

Cultivating Connections - On My Block! Enhancing Social Cohesion and Biodiversity by Food Production in Zuidplein

P5

Rohan Chhanai - Wednesday 8th of April 2026

WHY

Personal relationship

Why



ChatGPT, 2026



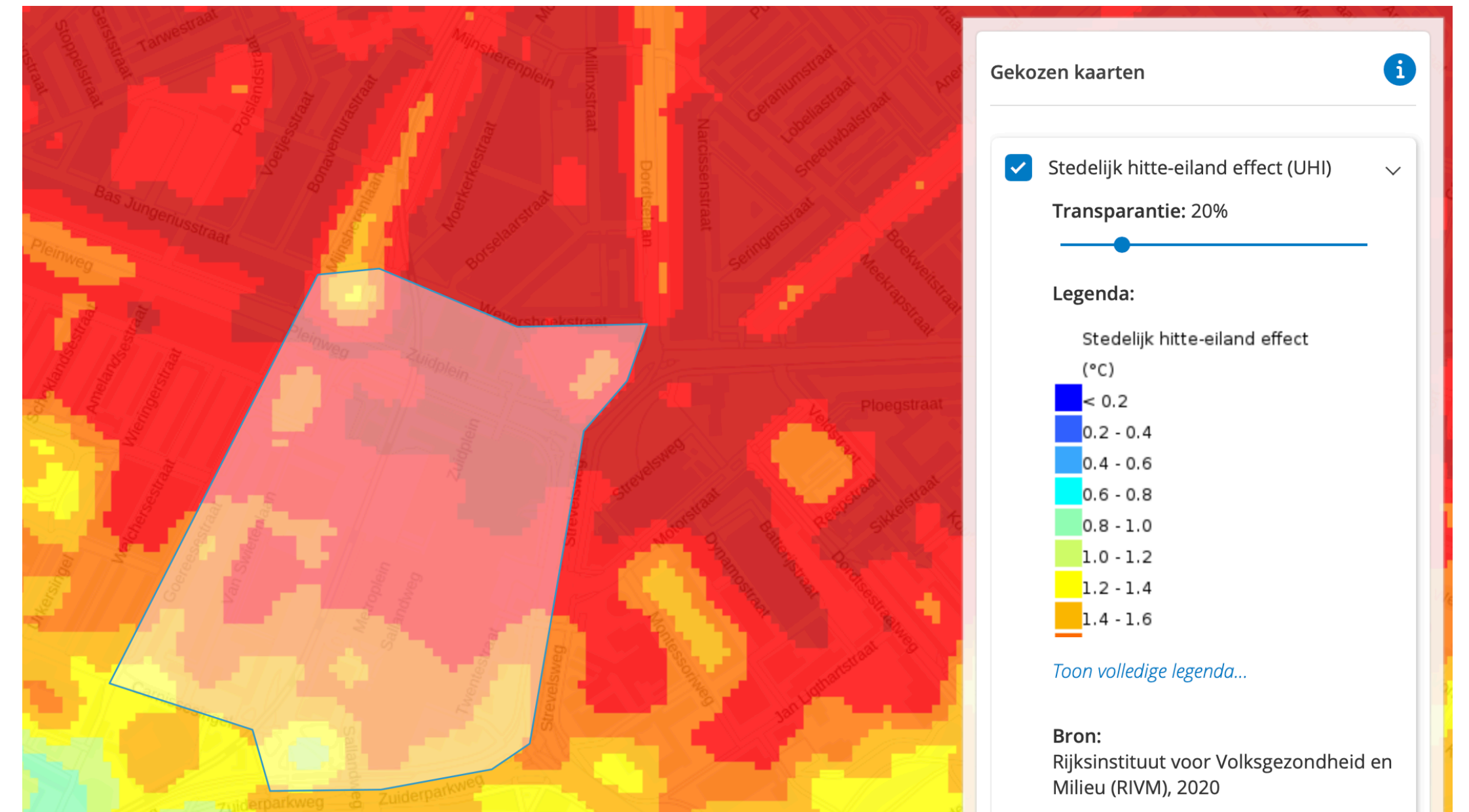
Google Maps, 2026

Physical observation

Why



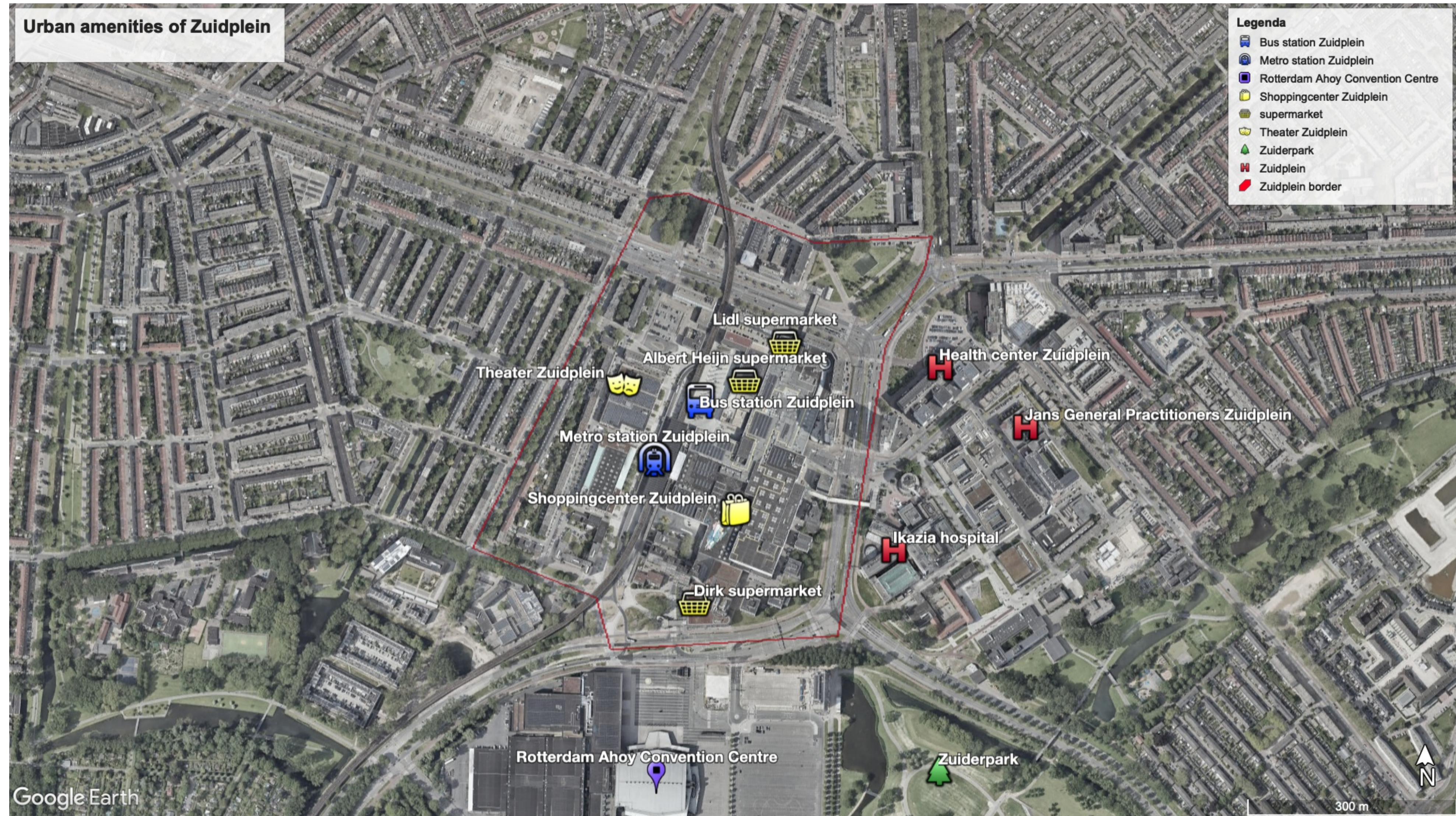
Gemeente Rotterdam, n.d.



Rijksinstituut voor Volksgezondheid en Milieu, 2020

Research

Why



Core problem

Why

- Lack of social cohesion
 - Lack of social spaces
 - Important for: mental health, safety, mutual understanding, energy transition
- Lack of biodiversity
 - nature
 - ecological connections
- How can we create an environment where people meet each other more often, where nature is truly present again, and where these two strengthen one another?



Vision & Design question

Why

Architecture should create living environments in which people and nature reinforce each other on a daily basis.

How can social cohesion and biodiversity in Zuidplein be strengthened together through the integration of communal gardens?

