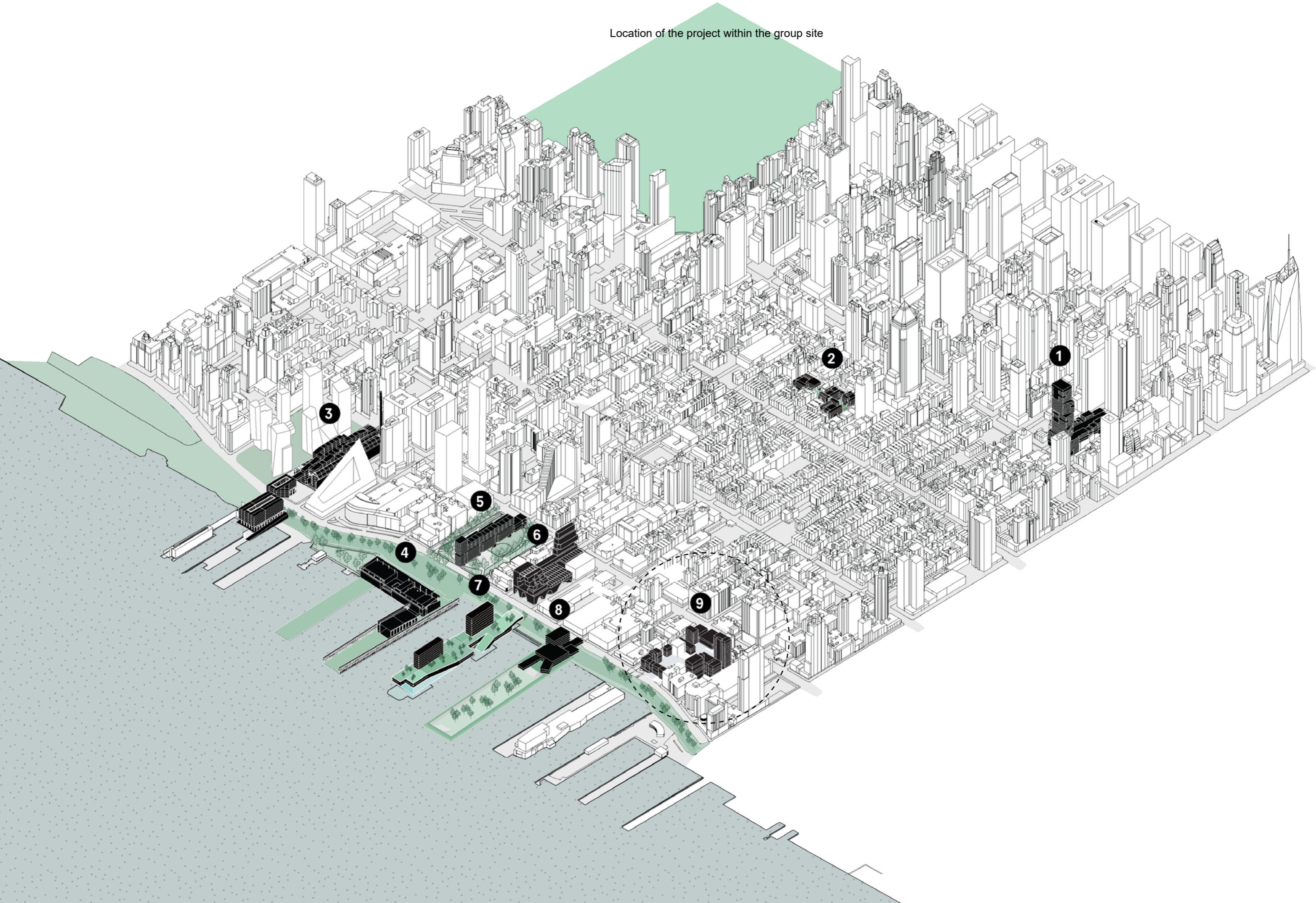


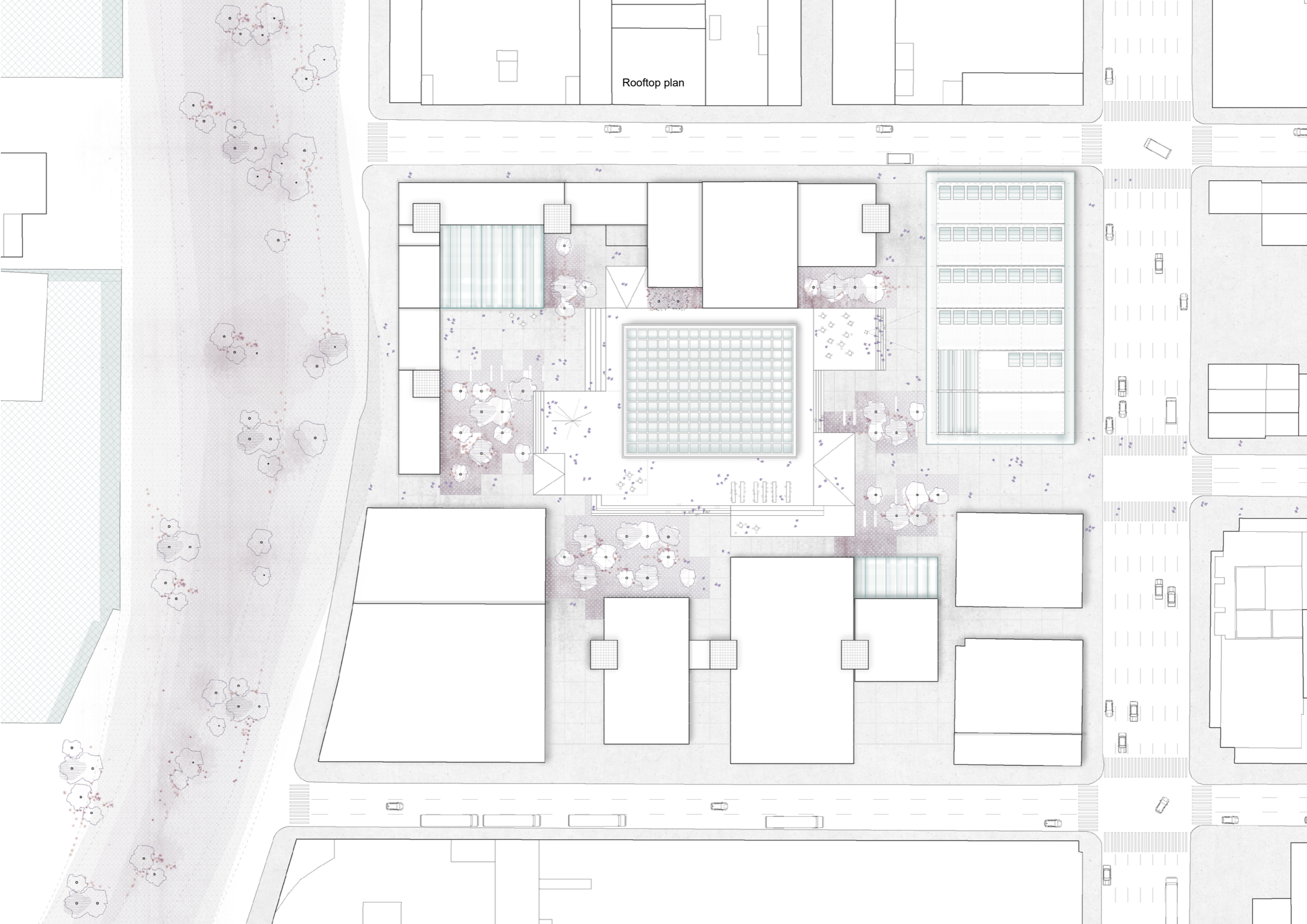
MADE IN MANHATTAN

revitalizing community through the creative engine

· Hell's Kitchen ·

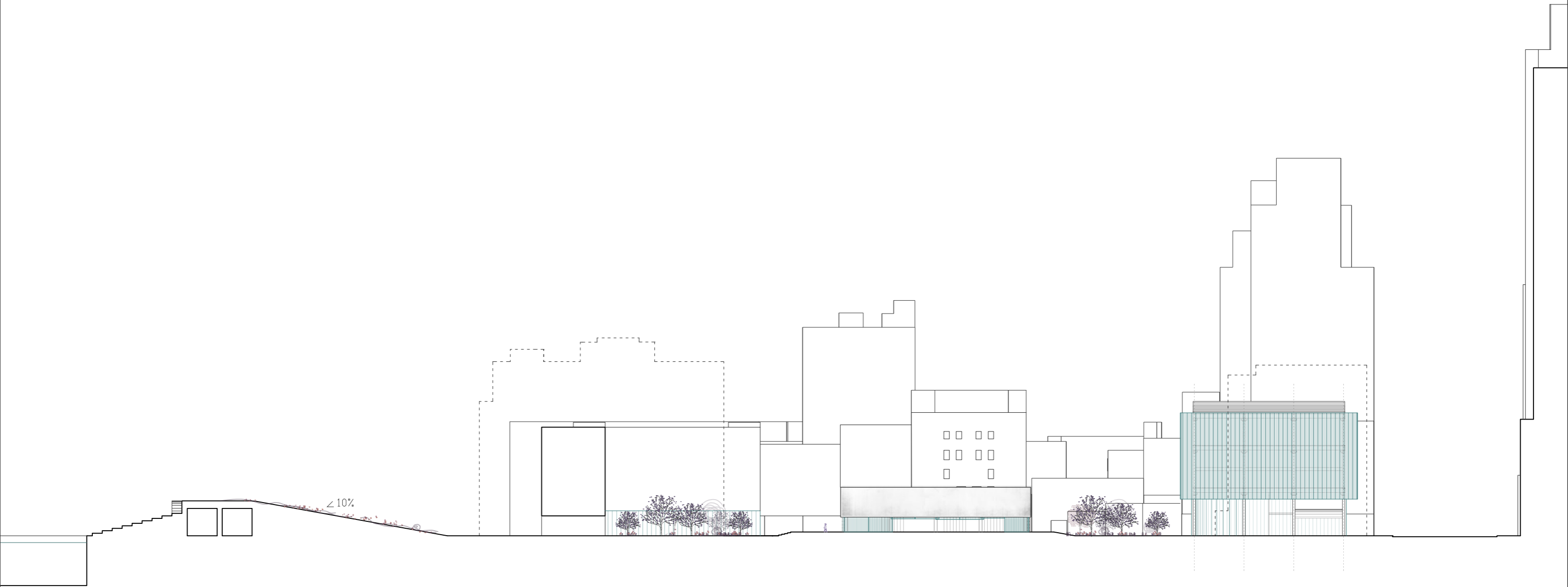
Location of the project within the group site



