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## EXECUTIVE SUMMARY

- **Introduction**

Recognising the need for regulating the development of the entire influence area of Rajpura town, Government of Punjab declared Local Planning Area Rajpura (LPA Rajpura) in December 2007. Government also designated Chief Town Planner, Punjab as the Planning Agency to prepare the Master Plan of LPA Rajpura. LPA Rajpura comprises of 166 villages, out of which three complete villages namely Rajpura, Bir Rajpura and Banwari and 8 part villages namely Shamdo, Pahar Kalan, Dhakansu Kalan, Islampur, Dhamoli, Nilpur, Said Kheri, Kharajpur have been merged in Municipal Council area of Rajpura. The total area of Rajpura Municipal Council is 18.26 sq.km. According to Census 2001, the total population of LPA Rajpura was 2,61,344 persons out of which 82956 was urban.

- **Regional Setting**

Rajpura is an important subdivision / tehsil of Patiala district of Punjab which is situated 26km to the north-east of Patiala city along N.H-I and N.H-64. Rajpura is situated nearly 40 km south east of Chandigarh, the capital city of Punjab. Regional location of Rajpura is very ideal as two National Highways cross through it viz. NH-1 & NH-64. Rajpura acts as middle point between Amritsar and Delhi on NH-1 as both these cities are 225 km away from Rajpura in opposite directions. It is a first railway junction of Punjab on Delhi – Amritsar railway line. Another railway line is diverted towards Bathinda and Rajasthan. It extends from 30°22' N 30°37'30"N Latitude and 76°30' E - 76°48' E Longitude.

- **Historical Background**

Rajpura town was founded by one of the famous minister of Akbar namely Raja Todar Mal and was once the headquarter of **Pinjaur Nijamat** in the erstwhile state of Patiala. Development of Rajpura town has taken place in three phases. One is old Rajpura, the second is Rajpura Township and third is development on the periphery of township and along highways. Earlier development of Rajpura town started along both sides of old G.T.Road and railway line which now a days is known as old abadi. The township was developed post independence to rehabilitate the people who migrated from Pakistan province of Bahawalpur. Establishment of fuel market Industrial Estate in 1963, Industrial Focal Point and Urban Estate in 1970 also contributed to the development of Rajpura. Subsequently unauthorized development took place on both sides of Patiala-Rajpura and Rajpura-Chandigarh road.

- **Legal Framework**

"The Punjab Regional and Town Planning and Development (Amendment) Act, 2006" provides the legal framework for preparation of Master Plan. The four stage process involves declaration of L.P.A, designation of Planning Agency, preparation of present land use map and preparation and approval of Master Plan. The contents of the Master Plan as laid down by the Act are;

- a) Broad indication of the manner in which the land in the area should be used.
- b) Allocation of areas or zones of land for use for different purposes.
- c) Indication, definition and provision of the existing and proposed highways, roads, major streets and other lines of communication.
- cc) Indication of areas covered under heritage site and the manner in which protection, preservation and conservation of such site including its regulation and control of development which is either affecting the heritage site or its vicinity shall be carried out.
- d) Regulations to regulate within each zone the location, height, number of storeys and size of buildings and other structures, open spaces and the use of buildings and structures.

The Act also provides for "Control of Development and Use of Land in Area where Master Plan is in Operation"

- **Population growth**

The population of LPA Rajpura as per 2001 census is 261344 persons which has grown at a growth rate of about 17.44% during 1991-2001. The details are summarized in table below:-

	POPULATION			GROWTH RATE IN %	
	1981	1991	2001	1981-91	1991-2001
<b>LPA RAJPURA</b>					
TOTAL	184158	222523	261344	20.83	17.44
URBAN	58645	70983	82956	21.03	16.87
RURAL	125513	151540	178388	20.73	17.72

The average population density of Rajpura town is 79 persons / ha. However, ward wise densities vary considerably. The highest and the lowest density varies between 452 persons per hectare and 19 persons per hectare respectively. The low average population density falls in peripheral areas, grain market, industrial focal point and residential urban estate.

- **Employment**

The work force participation rate of Rajpura M.CI as per 2001 census is 33.6%. The detailed data regarding various categories of workers in census 2001 pertaining to Rajpura town is not available.



- **Housing**

According to Census 2001, 91.3% of the census houses are of permanent nature, 5.2 % are semi-permanent, 3% serviceable temporary houses and only 0.5% non-serviceable temporary houses.

- **Present Land Use**

Preparation of present land use map was undertaken with the help of Punjab Remote Sensing Centre (PRSC), Ludhiana. For the core built up area, Quick Bird data of 0.6m resolution was used where as for the outer areas Cartosat I data of 2.5 m resolution was used. The maps based on satellite imageries were updated by undertaking field surveys. Out of total area of LPA, maximum proportion is occupied by agriculture (87.97%) followed by residential use (5.89%), and industry (2.31%).

- **Present Transport Network**

The regional road network of Rajpura comprises of two National Highways viz. N.H- 1 and N.H- 64. Shambhoo-Ghanaur road, Tepla-Banur road and Jansua-Saneta road via Khera Gajju are other major roads passing through LPA Rajpura. N.H.-I has a total length of 27.63 km within L.P.A out of which 24.05 km falls outside M.Cl. limits of Rajpura with a total right of way of 90 m. N.H.64 has a total length of 17.98 km within L.P.A out of which 9.53 km falls outside M.Cl. limits of Rajpura.

Within township area of Rajpura there is a combination of grid iron and semi-circular roads. Rajpura is very fortunate in terms of rail network as well as it is an important railway junction.

- **Physical Infrastructure**

Water supply of Rajpura town is predominantly canal based. The water supply for 2009 population works out to be more than 210 lpcd. (litres percapita per day) which is higher than the norm of 135 lpcd. 89.4% of the population of the town enjoys the facility of piped water supply. The water supply pattern of the villages falling in the LPA reflect that 98.8% of population of the LPA is covered under rural water supply scheme.

As regards sewerage, 84% of the population of Rajpura has access to underground sewerage. However, sewerage collected is pumped without treatment in the natural drains through pumping stations.

Though collection and transportation of solid waste is managed by the Municipal Council, yet disposal is not in the form of sanitary land fills as required under the

Municipal Solid Waste Rules of the Ministry of Environment and Forest.

- **Social Infrastructure**

L.P.A Rajpura has a large number of institutions imparting education at school and at college level. Rajpura offers quality of education in professional courses like ITI, pharmacy, nursing, engineering, planning & architecture, MBA. PMN College, N.T.C college, Govt. Multi-Discipline Academy of Engineering & Technology for girls, Gyan Jyoti Group of Institutions, Mukat College of Education, Chitkara Institute of Engineering & Technology, Chitkara school of Planning & Architecture, Chitkara School of Pharmacy, Swift College of Management, Swift Institute of Engineering, Swift Institute of Nursing, Surya Word Group of Education, Aryan College of Management are the important institutes of Rajpura. L.P.A Rajpura lacks in higher level medical facilities. Rajpura town has one Intermediate Hospital of Category 'A' and five Intermediate Hospital of category 'B' which serve only at town level. In addition to above, town has five nursing homes and two dispensaries. As per information obtained from the village directory, L.P.A Rajpura has 4 PHC, 23 sub centres, 11 allopathic dispensaries and 4 ayurvedic dispensaries. People earlier were making use of such facilities available at Chandigarh (P.G.I, Sector-32 Multi Specialty Hospital) and Govt. Rajindra Hospital at Patiala. Now the higher level medical as well as educational facilities are available at the outer extreme of L.P.A Rajpura at Gian Sagar Medical Education & Health Complex and Chitkara Deemed University at the outer limits of L.P.A Rajpura offers numerous technical and other courses. In addition to neighborhood and small parks, there are three city level parks in the town namely Shivaji Park, Nirankari Park and PTDB Park. Rajpura city has four sub post offices and one head post office, one Telephone Exchange and BSNL Training Institute in Rajpura city. L.P.A Rajpura has two police stations and five police posts at various locations in the city and L.P.A.

- **Population forecast**

The population of LPA Rajpura is estimated to grow to 4.06 lacs out of which urban population is estimated to be 2.90 lacs by 2031.

- **Infrastructure Demand**

The infrastructure requirements for the projected population by 2031 would be as follows:

- a) Water supply : 39.2 mld
- b) Wastewater : 31.4 mld

- c) Solid waste : 73 metric tons per day
- d) Power : 116 MW

- **Heritage Conservation**

3 buildings namely Kos Minar Rajgarh, Kos Minar Naushehra, Mughal Serai have been declared as protected monuments under 'The Punjab Ancient & Historical Monuments and Archaeological Sites & Remains Act, 1964'.

- **Vision 2031**

A specially constituted Think Tank comprising of official and non-official representatives from all walks of life articulated the Vision 2031 for Rajpura in following terms:

**“To develop and nurture the industrial, trade & commerce spectrum of Rajpura by striking a balance in the distribution of predominant landuses i.e. residential, industrial and commercial uses with enhanced physical connectivity in terms of road, rail and freight corridor in an environmentally sustainable manner.”**

The strategies to attain this vision would require spatial and land use planning, infrastructure planning ensuring environmentally sustainable development etc. The role of Master Plan in this regard would be that of facilitating a spatial and land use planning framework conducive to attaining the vision.

Visualising the future structure of the city involves delicate trade-offs. If urban development is freely permitted anywhere, it might lead to sprawl that is difficult to serve in terms of infrastructure services and may cause loss of fertile agricultural land. On the other hand, if the future structure is visualized as compact city that is easier to service, it might increase the land price where development is permissible and might cause unauthorized development where it is not. The extent of urbanization visualized is therefore not narrowly linked to land required for accommodating the population and economic activities by 2031. The extent of urbanization is based on the land requirement for various activities, transport network that would be desirable and the areas that would acquire development potential on account of such transport network.

- **Proposed Land Use and Road Network**

In the light of the above approach, land use and road network plan has been proposed as a part of the Master Plan. The land in LPA has been zoned for Residential, Commercial, Wholesale and Warehousing, Industrial, Logistic, Mixed Landuse and Rural & Agricultural purposes. However, specific designation for public purposes like

schools, hospitals, playground etc have not been earmarked. The proposed land use plan is shown in Drg no. STP (P) 291/2011 Dated: 21.10.2011.

The arterial road network proposed comprises of four categories roads viz. R1 (200') R2 (150'), R3 (100'), R4 (80') and R5 (60') This is separately shown on Drg no. STP (P) 292/2011 Dated: 21.10.2011.

- **Zoning Regulations**

"The Punjab Regional and Town Planning & Development (Amendment) Act,2006" provides for the "Control of Development and Use of Land in Area where Master plan is in operation". However, control of development through parameters like subdivision of land, ground coverage, FAR, parking, building design and construction has been covered through various controls which are elaborated after Zoning Regulations. The zoning regulations included in the Master Plan are confined to use of land. For this purpose, land use zones as shown in the Proposed Land Use Plan is one dimension and permissible uses in each of these zones is the second dimension supplemented with the landuse provisions as provided in various notifications issued by Punjab Government from time to time. In addition, regulations regarding maximum permissible densities and heritage conservation are also proposed.

# 1. INTRODUCTION

## 1.1 Initiation

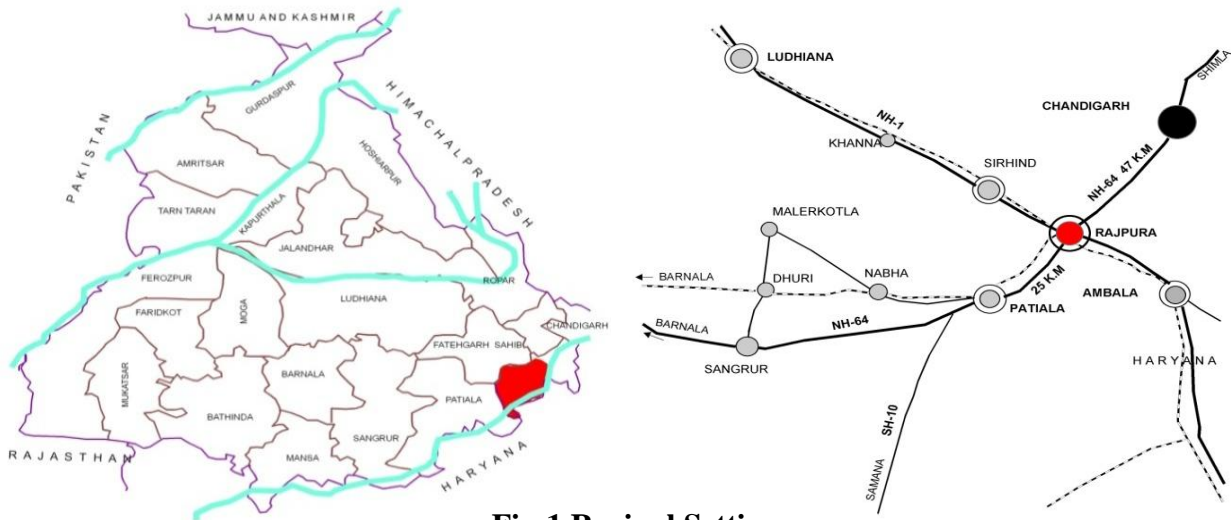
To develop Rajpura town and its surroundings in an orderly manner and to prepare its Master Plan under "The Punjab Regional and Town Planning and Development Act '1995' Local Planning Area was declared under **section 56(1)** of 'The Punjab Regional and Town Planning and Development(Amendment) Act, 2006' vide notification number **12/72/2006-4 HGI/9835 dated 17-12-2007.**(Annexure-I)

**L.P.A. Rajpura** comprises of **166 villages**. Total notified area of L.P.A Rajpura based on **census-2001** works out to **41961 hectares**, however, **Punjab Remote Sensing Centre** has calculated the area as **41767 hectares**. This discrepancy is due to the area of village Chharwar H.B.no.230 which as per revenue record and P.R.S.C works out to 336 ha. instead of 538 ha. mentioned in census handbook 2001. Therefore for the purpose various calculations and study, area as supplied by P.R.S.C. Ludhiana has been adopted in preparation of Master Plan. L.P.A Rajpura includes **eight villages** namely Khalawar, Budhanpur, Chharwar, Salempur, Bhagwanpur, Paragpur, Manoli Surat and Jhajon of **district S.A.S Nagar**. Out of 166 villages, three complete villages namely Rajpura, Bir Rajpura and Banwari and 8 part villages namely Shamdo, Pahar Kalan, Dhakansu Kalan, Islampur, Dhamoli, Nilpur, Said Kheri, Kharajpur have been merged in Municipal Council area of Rajpura. L.P.A Rajpura has a **total population of 2,61,344 persons** as per **census 2001** out of which **urban population is 82,956 persons** and **rural population is 1,78,388 persons**. The jurisdiction of L.P.A extends upto village Kehargarh, village Gurditpura and village Khera Gajju in the north, village Jhajon, village Tepla and village Rajgarh in the east, village Kabulpur and village Pipal Mangholi in the south, and village Takhtu Majra, Gopalpur and village Abdulpur in the west. The physical extent and boundaries of L.P.A are shown in Fig. 2 and list of all rural settlements covered under the jurisdiction of L.P.A Rajpura is given in Annexure II. Accordingly, **Chief Town Planner, Punjab** has been designated as the **Planning Agency** for L.P.A Rajpura vide **notification no. 12/72/2006-4HGI/9841 Dated17-12-2007.** (Annexure-III)

## 1.2 Regional Setting of L.P.A Rajpura in Punjab

Rajpura is an important subdivision / tehsil of Patiala district of Punjab which is situated 26km to the **north-east of Patiala town** on the Grand Trunk Road. It lies **40 km south-east of Chandigarh**, the capital town of Punjab and **22km from Ambala**. LPA Rajpura

touches Greater Mohali Region, L.P.A Banur in the north, L.P.A Patiala in the south, L.P.A. Fatehgarh Sahib in the west, L.P.A S.A.S Nagar, L.P.A Lalru, river Ghaggar and Haryana State boundary in the east. It is very well connected by road and rail network with major cities of Punjab, Haryana, Himachal, J&K and national capital i.e. Delhi. The town is the first railway junction in Punjab. It is a railway junction on the Delhi – Amritsar railway line. Here two major rail lines are diverted in two directions i.e. one towards Amritsar and Jammu and the other towards Bathinda and Rajasthan. Thus it is

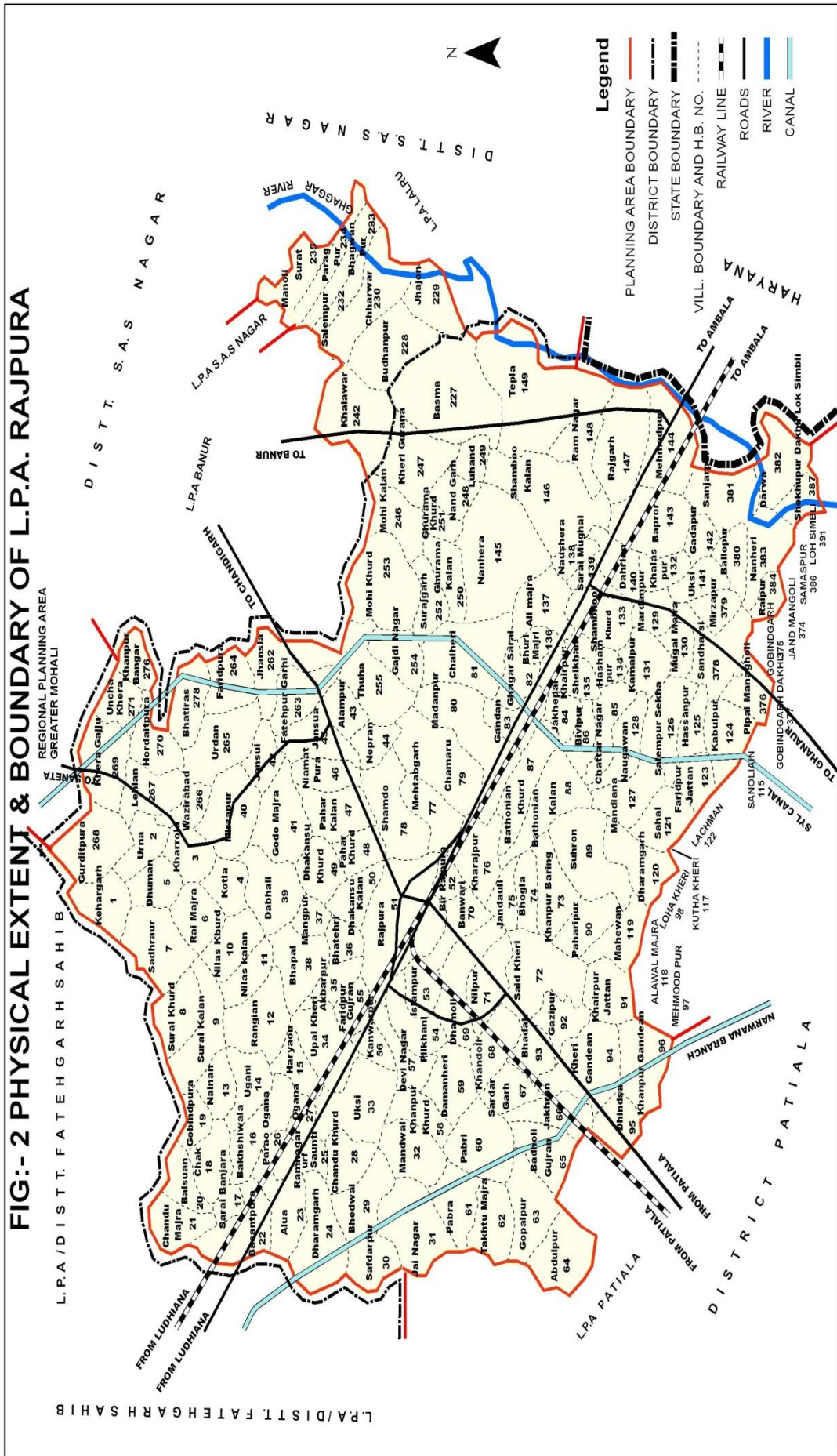


**Fig:1 Regionl Setting**

regarded as 'Gateway of Punjab' as all roads and rail transport touch Rajpura for the routes going to other major cities of Punjab, Haryana as well as Jammu & Kashmir. This is one of the major factor that it has a great potential for industrial growth. The nearest upcoming Chandigarh International Airport is at a distance of 32 Kms. L.P.A Rajpura lies between 30°22' N-30°37'30"N Latitude and 76°30' E - 76°48' E Longitude.

### 1.3 Physiography

L.P.A Rajpura covers north-eastern part of Patiala district and is a part of the great plains of North India. It has a mean elevation of 259m (849 feet). Out of the three physiographic regions of Patiala district, namely the Upland Plain, the Choe Infested Foothill Plain, the Flood Plain of the Ghaggar River, most of L.P.A Rajpura lies in the Eastern Upland Plain and part of Flood Plain of the Ghaggar River. Eastern Upland Plain is higher in elevation than the Flood Plain but is lower than the Choe infested Plain. This terrain is flat and featureless. The Flood Plain of the Ghaggar river runs in a narrow belt all along the river. Its present floodplain is flooded during heavy rainfall, which results in damaging of crops and bring boom for rice cultivators. Floods deposit silt and enrich the soils. Its soils are heavier (silty-loams) and are ideal for the cultivation of rice.



#### 1.4 Drainage System of L.P.A

The drainage system of L.P.A Rajpura consists of natural as well as man made drainage system. The drainage pattern of L.P.A Rajpura as shown in the Fig 3 indicates a very distinctive pattern of river, canals, distributaries, minors and drains passing through it.

**Ghaggar River:** - Ghaggar is essentially a seasonal river. It contains a streak of water in its upper course through out the year but remains dry in its lower parts during most of the year. However, during rainy season it is full of water. It is flooded during heavy rain fall. It has a braided course in its upper parts where its channel is shallow and wide. It flows in north eastern to south eastern direction of L.P.A Rajpura and enters L.P.A Rajpura at village Manoli Surat and after flowing through various villages it exits L.P.A at village Shekhupur Dakhli Lok Simbi.

**Bhagna Nadi:** - It is a natural creek and originates from Bhagwanpur village of L.P.A Rajpura and after flowing through various villages of L.P.A (Salempur, Chharwar, Budhanpur, Basma, Tepla, Ram Nagar, Rajgarh, Mehmampur, Sanjarpur) it merges in Ghaggar river near village Nanheri.

**Dhakansu Nallah:** - This seasonal nallah originates near Tangauri and brings rain waters of the Mohali area. It is known as Dhakansu Nallah till G.T.Road beyond that its name changes to Pachis dara. It enters LPA Rajpura near Jhansla village flowing further down to the south, it touches outskirts of Rajpura town after which it runs southward ultimately to join river Ghaggar near village Mehdoonan outside LPA. This seasonal nallah does not dry completely during other seasons. It contains a streak of water during other seasons too because of the disposal of sewerage water of Chandigarh town and areas around it into it. Earth filled bandha has been erected on the western side of Dhakansu/ Pachisdara nallah i.e. towards Rajpura town side so as to protect the town from the havoc of floods caused by this nallah.

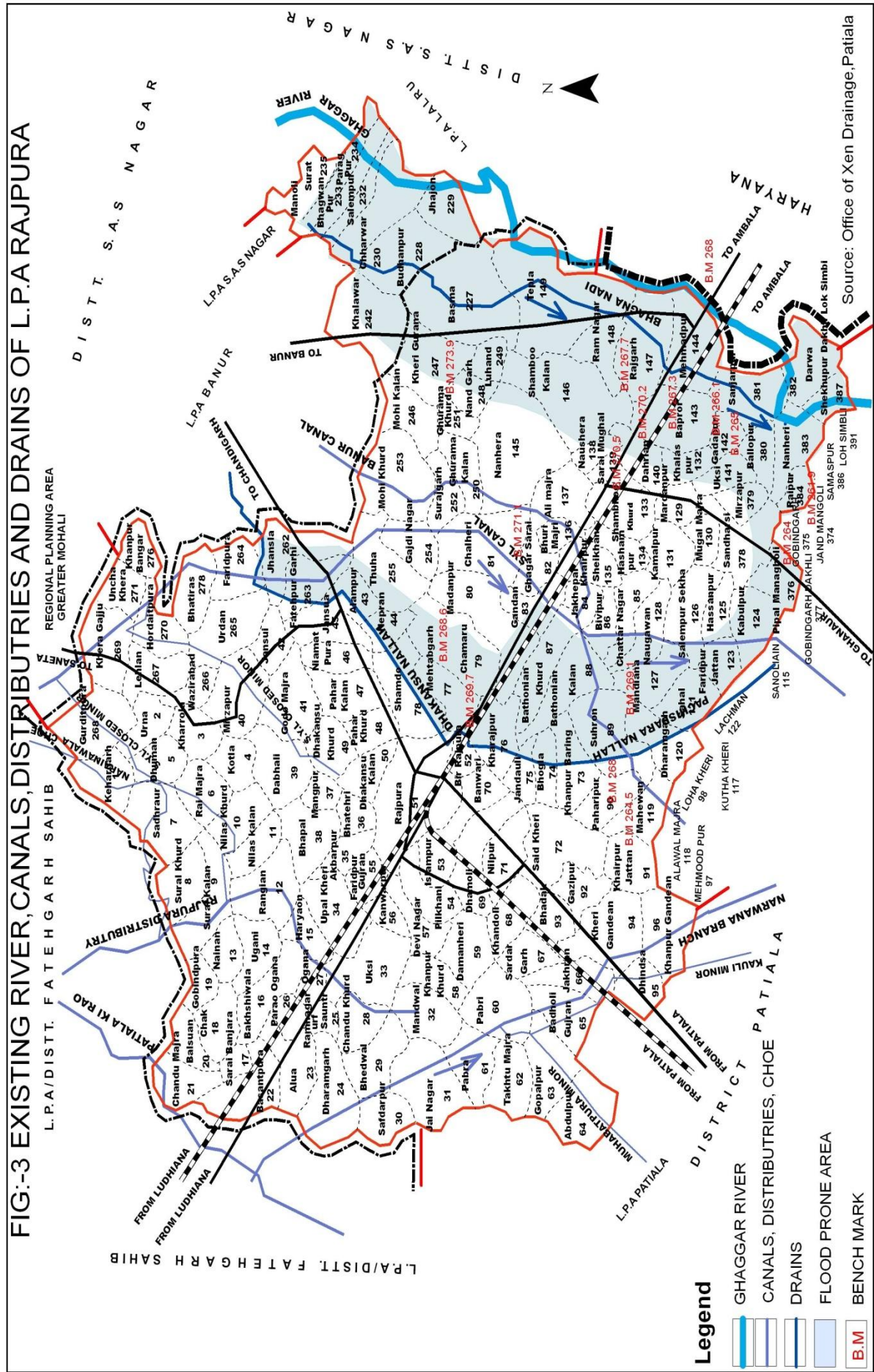
**Banur Canal:** - This seasonal canal originates from the tail of Ghaggar river at RD 120100. It enters L.P.A Rajpura at village Mohi Khurd and exits at village Mahewan.

**Rajpura Distributary:-** It originates from Bhakra main line RD 92230. It enters L.P.A Rajpura at village Sural Kalan.

**Narwana Canal:** - It also originates from the Bhakra main line near Sonda headworks and flows in the western direction of L.P.A Rajpura. It enters L.P.A at village Dharamgarh and after flowing through various villages it exits L.P.A. at village Khanpur Gandean.



FIG:-3 EXISTING RIVER,CANALS,DISTRIBUTORIES AND DRAINS OF L.P.A RAJJPURA



Source: Office of Xen Drainage, Patiala

## 1.5 Brief development history of Rajpura Town and its Landmarks

The ancient history of the Rajpura town goes back to the period of Mahabharata. Many coins have been found belonging to Yaudheyas, an ancient race who took an active part in the war of Mahabharata. This numismatic evidence reveals that this place was once the headquarters of Yaudheyas during the ancient time. Rajpura town was founded by one of the famous minister of Akbar namely Raja Todar Mal and was once the headquarter of **Pinjaur Nijamat** in the erstwhile state of Patiala.

**Thakurdwara** is an important old building supposed to be the first building built by Raja Todar Mal in the town during 16<sup>th</sup> century. It has been partly preserved and partly renovated and some portions of the building are extinct.

Development of Rajpura town started along both sides of old G.T.Road and railway line which now a days is known as old development. In the wake of partition of the country in 1947, millions of persons displaced from the territories of Pakistan migrated to India in a miserable plight and the Govt. of India and the State Govt. had to face an unprecedented and gigantic task of rehabilitating those unfortunate victims of partition. With that aim in view the then Govt. of Patiala and East Punjab States Union (PEPSU) promulgated 'The Rajpura Development Ordinance on April, 1949' for the purpose of setting up a township at Rajpura to provide shelter to the displaced persons from princely state of Bahawalpur. The Ordinance was later repealed and ultimately 'The Pepsu Townships Development Board Act, 1954' came into existence. Board has acquired about 1165 acres of land which was developed in a planned manner over a period of time for the rehabilitation of displaced persons from the state of Bahawalpur. This planned township area extends on both sides of Patiala-Rajpura road having road widths of 100 feet, 60 feet, 40 feet and 30 feet. Establishment of Industrial Estate in 1963, Industrial Focal Point and Urban Estate in 1970 also contributed to the development of Rajpura. Subsequently unauthorized development took place on both sides of Patiala-Rajpura and Rajpura-Chandigarh road.

**Table No.1.5.1 Development Milestones in Rajpura.**

Sr.No.	Year	Events
1.	16 <sup>th</sup> century	Establishment of G.T.Road.
2.	1951	A.P Jain Hospital was established.
3.	1960	Piped water supply system was introduced.
4.	1963	Development of industrial Estate.
5.	1970	Development of industrial focal point.
6.	1964	Planned underground sewerage system was started.
7.	1979	Fire Brigade was established.
8.	1993	NSIC (National Small Industrial Corp.) was established.

9.	1997	SOS (Save Our Soul) Children's village was established.
10.	2010	Govt. Multi-Discipline Academy of Engineering & Technology for girls is being established.

Source: STP Office, DTP Office

**Table No. 1.5.2 : Institutional Milestones of Rajpura.**

Sr.No.	Year	Events
1.	1961	ITI for Boys.
2.	1966	Patel Memorial National College.
3.	1992	ITI for Girls.
4.	2002	Chitkara Institute of Engg. & Tech..
5.	2007- 08	Ind Swift Institute of Nursing & Pharmacy.
6.	2008 - 09	Surya Group of Institutes Engg.& Tech..
7.	2010	Gyan Jyoti Group of Institutes .

Source: STP Office, DTP Office

**Table No:1.5.3 Planning & Administrative Milestones of Rajpura.**

Sr.No.	Year	Events
1.	1949	Establishment of PEPSU Township Development Board (PTDB).
2.	1951	First PTDB Scheme was initiated.
3.	1961	Establishment of Municipal Committee.
4.	1970	First Urban Estate was setup.
5.	1981	First Master Plan for Rajpura was prepared.
6.	1983	Rajpura Improvement Trust was setup.
7.	2007	L.P.A, Rajpura was notified.

Source: PTDB, Improvement Trust, STP Office, DTP Office

## 1.6 Legal Framework for Preparation and Implementation of Master Plan

Master Plan of L.P.A Rajpura is being prepared as per the provisions of "The Punjab Regional and Town Planning and Development (Amendment) Act, 2006" (PRTPD Act, 2006)". Main provisions of the law are given as under:-

The act is the sole legal framework available for preparing Master Plans and Regional Plans. It is a comprehensive act and provides for the manner in which the use of land in the area of a Local Planning Area shall be regulated. The act also prescribes specific time period for various steps in the plan preparation process.

### 1.6.1 The following sections of the Act deal with the preparation of Master Plans:

- Under section **56(1)**, L.P.A Rajpura was notified vide notification no. 12/72/06-4HGI/9835 dated 17.12.2007 (Annexure - II) in the official gazette for preparing Master Plan. Once an area has been declared under section-56 (1), no person can institute or change the use of land for any purpose or carry out any development in respect of any land without the prior permission of competent authority until the Master Plan comes into operation. However, this prohibition does not apply to any area comprised in abadi deh of any village falling inside its lal lakir or phirni.
- After the declaration of planning area as above, State Govt. has to designate the Planning Agency for the L.P.A under section 57. Accordingly Chief Town Planner,

Punjab has been designated as the Planning Agency for L.P.A Rajpura vide notification no 12/72/06- 4HGI/9841 dated 17.12.2007 (Annexure - III)

- Section **58** of the act states that the
  - (1) Designated Planning Agency will work under the overall directions and control of the State Government.
  - (2) The state Government may assign any or all of the following functions to the Designated Planning Agency, namely to
    - (i) Carry out survey of the regional planning area, L.P.A or a site for new town, as the case may be, and prepare reports on the surveys so carried out;
    - (ii) prepare an existing land use map and such other maps as may be necessary for the purposes of preparing regional plan, master plan and a new town development plan;
    - (iii) Prepare a regional plan, master plan and a new town development plan.
- Section **59** deals with the preparation of present land use map and fixes six months time for this purpose, after the designation of Planning Agency which may be extended by the State Govt. from time to time.
- Section 60 provides for expenses that the State Government or any other authority functioning in the Planning Area may determine for payment to the designated planning agency as contribution towards the expenses incurred by it in the discharge of its functions.

Chapter X deals with the preparation and approval of Master Plans of towns / cities.

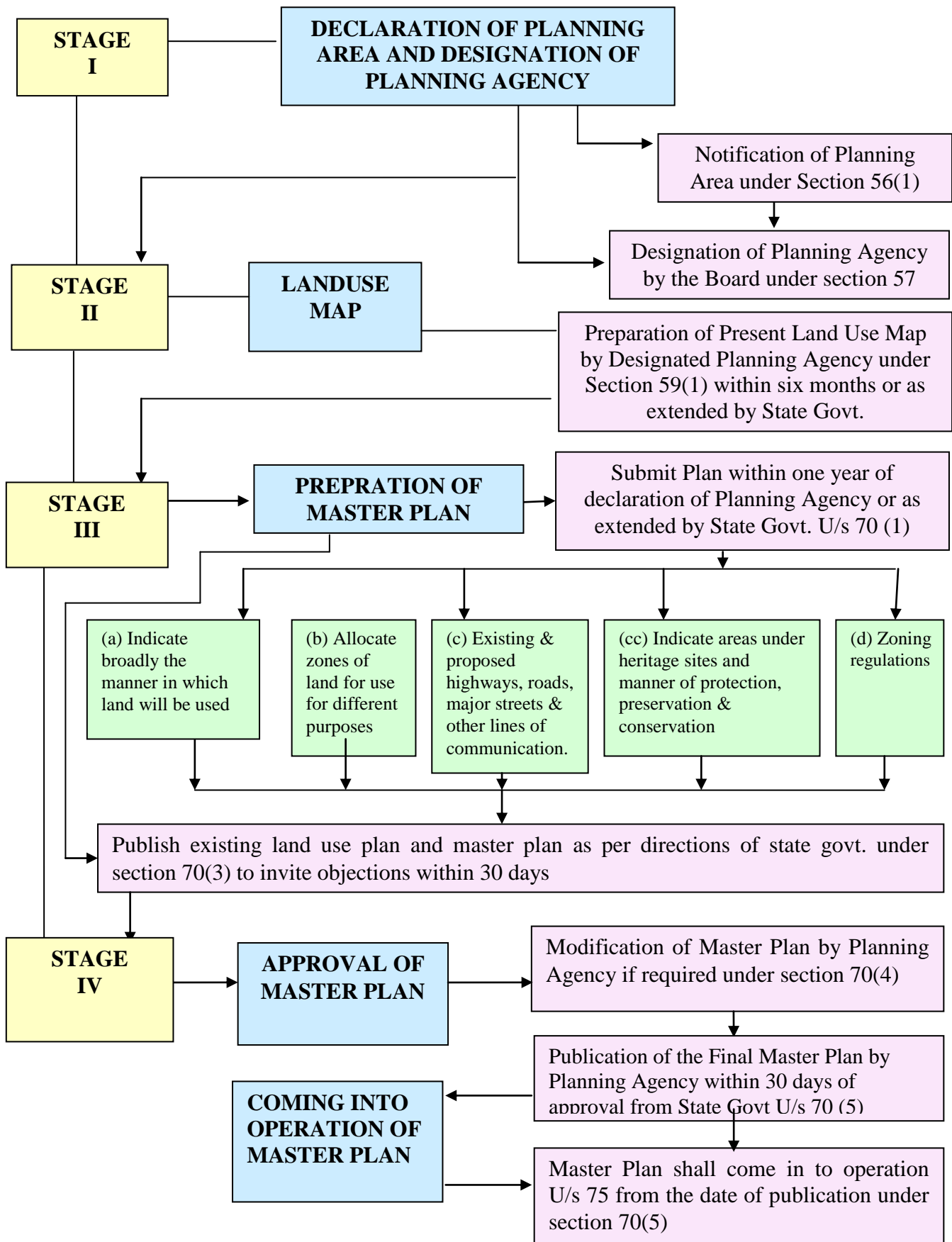
- Section **70(1)** states that the planning agency shall not later than one year after declaration of planning area and after the designation of that agency for that area shall prepare and submit to the state government a Master Plan for its approval. The Master Plan so prepared shall –
  - a) Indicate broadly the manner in which the land in the area should be used.
  - b) Allocate areas or zones of land for use for different purposes.
  - c) Indicate, define and provide the existing and proposed highways, roads, major streets and other lines of communication.
  - cc) Indicate areas covered under heritage site and the manner in which protection, preservation and conservation of such site including its regulation and control of development, which is either affecting the heritage site or its vicinity, shall be carried out.
  - d) Include regulations to regulate within each zone the location, height, number of storeys and size of buildings and other structures, open spaces and the use of buildings, structures and land.
- Section **70(2)** regulates the form and contents of the master plan and shall include such maps and such descriptive matter as may be necessary to explain and illustrate the proposals in the master plan.

