

ANALYTICAL STUDY OF DISTRICT CENTERS IN DELHI

A DISSERTATION

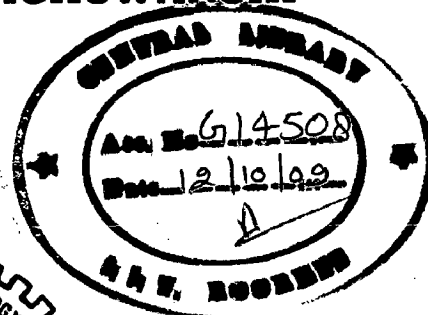
*Submitted in partial fulfillment of the
requirements for the award of the degree*

of

MASTER OF ARCHITECTURE

By

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JUNE, 2009

CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in this dissertation report entitled "Analytical Study of District Centers in Delhi" in partial fulfillment of the requirement of the award of Degree of Master of Architecture submitted in the Department of Architecture and Planning, Indian Institute of Technology, Roorkee is an authentic record of my own work carried out during the period of June 2008 to June 2009 under the supervision of **Dr. Pushplata**, Department of Architecture and Planning, Indian Institute of Technology Roorkee, Roorkee.

The matter embodied in this Dissertation has not been submitted by me for the award of any other degree.

Dated: 29th June, 2009

Place: Roorkee


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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.



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Especially, I would like to give my special thanks to my family whose patient love enabled me to complete this work. This dissertation is dedicated to them.

ABSTRACT

The District Centres are envisaged to serve as a climax of multi-nodal activities of the community, providing the city with a hub of mixed use activities, including commercial, retail and community facilities. It is a place, which brings all the necessities of daily life to the neighbourhood. They also effect the decentralization of the city centre into a number of smaller business centres to avoid congestion in the heart of the city and also to provide mixed zoning of the sub- districts of a city.

District centres constitute a variety of buildings types, from corporate offices to mixed-use office buildings with retail shops, hotels, restaurants, shopping malls, entertainment retail, community facilities, and public service. They also serve as places for the community together, and serve as a public space.

They support the commerce of a city and offer significant contributions towards its economy. They create a variety of jobs concentrated at one place and attract a large number of people for different purposes, such as business, shopping, entertainment and community gathering. They also form the infrastructure of a city by providing utilities such as petrol pumps, police station, fire station, clinics, post office and other government offices all at one place.

Thus, the district centres can be seen as a very integral part of a growing city, providing it with all the necessary facilities at one place and sustaining the neighbourhood. Proper planning of a district is a matter of prime concern for the planners of the city as they form a centre of commerce, shopping and entertainment at the same time. Proper attention is needed towards issues such as parking, pedestrian movement and segregation of traffic to create a meaningful public space which can be used by the whole community.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Work Centers have always been an important organizing force of an Urban Fabric. Their association to the day-to-day life of a common man is profound. Since historical times 'Central Areas', 'Bazaars' all of which were 'Work Centers' on basis of functionality, have been an important part of urban settlements and hence their planning and designing introduced the concept of district center by Delhi Master Plan.

District Centers are basically Work Centers of Delhi. They are designed to cater the need of people residing in that planning district. A district center is planned to serve 4-7 lakh of population. A district center consists of retail shopping, commercial offices, cinemas, restaurants, socio-cultural activity where people can get together and also banks, petrol pumps, bus terminal, informal sector as well as other amenities and facilities. The main aim of Delhi Master Plan was to check the haphazard development of Delhi and to promote a balanced and decentralized growth. Accordingly all of them are planned to have their own centre called as "District Centre".

1.2 NEED FOR STUDY

District Centers which were designed to 'decentralize' CBD's in terms of employment and community facilities and to maintain good relationship between home and workplace and consequently reduce traffic congestion. Delhi has been divided into nine planning districts such as-

South Delhi- Nehru Place, Saket District Centre, Bhikaji Cama Place,

East Delhi- Laxmi Nagar, Central Delhi- Jhandewalen, Rajendra Place,

North West Delhi- Mangalam Place (Rohini), Netaji Subhash Place (Wazirpur),

West Delhi- Janakpuri, Shivaji Place (Raja Garden).

It has been observed that there are changes in the design, activity patterns, circulation, built form and appearance came up in different phases. For example the

transition from the practice of using metro rail from smaller cars to bigger cars to private and again to mass rapid transit system over a period of last 50 years has periodically changed the parking requirements in a district centers. Likewise the built form and architectural expressions of pressing issues like parking, safety and aesthetics of district centers on one phase are considerably different than those of another. An in depth/analytical study of these district centers help us to identify various approaches to design of district centers their problems and issues and enable us to justice to their significant role in urban settlements.

1.3 AIM

The thesis aims to do the Analytical study of District Centres of Delhi.

1.4 OBJECTIVES

- 1) To understand the functioning of District Centers.
- 2) To understand various issues and aspects of District Centers.
- 3) To do a comparative study of District Centers of each phase as per Master Plan and drawing inferences.

1.5 METHODOLOGY

The methodology undertaken includes three stages:

- I. The general background of work places in terms of :
 - A. The study of origin and context of 'Central Areas'/Town Centers of towns from various historical periods. Because district centers are peculiar to Delhi and parallel can only be drawn from central areas of earlier towns having similar functions to the present day district centers.
 - B. The growth and evolution of the 'Central Areas'/Town Centers in terms of location (setting), planning, functioning, activity pattern, aesthetics, urban form, character and significance.
- II. The background of district centers in Delhi in terms of :
 - A. A brief overview of the evolution of work centers in Delhi from pre-colonial times and colonial times.

- B. The growth and evolution of District Center's in Delhi since first Master Plan, in terms of location (setting), planning, functioning, activity pattern, character, urban form, aesthetics and significance.
- C. A review of the provisions regarding District Center's in Delhi Master Plans from 1962-2021.

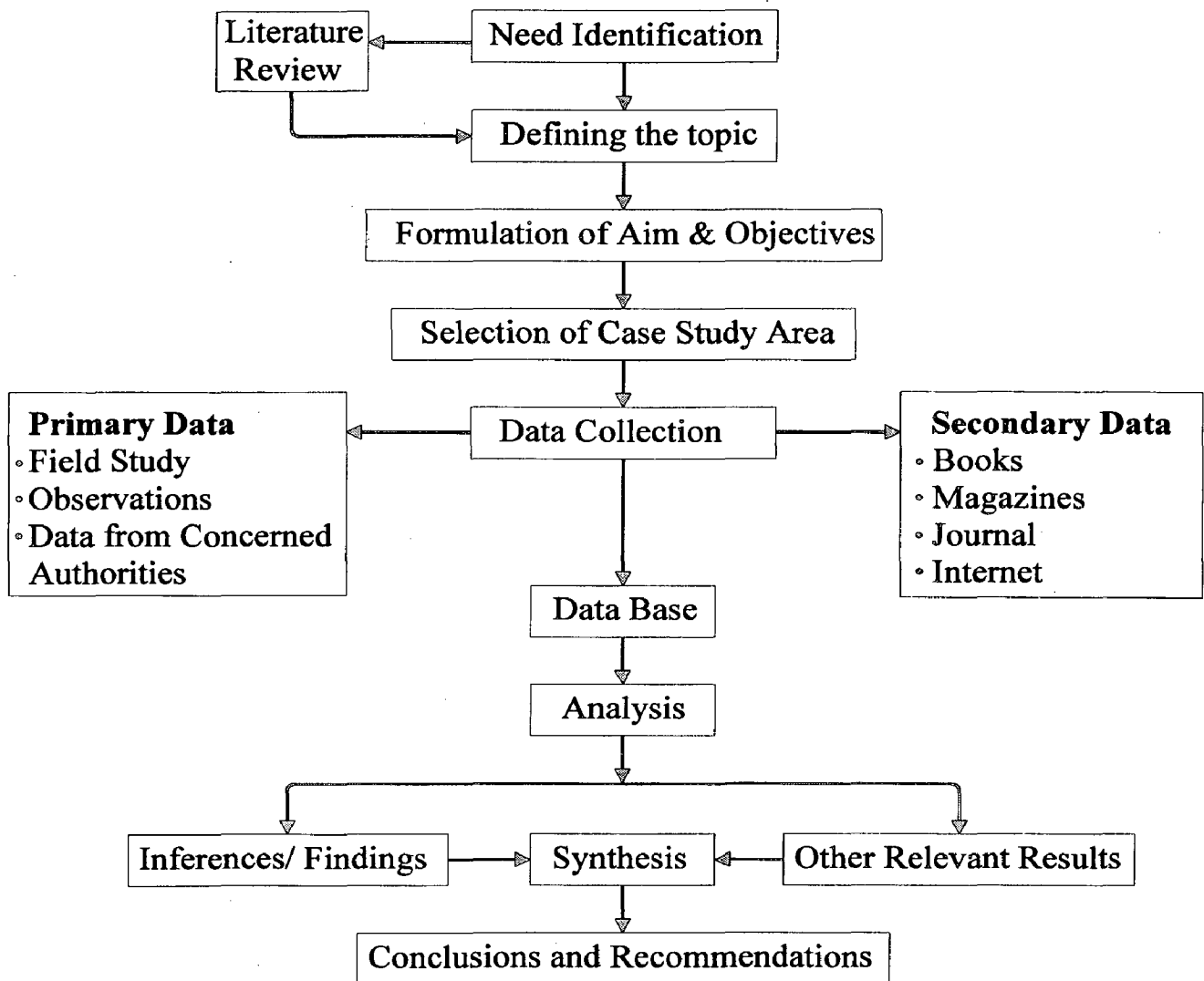


Fig 1.1: Methodology Chart

III. To conduct observational/analytical studies so as to understand the following in context of selected District Center's in Delhi.

- A. To understand the- circulation, activity patterns, parking, open spaces, urban form, landscaping and aesthetics of Nehru Place, Bhikaji Cama

Place, Laxmi Nagar, Saket Place and Jasola.

- B. To understand the changes in pattern of District Centre designs between earlier phase and later phase so as to identify the changing trends.
 - a) To understand important issues and aspects related to it's planning and designing.
- C. To understand the various patterns, form of selected District Centre.
 - a) To undertake detailed observational studies of the selected District centre and analyze it in terms of- layout, connectivity, open spaces, landscaping, built form, functional efficiency, services and aesthetics.
 - b) To understand various issues and aspects of District Centers.
 - c) Comparative and analytical study of Nehru Place, Bhikaji Cama Place, Laxmi Nagar, Saket Place and Jasola.

IV. Conclusions and Recommendations

1.6 SCOPE AND LIMITATION

1. The scope of the study is limited to the context of Delhi.
2. This work will primarily limit to detail study Nehru Place, Bhikaji Cama Place, Laxmi Nagar, Saket Place and Jasola.

Extent of study made was dependent on the availability of research material, information and time.

CHAPTER 2

TOWN CENTRES IN URBAN SETTLEMENTS

2.1 INTRODUCTION

In this chapter various aspects of Town Centre have been discussed such as (i) definition and requirement of town centre, (ii) zoning- theoretical relationship of zones, zones of special function, diversity and zoning, (iii) circulation pattern - vehicular and pedestrian, integrated circulation system, central area primary distributor, two level circulation and urban motorways, secondary distributor and service roads, pedestrian network, (iv) parking space, (v) urban form, (vi) conservation, (vii) approaches to design of central areas in a metropolitan centre.

2.2 DEFINITION AND REQUIREMENT OF TOWN CENTRE

It is basically the centre of commercial, administrative, cultural, social, recreational and industrial. It caters to all kind of needs of people living in that area. It has its own character at some places it needs conservation whereas some needs redevelopment. Requirement of a town centre varies from town to town.

Town centre is usually divided into three broad groups: the business or commercial group, which may be subdivided into the shopping centre, offices and wholesale warehouses; the civic group, being the main administrative, cultural and social centers, containing the town hall and other public buildings, and educational and recreational buildings, like a college and the theatre; and the light industrial area, containing the small factories and workshops. There will be some overlapping of functions. Major zones will be sub divided into smaller ones; entertainment buildings, like a cinema is usually associated with shopping; important buildings, like churches, may be scattered over the whole area; and there may be additional zones performing some specialized functions. It causes diversity in use and appearance, essential to a lively centre. The character of the central area as a whole, the place that should give the greatest feeling of urbanity: its spaces should be the most highly organized, the most architecturally and give the greatest impression of a town environment.

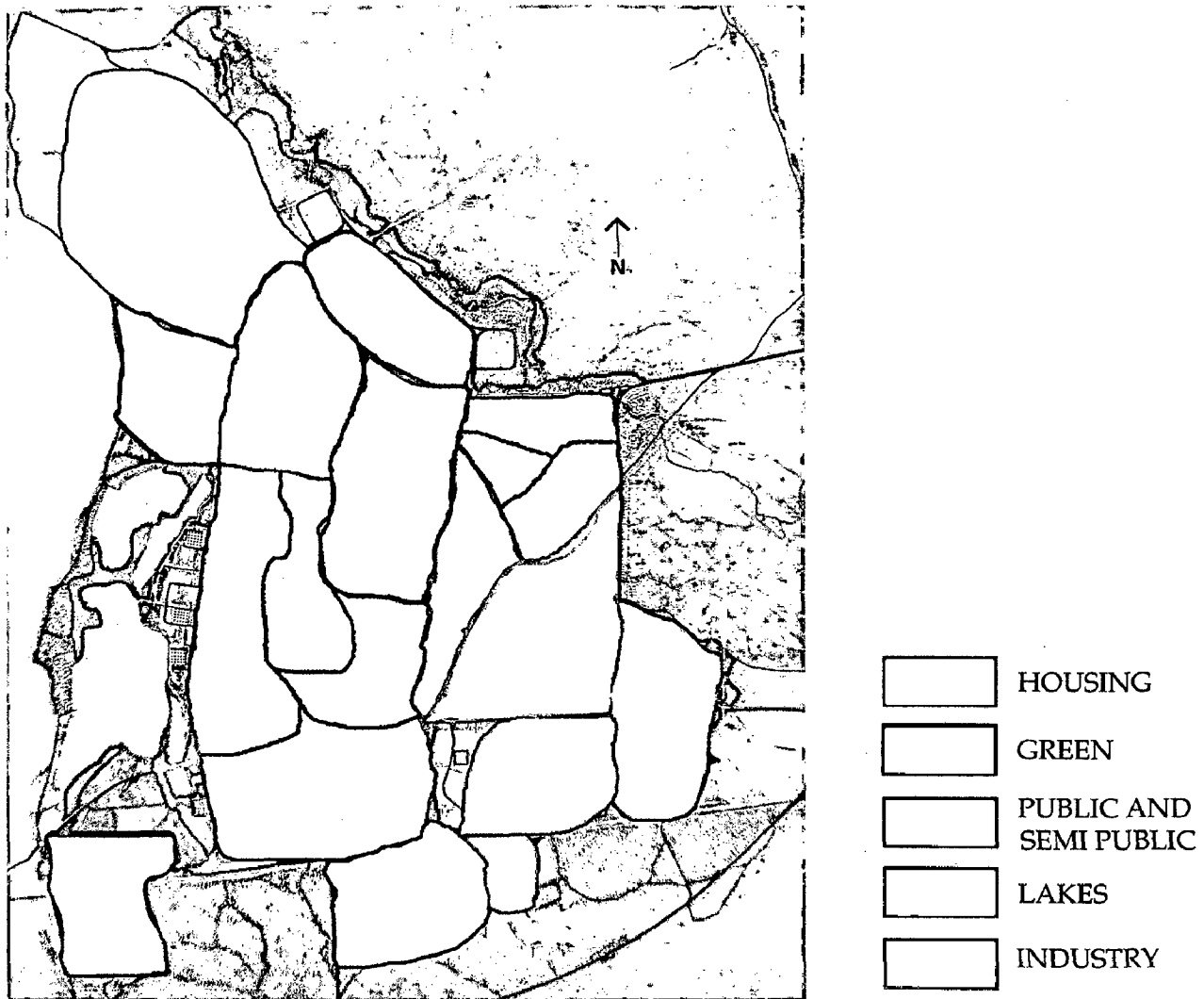


Fig 2.1: Land use plan of Hook New Town study done by London's Country Council

Source: Base Map, courtesy- Town Design by Frederick Gibberd

2.3 ZONING

Theoretical relationship of zones, zones of special function, diversity and zoning:

Theoretical relationship between three major zones, Light Industry, Business, and Civic is discussed, (a) Light Industry, which would be the small workshops, and service industries, is on the railway line where it has the least attractive position, and where an opportunity is given to form a railway siding. The Business area, with its shops, offices and wholesale warehouses, would be placed near the bus and railways stations, and between the Light Industry and the Civic group; it functions with both of them. The Civic Group, the most splendid area architecturally, is the most remote from the railways and Light Industry, the least attractive areas.

(b) The outdoor sports facilities provided for the town as a whole, such as stadium and cricket ground draw people from all parts of the town and from the surrounding region. (c) Shops, offices and warehouses are often mixed together in the business zone, they require quite different siting conditions and are better planned a three zones: Shopping centers, office Area and Warehouse Zones.