Ambition & Concept

Why

Sociale cohesion

Biodiversity

Themes

Inclusivity

Social interaction

Ecological sustainability

Goals

Ethnic acceptance

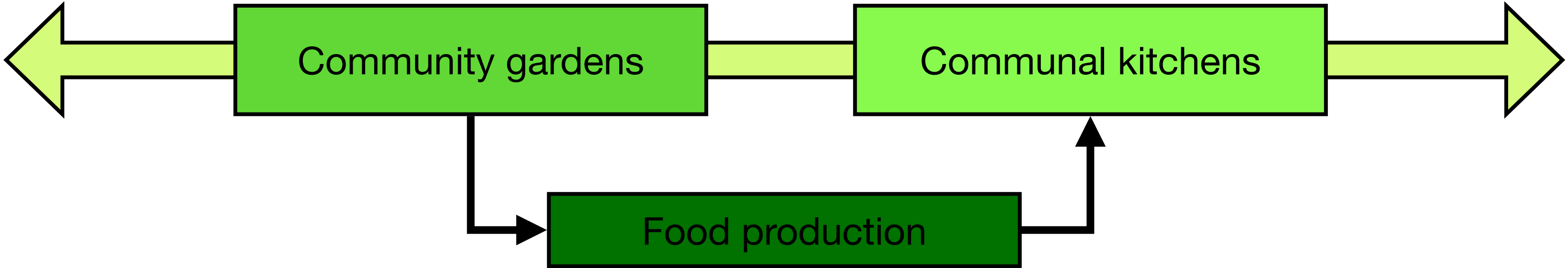
Spontaneous encounters

Strengthen urban biodiversity

Accessibility of urban life

Reduce CO2 emissions

Affordability of urban life

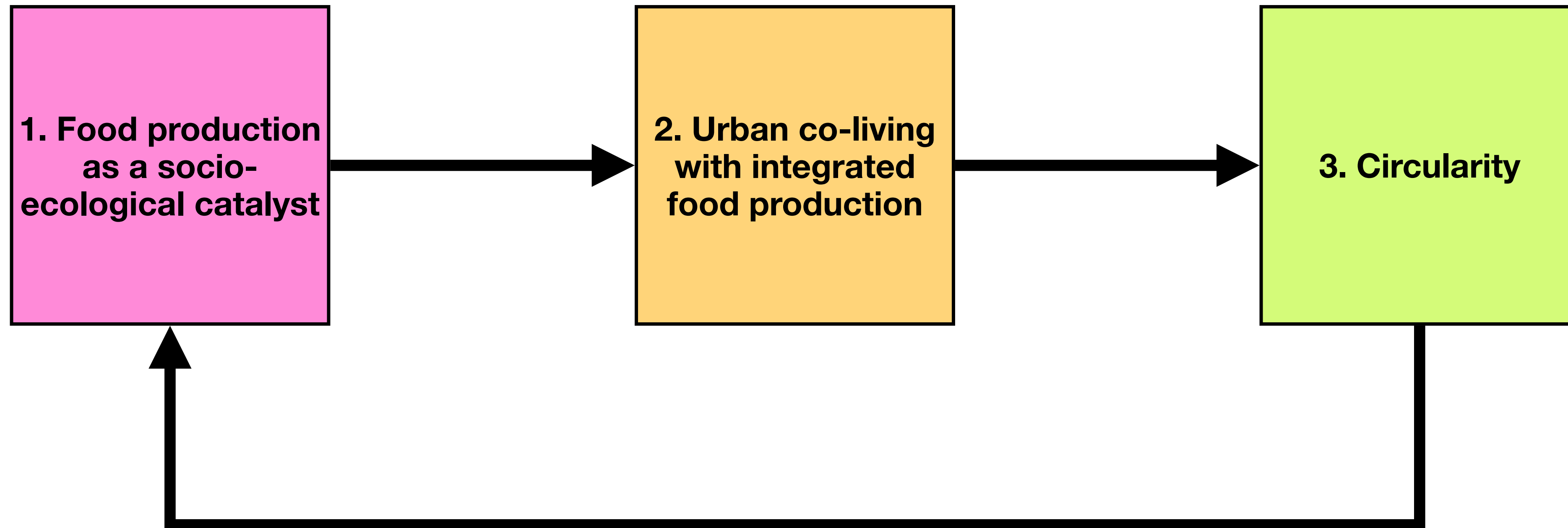


Food as a connector between people-nature and people-people

HOW

The tree core-mechanisms

How



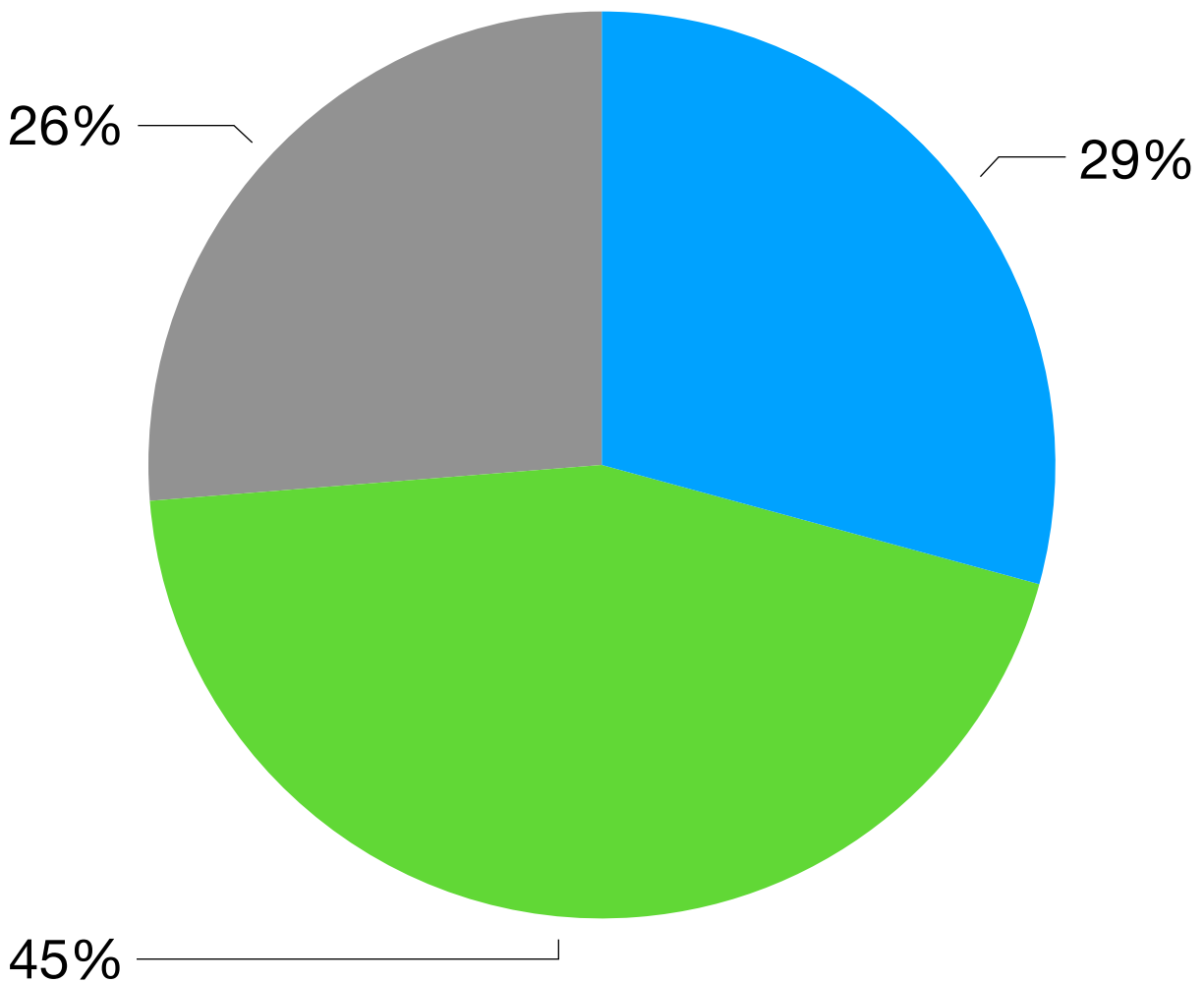
WHAT

Program

What

Program					
Plot:		6.000 m ²			
Levels:		5 levels			
Total space:		24.560 m ²			
Houses:		163 houses			
Residents:		326 residents			
Function	Space	Amount	Area per unit (in m ²)		Area (in m ²)
Residential function	Student housing	70	20		1.400
	Starter homes	33	60		1.980
	Single-family homes	35	80		2.800
	Senior housing	25	40		1.000
					<i>Subtotal</i>
Gathering function	Communal gardens				2.480
	Communal kitchens				1.220
	Other communal spaces				1.130
	Market square				5.450
	Neighborhood square				520
	Workshop spaces				130
				<i>Subtotal</i>	10.930
Other function	Circulation space				5.620
	Bicycle storage				480
	Mechanical space				350
					<i>Subtotal</i>

