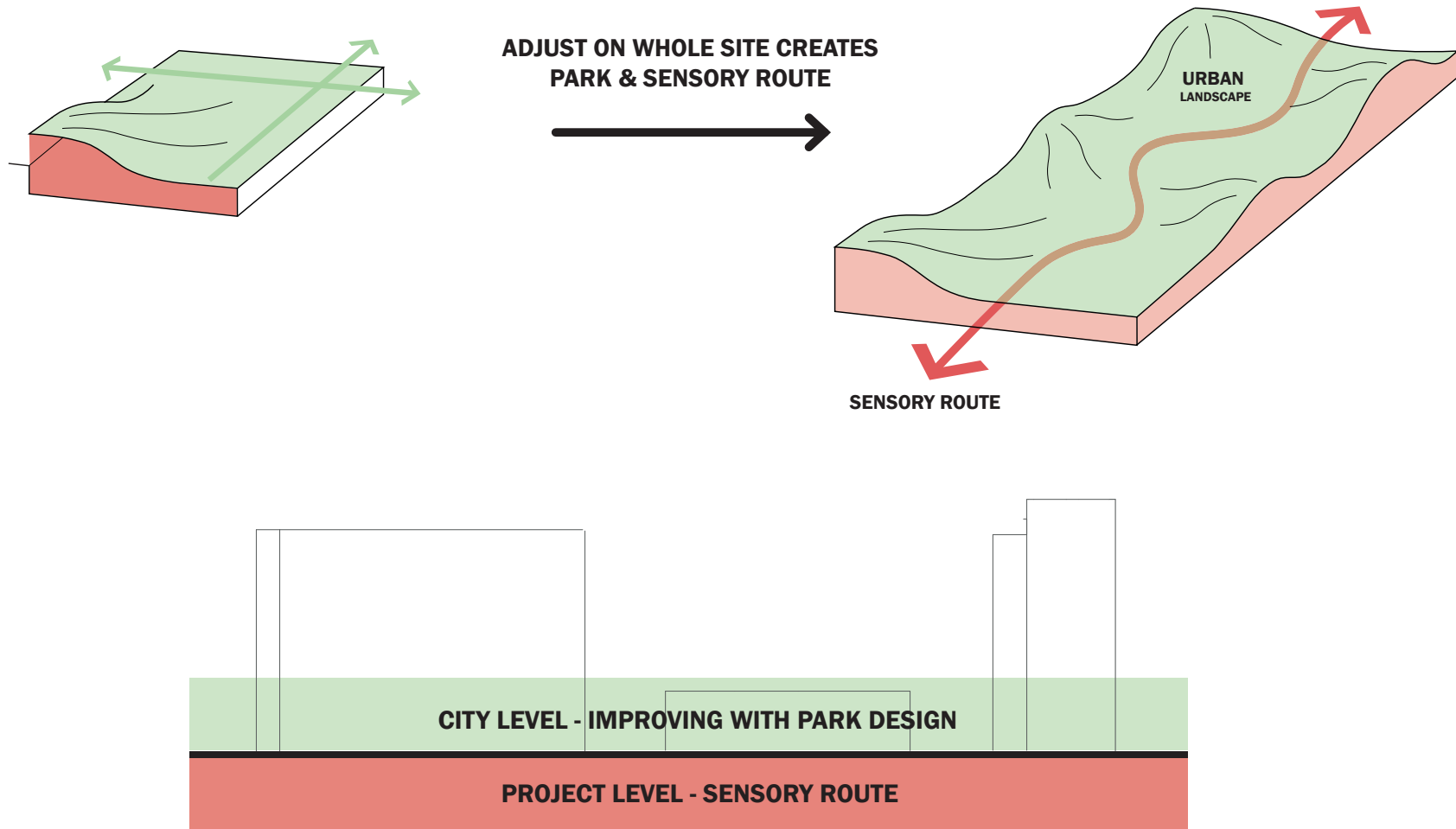
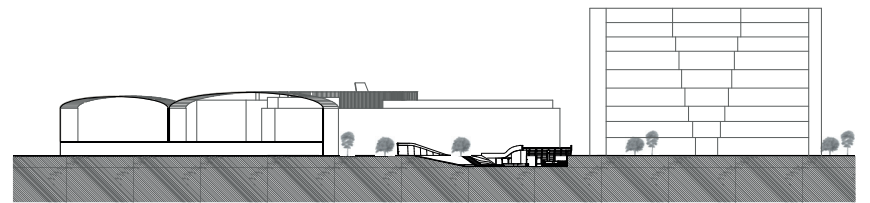
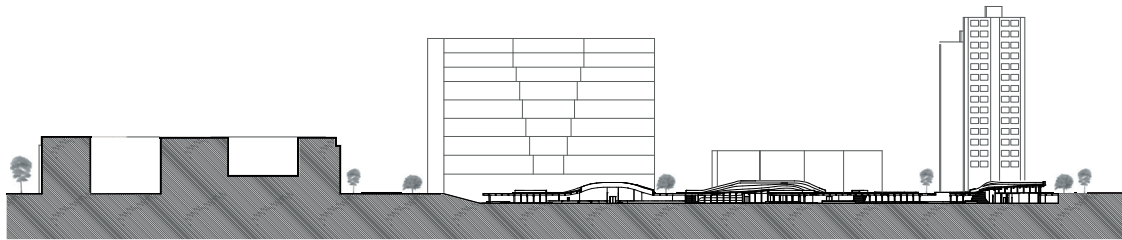


