



## **A Conceptual Approach for Development of Kukrail Nala, Lucknow**

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### **Abstract**

*With increasing pressure of population on urban areas, there is a corresponding increase in encroachment on open spaces. In order to make more urban areas available for development, a blue print of horizontal expansion was adopted, on which patterns of road configurations were stamped in complete disregard to potential land features, existing landscape and the rich architectural and planning heritage of the city. We may today rue the results but better would be that we attempt to correct some anomalies, however remote in character and intentions. Taking a cue from the aforesaid, this project is premised on planning, urban design and landscape proposals for a 2.5 km stretch of Kukrail Nala, Lucknow starting from the bridge on the Nala on Faizabad Road to a culvert on the Nala on Ring Road.*

### **1. INTRODUCTION**

Urban Design is the art of making convivial places for people, which ensures successful urban environment. But with the impact of increased development in high density urban areas, expression of our towns and cities has changed in the last few decades. Due to rapid urbanization, there is mounting pressure on land, resources of outdoor recreation - shorelines, green areas, open spaces, water, etc., which has diminished in the face of other land demands. The outcome of this is disastrous as people find it difficult to keep a relation with the nature.

All cherished historic cities of yesteryears paid due attention to the natural advantages of these sites on which they were built and that is why, despite common constraints, they were so different from each other. The intrinsic quality of these cities lies in their difference of character and attention to detail in the designing of their constructs. It is a pity that even architects, when entrusted with the job of planning their urban areas tend to overlook these parameters because of the enormity of the task.

Biological functions of human beings demand that he should breathe fresh air, enjoy leisure and take part in recreation. The distressing conditions of towns

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where people scramble for open spaces face every day continuous stretch of road packed with moving vehicles and contend with smoke filled sky in which human biological function gets disturbed.

Psychologically, a person is often oppressed by mechanized life of the city and he seeks a retreat, even for a while, in a park or woodland. Aesthetically the changing scene of the nature with seasonal variation is pleasing to him. The ornament also provides him the opportunities to pursue many educational, social and cultural activities which strengthen human mind as well as bodies and broadens understanding of the laws of nature. These factors have created a greater urge in people to move out to enjoy nature for some time. The objective of this study is to plan and develop the stretch of Kukrail Nala as a recreational stretch or leisure valley.

Kukrail Nala, along with its once overflow areas with width as wide as 200 meter originates from Kukrail Forest and runs in a zigzag pattern, collecting all the refuse of the adjacent evidential colonies. The problem derives its strength from an assumption that this huge piece of land with curative water of the Nala has been reduced to a trickle of dirty water. It can be easily reclaimed for urban development, instead of being left as ill-maintained green in the 2021 Master Plan of Lucknow proposals by containing it through underground sewage pipes.

## **2. A STUDY OF KUKRAIL NALA, LUCKNOW**

The study concerns the development of partial stretch of Kukrail Nala starting from the bridge on the Nala on Faizabad Road to a culvert on the Nala on Ring Road in Lucknow. Landform has developed because of once overflow of Kukrail Nala. The main access to the site is from a 40 meter wide Ring Road on the northern side. The site has positive potential for development as it is enclosed with residential areas of Indiranagar, Khurramnagar and Sarvodayanagar on the eastern, western and southern sides of the site respectively. A 7.5 meter wide embankment runs along the eastern periphery of the site. This landform is slightly contoured with a slope towards the southern side. Wild vegetation, bushes and scanty grasslands without many trees is present on the site. The total site area available for development is 125 acres.

The site is surrounded by unplanned residential zone, basically of lower middle income group. Residences comprise of two to three floor structures. The area lacks major commercial space for the residents, except for one unplanned road which results in traffic congestion and creates pollution. The area is highly cluttered and there is no breathing space for the residents.

