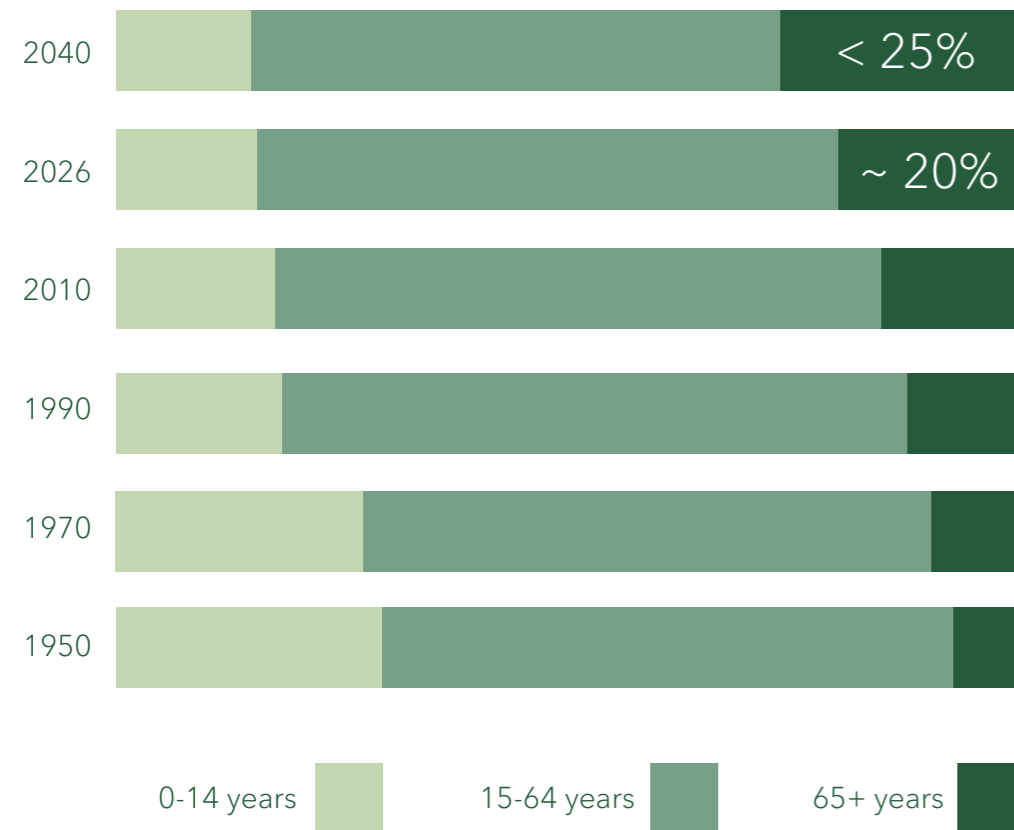


Tiem

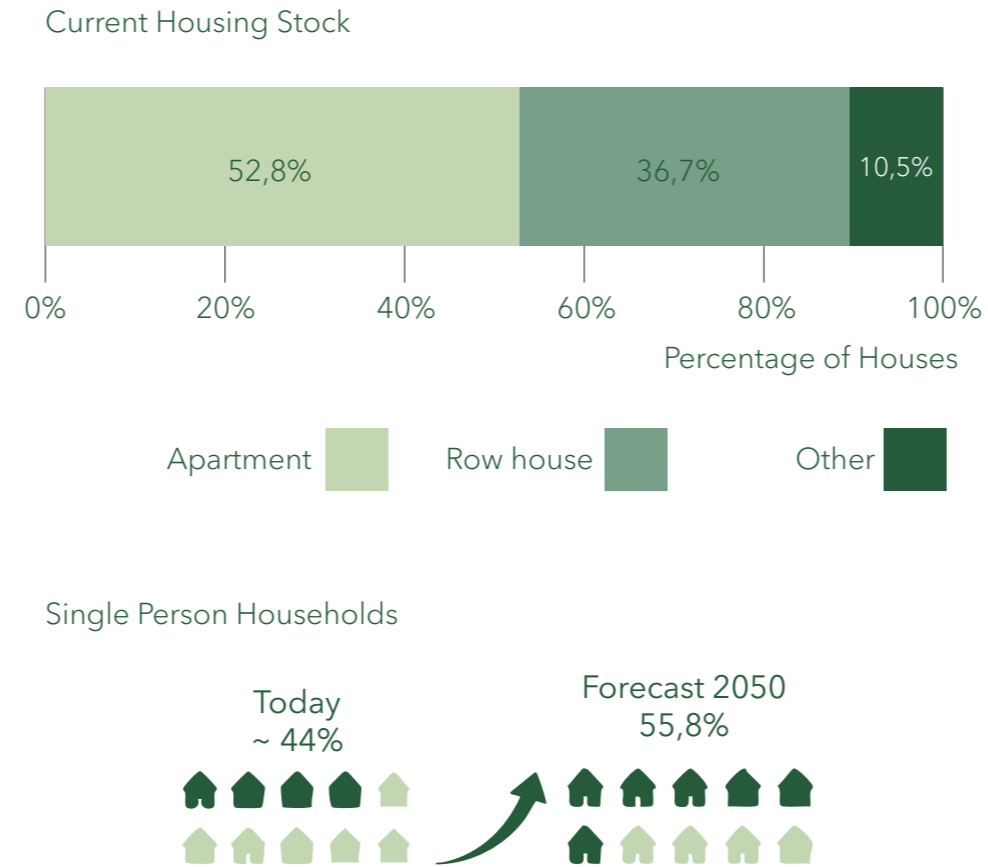
Together in
Everyday
Moments.

Context.

Ageing Population



Existing Housing Stock Mismatch



Feeling of Loneliness Among Elderly Adults



How can architectural and spatial design strategies create age-appropriate housing that supports everyday social interaction among older residents in Houtwijk?

Social Interaction in Everyday Routines

not through large communal spaces, but through movement, thresholds and shared use

Spatial Design Plays a Crucial Role

transitions, circulation and small-scale shared spaces enable low-threshold contact

Outdoor Space is Essential

preferably green, accessible and sometimes shared

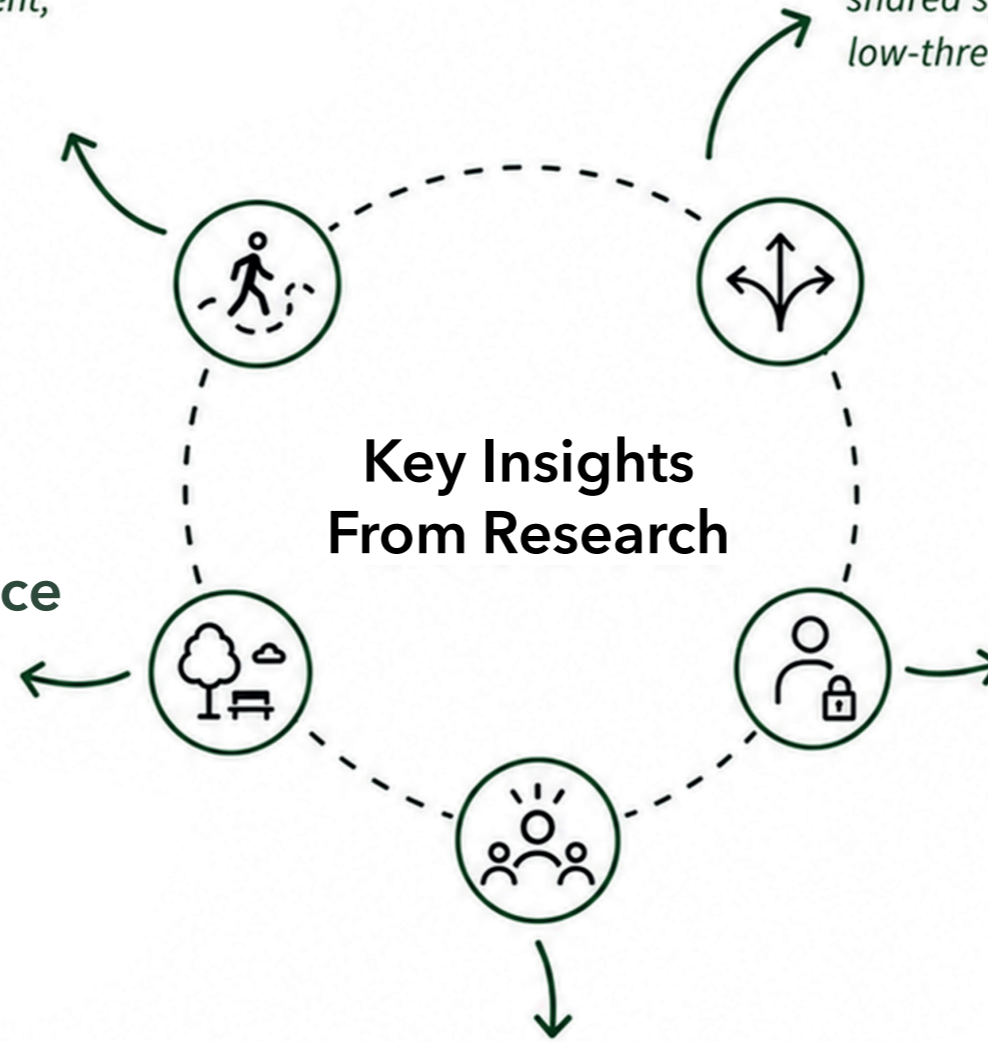
Older Residents Value Independence First

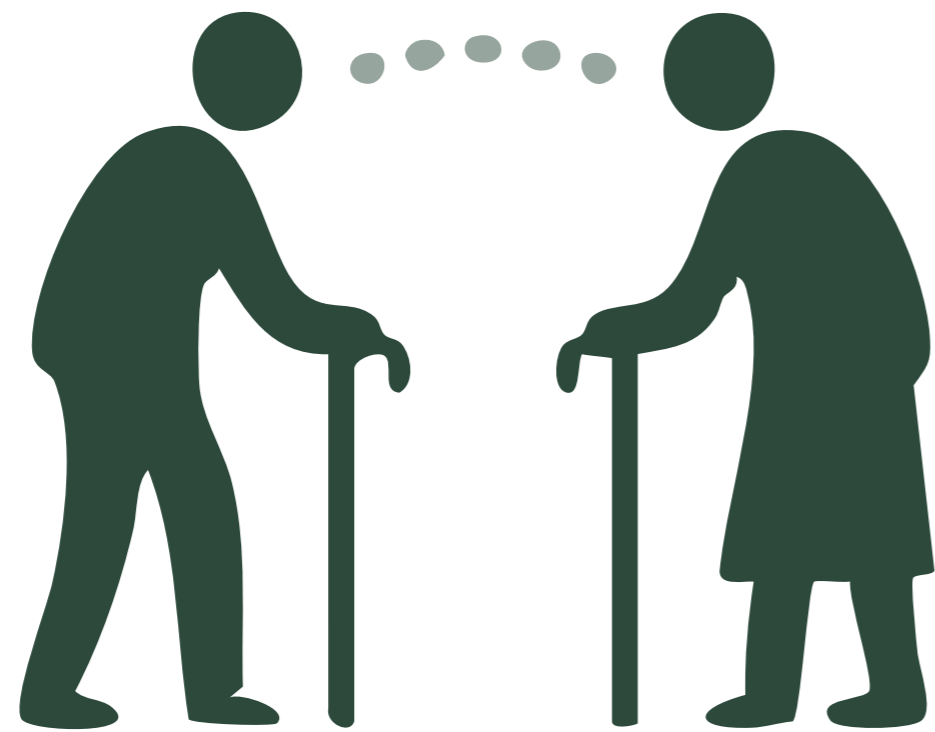
but are open to sharing if privacy and control are maintained

Key Insights From Research

Social Contact Should Remain Voluntary

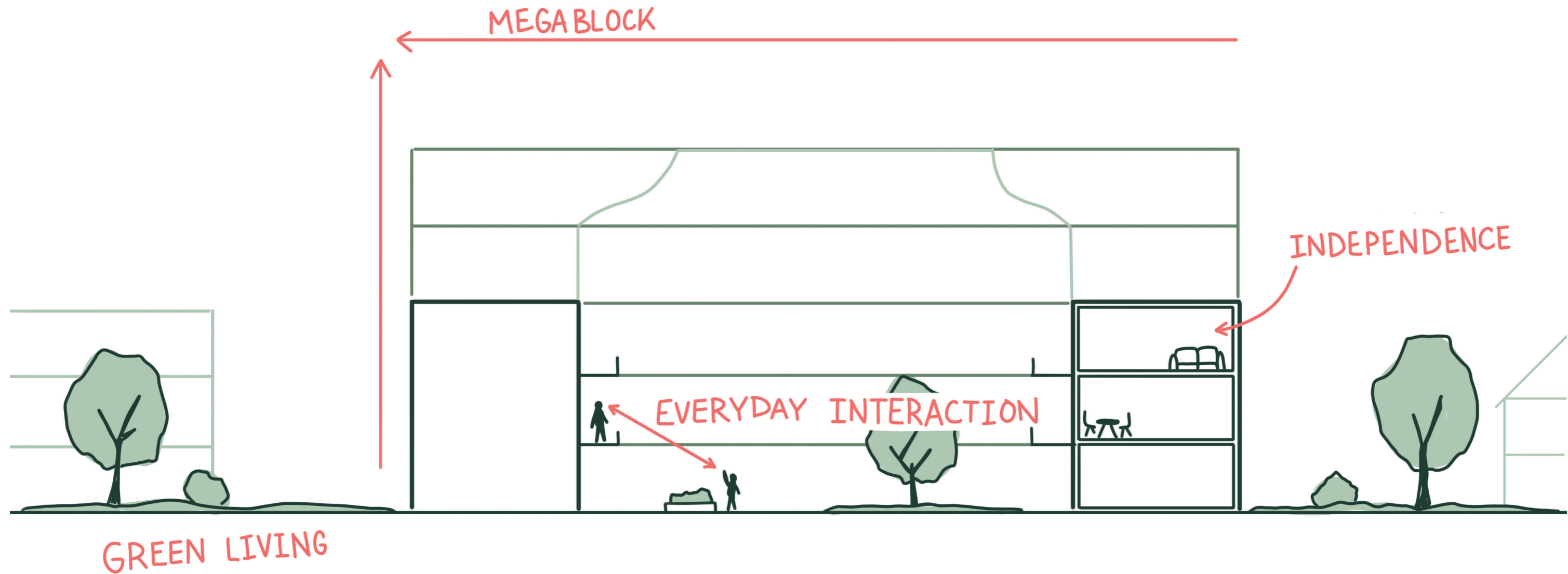
architecture should enable, not force interaction



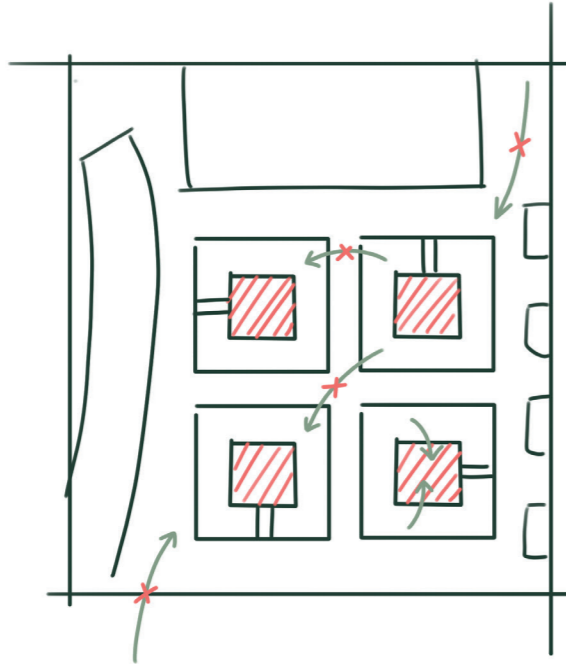


The design focuses on developing age-appropriate housing for older adults that balances independence with everyday social interaction.