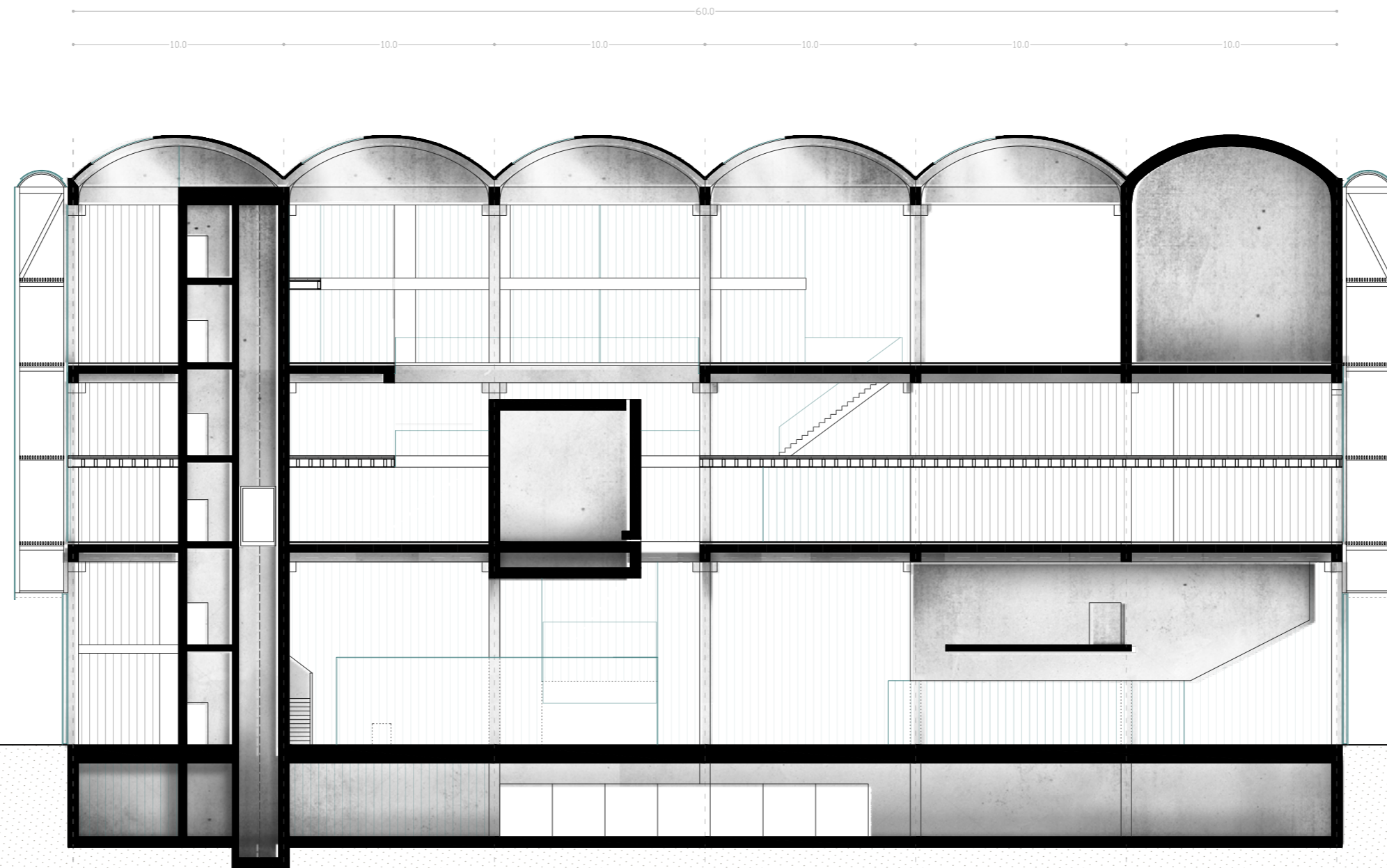


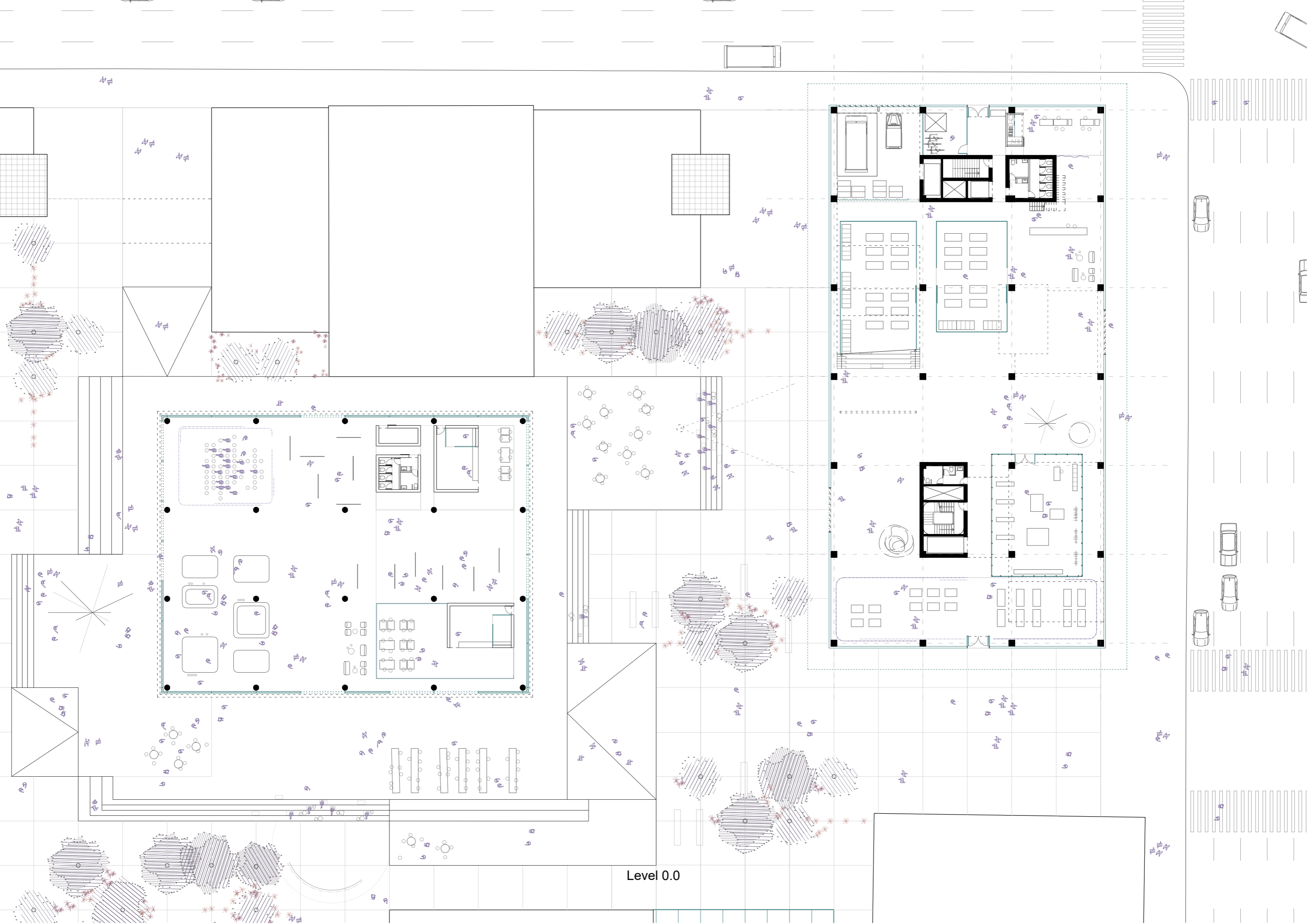
Rooftop plan

Urban section - courtyard

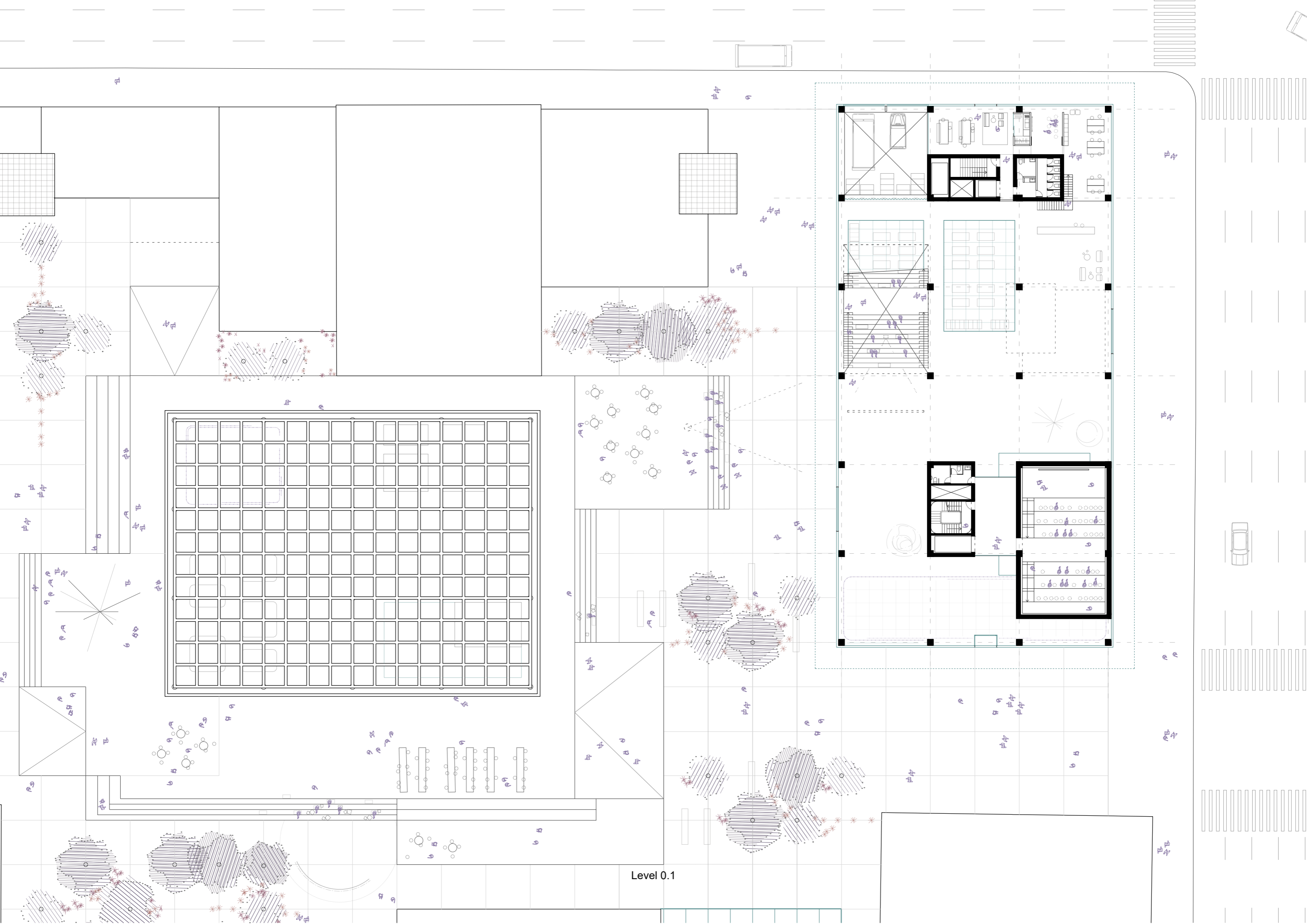


Section

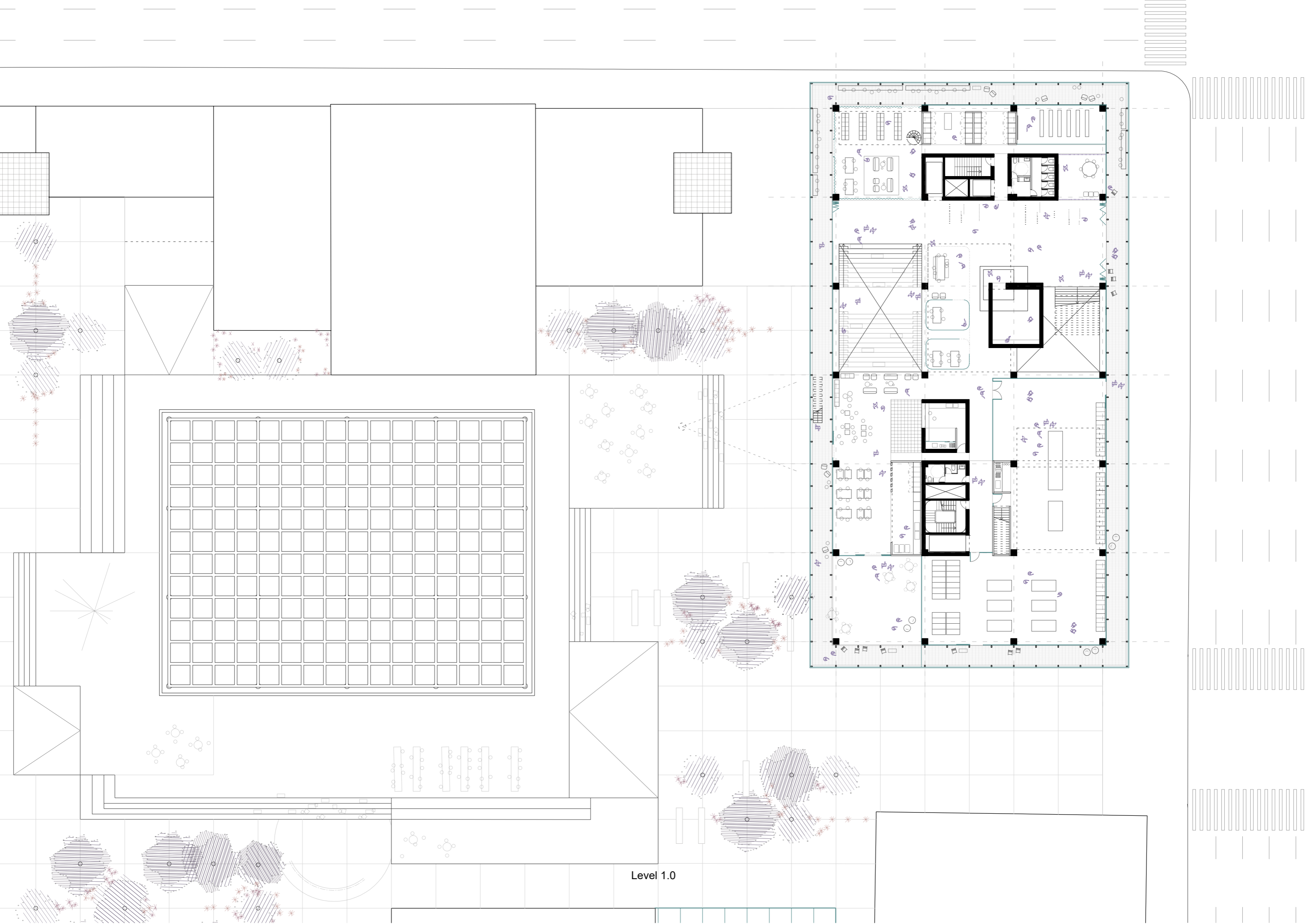




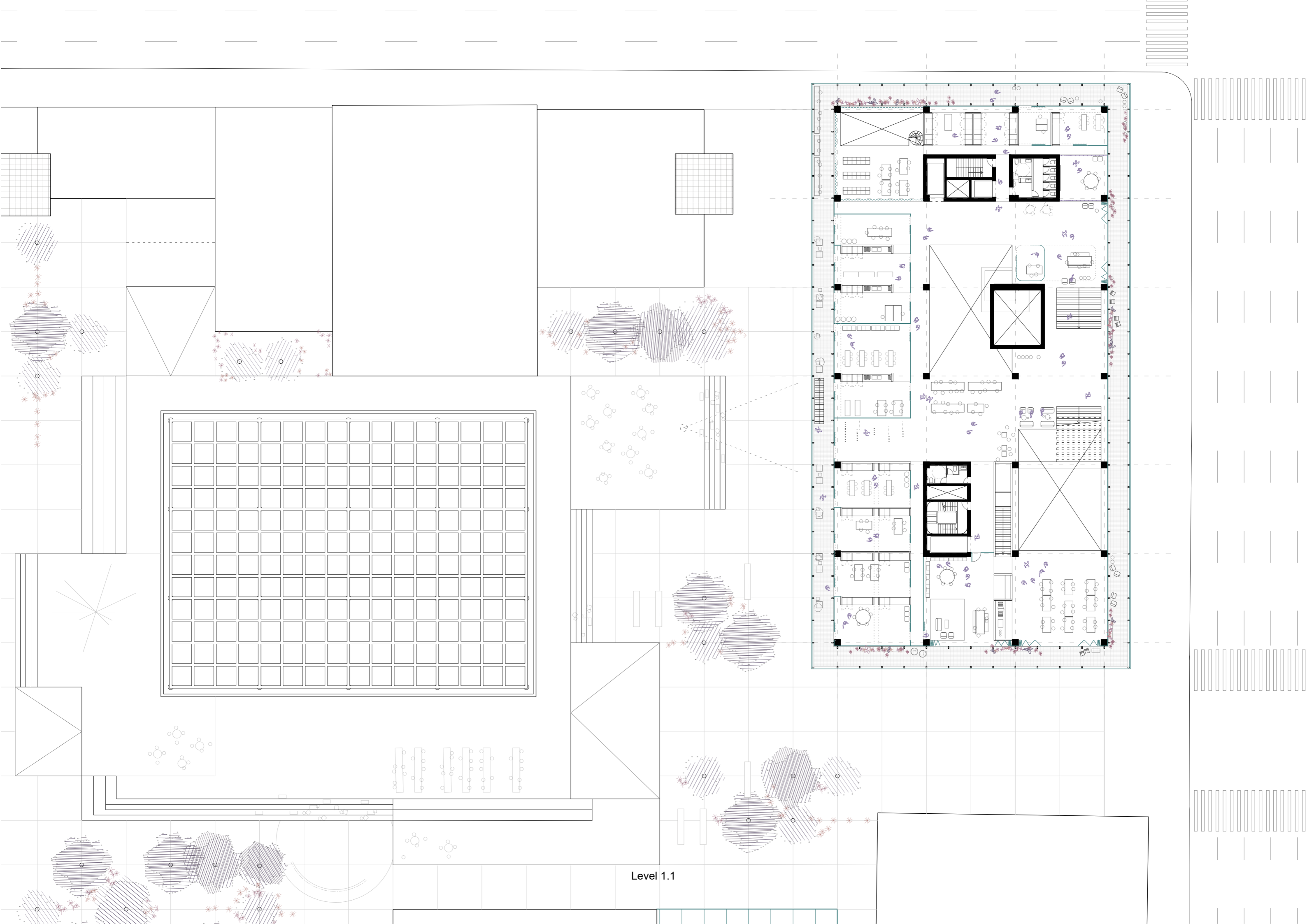
Level 0.0



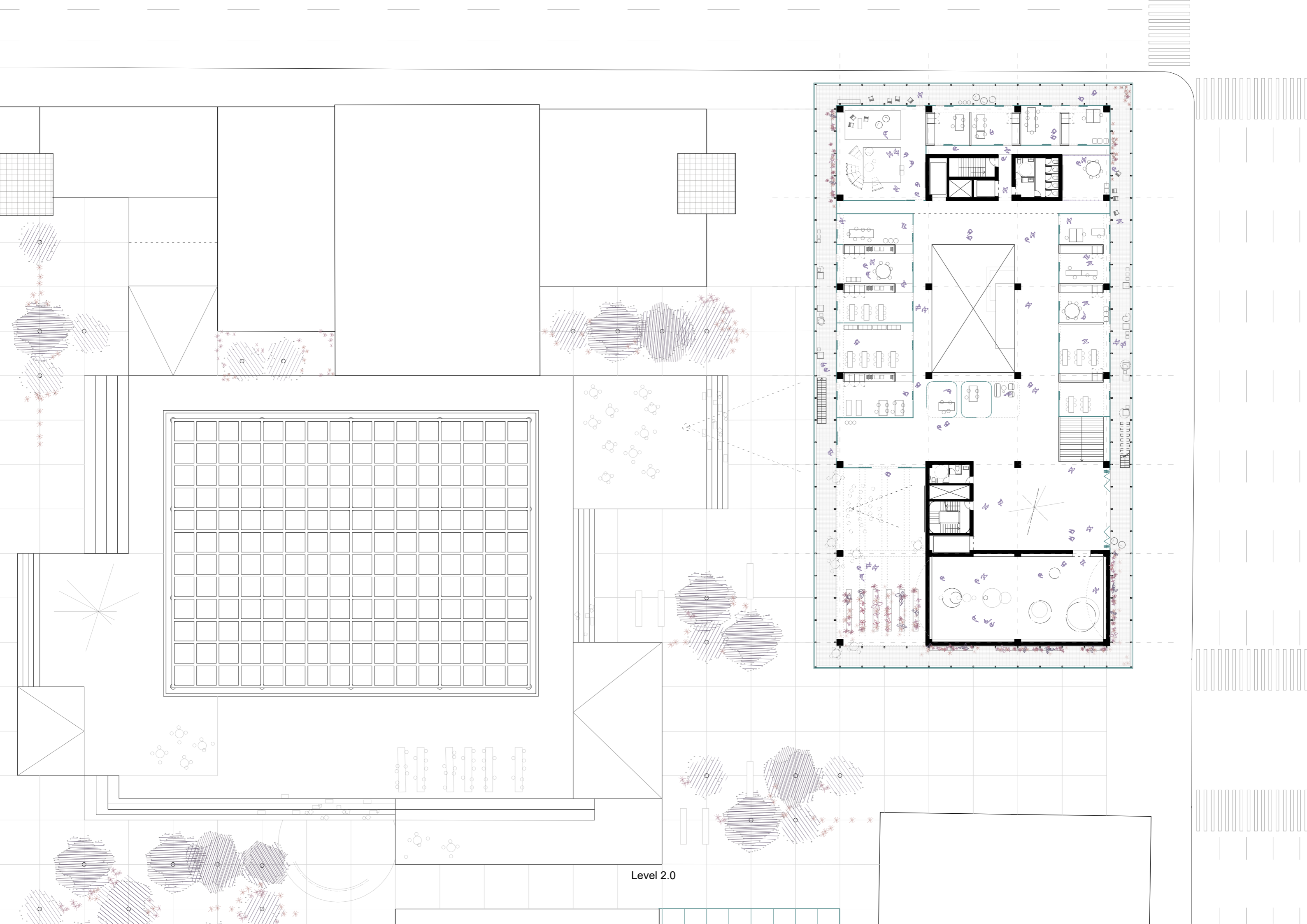
Level 0.1



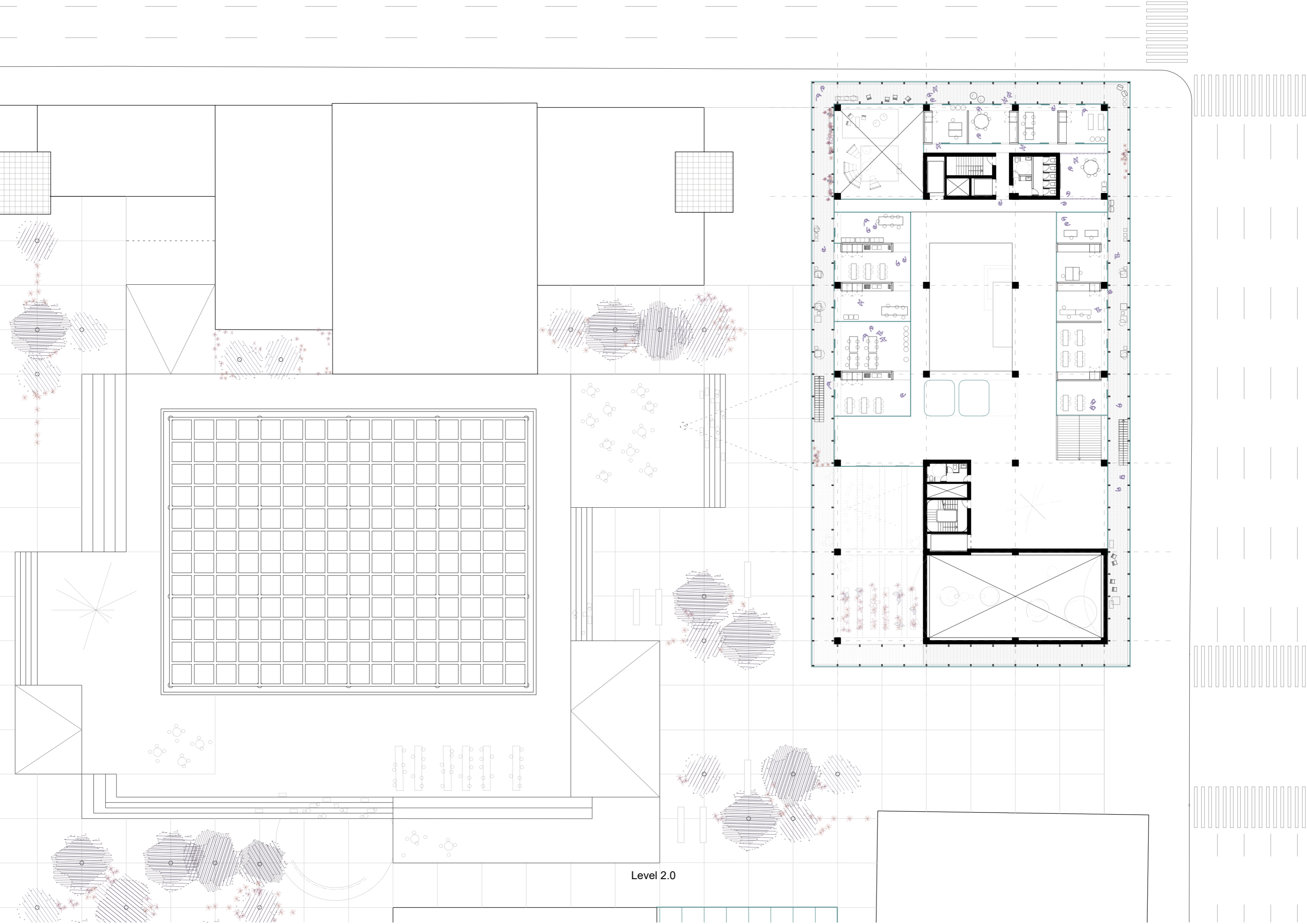
Level 1.0



Level 1.1



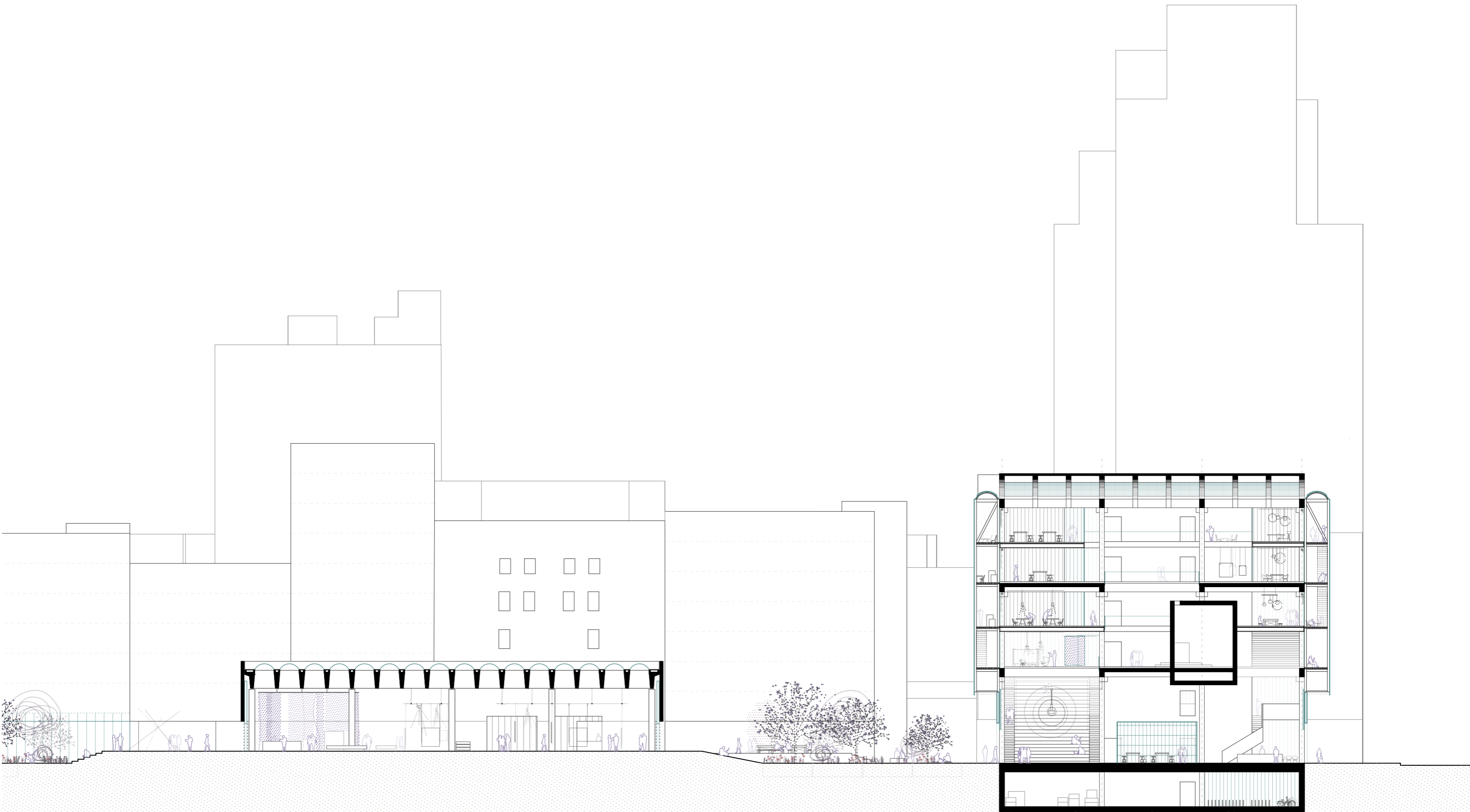
Level 2.0



Level 2.0

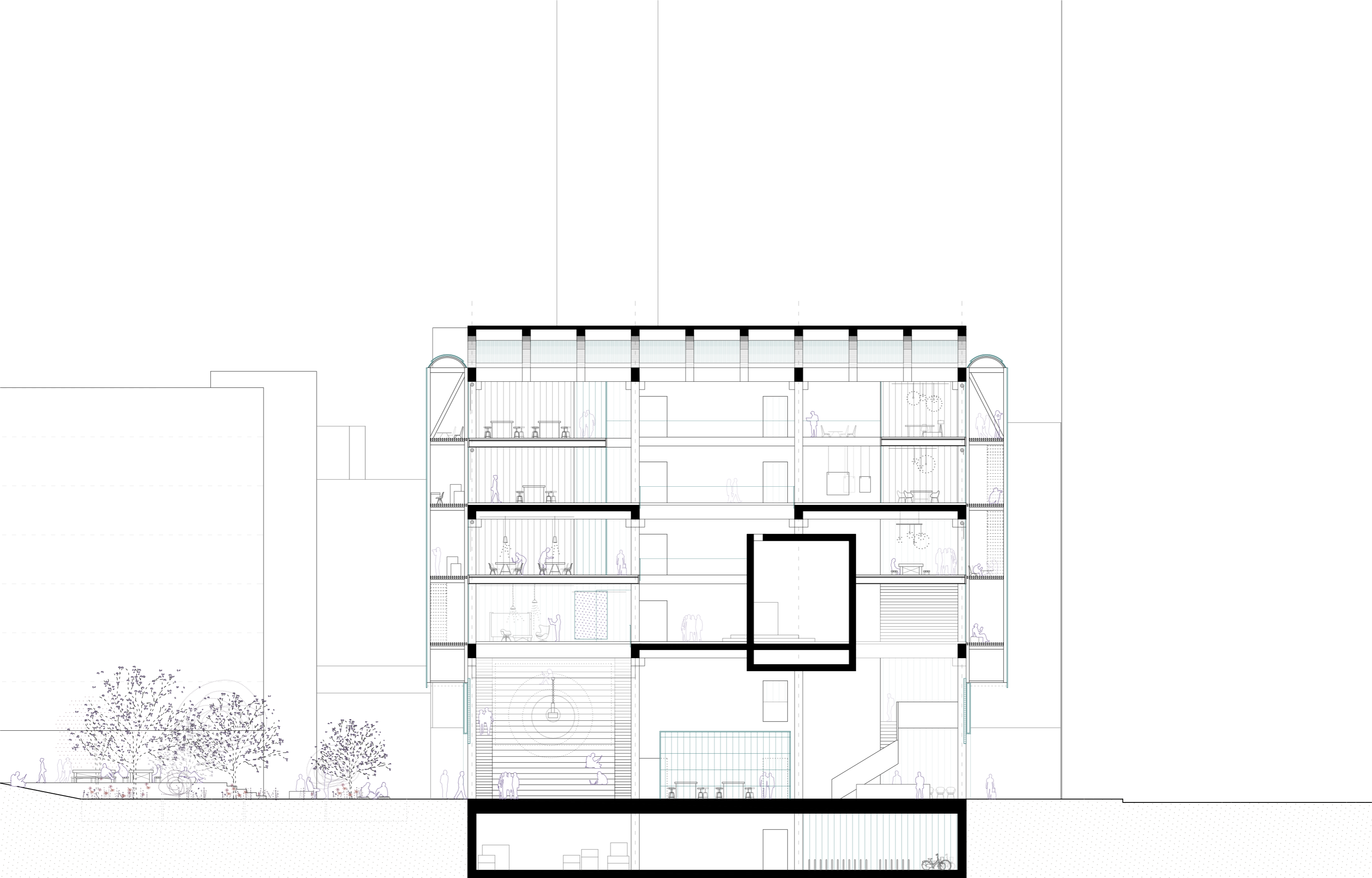


Basement

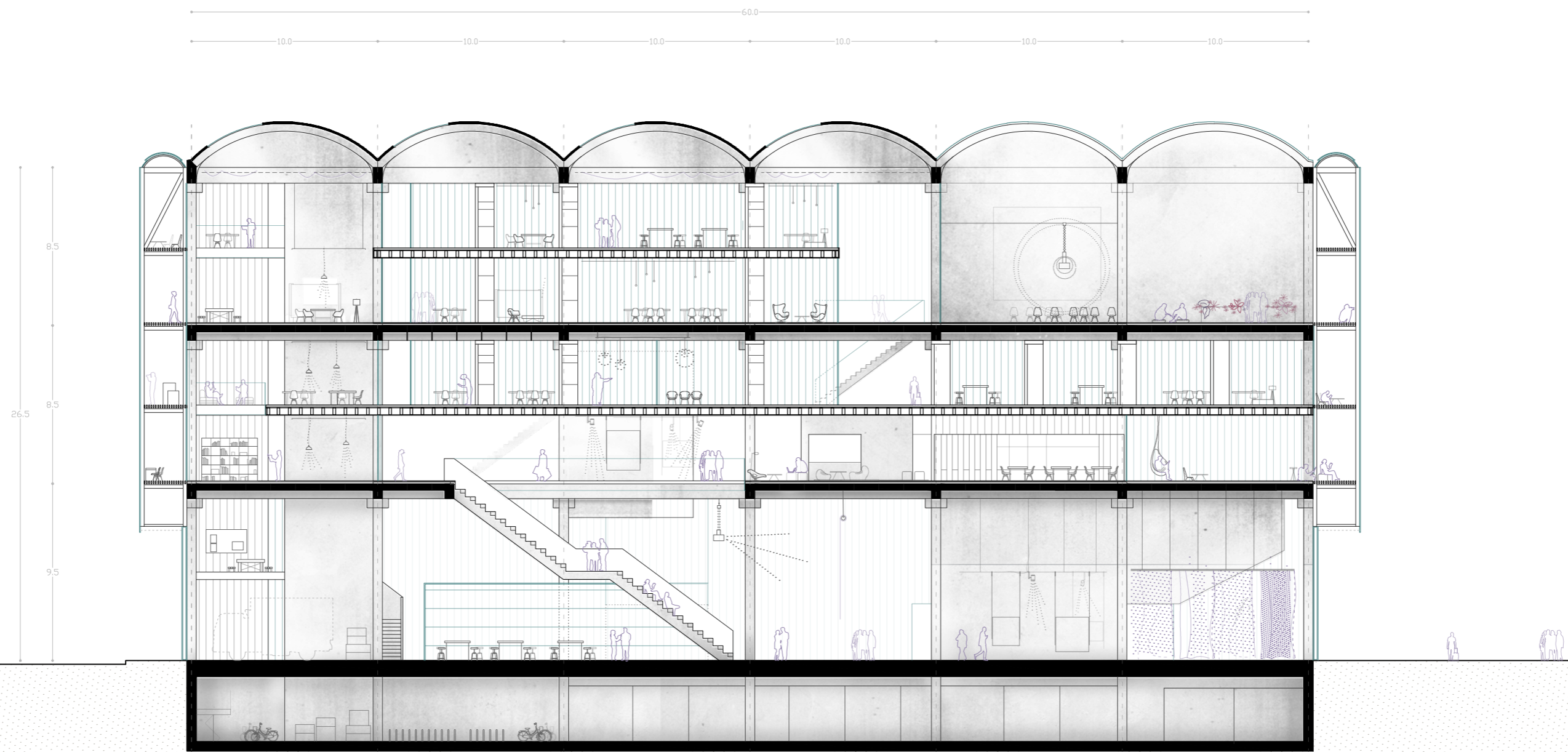


Section - the courtyard as element of connection





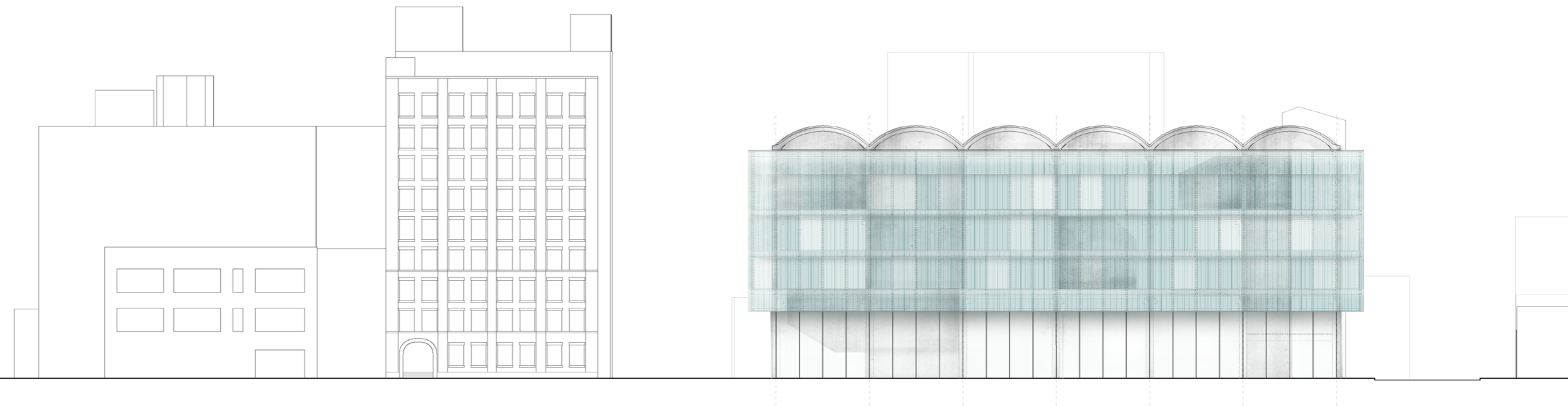
Longitudinal section



Longitudinal section

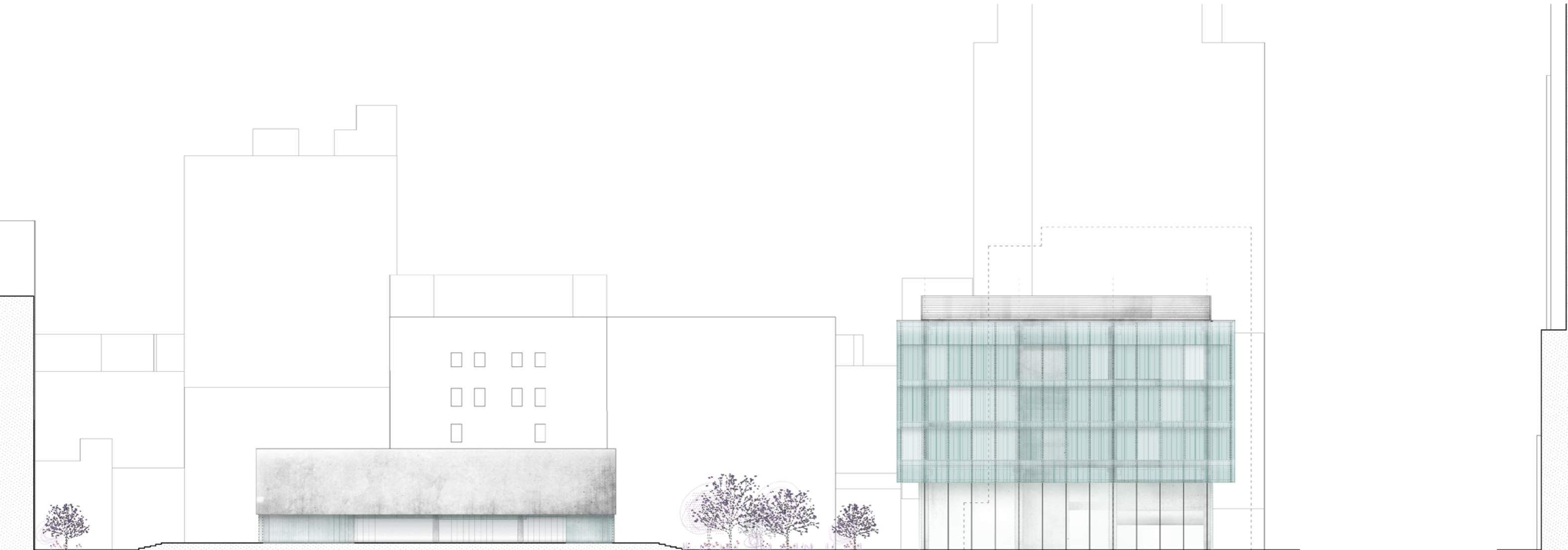
Elevation

urban setting



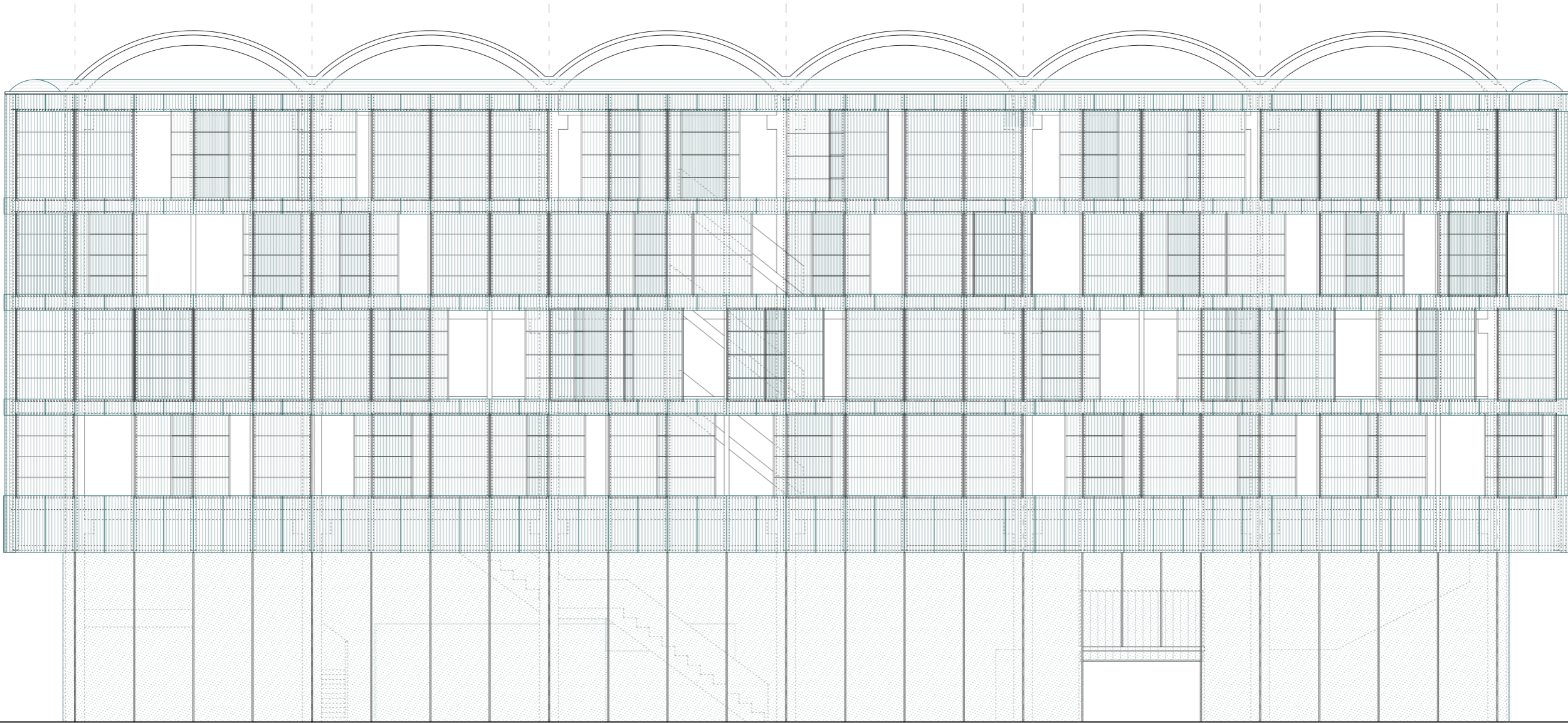
Elevation

urban setting



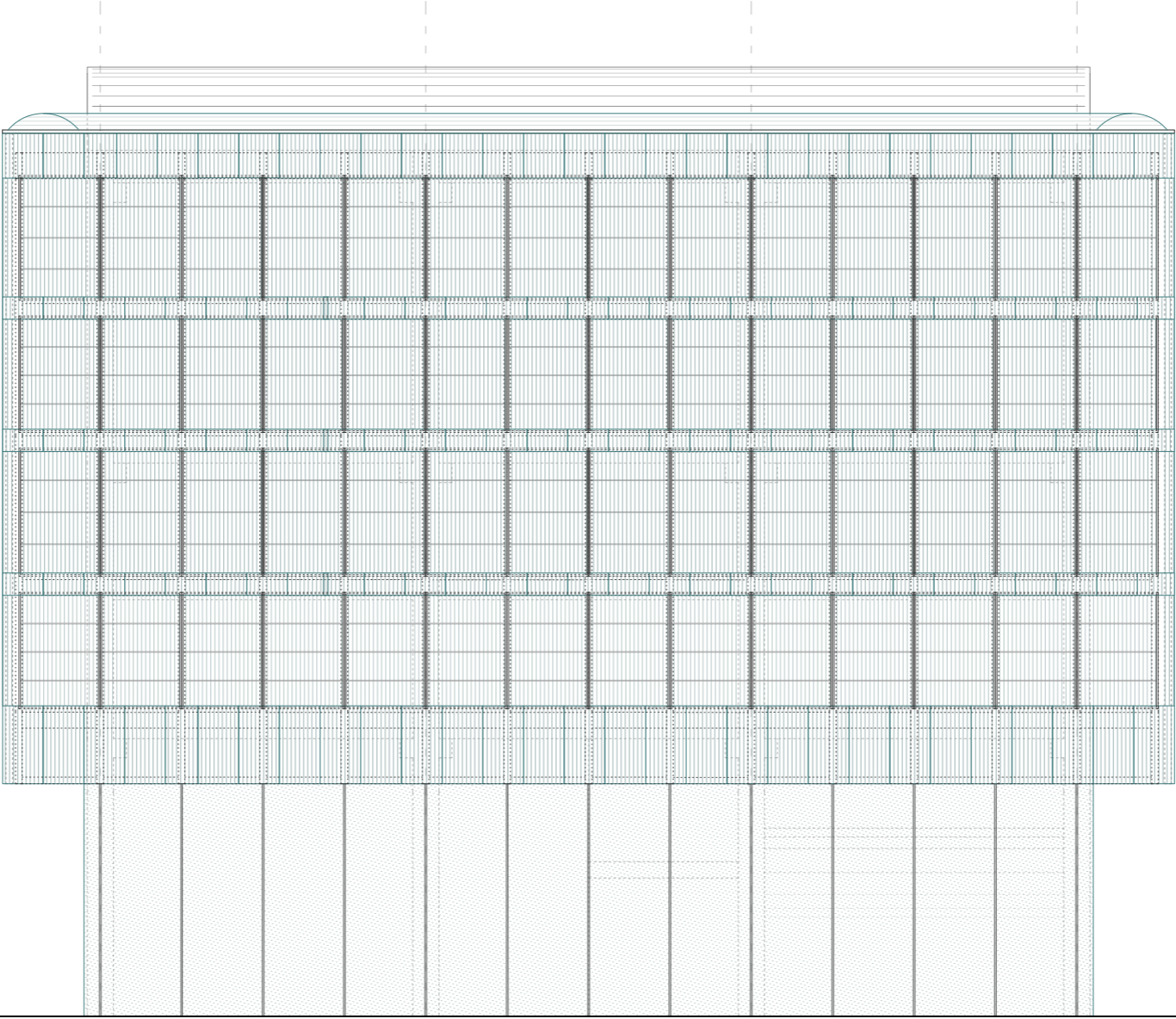
Elevation

system of facade

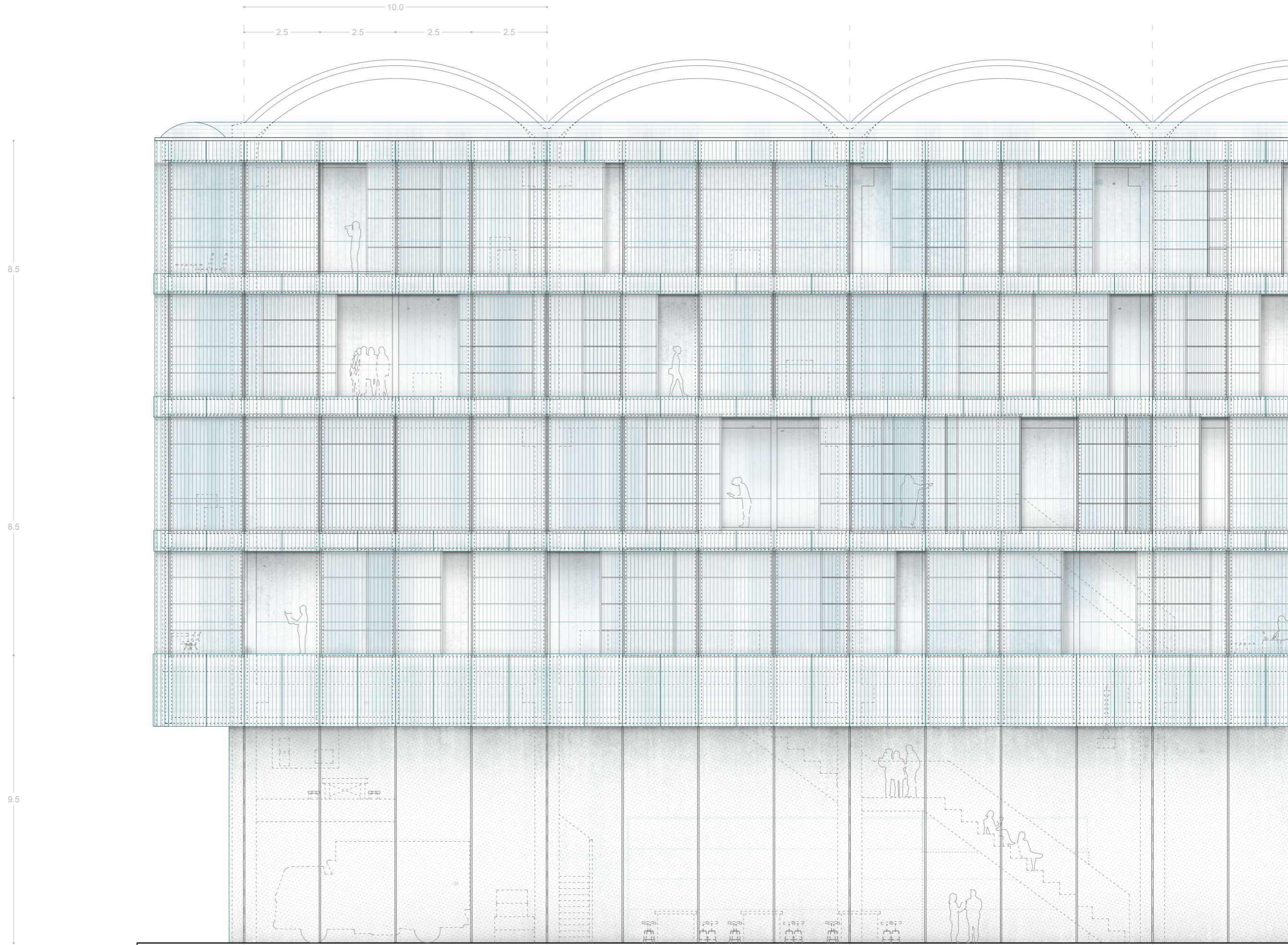


Elevation

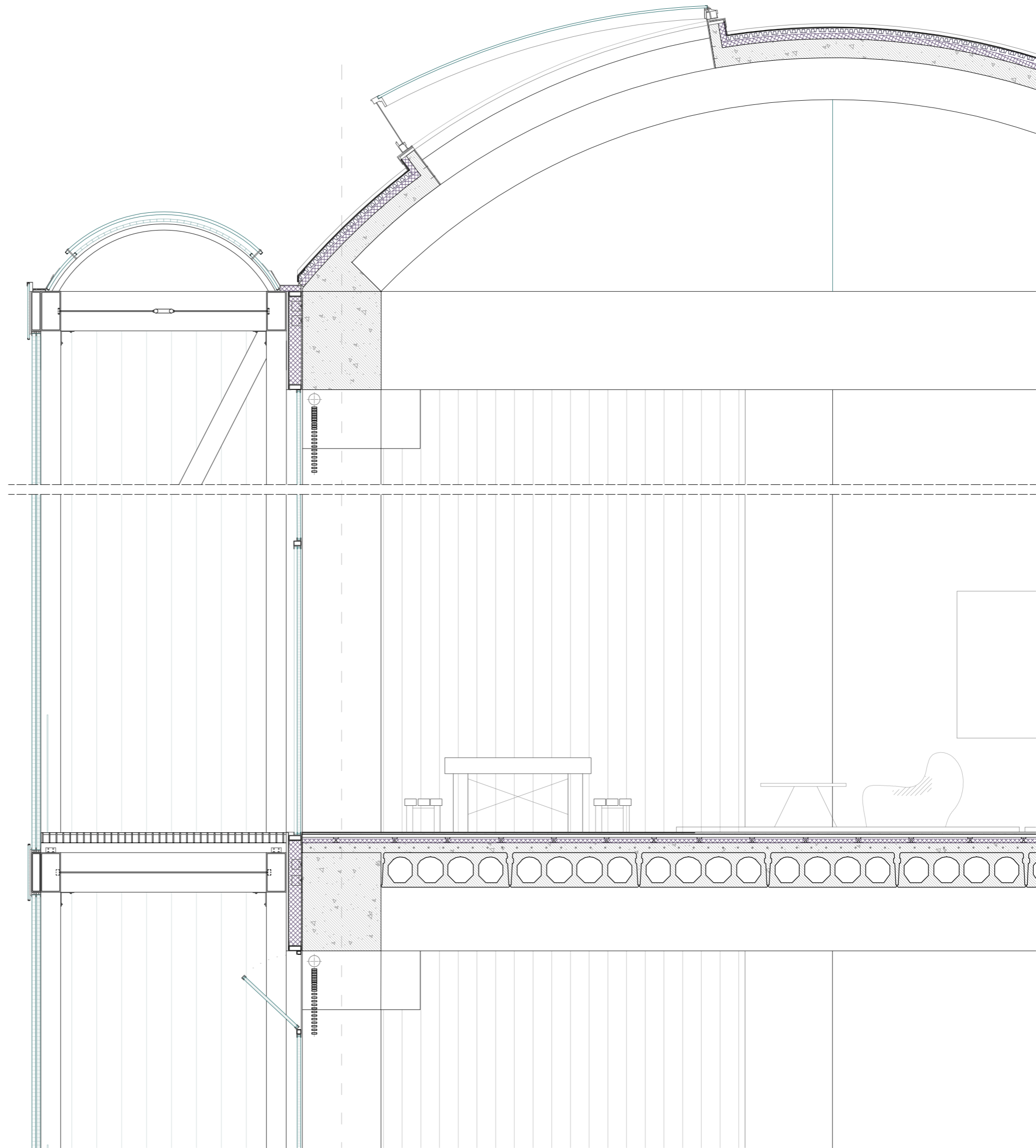
system of facade



