of a minimum width of 1.8 m with 0.5 m from the curb edge to be reserved for street furniture • Part of carriageway to be marked without a grade separation, as a overlap zone accommodating informal commercial, pedestrian and NMT vehicles • Driveways or walkways to be accommodated using table top crossings creating a seamless walking space • Pavements at food points or other junctions to be highlighted by mixing materials 	<ul style="list-style-type: none"> • Use of corbelled finish or any other rough finish that would make walking difficult
Seating	<ul style="list-style-type: none"> • Heavy-duty, low-maintenance benches to be placed at every 30 m which may have electrical points • Food kiosks or shops may also provide for temporary seating arrangements 	
Public Convenience Block	<ul style="list-style-type: none"> • These blocks shall be designed following the prescribed colour, material and design element theme, with provision for drinking water and one washroom each for males and females 	<ul style="list-style-type: none"> • To be limited within plot lines and not to be placed on sidewalks as portable units
Dustbins	<ul style="list-style-type: none"> • Heavy-duty, low-maintenance dustbins which may be innovatively designed to include planters, spittoons and cigarette bins 	<ul style="list-style-type: none"> • Single container unit to be discouraged to ensure segregation at source
Utilities	<ul style="list-style-type: none"> • All utilities to be shifted underground or to be shifted within plot lines with careful buffering 	

5.1 Activity Node Planning for Basic Route

Detailing Out: The basic route has been selected for detailing the proposed changes and process to demonstrate the effects of the recommendations, if they are executed on site. Previous interventions by different organizations at important nodes and streets have also been incorporated with a few modifications in design for our proposals.



Nine important nodes have been identified along the route where specific activity distribution has been done on the basis of activity and character of different areas:

Node A:

- Parking and Reception Plaza
- Research Centre for Handloom and Jewellery making studies
- Main History and Heritage Centre introducing people to the Red Fort, Jama Masjid and the Walled City's Development

Node B:

- Cultural Centre against the backdrop of Jama Masjid
- Research Centre for Islamic Studies

Node C:

- Spill out area
- Special Cookery Classes

Node D:

- Activity Centre for Paper-related Crafts
- Book Reading Centres
- Painting and Crafts Workshops

Node E:

- Jewellery Making Workshop
- Gilding and Stitching classes
- Poetry Reading and Singing workshops
- Photography workshops
- Research Centres for the above mentioned activity centres and for development of Walled City

Node F:

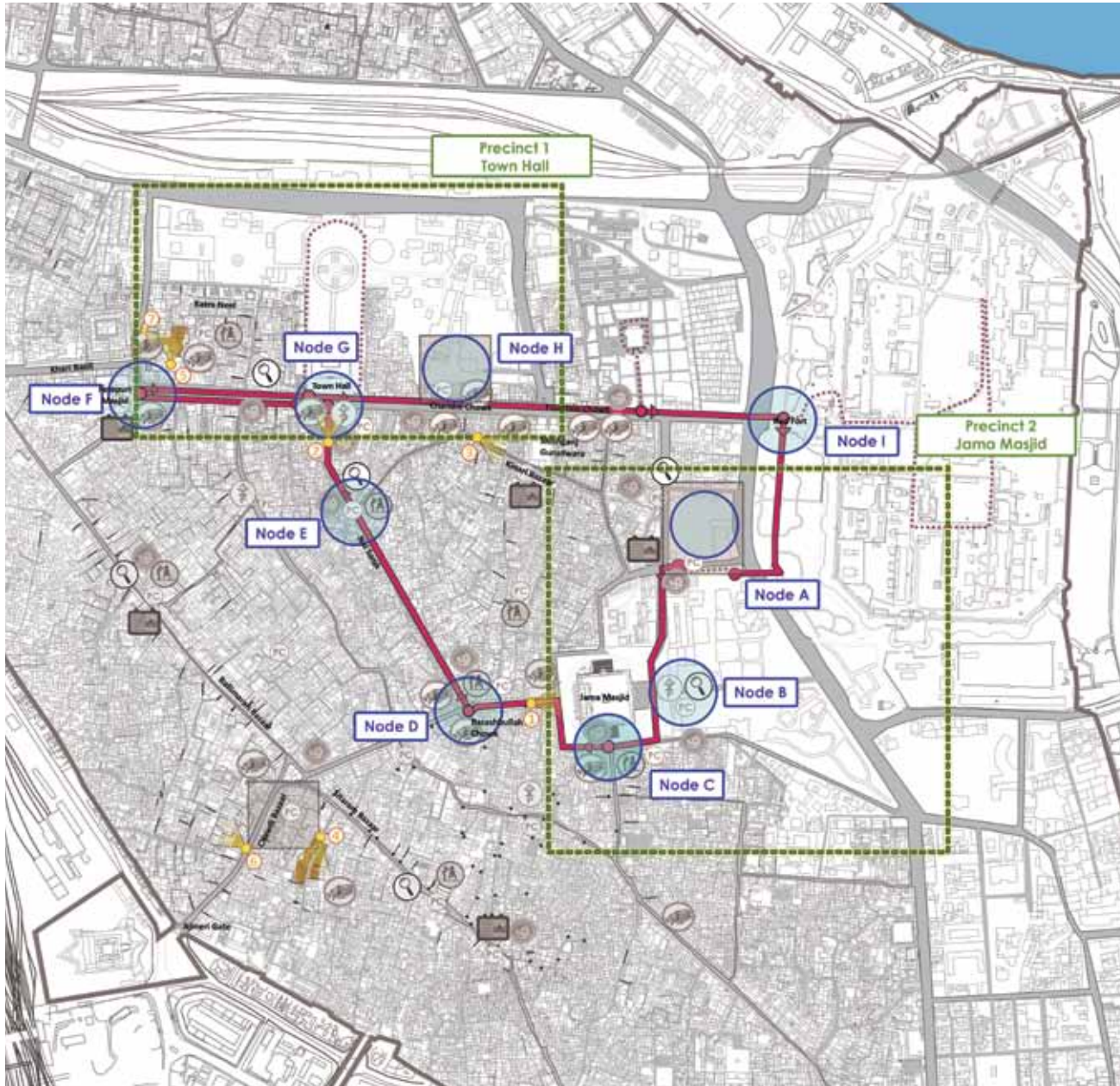
- Cultural Centre to hold street, outdoor and indoor plays and concerts

Node G:

- History and Heritage Centre introducing people to the City Core, development of bazaars and evolution of present day city

Node H:

- Parking and Reception Plaza



Detailing for the Basic Route has been carried out in 3 segments, namely:

1) Proposed Built Environment

The built environment has been modified based on the proposed recommendations at selected spots with different land use, character of space, street widths and heritage value.

Commercial Streets:

- **Point 1:** Jama Masjid Junction (Paper Market), portion of a commercial street approaching an important landmark of the area where buildings on both sides show distinct architectural character (Late Mughal)
- **Point 2:** Nai Sarak near Town Hall Junction, portion of a commercial street approaching an important landmark of the area, where buildings on both sides show no distinct character
- **Point 3:** Kinari Bazaar, portion of a narrow highly dense commercial street

Residential Streets:

- **Point 4:** Gali Kuncha Pati Ram, portion of a residential street with historic havelis on both sides
- **Point 5:** Gali Kuncha Khasi Ram (Katra Neel), portion of a street with historic havelis on one side and godowns on the other

Courtyards:

- **Point 6:** Courtyard of an identified heritage building (Chawri Bazaar), courtyard which is believed to have been a hamam for Razia Sultana, now lies vacant, unattended and filthy. The pool has been filled to ground level
- **Point 7:** Courtyard of a private building (Katra Neel), courtyard of vacant haveli being used as a godown

2) Proposed Public Spaces

Precinct 1: Jama Masjid Precinct

- Since there is a large chunk of open space already available in front of Jama Masjid, this precinct has the potential to be developed as a positive active space for interaction
- The area also forms a crucial transit hub for commuters using both public and private transportation with a new Metro station being constructed within the precinct

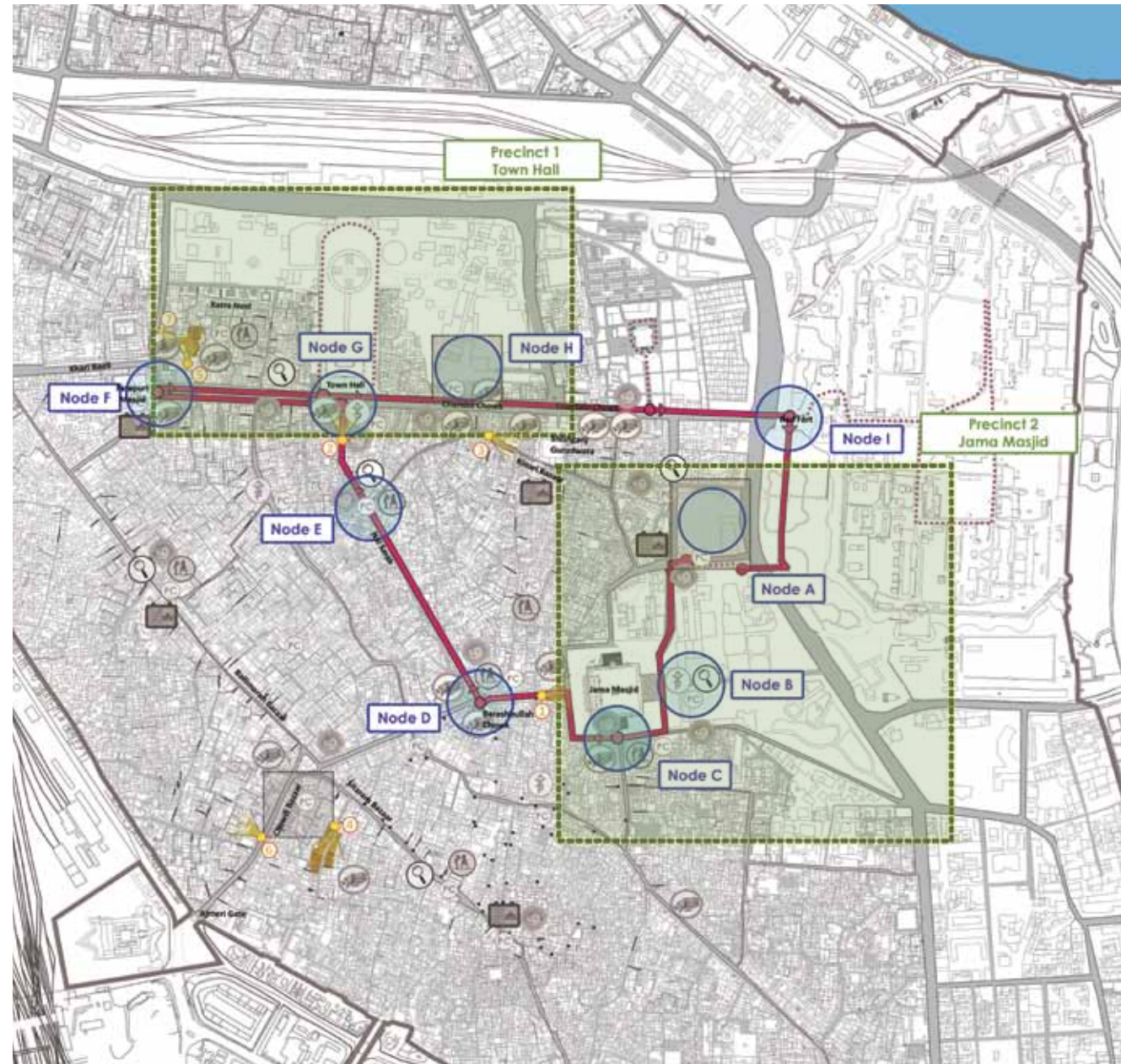
Precinct 2: Town Hall Precinct

- Town Hall from the Nai Sarak Junction extends up to the Old Delhi Railway Station.
- Open space around the Town Hall precinct has a potential to be redeveloped into more active public spaces.
- The area also forms a crucial transit hub for commuters using both public and private transport. Because of its proximity to the Railway Station and Kashmere Gate ISBT, it has the potential to be used as a halting zone for goods vehicles, as a bus depot or for parking

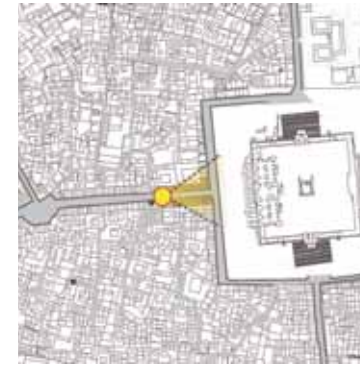
3) Legislative Provisions for Implementation

- The Master Plan and Zonal Plan documents have already laid down policies related to:
- Upgradation of areas of heritage value
- Development of public spaces
- Enhancement of accessibility, connectivity and circulation
- Urban design

The above have guided the recommendations given for development of the core area and helped formulate suggestions and guidelines to promote tourist-oriented development.



5.2 Street Restructuring and Façade Uplift



Commercial Streets – Point I: Jama Masjid Junction (Paper Market)

Portion of a commercial street approaching an important landmark of the area where buildings on both sides show distinct architectural character (Late Mughal period)

Existing Condition:

First Floor and Above

- These floors demonstrate a rich heritage in the form of architectural features such as railings, pillars, brackets, sun shades, louvres etc. These features are done away with or not maintained.
- Overhanging high-tension wires, other electrical supply units and lamp posts all end at this level; hanging outdoor units of ACs, add to the mess
- Façade finishes on some of the buildings are in complete contrast to the character of the space
- Temporary shelters on the top most floor give a messy appearance

Ground Floor Level

- Haphazard placement and lack of maintenance of hoardings on buildings
- Columns or pillars have been built upon, therefore losing their charm
- Shutters of shops are not maintained adding to the clumsy appearance of the façade

Street Level

- Unmaintained and non-continuous pathways encroached upon by buildings and utilities
- No designated space for informal commercial set-ups

Proposed Changes:

The intention of this proposal is to homogenize the façades, re-instil the overall late-Mughal character of the space and accentuate the frame of the building form as one approaches the landmark monument in the precinct

First Floor and Above

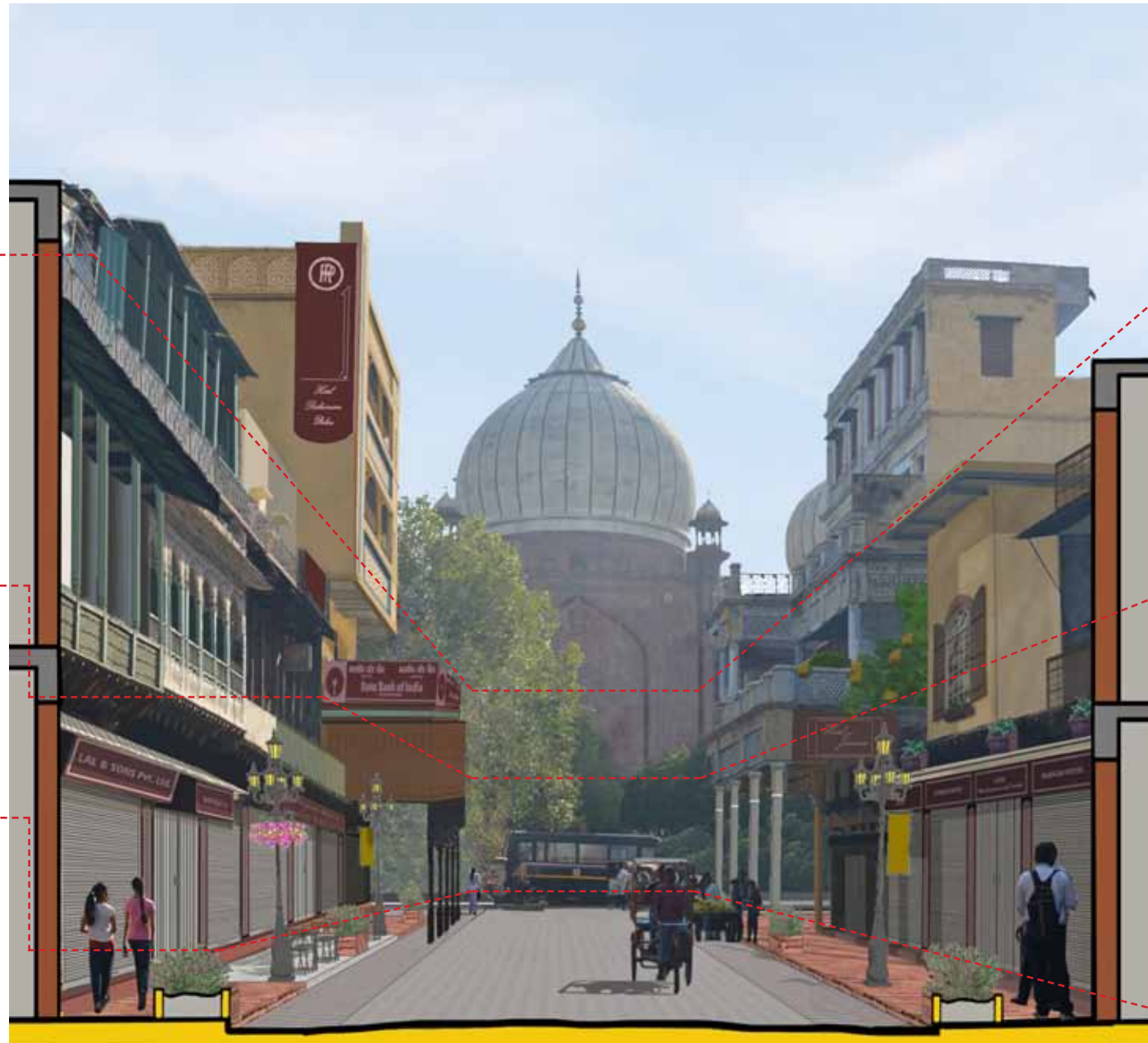
- Uniformity in the façade adhering to the characteristics of the space; repairing and retaining existing architectural features
- Clearing up of views by removing overhanging wires and on-surface utilities
- Temporary shelters on the top most floors to be redone in line with the overall building façade and with the use of prescribed materials and colour themes

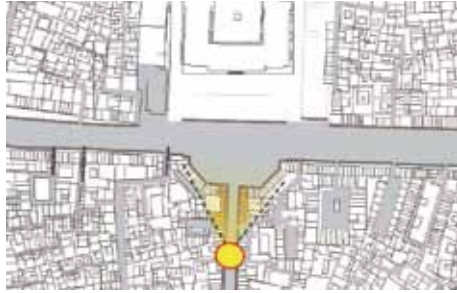
Ground Floor Level

- Uniformity in signage and treatment of shutters
- Existing columns have been accommodated within the footpath's width and the colonnade accentuated by addition and repair

Street Level

- Restructuring streets to ensure continuous pathways; accommodating all street furniture, including permanent and temporary seating
- Common share road space to accommodate pedestrian movement and informal commercial activities during peak hours





Commercial Streets – Point 2: Town Hall Junction (Nai Sarak)

Portion of a commercial street approaching an important landmark of the area where buildings on both sides show no distinct character



Existing Condition:

- **First Floor and Above**
 - Only a few buildings have some heritage architectural features, but are not maintained
 - Overhanging high-tension wires, other electrical supply units and lamp posts all end at this level; hanging outdoor units of ACs add to the mess
 - Façade finishes on some of the buildings are in complete contrast to the character of the space
 - Temporary shelters on the top most floor give a messy appearance
- **Ground Floor Level**
 - Haphazard placement and lack of maintenance of hoardings on buildings
 - Columns or pillars have been built upon therefore losing their charm
 - Shutters of shops are not maintained adding to the clumsy appearance of the façade
- **Street Level**
 - Unmaintained and non-continuous pathways encroached upon by buildings and utilities
 - No designated space for informal commercial set-ups
 - On-street parking further reduces the walking area

Proposed Changes:

First Floor and Above

- Uniformity in the façade adhering to the characteristics of the space and redesigning architectural features of the buildings.
- Any interesting feature could be repaired and retained if its condition permits
- Clearing up views by removing overhanging wires and on-surface utilities
- Temporary shelters on the top most floors to be redone in harmony with the overall building façade with use of prescribed materials and colour themes

Ground Floor Level

- Uniformity in signage and treatment of shutters
- Existing columns have been accommodated within the footpath's width and the colonnade accentuated by addition and repair
- All outdoor AC units to be shifted to the terrace and wiring to be concealed using frames, louvres or mouldings

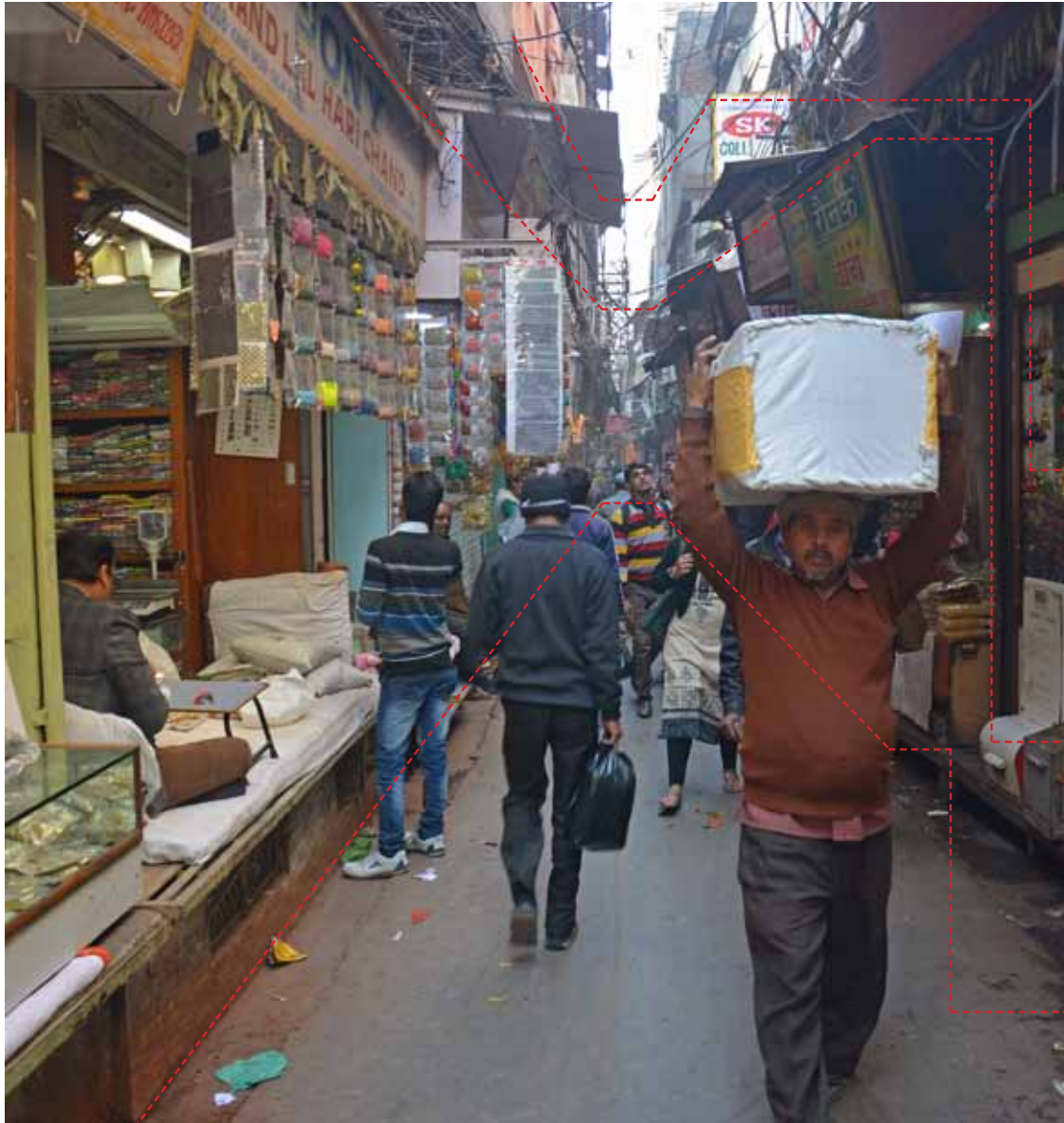
Street Level

- Restructuring streets to ensure continuous pathways, accommodating all street furniture
- Common shared road space for pedestrian and informal commercial activities

The intention of this proposal is to homogenize the façades. The avenue of buildings was to frame the approaching landmark in the precinct. Owing to the mixed commercial character of the street, it is necessary to accommodate informal commercial activities with ease and without compromising the overall width available for traffic movement on the street.

Services for the buildings cannot be ignored and space allocation for various service lines and equipment is necessary. They should be integrated with the new façades in such a way that they do not hamper the look of these buildings and can be installed in a cost effective and easy manner.





Commercial Streets – Point 3: Near Naughara Junction (Kinari Bazaar)

Portion of a narrow, highly dense commercial street with galis and residential buildings opening on to it. Pedestrians, NMT and two-wheelers use this stretch

Existing Condition:

- **First Floor and Above**
 - Projections of buildings obstruct the view of building façades and restrict natural light penetration
 - Overhanging high-tension wires, other electrical supply units and lamp posts all end at this level; hanging outdoor units of ACs add to the mess
 - Temporary shelters on the top most floor give a messy appearance
- **Ground Floor Level**
 - Haphazard placement and lack of maintenance of hoardings on buildings. Different sizes and designs of the signage break the virtual viewing lines thereby creating more confusion in the perception of the street
 - Shutters and shutter frames of shops are not maintained adding to the clumsy appearance of the façade
- **Street Level**
 - Street is too narrow to cater to both pedestrians and vehicles
 - Utilities such as street lights, public conveniences and hawker's areas face space restrictions

Proposed Changes:

- The intention of this proposal is to homogenize the façades, clear the air space so as to create a sense of open space along the narrow lane and accommodate as much of street design elements as possible in the available width.

First Floor and Above

- Projections have been limited to a particular depth or completely done away with so as to not hinder light penetration or view of the façades
- Clearing up of views by removing overhanging wires and on-surface utilities
- Any interesting architectural feature could be repaired and retained if its condition permits
- Temporary shelters on top most floors to be redone following prescribed materials and colour themes

Ground Floor Level

- Uniformity in signage and treatment of shutters. Signage to be placed at a particular height
- Display counters to be limited within shop premises to allow clear walking paths

Street Level

- The street needs to have a continuous smooth finish to facilitate pedestrian movement
- In-built street lighting to do away with lamp posts
- Since vehicular movement on this street has to be restricted during peak hours, bollards or barriers also need to be added





Residential Streets – Point 4: Gali Kuncha Pati Ram (Near Sitaram Bazaar)

Portion of a residential street with historical havelis placed along a 6–8 m wide local street.