Principles.

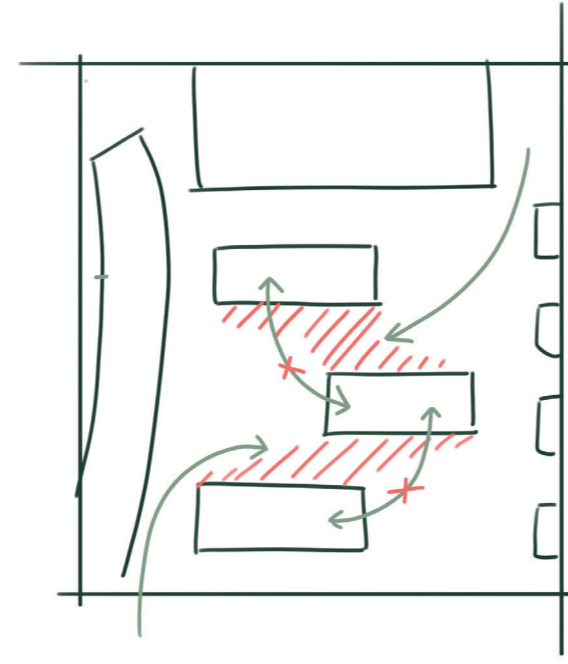


Why a Megablock?



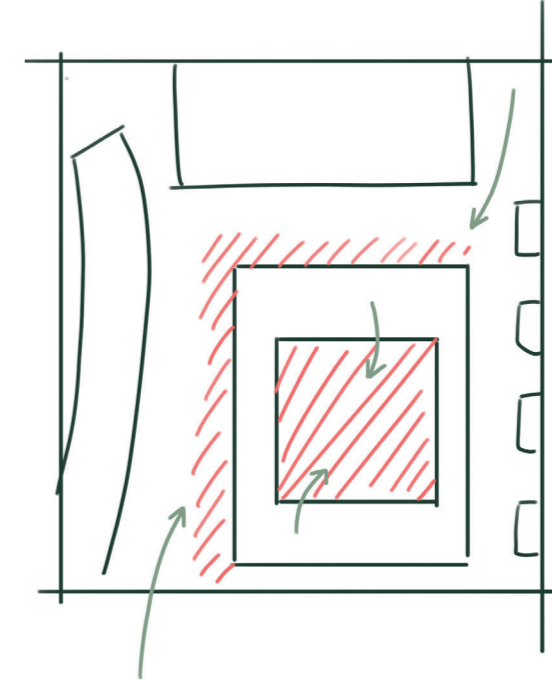
Hofjes

- Strong internal community
- Inward-oriented structure
- Limited neighbourhood connection
- Socially enclosed environment



Apartment Buildings

- Connection to the surrounding neighbourhood
- Shared spaces remain building-specific
- Limited interaction between different apartment buildings
- Fragmented social structure



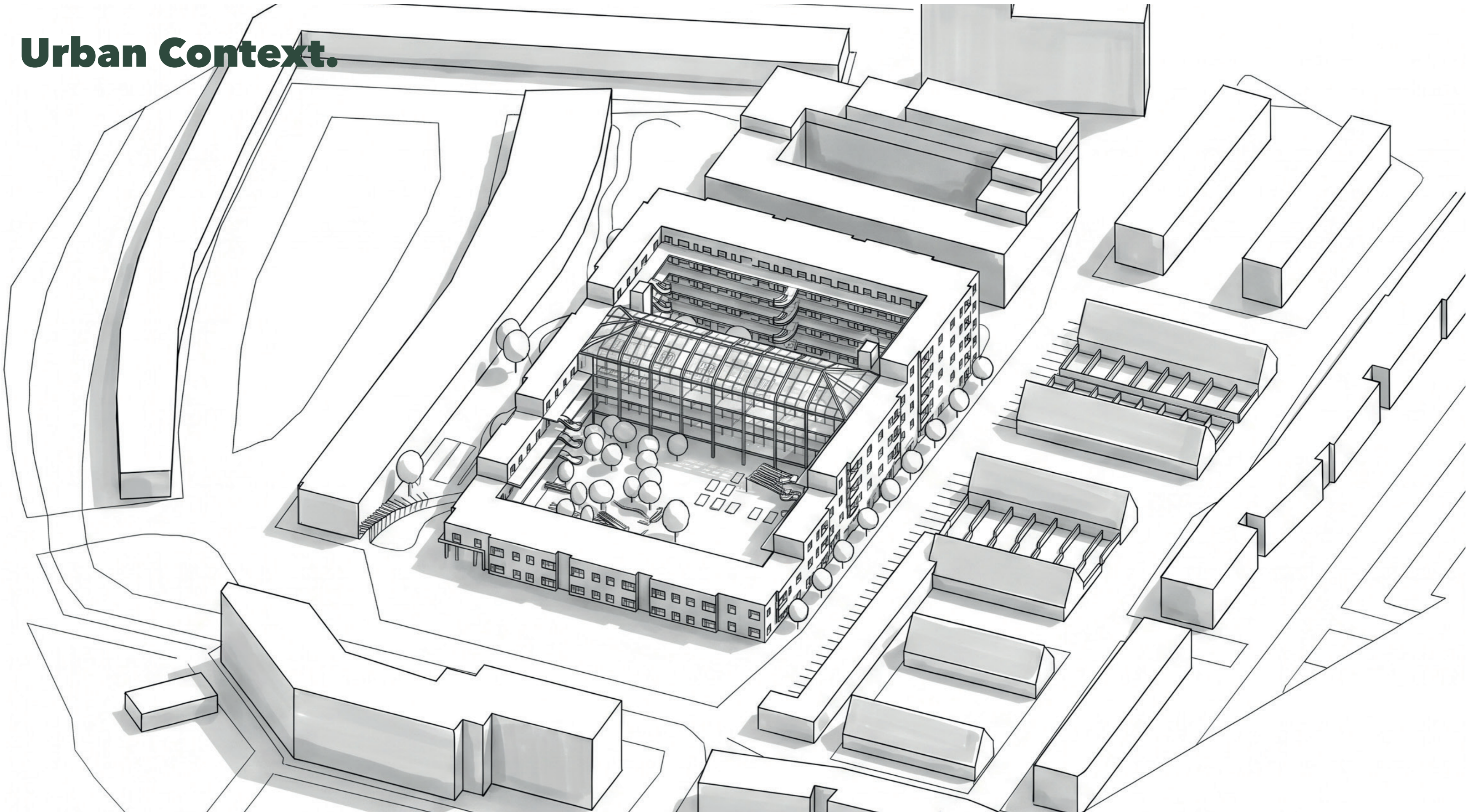
Megablock

- Strong connection throughout the entire building
- Central collective spaces encourage interaction
- Layered transitions between private and shared space
- Connected to the neighbourhood through surrounding public landscape
- Integrated social structure across the whole block

Location.



Urban Context.





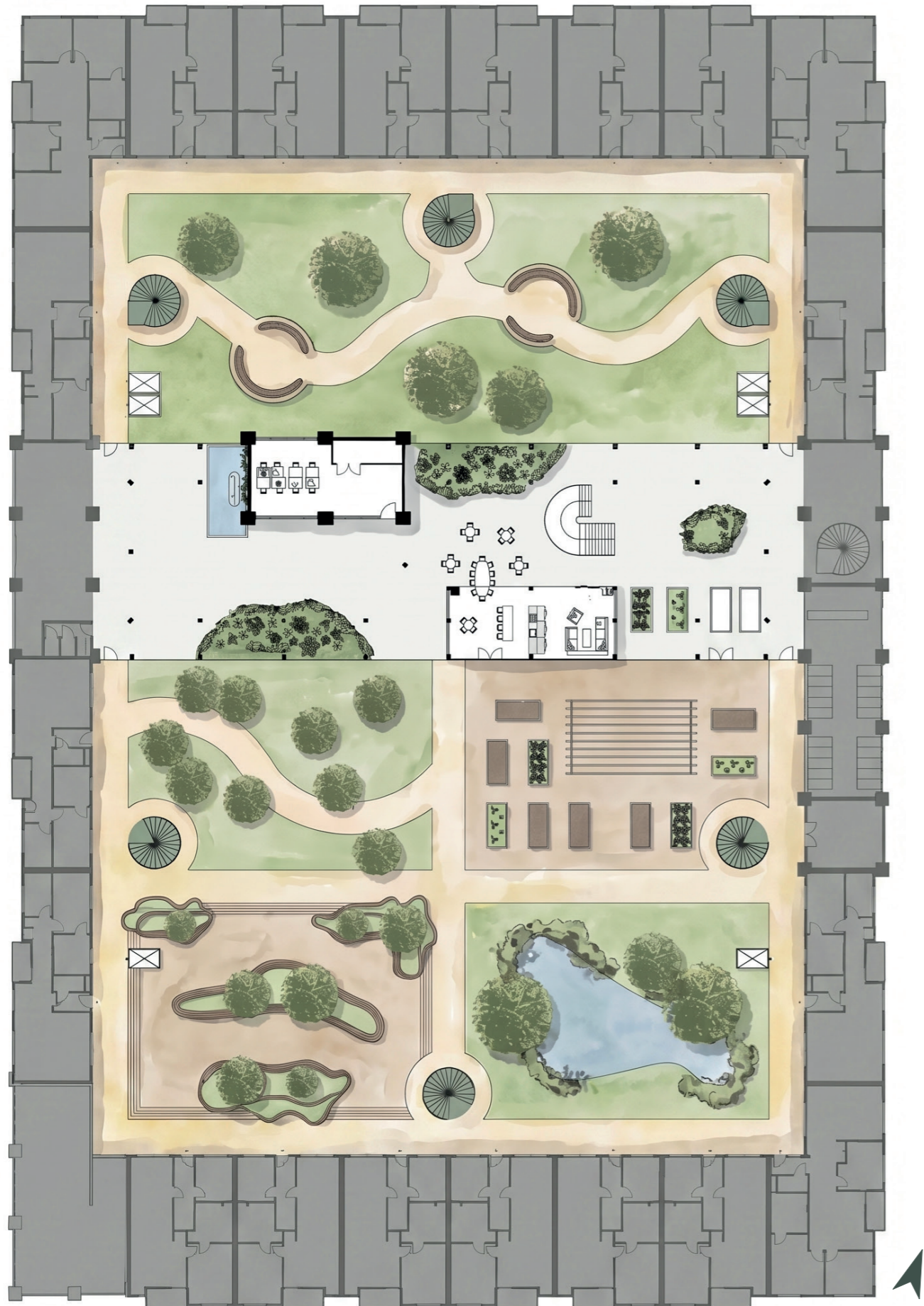
Arrival.

- Cafe
- Walking Route
- Entree

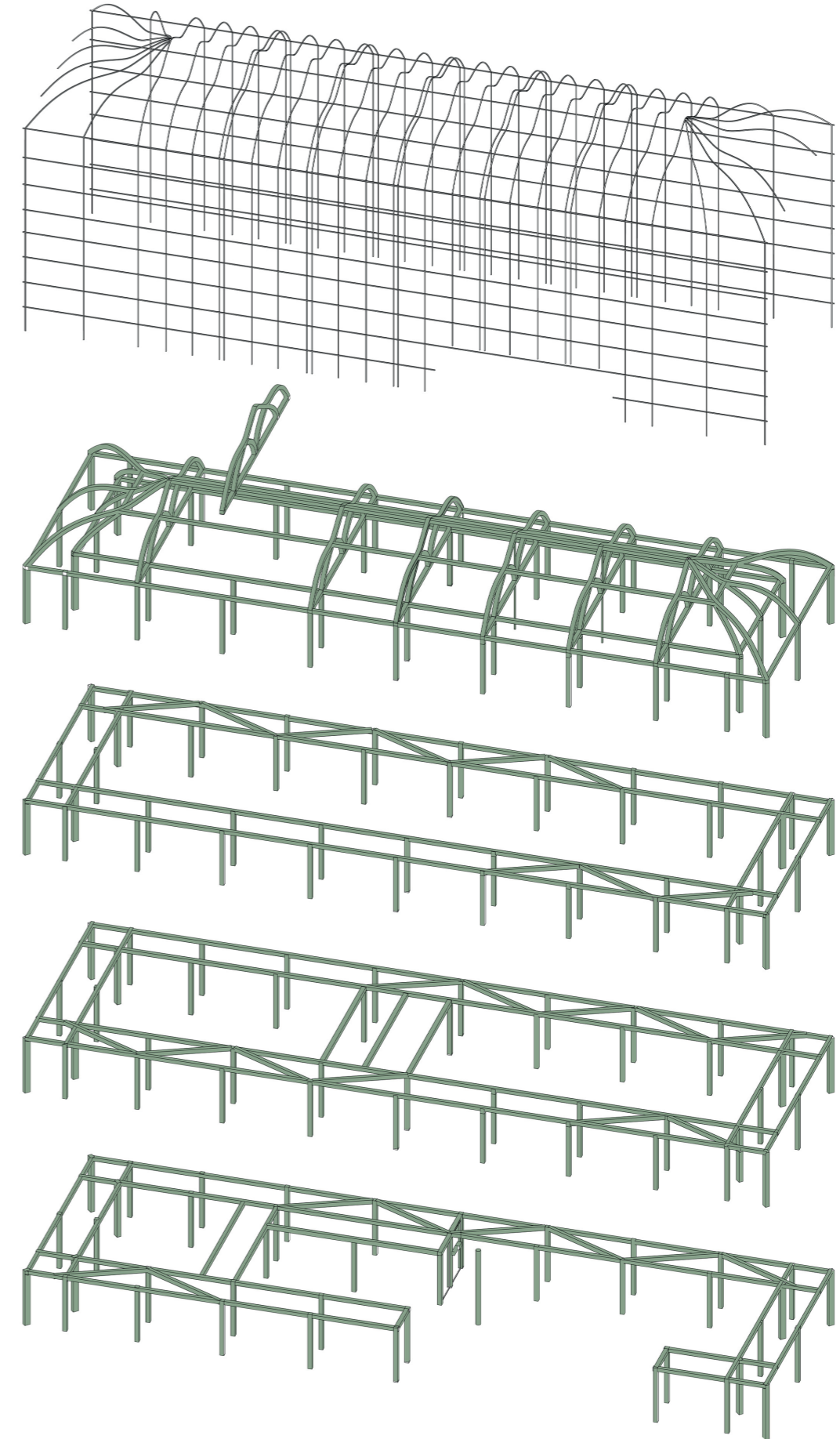
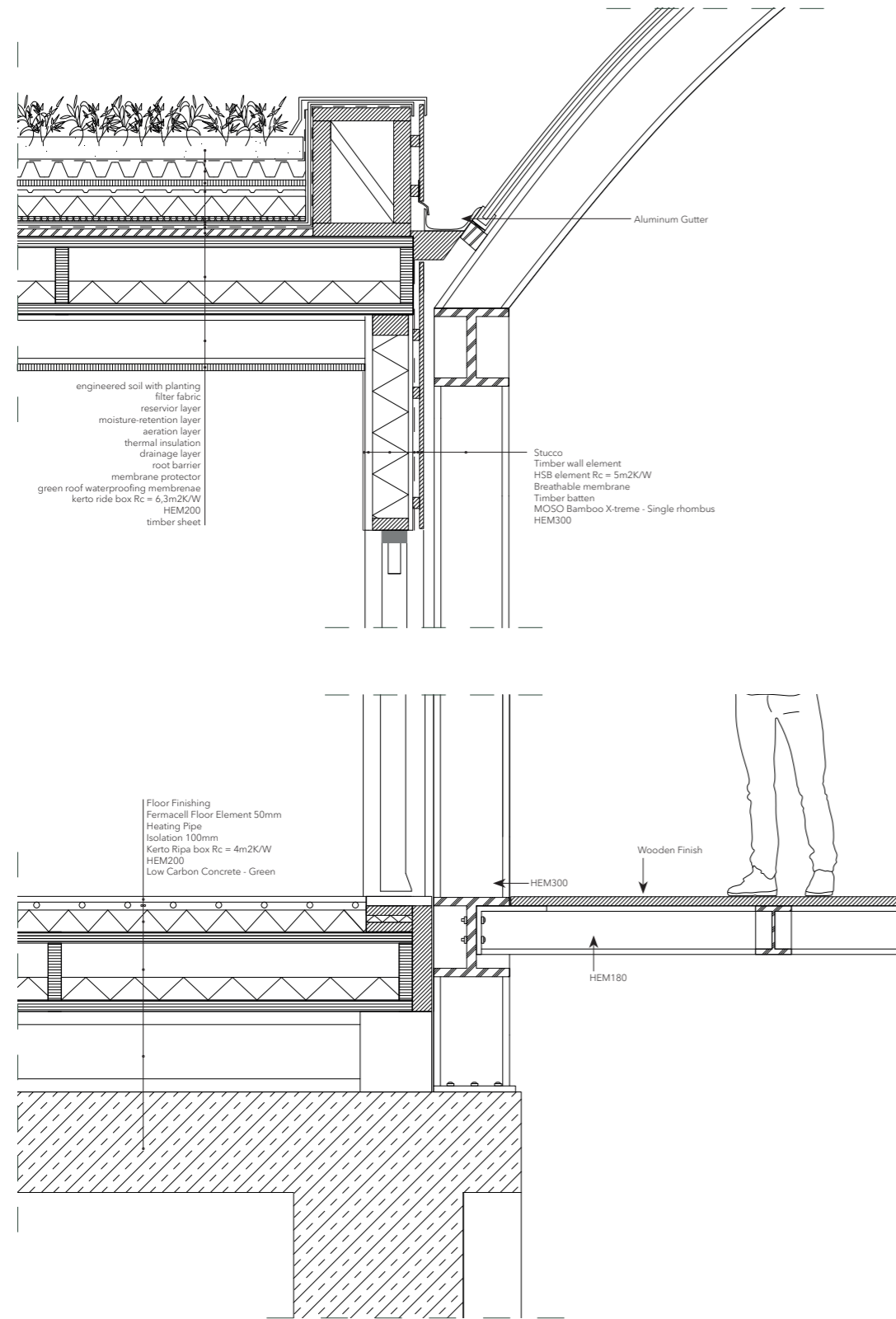