(d) The office zone overlapping the shopping, a distinct warehouse zone, and the shopping zones in which market is included. When the centre is decked over the zoning may become three dimensional, making a much closer and more intimate relationship of the parts with a corresponding increase in liveliness.

(e) A spine road passes under the deck to serve the buildings and car parks and a single loop road passes along one side, leaving the other free of obstruction, which enables it to be extended into housing. Visitor's car parking is likely to be associated with the loop road, to reduce pressure on the spine and to keep building costs down- to place all the serving and all the cars parking under the deck. (f) A town with more than normal administrative functions, such as regional centre, will have so large a variety of offices that they may function better as two zones: a large one for commercial firm, which might be near the wholesale warehouses and service industry, and a smaller one for doctors, architects and other professional people, which might be close to the Civic Group

(g) Public utility companies, have showrooms may be associated with the shopping centre. They generally like to be placed in the heart of a main shopping street, but since they have none of the bustle and activities of 'selling over the counter'; their ideal position is probably at the end of a shopping street, which runs into the Civic Group, or into the office zone. (h) In creating special entertainment zones, care must be taken that the Civic group is not drained of all buildings like restaurants and cafes; otherwise it may lack visual variety, and may be lifeless for long periods. Many market places have a distinctly different character from the rest of the shopping centre.

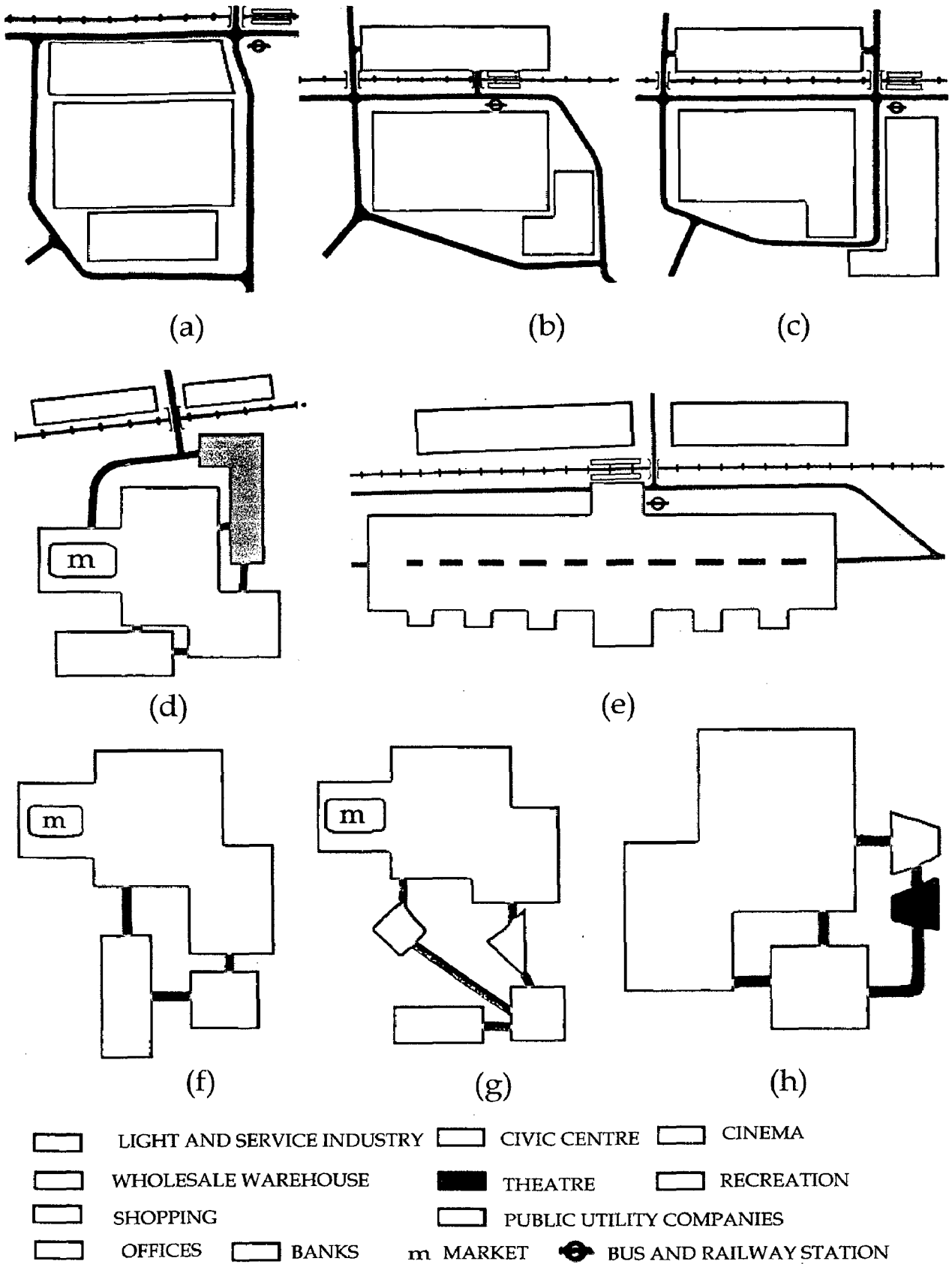


Plate 2.1: Various key plans of theoretical relationship of zones

Source: Base Map, Courtesy- Town Design by Frederick Gibberd

There are some towns where zoning is not found in a town centre because of some special function. Places like university campus, seaside towns, and port, market and manufacturing towns, all have the special functions, which usually find expression in the central area. So designer/planner should pay special attention for those areas while designing.

It is desirable to have some overlapping of functions in order to make the centre attractive, an interest and liveliness must be sustained in all its parts. This only happens when there is some mixing of building uses, resulting in contrast in architectural character and in the drawing people together using the centre at different purposes. If proper zoning is not done than dead and lifeless areas can be easily created. The aim should be to gain everything by mixed building uses with proper control and primary character of each area should not be destroyed.

2.4 CIRCULATION SYSTEM IN CENTRAL AREAS

Integrated Circulation System, Central area primary distributors, Two-level circulation and urban motorways, Secondary distributors and service roads, Pedestrian network.

a) Integrated Circulation System,

The growth of private car ownership is rapidly expanding and if the situation remains the same the day is not so far when town centers will be destroyed unless restrictions are placed on the motorist. It is no solution just to ban the private car from the streets of the central areas; solution is needed in terms of better and bigger roads. The problem is an extraordinary complex one and it can only be solved by complex systems of circulation system, which will be unique to each individual centre.

The complexity of the transportation system of a large metropolis is explained by the plan of Philadelphia (Fig. 2.2). It has interlocking of three different types of movement: automobiles, via an expressway loop; commuters via the railways, the underground railway and the bus systems; and pedestrian on decked walkways. The expressway loop encloses the rectangular central area and on it are sited

parking garages for 14,000 cars, and further parking garages are sited within the inner core. The heart of the plan contains underground concourses and in orange color indicates a pedestrian mall, with electric trolley service, which leads to the car parks.

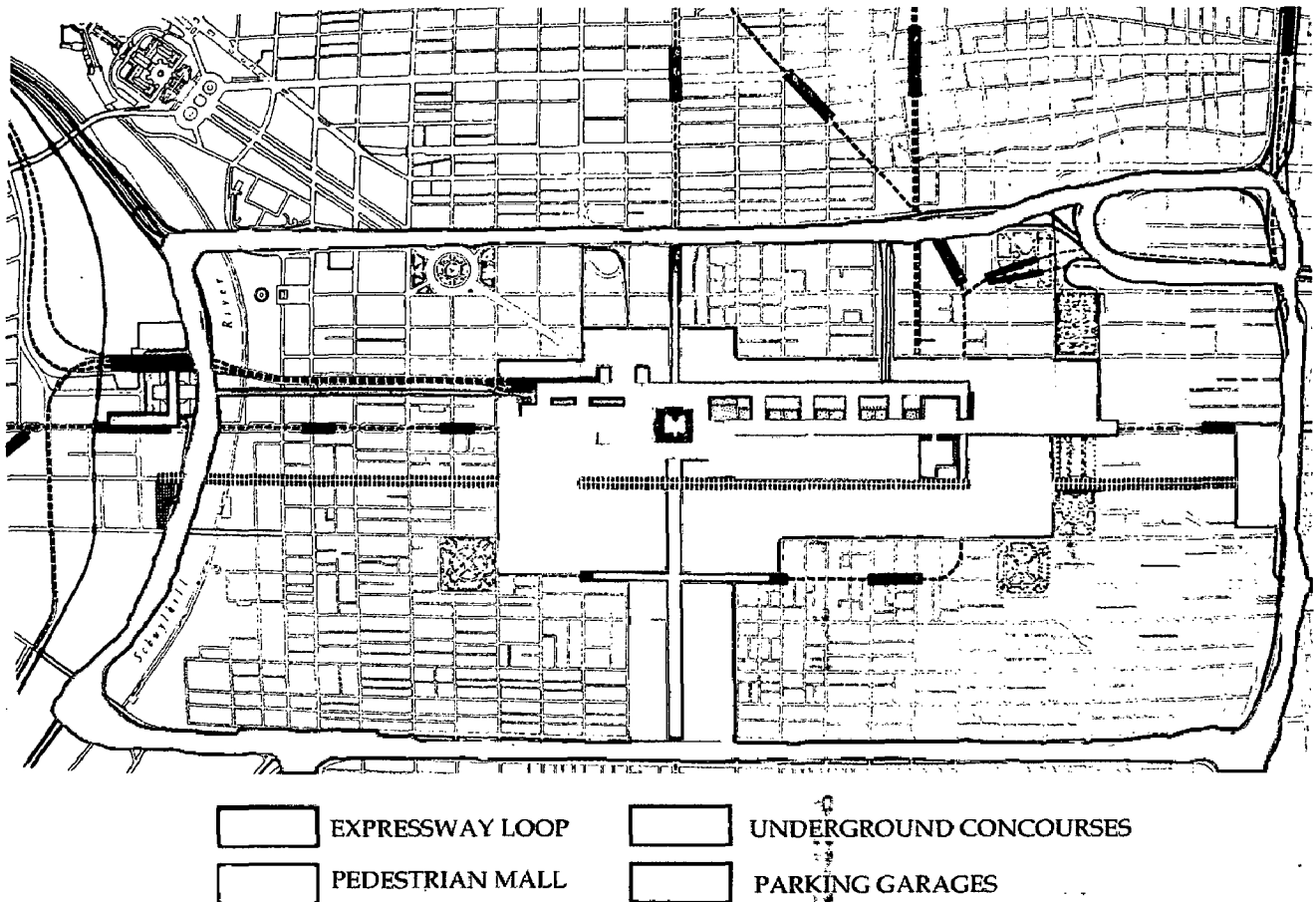


Fig 2.2: Philadelphia central area showing three different types of movements

Source: Base Map, Courtesy- Town Design by Frederick Gibberd.

b) Central area primary distributors:

The primary distributor is the backbone of the vehicular circulation system, linking the main zones to the rest of the town. It is not a bypass road, it is one of the primary distributors for the town as a whole: in other words, all the traffic using it will not be calling at the town centre.

The radial plan structure of the majority of towns concentrates all the traffic on to the central core and in order to prevent this it is connected to the radial roads together by a primary distributor in the form of a ring or loop road to pick up the traffic and divert it round the perimeter to the various points of entry to the centre.

As in case of St. Albans (Fig 2.3) central area where it has to take a considerable volume of traffic that has no business in the centre and town is also not a large one, where a large-scale primary distributor forms a north to south link on one side of the centre.

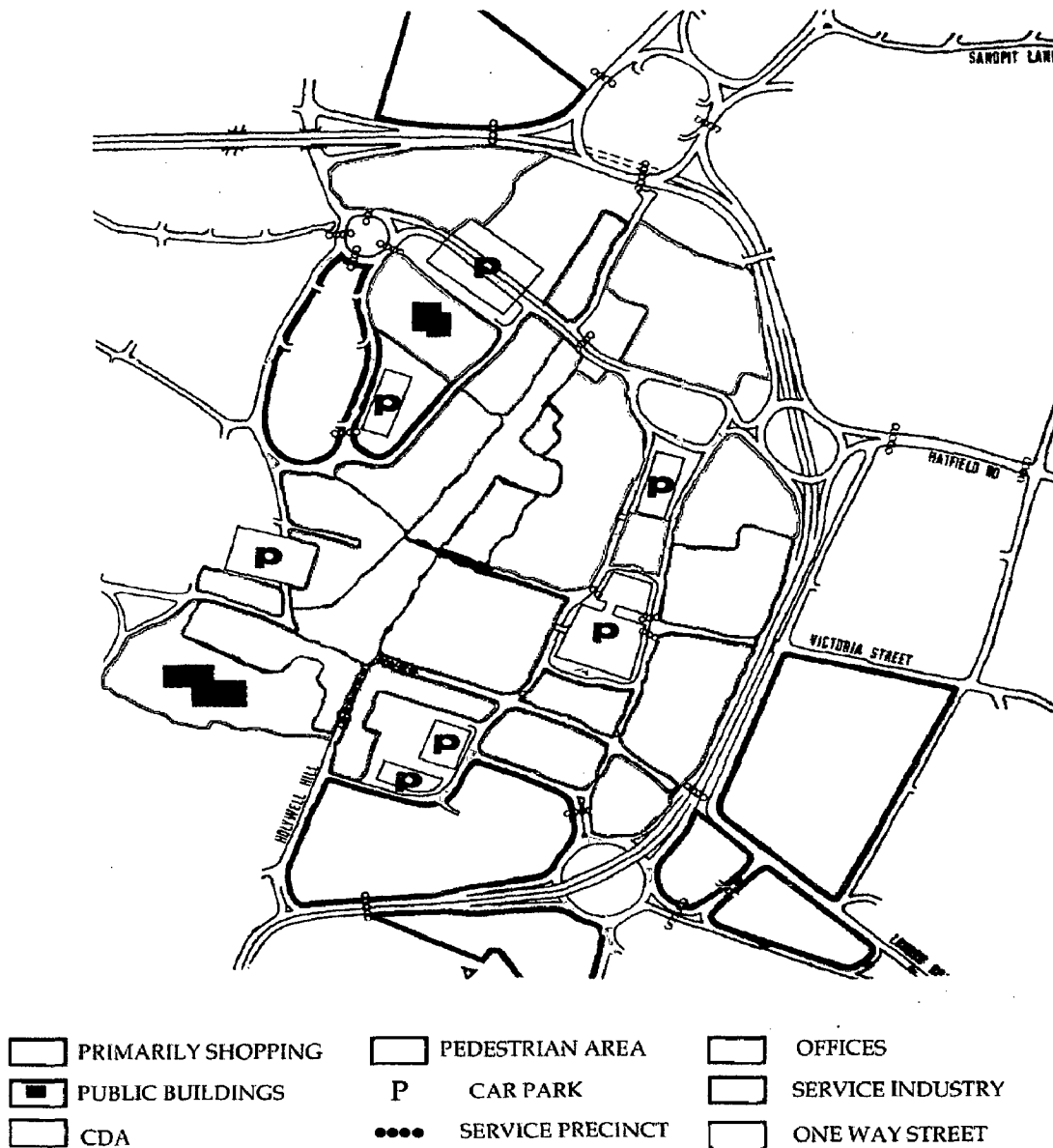


Fig 2.3: Land use map of central area of St. Albans by Ernest Doubleday

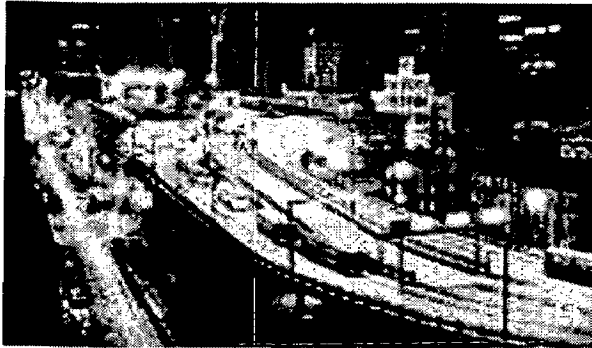
Source: Base Map, Courtesy- Town Design by Frederick Gibberd

c) Two-level circulation and urban motorways:

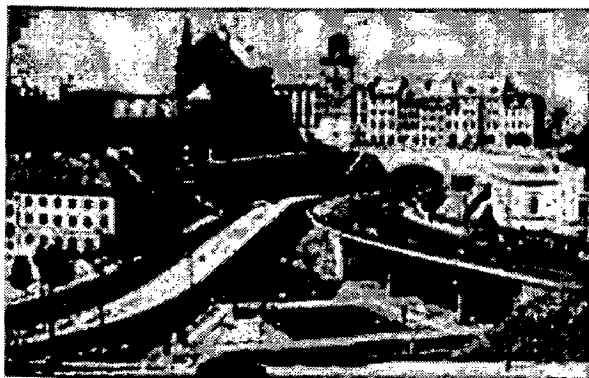
In the centre of a large metropolis the traffic densities is so high and the available space is so limited, the existing roads are almost fully occupied for getting people, goods. A high-speed elevated highway, running over the existing roads and

buildings, solves all the problems but at a considerable cost to the city as a living organism: the Bus Terminal (Fig 2.4). In new development it is possible to construct the road so that it will not cause over shadowing and other nuisance to buildings. There may be topographical reasons for raising a road but the elevated highway is likely to be restricted to positions where no other solution is possible, as in the Whitehurst freeway (Fig 2.5).