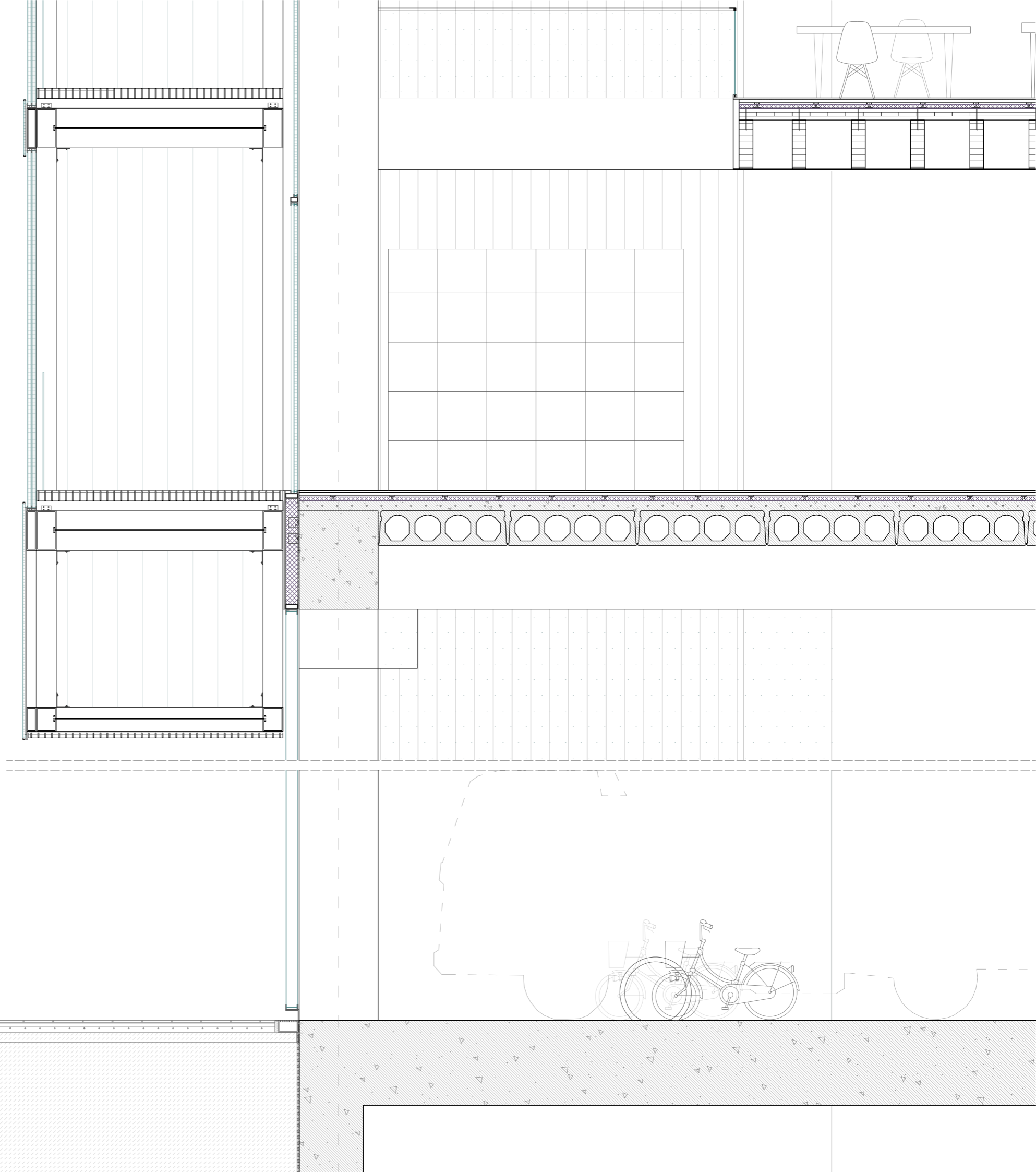
Elevation



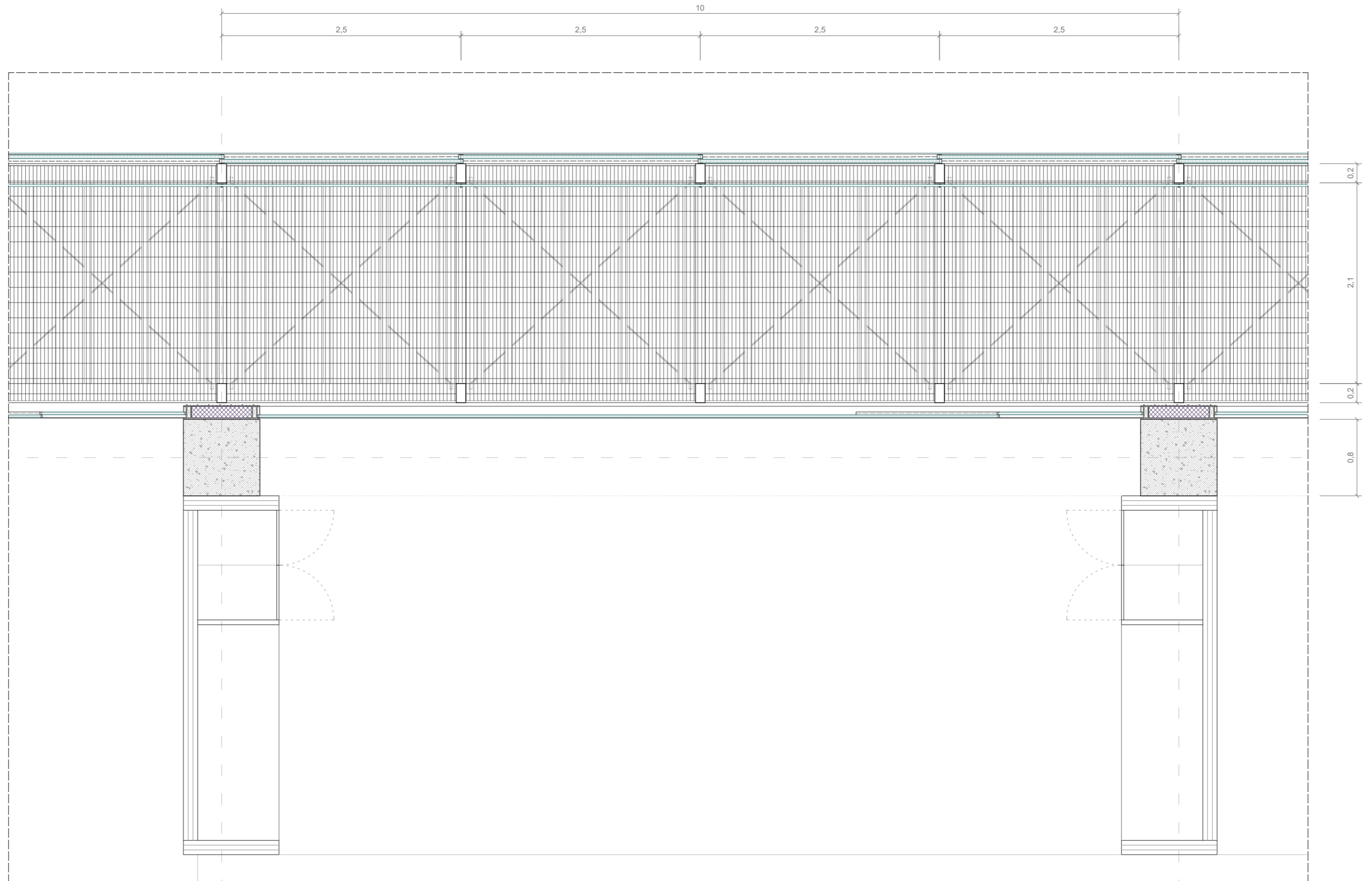
Facade - vertical section -

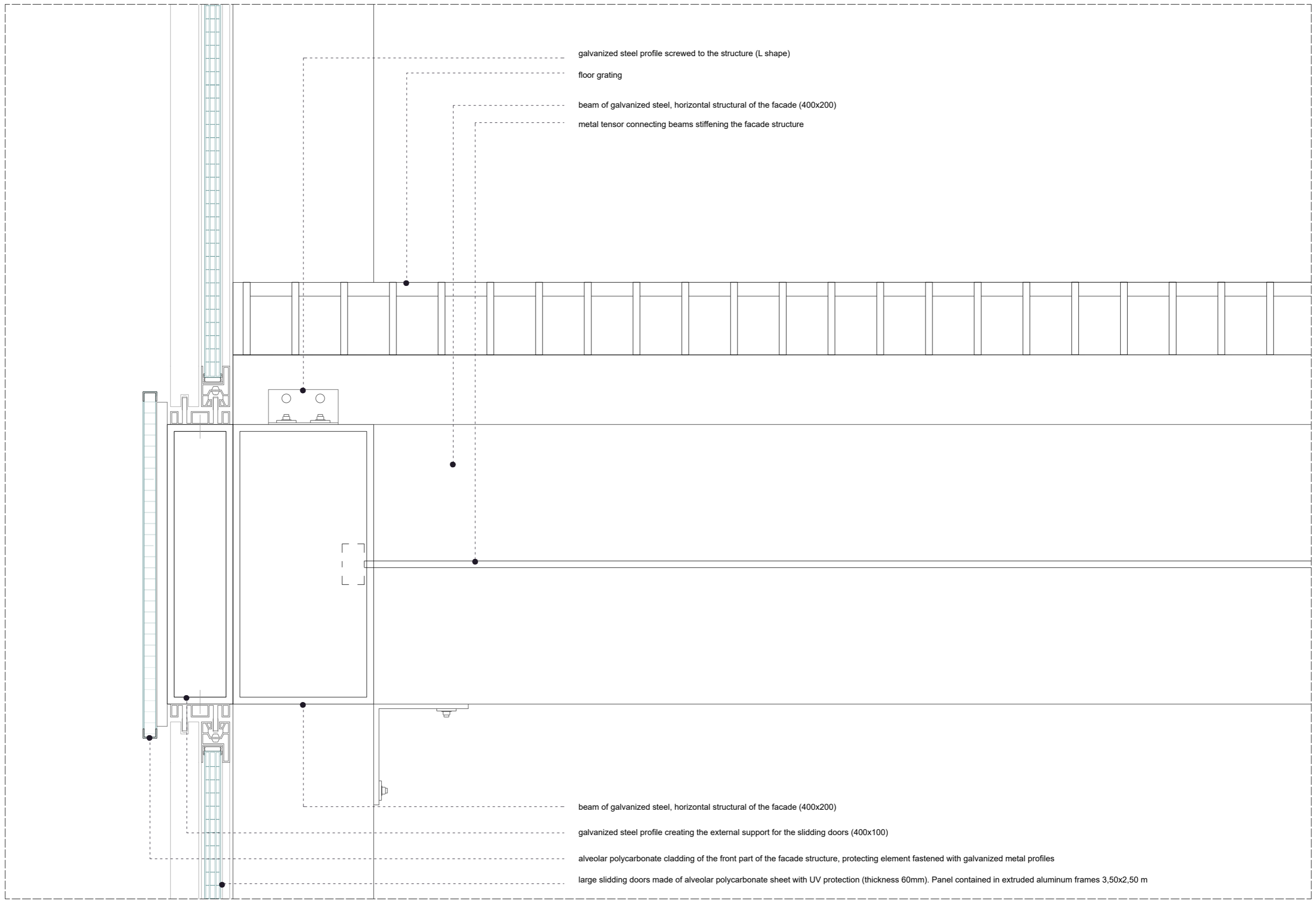


Facade - vertical section -



Facade - horizontal section -





- galvanized steel profile screwed to the structure (L shape)
- floor grating
- beam of galvanized steel, horizontal structural of the facade (400x200)
- metal tensor connecting beams stiffening the facade structure

- beam of galvanized steel, horizontal structural of the facade (400x200)
- galvanized steel profile creating the external support for the sliding doors (400x100)
- alveolar polycarbonate cladding of the front part of the facade structure, protecting element fastened with galvanized metal profiles
- large sliding doors made of alveolar polycarbonate sheet with UV protection (thickness 60mm). Panel contained in extruded aluminum frames 3,50x2,50 m

Facade - outer skin -

Technical floor Granab3000. Thickness: 105mm. This system is made up of the following elements arranged on the CLT wooden floor panel:

