



**TAYLOR'S
UNIVERSITY**

Wisdom • Integrity • Excellence

**SCHOOL OF ARCHITECTURE, BUILDING & DESIGN
BACHELOR OF SCIENCE (HONS) IN ARCHITECTURE**

ARCHITECTURE DESIGN PROJECT FINAL DESIGN REPORT

**HO XUN KAI 0334914
TUTORED BY MR. CALEB CHAN**



PERSPECTIVE view from street



03 Site Investigation & Contextual Studies

3.1 Macro site analysis

LOCATION PLAN

SITE PLAN



NEIGHBOURING BUILDINGS

1. CHOWKIT POLICE STATION



2. MENARA RAJA LAUT



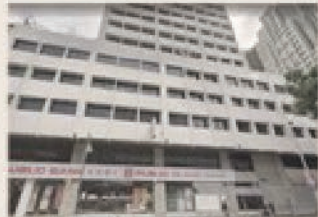
3. PLAZA GM



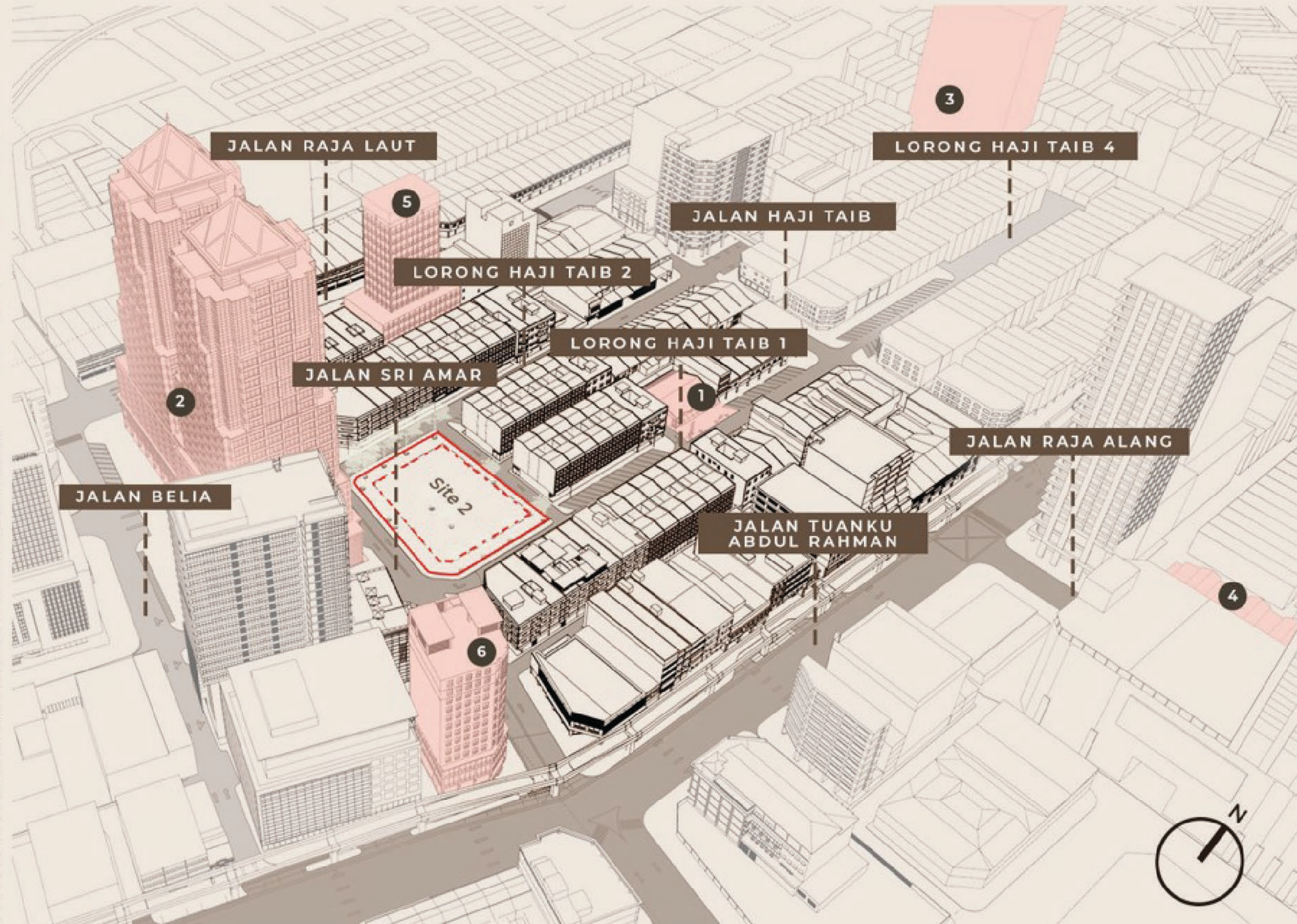
4. PASAR CHOWKIT



5. PUBLIC BANK



6. WP HOTEL



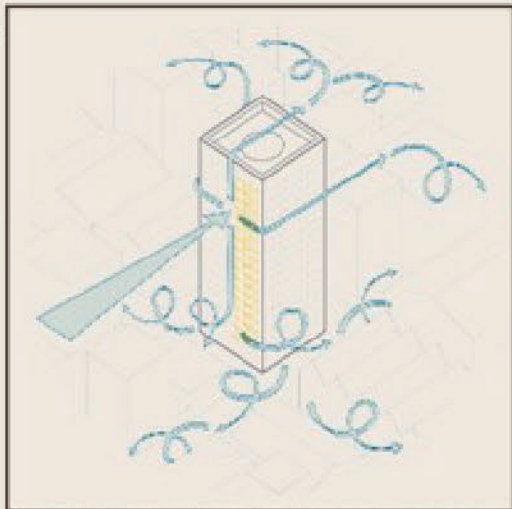
03 Site Investigation & Contextual Studies

3.1 Macro site analysis

LOCATION ANALYSIS

WIND PATH ANALYSIS

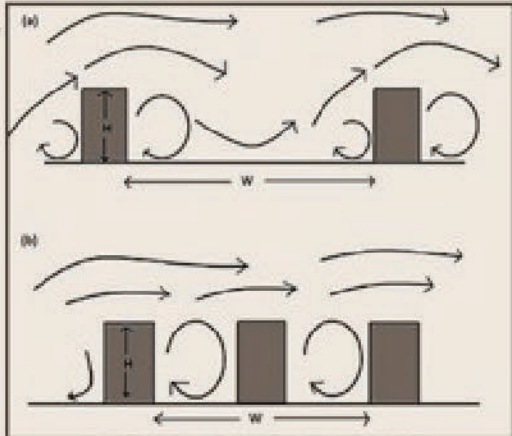
1.



WIND WITH HIGH-RISE

Due to the height of the high-rise building located South of the site, the prevailing wind there comes into contact with the building and disperse its directions. Therefore, the site will not receive a lot of strong winds.

2.

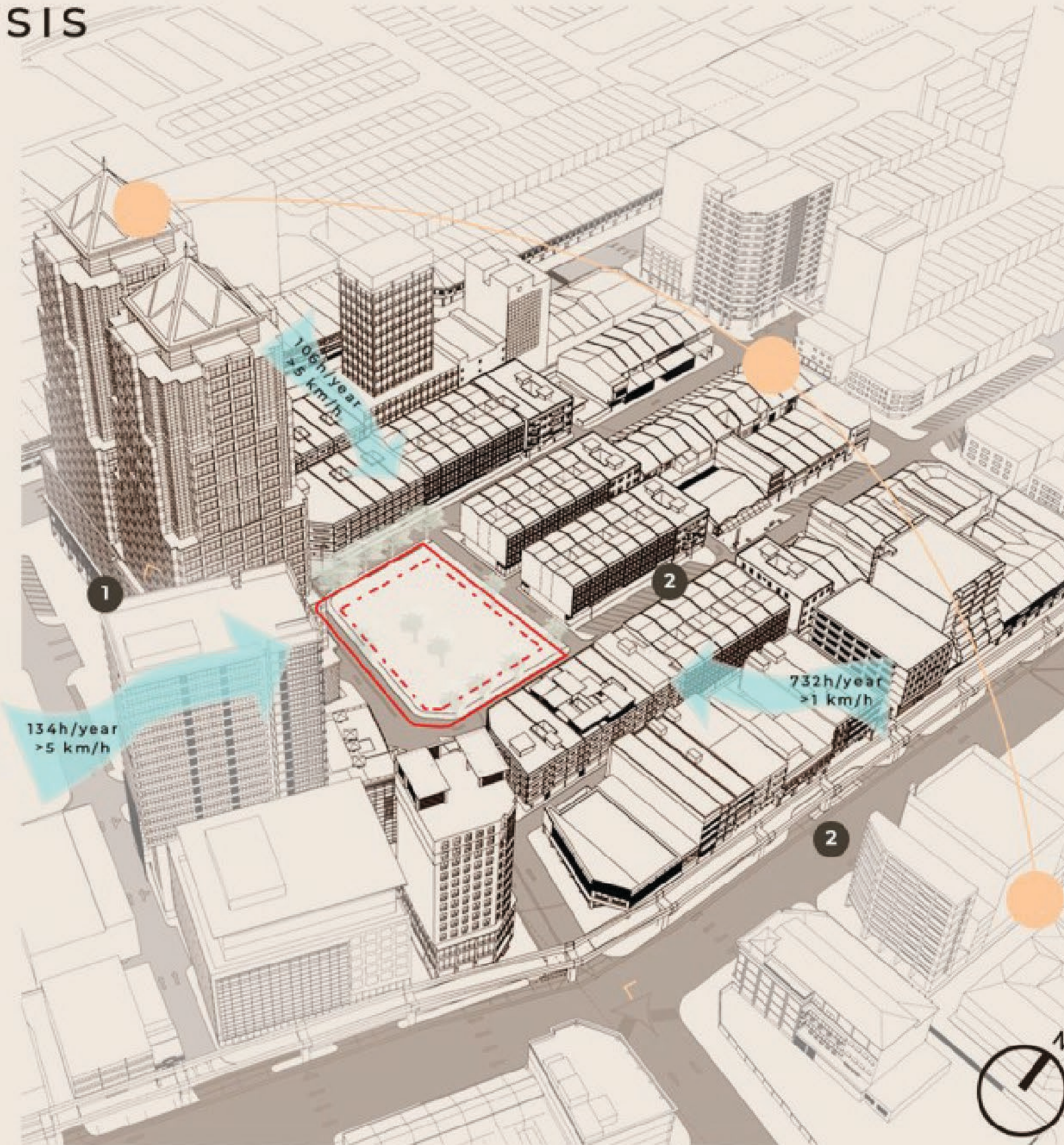


URBAN CANYON

The urban street canyon affects the temperature, wind speed & direction & air quality of the streets.

(a) Good flow of wind throughout the streets (Jalan Tuanku Abdul Rahman & Jalan Raja Laut)

(b) Bad wind flow causing higher temperature & bad air quality (Lorong Haji Taib 1 & 2).



SUN PATH & SHADING ANALYSIS



8 A.M.

During sunrise, shadows are formed in many parts due to the high-rise buildings in the surrounding area. The site still receives some sunlight as its not blocked by any high-rise.



1 P.M.

In the afternoon, the site & the surrounding area receives most amount of sunlight. Even so, the site is still adequately shaded by the surrounding trees.



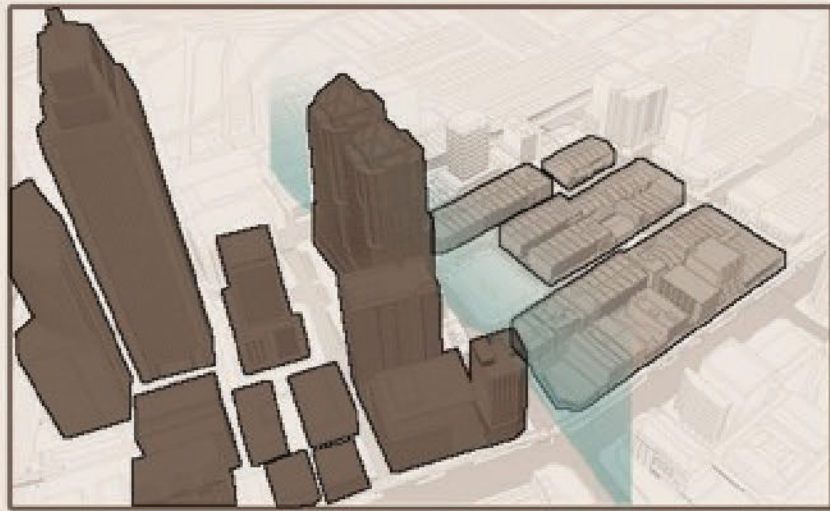
5 P.M.

Most of the area is almost dark during sunset. As for the site, it only receives light halfway. Therefore, artificial lighting is required before sunset.

03 Site Investigation & Contextual Studies

3.1 Macro site analysis

MACRO LEGIBILITY -EDGES



EDGE BY NEW & OLD DISTRICT

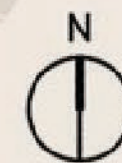


OLD DISTRICT



NEW DISTRICT

- EDGES BY NEW & OLD DISTRICT
- OLD DISTRICT
- NEW DISTRICT

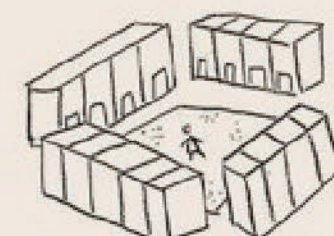
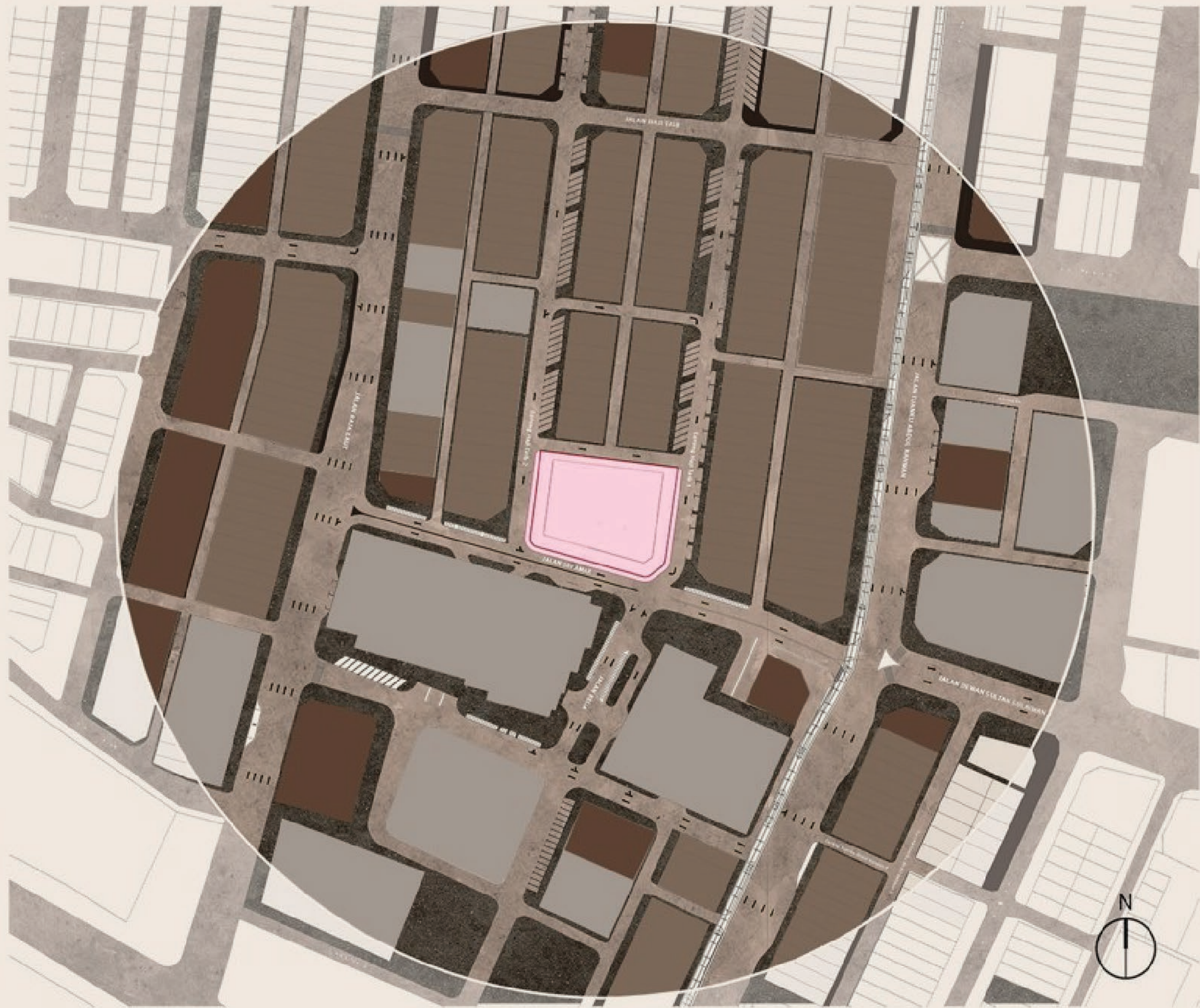


04 Design Strategy & Exploration

4.1 Micro Site Analysis

DISTRICT
- BY TYPES

- COMMERCIAL
- HOSPITALITY
- INSTITUTIONAL / PRECINCT



Site is located in a very commercialized area surrounded by shoplots.