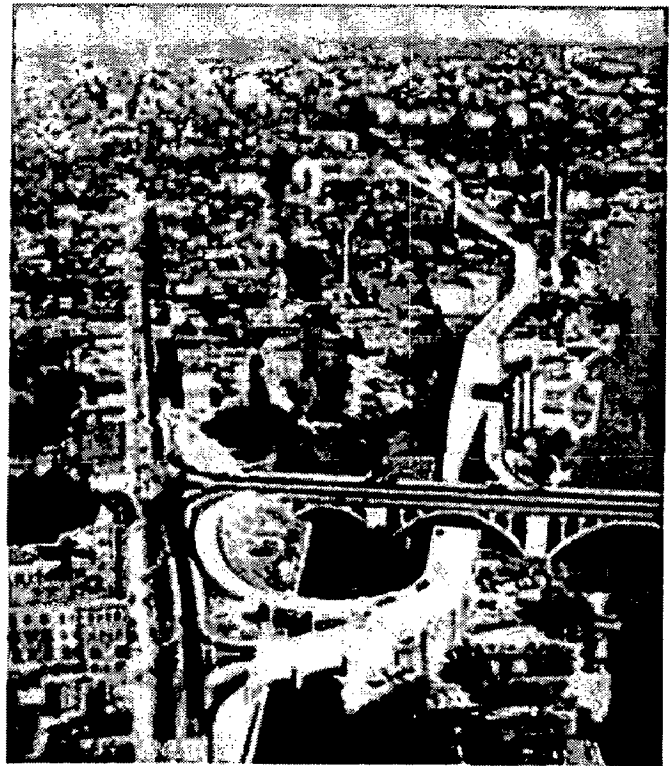
The tunnel may be even more expensive and is only applicable when overland routing is virtually impossible, as in the new Warsaw plan, where the east to west artery poses under a portion of the old city (Fig 2.6). The future of two-level circulation is not in elevating or depressing one particular element but in the vertical segregation of the complete areas as a total design.



(a)



(b)



(c)

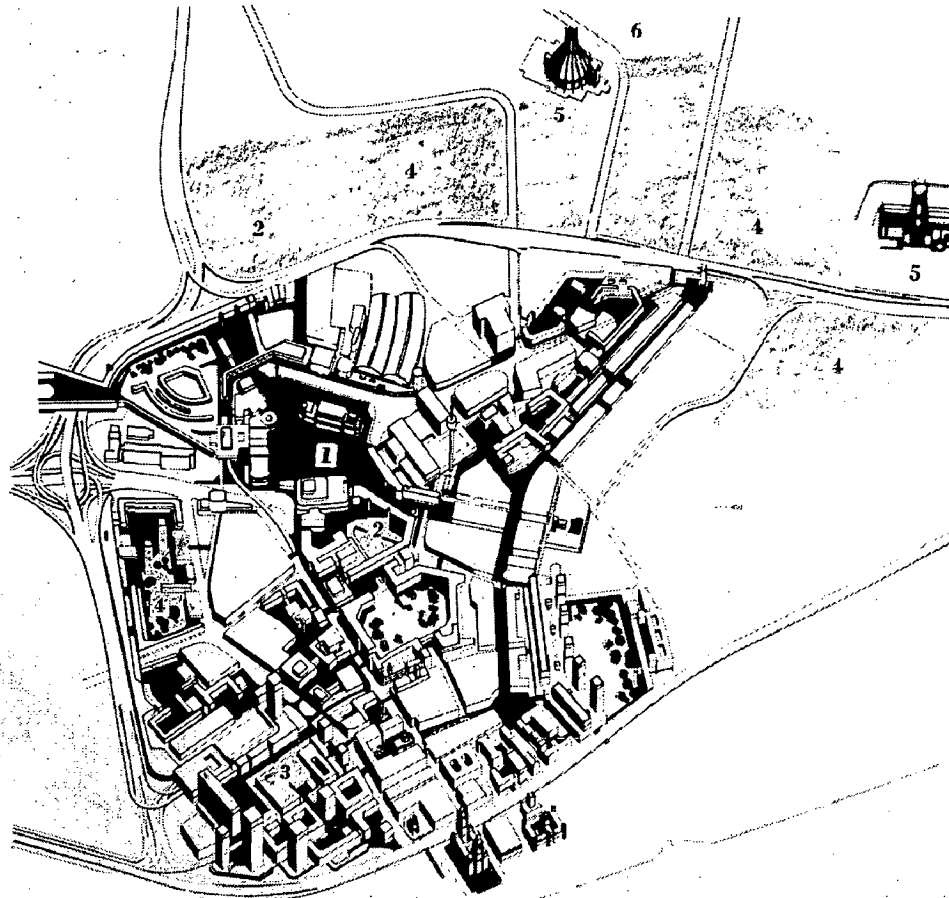
Fig 2.4: (a) An elevated highway, New York, Fig 2.6: (b) East-west tunnel road, Warsaw, Fig 2.7: (c) the Whitehurst Freeway, Washington

Source: Base Map, Courtesy- Town Design by Frederick Gibberd

d) Secondary distributors and service roads:

In small towns the secondary distributors or may be an inner periphery road (such as occur at Harlow and Stevenage) but large centers will be sub-divided into a

service of environmental areas around which the traffic will circulate on a secondary distributors system. It is found that large cities are sub-divided into zones, each having its own major function and character thus, at Liverpool central area (Fig 2.8). Apart from the usual civic, shopping and business zones, there are precincts for the university and two cathedrals.



	CIVIC CENTRE		SHOPPING ENTERTAINMENT		OFFICE ZONE
	RESIDENTIAL ZONE		CATHEDRAL PRECINCT		UNIVERSITY PRECINCT

Fig 2.5: Land use map of Liverpool central area

Source: Base Map, Courtesy- Town Design by Frederick Gibberd

e) Pedestrian network:

The pedestrian network which will run from traffic nodal points like public car parks, bus stops and the railway station and will focus on the precincts, of which the shopping centre will have the greatest pedestrian flow. It will be difficult, if not impossible, to do the complete segregation of pedestrian/ traffic congestion, in an existing town to avoid using some pavements alongside roads, but major roads will

be crossed by a bridge or underpass. Two-level segregation of this type, in the past, been mainly confined to subways at major interactions. The example, an area of comprehensive redevelopment, shows pedestrian routes running through the heart of the area, well clear of traffic interactions, and the use of existing levels for bridging service and main roads as shown in (Fig 2.9). In densely developed areas pedestrian bridges may connect to elevated walkways and the podiums of buildings to make a new pedestrian level above the existing roads.

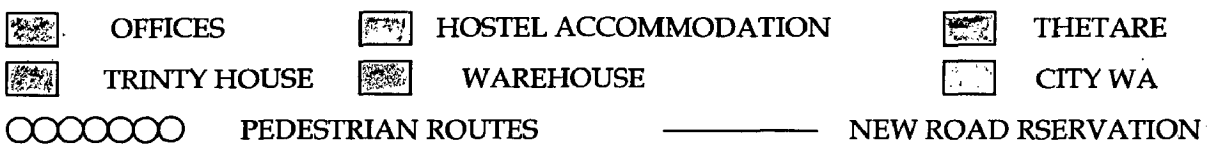
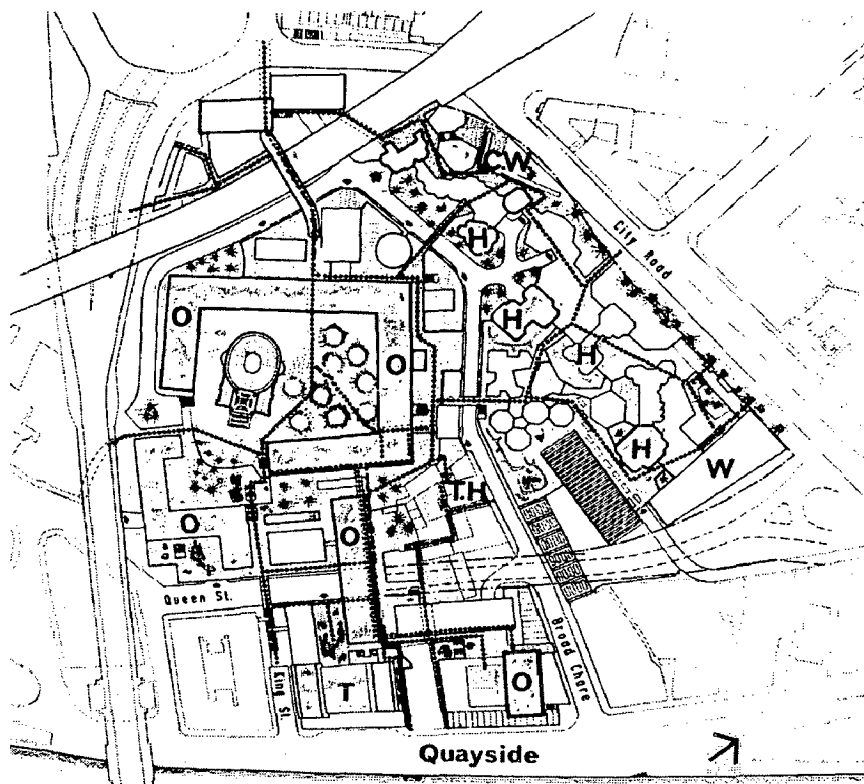


Fig 2.6: Land use map of All Saints redevelopment, Newcastle-on-Tyne

Source: Base Map, Courtesy- Town Design by Frederick Gibberd

Thus, in the South Barbican redevelopment in the City of London, there is a new ground level formed from the roofs of buildings and bridges, some 20 ft (6m) above the roads and on which are placed the main entrances to the buildings. Elevated walkways can be very open and draughty and there is a difficult problem of making

them as intimate and interesting as the old streets they replace: otherwise the public will not use them. This means having access to all the different building uses from the upper level and designing the podia to have the character of enclosed spaces rather than open decks. This may result in the formation of the complete upper level pedestrian precinct of multi-level centre.

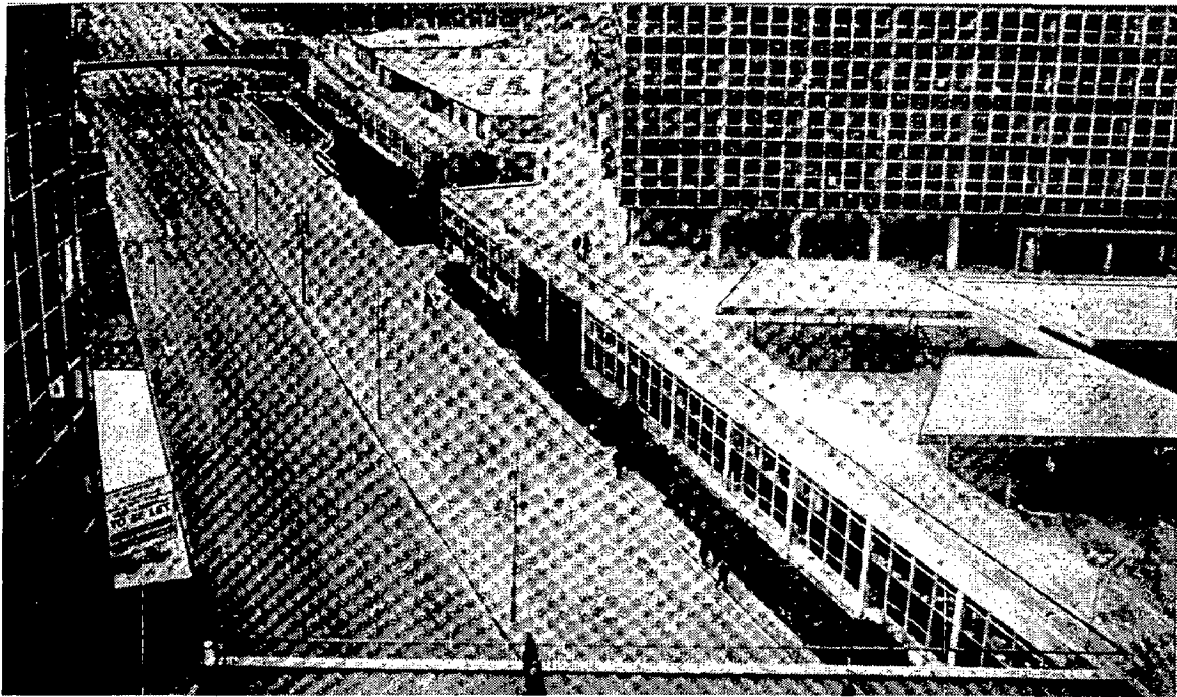


Fig 2.7: Pedestrian bridge connecting elevated walkway, London Barbican

Source: Town Design by Frederick Gibberd

2.5 PARKING SPACE

Parking is perhaps, the most difficult of all town centre problems because of the attitude of the citizen, earlier he was free to do almost what he likes. In the past it was reasonable: today the road has insufficient space to take the volume of moving traffic, and every motorist expects to be able to drive up to his destination and leave his car for any length of time.

When this becomes impossible, he demands bigger and better roads and car parks and he takes it as his right that they should be provided free of charge. Cars give an ugly view and should not be the part of visual composition of the centre. Many people are unconvinced about the harm the car does to the scene or accept it in their own selfish way: but today problem is not only with the aesthetics alone there is not

space to allow for indiscriminate parking and in the large city even multi-storey car parks will not be sufficient without wholesale demolition of buildings- it has been estimated that the provision of four-story car parking in Liverpool to house one car for every five workers would require the demolition of a third existing buildings.



Fig 2.8: Cars creating an ugly view

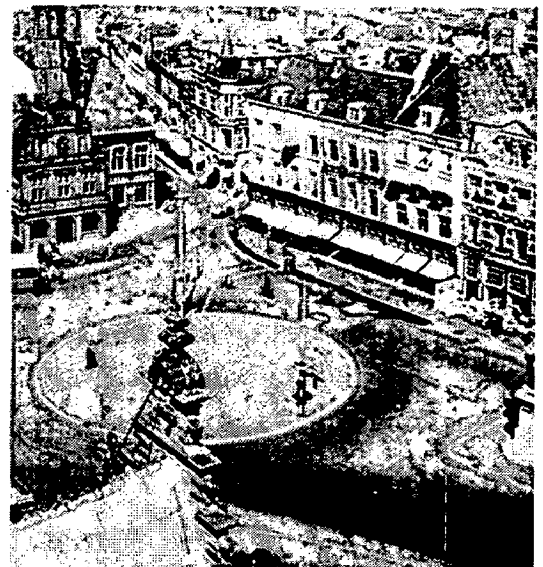


Fig 2.9: Shortage of parking space

Source: Town Design by Frederick Gibberd

Car parking is a function of private motoring; to succeed, both depend a much as upon provision of public transport as they do upon roads. In order to decide the amount of car parking, it is reasonable to divide the requirement into commuters and other users. Commuters are mainly office workers and it is not essential that they should for them to leave their cars adjacent to their work for the whole of the day.

On the other hand, it is important that cars can be used for shopping and they are left for comparatively short periods, in other words, there is a considerable turnover on the parking spaces. Everything must be done to encourage commuters to use public transport, by methods such as rapid peak-hour vehicles, subsidized if need be. The provision of car parking for the general public may be summarized by the word 'accessibility'. They should be dispersed round the centre in such a way that they are always within ten minutes 'walk of any attraction and the ideal plan is one in which they are linked together by primary distributor roads so that, when a park is full, the motorist can find an alternative without difficulty. The principle is

illustrated in the simulating proposal for Philadelphia (Fig 2.10), where cars are housed in huge circular towers ringing the central area, towers which are both symbolic and actual gateways to the city.

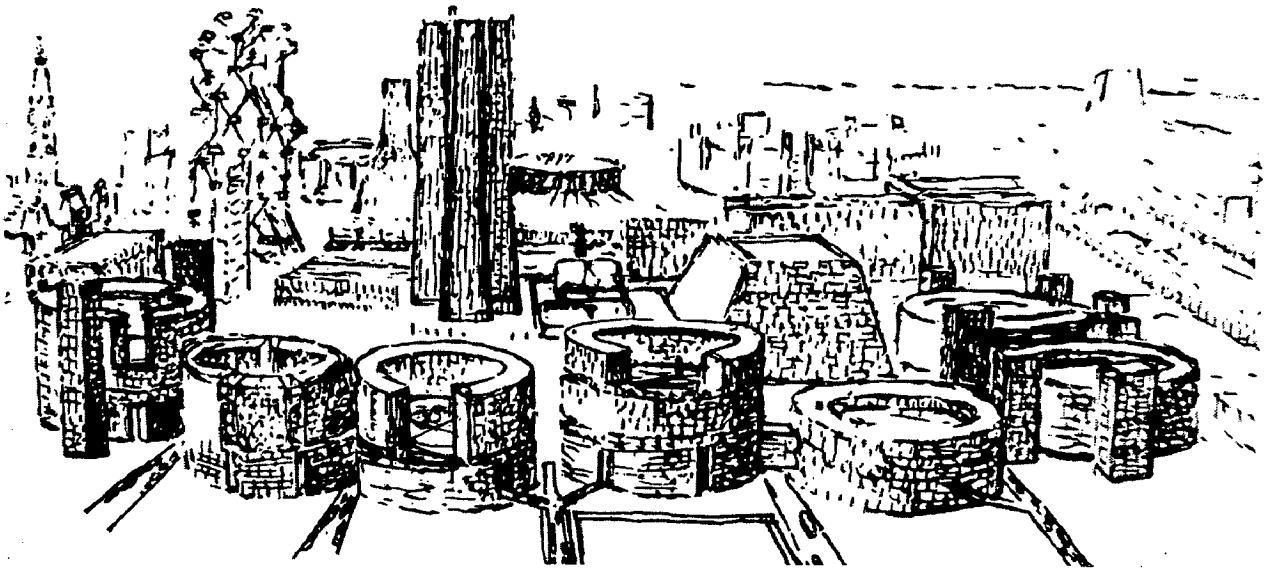


Fig 2.10: Proposal for Philadelphia by Louis Kahn

Source: Town Design by Frederick Gibberd

In a new town adequate car parking is mainly a matter of cost because multi-level parking garages can be designed to encircle the centre, or the whole it may be raised over parking decks and service roads. The problem is further simplified because traffic generators like markets, sports grounds and the bus station can be integrated with the road system.