The key issues to be considered while developing the site are:

- Retaining the land use pattern as per Lucknow Master Plan, 2021;



Fig. 1: Land Use Map, Lucknow

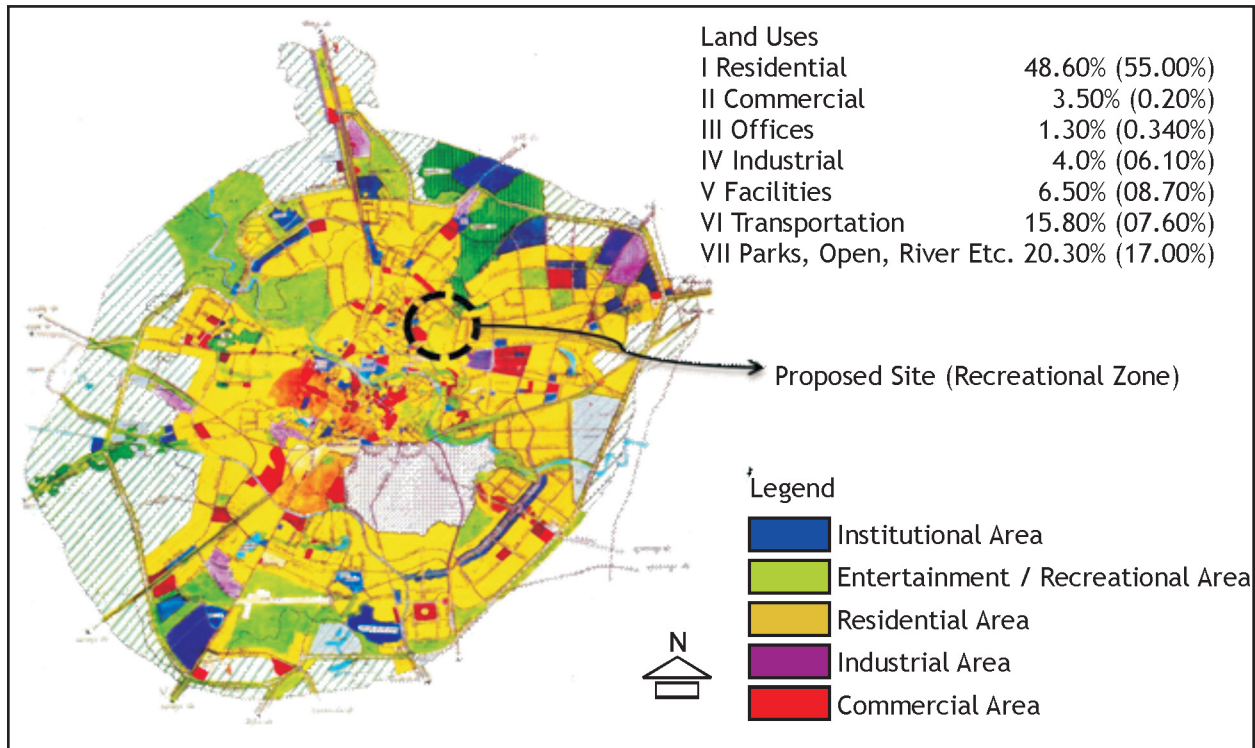


Fig. 2: Base Map for Study Area



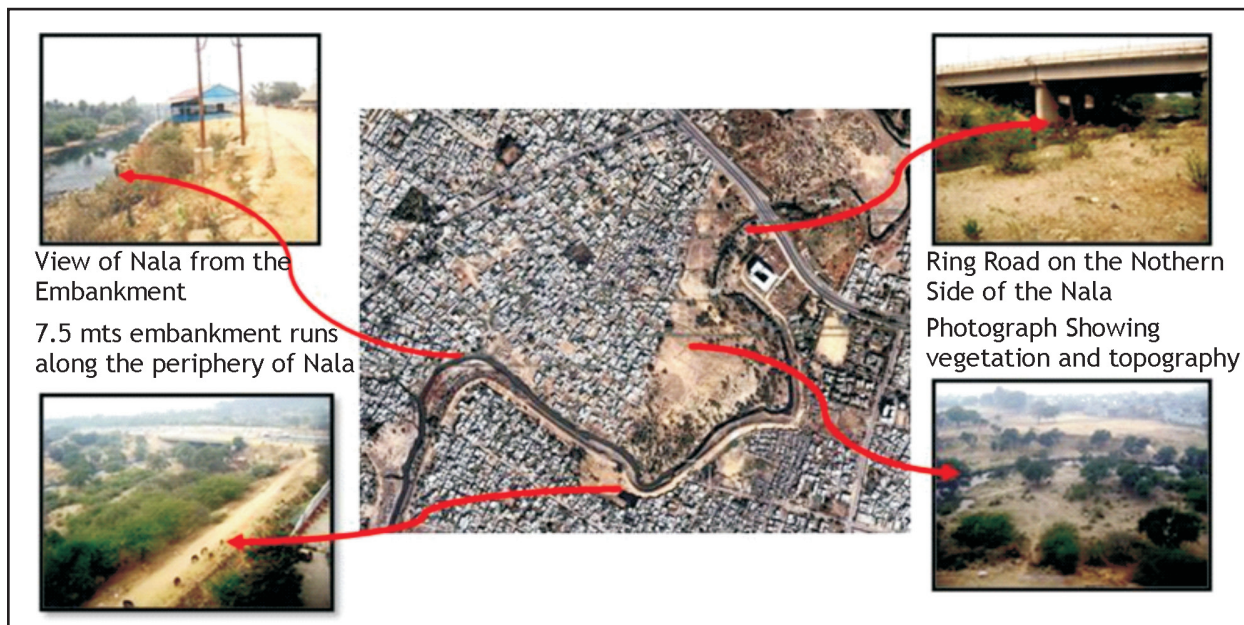
- To develop the site as a breathing space for highly dense residential zone;
- Proposing environment friendly landscape, which makes the scheme more viable;
- Maintaining the existing topography and natural environment of the site; and
- To harvest rainwater and use the same for landscaping.

### 3. DESIGN PROPOSALS

The concept of urban sustainability is kept in mind while preparing the conceptual proposal for development of Kukrail Nala stretch. The three triads considered for achieving urban sustainability are environmental stability, social adaptability, and economic viability.