Buildings in the outer layer surrounded by major roads are mainly institutional & hospitality buildings like banks & hotels.



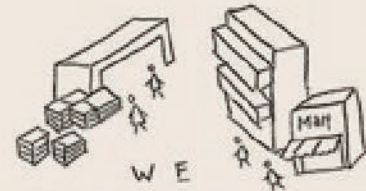
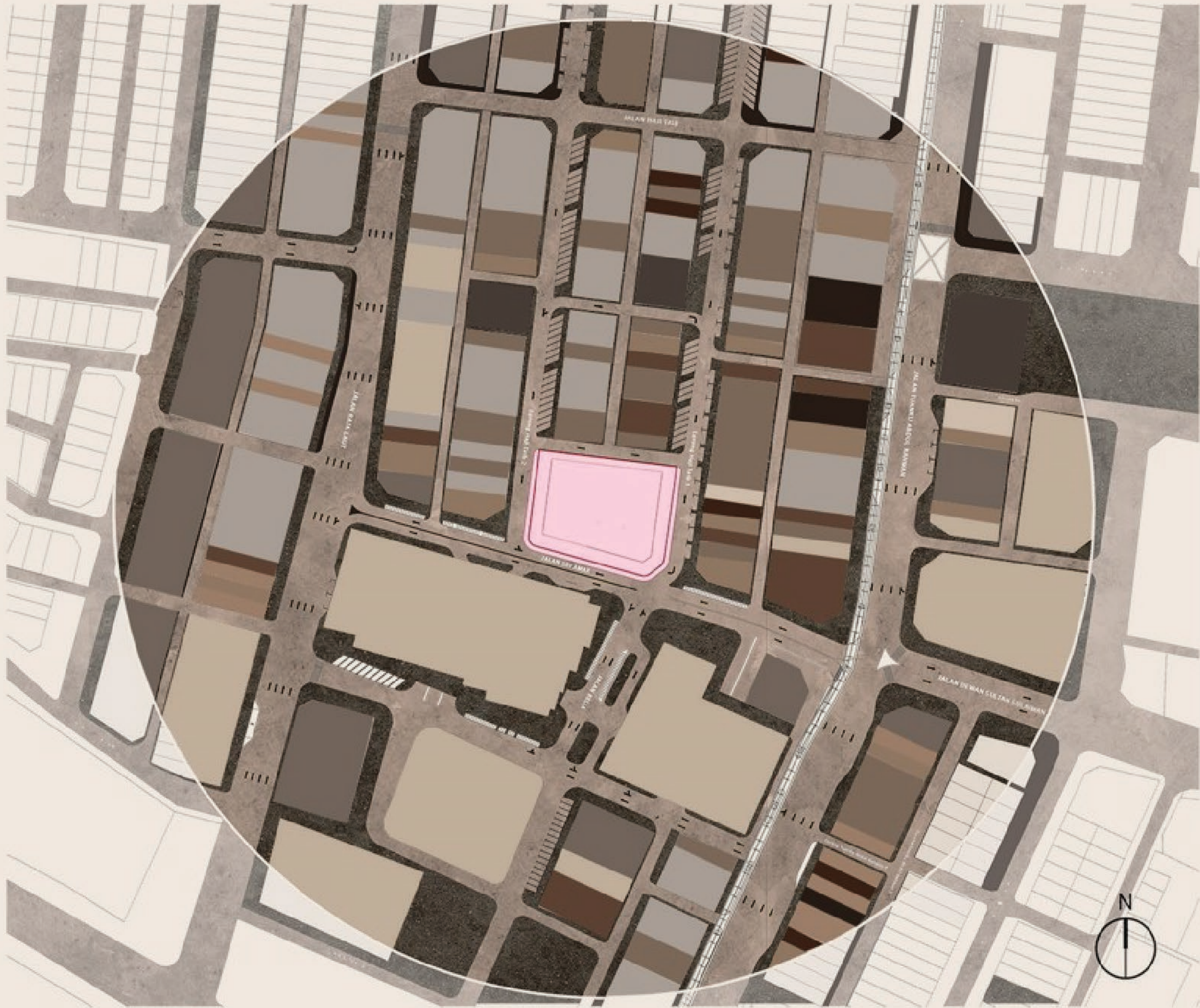
Buildings in the inner layer that are more secluded & hidden inside are smaller businesses & eateries.

04 Design Strategy & Exploration

4.1 Micro Site Analysis

DISTRICT - BY FUNCTIONS

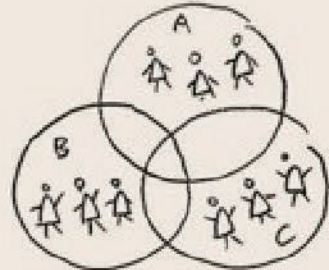
- WHOLESALE/
BUSINESS
- INSTITUTIONAL
- HOTELS
- VACANT
- MARTS
- EATERIES
- CONSTRUCTION
- MOTOR SHOPS
- GOVERNMENT
BUILDING
- ENTERTAINMENT
- MEDICAL



Shops at the West are mostly wholesalers while the East has more vacant buildings acting as residency for above levels. Hence, more marts & convenience stores are in the area.



In the South, there are more modern & high-rise towers. Bringing in white-collared workers to the site.

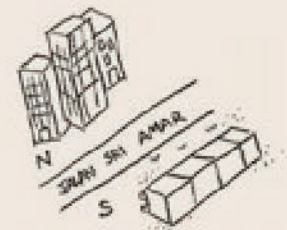
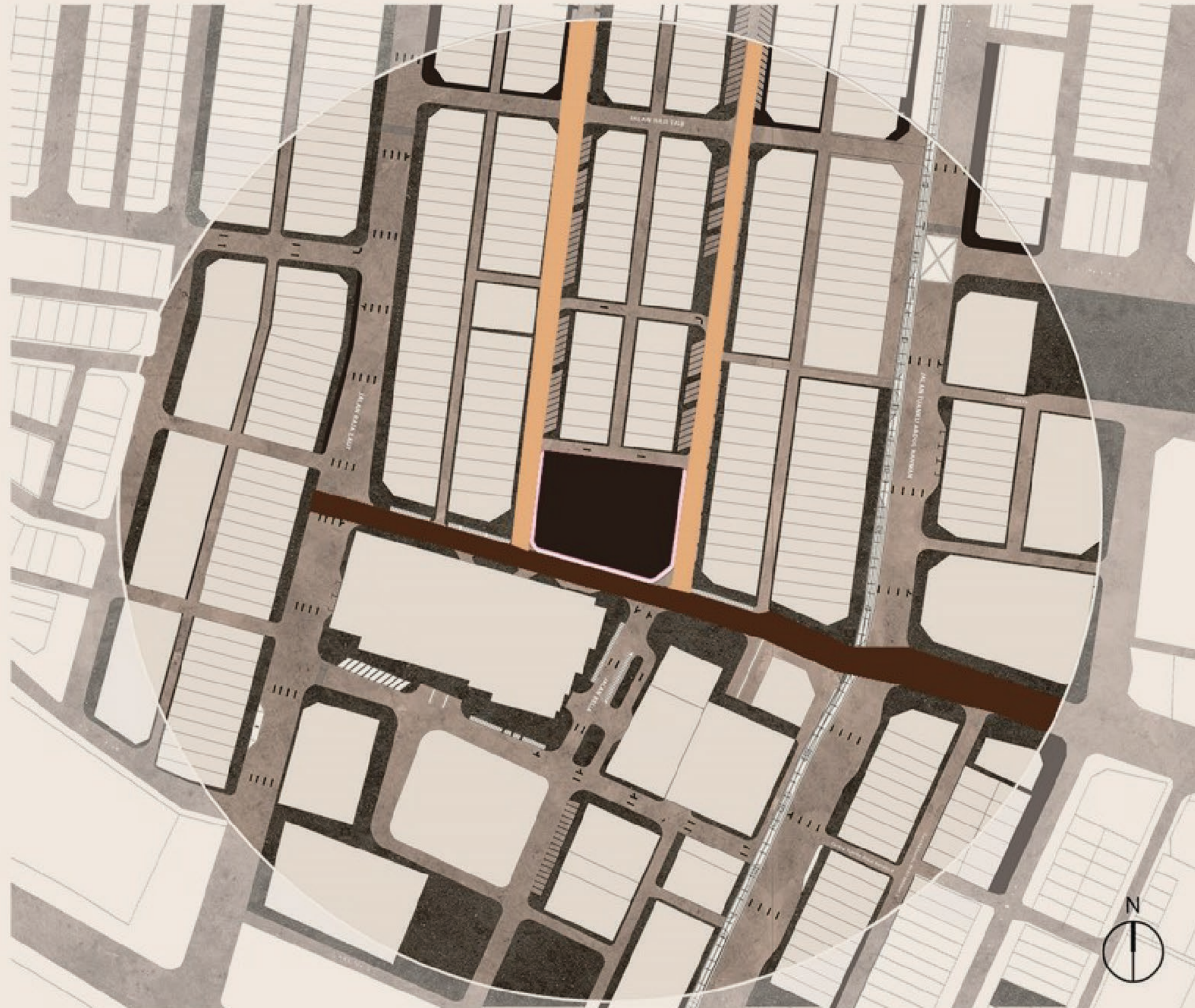


This creates a huge variety of demographics.

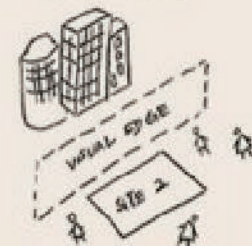
04 Design Strategy & Exploration

4.1 Micro Site Analysis

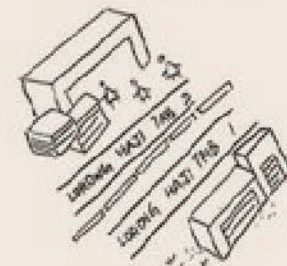
EDGES



Jalan Sri Amar acts as the major edge between the North & South (old & new)



Lorong Haji Taib 1 & 2 creates a segregation between the types of building functions. A separation between the wholeselling & vacant shoplots.

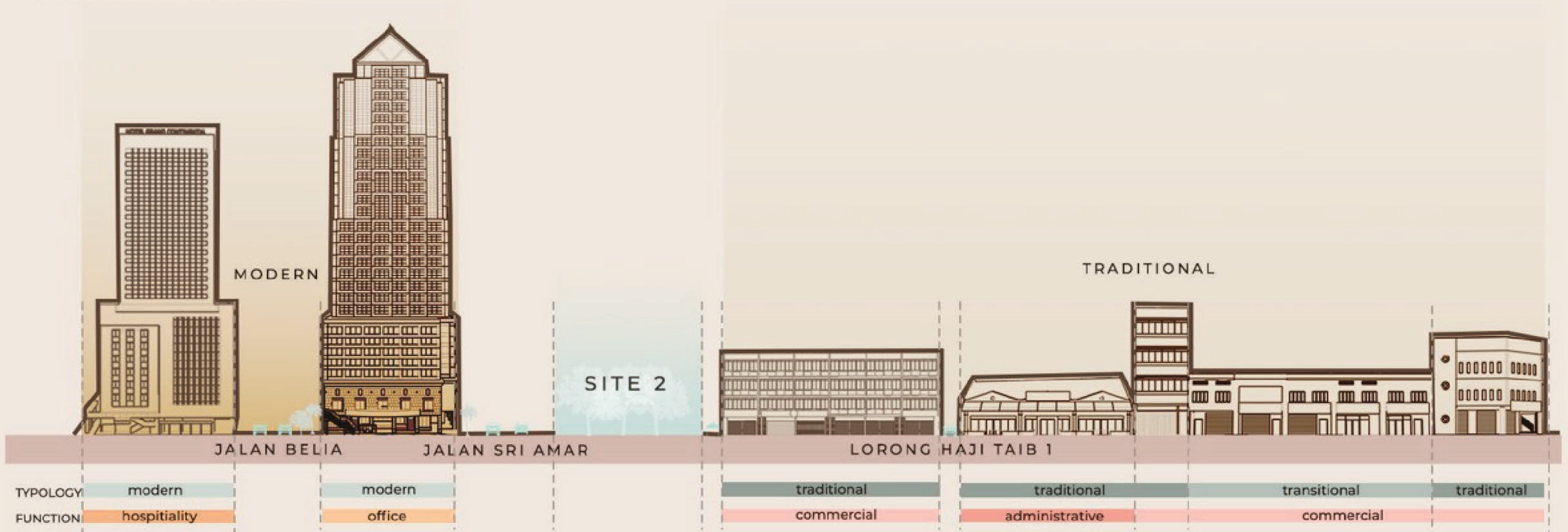


Site 2 is like a "visual edge" between the concrete jungle. A different scene from buildings to an open space. Like a warning where there would be a change in building style & scale when moving South.