In the existing centers the problem is of greatest complexity and it differs from town to town: holiday and market towns, they have their own special problems. The plan will locate the areas for car parking in the strategic positions on the perimeter of the various zones and where they will not cause visual harm. In large areas of comprehensive redevelopment the car parking can be integrated with the design— for example, at Doncaster (Fig 2.11) there are periphery car parks for the general public and underground garages for particular buildings. Otherwise it will be a matter of time before the sites become available and reliable will be placed on street parking. For the centre to succeed it must be accepted that no one should be free to leave a car on the highway. Car parking, even for very limited waiting period, needs its own space and a charge must be levied for it. The whole of the centre must

be zoned as an area of 'no waiting' except in spaces specially provided for that purpose: if that space is part of the street it must be clearly marked to distinguish it from the highway and a charge levied by some system such as a parking meter.

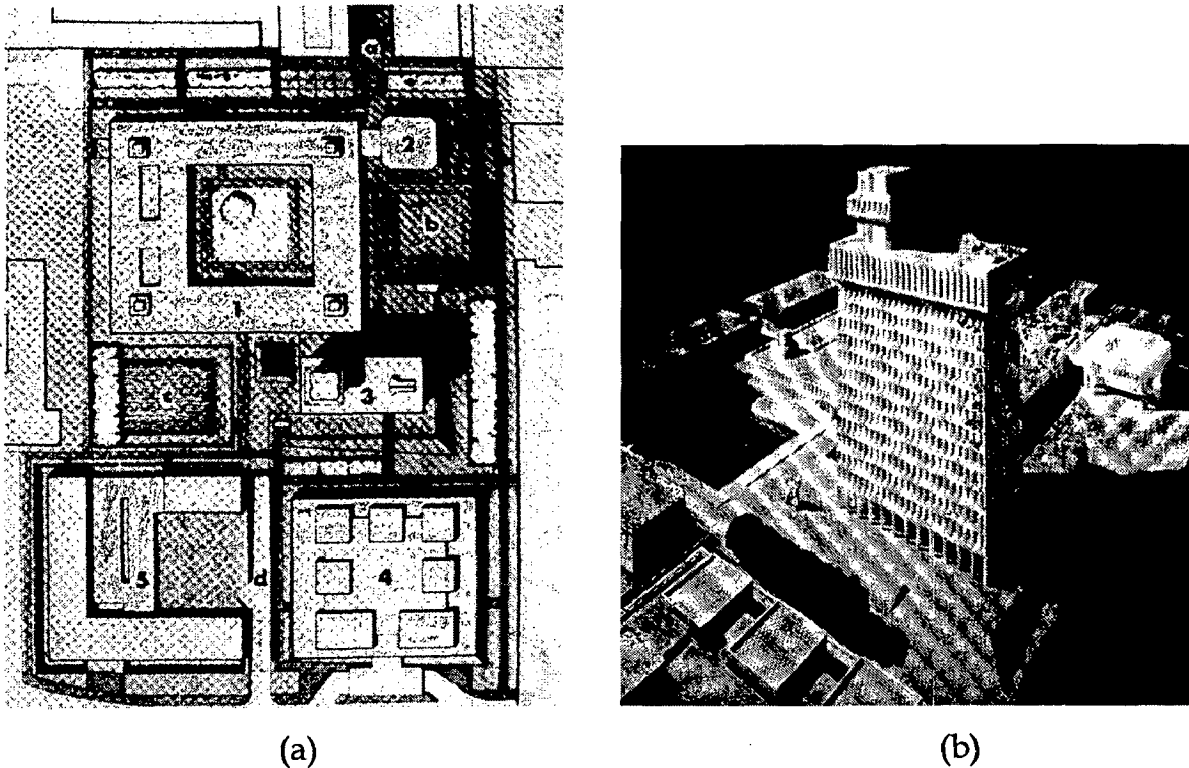












Fig 2.11: Car parking intergraded with the design Doncaster, Civic Centre

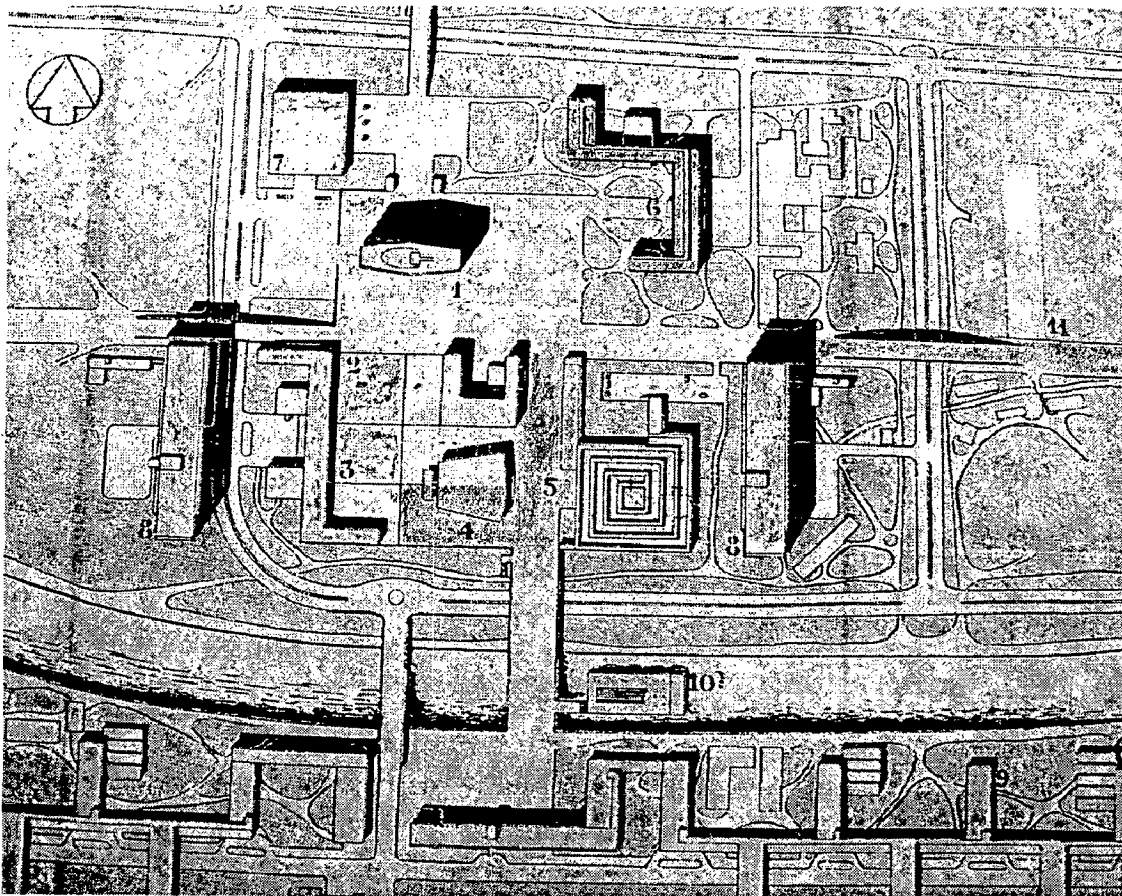
Source: Town Design by Frederick Gibberd

	TOWN HALL		SHOPPING
	COUNCIL CHAMBER		UNDERGROUND CAR PARK
	MUNICIPAL OFFICE TOWER		POOL
	LAW COURTS		RAMP TO CAR PARK
	POLICE STATION		PUBLIC CAR PARK

Parking requirements have become so complicated, serving buildings and circulation for vehicles and pedestrians that it is almost impossible to avoid the conflicts without planning on more than one level. There are some problems, which will get solved by moving more than one floor level, and all forms of multi-level circulation are costly, they will be increasingly adopted in high-density area. The principle of two-level scheme should keep pedestrians on the upper level, which then becomes the centre proper and place to motor-cars and servicing below them, it is the pedestrian

space about which buildings will be grouped and it is they who need sunlight, shadow and the skylight as a ceiling.

A famous prototype for a simple two-level scheme is Le Corbusier's beautiful scheme for the bomb-damaged centre of St. Die'. (Fig 2.12). The plan is based on a cross-path pedestrian circulation (as opposed to the traditional cross-road centre), superimposed over a ring road.













	ADMINISTRATIVE CENTRE		ARTISANS' TRAVEL CENTRE
	CAFÉ, PUBLIC HOUSE		COMMUNITY CENTRE
	MUSEUM		HOTELS
	DAPARTMENTAL STORE		I.S.A.I.
	INDUSTRY		SWIMMING POOL

Fig 2.12: Multilevel circulation in Saint Die' by Le Corbusier

Source: Town Design by Frederick Gibberd

The principal buildings are associated with a large rectangular pedestrian plateau, around which the motorists circulates on a ring road. Wide footways run from each side of the plateau and bridge over the ring road, to connect up with the adjacent

industrial and housing areas. Today most of the architects would design a town centre as a multi-level structure; the opportunities are likely to be limited to new towns and areas of comprehensive development in congested centers.

2.6 URBAN FORM

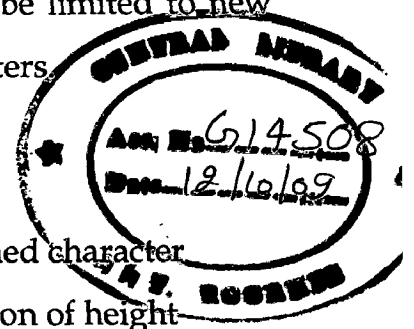
In towns there are many areas where streets have an established character through a constant building height, which will justify the imposition of height zoning, but there must be flexibility in the relationship between height and mass, to give opportunities for imaginative design and to encourage redevelopment.

In the past simple methods of height control were imposed, such as prescribing angles of light within which the building mass could be contained. But today more scientific methods are adopted in which the floor space index is linked to a system of daylight control. These controls give flexibility in design, at the same time, ensuring adequate lighting condition, an architect may be able to provide a twenty-storey building over a fraction of a site, or a six-storey one over the whole of it.

2.7 CONSERVATION

Conservation is primarily concerned with saving from destruction buildings or features of historic architectural or pictorial value. Examples of period townscape, such as an eighteenth-century street, are particularly difficult because the buildings have outgrown their function. Developers will try to prove that their modernization would be far more costly than providing a quite new building place like Bath the local authority have successfully converted tall terrace houses to modern flats with inestimable value to the character of the place.

There may be areas of no great architectural values that are worthy of preservation because they have a marked individual character. When rebuilding is allowed, it may be that there will be opportunities for improving the setting, for example, at Stratford-upon-Avon (Fig. 2.16) the new building was set back so that the end elevation of the adjacent half-timbered building could be renovated and become a



part of the street picture, and a small paved area laid down as a setting for both of them.

All the individual objects we see in the urban scene are elements of town design and all of them that give character to the town centre. The old features such as a street sign, or a bollard, be integrated into the new design so as acquire an added richness because of their quality as well as historic association.

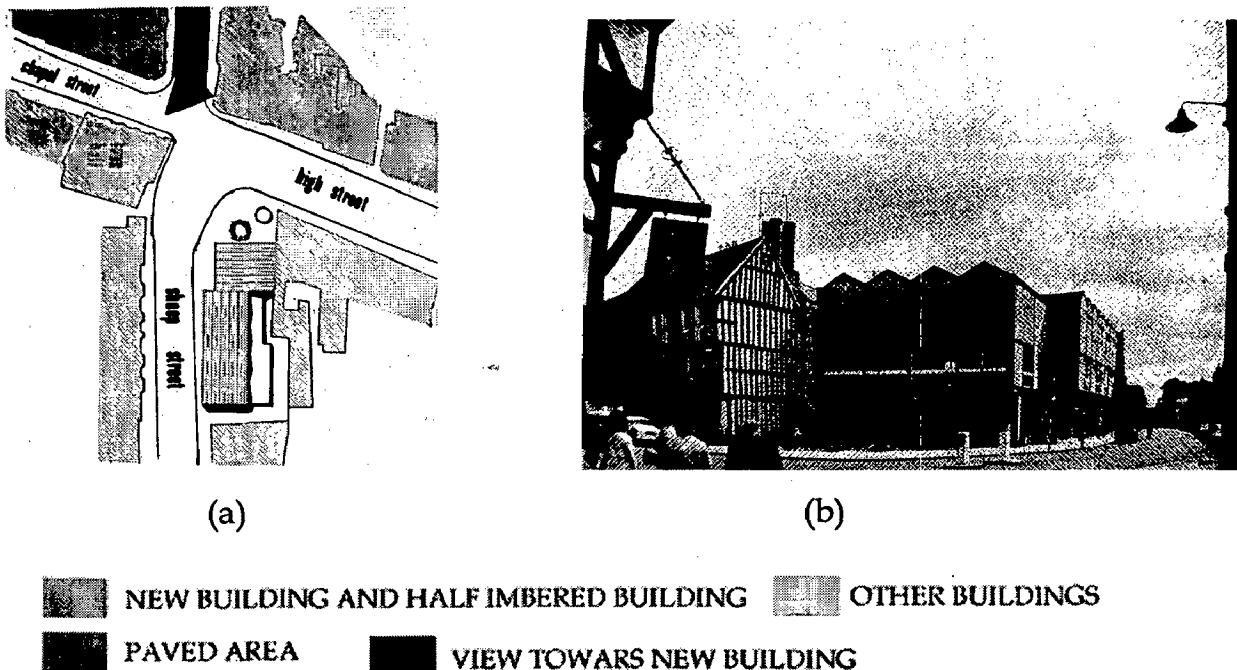


Fig 2.13: New building in Stratford-on-Avon by F. Gibberd

Source: Town Design by Frederick Gibberd

2.8 APPROACHES TO DESIGN OF CENTRAL AREAS IN A METROPOLITAN CENTRE

In the metropolitan centers the demand for land is so acute that land cost may become more significant than building cost. Development is towards multiplying the site area by decking it over at different levels to form large areas of 'man-made' ground.

With the multiplicity of levels can be multiplicity of building use: housing may be placed on the upper decks and, with it, crèches and schools, until a situation is arrived at in which there is a town within a town. There must be complete

integration with the centre as a whole because danger exists that so much enterprise concentrated on one particular area may exhaust resources and leave little opportunity for the redevelopment of the rest of the centre.

The design of 20 acre site in the heart of Nottingham (Fig 2.14) has a shopping parade 440 yards long, a market, sports centre, flats and a hotel, complete with a bus station and parking for 3,000 cars. Unless development is based on thorough economic and social surveys of the city as a whole, a situation can arise in which the bright and glittering complexes of a new world rise from a setting of indescribable squalor.