Existing Condition:

• First Floor and Above

- These floors have a rich heritage in the form of architectural features such as railings, pillars, brackets, sun shades, louvres etc. These features are done away with or not maintained.
- Overhanging high-tension wires, other electrical supply units and lamp posts all end at this level; hanging outdoor units of ACs add to the mess
- Temporary shelters on the top most floor give a messy appearance

• Ground Floor Level

- Façades of shops and commercial outlets are in complete contrast to character of the area
- This floor reveals a rich heritage in the form of architectural features such as doorways, mural work around door frames, pillars and verandahs whose views should be framed and enhanced

• Street Level

- Street is too narrow to cater to both pedestrians and vehicles
- Utilities such as street lights, public conveniences, hawker's areas face space restrictions
- On-Street parking tends to hinder free movement during peak hours

Proposed Changes:

First Floor and Above

- Uniformity in the façade adhering to the characteristics of the space; restoring and retaining the existing architectural features
- Clearing up views by removing overhanging wires and on-surface utilities
- Temporary shelters on the top most floors to be redone in harmony with the building's façade with use of prescribed materials and colour themes

Ground Floor Level

- Uniformity in signage and treatment of shutters. They also need to be interestingly integrated into the façade
- Existing features should be preserved and enhanced in every possible way by allowing other buildings to form frames for the heritage buildings

Street Level

- The street needs to have a continuous smooth finish so as to facilitate pedestrian movement
- In-built street lighting, so as to do away with lamp posts
- Intermediate, informal rest areas for visitors

Street furniture needs to be in character with the space and innovatively designed

The intention of this proposal is to create a clear ground and air space for an uninterrupted view of haveli façades along the street.

The width of the street and the need for clear views limits the use of above ground services or street furniture. Therefore it becomes necessary to use in-built and low height services. The dead space in front of these havelis has the potential to be developed as rest areas or waiting zones for visitors. The objective is to create viewing areas to observe these façades. However, all these interventions are to be incorporated without disturbing the original built environment or damaging the façades.





Residential Streets – Point 5: Gali Kuncha Khasi Ram (Katra Neel)

Portion of a street with historical havelis on one side and godowns on the other. The lane is as narrow as 4m and requires space for loading/unloading activity



Existing Condition:

• First Floor and Above

- These floors reveal a rich heritage in the form of architectural features such as railings, pillars, brackets, sun shades, louvres etc. These features are done away with or not maintained.
- Overhanging high-tension wires, other electrical supply units and lamp posts all end at this level; hanging outdoor units of ACs add to the mess
- Temporary shelters on the top most floor give a messy appearance

• Ground Floor Level

- Façades of shops and commercial outlets are in complete contrast to character of the area
- This floor demonstrates a rich heritage in the form of architectural features such as doorways, mural work around door frames, pillars and verandah whose views should be framed and enhanced for visitors

• Street Level

- Street is too narrow to cater to both pedestrians and vehicles
- Utilities such as streetlights, public conveniences and hawker's areas face space restrictions
- On-Street parking tends to hinder free movement during peak hours

Proposed Changes:

First Floor and Above

- Uniformity in the façade adhering to the characteristics of the space, repairing and retaining the existing architectural features
- Clearing up of views by removing overhung wires and on-surface utilities
- Temporary shelters on the top most floors to be redone in-line with the over all building façade using prescribed materials and colour themes

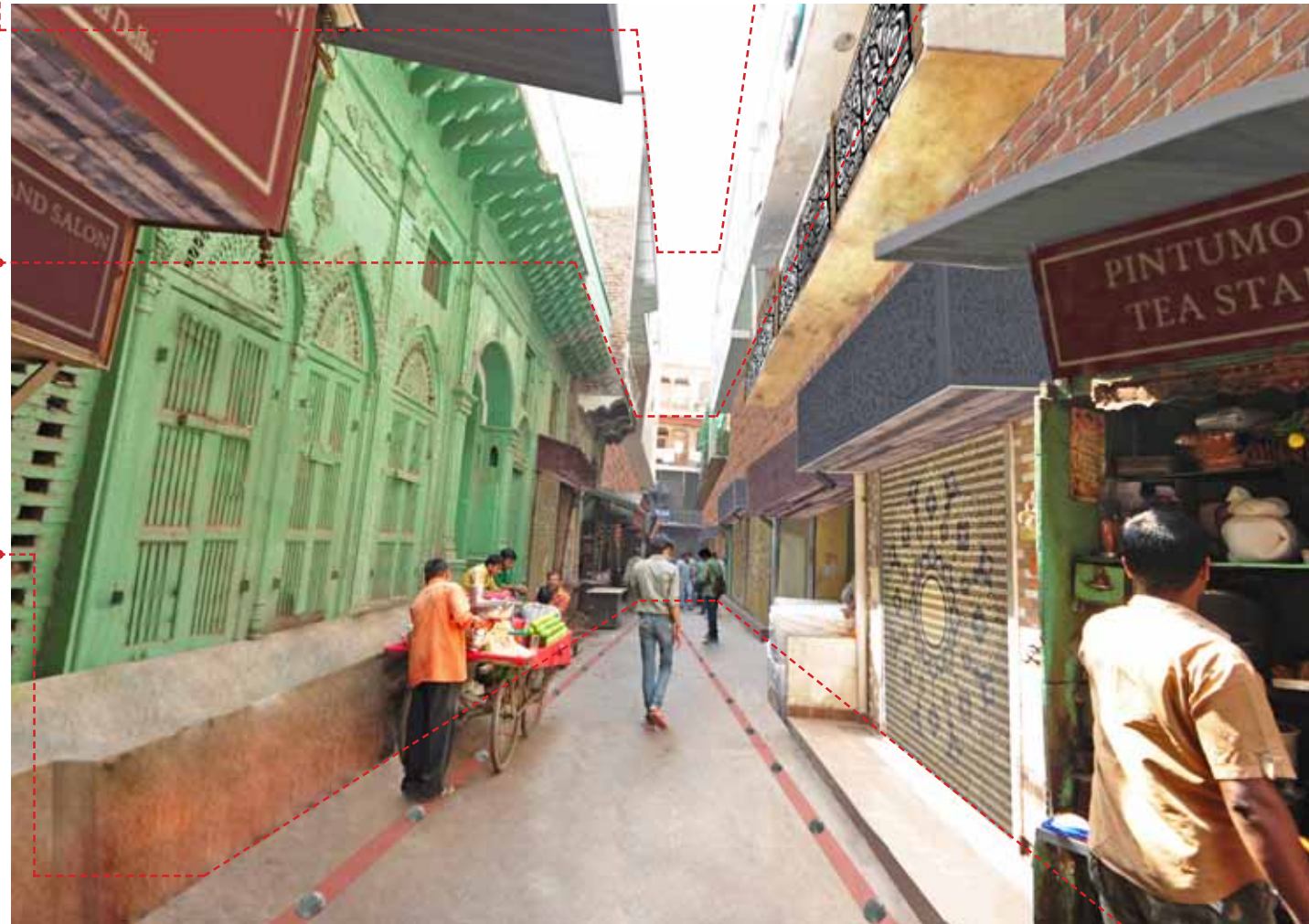
Ground Floor Level

- Uniformity in signage and treatment of shutters.They also need to be interestingly integrated with the façade
- Existing features should be preserved and in every way enhanced by allowing other buildings to form frames for the heritage buildings

Street Level

- The street needs to have a continuous smooth finish so as to facilitate pedestrian movement
- In-laid street lighting so as to do away with need to provide lamp posts
- Intermediate informal rest areas for visitors
- Street furniture needs to be innovatively designed and in character with the space

The intention of this proposal is to create a clear ground and air space for an uninterrupted view of haveli façades along the street. At the same time, the blank façades on the side with the godowns need be made interesting so that they do not dilute the entire feel of the space. Thus, these surfaces are proposed be used as exhibition panels for artwork and handicraft. The street needs to be cleared to provide ample space for the movement of pedestrians and light goods vehicles as and when required. This also guided the design of spacing and locating street furniture such as lighting, signage etc. in an innovate way.





Courtyards Point 7: Gali Kuncha Khasi Ram (Katra Neel)

Courtyards of vacant, privately owned havelis being used as godowns and as rest areas for workers of the godown



Existing Condition:

• Ceiling

- Wires run across the ceiling without being concealed or covered
- Hooks for fans and lights are not put to use
- Older material has been covered with plaster
- The open to sky central court is covered by fibre sheets or air space has been encroached upon by extensions or projections

• Vertical elements

- Finishes have not been maintained and have deteriorated
- Architectural features such as jharokhas, and doors are in a dilapidated state. Many such features have been blocked or done away with
- Most of the space has been taken up by goods being stored on the premises

• Floor

- The paving is broken and not smooth
- Some portions have been lined with newer materials
- Open garbage disposal is a problem
- Central courts of the properties with basements or reservoirs have these segments filled up or blocked so as to extend surface area

Proposed Changes:

Ceiling

- Wires to be concealed using moldings or designer frames
- Fixtures that are added should follow the overall theme of the area; old fixtures to be done away with unless reused or repaired
- Original material for ceiling finish to be preserved, if possible. However, patchwork repair of roofs should not be encouraged

Vertical elements

- Original finishes to be kept, if possible. However, patchwork repair of roofs should not be encouraged
- Architectural features such as jharokhas, doors to be retained, repaired and reused wherever possible
- These surfaces could also be innovatively used to display traditional art and craft

Floor

- Garbage collection and storage to be strictly controlled
- Space differentiation using different materials to be allowed, but should follow the overall character and prescribed theme
- Central courts of the properties with basements or reservoirs need to be opened up to create interesting design features

The intention of this proposal is to reuse courtyards of privately owned havelis which are not enlisted as Heritage Buildings, but have significant architectural and historical value. Adaptive reuse of these courtyards would generate spaces for bed and breakfast services, hotels and lodges catering to visitors. Authorities could provide incentives or assistance to owners of such properties in terms of marketing and maintenance services. This will increase the overall revenue generating power of the properties in the city. Even if these buildings continue to be used for storage, owners could be encouraged to put part of their property to some kind of public use and maintain basic design standards laid down by the authorities.





Courtyards – Point 6: Identified Heritage Haveli Grade-C (Chawri Bazaar)

This courtyard which is believed to be a Hamam for Razia Sultana now lies vacant, unattended and filthy. The pool has been filled up to the ground level.

Such courtyards of Havelis which have been enlisted as Heritage Buildings, could be used to create space for public activities required to support tourist routes such as cultural centres, activity centres, public galleries, rest areas with public conveniences. Authorities may provide incentives to owners of such properties by means of fund raising, marketing and maintenance services.

Existing Condition

Garbage is dumped in the corners of the court

Vegetation has destroyed parts of the buildings

Façade is left unfinished with haphazard or no treatment done which has completely destroyed its original character

No uniformity of fenestrations



Proposed Changes

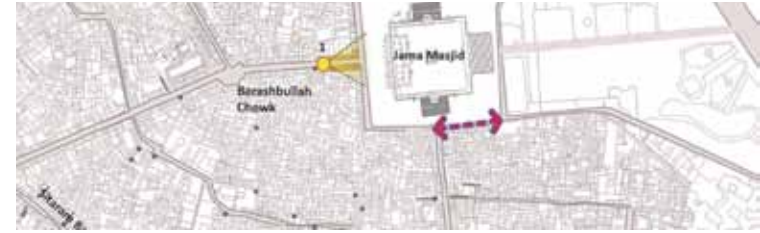
The courtyard could be developed for public seating and as a rest area in the form of gardens or an amphitheatre

The elevations are finished with materials from the recommended material palette

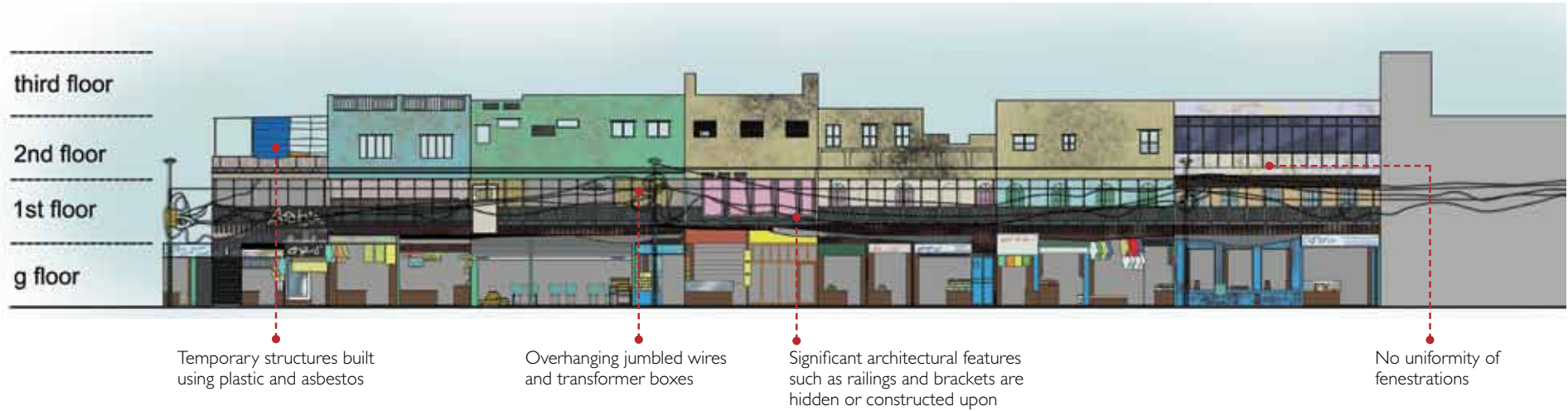
Building elements like balconies and fenestrations to be changed to follow a particular theme

Walls have been to designed as display panels for art and craft

The built environment that has been altered according to the recommendations can create a huge difference in the character of precincts around important landmarks, as shown below, on the altered panoramic view of the series of façades of buildings on the Matia Mahal Road, around Jama Masjid



Existing Condition



Proposed Changes



6.1 Landscape redevelopment of the Jama Masjid and Red Fort Precinct

Introduction



Key plan

The Jama Masjid and the Red Fort are magnificent examples of Mughal Architecture. The Jama Masjid or the Friday Mosque is the religious heart of the Walled City. It has been an active place of worship since its completion in 1656. The mosque and its surroundings continue to play an important role in the religious traditions, culture and economy of not just Shahjahanabad, but also the whole of Delhi. Surrounding the Red Fort and along the main axes of the city, were extensive gardens, elegant palaces and mosques built for the royal family and nobility. Prominent amongst these were the Fatehpuri Mosque at the western end of Chandni Chowk and the subsequently demolished Akbarabadi Mosque in Faiz Bazaar.

Another important bazaar, Khas Bazaar, once existed between the Jama Masjid and the Red Fort. It was very popular, with a variety of shops. The Bazaar was divided into two parts by the Salahuddin Chowk. On the Jama Masjid side, the bazaar was known as Zeenat Khas Bazaar. The royal procession used this route to go to the Jama Masjid for Friday prayers. One of Delhi's earlier rulers, Firoz Shah Tuglaq (1351–1388), had created a system of canals by diverting water from the Yamuna upstream. Shah Jahan restored this network of canals and extended it to the new city. One branch of the canal ran through the middle of Chandni Chowk and another flowed through gardens north of Chandni Chowk and then entered the Red Fort.

The city had many gardens within, as well as outside the city walls. Notable gardens built in the 1650s were Tis Hazari Bagh (outside Kabuli gate), Roshnara Bagh (near Lahori gate) and Shalimar Bagh (six miles beyond Lahori Gate) which was inspired by the Shalimar Baghs in Lahore and Kashmir. The largest garden of them all was Sahibabad – north of Chandni Chowk, built by Jahanara Begum in 1650.



Jama Masjid
Source : <http://www.albumislam.com/2011/01/jama-masjid-delhi.html>



Red Fort
Source : <http://drewdalyonline.com/explore-magnificent-forts-of-india/>



Meena Bazaar



Site plan

The 'buffer zone' identified by the ASI for the site is the area surrounding Red Fort and Salimgarh Fort. The edges of the buffer zone are delineated by important city roads. This zone is largely made up of open spaces on the eastern, southern and western edges of the fort. The northern edge and the south-eastern corner have a dense built fabric. The open spaces in the zone have been developed as landscaped lawns or parks enclosed by boundary walls and railings. The parks along the eastern edge are 'Dilli Chalo Park' and 'August Kranti Park'. The space immediately in front of Lahori Gate forms the forecourt for the entry of visitors to the Fort. Two major annual national events are celebrated here: Independence Day, on 15th August, when the prime minister addresses the nation from the ramparts of the barbican of Lahori Gate, and the Republic Day parade which starts at Rajpath, culminates in this space. Sunehri Masjid, which is also a protected monument, is located in the buffer zone, adjacent to the road which leads to Delhi Gate.

A parking lot is being developed along the southern edge for visitors to the Fort. Historically the Fort had an intrinsic relationship with the walled city of Shahjahanabad on the one hand and the Yamuna riverfront on the other. While the inner spaces of the Fort were greatly altered by British interventions, the built edges (fort walls) continue to retain their original Mughal features. The urban fabric and elements such as the roads enclosing the buffer zone have also changed over time.



Mazaar Maulana Azad
Source : <http://www.thedelhiwalla.com/2012/09/29/city-monument-maulana-azads-tomb-near-meena-bazaar/>



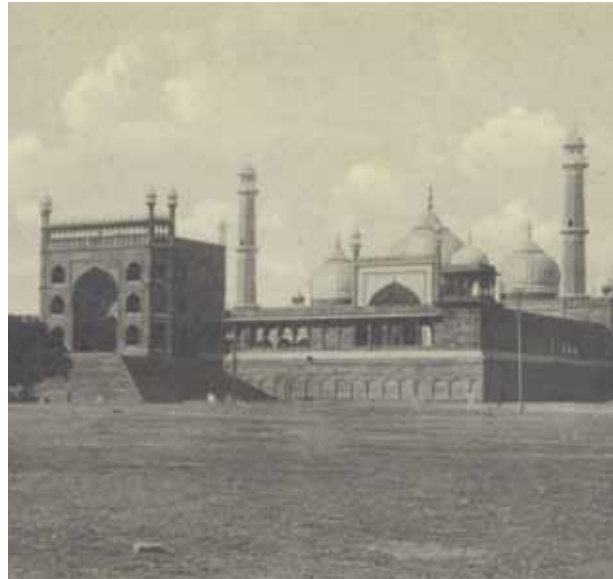
Sunehri Masjid
Source : https://commons.wikimedia.org/wiki/File:Sunehri_Masjid_in_Delhi.jpg



Netaji Subhash Statue



Distant view of Jama Masjid c 1865
Source : <http://www.thedelhiwalla.com/2012/04/02/city-series-stones-of-jama-masjid-iii-shahjahanabad/>



Royal Gate of Jama Masjid c 1875
Source : <http://oldpicturesandpostcards.blogspot.in/2013/04/old-postcards-of-delhi-lal-chand.html>



View from Nukkad Faiz Bazaar c 1857



Jama Masjid 19th century
Source : <http://www.vintag.es/2013/03/photographs-of-old-delhi-from-19th.html>



View from Urdu Bazaar c 1857



Lahori Gate of Red Fort c 1858
Source : [https://commons.wikimedia.org/wiki/File:The_Lahore_Gate_\(Western-Gate\)_of_the_Red_Fort_in_1858.jpg](https://commons.wikimedia.org/wiki/File:The_Lahore_Gate_(Western-Gate)_of_the_Red_Fort_in_1858.jpg)



View from Jama Masjid early 19th century
Source : <http://www.vijendranagar.com/early-delhi/>



Jama Masjid early 20th century



View from Jama Masjid 2014



Rear view of Jama Masjid c 1858
Source : <http://www.oldindianphotos.in/2013/06/rear-view-of-jami-masjid-delhi-c-1857.html>



Wall of Red Fort c 1858
Source : <http://www.rekontalk.com/delhi-photos-old-historical-images-india-part-5/>



Delhi Gate of Red Fort c 1858
Source : <http://thadhagadhan.blogspot.in/2012/05/>

Open Space Consolidation

Consolidation of all open spaces into one single open space by eliminating all barriers and creating a unified space for multipurpose activities.

EXISTING SCENARIO

The present day scenario of Jama Masjid and Red Fort precincts is the result of historical, political and cultural layering over decades.

Not much thought has been given to planning in this area which has led to fragmentation and creation of a number of small pockets of spaces. Areas, especially parks, which could be available for public use, are locked behind gates and high walls. Location and installation of various urban utilities such as electrical transformers, electrical cables, light poles, water tanks and pumping stations etc. is inappropriate and insensitive.

Excluding Meena Bazaar, Edward Park has been subdivided since Independence into Subhash Park, Urdu Park, Ladies Park, Maulana Abul Kalam Azad Mazaar and Dangal grounds.



Consolidation of all open spaces into one single open space by eliminating all barriers and creating a unified space for multipurpose activities.

PROPOSED SCENARIO

Fragmented open spaces have been clubbed together to form a single and large open space catering to multipurpose use.

Jama Masjid and Red Fort precincts read as one open space without or with low height boundary walls or fences that earlier divided the space.

Orchards spreading over the entire space bind the landscape giving it a unified character. The landscape flows from one point to another without being broken or divided.

The multipurpose spaces and parks open up for various formal and informal activities.



Visual System

Creation of a 'Visual System' in terms of visual experience and visual continuity with a strong visual axis in between important nodes and elements.

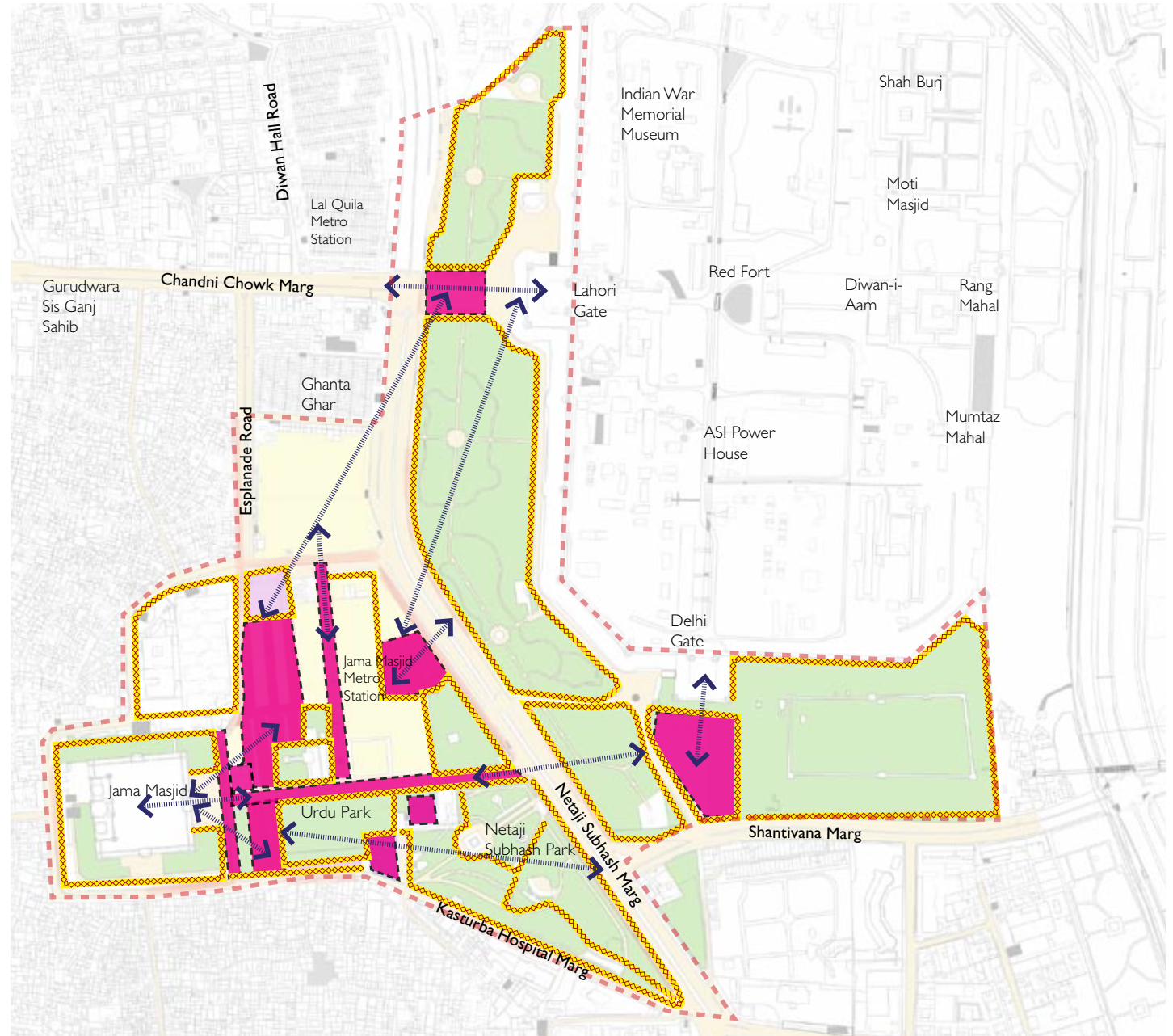
EXISTING SCENARIO

There are various zones and hierarchies of commercial activities in the precinct. The largest of these is Meena Bazaar, which occupies prime location in front of the mosque. This large market comprises almost 600 shops and kiosks. Meena Bazaar is most disorganised. It blocks most pedestrian movement routes. Kiosks occupy open courtyards between its blocks of shops, affecting light and ventilation. The terraces above the shops are littered with junk. Seen from the Jama Masjid level, it is an ugly sight. It is also a major fire hazard.

Along another major access from the north to the mosque, known as Cotton Market, shops have encroached onto the road. Their location prevents development of this important link to the Jama Masjid-Shahi Entry Road intersection. There are hundreds of hawkers in the area, their numbers increase and decrease according to the usage of the mosque. They are predominant around Esplanade Junction.

Legend:

-  Sight lines
-  Built up area
-  Fences/boundary walls



Creation of a 'Visual System' in terms of visual experience and visual continuity with a strong visual axis in between important nodes and elements.

PROPOSED SCENARIO

Jama Masjid and Red Fort are the key historical components which have huge foregrounds that need to be redesigned to link the two – not only physically, but visually as well. Some of the key design principles can be as follows:

- Relocating Meena Bazaar to a different location so as to get clear sight lines from the Red Fort.
- Relocating the parking area in front of the Delhi Gate of the Red Fort to a different location so that there is continuity in landscape from Jama Masjid to Red Fort. Redesigning the foreground of the Jama Masjid to enhance the grandeur and respect the scale of both monuments.