- Section **70(3)** has the provision for the state government to direct the designated planning agency to publish the existing land use plan and master plan and the information regarding the place or places where copies of the same may be inspected by the public for inviting objections in writing with respect to existing land use plan and master plan within a period of 30 days from the date of publication.
- Under section **70(4)**, the state government after considering the objections and in consultation with the board may direct the designated planning agency to modify the master plan or approve it as such.
- Under section **70(5)**, the Designated Planning Agency after approval of the state government shall publish the final master plan in the official gazette after carrying out the modification if any under intimation to the state government within a period of 30 days from the date of according approval by the state government.
- According to section **75**, the Master Plan shall come into operation from the date of publication. Refer to sub section 5 of section 70.
- Section **76** provides for the amendment in the master plan and says that at any time after the date on which the master plan for an area comes into operation, and at least once after every ten years, after that date, the Designated Planning Agency shall after carrying out such fresh surveys as may be considered necessary or as directed by the government, prepare and submit to the government a Master Plan after making alterations or additions as it considers necessary.

The flow chart showing the process of Master Plan preparation and its approval is illustrated on next page:

- **Chapter XI** of the Act also provides for “Control of Development and Use of Land in the area where the Master Plan is in operation”.
- **Chapter XII, Section 91** of the Act deals with the preparation of Town Development Schemes that can play a significant role in the implementation of Master Plan by way of planned development and through making land available for the open spaces, recreation, education and health services, transport and communication network, water supply, sewerage, sewage disposal and other public utilities including electricity and gas etc

**FIG 4: STAGES OF MASTER PLAN PREPRATION**  
 (As per "The Provisions of the Punjab Regional & Town Planning & Development  
 (Amendment) Act, 2006")



## 2 POPULATION, HOUSING AND EMPLOYMENT

The true character of the town can be **judged** by statistical data related to the demographic profile in terms of population growth, population density, literacy rate etc. The decadal study of population growth & its characteristics are of great help in bringing out the trends of population growth, population density, literacy rate & for perceiving the future of town. Thus, the following study examines the population growth & various characteristics of population in L P A Rajpura and Rajpura M.Cl.

### 2.1 Population Growth and Characteristics

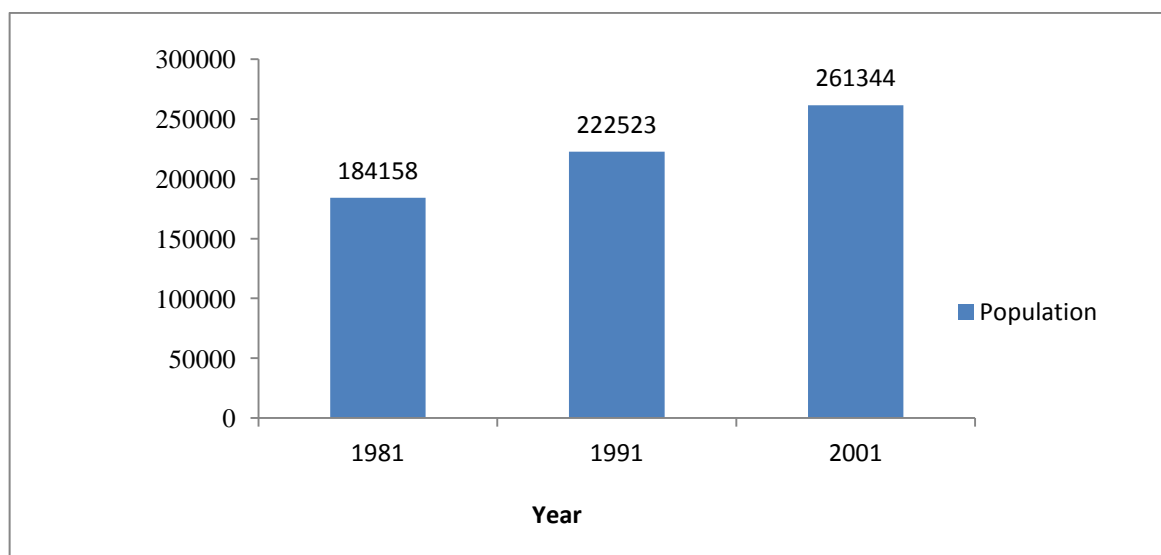
#### 2.1.1 Population Growth Rate of L.P.A Rajpura

L.P.A Rajpura comprises of 166 villages. Table No. 2.1(a) reveals the growth trends of L.P.A Rajpura. It shows that during the decade of 1981-91, the growth rate of population of LPA Rajpura was 20.83% which fell down to 17.44% during the decade of 1991-2001 as against the growth rate of of 20.81% and 20.10% respectively for State of Punjab during the same decades.

**Table No. 2.1(a) Population Growth of 1981-2001**

Punjab State Growth Rate(%)		
	1981-91	1991-2001
Total	20.81	20.10
Urban	28.95	37.86
Rural	17.69	12.65
L.P.A Rajpura Growth Rate(%)		
	1981-91	1991-2001
Total	20.83	17.44
Urban	21.03	16.87
Rural	20.73	17.72

Source: Census of India: 1981, 91 & 2001



**Fig 5:- Population growth trend of L.P.A Rajpura**

**Table 2.1 (b) Share of L.P.A Rajpura Population in Punjab.**

Year	Total			Urban Population			Rural Population		
	Punjab	L.P.A Rajpura	%	Punjab	L.P.A. Rajpura	%	Punjab	L.P.A Rajpura	%
1981	16788915	184158	1.10	4647757	58645	1.26	12141158	125513	1.03
1991	20281969	222523	1.09	5993225	70983	1.18	14288744	151540	1.06
2001	24358999	261344	1.07	8262511	82956	1.00	16096488	178388	1.11

Source: Census of India: 1981, 91 & 2001

It can be observed from table no. 2.1 (b) that the **total percentage share** of population of L.P.A in context Punjab in the **year 1981 was 1.10%** which decreased to **1.09% in 1991** & again came down to **1.07% in 2001**. The **share of urban population of L.P.A Rajpura** to total urban population of Punjab State was **1.26% in 1981, 1.18% in 1991** & slightly declined to **1.00% in 2001**. The share of rural population of L.P.A in context of Punjab rural population increased slightly from the period of 1981 to 2001 as it was 1.03% in 1981, 1.06% in 1991, 1.11% in 2001.

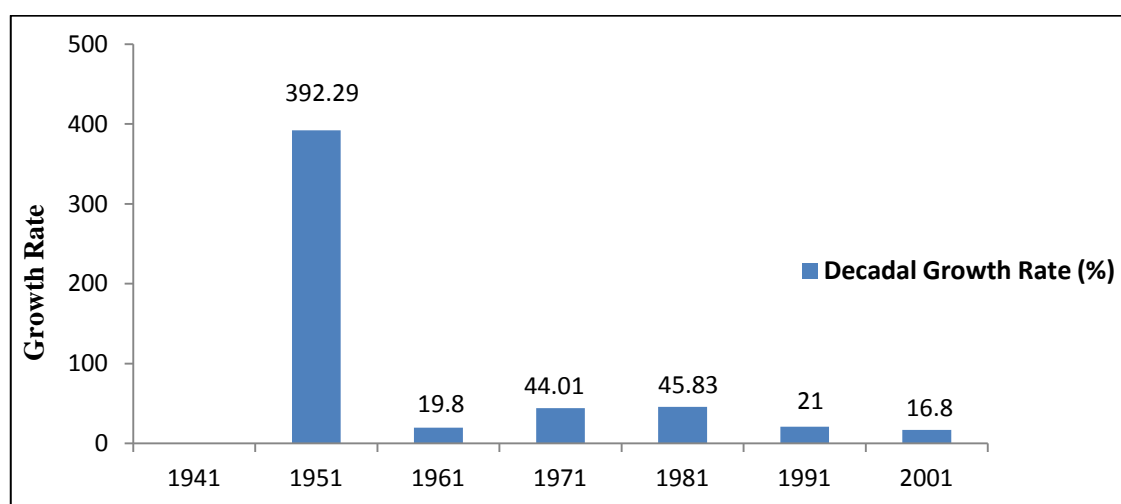
- **Population Growth since 1941 of Rajpura M.Cl.**

The growth of population of Rajpura M.Cl from 1941-2001 is shown in Table no. 2.1 (c). It is observed that the decadal growth rate of Rajpura M.Cl had increased at a fast rate after independence. The decade of 1941-51 marked a sharp increase in the growth rate of

**Table No. 2.1(c): Growth Trends- Rajpura M.Cl. (1941-2001)**

Year	Population	Decadal Growth Rate( %)
1941	4,735	-
1951	23,310	392.29
1961	27,925	19.80
1971	40,214	44.01
1981	58,645	45.83
1991	70,983	21.03
2001	82,956	16.87

Source: Census of India: 1981, 91 & 2001



**Fig 6:- Population Growth of Rajpura M.Cl.**



population. The total population in 1941 was 4,735 persons which rose to 23,310 persons in 1951 which shows a growth rate of 392.29%. One of the major reasons behind this sharp increase in growth rate of population was large influx of population from **district Bahawalpur** (Pakistan) after partition of India. The growth rate of population shows fluctuating trends from 1961-1981 as it plummeted down to 19.80% in 1961 and rose up to 45.83% in 1981. Decades of 1981-2001 showed decline in the growth rate of population. In 1981-1991 it fell down to 21.0% due to outbreak of riots in Punjab and large number of people migrated to other states. In 1991-2001 it further fell down to 16.8%.

- **Distribution of Population in L.P.A Rajpura.**

The study of distribution of the rural population of L.P.A Rajpura for the year 1991 and 2001 reveals that there is **high concentration of population** in the **vicinity of Banur - Tepla road** with the exception of villages Luhand and Mehmampur. The rural population is **moderately concentrated** in the villages lying **along Chandigarh -Rajpura- Patiala road** with the exception of villages Dhindsa, Gazipur and Pahar Khurd which are having low concentration of population, whereas all along Ambala – Rajpura – Ludhiana road and rest of the L.P.A rural indicates mixed trend of concentration of population as shown in the **Fig 7**. Positive growth rate has been noticed predominantly in all the rural settlements of L.P.A Rajpura except in few villages namely Pahar Kalan, Ugani, Gobindpura, Mohi Khurd, Kabulpur, Naugawan, Paharipur, Badhali Gujran, Takhtu Majra, Kanwarpur, Faridpur Gujran, Sardargarh, Balsuan.

**Paragpur, Kamalpur, Mugal Majra, Shekhupur Dakhli Lok Simbli** are **un-inhabited** villages.

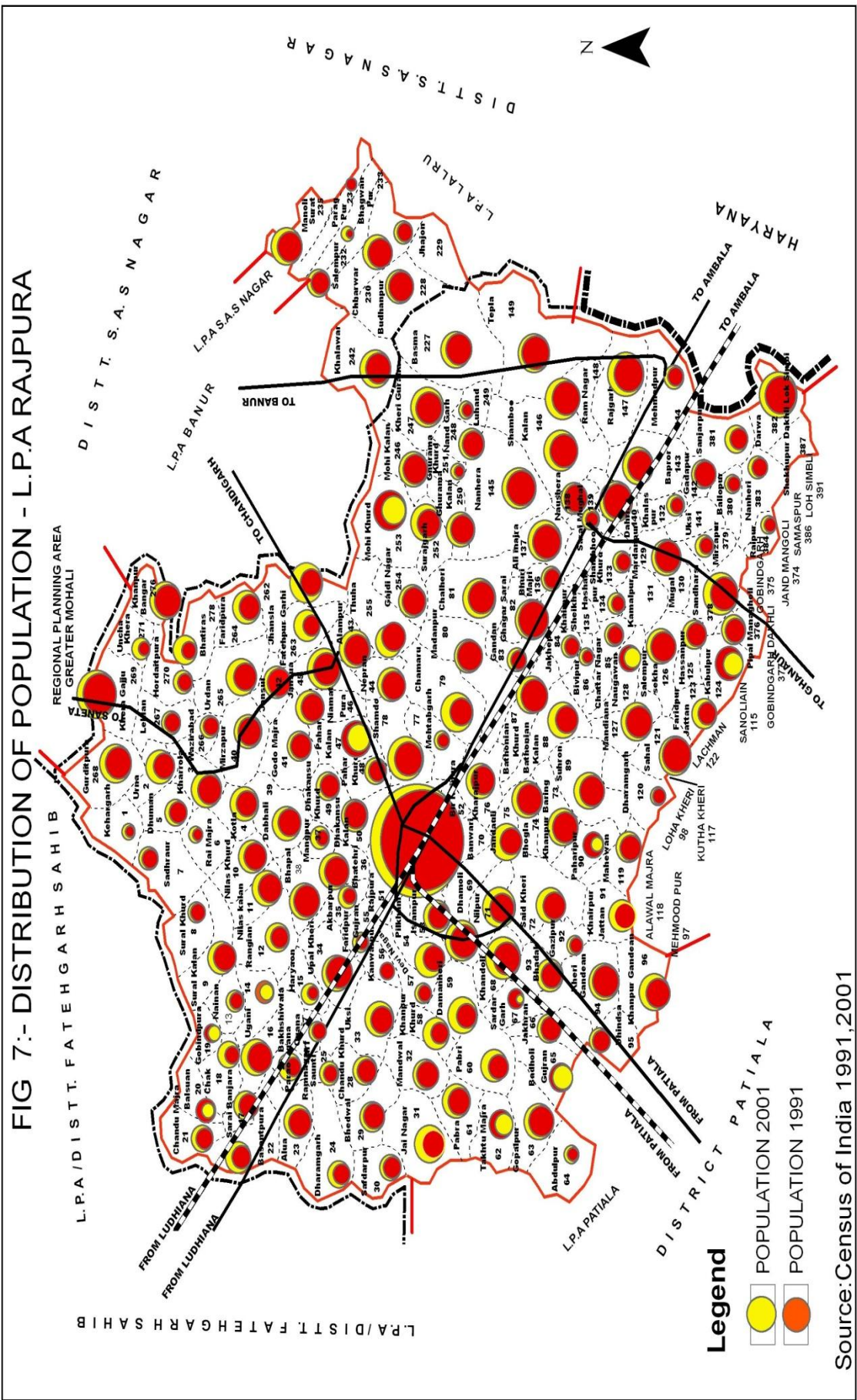
- **Density (Rajpura M.Cl.)**

The density of population of Rajpura town has increased from 5864 persons/sq km in 1981 to 7098 persons/sq km in 1991 (Table No.2.1 d). The population density of town is decreased to 4543 persons/sq km in 2001 due to the increase in the area of Municipal Council which was earlier 10 sq. km in 1991 and 18.26 sq.km in 2001.

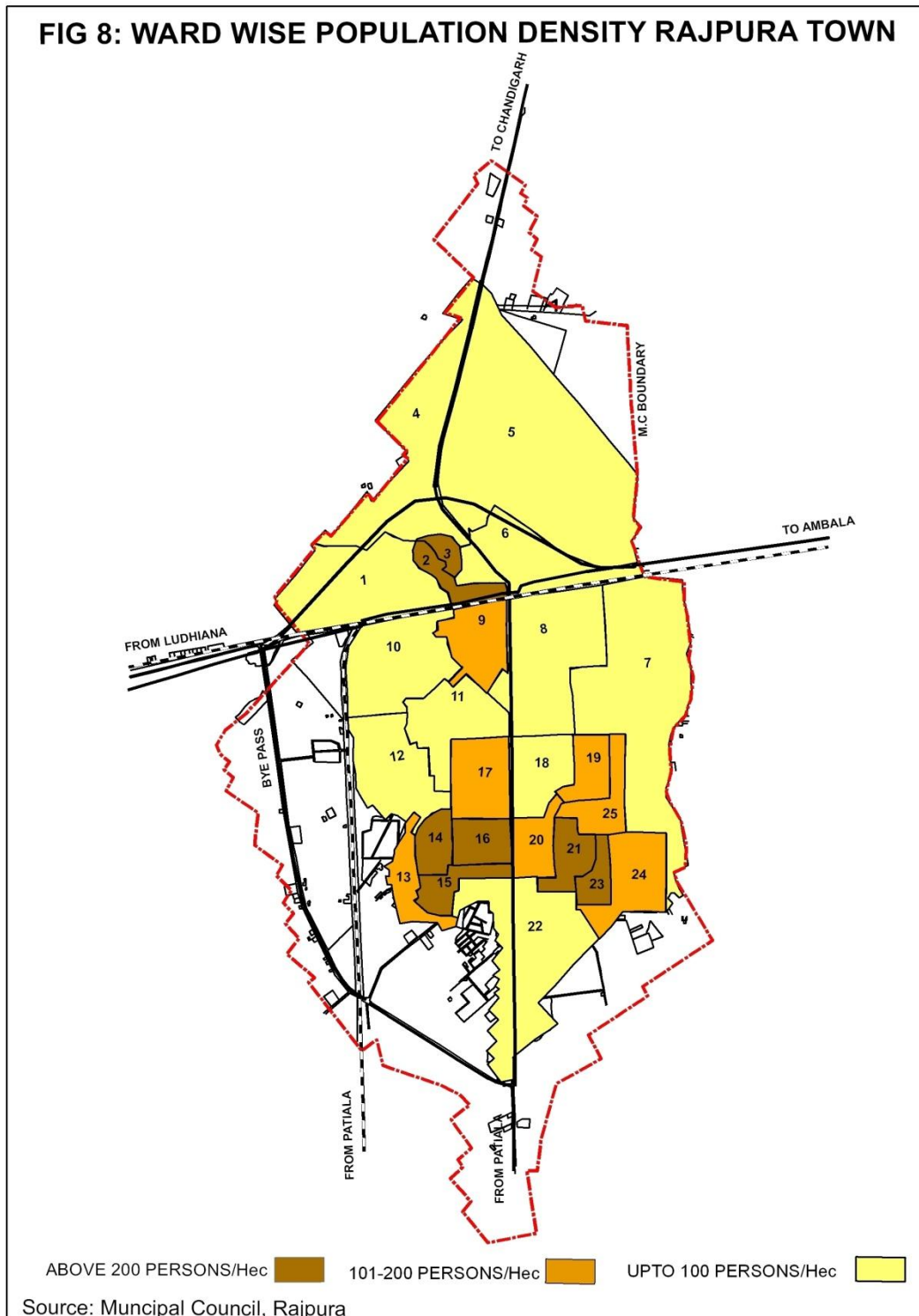
**Table No.2.1 (d): POPULATION DENSITY (Rajpura M.Cl.)**

Year	Total Population	Area (sq km)	Density (persons/sq km)
1981	58645	10.00	5864
1991	70983	10.00	7098
2001	82956	18.26	4543

Source: Census of India: 1981, 91 & 2001



The density of population within Rajpura municipal council limits is not uniform all over the town. It varies from ward to ward as is evident from the table given at annexure - IV. Inter Census comparison of ward wise density is however not possible as ward boundaries have been changing over the years. The density gradient of 2001 ward-wise population depicts that highest density i.e. 452 persons/ha. has been noticed in ward No. 3 and lowest density i.e. 19 persons/ha. has been observed in ward no.5.



The density gradient of population has been given in Table No.2.1 (e)

**Table No. 2.1 (e): Density Gradient Rajpura M.Cl. (ward wise) 2001**

Sr.No.	Density slab (Persons/ha.)	Ward numbers
1	Above 200 (high)	2, 3, 14, 15, 16, 21, 23
2	101 – 200 (medium)	9, 13, 17, 19, 20, 24, 25
3	Upto 100 (low)	1, 4, 5,6, 7, 8, 10, 11, 12, 18, 22

The highest density zone i.e. above 250 persons/ha. falls in the old residential area and some new township area of the town, whereas peripheral areas (outer area) including grain market, industrial focal point and residential Urban Estate area have low density. The density gradient as given above is shown in fig 8.

## 2.2 Housing

The growth of residential houses and households has been found to be keeping pace with the growth of population. Housing stock from the year 1971 to 2001, (table below) reveals that the number of occupied residential houses in the town increased from 2395 to 15596 because of the rapid urbanization of the town. A growth rate of 350% & 22% has been observed in 1971-1981, 1981-1991 respectively and sharp decrease in growth of 18% has been witnessed in the decade of 1991-2001. The number of households in 1981 was 10787 which increased to 13377 in 1991 showing a growth rate of 24% in the decade of 1981-1991. It further increased to 15788 households in 2001 and reported 18% of growth in 1991-2001. The household size which was 5.4 in 1981, decreased to 5.3 in 1991 and it further came down to 5.2 in the year 2001. Consequently, the number of households and number of occupied residential houses increased during this decade. The given table shows the growth pattern of houses, households and household size.

**Table No. 2.2(a) Growth Pattern of Occupied Residential Houses and Number of Households**

Year	Occupied residential houses	% growth rate of residential houses	No. of households	% growth rate of households	Household size
1971	2395	-	3035	-	4.9
1981	10772	350	10787	255	5.4
1991	13186	22	13377	24	5.3
2001	15596	18	15788	18	5.2

Source: Census of India 1971, 1981, 1991, 2001

- **Housing Characteristics**

- **Type of housing structure**

As per 2001 Census, in Rajpura town 91.3% of houses i.e. 13880 houses have permanent structure, 785 houses i.e. 5.2% of total census houses have semi-permanent structure. The total number of temporary housing structure houses is 540, out of which 449 are

serviceable and 91 are non serviceable. The detail of the distribution of census houses by their type of structure is shown in Table No. 2.2(b).

**Table No. 2.2 (b): Distribution of residential houses by their type of structure in Rajpura M.Cl. (2001)**

Type of structure	Permanent	Semi-Permanent	Temporary			Unclassifiable
			Total	Serviceable	Non-Serviceable	
No. of houses	13880	785	540	449	91	2
% age of total	91.3	5.2	3.5	3	0.5	0

Source: Census of India, 2001

### 2.3 Employment of L.P.A Rajpura

The occupational structure reflects the economic status of a region. The percentage of total workers in L.P.A Rajpura shows a varying graph because in 1971 growth rate was 28.6%, in 1981 it became 31.4%, in 1991 it came down to 30% and in 2001 it increased to 33.6%. The percentage of non-workers shows inverse trend as it was 71.4% in 1971, 68.66% in 1981, in 1991 it rose upto 70% and in 2001 it again came down to 66.4% as shown in Table No. 2.3(a).

**Table No. 2.3(a): Workers and Non Workers (L.P.A)**

Year	Total Workers		Non Workers	
	Number	%age to total population	Number	%age to total population
1971	11498	28.60	28716	71.40
1981	18386	31.40	40259	68.66
1991	21279	30.00	49678	70.00
2001	27834	33.60	55122	66.40

Source: Census of India 1971,1981, 91 & 2001

- **Distribution of Workers according to Industrial Categories (Rajpura M.Cl.)**

The data regarding distribution of workers according to Industrial categories (Rajpura M.Cl.) is available for 1971 and 1991 only. The Census of India reveals that in the year 1971 and 1991 in Rajpura town, a very small proportion of main workers i.e. 1.4% (1971), 3.5% (1991) were engaged in household industrial activities followed by workers engaged in cultivation, agricultural labour, planting, forestry and fishing, mining and quarrying altogether i.e. 3.9% in 1971 and further rose upto 9.4% in 1991. The main workers in construction activities comprised of only 315 persons (2.7%) in 1971 which increase to 782 persons (3.7%) in 1991. The main workers engaged in transport, storage and communication activities were more in number i.e. 1023 (8.9%) in 1971 and came down to 7.5% in 1991. 23.4% workers were engaged in other services in 1971 which came down to 21.9%.

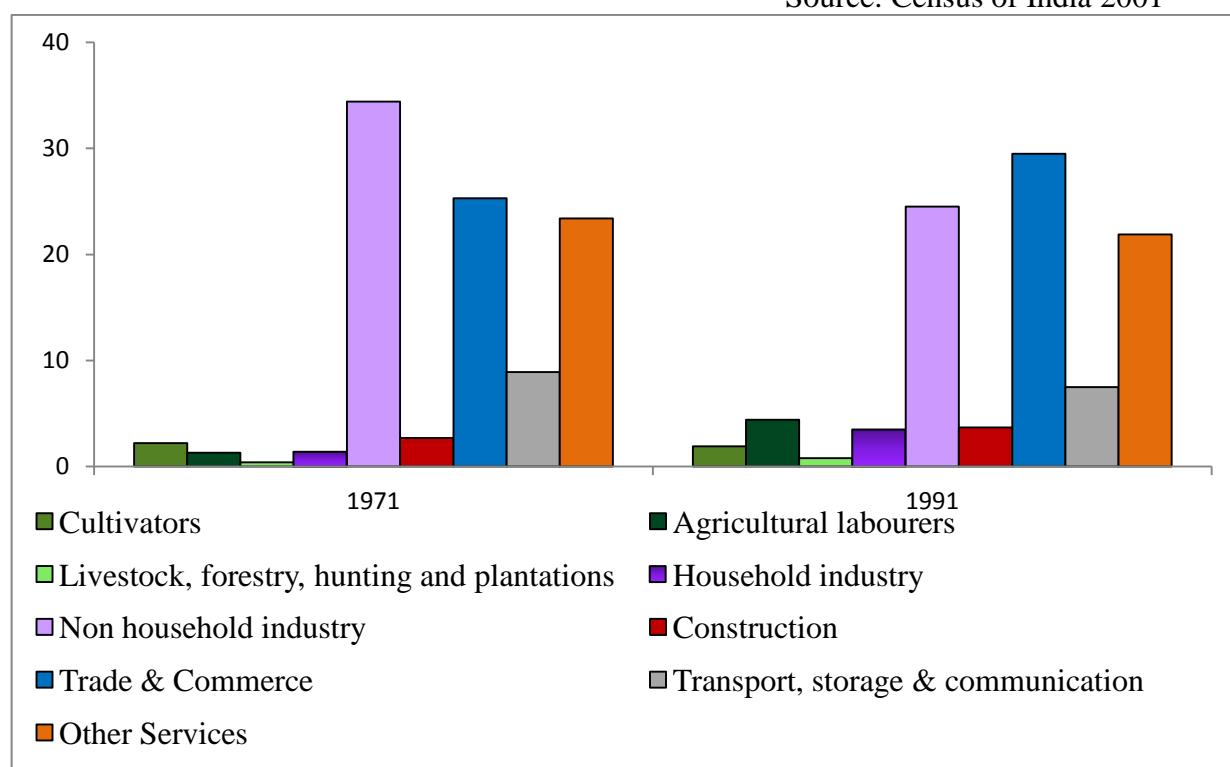
**In 1971** the percentage of town population involved in **trade and commerce constitutes**

25.3% of main workforce, the second highest number of main workers falls in this category. The highest percentage in the workforce of Rajpura town was of those workers who were involved in **non household industry** i.e. **34.4%** of main workers. But in 1991, due to shifting of major industries, the percentage of workers involved in **non-household industries** came down to **24.5%** and the percentage of workers involved in **trade and commerce activities** rose upto **29.5% in 1991** from **25.3% in 1971**. (Refer to Table No. 2.3 (b))

**Table No.2.3(b)Category wise distribution of workers (1971&1991) in Rajpura M.Cl.**

Code	Type of workers	No. of workers 1971	%age	No. of workers 1991	%age
I	Cultivators	253	2.2	411	1.9
II	Agricultural labourers	148	1.3	1419	6.7
III	Livestock, forestry, hunting and plantations, orchards and allied activities	47	0.4	181	0.8
IV	Mining & quarrying	---	---	---	---
V	Household industry	164	1.4	749	3.5
	Non household industry	3957	<b>34.4</b>	5220	24.5
VI	Construction	315	2.7	782	3.7
VII	Trade & Commerce	2904	25.3	6276	<b>29.5</b>
VIII	Transport, storage & communication	1023	8.9	1588	7.5
IX	Other Services	2687	23.4	4653	21.9
	<b>Total</b>	<b>11498</b>	<b>100</b>	<b>21279</b>	<b>100</b>

Source: Census of India 2001



**Fig. 9: Category wise distribution of workers in Rajpura (M.Cl.) 1971 & 1991**

### **3 EXISTING LAND USE AND TRANSPORT NETWORK**

#### **3.1 Preparation of Base Map**

The work for preparation of base map for L.P.A Rajpura was assigned to Punjab Remote Sensing Centre, (PRSC) P.A.U, Ludhiana as per the decision taken in the meeting held on 20th October 2007 in the committee room of PRSC, Ludhiana and as per the instructions issued to Punjab Remote Sensing Centre, Ludhiana by Chief Town Planner, Punjab vide his memo no. 4827 CTP (Pb) / SP 480 dated 22-10-2007. The base map of outer area (rural) of L.P.A Rajpura has been generated on **1:10,000** scale using Cartosat I data of **2.5m spatial resolution**. The cadastral maps of the villages falling in L.P.A were procured from the District Revenue Office by the staff of office of District Town Planner, Patiala and these maps were got scanned in the office of PRSC, Ludhiana and registered with Cartosat I data to demarcate village boundaries. The features like forests, roads, railway lines, high and low lands, canals, minors, drains and settlements etc. have also been delineated from Cartosat I data, by the concerned agency and shown on the draft base map prepared on the basis of satellite imagery. After editing the map details, the attributes to different features were assigned. After the preparation of LPA on **1:10,000** scale using Cartosat I data, the draft base map for densely populated built up areas of Rajpura town (core areas) was prepared on **1:5000** scale using Quickbird satellite data of **0.6 mtr. spatial resolution**. The Quickbird data (satellite imagery) was received by the PRSC, Ludhiana from National Remote Sensing Agency, Deptt. of Space, GOI, Hyderabad.

#### **3.2 Enhancement through field surveys-Land use and Road network**

The draft base map for L.P.A Rajpura and the densely built up areas (i.e. core areas) received from Punjab Remote Sensing Centre, P.A.U., Ludhiana were updated through ground truthing conducted by the staff of D.T.P Patiala. The various land uses have been identified at the site and earmarked accordingly. Similarly the road network, drains, distributaries and other communication zones have been verified and checked at site. After conducting field surveys, the necessary feedback was supplied to P.R.S.C Ludhiana which after incorporating the same ultimately prepared an updated base map District Town Planner and Senior Town Planner Patiala conducted second round of field verification (ground truthing) alongwith staff of drawing and field branch and the corrections were then supplied to P.R.S.C. PRSC got them incorporated and a final Land Use map was thus prepared.