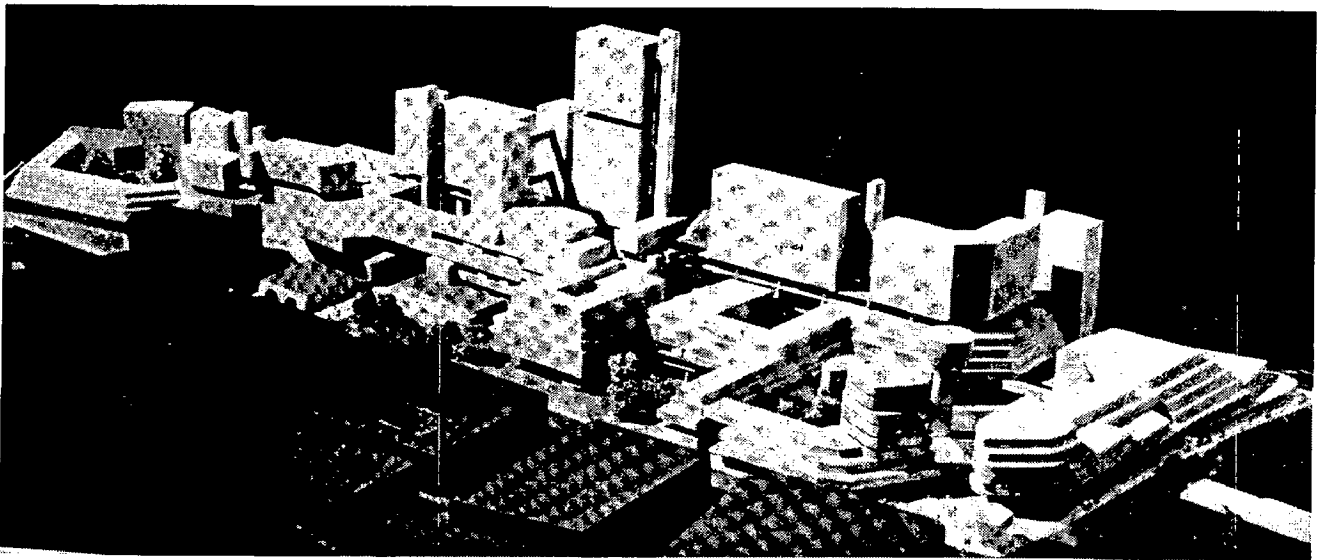


Fig 2.14: Redevelopment in the city centre project, Nottingham

Source: Town Design by Frederick Gibberd

2.9 CASE STUDY- HARLOW, THE TOWN CENTRE (Literature)

The Harlow was the first of the new towns to be approved by the Minister of Local Government and Planning. The Master Plan was designed by Frederick Gibberd for a population of 60,000. It has since been increased to 80,000, but the Plan retains its original structure, the increased population being obtained by a higher density. Work began in 1949 and by 1966 the greater part of the town had been built, housing some 68,000 people, of whom some 4 % travel outside to town to work.

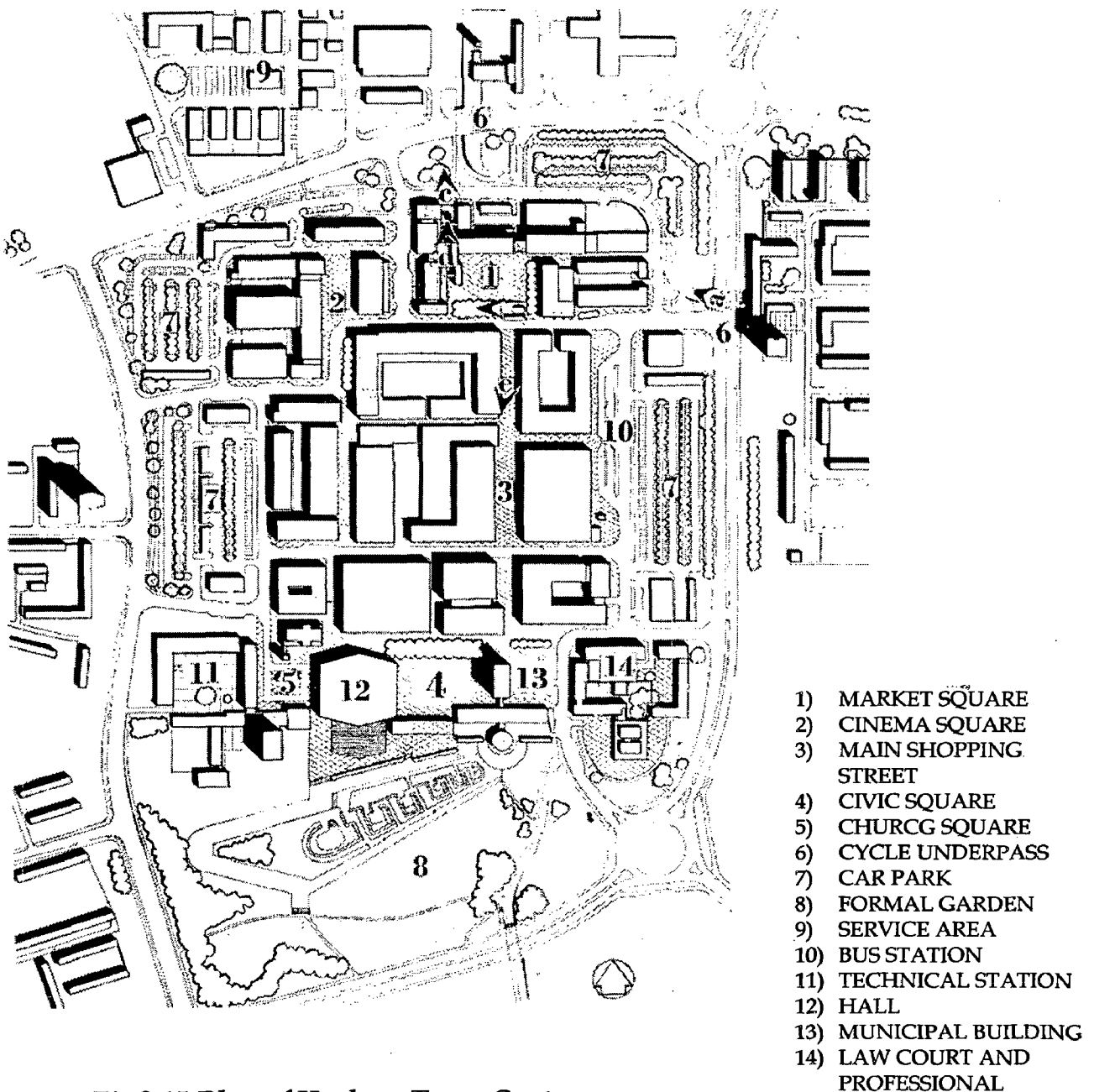


Fig 2.15 Plan of Harlow, Town Centre

Source: Town Design by Frederick Gibberd

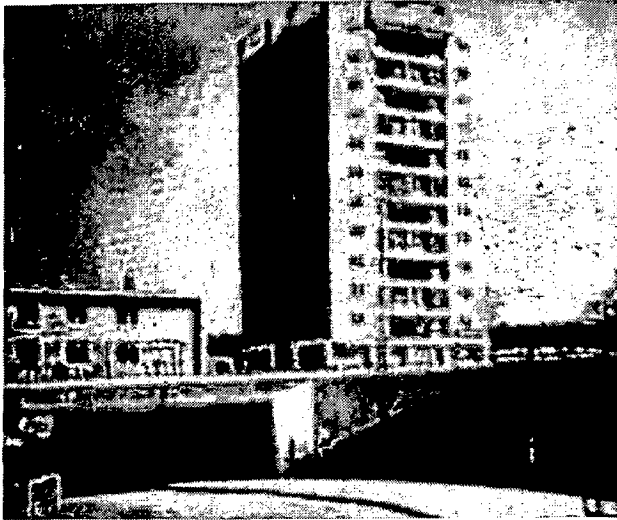
The central area is placed on high ground where it dominates the rest of the town. Its plan shape is long rectangular running from north to south, principal and a secondary shopping street is running in the centre and connecting main civic square on south and to the market square on the north.

(a) The inner core of the centre is designed as a pedestrian precinct, the area being surrounded by belts of car parks connected together by inner periphery roads. The town's independent cycle track and periphery road system. The town's independent cycle track and footpaths underpass the main roads and connect up to

cycle parks and the inner periphery road system. (b) Tower blocks of one-bedroom flats mark the principal east and west entrances to the centre, and provide focal points from the inner core. (c) Numerous short cuts connect the parking belts to the shopping streets. (d) The terrace is expanded in places to form sitting areas, and a system of bridges and staircase connects it with the market and adjacent buildings.

(e) The principal shopping street is some seventy feet wide and is formed by stores and other large shops. The views down it are closed on one direction by the civic buildings and in the other by the Market Square. (f,g) The south facade of the Square extends into shopping streets on the east and west and is broken by the entrance to the main shopping street. The other three sides are designed to appear as continuous walls to the space. (i) Connecting one street to another (j) At ground level the buildings provide continuous shopping frontages-other kinds of buildings, like banks, are at the end of the shopping parades. Canopies or arcades separate the shopping scene from the general views. A first floor terrace extends along the west side of the Market square into a shopping precinct which connect up to the underpass on the north. There is a Bank at one end of the terrace.

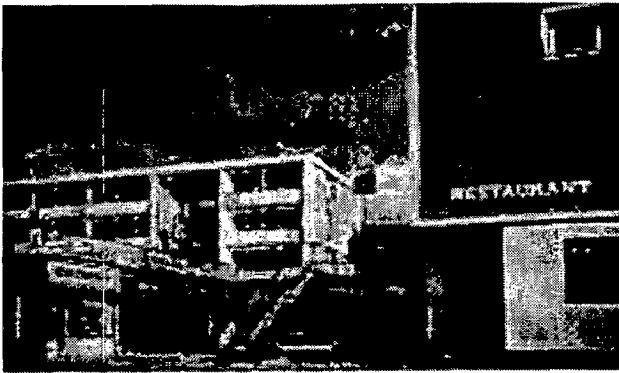
(k) The civic group is unlikely to be completed until the town approaches its maximum population. There are three interconnected civic spaces, the centre one being the town's meeting place. The tall office tower of the municipal buildings is the dominant element of the design and overlooks the civic space- a balcony gives facilities for addressing public meetings.



(a) Cycle track & footpath underpass



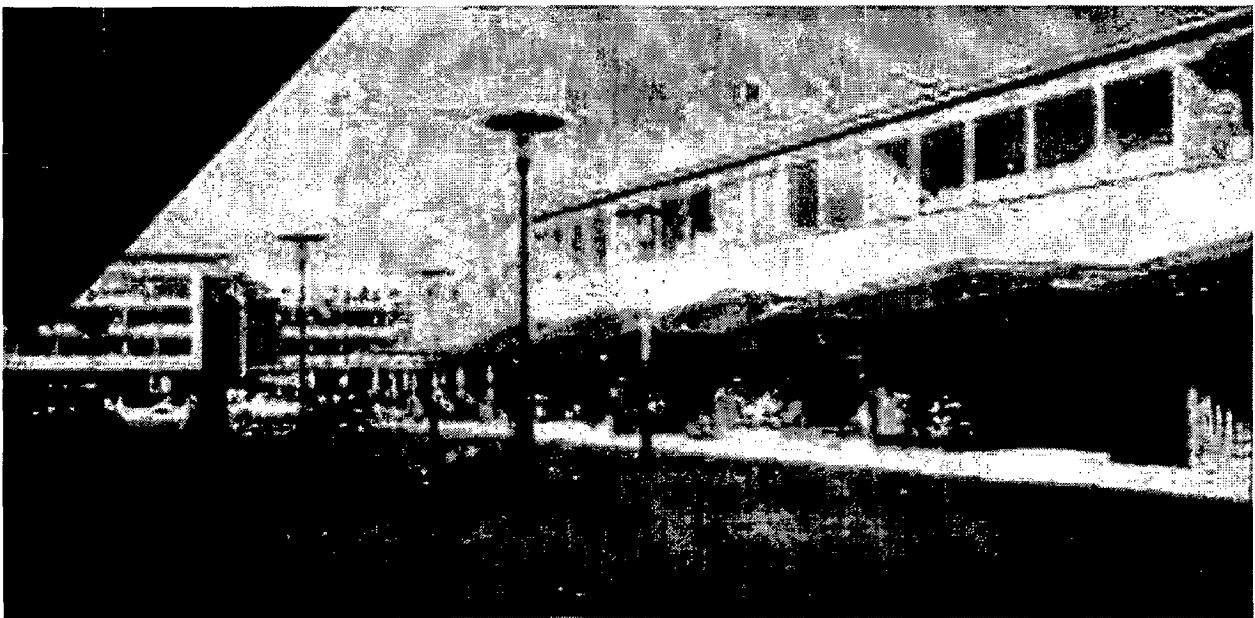
(b) Tower Block



(c) Shopping streets



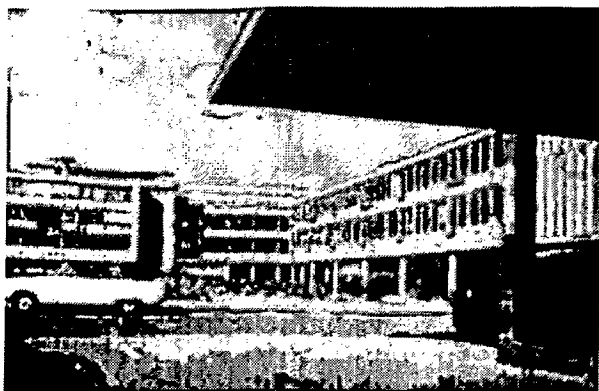
(d) Terrace expanded for sitting



(e) Principal shopping street

Plate 2.2: Images of Harlow, Town Centre

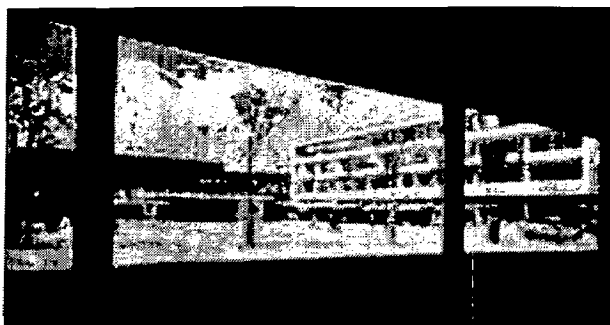
Source: Town Design by Frederick Gibberd



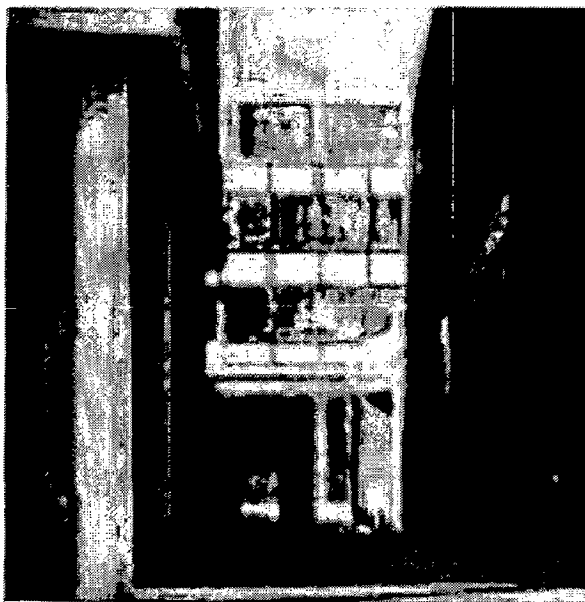
(f) South façade of the Square



(h) Shopping street



(g) South façade of the Square



(i) Connecting street



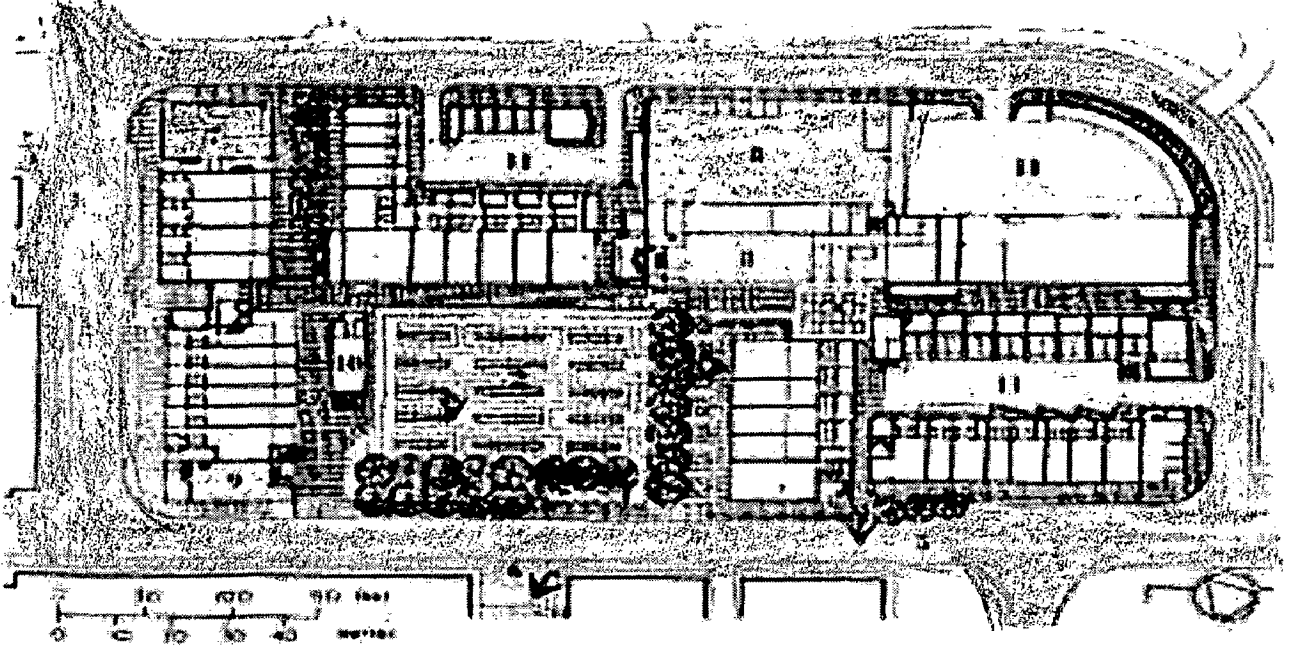
(j) Market Square

Plate 2.3: Images of Harlow, Town Centre

Source: Town Design by Frederick Gibberd

The Civic Centre is formed by three principal building groups associated with three inter-related civic squares. In the centre is the Town Hall, designed to be the

dominant building which, with the Civic Hall, forms the main civic square; on the east a group consisting of the Law Courts and Police Station make an entrance forecourt to the Town Hall; and on the west the College, Civic Hall and Church form a further space.