- 1_insulation: 50 mm mineral wool panel
- 2_10 mm air
- 3_Granab 3000 Technical Acoustic Floor System
- 4_22 mm agglomerate board
- 5_13 mm fiber-reinforced laminated gypsum board
- 6_2.5 mm anti-impact sheet
- 7_8 mm laminate flooring with Marmoleum Click linoleum

sliding door made of alveolar polycarbonate panel, thickness 30 mm

galvanized steel profiles (120x50mm)

insulation material, mineral wool thickness 120mm

corrugated steel sheet as cladding of the interior-skin facade

floor grating

galvanized steel profile screwed to the structure (L shape)

beam of galvanized steel, horizontal structure of the facade (400x200)

metal tensor connecting beams stiffening the facade structure

beam of galvanized steel, horizontal structural of the facade (400x200)

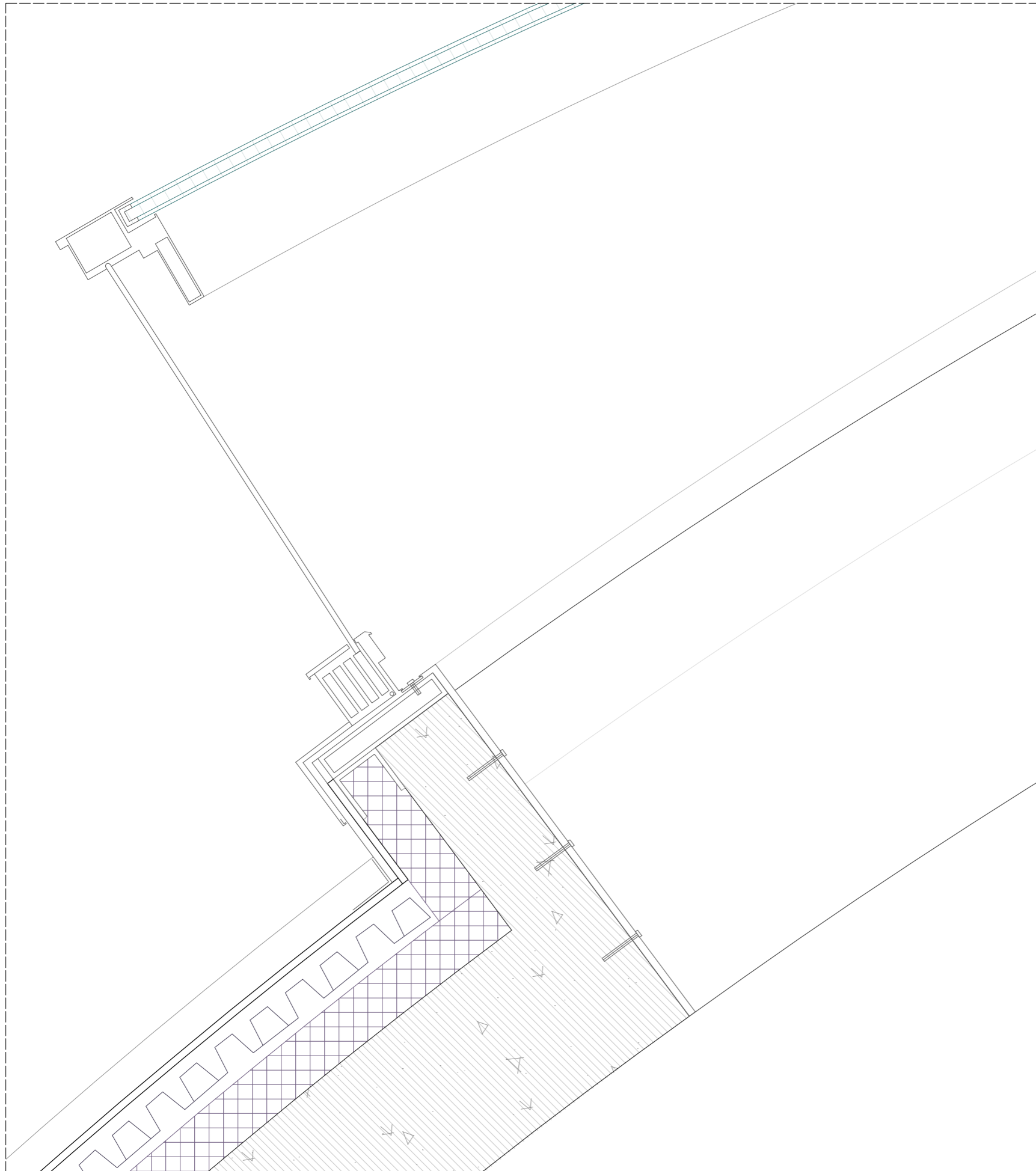
galvanized steel profile connecting steel beam and column (L shape)

prestressed concrete beam, main structure of the building (1000x700mm)