Site development as per the UDPFI guidelines and Lucknow Master Plan, 2021 is earmarked as the Recreational Zone. Site will serve as a breathing space for surrounding residential areas as a

**Fig. 3: Site Environment**



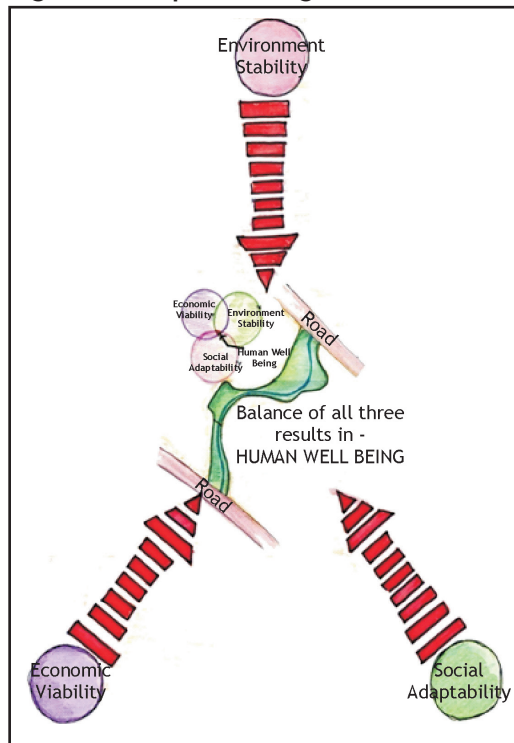
majority of it is developed as green. This will enhance micro-climate of adjoining areas.

Site will be developed as an active recreational zone which will generate revenue for development of land without pressurizing income of the people who reside all around the site. Theme park, sports complex and an underground Substrata market will act as major revenue generators as well as providing residents and shoppers enjoyable recreational facilities.

The residents welcome the prospect of providing hitherto scattered shopping areas into one major commercial hub where one finds all his need. Sports complex, jogging track and yoga center attracts residents and find unique opportunities for them to relax and spend their weekends.