# 2 LEVELS



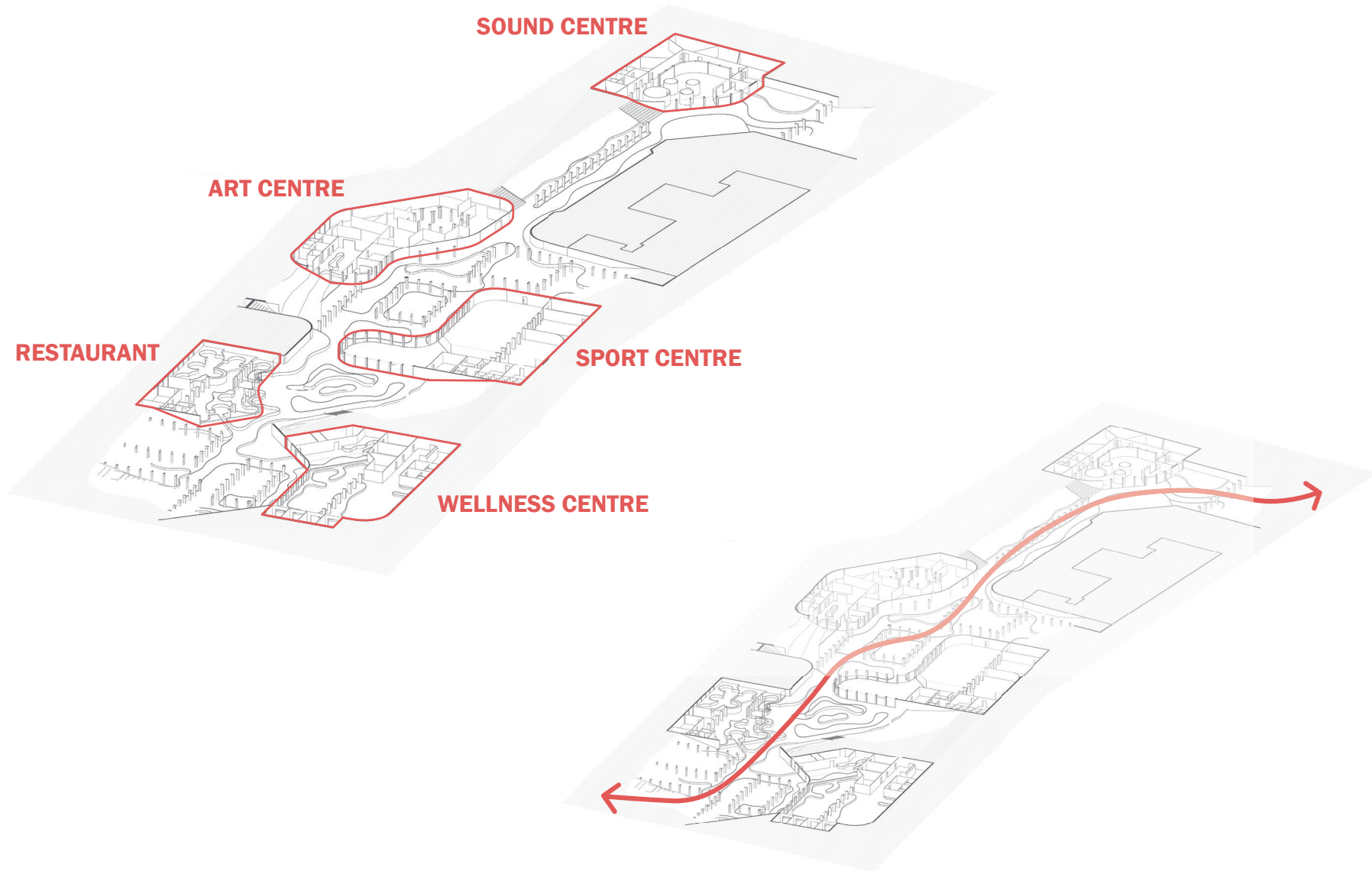
# URBAN SITUATION



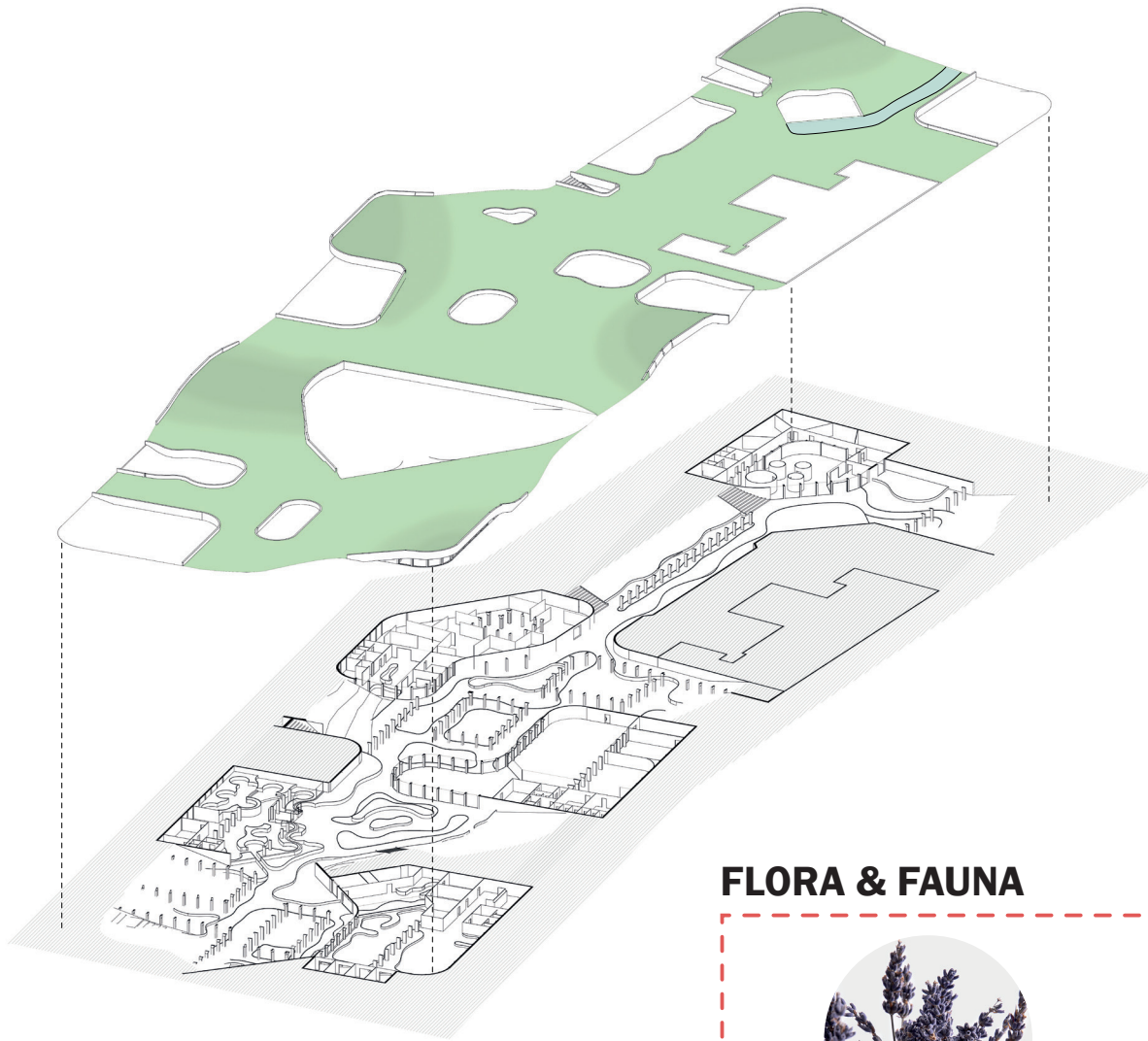
# SENSORY ROUTE DIAGRAM



# AXO SENSORY ROUTE LEVEL



# AXO SENSORY ROUTE LEVEL



## URBAN HEAT STRESS

- REDUCTION OF 30-40 DEGREES OF ROOF TEMPERATURE
- UP TO 5 DEGREES OF SURROUNDED AMBIENT CITY TEMPERATURE DECREASE

(WUR, 2015)

## REDUCTION OF ENERGY

- SMALL ENERGY USE REDUCTION (SUMMER CONDITIONS)

## FLORA & FAUNA



### LAVENDER

- Stress-relieving benefits
- Reduction in anxiety, depression & sleeplessness



### CHAMOMILE

- Reduction in anxiety and stress
- Soothing effects on skin
- Mental health improving aroma



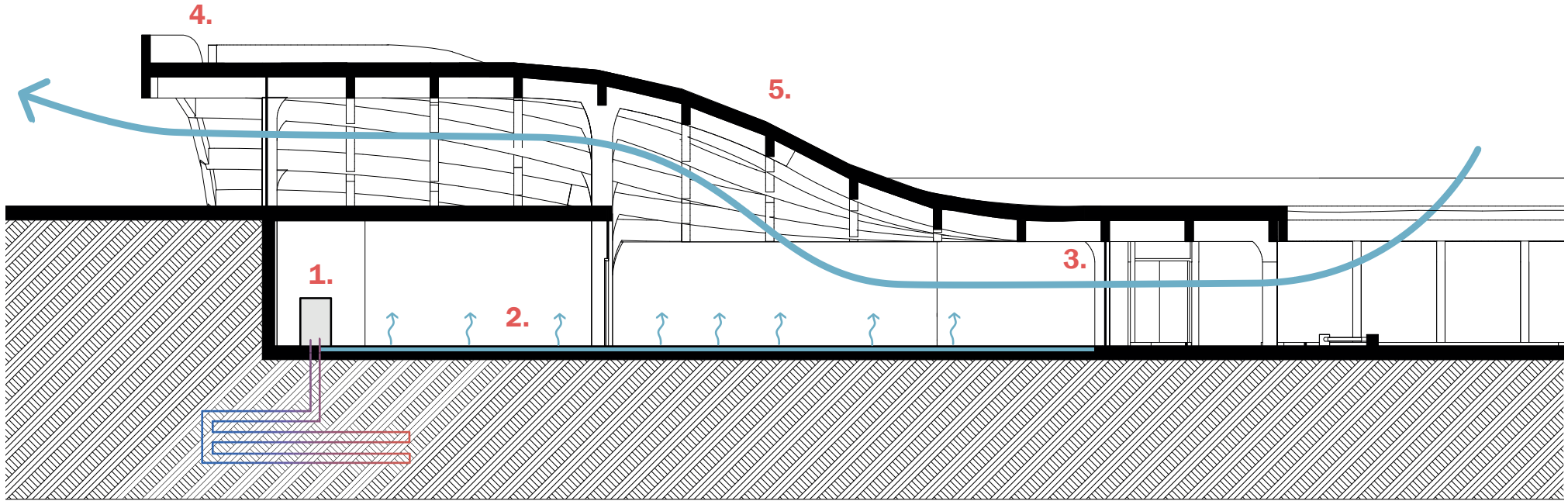
### INSECTS

- Healthy flora by pollination
- Affects public health

(Belluco et al, 2023)