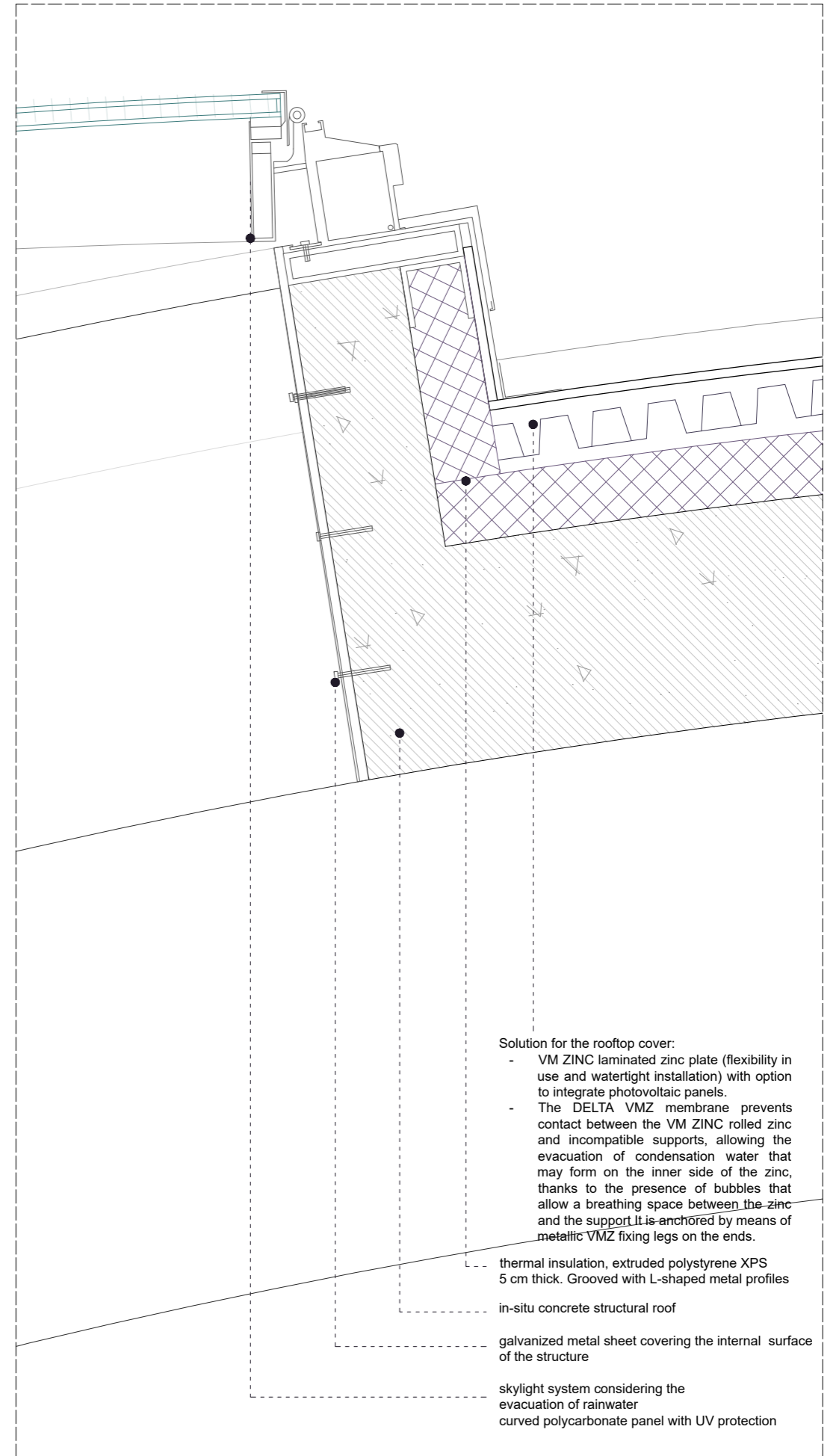
hollow core slab, thickness 350 mm

geotextil layer

Facade - inner skin-



Rooftop skylight



Solution for the rooftop cover:

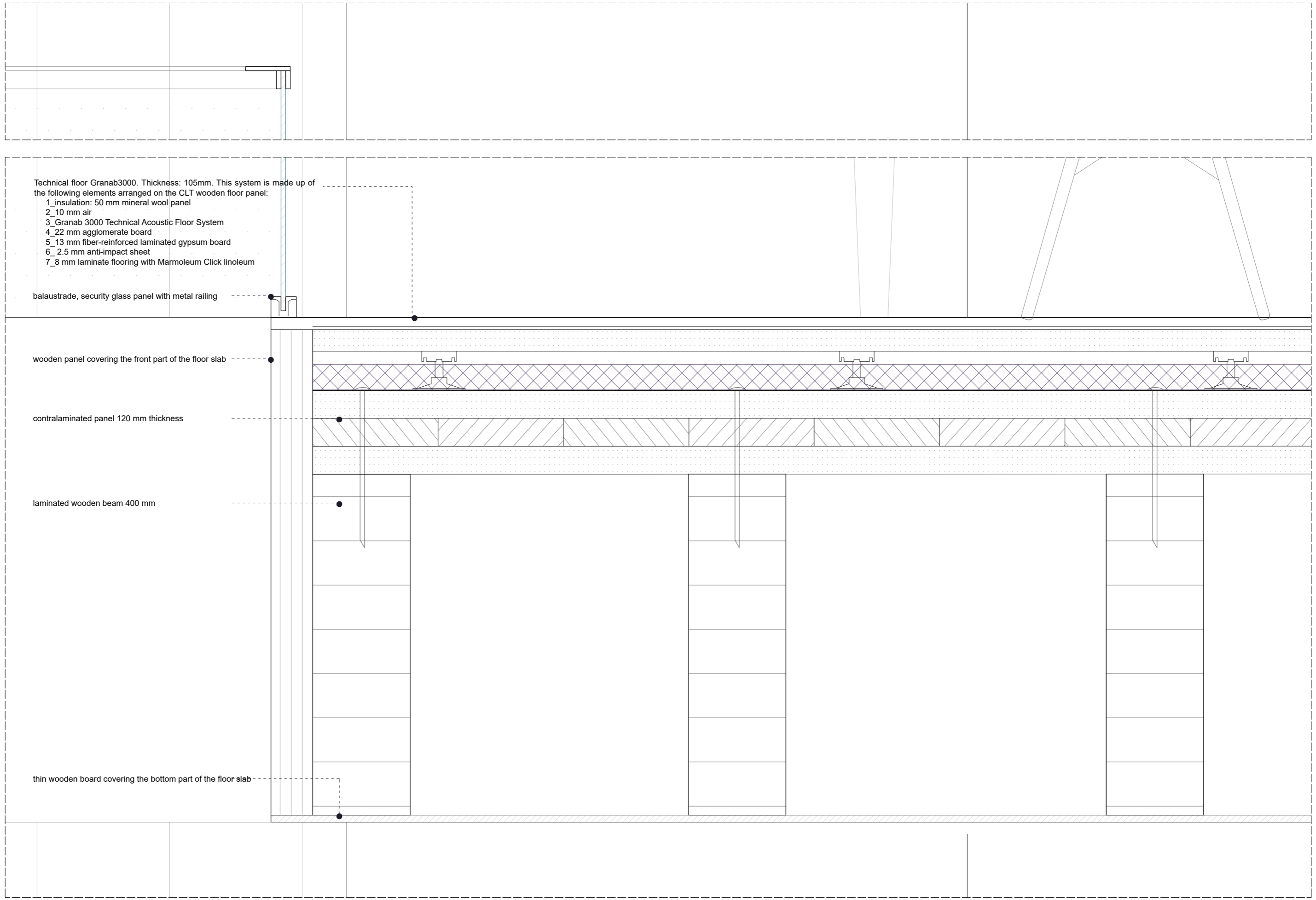
- VM ZINC laminated zinc plate (flexibility in use and watertight installation) with option to integrate photovoltaic panels.
- The DELTA VMZ membrane prevents contact between the VM ZINC rolled zinc and incompatible supports, allowing the evacuation of condensation water that may form on the inner side of the zinc, thanks to the presence of bubbles that allow a breathing space between the zinc and the support. It is anchored by means of metallic VMZ fixing legs on the ends.

thermal insulation, extruded polystyrene XPS 5 cm thick. Grooved with L-shaped metal profiles

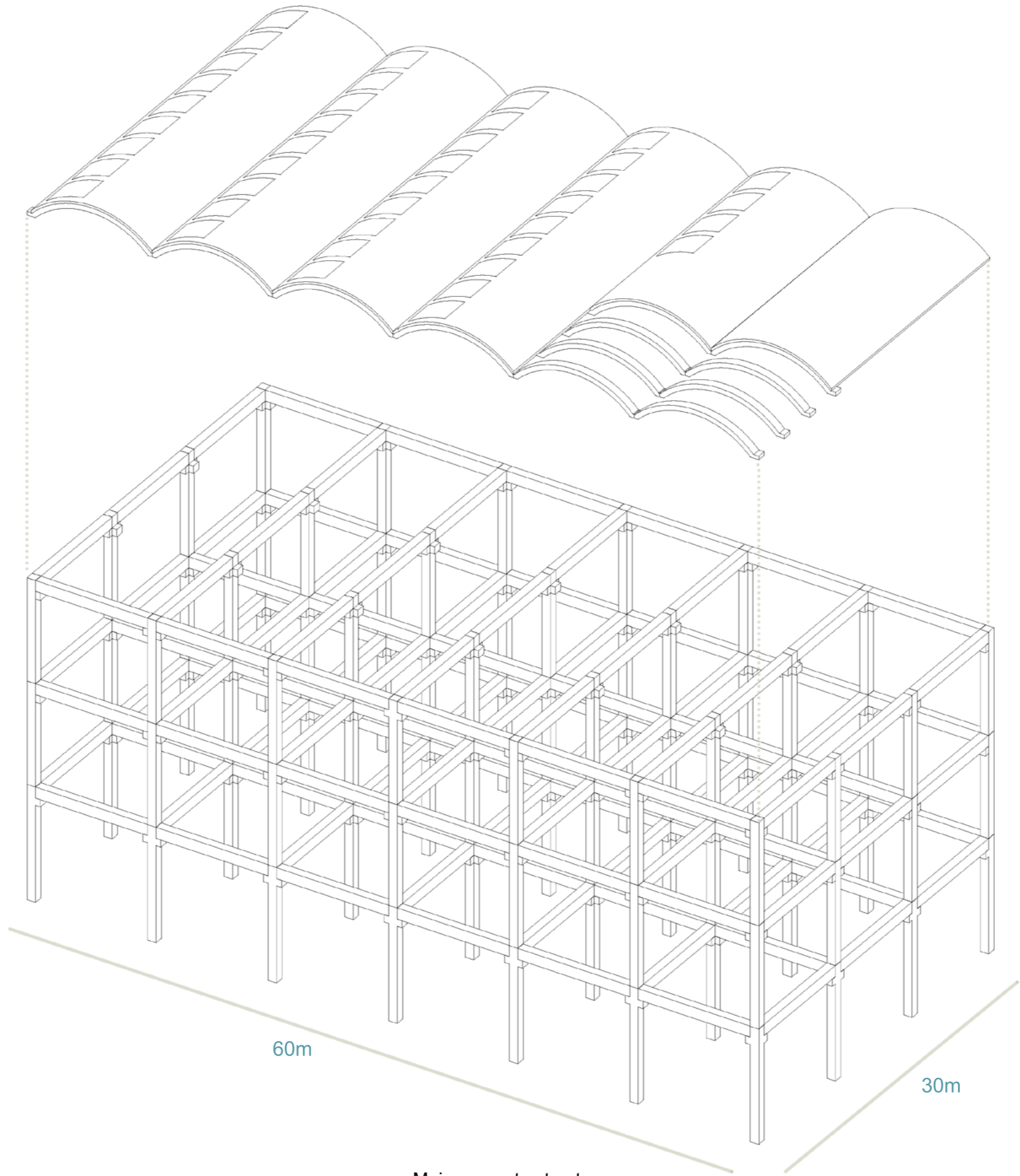
in-situ concrete structural roof

galvanized metal sheet covering the internal surface of the structure

skylight system considering the evacuation of rainwater curved polycarbonate panel with UV protection



