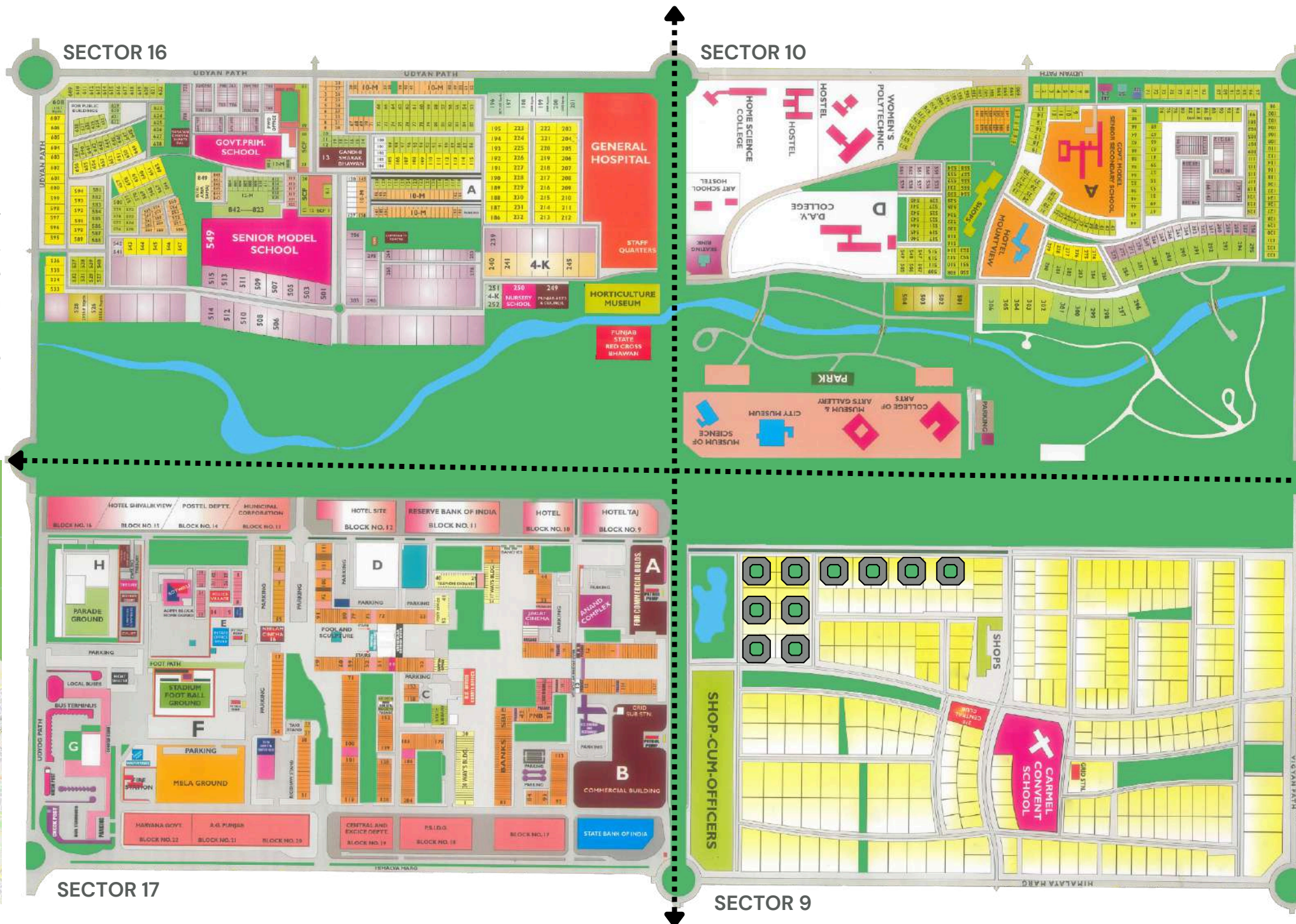
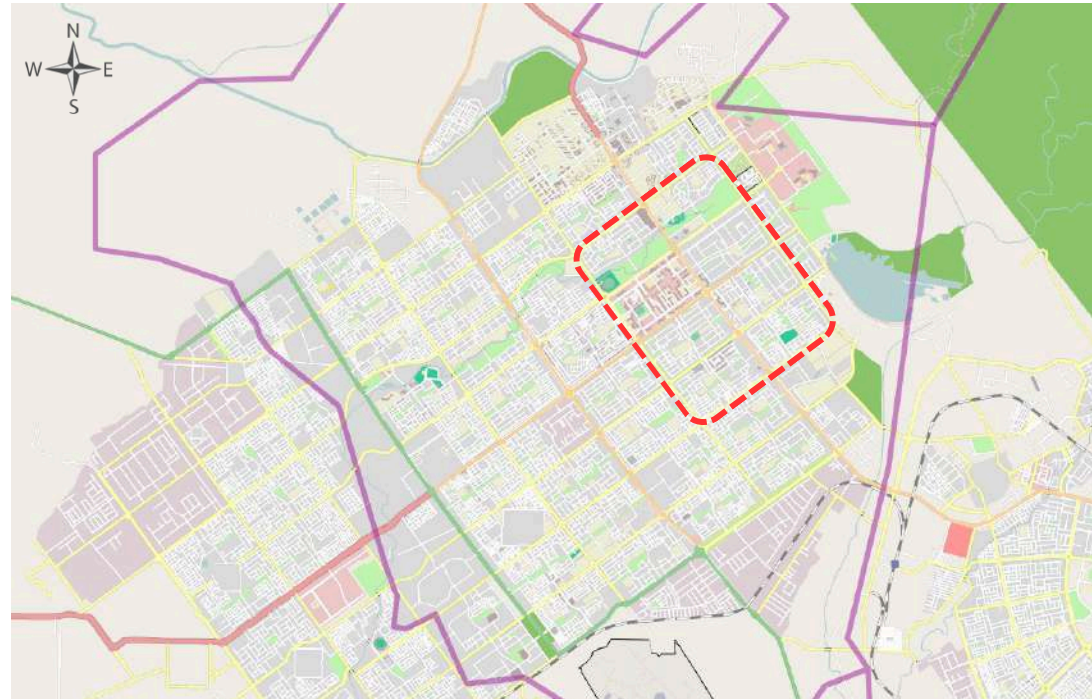