- | | | |
|-------------------|-------------------|-----------------|
| 1) NORTH PRECINCT | 2) MARKET SQUARE | 3) SITTING AREA |
| 4) EAST PRECINCT | 5) EAST GATE | 6) BROAD WALK |
| 7) PUBLIC HOUSE | 8) POST OFFICE | 9) BANK |
| 10) CAFÉ | 11) SERVICE COURT | |

Fig 2.16: Market Plan of Harlow, Town Centre

Source: Town Design by Frederick Gibberd

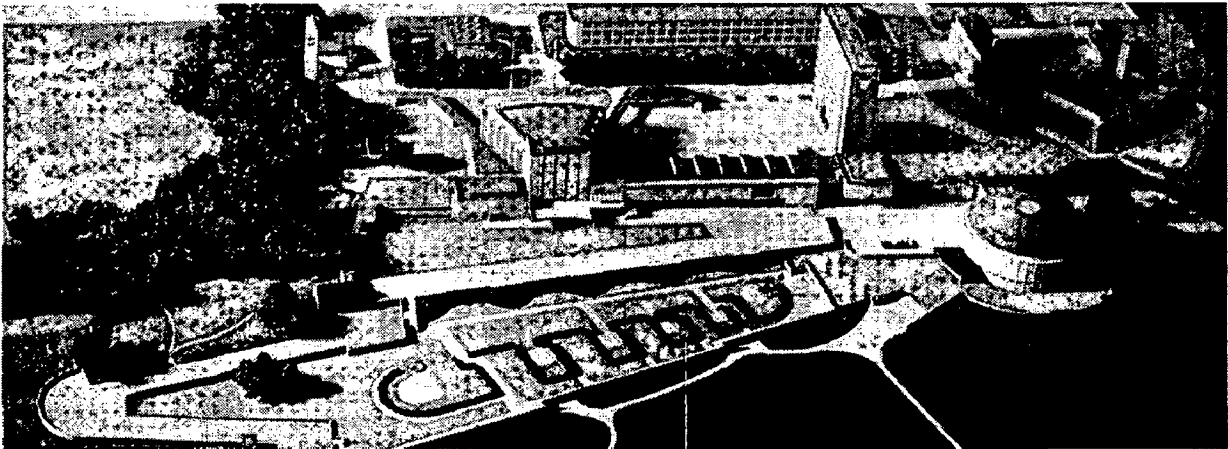


Fig 2.17: View of Civic Group of Harlow, Town Centre

Source: Town Design by Frederick Gibberd

CHAPTER 3

COMMERCIAL AREAS IN DELHI

3.1 INTRODUCTION

In Delhi presently, the Connaught Place and Chandni Chowk, and other central city areas constitute a strong business centre bringing lakhs of workers and other concerned every day to these areas. Areas like Walled city and its extension, Karol Bagh, Pahar Ganj, Sadar Bazar and Roshanara Road are old congested built-up areas mainly with mixed land use. These areas have very serious problem of traffic congestion, inadequate physical and social infrastructure, and lack of open spaces. As per the policy of 1962 of decentralization i.e. development of district centre for each district and directional freight complex for creating a completely new pattern and city foci.

3.2 EVOLUTION OF COMMERCIAL AREAS IN DELHI

Shopping areas create an image of the city. These cater to varying day-to-day shopping needs as well as casual and impulsive shopping. At present Delhi have about one lakh retail shops at the rate of 18.25 shops per thousand populations. These are located in about 1,600 markets, of varying size and character scattered all over the city. Delhi. Informal sector in retail trade plays a very important role about 1.39 lakh informal sector retail units (without roof) are working within the shopping areas, along road side and other areas of public concentration. Delhi has the tradition of weekly markets and at present there are 95 weekly market sites (1.8 weekly markets per 1 lakh population) with about 6,000 daily shopping spaces; these markets work once in a week at one place and the entrepreneurs keep moving to different places on different days of the week. This sector which is generator of employment remains at low productivity in the absence of proper infrastructure. It is possible to create lively shopping areas by suitably introducing informal sector. The retail shopping centers are varying from the temporary ones, in the sub-urban area to Palika Bazar, the most fashionable one in the city and also unique in the whole of North India. Urban Delhi has at present about 38.6 lakh sqm. of

commercial offices space; for additional employment 24.72 lakh sqm. of commercial office space is required within DUA 81 and 28.44 lakh sqm. in the Urban Extension at the rate of 12 sqm. gross floor space per employee.

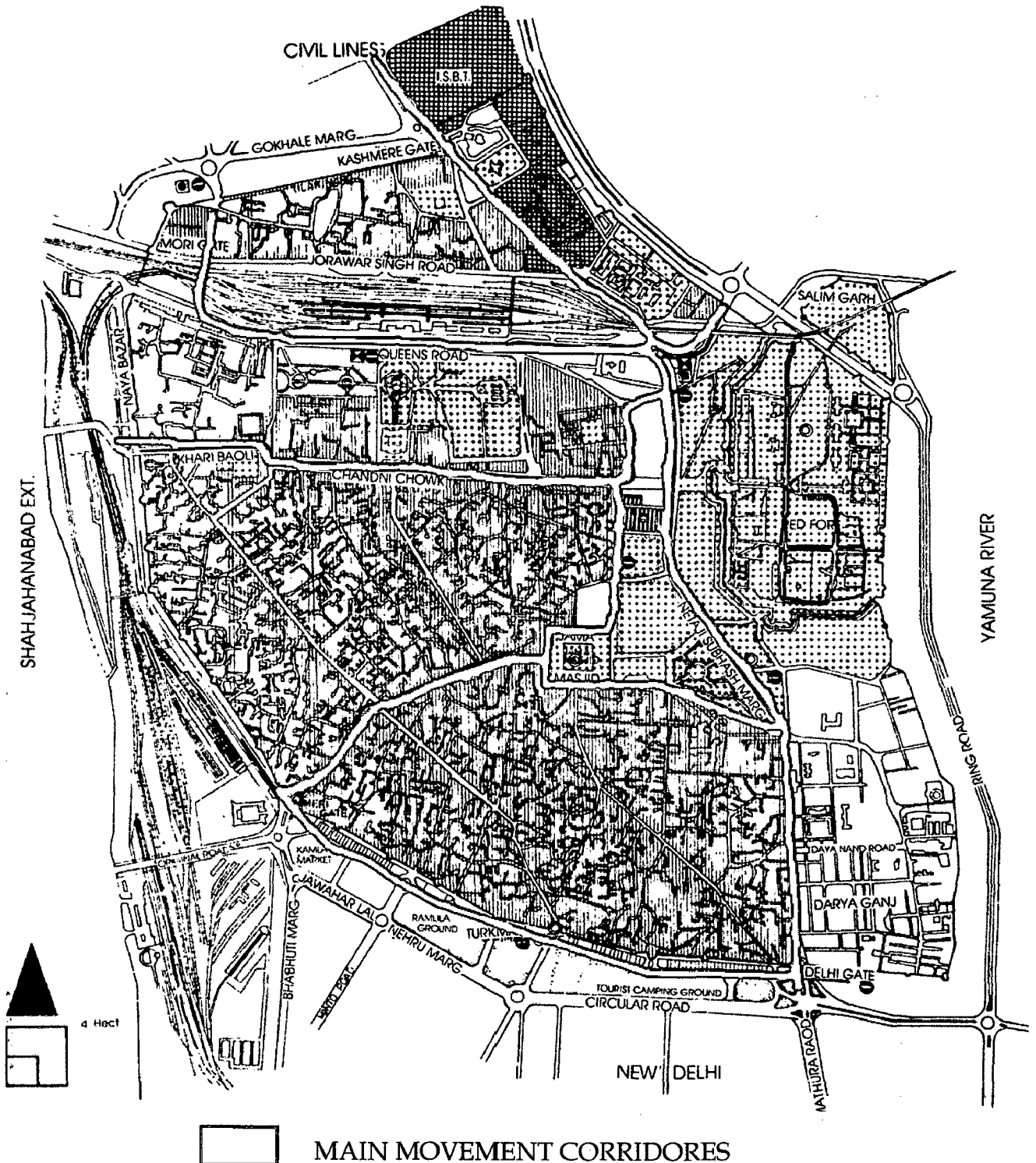


Fig 3.1: Walled City- Shahjahanbad, Conservation and Tansport Network Plan

Source: Base Map, Courtesy - Master Plan for Delhi Perspective 2001

Most important part of the traditional housing is Walled City and needs conservation as once a beautiful city, now presents a chaotic picture. The Walled City of Shahjahanabad has become a core of vast extended metropolis accommodating a part of the business district. The population in the Walled City of Shahjahanabad increased to its saturation upto the year 1961 around four lakh but since then there is large scale infill by commercial use replacing residential use. Traditional areas in Walled City need special treatment. There are about 1.5 lakh commercial and industrial establishments in the Walled City.

In the plan in 1961 the commercial use in the Walled City was restricted to north of Kharai Bawli for wholesale business, part of Chandni Chowk for general business and commerce and within the retail business centre of Lajpat Rai Market. During the period 1961-81 there has been a spurt of wholesale and other commercial activities in the Walled City. Presently, the trade and commerce activities have intruded much more in all the residential areas in the Walled City. There is every danger that whole of Walled City in due course of time may get converted into full commercial area. Thus completely destroying an area of important urban heritage. Out of 240.69 hectare of organic growth under buildings, 98.34 hectare i.e. 40 percent is under commercial and industrial use.

3.3 HIERARCHY OF COMMERCIAL AREAS IN DELHI

District Centres were proposed in Delhi Master Plan "to accommodate required shopping, commercial offices, offices and other related activities like cinema, hotel and needed facilities".

District Centres are second in this hierarchy of commercial areas. Commercial areas in Delhi have been divided in the Delhi Master Plan into five tiers system. Delhi Master Plan prepared in 1961 with the horizon year of 1981, proposed seven district centres namely, Nehru Place, Rajendra Place, Bhikaji Cama, Janakpuri, Laxmi Nagar, Shivaji Place, Jhandewalan. After that the second Master Plan, prepared in 1981 with the horizon year of 2001 and third Master Plan for Delhi with the horizon year of 2021.

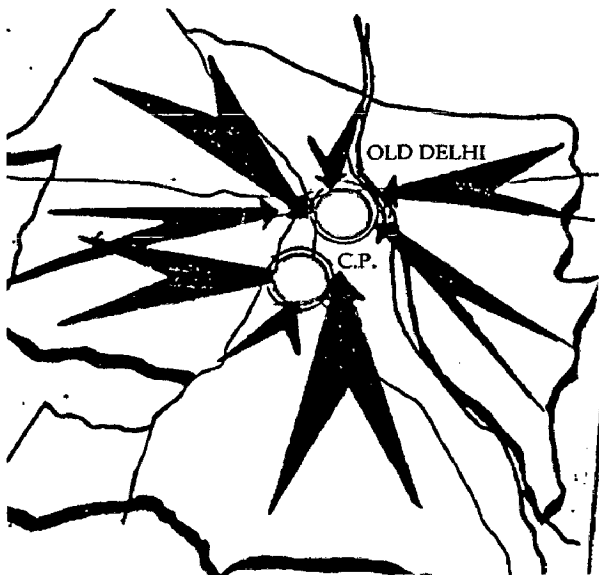
Table 3.1: Hierarchy of Commercial Areas as per Delhi Master Plan

Level	Name	Population served
1)	Central Business District (Including sub- CBD)	City (Including sub-city)
2)	District Centre	4,00,000-7,00,000
3)	Community Centre	60,000-100,000
4)	Local Shopping	15,000-20,000
5)	Convenience Shopping	5,000-6,000

Source: *Master Plan for Delhi Perspective 2001*

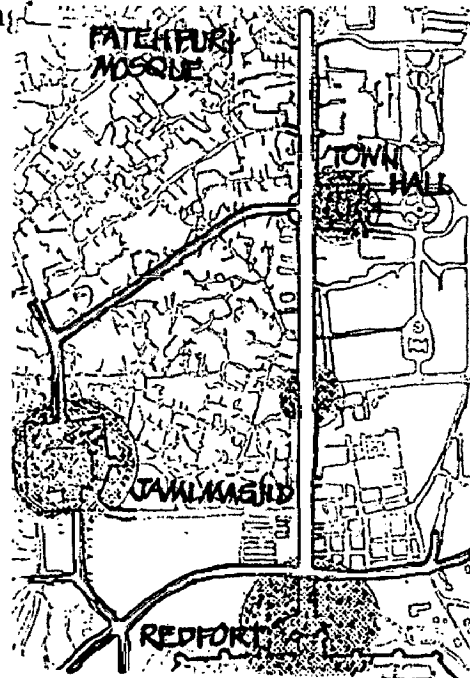
3.3.1 Central Business District:

Central business district (CBD) is at the apex in the hierarchy of the commercial centers working at city and regional level. The existing areas functioning as CBD are Connaught Place and its extension and commercial areas in the Walled City and its extension and Karol Ba



Before M.P.D- I Delhi was a binodal city with heavy concentration of commercial activities in Chandni Chowk and Connaught Place.

Fig 3.2 : Plan showing major CBD's



Chandni Chowk, spine developed between Red Fort and Fatehpuri Mosque.

Fig 3.3: Chandni Chowk

Source: *"Redefining District Centre" unpublished thesis SPA, Delhi*

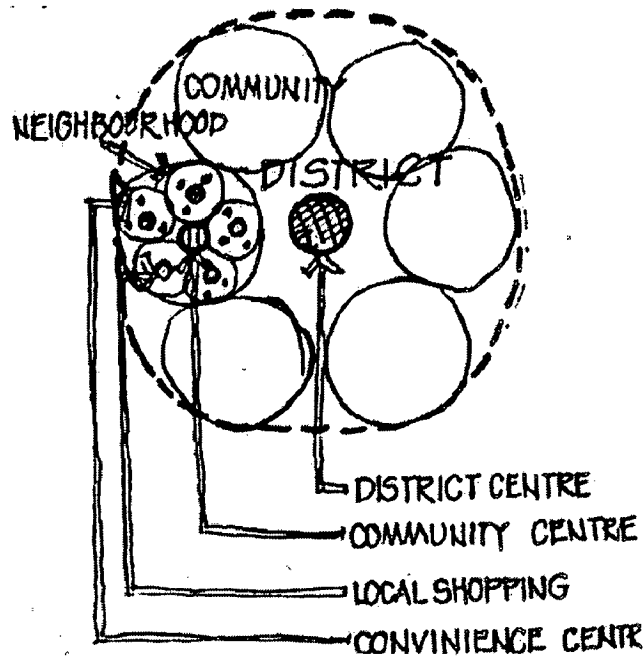


Fig 3.4: Four tier system within district

Source: "Redefining District Centre" unpublished thesis SPA, Delhi

3.3.2 Sub-Central Business District:

Two Sub-Central Business Districts at sub-city level are proposed for development for development by 2001, one in the Trans Yamuna area and other to be in the Urban Extension. Trans Yamuna area has more than one million populations as per 1981 census. By 2001 the sub-CBD shall cater to a population of about 1.7 million and should be developed on priority.

3.3.3 District centre:

The district centres are to serve as a climax of the multi-nodal activities of community; these should be conceived as major shopping centres, which while serving the community with reasonable selection of shops and department stores are also centres of socio-cultural activity where the community can get together. Each district centre should include a library and a multi-purpose meeting hall and also make provision for an exhibition centre which could hold art exhibitions. Three district centres, namely Nehru Place, Rajendra Place and Bhikaji Cama Place have been almost fully developed and three others, namely Janakpuri, Laxmi Nagar and Shivaji Place are in the process of development.