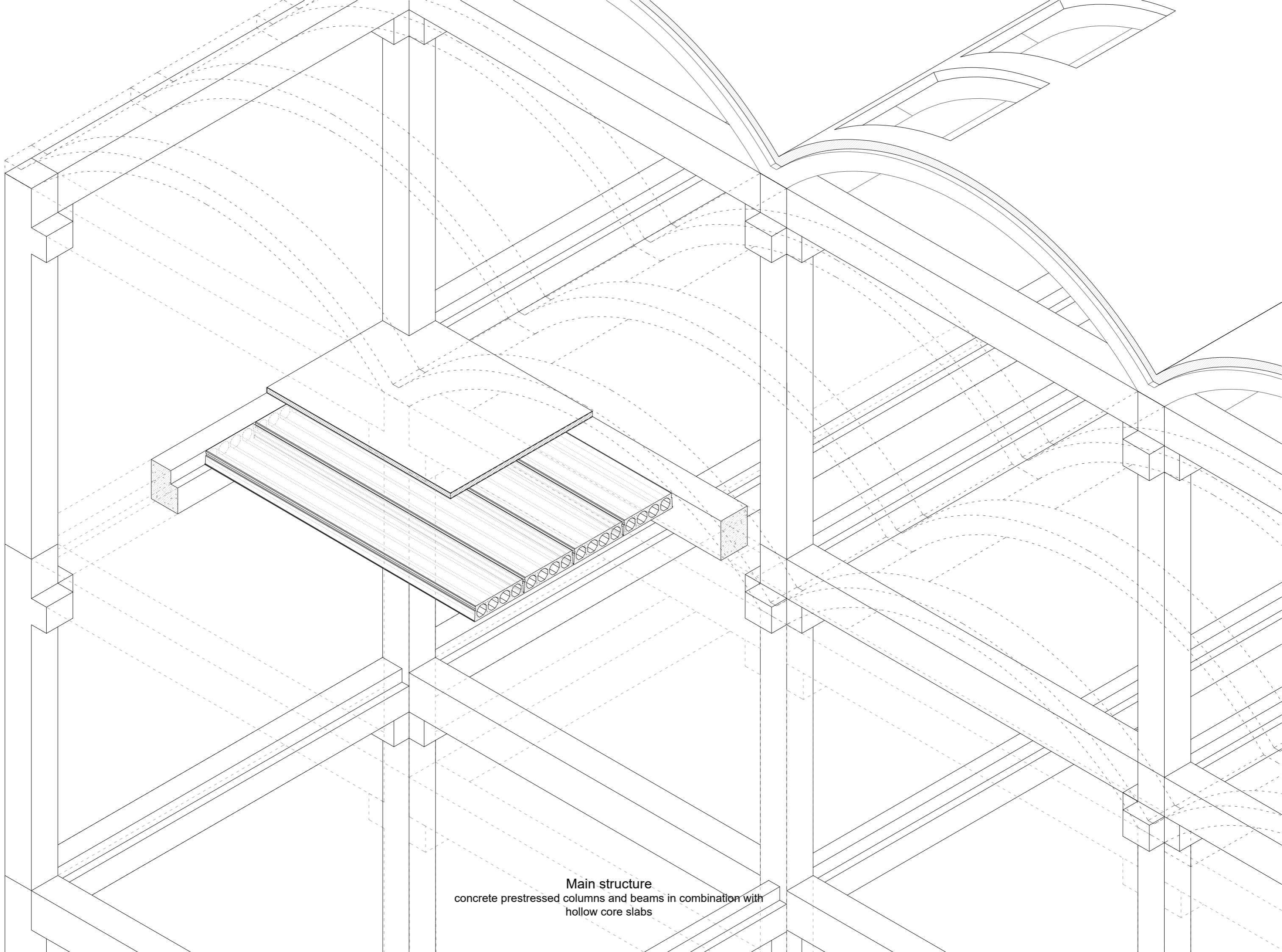
Secondary structure - timber elements -



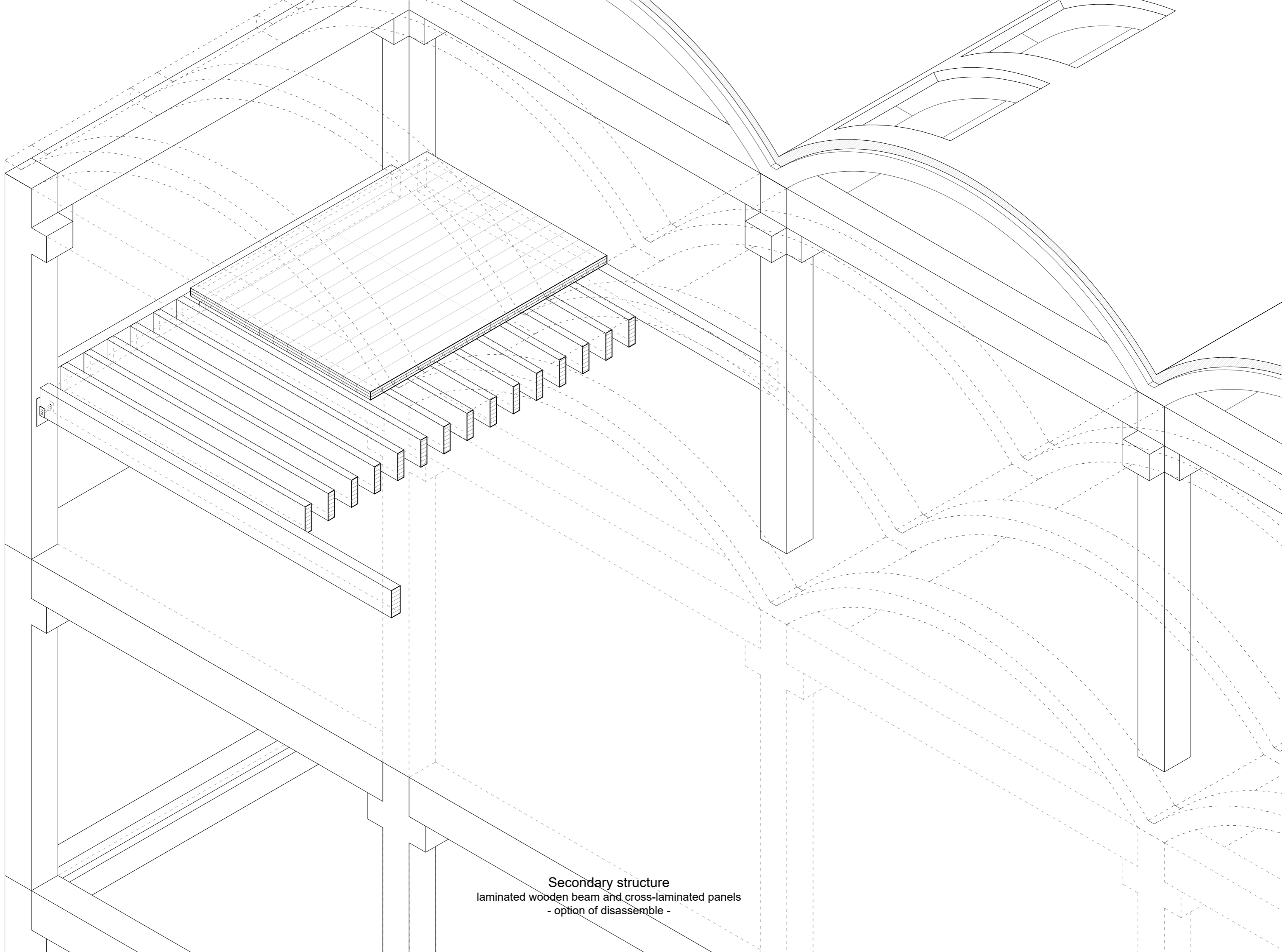
60m

30m

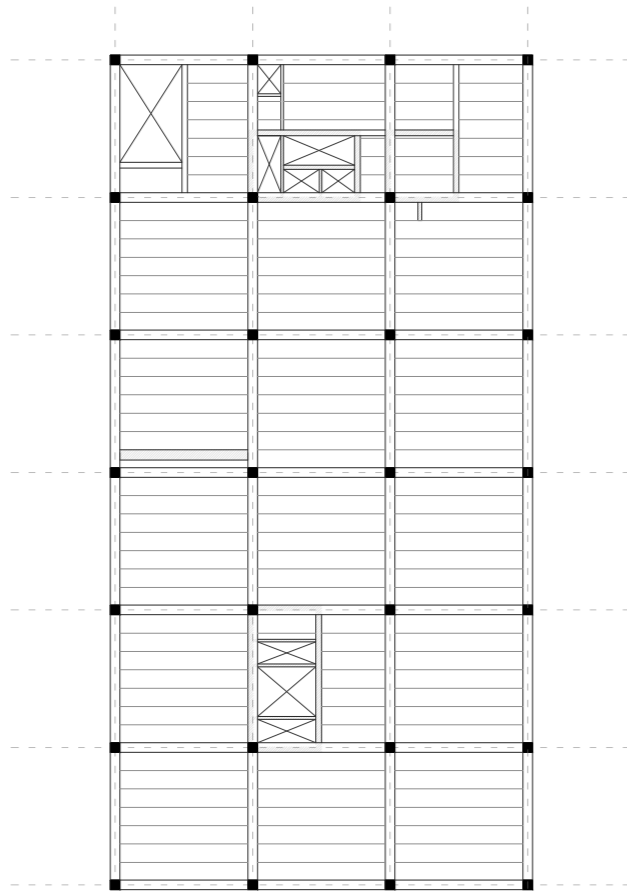
Main concrete structure



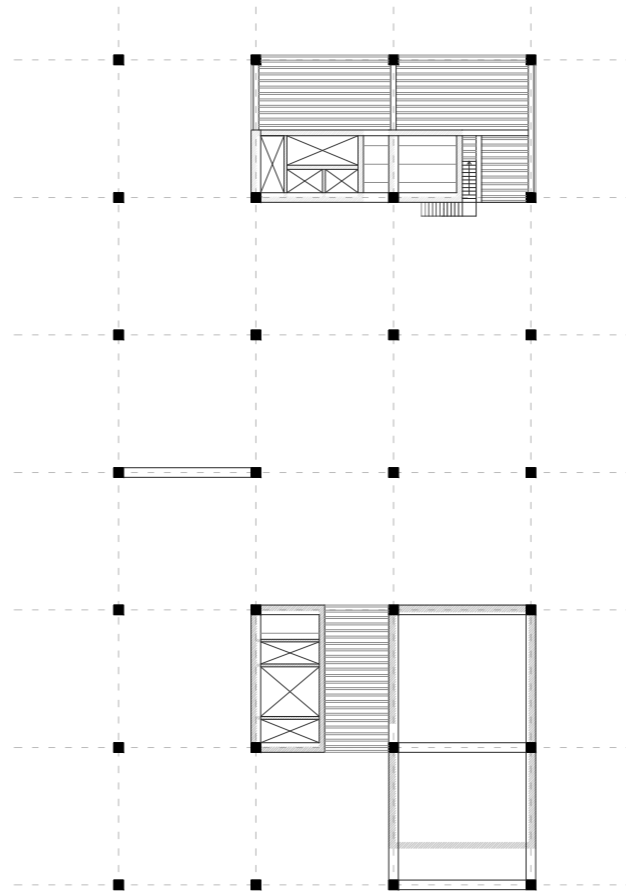
Main structure
concrete prestressed columns and beams in combination with
hollow core slabs



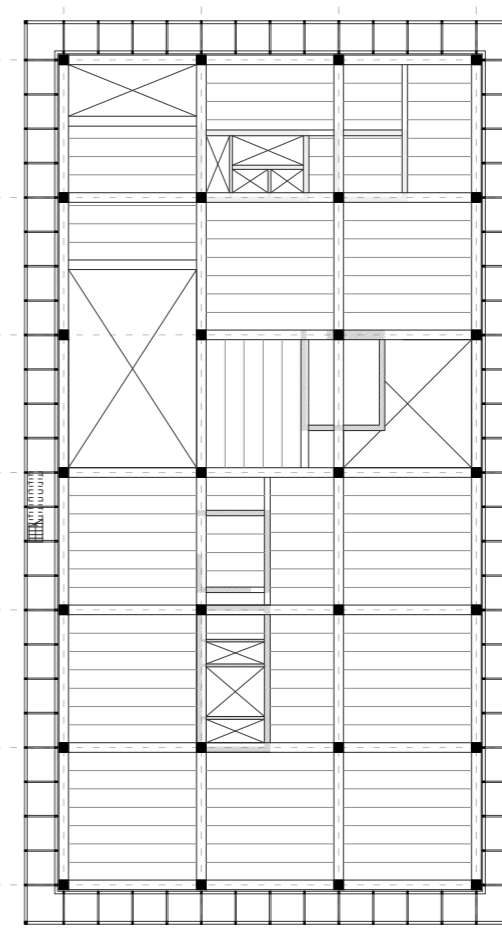
Secondary structure
laminated wooden beam and cross-laminated panels
- option of disassemble -



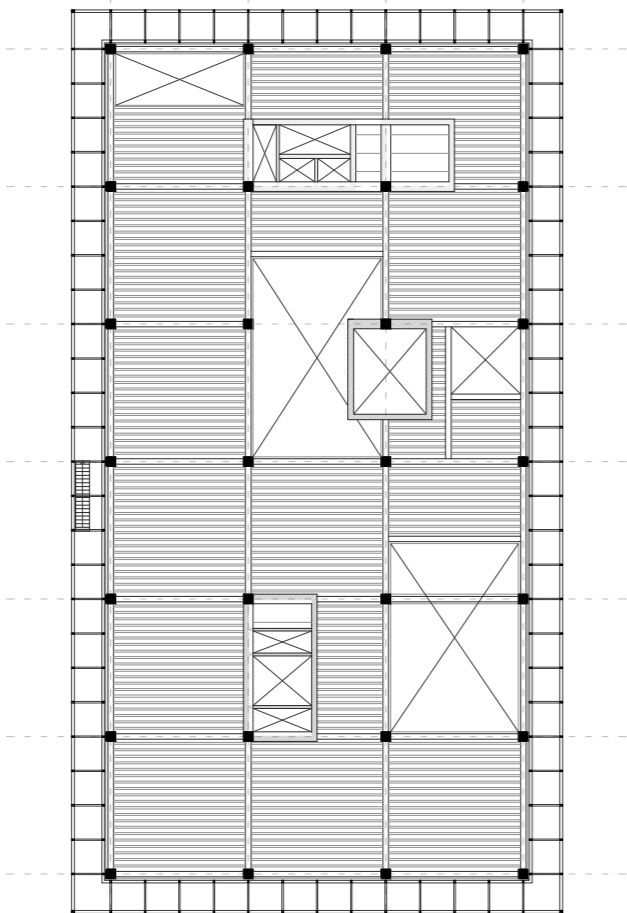
level 0.0



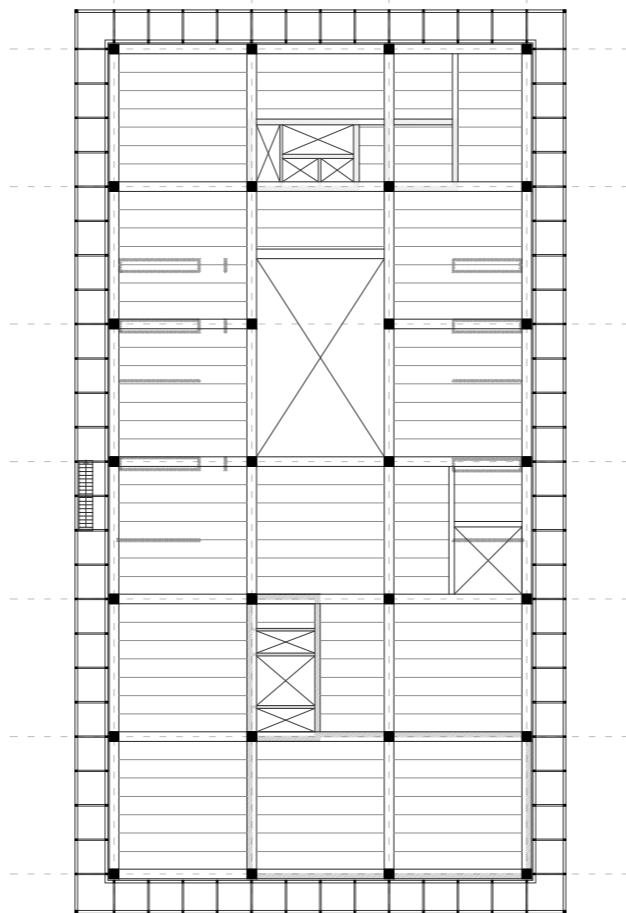
level 0.1



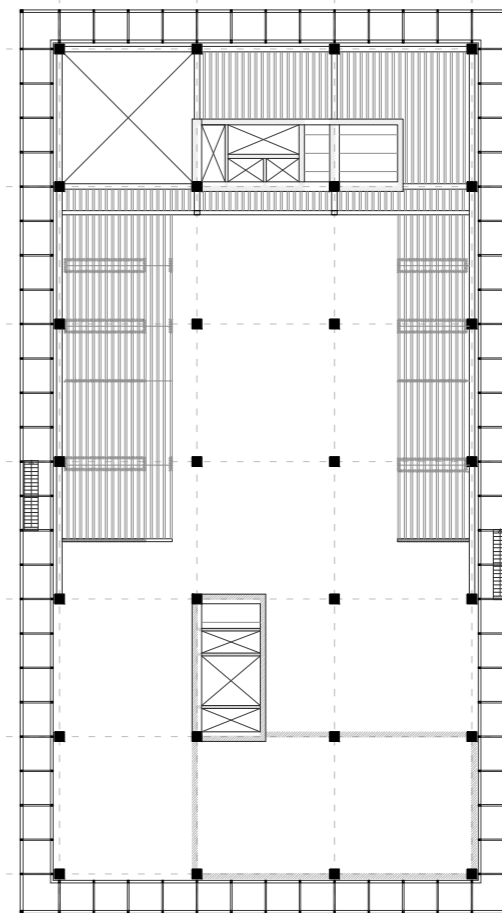
level 1.0



level 1.1

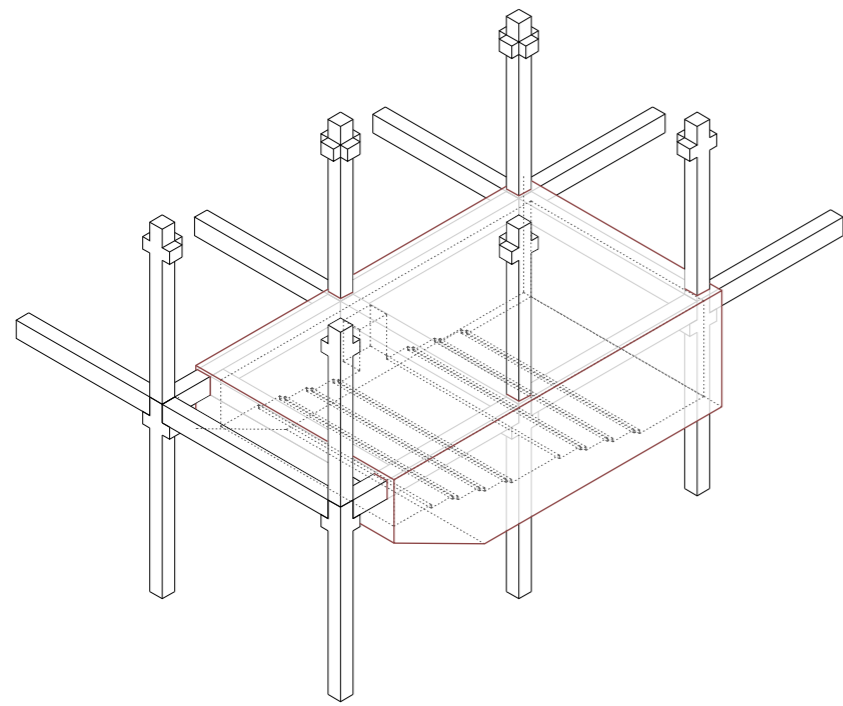


level 2.0

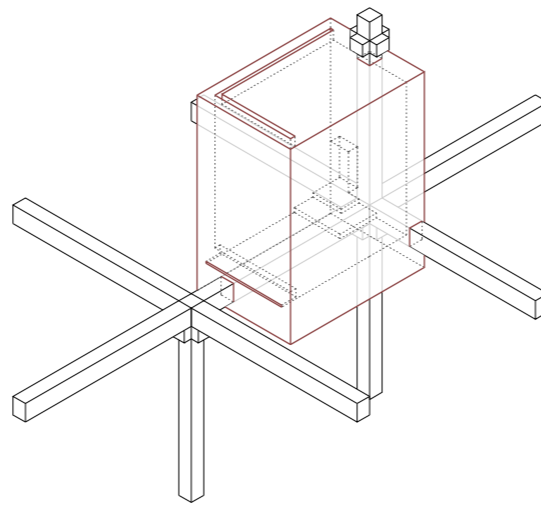


level 2.1

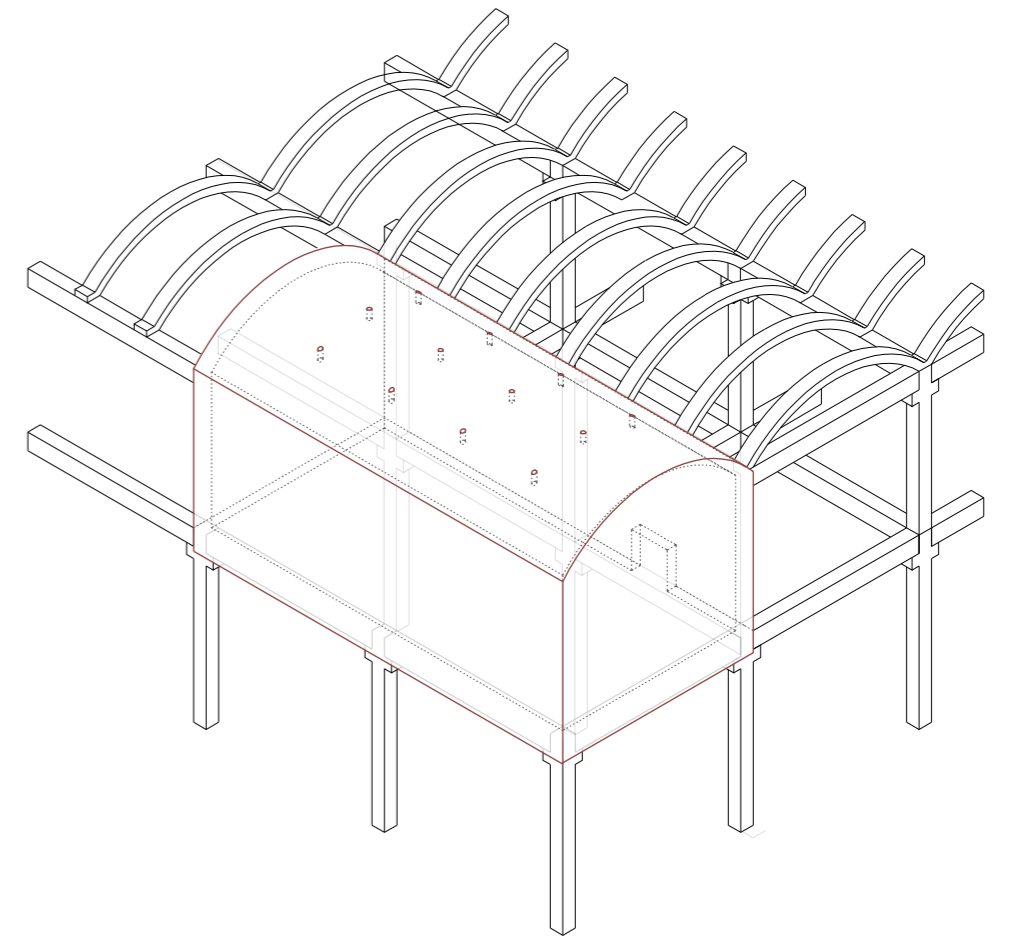
Structural development



Flexible auditorium
level 0.1



Exhibition
level 1.1

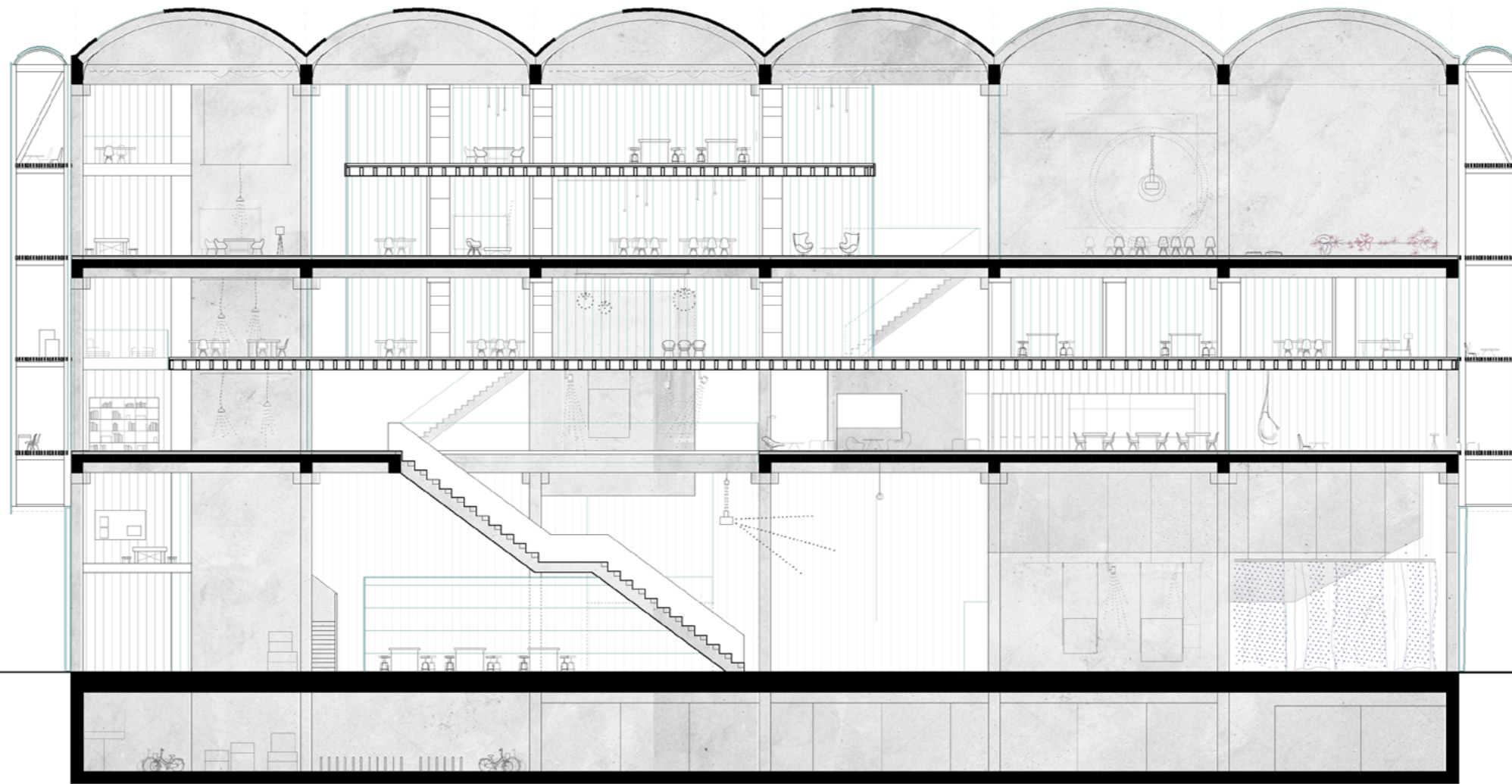


Exhibition
level 2.1

Crucial elements of the structure
massive volumes

Principles of sustainability

Fix structure - avoiding future demolition -
with space enough to make it adaptable for future uses