- Residential function
- Gathering function
- Other function



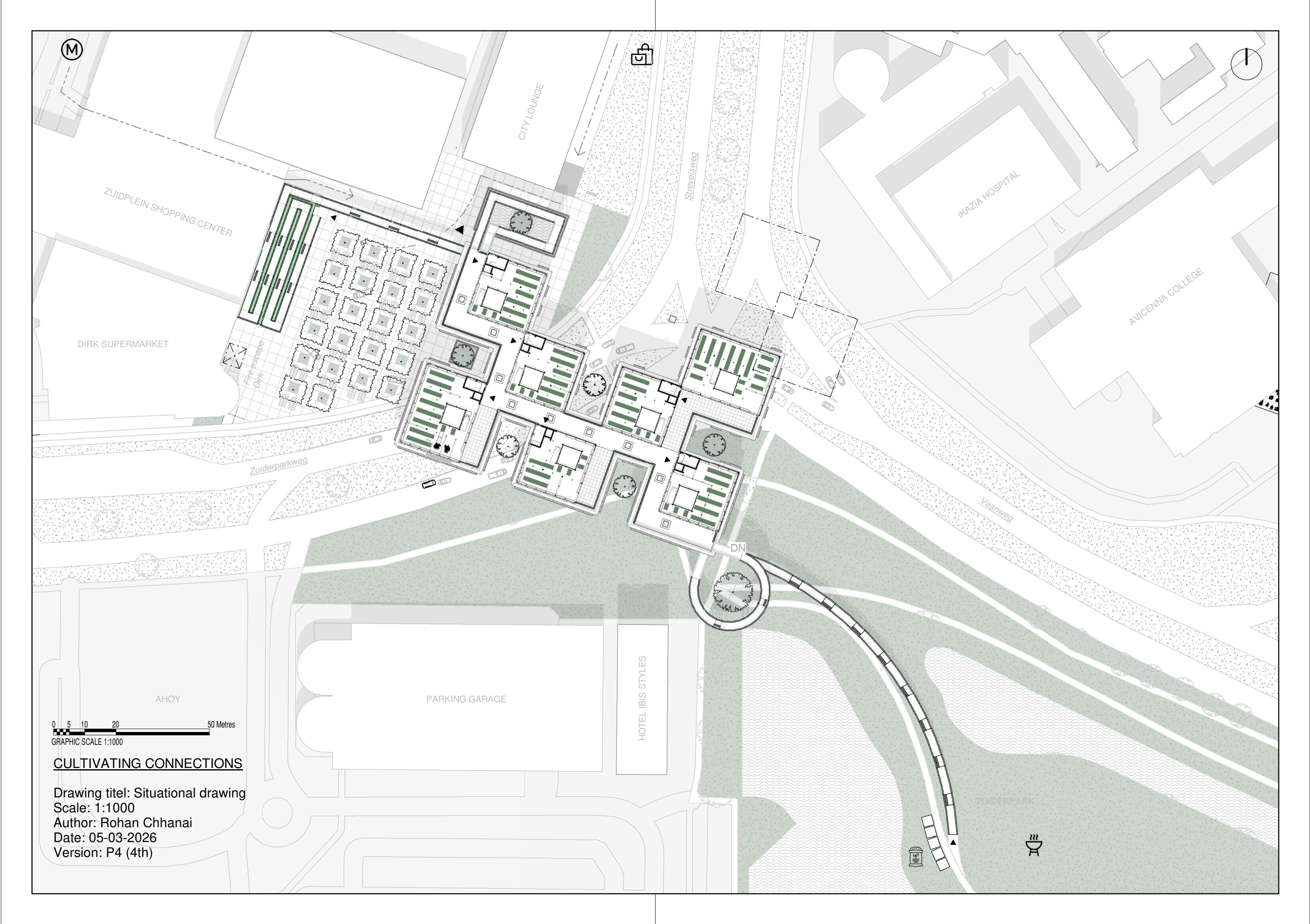
Public Market Square and Productive Plinth

What



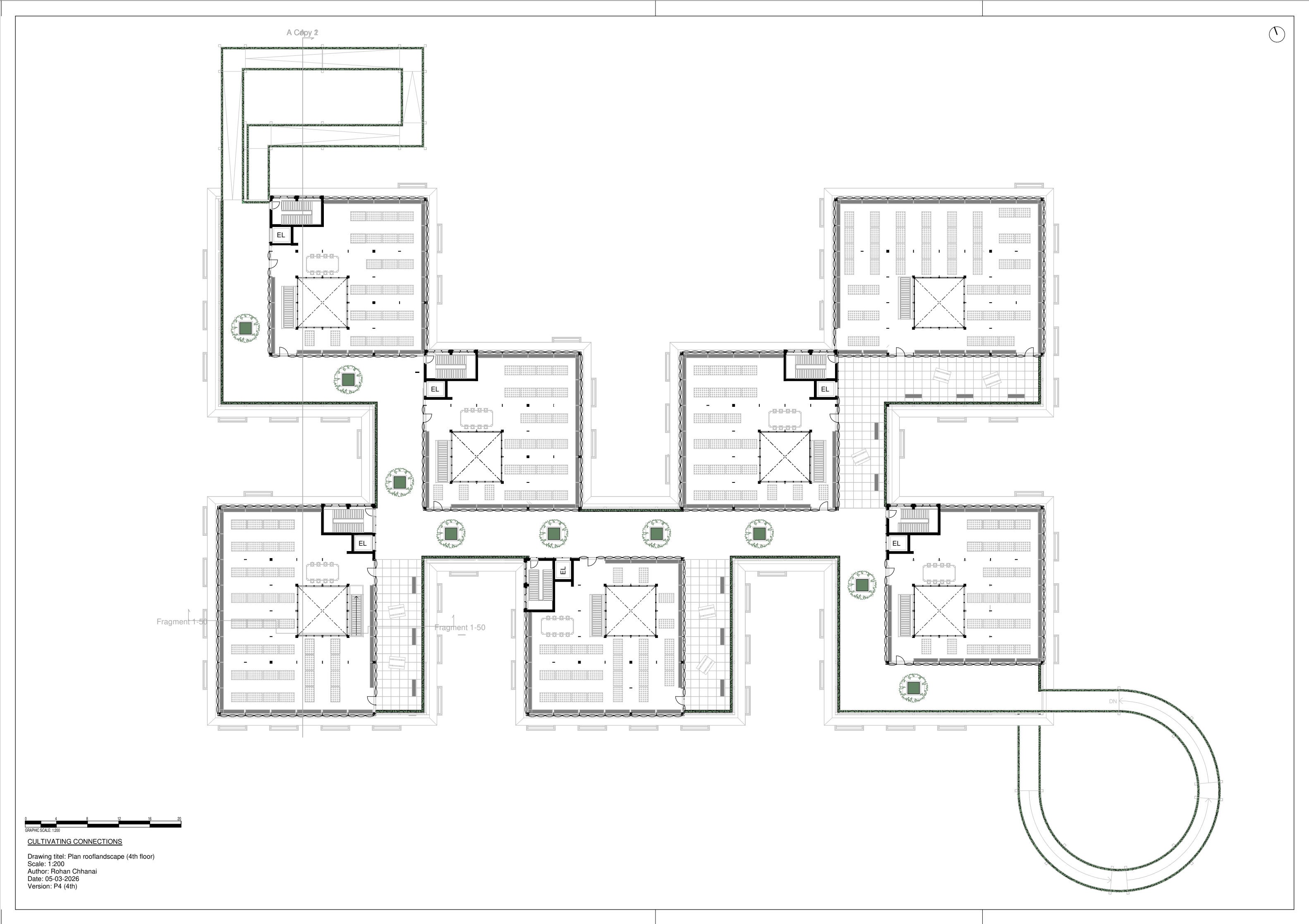
Accessible Roof Route as Social Landscape

