A CITY WITHIN A CITY:
From Urbanization Stress to the Relief Realm

A.A. 2022/2023
Student: Omar Mahdy
Supervisor: Michele Roda

Politecnico di Milano
Master Thesis
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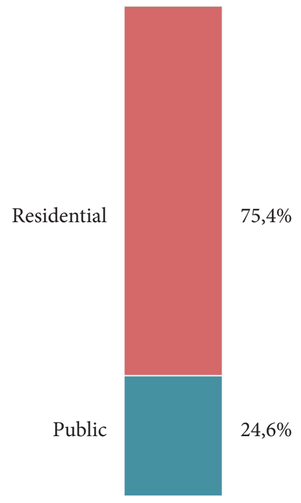
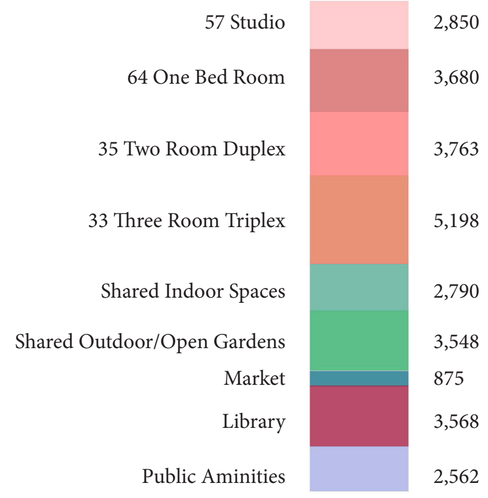
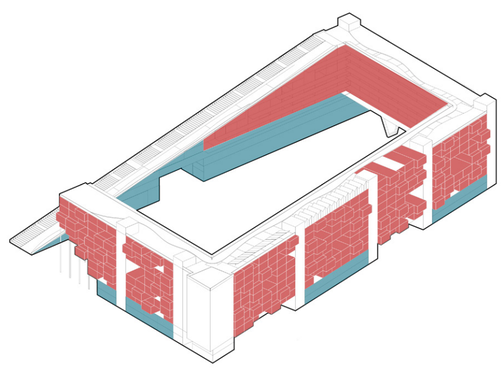
Main Axonometric



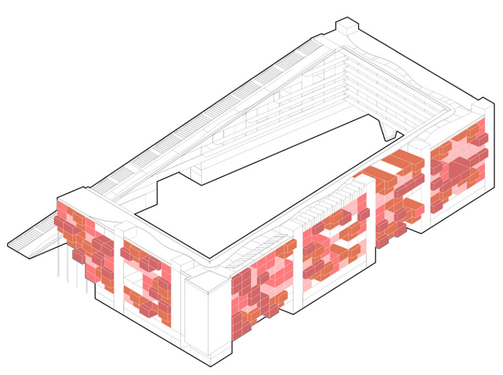


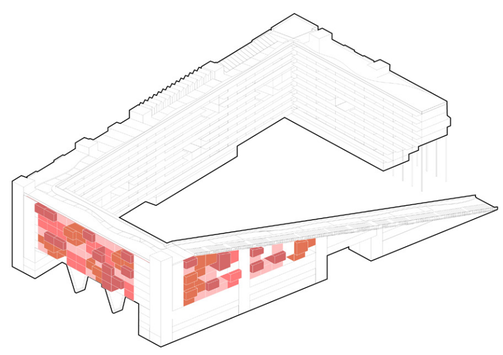
Total Functional Area = 28,834 m²
Total Gross Area = 34,662 m²
Ground Floor Footprint = 3,223 m²