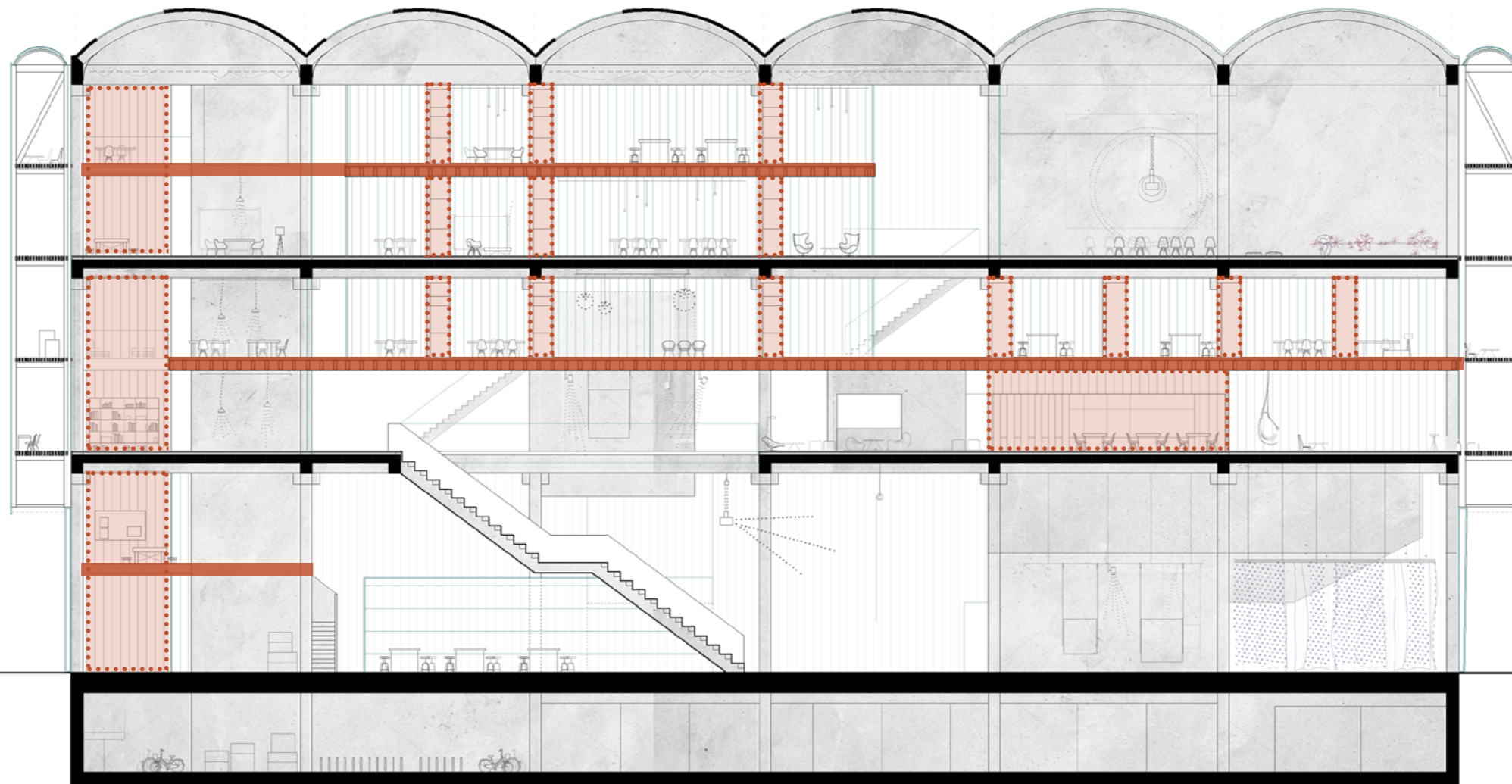
Partition boxes

adaptable to changes in use

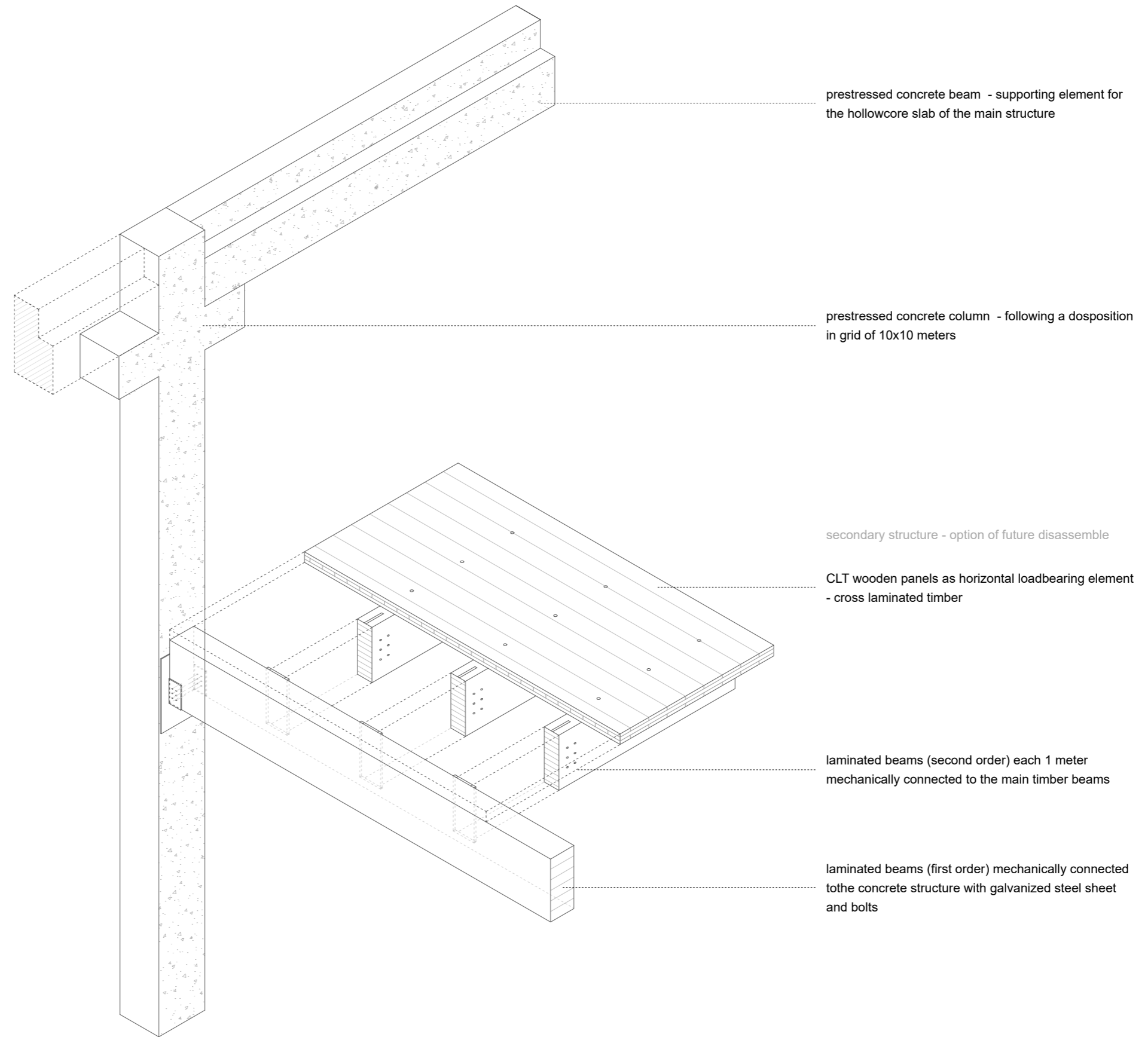
reusable elements and materials

with sustainable benefits /cross laminated timber panels/

self-supporting panels + additional functional use = individual storage + pass ducts for individual uses



Prefabricated systems



prestressed concrete beam - supporting element for the hollowcore slab of the main structure

prestressed concrete column - following a disposition in grid of 10x10 meters

secondary structure - option of future disassemble

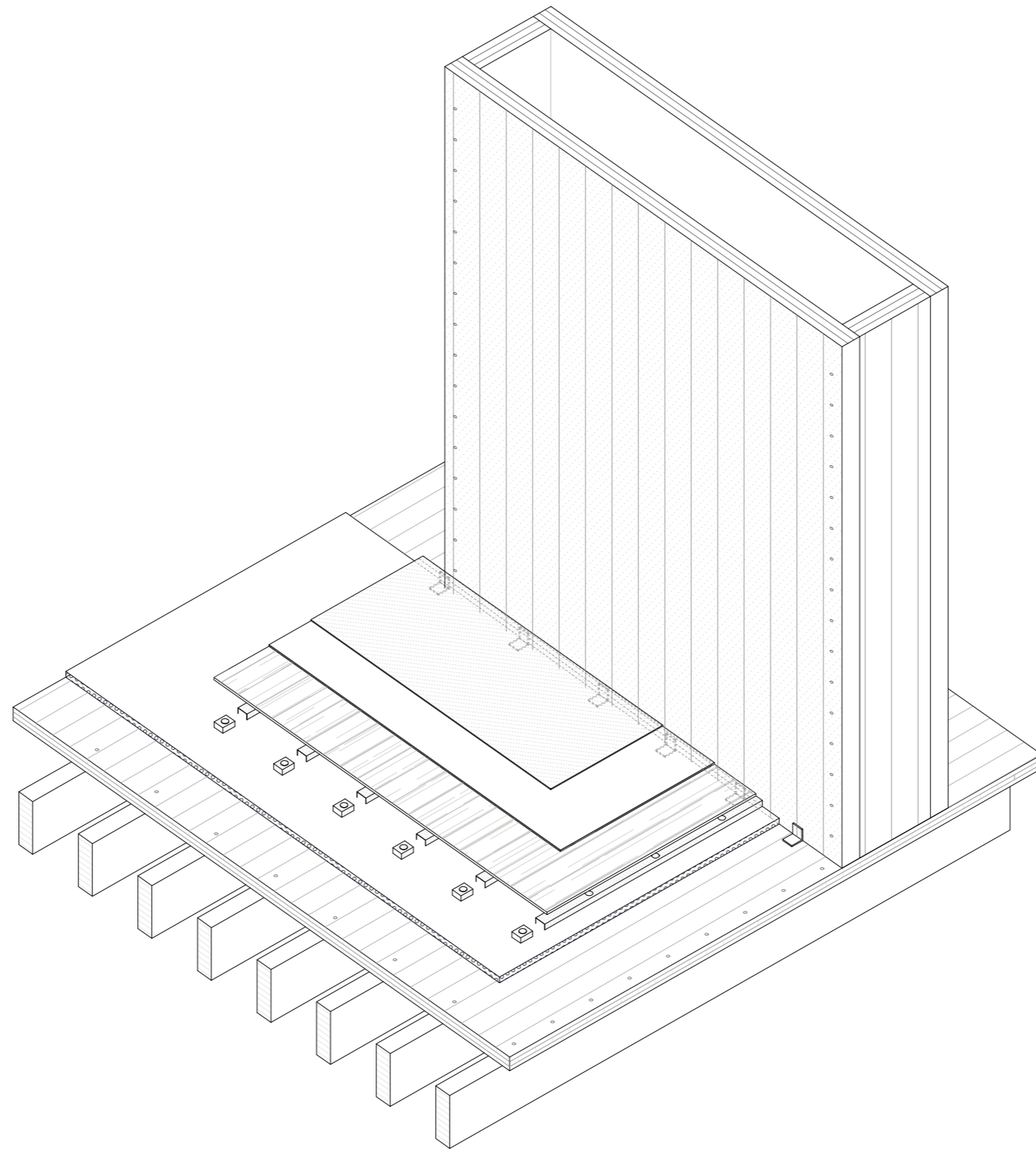
CLT wooden panels as horizontal loadbearing element - cross laminated timber

laminated beams (second order) each 1 meter mechanically connected to the main timber beams

laminated beams (first order) mechanically connected to the concrete structure with galvanized steel sheet and bolts

combination of fixed precast concrete elements and timber in specific parts of the structure

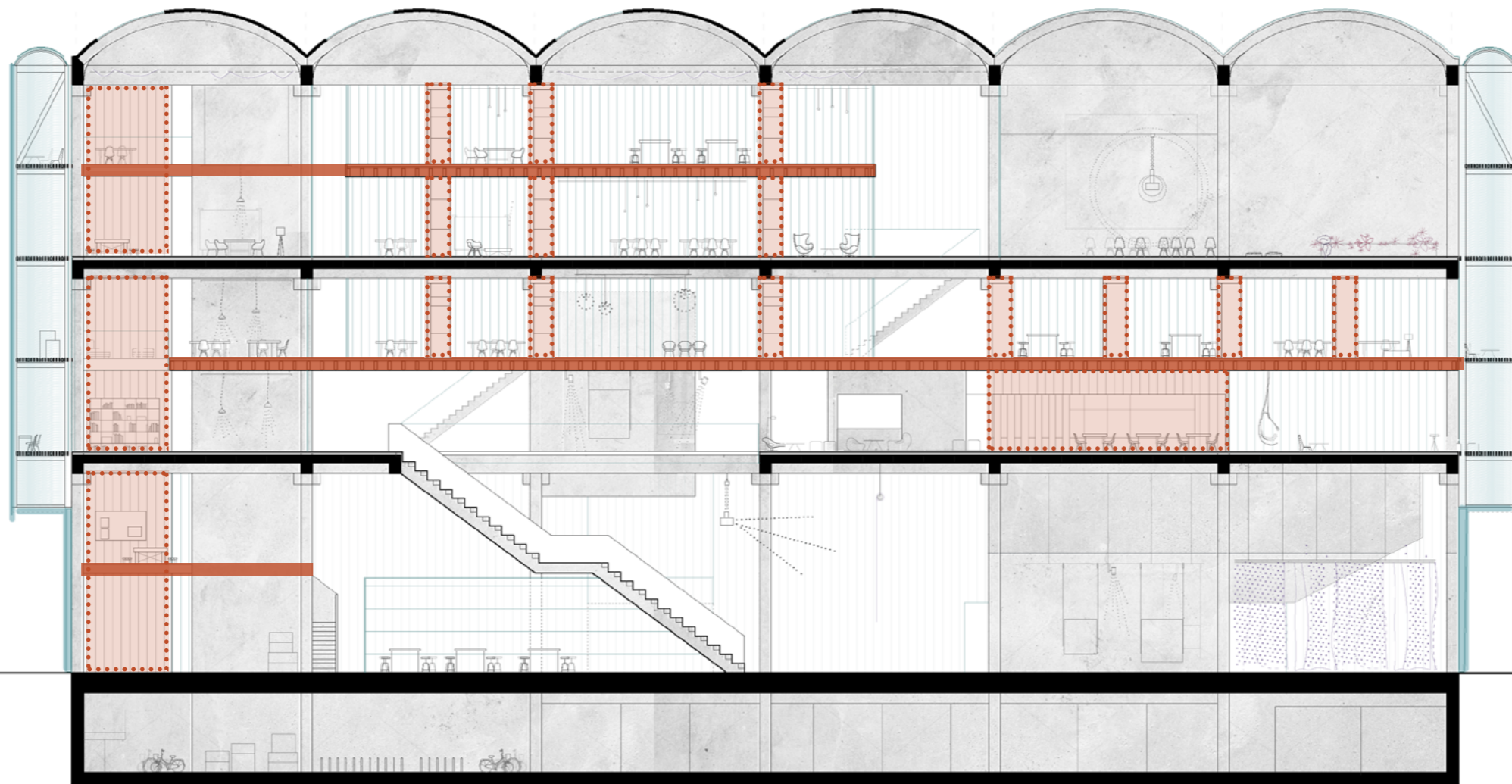
Prefabricated systems



internal division of spaces + technical floor
crosslaminated timber panels

Sustainable benefits of the facade

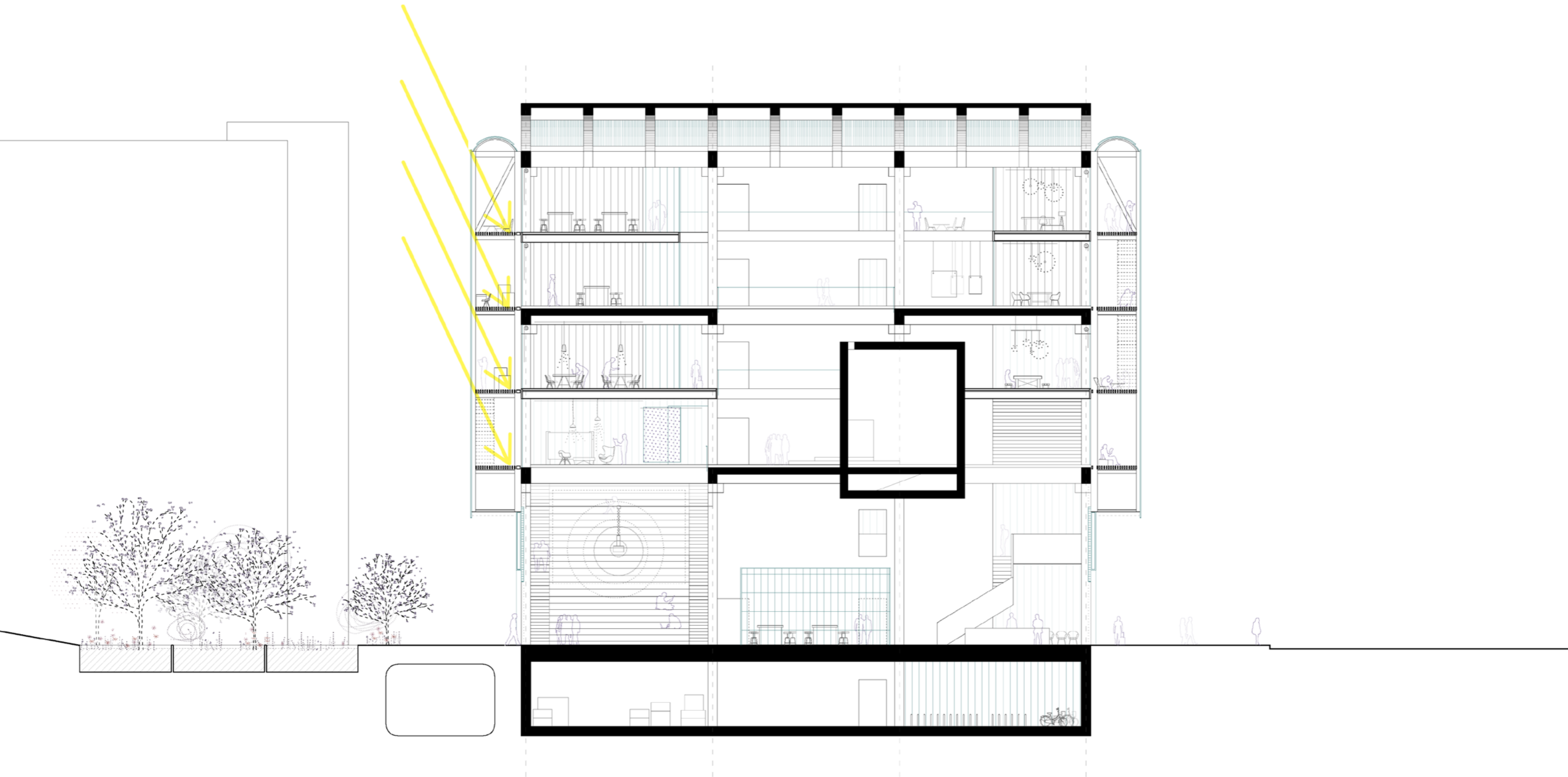
- double skin facade
- control of cross natural ventilation
- sun protection
- extra functional qualities