04 Design Strategy & Exploration

4.1 Micro Site Analysis

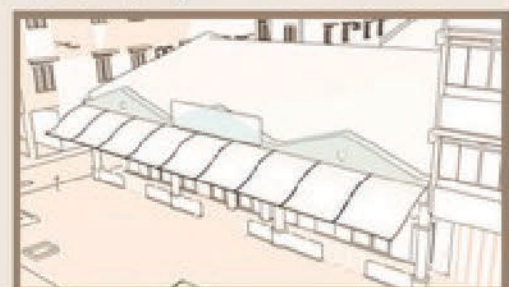
URBAN WALL -BUILDING TYPOLOGY



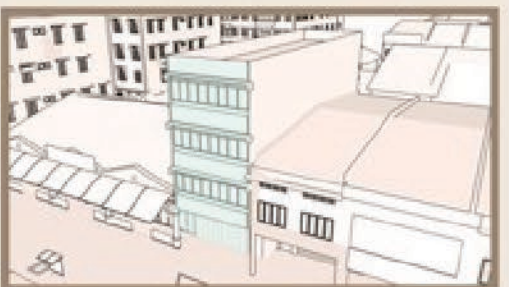
FACADE STUDY (traditional)



EGG-CRATE SHADING
Vertical and horizontal shading elements as shophouses' facade suitable for Malaysia's hot climate



TRIANGULAR PEDIMENT
The decorative triangle pediment shows a feature of the neoclassical inspired architectural style of the traditional Malaysian shophouse.



LOFTY
Presence of taller building in between two short buildings causes disruption of skyline.

MATERIALITY MODERN TRADITIONAL



wall tiles



tinted glass panels



metal window grilles



terracotta roof tiles

04 Design Strategy & Exploration

4.1 Micro Site Analysis

DEMOGRAPHICS



04 Design Strategy & Exploration

4.4 Design Narrative & Concept

NARRATIVE & DESIGN CONCEPT IDEA -NARRATIVE

ISSUES



busy doing work,
stressful



alot of noise vehicle &
workers loading /
unloading goods



lack of public space for
them to gather and relax
also do exercise to keep
their body healthy



children sitting on the
floor besides their
parent's food kiosk

Design Narrative

RECHARGE

They are overwhelmed by the daily stresses of daily life, so provide a place where they can refresh themselves, put life's worries aside, recharge their batteries in a comfortable environment for a while, and move on

to create a urban park to let gather all people around the site to our site and release their stress

create a urban park that remain the greenery of the site, allow people in city to have a break from city & rest in surrounding that with alot of nature

Exposure to nature not only makes you feel better emotionally, it contributes to your physical wellbeing, reducing blood pressure, heart rate, muscle tension, and the production of stress hormones

HOW TO RECHARGE

how to recharge?

- healing
- meditation
- calm
- very comfortable and relaxing
- walk around or have a small park allow jogging serrounding by natural environment



4.5 Proposed Programs for Target User

SPATIAL PLANNING
-PROGRAM &BUBBLE DIAGRAMS

PROGRAMES

Open park with natural environment

Kopitiam

Light Exercise

Urban Farming

cafe with relaxing music

self learning area, reading area

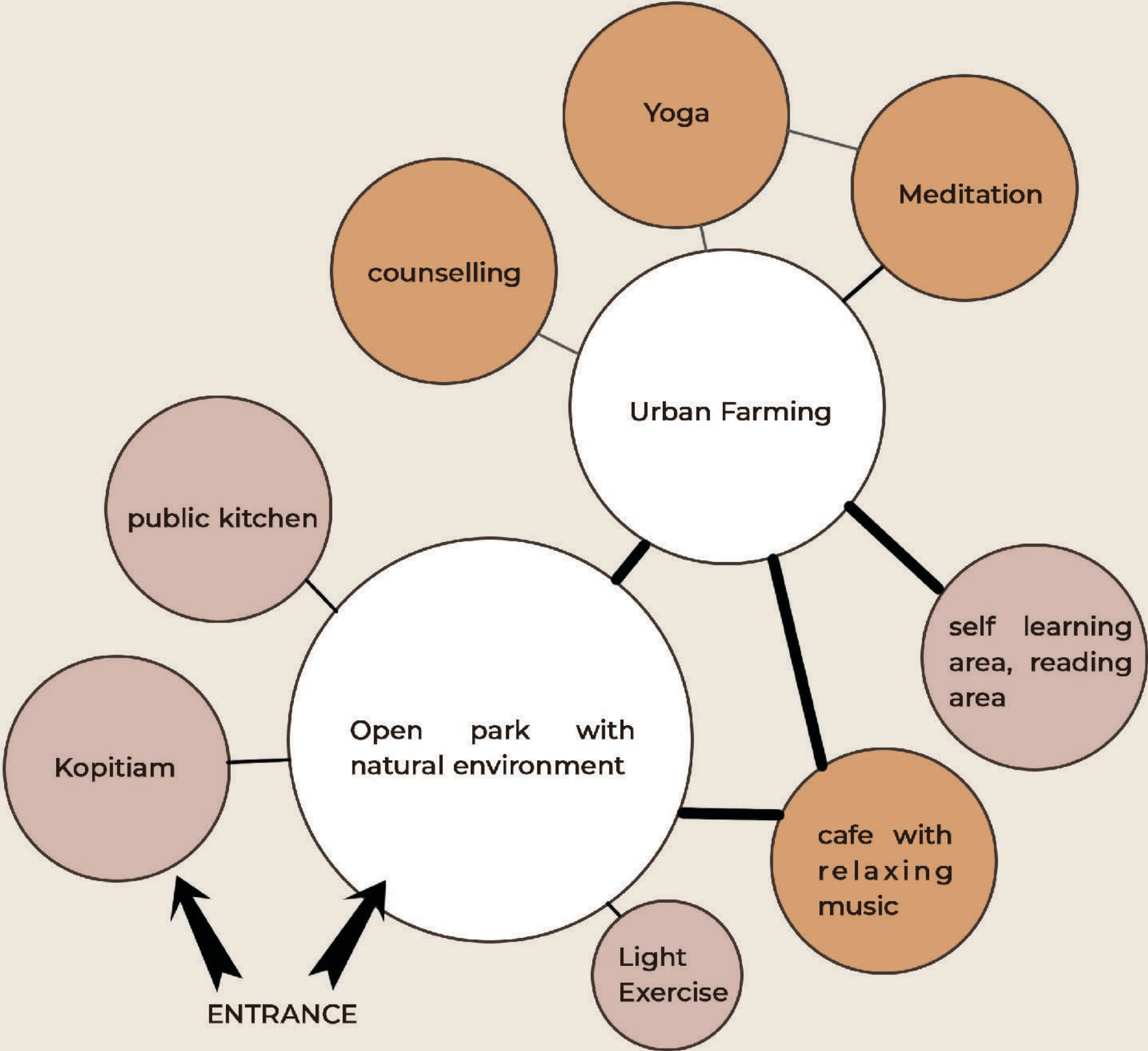
Meditation

Yoga

counselling

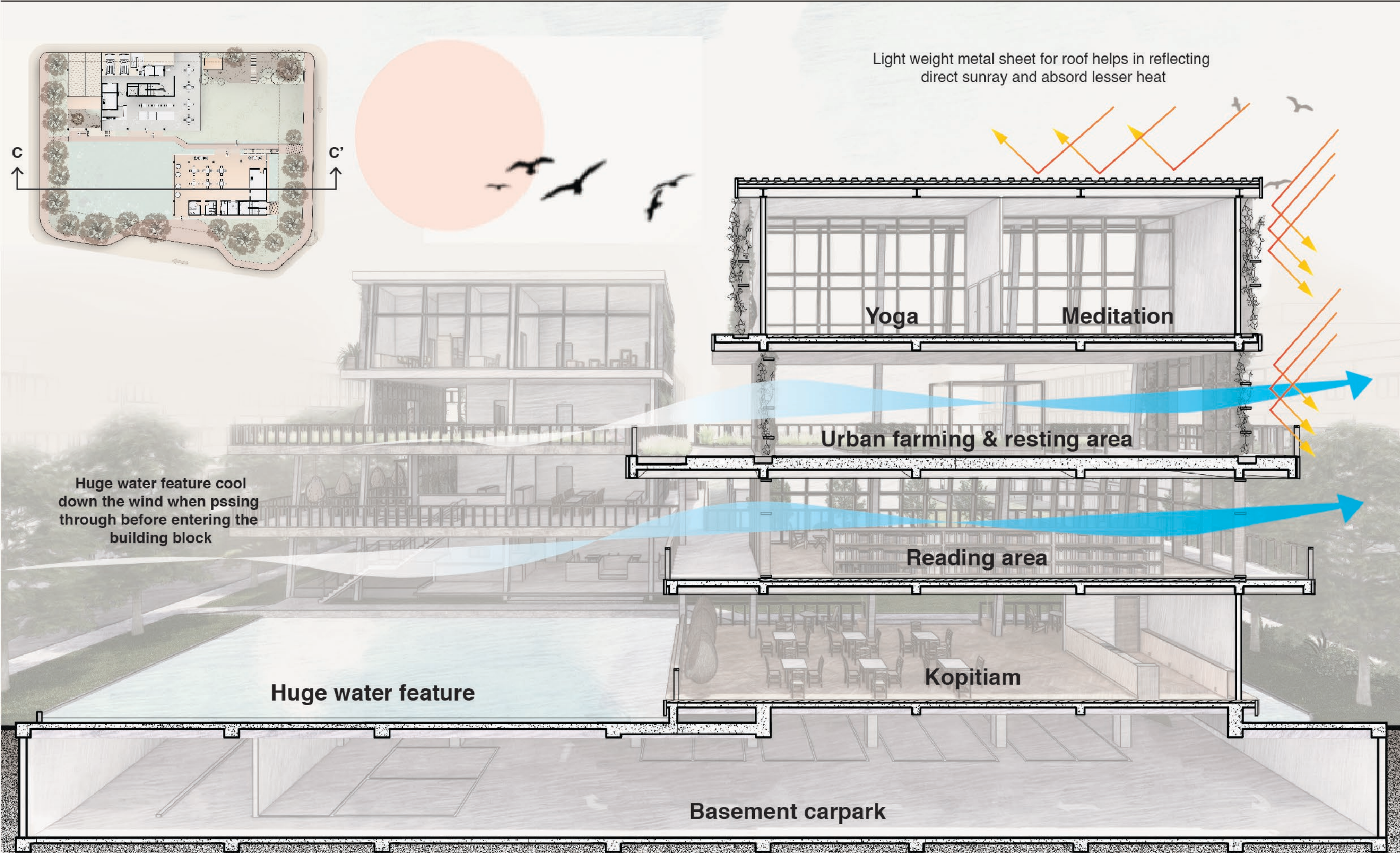
Public kitchen

BUBBLE DIAGRAMS



05 Technical Components

5.1 Passive Design Strategies



05 Technical Components

5.2 Material & Building System



Metal sheets
roof



Timber



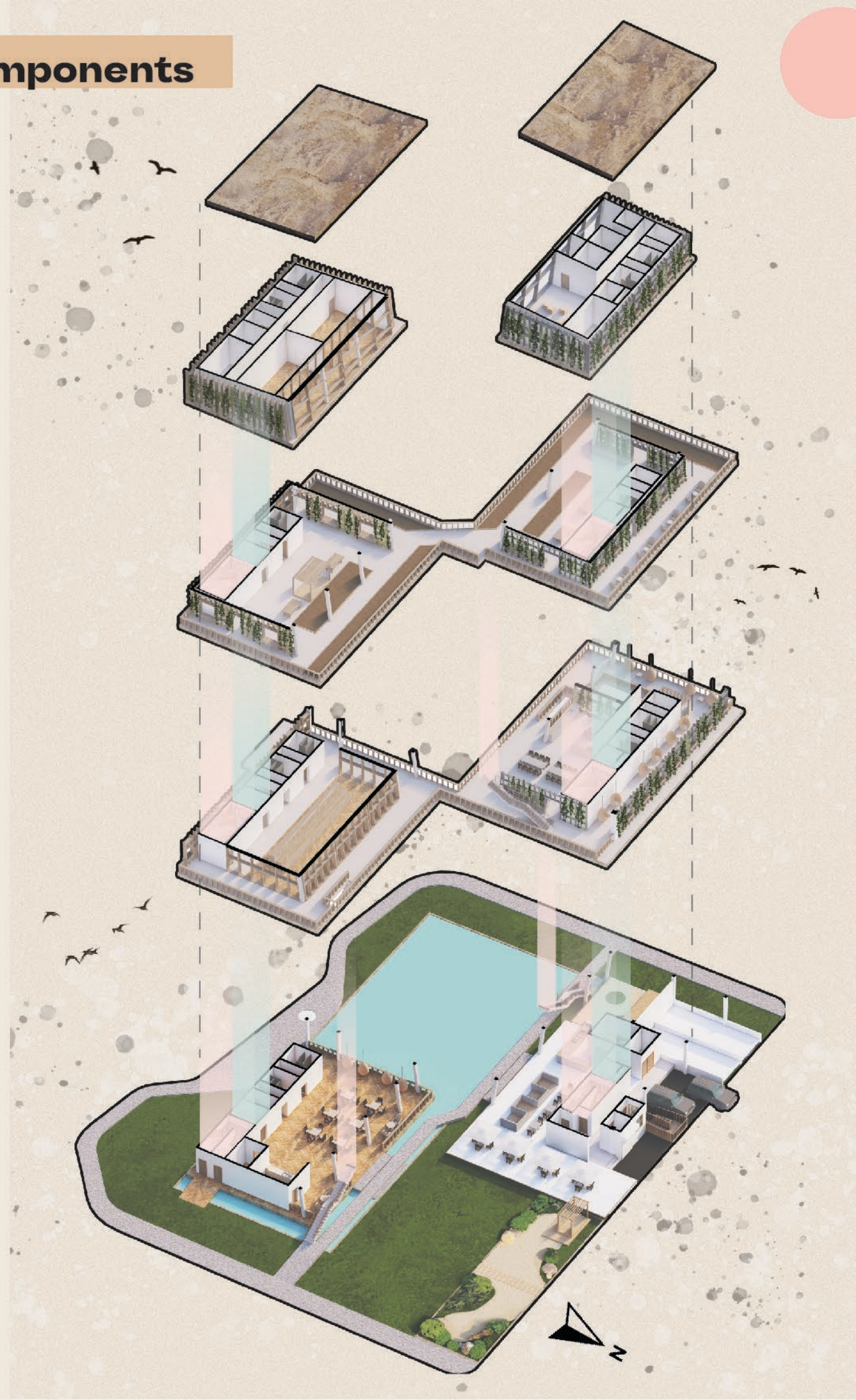
Reinforce
Concrete



Natural Stone
Flooring

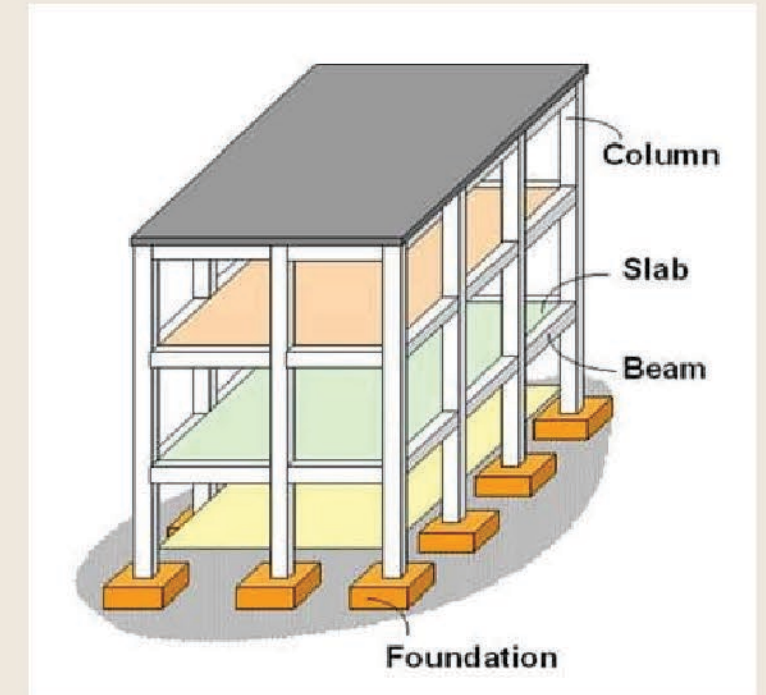


White sand
and gravel
(zen garden)