### 3.3 Existing Land use: L.P.A Rajpura

The base map (shown in Drg no. **STP (P) 288/2011** dated 20.01.2011) prepared by Punjab Remote Sensing Centre, Ludhiana as described above shows the existing landuse of L.P.A Rajpura. Based on this plan, following is the break up of Existing Landuse of L.P.A Rajpura:-

**Table No. 3.3 Existing Land use: L.P.A Rajpura**

LANDUSE TYPE		AREA (Ha.)	%age
<b>RESIDENTIAL</b>	Urban Residential(built up)	394.79	0.94
	Residential Plotted	425.3	1.02
	Rural Residential	1211.39	2.9
	Internal Road Area	430.36	1.52
	<b>TOTAL</b>	<b>2461.7</b>	<b>6.38</b>
<b>COMMERCIAL</b>	Retail Shopping/ General Business, city Centre, Petrol Pump, Marriage Palace	69.74	0.17
	Whole Sale, Godowns, Warehousing	38.22	0.09
		124.43	0.3
	<b>TOTAL</b>	<b>232.39</b>	<b>0.56</b>
<b>INDUSTRY</b>	Industry	965.23	2.31
	<b>TOTAL</b>	<b>965.23</b>	<b>2.31</b>
<b>PUBLIC &amp; SEMI-PUBLIC</b>	Govt / Semi Govt/ Public Offices	33.11	0.08
	Education and Research	185.03	0.44
	Medical & Health	12.98	0.03
	Social, Cultural & Religious	59.16	0.14
	Cremation & Burial Grounds	50.27	0.12
	<b>TOTAL</b>	<b>340.55</b>	<b>0.81</b>
<b>TRANSPORTATION</b>	Roads	626.87	1.01
	Flyovers	0.54	0
	Railway line & Siding	135.09	0.32
	Railway Station	0.58	0
	Bus Terminus	1.84	0
	<b>TOTAL</b>	<b>764.92</b>	<b>1.33</b>
<b>RECREATIONAL</b>	Play Grounds, Stadium	3.01	0.01
	Parks & Gardens ( Public Open Spaces)	20.66	0.05
	<b>TOTAL</b>	<b>23.67</b>	<b>0.06</b>
<b>UTILITIES</b>	Water Works	30.47	0.07
	Water Treatment Plant	8.73	0.02
	Main Pumping Station	5.5	0.01
	Solid Waste Site	0.17	0
	Electric Grid Station/Sub Station	14.52	0.05
	<b>TOTAL</b>	<b>59.39</b>	<b>0.15</b>
<b>AGRICULTURAL</b>	Agriculture & Kachha rasta	34797.29	83.31
	Brik kiln	32.09	0.08
	Extractive Area	140.39	0.34
	Water Bodies	618.57	1.48
	Plantation & Orchards	548.55	1.32
	Dairy and Poultry Farms	37.25	0.09
	Vacant Land	663.38	1.59
	<b>TOTAL</b>	<b>36837.52</b>	<b>88.21</b>
<b>SPECIAL AREA</b>	Heritage & Conservation Area	4.75	0.01
	Other Use	76.88	0.18
	<b>TOTAL</b>	<b>81.63</b>	<b>0.19</b>
	<b>GRAND TOTAL</b>	<b>41767</b>	<b>100.00</b>

Source P.R.S.C. Ludhiana



### 3.4 Existing Land use: Rajpura (M.Cl. + Outgrowth)

The total area of Municipal Council of Rajpura is 18.26 sq. kms. The details of major existing land uses within the M.Cl. limits and its outgrowth as shown in Drg. no. STP (P) 287/2011 dated 18.01.2011 is given in table below:

**Table No. 3.4:- Rajpura (M.Cl. + Outgrowth) area under different landuse g**

LANDUSE TYPE		AREA (Ha.)	%age
<b>RESIDENTIAL</b>	Urban Residential(built up)	388.06	18.34
	Residential Plotted	380.28	17.97
	Rural Residential	14.67	0.69
	Internal Road Area	199.59	9.43
	<b>TOTAL</b>	<b>982.6</b>	<b>46.43</b>
<b>COMMERCIAL</b>	Retail Shopping/General Business	41.66	1.97
	city Centre, Petrol Pump, Marriage Palace	17.44	0.82
	Whole Sale, Godowns, Warehousing	81.88	3.87
	<b>TOTAL</b>	<b>140.98</b>	<b>6.66</b>
<b>INDUSTRY</b>	Industry	117.01	5.53
	<b>TOTAL</b>	<b>117.01</b>	<b>5.53</b>
<b>PUBLIC AND SEMI PUBLIC</b>	Govt / Semi Govt/ Public Offices	24.44	1.16
	Education and Research	56.04	2.65
	Medical & Health	10.76	0.51
	Social, Cultural & Religious	25.25	1.19
	Cremation & Burial Grounds	5.36	0.25
	<b>TOTAL</b>	<b>121.85</b>	<b>5.76</b>
<b>TRANSPORTATION</b>	Roads	85.68	4.05
	Railway line & Siding	32.82	1.55
	Railway Station	0.23	0.01
	Bus Terminus	1.84	0.09
	<b>TOTAL</b>	<b>120.57</b>	<b>5.70</b>
<b>RECREATIONAL</b>	Play Grounds, Stadium,	2.09	0.03
	Parks & Gardens ( Public Open Spaces)	20.66	0.36
	<b>TOTAL</b>	<b>22.75</b>	<b>0.39</b>
<b>UTILITIES</b>	Water Works	5.65	0.26
	Main Pumping Station	5.50	0.26
	Solid Waste Disposal	0.17	0.01
	Electric Grid Station	2.02	0.10
	<b>TOTAL</b>	<b>13.34</b>	<b>0.63</b>
<b>AGRICULTURAL</b>	Plantation & Orchards	16.64	0.79
	Dairy and Poultry Farms	1.14	0.05
	Water Bodies	3.34	0.16
	Agriculture	418.79	19.79
	Vacant Land	156.99	7.42
	<b>TOTAL</b>	<b>596.90</b>	<b>28.21</b>
	<b>GRAND TOTAL</b>	<b>2116.00</b>	<b>100</b>

Source P.R.S.C. Ludhiana

The above mentioned landuses are elaborated as under:-

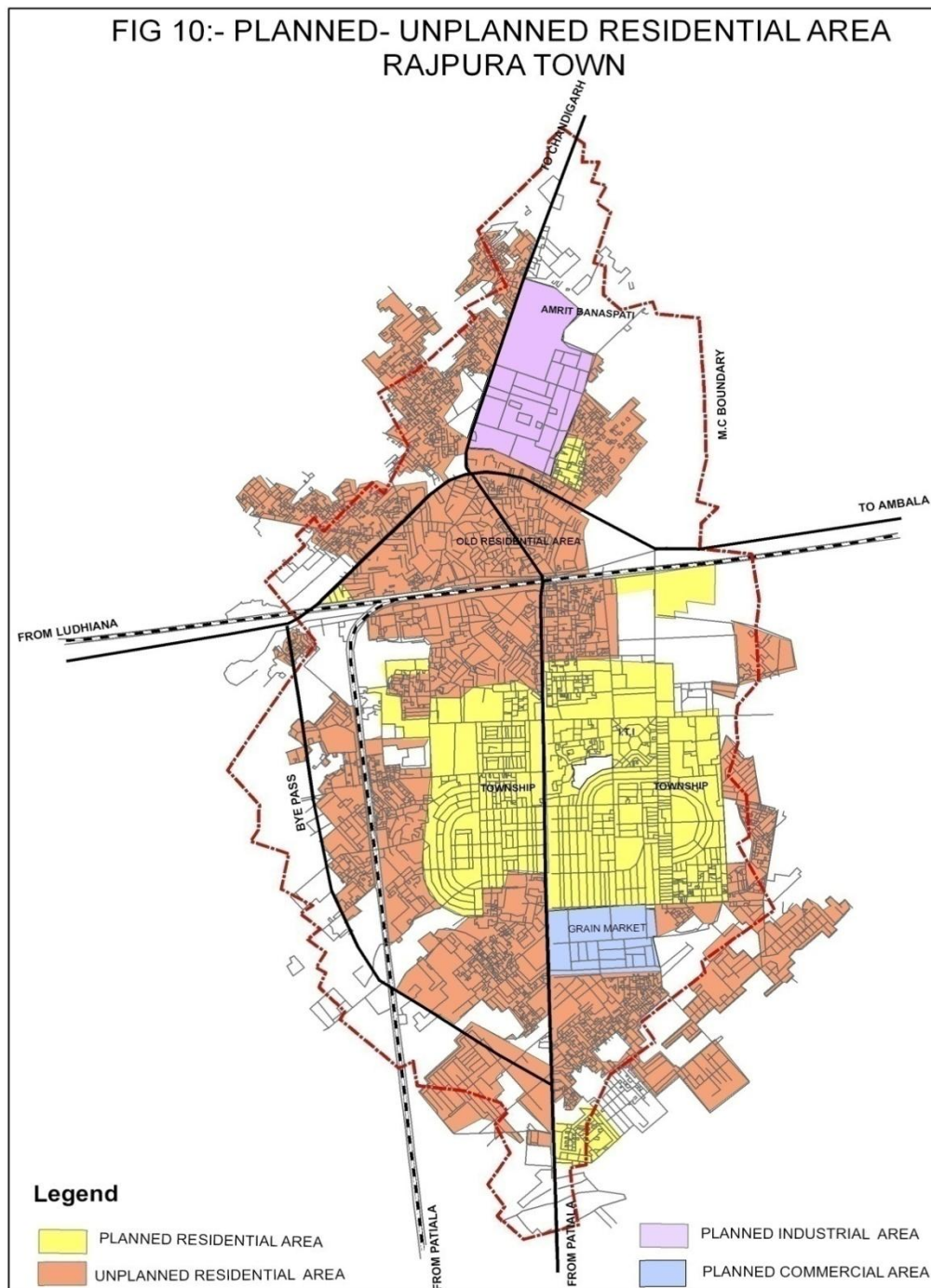
#### 3.4.1 Residential

It is quite evident from the table above that residential use has a larger share of developed area. Out of the total area of 2116 ha. comprising of Rajpura(M.Cl. + Out growth) 982.6 ha. is under residential use which includes both planned and unplanned development. Out





of this total developed residential area, 559.85 ha. is under planned/ regulated schemes which is almost 56.9%. This planned, regulated residential area comprises of township area developed by Pepsu Township Development Board (PTDB), Urban Estate, Police Group Housing and approved colonies of Kanika Garden, Sewak Colony, Amardeep Colony, Madhuban Colony, M.C Flats which are located in the town. King City approved colony developed by Parasnath builders comprising an area of 112.86 acres is coming up in village Darian and Shambhoo within L.P.A Rajpura. The detail of these planned / regulated areas is shown in fig 10 and table no 3.4.1



**Table No. 3.4.1: Planned Regulated Areas**

Sr. no.	Name of Scheme	Name of agency	Area in acres
1	Rajpura Township	PTDB	1165.00
2	Urban Estate	PUDA	20.55
3	Police Group Housing	Police Housing Corporation	1.75
4	M.C Flats (Basera project)	Municipal Council, Rajpura	12.00
5	Kanika Garden	PUDA approved	8.50
6	Sewak Colony	Punjab Govt. approved	8.96
7	Amardeep Colony	PUDA approved	31.21
8	Madhuban Colony	PUDA approved	22.00
9	King City	Partly PUDA & partly Punjab Govt. approved	112.86
	<b>Total Area</b>		<b>1382.83acres (559.85ha.)</b>

Unplanned residential area comprises of old abadi area along N.H-64, bypass and area on the outer limits of township namely Sunder Nagar, Gagan Vihar, Basant Vihar, Deep Nagar, Ajit Nagar etc. These colonies are characterised by narrow roads, lack of parks and open spaces. Except for old abadi area, the remaining unplanned residential area is devoid of sewerage and piped water supply.

### 3.4.2 Commercial

The commercial use is the most important use of the urban area though it may have lesser share in the areal extent. It plays a vital role in the formation of town character. In case of Rajpura town, the total area covered under planned as well as unplanned commercial use is 140.98 ha. which is 6.66% of the total developed area. Out of this, 18.13 ha. area is under planned commercial, which is 12.85% of the total commercial area. Similarly Rajpura township has a good share of following planned commercial areas:-

**Table No. 3.4.2: Commercial Pockets Planned by PTDB.**

Sr. no.	Name of area	Area (in acres)
1.	Guru Nanak Colony (Mohinder Ganj road)	0.74
2.	Gobind Colony	1.00
3.	Giani Zail Singh Market (New Market)	0.62
4.	City Centre for township	20.52
5.	Town no.2 shops	0.72
6.	Sabzi Mandi & Meat Market	0.826
7.	Sabzi Mandi & Vegetable Market	0.160
8.	Garden no. 4, near SDM resident	3.63
9.	Shahid Bhagat Singh Colony	0.46
10.	Durga Mandir Near Godowns	0.124
11.	Old Sabzi Mandi	1.43
12.	Timber Market	14.10
13.	Krishna Or Ganesh Market	0.45
	<b>Total</b>	<b>44.78 acres (18.13 ha.)</b>

The main unplanned commercial area is along the important roads of the town namely Satya Narayan mandir road, Arya Samaj mandir road, M.L.A road, Gurdwara Singh Sabha road, opp. A.P.Jain hospital, Jhanda ground road, Durga mandir road, K.S.M road,

Mahavir mandir road, Bhogla road. Similarly all the planned residential areas have commercial (retail) activity along the main roads.

This use includes wholesale markets like timber market (fuel market) and grain market along with godowns, open plinths and cold stores. The wholesale grain market of **85.33** acres is located on Patiala- Rajpura road which is quite centrally located.

### 3.4.3 Industrial

Under this use comes the earlier developed Industrial Estate on I.T.I road in 1963, Industrial Focal Point located on Rajpura - Chandigarh road, Mukat Pipe on Patiala- Rajpura road, within the limits of Municipal Council and the outgrowth.

Apart from above, Siel Complex in village Damanheri, Khandoli and Sardargarh, Nu Way Organic Nature (Ind) Ltd. in village Devi Nagar are already running in L.P.A Rajpura.

Alliance Integrated Metallic Ltd. in village Sarai Banjara, N.V. and Regal distillery falling in village Sandharsai, Nabha Thermal Plant by Larsen & Toubro in village Rangian, Sadroun, Sural Kalan, Sural Khurd, Nalas Kalan, Nalas Khurd are coming up in L.P.A Rajpura.

Apart from above there are quite a few rice- shellers and tool manufacturing industries within M.Cl. Rajpura and its outgrowth. Thus the total area under industry within L.P.A Rajpura comprising of all industries is 965.22 ha. which is 2.31% of the total L.P.A Rajpura. 117.01 ha. area under industry is located in Rajpura M.Cl. and its outgrowth which is 5.53% of the total area of Rajpura (M.Cl. + outgrowth).

**Table No. 3.4.3: Major Industrial Areas in M.Cl. and L.P.A Rajpura**

Sr. no.	Name of industry	Location	Area (in acres)
1.	Industrial focal point	Rajpura-Chandigarh road	149.68
2.	Industrial Estate	I.T.I.Road	14.00
3.	Mukat Pipe	Patiala- Rajpura road	6.20
4.	Nu Way Organic Nature (Ind) Ltd.	Falls on 35' wide road 500 meters away from N.H-I	26.96
5.	Alliance Integrated Metallic Ltd.	Rajpura-Chandigarh road	69.00
6.	Siel Complex	Link road from bye-pass to village Sardargarh	635.00
7.	N.V. distillery and Regal distillery	Shambhoo-Ghanaur road	52.50
8.	Nabha Thermal Plant	On proposed 50' wide link from Jansua-Saneta road	1278.16
	<b>Total</b>		<b>2231.50acres (903.44 ha.)</b>

### 3.4.4 Public & Semi Public

This use comprises of areas covered under Govt./Semi Govt.offices, education, health, socio-cultural, cremation grounds etc. As per table of existing land use, the total area covered by this use is 121.85 ha. which is 5.76% of the total area of Rajpura (M.Cl.+out

growth). Rajpura M.Cl. has two degree colleges and one Government Educational & Management College for girls (under construction) and one college of education i.e. Mukat College of Education is located on approach road to village Damanheri. There are two Industrial Training Institutes, one for boys and another for girls. In addition to this, this use includes area under office of Pepsu Township Development Board, office of Rajpura Municipal Council located in township area, office of SDM and Tehsildar of Rajpura situated in the Fort of Raja Todar Mal, Judicial Complex along I.C.L road.

Similarly on health side, it includes one Intermediate Hospital of Category A and five Intermediate Hospitals of Category B. In addition to above, town has five nursing homes and two dispensaries- Civil dispensary and railway dispensary.

Similarly it includes area under religious places and cultural places like clubs, community centres and library. Lastly there are five cremation grounds within the town.

#### **3.4.5 Recreational**

This use comprises of playgrounds, stadiums, sports complex, parks and gardens. There is lack of recreational facilities in Rajpura. As per the table of existing landuse, the total area covered by this use is 22.75 ha. which is 0.39% of the total Rajpura (M.Cl.+ outgrowth). This use comprises of Shiva ji park, PTDB Park, Nirankari Park, Jhanda ground at town level. Apart from these, it comprises of 56 neighbourhood parks in township developed by PTDB and other neighbourhood parks in Urban Estate, Industrial Focal Point and other PUDA approved colonies including colonies approved under PAPRA, 1995.

#### **3.4.6 Traffic & Transportation**

This use comprises of roads, railway line & station, bus terminus, bridges and flyovers. As per table of existing landuse, the total area covered by this use is 120.57 ha. which is 5.70% of the total developed area. Further detailed study of traffic & transportation has been covered in chapter no 3.5 and chapter no 4.5 ahead. However, table depicts that out of this use, major share i.e. 4.05% of total developed area is covered under roads.

#### **3.4.7 Utilities**

This use comprises of water treatment plant, electric grid stations (E.G.S), solid waste dump site, MPS (Main Pumping Station) covering a total area of 5.50 ha. which is 0.26% of the total developed area.

#### **3.4.8 Agricultural**

There are small unevenly distributed chunks of agricultural land falling within Municipal Council limits, which comprises of 418.79 ha. which is 19.79% of the total developed

area. This area lies on the north direction of the town and southern side of village Khandoli. A large chunk of agricultural land of village Shamdo is located in the south-east direction of the Industrial Focal Point. Some agricultural area comprising of village Nilpur, Dhamoli, and Islampur lies on both sides of Patiala bye-pass. Small patches of agricultural area of village Dhakansu Kalan, Pahar Khurd lies along the left hand side of Chandigarh road (N.H-64).

### **3.4.9 Special areas**

Special areas include other use and protected heritage buildings which have been declared as protected under “The Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964”. Mugal Serai, Kos Minar (Naushera), and Kos Minar (Rajgarh) falling in L.P.A Rajpura have been taken under this use. The other use comprises of 76.88 hectare which is 0.19% of total area of L.P.A Rajpura.

### **3.5 Existing Road-Rail Transport Network**

Road and Rail network play a vital role in the urban planning and traffic & transportation which has been considered as a function of land use planning. The good road and rail network is the symbol of the sound development of any city and the study of transportation helps in understanding the existing situation, potentials, weaknesses etc. and helps to draft out strategies and projects for the future development.

Road and Rail sector occupy the significant roles in the transport sector in Rajpura and surrounding areas. The road network has been studied in terms of classification of roads, length of roads, cross section of roads (divided and undivided carriageways), area under major existing roads and major road intersections. Available data regarding rail network has also been studied.

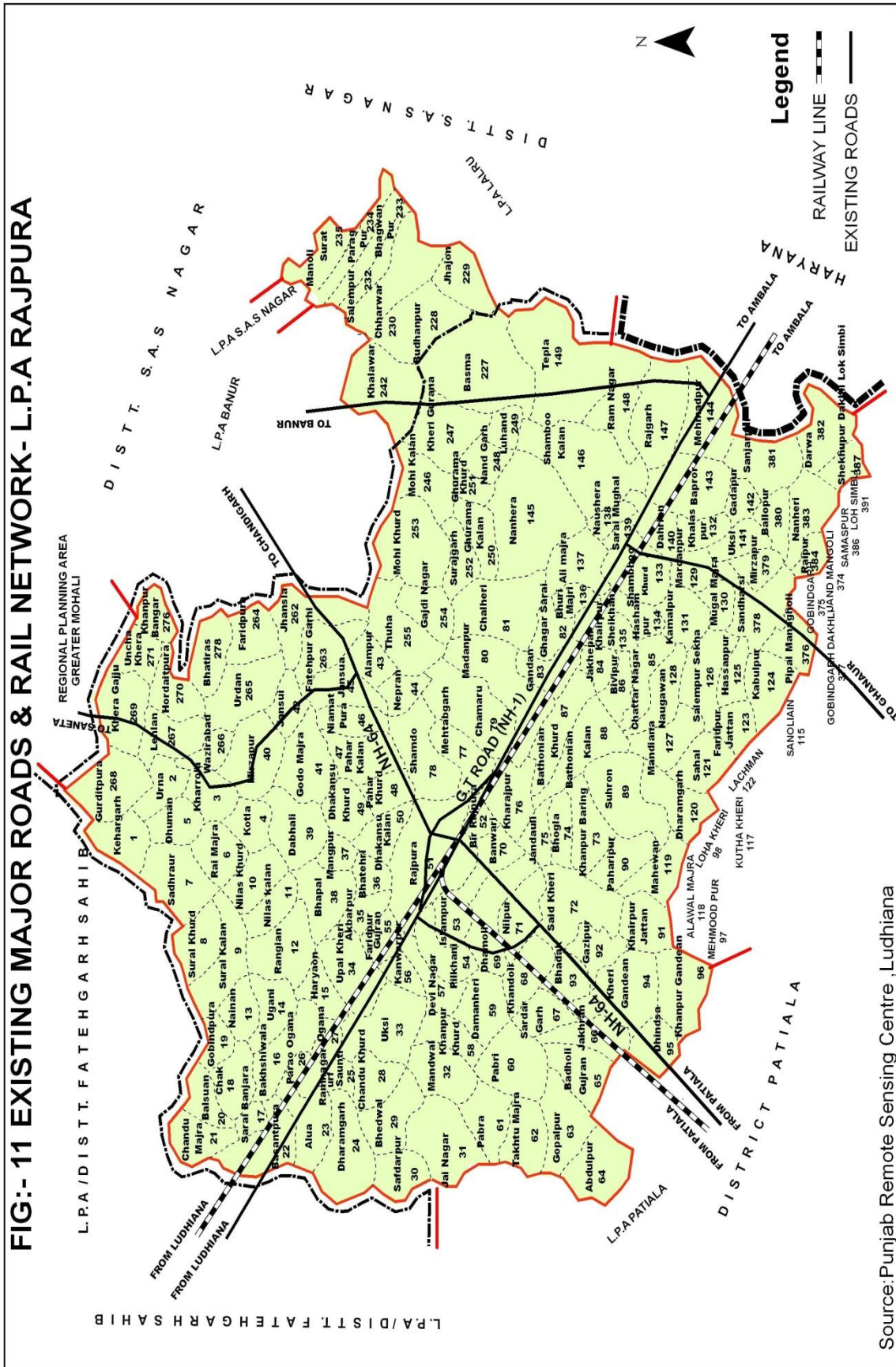
#### **3.5.1 Road Network at L.P.A. Level**

L.P.A Rajpura is well connected to main cities of other districts of Punjab, Haryana and Himachal Pradesh. Two National Highways namely N.H.-I (from Amritsar to Delhi) and N.H.-64 (from Zirakpur to Dabwali) pass through it. Other major roads passing through Rajpura are Shambhoo-Ghanaur road, Tepla-Banur road and Jansua-Saneta road via Khera Gajju as shown in fig.11

National highway-I has divided carriageway both within M.Cl. limits as well as outside M.Cl. limits. N.H.-64 has undivided carriageways.



**FIG:- 11 EXISTING MAJOR ROADS & RAIL NETWORK- L.P.A RAJPURA**



Source: Punjab Remote Sensing Centre, Ludhiana

**Table No. 3.5.1 Length & width of Major Roads in L.P.A Rajpura**

Sr. No.	Name of Roads	Length of roads in L.P.A. (Km)		Width of road (ROW) (in m)	Width of carriage ways (outside M.Cl. limits)	Divided/ undivided
		Total	Outside M.Cl.limits			
1.	G.T.Road N.H.-I	27.63	24.05	90.00	20.00	Divided
2.	Zirakpur-Dabwali road	17.98	9.53	30.00	10.00	Undivided
3.	Rajpura-Patiala Bye-Pass	4.28	0.38	8.67	10.00	Undivided
4.	Shambhoo-Ghanaur road	7.79	7.79	26.22	5.49	Undivided
5.	Jansua-Saneta road via Khera Gajju	8.89	8.89	24.70	5.49	Undivided
6.	Tepla-Banur road (S.R-30)	12.04	12.04	44.36	12.04	Undivided
	<b>Total</b>	78.61	62.68	-	-	

Source: Field survey, 2010

The existing road network in L.P.A Rajpura shows that it is well served by the regional roads which provide high level of connectivity not only with other parts of the state of Punjab but also with Haryana, Rajasthan and national capital, Delhi. These roads have a total length of 78.61 kilometers within L.P.A out of which 62.68 km falls outside Municipal Council limit of Rajpura.

Out of the total road length of these main roads within L.P.A, National Highway -I comprises of 27.63 km with a total right of way of 90 m of Amritsar-Rajpura-Delhi road. The road network of these main roads of L.P.A Rajpura is shown in fig 12 attached alongwith.

### 3.5.2 Road Network at Town Level

Rajpura township has distinct road network. The existing road pattern developed by Pepsu Township Development Board (PTDB) is a combination of grid iron and semi circular roads. The width of outer semi circular roads is 60 feet, inner semi circular roads have width of 40 feet and 30 feet. Major grid iron roads have width of 60 feet and minor grid iron roads are 40 feet, 30 feet and 20 feet wide.

National Highway- I enters the town from two sides i.e north-west and south-east, National Highway 64 enters the town from north and south- south-west.

The important roads entering the town are listed below:

1. Amritsar -Rajpura (N.H. I)
2. Delhi-Rajpura (N.H. I)
3. Bathinda-Rajpura (N.H. 64)
4. Zirakpur-Rajpura (N.H. 64)

**Table No 3.5.2 Length & width of Major Roads in Rajpura (M.Cl. Limit)**

Sr. No.	Name of the Road	Length in K.M.	Width of Road (in mts)	Width of Carriage way ( in mts)	Divided/ Un-divided	Area
1	N.H -I	4.20	90.00	20.00	Divided	93.37
2	Rajpura - Zirakpur	5.10	28.85	10.25	Un-divided	36.35

3	Rajpura - Bathinda	4.70	42.40	19.80	Divided	49.20
4	A.P. Jain Hospital - Singh Sabha Gurdwara	1.46	18.00	6.75	Un-divided	6.49
5	A.P.Jain Hospital - Jhanda ground	0.81	17.50	6.10	Un-divided	3.50
6	Singh Sabha Gurdwara - Girls School	1.30	18.75	7.65	Un-divided	6.02
7	Gaushalla road	0.84	19.40	6.60	Un-divided	4.02
8	Arya Samaj road	0.85	19.25	8.65	Un-divided	4.04
9	From I.T.I Chowk - P.M.N.College	0.78	18.20	7.50	Un-divided	3.51
10	From I.T.I Chowk - S.O.S Village	1.40	18.25	8.25	Un-divided	6.31
11	From I.T.I Chowk - Under Bridge	1.03	19.00	6.40	Un-divided	4.83
12	From I.T.I Chowk - Pachranga Chowk	1.37	17.90	8.55	Un-divided	6.06
13	F.C.I.godown – BSNL quarters	1.15	21.60	8.60	Un-divided	6.14
14	I.C.L - Kasturba road	1.86	19.70	7.00	Un-divided	9.05
15	From Old Sabji Mandi - Village Dhamoli	0.36	18.15	6.25	Un-divided	1.61
16	Old G.T.Road	0.75	26.00	9.80	Un-divided	4.82
17	From Old G.T.Road to N.H.-1	0.45	23.30	16.65	Un-divided	2.60
18	From M.L.A Road-Saw-mill	1.15	17.00	8.40	Un-divided	4.83
19	Bhogla to Jandauli	1.40	18.20	5.60	Un-divided	6.29
20	Bye-Pass	4.28	60.67	10.00	Un-divided	64.14
21	Jandauli road-K.K.Public School	0.80	18.00	6.75	Un-divided	3.56
22	From Rajpura-Chandigarh road to inside Industrial Focal Point	0.665	30.00	6.50	Un-divided	4.93
23	From N.H-I to Industrial Focal Point including inner road	0.836	30.00	6.50	Un-divided	6.19
24	Slaughter house road	0.360	18.29	5.48	Un-divided	1.63
25	From N.H-64 to Dalima Vihar	0.360	18.29	5.48	Un-divided	1.63
26	First entry from N.H-64 to Grain Market	0.120	30.48	10.06	Divided	0.90
27	Second entry from N.H-64 to Grain Market	0.120	30.48	10.06	Divided	0.90
28	Kasturba road to Lakar mandi	1.15	18.25	7.00	Un-divided	5.18
29	N.H-64-Bhogla road	1.3	15.85	5.60	Un-divided	2.06
30	P.M.N College-Vill.Islampur	0.49	15.85	5.60	Un-divided	0.80
31	Internal road in focal point	1.8	21.34	5.60	Un-divided	3.80
32	Mittal House to Gagan Chownk	1.0	19.82	11.59	Divided	1.98

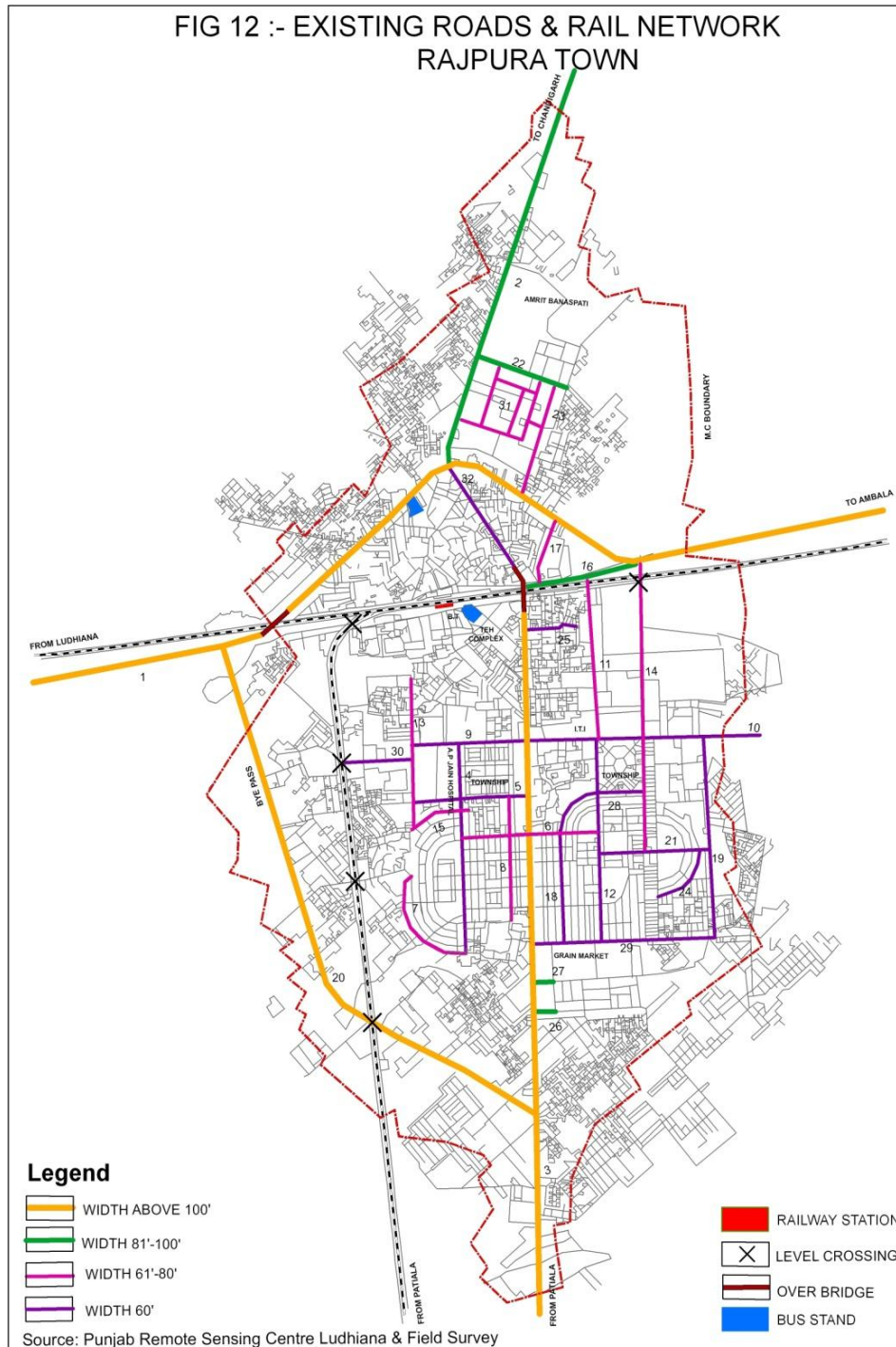
Source: D.T.P Office, Patiala

Total area of the 32 roads = 356.74 acres.(144.37 ha.)

Total length of the 32 roads = 44.241 Kms

The existing position of these roads has been shown in Fig 12. The above mentioned major town roads carry the traffic from one segment to other i.e. they are the sector roads which have irregular alignments with varying widths (i.e. between 17m and 90m). The data given about the length and width (in terms of right of way) of the National Highways and other major roads existing in the town shows that the total length of National Highway-I coming from Ludhiana and leading to Ambala works out to 4.2 kms and National Highway-64 coming from Patiala and leading to Zirakpur works to 9.8 kms. The total road length of major roads works out to 44.241 kms. The length of these roads has been measured from their respective starting points to the end of M.Cl. limit. The total

area under these major roads works out to 144.37ha. which is 7.91% of total area under M.C.I. limit.



### 3.5.3 Rail Network

Rail is considered as the lifeline of a nation and a good rail network boosts the economy. Rajpura is very fortunate in terms of rail network as well as it is an important railway junction. 39 passengers trains passes through this railway junction and connect Rajpura to not only to various cities of Punjab but with other states of India also.

### 3.5.4 Railway Under Bridges (RUBs)

There is only one railway under bridge in Rajpura M.Cl. which is located at old G.T.Road. Besides this, three rail under bridges are located in L.P.A Rajpura, one is located in village Dahrian another is located in Upal Kheri and third one is located in village Basantpura.

### 3.5.5 Level Crossings / R.O.Bs

There are two Railway Over Bridges (R.O.B's), one in old town on National Highway-64 and another is located on Rajpura-Sirhind road (N.H.-I), within the town. There are six level crossings within M.Cl. limit on Ludhiana-Ambala and Rajpura-Patiala railway lines. The detail of level crossings is given in the table:

**Table No. 3.5.3 Detail of Level Crossings**

Sr. No.	Location	Status
1.	Rajpura Patiala bypass	Manned
2.	Rajpura town to Dhamouli road	Manned
3.	Rajpura town to Islampur road	Manned
4.	From old bus stand to Bye-pass	Manned
5.	I.T.I to Old G.T.Road	R.U.B
6.	ICL Phatak	Manned

Source: Station Master Railway, Rajpura, D.T.P Office, Patiala

### 3.6 Planning Problems

Numerous problems related to planning in Rajpura town and adjacent area are illustrated as under:-

- Like most developing towns, there is fair share of incompatible landuses in Rajpura where industries are operating side by side with other landuses inflicting more conflict rather than complementing appropriate landuses. For better use of land and affective urban planning for Rajpura, such incompatible uses will have to be identified and surfaced to GMADA/PDA for any possibility of relocation from their existing locations.
- The earlier timber market developed by PTDB which was known as fuel market now falls centrally in the town within residential area. Apart from this, numerous timber warehouses along with saw mills are existing within residential area unauthorisedly. Presence of these warehouses within residential areas creates not only traffic problems but also noise pollution. There is a dire need of separate timber market away from residential area keeping in view the potential of timber trade in Rajpura sourced from Himachal Pradesh, Madhya Pradesh, Assam and Gujarat (imported timber).
- Khokhas have been put up on drains falling within ROW of National Highway-64 within

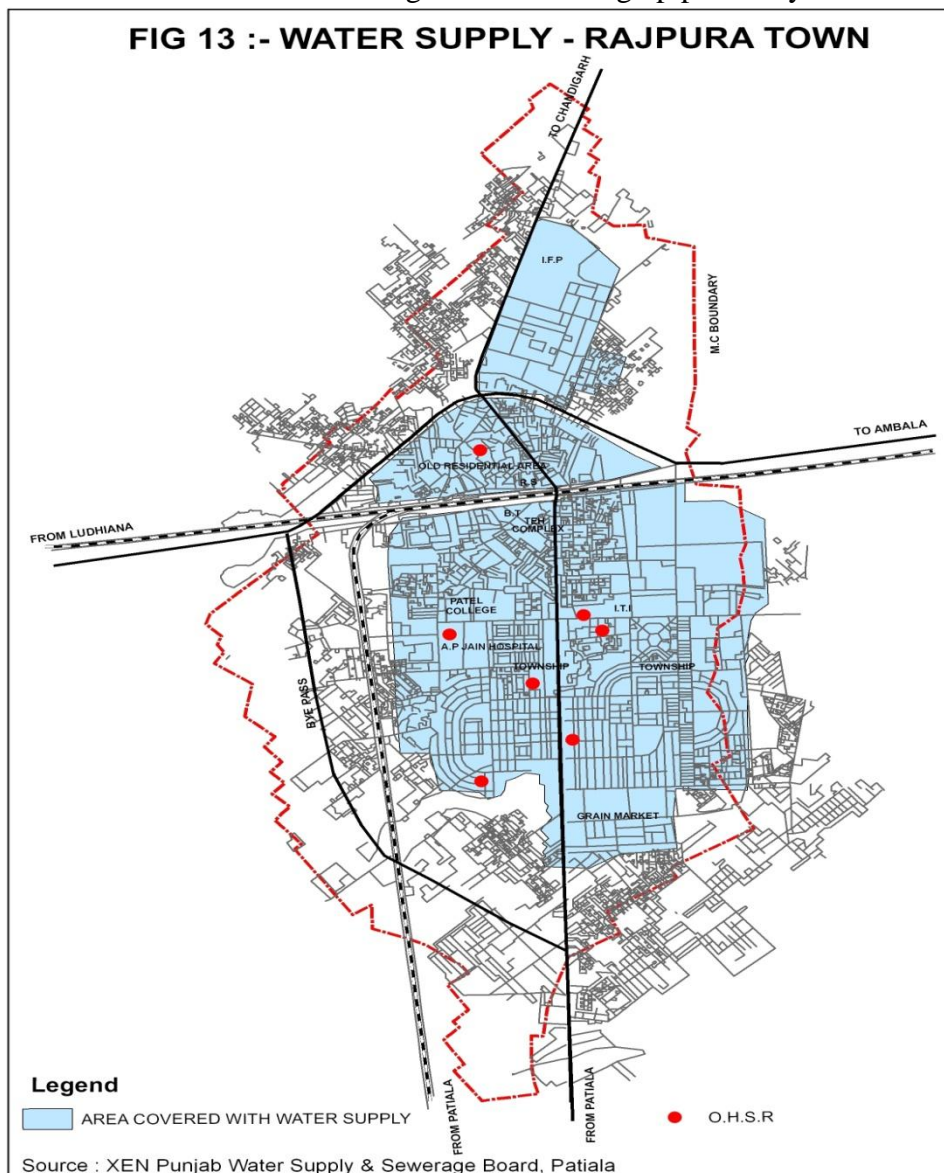
M.C.I. limits between Tahli walla chowk and Durga mandir chowk. The vehicles are parked along the road side in front of these khokhas. Not only this but at places, rehri are also parked beyond this unauthorised parking of vehicles which further reduces the effective width of road and the traffic is compelled to move on a less than half of available width of road which leads to traffic congestion on otherwise adequately wide road. There is dire need to shift these khokhas at an appropriate place, so that actual right of way of this road is made available for the uninterrupted flow of traffic.

- The main commercial centre (so called the present town centre) was developed way back in 60's with parking facility which is inadequate to meet the present parking requirements. So now people are forced to park their cars either on M.L.A road or on road leading to girls school which reduces the effective width of road and creates traffic problem.
- Mushrooming of commercial activity in residential area on road front without the provision of any parking is another major traffic problem especially near Singh Sabha Gurdwara, area around Arya Samaj Mandir, Durga Mandir and Satya Narayan Mandir, adjoining area of old grain market which ultimately disrupts the smooth flow of traffic.
- There is no appropriate site for solid waste dump and the solid waste is thrown in the town at number of places.

## 4 EXISTING INFRASTRUCTURE

### 4.1 Water Supply

- Tubewell based water supply was **first introduced** in Rajpura town in the **year 1960** by the Punjab Public Health Department.
- **First augmentation** of water supply scheme was proposed by the Punjab PWD Public Health Branch in the **year 1972** to meet the requirements of increasing population, under which canal based water supply was introduced instead of tubewell based because underground water was not fit for drinking purposes. At present there are three number of tubewells serving the town through pipe line system.