Courtyard Landscape.

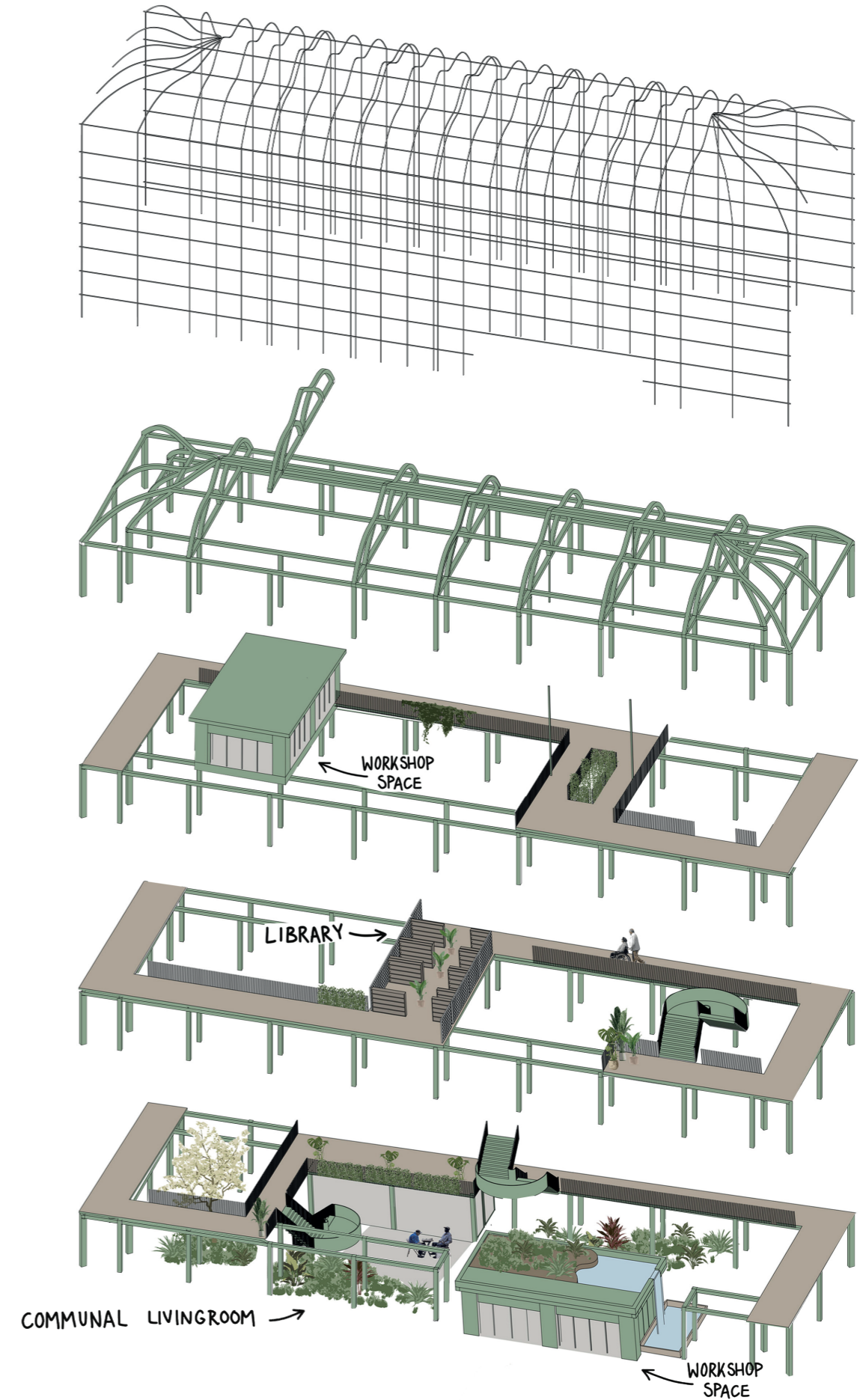
- Orangerie
- Quiet Garden
- Functional Garden

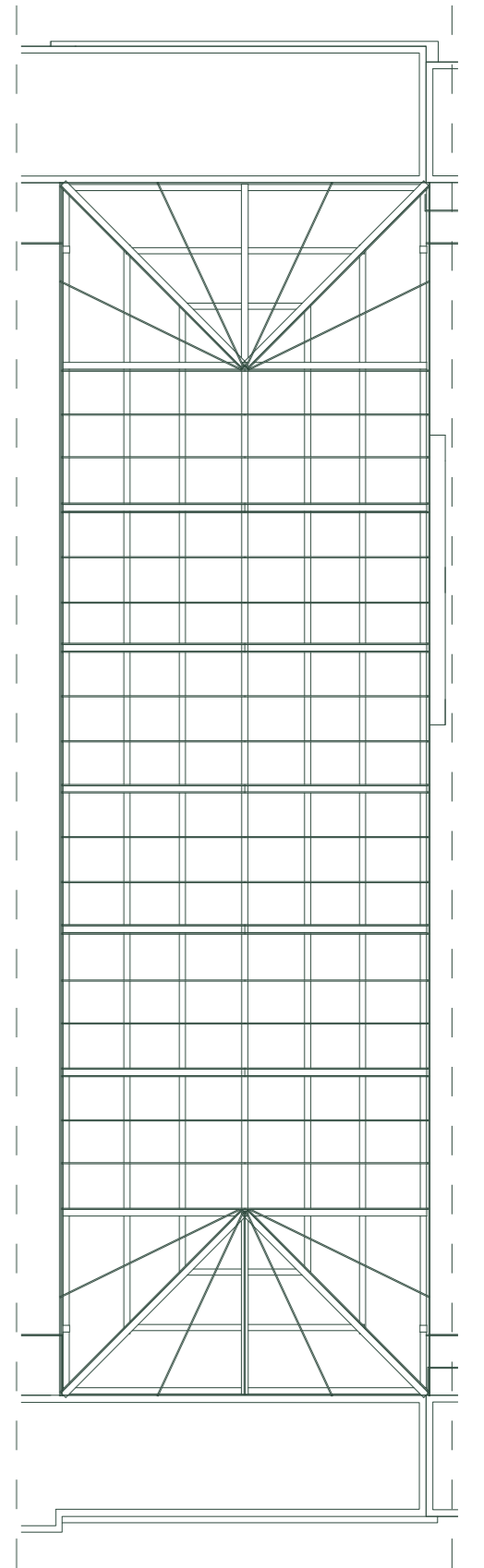
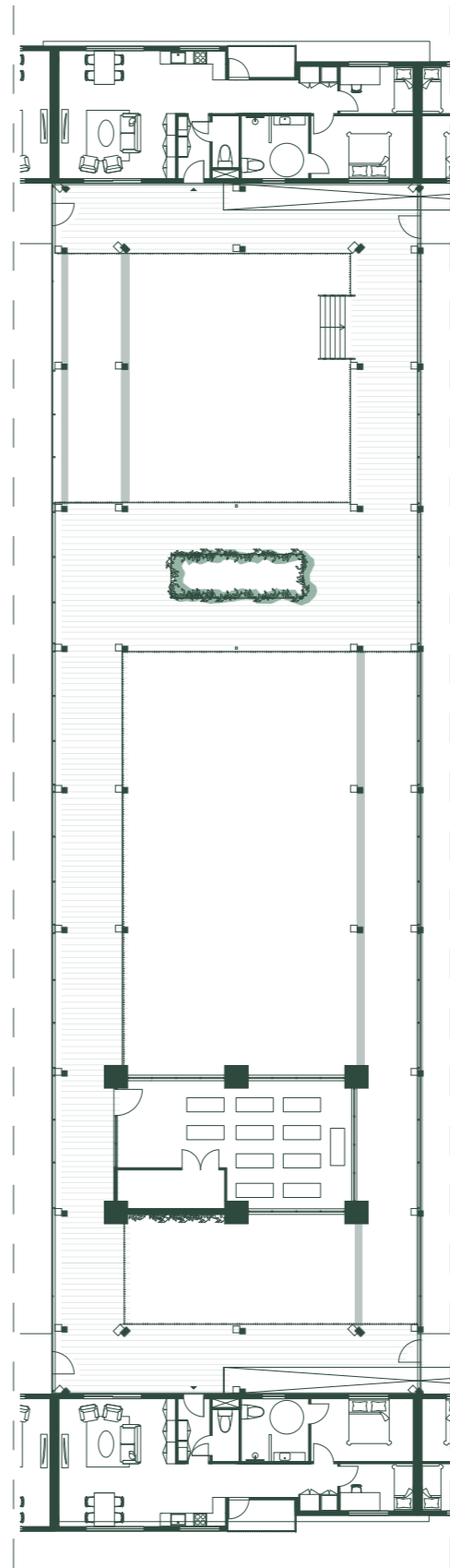
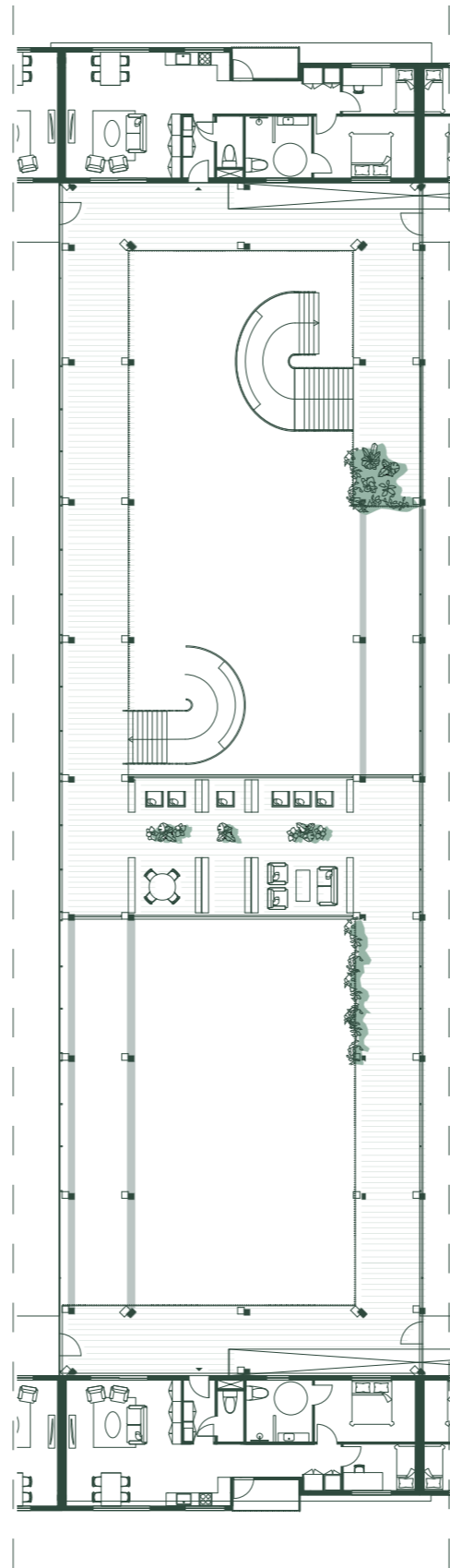
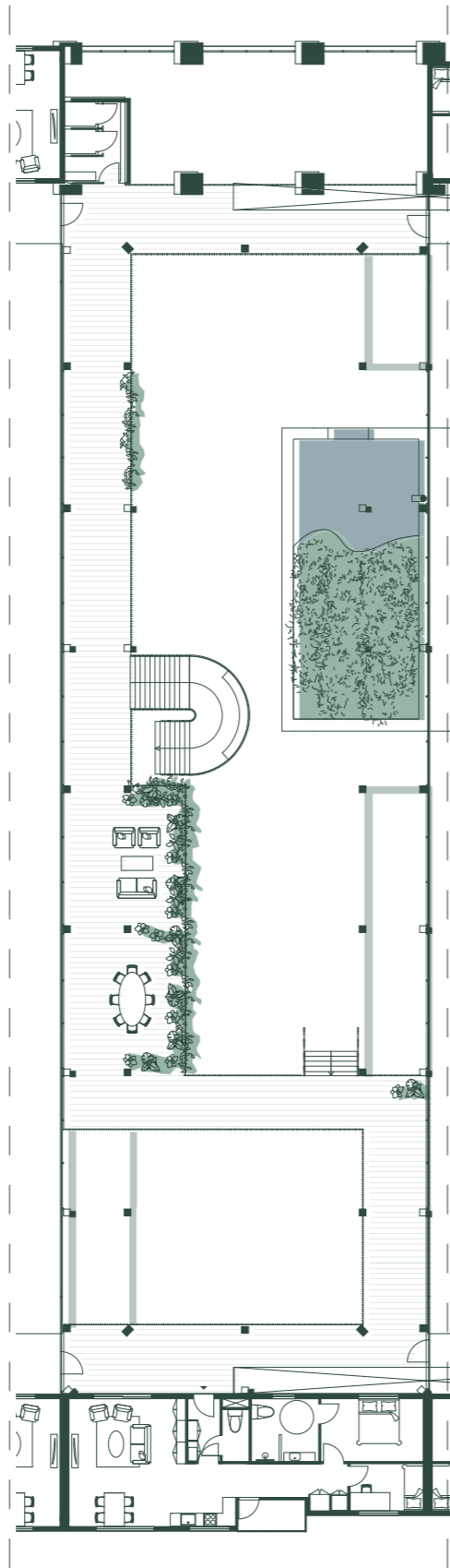
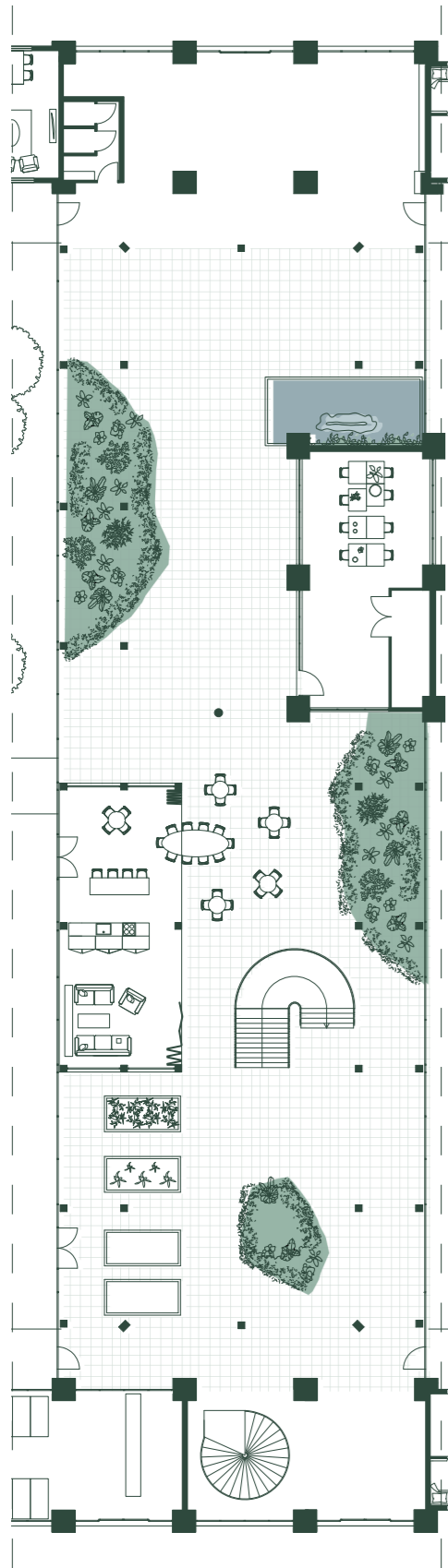


The Orangerie.