Structural System

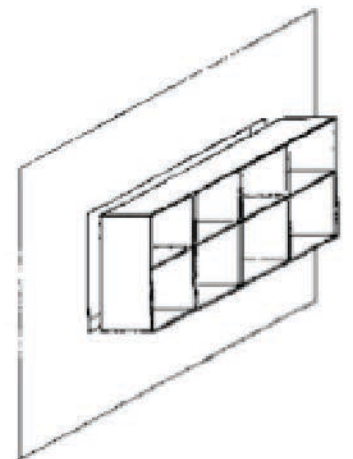
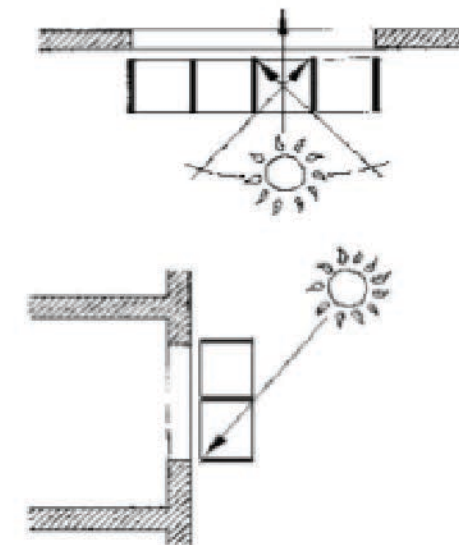
Reinforced Concrete Frame Structural System



Facade

Egg crate facade finishes:

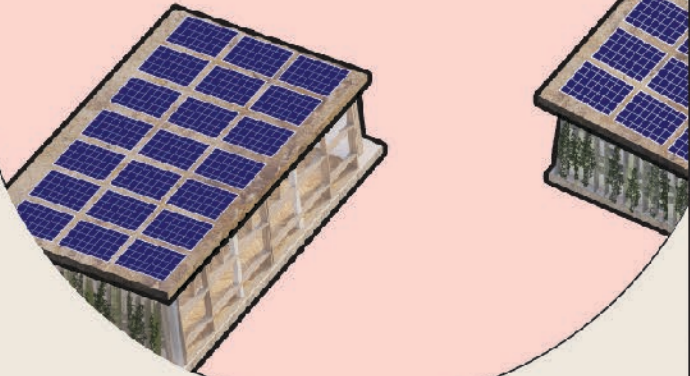
- Concrete egg crate facade
- timber egg crate facade



5.3 Innovations

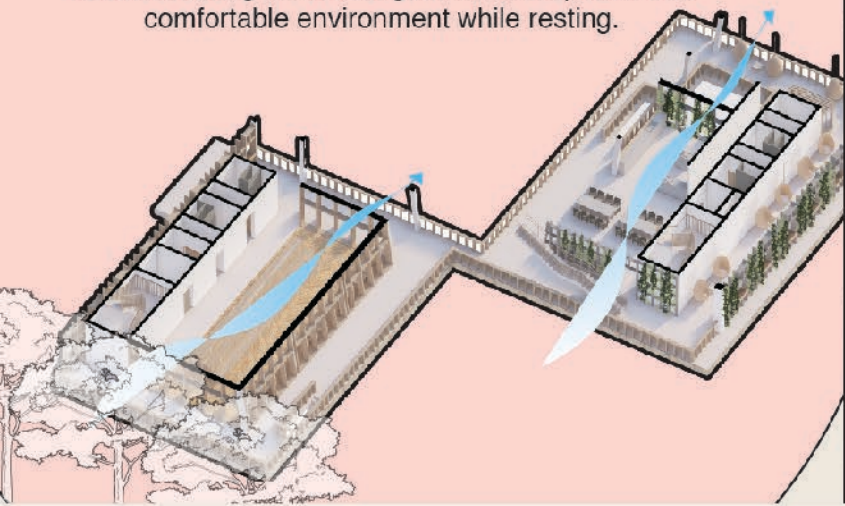
Solar Panel

Solar panel installed on the roof with angle that able to received maximum amount of sunlight to create renewable energy to use.



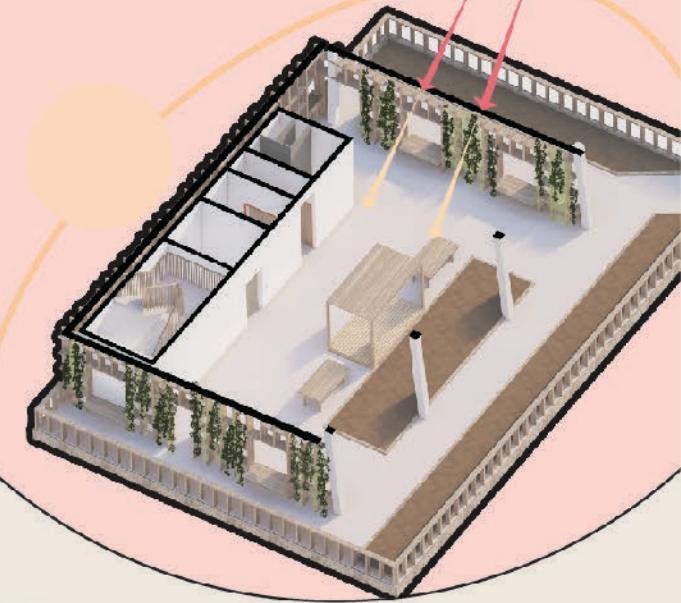
Natural Cross Ventilation

Most of the building having big opening on both side of the building block to allow natural cross ventilation. Also, trees and greeneries will cool down the wind before entering the building, this will keep user in a comfortable environment while resting.



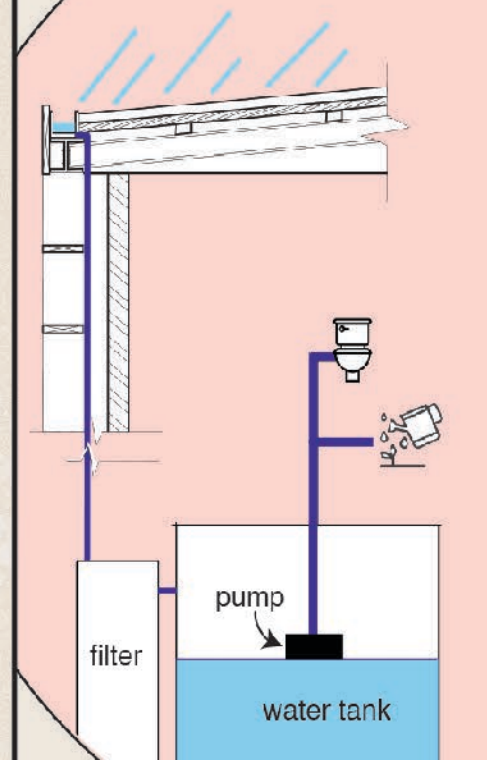
Egg crate facade with plants

Wooden and concrete egg crate act as sun shading to filter direct sunlight, at the same time reduce glare into building. greenaries on facade reduces heat gain and provide a cool and shaded comfort environment to user.



Rainwater Harvesting

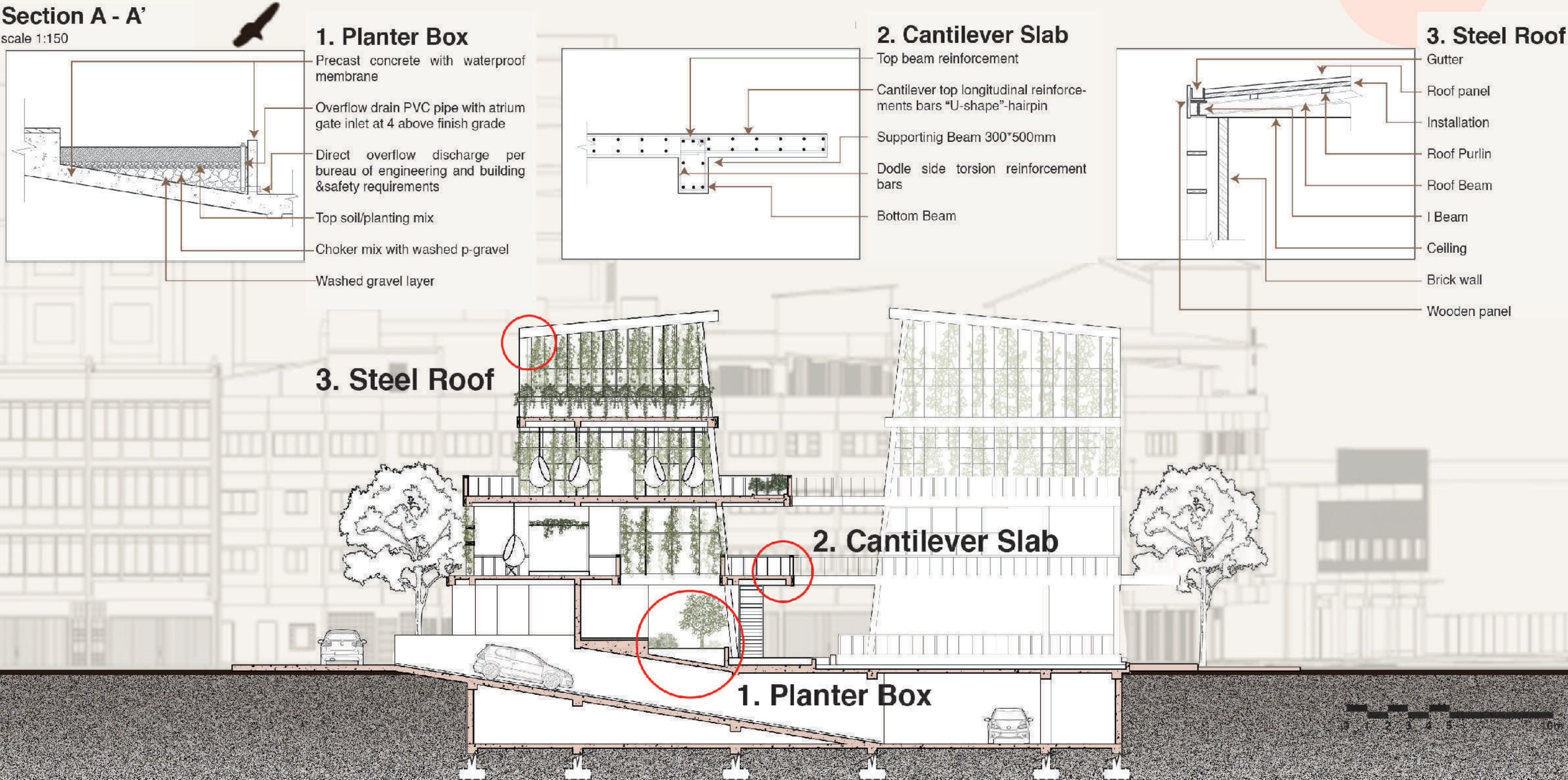
Rainwater Harvesting collect rainwater from roof to gutter then passby filter store it in water tank for flushing toilet, watering vegetation, also for water feature on site.



05 Technical Components

5.4 Architectural Detailing (Sectional Details)

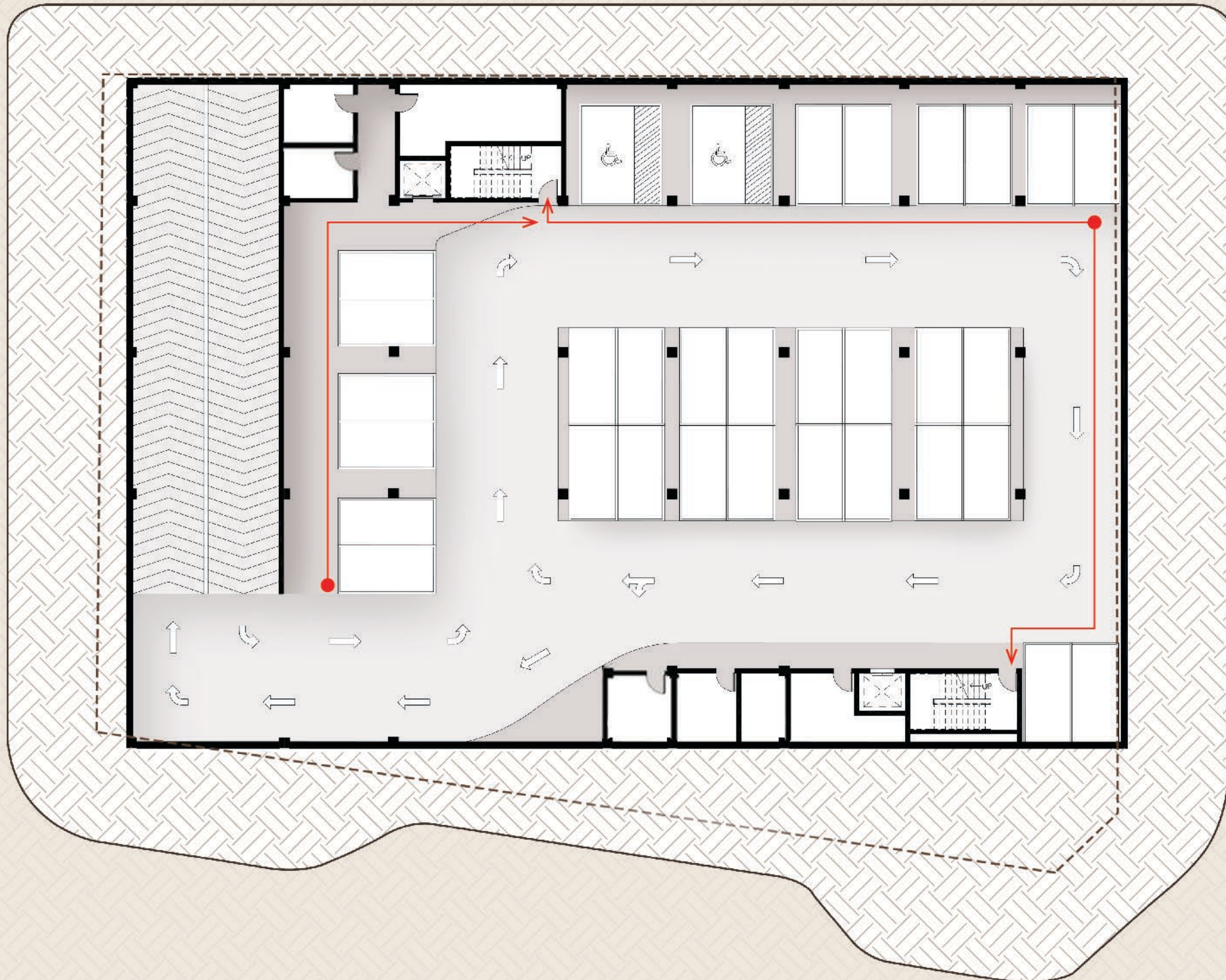
Section A - A'
scale 1:150



05 Technical Components

5.5 Bomba (Fire Safety Plans)

- Fire Run not more than 60m
- Door swing need to be in the direction of escape
- Fire staircase should not be privatised in an enclosed room