- As per data obtained from Executive Engineer Punjab Water Supply and Sewerage Division the total length of distribution line (mains and sub-mains) is 102 km and

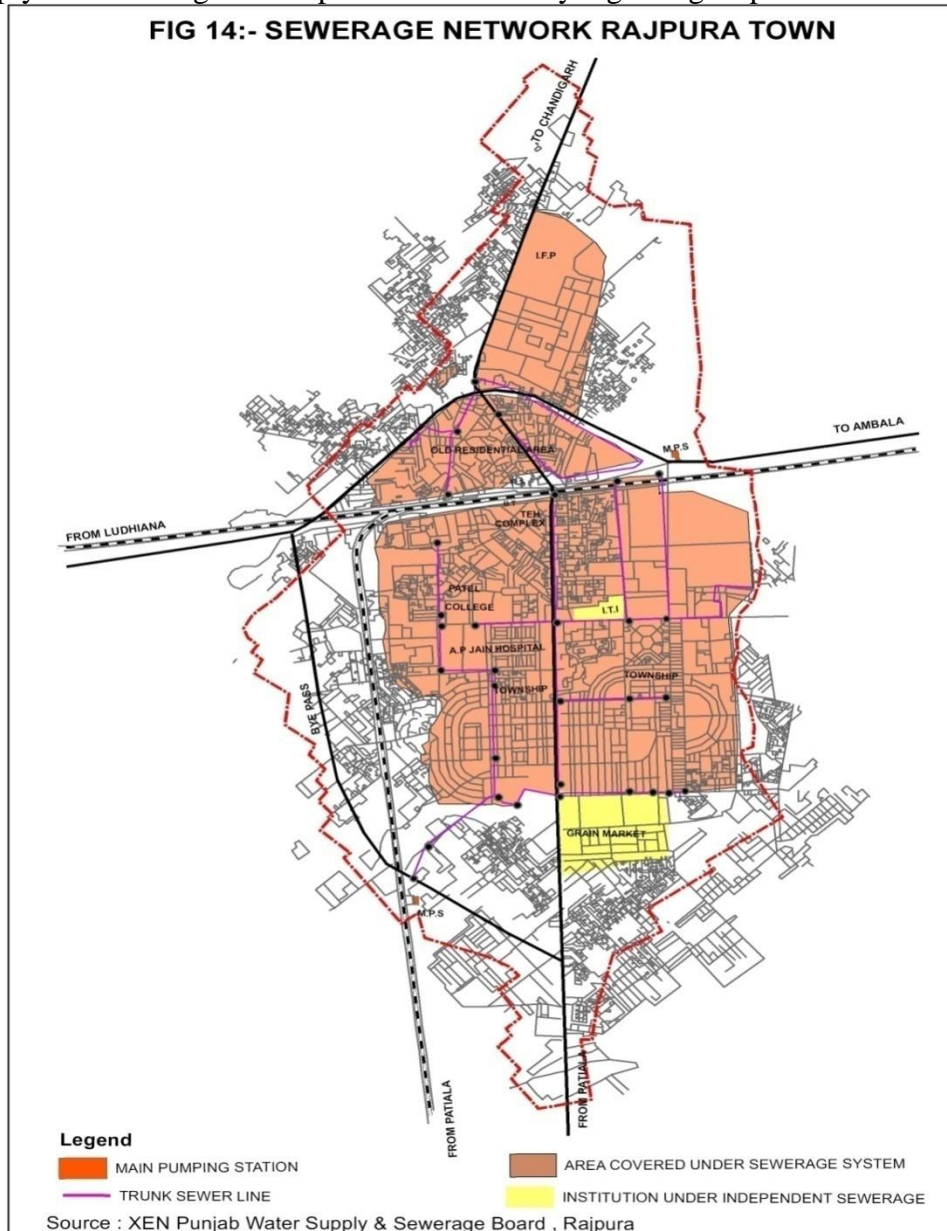
85747 persons having access to piped water supply which is 89.4% of the projected population of the town till 31.03.09.

- Two water treatment plants having capacity of 3.15mgd (million gallons per day) each are working in the town located on Patiala- Rajpura road as shown in Fig. no.14.
- Water supplied on per capita basis works out to more than 210 lpcd (liters per capita per day) which is higher than the norm of 135 lpcd.
- **Water supply network (LPA) rural**

The water supply pattern of the villages falling in the LPA reflects that 98.8% of population of the LPA is covered by the water supply.

#### 4.2 Sewerage

- The **sewerage system** was **first** introduced in Rajpura in the **year 1964**. Punjab Water Supply and Sewerage Board provides the facility regarding disposal of sewerage in





the town. This includes waste generated both from domestic, commercial and institutional units operating in the town.

- Two institutes i.e. I.T.I. Rajpura and Grain market have their own sewerage system.
- As per data obtained from Executive Engineer Punjab Water Supply and Sewerage Division about 81850 persons i.e 84% of the projected population has the facility of sewerage system till 31.03.09 whereas 14% of the population is devoid of this facility resulting in the poor sanitation conditions.
- Two Main Pumping Stations (MPS) are already existing and running smoothly in the town. One is located on Patiala bye-pass road (having capacity of 8MLD) and another is located adjoining industrial focal point bye-pass road near Dhakansu Nallah (capacity 10MLD).

### **4.3 Solid Waste Management**

Increase in urban population coupled with change in life style and economic prosperity has lead to generation of considerable solid waste which is the prime responsibility of Public Health Department of Rajpura Municipal Council within the council area. Council partially discharges this duty through the infrastructure created for collection, storage, transportation and disposal.

There is no fixed place for the disposal of solid waste. Earlier solid waste was dumped along Bhogla road adjoining new grain market. After the area got filled the solid waste is now dumped in the low lying area of village Jandauli (brick kiln site, depth 15 to 18 feet). No treatment of the solid waste is undertaken during the dumping process as required in the system of sanitary landfills. Thus the present practice of disposing solid waste does not comply with Municipal Solid Waste Rules 2000 of the Ministry of Environment and Forest Govt. of India.

### **4.4 Traffic and Transport**

Without transportation the cities could never have developed. First of all transportation forms the circulatory system that connect cities with each other and with the countryside.

#### **Bus Transport**

##### **➤ Bus Terminal**

There are two bus terminals in the town. The old one is located in front of railway station comprising an area of 1.61 acres and the new bus stand is located on N.H -I. The total area of new bus stand is 2.27 acres. The most preferred mode of transport in the area is bus

transport as buses from all the districts of Punjab and neighbouring states on their way halt at the bus stand and quite a few originate and terminate at the main bus stand. Bus transport is also considered as a preferred means of transport for the daily commuters which considerably contribute to the increasing bus traffic.

- **Management of Urban Transport**

A number of agencies are involved in the management of urban transport in L.P.A Rajpura. Several govt. agencies like Municipal Council, State P.W.D, National Highway Authority of India and the Central Ministry of Surface Transport are involved in the development and maintenance of roads and the associated infrastructure. The licensing agency of motorized vehicles is District Transport Agencies and non-motorized vehicles is Municipal Council. In terms of providing bus transport service both govt. agencies like P.R.T.C and private transporters are involved. For traffic management, Traffic Police Rajpura is responsible and rail services come under the control of Ministry of Railways. The management and development of urban transport is undertaken independently by these numerous agencies. They plan their activities and operate independently without any coordination among themselves. The funds for developments/management of traffic and transport are sourced independently and are spent by them, which creates severe problems in integrated traffic management.

- **Rail Based Transport**

Besides road traffic, rail transport also plays a vital role in the traffic and transportation network of the town. Rajpura Town is an important railway junction. A total number of 39 passenger trains passes through the railway junction of Rajpura thus connecting it with as far as Chennai in the South, Hawra (West Bengal) in the east, Mumbai (Maharashtra) in the west and Jammu (Jammu & Kashmir) in the North. In this way Rajpura is not only well connected with the state of Punjab but with the entire country. There are six level crossings within town. In addition to the passenger trains, goods trains also pass through Rajpura.

#### **4.5 Fire Prevention and Protection**

Fire accidents have become a common day phenomenon so to prevent & protect from fire it is necessary to provide essential services in the town. It becomes the foremost obligation of the govt. to provide security from fire accidents. The whole town is served by the single fire station having an area of 0.5 ha., located in M.Cl's office. As per the information supplied by the M.Cl. Rajpura there are three fire tenders and one ambulance.

**Table No. 4.5 Availability of Fire Stations**

Sr. No.	Name of Facility	Norms	Existing	Surplus	Deficiency
1	Fire Station	1 fire station or sub-fire station within 1 to 3 km to be provided for 2 lakh population	1	-	-

**4.6 Power Supply**

The power supply to Rajpura town and L.P.A Rajpura is provided by Punjab State Electricity Board through **10 grid stations** which are installed in L.P.A Rajpura out of which 2 are situated within the limits of Municipal Council. One is situated in old Rajpura town and another in Industrial Focal Point area and 8 are located outside Municipal Council limits but within the L.P.A Rajpura.

One Power grid of 400 kv is under construction by Grid Corporation of India.

The remaining grid stations falling in L.P.A are Damanheri with capacity of 220 Kv, and 6 Sub Stations of 66 Kv capacity are located at Dharamgarh, Khera Gajju, Sarai Banjara, Bapror, Siel Chemical Factory, Faridpur respectively.

**4.7 Educational Facilities**

L.P.A Rajpura has number of institutions imparting education at school level. At present it has 148 primary schools, 35 high schools and 20 senior secondary schools. In addition to all these schools, the town has the facility of SOS (Save Our Soul) Children's village for orphans also.

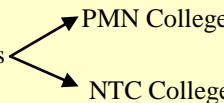
Rajpura M.Cl. has two degree colleges namely Patel Memorial College located on P.M.N.College road and N.T.C.(Kasturba)College for girls located on Kasturba mandir road. One Government Multi-Discipline Academy of Engineering & Technology for girls (under construction) located on P.M.N College road and one college of education i.e. Mukat College of Education which is located on approach road to village Damanheri. There are two Industrial Training Institutes, one for boys (backside of ITI Chowk) and another for girls (Nilpur).

Three institutes run by the Chitkara Group of Institutions namely Chitkara Institute of Engineering & Technology, Chitkara School of Planning and Architecture located at village Jhansla and Chitkara College of Pharmacy is located at village Fatehpur Garhi within L.P.A Rajpura. Apart from these, Aryan College of Management, Nepra, Gyan Jyoti Group of Institutes, Surya World Group of Institutions, Swift College of Management are new multiple education institutes which impart education in various fields of engineering, management, dental, nursing and pharmacy. One art and craft

institute at village Bhadak and NSIC (National Small Industries Corp.) also serve the L.P.A.

The availability of educational institutions at various levels both in the area of technical and non technical education have been detailed below in Table No. 4.7

**Table No. 4.7: Educational Facilities in L.P.A Rajpura**

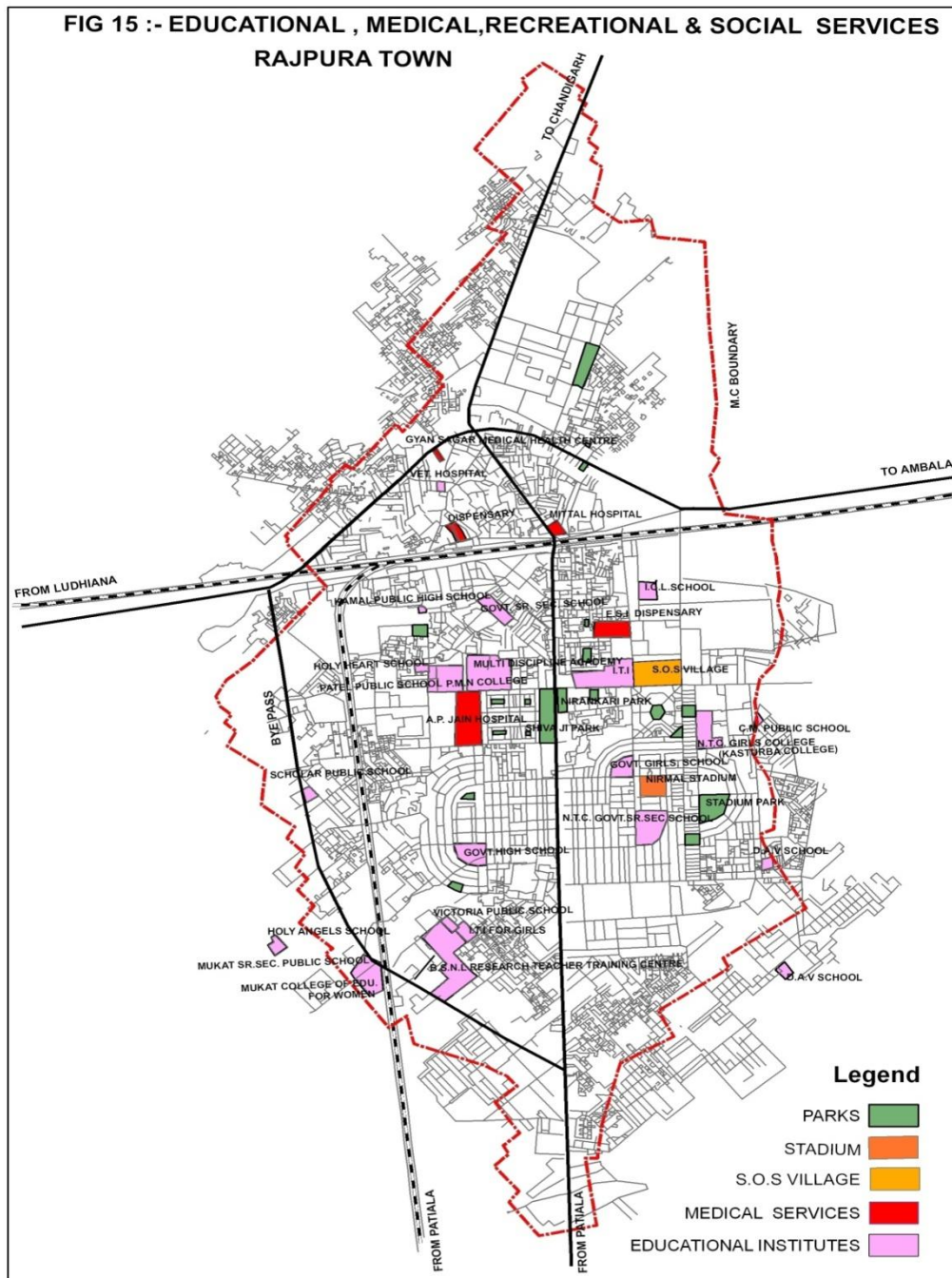
Sr. No.	Name of Facility	Norms	Existing	Surplus
1	Primary and Elementary Schools	1 for 5000 pop.	10*+120**+ 40***=170	118
2	High / Secondary Schools and Senior Secondary Schools	1 for 7500 pop.	55	20
3	Degree Colleges 	1 for 1.25 lakh pop.	2	-
	Specialised Colleges			
	i) Govt. Multi-Discipline Academy of Engg. & Tech. for girls	-	1	-
	ii) Aryan College of Management, Nepra	-	1	-
	iii) Swift College of Management	-	1	-
	iv) Surya World Group of Education. (College of Management)	-	1	-
	v) Gyan Jyoti Group of Institutes	-	1	-
4	I.T.I's	1 for 10 lakh Pop.	2	-
5	Engineering Colleges	2 numbers to be provided in urban extension.	6	4
	i) Govt. Multi-Discipline Academy of Engg. & Tech. for girls	-	-	-
	ii)Chitkara Institute of Engineering & Technology.	-	-	-
	iii)Chitkara School of Planning and Architecture.	-	-	-
	iv) Swift Institute of Engineering.	-	-	-
	v) Gyan Jyoti Group of Institutes	-	-	-
	vi) Surya Institute of Engineering	-	-	-
6	Pharmacy / Nursing	2 numbers to be provided in urban extension.	4	2
	i) Chitkara College of Pharmacy.	-	-	-
	ii) Swift School of Pharmacy.	-	-	-
	iii) Swift Institute of Nursing.	-	-	-
	iv)Surya Institute of Pharmacy	-	-	-
7	Art and Craft Training Institute	-	1	-
8	NSIC	-	1	-

Source: D.E.O. Patiala, Village Directory 2008-09, Interent.

**Note:-** \* town level primary schools of villages, \*\* Primary schools of villages, \*\*\* Senior Secondary schools of villages having facility of primary education.

\*UDPFI guidelines : Urban Development Plans Formulation and Implementation guidelines, Govt. of India

Considering the existing population and the norms defined for educational institutions in UDPMI\* guidelines, quantitatively the number of institutions are more than required to cater to the needs of the education of the town.



#### 4.8 Health Care

In L.P.A Rajpura govt. as well as private operators play a very significant role in providing health care facilities. Rajpura town has one Intermediate Hospital Category A and five Intermediate Hospital Category B which serves only at town level. In addition to above town has five nursing homes and two dispensaries one Civil dispensary, and another one is railway dispensary.

As per information obtained from the village directory L.P.A Rajpura has 4 PHC, 23 Sub centres, 11 allopathic dispensaries and 4 ayurvedic dispensaries. The detail of the different health care facilities in LPA Rajpura are given in Table No 4.8

**Table No. 4.8: Health Care Facilities in LPA Rajpura**

Sr.no	Nature of the Facility	Norms	Existing	Surplus	Deficit
1	General Hospital	1 for 2.5 lakh pop.		-	1
2	Intermediate Hospital Category A	1 for 1 lakh pop.	1	-	2
3	Intermediate Hospital Category B	1 for 1 lakh pop.	5	2	-
4	Nursing Homes, Child Welfare and Maternity centre	1 for 0.45-1 lakh pop	5+4 (Phc) = 9	6	-
5	Dispensary	1 for 0.15 lakhpop	41	24	-
	Total		56		

Source: C.M.O. Patiala, Census 2001

#### 4.9 Parks and Grounds

- **Parks and open spaces**

There are three town level parks namely Shiva ji Park covering an area of 7 acre and Nirankari park having an area of 1.56 acres, located on Patiala-Rajpura road and third one is PTDB Park comprising an area of 6 acre, 7 kanal, 10 marle (6.94 acres) located on K.K.Public School leading to village Jandauli. In addition to this, there are 56 neighborhood and small parks in various PTDB schemes. PUDA approved and colonies approved under PAPRA have their own neighborhood level parks. Besides this one stadium namely Nirmal Stadium is located on ICL road.

- **Grounds**

There is only one ground in the town i.e. Jhanda Ground (3.57 acres) on Patiala-Rajpura road.

#### 4.10 Post & Telegraph

Due to the rapid advancement in technology, communication by this time has changed its modes but post and telegraph still remains the most popular option of communication for vast majority of population. Rajpura town has 4 branch post offices and one head post office. There are 28 sub post offices located in L.P.A Rajpura. The detail of post offices located in L.P.A Rajpura is given in table no.4.10

**Table No.4.10: Post Offices in L.P.A Rajpura.**

Sr. No.	Name of Facility	Rajpura Town	L.P.A Rajpura
1.	Branch Post Office	4	4
2.	Sub Post Office	-	28
3.	Head Post Office	1	1

Source: Head Post Office, Rajpura

#### **4.11 Telephone Exchanges**

In order to cater to the communication needs of population, L.P.A Rajpura town has one govt. Telephone Exchange. Town has the facility of BSNL Training Institute, which is situated at Rajpura bye-pass. Many private communication giants like Reliance, Airtel, Idea, Vodafone, Connect etc. are also having a major share in the telecommunication sector of L.P.A Rajpura.

#### **4.12 Police Facilities**

Basic function of the police administration is to maintain law and order. To fulfill this purpose, Rajpura has 2 police stations and 5 Police Posts at various locations in the town and LPA, out of which 3 Police Posts are located namely at bus stand Rajpura, Kasturba temple, Basantpura and two are temporary which are located at industrial focal point area Rajpura and another one in Shambhoo.

## 5 HERITAGE

### 5.1 Built Heritage

Built heritage provides us vital information and know how about ancient culture, way of life, level of development, building techniques, use of material, art and architecture and other areas concerning physical, social, economic aspects of a society of a particular period. Therefore, it becomes vital that this repository of knowledge forming vital linkages between past and present is not only carefully and thoughtfully preserved but also appropriately managed.

State of Punjab has inherited enormous wealth of built heritage and district Patiala in particular has also followed the footprints of state. L.P.A Rajpura has a small share to contribute towards district's major share.

In the year 1540-45 AD Sher Shah Suri introduced the system of "Dak Choki" and few of them later developed with Serai. In the year 1556-1606 AD the great ruler "Akbar" also derived inspiration from "Dak Choki" to develop the idea of "Kos Minar." It was used as a better institution of communication and identification. These Kos Minars were useful for those also who had lost their way. It also gave respite to the fatigued travellers. Most of the Kos Minars found in present days in Haryana and Punjab were constructed by Mughal emperor Jahangir (1605-27AD). According to Tuzik-i- Jahangir, emperor Jahangir had ordered his fauzdar of Multan "Baquir Khan" in the year 1619 AD. to construct Kos Minar at every 'Kos' (5000 yards or modern 4.5 kms) according to Tuzik-i- Jahangir.

L.P.A Rajpura has following three heritage protected buildings:-

#### i) Kos Minar (Rajgarh)

The Kos Minar at village Rajgarh forming part of L.P.A Rajpura is a brick structure covered with plaster and it soars from a tapering octagonal base, which rises to nearly half of its height. The octagonal base is separated from the circular portion which lies on a square platform by a moulding, above which runs a band of colour. It was declared a heritage monument, protected under the "The Punjab Ancient and historical Monument and Archeological Sites and Remains Act-1964" vide





**notification no. 359-T&C-76/19428 dated 14/07/1976 (area 7 Marla.)**

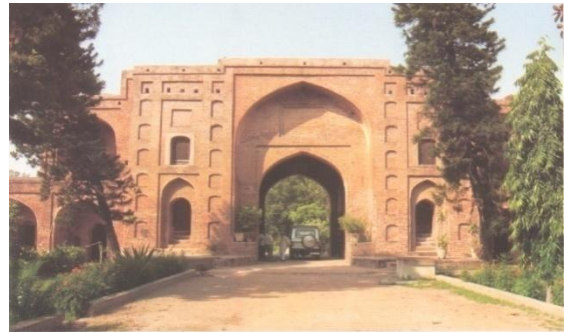
**ii) Kos Minar (Naushehra)**

Another Kos Minar, Naushehra is also situated on G.T. Road in tehsil Rajpura forming part of L.P.A Rajpura. It is a roundish solid structure of Lakhauri bricks. Minar tapers toward top. It was declared a protected monument by the Punjab government under the “ The Punjab Ancient and historical Monument and Archeological Sites and Remains Act-1964” vide notification no. **360-T&C-76/19430 (comprising an area of 2 Marla.)**



**iii) Mughal Serai**

Mughal Serai is situated on Sher Shah Suri Marg about 11 km from Rajpura, near Shambhu barrier. It was originally built by Sher Shah Suri. It lies on the route to Delhi and provided shelter to the caravans of merchants. It also served as a dak chowkie and later on as a military and police post. The serai was rebuilt by Mughals which is evident from its style. Serai complex is



built in baked Lakhauri bricks and lime plaster. It spreads on an area of 128.54 x 116.54m square from outside including octagonal basions at corners. The monument has two majestic two storeyed gates each in the north and south in typical Mughal architectural style. The whole complex is plastered with lime and profusely painted all around with the floral designs in natural minerals and herbal colours made locally. Based on serai’s historical and architectural value, it was declared a heritage monument protected under the “The Punjab Ancient and historical Monument and Archeological Sites and Remains Act-1964” for posterity through Punjab Govt’s. notification in 1975 and an amended notification in 1995 (vide notification no. **12/85/95/4TC/2486 dated 20/09/1995 (area 53 Bigha, 15 Biswa)**) and is being conserved on the principles of Archaeology by the State Archaeology Department.

## 6 VISUALISING THE FUTURE

Visualising future is vital for the formulation of proposals of the Master Plan. Population forecast for the horizon year is the first step in that direction.

### 6.1 Population Projections 2031

Indian urbanisation has shown different trends in the year 2001 as compared to past trends. As per census 2001 reduction in growth rate of urban population and also reduction in URGD (Urban Rural Growth Differential) has been observed. Hence population forecast instead of trend projection is based on the estimates of Punjab total and its share towards national urban component projected by report of technical group on population projections constituted by the National Commission on Population May 2006 entitled "POPULATION PROJECTIONS FOR INDIA AND STATES 2001-2026" has been considered. The basic assumption is that the share of Rajpura town population to Punjab Urban as observed in 2001 will remain constant for coming years until 2026. For subsequent period upto 2031 imputed growth rate during 2021-2026 is used. L.P.A Rajpura comprises of only one urban settlement viz Rajpura M.Cl.

Following assumptions have been used for the population projection of L.P.A.Rajpura urban and rural areas:

1. By first estimating the share based on the actual shares observed in 2001; shares in future can be estimated and then the population forecast for Rajpura urban as well as Rajpura rural has been calculated.
2. The share of Rajpura town towards Punjab urban (2001) and L.P.A Rajpura rural towards Punjab Rural (2001) will remain constant in future.

**Table No.6.1 Population Projections of LPA Rajpura for 2031**

LPA RAJPURA POPULATION FORECAST							
Year	2001	2006	2011	2016	2021	2026	2031
<b>Punjab Urban Pop '000</b>	<b>8263</b>	<b>9439</b>	<b>10681</b>	<b>11940</b>	<b>13185</b>	<b>16456</b>	-
RAJPURA M.Cl.	82956	94947	106938	119428	131918	164515	205167
Population of remaining Villages falling within Urbanisable Limit	34446	39425	44404	49590	54776	68366	85376
Total LPA Rajpura Urban	117402	134372	151342	169018	186694	232881	290543
<b>Share in Punjab Urban</b>	<b>1.42%</b>	<b>1.42%</b>	<b>1.42%</b>	<b>1.42%</b>	<b>1.42%</b>	<b>1.42%</b>	<b>1.42%</b>
<b>Growth rate decadal</b>			<b>28.91%</b>		<b>23.36%</b>		
<b>Punjab Rural Pop '000</b>	<b>16096</b>	<b>16620</b>	<b>16997</b>	<b>17172</b>	<b>17138</b>	<b>14889</b>	<b>12953</b>
LPA Rajpura Rural	143942	148390	152838	153648	154458	135452	116446
<b>Share in Punjab Rural</b>	<b>0.89%</b>	<b>0.89%</b>	<b>0.90%</b>	<b>0.89%</b>	<b>0.90%</b>	<b>0.91%</b>	<b>0.90%</b>
<b>Growth rate decadal</b>			<b>6.18%</b>		<b>1.06%</b>		<b>-24.61%</b>
<b>LPA Rajpura Total Pop '000</b>	<b>261344</b>	<b>282762</b>	<b>304180</b>	<b>322666</b>	<b>341152</b>	<b>368333</b>	<b>406989</b>
<b>Growth rate decadal</b>			<b>16.39%</b>		<b>12.15%</b>		<b>19.30%</b>

Thus the total population of LPA Rajpura that was 2.61 lakhs in 2001 is expected to grow to 4.06 lakhs by 2031.

## **6.2 VISION LPA 2031**

- **Planning Analysis**

Having assessed the existing conditions found within L.P.A Rajpura, this section presents the SWOT (Strength, Weakness, Opportunity and Threat) analysis. It involves a review of the present and future regional and local situations that may have an impact on the development of Rajpura. This contextual analysis will help to guide the master planning approach for the town.

- **Strengths and Opportunities**

Strengths and opportunities refer to those factors or conditions that will facilitate change and/or enhance development options. These provide a positive impetus for growth and development. The following are the strengths and opportunities affecting the execution of development strategies and the realisation of the planning vision for L.P.A Rajpura.

Rajpura town has immense strength in terms of connectivity not only with major cities of Punjab State but with states of Haryana, Himachal and Delhi (U.T.) as well by virtue of its location on N.H-I (G.T.Road) and Delhi – Amritsar main railway line which runs in east-west direction of L.P.A Rajpura. Similarly N.H.-64 runs in a north-south direction. It has additional advantage of connectivity through air as well as international airport is coming up at a distance of 32 kms only from Rajpura town.

Dedicated Eastern Freight Corridor from Ludhiana to Son Nagar in Bihar will also provide an opportunity for economic development to the region by way of creation of Logistic Corridor along with Industrial Corridor (Park).

The upcoming Nabha Thermal Plant by Larsen and Toubro within L.P.A Rajpura will give economic impetus to the town and its ambience. This opportunity along with the coming up of cement plant which is complimentary and supplementary to thermal plant will further boost the economy of town.

- **Threats and Weakness (Constraints)**

These refer to conditions and factors that will likely hinder the future developments within L.P.A. After being identified and assessed, the negative impacts of these factors can be mitigated through proper landuse planning and with the upgradation of existing infrastructure. The major threats and weaknesses pertaining to Rajpura are elaborated as

under:-

The greatest threat for Rajpura is that it is prone to floods due to its terrain, river Ghaggar and drains like Dhakansu nallah/ Pachisdara and Bhagna nadi flowing through eastern side of L.P.A Rajpura. The future development of town needs to be contained within bandha of Dhakansu nallah/ Pachisdara drain. The major future development of town thus shall be predominantly required to be envisaged towards north-west and south-west.

Rajpura town is only a tehsil headquarter which lacks in higher level of facilities in terms of educational and medical facilities. People earlier were making use of such facilities available at Chandigarh (P.G.I, Sector-32 Multi Specialty Hospital) and Govt. Rajindra Hospital at Patiala. Now the higher level medical as well as educational facilities are available at the outer extreme of L.P.A Rajpura at Gian Sagar Medical Education & Health Complex. Chitkara Deemed University at the end of LPA Rajpura offers numerous technical and other courses.

### **VISION 2031**

For the Master Plan, it is necessary to formulate a long term (2031) vision for the town that takes into account the present strengths, opportunities, weaknesses (limitations) and threats (SWOT). For visualizing future town of Rajpura, the govt. vide letter no. 7463-72 dated 1-12-2008 had ordered the constitution of a "Think Tank" under the chairmanship of Deputy Commissioner, Patiala. The basic objective of this "Think Tank" was to discuss SWOT analysis and finalise vision 2031 along with conceptual plan of the Master Plan, Rajpura and ensure Govt. and public participation so that the Master Plan so prepared takes care of all the aspects of future town development taking care of the requirements of each section of the society and is readily acceptable to the public.

As directed by the Govt., the "Think Tank" was constituted in such a way that almost all sections of the society viz public sector, private economic sector and social sector were duly represented. Four meetings of think tank were held on 20.09.2010, 06.10.2010, 08.11.2010 and 7.12.2010 under the Chairmanship of Deputy Commissioner, Patiala and the following Vision for L.P.A Rajpura 2031 was discussed in these meetings and was finalized through intensive deliberations.

**“To develop and nurture the industrial, trade & commerce spectrum of Rajpura by striking a balance in the distribution of predominant landuses i.e. residential, industrial and commercial uses with enhanced physical connectivity in terms of road, rail and freight corridor in an environmentally sustainable manner.”**

### 6.3 Strategies to Attain Vision

Based on SWOT analysis, following strategies as discussed in Think Tank meetings are required to be developed for attaining the above referred VISION 2031:-

- i **Rail link between Rajpura and Mohali** is need of the hour. This vital link will prove complementary and supplementary to road link between Rajpura and Chandigarh. This rail link will not only link Patiala and Rajpura with Chandigarh but will also connect the other southern districts of Punjab as well especially Bathinda which is a new emerging economic centre.
- ii **Local drainage and flood affected areas** should be properly studied and as far as possible future development by 2031 should be proposed away from flood prone areas.
- iii **Allocation of sufficient land** (as per requirement) shall be made for residential, industrial and commercial activity to provide a comprehensive range of retail and wholesale commercial services and provision for industries and allied activities in a conducive manner.
- iv **To ensure efficient transportation system**, provision of elevated roads, fly overs, rail over bridges, pedestrian under passes, footoverbridges, new sector roads etc. shall be made.
- v **To provide social infrastructure like education, health and recreational etc.** following methods shall be adopted:-
  - Through utilization of vacant govt. /M.C./Panchayat/Wakf Board lands etc.
  - By encouraging planned development as provided in PAPRA Act, 1995, Town Development Schemes, Development Schemes of Improvement Trust.
  - By introducing Land Pooling Policy, transfer of Development Rights concept may also be developed.
  - Acquisition of land through Land Acquisition Act, 1894 may also be carried out for the provision of projects which are of state / national importance in public interest.
- vi **To promote an eco-friendly Solid Waste Management system** following steps need to be adopted:-
  - Provision of appropriate solid waste dump site.
  - Installation of solid waste processing plant for the waste disposal and at the same time generating energy from the solid waste or preparing manure.
- vii **To provide utilities** that will satisfy the needs of the residents of L.P.A following need to be adopted:-
  - To ensure 100% coverage of the city in terms of Sewerage System.
  - To ensure 100% coverage of the city in terms of canal based Water Supply.
  - To promote eco-friendly decentralized sewage treatment plant.
  - To promote rain water harvesting and recycling of water.

#### **6.4 Components of the Master Plan**

The scope of a master plan confines to the broad proposals and allocation of land for various uses such as residential, industrial, commercial, wholesale & warehousing and rural etc. which will be supplemented with road network. It will identify areas covered under historical, architectural and cultural heritage required to be preserved and conserved along with preservation of features, structures of environmental value. It will include zoning regulations and development controls for regulating development within each zone. Therefore, a master plan is an important instrument for guiding and regulating development of a town over a period of time and contributes to planned development both conceptually and operationally.

#### **6.5 Master Plan Objectives**

Supporting the earlier elaborated vision is a set of development objectives with reference to the relevant strategies recommended for L.P.A Rajpura:-

- i) To make land allocation for various landuses in an environmentally sustainable manner especially reserve large area under industrial use in and around town as it is going to develop as a major industrial town in times to come which was an earlier trend long time back.
- ii) To strengthen the basic infrastructure favourable for Thermal Plant, I.T/Knowledge city Projects and Logistic Corridor along with Eastern Dedicated Freight Corridor.
- iii) To ensure efficient transportation system by :-
  - Effectively planning the traffic and transportation within L.P.A.
  - Effectively managing the traffic and transportation within the town through the mechanism of rationalizing the landuse pattern defined in the Master Plan.
  - Ensuring safety, mobility and efficiency of inter and intra town traffic.
- iv) To optimize the use of available land resource through well defined development norms and to minimize diversion of valuable agricultural land for non-agricultural purposes.
- v) To identify manmade architectural, natural heritage and to make heritage conservation as an integral part of the town/ L.P.A planning and development process.
- vi) To maintain and preserve existing drains, minors and distributaries so that natural disposal of water remains uninterrupted.
- vii) To plan L.P.A as an integrated single unit with strong forward as well as backward linkages.

Other objectives related to urban management, urban finance and local economic development etc. are outside the scope of Master Plan and hence not deliberated.

## 6.6 Land Use Requirements

Before proceeding to prepare proposed land use plan and transport network the areas required for different purposes are to be worked out on the basis of norms and standards of various organizations.

The area requirements for different uses for projected population of Rajpura town have been worked out on the basis of norms given in UDPFI. The assessment of the urbanisable area is normally based on the proposed residential area which is considered to be 40% of total proposed urbanisable area of towns like Rajpura i.e. The Appendix-B of Norms and Standards, of UDPFI guidelines has been followed for calculating the area requirements for different land uses.

### ➤ Residential Use

For calculating the housing requirements following assumptions have been kept in mind:

**Table No. 6.6 (a): Calculation of average plot area in L.P.A Urban**

Sr.No.	Description	Area in sq.m.
1	Carpet area of average dwelling unit. 1 Living Room,2 Bed Rooms, 1 Kitchen and others	120
2	Built up area inclusive of walls, verandahs etc	150
3	Plot area @ footprint to plot ratio of 0.60	230

**Table No. 6.6 (b): Stage wise residential area requirements for urban area, L.P.A Rajpura(2010-2031).**

Year	2011	2016	2021	2026	2031
No. of families	30268	33804	37339	46576	58109
Net land requirements in ha.	464	518	573	714	891
Gross land requirements in ha.	928	1036	1146	1428	1782

- Assuming 1.5 dwelling unit might be accommodated in each plot.
  - Assumed family size =5
  - 50% area is assumed under shopping, roads, parks & open spaces and public buildings.
- a) Projected area required for residential purposes by 2031 = 1782 ha. (4402 acres).  
 b) Existing urban area under residential use = 1039.67 ha.  
 c) Proposed increase in urban residential use= a-b=1782-1039.67ha.=742.33ha.(1834.32 acres)

### ➤ Commercial Use

The area requirements for commercial activities have been calculated as per norms given at page 159 of Volume-I of UDPFI guidelines which have been reproduced in table 6.6(c) below and based on these norms the area requirements for Rajpura have been worked out as given in table 6.6(d).