The Social Heart.





How the Orangerie Breathes.

1. Roof rainwater collection

- 1.1 Gutter drainage system
- 1.2 Primary pond
- 1.3 Waterfall to secondary pond
- 1.4 Overflow to storage reservoir
- 1.5 Pumped recirculation to waterfall
- 1.6 Automatic irrigation system for planting

2. Thermal Energy Storage (TES) System

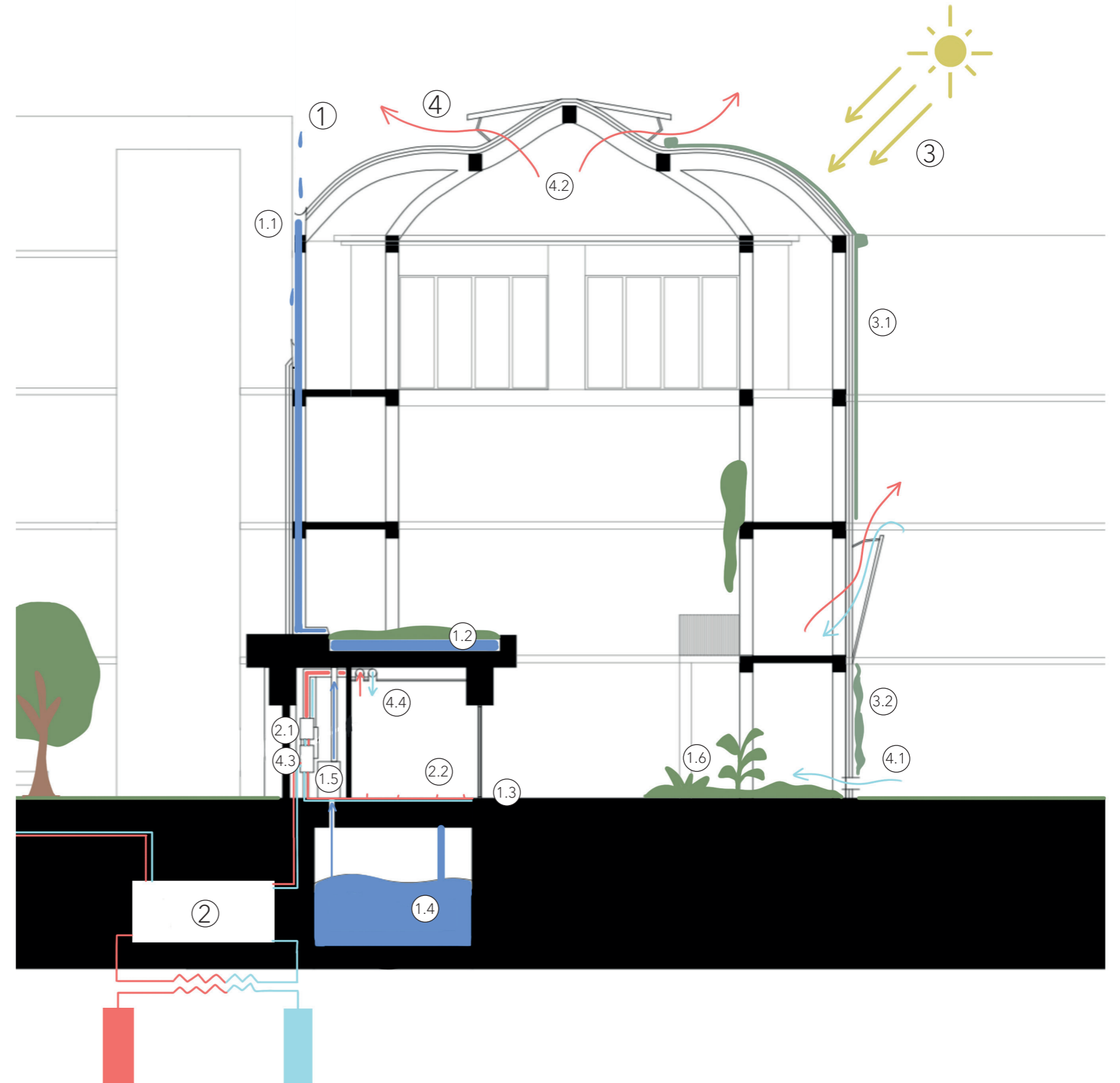
- 2.1 Heat Pump
- 2.2 Floor Heating (or Cooling)

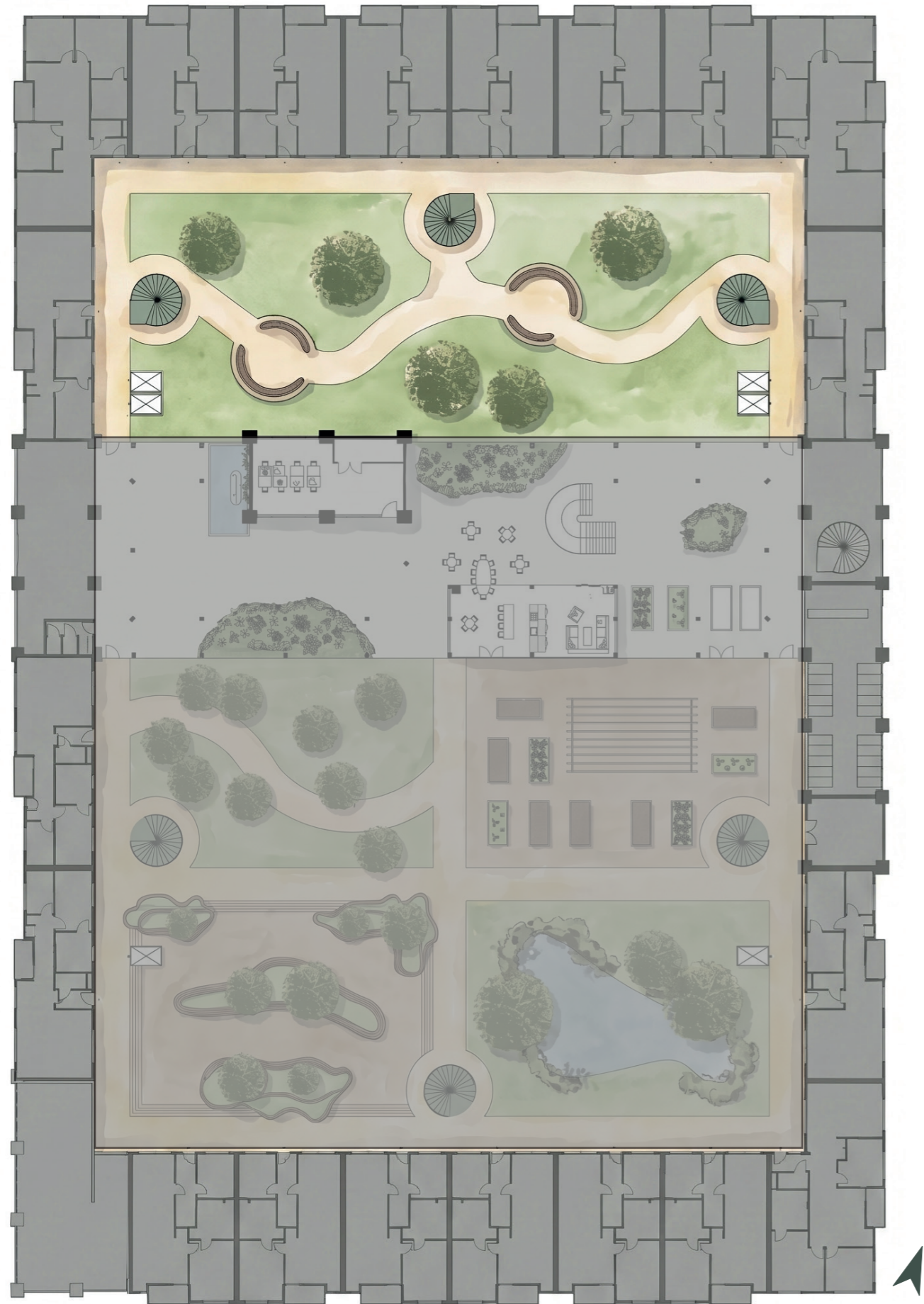
3. Sun Protection

- 3.1 Sunshades
- 3.2 Ivy Plant

4. Ventilation

- 4.1 Fresh Air Intake
- 4.2 Stack Effect Ventilation
- 4.3 MVHR Heat Recovery Unit
- 4.4 Mechanical Ventilation for Controlled Climate





Quiet Garden.



Reading

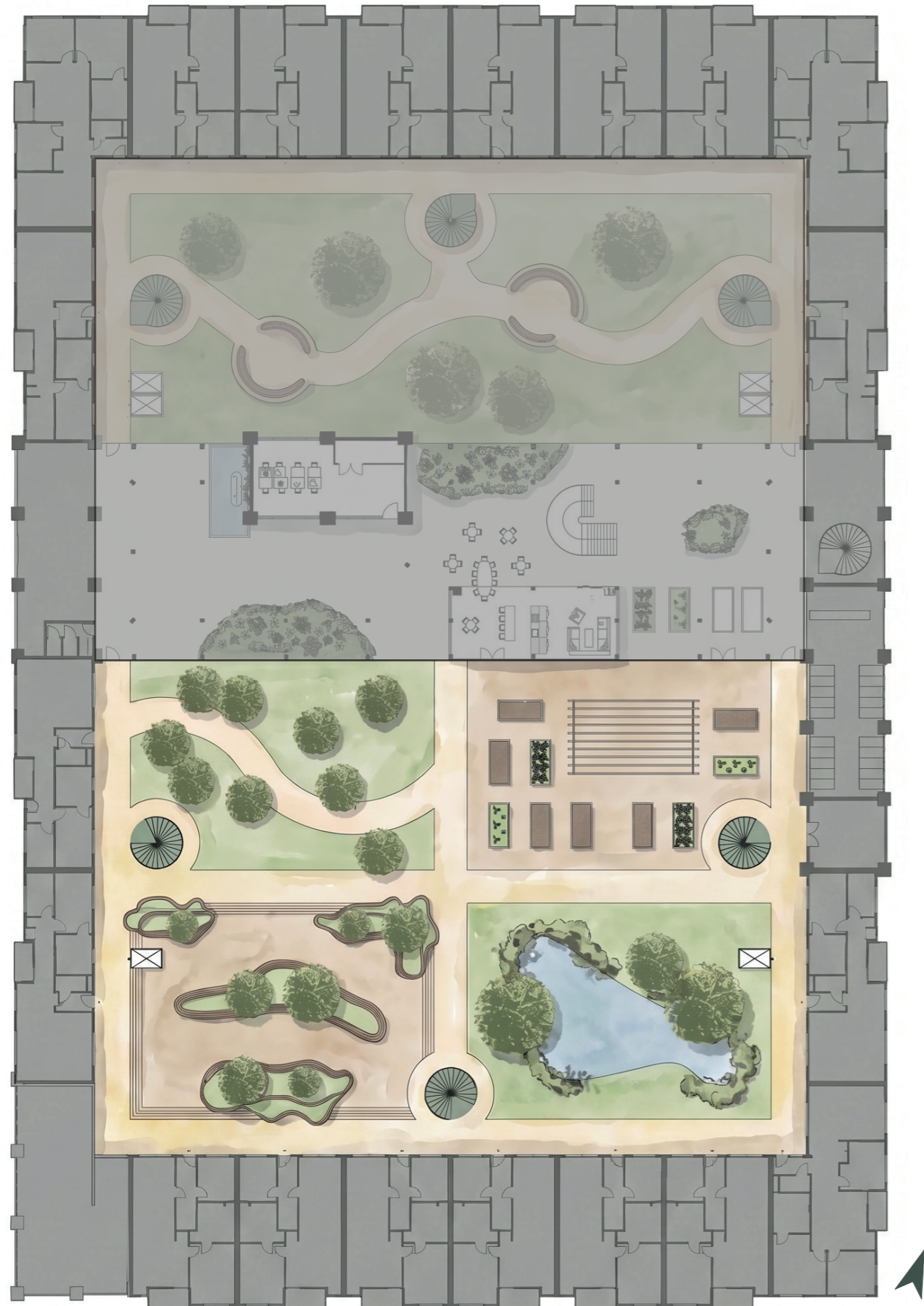


Relaxing



Greenery





Functional Garden.