# CLIMATE

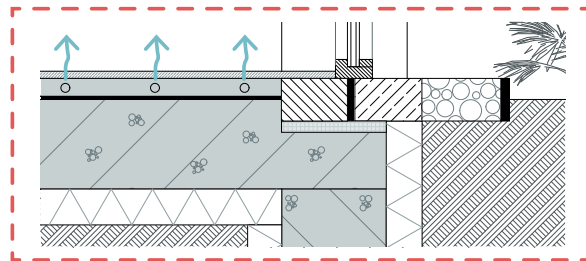
## SUMMER SITUATION



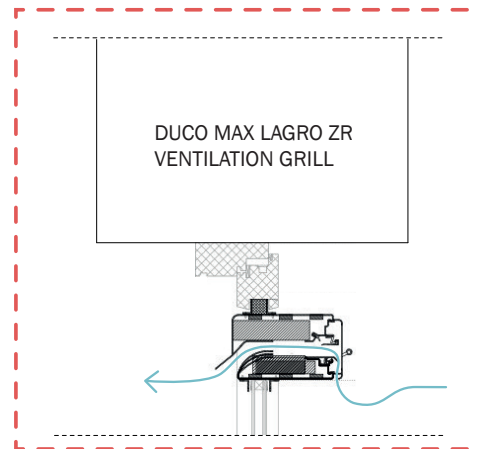
### 1. GEOTHERMAL HEAT PUMP

EXTRACTING COLD FROM THE SOIL

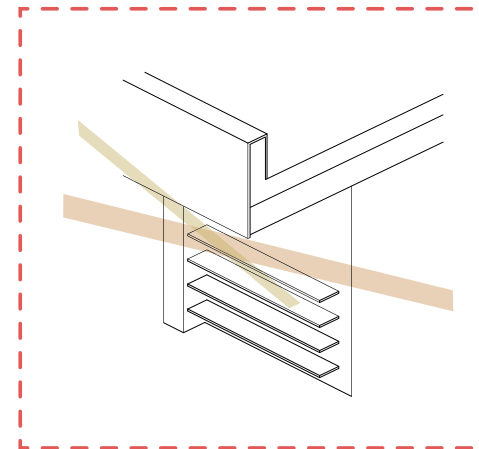
### 2. ENERGY SUFFICIENT FLOOR COOLING



### 3. PASSIVE VENTILATION



### 4. CANOPY & SLATS

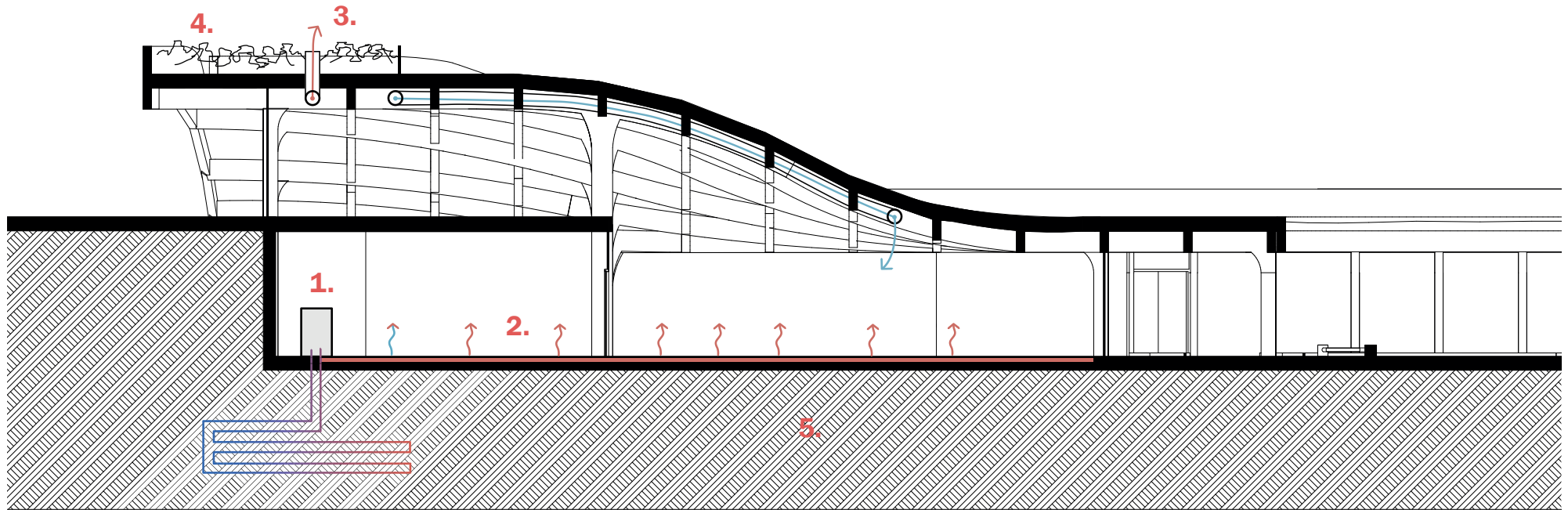


### 5. GREEN ROOF

REDUCES COOLING ENERGY

# CLIMATE

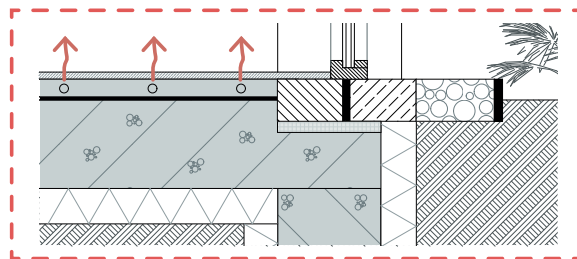
## WINTER SITUATION



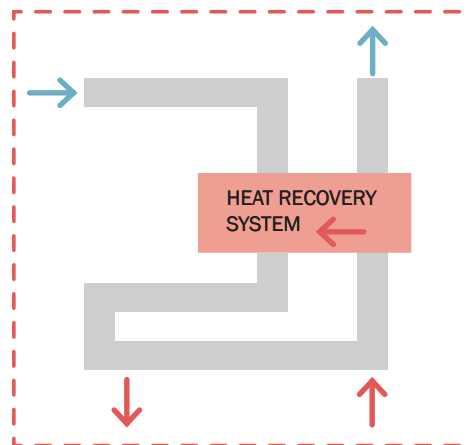
### 1. GEOTHERMAL HEAT PUMP

EXTRACTING WARMTH FROM THE SOIL

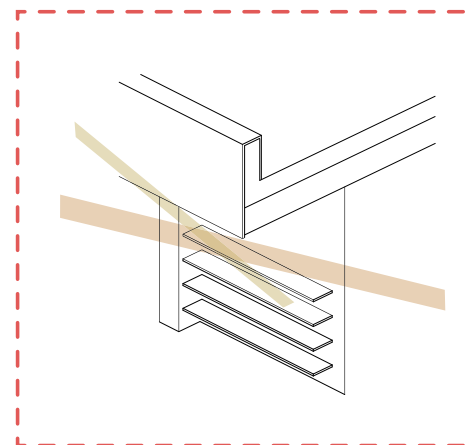
### 2. ENERGY SUFFICIENT FLOOR HEATING



### 3. MECHANICAL VENTILATION



### 4. CANOPY & SLATS

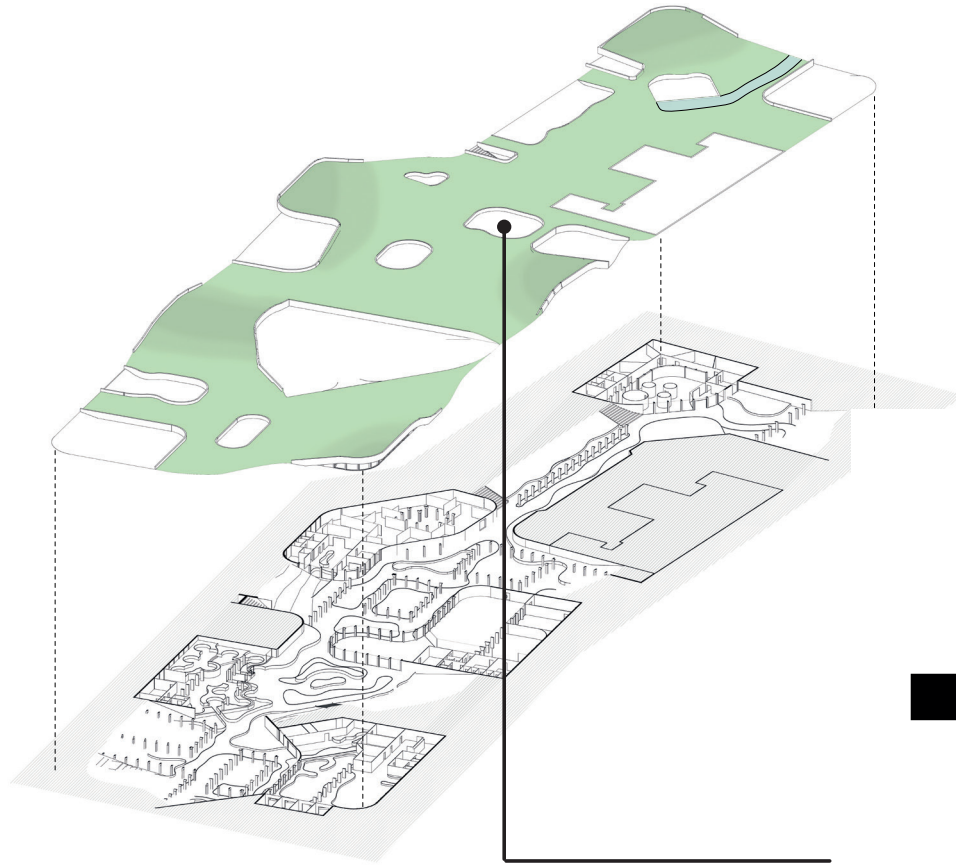


### 5. CONSTANT SOIL TEMPERATURE

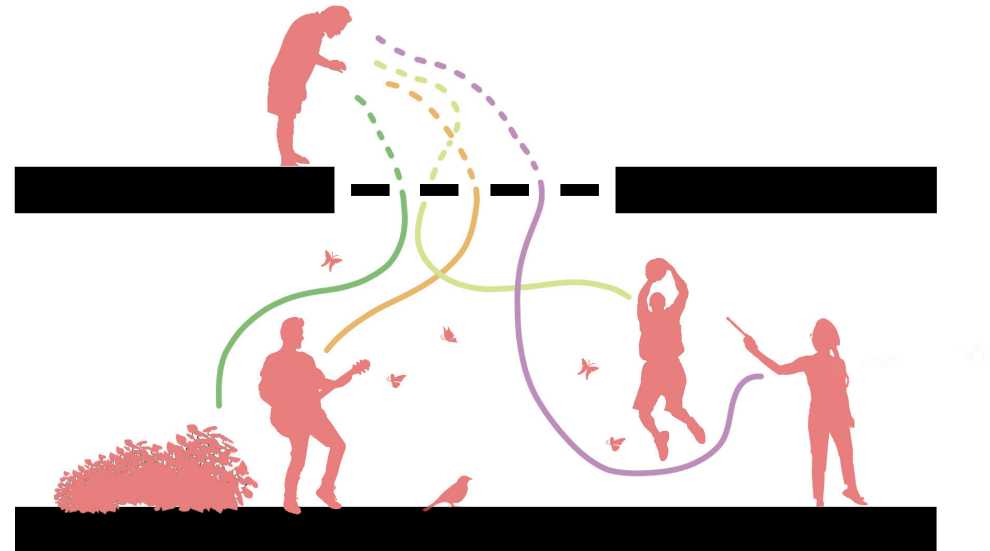
REDUCES HEATING ENERGY

CONSTANT SOIL TEMPERATURE OF AROUND 10 °C

# NET PRINCIPLE

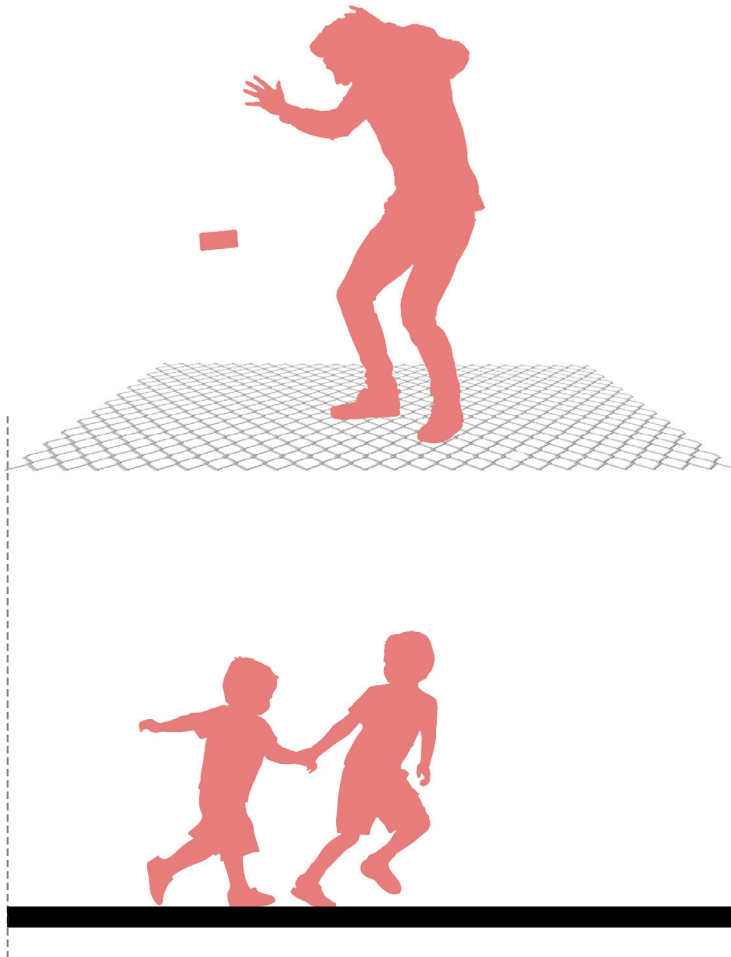


Within the design, certain nets provide daylight and invites people to enter the sensory route. As a visitor, you can see, hear and smell a bit what is happening beneath you, but you do not have the full experience.