**Table No. 6.6(c): Area for commercial centres**

Hierarchy of commercial centre	Area per 1000 persons sq.m	Number of shops
Cluster centre	220	1 for 110 persons
Sector center	300	1 for 200 persons

Community Centre	500	1 for 200 persons
District Centre	880	1 for 300 persons
<b>Total</b>	<b>1900 sq. m</b>	

**\*Area per person required 1.9 sq .mts. say 2 sq. mts**

**Table No. 6.6 (d): Commercial area requirements for urban areas of LPA, Rajpura**

Sr. No.	Year	Projected Population	Commercial area required in hectares
i	2011	151342	30.3
ii	2021	186694	37.3
iii	2031	290543	58.1

**Note:**

- ***This does not include the area required for wholesale markets which will be worked out separately as per the nature of the wholesale market.***

➤ **Industrial Use**

The detailed data regarding various categories of workers in census 2001 pertaining to Rajpura town is not available. The data of industrial workers available in census 2001 is limited to the household industry only. The no. of workers engaged in other industries is not available. The projections of industrial workforce cannot be made accurately, therefore, for calculating the industrial use requirements the proposed land use structure standards cited in UDPFI guidelines on page no 147 of Volume-I are adopted as given below:-

Total existing industrial area of Rajpura M.Cl+ Outgrowth 403.76 ha.

Existing industrial use as a percentage of M.Cl+ Outgrowth 5.53%

Norms and standards for industrial use (as per UDPFI guidelines) 8%-10%

As per existing land use plan, the area occupied by industrial use is only 5.53% of the total area of Rajpura M.Cl+ Outgrowth. With the coming up of mega projects like Thermal Plant, Cement Plant, three distilleries and Dedicated Freight Corridor the number of industrial workers shall increase substantially. Therefore the area projected for industrial use based on the figures of 2001 census may not be relevant. The scope of major industries is foreseen in future around Rajpura town and in proposed industrial corridor contiguous to logistic corridor and crossing station of Dedicated Freight Corridor. In light of the above facts UDPFI guide lines may not be achieved within urbanisable area as the crossing station of Dedicated Freight Corridor selected by Railway Authority around which Logistic Corridor/Industrial area has been proposed falls outside the urbanisable limit at Shambhoo Station but within L.P.A Rajpura. Therefore major industrial use shall be proposed outside urbanisable limit but within L.P.A Rajpura. The area requirements for industrial use for urbanisable area of Rajpura town by 2031 works out 660 ha.



The above projected area does not include the area of Thermal Plant because this is an independent special industrial complex which is not covered in UDPFI guidelines.

➤ **Recreational Facilities**

According to UDPFI guidelines, recreational facilities include parks, open spaces, amusement parks, sports centre, play ground, botanical, zoological park, water bodies and other natural features, places of tourist interest etc. The norms of UDPFI state that 10sq.m-12sq.m. per person area for recreational facilities is required at city level. As per this norm, area required for L.P.A Rajpura urban by 2031 would be 290 ha.

**6.7 Norms and Standards for Traffic And Transportation**

The norms and standards (land width) for different category of roads are listed as follows:

**Road Hierarchy**

- R1: 200' (ROW)
- R2: 150' (ROW)
- R3: 100' (ROW)
- R4: 80' (ROW)
- R5: 60' (ROW)

Within the above ROW, width of footpaths and cycle tracks given may be provided as follows if required:

**Footpath**

The width of footpaths is listed as below:

Minimum width	1.5 m
Adjoining shopping frontage	At least 3.5 m
Longer shopping frontage	Minimum 4.5 m
Width should be increased by 1m in business / shopping areas	

**Cycle Track**

The minimum width of cycle tracks should be 2m. Each additional lane, where required, should be one meter. The capacity of cycle tracks recommended is as below:

Width of Cycle Track	Width in meters	Capacity (Cycles / hr)	
		One way	Two way
Two lanes	3	250-600	50-250
Three lanes	4	>600	250-600
Four lanes	5	-	>600

**6.7.1 Transport Network Requirements**

• **Road Hierarchy**

Above road hierarchy has been adopted in Proposed Traffic and Transportation of LPA Rajpura which is elaborated in detail in chapter no. 7.2.8

• **At Town Level**

**Truck Terminal**

Truck terminal shall be part of proposed wholesale and warehousing zone which will include timber market as well.

## 6.8 Infrastructure Demand

Infrastructure is the basic requirement of urban life and its adequacy and accessibility are two important ingredients and key contributors in the upgradation and enrichment of quality urban life. Infrastructure is divided into two parts viz. Physical Infrastructure & Social Infrastructure.

Infrastructure has been worked out for 2,90,543 persons of L.P.A. urban by 2031.

### 6.8.1 Space Norms And Standards for Public Utilities/Physical Infrastructure and Social Infrastructure

Basically UDPFI norms and standards have been followed for calculating the area requirements for different social infrastructure and public utilities however, the Punjab State Govt. policies issued time to time have also been adopted where it was applicable. There are three different sets of norms and standards taken into consideration the comparative chart of these is given in Annexure- VI.

From the comparative table of norms and space standards as given at annexure- VI, the norms suggested by UDPFI guidelines have been found more suitable for the preparation of Master Plan Rajpura because of the following reasons:

- The norms and standards suggested by UDPFI guidelines are more detailed and cover almost each and every physical and social infrastructure as compared to Master Plan Zoning Regulations / Govt. policies.
- Norms and standards suggested by UDPFI guidelines are more realistic and suitable to local conditions such as prevailing development controls, availability of land, land prices etc.
- UDPFI guidelines suggest different norms and standards for different category of towns like small and medium towns, large cities and hill areas which are not available in other guidelines.
- The norms and standards of Master Plan Zoning Regulations are not detailed and do not cover the whole range of activities, hence are not being adopted.
- Norms and standards suggested by Delhi Master Plan have not been found suitable for L.P.A Rajpura because these norms are of higher level, formed especially for Mega cities like Delhi, where development controls are very stringent, land is scarce and costly.

#### Note:-

- *The norms space standards as suggested by Punjab govt. policies and as prescribed by various affiliating authorities of different courses issued from time to time shall have the overriding*

*effect on the norms and standards of UDPFI guidelines adopted for the preparation of Master Plan, Rajpura.*

- *For the aspects which are not covered under UDPFI guidelines, the norms and standards as suggested by Master Plan zoning regulation in Punjab shall be adopted and where these zoning regulations are also silent, only in that case, the norms and standards suggested by Delhi Master Plan shall be followed.*

## **6.8.2 Requirements of Physical Infrastructure/Public Utilities**

Physical Infrastructure includes water supply, sewerage, drainage, solid waste disposal, electricity, transportation.

### **Water supply & Sewerage flow**

Requirement for Water Supply for Rajpura Town by 2031 is calculated 39,223,305 lpcd (as per the standard 135 lpcd) and Sewerage flow has been taken as 80% of water supply i.e. 31,378,644 lpcd.

### **Solid Waste**

The production of solid waste is considered as an important function of the socio-economic profile of the population and activities in urban area. According to UDPFI guidelines, the generating of waste varies from about over a quarter kilogram in small city to about half a kilogram per capita in large and metro cities. Rajpura which falls in the category of small towns, the waste generation will be 1/4 of kilograms per capita per day. This implies that total waste generation in L.P.A urban by 2031 would be around 73 Metric Tons.

### **Power**

According to UDPFI guidelines and based on the estimated requirements of power supply as per the Master Plan of Delhi, the average consumption works out to 2 KV per household at the city level and includes domestic, commercial, industrial and other requirements. One electric substation of 11 KV switching station for a population of 15,000 is recommended. For Rajpura town, future requirement for power are estimated in the given table:

**Table No 6.8.2(a) Future Requirement of Power for L.P.A Urban**

<b>Year</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>
Household	26874	30268	33803	37338	46576	58108
Power consumption in MW	54	60	67	75	93	116

The table no. 6.8.2 (a) shows that for the projected population of 290543, 116 MW of power is required in 2031 i.e. for 58108 projected household as per the norms of UDPFI guidelines, 3 electric sub-station of 66 KV capacity are required for the projected population of 2031.

### 6.8.3 Land Required For Social Infrastructure

Social infrastructure includes facilities of education, health, police, fire protection, recreation etc. The land requirement of social infrastructure for Rajpura urban is calculated as below:

**Table No. 6.8.3 (a): Requirement of Educational Facilities within Urbanisable limit**

Educational Facilities	Area Required	Norms	Projected Requirements	Existing	Additional Requirements by 2031( in numbers)	Additional Area Required (in ha.)
College	4 ha.	1 for 1.25 lakh pop.	2	2	-	-
Sec. Schools	1.60 ha.	1 for 7500 pop.	39	15	24	38.4
Primary School	0.4 ha.	1 for 5000 pop.	58	10*+30** +14***=5 4	4	1.6
<b>Total area required</b>						<b>40.0</b>

*Note:*

- 10\* Town level primary schools, 30\*\* Primary schools of those villages which are falling within M.C.I limits, 14\*\*\* Senior Secondary schools having facility of primary education.

**Table No.6.8.3 (b) Requirement of Educational Facilities in L.P.A rural.**

Educational Facilities	Area Required	Norms	Projected Requirements	Existing	Additional Requirements by 2031( in numbers)	Additional Area Required (in ha.)
Sec. Schools	1.60 ha.	1 for 7500 pop.	15	40	-	-
Primary School	0.4 ha.	1 for 5000 pop.	23	140	-	-

**Table No. 6.8.3 (c): Technical Education**

	Norms	Area required	Required	Existing	Additional Requirement
I T I	1 for 10 lakh pop.	1.60ha.	1	2	-

As per UDPFI norms, one I.T.I needs to be provided for every 10 lakh population. Rajpura town already has two I.T.Is (1 for boys on the backside of ITI Chowk and another for girls in Nilpur.)

#### **Professional Education**

According to UDPFI norms, two new engineering colleges are required to be provided in urban extension each having 2.02 ha. There are three institutes namely Chitkara Institute of Engineering & Technology, Surya World Group of Institutions, Swift College of Management in L.P.A Rajpura which fulfill the requirements of engineering and technical educations.

**Table No. 6.8.3 (d): Requirement of Medical Facilities**

Medical facilities	Norms	Projected Requirements	Existing	Additional Requirement by 2031( in numbers)	Additional Area Required (in ha.)
General hospital	1 for 2.5 lakh pop.(area:6 ha each and 500 beds)	1	-	1	6
Intermediate hospital (category A)	1 for 1 lakh pop.(area 3.7 ha each and 200 beds, initially 100 beds)	3	1	2	7.4 ha
Intermediate hospital (category B)	1 for 1 lakh pop.(area:1 ha each and 80 beds, initially 50 beds)	2	5	-	-
Nursing Homes, Child Welfare and Maternity centre	1 for 0.45-1 lakh pop.(area:0.20-0.30 ha each and 25-30beds,)	2	5(Pvt.)	-	-
Dispensary	1 for 0.15 lakh pop.(area 0.08-0.12 ha each)	19	3*+6**=9	10	0.8 ha

**Note:**

- *\*Dispensaries falling within M.C limit, \*\* Dispensaries falling in villages within urbanisable limit*
- *Quantitative availability for intermediate hospital (category B), Nursing Homes, Dispensaries satisfies the norms, from accessibility point of view additional facilities shall be provided in proposed residential areas.*

**Table No.6.8.3 (e) Per Capita Land Requirement for Police Units**

Police facilities	Norms	Area/Unit (in ha.)	Projected Requirements	Existing	Additional Requirement by 2031( in nos.)	Additional Area Required (in ha.)
Police Station	one for 90,000 persons	1.5	3	2	1	1.5 ha.
Police Post	two for 50,000 persons	0.16	12	5	7	1.1 ha.
Total area						2.6 ha.

### Fire Station

As per norms of UPDFI guidelines, 1 fire station or substation within 1-3 Km. is to be provided for 2 lakh population. Area for fire station with essential residential accommodation is 1.00 ha and area for sub fire station with essential residential accommodation is 0.60 ha. The requirement of fire stations by 2031 would be one, which already exists in the town.

**Table No. 6.8.3(f) Stage Wise Land Requirements For Projected Population of L.P.A Rajpura - 2031**

Sr. No	Aspect	Norms and Standards	Existing No.	Additional Requirement by 2031 (in no.)	Stage Wise Requirement (Number and area in hectares)						Total area (in ha)
					2011		2021		2031		
					No.	Area (in ha)	No.	Area (in ha)	No.	Area (in ha)	
1	Primary School	<b>Population: 5,000</b> Number of students: 500 Area per school: 0.4 ha Covered area: 0.20 ha Minimum play field area: 0.20 ha	170	-	No additional requirement for the Primary school Quantitative availability satisfies the norms, accessibility consideration shall lead to additional schools in new residential areas.						
2	Senior Secondary School	<b>Population: 7,500</b> Number of students: 1,000 Area per school: 1.60 ha Covered area: 0.60 ha Minimum play field area: 1.00 ha	55	-	No additional requirement for the Senior Secondary school Quantitative availability satisfies the norms, accessibility consideration shall lead to additional schools in new residential areas.						
3	College	<b>Population: 1,25,000</b> Number of students: 1000-1500 Area per college: 4.00 ha Covered area: 1.80 ha Play field area: 1.80 ha Residential / hostel area: 0.40 ha	2	-	No additional requirement for the college.						
4	University	New University Area: 60.00 ha	1	-	No requirement for the university.						
5	Technical Education Centre	<b>Population: 10,00,000</b> Area per centre: 4.00 ha Area per technical centre: 2.10 ha Area per ITI: 1.40 ha Area per coaching centre: 0.30 ha	2	-	No additional requirement for the Technical Education Centre						
6	New Engineering College	<b>2 numbers to be provided in urban extension</b> Number of students: 1500-1700 Area per college: 60.00 ha	3	-	No additional requirement for the New Engineering College						
7	Medical / Dental / Pharmacy College	<b>Population: 10,00,000 (DMP)</b> Area: 5 acres (Rural) Area: 2.5 acres (Distt. Headquarter Corporation Limit)	2*	-	No requirement for the Medical /Dental Pharmacy College as per standards						

8	Dispensary	<b>Population: 15,000</b> Area: 0.08 to 0.12 ha	23**+11*** +4**** =38	-	No additional requirement for the Dispensary						
9	Nursing Home	<b>Population: 45,000-1,00,000</b> Capacity: 25 to 30 beds Area: 0.20 to 0.30 ha	5	-	No additional requirement for the nursing homes						
10	General Hospital	<b>Population: 2,50,000</b> Capacity: 500 beds Area for hospital: 4.00 ha Area for resi accommodation: 2.00 ha Total area: 6.00 ha	-	2	1	6	-	-	1	6	12
11	Library	<b>Population: 15,000</b> Area: 2,000 sq m (0.2 ha)	2	25	20	4	2	0.4	3	0.6	5
12	Club	<b>Population: 1,00,000</b> Area: 10,000 sq m (1.0 ha)	-	4	3	3	-	-	1	1	4
13	City level park	<b>Population: 5,00,000</b> Area: 10 acres (4.0 ha)	3	-	No additional requirement for the city level park.						
14	Neighborhood level park	<b>Population: 10,000</b> Area: 10,000 sq m (1.0 ha)	57	-	Neighborhood level park are required to be provided within proposed urbanisable area.						-
15	Golf Course	<b>Population: 10,00,000</b> Area: 10-30 ha	-	-	No requirement for the Golf Course as per norms.						
16	Sports Centre / Stadium	<b>Population: 5,00,000</b> Area: 3-10 ha	-	1	-	-	-	-	1	5	5
17	Post and Telegraph Office	<b>Population: 10,000</b> Area: 0.1 ha	33	7	-	-	1	0.1	6	0.6	0.7
18	Orphanage/ Children Centre	<b>Population: 5,00,000</b> Area: 1,000 sq m (0.1ha)	1	-	No additional requirement for the Orphanage / Children Centre						
19	Multipurpose Ground (Exhibition cum Fair Ground)	<b>Population: 1,00,000</b> Area: 20,000 sq m (2.0 ha)	1	3	2	4	-	-	1	2	6

Note:- \*Two colleges of Pharmacy namely Chitkara college of Pharmacy and Swift college of Pharmacy are running in L.P.A Rajpura.

\*\* 23 sub-dispensaries, \*\*\* 11 allopathic dispensaries,\*\*\*\* 4 ayurvedic dispensaries are existing in L.P.A Rajpura.

20	Police Post	<b>Population: 40,000- 50,000</b> Area: 0.16 ha (area inclusive of essential residential accommodation)	5	3	1	0.16	-	-	2	0.32	0.48
21	Police Station / Police Division	<b>Population: 90,000</b> Area: 1.5 ha Area inclusive of essential residential accommodation 0.05 ha additional to be provided for civil Defence and home guards	2	2	-	-	1	1.5	1	1.5	3
22	Fire Station	<b>1 fire station or sub-fire station within 1 to 3 km to be provided for 2 lakh population</b> Area for fire station with essential residential accommodation: 1.00 ha Area for sub-fire station with essential residential accommodation: 0.60 ha	1	1	-	-	-	-	1	1	1

**Note:**

- The space standards given above are minimum. Extra space if available may be used for providing social infrastructure.
- However, in case the govt./ Panchayat land is used for provision of social infrastructure, up to 10-15% variation in minimum space norms may be allowed as per site conditions.
- The above given requirements have been calculated on the basis of existing LPA population in 2001 (2,61,344) and projected population for 2011 (3,04,180), 2021 (3,41,152) and 2031 (4,06,989)



## 7 LANDUSE PROPOSALS BY 2031

### 7.1 Planning Proposals

Based on the detailed studies conducted by the office of DTP Patiala and STP Patiala pertaining to L.P.A Rajpura, proposed landuse plan and transport network has been proposed keeping in view the SWOT analysis and as per the outcome of various deliberations of Think tank. The proposed landuse plan and transport network of LPA Rajpura has been finalised after various discussions held at different levels i.e. with Secretary Housing and Urban Development, Advisor Town Planning and Chief Town Planner (Pb.). In order to maintain the connectivity of urban development as far as possible the model of compact urban development has been adopted except where the existing and anticipated govt. / semi govt. /private projects are coming up away from town but within LPA Rajpura.

Proposals have been envisaged keeping in view the existing trend of development and future requirements of land under various uses by 2031. Apart from this, highly flood prone Dhakansu/Pachisdara nallah has been the guiding factor for planning of future development. In addition to this, proposals related to six laning of National Highway No.-I and upcoming Dedicated Freight Corridor by Dedicated Freight Corridor Corporation of India (DFCCI) have played a pivotal role in giving shape to proposals for L.P.A Rajpura by 2031.

Existing Rajpura town has predominantly developed along Chandigarh- Patiala road i.e. National Highway no. 64. The future development by 2031 has also been proposed along N.H.64 upto permanent existing and proposed features. The proposed development is more pronounced towards west where there is no physical constraint as compared to east where the development is restricted to bandha of Dhakansu nallah/ Pachisdara in order to save the town from the havoc of floods caused by Dhakansu nallah. In south-west, future development has been proposed uptill the proposed 150' wide road from N.H.I to proposed industrial use. Since entry from N.H.I is feasible from flyovers only, the above road has been proposed from Uksi Jattan flyover which is the next flyover from existing bypass flyover. Logistic corridor and industrial zone have been proposed at a distance from proposed urbanisable limit because of upcoming crossing station of Dedicated Eastern Freight Corridor at Shambhoo Station keeping in view the existing connectivity to this station through Shambhoo-Ghanaur road from N.H-I and Banur-Tepla road as per decision taken in a joint meeting of representatives of Railways, Dedicated Freight

Corridor Corporation of India Limited and Town Planning Department (copy of minutes of the meeting attached at annexure -VII). Similarly Nabha Thermal Plant coming up in north-west of LPA Rajpura is far away from proposed urbanisable limit.

Based on the existing character of town and various major govt. / semi govt. and private projects which are in the pipeline, following landuse zones have been proposed for LPA Rajpura:-

- Residential Zone.
- Commercial Zone.
- Wholesale & Warehousing Zone.
- Industrial Zone.
- Logistic Zone (Corridor).
- Mixed Landuse Zone.
- Rural & Agricultural Zone.

*The concerned aspects of above different landuse zones have been detailed out below which have to be read with Zoning Regulations specified for different land uses. However, the lands which come under the Optimum Utilization Of Vacant Govt. Lands (OUVGL) scheme of the state Govt., use of such lands/sites shall be determined by the Govt. at any appropriate time irrespective to their existing/ proposed landuses.*

*The sites on which various projects have been approved or whose change of landuse has already been permitted by competent authority/govt., such sites shall be deemed to be adjusted.*

## **7.2 Proposed Land Use & Transport Network Plan (2010-2031)**

Although it has been observed from the studies that there is a tendency of growth along transport corridors, considering areas with great potential for development, wider areas of development have been considered. Therefore the proposed areas under various landuse zones will exceed the areas calculated for different uses which are the minimum required. After going through the detailed studies conducted by the office of STP Patiala pertaining to LPA Rajpura and discussions held with Secretary Housing and Urban Development, Advisor Town Planning, Chief Town Planner Punjab, Think Tank members and further based on analysis, assumptions and projected population of LPA Rajpura, the Proposed Land Use Plan 2031 was prepared and presented in Drg.no.STP (P) 289/2011 dated 17.02.2011 which has been revised as Drg. no.STP (P) Drg.no. 291/2011 dated 21.10.2011 in light of decision taken in the 23<sup>th</sup> meeting of the Punjab Regional and Town Planning and Development Board held on 23-09-2011. The land use distribution of the urbanisable area and total L.P.A Rajpura -2031 is given in table no. 7.2.

**Table no.7.2 Break-up of Major Proposed Landuse Zones of L.P.A Rajpura 2010- 2031**

Proposed Land Use Zones	Within Urbanisable limits		Outside Urbanisable limits	Total LPA	
	Area (Ha.)	%age		Area (Ha.)	%age
<b>RESIDENTIAL ZONE</b>					
RD <sub>1</sub>	1147.12	13.97	-	1147.12	2.75
RD <sub>2</sub>	3514.51	42.79	103.84	3618.35	8.66
Rural settlement	256.51	3.12	957.85	1214.36	2.91
Internal roads	178.92	2.18	0	178.92	0.43
<b>TOTAL</b>	<b>5097.06</b>	<b>62.06</b>	<b>1061.69</b>	<b>6158.75</b>	<b>14.75</b>
<b>COMMERCIAL ZONE</b>					
City Centre, District Centre	10.44	0.13	0.74	11.18	0.03
<b>TOTAL</b>	<b>10.44</b>	<b>0.13</b>	<b>0.74</b>	<b>11.18</b>	<b>0.03</b>
<b>WHOLESALE &amp; WAREHOUSING ZONE</b>					
Whole Sale market, Godowns, Ware Housing	310.93	3.79	-	310.93	0.74
<b>TOTAL</b>	<b>310.93</b>	<b>3.79</b>	<b>-</b>	<b>310.93</b>	<b>0.74</b>
<b>INDUSTRIAL ZONE</b>					
Existing Industry	349.12	4.25	845.6	1194.72	2.86
Proposed Industry	1048.24	12.76	1422	2470.24	5.91
<b>TOTAL</b>	<b>1397.36</b>	<b>17.01</b>	<b>2267.6</b>	<b>3664.96</b>	<b>8.77</b>
<b>LOGISTIC ZONE</b>					
Logistic Corridor	-	-	293.61	293.61	0.70
<b>TOTAL</b>			<b>293.61</b>	<b>293.61</b>	<b>0.70</b>
<b>MIXED LANDUSE ZONE</b>					
Mixed Landuse	655.79	7.98	1525.34	2181.13	5.22
Commercial Mix	74.61	0.91	0	74.61	0.18
<b>TOTAL</b>	<b>730.4</b>	<b>8.89</b>	<b>1525.34</b>	<b>2255.74</b>	<b>5.40</b>
<b>DESIGNATED USES</b>					
<b>a)Traffic &amp; transportation</b>					
Railway line siding & Proposed Eastern Dedicated Freight Corridor	59.45	0.72	70.2	129.65	0.31
Railway station/Crossing Station	18.27	0.22	11.49	29.76	0.07
Bus termini	0.62	0.01	-	0.62	0.00
Major roads/minor roads	456.99	5.56	975.24	1432.23	3.43
<b>b) Public &amp; Semi Public</b>					
Govt./Semi Govt. offices	7.34	0.09	4.03	11.37	0.03
Educational/Instututional	36.09	0.44	57.17	93.26	0.22
Medical & Health	5.8	0.07	0	5.8	0.01
Social Cultural & Religious	5.07	0.06	0	5.07	0.01
Stadium/Parks	16.46	0.20	-	16.46	0.04
<b>C) Utilites</b>					
Water Treatment Plant	8.48	0.10	-	8.48	0.02
Electric Grid Station	7.21	0.09	-	7.21	0.02
Main Pumping Station	5.35	0.07	-	5.35	0.01
<b>TOTAL</b>	<b>627.13</b>	<b>7.64</b>	<b>1118.13</b>	<b>1745.26</b>	<b>4.18</b>
<b>SPECIAL AREAS</b>					
Other Use	-	-	79.24	79.24	0.19
Heritage Buildings	-	-	4.52	4.52	0.01
Restricted Area	-	-	37.47	37.47	0.09
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>121.23</b>	<b>121.23</b>	<b>0.29</b>
<b>AGRICULTURAL ZONE</b>					
Plantation and orchards	7.57	0.09	192.58	200.15	0.48
Water bodies	19.97	0.24	550.01	569.98	1.36
Green belt	11.94	0.15	11.97	23.91	0.06
Agriculture & Katcha Rasta	-	-	26411.3	26411.3	63.23
<b>TOTAL</b>	<b>39.48</b>	<b>0.48</b>	<b>27165.86</b>	<b>27205.34</b>	<b>65.14</b>
<b>GRAND TOTAL</b>	<b>8212.8</b>	<b>100.00</b>	<b>33554.2</b>	<b>41767</b>	<b>100.00</b>

Source P.R.S.C. Ludhiana

### **7.2.1 Residential Zone**

The projected population of Rajpura town and the villages falling in proposed urbanisable limit works out to 2,90,543 persons by the year 2031 which is more than double the population of 2001 census, therefore the rise in demand for additional residential area is inevitable. In order to accommodate the growing population within the limits of proposed urbanisable area of Rajpura town, the proposals have been suggested for the various pockets which have been identified as most potential and suitable for residential purpose. As stated in chapter 6.6 (b) an area of 1782 ha. is required for residential purpose for Rajpura within urbanisable area by the year 2031. Keeping in view the major trend and growth potential of residential area as well as accessibility of area along Patiala-Rajpura road, potential area has been identified contiguous to the existing residential area between right hand side of Patiala-Rajpura road and bandha of Pachis dara on one side and upto proposed 150' wide road connecting N.H-I and proposed industrial area on the other side. Keeping in view the existing trend of residential development on left hand side of Patiala-Rajpura road, residential area has been proposed between N.H-64, Bathinda-Rajpura railway line, existing bye pass and area upto Mukat Pipe factory.

On south-western side, area lying on the other side of railway line, between Narwana branch, National Highway-I, proposed whole sale and warehousing zone upto proposed 150' wide approach road to industrial area from National Highway-1 has been proposed as residential.

On north western side, keeping in view the existing trend of residential development, area lying between Ludhiana-Ambala railway line, Rajpura-Chandigarh road (N.H-64) upto the proposed 150' wide road and Jansua-Khera Gajju road has been proposed as residential. This residential area has been further extended upto Dhakansu bandha on right hand side of Jansua- Khera Gajju road which predominantly comprises of the abadi area of village Jansua.

On north-eastern side, vacant area lying between Rajpura-Chandigarh road i.e. National Highway-64 and Dhakansu bandha has been proposed for residential development upto abadi area of village Shamdoo H.B.No.68 and proposed industrial area keeping in view the residential trend.

### **7.2.2 Commercial zone**

As discussed in table no. 2.3 (b) the larger share of workforce of Rajpura town is engaged in commercial activity which comprises of about 29.5% of total work force. The study

reveals that the existing city centre is congested because of encroachments and thus it lacks in adequate parking facilities. Therefore to serve the additional population of the town more new commercial areas are required to be developed in the new expansions. However, the present city centre would continue to maintain its status inspite of the challenges of latest trends. Soon Rajpura town is going to have its district Centre of 8.23 acre adjoining Judicial Complex. This district centre is being planned on modern pattern. Besides this, following new commercial areas are going to be developed in various PUDA approved and PTDB colonies.

**Table No 7.2.2- Proposed Commercial Areas**

Sr.No.	Name of the Commerical Pocket	Name of developing Agency	Area	
			Acres	Hectares
1	Madhuban Colony	PUDA approved	1.10	0.44
2	Adjoining Judicial Complex	PTDB	8.23	3.33
3	Sewak Colony	Punjab Govt. approved	0.42	0.17
4	Kanika Garden	PUDA approved	2.80	1.13
5	Guru Arjun Dev Colony Extension	PTDB	1.50	0.61
<b>Total</b>			<b>14.05</b>	<b>5.68</b>

### 7.2.3 Wholesale Market and Warehousing Zone

The study reveals that Rajpura being a gateway of Punjab has a good accessibility in terms of roads and rail. These factors have been instrumental in the establishment of important timber market (fuel market) at Rajpura. As discussed in chapter 3.4.2 the study reveals that earlier timber market developed by PTDB is existing within the town and number of timber godowns have come up unauthorisedly on ICL road and other parts of town. Therefore there is a dire need of separate timber market away from residential area alongwith proper truck stand. Similarly the present grain market which lies centrally within residential area of urbanisable limit of 2031 may require to be shifted at some point of time. So wholesale market and warehousing zone comprising of whole sale commercial activity of various types i.e. warehouses, cold storage etc have been proposed between existing bye pass & National Highway-1 behind commercial mix use as per decision taken in Think Tank meetings. This site has been proposed for wholesale market and warehousing zone keeping in view the good accessibility from the existing 200' wide existing bypass and National Highway-I. Present grain market and govt. warehouses on both sides of Patiala-Rajpura railway line have been spot zoned.

### 7.2.4 Industrial Zone

The proposed area for industrial use works out to 1397.36 ha. within urbanisable limit. As already mentioned in para 6.6 of industrial use, major industrial area of 1511.69 ha.



has been proposed in close proximity to proposed Logistic Corridor between S.Y.L.canal and Shambhoo- Ghanaur road outside urbanisable limit but within L.P.A Rajpura. This major industrial area shall comprise of complete village of Mugal Majra and part villages of Bathonian Khurd, Bathonian Kalan, Jakhepal, Bivipur, Kherpur Sheikhan, Hashampur, Naugawan, Chattar Nagar, Salempur Sekha, Hassanpura, Kabulpur, Faridpur Jattan, Mardanpur and Sandharsi.

New industrial area has also been proposed contiguous to existing approved SIEL complex upto proposed 100' wide road keeping in view the existing trend of industrial development around SIEL complex. It was decided in 23rd meeting of the Punjab Regional and Town Planning and Development Board held on 23-9-2011 that rather than developing approved Vividha Infrastructure Project abutting N.H.I in isolation, contiguous area around it may be proposed for industrial purpose. Accordingly the existing road from N.H.I to village Chamaru abutting the proposed industrial area may be widened to 100' instead of 60' as proposed earlier of course this area shall be developed subject to clearance from Drainage department.

Apart from this, L.P.A Rajpura shall comprise of mega projects like Thermal Plant, Cement Plant (yet to come) and two distilleries namely N.V. distillery and Regal distillery and integrated township. Thus the total area under industrial use in L.P.A Rajpura, both existing and proposed works out to 2751.71 ha. which is 6.59% of the total area of L.P.A Rajpura.

Out of the total industrial area within urbanisable limit, 250.34 ha. area has been proposed at the back of industrial focal point and adjoining abadi area of village Shamdoo as decided in the think tank meeting held under the chairmanship of Deputy Commissioner, Patiala. Similarly keeping in view the small industrial cluster comprising of numerous industries along Patiala-Rajpura road between the village Khandoli and area upto proposed R2 ring road has been proposed as industrial.

As per the notification no.GPC/Gen./419/2009/3658-63 dated 02-02-2009 issued by Punjab Pollution Control Board, 15m wide green strip of broad leaved trees shall be provided within the industrial use zone where the industrial & residential use zone shall coincide. Moreover as per the notification of Department of Science, Technology, Environment & Non Conventional Energy a minimum distance of 250 mts. from the hazardous (Maximum Accident Hazard) industries notified by Director General Factory Advise Service Labour Institute as per notification no. 3/6/07/STE (4)/2274 dated 25 July

2008 shall be required to be maintained from all residential colonies, commercial establishments like shopping malls, multiplexes etc.

Existing Industrial Estate on I.T.I road, Industrial Focal Point on Rajpura-Chandigarh road developed by Industries Department and important project like Nu Way Organic Nature (Ind) Ltd. in village Devinagar which have been approved by Punjab Government have been spot zoned within the urbanisable limit.

Industries which do not conform to the provisions of Zoning Regulations shall be treated as per section 79 of "The Punjab Regional & Development (Amendment) Act, 2006".

**Incentives for shifting of existing industries:**

Industries existing within the non designated industrial zone which are in operation as on date of Master Plan notification if shifts outside this zone to any of the designated industrial zone within the state of Punjab and generate at least the same number of jobs at the new location, will enjoy the following benefits:

- 1 No CLU, EDU or Licence Fee on the present site if used for plotted residential purposes provided the industry shifts within three years of the notification of the Master Plan. If used for any permissible land use other than plotted residential, the difference between CLU, EDC and Licence Fee of the new land use and plotted residential has to be paid. In case that particular land is put to a land use for which CLU, EDC or Licence Fee is less than the plotted residential, the difference between these fees / charges for the plotted residential and proposed land use shall not be payable by the Government / Urban Development Authority.
- 2 If the industry shifts in the subsequent two years of the above mentioned period of three years, it will enjoy 50% discount on CLU, EDC and Licence Fee on the present site if used for plotted residential purposes. If used for any permissible land use other than plotted residential, the difference between the CLU, EDC and Licence Fee of the new land use and that of 50% of plotted residential has to be paid. In case that particular land is put to land use for which CLU, EDC or Licence Fee is less than the plotted residential, the difference between these fees / charges for the plotted residential and proposed land use shall not be payable by the Government / Urban Development Authority.
- 3 No CLU, EDC or Licence fee on the new industrial site if the industry shifts within five years of the notification of the Master Plan.
- 4 After shifting to the new location, the type of such industry may change.

The prescribed distance for residential development in the non designated industrial from



existing red industries shall be as prescribed by the Department of Environment, Government of Punjab or Punjab Pollution Control Board.

*Note:*

- I. No industry in the Master Plan shall be permitted on a road having less than 40' ROW. In case, the existing road is less than 40' wide, it shall be widened to 40' by taking equal strip of land from both sides of the road.*
- II. A minimum buffer of 15 meters of broad leaf shall be provided for segregating industrial zone from the residential zone. The provision of buffer strip shall be made by the owner of Land use which comes later.*
- III. The standards prescribed by Punjab Pollution Control Board from time to time would have to be met by all industrial units in addition to other specific conditions in terms of plot size, ground coverage, F.A.R., height, parking norms etc.*
- IV. The existing industrial units falling under red category (as classified by Punjab Pollution Control Board) located in non-designated areas need to relocate to designated areas themselves within period of 10 years from date of publication of this Master Plan.*

#### **7.2.5 Logistic Zone (Corridor)**

Development of eastern dedicated freight corridor i.e. creation of rail infrastructure on such a scale - unprecedented in independent India is bound to drive the establishment of industrial corridor and logistic corridor along its alignment. There will be enormous potential of utilizing the proposed crossing station of Dedicated Freight Corridor as Cargo Station for the movement of goods in and out of the logistic corridor. This Truck-Rail inter-modal facility will enhance the distribution/ movement of manufactured products and even bulky raw materials from one point to other parts of India more efficiently. Thus this integrated facility will serve as a business hub for logistics, insurance and business distribution purpose.

In a joint meeting held on 7.10.2010 attended by Chief Engineer, Dedicated Freight Corridor Corporation of India Ltd., Senior Town Planner, Patiala and Senior Divisional Engineer, Northern Railways, Ambala (copy of proceedings attached at annexure no.VII) it was decided to propose logistic corridor along proposed Shambhoo crossing station of Dedicated Freight Corridor i.e. between SYL canal and Shambhoo- Ghanaur road upto a depth of 1 kilometer approximately. This area has been proposed keeping in view the following factors:-

- a. The ROB is already sanctioned at Level Crossing No. C/131 in Shambhoo yard on Ghanaur road.
- b. Many parties have approached railways for setting up of plants/handling facilities of cargo near Shambhoo station due to availability of land.
- c. National Highway Authority of India is providing a flyover at the junction point of

Ghanaur road which will further facilitate the movement of traffic smoothly.

The area under logistic corridor (zone) shall be 293.61 ha. comprising of part villages of Bathonian Khurd, Gandan, Ghaggar Sarai, Jakhepal, Khairpur Sheikhan, Hashampur, Shambhoo Khurd and Mardanpur.