Program Bars



Functions Diagram





Housing Typologies Diagram

Exterior Collage

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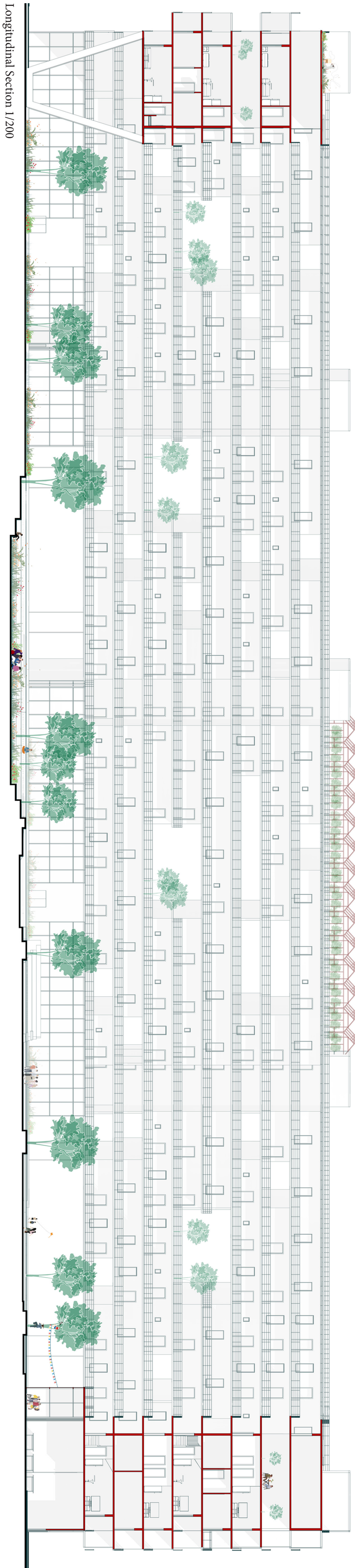
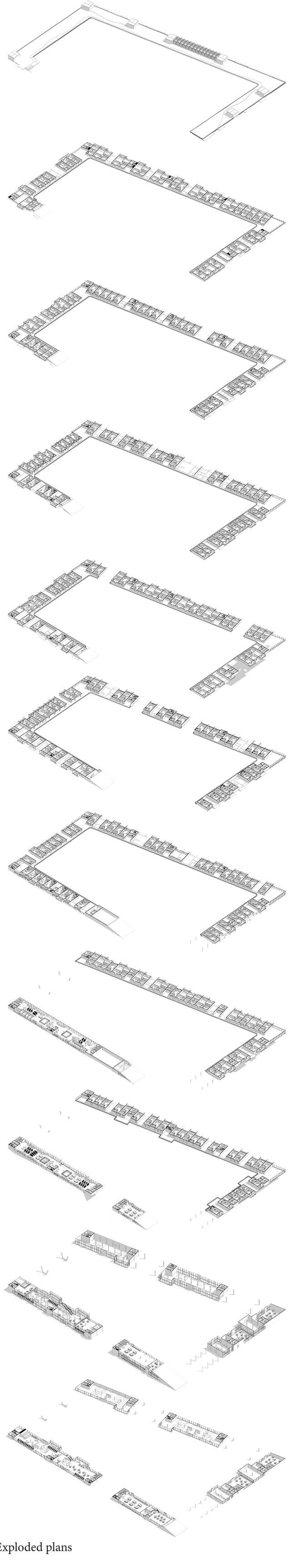
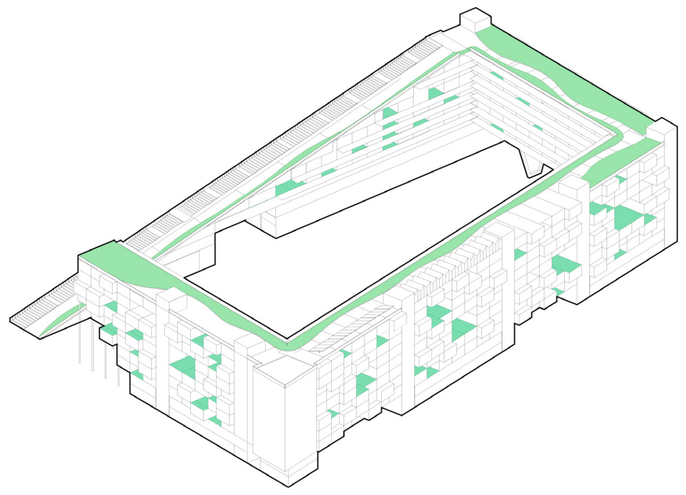
Longitudinal Section 1/200