# URBAN PROJECT

## Chandigarh

Chandigarh was designed by Le Corbusier in 1951 for a maximum population of 500,000 residents, (initially 150,000) following a highly planned urban model with self-sufficient, well-defined sectors. However, the current population of the city exceeds 1,200,000 residents, more than double its original capacity and with 20% of its population living in slums.

With accelerated growth, projections suggest that by the year 2050, the population will reach 2,500,000 residents, posing significant challenges to sustainability and the preservation of the city's original design.



### PROPOSED INTERVENTION



#### Blurring the Boundaries Between the City and Nature

The proposal aims to dissolve the rigid boundaries between the urban landscape and nature by submerging major roads underground, allowing for seamless pedestrian and ecological connectivity. This approach reconnects the sectors surrounding the Leisure Valley, transforming fragmented urban spaces into a continuous green network. The removal of physical barriers promotes fluid interaction between natural and built environments, fostering an urban fabric where nature is not an isolated element but an integral part of daily life.

#### Integration of Small Reservoirs and Lakes with Vegetation

To enhance Chandigarh's ecological resilience and improve the quality of urban life, the proposal includes the creation of small reservoirs and artificial lakes surrounded by native vegetation. These water bodies will serve not only as aesthetic and recreational spaces but also as key elements for sustainable water management, supporting rainwater harvesting and groundwater recharge. The integration of aquatic ecosystems with green corridors will foster biodiversity, mitigate urban heat islands, and create microclimates that enhance environmental comfort.

#### Integrated Metro-Tram System for (dotted lines)

The proposal introduces a metro-tram system that runs both underground and elevated, ensuring efficient connectivity across the city. Underground sections will reduce urban congestion, while elevated tracks offer scenic views and minimize land use. This system promotes sustainable mobility, connecting key sectors seamlessly and reducing reliance on private vehicles.

#### SECTOR 17: From Parkings to PARKS

This proposal aims to convert all surface parking areas in Sector 17 into vibrant green spaces, enhancing walkability and urban livability. To maintain parking capacity, underground parking facilities will be built beneath these new parks. This transformation will promote social interaction, support local businesses, and improve environmental quality, making Sector 17 a greener, more pedestrian-friendly urban hub.

#### Proposal for Low-Density Collective Housing

To address population growth while respecting Chandigarh's original legacy, a low-density housing model is proposed, featuring **four-story buildings**. This approach seeks to minimize visual and structural impact while maintaining the city's human scale. The housing units will integrate design principles inspired by the Plan Cerdà, ensuring efficient urban planning and promoting community engagement.

- **Square Layout with Central Space:** Housing units will follow a square configuration, with an open central courtyard serving as a communal area for collective activities. This echoes the principles of the Cerdà grid, where open spaces and connectivity were prioritized.
- **Multifunctional Corners:** Inspired by Cerdà's integration of mixed uses within blocks, the corners of these complexes will house shared facilities such as libraries, workshops, urban gardens, and coworking spaces.
- **Connectivity and Green Corridors:** Emulating the green and interconnected avenues of Cerdà's plan, rooftop gardens and green corridors will link the housing units to surrounding natural areas, promoting a garden-city atmosphere and enhancing ecological balance.
- **Energy Autonomy:** Each unit will feature rainwater harvesting systems, solar panels, and waste management infrastructure, ensuring sustainability and reducing the ecological footprint.

#### Integration of the Plan Cerdà Principles in Chandigarh

The Plan Cerdà, originally devised for Barcelona, focused on achieving a balance between density, mobility, and public spaces. Its grid system promoted efficient land use and accessibility.

- **Scalability and Adaptability:** The low-density model ensures that housing remains flexible for future expansion while maintaining the visual harmony of the city.
- **Community-Centric Design:** Like Cerdà's emphasis on the human experience, this proposal prioritizes social cohesion through shared spaces and activities.
- **Sustainability:** Both plans champion green integration and efficient resource management as core elements of urban development.

By merging Le Corbusier's vision for Chandigarh with the adaptable and sustainable principles of the Plan Cerdà, the city can address future population demands while preserving its identity and functionality.

#### Ground Floors Dedicated to Local Commerce and Essential Services

In order to support a more sustainable and community-centered urban economy, the lower floors of residential buildings will be dedicated to local commerce and essential services such as small grocery stores, pharmacies, cafes, and workshops. This design promotes walkability, reduces dependence on large shopping centers, and strengthens neighborhood identity. Meanwhile, large commercial hubs and industrial zones will remain on the outskirts of the city, minimizing traffic congestion in residential areas while maintaining efficient logistics for the city's broader economic activities.

SECTOR 9, currently occupied by single-family homes, is proposed as the site for low-density collective housing to address population growth while preserving Chandigarh's legacy. The blocks are 1/4 of the Cerdà ones. The ground floor is 4m and the others are 3m.