What



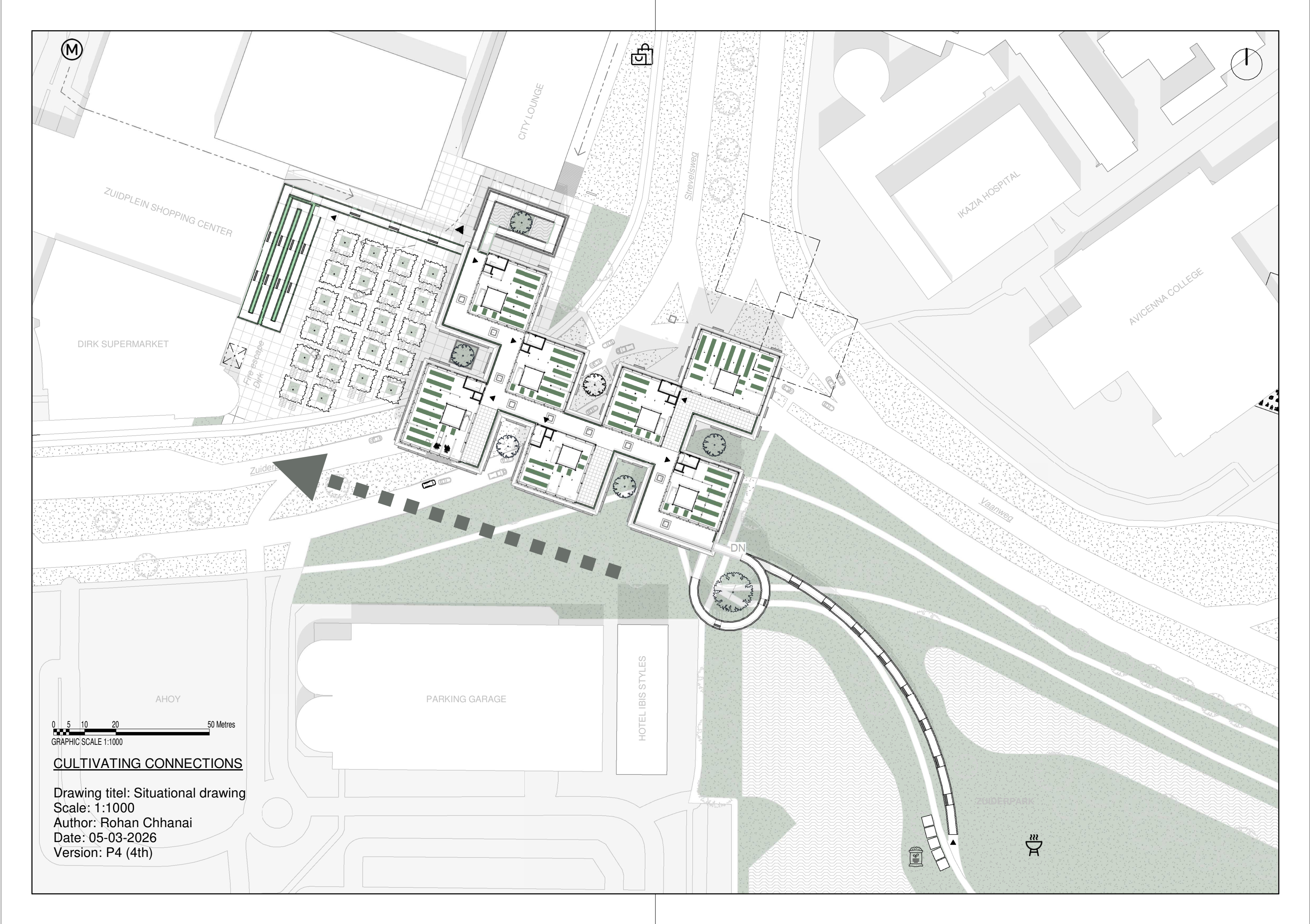
Roof landscape

What



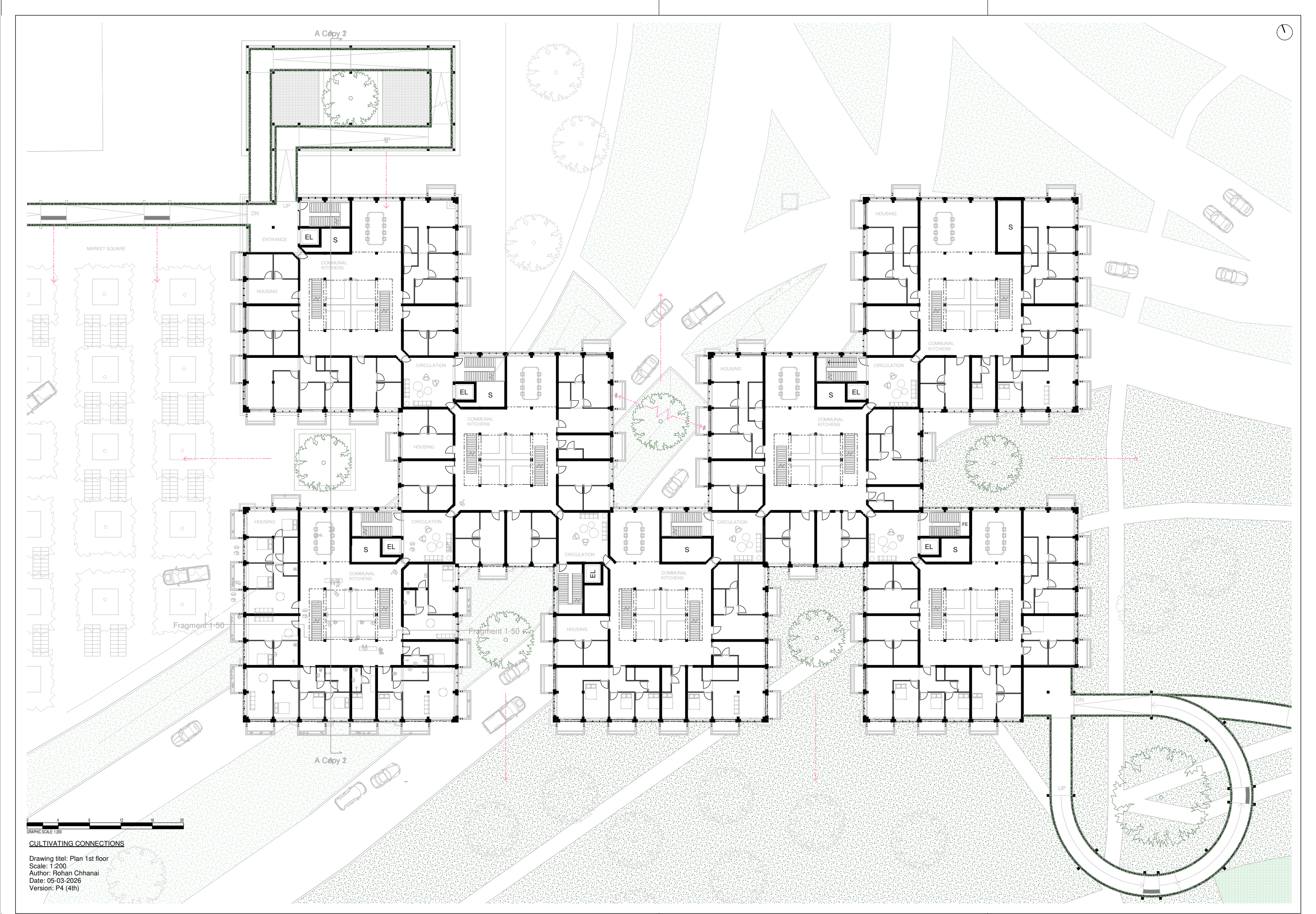
Park Connection and Socio-Ecological Corridor

What



Checkerboard Plan and Historical Urban Pattern

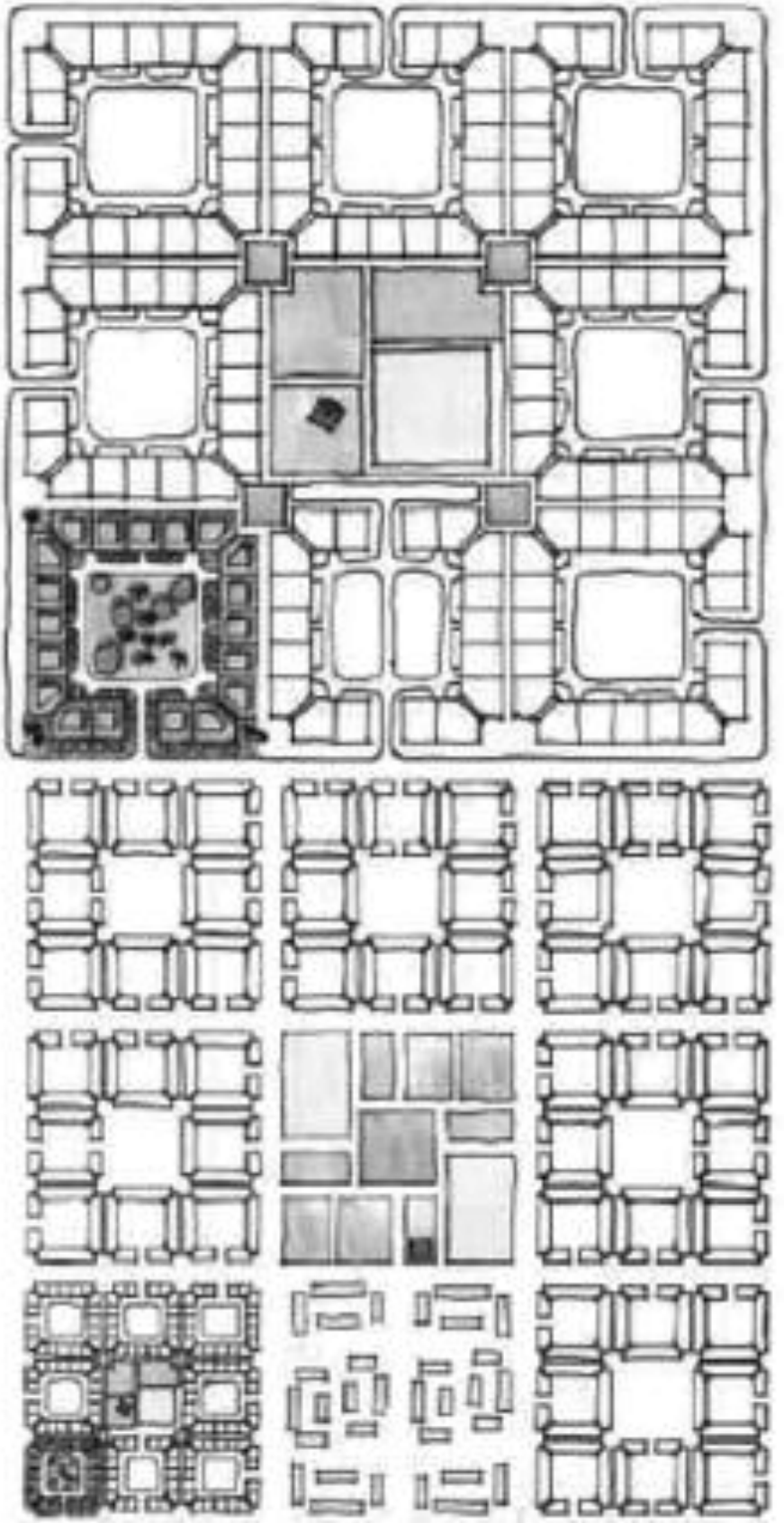
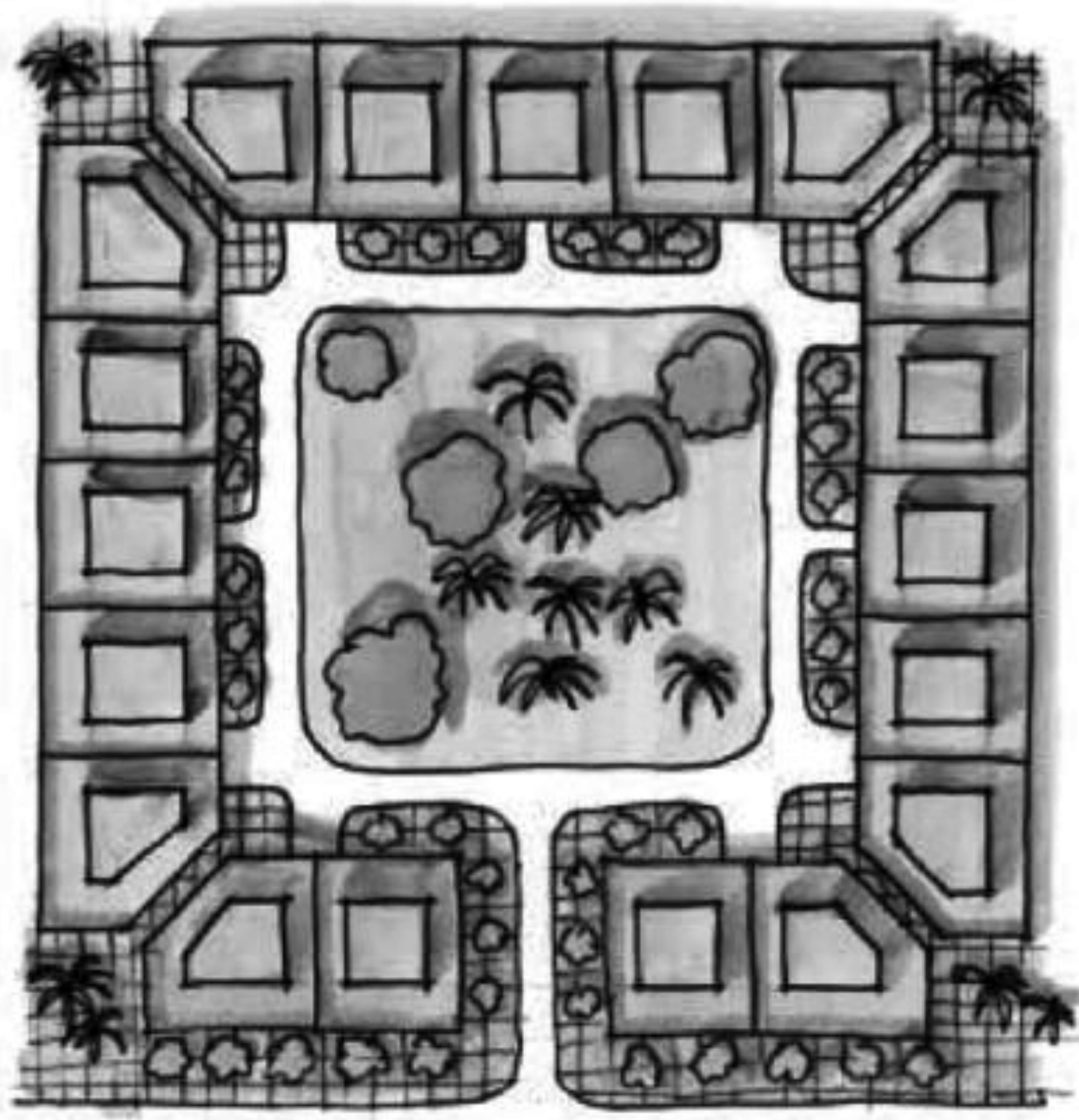
What