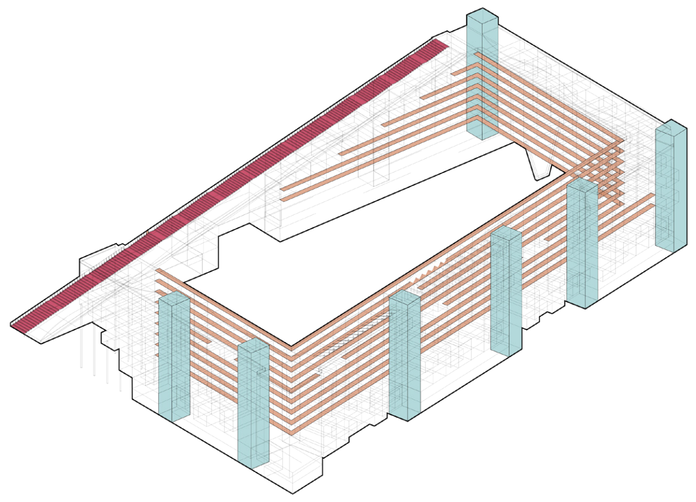




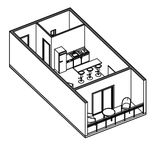
3D Exploded plans

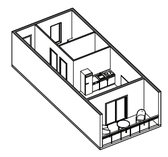


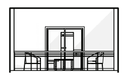
Green voids and Roof Top Diagram



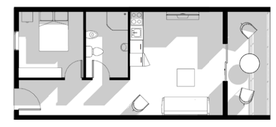
Circulation Diagram



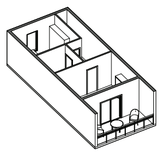


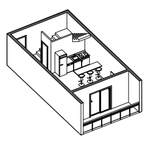


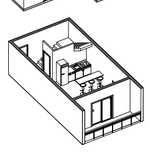
1 Bed Room

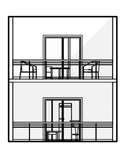


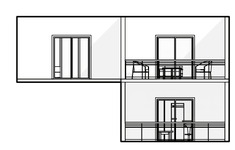
Studio Unit

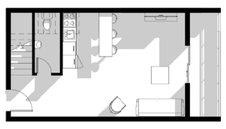












2 Bed Room duplex

3 Bed Room Triplex

Housing Typologies 1/200

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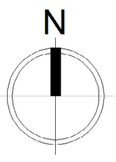


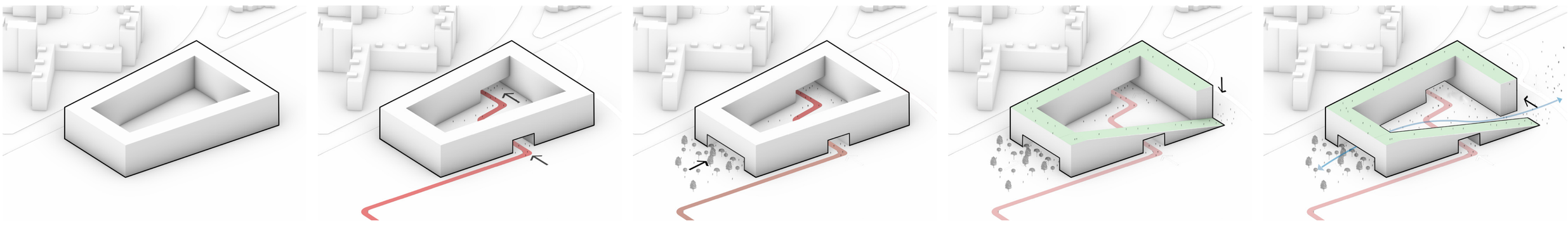
GROUND FLOOR PLAN 1/400

Outdoor Program

1. Edible Gardens & Orchards
2. Outdoor flexible market
3. Urban Farming
4. Nature Sanctuary
5. Outdoor Amphitheater
6. Playground
7. Outdoor Gym
8. Outdoor Art Gallery Classes
9. Outdoor Reading Space
10. Outdoor children area
11. Out door sitting & dinning
12. Outdoor cafe sitting
13. Outdoor Working space

Indoor Program

14. Market
15. Library
16. Co-working space
17. Cafe
18. Bike shed
19. Workshop/Art Gallery
20. Local Restaurants
21. Community Events Room



1. Courtyard: Creating a sanctuary for the residents in the heart of the block

2. Permeability: Respecting the existing route and enhancing the accessibility between outside and inside

3. Acting with: Respecting the existing vegetation by flipping-up the western facade

4. Open-to-all: Making the building accessible from the ground by facilitating the way to the green roof top which acts as a social layer in the project

5. Porosity: Make the courtyard fully accessible from 4 sides and thus foster the relationship between the building and the outer greeneries