#### **7.2.6 Mixed Landuse Zone**

Keeping in view the higher level of potential for development along major transport corridors i.e. along N.H-I, N.H-64, Shambhoo-Ghanaur road and proposed Outer Ring road a mixed landuse zone has been proposed in Master Plan of L.P.A Rajpura as shown in Drg.no. STP(P) 291/2011 dated 21.10.2011. The principle objective of mixed land use development is to provide a variation of residential, commercial, institutional, recreational uses and industries except red and orange category as listed by Punjab Pollution Control Board (PPCB) or as amended from time to time shall be permissible subject to environmental safeguards in a regulated manner.

- Mixed landuse zone upto a depth of 300 mts was earlier proposed along one side of N.H-I outside the urbanisable limit of L.P.A Rajpura. But it was also decided in 23rd meeting of the Punjab Regional and Town Planning and Development Board held on 23-9-2011 that mixed landuse should also be proposed between N.H-I and existing railway line and all the roads leading to the various level crossings along this stretch should be widened to 60 feet so as to facilitate the construction of ramps for railway over bridges and railway under passes.
- Mixed landuse zone has been proposed on both sides of Patiala-Rajpura road (N.H-64) upto a depth of 300 mts outside Municipal limit of Rajpura upto L.P.A boundary keeping in view the existing trend of mixed development along N.H.64. Similarly, mixed landuse of a depth of 300 mts has been proposed on both sides of Rajpura-Chandigarh road (N.H-64) outside the urbanisable limit in north-east upto L.P.A Banur boundary.
- Commercial Mix Landuse of 300 mts has been proposed along bye-pass and N.H.I in front of wholesale zone which will comprise of commercial, residential use & institutions only.

Apart from above, 200 mts mixed landuse zone has also been proposed along the following roads:-

- Along eastern side of Shambhoo - Ghanaur road.
- Along the outer side of proposed 150' wide R2 road connecting N.H-I and Narwana

branch.

- Along the outer side of proposed 150' wide R2 road connecting Jansua-Saneta road with R.U.B of Upal Kheri.
- Along the southern side of proposed road connecting N.H.64 with bandha of Pachis darah

### **General Terms and Conditions Governing Mixed Use in Individual Plots**

Mixed land use shall be permitted subject to the following terms and conditions:

- Development controls/norms as applicable for the particular residential use will continue to be applicable even if the plot / dwelling unit is put to mixed use.
- Where service road is available or provided by the concerned authority then mixed use premises should have approach from such service road and not directly from the main road.
- The parking as per prescribed norms by the State Govt / concerned development authority from time to time shall be provided within the premises. The existing norms are as under:

Commercial -	2 ECS / 100 square meters covered area
Industrial -	1 ECS / 100 square meters or fraction thereof
Institutional -	1 ECS / 100 square meters
- However, in case the project is approved by Municipal Council / PTDB then the parking norms as prescribed by the local body shall be applicable provided that the land use proposals of the Master Plan are adhered to.
- If no parking space is available, land / plot on the said street, parking should be made available by the applicant or trader association either by acquiring additional area for construction or by creating multilevel parking. Development of such parking facilities shall be done by either the applicant solely or traders association of that area or by the local body subject to the payment of the cost by the beneficiaries.
- The existing obnoxious, hazardous, inflammable, non-compatible and polluting industries shall have to move out to the designated industrial zone within a period of ten years from the publication of notification of the Master Plan.
- However, in case of voluntary shifting of this industry before the specified period, to designated industrial zones, the owner shall be eligible to put his/her plot, so vacated, to any other compatible use (including commercial use) subject to the provision of building bye laws and Master Plan conditions applicable for that particular land use in that particular area by paying conversion charged as fixed by the Local Body /

government from time to time besides providing incentive as may be decided by the government.

- The conversion of land use shall be subject to the payment of defined charges.

### **7.2.7 Rural and Agricultural Zone**

With the intention of preserving the basic character of agriculture, the remaining part of the rural area which has not been proposed for any other use will be retained as predominantly agricultural. This zone shall include permitted expansion of village abadis upto 100 metres from existing phirni. This zone broadly will comprise of agriculture, poultry, piggery, horticulture, floriculture, forest and other uses complimentary to agriculture, the detail of which is given in zoning regulations. Out of total area of 41767 hectares of LPA Rajpura 27205.34ha. has been proposed to be kept under rural and agricultural zone which is 65.14% of total area. Drg.no. STP (P) 291/2011 dated 21.10.2011 clearly shows that major share of land is allocated to rural and agriculture zone.

### **7.2.8 Designated Uses**

#### **I. Proposed Transport Network**

Transport network and land use need to be considered in an integrated manner. For Master Plan of LPA Rajpura, extensive road net work has been proposed taking into account the connectivity requirements as well as comprehensive proposals related to six and four laning of National Highway-I and National Highway-64 respectively. Moreover the future road network has been proposed as per the policy requirements of railways that no new level crossing will be provided on the Ambala-Ludhiana stretch and all the futuristic roads of the Master Plan have to be adjusted with the existing level crossings or flyovers/ROBs as enunciated in letter from railway authorities given in annexure-VII. The entire network will develop in phases as the traffic demand builds. However, it is emphasized that landuse proposals of Master Plan may be reviewed as the road network actually develops.

The concurrent planning of urban and rural growth in L.P.A Rajpura and the transportation system is required to provide an integrated, safe and efficient system for transportation of people and goods. The system is intended to meet the projected travel needs of passengers and goods both by road and rail. The significant proposals related to rail, roads and related infrastructure in collaboration with the proposed landuse pattern has been as shown in the plan, Drg.no. STP (P) 292/2011 dated 21.10.2011.

### ➤ **Eastern Dedicated Freight Corridor**

The plan to construct dedicated freight corridors across the country marks a strategic inflexion point in the history of Indian Railways that has essentially run mixed traffic across its network. Creation of rail infrastructure on such a scale - unprecedented in independent India – is also expected to drive the establishment of industrial corridors and logistic parks along its alignment.

#### **OBJECTIVES & MISSIONS OF DFCCIL**

- Reduce unit cost of transportation by speeding up freight train operations and higher productivity.
- Increase rail share and freight market by providing customized logistic services.
- Segregate freight infrastructure for focused approach on both passenger and freight business of railways.
- Provide a modern, quicker and safer freight transportation system.
- Leverage reduced emission of Green House Gases by encouraging a modal shift from road to rail.

DFCCIL will be constructing eastern dedicated freight corridor which after starting from Ludhiana will pass through Doraha, Khanna, Gobindgarh, Sirhind and Rajpura in Punjab and further thereon shall pass through the states of Haryana, Uttar Pradesh and terminate at Son Nagar in Bihar. It has been billed as the future life line of region. It will cater to a number of traffic streams-coal for power plants in the state from the eastern coal fields, finished steel, food grain, cement, fertilizers and general goods.

Eastern Dedicated Freight Corridor passing through LPA Rajpura shall have its junction at Shambhoo as discussed in 7.2.5. In order to meet the enormous demand of coal for various thermal plants around Bathinda and National Fertilizer Plant Bathinda, Rajpura-Bathinda railway line will function as feeder line for Eastern Dedicated Freight Corridor at Rajpura with junction at Shambhoo.

### ➤ **Proposed Road Network**

As far as possible efforts have been made to follow the existing road network while proposing the new hierarchy of the roads except in few cases. The following hierarchy of roads has been proposed:-

- R-1                    200 feet wide and above.
- R-2                    150 feet wide.
- R-3                    100 feet wide.
- R-4                    80 feet wide.
- R-5                    60 feet wide

### **National Highway No.I (R-1)**

The National Highway-I (NH-I) connecting the national capital, Delhi and bordering holy city of Amritsar is one of the major high-density traffic highways in India. Upgrading of this existing four lane highway to six lanes between two major cities (i.e. Panipat & Jalandhar) is a major and an integral component of the Government of India's National Highways Development Project.

The six laning of N.H-I (Panipat-Jalandhar) is a major infrastructure development project in Punjab & Haryana, the salient features of which are as under:-

- a. Construction of **access controlled six lane** main carriageway (three lane on either side) with exit/entry point from service road to main carriageway and vice versa.
- b. **Two way service road of 7m/5.5m** on either side of main carriageway for movement of local traffic in urban/rural areas respectively.
- c. In addition the facilities/amenities as drainage, utility corridor, highway lighting in urban areas, bus laybys on service road are being provisioned as part of six laning of N.H-I.
- d. **ROW shall vary between 60mts to 110 mts.**

The typical widened cross-section of National Highway No.-I in urban and rural area respectively as given in annexure no.VIII would consist of the following salient features:-

- i. 6-lanes of 3.5m width each
- ii. 65m wide Standard ROW in rural area and 60m wide Standard ROW in urban areas.
- iii. 1.5m wide paved shoulders, minimum 1m wide earthen shoulders.
- iv. 4.5m wide median in rural stretch and 1.2m wide median in urban stretches.
- v. 5.5m service road in all rural sections and 7m service roads in urban section, which may be extended to 10m except at major bridge and ROB locations.

### **Corridor Management Plan**

The corridor access management lane for this project has been developed based upon basic principles and the policy decisions taken by NHAI, the salient features of which are listed below:-

- The access to side roads, U turns and right turns are routed through **interchange** flyovers.
- Service road has been provided on both sides of project road having connection/access to main highway at interchange/flyover area.
- New grade separators have been provided along the project road besides existing flyovers.

### **National Highway No.64 (R-1)**

- Proposed R-1 roads have been shown in red colour. As per report of technical consultants for National Highway-64 conducted in 2007, right of way of 45 metres shall be required till 14 years after which six lane shall be required. Thus this road has been proposed to be widened to 200 feet i.e.R-1 in Master Plan, Rajpura.



- 200 feet R1 road has been proposed all along SYL within LPA Rajpura. This proposed road can be further connected to proposed PR-9 in LPA Banur at village Giga Majra which will provide direct link with upcoming International Airport at Chandigarh. This will not only provide connectivity with proposed major industrial area along Eastern Dedicated Freight Corridor and proposed Logistic Park but will also provide alternative link with Patiala through Ghanaur.

### **R-2 Roads (150')**

Proposed R-2 roads have been shown in green colour. Following new R2 roads have been proposed:-

- 150' wide R2 road has been proposed from Uksi Jattan flyover to proposed industrial area upto Narwana branch for providing link from N.H-I.
- 150' wide R2 road has been proposed connecting Jansua – Khera Gajju road with railway under bridge of Upal Kheri.
- Major link through 150' wide road has been proposed connecting proposed R2 road (i.e. from Uksi Jattan to Narwana branch) and Shambhoo-Ghanaur road along Narwana branch crossing Bathinda-Rajpura railway line, Patiala-Rajpura road (N.H-64) via village Kheri Gandean, Khairpur Jattan, Mahewan, Suhron, Dharamgarh, Mandian, Naugawan, Salempur Sekha and Mardanpur.
- 150' wide R2 road has been proposed in the eastern side of SYL canal to facilitate the proposed industrial area.
- Apart from above Shambhoo-Ghanaur road has been proposed to be widened to 150' (45 mts) to facilitate the movement of cargo to the upcoming crossing station of Dedicated Eastern Freight Corridor.
- Apart from above, there is urgent need to remove the encroachments on both sides of earlier N.H.64 i.e. from Liberty Chowk to existing R.O.B by shifting the khokhas at alternative sites so that actual ROW of 150' (45 mts) is available for smooth flow of traffic within town.

### **R-3 Roads (100')**

Proposed R-3 roads have been shown in purple colour. Following new R3 roads have been proposed:-

- Two 100' wide R3 roads have been proposed connecting proposed R2 road and existing bye-pass (R1).
- One R3 road has been proposed connecting proposed R2 road along Narwana branch



with level crossing at village Khandoli.

- 100' wide R3 road has been proposed connecting N.H-64 (R1) and proposed R4 road along Pachisdara nallah.
- 100' wide R3 road has been proposed connecting N.H-64 and proposed R2 road i.e. road connecting Jansua – Khera Gajju road with railway under bridge of Upal Kheri.
- Existing 100' wide road of industrial focal point has been extended upto proposed R4 road along Dhankansu nallah.
- Existing link road connecting NH1 and proposed R1 road along SYL canal by passing village chamaru has been proposed.
- Two 100'wide R3 roads have been proposed connecting proposed R2 road along SYL and Shambhoo-Ghanaur road.
- Existing link road connecting village Ghagar Sarai with Salempur Sheikhan has been proposed to widen as R3 road i.e. 100'.
- Jansua– Khera Gajju road has been proposed to be widened to 100' (30mts) which is another link to Mohali in case of blockades on N.H.64. Similarly approach road to Nabha Thermal Plant from Jansua-Khera Gajju shall be widened to 100'.
- One more 100' wide R3 road has been proposed connecting proposed R2 road (Jansua road) and village Nilas.
- Another link of 100' wide i.e. R3 road has been proposed from Pachisdara Drain to propose industrial area near proposed Logistic Corridor.

#### **R-4 Roads (80')**

80' wide road shown in mustard colour has been proposed along bandha of Dhakansu nallah to provide connectivity from N.H-64 to N.H-I where it will join the service lane. Similarly 80' wide road has been proposed along bandha of Pachisdara nallah from proposed 150' wide road. This road cannot be extended upto N.H-I because as per the policy of railways, no new level crossing will be provided on the Ambala-Ludhiana stretch and all the future roads of the Master Plan have to be adjusted with the existing level crossing or flyovers/ROBs. In the present circumstances, the proposed 80' wide road has been connected with N.H.I through existing 60' ICL road. This existing 60' ICL road needs to be widened to 80'. Similarly more R4 roads have been proposed connecting R1 and R2 roads, R2 and R3 roads, R3 and R3 roads along with R1 road with proposed R4 roads.

### **R-5 Roads (60')**

In order to enhance the connectivity in the new proposed areas further, 60' wide roads shown in magenta color have been proposed for connecting the 80' wide roads with 100' wide roads.

### **Road Cross – Sections**

Road Cross – Sections of proposed R-1, R-2 and R-3 shall be procured from concerned road authority. Typical road cross-section of six lane National Highway no.-1 in the urban and rural area is given at annexure no-VIII.

### **R.O.Bs (Railway Overbridges)**

There is only one Railway Over Bridge (R.O.Bs) presently existing in the town. In order to ensure the smooth flow of regional and local traffic over the existing and proposed roads of LPA Rajpura, following R.O.Bs are proposed in the town:-

- i. Strengthening of existing R.O.B on N.H-I.
- ii. Level crossing of Patiala-Rajpura road (bypass) on N.H-64.
- iii. Level crossing on Shambhoo-Ghanaur road.

### **R.U.B (Railway Underbridge)**

Following R.U.B have been proposed in the town:-

- i Level crossing on I.C.L road.
- ii Level crossing near village Dhamoli

Apart from above R.U.B. at Upal Kheri shall be required to be widened.

### **Flyovers**

Eight flyovers and three vehicular under passes on National Highway No-I have been proposed by National Highway Authority of India within L.P.A Rajpura, the detail of these flyovers is given at annexure-IX. Similarly one flyover at Liberty Chowk on National Highway no-64 has been proposed by National Highway Wing of P.W.D(B&R)

### **Pedestrian UnderPasses**

Five pedestrian under passes on National Highway No. – I and one pedestrian under pass on National Highway No. – 64 have been proposed by National Highway Authority of India and National Highway Wing of P.W.D (B&R ) respectively the detail of which are given at annexure-IX.

### **Foot Over Bridges**

Seven foot over bridges on National Highway No-I have been proposed by National Highway Authority of India and one foot over bridge has been proposed by National Highway wing of P.W.D (B&R) the detail of which is given at annexure-IX.

### **Pedestrian Bridge over Ghaggar**

One pedestrian bridge over Ghaggar near village Nanheri has been proposed in order to

facilitate the movement of villagers across the river for carrying out activities related to agriculture.

Apart from above, the following proposals are envisaged for enhancement of capacity of existing roads after carrying out extensive traffic surveys:-

- Prohibiting on –street parking of vehicles, and simultaneously developing off –street parking facility;
- Segregating the bi-directional traffic flow through central verge/median;
- Provision of segregated right of way for slow moving vehicles;
- Imposing restrictions on the movement of animal drawn /other slow moving vehicles, and/ or heavy commercial vehicles on busy arterial/ sub-arterials during selected periods, specially the peak hours;
- Reduction of roadside friction through control of abutting land – use and roadside commercial activity;
- Provision of adequate facilities for pedestrians and cyclists;
- Banning certain conflicting movements at major intersections, particularly during peak hours;
- Controlling the cross traffic and side –street traffic by regulating the gaps in median.

➤ **Termini**

- **Bus Termini**

The new bus stand site of 0.9 ha (2.47 acre) and old bus stand site of 0.6 ha. (1.61 acre) have been spot zoned.

- **Truck Terminal**

Site for the truck terminal shall be part of proposed whole sale and warehousing zone.

## **II. Public & Semi-public**

As it has already been discussed in chapter 3 of the report, there are several categories of designated areas such as Public & Semi-public uses existing in the Rajpura town and in LPA Rajpura. The existing important offices of **Pepsu Township Development Board, Municipal Council, Judicial Complex** and **Tehsil Office** have been spot zoned as designated area. The existing important educational institutes namely Multi Disciplinary Academy of Engineering & Technology for girls, Patel Memorial National College, N.T.C. (Kasturba) College for girls, B.S.N.L Research Teacher Training Centre, two ITIs and important schools have been spot zoned as designated areas. Similarly the existing medical facilities namely A.P.Jain hospital has been proposed to be retained as such and shown as designated area. Similarly the other educational and medical institutes have

been shown as part of residential zone. More such institutes will be required in new residential areas.

Shivaji Park, Nirankari Park, major PTDB Park and Jhanda ground have been spot zoned as designated area, however the smaller parks have been shown as part of the residential zone. For future requirements the green areas as per the provisions of PAPRA Act, 1995 would be carved out at the time of preparation/approval of residential estates/colonies. Existing Nirmal Stadium has been spot zoned as designated area. Another stadium to be developed by PTDB has been shown in P.L.U; however, the other play grounds have been retained in the residential zone.

### **III. Utilities**

The area covered under utilities namely water treatment plant, electric grid stations are designated for the same use and have been proposed to be retained as such.

There is a proposal to have two Sewage Treatment Plants (STP), one in town area located on Patiala bye-pass road having capacity of 8 MLD and another one near focal point on Ambala bye-pass road having capacity of 10 MLD. Permanent location for solid waste dump is under the active consideration of local administration.

#### **7.2.9 Conservation Areas**

- **Heritage Protected Areas**

Two Kos Minars and Mugal Serai heritage buildings which have been declared as protected monuments under 'The Punjab Ancient & Historical Monuments and Archaeological Sites & Remains Act, 1964' by the Department of Cultural Affairs, Archaeology and Museums, Punjab (as per list attached at annexure-V) which shall be preserved and conserved as per the provisions of this act.

#### **7.2.10 Defence Land**

Area of 79.24 ha. belonging to Air Force Station in which only the uses related with Air Force Station and its allied activities shall be permissible.

##### **Restricted Areas/ No Construction Zone**

There is a restricted area (prohibited) where instructions are clearly spelled out for all Air Force Stations in part II Section 4 for the Gazette of India-New Delhi the 14<sup>th</sup> February, 2007 where Ministry of Defence in exercising the powers of section 3 and 7 of The Works of Defence Act, 1903 (7of 1903) had found it expedient to impose restrictions upon the use and enjoyment of the land lying in the vicinity of Air Force Station in Rajpura (Punjab) as per the Gazette notification in respect of Air Force Stations issued by Government of India, Ministry of Defence vide F.No. 4 (13)/2005/D(Air-II) Dated 14<sup>th</sup>

February, 2007. No building or structure shall be constructed, created or erected or no tree shall be planted on any land within the limits of 100 meters from the crest of the outer parapet of Indian Air Force Stations and installations as given in the annexure 'A' to this notification. The above restricted area will be observed in the Master Plan. (as per annexure-X).

### **7.2.11 Mathura-Jalandhar Pipeline**

Indian Oil Corporation Ltd. has laid a cross country pipeline under "The Petroleum & Mineral Pipeline (Acquisition of Right of User in Land) Act, 1962" and the said pipeline is meeting the petroleum products requirement of all the northern states including defence. This pipeline passes through L.P.A Rajpura in east-west direction, the guidelines and restrictions regarding the use of land as received from Chief Maintenance Manager, Technical Services, Northern Region Pipelines, Indian Oil Corporation, Panipat is enclosed at annexure-XI.

## **SECTION-I**

### **7.3 ZONING REGULATIONS**

**The zoning regulations proposed for adoption in L.P.A Rajpura are as below:-**

Chief Town Planner, Punjab being the Planning Agency designated under section 57 of "The Punjab Regional and Town Planning and Development (Amendment) Act 2006" for the Local Planning Area, Rajpura declared under section 56 of the said Act, hereby makes the following zoning regulations as per the requirement under clause (d) of sub section 1 of section 70 of the above said Act relating to the Master Plan prepared for Local Planning Area, Rajpura.

The zoning regulations proposed under this Master Plan are primarily concerned with the control of land use. The proposed land use plan includes following land use zones:

- Residential
- Commercial
- Whole sale and warehousing
- Mixed land use
- Industrial
- Logistics
- Rural and Agricultural

In addition, specific designated uses have been shown in respect of proposed traffic and transportation, utilities, governmental and public & semi-public facilities etc.As explained earlier sub – division of land, design and construction of buildings is being controlled through well-established building byelaws / regulations by the concerned

authorities. The zoning regulations under the Master Plan are seen as the guiding parameters for these agencies to ensure that the development permitted by them is in conformity with the Master Plan.

**Use and development of land to be in conformity with Master Plan:**

As provided under **Section 79** of the Punjab Regional and Town Planning and Development (Amendment) Act 2006, after coming into operation of this Master Plan, no person shall use or permit to be used any land or carry out any development in any area otherwise than in conformity with this Master Plan.

Provided that the competent authority may allow the continuance of any use of any land for a period not exceeding ten years, upon such terms and conditions as may be provided by regulations made on this behalf for the purpose and to the extent to which it was being used on the date on which this Master Plan came into operation.

**7.3.1 SHORT TITLE, SCOPE, EXTENT & COMMENCEMENT**

**Title**

These regulations shall be called the Zoning Regulations and development control regulations for Local Planning Area, Rajpura 2010 (hereinafter referred to as “These Regulations”).

**Scope of the Regulations**

The scope of these regulations is limited to defining permissible land uses in various land use zones depicted in the proposed land use plan forming part of the Master Plan. Other aspects of development such as sub-division and layout of land or intensity of development measured through FAR, ground coverage, parking requirements, building design and construction etc. will be governed by other acts and regulations promulgated by Government from time to time. Competent Authorities under such regulations shall ensure that the developments permitted by them are in conformity with these regulations.

**Jurisdiction**

These regulations shall apply to all “developments” in the Local Planning Area, Rajpura declared under section 56(i) of "The Punjab Regional and Town Planning and Development (Amendment) Act, 2006" vide notification no 12/72/2006 – 4 HGI/9835 dated 17-12-2007.

**Date of Coming into Force**

These regulations shall come into force on the day on which the designated Planning Agency publishes the final Master Plan along with these regulations in the *Official*

*Gazette* after obtaining the approval of the State Government under sub section (5) of section 70 of "The Punjab Regional and Town Planning and Development (Amendment) Act 2006".

*Till such approval, the authorities considering the applications for permission for development shall give due regard to the draft proposals including these regulations.*

### 7.3.2 DEFINITIONS

For the purpose of these zoning regulations, the following definitions, unless the context otherwise requires, shall apply:-

1. **“Act”** means "The Punjab Regional and Town Planning and Development (Amendment) Act, 2006" (Punjab Act No. 11 of 1995).
2. **“Government”** means the Government of the State of Punjab.
3. **“Chief Town Planner”** means the Chief Town Planner of the Department of Town & Country Planning, Punjab or any other officer to whom his powers are delegated.
4. **“Planning Agency ”** means the Chief Town Planner Punjab designated as such under Section 57 of "The Punjab Regional and Town Planning and Development (Amendment) Act 2006" for Local Planning Area, Rajpura.
5. **“Competent Authority”** means any person or authority appointed by the state government, by notification to exercise and perform all or any of the powers and functions of the competent authority as per section 2 (m) of "The Punjab Regional and Town Planning and Development (Amendment) Act, 2006."
6. **“Local Planning Area”** means the Local Planning Area declared under section 56(1) of "The Punjab Regional and Town Planning and Development (Amendment) Act 2006" vide notification No. 12/72/2006-4HG1/ 9835 dated 17-12-2007.
7. **“Existing Landuse Plan”** means the plan showing the different landuses existing at the time of preparation of the Existing Landuse Plan of Local Planning Area, Rajpura and as indicated on Drawing No. STP (P) 288/2011 dated 20.01.2011 or as amended and notified from time to time.
8. **“Proposed Landuse Plan”** means the plan showing the proposed admissible uses of different areas and landuse zones covered in the Local Planning Area, Rajpura and as indicated on Drg.no. STP (P) 291/2011 dated 21.10.2011 or as amended and notified from time to time.
9. **“Non- Conforming Building or use”** means use in respect of any land or building in the Local Planning Area, the existing use of which land or building is contrary to

the prescribed landuse.

10. **“Zoning Plan”** means the plan of area or part there of or supplementary layout plan approved by the Chief Town Planner, Punjab and maintained in the office of Competent Authority showing the permitted use of land and such other restrictions on the development of land as may be prescribed in the zoning regulations, for any part or whole of the area such as sub-division of plots, open spaces, streets, position of protected trees and other features in respect of each plot, permitted land use, building height, coverage and restrictions with regard to the use and development of each plot in addition to such other conditions as laid down in these regulations hereafter.
11. **“Mixed Landuse”**: Mixed landuse means the area where multiple use of land comprising residential, commercial, institutional, recreational and industries (other than orange and red category as listed by Punjab Pollution Control Board (PPCB) or as amended from time to time) shall be permissible subject to environmental safeguards in a regulated manner.
12. **“Commercial Mix Landuse”**: Commercial Mix Landuse means the area where only residential, commercial, institutional and recreational uses are permissible.
13. **“High Technology Parks/IT Parks”**: This will largely be high technology, value-added kind of industrial development in the form of Science Park, Business Park and R&D parks. The target industries include IT parks and bio-technology industries.
14. **“Fashion Technology Park”**: Means where knowledge based infrastructure to inspire the global fashion community catching all segments of designing, manufacturing, marketing, R & D, logistics, broad forecasting are all under one roof.
15. **“Knowledge Park”**: A platform for interaction and provision of clustering opportunities to all the Organizations, Institutions, Hotels, Restaurants, Hospitals. Real Estate Agency clubs, Business Parks with main objective of facilitation of better technology for public and private sector.
16. **“Logistic Park”** A Logistic park is an area within which all activities related to transport, logistics and distribution of goods for both national and international transits are carried out by various operators on a commercial basis.



17. **“Farm House”** Farm house means a building allowed on a minimum holding of 2.5 acre (1ha.) of agricultural land for residential and agricultural activity of the land holder.
18. **“Atta Chakki”** is categorized as service industry where:
  - Grinding of only food grains is carried out through the process of crushing under the load and rotational movement of two plates or blocks.
  - The maximum electric load does not exceed 20 KW.
  - The Atta Chakki shall be used for grinding food grains supplied by the consumers only and no sale / purchase of food grains / flour shall be carried out by the Atta Chakki owner at commercial level.
  - The Atta Chakki shall only be permitted on roads having minimum 40 feet ROW.
19. **“Industry”**: Means the place or site where processing and reprocessing of raw materials into consumer goods or further processed goods from other industry or build capital good used to manufacture consumer and non-consumer goods, it also includes energy producing industries and construction industries. It includes green, orange and red category industries or any other category as categorized by Punjab Pollution Control Board/Department of industries or as amended from time to time.
20. **“House Hold Industry”**: House Hold Industry means house hold occupation/ industrial activities conducted only by family members/persons residing in the dwelling unit with or without power and not contrary to the provisions of the Water Pollution (Prevention and Control) Act 1974, Air pollution (Prevention and Control) Act 1981 and Environment (Protection) Act 1986
21. **“Cottage Industry”**: Industrial units employing less than 10 workers, not creating excessive traffic and not omitting fumes, noise and effluents injurious to the existing sewers and not contrary to the provisions of the Water Pollution (Prevention and Control) Act 1974, Air Pollution(Prevention and Control ) Act 1981 and Environment (Protection) Act 1986.
22. **“Public and Semi Public activities”**: Public and semi public activities means the uses related to governmental/semi governmental offices, educational, medical institutions, recreational and entertainment facilities, cultural and religious institutions etc.

***Terms and phrases used but not defined in these regulations shall have the same meaning as assigned to them in Act.***

### 7.3.3 LAND USE ZONES

The proposed land use plan incorporated in the Master Plan of LPA Rajpura depicts the following land use zones:-

- 3.1 Residential
- 3.2 Commercial
- 3.3 Wholesale and Warehousing
- 3.4 Industrial
- 3.5 Logistics
- 3.6 Mixed Landuse
- 3.7 Rural and Agricultural

#### USE PROVISIONS IN LANDUSE ZONES:-

Permissible uses in the above land use zones shall be as given below:-

#### 3.1 Residential: Permissible Uses

##### 3.1.1 Housing

- Plotted housing, Group housing, Farm houses for customary residence including EWS housing.
- Oldage homes, Orphanages, Homes for mentally/physically challenged children, leprosy ashram, hostels
- Service apartments, Hotels, Motels, Guest houses, Dharamshalas, Lodging houses, Serai, Rayan Baseras
- Jails, Asylums, Reformatories

##### 3.1.2 Trade & Commerce

- Retail trade and service shops, restaurants.
- Professional services such as those provided by lawyers, accountants, town planners, architects and others, A.T.M., Cyber Cafes
- Rehri markets
- Departmental stores, shopping malls
- Filling stations
- Milk chilling plant (in RD2 residential only)
- Only retail sale and distribution of gas cylinders without their storage.
- Only retail sale of kerosene oil.
- Household industry, Cottage industry, Atta chakki, Biogas Plants & Solar Energy Plants.
- Repairs of household articles, cycles & scooters
- I.T.Park, Knowledge Park, Fashion Technology Park, Bakery.

##### 3.1.3 Public, Semi-Public

- Education- schools, coaching classes, I.T.I., polytechnic, engineering college, medical college and other degree colleges, universities, professional research and training Institutions, advanced education and training like IIM or IIT.
- Health care- Clinics, health centres, dispensaries, nursing homes / nursingcare facilities, health clubs, hospitals( including super specialty hospitals) (subject to notification no.17/17/5-Hg2-311/11.1.08), veterinary dispensaries and hospitals
- Art, entertainment, cultural and religious activities such as libraries, museums, clubs, marriage palaces, bhawans, sports activities including parks, gardens, play grounds, swimming pools, gymnasias, stadia, golf courses etc., amusement parks, cinemas,

auditoriums, theatres, places of worship.

- Public utilities and services- fire station, dhobi ghat, police stations, post office, water works, water treatment plant, storm water disposal, main pumping disposal, sewerage treatment plant, electric grid station, bus stand, auto rickshaw/taxi stand, telecom & transmission towers, telephone exchange.
- Plant nurseries and green houses related to nurseries, floriculture
- Cemeteries/ cremation grounds/ graveyards/ existing caracus sites/solid waste dump site
- Water harvesting measures

### **3.2 Commercial: Permissible uses**

#### **3.2.1 Trade & Commerce**

- Retail trade( booths, shops, shop-cum-office, shop-cum-flat) business showrooms & service shops, restaurants.
- Rehri markets, informal markets
- A.T.M., cyber cafes
- Super markets, departmental stores, shopping malls, multiplex, metro stores, cash-n-carry stores.
- Trade fairs, exhibition & convention centres
- Filling stations
- Gas distribution (without storage of cylinders)
- Printing press, atta chakki
- Automobile showrooms, motor market and service stations

#### **3.2.2 Housing**

- Service apartments, hotels, motels, guest houses, dharamshalas, lodging houses
- Residences on upper floors only

#### **3.2.3 Offices**

- Offices of all types including banks and financial institutions etc.

#### **3.2.4 Public Semi - Public**

- Education- coaching classes, distant education, I.T. enabled services, colleges, vocational training institute.
- Health care- clinics, health centres, dispensaries, nursing homes, hospitals and veterinary services
- Art, entertainment, cultural and religious activities such as libraries, museums, marriage palaces, sports activities including parks, gardens, play grounds, swimming pools, gymnasia, stadia, golf courses etc ., amusement parks, cinemas, auditoriums, theatre, casino, pubs & bars, night clubs, night food streets, discotheques
- Plant, nurseries and green houses related to nurseries, floriculture
- All Public utilities and services- fire station, water works, water treatment plant, main pumping disposal, sewerage treatment plant, storm water disposal, electric grid station, police stations, post office, bus stand, auto rickshaw/taxi stand, telecom & transmission towers.
- Water harvesting measures

### **3.3 Whole sale and Warehousing Zone: Permissible uses**

- Whole sale trades with storage of all commodities including grain, fruit & vegetable market, iron and timber markets
- Residences for watch and ward staff
- Retail trade including markets for fruits & vegetables, meat & fish, super markets, informal shopping
- Department stores, malls including super market, multiplexes & restaurants

- Showrooms of mill/factory retail outlets
- Petrol filling / service stations
- Kerosene storage/gas godown and storage of fire works
- Trade fairs, exhibition & convention centres
- Manufacturing of food products, furniture, repair of machinery & equipment
- Milk chilling independent plot, pasteurisation plant, cold storage, Fruit ripening centre, Ice factory.
- Warehousing, rail and air freight terminals, truck terminals, bus terminals, logistic park, storage, godown, freight complex, container yards
- Telecom & transmission towers
- Medical & dental dispensary, veterinary dispensary
- Places of worship
- Marriage palaces
- Police station, fire station, cemeteries, grave yards, cremation grounds
- Water collection, treatment & supply
- Sewerage
- Water harvesting measures
- Plant nursery, green houses related to nursery, floriculture

### **3.4 Industrial: Permissible uses**

All types of industries as classified by the department of industries and commerce further categorised by PPCB (Punjab Pollution Control Board) and following uses are permissible in the industrial zone:

- Junk yards, disposal works, gas works, power plant, hot mix plant
- I.T.Parks, Knowledge Parks, Industrial Parks, Super Mega Mixed Use Integrated Park (These parks shall be established as per the policies/guidelines of the govt. issued from time to time), fashion & technology park, film city
- Warehouses, godown & covered storage for industries, cold stores, logistic parks, freight complex, container yards, dry port, weigh bridges
- Loading & unloading yards, truck terminals, bus terminals, railway station and siding, railway yards, helipads, metro stations
- Trade & Commerce : Retail trade, business showrooms & service shops, restaurants. Rehri markets, informal markets, A.T.M., cyber cafes, Super markets, departmental stores, shopping malls, multiplex, Trade fairs, exhibition & convention centres, Filling stations, Gas distribution, printing presses, atta chakki, Automobile showrooms, motor market and service stations
- Tempo / taxi stand, bus stops, tonga stand
- Petrol filling / service stations, fuel storage, LPG storage, manufacturing and storage of fire crackers
- Education- Schools, coaching classes, I.T.I., polytechnic, engineering college, medical college and other degree colleges, universities, professional research and training Institutions, advanced education and training like IIM or IIT.
- Health care- Clinics, health centres, dispensaries, nursing homes, health clubs, hospitals, including super specialty hospitals (subject to notification no.17/17/5-Hg2-311/11.1.08), veterinary dispensaries and hospitals
- Entertainment centre, multimedia centre, hotel, restaurant, parks & open spaces, showroom of mills, marriage palaces, places of worships
- Govt., Semi Govt. / Private business offices, financial institutions
- Residences for watch & ward staffs, residences for industrial workers / management,

E.W.S housing.

- All public utilities, police station, police post, fire station, cemeteries / graveyard, caracas site (existing only), slaughter house
- Farming, quarrying

### **3.5 Mixed Land Use Zone: Permissible uses**

- All types of uses permissible in residential use zone, commercial use zone, wholesale & warehousing zone.
- All industries except those of orange and red category alongwith other uses permissible within industrial use zone shall be permissible.

### **3.6 Logistic Zone (Corridor): Permissible uses**

- Container yards, Logistic parks, Inland Container Depot(ICD), Container freight stations.
- Storage facilities, warehouses, cold stores
- Allied industries to Logistics as packaging, palletizing, labelling etc.
- Allied offices and commercial activities.
- Healthcare facilities: clinics, health centers and dispensary
- Open spaces: parks etc.
- All public utilities and services- water works, water treatment plant, main pumping disposal, sewerage treatment plant, storm water disposal, electric grid station,
- Services: police station, post office, bus stop, auto rickshaw/taxi stand, telecom & transmission towers.
- Water harvesting measures
- Petrol filling / service stations, fuel storage, LPG storage.