# NET PRINCIPLE - SAFETY



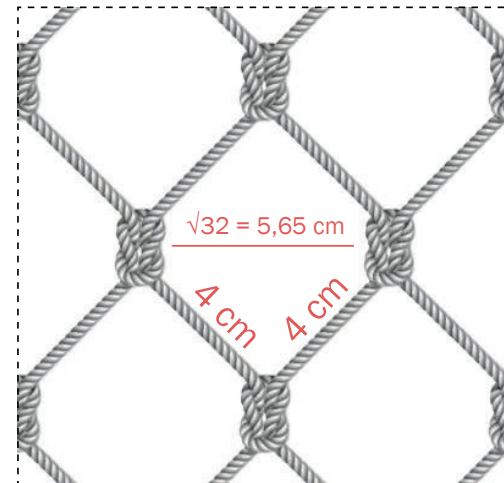
## MOST COMMON PRODUCTS FALLING OUT OF POCKETS



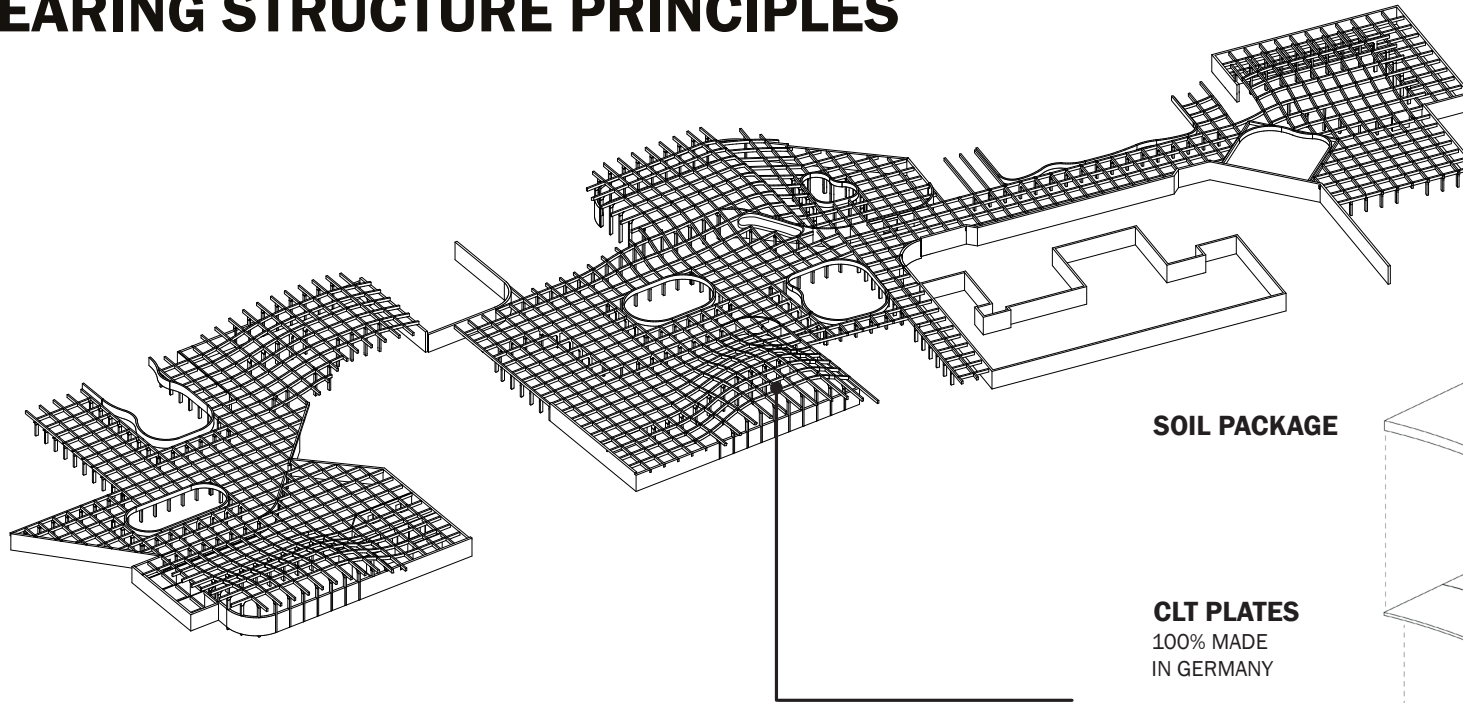
7 x 14,5 cm



9 x 12 cm



# LOAD BEARING STRUCTURE PRINCIPLES

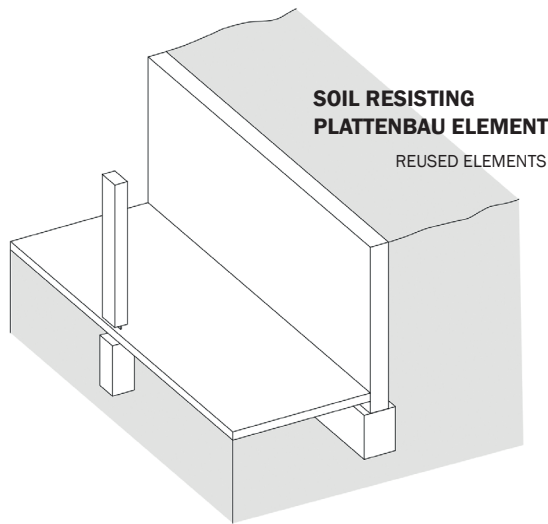
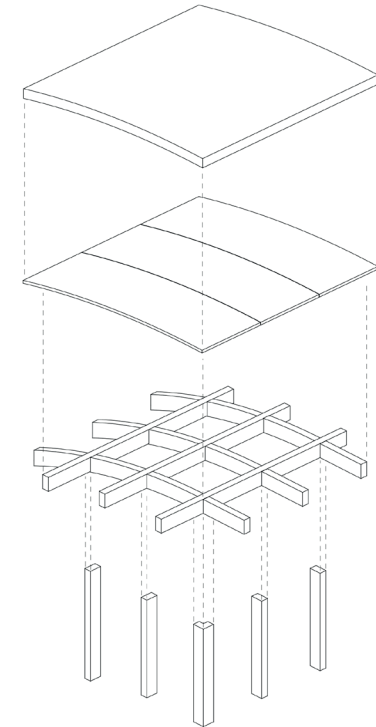


**SOIL PACKAGE**

**CLT PLATES**  
100% MADE  
IN GERMANY

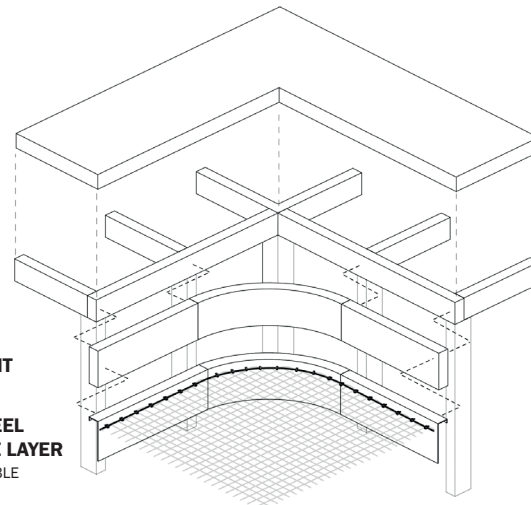
**GLT BEAMS**  
100% MADE  
IN GERMANY

**GLT COLUMNS**  
100% MADE  
IN GERMANY



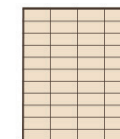
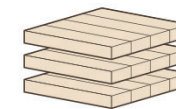
**SOIL RESISTING  
PLATTENBAU ELEMENT**

REUSED ELEMENTS

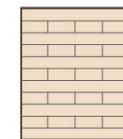
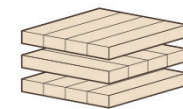