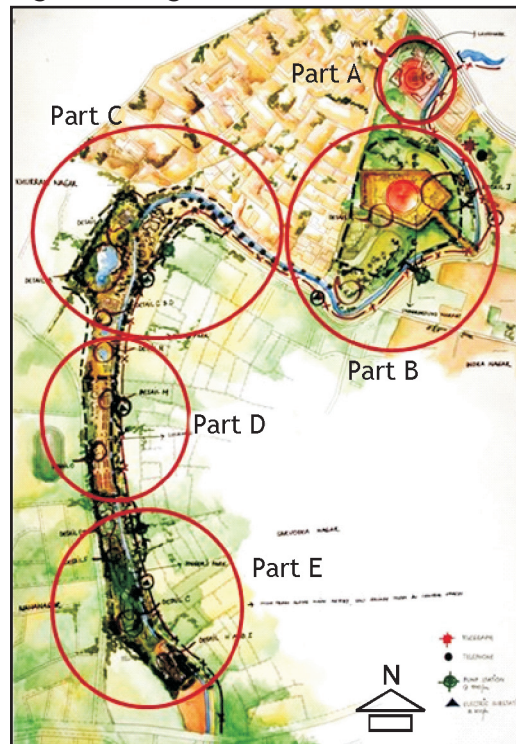
Zoning has been done as per the UDPFI Guidelines, Ministry of Urban Affairs and Employment, Government of India. The site is divided into three parts. Part A: Office Zone: It is located near the ring road. It has good economic viability as it is in close proximity to main road. Part B and Part D: Commercial Zone: This zone will serve as major shopping hub for the nearby

**Fig. 4: Concept Planning**





**Fig. 5: Zoning Plan**



**Fig. 6: Plan of Part A and Part B (Commercial Zone)**



surrounding areas. It will provide an organized solution to all the residents. This zone combines all scattered shopping areas into one zone. It will serve as major means of revenue generator for the site. Part C and Part E: Recreational Zone: This area will serve as the breathing space for the surrounding residential areas. Absence of any major park and green areas justifies its location. It will add to the overall aesthetics of the site besides also acting as a means of revenue generation. It will also help in maintaining overall micro-climate of the site and nearby areas.

As per the given program, the proposal meets the criteria on the following grounds:

- The embankment on the site periphery connects the Faizabad road with Ring Road and acts as a much needed city arterial road. Besides, it also provides very soothing and natural atmosphere for the pedestrian movement;
- The proposal includes all types of developments viz. commercial, residential and recreational without disturbing the natural topography and environment of the area. It acts as a breathing space for the residents of Sarvodayanagar, Khurramnagar and Mahanagar;
- The northern portion of the site has more builtup area as compared with the southern portion because there is already a park (breathing space) for

Indiranagar adjacent to Ring Road, but as per our surveys and requirements of the residents, there is no commercial shopping center located in that area;

- The southern portion of the site has theme based parks, jogger's park and weekly bazaar. They all commensurate with the natural topography and runoff the Nala stretch to give the development an organic character and suitable for pedestrian movement;
- Revenue generated from the saleable and leased area of the site will be more than enough for further development and maintenance of the site. All private sector players will get attracted to the site, as it is located in the heart of the city with very dense population and attractive economic feasibility; and
- On the extreme southern portion of the site, which is adjacent to Faizabad road, the rehabilitation clusters for the slum population are proposed.

#### 4. CONCLUSIONS

Demand for urban spaces will grow with the passage of time, which is likely to result in encroachment of open spaces. Hence there is an urgent need to develop green breathing spaces in between high density areas thereby providing healthy environment to urban dwellers. The proposal tries to create hale and hearty environment for the highly dense residential areas surrounding Kukrail Nala. The project will also generate revenue from commercial and recreational activities, which makes it economically viable.

#### REFERENCES

Government of India (2004) *The UDPFI Guidelines*, Government of India, New Delhi.  
 Government of Uttar Pradesh ( ) *Lucknow Master Plan 2021*, Lucknow Development Authority, Lucknow.

Fig. 7: Plan of Part C (Amusement Park)



Fig. 8: Plan of Part D and Part E (Joggers Park)