Gathering



Gardening

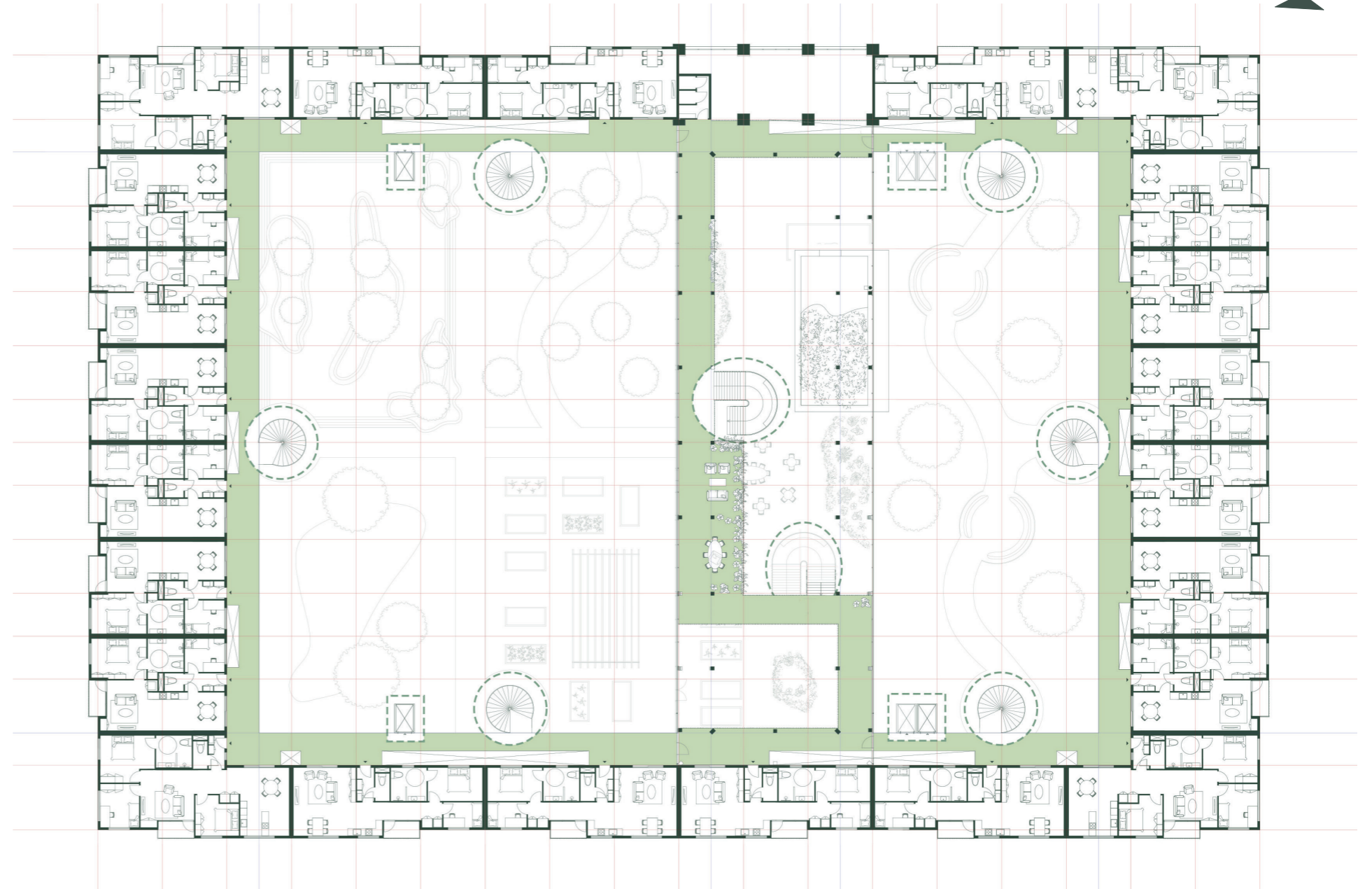
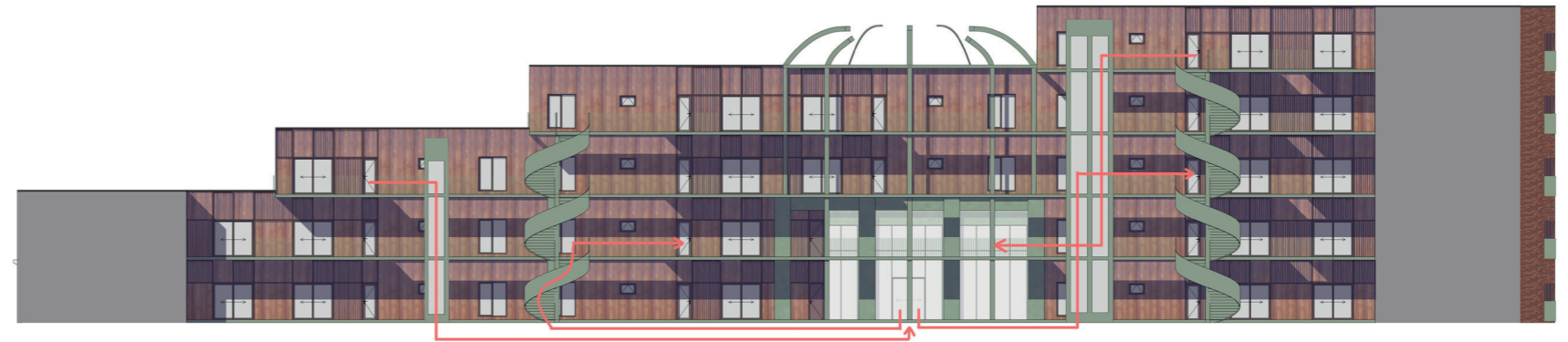


Activity



Galleries and Routing.

- 6 Elevators
- 6 Staircases
- Openings in Gallery to Have Extra Balcony Space

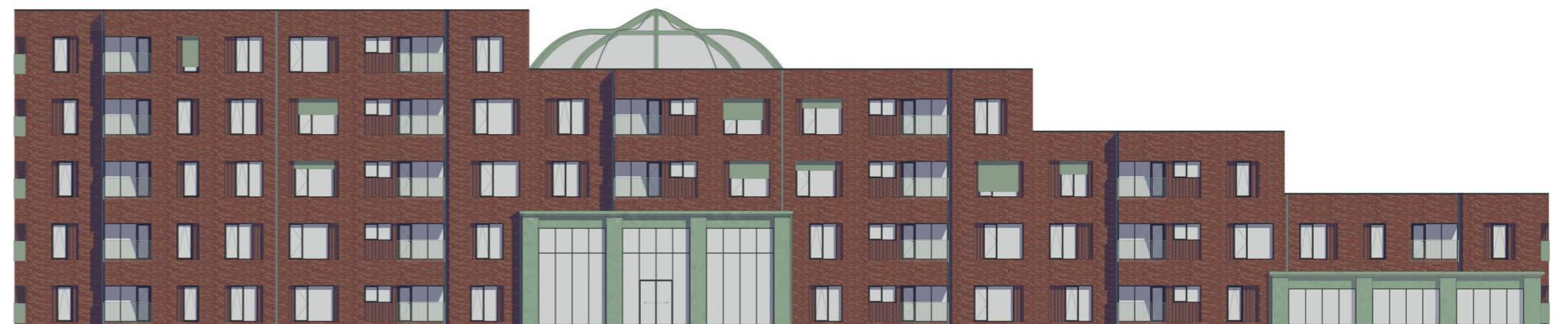


Neighbourhood Facade.

- Red Brick, Connection with Neighbourhood
- Grid of Windows and Logias

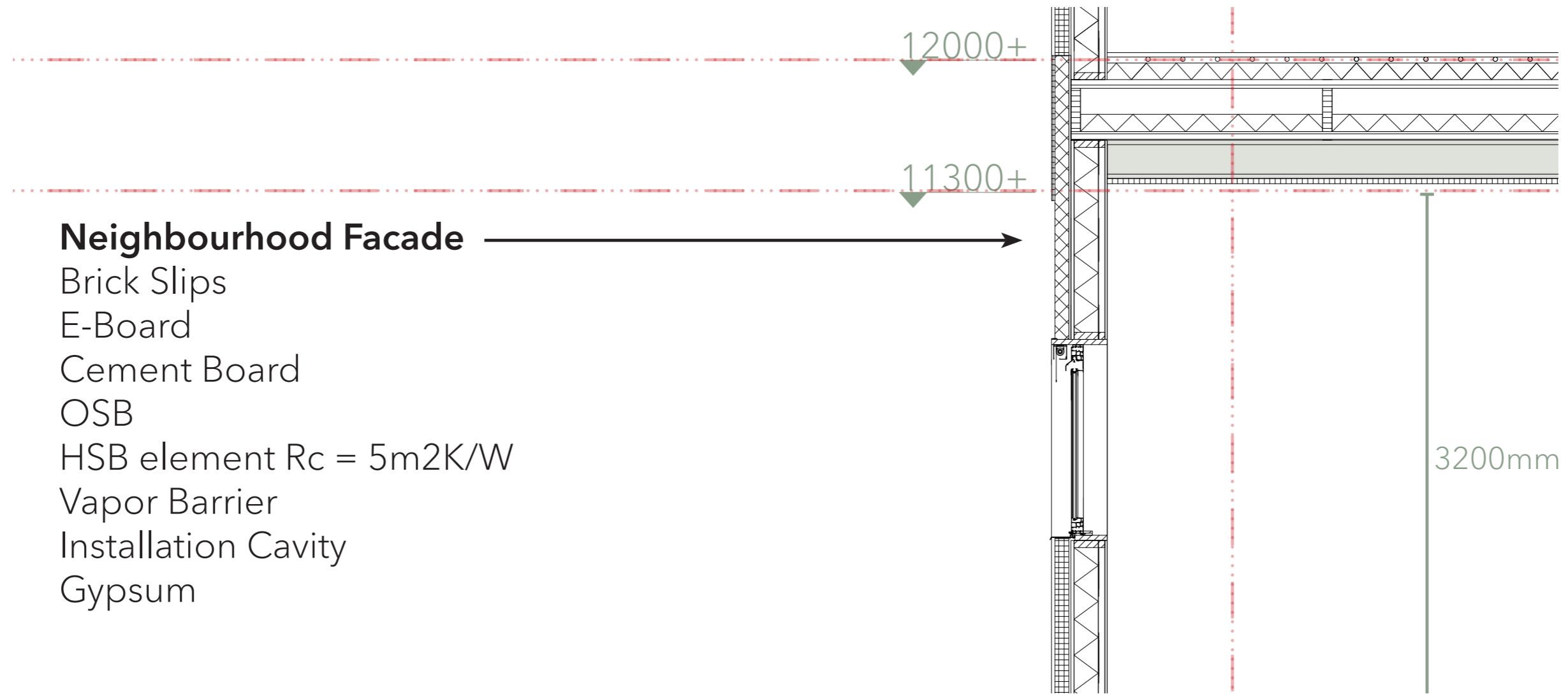


North



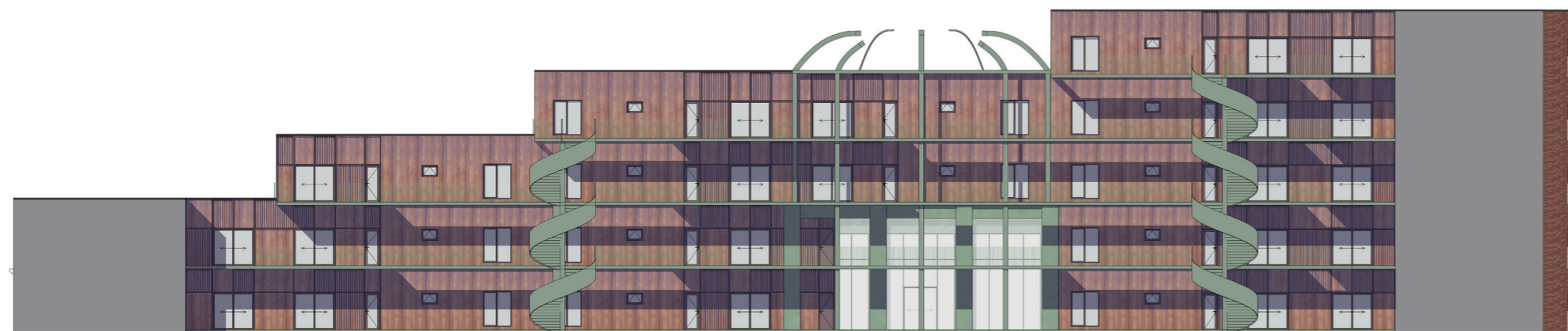
West

Material Details.

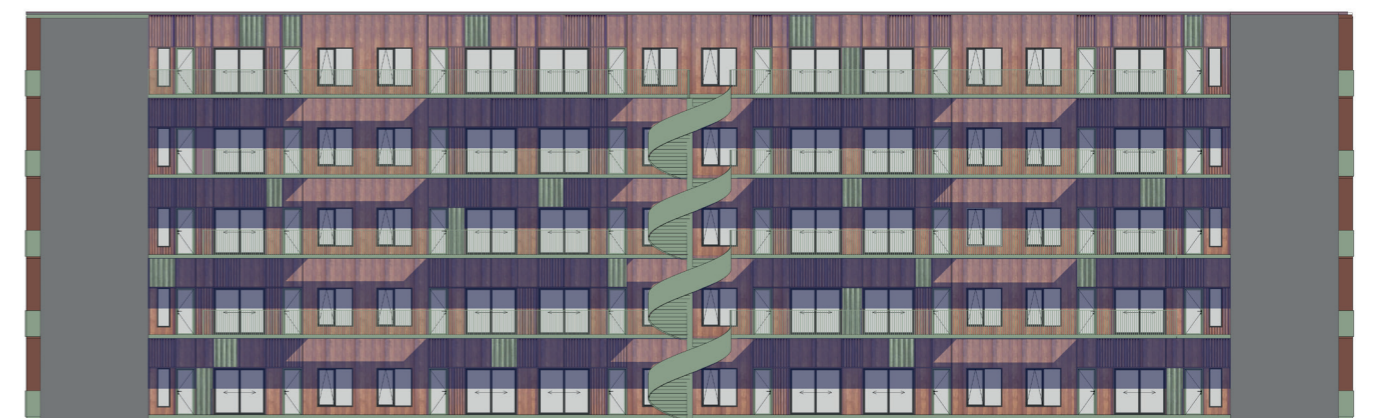


Courtyard Facade.

- Variable Wood Panels, Connection with Courtyard
- Grid Vertical and Horizontal Elements

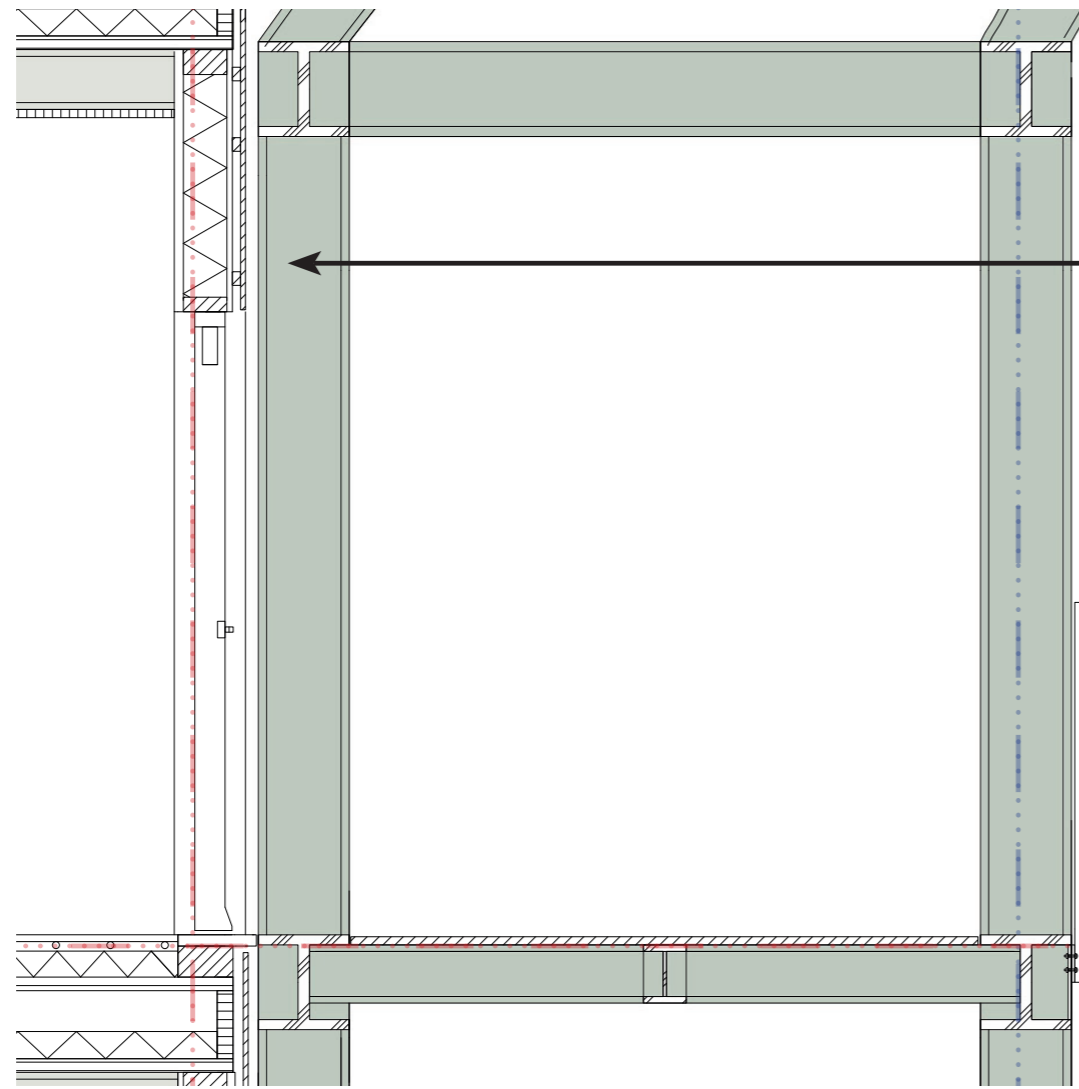


West



North

Material Details.