**GLT ELEMENT**

**CORTEN STEEL  
PROTECTIVE LAYER**  
100% RECYCLABLE  
MATERIAL



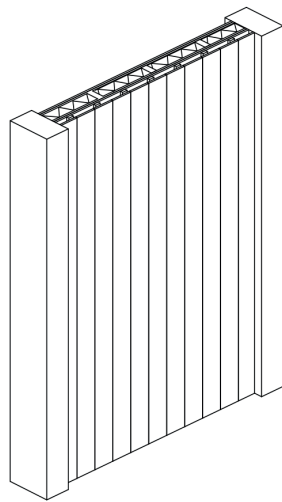
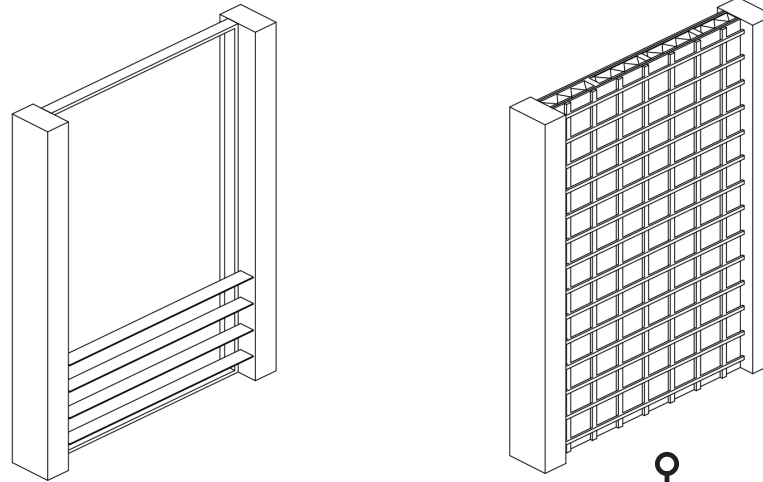
**GLT**



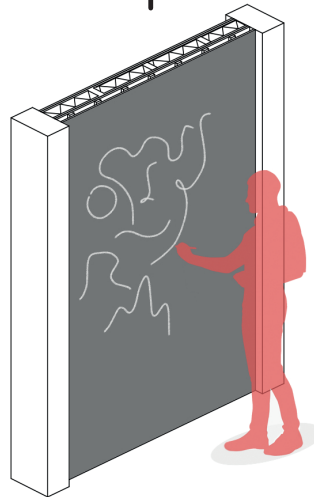
**CLT**

# FACADE PRINCIPLE

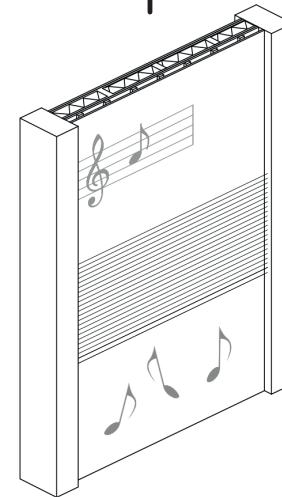
The facade is made of a timber frame construction between the load bearing columns. The finishing depends on the function of the building and can be interactive.



**VERTICAL TIMBER  
FACADE FINISHING**

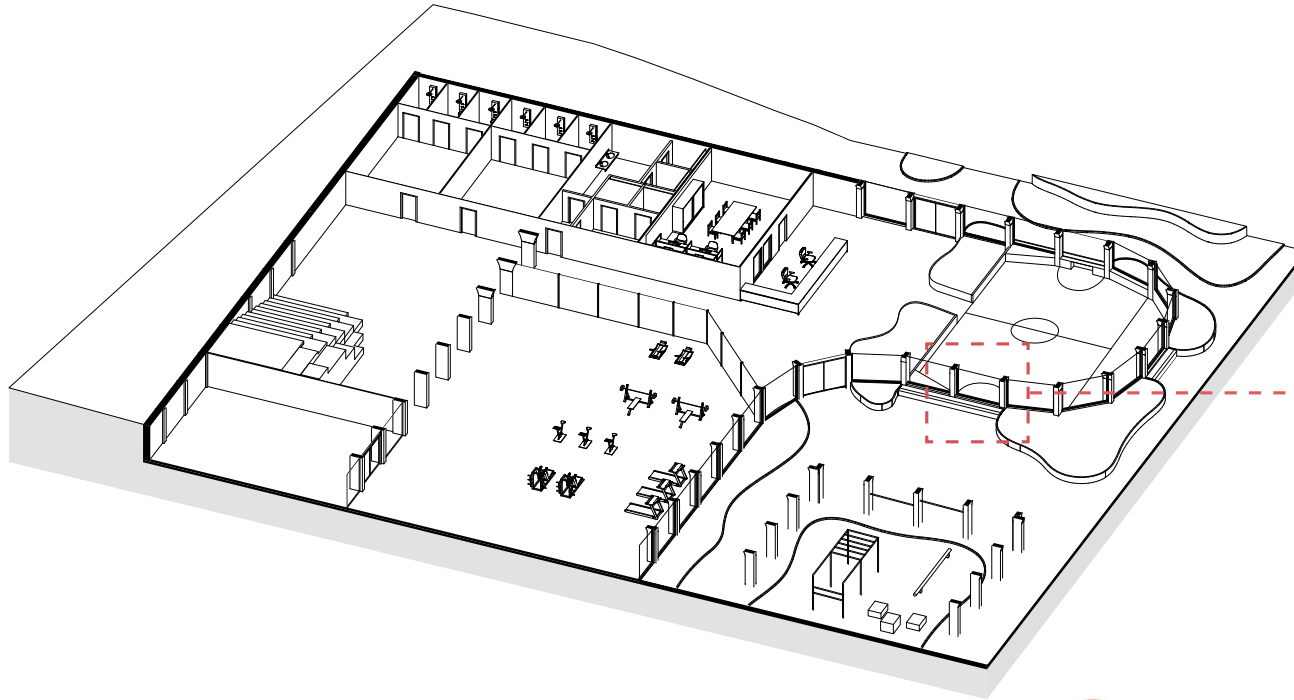


**CHALKBOARD  
(ART WALL)**



**MUSIC FACADE  
(SOUND CENTRE)**

# FACADE PRINCIPLE - INTERACTIVE DESIGN



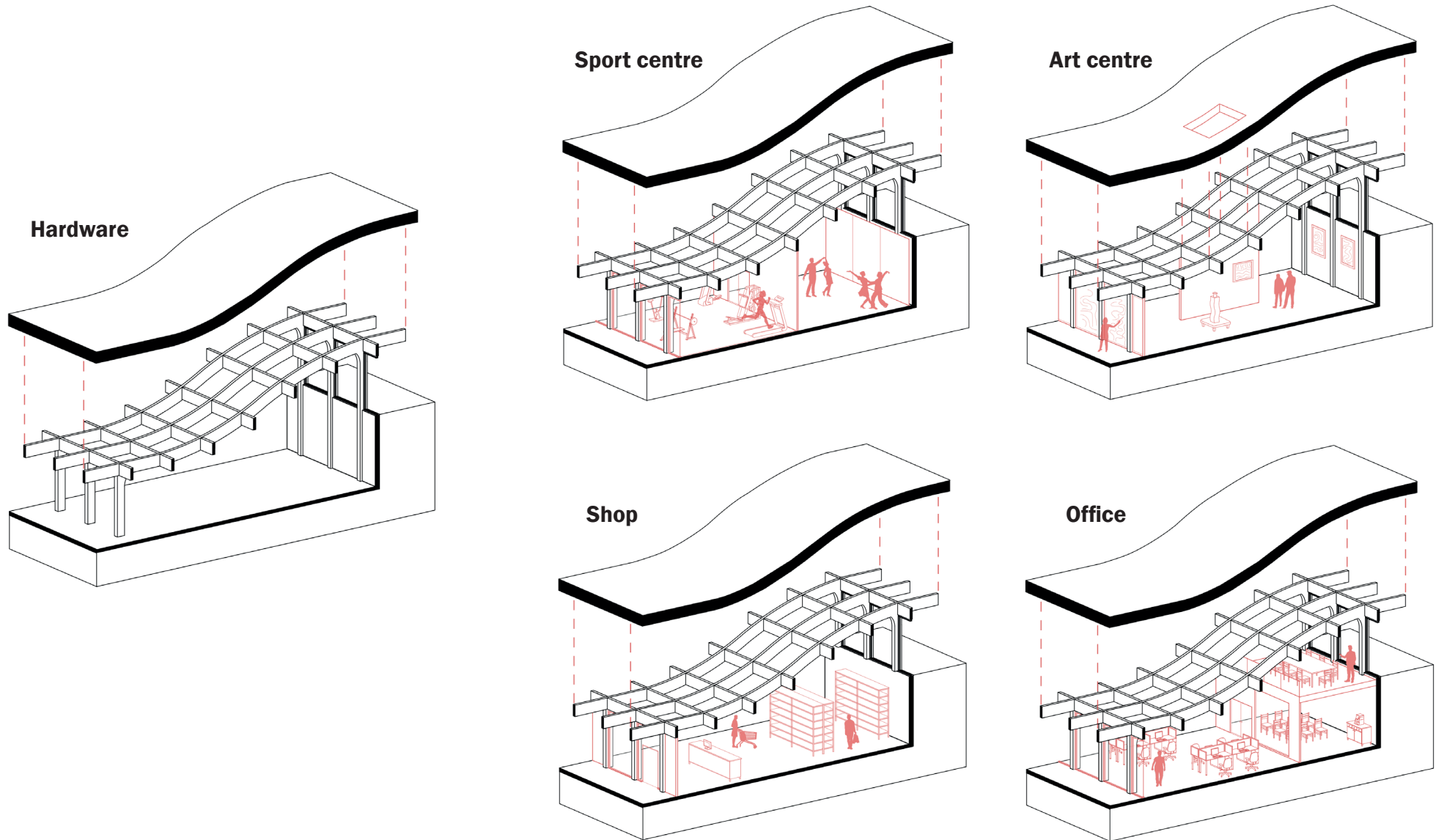
Within the design, interactive facades are designed. These facades does not only have the goal to make a difference between inside and outside and keep the warmth in the building, but does also interact with the function and the users.

For example this facade, that is a facade, a bench and a soccer goal at the same time. Another example is the art facade made of chalkboard, where people can draw on (see render).