Legend:

 Sight lines

 Key nodes



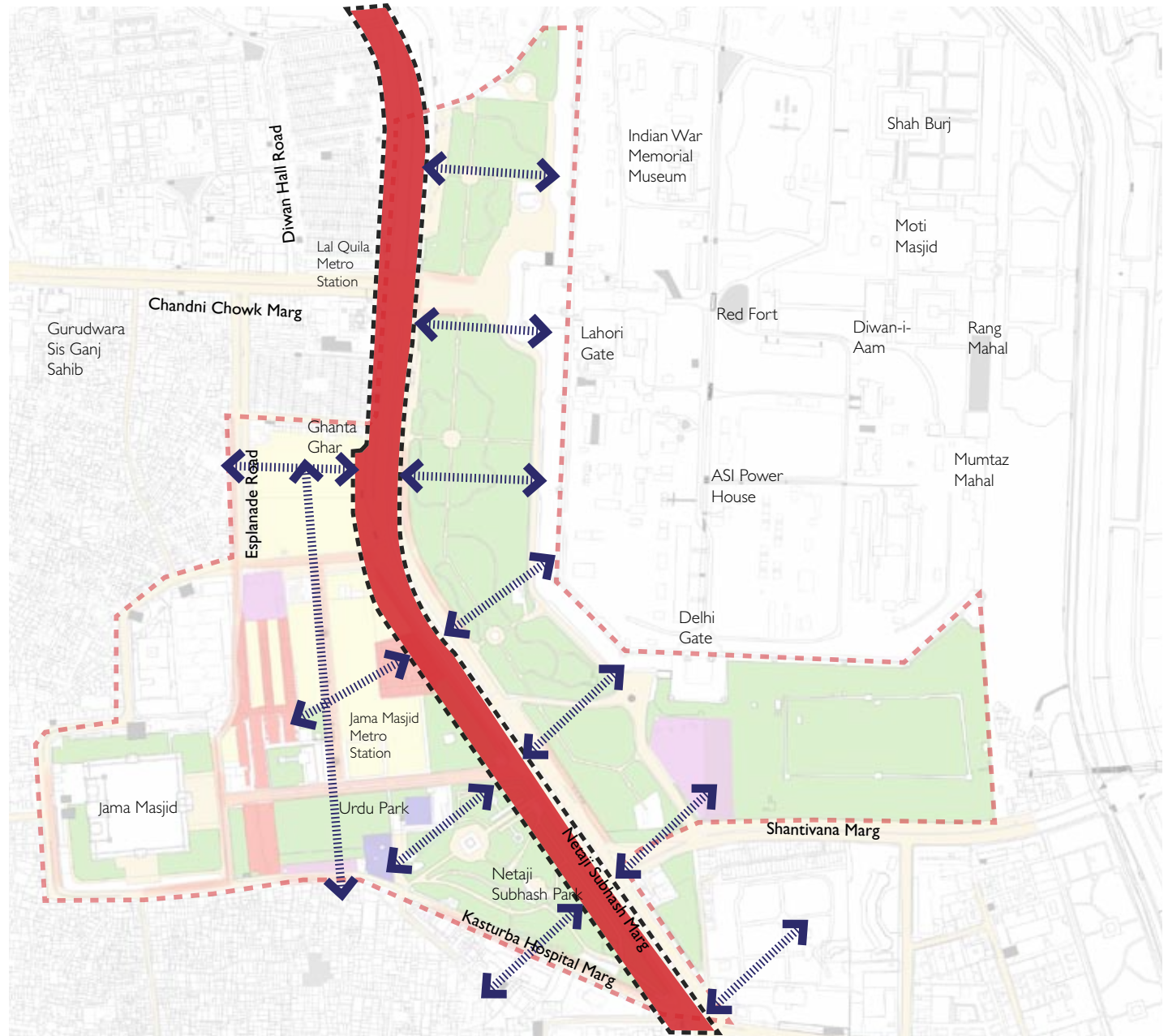
Connections

Establishing connections without changing vehicular circulation or functional requirements.

EXISTING SCENARIO

Netaji Subhash Marg divides the space visually and physically in two parts: one being the Jama Masjid precinct and the other being the Red Fort precinct.

Movement/circulation is restricted within the respective precincts leading to a restricted experience of the landscape as a whole. The two spaces read as two different landscapes with different characteristics.



Legend:



Movement/circulation



Netaji Subhash Marg

Establishing connections without changing vehicular circulation or functional requirements.

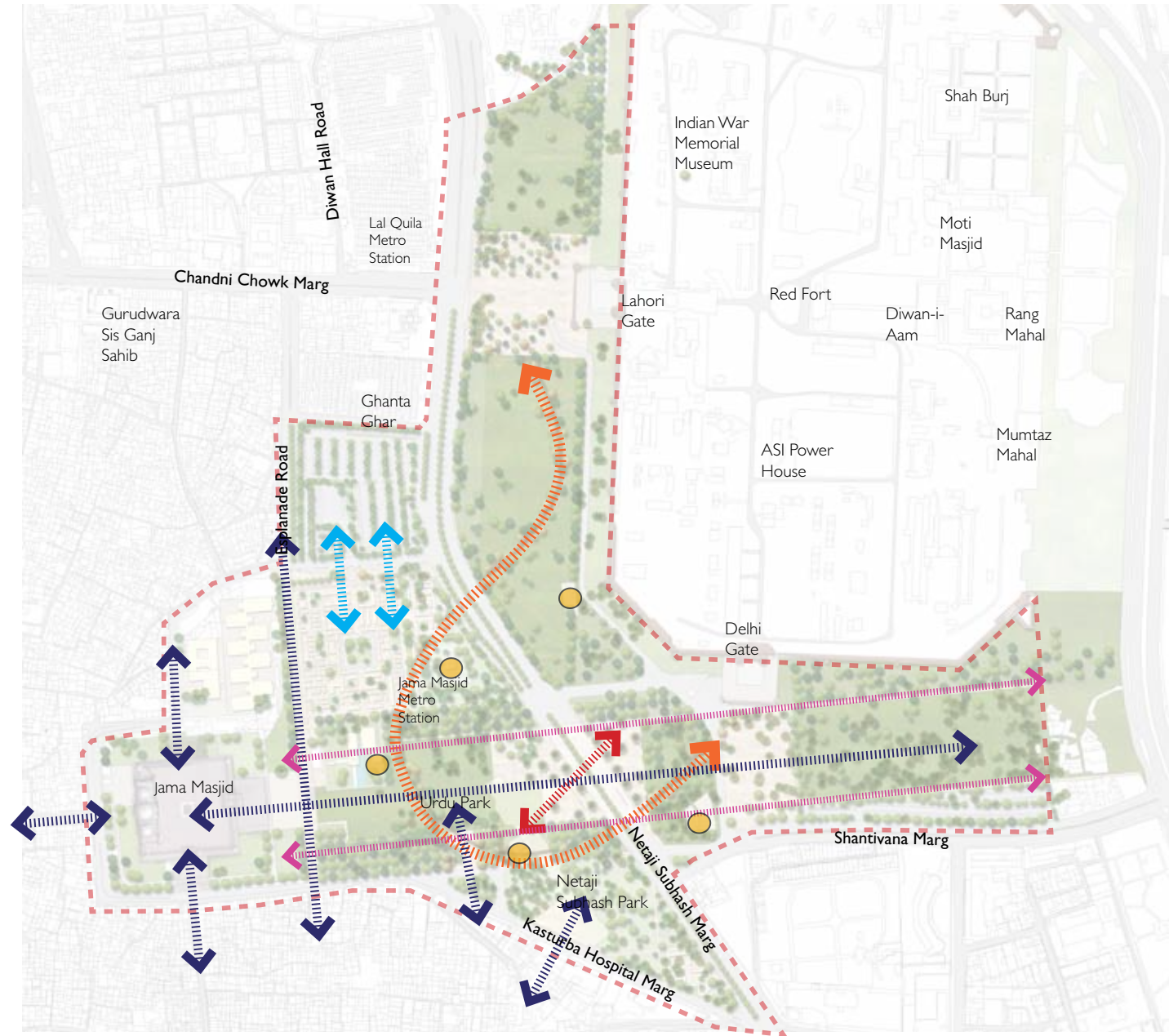
PROPOSED SCENARIO

In the proposed design, connections have been established without changing vehicular or functional requirements.

The site is well-connected from all sides. Roads through large plazas act as entry nodes to the premises. The orchards frame the Jama Masjid and continue in the Red Fort precinct, giving continuity

Legend:

-  Key Entry Plazas/Connections
-  Parking /Entry Plaza
-  Orchard Walk
-  Cultural Loop
-  Metro Underpass
-  Key Structures



Programme for Open Spaces



Sketch showing initial concept development of the site with regard to existing conditions, outlining the open spaces, tree planting strategy, key nodes, relocation of certain structures etc.



Sketch showing overall concept/scheme for the proposal



Consolidation of all open spaces into one single open space by eliminating all the barriers and creating a unified space for multipurpose activities

ZONE 1 (Recreational Zone)

Is a mix of active and passive zones with activities like eating places, sit out areas, orchards and plazas.

ZONE 2 (Multipurpose Zone)

Is an intense activity zone. A large unified open space, which can be used for various purposes like festivals, meetings, plays, theatre with Jama Masjid as the backdrop. The space can be used by the children to play and for families to relax.

ZONE 3 (Commercial Zone)

This is a service and commercial zone with a parking zone. The Meena Bazaar punctured with open spaces that can be used as resting points. This too could be an activity zone for large gatherings.

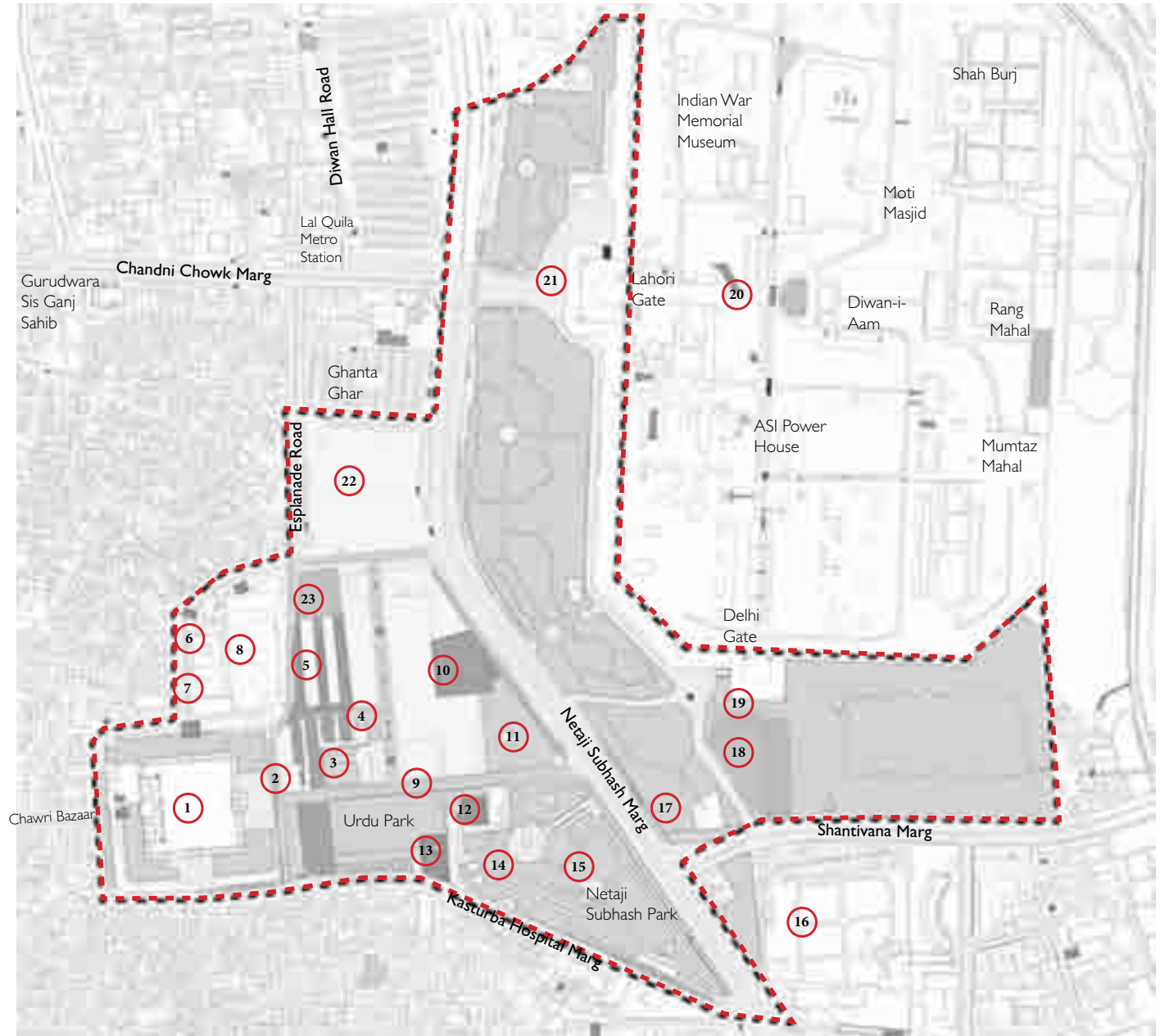
ZONE 4 (Intermediate Zone)

This forms an intermediate zone that connects the two precincts. This roadside zone is characterized by tree-lined walkways and places for pedestrians to pause. Medians have shrubs and trees to provide shade and enhance the character of the whole scheme.

Existing Layout

Legend:

- 1 Jama Masjid
- 2 Mazaar Sufi Sarmad & Hare Bhare Shah
- 3 Mazaar Maulana Azad
- 4 Mazaar Baba Ubbrey Shah & Gen Shah Nawaz
- 5 Meena Bazaar
- 6 Police Station
- 7 Fire Station
- 8 School
- 9 Shahi Entry Road
- 10 Dargah Sheikh Kallimullah
- 11 Proposed Jama Masjid Metro Station
- 12 DJB
- 13 Substation
- 14 Netaji Subhash Statue
- 15 Amphitheatre
- 16 Pardah Bagh
- 17 Sunehri Masjid
- 18 Parking
- 19 Delhi Gate
- 20 Red Fort
- 21 Lahori Gate
- 22 Parade Ground
- 23 Parking



Proposed Layout

Legend:

- 1 Jama Masjid
- 2 Mazaar Sufi Sarmad & Hare Bhare Shah
- 3 Mazaar Maulana Azad
- 4 Mazaar Baba Ubbrey Shah & Gen Shah Nawaz
- 5 Meena Bazaar
- 6 Orchards
- 7 Netaji Subhash Statue
- 8 Dargah Sheikh Kallimullah
- 9 Food & Beverage Area
- 10 Parking
- 11 Multipurpose open space
- 12 Entrance Plaza
- 13 Heritage/Cultural loop
- 14 Central Square
- 15 Sunehri Masjid
- 16 Proposed Jama Masjid Metro Station



Proposed Layout



Proposed Layout



Longitudinal Section A-A' through Jama Masjid and Multi-purpose Open Space showing space distribution of the area



Road Section B-B' through Netaji Subhash Marg

Proposed Views



View Showing organized Meena Bazaar Market space with the backdrop of Jama Masjid

Proposed Views



Birds Eye view of Jama Masjid looking towards Red Fort



Central Avenue looking towards Jama Masjid



View showing parking space near Ghanta Ghar segregated for cars, busses and scooters



Recreational Space near Meena Bazaar

Planting Policy

Parking areas

- Ideal plant material in the parking area is trees and shrubs. Trees provide shade in summer and improve the environment of a car park, provide a visual break to the appearance, screen off parking areas and define parking rows.
- Deciduous trees shed leaves intermittently and maintenance is needed to keep drainage clear. Therefore, it is advisable to plant evergreen and flowering trees. Evergreen trees also provide protection from sun rays which cause discolouration of painted surface of vehicles.
- Fruit bearing trees are also not advised as fallen fruit can damage the surface of vehicles.



Source : <http://www.nationwideconsultingllc.com/landscaping-walkways-and-open-space-in-commercial-parking-lot-design/>



Open Spaces

- Species used should be resistant to drought, pests and diseases, and should be capable of thriving under conditions prevailing in an urban environment, such as pollution, trampling, heat etc. and should possess properties which help to create a pleasant and diverse urban environment all-year-round.
- The plant palettes for transitional landscapes should typically consist of a combination of appropriate and compatible native or indigenous species to promote biodiversity For example *Acacia auriculiformis*, *Lagerstroemia flos reginae* (Pride of India), *Pterospermum acerifolium* (Kanak Champa), *Alstonia scholaris*, *Putranjiva roxburghii* (Jalpitri), *Azadirachata indica* (Neem), *Dalbergia sissoo* (Sheesham) etc.
- Specimen trees such as *Ficus bengalensis* (Banyan), *Cassia fistula* (Amaltas), *Bombax malabaricum* (Silk Cotton), *Cassia nodosa* (Pink Javanica), *Jacaranda mimosaeifolia* (Neeli Gulmohar), *Chrosia speciosa*, *Mimosops elengi* (Moulsari) *Callistemon lanceolatus* (Bottle Brush) etc. can be planted to give unique/strong character to the open space.
- Selective pruning or cutting of trees and shrubs will be required at situations where these (i) interfere with sight distance, (ii) come in the way of effective street illumination, (iii) are too close to the carriageway so as to be hazardous, (iv) conceal desirable views and scenic vistas and (v) have become too old or dead.



Source : <http://www.telegraph.co.uk/gardening/gardens-to-visit/best-orchards-to-visit/>



Source : <https://www.colourbox.com/image/footpath-in-a-beautiful-park-landscape-image-2299441>



Source : <http://plannersweb.com/2013/08/a-tale-of-three-parks/>

Planting Policy

Screening

- Plantation of pollution resistant dwarf shrub species in the median to prevent glare from vehicles moving in opposite direction during the night.
- A mix of medium and large trees along the roadside to screen the evening glare for the traffic moving towards west-northwest.
- Screen plantation as a visual barrier in schools, hospitals, residential colonies, etc.

e.g. *Casuarina equisetifolia*, *Grevillea robusta* (silver oak), *Ficus benjamina*, *Polyalthia longifolia* (Ashok), *Putranjiva roxburghii*, *Schleichera trijuga* (Kusum), Golden bamboo etc.



Source : <http://plannersweb.com/2013/08/a-tale-of-three-parks/>



Aesthetics

- Provision of flowering trees in urban sections and major crossings
- Provision of flowering shrubs in the median
- Softening vertical surfaces of retaining walls of grade separators and raised sections of the carriageway with climbers.

Shade

One of the main objectives of tree plantation is to provide shade. Large and spreading shade trees, with thick foliage are proposed to provide much needed shade in hot, glaring open spaces during summer. Evergreen trees do not have substantial leaf fall, which avoids the nuisance of clogging of lined drains.



Source : <http://florida-inform.com/fruit-and-spice-park.php>



Source : <http://www.landazine.com/index.php/2011/06/tree-museum-by-enzo-enea/tree-museum-enea-garden-design-03/>

Road Plantation

The species to be planted in median would be of low or medium height with ornamental value to enhance the visual experience of the road corridor. It will also act as a screen to prevent glare from oncoming vehicles.



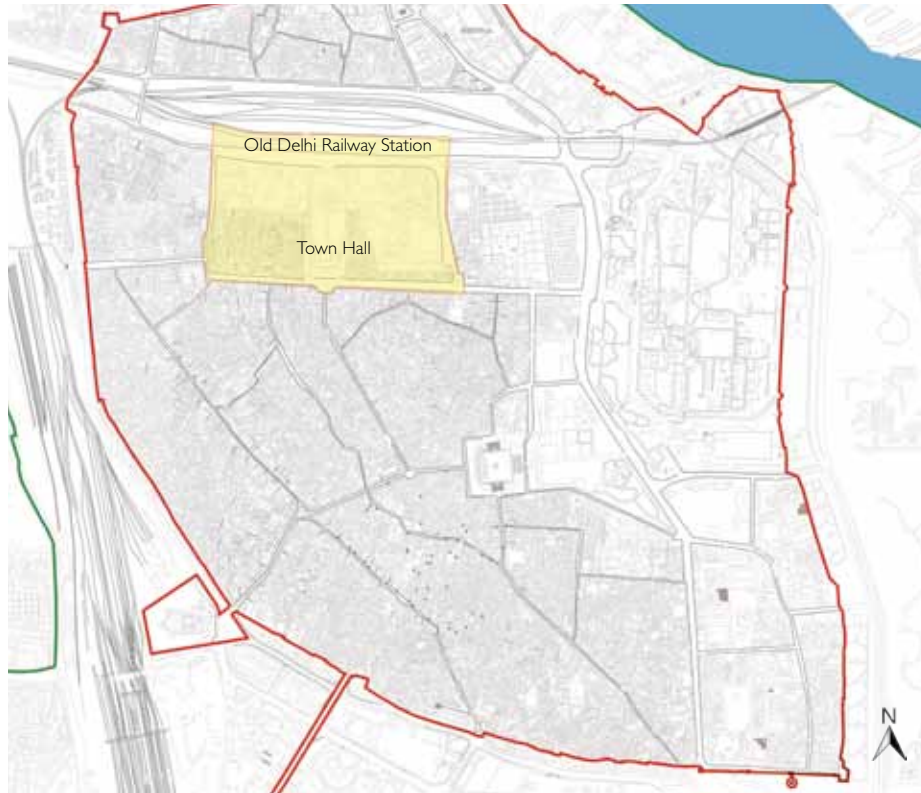
Source : <http://www.decorbold.net/street-planting-design.html>



Source : <http://www.akarlandscaping.com/portfolio-2/4-columns-2/#all>

6.2 Enhancing Open Spaces around Town Hall Precinct

Introduction



Key Plan

The walled city of Shahjahanabad was built during 1639–48 as an abode for Emperor Shah Jahan after he decided to move his capital from Agra to Delhi, as Agra became too crowded to support ceremonial processions and general movement. Since Delhi was already known for its past glories, Shah Jahan, the Mughal emperor who succeeded Akbar, decided to build his capital on a new site on the banks of River Yamuna. The new capital had Red Fort as its focal point, Jama Masjid as the centre for prayer, and the fascinating Chandni Chowk market as its commercial zone.

Chandni Chowk, or the Moonlight Square, was designed and established by Princess Jahanara Begum, Shah Jahan's favourite daughter, in 1650 CE. Originally, it contained 1,560 shops. The bazaar was 40 yards wide and 1,520 yards long. A pool in the centre of the complex added elegance to this square-shaped bazaar. The pool shimmered in the moonlight, a feature which was perhaps gave the bazaar its name. Shops were originally placed along a crescent, now non-existent. It was famous for its silver merchants, which may have contributed to the name, as silver is referred to as Chandi in Hindi, a slight variation of which forms Chandni.

The pool in the chowk was replaced by a clock tower (Ghantaghar) until the 1950s. The centre of the market is still referred to as Ghantaghar. Chandni Chowk was once the grandest Indian market. Mughal imperial processions passed through Chandni Chowk. The tradition was continued when the Delhi Durbar was held in 1903. The Delhi Town Hall was built in 1863 by the British. Chandni Chowk runs through the middle of the Walled City, from the Lahori Gate of the Red Fort to Fatehpuri Masjid. Originally, a canal ran through the middle of the street.



Town Hall

Source : <https://www.colourbox.com/image/footpath-in-a-beautiful-park-landscape-image-2299441>



Inside the Town Hall premises



View of Nai Sarak



Site Plan

In the centre of Chandni Chowk an iconic clock tower, termed Northbrook Clock Tower or Ghantaghar was located, till the early 20th century. Built in 1870, it collapsed and was subsequently demolished in the 1950s. The old city of Delhi was laid out by Princess Jahanara Begum, who constructed an elegant caravanserai on the east side of the street with gardens at the back.

The serai was demolished even before 1857, and was replaced by the Victorian-Edwardian style building now known as the Town Hall. The pool in the middle of the square was replaced by a grand clock tower. The Town Hall was actually planned before the Revolt, and was built between 1860–1865, as a centre for Europeans and was initially called the Lawrence Institute. The Institute, contained a Darbar Hall with a public library and reading rooms. In front of the Lawrence Institute, stood the Northbrook Clock Tower.

A bronze statue of Queen Victoria stood between the tower and the municipal building in 1902 which was later moved to the Delhi College of Art, when India became independent. The upper part of the tower collapsed in 1950, killing some local citizens. In 1957 the Municipal Corporation allocated Rs 2 lakh for its rebuilding. However the structure had come to be known as an English relic, and thus it was never rebuilt.



Mahatma Gandhi Park



Old Delhi Railway Station



Swami Shradhanand Park



Jahanara Begum's caravanserai that formed the original Chandni Chowk, from Sir Thomas Theophilus Metcalf's 1843 Album

Source : <https://www.colourbox.com/image/footpath-in-a-beautiful-park-landscape-image-2299441>



"A street scene in the imperial City;" photo by Jadu Kissen, acquired by a visitor in 1910, as viewed from Nai Sarak

Source : <https://commons.wikimedia.org/wiki/File:Kissen1910.jpg>



Indian National Flag hoisted at Chandni Chowk, 15 August 1947

Source : <http://www.reckontalk.com/delhi-photos-old-historical-images-india-part-3/>



"The Imperial Assembly of India at Delhi: the Viceregal Procession passing the Clock Tower and Delhi Institute in the Chandni Chowk;"

Source : <http://www.wikiwand.com/en/Colonialism>



A photograph by Lala Deen Dayal, c.1880's

Source : <http://vintageindica.blogspot.in/2010/08/chandni-chowk-in-1880sclock-tower-seen.html>



Lahori Gate of Red Fort c 1858

Source : [https://commons.wikimedia.org/wiki/File:The_Lahore_Gate_\(Western-Gate\)_of_the_Red_Fort_in_1858.jpg](https://commons.wikimedia.org/wiki/File:The_Lahore_Gate_(Western-Gate)_of_the_Red_Fort_in_1858.jpg)



View of Chandni Chowk from the Red Fort c 1840

Source : http://www.columbia.edu/itc/mealac/pritchett/00/routesdata/1600_1699/shahjahanabad/panoramas/redfortpanorama/redfortpanorama.html



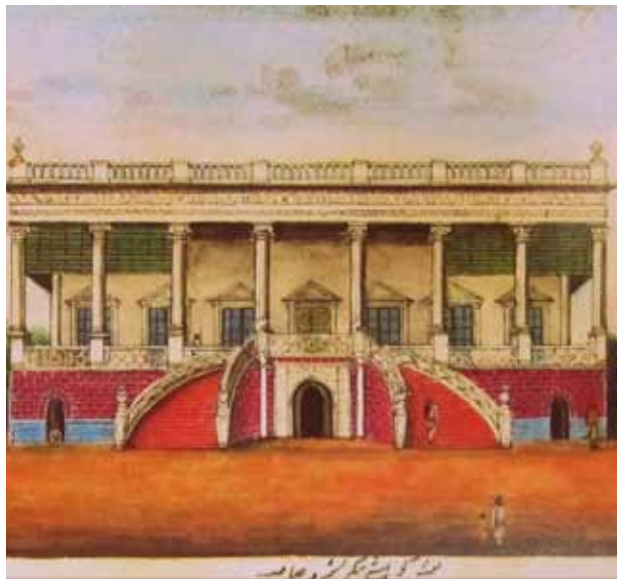
From the top of Lahore Gate of Red Fort-the canal running down the middle can be clearly seen. 1814-1815, British Library

Source : <http://mariam-uz-zamani.blogspot.in/2015/12/#.WTjsLOuGNnQ>



The former "Begam Samru's House" on Chandni Chowk was made into a bank. This painting from the 1820's is in the Aga Khan Museum

Source : http://www.columbia.edu/itc/mealac/pritchett/00/routesdata/1600_1699/shahjahanabad/delhibank/delhibank.html



Begum Sanru's Palace in Begum ka Bagh c 1840

Source : <https://adatewithdelhi.files.wordpress.com/2013/07/begum-samrus-palae-south-view-chandni-chowk.jpg>



Wall of Red Fort c 1858

Source : <http://www.rekontalk.com/delhi-photos-old-historical-images-india-part-5/>

Town Hall and Key Surroundings

Begum ka Bagh/Begumabad

In 1650, Jahanara Begum commissioned the construction of a massive structure of stone and marble, surrounded by a garden with huge trees and magnificent fountains. Jahanara's caravan sarai was a two-storeyed building, that housed Persian and Uzbek merchants in 90 lavishly decorated rooms. A large courtyard dominated the centre of the building, complete with canals and gardens. There was also a Prayer Hall attached to the Sarai. It was set in an enclosed garden, with pools and channels for running water. Only women and children were allowed to enter the bagh. There were fountains and canopies supported on 12 pillars of red stone. These provided cool resting places for people who came to the garden. The water in the channels came from a special canal system and helped irrigate the trees and plants. There were plenty of flowering and fruit trees – some of them with swings. It was the favourite resting place for the princesses and ladies of the palace, and was often visited by the wives and daughters of the nobles. Many festivals were celebrated within Begum ka Bagh, the most important of which was the 'Pankhon ka Mela' – a week long fair exclusively for ladies. There were stalls of beautiful embroidered kurtas and dupattas, colourful bangles and other jewellery, toys and all kinds of goodies to eat, gleaming utensils and sparkling crockery, paintings, clay figures and every kind of



Source : <http://mariam-uz-zamani.blogspot.in/2015/12/#.WTjy5OuGNnQ>

beautiful objects that you can think of. There were singing sessions, poetry readings, festivities and games as well.