Courtyard Facade

Stucco

Timber wall element

HSB element $R_c = 5m^2K/W$

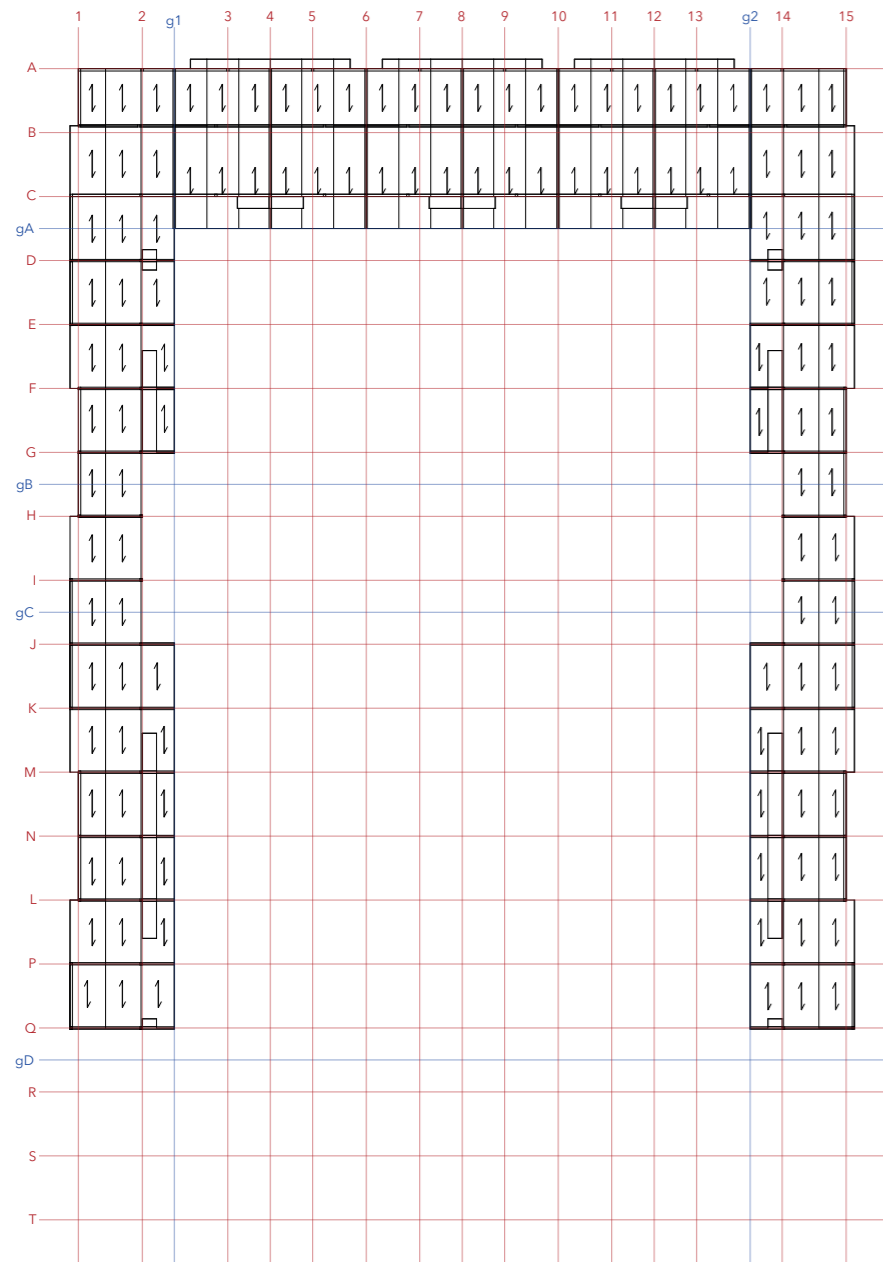
Breathable membrane

Timber batten

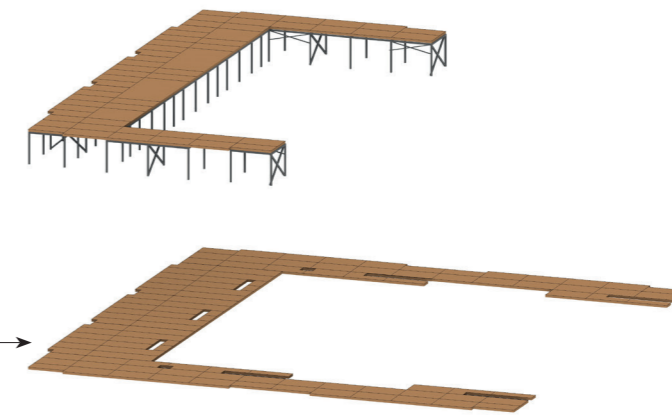
MOSO Bamboo X-treme - Single rhombus

Structure.

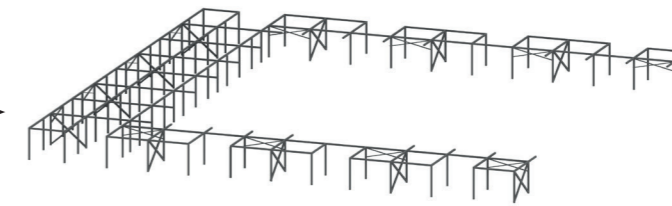
- 5,4m x 5,4m Grid



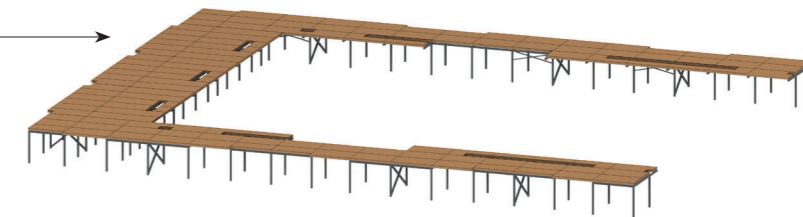
Kerto Ripa Floors



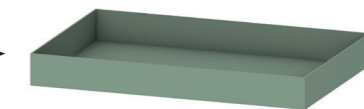
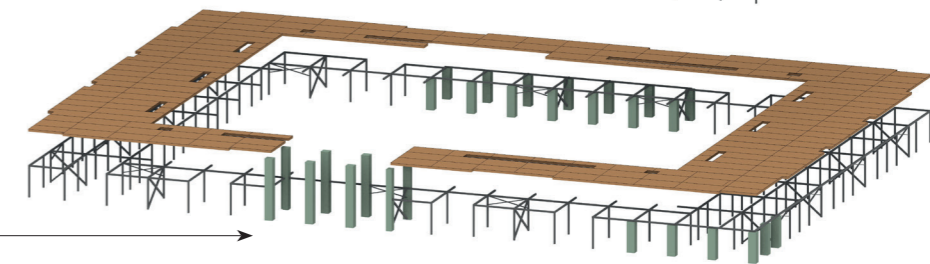
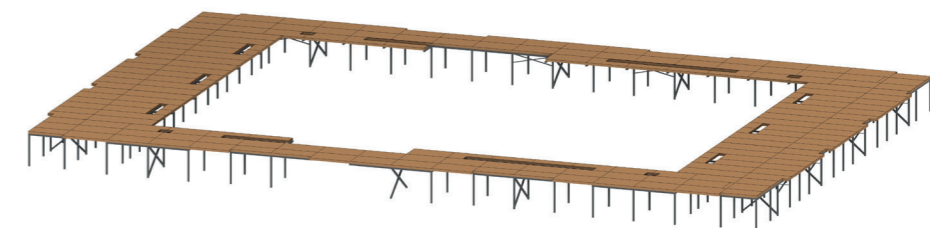
Steel Frame



Concrete Beams
(low carbon)

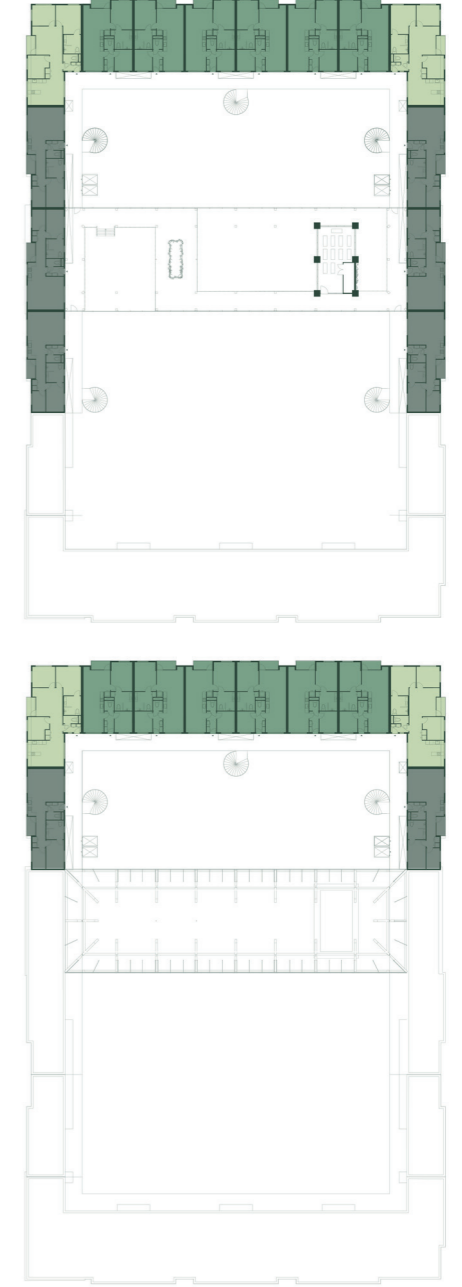
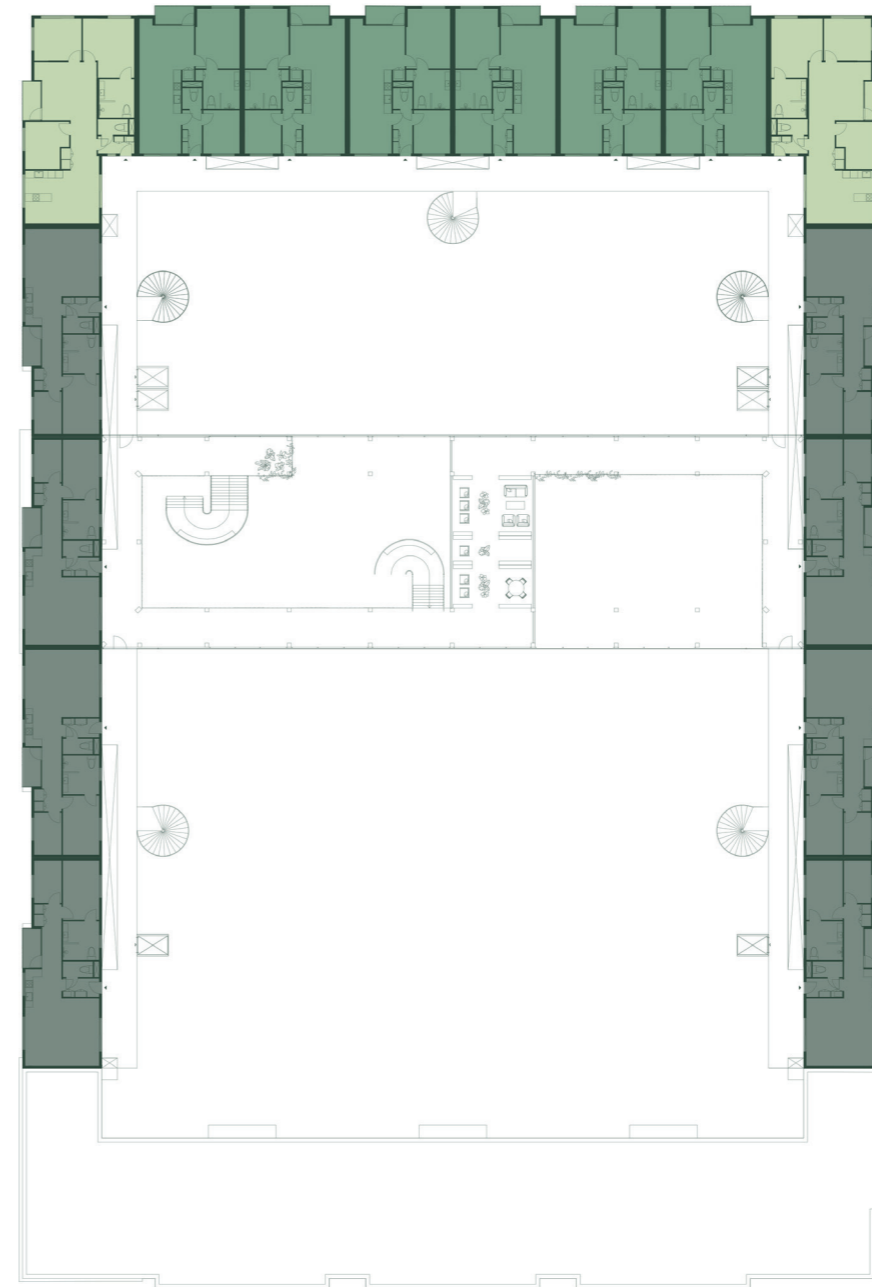
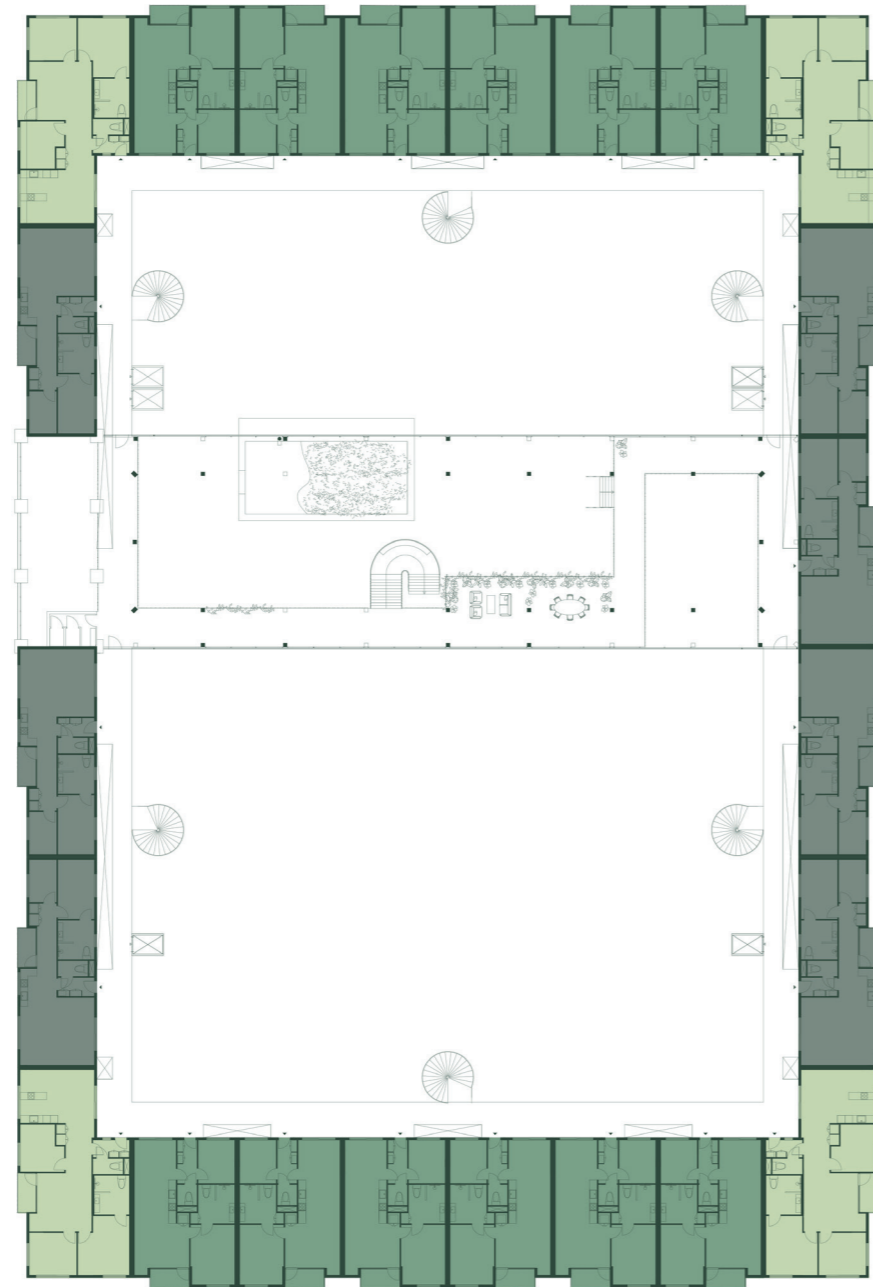
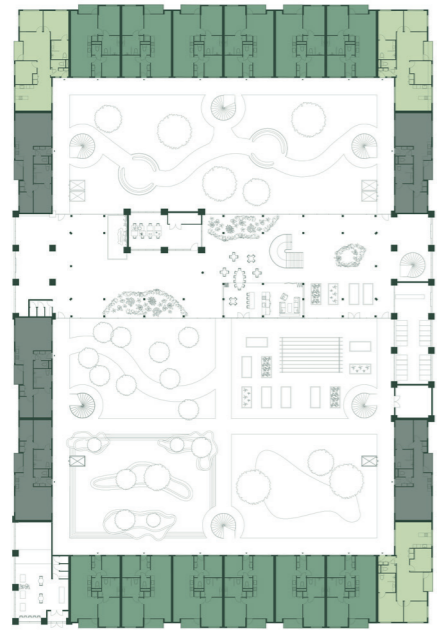