### **3.7 Rural & Agricultural Zone: Permissible Uses**

This zone is sub divided into two sub zones viz village abadis and 100mts around phirni and agricultural/ rest of area.

#### **Area upto 100mts of Phirni: Permissible uses**

- Residential development in the form of plotted and group housing
- Educational, medical, cultural, religious and recreational uses which commensurate with the scale of village population
- Local commercial, service industry, cottage and household industry, dhobi ghat
- Public utilities & services including communication towers

#### **Agricultural Zone: permissible uses in the rest of the area**

- Farm houses, hostels for students, working women
- Oldage homes, orphanages, jails, asylums
- Agriculture, horticulture, dairy, piggery, fishing, poultry farming, mushroom growing centre, slaughter house
- Milk collection centres, Chilling stations, Pasteurisation plants, Cold store, Ice factory, Fruit ripening centre and allied activities, Rice shellers, agro based industry (green category), Processing of farm (grains, fruits and vegetables) products, Brick Kiln, Lime Kiln, Charcoal Kiln
- Petrol filling/service stations, Storage of Fuel Oils, LPG Storage Godowns, Manufacturing and storage of Fire Crackers, wholesale trade of agricultural products only Warehousing, Godowns of agricultural produce, Logistic park, Cold storage, Cement / Sand and Concrete mixing plant, hot mix plant
- Railway line, railway station, sidings, bus stop, truck terminal, container yard, air freight and parking area
- Public buildings and utilities including electric sub-stations, sewage treatment plant (STP) solid waste dump site, caracas disposal site

- Transmission & telephone lines and poles, telecommunication towers, surface drainage, water bodies including irrigation canals
- Afforestation including orchards, gardens and commercial timber, Land preservation and conservation measures such as storage, check dams, Water harvesting measures
- I.T.Park, Knowledge Park, Fashion Technology Park
- Education- schools, coaching classes, I.T.I., polytechnic, engineering college, medical college and other degree colleges, universities, professional research and training Institutions, advanced education and training like IIM or IIT.
- Health care- clinics, health centres, dispensaries, nursing homes / nursingcare facilities health clubs, hospitals(including super specialty hospitals) (subject to notification no.17/17/5-Hg2-311/11.1.08), veterinary dispensaries and hospitals
- Art, entertainment, cultural and religious activities such as libraries, museums, clubs, trade fairs, exhibition, mela grounds, camping grounds, marriage palaces, bhawans, sports activities including parks, gardens, play grounds, swimming pools, gymnasia, stadia, golf courses etc ., amusement parks, places of worship.
- Panchayat ghars, dharamshalas and any other project of Central and State Govt. agencies / Deptts. / undertakings / Local Bodies.
- Expansion of upcoming thermal plant and its ancilliary activities.

**The activities / uses not mentioned above but found compatible for a particular land use zone shall also be permissible with permission of the Competent Authority.**

#### **7.3.4 DESIGNATED AREAS**

Following areas have been specifically designated in the proposed land use plan.

1. Traffic and Transportation
2. Recreational Use
3. Utilities
4. Public & semi public
5. Protected Monuments/Conservation Sites
6. Other Use
7. No Construction Zone/Restricted Area
8. Forest Area

#### **USE PROVISIONS IN DESIGNATED AREAS**

Following uses are permissible in the designated areas

##### **1. Traffic & Transportation: Permissible uses**

All types of Roads, Railway lines, Dedicated Freight Corridor, Rail yards, Railway station & sidings, Crossing Station, Transport Nagar (including, Post & Telegraph offices & Telephone exchange, dhabas, labour yards, areas for loading and unloading, stores, depots, and offices of goods booking agencies, Petrol Filling station & service garages, parking spaces, public utilities and buildings of broadcasting stations, Bus Terminus & depot, bus stop shelter, taxi/ tonga/ rickshaw/scooter stands, parking.

##### **2. Recreational uses: Permissible uses**

Sports Complex, Sports training centers, Swimming Pools, Regional parks, Local Parks, Green Belts, Play Grounds , Holiday Resorts with ground coverage not exceeding 3%,

Open air cinema/auditorium and Shooting ranges.

**3. Utilities: Permissible uses**

Water supply, Sewerage system (including main pumping station and Sewage Treatment Plant {STP}), drainage, storm water, waste processing and disposal, electricity, communication systems and related installations etc.

**4. Public and semi-public activities: Permissible uses**

Governmental and semi-Governmental offices, Governmental administrative centres/ Secretariat, Educational, Cultural and Religious institutions including theaters, auditoriums etc. Medical Health Institutions, Community Centres, Club, Orphanage, Old Age Home, Banks, Police Stations etc.

**5. Protected/ Conservation Sites: Permissible uses**

In exercise of the powers conferred by rule 29 & 30 of 'The Punjab Ancient And Historical Monuments And Archaeological Sites And Remains Rules,1965' vide draft notification No. 10/46/09-4 T.C. dated 5.5.09 Department of Cultural Affairs, Archaeological Sites and Museums, Punjab had given one month's notice of its intention to declare under Rule 29(2) prohibited areas, 100 meters from the protected limits and further beyond upto 200 meters near or adjoining protected 3 monuments located in L.P.A Rajpura declared under. 'The Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964' to be prohibited (Protected) and regulated areas respectively for purpose of both mining operation and construction. The final notification under rule 30 of the said rules has not been issued so far.

• **Heritage Buildings and Sites**

Material changes to heritage buildings by way of repair, replacement, reconstitution or change of use of any part or whole of the heritage building will require prior consent of the Heritage Committee (when constituted). New construction on the heritage site shall be in conformity with the design, materials and elevation of the existing heritage structure and shall be permitted only with the consent of the Heritage Committee, Patiala.

**6. Other Use: Permissible uses**

All the uses related to Defence Services and any other use as decided by the Ministry of Defence. No other uses shall be permissible.

**7. No Construction Zone/Restricted Area**

There is a restricted area (Prohibited) where restrictions are clearly spelled out in part II Section 4 for the Gazette of India – New Delhi, 14 February, 2007 where the Ministry of

Defence in exercising the powers of section 3 and 7 of the works of Defence Act, 1903 (7 of 1903) had found it expedient to impose restrictions upon the use and enjoyment of the land lying in the vicinity of the Indian Air Force Station in Rajpura. As per the gazette notification in respect of the Indian Air Force Stations issued by Government of India, Ministry of Defence vide No F.No.4(13)/2005/D(Air-II) dated 14 February, 2007, no building or structure shall be constructed, created or erected or no tree shall be planted on any land within the limits of 100 meters from the crest of the outer parapet of Indian Air Force Stations and Installations.

However, in case Air Force authorities issue prior permission to any building / premises which falls under the No Construction Zone of the Master Plan, the department of Housing and Urban Development shall have no objection to that building / premises provided the land use should be compatible to the existing adjoining activities / land uses.

#### **8. Forest Areas: Permissible uses**

This area indicates all Protected Forests and along various roads, railway lines, canals, minors, drains and rajbahas notified by the Forest Department, as shown in annexure no. XII. No activity other than Forest is permitted in this area unless allowed by the Forest Department.

#### **7.3.5 SPECIAL CONDITIONS**

- The siting of Petrol Pump / Filling Stations shall be subject to fulfillment of instructions/guidelines of IRC/MORTH/TCPO /Punjab Govt. issued from time to time.
- Minimum width of access road for warehousing uses shall be 60'.
- All public and semi-public uses in residential zone shall be located on independent plots with minimum access of 60'.
- All types of industries permitted in the industrial use zone are subject to the fulfillment of conditions issued by industries department / Punjab Pollution Control Board from time to time.

#### **7.3.6 RESIDENTIAL DENSITIES**

Residential zone is divided into two sub-zones as shown on Proposed Landuse Plan Drg.no. STP(P) 291/2011 dated 21.10.2011. The maximum average residential density of different sub-zones is given as under:

**Table 7.3.7: Proposed Residential Density for LPA, Rajpura 2031**

<b>Density zone</b>	<b>Proposed Residential density</b>
Area within MCI limits (RD1)	Not more than 300 persons per acre
Outside MCI limits and within urbanizable limits (RD2)	Not more than 200 persons per acre



In case of standalone group housing projects/chunk site reserved for group housing purpose, maximum average residential density @ 60 dwelling units per acre shall be permissible irrespective of the density zone. The areas zoned for residential use are not derived from affordable densities but are based on potential for growth. A large proportion of the areas of these density zones particularly on the periphery may remain undeveloped by 2031.

### **7.3.7 IMPLEMENTATION OF THESE REGULATIONS**

- All authorities competent to grant permission for layout or sub-division of land or construction of building or development of land in any other form shall ensure that the permitted development is in compliance with these regulations.
- Land owners desirous of developing their land can apply to the designated authority in writing by giving details of their land as per revenue record along with necessary maps.
- Similarly land owners proposing development of certain uses on their land can obtain a certificate of “Compliance with Master Plan” from a designated authority.

## **7.4 Development Control Regulations**

### **Section I: Development Control Regulations**

The purpose of the Development Control Regulations (DCR) is to guide developers and land users within the Local Planning Area, Rajpura to strive for a more quality and environment –friendly development.

These Development Control Regulations are applicable to new and future developments. The developers are requested to abide by the zoning and planning intentions of the Master Plan. *However, development proposals/projects that have been granted approval (including CLU) by the Competent Authority before coming of these into operation will continue to be honoured subject to the terms and conditions of approval and shall not be affected by these controls.*

*The F.A.R height, ground coverage, parking areas, set back, width of road and frontage of site etc. regarding residential, commercial, institutional, industrial or any other use for areas existing within M.Cl. limits shall be governed by Municipal bye-laws.*

Some of the key regulations currently in force are reproduced below.

#### **7.4.1 Residential**

Minimum area and development of residential colony within Master Plan Rajpura shall be as per the provisions of PAPR Act, 1995 and guidelines issued by govt. from time to

time :-

**a) Minimum Plot size**

Category	Minimum Plot size
Residential Plotted	5 acres
Group Housing General EWS	2 acres independent 2.5 acres

**Note:**

- (i) *Minimum area of colony within M.Cl. limits shall be as per Local Govt. norms.*
- (ii) *The lowest hierarchy street within residential zone of Master Plan shall be minimum 35 feet wide or as prescribed in the guidelines issued by govt. from time to time.*
- (iii) *The saleable area of any plotted residential colony shall be as per the provisions of PAPR Act, 1995 or as amended from time to time.*

**Group Housing (outside M.Cl. limits)**

1	Minimum Plot size	
	General category EWS category	2 acres 2.5 acres
2	Minimum road width	For group housing stand alone projects, minimum width of approach road shall be 60 feet and the promoter shall be required to leave space from his own land for widening it to 80' and the space so left shall be public space. In a planned colony, group housing shall not be permissible on a road less than 60' wide.
3	Minimum Frontage	20 meters
4	Permissible FAR	1:1.75
5	Permissible Height	There shall be no restriction on the height of building subject to clearance from Air Force Authority and fulfilment of other rules such as set backs, distance between buildings etc. However, structural safety and fire safety requirements as per National Building Code shall be compulsory.
6	Parking Provisions	For group housing developments, the requisite parking provision is 1.5 ECS per 100 sq m of covered area subject to maximum of 3 ECS per dwelling unit.

**Note:**

- i. *Construction of residential houses sold by promoters on floor basis shall also be considered as group/flatted housing development & parking requirements shall be as per the norms applicable to Group Housing.*
- ii. *For group housing within M.Cl. limits the norms of Local Govt. shall be applicable.*

**Farm House**

Minimum agricultural land holding	2.5 acres*
FAR	0.04
Ground Coverage	2%
Number of storeys	2
Height	Single Storey 18'-0" Double Storey 28'-0"
Hard Surface	10%

**\*Area other than under built up farm house shall be exclusively used for agricultural and its allied activities.**

**7.4.2 Commercial**

**At Local Level**

There shall be provision for small scale, double storey commercial facilities at the local level subject to the condition that abutting road shall have a minimum width of 60 feet & with minimum 20 feet front set back from road for parking purposes. However, the area

requirements for low rise commercial developments within M.CI limits shall be as per the local body/Municipal's Council's rules and regulations.

### **Stand-alone commercial complexes**

For stand alone commercial complexes with height more than double storeys the additional criteria listed in following table shall apply.

#### **Additional criteria for stand-alone commercial complexes (more than double storeys)**

1	Minimum area required	1000 sq m
2	Minimum approach road width	80 feet
3	Minimum frontage	20 meters
4	Maximum F.A.R	1:1.75
5	Maximum ground coverage	40%
6	Maximum height	There shall be no restrictions on the height of building subject to clearance from Air Force Authority and fulfillment of other rules such as setbacks, distance between buildings etc. However, structural safety and fire safety requirements as per N.B.C shall be compulsory.
7	Parking	For projects with no multiplexes, the minimum parking shall be 2ECS per 100 sq m of covered area (including circulation area). For projects having mutiplexes/cinemas/theatres, the minimum parking shall be: a) 3 ECS per 100 sq m of covered area (in repect of the covered area of the mulitplex/cinema/theatre component +30% of the total covered area of that component). b) 2 ECS per 100 sq m of covered area (in respect of balance commercial component and circulation area). Total parking requirement shall be provided in the compulsory front set back and within the development site boundary or in the basement.
8	Basement	Multi level basement will be allowed below the building in zoned area except in setbacks provided it is proposed for parking purposes only and shall satisfy the public health and structural requirements.
9	Landscaping	If the site area is one acre or more, minimum 15%of the total area is to be reserved for landscaping.
10	Set backs	The minimum set back distance shall comply with the existing norms and standards.

#### **Note:-**

*The E.C.S shall be counted as below:*

- *23 square meters for open parking.*
- *28 square meters for parking under stilts on ground floor.*
- *32 square meters for parking in the basement.*

These commercial facilities are intended to serve the needs of local residents only and will not be shown separately on the Master Plan. Instead, they shall be subsumed under the predominant residential land use zone.

#### **7.4.3 No Construction Zone along major roads**

All properties within the jurisdiction of LPA Rajpura, that abut National highways, intercity roads and other proposed roads of category R1 and R2 shall have access through service lanes and shall have no construction zone after proposed ROW as given below

irrespective of the landuse shown in the proposed landuse plan Drawing No. STP(P) 291/2011 dated 21.10.2011.

Sr. No.	Name of the road	Hierarchy	Right Of Way (in mts)	No construction zone on both sides of proposed ROW (in mts) Within and Outside M.Cl.limits
1.	Rajpura – Sirhind road (N.H. I).	R1	120	5
2.	Rajpura – Ambala road (N.H. I).	R1	120	5
3.	Rajpura-Chandigarh road (N.H. 64)	R1	60	5
4.	Rajpura- Patiala road (N.H. 64)	R1	60	5
5.	Existing Bye-pass.	R1	60	5
6.	Patiala-Ghanaur-Shambhoo road.	R2	45	5
7.	Kharar-Banur-Tepla road.	R2	45	5
8.	Road from N.H-I to Proposed industrial area.	R2	45	5
9.	Road from N.H-I to N.H-64.	R2	45	5
10.	Road connecting proposed road to Proposed industrial area with Shambhoo-Ghanaur road.	R2	45	5
11.	Existing road from Liberty chowk to Ludhiana-Ambala railway line.	R2	45	5

**Note:**

*Where widening of existing road is proposed, the land shall be taken proportionately equally from both sides of existing roads.*

#### 7.4.4 Institutional

Components	Institutional
Minimum Plot size	Area and size shall be as prescribed by affiliating authority or 5000 square meter whichever is more as prescribed by Punjab govt.
Minimum frontage	200 feet
Minimum width of approach road	60 feet or as proposed in Master Plan
Maximum F.A.R	1:1
Maximum ground coverage	40%
Parking	1 ECS per 100 square meters of the covered area if the project is covered under notification no.17/17/5-Hg2-311 dated 11.01.08 .

**Note:**

*Other building regulations shall be governed by Zoning Plan as approved by the competent authority.*

#### 7.4.5 Industrial

Size of Plot	Site Coverage
For the first 2420 sq yds	50% of the site
For the next 2420 sq yds	33% of the site
In excess of 4840 sq yds	25 % of the site
FAR	1:1.0
Parking	1 ECS per 100 square meters of the covered area.
Road width	The minimum road width for industrial unit shall be 12 mts.

**Note:**

- **Residential component: Residential component in the industrial plot/premises shall not**

*exceed 5% of the area of the site and shall be within the maximum permissible covered area.*

- *The minimum road width for industry shall be 40 feet. However, in case the existing road width is less than 40 feet then it shall be widened to 40 feet by taking equal strip of land from both sides of road. In case, where habitation / settlement/ other physical feature comes in the alignment in that case widening shall be on the other side of habitation / settlement/ other physical feature.*
- *In case of industries existing before the final notification of this Master Plan , if the road width is less than 40 feet wide then the owner of the site/ industry shall give a self declaration for leaving the required strip of land from his ownership as and when required by the concerned authority.*
- *Industrial / IT Park shall have minimum 10 acres area. In IT Park, IT component shall have FAR 2.0. In industrial park, for an industry component FAR shall be 1.0 and other components shall have FAR as mentioned under different uses in the Master Plan.*

#### **7.4.6 Environment Considerations**

- Minimum buffer of 15 meters green belt of broad leaf trees should be provided around the boundary of village expansion falling in the industrial zone of Master Plan. This should also be provided between residential areas and red category industries falling in industrial zone of Master Plan boundaries of which are located within 100 m from the boundary of such areas. It is clarified that 15 meter buffer shall be provided by the owner of the project who comes later. However, for special type of industries such as Rice Shellers / Sailsa Plants, Brick Kilns, Stone Crushers, Hot Mix Plant, the standards prescribed by the Punjab Pollution Control Board or any other agency shall be applicable or as amended from time to time.
- All residential colonies, commercial establishments like shopping malls, multiplexes etc shall maintain a minimum distance of 250 meters from the hazardous (maximum accident hazardous) industries notified by Director General, Factory Adviser Service Labour Institute. The distance shall be measured from source of pollution/hazard in the industrial premises to the building lines as per Zoning Plan of the colony/complex or as amended from time to time.
- Gap of atleast 100' should be left between the railway boundary and the nearest private buildings so as to avoid smoke and noise nuisance to these adjacent buildings. Wherever it is not possible to leave, a road width (minimum 20') may be left between the railway boundary and the nearest adjacent buildings, the standards prescribed by the Railway Board conveyed by Divisional Supdt. Northern Railway, Ferozepur to the Secretary Local Self Govt. Punjab vide their letter dated 22.09.71.

#### **7.4.7 Other Development Controls and Guidelines Required**

- i) Expansion of village abadies: Contiguous expansion of village abadies in non residential zones of Master Plan is permissible up to 100mts in the Master Plan. However, for the village abadies falling in residential zone of Master Plan, no such limit has been earmarked as the area around them is already earmarked as residential.
- ii) The contiguous expansion of village abadies falling under agricultural zone of Local Planning Area is also permissible to accommodate the natural growth of village abadies.
- iii) Regulation for village abadi: Special building regulations shall be prepared for the development and regulation of an area falling within the lal dora or phirni of the villages falling in the Local Planning Area.
- iv) The existing high tension lines shall be shifted along the road outside the right of way to ensure unhindered ROW for traffic and other services for all times.
- v) Minimum 5 meters wide green strips on each side of minor drain shall be maintained and other major water bodies shall have minimum 30 meters green strips on each side. Realignment of water bodies shall be permissible wherever feasible, subject to the certification by the Drainage / Engineering Department to ensure free flow of storm water. After any such realignment, the river mouth, the river bed and the green strip on either side shall be maintained at least to the minimum prescribed level. In these green strips, golf course, sports and recreational activities shall be permissible but no construction would be allowed. The supporting facilities for these activities shall be constructed outside the green strips.
- vi) Realignment of water bodies shall be permissible wherever feasible, subject to the certification by the Drainage/ Engineering Department to ensure free flow of storm water. After any such realignment, the river mouth, the river bed and the green strip on either side shall be maintained as per to the minimum prescribed level.

#### **7.4.8 Transferable Development Rights**

To facilitate development, it is necessary to accord top priority to the implementation of public utilities and infrastructure (such as roads, parks, green belts etc.) which will in turn encourage urbanization.

However, the respective technical agency or authority will not be able to proceed with its implementation programmes until the ownership of private land affected by these public utilities and infrastructure has been transferred to the state or to the relevant

authority(s).

Acquisition of private land for this purpose can be carried out through one of the following options:

- Cash compensation can be made to affected land owners whose land is to be acquired.
- A government – approved land pooling scheme can be implemented.
- Transferable Development Rights (TDR).

Under the TDR scheme, the affected land owner(s) shall be entitled to additional FAR for the development of his balance land parcel at a rate of 1:1. The additional FAR will not be subjected to any CLU, EDC or license / permission fees. The land owner(s) also has the option to sell it in total or in parts to a third party.

All the records of transactions administered under the TDR scheme shall be maintained by the state and / or relevant authority(s), based on the precedence set in Mumbai Maharashtra.

The TDR scheme shall be restricted to development projects for public infrastructure and facilities which shall be announced from time to time. The additional FAR shall not be transferable from one L.P.A to another.

Detailed policy guidelines on the operation and implementation of TDR Scheme shall be prepared and announced by the competent authority in due course of time.

#### **7.4.9 EXCEPTIONS**

- Uses determined by the Chief Town Planner, Punjab as compatible with uses permissible shall be allowed in respective zones.
- Developments/ projects approved prior to coming into force of these regulations shall be deemed to be in compliance with these regulations.
- The site on which various projects have been approved or whose change of land use has already been permitted by competent authority/Govt., such sites shall be deemed to be adjusted as sanctioned/ permitted.
- Use of Land covered under Optimum Utilisation of Vacant Govt. Land (OUVGL) Scheme of the State Government shall be determined by the Government at any appropriate time notwithstanding the provisions of this Master Plan.
- In the event of conflict in interpretation of data within the study area the information in the GIS format will be deemed as the accurate version and shall prevail.
- In case the area of a project falls partially under no construction zone along a water body, relaxation of maximum upto 5% on the total area of the project shall be allowed towards

calculation of saleable area in lieu of the area falling under the no construction zone. In case, the area falling under no construction zone is less than 5% of the total area of the project then the relaxation shall be proportionately less.

- The buildings / premises for which the existing (present) land use has been retained as such in the Master Plan may continue to operate without time limit. However, in case the present use of the buildings / premises is discontinued (partially or wholly) these buildings / premises or part thereof may be put to any compatible use (except industry) with the surrounding use zone in the Master Plan provided it fulfills the other development regulations / controls as laid down in the Master Plan or as prescribed by the Govt. / Local Body from time to time.
- Within the existing M.C. limits the buildings rules notified by the local Govt. shall be applicable. i.e. The F.A.R., height, ground coverage ,parking requirements, set backs, width of and frontage of site etc. regarding residential, commercial, institutional, industrial or any other use for areas existing within M.C. limits shall be governed by municipal rules/bye –laws.
- Any change in the above said development controls notified or to be notified in future by the concerned development authority shall have overriding effect on the development controls mentioned above.



**GOVERNMENT OF PUNJAB  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
(HOUSING BRANCH-1)**

**NOTIFICATION**

**Dated: 17.12.2007**

**No :-** 12/72/06-4HGI/9835 Whereas it appears to the Governor of Punjab that to meet the challenge of rapid growth of Rajpura city and to provide for a workable framework for comprehensive planned regulated development, preparation of Statutory Master Plan of Rajpura city is very essential. Hence in order to develop Rajpura city and its surroundings in orderly manner and to prepare its Master Plan under "The Punjab Regional and Town Planning and Development Act 1995", the Governor of Punjab is pleased to declare the **local planning area of Rajpura** city within the meaning of sub section (1) of section 56 of "The Punjab Regional and Town Planning and Development (Amendment) Act, 2006." The total area proposed for local planning area is **41961 hectares (103643 Acres)** shown on Drg. No. DTP (P) 3441/07 dated 2.11.2007 which includes **Rajpura & adjoining 165 Villages** as shown in the list attached. The schedule of boundary of Local Planning Area is as under:-

**SCHEDULE OF BOUNDARY**

**NORTH:** Starting from point 'A' which is the meeting point of Northern boundary of Ludhiana-Ambala Road (N.H.No.1) and western boundary of village Basantpura (H.B. 22) moving towards north along the western boundary of village Basantpura (H.B. 22) crossing Ludhiana - Ambala railway line, thence along the western and northern boundary of village Chandu Majra (H.B. 21), northern boundary of village Balsuan (H.B. 20), Gobindpura (H.B. 19), Sural Kalan (H.B. 9), Sural Khurd (H.B. 8), western boundary of village Sadhraur (H.B. 7), western & northern boundary of village Kehargarh (H.B. 1), Gurditpura (H.B. 268). Then along the northern boundary of village Gurditpura (H.B. 268), Khera Gajju (H.B. 269) crossing S.Y.L.Canal, then again along the northern boundary of village Khera Gajju (H.B. 269), Uncha Khera (H.B. 271) and Khanpur Bangar (H.B. 276). Thence along the eastern southern boundary of village Khanpur Bangar (H.B. 276) and Hordaitpura (H.B. 270) crossing S.Y.L.Canal, then along the eastern boundary of village Hordaitpura (H.B. 270) and northern boundary of village Bhatiras (H.B. 278) crossing S.Y.L. Canal,

then along the eastern boundary of village Bhatiras (H.B. 278), Faridpura (H.B. 264) and Jhansla (H.B. 262) crossing Rajpura-Chandigarh Road (N.H. 64), then along the northern boundary of village Thuha (H.B. 255), and village Mohi Khurd (H.B. 253) crossing Banur canal, then again along the northern boundary of village Mohi Khurd (H.B. 253), Mohi Kalan (H.B. 246) and western boundary of village Khalawar (H.B. 242) crossing Banur-Tepla Road, then along the northern boundary of village Khalawar (H.B. 242), north boundary – western boundary of village Chharwar (H.B. 230), Salempur (H.B. 232), Bhagwanpur (H.B. 233) and eastern boundary of village Bhagwanpur (H.B. 233), northern boundary of village Paragpur (H.B. 234), then along the western boundary of village Manoli Surat (H.B. 235) up to point 'B' which is the meeting point of western boundary of village Manoli Surat (H.B. 235) and common boundary of district Patiala and district SAS Nagar.

**East :** Starting from point 'B' moving towards south along the northern and eastern boundary of village Manoli Surat (H.B. 235) and then along the eastern boundary of village Paragpur (H.B. 234), then along the south – eastern boundary of village Bhagwanpur (H.B. 233), then along the eastern boundary of village Jhajon (H.B. 229) crossing Ghaggar river then again along the southern boundary of village Jhajon (H.B.229) and eastern boundary of village Basma (H.B. 227), Tepla (H.B. 149) crossing Ghaggar river and again along the eastern boundary of village Tepla (H.B. 149), then along the common state boundary of Punjab & Haryana i.e. along the eastern boundary of village Rajgarh (H.B.147), Mehmampur (H.B. 144), crossing Ludhiana – Ambala road (N.H.1) and Ludhiana – Ambala railway line, along the southern boundary of village Mehmampur (H.B.144), then along the eastern boundary of village Sanjarpur (H.B. 381) along the northern and eastern boundary of village Darwa (H.B. 382) upto point 'C' which is the meeting point of southern boundary of village Darwa (H.B.382) and common state boundary of Punjab and Haryana.

**South:** Starting from point 'C' moving towards west along the southern boundary of village Darwa (H.B. 382), Salempur Dakhli-Loh Simbi (H.B. 387), Nanheri (H.B. 383), along the southern and western boundary of village Rajpur (H.B. 384), along the southern boundary of village Sandharsi (H.B. 378) and eastern & southern boundary of village Pipal Mangoli (H.B. 376) crossing Shambhoo-

Ghanaur road, along the southern bounсарy of village Kabulpur (H.B. 124), crossing S.Y.L. Canal along the south - western boundary of village Kabulpur (H.B.124), Faridpur Jattan (H.B. 123), Sahal (H.B. 121), Dharamgarh (H.B. 120), Mahewan (H.B. 119), crossing Banur canal, then along the southern boundary of village Khairpur Jattan (H.B. 91), along the eastern & southern boundary of village Khanpur Gandean (H.B. 96) crossing B.M.L. (Narwana branch) canal, along the south western boundary of village Khanpur Gandean (H.B.96) crossing kauli distributary and southern boundary of village Dhindsa (H.B. 95) crossing Rajpura-Patiala road (NH-64) and Rajpura Patiala railway line, then along the western boundary of village Dhindsa (H.B. 95) and southern boundary of village Jakhran (H.B. 66), Badholi-Gujran (H.B. 65), then along the eastern boundary of village Gopalpur (H.B. 63), Abdulpur (H.B. 64), then along the south western boundary of village Abdulpur (H.B.64) upto point 'D' which is the corner point of southern & western boundary of village Abdulpur (H.B. 64).

**West :** Starting from point 'D' moving towards North along the Western boundary of village Abdulpur (H.B. 64), Gopalpur (H.B. 63), Takhtu Majra (H.B. 62), Pabra (H.B. 61) Jai Nagar (H.B. 31), Safdarpur (H.B. 30), Dharamgarh (H.B. 24) crossing B.M.L. (Narwana Branch) Canal, Then along the western boundary of village Alua (H.B. 23), Basantpura (H.B. 22) crossing Ambala-Ludhiana Road (N.H. 1) upto point 'A' which is the starting point.

The boundaries of local planning area Rajpura are specifically shown on the drawing no. DTP(P)3441/07 dt. 2.11.07. All the provisions laid down U/s 56(2) of "The Punjab Regional and Town Planning and Development Act, 1995" (Amendment 2006) and all the concerned rules framed under the act have been taken into consideration.

Chandigarh  
Dated:

(Arun Goel, I.A.S)  
Secretary to Govt. Punjab,  
Housing & Urban Development Department.  
Cum- Member Secretary The Punjab Regional  
& Town Planning & Development Board,  
Chandigarh.

**Annexure-II**

**List of Town/Villages falling within Rajpura Local Planning Area**

Sr. No.	Name of Town/Village	H.B. No.	Area in Hectares	Population		Remarks
				1991	2001	
1	2	3	4	5	6	7
1	Haryaon	15	119	467	492	
2	Upal Kheri	34	234	1048	1168	
3	Akbarpur	35	109	409	473	
4	Faridpur Gujran	55	131	260	261	
5	Kanwarpur	56	42	57	56	
6	Uksi	33	335	1571	1736	
7	DeviNagar	57	227	419	466	
8	Bhatehri	36	210	1051	1300	
9	Dhakansu Kalan	50	382	2360	2387	
10	Dhakansu Khurd	49	221	334	584	
11	Pahar Kalan	47	194	994	960	
12	Pahar Khurd	48	129	523	667	
13	Niamatpura	46	150	711	827	
14	Jansua	45	254	2382	2958	
15	Fatehpur Garhi	263	220	656	960	
16	Alampur	43	129	908	1078	
17	Thuha	255	527	2317	2481	
18	Nepran	44	158	1026	1057	
19	Chamaru	79	678	2489	2599	
20	Shamdo	78	458	2790	3307	
21	Mehtabgarh	77	290	111	133	
22	Madanpur	80	385	2256	2534	
23	Gandan	83	126	378	435	
24	Chalheri	81	586	1916	2096	
25	Ghagar Sarai	82	259	1481	1506	
26	Bhuri Majri	136	60	335	391	

27	Ali Majra	137	170	1276	1480	
28	Naushehra	138	172	621	806	
29	Sarai Mughal	139	48	432	459	
30	Rajgarh	147	365	1128	1366	
31	Mehmadpur	144	362	414	722	
32	Bapror	143	392	1725	2129	
33	Khalaspur	132	178	436	506	
34	Shambhoo Khurd	133	152	478	566	
35	Hashampur	134	136	424	438	
36	Khairpur Sheikhan	135	127	786	835	
37	Jakhepal	84	88	420	490	
38	Bathonian Khurd	87	237	1097	1424	
39	Kharajpur	76	163	1206	2072	
40	Jandauli	75	209	1076	2290	
41	Bhogla	74	192	913	1072	
42	Khanpur Baring	73	276	1230	1444	
43	Said Kheri	72	455	3004	4185	
44	Gazipur	92	175	386	442	
45	Kheri Gandean	94	457	1556	1730	
46	Bhadak	93	126	583	714	
47	Nilpur	71	271	1506	4004	
48	Jakhran	66	201	514	567	
49	Sardar Garh	67	156	320	35	
50	Pabri	60	400	1016	1333	
51	Khandoli	68	294	921	1441	
52	Damanheri	59	290	1081	1416	
53	Dhamoli	69	346	1192	1476	
54	Pilkhani	54	322	1516	1658	
55	Islampur	53	121	630	746	
56	Dahrian	140	149	1129	1468	
57	Jhansla	262	313	1186	1542	
58	Nanhera	145	608	1871	1968	

59	Shambhoo Kalan	146	735	2977	3327	
60	Ram Nagar	148	292	1610	1952	
61	Tepla	149	801	2256	2676	
62	Badholi Gujran	65	228	750	710	
63	Pabra	61	311	894	1123	
64	Jai Nagar	31	426	1304	1531	
65	Mandwal	32	239	881	987	
66	Khanpur Khurd	58	206	638	821	
67	Safdarpur	30	140	630	733	
68	Bhedwal	29	253	1296	1389	
69	Chandu Khurd	28	188	432	493	
70	Dharamgarh	24	364	348	419	
71	Ram Nagar / Saunti	25	102	223	287	
72	Ogana	27	66	282	295	
73	Alua	23	296	1246	1361	
74	Parao Ogana	26	35	269	371	
75	Ugani	14	250	542	536	
76	Bakhsiwala	16	402	1204	1425	
77	Sarai Banjara	17	64	590	754	
78	Basantpura	22	308	765	1216	
79	Chandu Majra	21	306	642	655	
80	Balsuan	20	169	634	359	
81	Chak	18	172	455	846	
82	Nainan	13	174	387	411	
83	Gobindpura	19	60	213	206	
84	Sural Kalan	9	314	1328	1592	
85	Sural Khurd	8	188	301	331	
86	Sadhraur	7	307	667	774	
87	Rai Majra	6	186	112	121	
88	Kotla	4	213	975	1163	
89	Nilas Khurd	10	232	810	930	
90	Nilas Kalan	11	131	1018	1253	

91	Rangian	12	165	557	625	
92	Bhupal	38	475	1582	1782	
93	Mangpur	37	145	371	421	
94	Dabhali	39	300	1020	1206	
95	Godo Majra	41	250	822	832	
96	Jansui	42	159	745	852	
97	Mirzapur	40	318	1093	1202	
98	Faridpura	264	268	786	930	
99	Bhatiras	278	145	304	315	
100	Wazirabad	266	119	241	271	
101	Kharrola	3	211	1421	2015	
102	Dhuman	5	233	587	617	
103	Urna	2	197	1000	1212	
104	Lehlan	267	173	398	452	
105	Hordaitpura	270	201	487	580	
106	Kehargarh	1	255	105	114	
107	Gurditpura	268	305	1345	1446	
108	Khera Gajju	269	606	3392	3980	
109	Uncha Khera	271	126	309	472	
110	Khanpur Bangar	276	238	1064	1245	
111	Gajdi Nagar	254	270	734	796	
112	Mohi Khurd	253	366	1611	977	
113	Mohi Kalan	246	320	1015	1048	
114	Surajgarh	252	200	932	970	
115	Ghurama Kalan	250	269	1273	1404	
116	Ghurama Khurd	251	149	135	203	
117	Nandgarh	248	116	739	816	
118	Luhand	249	121	214	273	
119	Basma	227	707	2118	2463	
120	Kheri Gurana	247	393	1335	1641	
121	Budhanpur	228	381	1117	1171	
122	Khalawar	242	473	1089	1321	

123	Chharwar	230	538	1121	1313	
124	Salempur	232	115	685	780	
125	Bhagwanpur	233	135	21	167	
126	Dhindsa	95	198	559	786	
127	Khanpur Gandean	96	358	1568	1790	
128	Khairpur Jattan	91	223	937	1106	
129	Paharipur	90	171	689	115	
130	Mahewan	119	171	709	834	
131	Suhron	89	431	1944	2747	
132	Dharamgarh	120	314	269	286	
133	Bathonian Kalan	88	354	1284	1550	
134	Bivipur	86	91	255	283	
135	Mandiana	127	299	1167	1362	
136	Sahal	121	262	1082	1183	
137	Chattar Nagar	85	158	555	632	
138	Kamalpur	131	78	-	-	(Uninhabited)
139	Salempur Sekha	126	249	2467	2674	
140	Faridpur Jattan	123	139	699	887	
141	Hassanpur	125	193	738	833	
142	Kabulpur	124	272	1111	1058	
143	Mugal Majra	130	69	-	-	(Uninhabited)
144	Mardanpur	129	456	2126	2336	
145	Mirzapur	379	156	377	461	
146	Sandharsi	378	403	1443	1652	
147	Pipal Managholi	376	170	782	871	
148	Uksi	141	105	252	307	
149	Gadapur	142	217	763	846	
150	Ballopur	380	153	443	500	
151	Raipur	384	120	334	349	
152	Nanheri	383	318	591	661	
153	Sanjarpur	381	252	647	795	
154	Darwa	382	162	384	443	



155	Salampur, Dakhli, Lohsimbi/Sekhupur Dakhli Lok Simbli	387	100	7		(Uninhabited)
156	Manoli Surat	235	352	1579	2072	
157	Takhtu Majra	62	205	834	678	
158	Gopalpur	63	419	1789	1918	
159	Abdulpur	64	193	340	398	
160	Paragpur	234	143	35	-	(Uninhabited)
161	Jhajon	229	255	617	698	
162	Urdan	265	429	1644	1849	
163	Naugawan	128	229	751	733	
164	Rajpura (M. C.)	51	579	70983	82956	Population of year 1991 and 2001 on Villages at Sr. No. 164 to 166 merged in Rajpura, MC
165	Bir Rajpura	52	87			
166	Banwari	70	264			
	<b>Total</b>		<b>41961</b>	222523	261344	

**PUNJAB GOVERNMENT  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
(HOUSING BRANCH-1)**

**NOTIFICATION**

DATED: 17.12.07

No. 12/72/2006-4HGI/9841 whereas the Governor of Punjab was pleased to declare the Local Planning Area of Rajpura and its surrounding area u/s 56 (1) of "The Punjab Regional and Town Planning and Development Act, 1995" vide notification No. 12/72/2006-4HGI/9835 dated 17/12/2007

Further the Government of Punjab is pleased to designate the Chief Town Planner, Punjab as Planning agency for the above Local Planning area under Section 57 of "The Punjab Regional and Town Planning and Development Act, 1995"

Dated : Chandigarh  
11.12.2007

Arun Goel  
Secretary to Government of Punjab  
Deptt. Of Housing & Urban Development

.....