05 Technical Components

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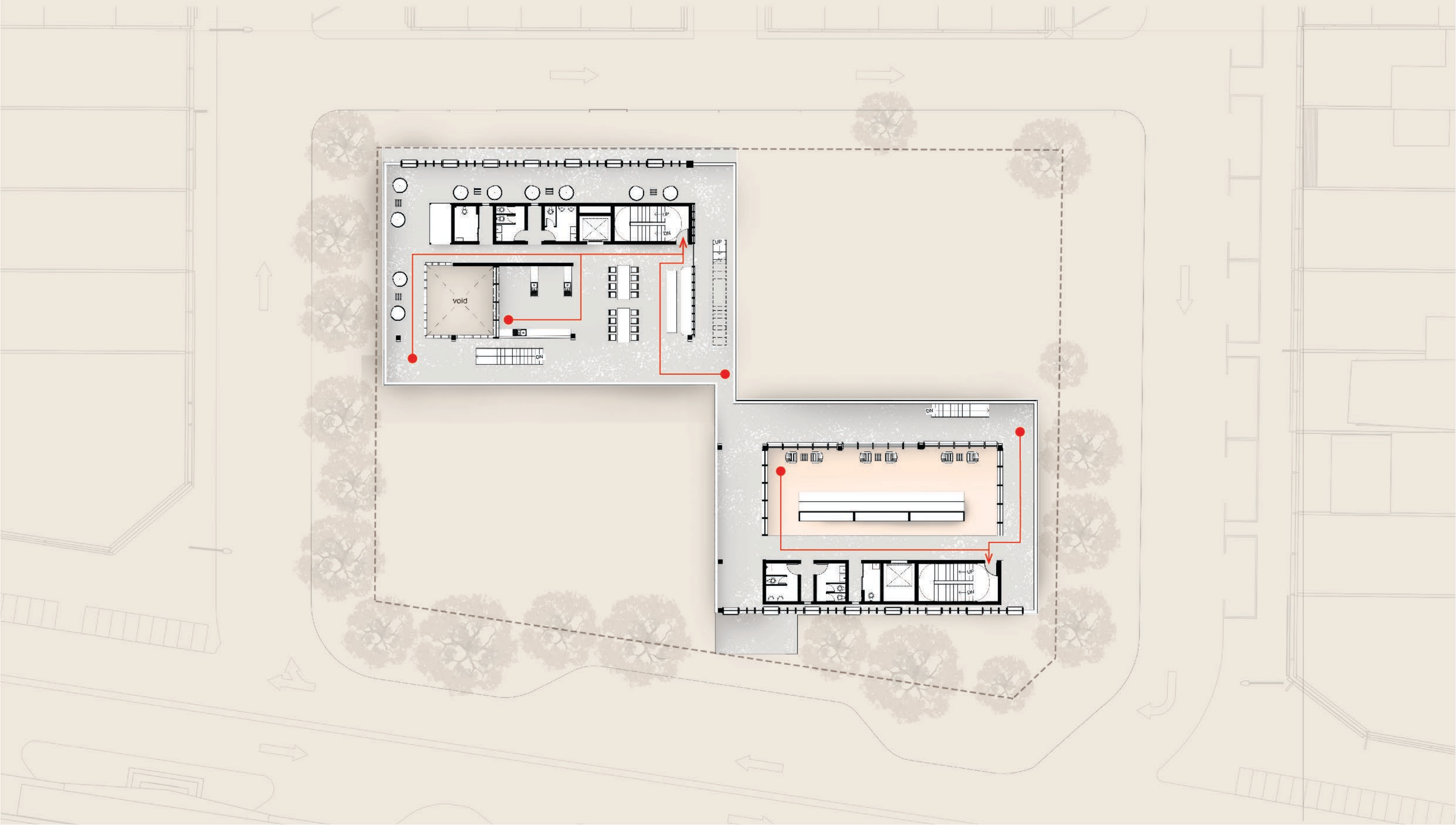
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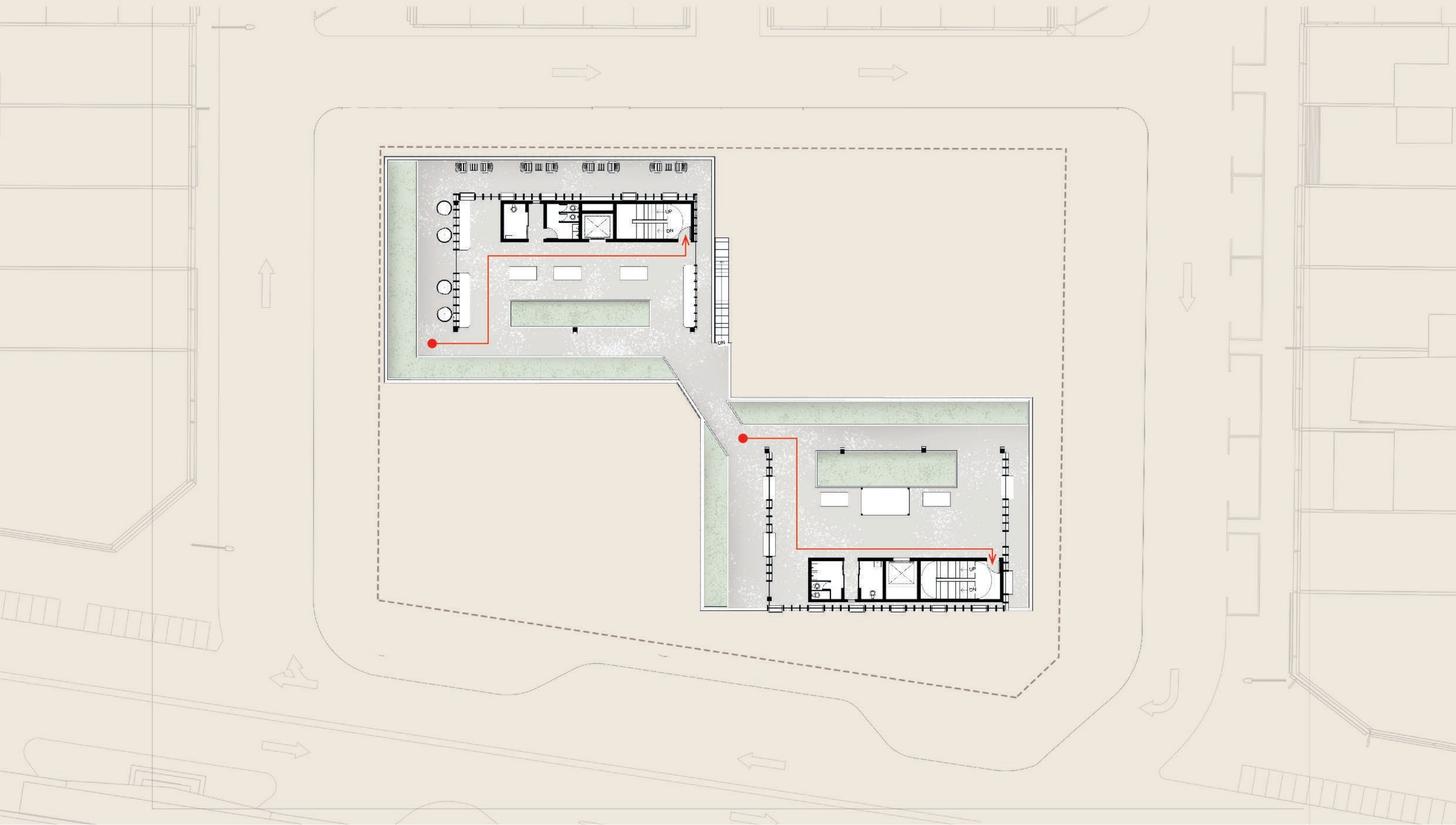
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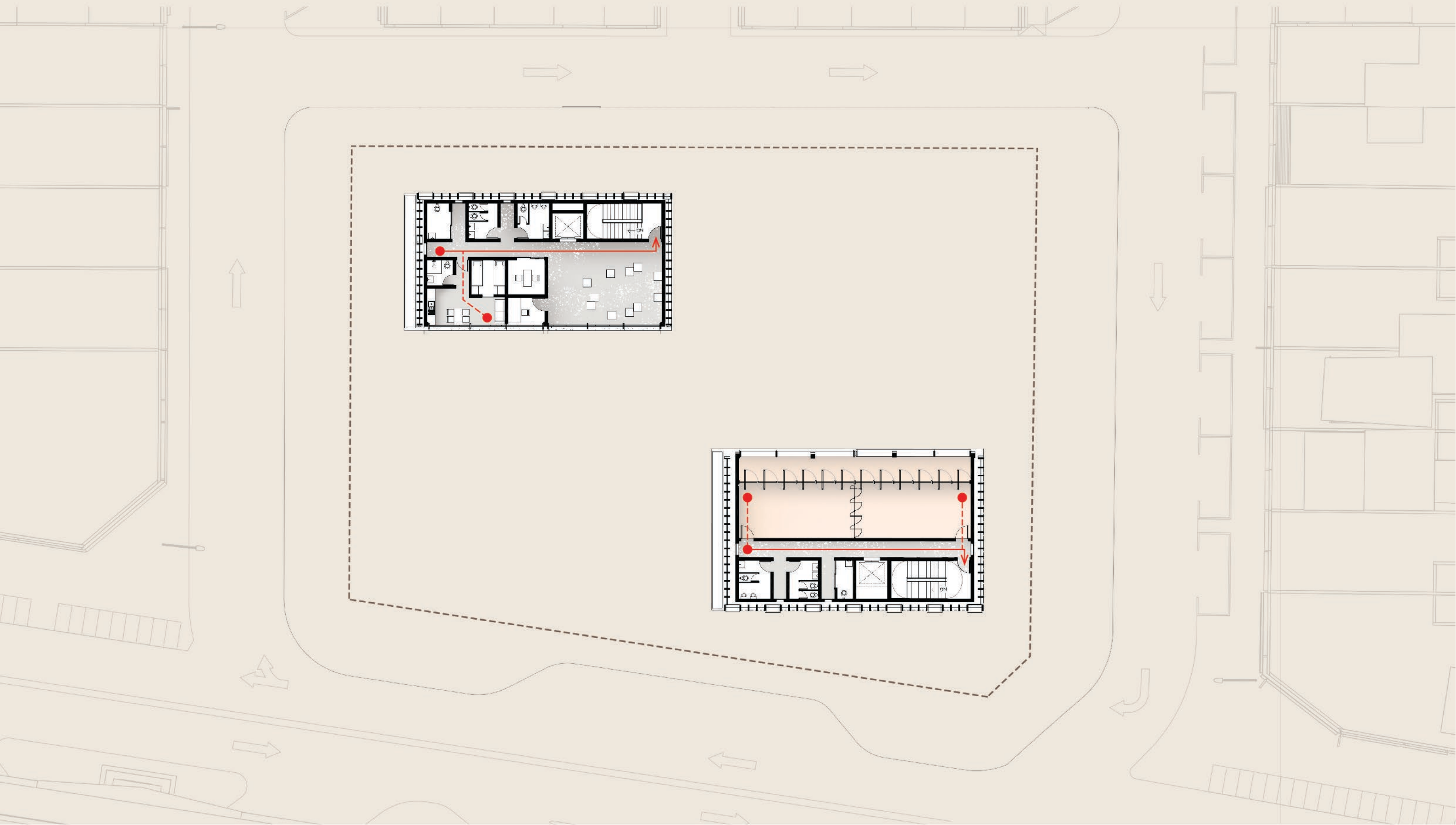
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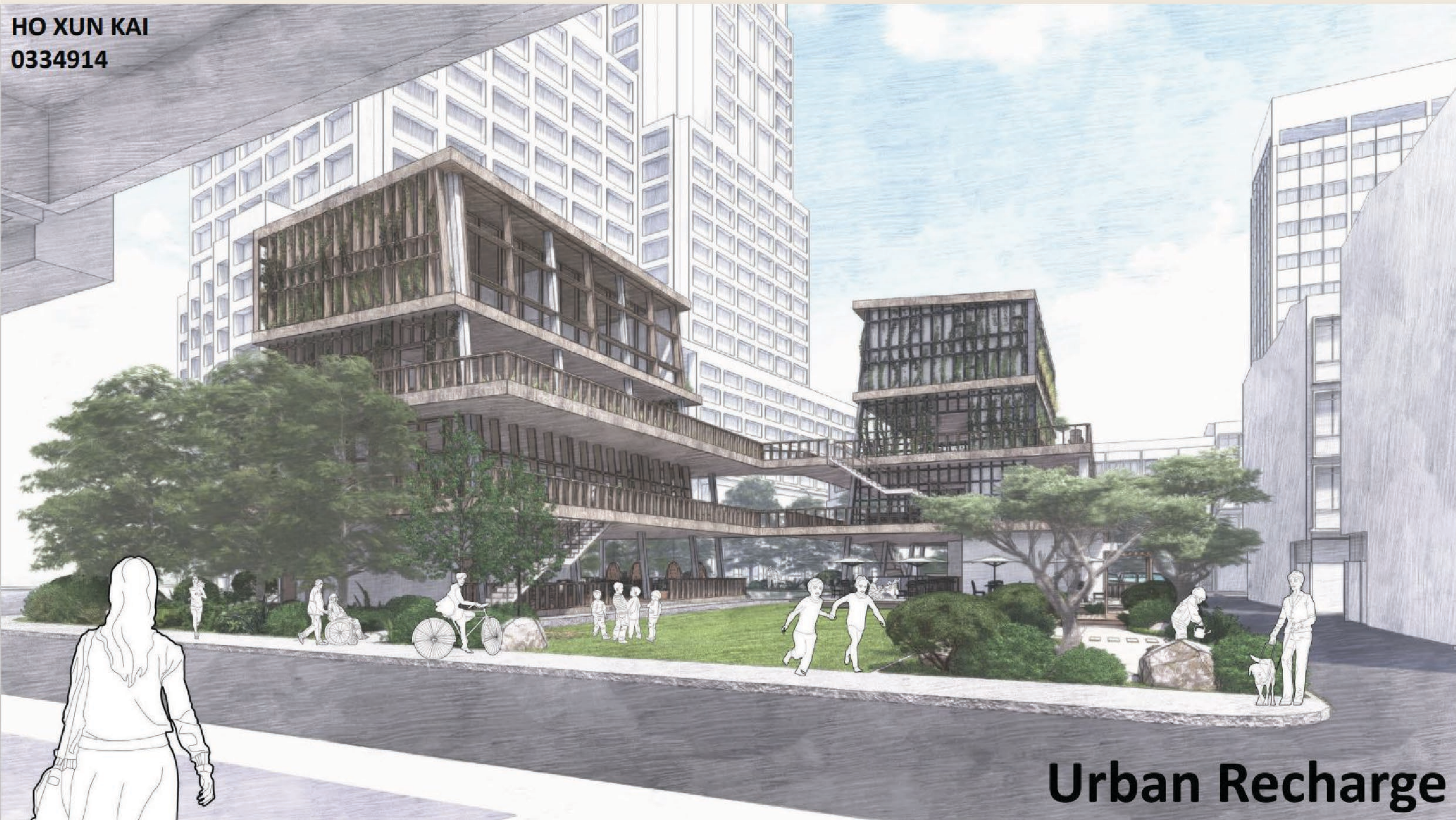
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URBAN RECHARGE

