

Redevelopment of Central Business District Center, Sector 17, Chandigarh

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Abstract—Chandigarh has been designed by great architect Le Corbusier on the philosophy of modern architecture movement. Le Corbusier has designed this city on grid iron pattern and whole city is divided in different sectors. Sector 17 is being designed as central business district center and placed in center of city.

There are so many transformation happened after five decades of making Chandigarh at the level of economic, social, political as well environment, there is need to redefine the central business district center for the fulfillment of the present need. The technological advancement has changed the whole concept of living and showrooms, offices, multiplexes of sector 17 are supposed to cater the needs of new demand but sector 17 is failing on these parameters. Earlier people of Chandigarh were not having the exploration of new Malls but recently after introducing the change in land use of industrial area to commercial, big malls like Elante mall have given opportunity to people of Chandigarh to explore the new type of shopping. It can be seen that on weekends the people prefer to go to Elante mall instead of Sector 17, Chandigarh.

On the other hand Chandigarh is being nominated as world heritage site recently and in process of getting status of world heritage site. Chandigarh can not get away of Le Corbusier original idea about city as well about Sector 17, Chandigarh. Redevelopment of Sector 17 is not so easy as it seems to be, on one hand it should adopt the development which meets the present need and on the other hand it should retain its original character due to heritage status.

There is need to identify the elements of design of sector 17 which are responsible for its unique architectural character. There is also need to study existing situation of sector 17 to assess the changes required to be done. The paper will also discuss ways and means to incorporate the new development to its existing situation without disturbing its original character.

Keywords: central business district centre, sector17, World Heritage,

1. INTRODUCTION

The CBD developed as the market square in ancient cities. On market days, farmers, merchants and consumers would gather in the center of the city to exchange, buy, and sell goods. This ancient market is the forerunner to the CBD. As cities grew and developed, CBDs became fixed location where retail and commerce took place. The CBD is typically at or near the oldest part of the city and is often near a major transportation

route that provided the site for the city's location, such as a river, railroad, or highway.

Over time, the CBD developed into a center of finance and control or government as well as office space. In the early 1900s, European and American cities had CBDs that featured primarily retail and commercial cores. In the mid-20th century, the CBD expanded to include office space and commercial businesses while retail took a back seat. The growth of the skyscraper occurred in CBDs, making them more and more dense.

By the beginning of the 21st century, the CBD had become a diverse region of the metropolitan area and included residential, retail, commercial, universities, entertainment, government, financial institutions, medical centers, and culture. The experts of the city are often located at workplaces or institutions in the CBD – lawyers, doctors, academics, government officials and bureaucrats, entertainers, directors and financiers. In recent decades, the combination of gentrification (residential expansion) and development of shopping malls as entertainment centers have given the CBD new life.

One can now find, in addition to housing, mega-malls, theaters, museums, and stadiums. San Diego's Horton Plaza is an example of redeveloping the downtown as an entertainment and shopping district. Pedestrian malls are also common today in CBDs in an effort to make the CBD a 24 hour a day destination for not only those who work in the CBD but also to bring in people to live and to play in the CBD. Without entertainment and cultural opportunities, the CBD is often far more populated during the day than at night as relatively few workers live in the CBD and most do commute to their jobs in the CBD.

2. CITY CENTER SECTOR 17, IN CONTEXT OF CITY CHANDIGARH:

Le Corbusier conceived the master plan of Chandigarh as analogous to human body, with a clearly defined head (the Capitol Complex, Sector 1), heart (the city Centre, Sector 17), lungs (the leisure valley, innumerable open spaces and sector

greens), the intellect (the cultural and educational institutions), the circulatory system (the network of roads, the 7Vs) and the viscera (the industrial Area).

The city center sector-17 comprise of several specialized markets amalgamated together to provide the city with specialized services. Since Le Corbusier has termed city center as Heart of city, the function of Heart is most important one in body so in similarly city center plays very important role for city Chandigarh .Sector 17 may not be physical center of city but has been placed in prime location to connect with rest of sectors.