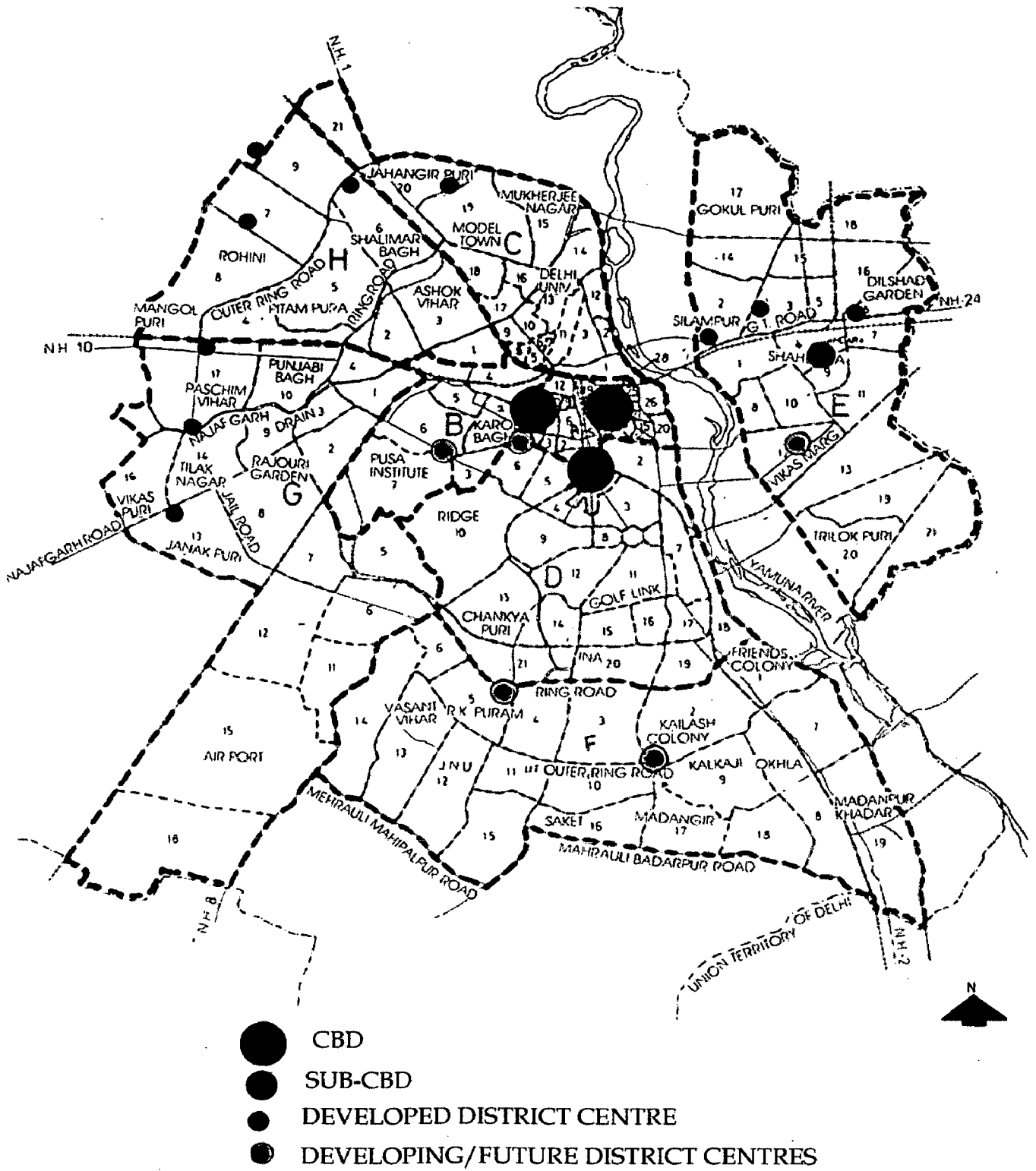


Fig 3.5: Map showing District centres in Delhi

Source: Base Map, Courtesy - Master Plan for Delhi Perspective 2001

Table 3.2: Five tier system of Commercial Area

FIVE TIER SYSTEM OF COMMERCIAL AREAS				
I	II	III	IV	V
CBD & Sub CBD	District Centre	Community Centre	Local Shopping C.	Convenience Shopping C.
City & Sub City level	About 7 lakh	About 1 lakh	About 15 thousand	About 5 thousand
AREA				
	44ha (for 5lakh pop.)	5.40 ha	0.46 ha	0.11 ha
LAND REQUIREMENT /THOUSAND PERSONS				
	880 sqm	540 sqm	306sqm	220sqm
All activities of tier II	ACTIVITIES			
	Shopping (Retail, service, repair & limited wholesale) Informal shopping, Commercial offices, Cinema, Hotel, guest house, nursing home	Shopping (Retail, service, repair) informal shopping, Commercial offices, Cinema, Hotel, guest house, nursing home	Shopping (Retail, service, repair) Informal shopping, Commercial offices,	Shopping (Retail, repair) Informal shopping,
	Service Industries	Service Industries		
	Auditorium, Museum, Library, Science centre, Art / Craft/Music/Dance School/Book Bazaar, weekly Markets (on close days), Delhi Administration, Delhi Development Authority & Municipal offices,		Community Hall	
	l, Fire Post, Police Post, exchange, electric sub- and Telegraph office, Conveniences Residential	Post office, dispensary, petrol Pump (filling station only), weekly markets, electric sub-station conveniences	Electric sub-station conveniences	Electric sub-station conveniences

Source: Gazette Delhi Master Plan, 1987

The land allocation for these district centres is given below:

Table 3.3: Hierarchy of Commercial Areas as per Delhi Master Plan

Serial no.	District centre	Area in hectare
1)	Nehru Place	38.20
2)	Rajendra Place	9.31
3)	Bhikaji Cama Place	14.16
4)	Janakpuri	14.97
5)	Laxmi Nagar	12.95
6)	Shivaji Place	22.60
7)	Jhandewalan	12.97

Source: Master Plan for Delhi Perspective 2001

In Nehru Place, 4 hectare area which was proposed for Govt. Offices during the period 1961-81 is now recommended to be developed as retail shopping on 30 percent coverage and 75 Floor Area Ratio (FAR). Besides the above 7 district centres, 22 other district centres required to be developed by 2001 as per the programmes has been discussed in tables 3.4.

3.3.4 Community Centre and Local Shopping and Convenience Shopping:

There would be 82 community centres in DUA 81 and 40 in Urban Extension. Some of the community centres in urban extension are proposed to be expanded along the roads as street shopping on the pattern of traditional shopping. The shopping is segregated from the main street by three to four rows of plantation and by linear parking strips. During the period 1961-81 community centres were mainly provided for retail shopping, commercial and professional offices. The need of fruits and vegetables and service and repair shops should also be integrated.

3.3.5 Informal sector:

Large sections of unemployed and under-employed in rural areas and small towns look forward to the metropolitan cities like Delhi for employment and enter the city to move up the economy ladder. This sector with highly reduced needs of equipment and buildings is important as a source of employment and also for the

Table 3.4: Land in hectare of district centre proposed by DMP-II

District centre	Land in Hectares								
	Whole sale	Retail	Office	Service centre	Hotel	cultural centre	Facility	Landscape	Total
Saket	...	6.2	7.7	..	2.0	..	2.5	4.6	23.0
Rohatak Road	10.0	5.9	2.0	..	2.0	..	2.5	5.6	28.0
Paschim Vihar	..	4.3	3.6	..	..	..	2.5	2.6	13.0
Wazirpur	5.0	7.8	7.5	..	2.0	..	2.5	6.2	31.0
Shalimar Bagh	..	4.0	2.0	..	..	..	2.0	2.0	10.0
Jahangir Puri	..	6.9	7.8	..	2.0	..	2.5	4.8	24.0
Khyber Pass	..	4.7	2.0	..	2.0	..	2.5	2.8	14.0
Dilshad Garden	..	2.0	2.3	..	2.0	..	2.5	2.2	11.0
Eastern Yamuna Canal	..	3.0	4.1	..	..	..	2.5	2.4	12.0
Shahdara	..	3.2	2.0	..	..	..	2.0	1.8	9.0
Mayur Vihar	..	2.8	5.5	..	2.0	..	2.5	3.2	16.0
Rohini	10.0	11.0	7.0	1.5	2.0	2.0	2.5	9.0	45.0
Mangol Puri	..	4.9	4.4	1.0	2.0	2.0	2.5	4.2	21.0
Auchandi Road	..	4.9	2.0	1.0	2.0	2.0	2.5	3.6	18.0
SUB-TOTAL	25.0	71.6	59.9	3.5	20.0	6.0	34.0	55.0	275.0
URBAN EXTENSION (Six District Centres)	40.0	91.1	93.6	9.8	12.0	12.0	15.0	68.5	342.0
GRAND TOTAL	65.0	162.7	153.5	13.3	32.0	18.0	49.0	123.5	617.0

Source: Gazette Delhi Master Plan, 1987

economic functioning of the city. The informal sector units locate themselves strategically near work centres, commercial areas, outside the boundaries of schools, colleges and hospitals, transport nodes and near large housing clusters. Walled City and Trans Yamuna area particularly show a very high percentage of this activity. The Municipal Corporation of Delhi is charging a certain fee termed as teh -bazari for continued use of particular space by such units. A large number of units are either mobile or not covered under the bazari. It is proposed to incorporate the informal sector in trade in the planned development of various zones.

(a) Weekly Markets:

Weekly Markets, the traditional style of retail shopping is quite popular in Delhi, especially among the lower and middle income groups. These markets are operating in a systematic manner choosing locations central to a large population either on vacant land or road sides. The largest city level weekly market is held every Sunday on Ring Road at the rear of the Red Fort. There are about 24,600 wholesale shops and establishments in wholesale markets in Delhi. Most of the wholesale markets are located in the congested central part in Old Delhi and were established during the late 19th century and early 20th century. The new wholesale markets need to be developed at suitable locations in different parts of the city to encourage decentralization at two levels:

- i. Regional distribution and
- ii. Regional cum local distribution

I) Regional Distribution Markets:

Regional Wholesale markets along with warehousing and truck terminal facilities are proposed to be developed on the major entry routes to Delhi as given below:

Table 3.5: Proposed Regional distribution markets on the major entry routes, Delhi

S.No.	Proposed Regional Distribution Markets
1	In the East Near Patparganj and on Loni Road
2	In the South near Madanpur Khadar
3	In the South West in Urban Extension
4	In the North in Urban Extension

Source: Master Plan for Delhi Perspective 2001

ii) **Regional Cum Local Distribution Markets:**

Delhi is one of the metropolitan cities but has become an agglomeration of cities. Regional-cum local markets are proposed as under:

Table 3.6: Proposed regional cum local distribution markets on the major entry routes, Delhi

S.No.	Proposed Regional Cum Local Distribution Markets
1	Sub- Cbd (Shahdara) South
2	Okhla
3	Rohtak Road District Centre
4	Shivaji Place District Centre North
5	Wazirpur District Centre
6	Rohini District Centre
7	Market of 8 to 10 Ha. Each in the Urban Extension

Source: Master Plan for Delhi Perspective 2001

3.4 CONCEPT OF DISTRICT CENTRE

The District Centres are envisaged to serve as a climax of multi-nodal activities of the community, providing the city with a hub of mixed use activities, including commercial, retail and community facilities. It is a place, which brings all the necessities of daily life to the neighbourhood. They also effect the decentralization of the city centre into a number of smaller business centres to avoid congestion in the heart of the city and also to provide mixed zoning of the sub-districts of a city. District centres constitute a variety of buildings types, from corporate offices to mixed-use office buildings with retail shops, hotels, restaurants, shopping malls, entertainment retail, community facilities, and public service.

Ideology behind the development of district centre is as follows-

- 1) To decongest the growing pressure of employment, retail, socio-cultural facilities on Central Business District.
- 2) For balanced development of the districts within city and minimum friction between zones.



Fig 3.6: Delhi Metropolitan Area

Source: www.cultureholodays.com

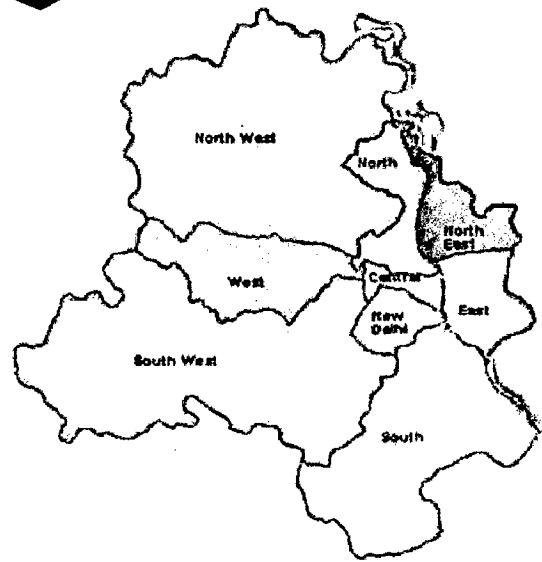


Fig 3.7: Nine Planning districts, Delhi

Source: www.whereincity.com

They also serve as places for the community together, and serve as a public space. They support the commerce of a city and offer significant contributions towards its economy. They create a variety of jobs concentrated at one place and attract a large number of people for different purposes, such as business, shopping, entertainment and community gathering. They also form the infrastructure of a city by providing utilities such as petrol pumps, police station, fire station, clinics, post office and other government offices all at one place. Thus, the district centres can be seen as a very integral part of a growing city, providing it with all the necessary facilities at one place and sustaining the neighbourhood.

Proper planning of a district is a matter of prime concern for the planners of the city as they form a centre of commerce, shopping and entertainment at the same time. Proper attention is needed towards issues such as parking, pedestrian movement and segregation of traffic to create a meaningful public space which can be used by the whole community.

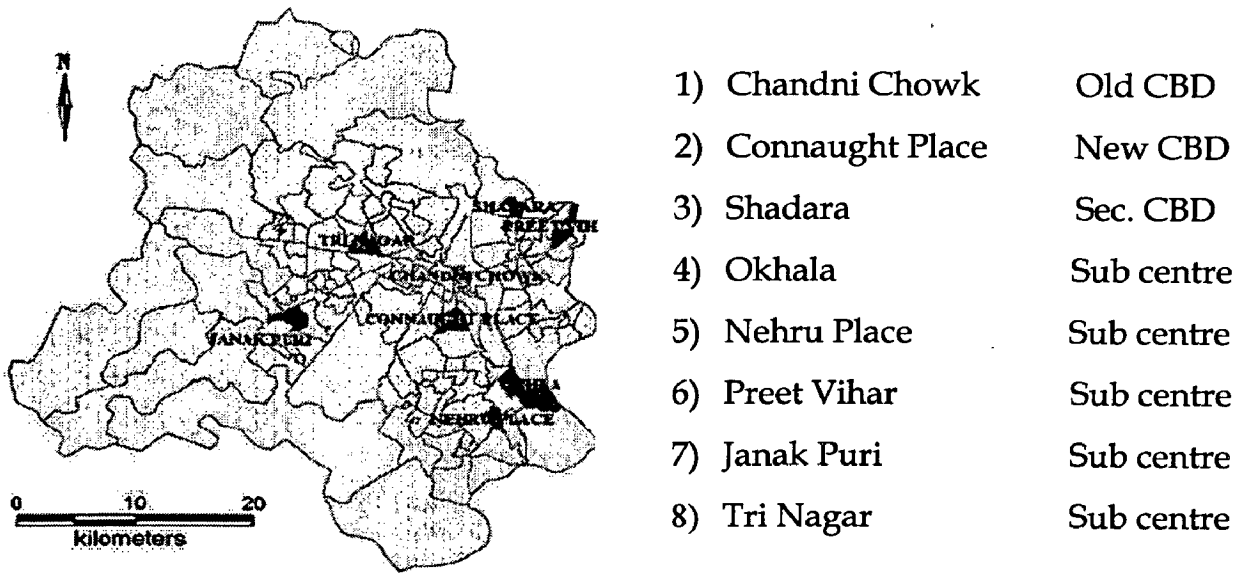


Fig 3.8: Map showing the location of the Old, New and Secondary CBD's

Source: Impact of Globalization on employment distribution and Urban Mobility, Delhi

3.5 PROVISIONS FOR DISTRICT CENTRES IN MASTER PLAN

3.5.1 Planning Norms

Table 3.7: The planned development of various zones

Serial. No.	Use zones/use premises	No. of informal shops/units
1	Retail Trade: Metropolitan City Centre, District centre, Community Centre, Convenience Shopping Centre,	3 to 4 units per 10 formal shops(to be provided in informal bazaar/service market components)
2	Government and Commercial Offices	5 to 6 units per 1000 employees
3	Wholesale trade and Freight Complexes	3 to 4 units per 10 shops

Source: Master Plan for Delhi Perspective 2001

Table 3.8: Development controls for Commercial Centre

Development controls- Commercial Centre					
Use/use premises	Max. Cover -age (%)	FAR	Ht (m)	Parking Std ECS/ 100 sqm of floor area	Other controls
(a) Commercial Centres					
- Convenience Shopping Centre/ Local shopping Centre/ Local Comm. areas	40	100	15	2	Max.10% additional ground coverage shall be allowed for providing atrium only in LSC
- Service market	40	100	15	2	
- Organised informal bazaar	40	40	8	-	
- Community Centre/Non-hierarchal Commercial Centre	25	125	NR*	3	Max.10% additional ground coverage shall be allowed for providing atrium
- District Centre/ Sub-CBD/Sub-City Level Commercial areas	25	150	NR*	3	Max.10% additional ground coverage shall be allowed for providing atrium
(b) Metropolitan City Centre/ Central Business District					
- Commercial Metropolitan City Centre i.e. Connaught Place & its Extension	25	150	NR*	3	(i) The size of the plot shall be as in the layout of commercial area and ant subdivisional of the plot in Connaught Place & its Extension should not be permitted. (ii) The development controls shall be in accordance with he comprehensive plan of the area to be framed by the local body. (a) In case of Connaught Place, the existing shall be maintained and FAR could be achieved by increasing proportionate ground coverage. (b) No basement shall be permitted in the middle of Connaught Place. (c) Mandatory Architectural Controls shall be applicable.