HO XUN KAI
0334914

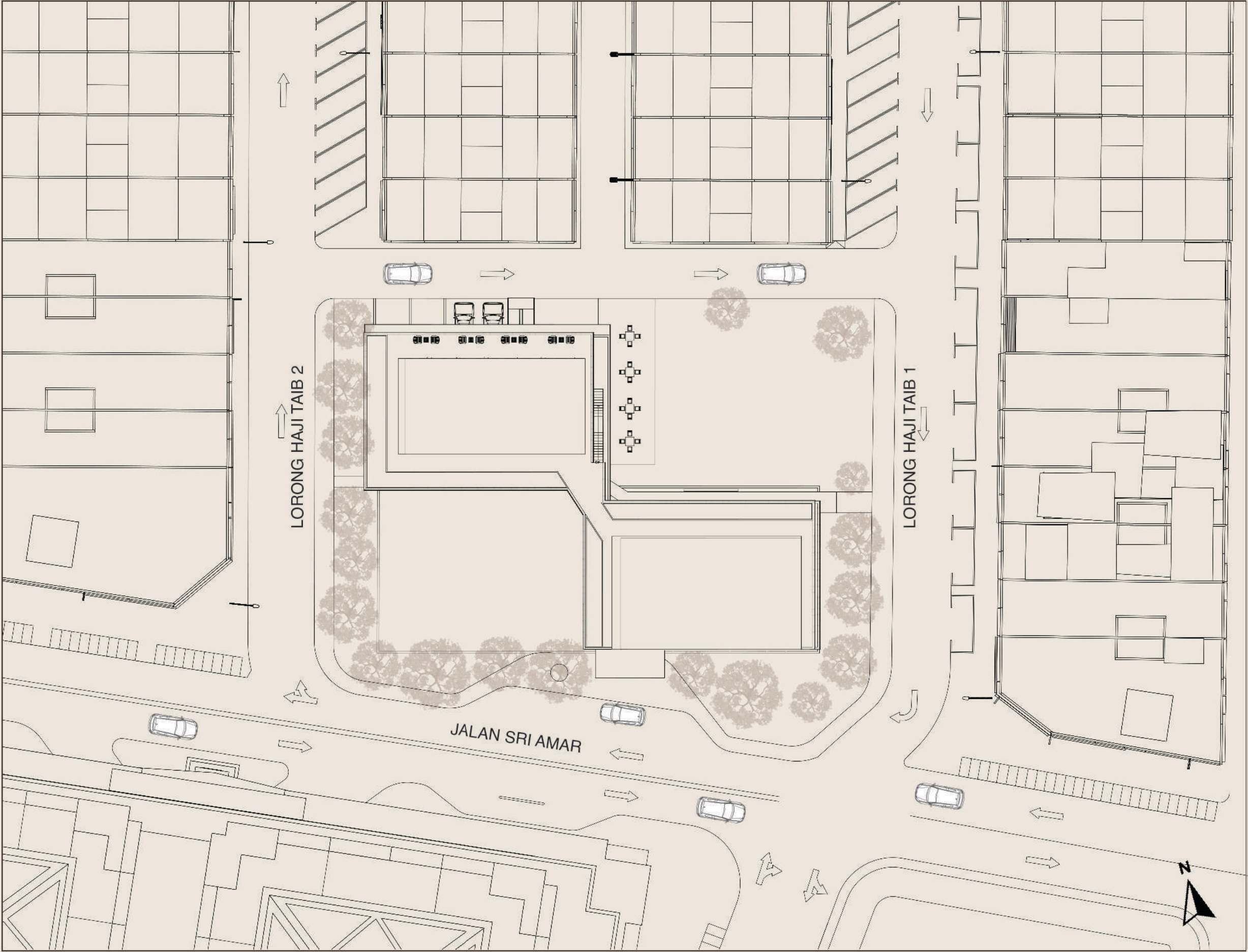


Urban Recharge

6.1 Floor Plans with Perspective Views

Site Plan

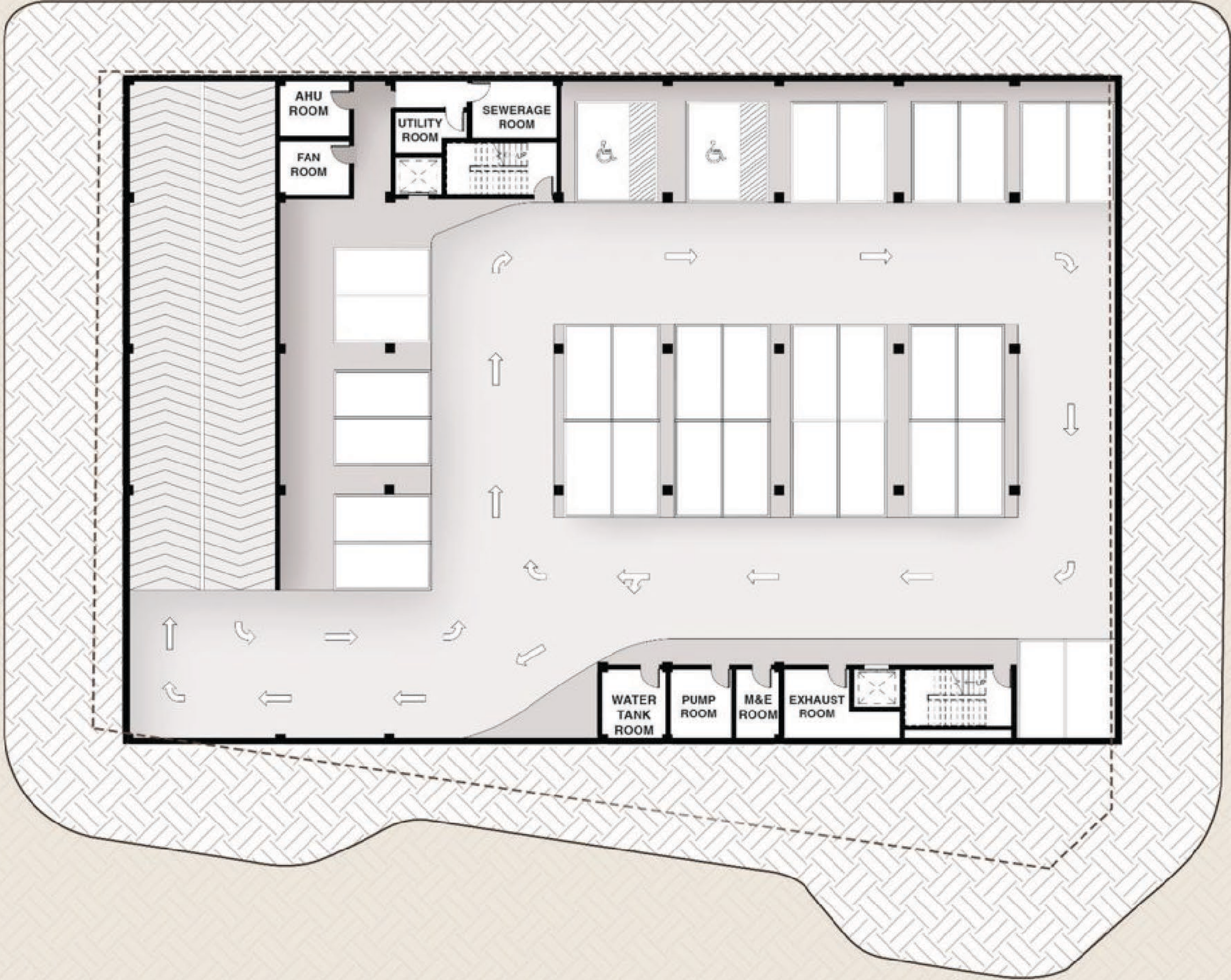
scale 1:400



PERSPECTIVE view from high rise office block beside



6.1 Floor Plans with Perspective Views



Basement
scale 1:200

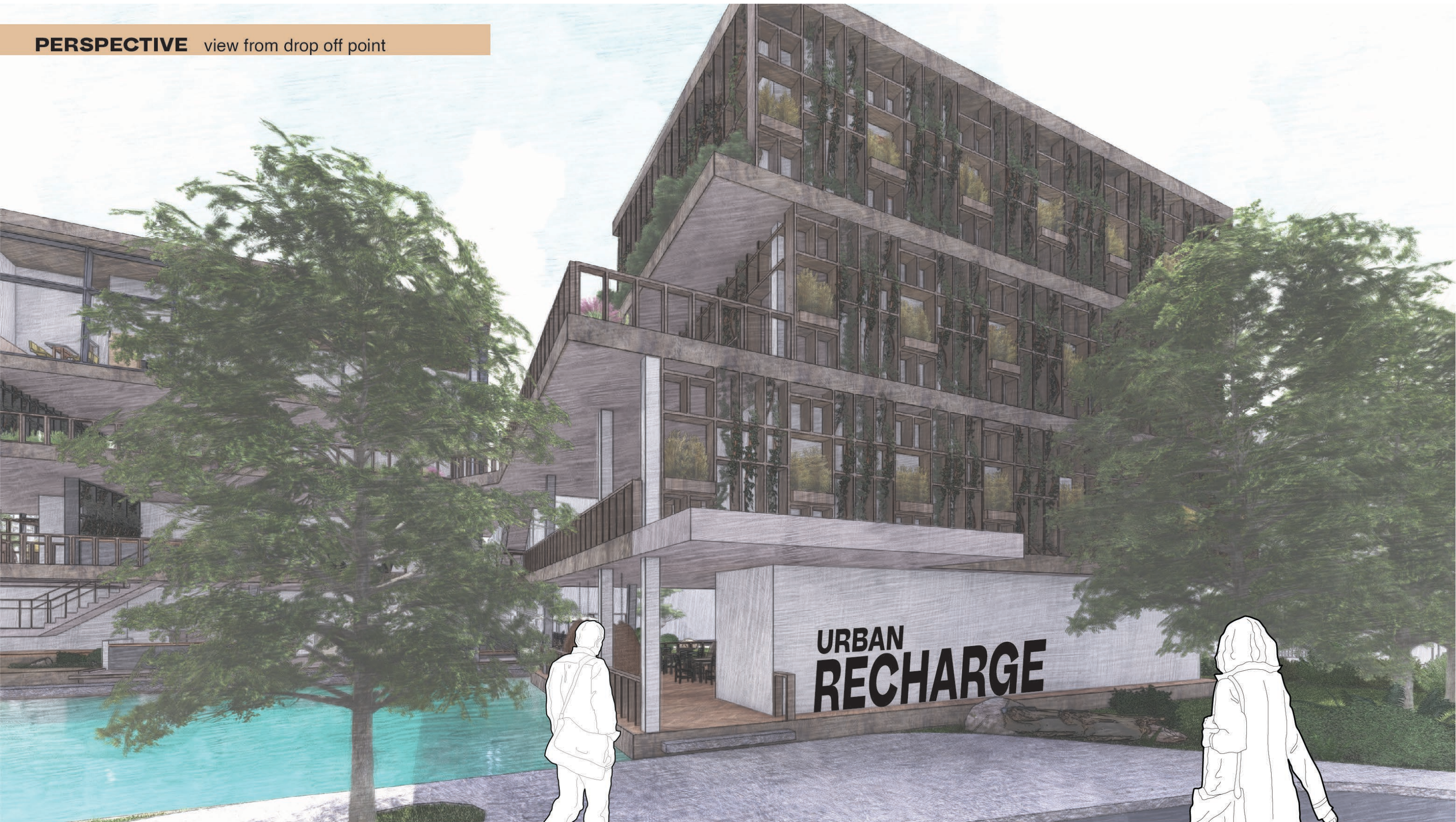


6.1 Floor Plans with Perspective Views



Ground Floor Plan
scale 1:200

PERSPECTIVE view from drop off point



PERSPECTIVE view from east side entrance walkway



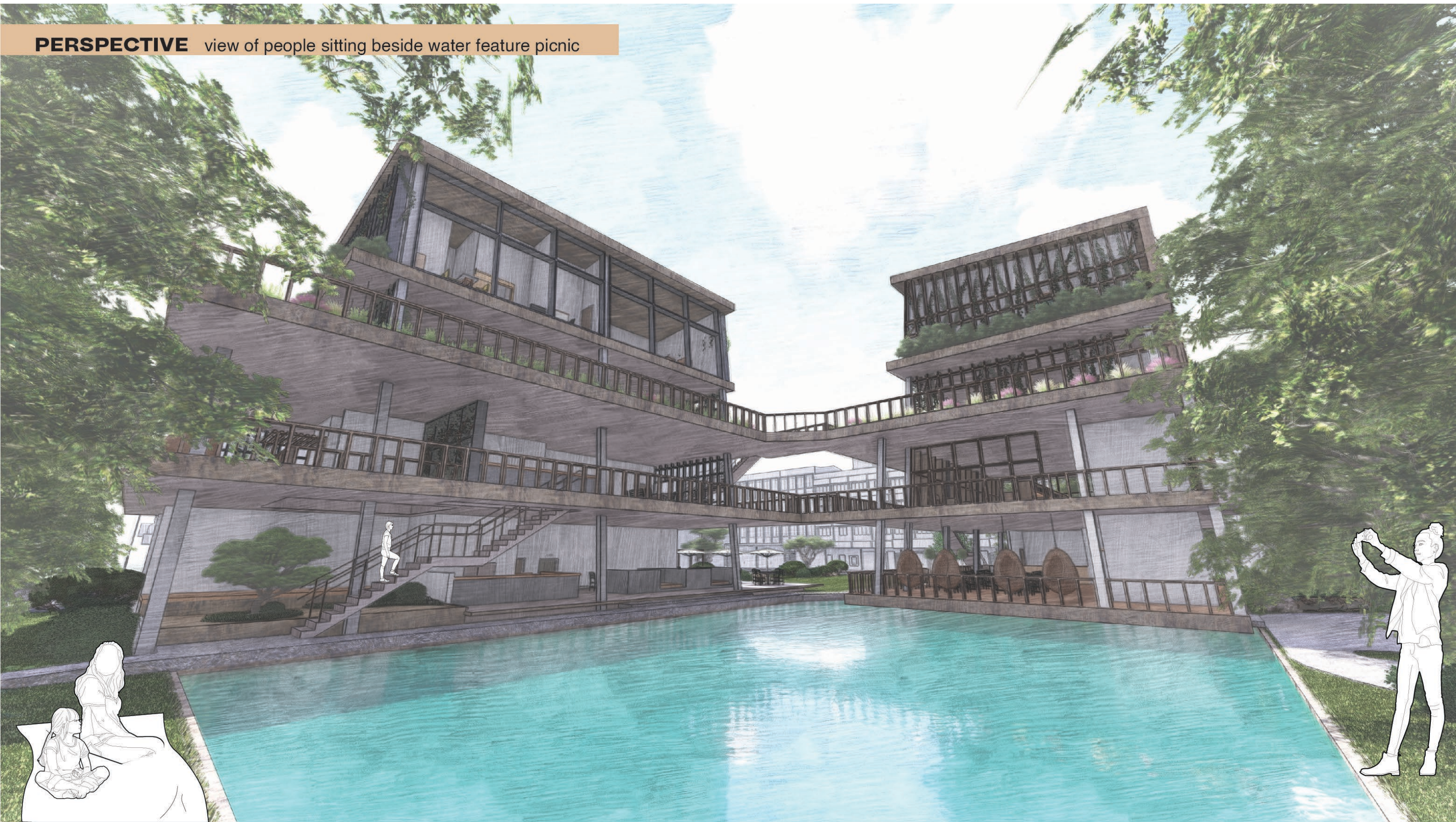
PERSPECTIVE view of Zen garden beside open plaza