3. DESCRIPTION AND ANALYSIS OF EXISTING SITUATION OF SECTOR 17:

3.1 LOCATION

Sector 17 is surrounded by three V2'S and one V3. It is surrounded by various roads ,on its north east side Madhya marg (V2), on north west side Jan marg (V2) , south east side Himalayan Marg (V2b) and on south west side Udyog path (V3) . The Madhya Marg linked it to Panchkula, Shimala, Delhi while the Jan marg linked it to Sector 34, Mohali and other parts of Punjab. The Himalayan Marg linked it to Zirakpur, Delhi, Patiala etc and Udyog path linked it to Sector 43, Sukhna Lake, Capitol complex. etc

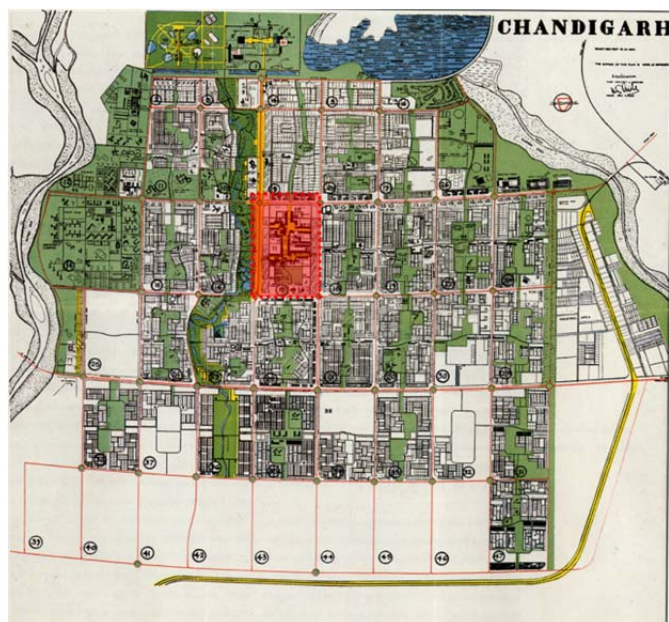


Fig. 1: Location of Sector 17

It can be inference that the location of sector 17 is very strategic, it is not only well connecting within city but it is also well connected to other cities.

3.2 Land Use

Land use of Sector 17 is divided into two main parts, namely commercial zone and civic zone. The commercial zone

includes Shop-cum-offices-cum residences, five cinemas, Central Library, Town hall, Post & Telegraph Office, Bank Square, two Petrol Pumps, Police Headquarter, Hotels, Office spaces, proposed Eleven Storeyed block. The civic zone includes Interstate Bus Terminus, Fire Station, Exhibition ground, Parade Ground, District Courts, Treasury Office, Central Police Station Police Housing, and Football Stadium