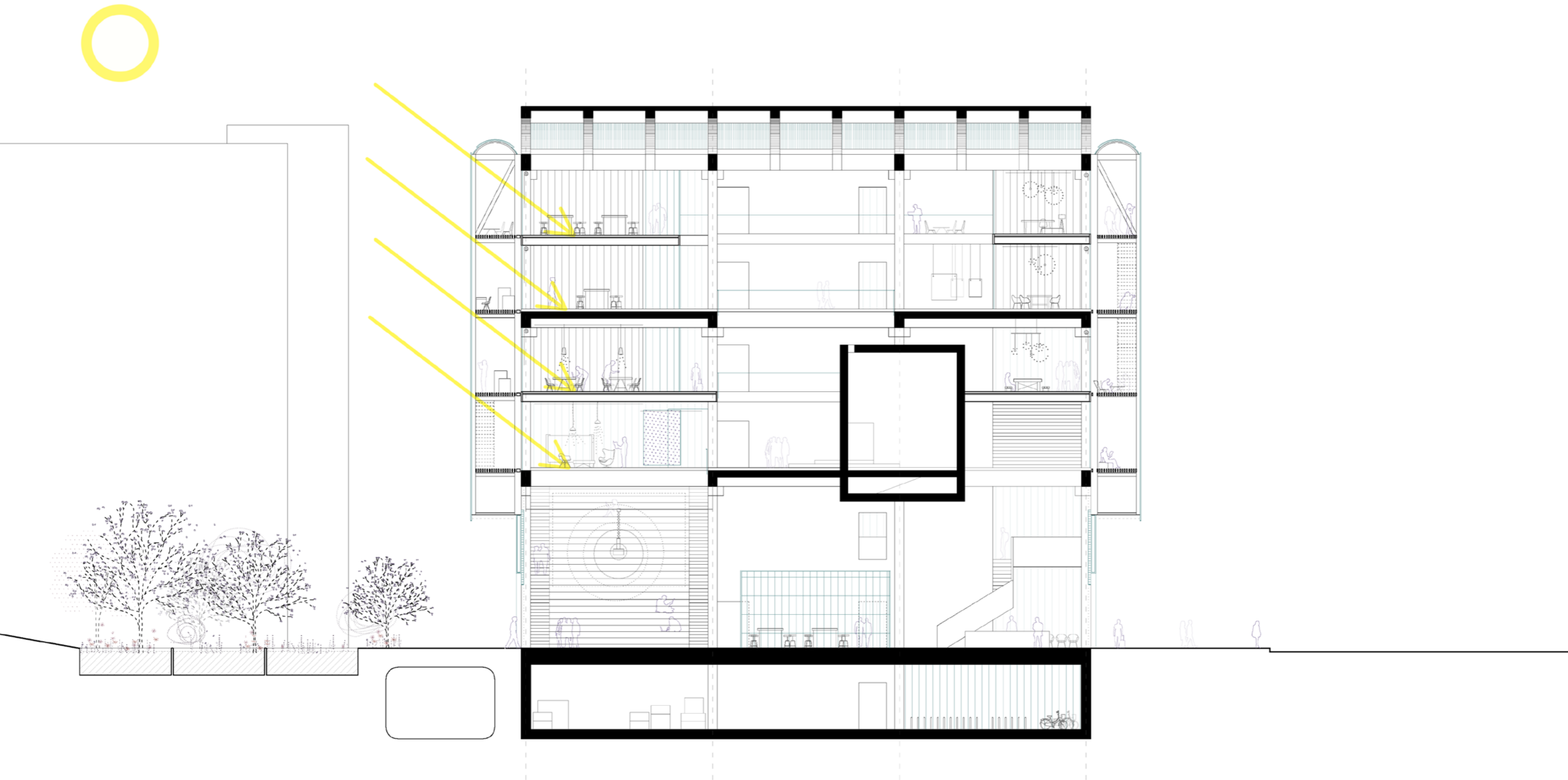
Wide facade - summer

sun exposure of the building
protection from high radiation



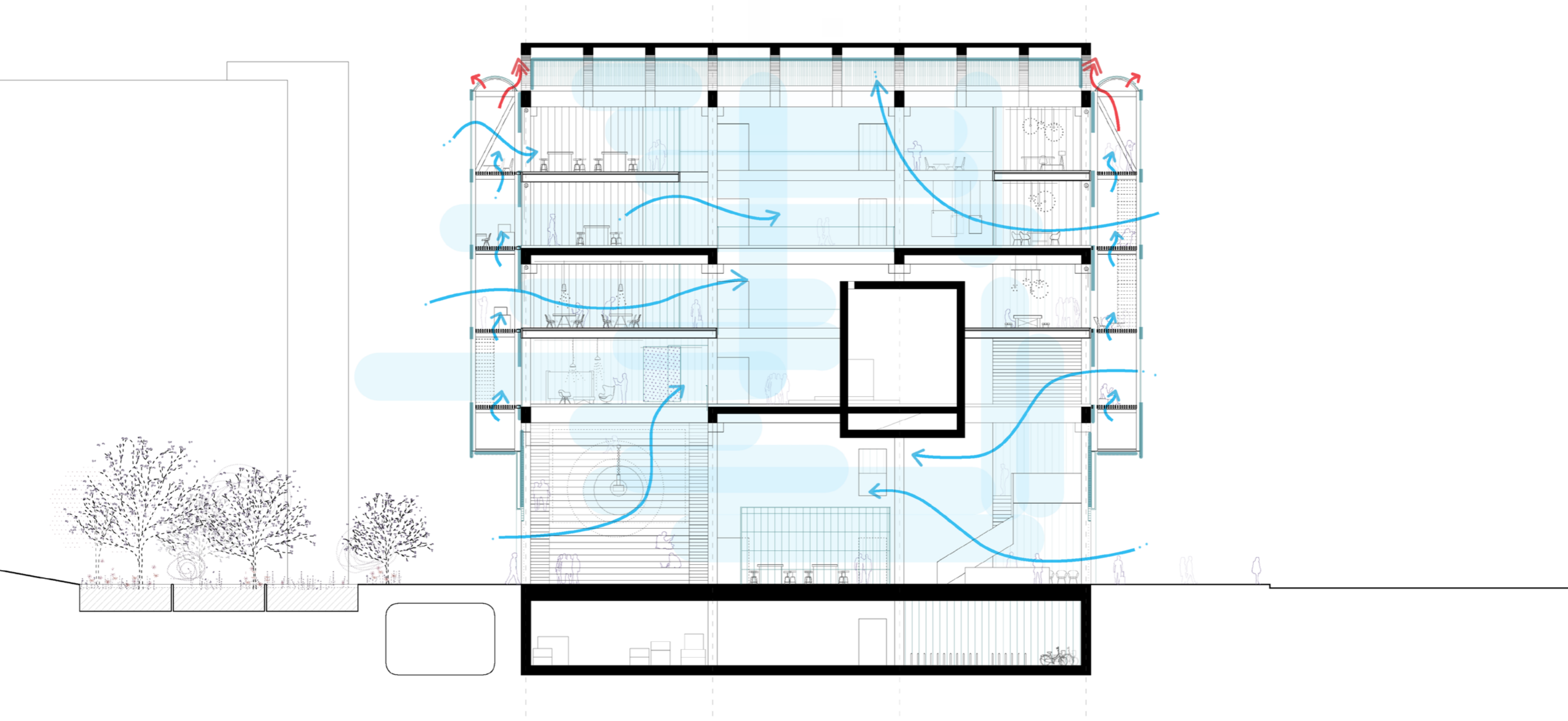
Wide facade - winter

sun exposure of the building



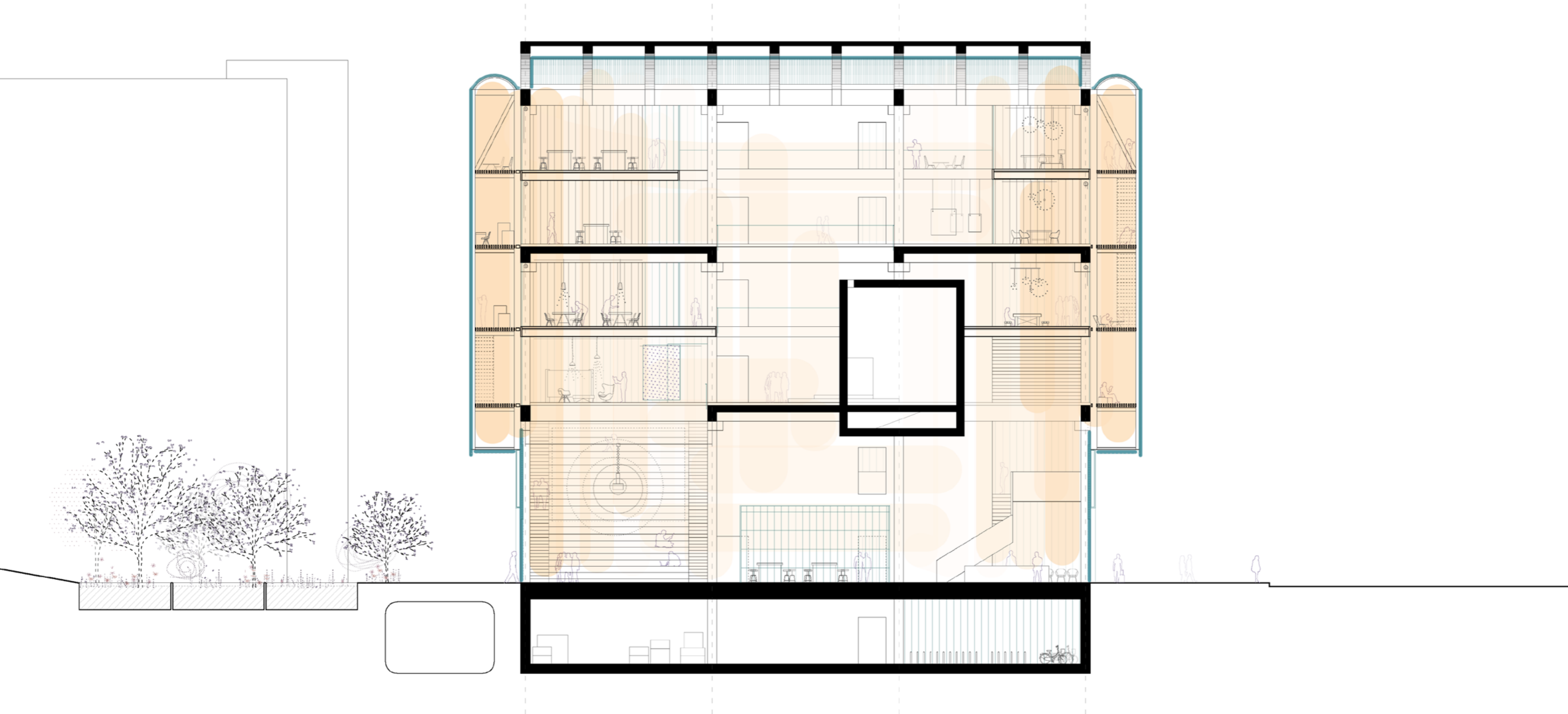
Facade with openable doors - natural cross ventilation

passive cooling system

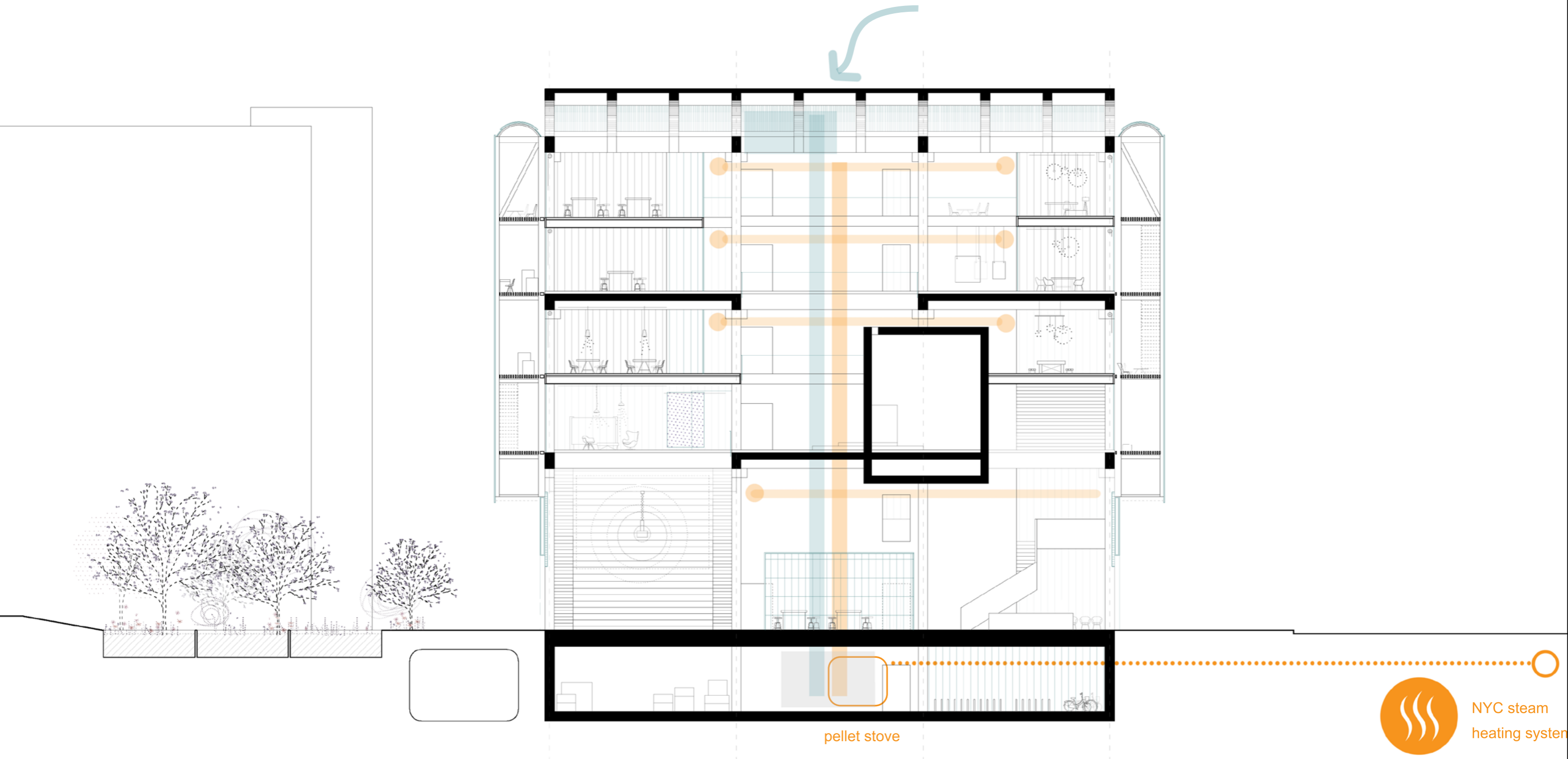


Facade of polycarbonate - green house effect

passive heating system



Mechanic heating system



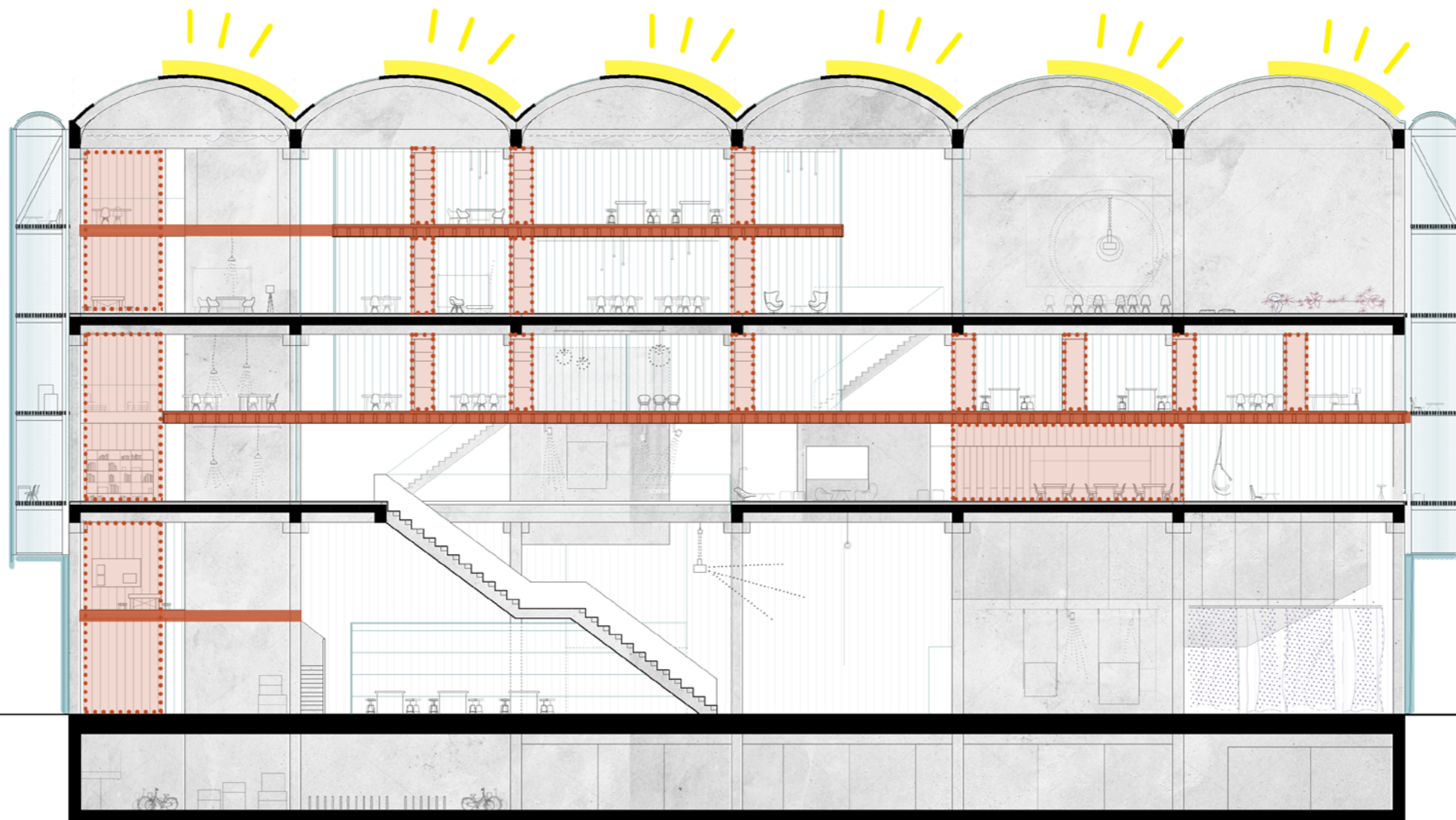
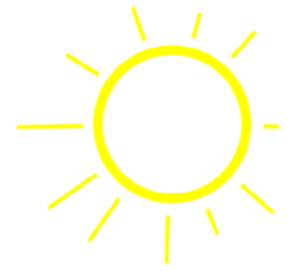
pellet stove



NYC steam heating system

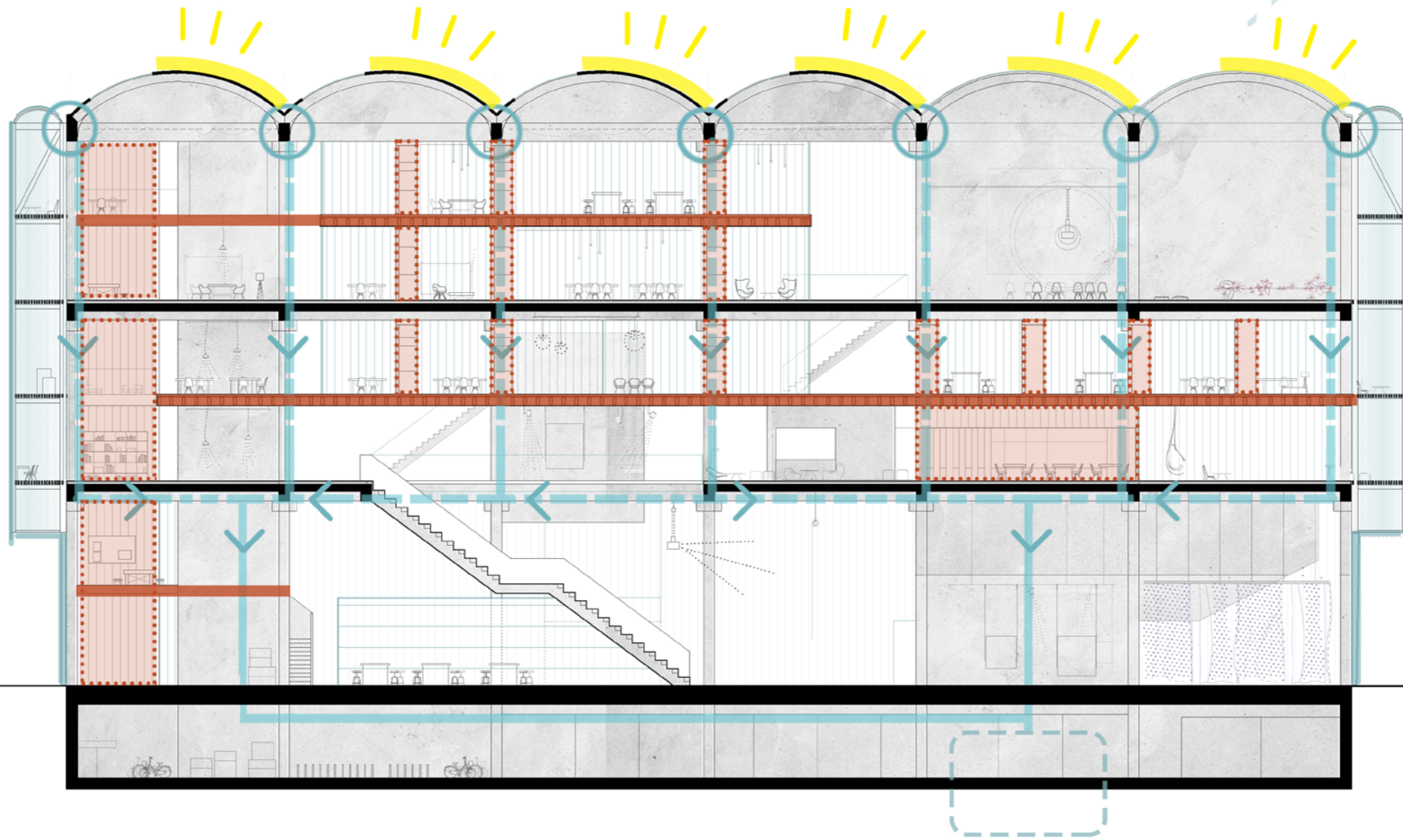
Integration of solar energy in roof

inclination for the panels
rooftop made of zinc sheets with directly integrated photovoltaic panels



Collection of rainwater

ducts circulation through the facade vertically
rainwater is collected in a deposit in the basement for later reuse after treatment



Collection of rainwater

ducts circulation through the facade vertically
rainwater is collected in a deposit in the basement for later reuse after treatment