Concrete Basement
(low carbon)



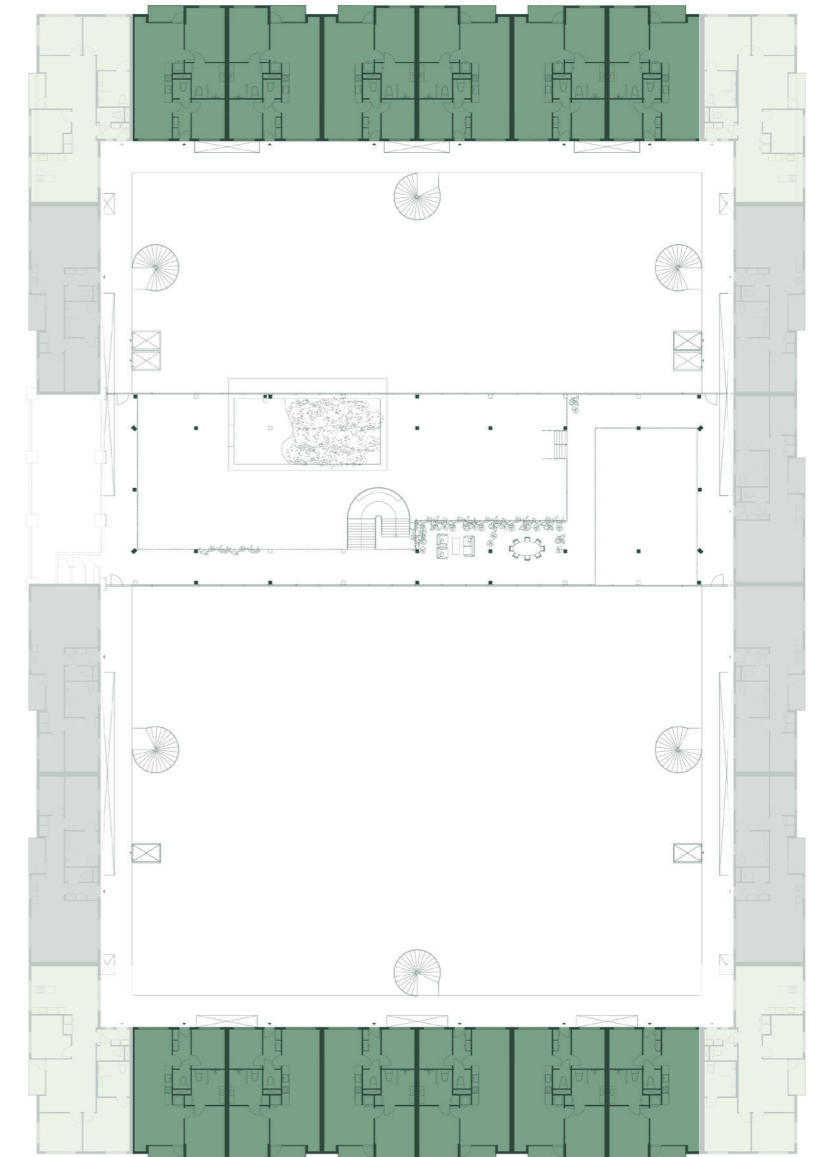
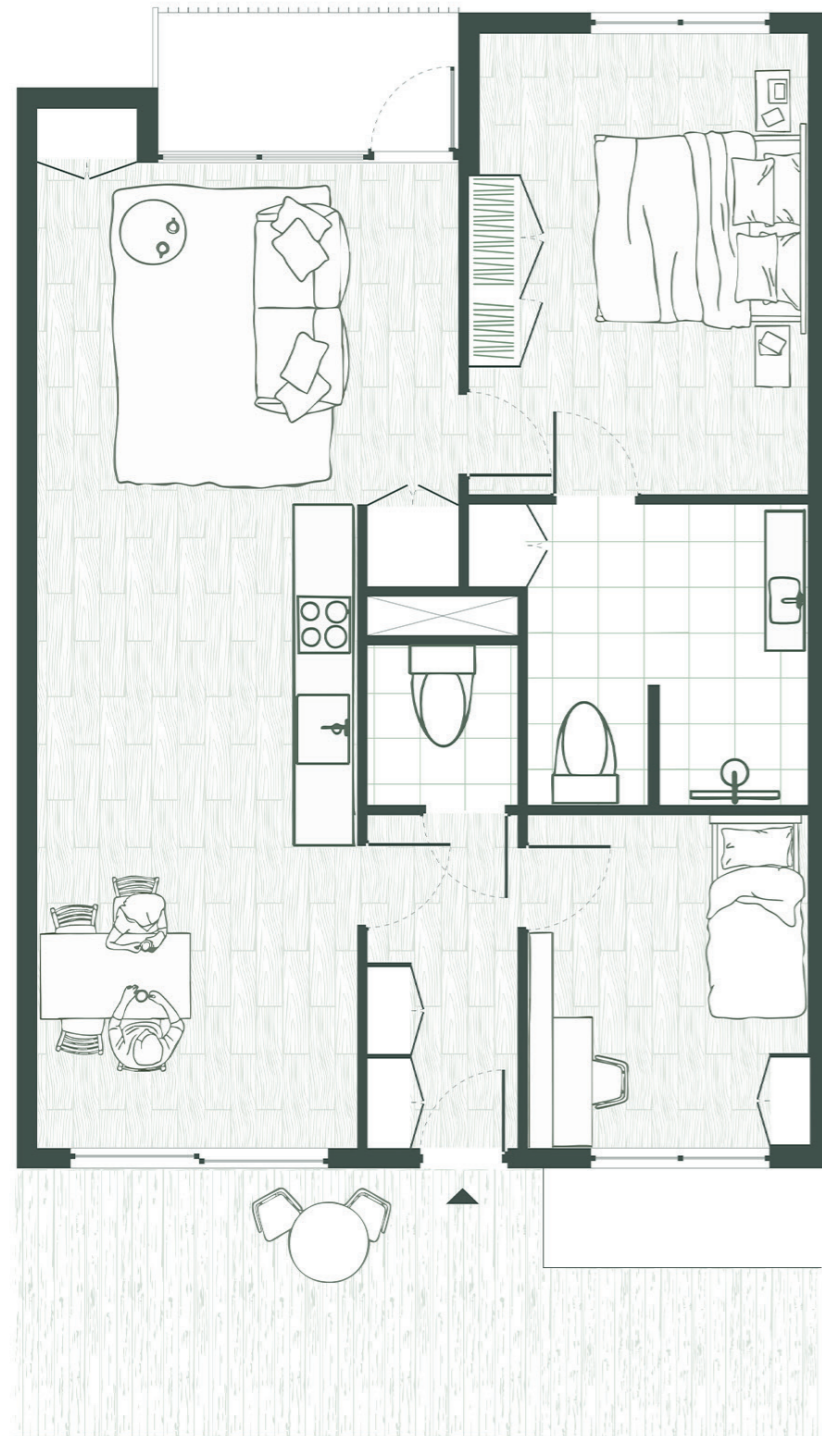
Dwellings.

- Standaard
- Long
- Corner
- 83 Apartments



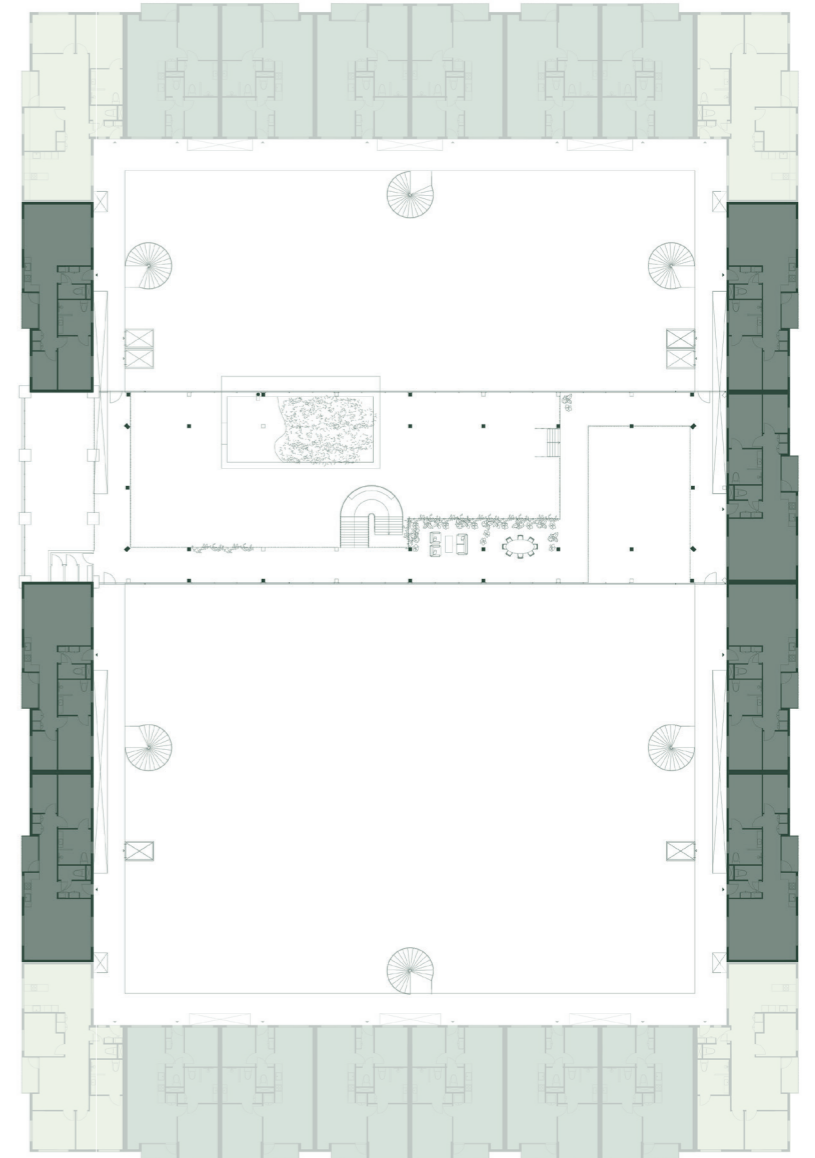
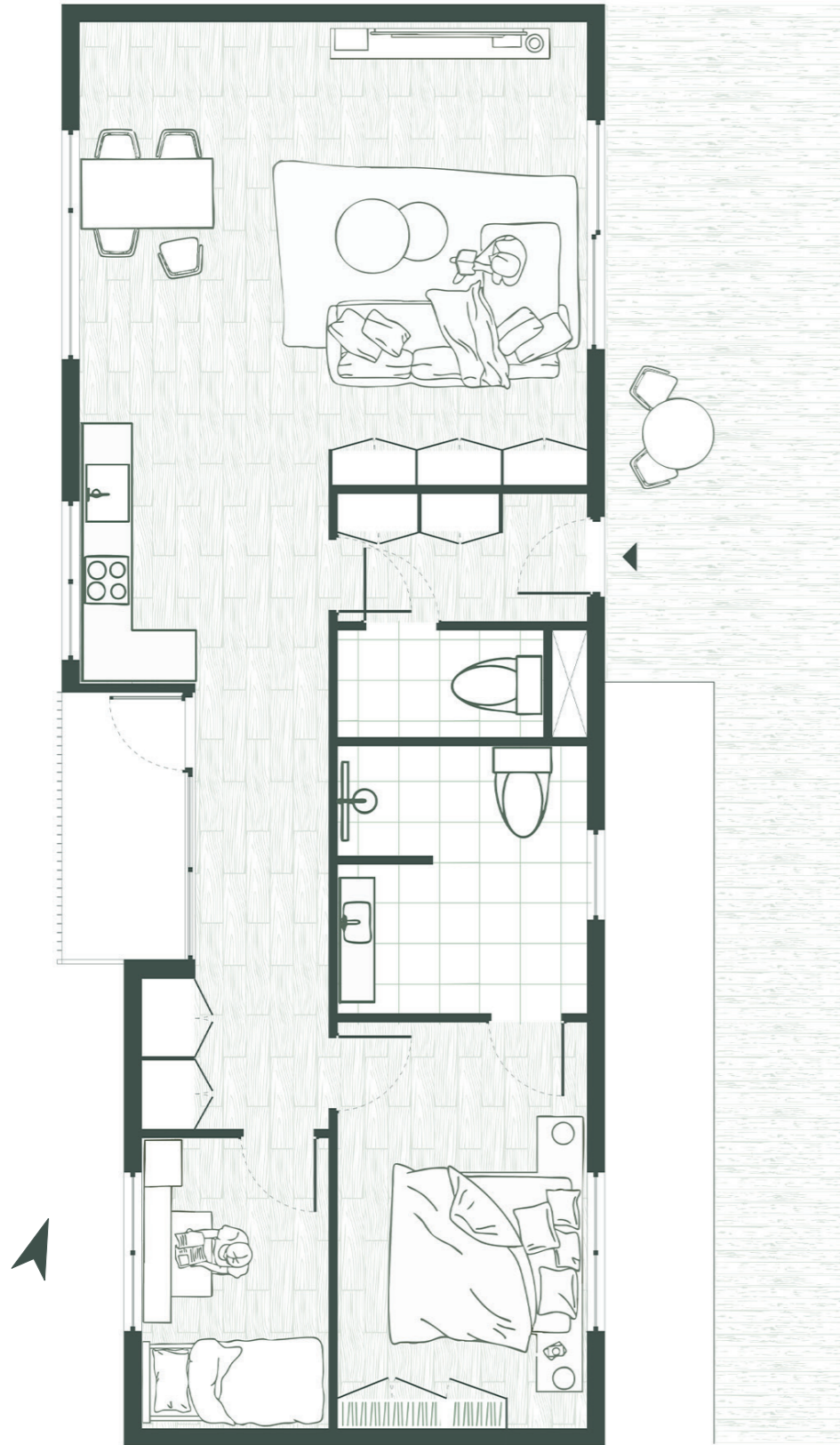
Standaard Apartment.