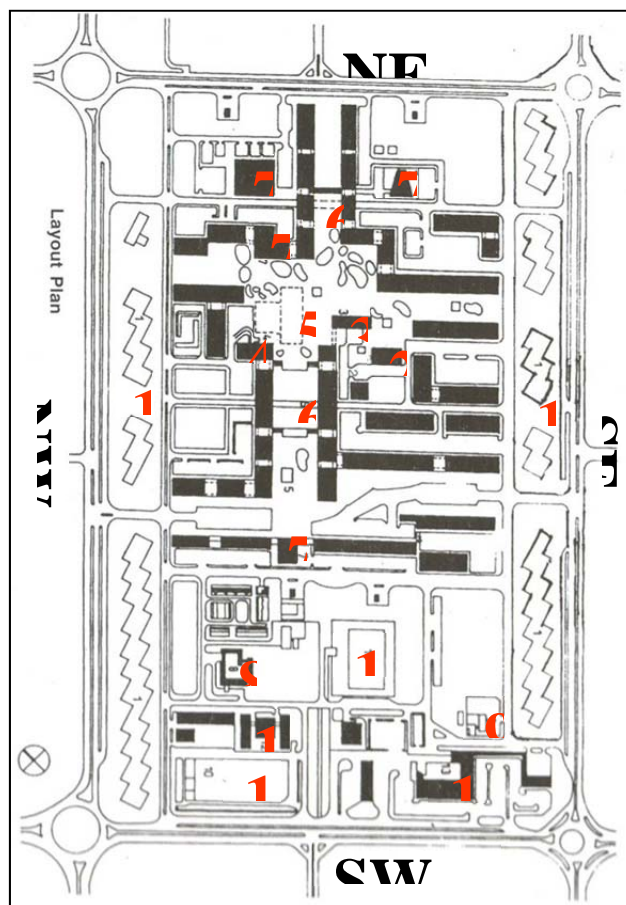


Fig. 2: Land use pattern of Sector 17 (NTS)

1. High rise buildings
2. Central state Library
3. Town Hall
4. Post and Telegraph
5. Building
6. Plaza
7. OverBrige
8. Cinema Halls
9. Police station
10. Fire Station
11. Parade Ground

The civic zone function 11. Foot ball stadiums are not compatible with commercial zone functions of secto 12. District Courts 17 and both parts have no interaction. There are few more c 13. Bus Terminusivic functions like central state library as well

town halls which fall in commercial zone are also not compatible to commercial.

3.2 BLOCKING, PIAZZA, CIRCULATION AND PARKING

The fundamental concept of Sector 17 is creation of Piazza. The piazza is working on two perpendicular axis, on the intersection of these two axis there is proposal to built 11 storied tower which never built. To link the space of piazza on ground, the two over bridge has been built for roads to cross. The most of blocks are being put around this piazza.

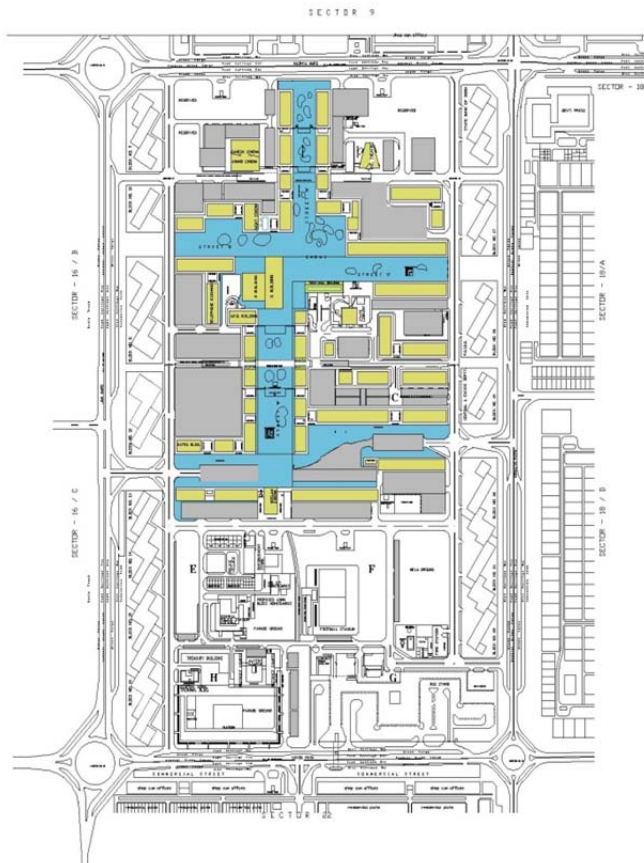


Fig. 3: Blocking, Piazza and Parking in commercial zone of Sector 17.

The vehicular circulation and pedestrian circulation has been well segregated. The parking mostly is on periphery around the piazza so it did not interfere with circulation of pedestrian piazza. The most of parking is provided on surface only but now Chandigarh administration has constructed multistoried tower for parking.