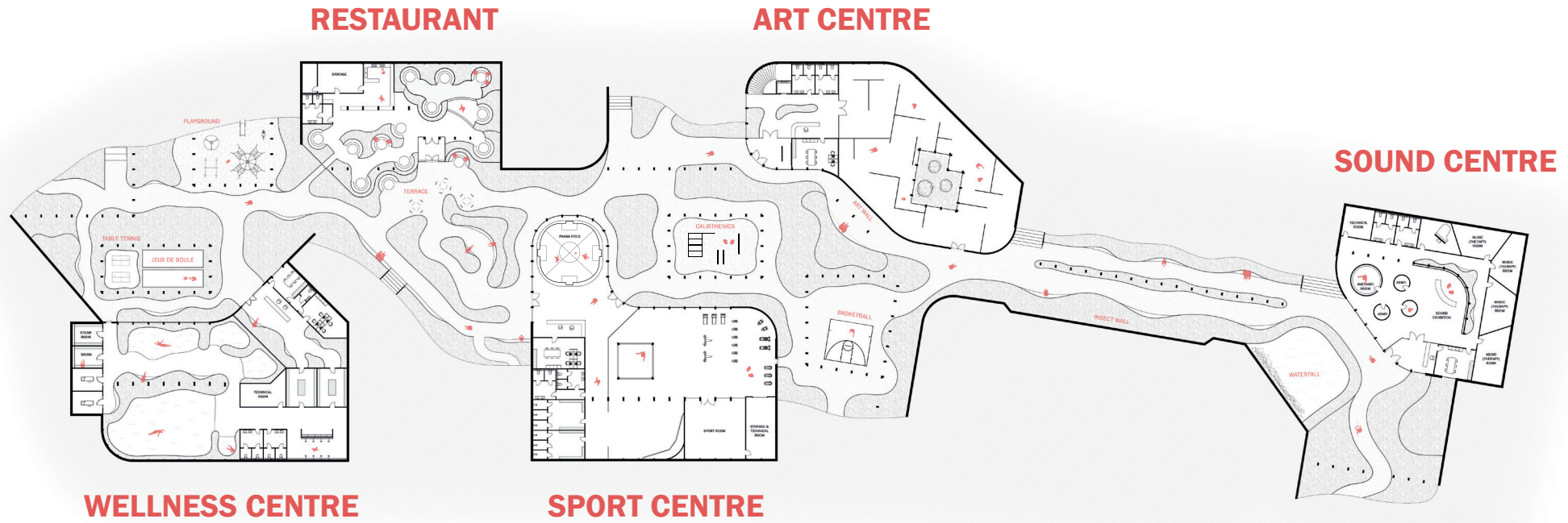


# 'HARDWARE' VS 'SOFTWARE'

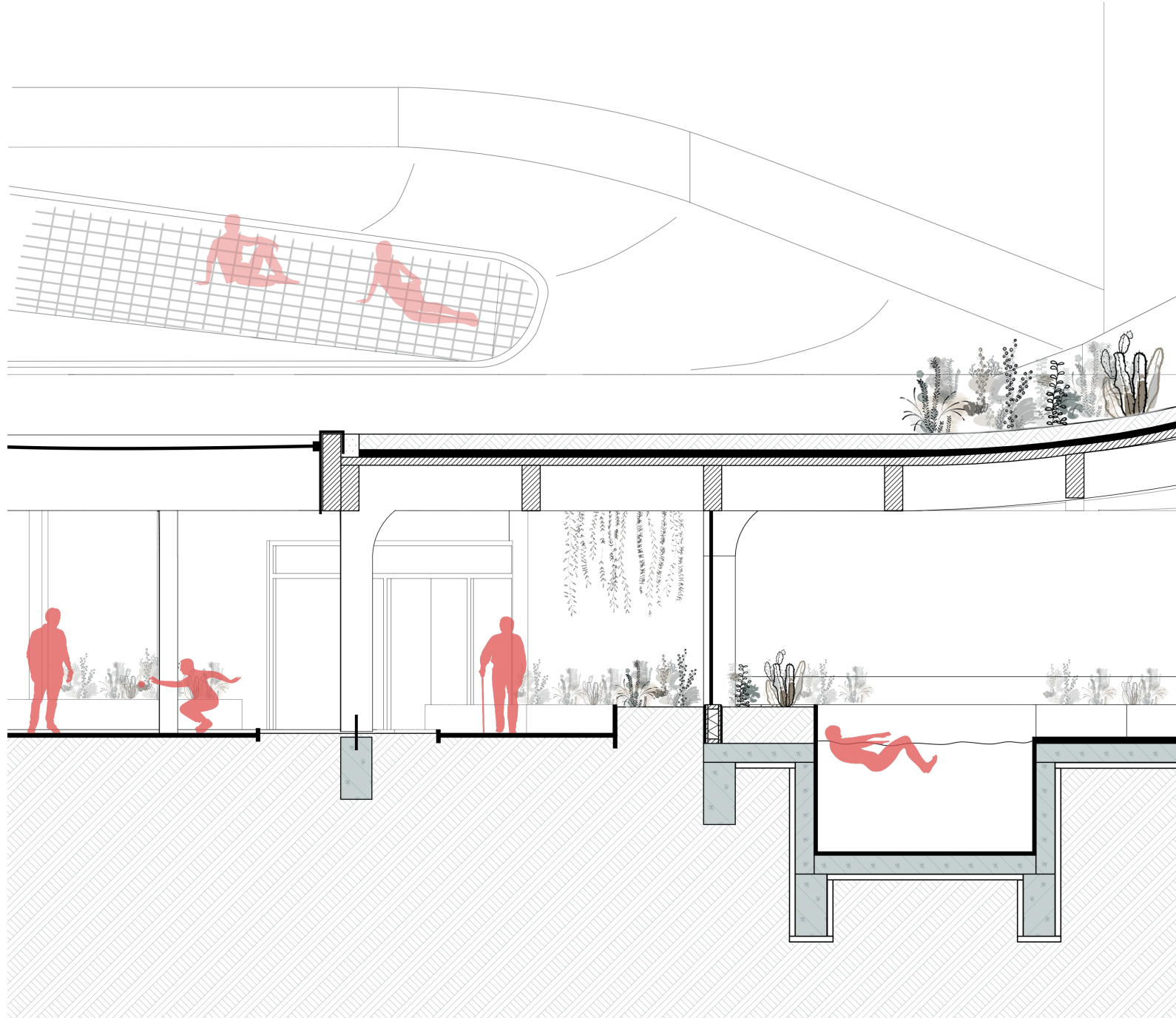
The hardware are the building parts that will always stay the same, like the construction and the green roofs. The software is the infill. This can easily change over time and is 'future proof'.