Source: Master Plan for Delhi Perspective 2021

3.5.2 Other Controls (as per Master Plan norms)

- 1) Some of the buildings in a District Centre could be permitted upto 50m height with the approval of the Government for achieving an urban form.
- 2) Basement (s) upto the building envelope line to the maximum extent of plot area shall be allowed and if used for parking and services should not be counted in FAR.

3.6 DESIGN GUIDELINES (DELHI MASTER PLAN- 2001 PERSPECTIVE)

The district centre has the following components: Retail shopping; Commercial offices; service centres; hotels; landscape component; wholesale. An integrated plan for all the above components in other cases because of factors like the time required between the land development and disposal, tenure conditions or even certain design requirements such solution may not be possible.

The components like facilities, hotel and wholesale may be required to be demarcated separately for development. Possibly the other group i.e., retail, office, cultural complex and residential could be more easily integrated in the same building space or area through landscape and circulation.

Thus it would be desirable to leave it to the designer to prepare an integrated plan for all or some of the components. The district park area adjoining to the district centre proposed in the master plan/division plan should be properly integrated with the district centre. The area provided for landscapes part of the district centre should weave through the entire district centre to create a pleasant environment. District centre should be accessible from the surrounding residential areas through the pedestrian approach or by sub-way etc.

3.7 CHANGING PATTERNS OF DISTRICT CENTRE

District Centres have been conceived as centres of multi-nodal activities like shopping, commerce, business, recreation etc. to serve the people of that district.

These were to provide work facilities for the people of that district and thus reduce friction between zones of the city and also commuting time. But today it is noticed that most of district centres have developed into office commercial complexes with

other functions and facilities become subservient to offices over period of time. Today rapid changes in technology and society will require shifts in the allotment of space for different functions and locations of various elements within a city structure.

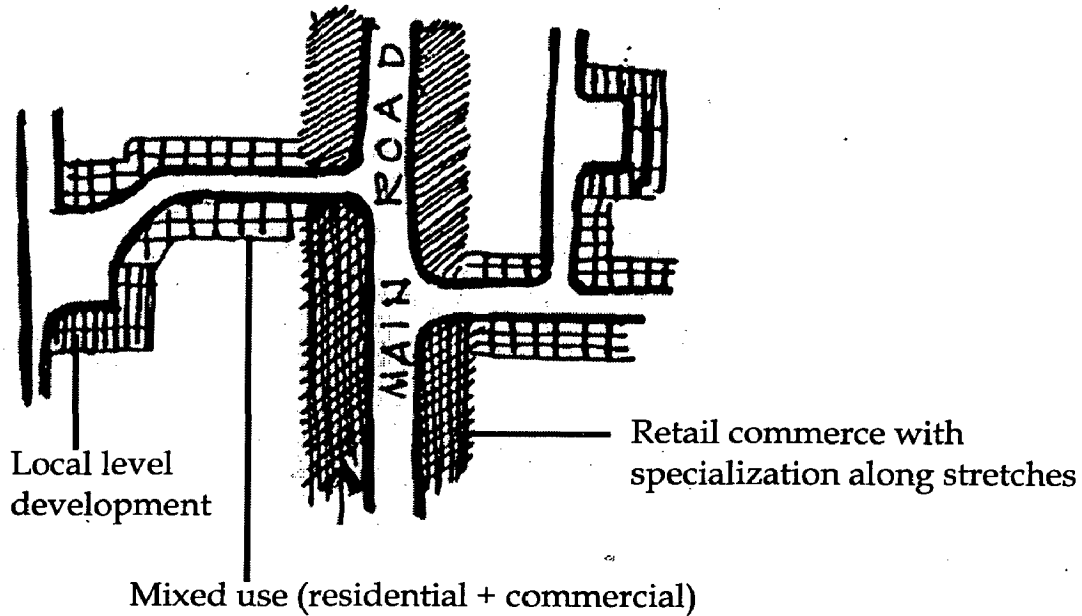
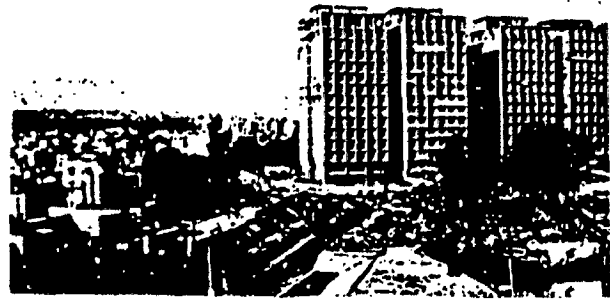
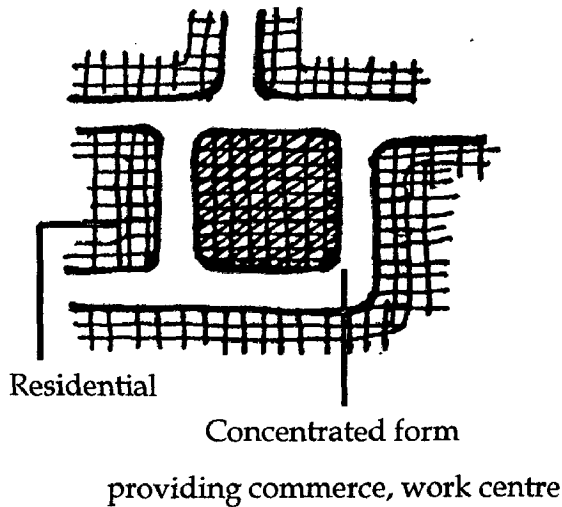


Fig 3.9: Plan showing linear development along the main road

Source: "Redefining District Centre" unpublished thesis SPA, Delhi

The design of urban structure should be such that so as to make change and growth easy. Instead of an integrated, concentrated form to provide for commerce, work, recreation etc. within a block/sector, mixed use over a large area could meet the needs of a rapidly changing society. The design form for provisions of retail, business, socio-cultural facilities show a parcelised approach whereby one block/sector is allocated for commercial use. This type of built form ignores the activity patterns and spontaneity of retail and socio-cultural functions. Such planned centres consist of single building or group of buildings. The traditional and evolved commercial precincts do not contain concentrated/integrated built form serving commercial, socio-cultural functions but forms an area that is an integral part of the city structure. The precinct works as a network of urban spaces and activities. The precinct in this case consists of a system of specific nodes linked by linear activity spine rather than one block/sector as commercial centre.



Provision of concentrated, consolidated block for different uses causes physical seclusion an inability to form a functional network with a context

Fig 3.10: Plan and view showing concentrated built form

Source: "Redefining District Centre" unpublished thesis SPA, Delhi

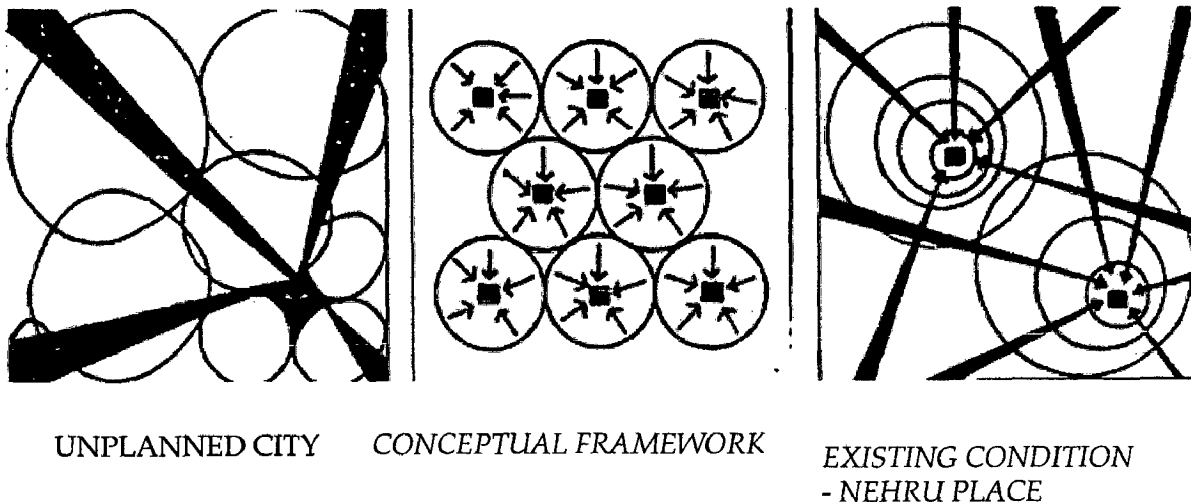


Fig 3.11: Plan shows conceptual and existing condition of district centres

Source: "Design proposal for district centres" unpublished thesis SPA, Delhi

The district centres in Delhi were proposed to decentralize commercial activities and make the district more or less self contained for the purpose of living, shopping, employment, recreation etc. But by the time these district centres came up in certain districts, the district already had shopping, employment and other specific nodes to support the needs of the district provided by agencies or Government in the form of community centres or nodes that were naturally evolved due to economic pressures. Each of the districts thus have their own built form-activity pattern. In

the design of district centres the existing built form- activity pattern should take into consideration so as to increase interaction between the old and new nodal functions.

Today in most of the cities the activities of an individual predominately revolve around home and places of work. Hence today the commercial precincts play an important role as 'civic space' in the city. District Centres form important commercial precincts with in a district. The design form of district centres should provide for variety, diversity, spontaneity serving as an important civiv space for the people of the district and city.

3.8 ISSUES

1. Most of the district centres that have already come up though conceived as multifunctional centres function more as city level office complexes.
2. Integrated megaform of district centre fails to respond to the rapidly changing needs of that district.
3. The design form of district centre shows a parcelised approach with one block/sector for multimodal functions while it ignores the activity patterns and spontaneity of retail and socio-cultural facilities.
4. The integrated-concentrated megaform of district centre results in activity pattern that fails to interact with the existing nodes and spines of that district.

CHAPTER 4

CASE STUDIES

4.1 INTRODUCTION

This chapter consists of detailed description and analysis of selected district centres following aspects/parameters of the selected case studies have been analysed, background, planning, landuse, circulation, parking, urban form, public spaces, aesthetic, landscape, and informal sector.

4.2 CASE STUDY I: NEHRU PLACE, DELHI

4.2.1 Background

Nehru Place a large commercial, financial, and business centre in Delhi, and it houses the headquarters of several Indian firms and rivals with other financial centres in the metropolis like Connaught Place, Gurgaon and Noida. It is widely considered to be a major hub of South Delhi's information technology industry. Widely regarded as the centre for small-scale IT services, Nehru Place is hub for all forms of IT hardware, such as personal computers, servers, networking equipment, software, documentation services.

After Connaught Place, Nehru Place is the biggest office/ commercial complex of Delhi. It is located in south zone F2 at the intersection of outer Ring Road and Lala Lajpat Rai Path. It is a distance of about 10kms from Connaught Place, an important constituent node of the central commercial district of the city. The centre is fairly well surrounded by Noida, Faridabad, the industrial work centre of Okhla, as well as enjoys the immediate vicinity of residential areas Greater Kailash I & II, Kalkaji, Chittaranjan Park, Pamposh Enclave, Chirag Enclave etc. The areas encompass cinema halls, markets, and also educational institutions.

Its location in terms of the huge private residential catchments area, a large population of higher and upper income groups in vicinity and the DDA's initiative of speculative investment of finance in the place, has lead to the acceptance of the place by many corporate offices and it's subsequently becoming an important work

centre for the entire city.

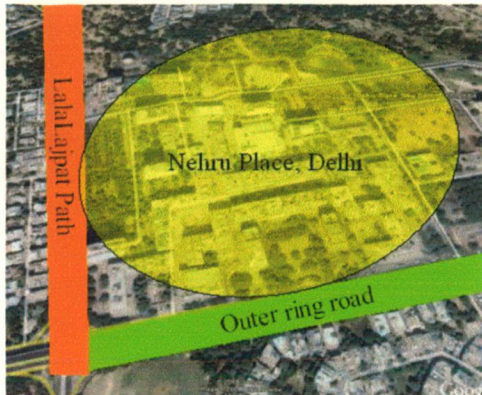


Fig 4.1: Location of N.P.

Source:

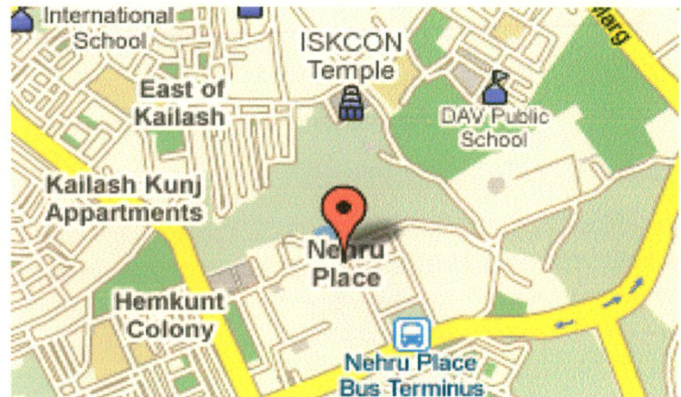


Fig 4.2 N.P. surrounded by residential colonies

Source:



Fig 4.3: Offices located in N.P.

Source:

4.2.2 Planning

Its site area is 38.20 hectare. It has been proposed by Delhi Development Authority during Delhi Master Plan-I (1961-81). The centre was planned for a population of 3,00,000. The first priority was given to the shopping cum commercial complex (including Paras cinema), and second to the hotel and municipal functions. The Master Plan recommended 82 acre of land for this district centre.

1. 10 acres is for government offices and
2. 15 acres for work -cum- industrial centre (flatted factories).
3. Remaining 57 acres of land is to be developed for various other commercial uses and service industries.

The ground floor shops along the main piazza functions well. One reason could be that most of the office staff taking buses for their commutation should be traversing this area.

4.2.4 Circulation

It has its own bus terminal, popularly known as Nehru Place bus terminal plying buses to almost every part of the city and even outside. It takes 30 minutes from Nizamuddin Railway Station and one hour from New Delhi Railway Station.

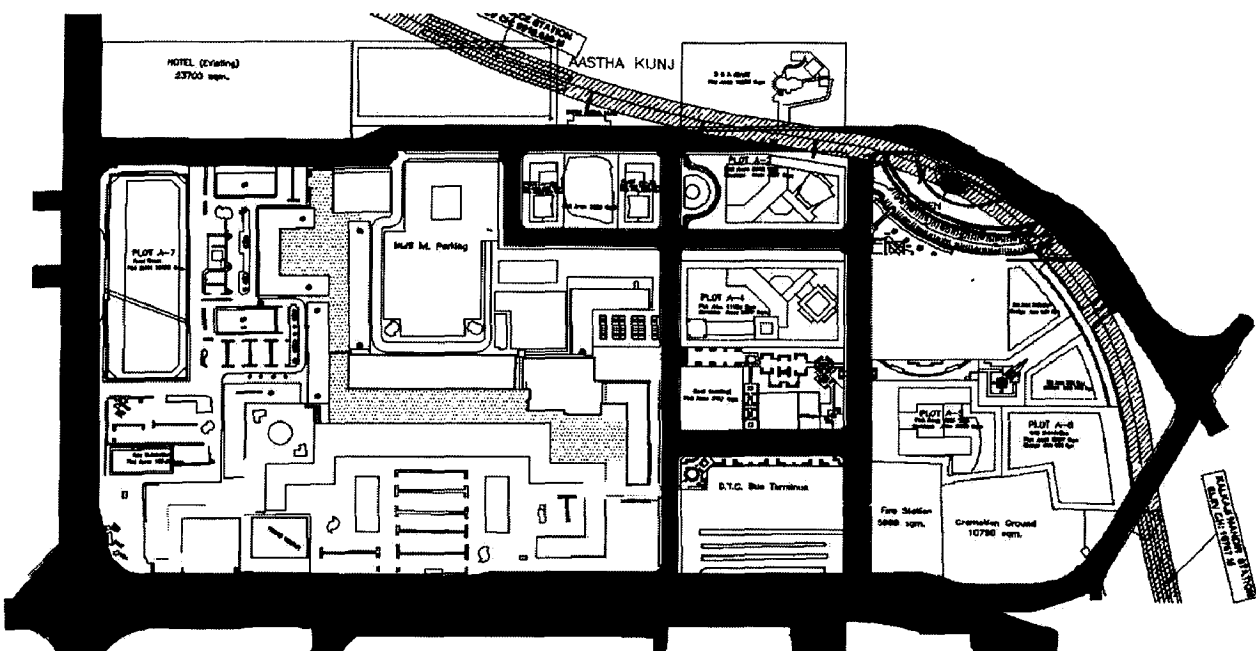


Fig 4.11: Plan showing vehicular circulation
Source: Base Map courtesy- Delhi Development Authority

For pedestrians there is a subway, which is used by good number of pedestrians coming to district centre.

This district centre is today more an office complex than a multifunctional centre. The permeability along the building front facing the road is almost absent due to:

1. Barriers created between the roads and building front by parking spaces.
2. Absence of major socio-cultural activity that attracts people to the centre.
3. Lack of proper entrance foyers to the centre as a whole and even at each building level, like office towers or other buildings.
4. Introverted nature of the retail front.