Later, a section of the garden was gifted to the mother of Shah Jahan, Begum Samro. She built a palace there, which is now known as Bhaghirath Palace. It remained a garden for royal ladies until the reign of Shah Alam II before becoming the Company Bagh during the early rule of the British East India Company. In 1876 it was again renamed as the 'Queen's Garden' following Queen Victoria's elevation to Empress of India. Sadly, the Begum Samro's Palace which was built in a garden during the reign of Shah Alam II, is now one of Delhi's main markets for electrical goods. The only surviving part of the garden is the now Mahatma Gandhi Park.

Town Hall

The Town Hall was completed in 1865, though the construction began five years earlier, when Bahadur Shah still occupied the Red Fort, but was a prisoner of the British. Civic affairs were not conducted at the Town Hall in those days – it was then the Lawrence Institute of Educational and Cultural Affairs. Later it was converted into the Municipal Headquarters, though the European Club and Library continued to exist within it. The statue of Queen Victoria outside has been replaced by one of Swami Shradhdhanand. Queen Victoria was then at the helm of affairs – at a turning point in history and statues to commemorate her were erected in many cities, gardens and parks.

Old Delhi Railway Station

Delhi Junction, also known as Old Delhi Railway Station, is the oldest railway station in the city. It was established near Chandni Chowk in 1864 when trains from Howrah, Calcutta started operating up to Delhi. Its present building



Source : <http://www.alamy.com/stock-photo-old-delhi-railway-station-111376290.html>

was constructed by the British Indian government in the style of the red-coloured Fort in its vicinity and was opened in 1903.

Mahatma Gandhi Park

Mahatma Gandhi Park is located on Church Road near Old Delhi Railways Station. It is also referred to as 'Company Bagh' as it was an integral part of European social life in the early 19th century. The park had a cricket ground which was the favourite game of the British. Mahatma Gandhi Park is a small, simple park originally called 'Queen's Park' by the British which was then used as an open air club and meeting place for the affluent and served as a venue for various cultural, religious, musical and other programmes. When India became Independent it was renamed after the driving force behind the movement, Mohandas Karamchand Gandhi. Sometimes community functions, cultural and social activities are celebrated here. The Mahatma Gandhi Park has a bronze coloured statue of Mahatma Gandhi and many towering trees around it give it a sheltered look.

Existing Layout

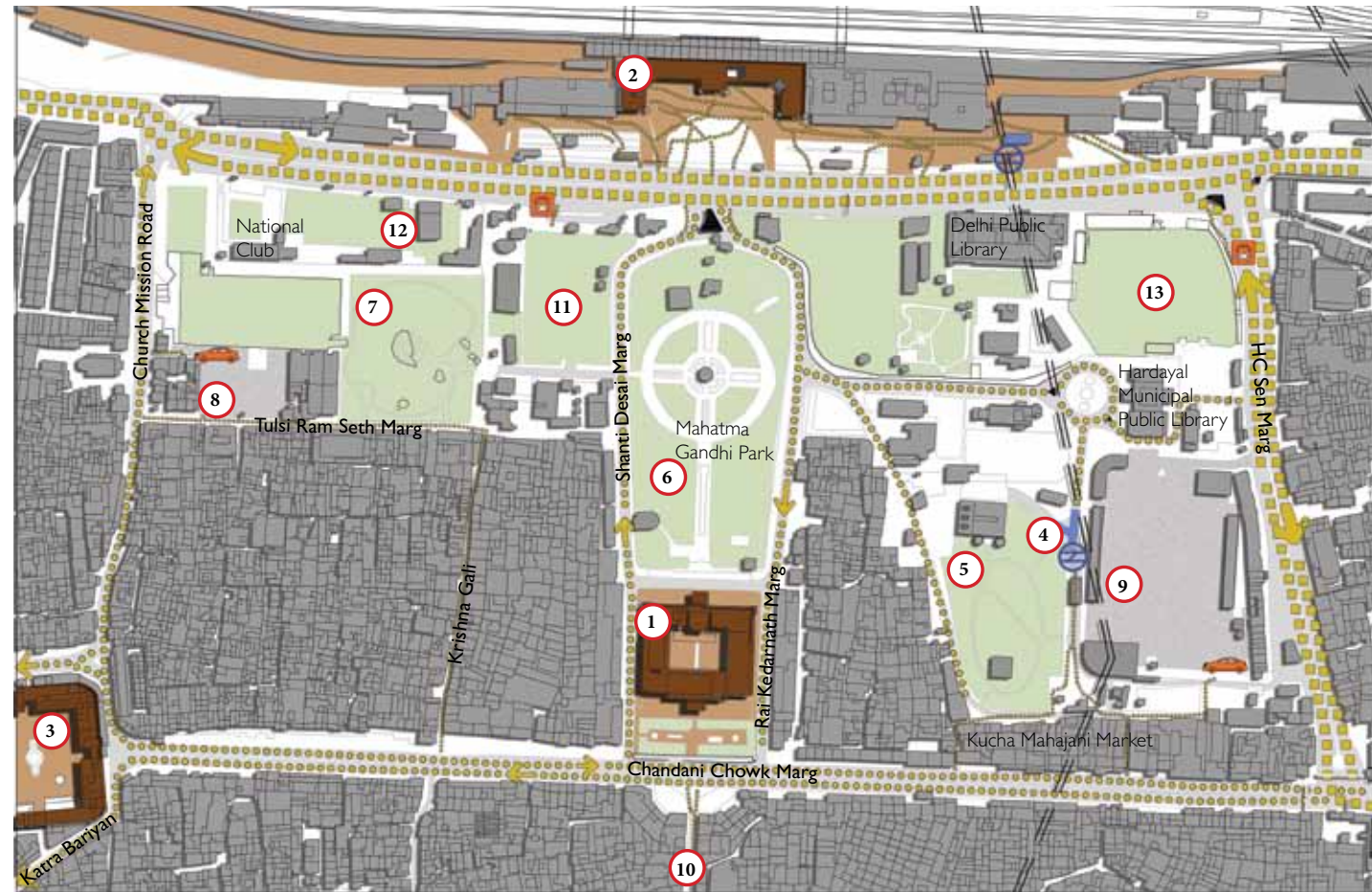
Open Space Analysis

Begum ka Bagh no longer exists as a single large open space. Over time, division of the available land into smaller parcels has resulted in a fragmented and incoherent space with no image of its own.

At present, the only green spaces in the site are Mahatma Gandhi Park, Kachha Bagh, Bagh Diwar Park and a park near Khoya Mandi. These greens are well-maintained, though restricted entry timings prevent active usage throughout the day. Portions of the Bagh are not maintained, thereby encouraging encroachment and informal activities.






Apart from the Town Hall, several offices and stores of MCD, Delhi Jal Board and Delhi Vidyut Board are scattered over the site. Parking requirements for these offices results in cars being parked along inner roads. A notable feature of the site is the presence of socio-cultural facilities, namely two libraries – the Hardyal Library and the Delhi Public Library. Along the northern edge of the site are a number of clubs: Youth Club and National Club.

The Bagh is also the site for the Metro station which has greatly increased the number of people coming to the area, causing congestion.

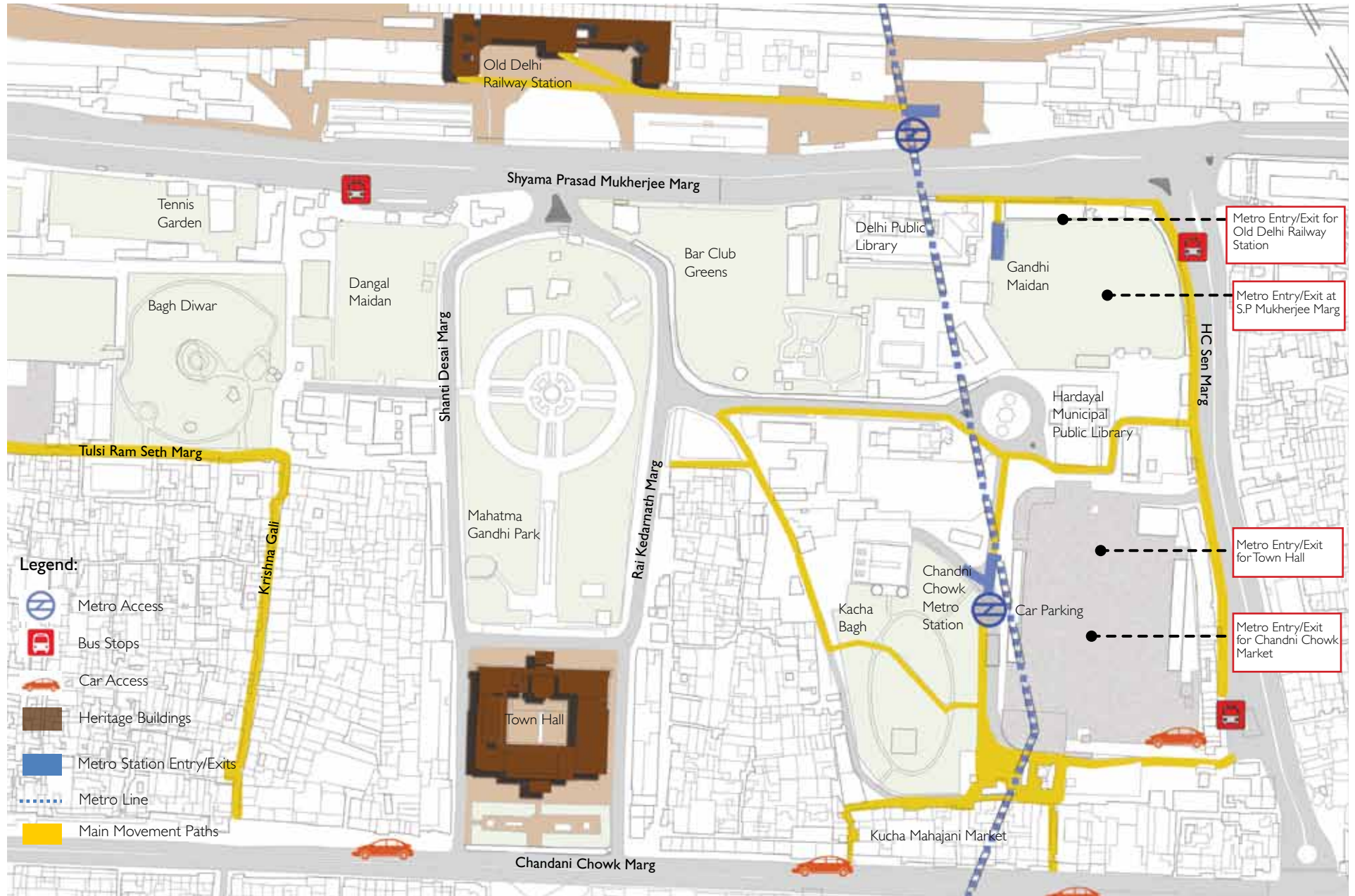


- | | |
|---|--------------------------------------|
| 1. Town Hall | 8. Park |
| 2. Old Delhi Railway Station | 9. Car Parking |
| 3. Fatehpuri Masjid | 10. Nai Sadak |
| 4. Chandni Chowk Metro Station
(Yellow Line) | 11. Dangal Maidan |
| 5. Kacha Bagh | 12. Tennis Garden near Dangal ground |
| 6. Mahatma Gandhi Park | 13. Gandhi Maidan |
| 7. Bagh Diwar Park | |

Legend:

- | | |
|---|---------------------------------|
|  | Heritage Structures |
|  | Vehicular route- Heavy Vehicles |
|  | Vehicular route-cars |
|  | Pedestrian route |
|  | Parks |

Accessibility by Metro

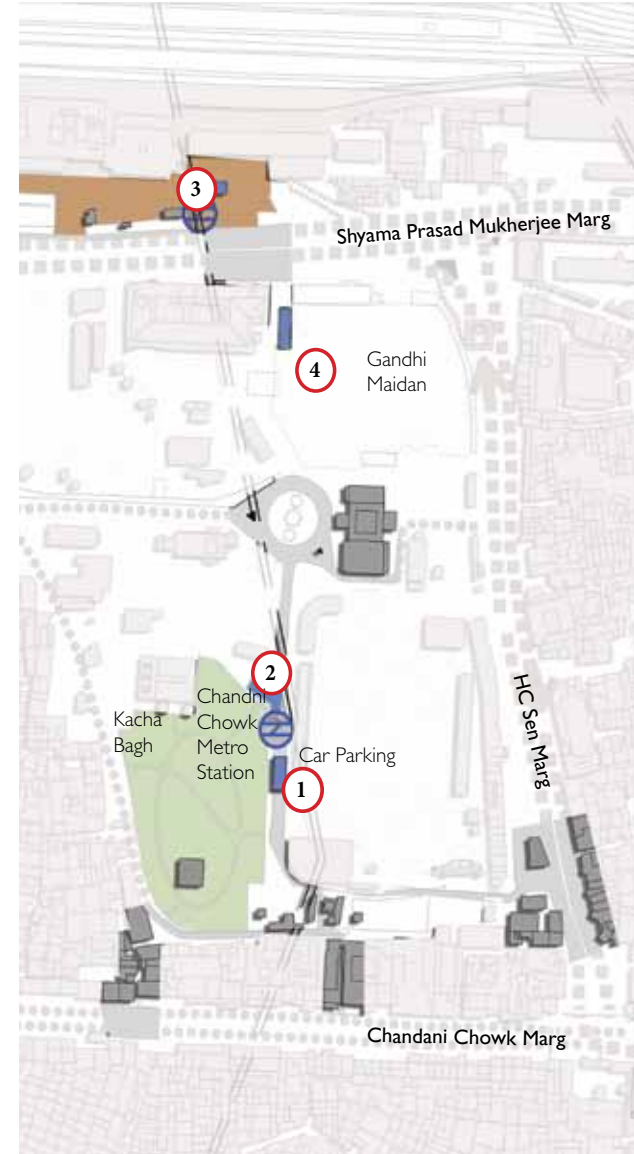




1. Entry towards Chandni Chowk from the Metro Station (Chandni Chowk Station – Yellow Line) exit



2. Approach towards Chandni Chowk Metro station (Chandni Chowk Station – Yellow Line)



3. Entry towards Old Delhi Railway Station (Chandni Chowk Station – Yellow Line) exit



4. Entry towards Chandni Chowk from the Metro Station (Chandni Chowk Station – Yellow Line) exit

Accessibility by Road

The Town Hall precinct is bordered on three sides by roads – on the north SP Mukherjee Marg, east HC Sen Marg and Church Mission Road on the west. Chandni Chowk, the main street of Shahjahanabad is in close proximity to the south. Transverse movement between the two primary roads is mainly through Mission Church road and HC Sen Marg. As a result of this, the Bagh is almost an island, surrounded by moderate to heavy traffic. Internal roads are narrow and at a pedestrian scale.

Old Delhi Railway Station serves as the largest transportation node of the city. The nature of activities within the precinct generate a very high demand for parking. The wholesale market generates a lot of movement of goods going out and coming in from the Railway Station.

Several alleys and lanes are used as shortcuts for the movement of goods, resulting in strong transverse linkages throughout the site. One such important pedestrian link is through Kutra Neel, connecting Chandni Chowk to SP Mukherjee Marg.

Pedestrian movement is particularly intense along the main roads and due to the presence of the Metro station within the precinct. Certain important squares are also present within the precinct which form important points of cross-overs, entry and halting for road users. These are mainly the Fountain Chowk and Nai Sarak on Chandni Chowk and Old Delhi Railway Station crossing on SP Mukherjee Marg.





1. Entry towards Chandni Chowk from the Metro station



2. Narrow gali (Natraj gali) access route between Metro station and Chandni Chowk Road



3. Town Hall building on the Chandni Chowk Road



4. Chandni Chowk Road



5. Old Delhi Railway Station as seen from SP Mukherjee Marg



6. SP Mukherjee Marg



7. Town Hall abutting Shanti Desai Marg

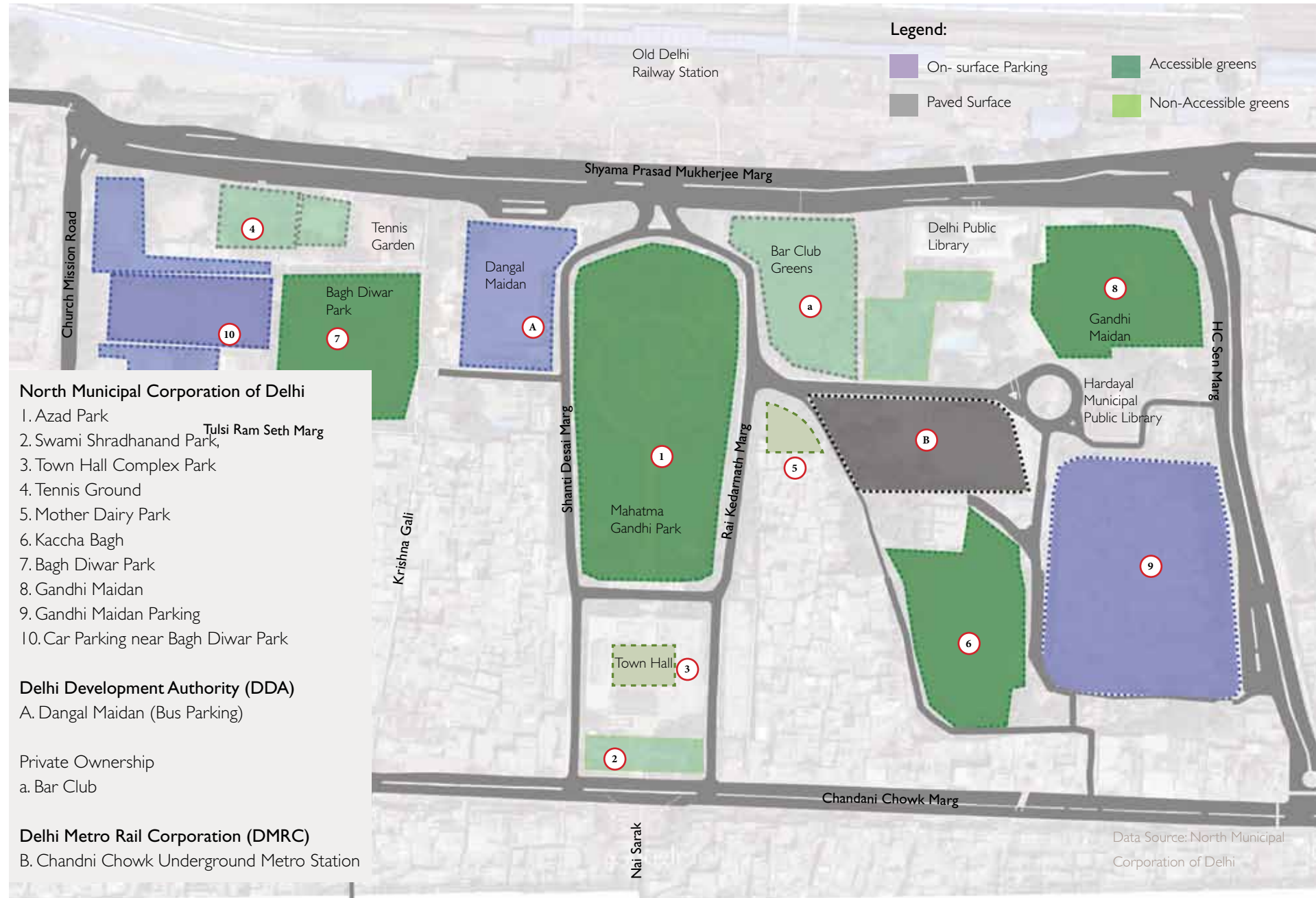


8. Shanti Desai Marg, encircling Town Hall

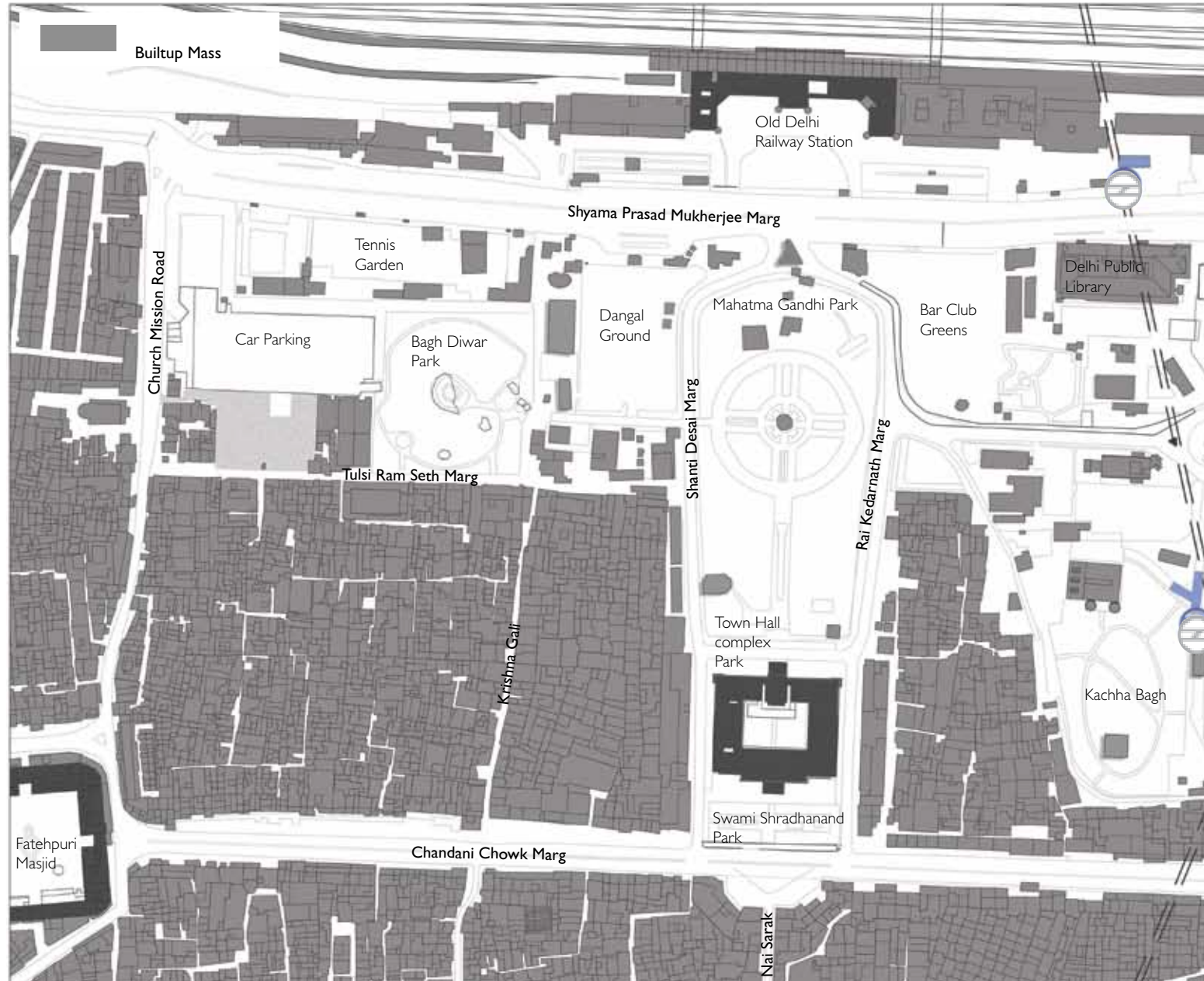
Open Space Layout



Ownership of Open Spaces



Urban Character



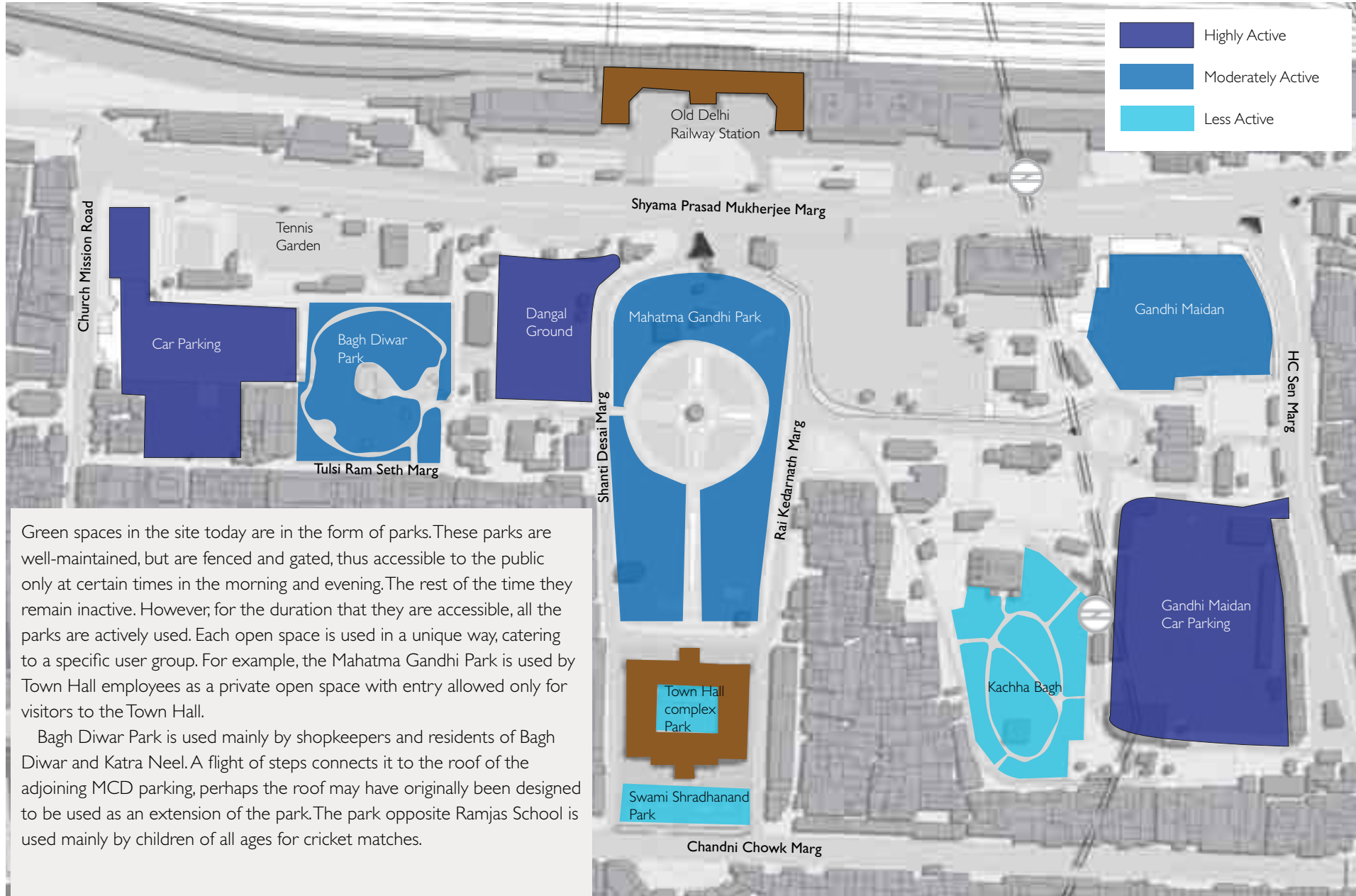
Built Character and Edges

The built fabric in and around the precinct is very dense with fine grain and texture and latticework of narrow alleys. Important monuments and structures are distinguished by their scale, and thus act as visual landmarks.