- 90 m²
- 2 bedrooms
- Separated Toilet
- 42 Apartments



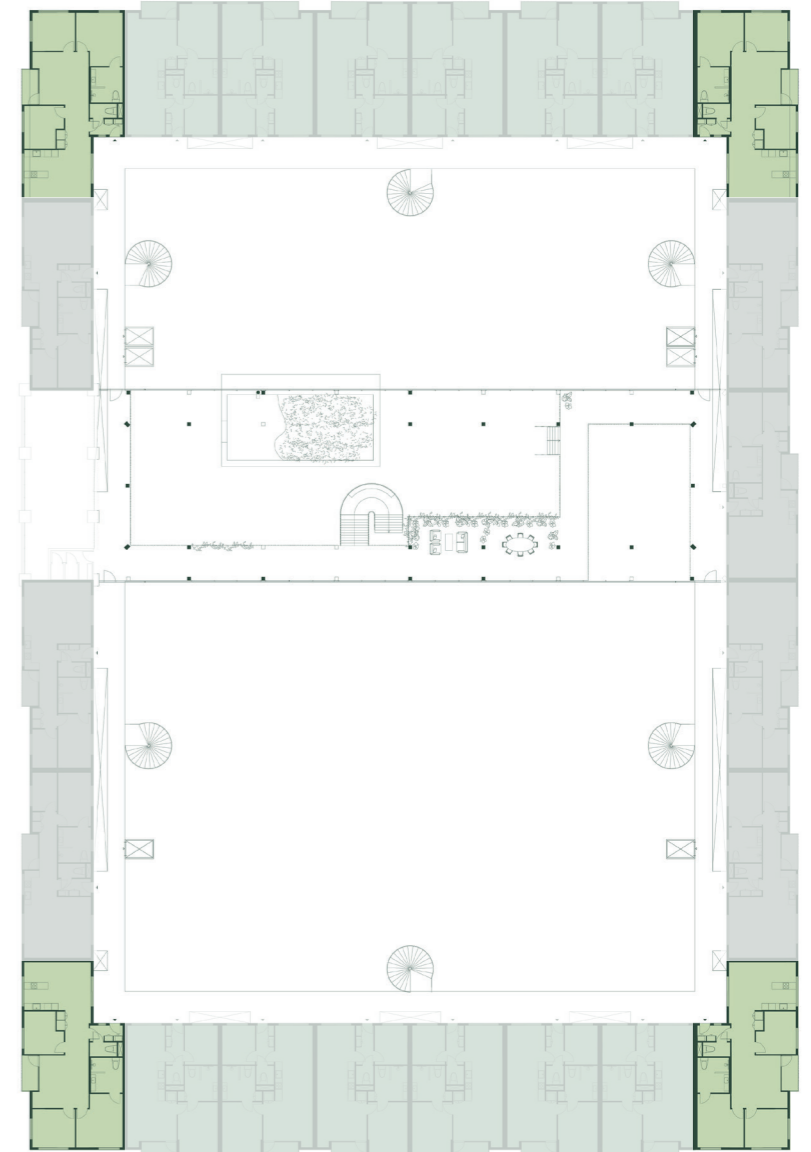
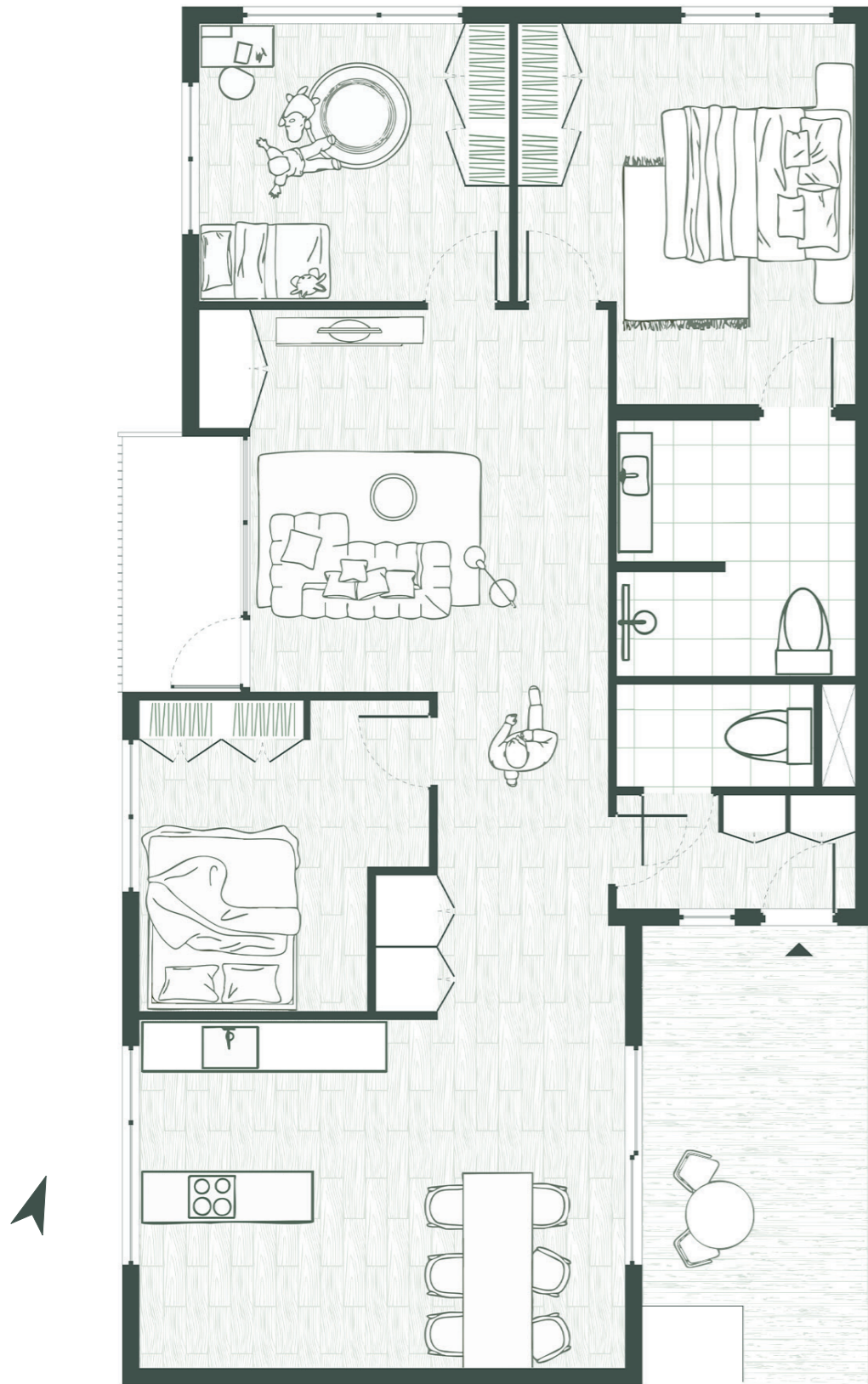
Long Apartment.

- 95 m2
- 2 bedrooms
- Separated Toilet
- 28 Apartments



Corner Apartment.

- 120 m²
- 3 bedrooms
- Separated Toilet
- 13 Apartments



Climate of the Dwellings.

1. Roof Rainwater

- 1.1 Rainwater Collection
- 1.2 Runoff directed to swale
- 1.3 Temporary water storage
- 1.4 Filtration through vegetation

2. Thermal Energy Storage (TES) System

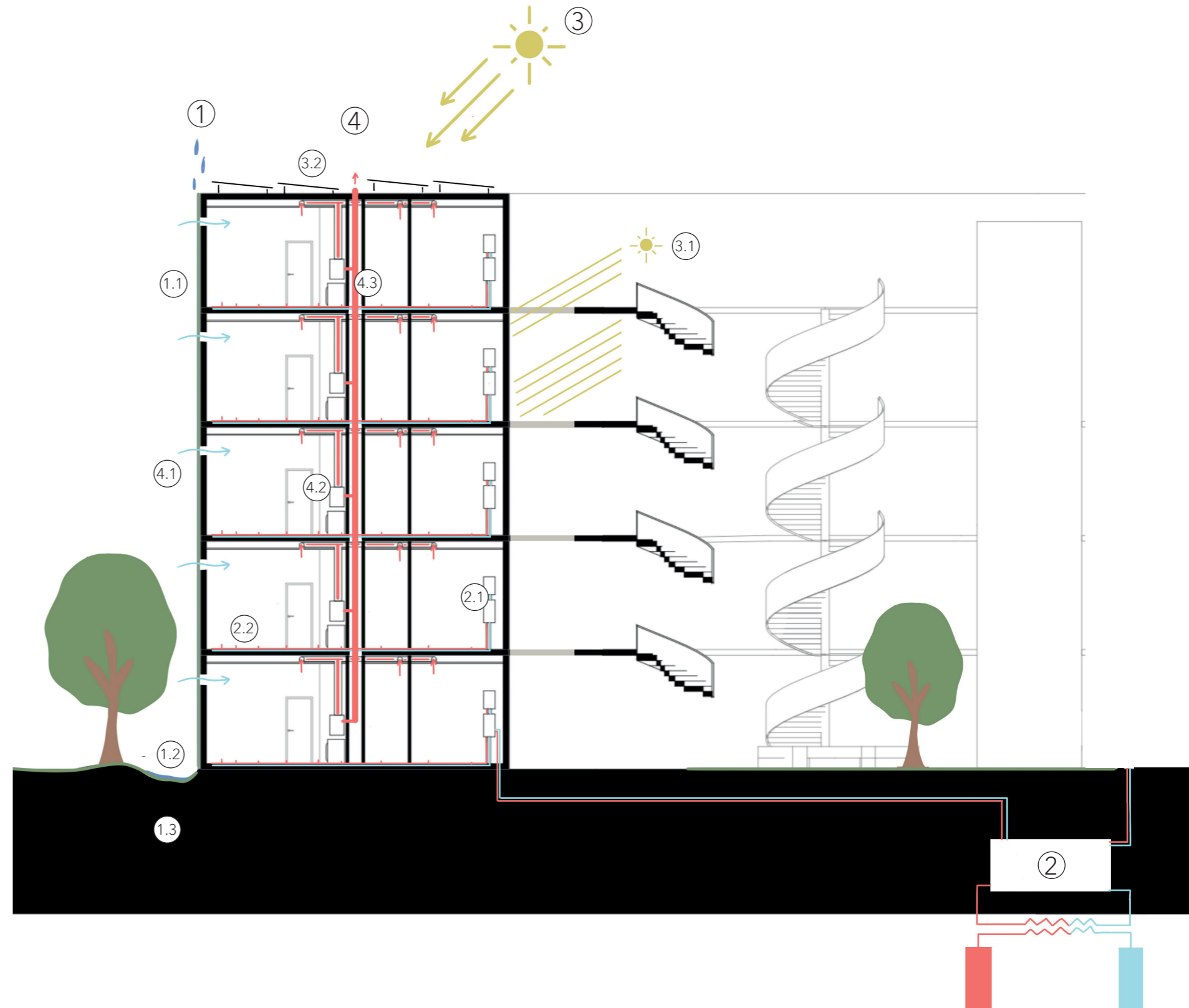
- 2.1 Heat Pump
- 2.2 Floor Heating (or Cooling)

3. Sun

- 3.1 Galleries Create Shade
- 3.2 Solarpanels

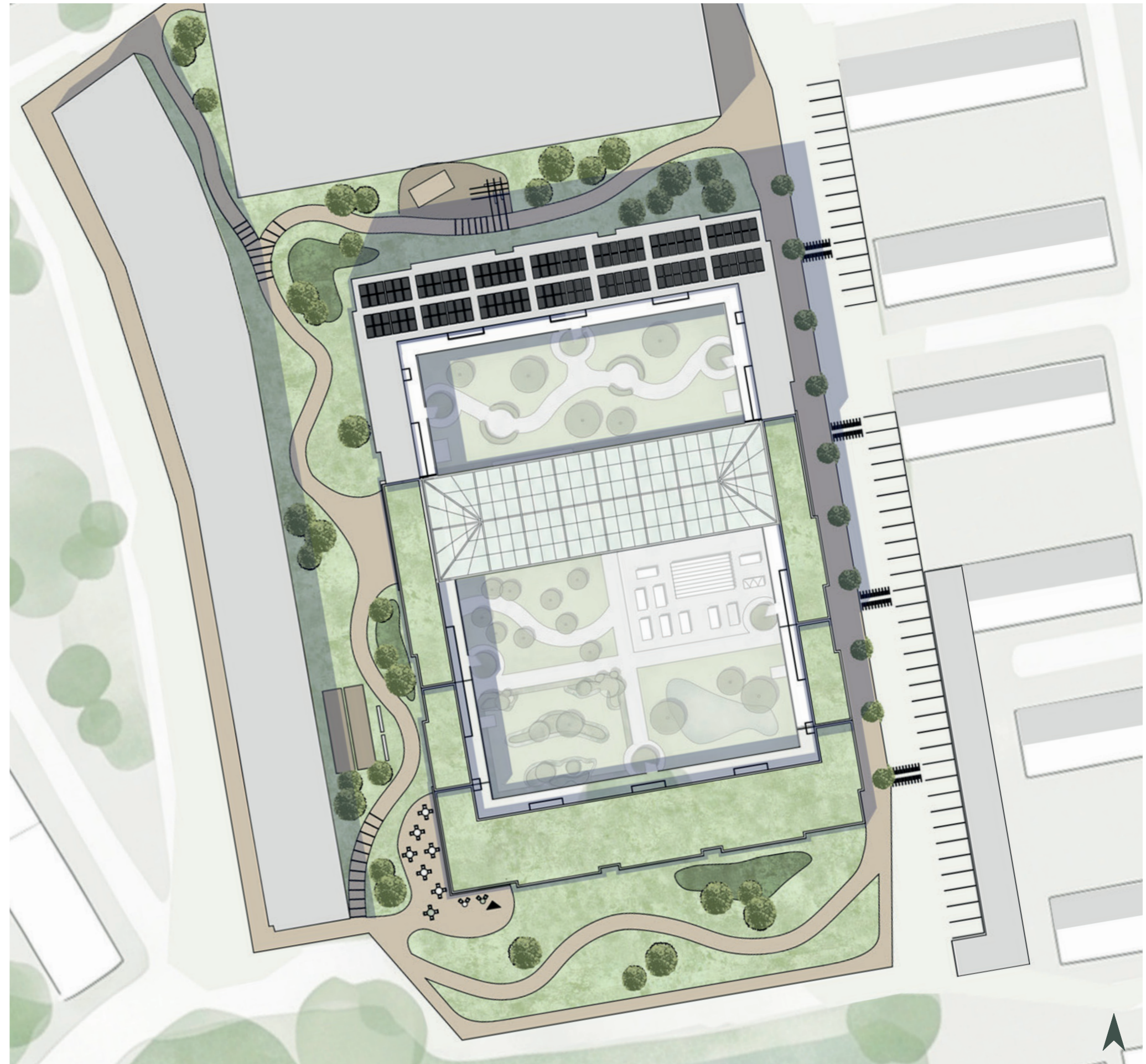
4. Ventilation

- 4.1 Fresh Air Intake
- 4.2 MVHR Heat Recovery Unit
- 4.3 Mechanical Air Extraction



Roofscape and Ecology.

- Sunpanels
- Green roofs
- Swales





Thank You.