Fareej-Inspired Collective Neighborhood Structure

What

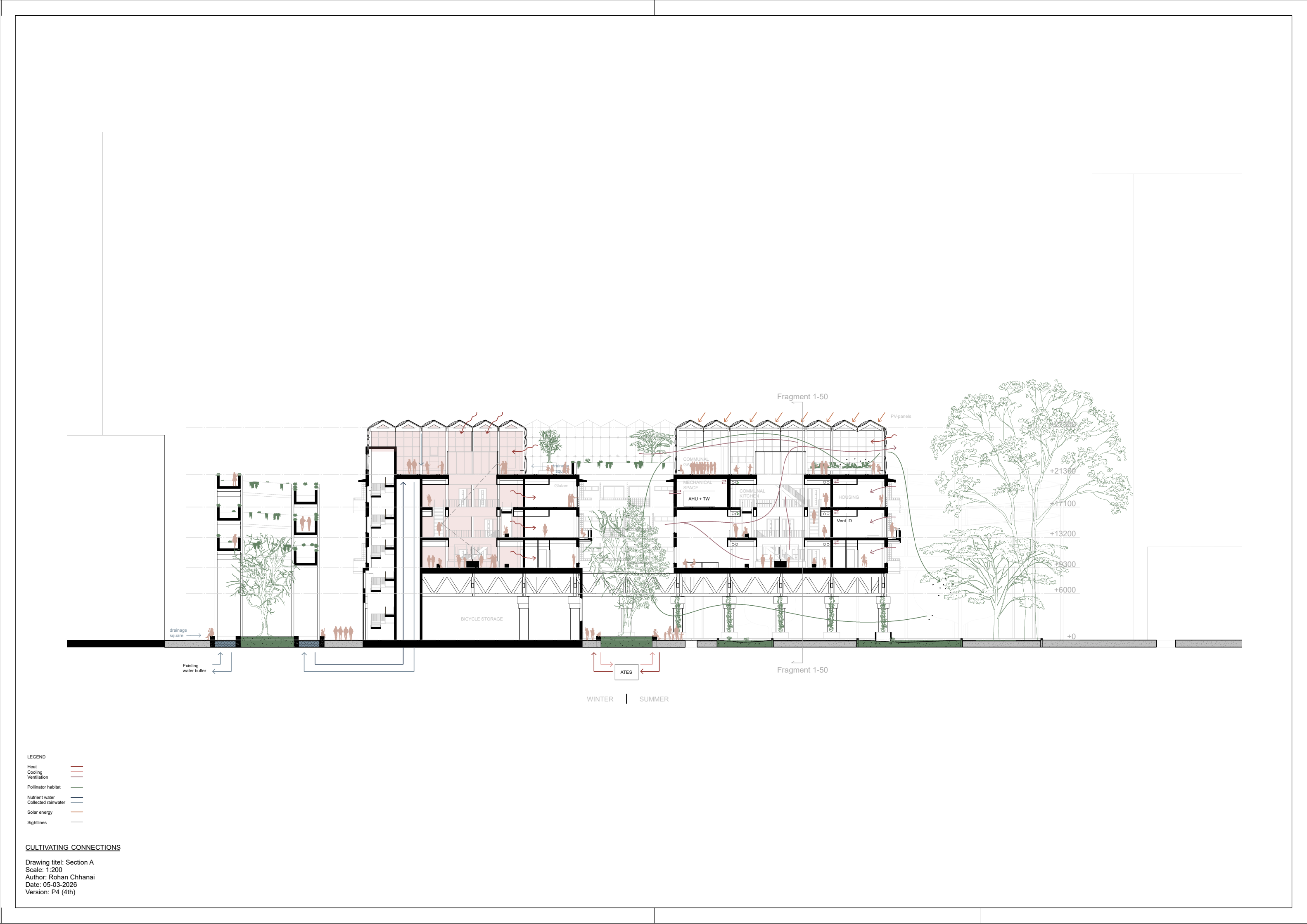
Fareej
(240m x 240m)
125 population
5.76 Ha
3.3 units / Ha
19 units