Buildings abutting roads such as Chandni Chowk, Mission Church Road and Bagh Diwar form a continuous façade.

The edges of the precinct are defined by roads: SP Mukherjee Marg on the north, HC Sen Marg on the east and Mission Church Road on the west. However, the Bagh cannot be perceived from these corridors as an open space from any of these three sides since there is no visual connection. On the southern edge, the tall buildings along Bagh Diwar and Kucha Natwa provide a sense of enclosure giving a definite edge to the open space.

Usage Pattern



Green spaces in the site today are in the form of parks. These parks are well-maintained, but are fenced and gated, thus accessible to the public only at certain times in the morning and evening. The rest of the time they remain inactive. However, for the duration that they are accessible, all the parks are actively used. Each open space is used in a unique way, catering to a specific user group. For example, the Mahatma Gandhi Park is used by Town Hall employees as a private open space with entry allowed only for visitors to the Town Hall.

Bagh Diwar Park is used mainly by shopkeepers and residents of Bagh Diwar and Katra Neel. A flight of steps connects it to the roof of the adjoining MCD parking, perhaps the roof may have originally been designed to be used as an extension of the park. The park opposite Ramjas School is used mainly by children of all ages for cricket matches.

Tourism and Food-based Activity

The objective would be to tap the potential of the existing intangible heritage and develop an urban form to support this heritage.

Developing tourist circuits which would connect major monuments within the city such as Jama Masjid, Red Fort, Town Hall, Fatehpuri Masjid and Ajmeri Gate. Additional lateral connectors could be developed which would take tourists through areas rich in havelis, specific historical market areas etc.

Additionally open areas and public spaces to be created within particular zones or katras with the idea of redevelopment of congested residential areas.

These could also be redeveloped into active public areas and social infrastructure zones which will help residents within the Walled City and help reduce overcrowding.

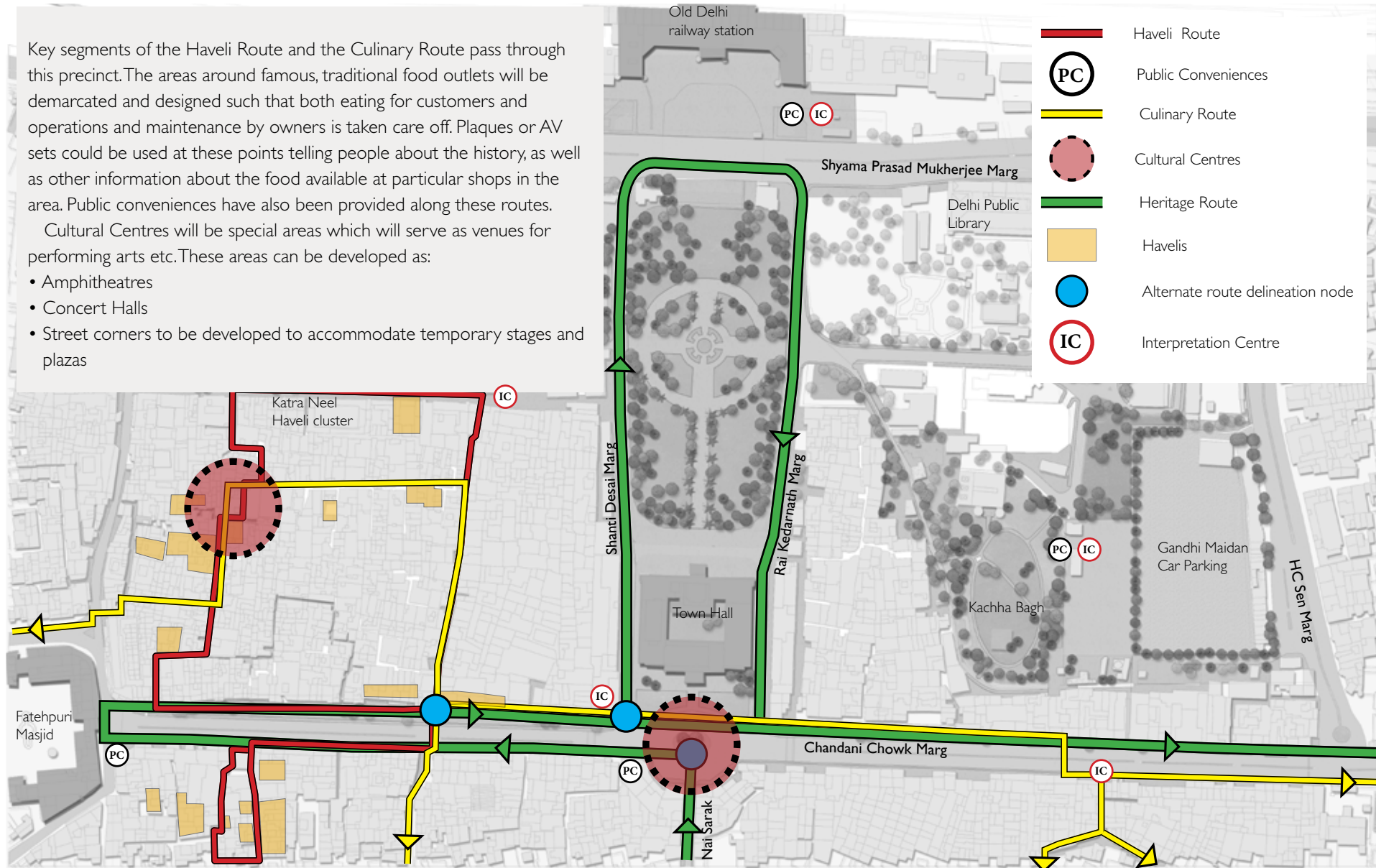


Tourism and Food-based Activity

Key segments of the Haveli Route and the Culinary Route pass through this precinct. The areas around famous, traditional food outlets will be demarcated and designed such that both eating for customers and operations and maintenance by owners is taken care off. Plaques or AV sets could be used at these points telling people about the history, as well as other information about the food available at particular shops in the area. Public conveniences have also been provided along these routes.

Cultural Centres will be special areas which will serve as venues for performing arts etc. These areas can be developed as:

- Amphitheatres
- Concert Halls
- Street corners to be developed to accommodate temporary stages and plazas



Planning and Design Intent

Pedestrian Linkages

In context to the historicity there is a need to restore the original essence of space that Begum ka Bagh represented.

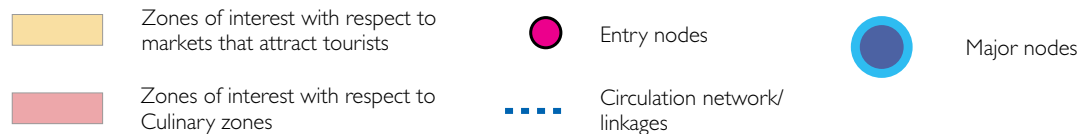
Hence, a seamless movement pattern is proposed to connect all the open spaces through defined movement corridors and public facilities.

Edges

At present the edges of the open spaces are not well-defined. Hence, uniformity in the treatment of edges has been proposed which will not act as visual or physical barriers. Also, edges where shrubs are too high should be reduced to the same height everywhere to give a uniform character.

Streetscape

With the identification of major movement corridors and nodes binding the entire site, certain landscape elements like benches, light poles, bins etc. should be incorporated into the scheme.



Planting Design

The species used should be drought, pest and disease resistant, capable of thriving in conditions like pollution, trampling, heat etc. and that which create a pleasant and diverse urban environment all-year-round.

Selective pruning or cutting of trees and shrubs will be required in situations where these (i) interfere with sight distance, (ii) come in the way of effective street illumination, (iii) are too close to the carriageway so as to be hazardous, (iv) conceal desirable views and scenic vistas and (v) have become too old or dead.

Appropriate and compatible native or indigenous species denoting traditional landscapes: *Acacia auriculiformis*, *Lagerstroemia flos reginae* (Pride of India), *Pterospermum acerifolium* (Kanak Champa), *Alstonia scholaris*, *Putranjiva roxburghii* (Jalpitri), *Azadirachata indica* (Neem), *Dalbergia sissoo* (Sheesham) etc.

Specimen trees to give unique/strong character to the open space: *Ficus bengalensis* (Banyan), *Cassia fistula* (Amaltas), *Bombax malabaricum* (Silk Cotton), *Cassia nodosa* (Pink Javanica), *Jacaranda mimosaeifolia* (Neeli Gulmohar), *Chrosia speciosa*, *Mimusops elengi* (Mulsari), *Callistemon lanceolatus* (Bottle Brush) etc. can be planted



Large and spreading shade trees, with thick foliage should be proposed to provide much needed shade in hot open spaces during summer

Source : <https://destinationfiction.blogspot.in/2014/04/luxembourg-gardens-paris.html>



The most desirable plant material in parking area are trees and shrubs. Trees provide shade in summer and improve the environment of a car park, provide a visual break to the appearance, screen off parking areas and define some of the rows of parking

Source : <http://www.localecologist.org/2009/10/cooling-parking-lots-trees-face.html>



Meandering paths opening into chowks or meeting points enclosed by variety of trees providing shade as well as permeable character to the space



Open spaces like parks and gardens can have tree enclosures of various scales with different activities/functions in every space

Source : <http://www.wikiwand.com/zh-sg/%E4%B9%9D%E9%BE%8D%E4%BB%94%E5%85%AC%E5%9C%92>



Open spaces can be designed in a way so as to balance the hardscape and softscape by choosing trees that don't visually obstruct the creation of a large gathering space

Source : <https://www.housingauthority.gov.hk/sc/about-us/publications-and-statistics/housing-dimensions/article/20090227/detail/okl48.html>



Specimen trees like *Delonix regia*, *Bombax malabaricum* etc add a unique character to the space by defining the space and making it more dynamic

Source : http://galleryensign.blogspot.in/2011/04/01_archive.html

Design Conceptualization

Key Objectives

1. Creating visual and physical permeability
 - Physical axis: Creation of continuous movement corridors for ease of access
 - Visual axis: Through landscape elements
2. Improving accessibility between transit points and destinations
3. Creating seamless access
4. Connecting open and green spaces
5. Upgradation of public facilities and pedestrian links

Key Design principles

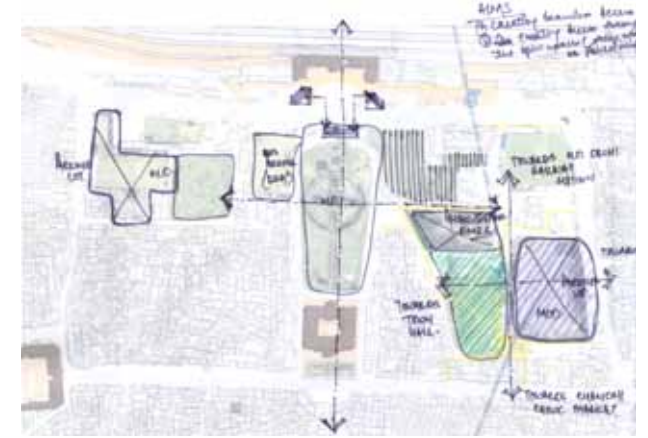
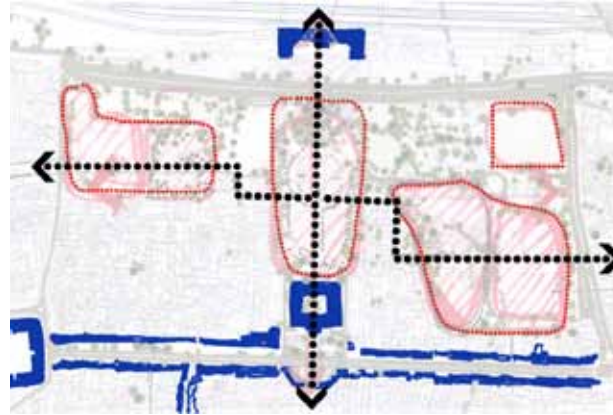
The basic concept was to create strong and prominent horizontal and vertical axes of physical connectivity and visual perception of the site on the whole.

Horizontal Axis

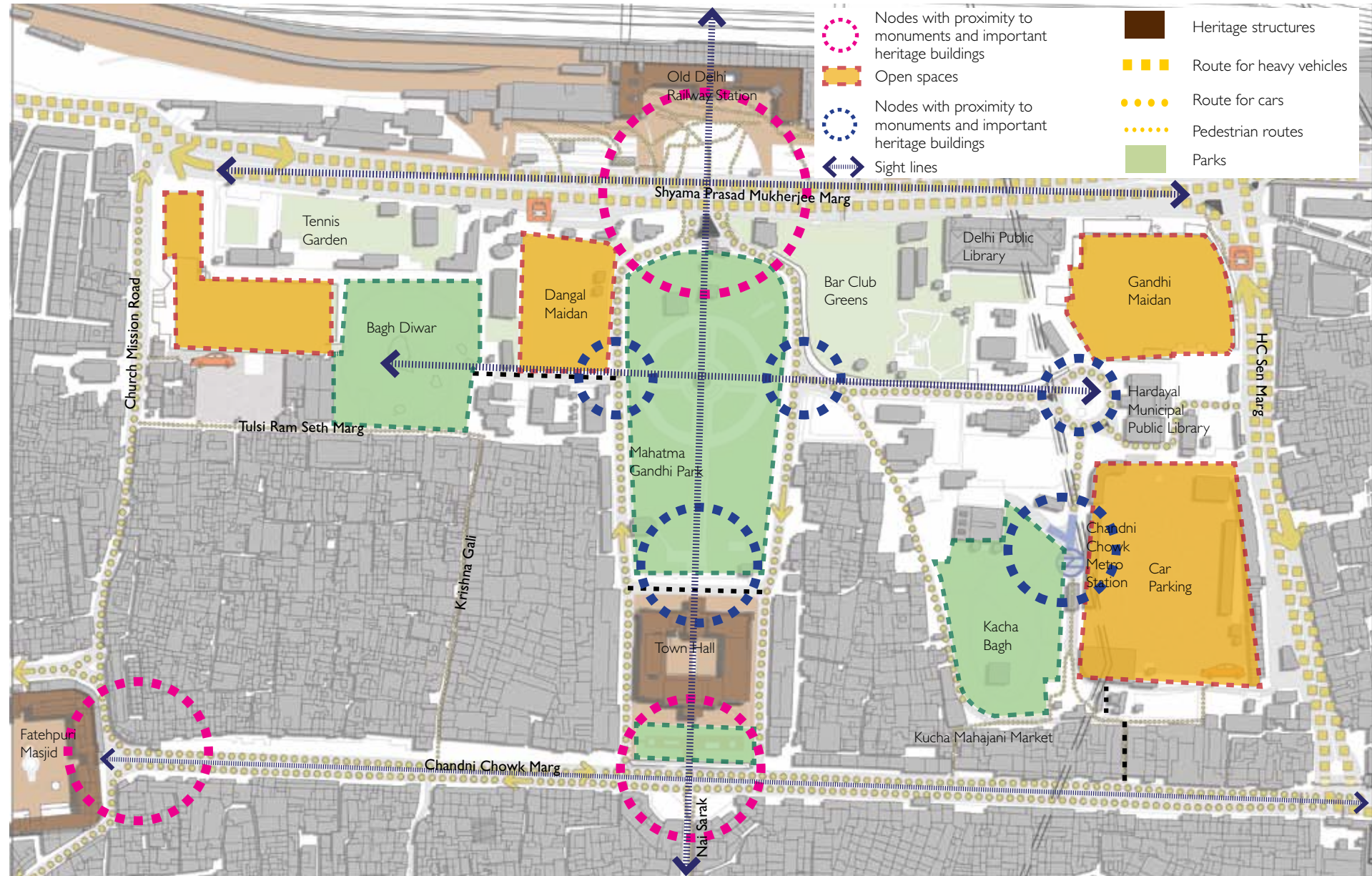
- Defining movement paths. Connecting across all the transit nodes, i.e the Metro station exit to the adjoining work centres/neighbourhoods, etc.
- Optimum use of available greens.

Vertical Axis

- Creating a seamless access to heritage structures through continuous landscape
- Seamless access and connecting open spaces which are otherwise segregated by increasing the scope of unhindered percolation from one space to the other. Uninterrupted views from one open space to the other; at the same time framing landmark buildings



Design Intent



Proposed Design

- | | |
|---------------------------------|--|
| 1. Azad Park | 8. Entry to Katra Neel |
| 2. Plaza | 9. Fatehpuri Masjid |
| 3. Town Hall | 10. Entry to Chandni Chowk Metro Station |
| 4. Town Hall Park | 11. Kaccha Bagh |
| 5. Parking Area | 12. Parking Area |
| 6. Bagh Diwar Park | 13. Gandhi Maidan |
| 7. Extension of Bagh Diwar Park | |





Area showing Bagh Diwar park and its extension



Area showing Kachha Bagh and the entry plaza around the Metro area



Area showing the connectivity of Old Delhi Railway Station with Town hall

Proposed Aerial View of Town Hall and Surrounding Areas



Proposed View showing the visual and physical connections creating a seamless access to heritage structures through continuous landscape

Proposed View highlighting the roundabout design on Chandni Chowk Marg for seamless connectivity



7.1 Legislative Framework

Upgradation of Areas of Heritage Value

While considering upgradation of 'Areas of Heritage Value' in the City the following interventions were proposed, for which legal provisions have been studied and further guidelines given as discussed below:

A. Adoptive reuse of buildings to provide for public/ semi-public use

Legislative Provisions:

- Annexure-I of Building Bye Laws 2016.
- 3.3 Redevelopment of existing urban area (permission to recognize/pool properties through TDR or Accommodation Rights), MPD 2021 (2015, p. 3-9)
- 3.3.1.2 Special areas, A. Shahjahanabad (Walled City) , MPD 2021 (2015, p. 3-11)
- 16.2 Special Area Regulations MPD 2021 (2015, p. 16-2)
- 5.7 Redevelopment of Katras and evacuee properties . ZDP (1999, p.8)

Suggested Guidelines:

- Identification and grading of both public and private buildings that have heritage value; levels of intervention in buildings of different grades to be set by the authority following building bye law regulations
- Suggested list of activities (such as F & B, Hotels, Lodges, Restaurants, Research Centres, Activity Centres or Workshops, Culture Centres etc.) to be made permissible in such premises

Fiscal schemes to be developed for the upgradation of such buildings using innovative techniques such as:

- Incentives for upgradation of private buildings – soft loans, TDR, tax concessions, relaxation of charges or levy if expert bodies, trusts, corporates or co-operative societies are involved, leasehold rights of developed

properties, concession on charges for change of use, flexible development charge slab, property evaluation based on its holding capacity. Penalty – 6 months time to notify the authority of intentions of use, time period for development of property to be finalized by agreement between owner and authority and in case of failure to complete development in time, the defaulter will have to get into an agreement with the competent authority accepting either a fine-based extension on time of completion or surrender the property to the authority. Defaulters may also be subject to scrutiny under criminal offence.

- Incentives for upgradation of public buildings – relaxation of charges or levy if expert bodies, trusts, corporates or co-operative societies are involved in promoting FDI, PPP models, leasehold rights of developed properties, property evaluation based on its holding capacity. Penalty – defaulters may be subject to scrutiny under criminal offence

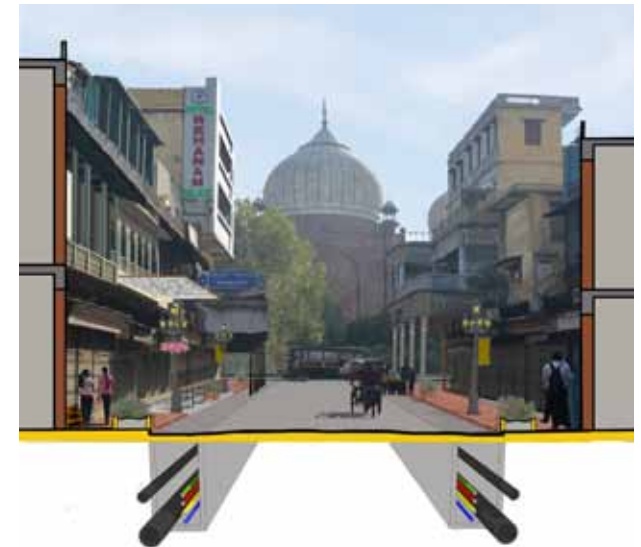
B. Infrastructure upgradation along identified heritage trails or precincts

Legislative provisions:

- 11.0 Urban Design 2. Walled City and Extensions, MPD 2021 (2015, p. 11-2)

Suggested Guidelines:

- Innovative reinstallation of utilities (such as electric wires, DG sets, transformers, drains, lighting fixtures etc.), without damaging the existing elevation or visual harmony



Development of Public Spaces

While considering developing existing public spaces and developing new ones, the following interventions were proposed for which legal provisions have been studied and further guidelines given as discussed below:

A. Identified Heritage Walk Circuits

Legislative Provisions:

- 11.0 Urban Design 2. Walled City and Extensions, MPD 2021 (2015, p. 11-2)

Suggested Guidelines:

- Identifying and locating public amenities for tourists, such as parking, toilet blocks, drinking water fountains, help desks, reception centres etc. along heritage trails
- Developing an operations and maintenance profile for the above mentioned services
- Part of stretches to be designed as open art and craft galleries or exhibition spaces

B. Development of Open Public Spaces for Tourists

Legislative Provisions:

- 11.0 Urban Design 2. Walled City and Extensions, MPD 2021 (2015, p. 11-2)
- 6.1 Preparation of Urban Renewal Plan, ZDP (1999, p.11)
- 6.3 Recommendation of Urban Renewal Scheme in Walled city, ZDP (1999, p.11)

Suggested Guidelines:

- Enhance accessibility to identified precincts by integrating interfaces of various modes of transportation for e.g. Metro stations with authorized parking areas, bus stands and other pick up and drop off points.
- Tourist-based activities to be permitted within and

around precincts along with required public amenities.

Tourist based activities can be:

- Cultural centres,
- Parks, amphitheatres,
- Open workshops for art and culture
- Mini museum
- Interpretation centres, research centres
- Landscaping of existing green areas and adaptive reuse of the existing buildings to be taken up on a priority basis, and to be designed/developed without compromising its original character

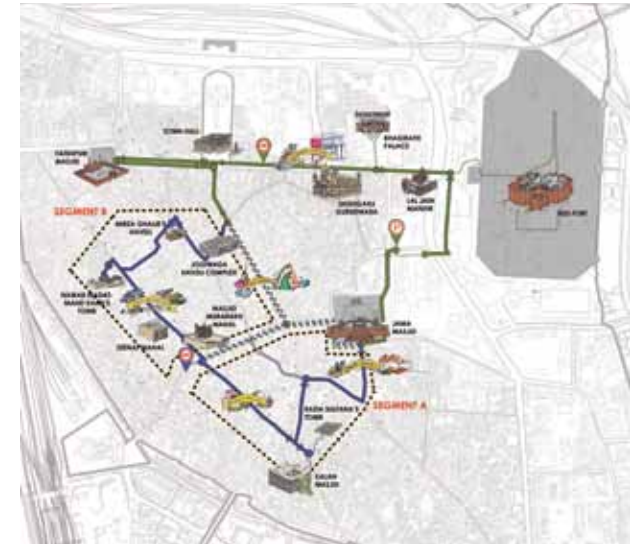
C. Development of Public Amenities

Legislative Provisions:

- 6.3 Recommendation of Urban Renewal Scheme in Walled city, ZDP (1999, p.11)

Suggested Guidelines:

- Propose a waste management plan to increase capacity building for proper storage, collection and disposal of garbage and locating strategic community collection points (CCP),
- Government or private evacuee properties to be redeveloped as public and semi-public buildings.



Enhancement of Accessibility, Connectivity and Circulation

Accessibility to the City, circulation within it and connectivity to it have always been critical issues for which the following interventions were proposed and for which legal provisions have been studied and further guidelines given as discussed below:

A. Congestion Management

Legislative Provisions:

12.8 Transportation for Special Areas , MPD 2021 (2015, p.12-13)

Suggested Guidelines:

Traffic regulation on a time based uni-directional circulation system.
Design intersections to control traffic movement and speed at selected junctions in the form of dividers, temporary medians and roundabouts.



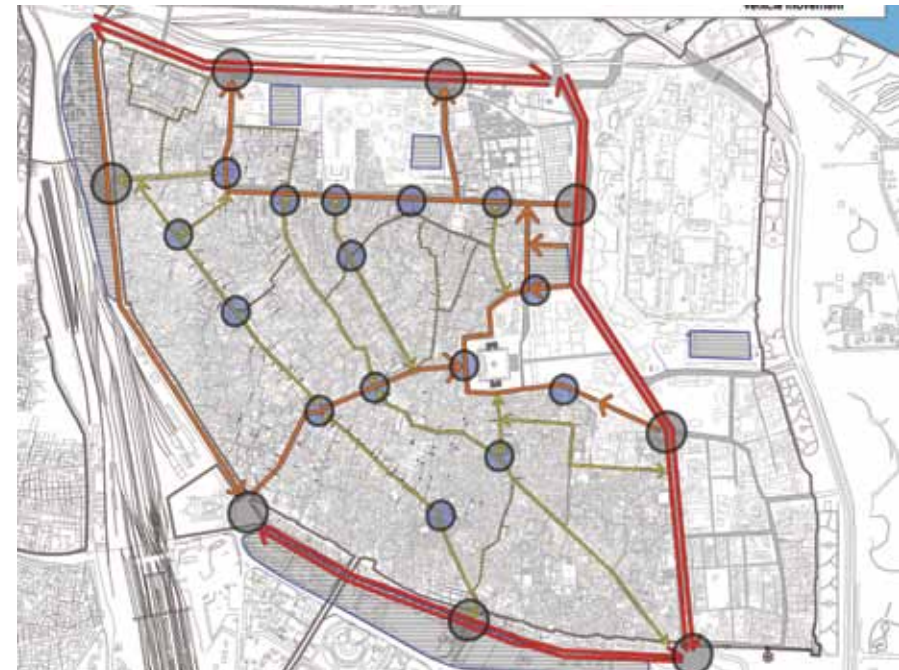
B. Improved access

Legislative Provisions:

6.3 Recommendation of Urban Renewal Scheme in Walled city, ZDP (1999, p.12)

Suggested Guidelines:

Filtered vehicular and pedestrian movement based on street width and its carrying capacity.
Park and ride facilities in the form of e-rickshaw stands at drop-off/pick-up points and parking zones
Park and walk continuous walkways connectivity linking to tourist circuits and landmarks.