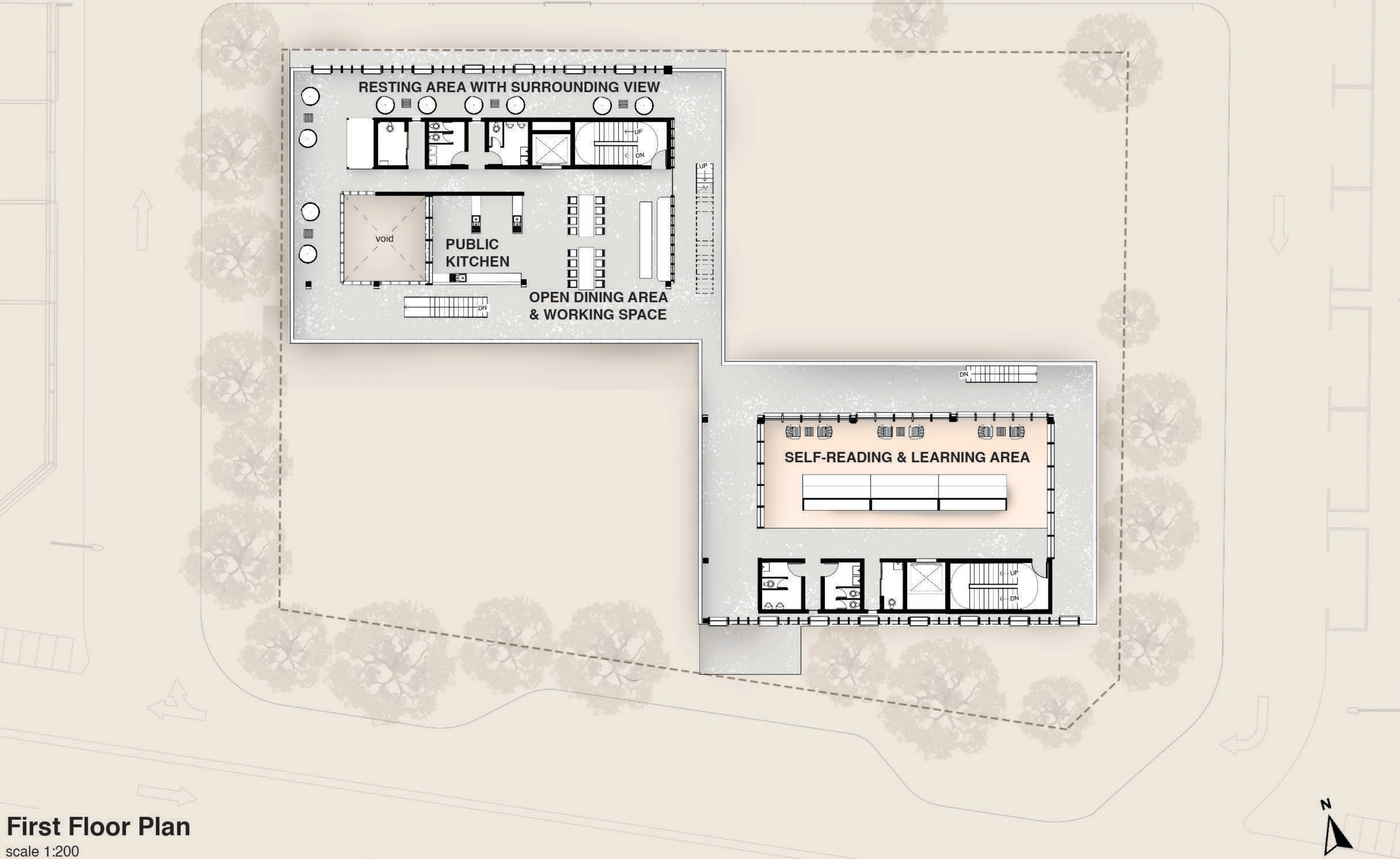
PERSPECTIVE view of semi-open zen garden beside water feature



PERSPECTIVE view of people sitting beside water feature picnic



6.1 Floor Plans with Perspective Views



First Floor Plan

scale 1:200

PERSPECTIVE view of self-reading area



PERSPECTIVE view to street from one of the resting area on 1st floor beside public kitchen



6.1 Floor Plans with Perspective Views



Second Floor Plan

scale 1:200



PERSPECTIVE view of Urban Farm 1



PERSPECTIVE view of Urban Farm 2



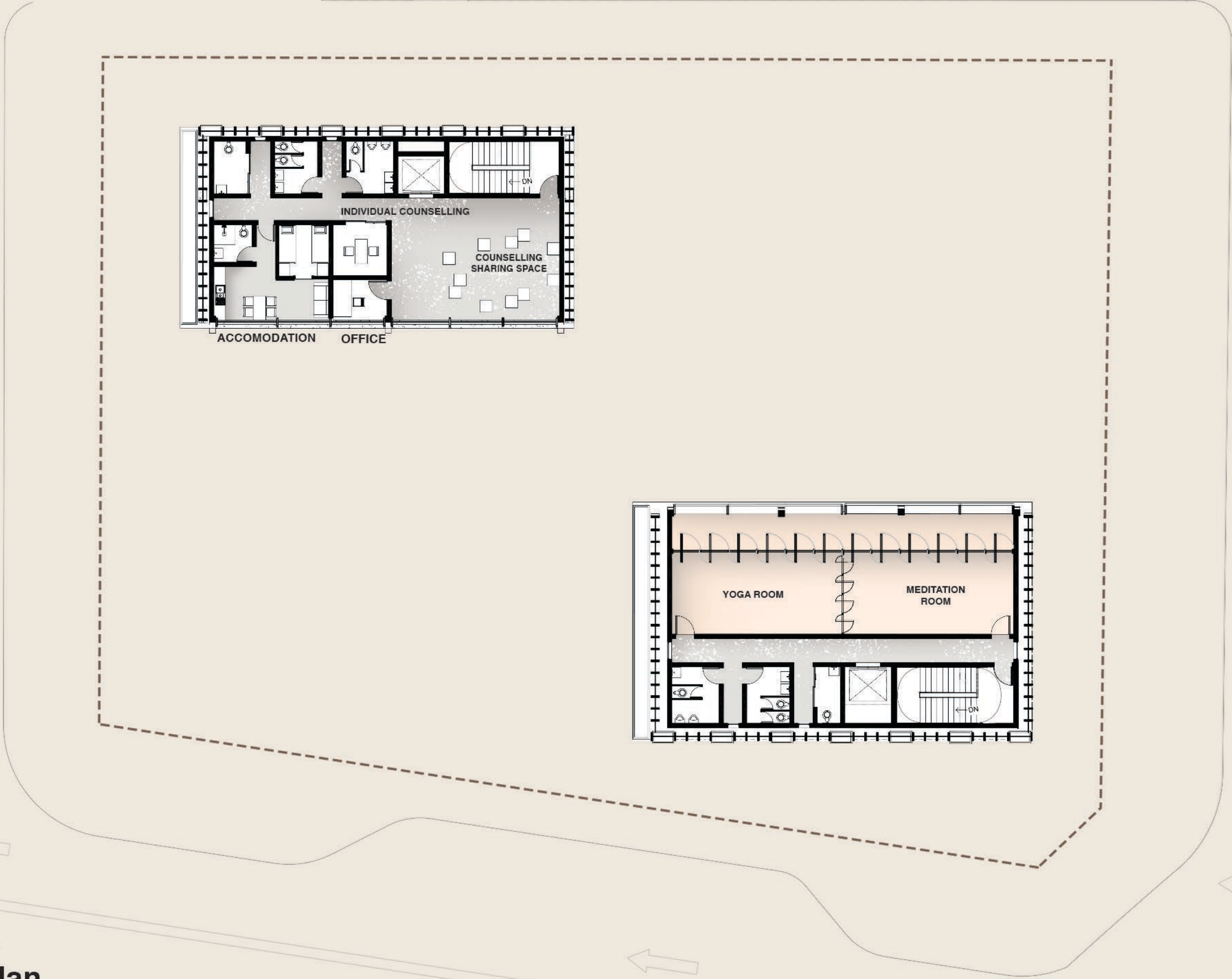
PERSPECTIVE view of sitting and resting area among Urban Farm area 1



PERSPECTIVE View of resting area beside Urban Farm 2



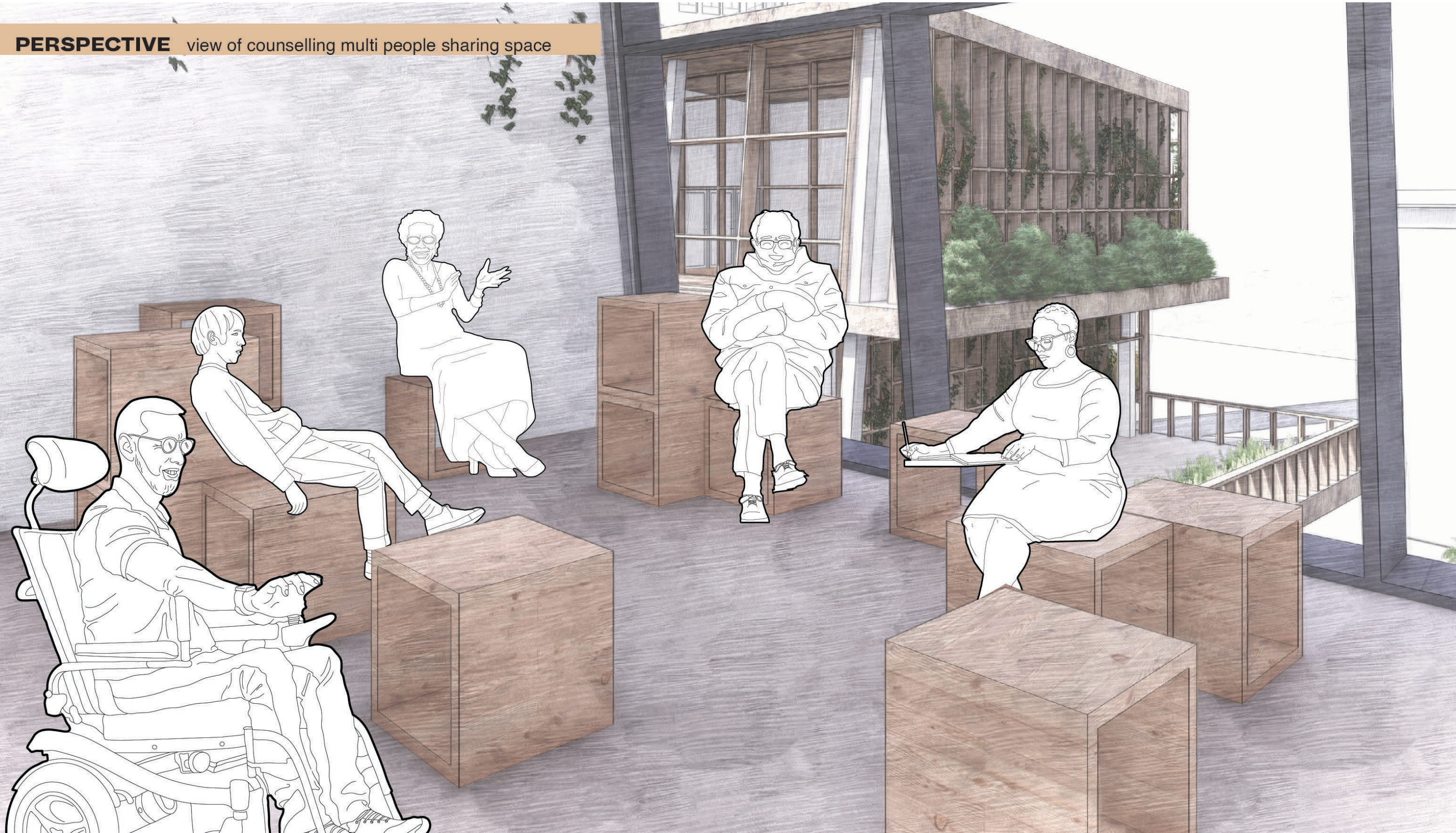
6.1 Floor Plans with Perspective Views



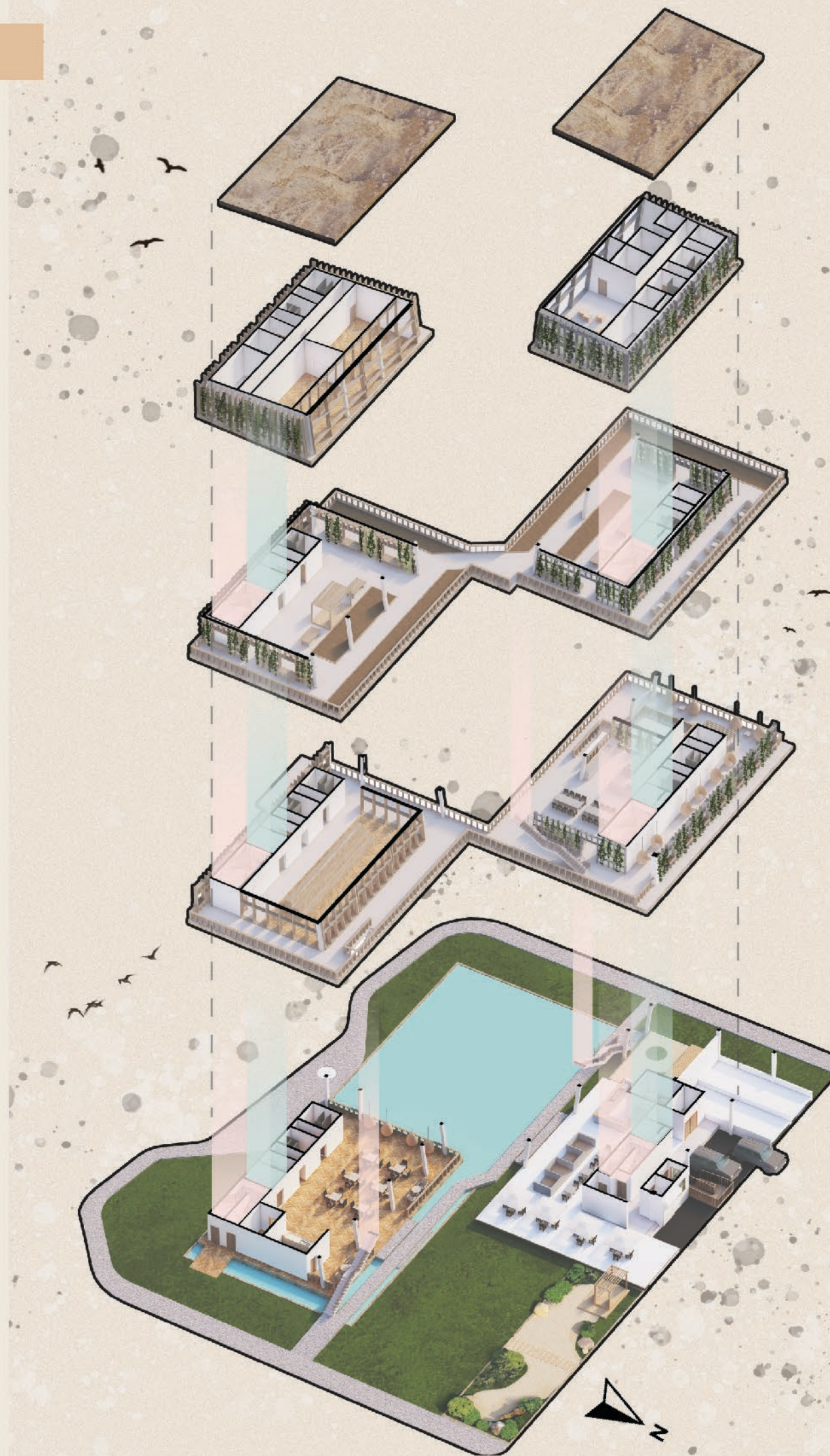
Third Floor Plan

scale 1:200

PERSPECTIVE view of counselling multi people sharing space



6.2 Axonometric 3D



3F Private and Quite Space

A floor that far from the noise and busy city and allow them really sit down talk to counselling or do meditation & yoga to healing and recharge.