Khaled Galal Ahmed, 2012

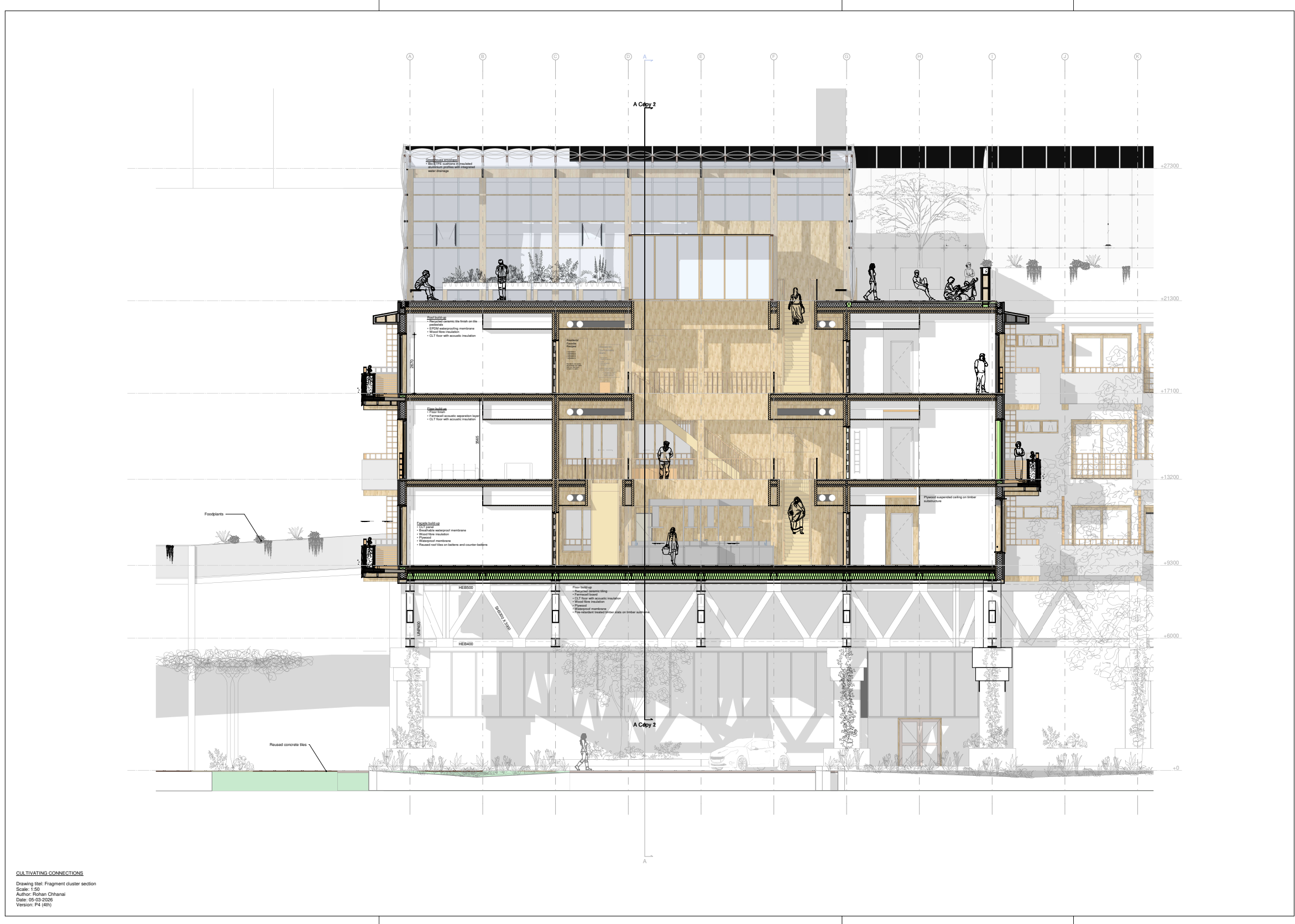
Bridge Structure Above Infrastructure

What



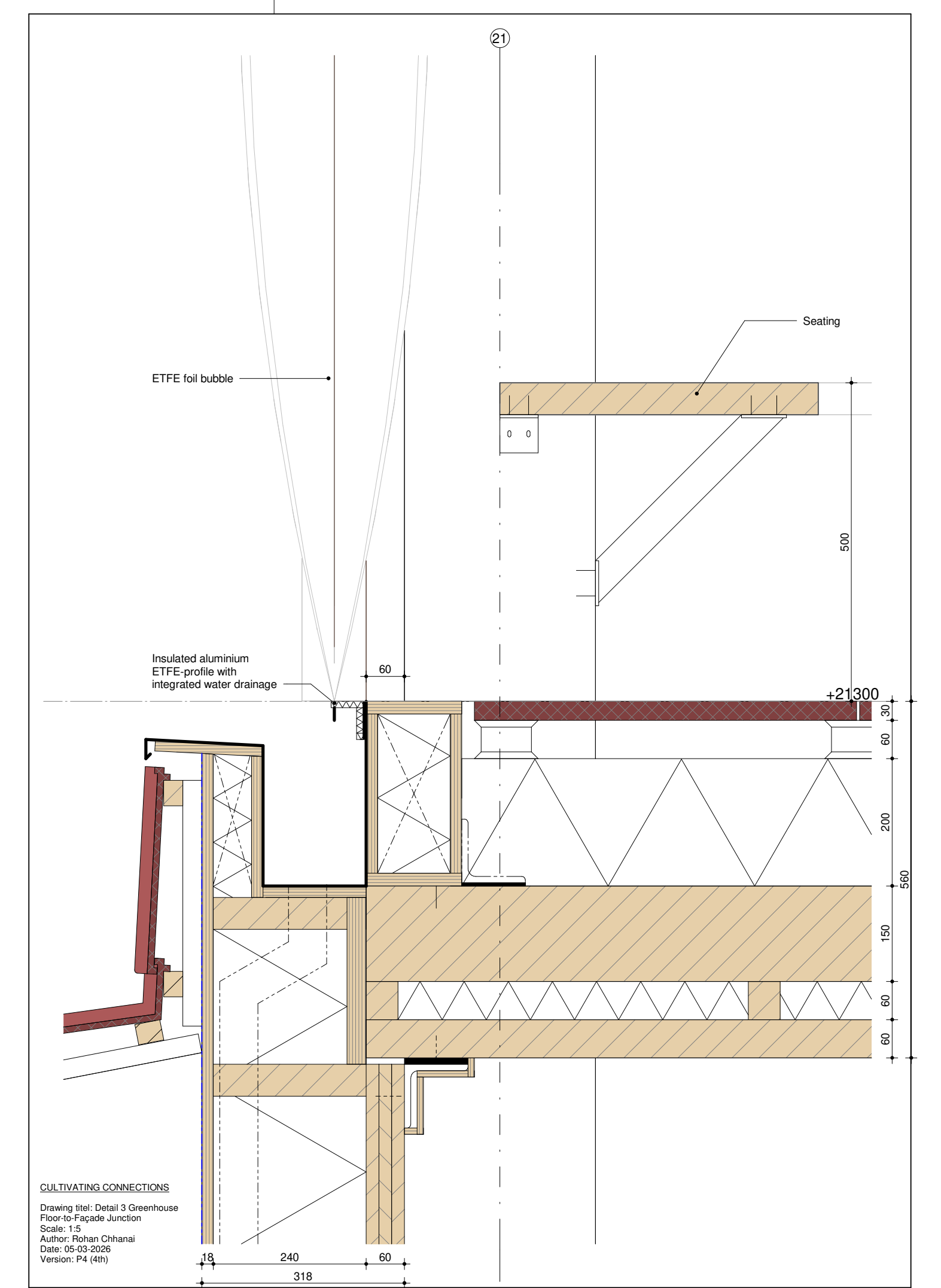
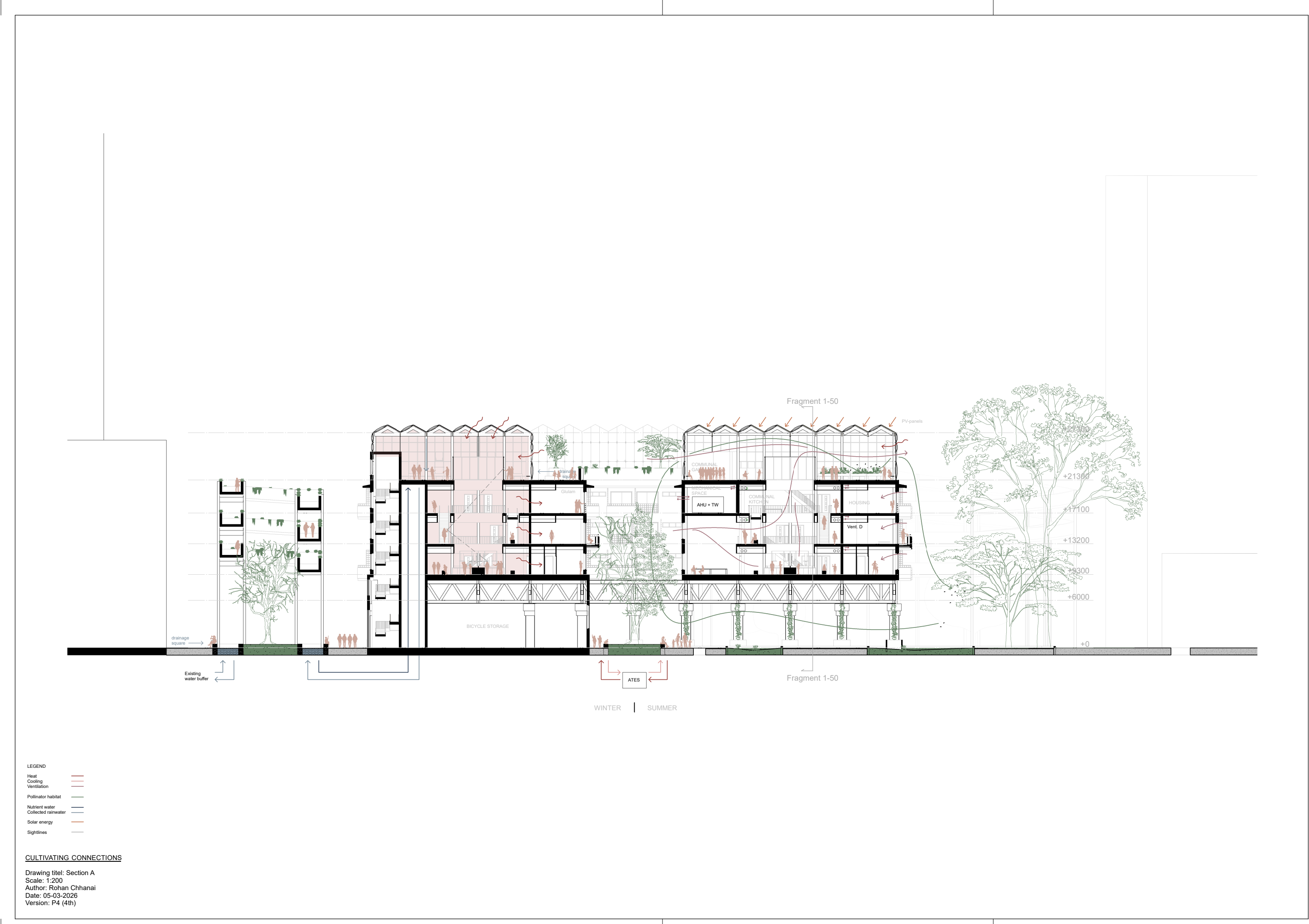
Cluster Living Around the Atrium