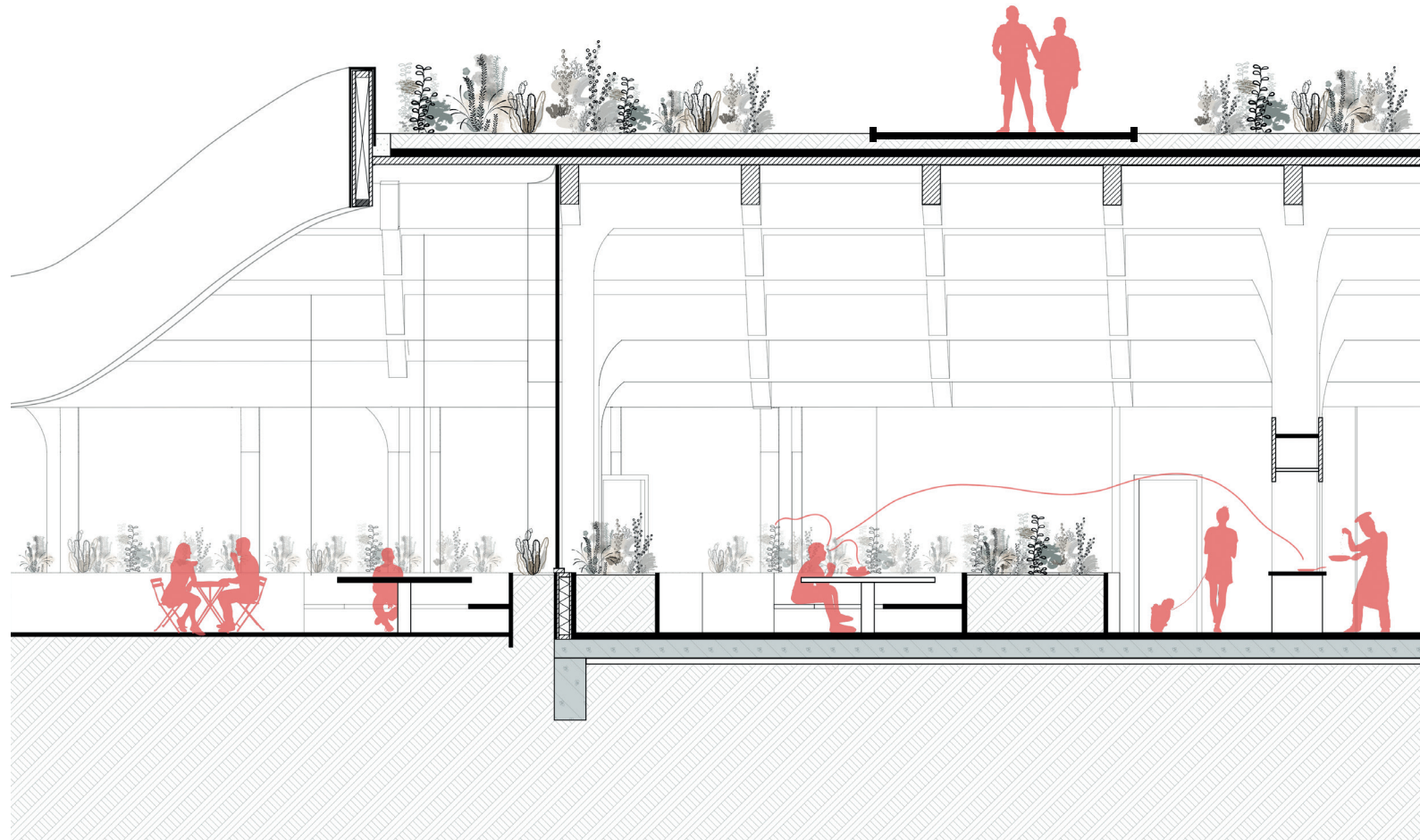
# FLOORPLAN



# 1:50 FRAGMENT WELLNESS

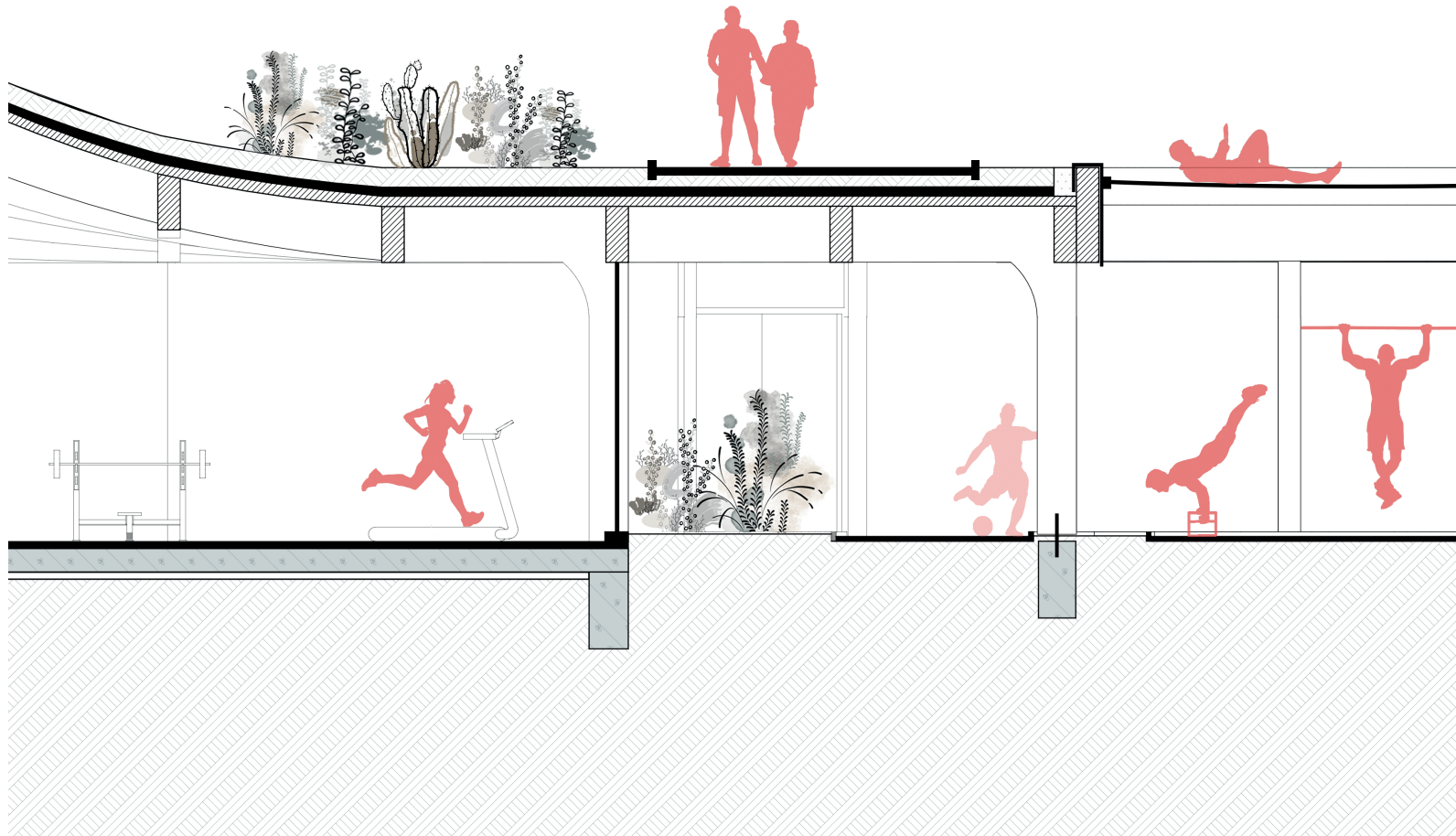


# 1:50 FRAGMENT RESTAURANT





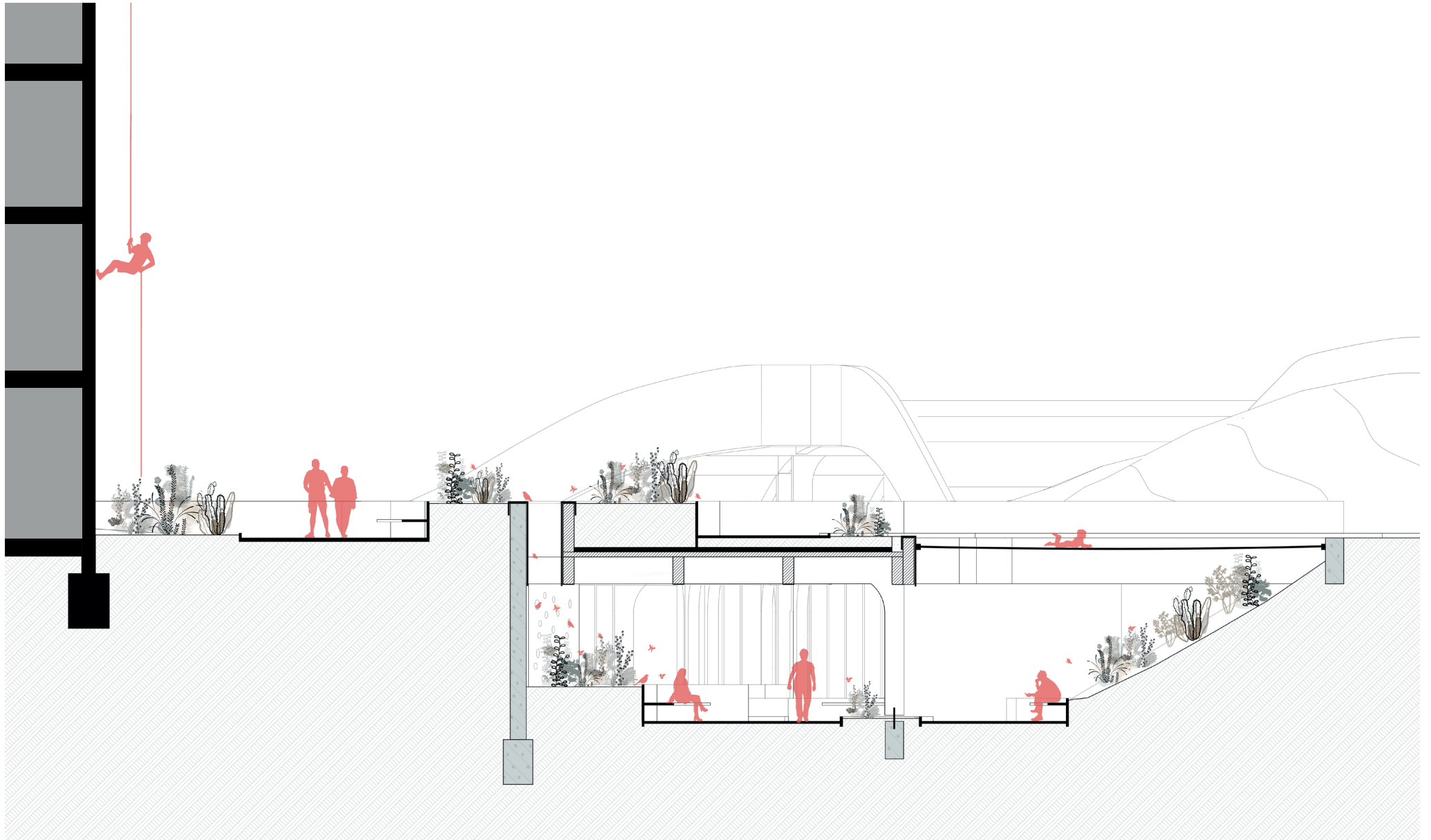
# 1:50 FRAGMENT SPORT CENTRE



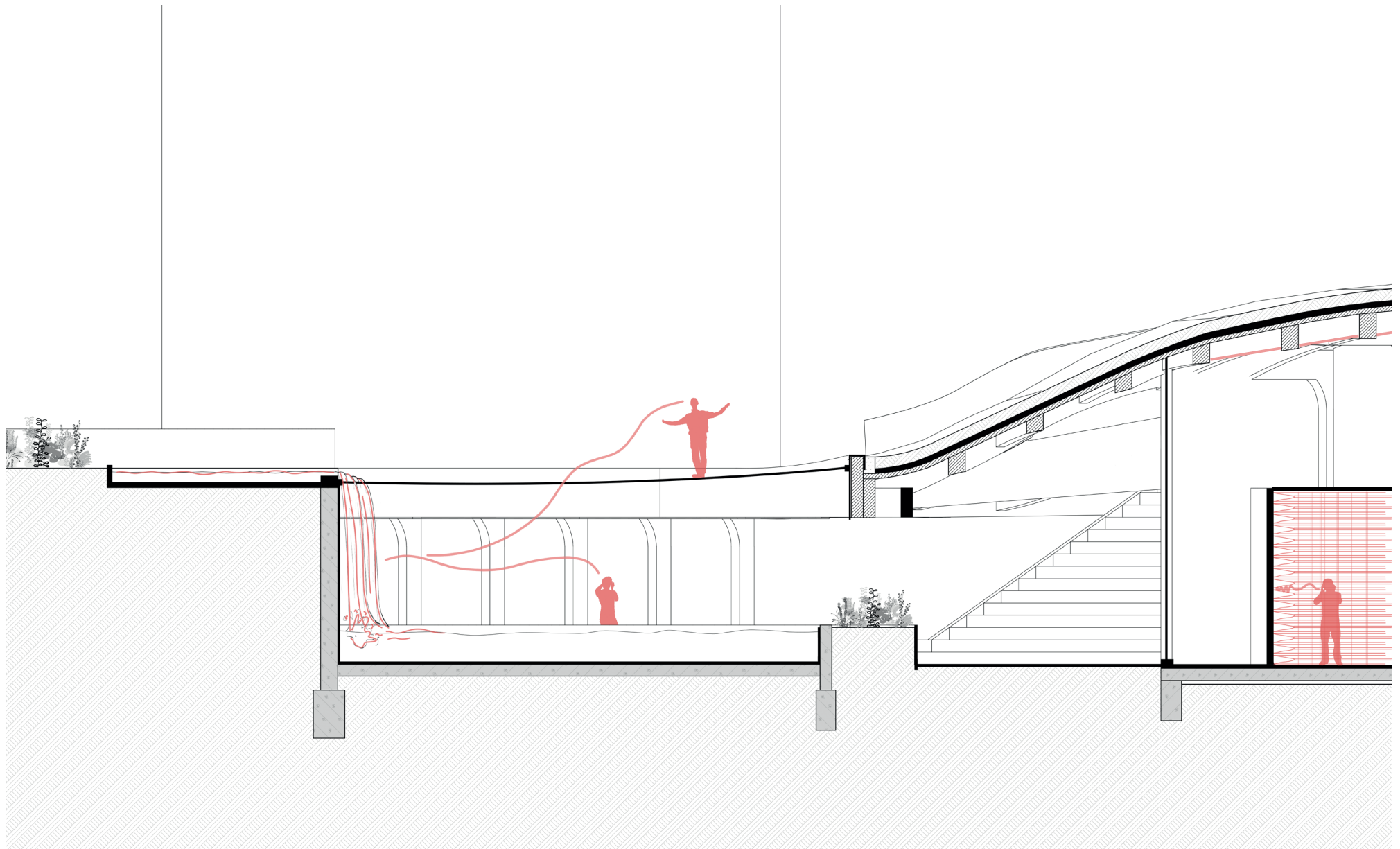