A copy along with spare copy is forwarded to the Controller, Printing & Stationary, Punjab Chandigarh with the request that the notification may be published in the official gazette (Ordinary) and 50 copies of the printed notification may be sent to the Government for record.

Additional Secretary  
Department of Housing & Urban  
Development

Endst. No. 12/72/2006-4HGI/9843

Dated, Chandigarh, 17/12/2007

A copy of the above is forwarded to the following for information & necessary action:-

1. Chief Town Planner, Punjab, Chandigarh.
2. Chief Administrator, PUDA, Mohali.
3. Additional Chief Administrator, PUDA, Patiala.

Superintendent  
Department of Housing & Urban Development

## Annexure-IV

### WARD WISE POPULATION DENSITY OF RAJPURA TOWN: 2001

Sr.No.	Ward No.	Area in Hect.	Population	Density Persons Per Hectares
1	Ward No - 1	67	3124	47
2	Ward No - 2	12.8	3340	261
3	Ward No - 3	5.4	2440	452
4	Ward No - 4	80.7	5030	62
5	Ward No - 5	187.1	3607	19
6	Ward No - 6	47.2	4190	89
7	Ward No - 7	120.8	3176	26
8	Ward No - 8	72.7	3527	49
9	Ward No - 9	26.4	3346	127
10	Ward No - 10	52.7	2978	56
11	Ward No - 11	36	3028	84
12	Ward No - 12	42.3	3595	85
13	Ward No - 13	16.2	1798	111
14	Ward No - 14	12.6	3569	283
15	Ward No - 15	14.0	3424	244
16	Ward No - 16	15.4	3736	243
17	Ward No - 17	27.9	3207	115
18	Ward No - 18	27.2	2660	98
19	Ward No - 19	15.5	3004	194
20	Ward No - 20	16.1	2747	171
21	Ward No - 21	15.6	3883	249
22	Ward No - 22	81	2924	36
23	Ward No - 23	9.7	3419	352
24	Ward No - 24	31.4	3870	123
25	Ward No - 25	17.9	3334	186
	<b>Total</b>	<b>1051.6</b>	<b>82956</b>	

Source: Census of India 2001

## Annexure-V

### L.P.A Rajpura

<b>Kos Minar, Rajgarh</b>	No:359-T&C-76/19428 Dated:14-6-76	7 Marla
<b>Kos Minar Village, Nausehra</b>	No:360-T&C-76/19430	2 Marla
<b>Mughal Sarai, Shambhu</b>	No:12/85/95/4TC/2486 Dated:20-9-95	53 Bigha, 15 Biswa

**Government of Punjab**  
**Department of Cultural Affairs**  
**(Tourism Branch)**  
**Preliminary Notification**

Dated:-18/5/2009

No:10/46/09-4TC/968 Government of Punjab, Department of Cultural Affairs, Archaeology and Museums, Punjab, had declared, following Monuments as Protected Monuments under the "Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964".

Kos Minar, Bharowal, Gate of Sarai and Mosque, Fatehabad, Old Tehsil, Ajnala, Kos Minar-Norangabad in (District Amritsar). Anglo Sikh War Memorial, Sabhraon, Anglo Sikh War Memorial, Ferozeshah, Anglo Sikh War Memorial, Misriwala, Anglo Sikh War Memorial, Mudki in (District Ferozpur), Aam Khas Bagh, Sirhind, Tomb of Ustad, Vill. Talania, Sirhind, Tomb of Amr Ali, vill. Dera Meer Mian, Mosque of Bhagat Sadna Kasai, Sirhind, Jahaji Haveli, Todar Mal, Sirhind in (District Fatehgarh Sahib), Old Thana Monument, Jaito in (District Faridkot), Jhandewala Temple, Dholbaha, Exacavated Temple, Dholbaha, Mansa Devi Temple, Dholbaha, Ancient Temple, Dholbaha, Octagonal Well, Dholbaha, Samadh Takhawal, Mukerian, Mandir Hari Devi, Bhawanipur in (District Hoshiarpur), Kos Minar, Vill. Toot, Commissioner's Residence, Jalandhar, in (District Jalandhar), Moorish Mosque, Kapurthala, Hndira-Sultanpur Lodhi, Gol Kothi Kapurthala in (District Kapurthala), Mughal Sarai, Doraha, Anglo Sikh War Memorial Aliwal with approach path way, Ancestral House of Lala Lajpat Rai at Jagraon & Plot in front of house, Kos Minar, Kot Paniach, Ancestral House of Shaheed Sukhdev Thapar Ludhiana, Quila at Payal, Sarai Lashkari Khan, Teh. Khanna., in (District Ludhiana), Ancestral House of Shaheed Bhagat Singh, Khatkar Kalan, Maharaja Ranjit Singh Hill Park, Asraon in (District : Shaheed Bhagat Singh Nagar (Nawanshahar), Sheesh Mahal Patiala, Quila Mubarak Patiala, Samania Gate Patiala, Sunami Gate Patiala, Sirhindi Gate Patiala, Darshani Gate Patiala, Baradari Moti Bagh, Painted Chamber of Kali Devi Temple, Quila Beer, Bahadurgarh(only outer wall & ditch), Painted Chamber, Rani Hall, Nabha, Bhikham Shah Da Maqbra, Ancient Mound at Ghuram, **Kos Minar Rajgarh,** **Kos Minar Vill. Nausehra,** Samadh Baba Maghi Dass, vill Chhintanwala, **Mugal Sarai Shambhu,** Patiala, Historical Bridge on Patiala-Sanaur Road, Mandir Shri Badri Narain (Bahadurgarh), Mandir Shri Tung Nath, in (District Patiala), Tomb of

Alawal Khan, Behlolpur, Tomb of Hussain Khan (Father) Behlolpur, Tomb of Nawab Bahadur Khan (Son) Behlolpur, Bauli at vill. Majha Mohewal in (District Ropar), Diwan Khana, Sangrur, Marble Baradari including Tank, Sangrur, Samadh and Bauli, Bagrian, Ancestral House of Shaheed Udham Singh, Sunam, Ancestral House of Akali Phoola Singh, Dehla Sheehan in (District Sangrur), Quila at Manauli, Ancient Mound at Chhat in (District Mohali) and Quila at Patti, in (District Taran Taran).

Now, the Government of Punjab Department of Cultural Affairs, Archaeology and Museums, Punjab, in exercise of powers conferred under rule 29 and 30 of the "Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Rule, 1965", intends to declare under Rule 29(2) prohibited areas, 100m from the protected limits and further beyond it, up to 200m near or adjoining to the each protected monument as specified above to be regulated areas respectively, for the purpose of mining operation or construction or both. Accordingly under the Rule 29(i) of the "Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Rule, 1965", one month notice of its intention is given for declaring an area as described above as prohibited and regulated areas. This notification is without prejudice to any notification issued earlier. This notification would also apply to all protected monuments already declared or to be declared in future.

Any person interested in this area specified above can file objections under Section 29 (2) to the declaration of this area around monument to be prohibited and regulated areas in writing within one month from the date of issue of this Notification.

Any objection if, received, from any persons, within the period specified, as above, will be taken into consideration by the Principal Secretary to Government of Punjab, Department of Cultural Affairs, Archaeology and Museums, Punjab, and the final notification will be issued under section 30, after dealing with such objections received if any.

Place:-Chandigarh  
Dated:-5.5.2009

Principal Secretary to Govt. of Punjab,  
Department of Cultural Affairs,  
Archaeology & Museums, Punjab, Chd.

Endst.No. 10/46/09-4 TC/972-A

Dated, Chandigarh: 18-5-2009

A copy is forwarded to the following for information and necessary action:-

- 1) Director, Cultural Affairs, Punjab Chandigarh with their reference. No. Pura/DCAM/2008/2310, dated 29.4.2009.
- 2) All the Deputy Commissioners (State of Punjab).
- 3) All the Divisional Commissioners (State of Punjab).
- 4) Director. Public Relations, Punjab with the request that it may be published in the leading Newspapers (In Punjabi and English) the bills of this Newspapers may be sent to the Director Cultural Affairs, Punjab for the payment.
- 5) A copy along with spare copy is being sent to the Controller, Printing and stationary with the request that this Notification may be got published in the Gazette (Ordinary) and 300 copies may be made available to this Department for official use.

Superintendent

## Annexure-VI

### SPACE NORMS FOR SOCIAL INFRASTRUCTURE AND PUBLIC UTILITIES

Space Norms for Social Infrastructure and Public Utilities Comparative statement of Norms and Standards suggested by Master Plan Zoning Regulations / Punjab Govt. Policies, UDPFI guidelines and Delhi Master Plan is given as under:-

Aspect	As per zoning regulations and sub division clauses for Master Plans in Punjab / Govt. Policies	UDPFI Guidelines	Delhi Master Plan
Primary School	<b>Population: 3,000-4,000</b> Number of students: 600 Area a) Old city (over 650 ppha): 0.2 ha b) Outer areas (less than 650 ppha): 0.5 ha	<b>Population: 5,000</b> Number of students: 500 Area per school: 0.4 ha Covered area: 0.20 ha Minimum play field area: 0.20 ha	<b>Population: 10,000</b>  Area: 2000-4000 sq m
Senior Secondary School	<b>Population: 12,000 to 20,000</b> Number of students: 1000 Area a) Old city (over 650 ppha): 1.00 ha b) Outer areas (less than 650 ppha): 2.5 ha	<b>Population: 7,500</b>  Number of students: 1,000 Area per school: 1.60 ha Covered area: 0.60 ha Minimum play field area: 1.00 ha	<b>Population: 10,000</b>  Area: 6000-8000 sq m
College	<b>Population: 30,000</b> Number of students: 800 Area a) Old city (over 650 ppha): 2.50 ha b) Outer areas (less than 650 ppha): 5.00 ha	<b>Population: 1,25,000</b> Number of students: 1000-1500 students Area per college: 4.00 ha Covered area: 1.80 ha Play field area: 1.80 ha Residential / hostel area: 0.40 ha	<b>Population: 5,00,000</b>  Area: As per UGC Norms
University	N.A.	New University Area: 60.00 ha	<b>4 sites in urban extension to be provided at city level</b> Area: Up to 20.00 ha
Technical Education Centre	N.A.	<b>Population: 10,00,000</b> Area per centre: 4.00 ha Area per technical centre: 2.10 ha Area per ITI: 1.40 ha Area per coaching centre: 0.30 ha	<b>Population: 5,00,000</b> Area: 4000 sq m
New Engineering College	Number of students: 300 Area a) Old city: (over 650 ppha): 1.00 ha b) Outer areas (less than 650 ppha): 2.50 ha	<b>2 numbers to be provided in urban extension</b> Number of students: 1500-1700 Area per college: 60.00 ha	<b>Population: 5,00,000</b> Area: As per AICTE norms
Medical / Pharmacy College	Area: 5 acres (Rural) Area: 2.5 acres (Distt. Headquarter Corporation Limit)	2 site of 15 ha each in urban extension including space for specialized general hospital.	<b>Population: 10,00,000</b> Area: As per Medical Council of India / Regulatory Body
Dispensary	<b>Population: 5,000</b> Area: 0.1 ha	<b>Population: 15,000</b> Area: 0.08 to 0.12 ha	<b>Population: 10,000</b> Area: 800-1200 sq m
Nursing Home	N.A.	<b>Population: 45,000-1,00,000</b> Capacity: 25 to 30 beds Area: 0.20 to 0.30 ha	<b>Population: 50,000</b> Area: 1000-2000 sq m
General Hospital	<b>Population: 50,000</b> Area: 2.5 ha	<b>Population: 2,50,000</b> Capacity: 500 beds	<b>Population: 5,00,000</b> Capacity: 501 beds and



		Area for hospital: 4.00 ha Area for resi accommodation: 2.00 ha Total area: 6.00 ha	above Area: 25,000-45,000 sq m
Veterinary Hospital	N.A.	N.A.	<b>Population: 5,00,000</b> Area: 2,000 sq m
Community Hall and Library	N.A.	<b>Population: 15,000</b> Area: 2,000 sq m	N.A.
Club	N.A.	<b>Population: 1,00,000</b> Area: 10,000 sq m	<b>Population: 5,00,000</b> Area: 5000 sq m
Amusement Park	N.A.	N.A.	<b>Up to 10 ha</b>
City level park	N.A.	N.A.	<b>Population: 5,00,000</b> Area: 10 acres
Neighborhood level park	N.A.	N.A.	<b>Population: 10,000</b> Area: 10,000 sq m
Golf Course	N.A.	N.A.	<b>Population: 10,00,000</b> Area: 10-30 ha
Sports Centre / Stadium	N.A.	N.A.	<b>Population: 5,00,000</b> Area: 3-10ha
Post and Telegraph Office	<b>Population: 10,000</b> Area: 0.1 ha	N.A.	<b>Population: 10,00,000</b> Area: 2,500 sq m
Religious Building	<b>Population: 15,000</b> Area: 0.1 ha	N.A.	<b>Population: 10,00,000</b> Area: 40,000 sq m
Old Age Home	N.A.	N.A.	<b>Population: 5,00, 000</b> Area: 1,000 sq m
Orphanage / Children Centre	N.A.	N.A.	<b>Population: 5,00,000</b> Area: 1,000 sq m
Multipurpose Ground (Exhibition cum Fair Ground)	N.A.	N.A.	<b>Population: 1,00,000</b> Area: 20,000 sq m
Burial / Cremation Centre	N.A.	N.A.	<b>Population: 10,00,000</b> Area: 10,000 sq m
Electric Sub Station	<b>Population: 50,000</b> Area: 0.4 ha	N.A.	<b>Population: 5,00,000</b> Area: 29,600 sq m
Police Post	N.A.	<b>Population: 40,000- 50,000</b> Area: 0.16 ha (area inclusive of essential residential accommodation)	<b>Population: 1,00,000</b> Area: 1000 sq m
Police Station / Police Division	<b>Population: 50,000</b> Area: 0.8 ha	<b>Population: 90,000</b> Area: 1.5 ha Area inclusive of essential residential accommodation 0.05 ha additional to be provided for civil Defence and home guards	<b>Population: 2,50,000</b> Area: 10,000 sq m
Police Line	N.A.	<b>Population: 20,00,000</b> Area: 4.00 to 6.00 ha	<b>1 for each administrative zone to be provided at city level</b> Area: 2.0 ha
District Jail	N.A.	<b>Population: 10,00,000</b> Area: 10.00 ha	<b>Population: 25,00,000</b> Area: 5.0 ha
Fire Station	N.A.	<b>1 fire station or sub-fire station within 1 to 3 km to be provided for 2 lakh population</b> Area for fire station with essential residential accommodation: 1.00 ha Area for sub-fire station with essential residential accommodation: 0.60 ha	<b>3 Fire Stations for 5,00,000 population within radius of 5 to 7 km</b> Area: 10,000 sq m

**Northern Railway**


No.WW/Misc/UMB/Loose  
Dated.03.01.2011

Divisional Office  
Ambala Cantt.

**Senior Town Planner,  
Patiala (Pb.)**

**Subject :- Minutes of tripartite meeting held on 07/10/2010.**

As inquired by you in reference to point no.d of para no.2, the length of Logistic Corridor parallel to the track should be in the range of 3 to 4 km and perpendicular to the track should be 2 to 3 kms.

  
**Sr. Divisional Engineer-I,  
N.Rly., Ambala Cantt.**

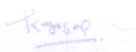
DA : Minutes of meeting

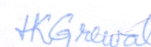
### MINUTES OF MEETING WITH STP, PATIALA ON 07.10.2010


The meeting was held on date among STP, Patiala, Railway authorities & DFC authorities to discuss the future railway requirements for freezing the master plan of the Rajpura area. The railways have given following recommendations:-

1. The alignment of DFC has been given to STP for futuristic planning of the area. The land width required will be 40m to 80m from the existing Railway Line.
2. Logistic corridor at Shambhu station:- It was suggested by railways to earmark the area for loading & unloading facilities at Shambhu station keeping in view the following points:-
  - a. The ROB is already sanctioned at Level Crossing No.C/131 in Shambhu yard on Ghanaur Road.
  - b. Many parties have approached railways for setting up of plants/handling facilities of cargo near Shambhu station due to availability of land.
  - c. National Highway is providing flyover at the junction point of Ghanaur road which will further facilitate the movement of traffic.
3. The change of land use for any type of activity should be given after taking the NOC from the Railways.
4. It was also discussed that as per the policy of railways no new Level Crossing will be provided on the Ambala-Ludhiana stretch & all the futuristic roads of the master plan have to be adjusted with the existing Level Crossing or flyovers/ROBs will be required.
5. DFC authorities have also told there is a planning to build the ROB/RUBs, where TVUs (Train Vehicle units) are more than 50,000. This will require ramp on both sides on railway line. So it was suggested that any type of activities between National Highway and railway line should not be allowed, otherwise during any emergency it will become difficult to approach the site.

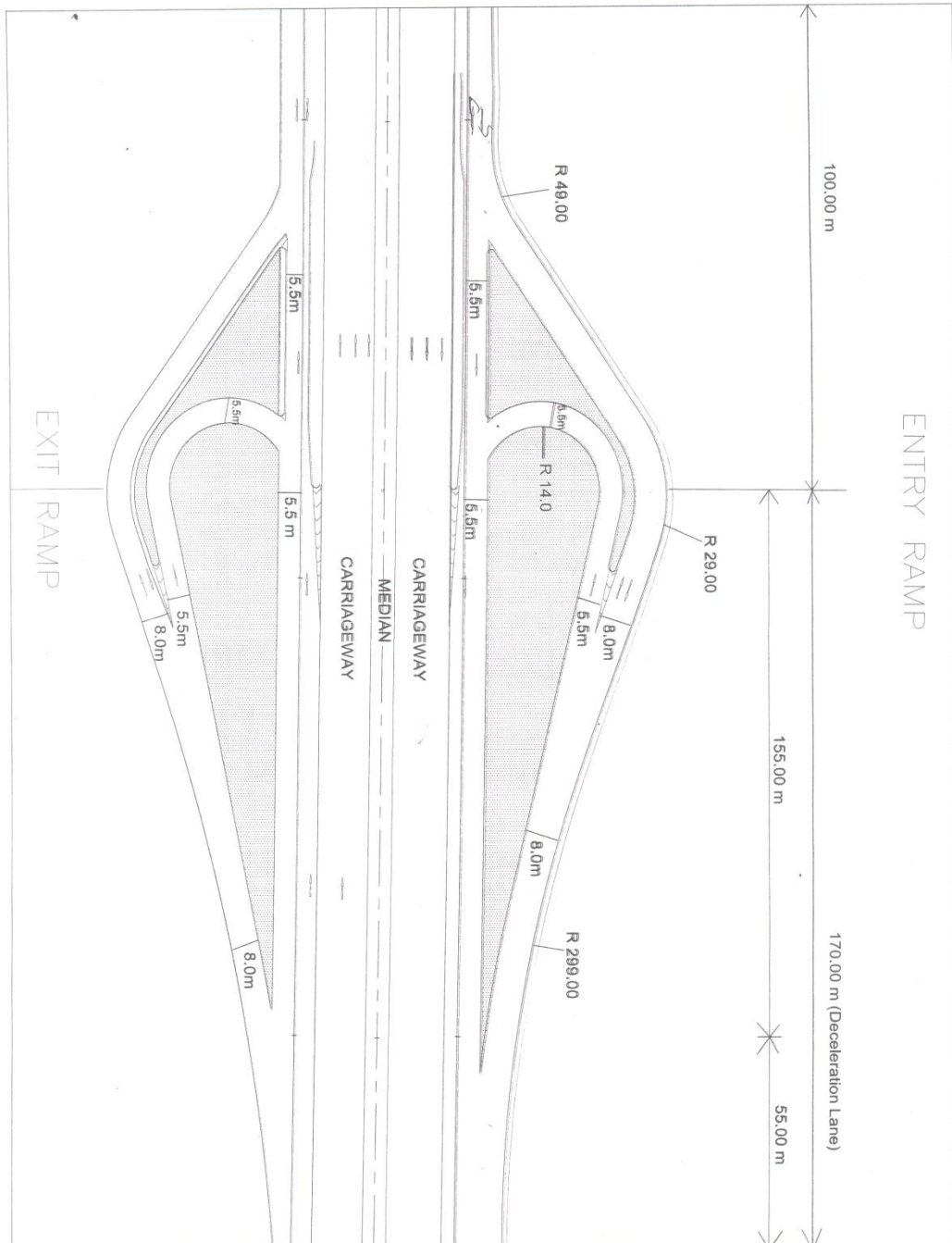
In addition to above, minimum 30m clearance is required from edge of railway boundary for any development activity. Further as per foreign concept, a parallel road along the railway line is required to attend any emergency. So keeping in view the above points it is desirable that area between the National Highway and railway line should be kept free from construction activities. Further the expansion of National Highway the Railways will also suffer if any type of activities is planned between these two modes of transport.

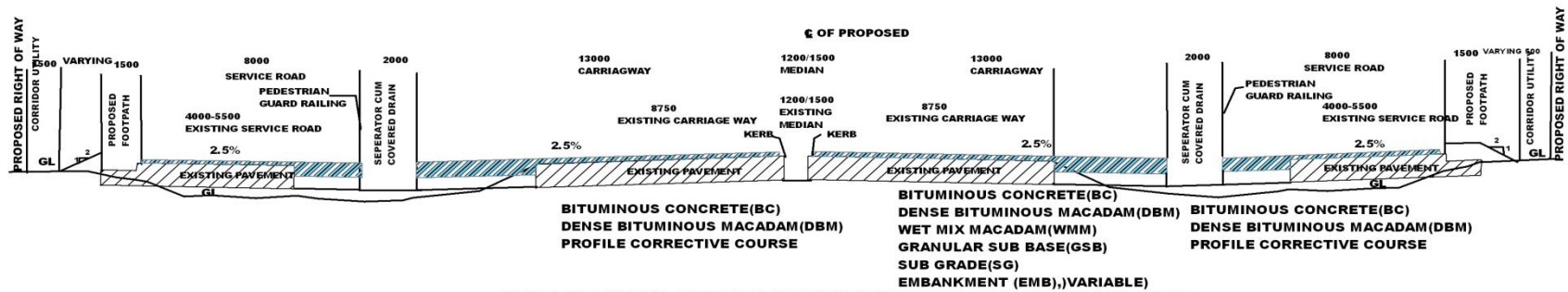
  
P.K. Goyal  
CPM/DFCLDH

  
Harpreet K. Grewal  
STP, Patiala

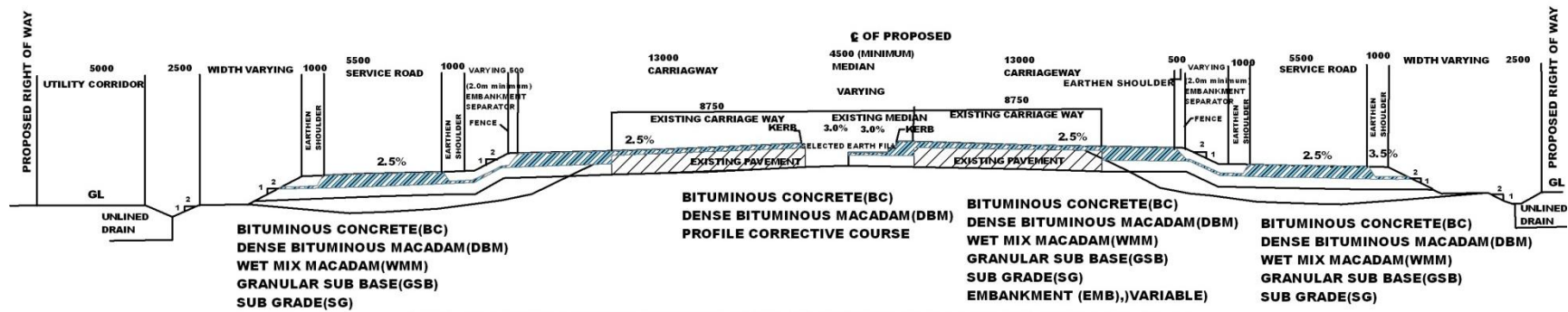
  
Natraj Singli  
Sr. DEN-I/UMB

TYPICAL ROAD CROSS SECTIONS





TYPE-2A TYPICAL CROSS SECTION IN URBAN AREA WITH SERVICE ROAD  
CONCENTRIC WIDENING(Applicable for existing service road)



TYPE-3A TYPICAL CROSS SECTION IN RURAL AREA WITH SERVICE ROAD(Out Side Drain)

## Annexure-IX

### OVER BRIDGES/FLYOVERS, VEHICULAR UNDERPASSES, PEDESTRIAN UNDER-PASSES, FOOTOVER BRIDGES ON NATIONAL HIGHWAY NO.- I

Sr.No.	Chainage	Location	Status
1.	213+050	For circulation of Banur (Tepla) road	Flyover
2.	218+375	Ghanaur road	Flyover
3.	221+050	Hashanpur Ghaggar Serai road	Flyover
4.	224+800	Chamaru road	Flyover
5.	227+625	Rajpura town	Flyover
6.	229+175	N.H.64 crossing	Flyover
7.	231+300	Just after ROB approaches	Flyover
8.	233+875	Uksi Jattan	Flyover
9.	239+600	Mullanpur-Basantpura	Flyover
10.	212+650	-	Vehicular Underpass
11.	236+750	-	Vehicular Underpass
12.	219+800	-	Pedestrian under-pass
13.	228+550	-	Pedestrian under-pass
14.	229+700	-	Pedestrian under-pass
15.	239+320	-	Pedestrian under-pass
16.	213+050	-	Footover bridge
17.	215+700	-	Footover bridge
18.	217+780	-	Footover bridge
19.	223+400	-	Footover bridge
20.	226+100	-	Footover bridge
21.	228+530	-	Footover bridge
22.	239+260	-	Footover bridge
23.	217+830	-	Exit(LHS)
24.	217+830	-	Entry(RHS)
25.	221+510	-	Exit(LHS)
26.	221+590	-	Entry(RHS)
27.	226+950	-	Exit(LHS)
28.	226+950	-	Entry(RHS)
29.	231+960	-	Exit(LHS)
30.	231+960	-	Entry(RHS)
31.	239+050	-	Exit(LHS)
32.	239+050	-	Entry(RHS)

**Annexure-X****THE GAZETTE OF INDIA: MARCH 3, 2007/PHALGUNA 12, 1928****New Delhi, the 14<sup>th</sup> February, 2007**

S.R.O.12- In exercise of the powers conferred by Section 3 and 7 of the Works of Defence Act 1903 (7 of 1903), the Central Government, being of the opinion that it is necessary and expedient to impose restrictions, upon the use and enjoyment of land in the vicinity of the Indian Air Force Stations and Installations, hereby declares that such land shall be kept free from buildings and other obstructions and directs that:-

(a) No building or structure shall be constructed, created or erected or no tree shall be planted on any land within the limits of 100 meters from the crest of the outer parapet of Indian Air Force Stations and Installations as given in the Annexure 'A' to this notification.

(d) The restrictions imposed by the Government of India in the Ministry of Civil Aviation under Section 9A of the Aircraft Act, 1934 (22 of 1934), vide its notification number S.O.988, dated the 5<sup>th</sup> January, 1988 shall continue to be applicable to the Indian Air Force Aerodromes.

(e) For the purpose of this notification, the Air Officer Commanding or Commanding Officer of the concerned Indian Air Force Stations or Installations, as the case may be, shall provide all the relevant details including land holdings to the Collector for inclusion in the public notice to be given by him under sub section (2) of section 3 of the works of Defence Act, 1903 (7 of 1903).

2. This notification shall come into force on the date of its publication in the Official Gazette.

**Annexure 'A'****STATIONS OR INSTALLATIONS WHERE RESTRICTION TO BE IMPOSED UPTO 100 MTRS.**

<b>Sr. No.</b>	<b>Name of Air Force Station</b>	<b>District</b>	<b>State</b>
	<b>Western Air Command</b>		
1.	Air Force Station Palam	South – West Delhi	Delhi
2.	Air Force Station Leh	Laddakh	Jammu & Kashmir
3.	Air Force Station Jammu Cantt	Jammu	Jammu & Kashmir
4.	Air Force Station Highgrounds	Mohali	Punjab
5.	Air Force Station Rajokri	South -West Delhi/Gurgaon	Delhi/Haryana
6.	Air Force Station Sarsawa	Saharanpur	Uttar Pradesh
7.	Air Force Station Thoise	Laddakh	Jammu & Kashmir
8.	Air Force Station Amritsar Cantt.	Amritsar	Punjab
9.	Air Force Station Patiala	Patiala	Punjab
10.	Air Force Station Kaluchak	Jammu	Jammu & Kashmir
11.	Air Force Station Bikaner	Bikaner	Rajasthan

12.	Air Force Station Bhagwansar	Ganganagar	Rajasthan
13.	Air Force Station Barnala	Sangrur	Punjab
14.	Air Force Station Ajarh	South Delhi/ Gurgaon	Delhi/Haryana
15.	Air Force Station Badgampura	Badgampura	Jammu & Kashmir
16.	Air Force Station Dalhausie	Chamba	Himachal Pradesh
17.	Air Force Station Kasauli	Solan	Himachal Pradesh
18.	Air Force Station Barwala	Mohali/ Ambala	Punjab/Haryana
19.	Air Force Station Natharaj	Udhampur	Jammu & Kashmir
20.	Air Force Station Basantnagar	South- West Delhi	Delhi
21.	Air Force Station Kalpi	Ambala	Haryana
22.	Air Force Station Mullanpur	Mohali	Punjab
23.	Air Force Station Dhansa	South- West Delhi	Delhi
24.	Air Force Station Narela	North- West Delhi	Delhi
<b>25.</b>	<b>Air Force Station Rajpura</b>	<b>Patiala</b>	<b>Punjab</b>
26.	Air Force Station Baknour	Ambala	Haryana
27.	Air Force Station Dadri	Goutam Budh Nagar	Uttar Pradesh
28.	Air Force Station Chandinagar	Bagpar	Uttar Pradesh
29.	Air Force Station Maman Cantt.	Gurdaspur	Punjab
30.	Air Force Station Faridabad	Faridabad	Haryana
31.	Western Air command Subrolo Park	South- West Delhi	Delhi

**F.No. 4 (13)/2005/D (Air-II)**

S.K Jha, Under Secretary





इंडियन ऑयल कॉर्पोरेशन लिमिटेड

उत्तरी क्षेत्र - पाइपलाइन्स,  
पी.ओ. पानीपत रिफाइनरी, बडोली, पानीपत - 132 140

Indian Oil Corporation Limited

Northern Region- Pipelines  
P.O. Panipat Refinery, Baholi, Panipat - 132 140  
Fax : 91-180-2578710



पाइपलाइन्स प्रभाग

PIPELINES DIVISION

NRPL/PNP/ML/603

Dated 29.01.2011

To,

The Senior Town Planner, Patiala  
Zila Parishad Building  
Sirhind Road  
Patiala - 147001  
(Punjab).

**Sub: Alignment of Mathura Jalandhar Pipeline (MJPL) passing through Rajpura, District - Patiala.**

Dear Sir,

This has reference to your Memo No. 1412 dated 17.09.2010 received to this office through email on dated 29.01.2011. In this connection we would like to bring to your notice the following points for your consideration:

1. Indian Oil Corporation Limited has laid a cross county product pipeline from Mathura to Jalandhar under "The Petroleum and Mineral Pipeline (Acquisition of Right of User in Land) Act 1962" and the said pipeline is meeting the petroleum products requirement of all the Northern states including defence.
2. This pipeline is transporting highly inflammable petroleum products and is laid by adhering to various National, International codes & OISD standard for the safety of the pipeline/ adjoining residents as well as to carryout regular preventive maintenance for up keeping the health of the pipeline.
3. MJPL pipeline is normally laid at a depth of one meter below the ground level, maintaining 18 M wide ROW throughout from Mathura to Jalandhar for regular patrolling and time to time maintenance of the pipeline.

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4. **Restriction regarding the use of the land** : there shall not be any permanent structure like building, tank, reservoir, dam or planting of any tree etc within ROW as it will not only bring hindrances for the movement of heavy machineries during emergency handling but also damage the pipeline structure.
5. No dwelling unit to be constructed within 50 meters from either side of the Right of Way (ROW) .
6. No flare fire or higher temperature activities are to be carried out near pipeline as it transports highly inflammable Petroleum products which may cause fire and subsequent damage to life and property. All required precaution practices may please be adhered to while carrying out any activity near pipeline ROW. A safe distance of 150 meter from pipeline to be maintained for any industrial activity.
7. Only Green belt shall be allowed to be maintained within the ROW including cultivation.
8. No heavy vehicular movement is allowed as it may exert direct load to the pipeline which may lead to the rupture of the pipeline in due course of time. However in specific cases for the movement of heavy vehicles Culvert Bridges are to be made across/over the ROW with prior permission in writing.
9. No construction activities are to be started in ROW without permission in writing.
10. Further you may feel free to ask any clarification on the subject matter.
11. We are enclosing herewith a route map indicating the villages through which the pipeline (MJPL) is traversing.

Thanking you.

Yours Truly,

  
(J.K. Jha)

Chief Maintenance Manager

**Annexure-XII****PROTECTED FOREST STRIPS OF RAJPURA FOREST RANGE, PATIALA DIVISION**

<b>Sr.No.</b>	<b>Name of strip</b>	<b>Length (kms.)</b>	<b>Width (mts.)</b>	<b>Area (ha.)</b>
1.	G.T.road	27	22	59.4
2.	Zirakpur-Patiala road	12.6	60	75.6
3.	Kharar-Banur-Tepla road	11.5	16	18.4
4.	Siel-Ghanaur-Shambhoo road	7.20	9	6.48
5.	Jansua-Kharola-Manakpur road	12	14	16.80
6.	Rajpura-Patiala bypass	4	35	14
7.	Old G.T.road	3	35	10.50
8.	G.T.road Nilas-Bhagrana link road	15	4	6.00
9.	N.B.Canal	13	85	110.5
10.	Banur Canal	41	20	82
11.	Rajpura Rajbaha	7.25	20	14.5
12.	Sarai Banjara	4.65	20	9.3
13.	Kauli-Rajbaha & Minor	4.1	25	10.25
14.	Mohabbatpur Minor	3	20	6
15.	S.Y.L Canal	24.5	70	171.5
16.	Main railway line	26	60	156
17.	Rajpura-Patiala railway line	9.3	60	55.8
18.	Dhakansu Bandha	10	70	70
19.	PachisdaraBandha	8	70	56
20.	Kharola-Airforce area			87
21.	Bhagna Drain	7.076	25	17.65