What



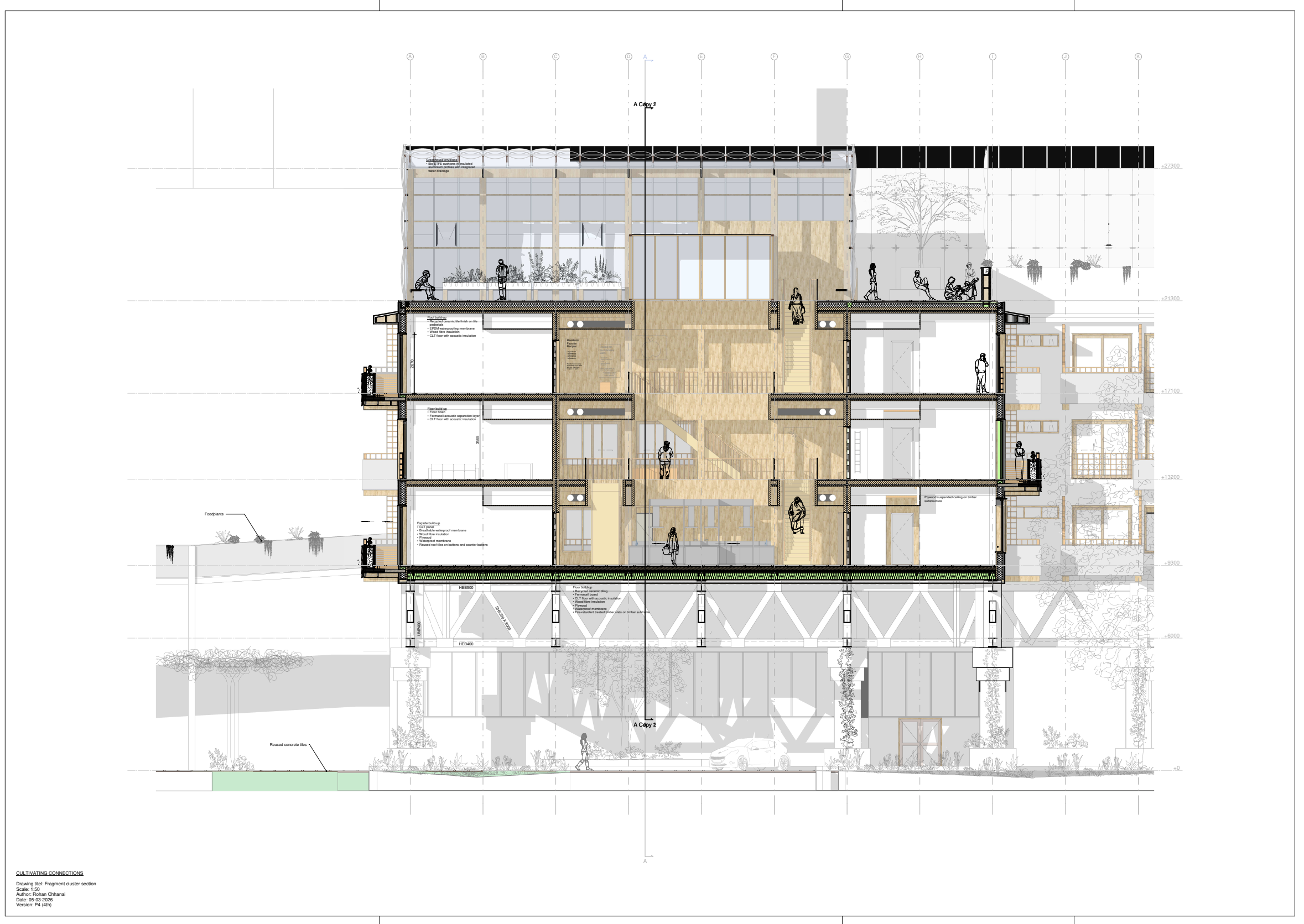
Integrated Food and Environmental Systems

What



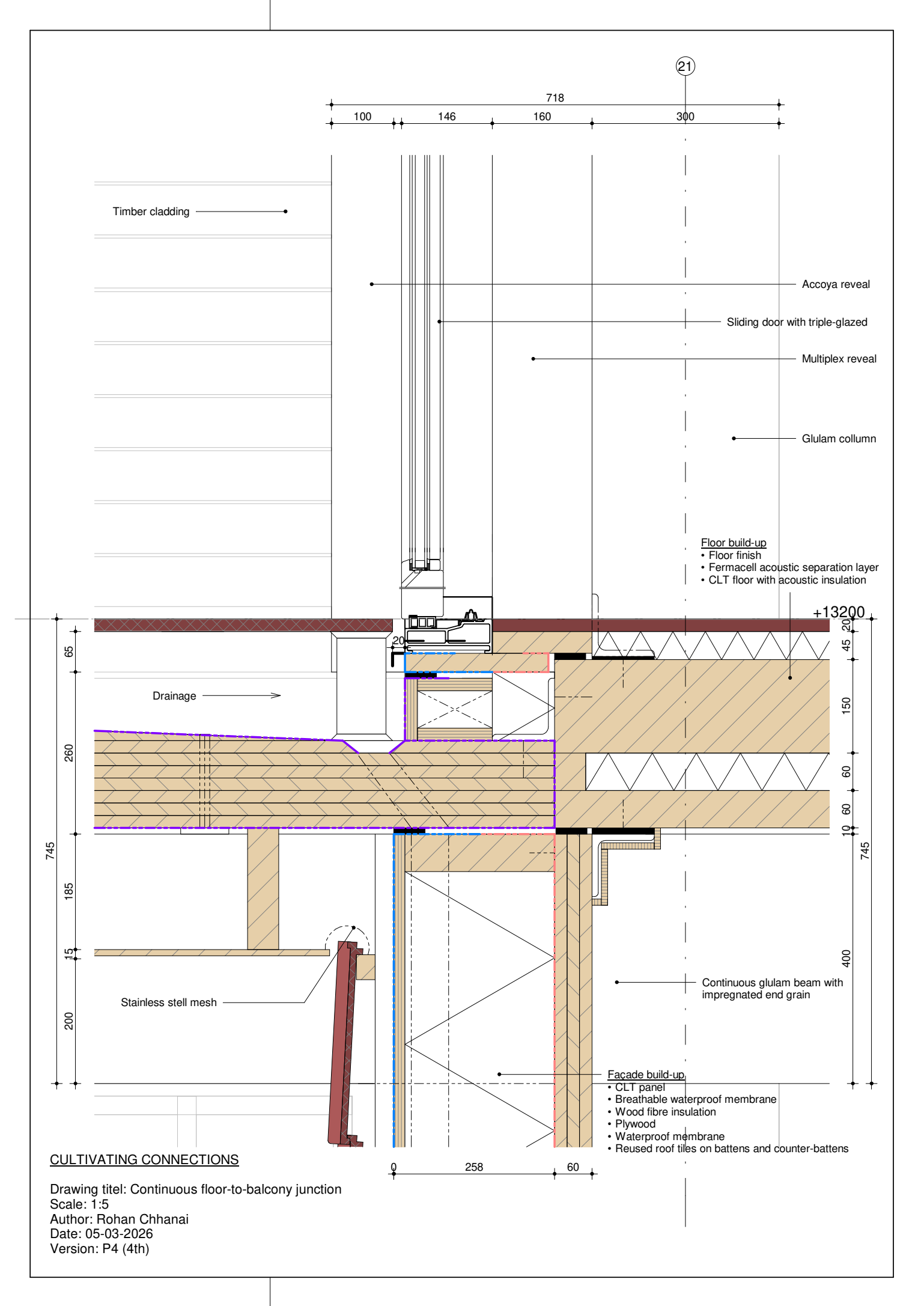
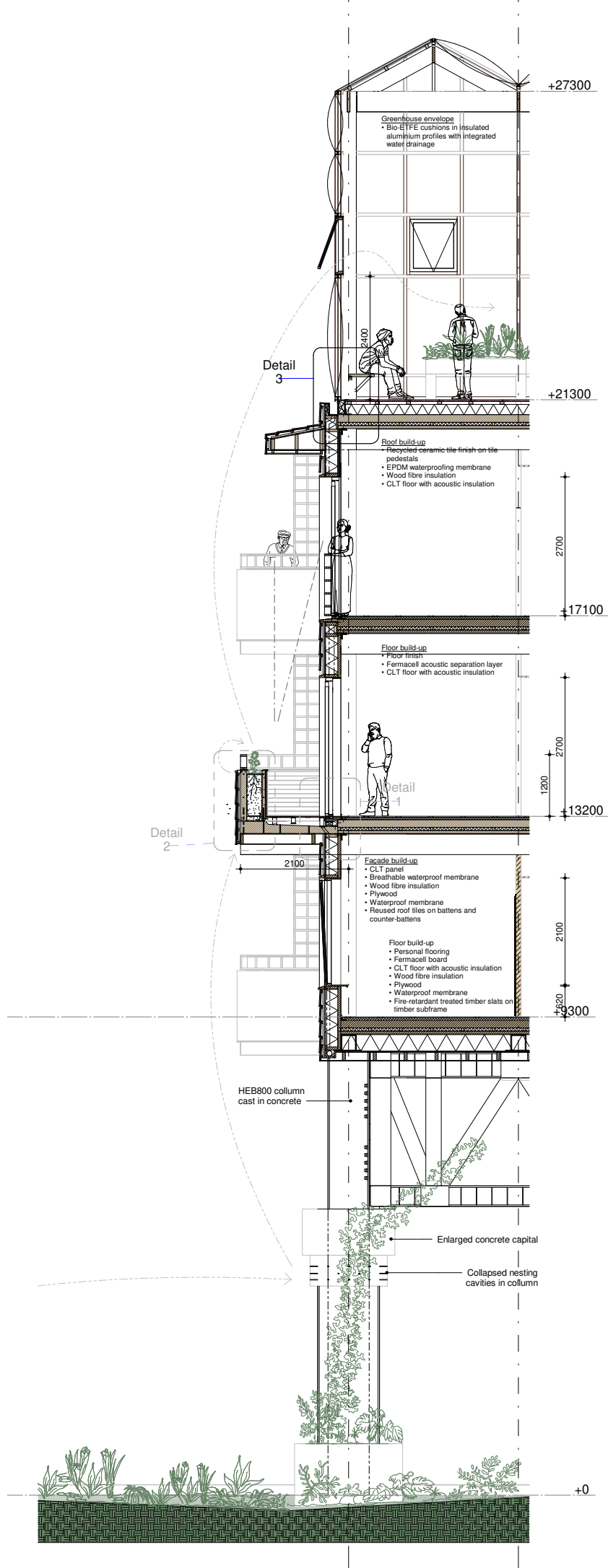
From Atrium to Dwelling