Urban Design

To improve the overall quality of space in the City while retaining its original character, the following interventions were proposed for which legal provisions have been studied and further guidelines given as discussed below:



A. Streetscaping

Legislative Provisions:

- 5.8.3 Measures to be taken around historical premises within the control zone, ZDP(2015, p.11)

Suggested Guidelines:

- Restructuring and upgradation of streets to accommodate activities like informal commercial set-ups and pedestrian and vehicular traffic
- Shared spaces to be generated for informal commerce and pedestrians vehicles
- Lighting fixtures to be in accordance with present conditions of streets notified

B. Homogeneity

Legislative Provisions:

- 4.2.2.2. Traditional Inner City and Unplanned areas, A. Special Area and Villages
- 5.4 Control for building/buildings within use premises, ZDP (1999, p.7)
- 5.8.3 Measures to be taken around historical premises within the control zone, ZDP (2015, p.11)

Suggested Guidelines:

- Theme based façade upliftment as per prescribed colour; material and design elements palette.
- Developing visual avenues by cleaning exposed electrical wires, exceeded shading devices and other projections
- Uniformity in signage/hoardings and shading devices
- Innovative shutter designs to be incorporated with respect to the context

C. Landscaping

Legislative Provisions:

- 5.8.3 Measures to be taken around historical premises within the control zone, ZDP(2015, p.11)

Suggested Guidelines:

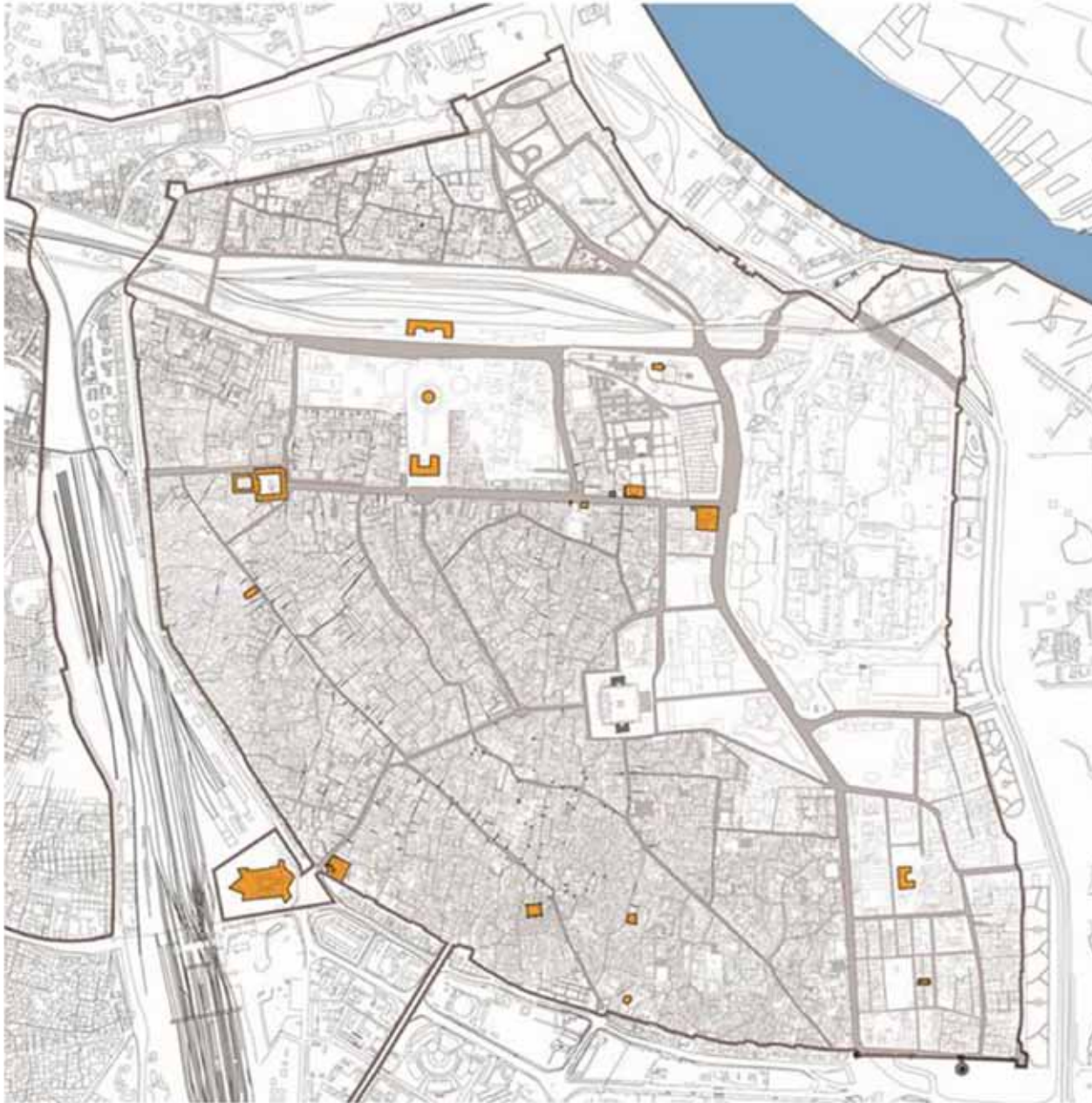
- Drought-resistant, native and naturalized materials to be used
- Self-sustaining and eco-friendly designs (such as in-built biodigester planters etc.) to support vegetation
- Planting of big trees or plants should be limited to open spaces and courtyards at a considerable distance from buildings

ANNEXURES

- Analysis
- Proposals

- Site of Hari Nagar Greens
- Existing Infrastructure
 - Area of Intervention
 - Major Landmarks
 - Existing Land Use Patterns
 - Circulation Patterns
- Site Scenario of Hari Nagar Lake Park
- Key Issues of Hari Nagar Lake Park

Analysis

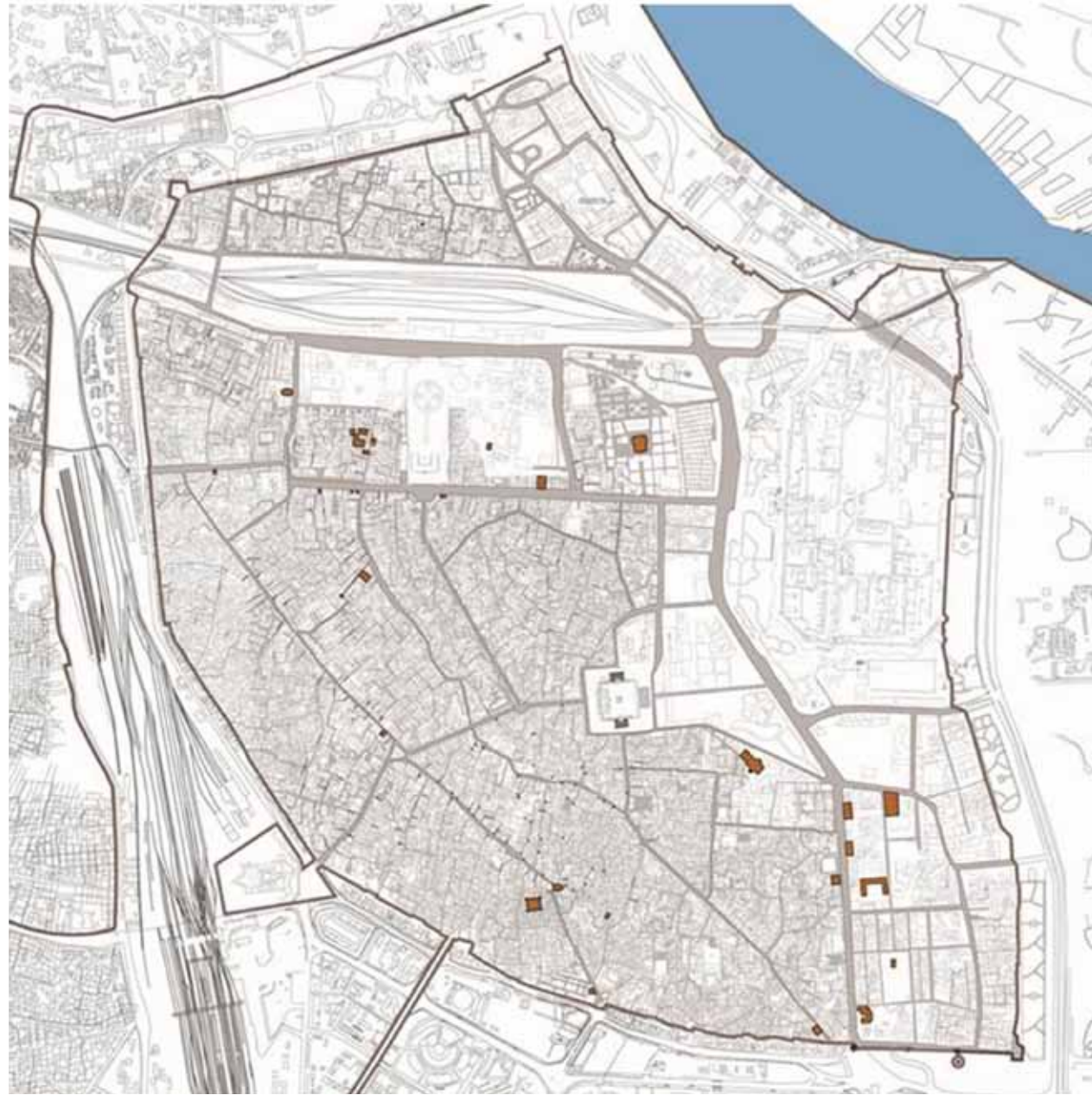


Historical Context

Monuments under HCC – Grade I

Grade I	
Idgah	
Fatehpuri Masjid	A40
Old Delhi Railway Station	A77
Sunehri Masjid	A85
Gurudwara Sis Ganj	A88
St. Mary's Church	A95
Gateway of Zinat Mahal	A95
Lal Mandir	A139
Bridge near Lahore Gate, Red Fort	
Mosque of Ghaziuddin Khan	A168
Anglo-Arabic Public School	A170
Rehmani Masjid	A171
Holy Trinity Church	A189
Mosque of Shah Ghulam Ali	A105
Dargah of Shah Ghulam Ali	A106
Sunehri Masjid	A208
Shroff Eye Hospital	A223
City Wall South Daryaganj	A227
Mortello Tower	A228
Town Hall	A74
Company Bagh	A75
State Bank of India	A83

 Grade I HCC Heritage Buildings

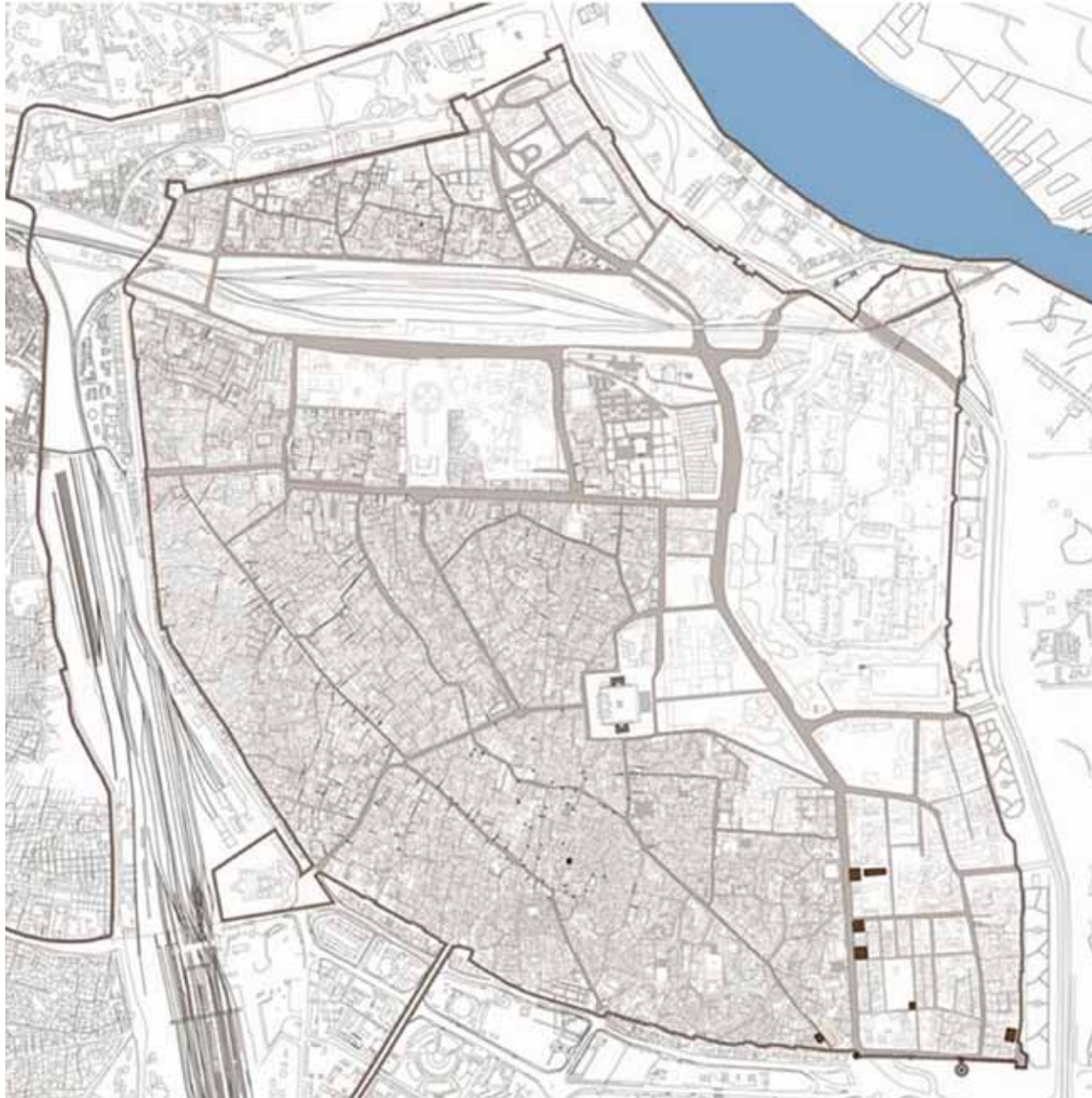


Grade II HCC Heritage Buildings

Historical Context

Monuments under HCC – Grade 2

Grade II	
Hauzwali Masjid	Naya Bans
St. Stephen's Church	Chandni Chowk
Gateway	Katra Neel
Shivalaya Kunniji Maharaj	Katra Neel
Manakchanda Shivalaya	Katra Neel
Bada Shivalaya	Katra Neel
Residence	Katra Neel
Shivalaya Ghanteshwar Mahadev	Katra Neel
Dhumimal Shivalaya	Katra Neel
Pandit Hari Ramji ka Shivalaya	Katra Neel
ANZ Grindlays Building	Chandni Chowk
Union Bank of India Building	Chandni Chowk
Oriental Bank of Commerce Building	Chandni Chowk
Gateway to Katra Neel	Katra Neel
Mirza Gahlib's Haveli	Ballimaran
Mirza Gahlib's In-laws Haveli	Ballimaran
Hakim Mihr Ali Shah's Mosque	Chandni Chowk
Bhagirath Palace	Chandni Chowk
Masjid Mubarak Begum	Hauz Quari
Jain Mandir	Chandni Chowk
Kasturba Zenana Hospital	Daryaganj
Badi Masjid	Turkman Gate
Kalan Masjid	Turkman Gate
Amnudwall Masjid	Sitaram Bazaar
Masjid Beriwali	Daryaganj
Police Station	Daryaganj
H.M.D.A.V Middle School	Daryaganj
Gateway to Katra Nawab	Chandni Chowk

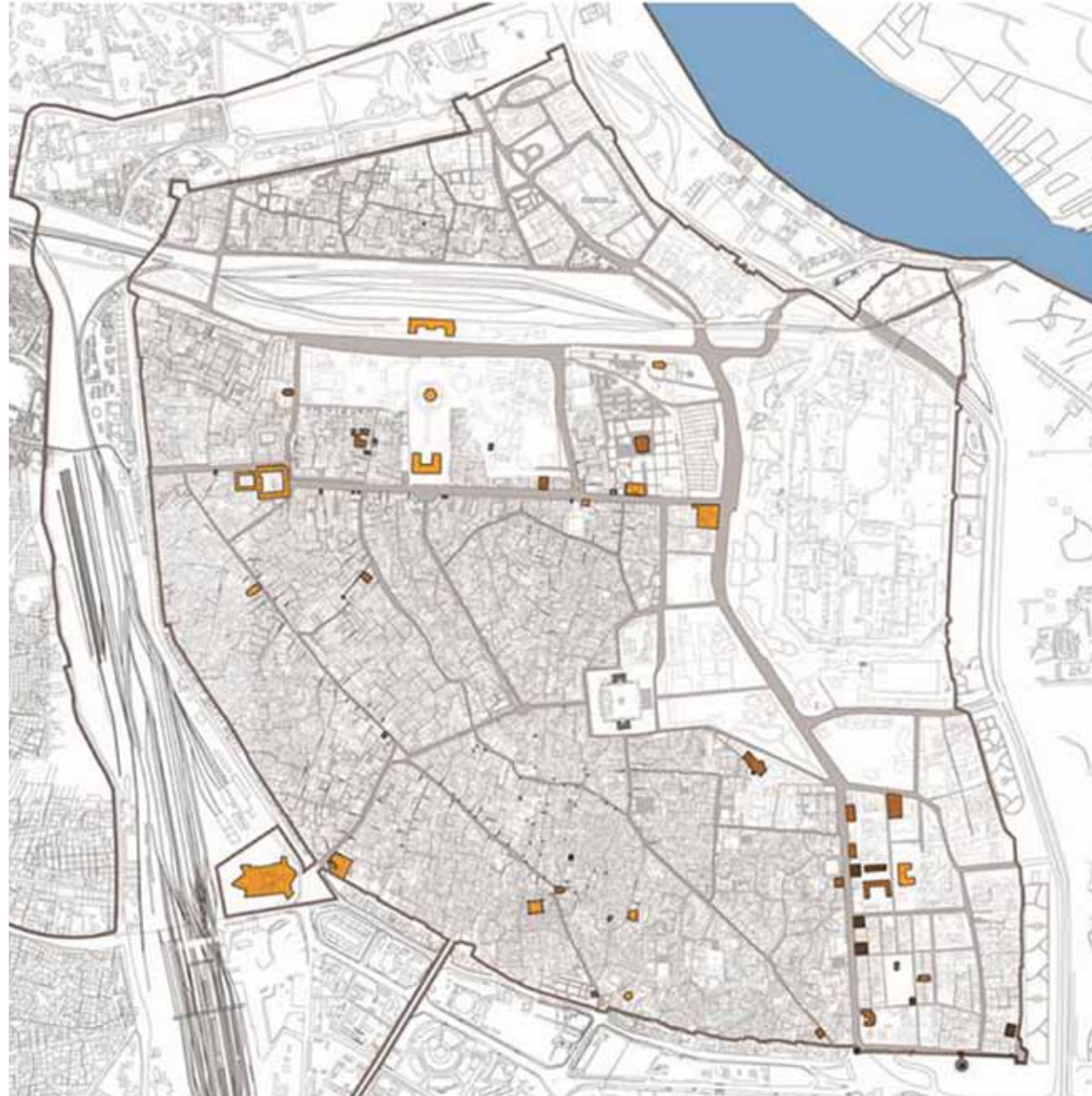


 Grade III HCC Heritage Buildings

Historical Context

Monuments under HCC – Grade 3

Grade III	
Residence	Sitaram Bazaar
Tomb of Razia Sultana	Turkaman Gate
Jain Temple and School	Daryaganj
Hotel Moti Mahal	Daryaganj
Residence cum Commercial Bulding	Daryaganj
Commercial Street	Daryaganj
Hindi Park Housing Area	Daryaganj
Dr Ansari's House	Daryaganj



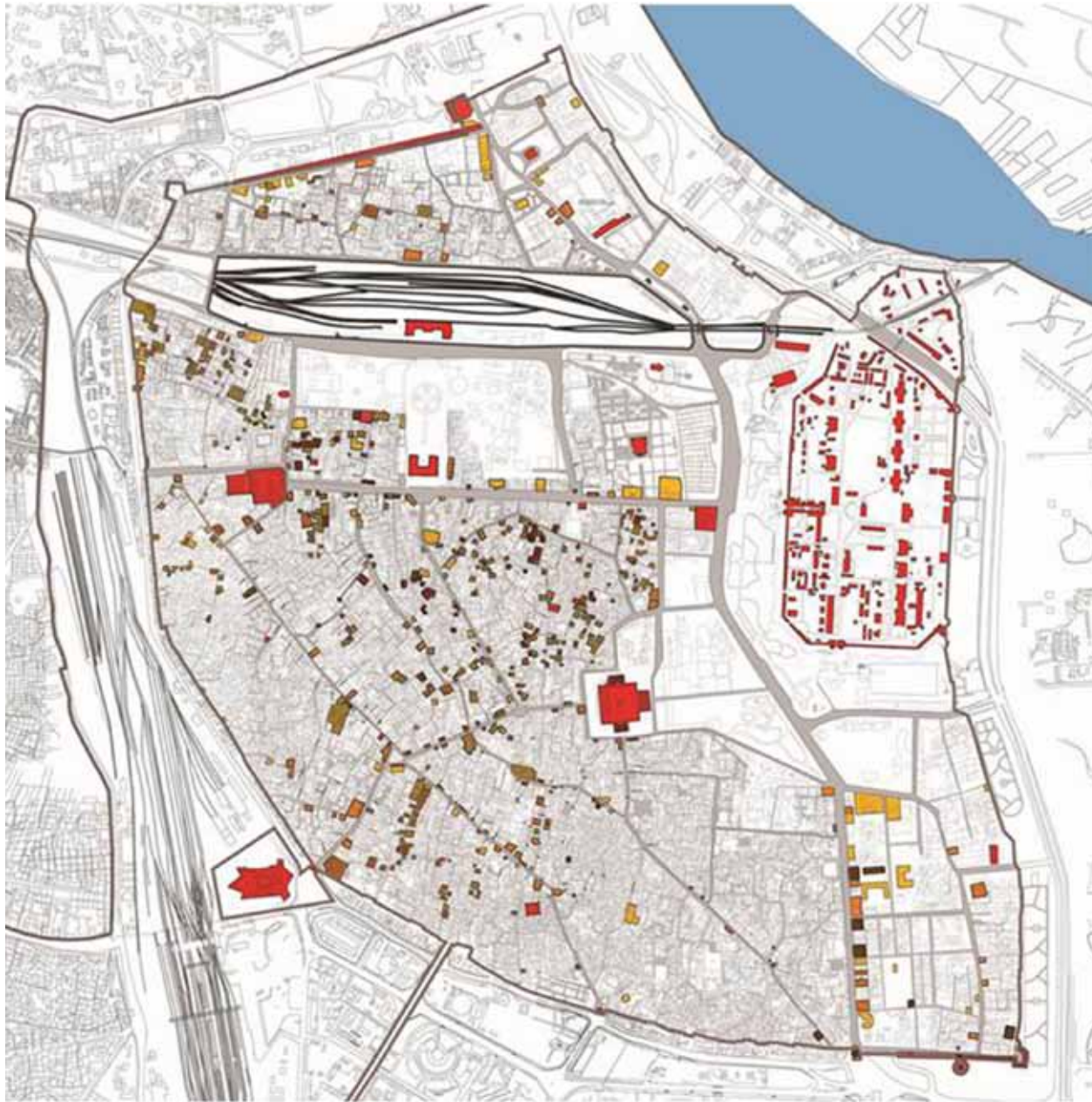
Historical Context

Monuments under HCC

Identified after site visits; heritage structures under Heritage Conservation Committee:

- i No development or redevelopment or engineering operation of additions/alterations, repairs, renovations of the listed buildings or listed precincts or listed natural feature areas shall be allowed except with the prior permission of the Commissioner. Before granting such permission, the agency concerned shall consult the Heritage Conservation Committee and shall act in accordance with the advice of the Heritage Conservation Committee.
- ii Provided that, before granting any permission, objections and suggestions from the public shall be invited and shall be considered by the Heritage Conservation Committee.
- iii Provided that, only in exceptional cases, the case may be reconsidered. However, the decision of the Heritage Conservation Committee after such reconsideration shall be final and binding.

- Grade I HCC Heritage Buildings
- Grade II HCC Heritage Buildings
- Grade III HCC Heritage Buildings



Historical Context

Monuments under INTACH

INTACH's guidelines for listing buildings: The grade assigned to a building or property will depend on

- Age
- State of Preservation
- Archaeological, Historical and Architectural Value

GRADE

Grade I: Buildings/Properties in this category are of exceptional national/regional importance with unique features and are the prime landmarks of a city/town.

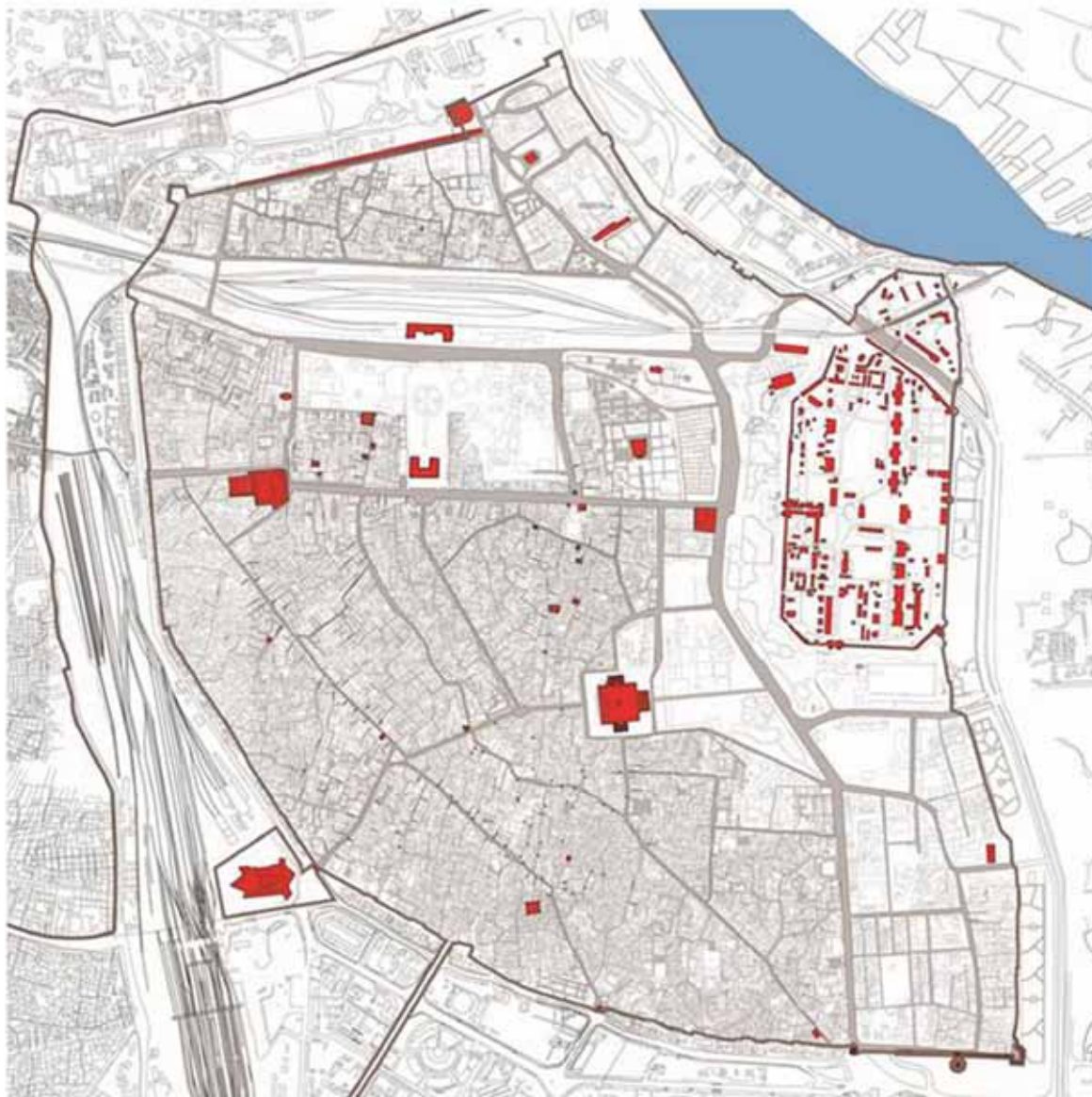
These buildings need to be kept under a permanent state of preservation, and can be recommended for protection. Intervention in such structures is to be closely monitored.