# 1:50 FRAGMENT ART CENTRE



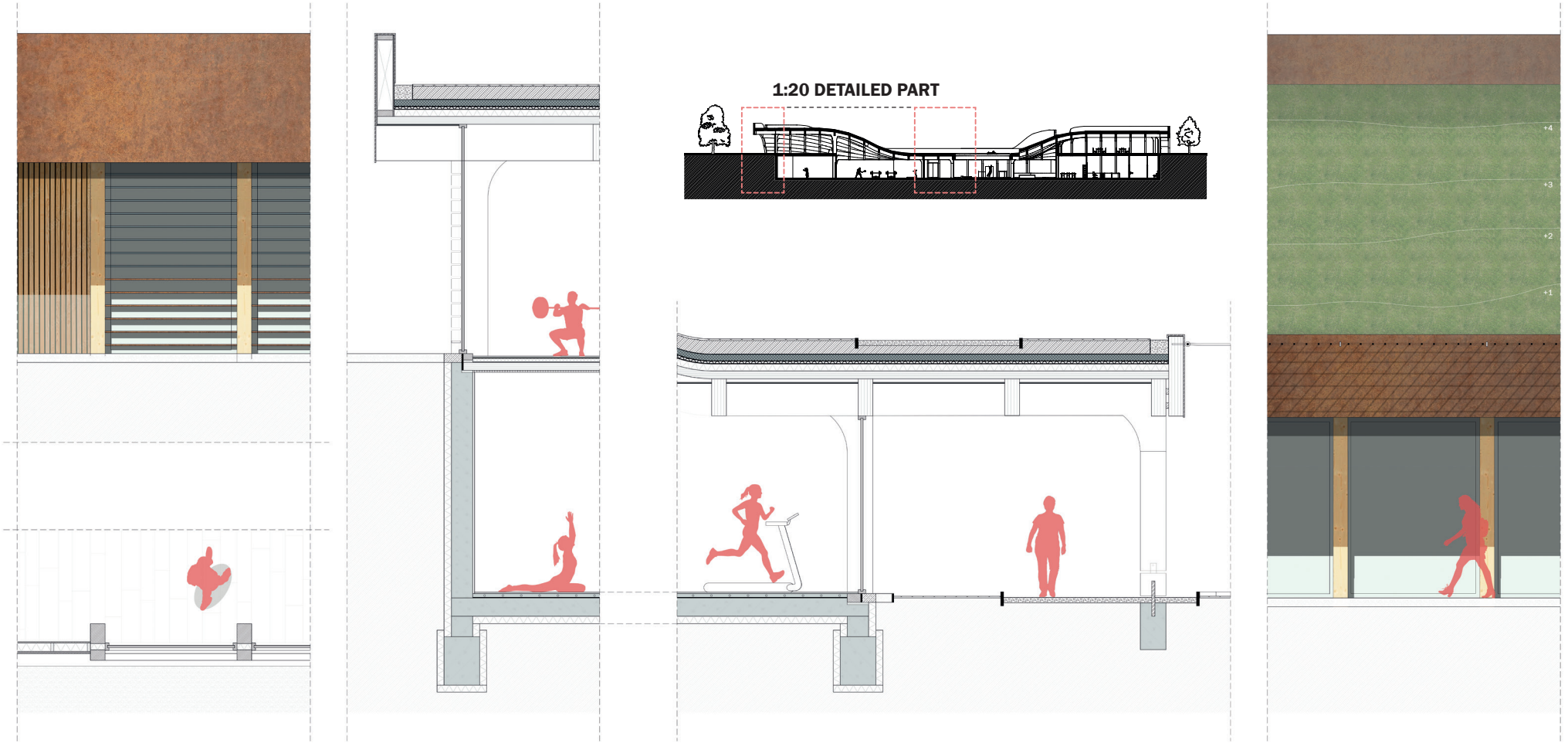
# 1:50 FRAGMENT INSECT WALL



# 1:50 FRAGMENT SOUND CENTRE



# 1:20 FRAGMENT



# RENDER



# RENDER

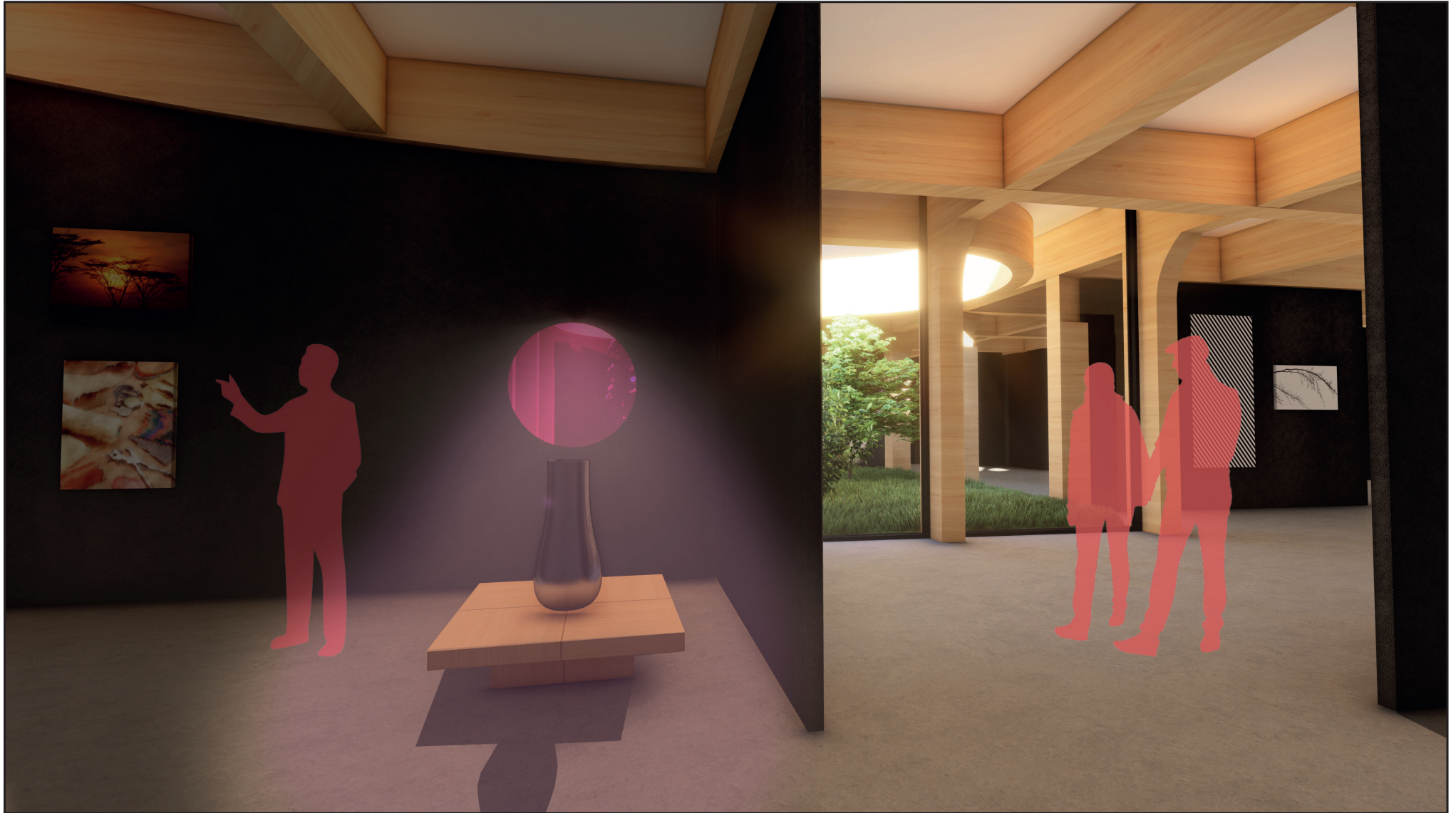


# RENDER





# RENDER



# RENDER



# RENDER



# RENDER



# RENDER



# RENDER



# RENDER



# RENDER