Piazza is very big in length one axis and it is difficult to integrate, on the another axis the piazza is appropriate but it lacks right functions around it i.e., the town hall, bank square telephone exchange, post office etc. Piazza is very active near Neelam Piazza and it is become very inactive as it approaches to post office and also not has any impact towards sector 9.

The surface parking is very well organized and working so well but it is not able to cope with present needs. Keeping in view of shortage of parking, Chandigarh Administration has constructed the multistoried parking but its workability is doubtful until and unless it connect well with main Piazza.

3.3 SHOPPING BLOCK DESIGN AND ARCHITECTURAL CONTROLS:

All constructions in the City Centre were governed by the "System of Construction and Architectural Treatment of Exterior Controls" that, like the rest of the city, was determined by limitations of economy and technology. A uniform four-story height was established for all commercial buildings. The max height of such blocks was restricted to 57'7". Few blocks have been built of five storeyed in the max permissible height. A basic reinforced concrete frame of the most economical bay size (17'-3") and capable of interior modification was specified. Around the outside of every building block would be a 11'10" feet wide compulsory verandah on ground floor and a unifying exterior pattern of columns and standardized concrete balustrades. Space for advertisement is also specified in these blocks.

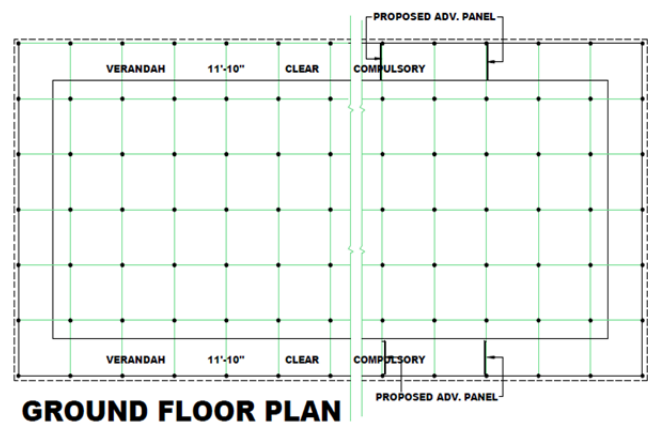


Fig. 4: Plan of Shopping block of R.C.C.



Fig. 5: View of Shopping block of R.C.C.

For shopping the other types of blocks are also being designed which are having exposed brick work. These blocks break monotony of R.C.C Blocks.



Fig. 6: View of exposed brick work blocks.

A “Schematic Design” produced by the Capital Project Office governed special buildings such as the cinema halls and petrol pumps that would not ordinarily fit in the above pattern of building



Fig. 7: View of Neelam theatre.



Fig. 8: Changes on façade, air conditioner and aluminium cladding panels

The architectural controls have been violated, some of these violations seem to be need based but most of violations are due to not strictly complying the controls. The air-conditioned spaces, generators, mobile towers and other such items are essential requirements of present needs and it should be incorporated in well design manner.

The owners are also changing their façade by various means to create uniqueness of their shops which can not considered as need based to large extent. These must be strictly comply because concrete is such wonderful material in context of sector 17 only it should be preserved to avoid the ugly look.

4. IDENTIFYING THE ELEMENTS TO BE PRESERVED IN SECTOR 17 TO MAINTAIN ARCHITECTURAL CHARACTER. :

- a) Piazza to be preserved in its original size and shape.
- b) Building materials to be preserved for its showing its truthfulness as conceived by designer.
- c) Landscaping to be preserved.
- d) Concrete as paving material to be preserved.
- e) Building forms of shopping (both type), form of cinemas and other buildings also to be preserved.