Grade I*: This category comprises buildings and precincts of national and historic importance and are under the protection of the ASI or the State Department of Archaeology.

Grade III: This category comprises buildings of local importance, possessing special architectural or historical value. These buildings are local landmarks contributing to the image and identity of the city.

Grade III: This category comprises buildings/precincts, which normally do not qualify for permanent retention, but are nevertheless of some historical or architectural importance and contribute to determining character of the locality.

- INTACH Grade A Heritage Buildings
- INTACH Grade B Heritage Buildings
- INTACH Grade C Heritage Buildings
- INTACH Grade A Heritage Haveli
- INTACH Grade B Heritage Haveli
- INTACH Grade C Heritage Haveli



■ INTACH Grade A Heritage Buildings

Historical Context

Monuments under INTACH – Grade A

Red Fort

1. Red Fort
2. Salimgarh

Kashmere Gate

3. Dara Shikoh Library
4. Kashmere Gate
5. City Wall
6. St. James Church

Chandni Chowk

7. Digambar Jain Lal Mandir
8. Bhagirath Palace
9. Gurudwara Sis Ganj
10. Sunehri Masjid
11. Northbrook Fountain
12. Town Hall
13. Old Delhi Railway Station
14. St. Mary's Church

Fatehpuri

15. Fatehpuri Masjid
16. Gododia Market
17. Pandit Hari Ramji ka Shivalaya

Khari Baoli

18. St. Stephen's Church

Ajmeri Gate

19. Anglo Arabic School
20. Ajmeri Gate

Lal Kuan

21. Nawab Iradatmand Khan's Grave
22. Masjid Mubarak Begum

Chawri Bazar

23. Masjid Rubin ud Dawa
24. Jama Masjid

Kinari Bazar

25. Shri Marwari Aushadhalaya
26. Ram Nath Indra Devi Trust Dhramshala
27. Meru Mandir

Dharampura

28. Anand Aushadhalaya

Turkman Gate

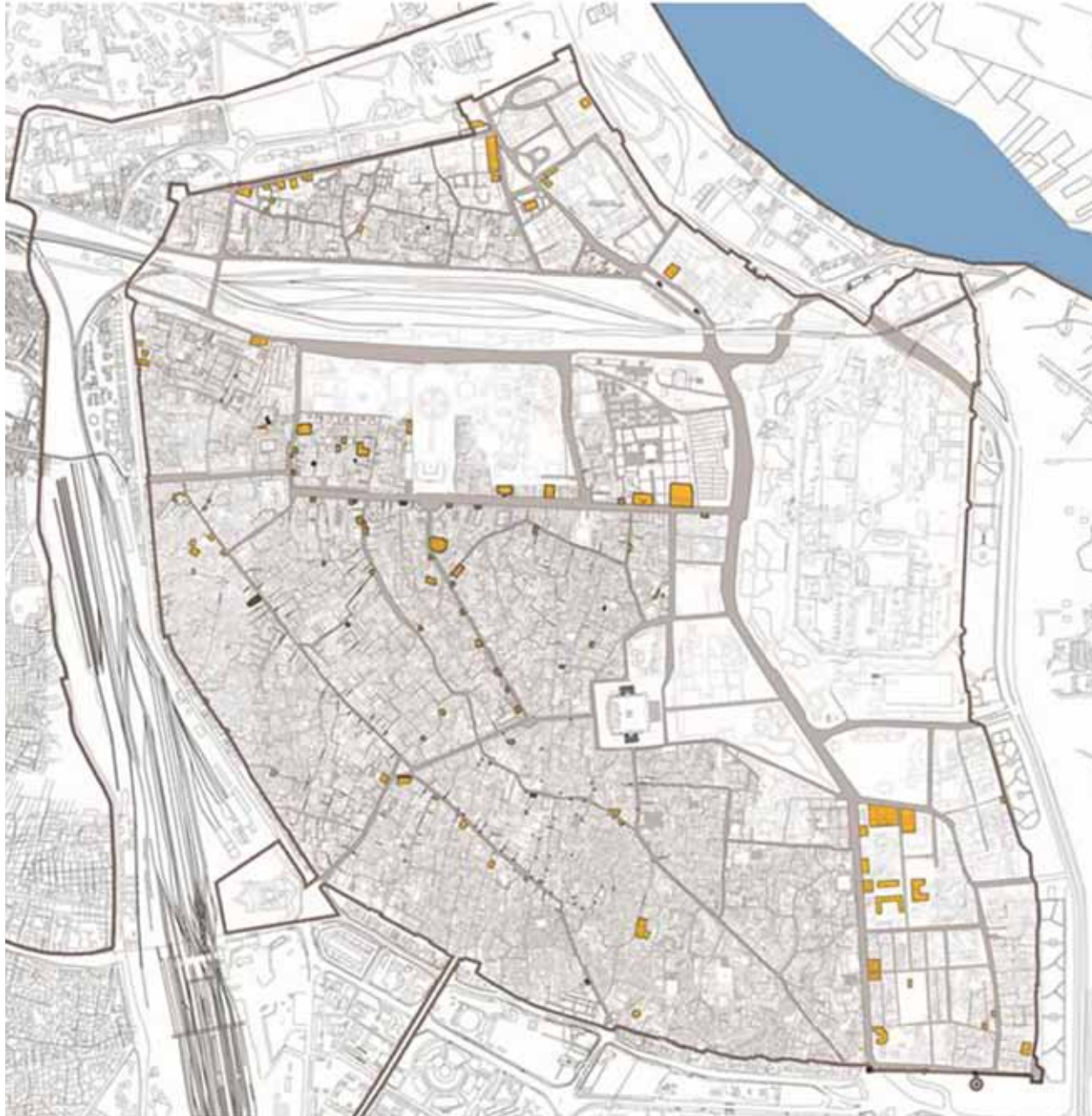
29. Kalan Masjid
30. Turkman Gate
31. Tomb of Razia Sultana


Chitli Qabar

32. Digambar Jain Mandir

Dariyaganj

33. Zeenat ul Masjid or Ghata Masjid
34. City Wall



 INTACH Grade B Heritage Buildings

Historical Context

Monuments under INTACH – Grade B

Kashmere Gate

1. Post Office
2. Magazine Gateway
3. Delhi Girls BNNCC
4. Old St. Stephen's College
5. Ambedkar University Office
6. William Frazer's Residences

Chandni Chowk

8. E S Peearay Lal Building
9. SBI Building
10. Central Baptist Church
11. Mahavir Building
12. Allahabad Bank Building

Fatehpuri

13. Bhowani Shankar ki Kacheri
14. Dharamashala Ray Sahab Lal Laxmi Narayan
15. Bada Shivalaya
16. Ghanteshwar Mahadev Mandir

Ballimaran

17. Hindustani Dawa Khana
18. Lala Shamnath Smriti Vachnalay
19. Chaumukhi Mandi
20. Akhil Bharatiya Jangrid Brahman Mahasabha
21. Gateway to Ahata Mohalla

Nai Sarak

22. Katra Mahesh Das
23. Marwari Dharamshala

Maliwada

24. Mandir Shri Balu Kesariji

Kinari Bazar

25. Shri Mani Bhadravir Mandir

Dharampura

26. Baabe Mandir
27. Mahabir Mandir
28. Shri Radha Krishna Mandir

Dariba Kalan

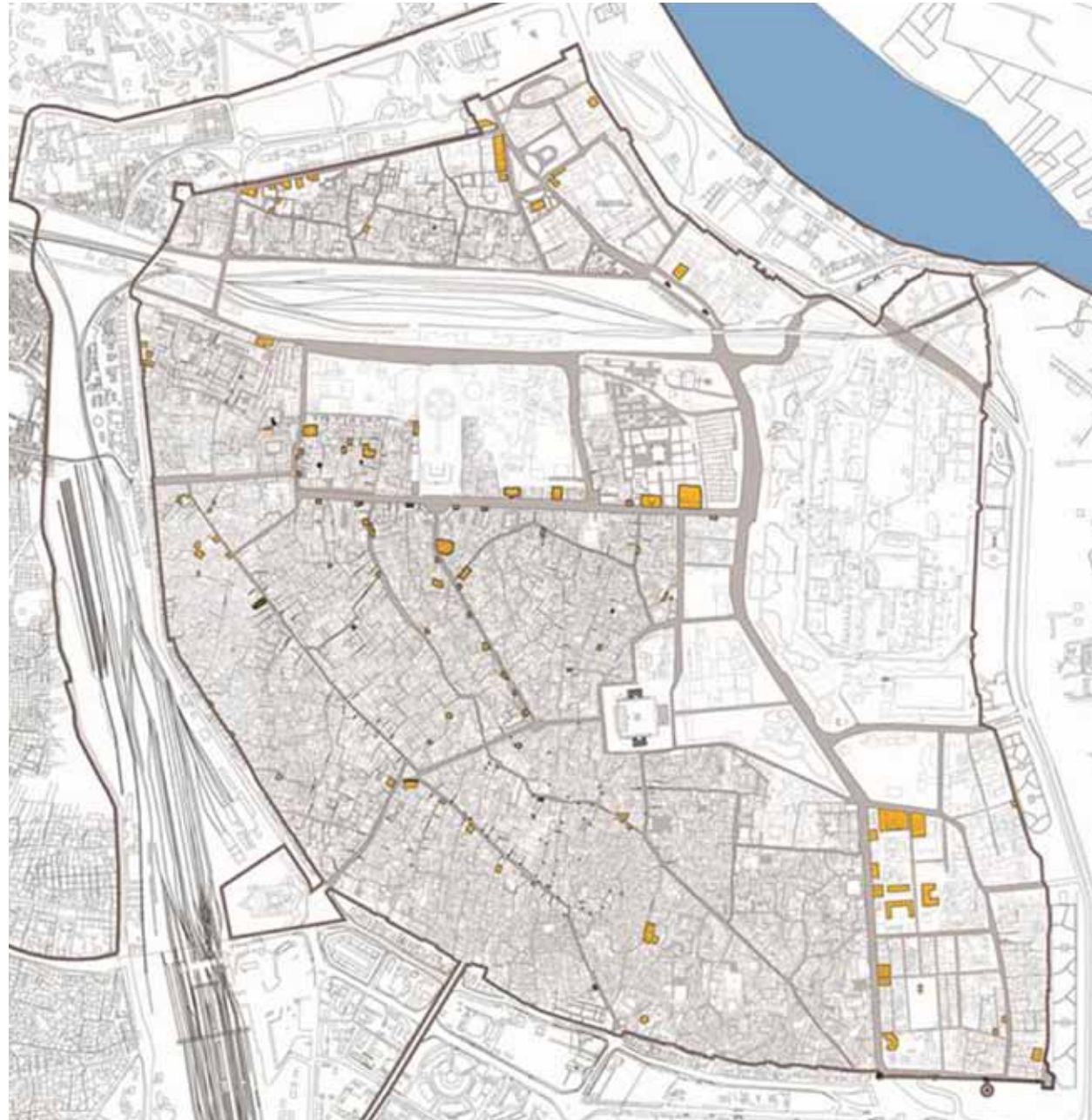
29. Jain Dharamashala

Chawri Bazar

30. Arya Samaj Girls School

Khari Baoli

31. Golden Building
32. Mandir Shri Ramchandrajai Maharaj
33. Dharamashala Salekh Chand
34. Gateway to Galli Tellian and Katra Ghee
35. Phatak Nahar Saadat Khan
36. Hotel Taj Mahal
37. Hotel Frontier



Historical Context

Monuments under INTACH – Grade B

Naya Bans

- 38. Delhi Art Press
- 39. Tahawwur Rana Masjid
- 40. Prathmik Vidyalaya
- 41. St. John's Dispensary

Lal Kuan

- 42. Gateway to Zeenat Mahal
- 43. Pyarelal Building

Ajmeri Gate

- 44. Tara Devi Happy School
- 45. Gayatari Building
- 46. Chitragupta Bhawan

Sitaram Bazaar

- 47. Hauz Quazi Masjid
- 48. Dharamshala Pyarelal Madho Ram
- 49. MSD School
- 50. Phatak Sher Singh

Turkman Gate


- 51. Teliyon Ka Phatak
- 52. Khankha Masjid
- 53. Holy Trintity Church
- 54. Arya Samaj Mandir

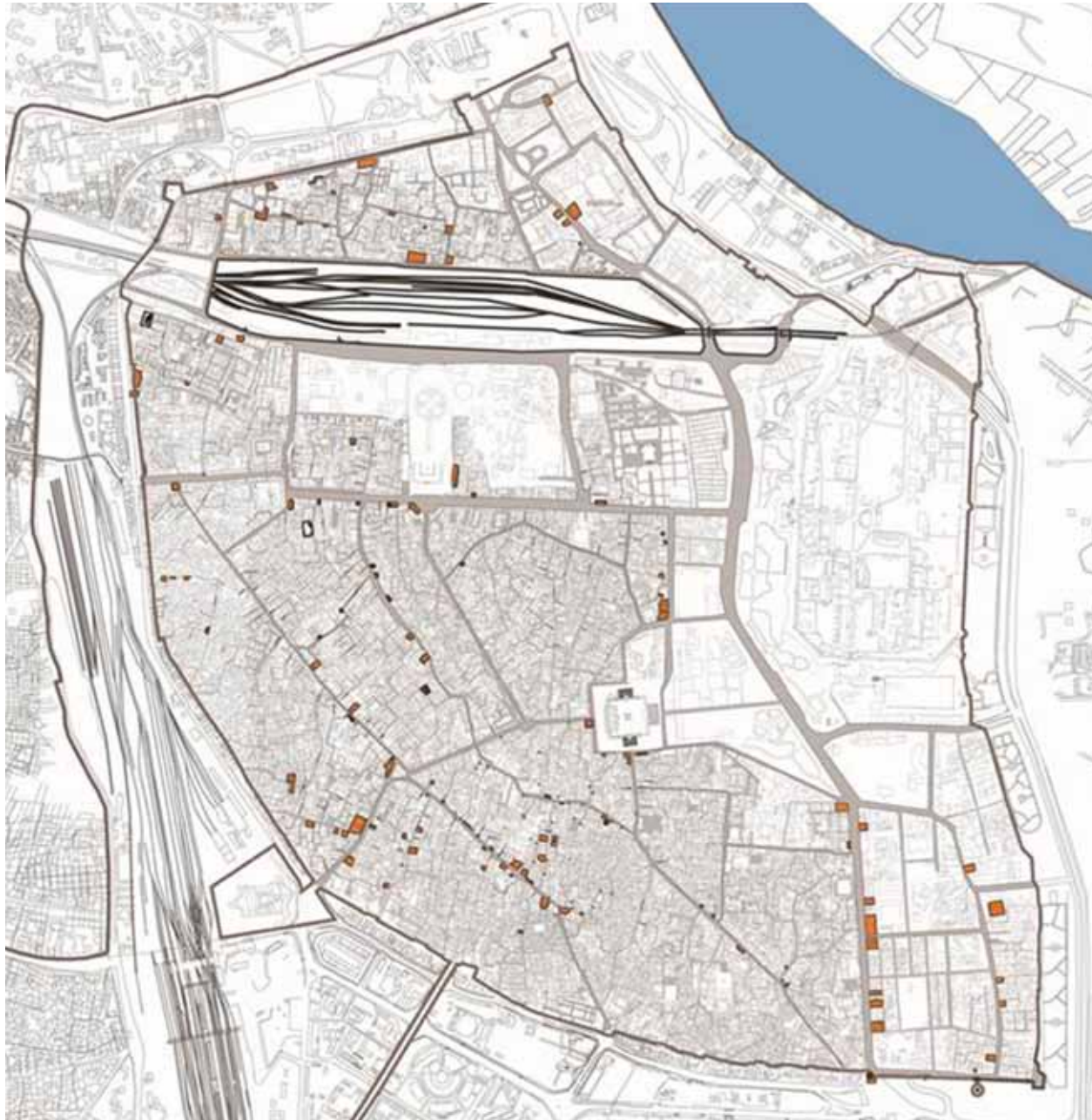
Chitli Qabar

- 55. MCD Model School
- 56. Masjid Pahari Imli

Dariyaganj

- 57. Krishnadevi Rajkrishna Jain Smriti Bhawan
- 58. Jain Residence
- 59. Radha Krishna Bhawan
- 60. Jain Balasharam
- 61. ASVJ School
- 62. Hindustan Refrigerator Building
- 63. Dargah Shah Shabir Baksh
- 64. Masjid Beriwali
- 65. Sterling House
- 66. Sarans Heritage Hotel

 INTACH Grade B Heritage Buildings



 INTACH Grade C Heritage Buildings

Historical Context

Monuments under INTACH – Grade C

Fatehpuri

1. Building
2. Hotel Wall City

Ballimaran

3. Muslim Musafir Khana
4. Sharif Manzil
5. Anglo Sanskrit School
6. Reaba Girls School

Nai Sarak

7. Haji Ali Jaan Building
8. Rani Sati Mandir

Malliwara

9. Ayurveda Seva Samiti Aushdhalaya

Chawri Bazar

10. Hotel Jamla

Dariba Kalan

11. Shri Jagannath Temple
12. Hero Cycles Office

Khari Baoli

13. Gateway to Tilak Bazaar
14. Thakurdwara Dharamshala
15. Masjid Hafizullah Khan

Lal Kuan

16. Netaji Building
17. Sirkiwalan Gateway
18. Municipal Dispensary
19. Ganga Dharamshala
20. Phatak Dhobiya

Ajmeri Gate

21. Unchil Masjid

Sitaram Bazaar

22. Lala Bhaganwandas Heeralal Building
23. Lal Darwaza
24. Ayurvedic Dispensary
25. Dhamani Market

Turkman Gate

26. Amnuowalli Masjid
27. Benwall Masjid

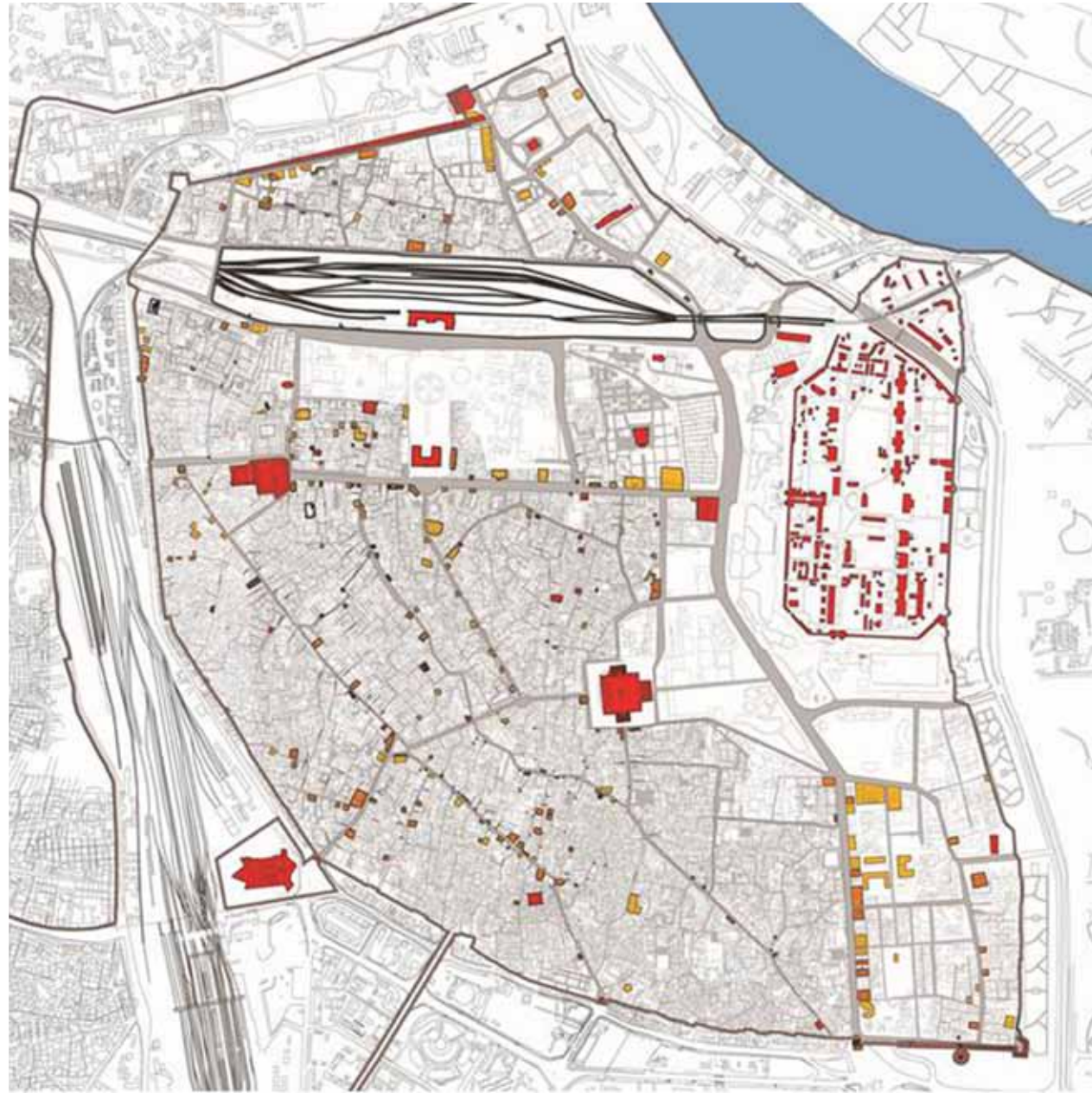
Chitli Qabar

28. CPI (M) Office Building
29. Haji Hotel & Police Station
30. Dalwali Masjid

Dariyaganj

31. HMDAV School
32. Sitaram Ferozilal Jain Building
33. Durga Bhawan
34. Canara Bank Building

Historical Context Monuments under INTACH



Town Hall

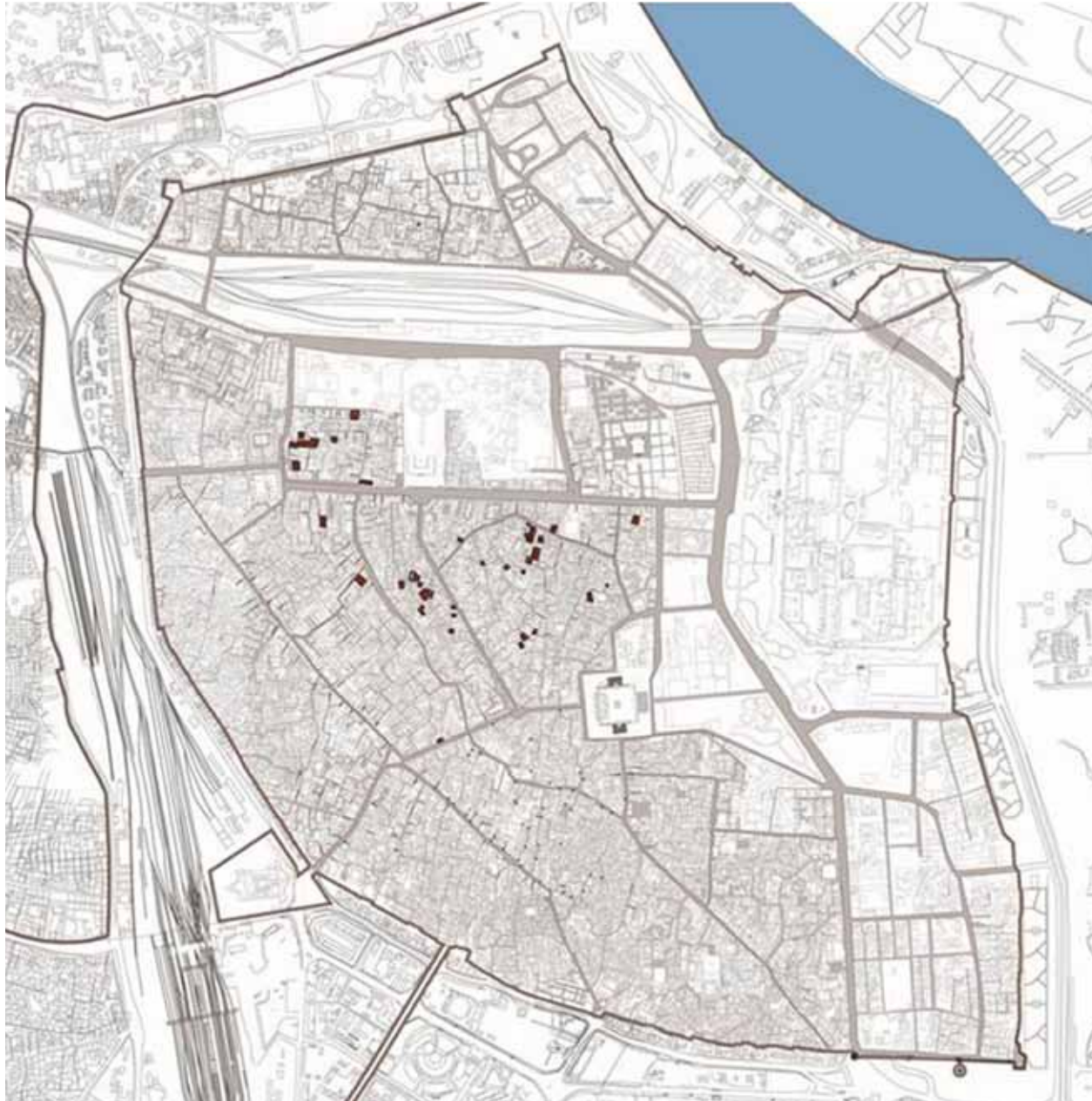


Fatehpuri Mosque



Jama Masjid

■ INTACH Grade A Heritage Buildings ■ INTACH Grade B Heritage Buildings ■ INTACH Grade C Heritage Buildings



Historical Context

Havelis under INTACH – Grade A

Fatehpuri

Grade A Havelis – (FA1-Chunnamal ki Haveli)