Outside Perspective

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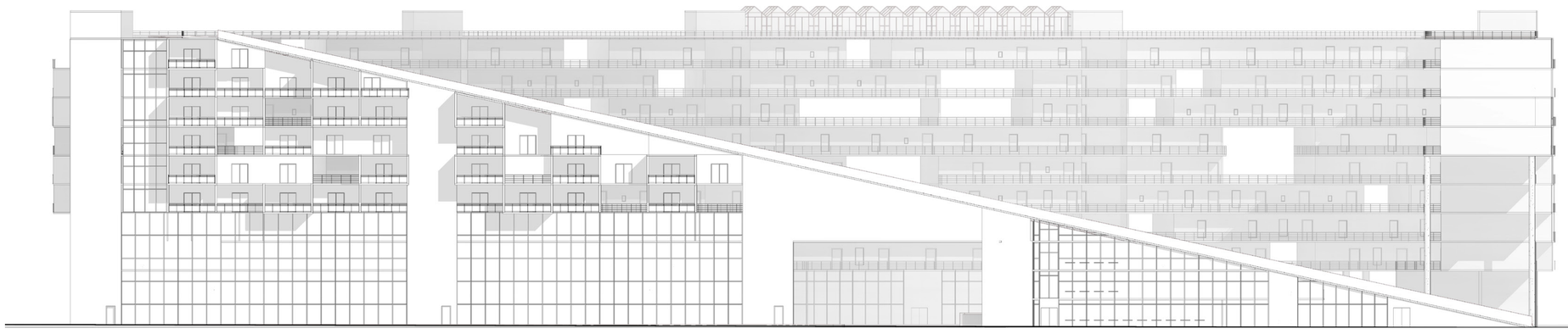
Edible Garden

Sixth Floor Plan 1/400



Southern Elevation 1/400

Northern Elevation 1/400

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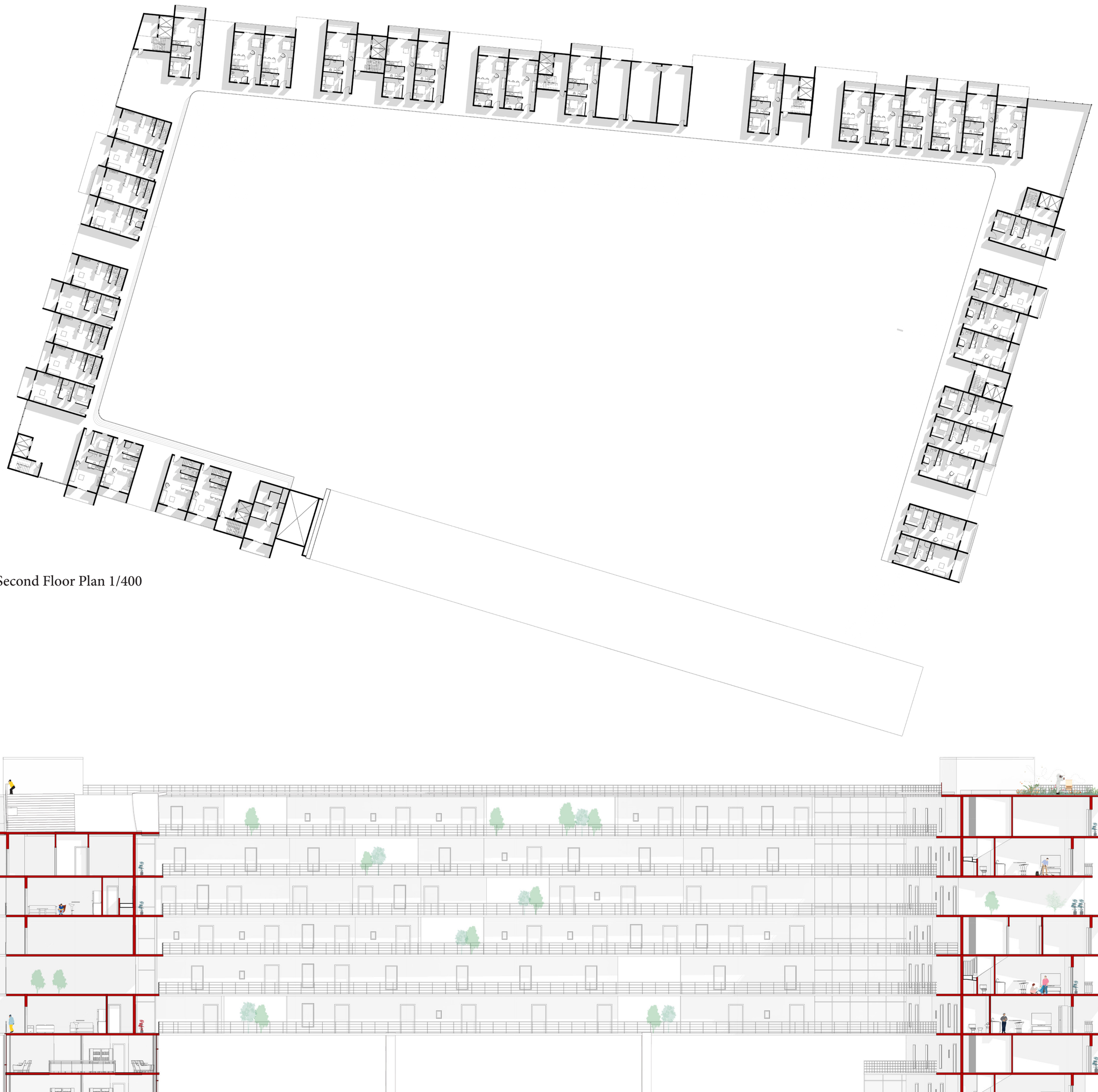
Urban Farming & outdoor Market