5. STRATEGIES TO BE ADOPTED TO CATER THE PRESENT NEEDS WITHOUT DISTURBING ITS ORIGINAL CHARACTER

5.1 REVITALIZING THE PIAZZA

Piazza is the essence of central business district center of sector 17. To make it more active, it may be planned for different activities in different zones. There are possibilities of incorporating different functions in the building around the piazza.

Piazza around the town hall and central library is very dull due to these functions, the town hall, central library has no role to play in context to city center, these may be replaced by some cultural activities, museum etc to attract the people of Chandigarh as well foreign tourists .

Piazza around the Post office and telephone exchange is also not active, the post office and telephone exchange may be shifted to other building on periphery and shopping related activities may be replaced in these building.

Piazza towards the sector 9 is also not active; the building around this piazza may be converted into recreational zone activities like restaurants, kids zone to explore their shops.

The other proposal to make piazza active might be allowing different temporary activities in different festival in very organized manner in very specific areas of piazza.



Fig. 9: Activities spreading out in piazza to make it more active



Fig. 10: Temporary Activities in Piazza for different occasions.

5.2 UNBUILT ELEVEN STOREYED TOWER:

The eleven storey tower proposed by Le Corbusier in the city center has been conceived as highest building of city. He has not designed this building but he has allocated the space for this tower on the intersection of two axis of piazza.



Fig. 11: Example of similar character of Building form for 11 soteryed tower

This tower might be designed as landmark building and may be developed in contemporary architecture ,of course respecting the character of city center .It may be design as contrast building to fulfill the needs of modern time, to incorporate the technology, sustainability, modern social living as well representing the high economic growth to fulfill the inspiration of new generations .

5.3 LANDSCAPING, SEATING AND LIGHTING:

The piazza and other open spaces should be revitalizing through landscaping, seating, and lighting. Sector 17 has mostly hard landscape for its paving which becomes very hot in the summers and radiates heat in the evening. So there is need to mix soft landscape in hard landscape. The soft landscapes can also create good for visuals for sector 17.

The seating and lighting are the two factors which need to be done in similar fashion as it is being done in the part of Neelam Piazza.

5.4 PARKING

Chandigarh Admistration has built mutli storeyed tower for parking recently but it is not linked well with piazza so it cannot be termed as good solution. The piazza is very big and if multistoried automated parking system could be worked out underneath of the piazza through creative approach, it may be termed as best solution for sector 17.



Fig. 12: Automated multistoried parking in basement underneath the piazza

5.5 CYCLE TRACKS AND PEDESTRIAN PATHWAYS:

There is no parking system for cycles and pedestrian routes are also not designed in proper manner. The piazza is too big, it must be worked out for pedestrian movement, seating, activities, cycle movement within the piazza.



Fig. 13: Example of organized cycle parking

5.5 ARCHITECTURAL CONTROLS /SIGNAGE SYTEM

There is serious issue of signage and violating architectural controls by the owner, sometimes people get bored by the concrete surface or not able to maintain the concrete surface, they try to paint, put other material on it, change its texture but these cannot be termed as good solutions. Owner wanted to identify their shops so there is possibility of exploration of digital signage system and interactive signage system but it should also be done very carefully in context to sector 17.



Fig. 14: Example of digital signage system for changing theme, colour etc.

Since the height of corridors is good enough to accommodate the building services like wiring, small air conditioner etc, so there is need to work out the new section to incorporate these things without spoiling its façade character.

6. CONCLUSIONS

City center has been designed to represent a new model of central business district center after freedom of India. Sector 17 has worked very well in past but it is not able to adapt the changes which required in new global economy and technological advancement of 21st century.

City center has very strong architectural character but it needs to adapt few changes which are required to fulfill needs and aspiration of people of Chandigarh. Chandigarh Administration is not very clear in its redevelopment plan due to its misconception about conservation of its heritage. It is adding to more problems which can be seen in its violation of building byelaws and architectural controls. It is very important to take decision on redevelopment plan now otherwise more haphazard growth likely to be happening in future.

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