Ballimaran

Grade A Havelis: 2 (BMA1 – Mirza Galib ki Haveli)
(BMA2 – Haveli Sharif Manzil)

Nai Sarak

Grade A Havelis: 9 (NA4 – Twin Havelis)

Malliwara

Grade A Havelis: 3

Kinari Bazar

Grade A Havelis: 11 (KNA1 – Naughara Mansions)

Dariba Kalan

Grade A Havelis: 1

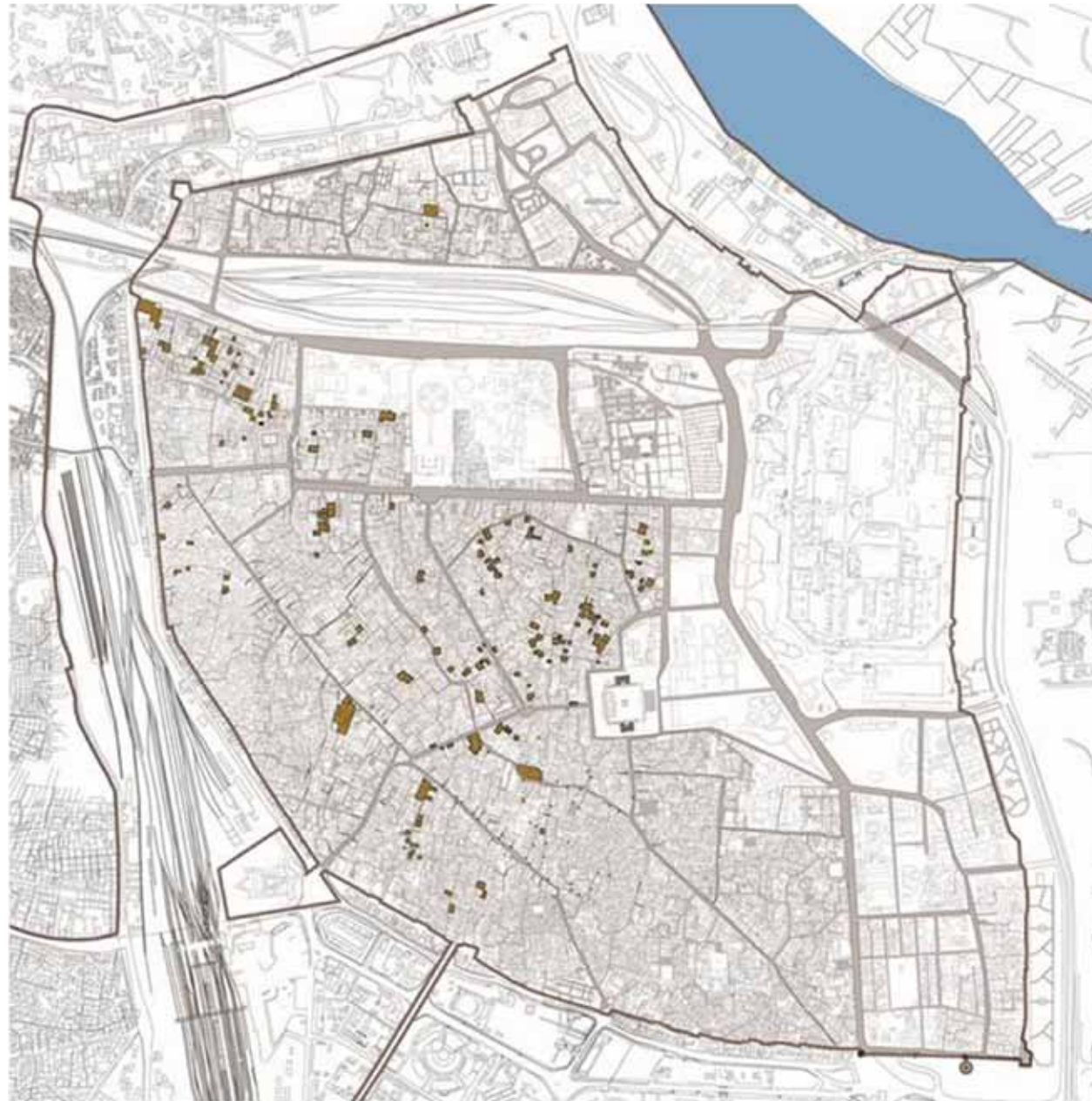
Chawri Bazar

Grade A Havelis: 1

Dharampura

Grade A Havelis: 8

 INTACH Grade A Heritage Haveli



Historical Context

Havelis under INTACH – Grade B

Khari Baoli

GRADE B: Peeli Kothi

Ajmeri Gate

Grade B Havelis: 3

Sitaram Bazar

Grade B Havelis:1 (SBBI - Haksar Haveli)

Fatehpuri

Grade B Havelis:2

Ballimaran

Grade B Havelis: 10

Nai Sarak


Grade B Havelis:5

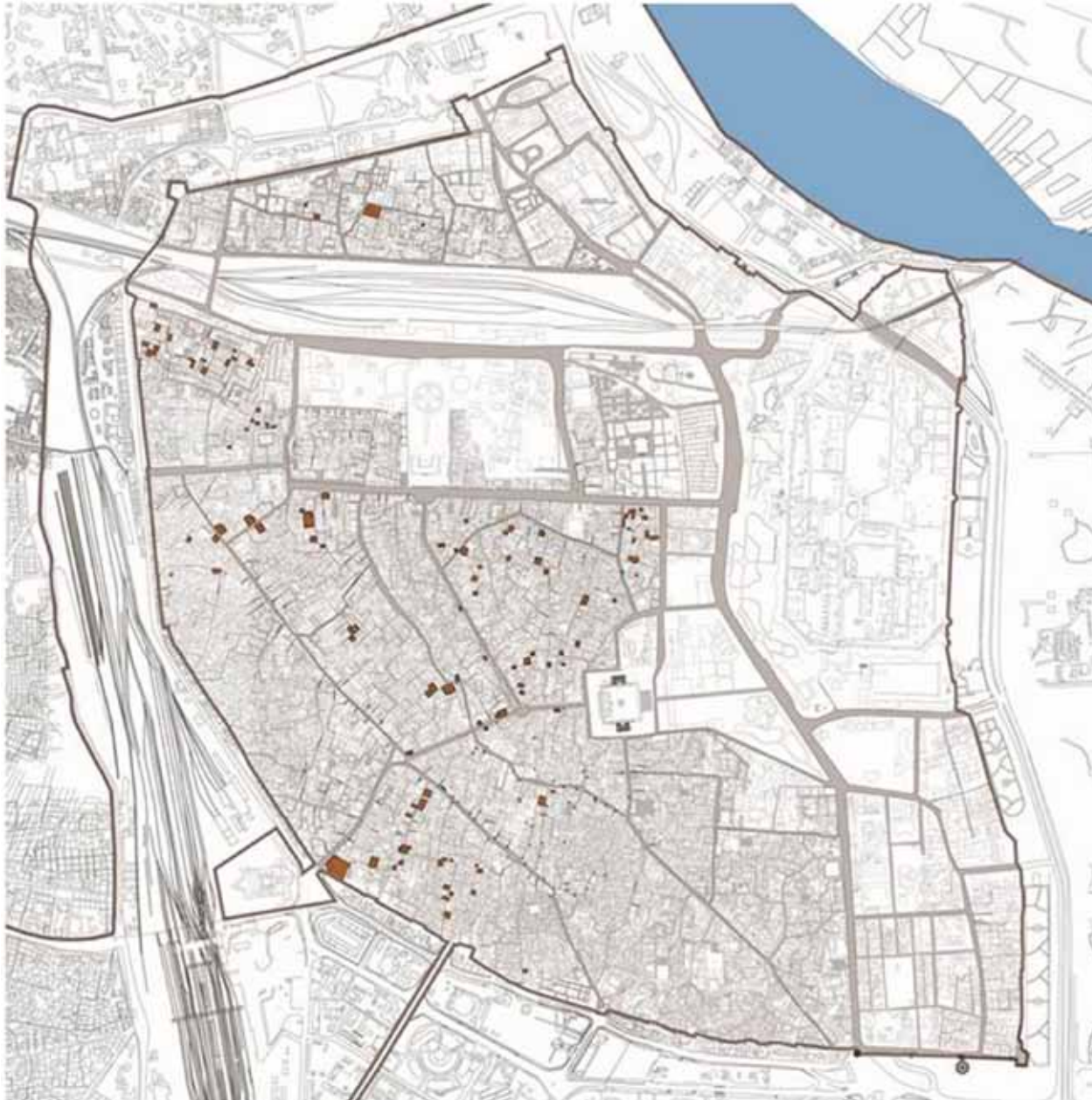
Malliwara

Grade B Havelis: 7

Kinari Bazar

Grade B Havelis: 7

 INTACH Grade B Heritage Haveli



Historical Context

Havelis under INTACH – Grade C

Kashmere Gate

Grade C Havelis: 1

Khari Baoli

Gate C Havelis: 30

Ajmeri Gate

Grade C Havelis: 3

Sitaram Bazar

Grade C Havelis: 4

Fatehpuri

Grade C Havelis: 1

Ballimaran

Grade C Havelis: 5

Nai Sarak

Grade C Havelis: 1

Malliwara


Grade C Havelis: 1

Naya Bans

Grade C Havelis: 7

Lal Kaun

Grade C Havelis: 5 (LKCI – Haveli of Zeenat Mahal)

 INTACH Grade C Heritage Havelis

Historical Context Havelis under INTACH



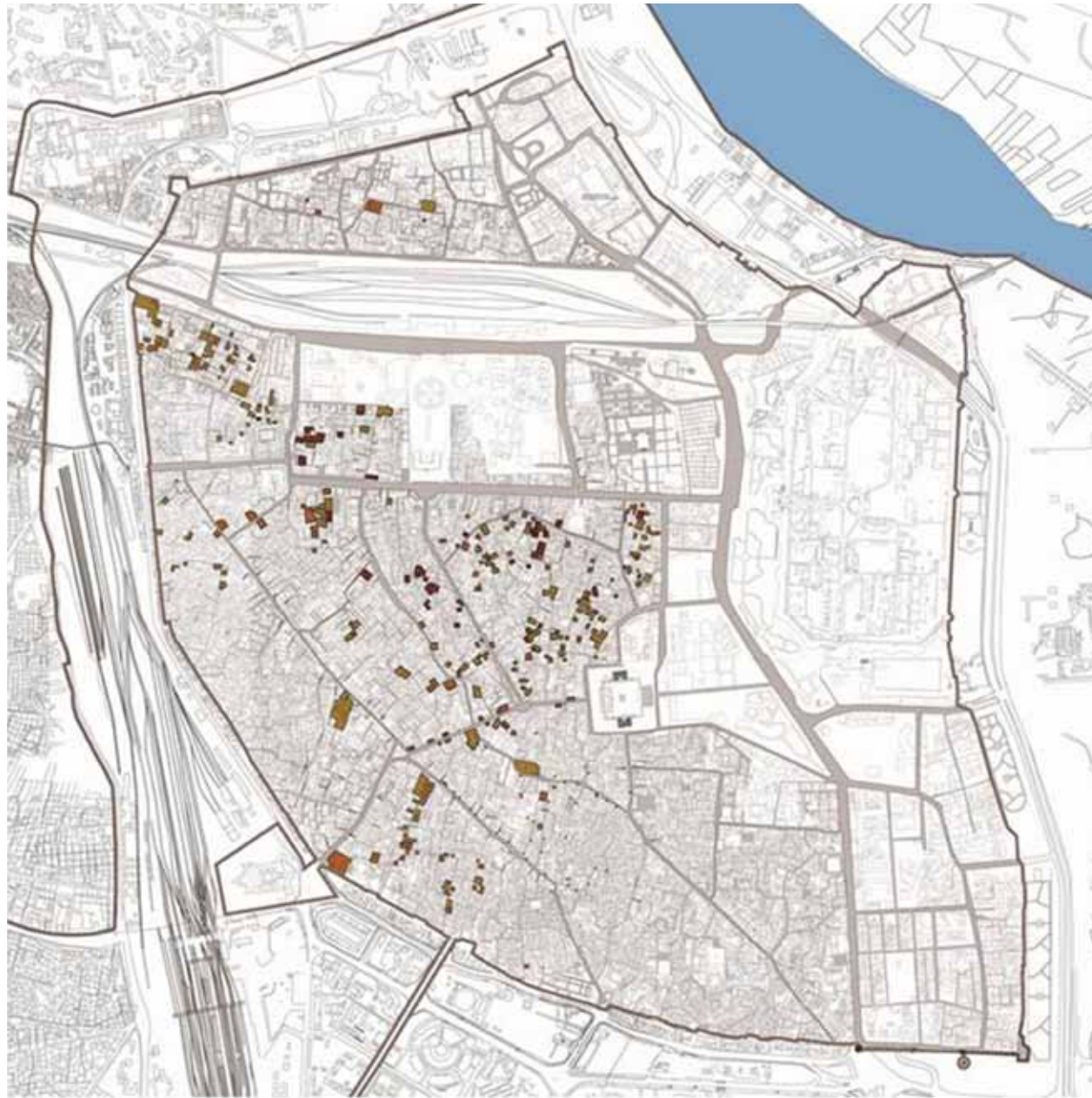
Chunnamal ki Haveli



Mirza Galib ki Haveli



Zeenat Mahal ki Haveli



■ INTACH Grade A Heritage Havelis ■ INTACH Grade B Heritage Havelis ■ INTACH Grade C Heritage Havelis

Proposals



Map showing location of sanitary landfill site disposal of waste from Shahjahanabad

■ Ghazipur Landfill Site ■ Shahjahanabad

General Recommendations for Designing Tourist Routes

Waste Management Plan

Objective

To implement a zero waste management strategy in Shahjahanabad through segregation, collection, storage transportation, processing and disposal.

Existing Conditions

- Shahjahanabad has an area of 569 ha with a high density approx. 439 pph. The total waste generated is 125 TPD.
- The total cost of transporting waste to landfill sites by the local body is estimated at Rs 87,500 per day (700/- x 125 tons) i.e Rs. 26.25 lakhs per month.
- The area has enormous economic activity in the market as well as on the ribbon corridor roads which generate large amounts of waste:
 - i. Organic waste (40%)
 - ii. Recyclable waste (39%)
 - iii. Combustible waste (10%)
 - iv. Inert waste (15%)

Composition of Municipal Solid Waste Generated Shahjahanabad

Area	Total Population	Solid Waste generated @ 0.5 kg per capita per day (in kg)	Organic Waste (40%) Bio-degradable	Recyclable Waste (39%) Glass + Ceramic (5%) Metal (3%) Paper (23%) Plastic 4%	Combustible Waste Textile (9%) Wood (1%)	Inert Waste
Shahjahanabad		125000	50000	6250 3750 28750 5000	11250 1250	18750
Total	250000	125000 (125 tons)	50000 (50 tons)	43750 kg (44 tons)	12500 kg (13 tons)	18750 kg (19 tons)

Non-recyclable waste of 5–10% will be disposed in the landfill site.

Solid Waste Management: Typologies of Waste Generated and Related Issues

Residential areas

Typologies of waste

Biodegradable waste, paper and plastic, textile, glass and sanitary waste.

Issues

- No daily collection of waste
- No segregation at source
- Overflowing bins and dhalaos leading to encroachment on streets and pedestrian paths
- No space for sorting and segregation in the dhalao

Commercial and Mixed Use Streets:

Typologies of waste

Biodegradable waste, paper and plastic, textile, glass, sanitary and bio-medical inert waste

Issues

- Bins are not distributed uniformly throughout markets
- Encroachment of overflowing waste on to pedestrian and road ROW.



Map showing typologies of waste generated and related issues in different land uses

Summary

- No segregation of waste at source
- No 100 per cent coverage of door-to-door collection
- Waste not collected daily
- Overflowing of waste encroaches on to the pedestrian path and creates unhygienic conditions on roadside dumping areas
- Dhalaos poorly designed with no space for sorting, segregation, separation and storage of waste

General Recommendations for Designing Tourist Routes

Waste Management Plan

• Roads / Street area

Typologies of waste

Dust, paper and plastic etc.

Issues

- Burning of waste
- No daily sweeping
- Coverage of sweeping not sufficient

• Green areas

Typologies of waste

Biodegradable waste, paper and plastic

Issues

- Burning of leaves etc.
- No daily collection/sweeping.

• Public and Semi-public Use

Typologies of waste

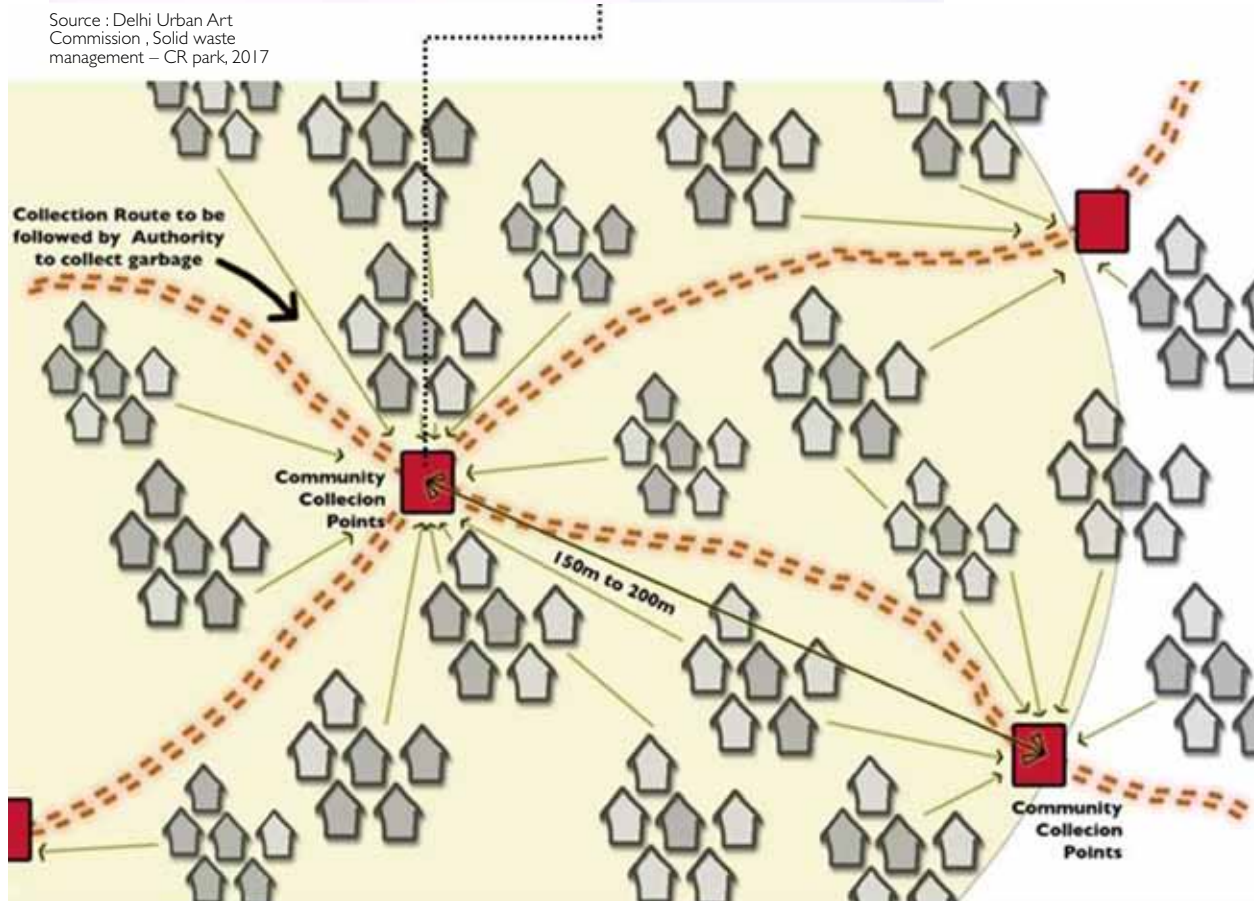
Bio-degradable waste, organic waste, flower and perishable items, recyclable waste

Issues

- Bins are often overflowing
- No uniform pattern in bin placement
- Burning of waste causing pollution
- Encroachment of overflowing waste on to pedestrian paths and ROW



Source : Delhi Urban Art Commission , Solid waste management – CR park, 2017



Community Collection Points/ Dustbin Prototypes

- Designed for ease of segregation at source
- Minimum spillage and ease of maintenance
- Minimum open dumping

General Recommendations for Designing Tourist Routes

Waste Management Plan

Provision of dustbins

- Compulsorily use and maintenance of dustbins that will be provided to shopkeepers, both in groups or as individuals, depending upon the type of waste generated. This would ensure incentives in the form of compensations in the form of better levy/maintenance charges charged by authorities.
- Authorities can prescribe the dustbin design type to be used. However they should be equipped with a spittoon, waste segregator and cigarette stubbing stand.

Regular collection and street cleaning

- All waste, including domestic waste will be disposed by individuals at designated community collection points. Property owners who leave garbage unattended on the street will be penalized.
- The community collection points (CCPs) will be located at intervals such that they have a coverage of 150 to 200 m along specified routes followed by the authority collection vans for collection and dumping of solid waste.
- Authorities will run street cleaning vehicles at regular intervals to ensure that the streets are clean throughout the day.

Rejuvenation of Shahjahanabad



Map showing typologies of waste generated and related issues in different land uses.

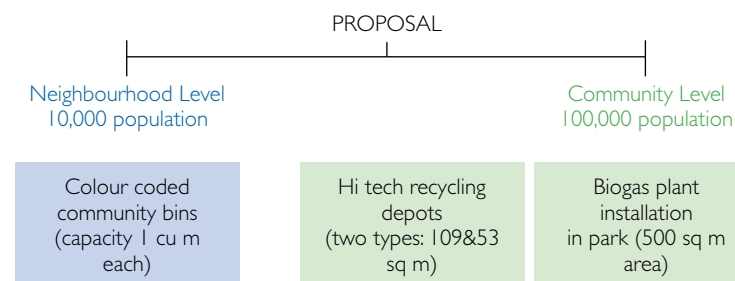
Legend

- Colour coded community bins (01 cum)
- Recycling depots
- Biogas Plant (05 tons capacity per day)
- ➔ Proposed route for garbage collection

Proposals

General recommendations for tourist routes

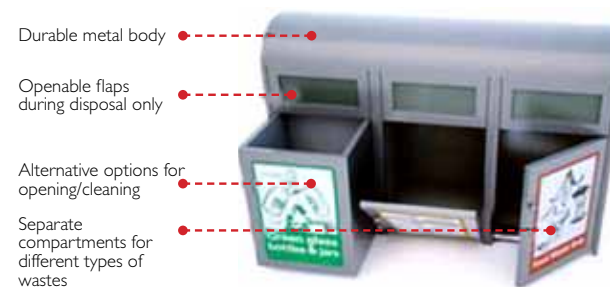
Waste Management Plan



I. Proposal for colour coded bins

Spacing of colour coded community bins – governing factors for spacing

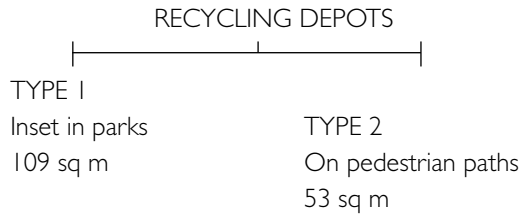
- a. Availability of space for installing a dustbin at intersections of roads, near community garden or public utilities/market areas and other similar places
 - b Capacity of dustbin
 - c Population density
 - d Average distance convenient for residents and sweepers for taking the refuse to the dustbin
- Colour coded bins at maximum 150 m apart.
 - Conceptually estimated no. of bins – 400 for existing 2.5 lakh population



Source : Delhi Urban Art Commission , Solid waste management – CR park, 2017

2. Proposal for colour coded Bins

- 12 Locations for Recycling Depots identified
- Two types of Recycling Depots have been proposed, depending on availability of space, to replace existing dhalaos.



Total: 06 in number Total: 06 in number

Facilities

1. Area for segregation and temporary storage of recyclable waste
2. Public toilet compost pits

- Facilities**
1. Area for segregation and temporary storage of recyclable waste
 2. Public toilet

Type 1 – Hi-Tech Recycling Depots:



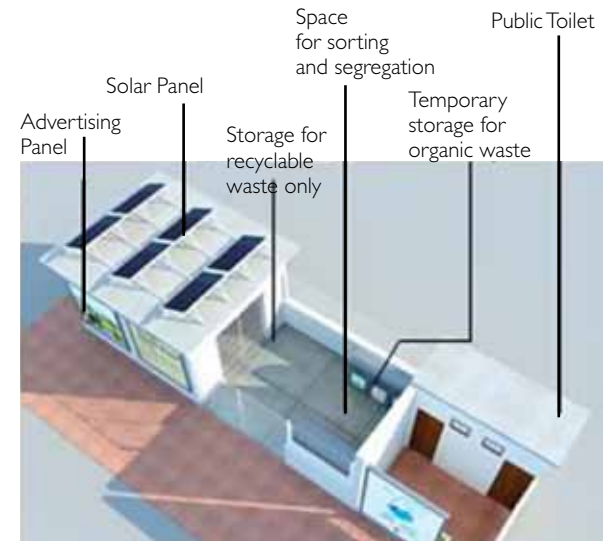
Design credits : Delhi Urban Art Commission , Solid waste management – CR park, 2017



General Recommendations for Tourist Routes

Waste Management Plan

Type 2 – Hi- Tech Recycling Depots:



3 D View of Type-2 Hi-Tech Recycling Depot



3 D View of Type-1 Hi-Tech Recycling Depot

3. Lighting of public open spaces-based biogas plant in Bagh Diwar Park:

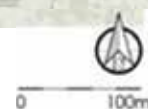


Legend

Tentative Location of Biogas Plant

Formal Restaurants and Hotels

Culinary Zones – All Day Meals and Snacks Area



- Restaurants, hotels and culinary zones contribute to organic waste which will be treated in the biogas plant.
- The proposed biogas plant will help generate electricity and produce manure as a by-product. This energy can be utilized to light public open spaces (about 700 tube lights).
- The capital cost of the plant at the existing market value is approximately Rs.120 lakhs. The pay back period of the project is estimated at 8 years.

General Recommendations for Tourist Routes

Waste Management Plan

The proposed biogas plant with a capacity of 05 tons per day requires about 500 sq m area in Bagh Diwar Park

The following are the standard calculations for 5 ton biogas plants utilized for electricity generation:

Project Biogas Utilized for Electricity Generation

1.	Plant cost	Rs 120 Lakhs
2.	Biogas generated	300 cum/day
3.	Electricity generated	400 kwh/day
4.	Auxiliary consumption	@ 50kwh/day
5.	Annual saving by using biogas (considering 330 operating days)	Rs 7.50 lakhs (350 kwh/day × Rs 6.50/ kwh × 330 days)
6.	Annual saving from manure	Rs 1.8 lakhs (150 tons per annum × Rs 1200/ MT)
7.	Savings (electricity+ manure + transportation)	Rs. 20.8 lakhs
8.	Saving to ULB in transportation of waste to landfill site	Rs 11.50 lakhs (5TPD × Rs. 700/ tons × 330 days)
9.	O & M Cost	Rs 20.8 lakhs
10.	Net savings	Rs 9.50 lakhs/year
11.	Simple pay-back period	08 years

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