Second Floor Plan 1/400

Cross Section 1/200

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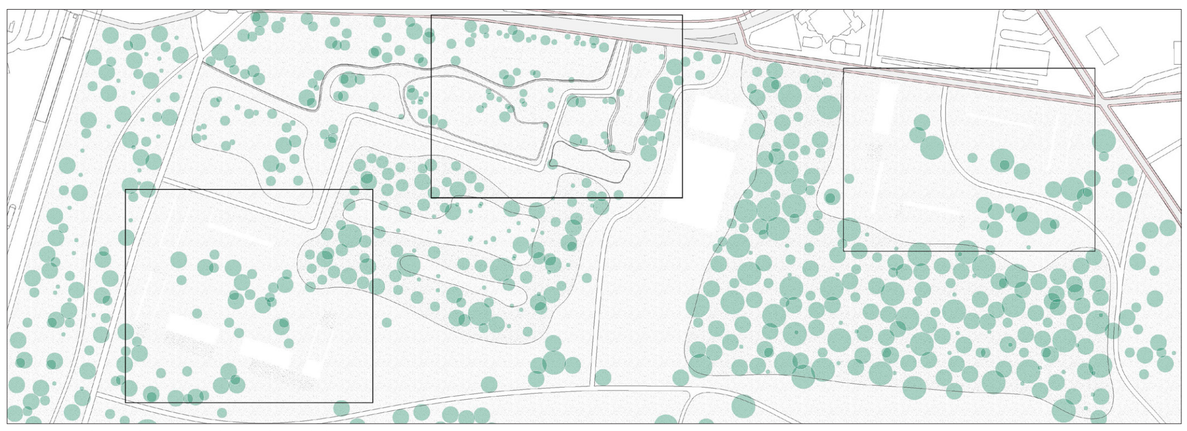
Master Ground Floor Plan, 1/1500