What



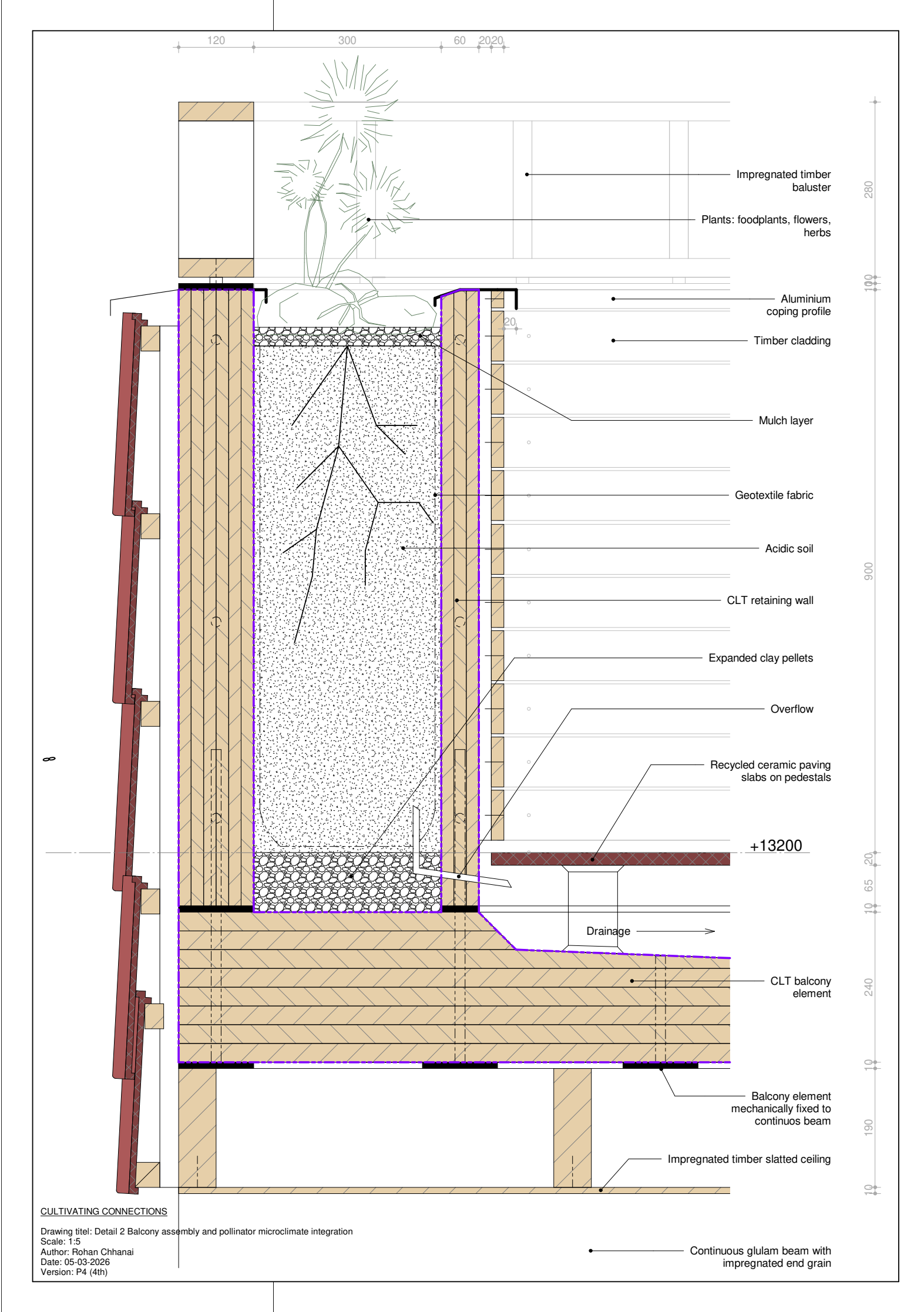
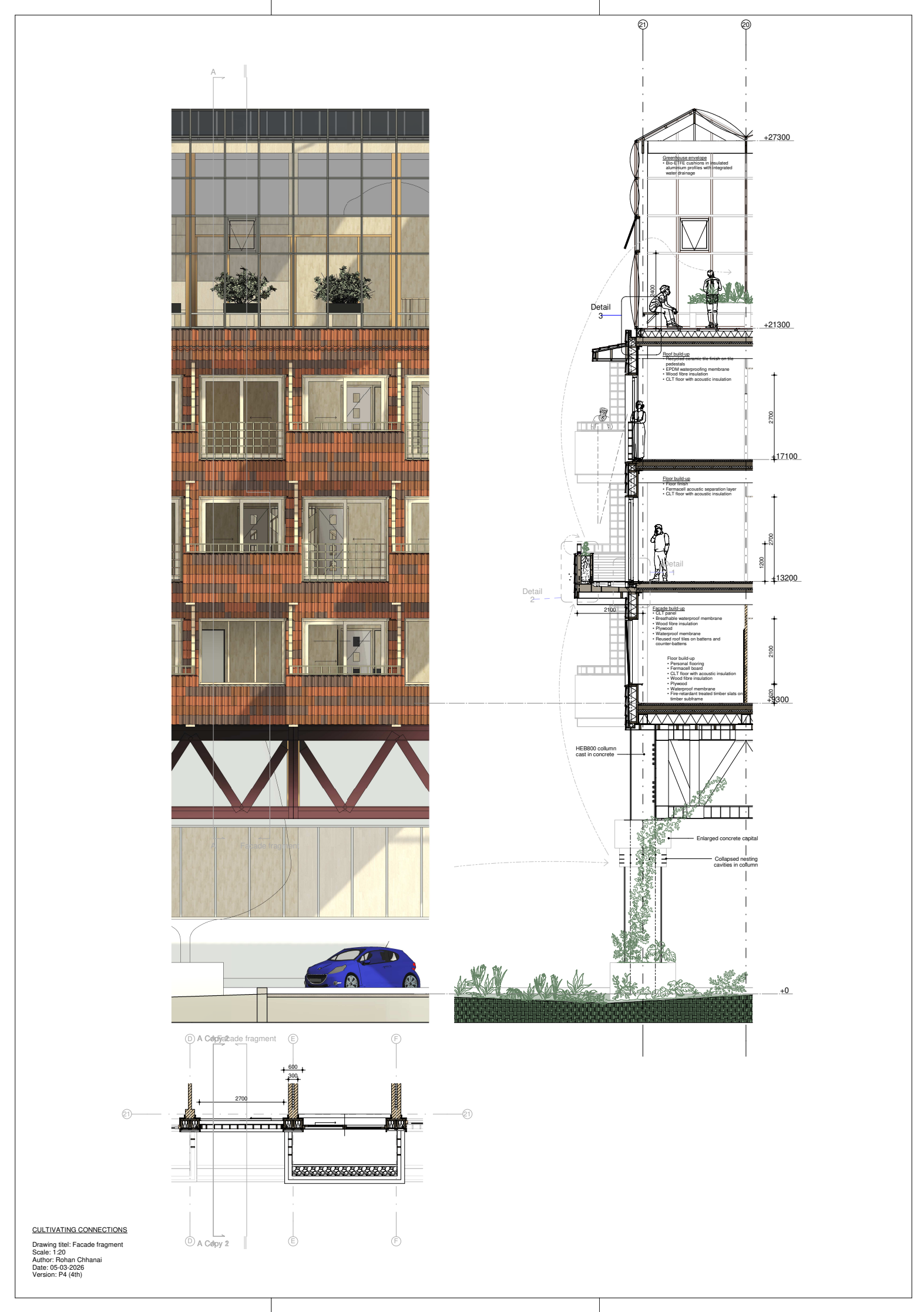
Balcony as Social and Climatic Buffer

What



Circular, Demountable and Ecologically Inclusive Façade

What



The Bridge

What