Rest & Healing:
- Yoga
- Meditation
- Counselling

-Office
-Accommodation

2F Green space

Urban farm area that create Surrounding that with lot of greens and mix resting space in between to allow people rest with full of natural greenery

Community:
- Urban farm

Rest & Healing:
- Resting area in between

1F Semi-Public Space

transform from a public space slightly to more private

Community:
-Reading area
-Community public kitchen to cook and share food and happiness with other together

GF Public Space

Gather & Attract target user from surrounding to rest and take a break recharge in my site.

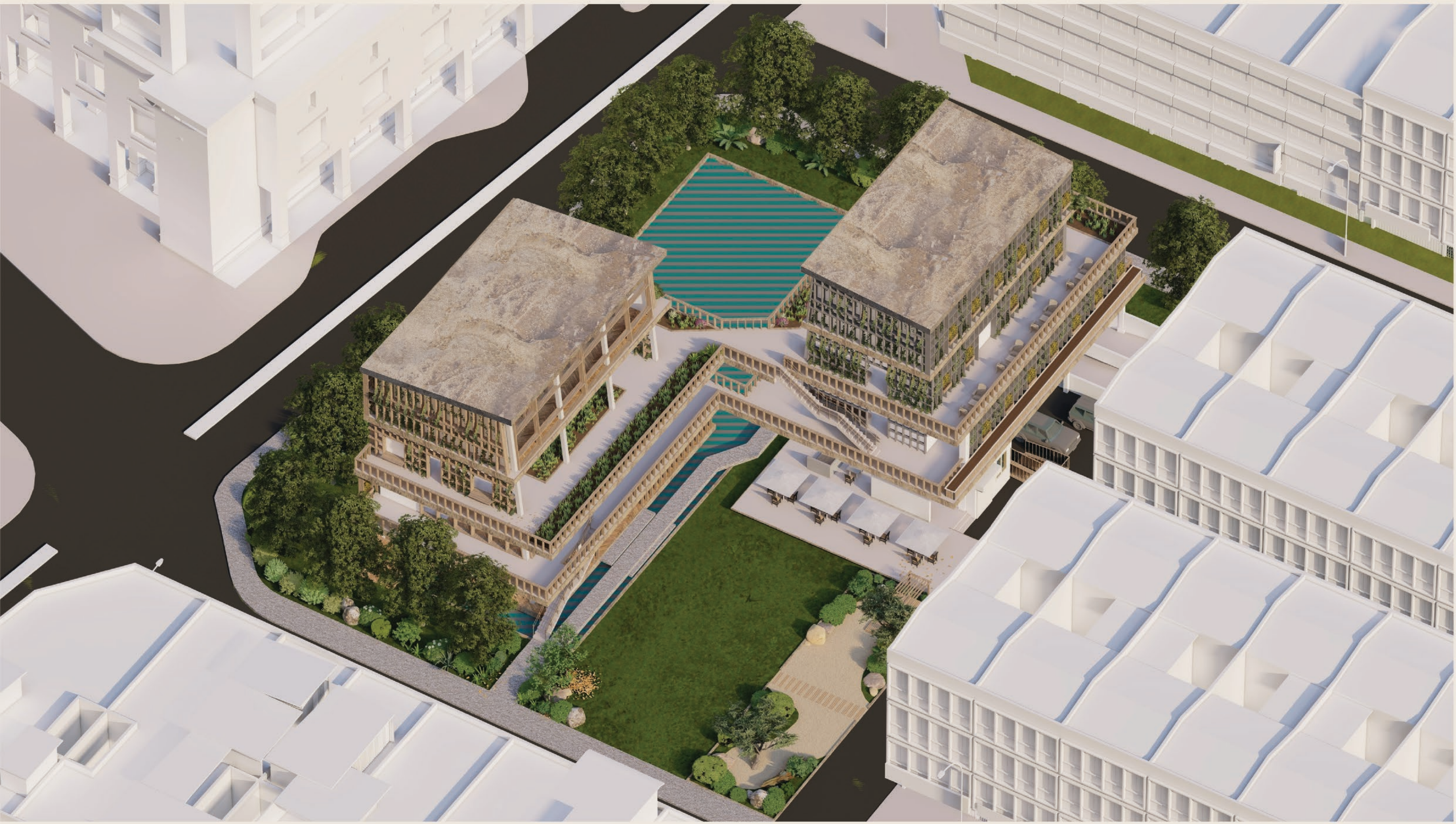
Community:
- relaxing coffee shop
- kopitiam

Rest & Healing:
- Zen garden
- Water feature with comfortable tree shading

LG Basement Carpark

6.2 Axonometric 3D

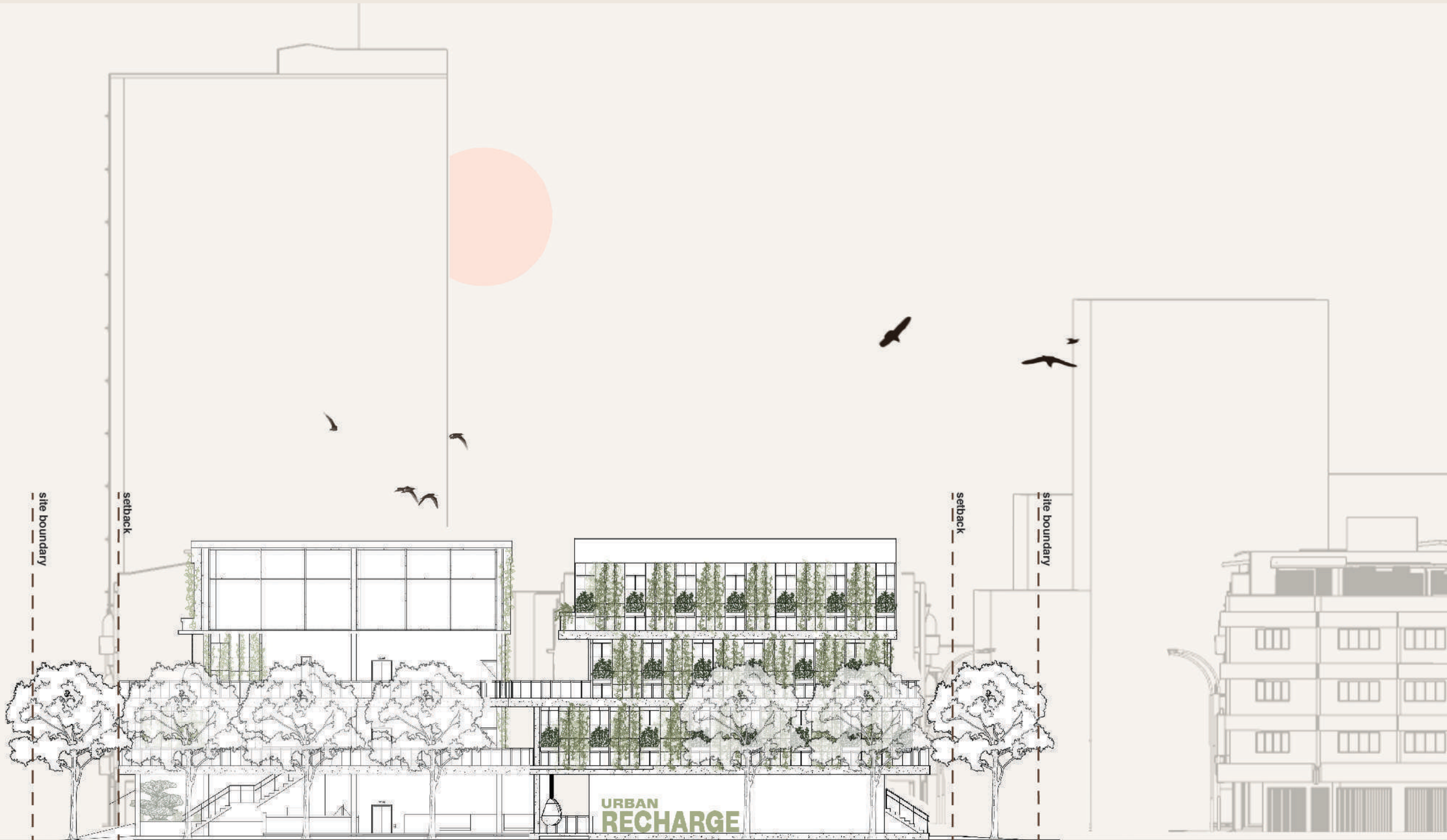
With greenaries



6.3 Elevations

South Elevation

scale 1:200



6.3 Elevations

West Elevation

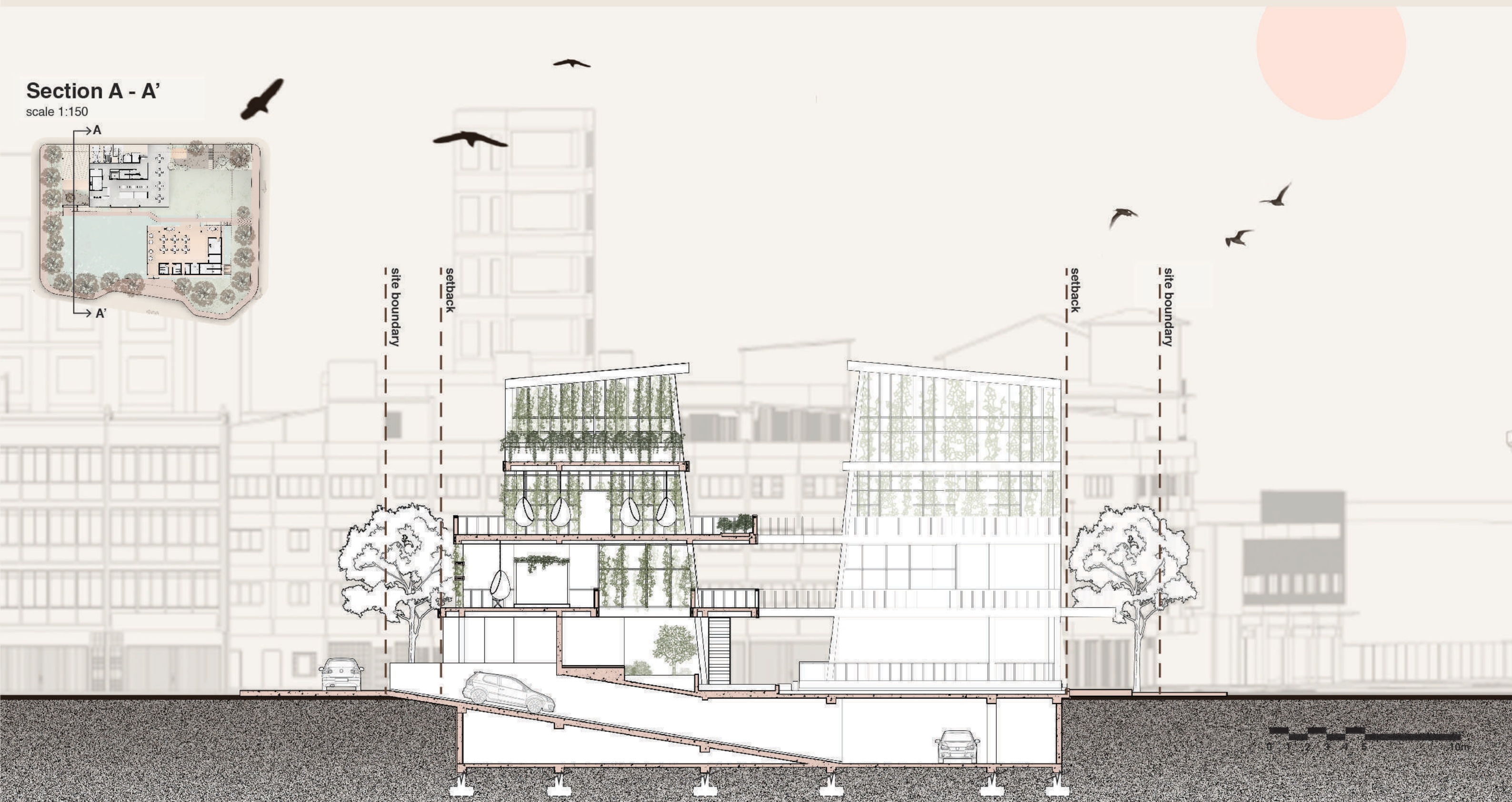
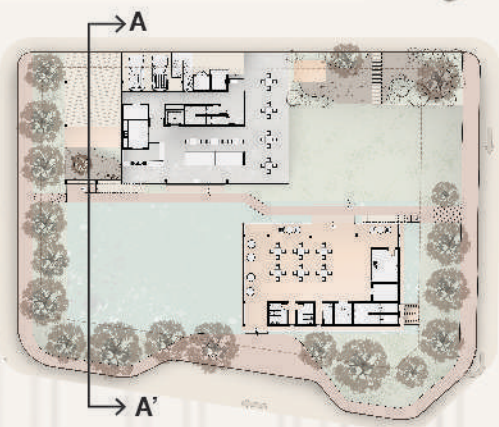
scale 1:200



6.4 Sections

Section A - A'

scale 1:150



6.4 Sections

Section B - B'

scale 1:150