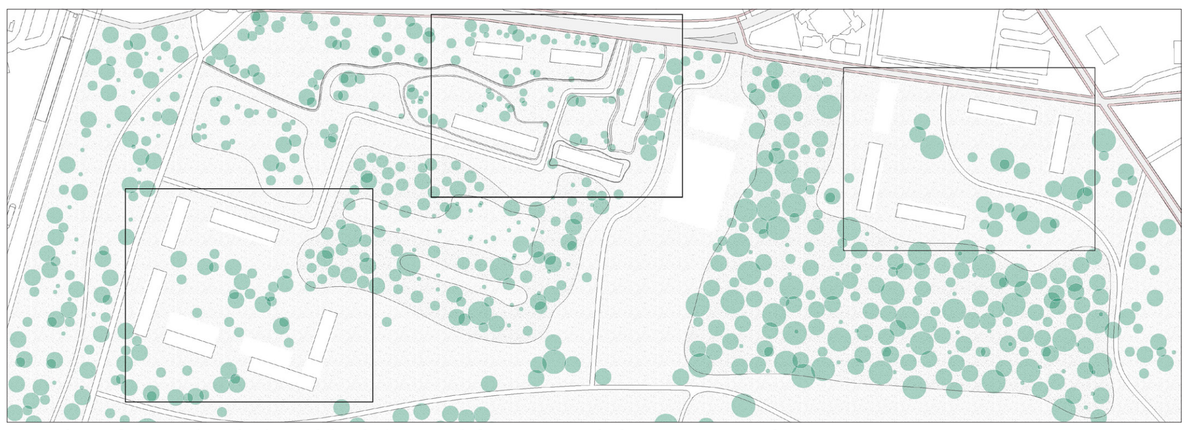
1. Existing situation

4. Islands landing on the site



2. Archipelagos (the islands) zones

5. Linking the islands with city streets

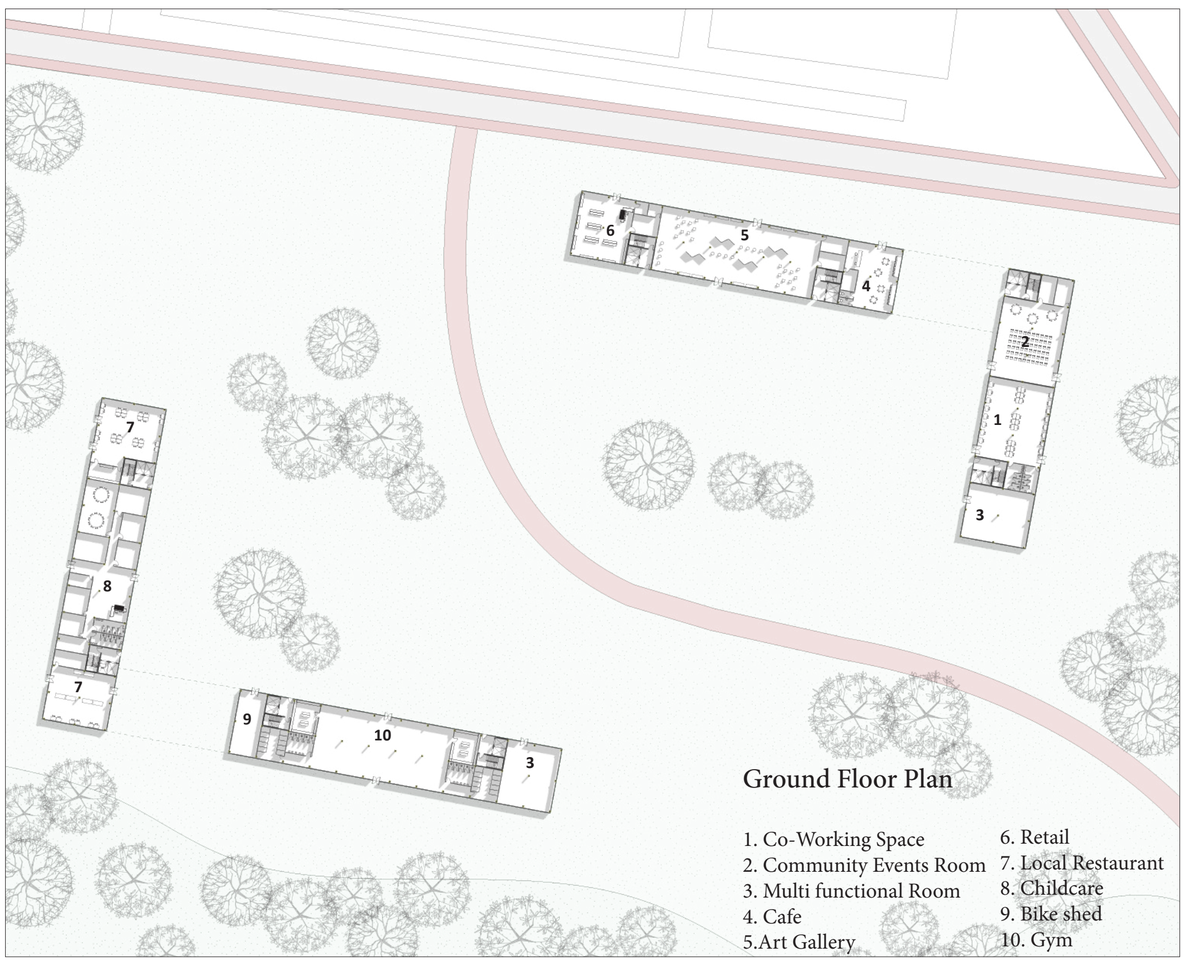


3. Identifying Islands (city blocks) initial footprint while respecting the existing greeneries

6. Grouping city blocks from the top floor and creating friendly indoor sanctuaries

Concept Development Schemes

Western Island, 1/800



Eastern Island, 1/800