

COMPLEX PROJECTS

MAR ELIAS CROP MARKET

DRAWING SET

Tycho van Gelder

24/06/2022

COLOFON

Complex Projects

Beirut studio

AR3CP100

2021-2022

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AR – Eline Blom

BT – Hubert van der Meel

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GROUP SITE PLAN

1:10 000

SITE PLAN

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URBAN IMPLEMENTATION

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FAÇADES

1:200

INTERIOR FRAGMENT

1:50

ENVELOPE FRAGMENT

1:20

CONSTRUCTION PRINCIPLE

poster

DETAILS

1:5

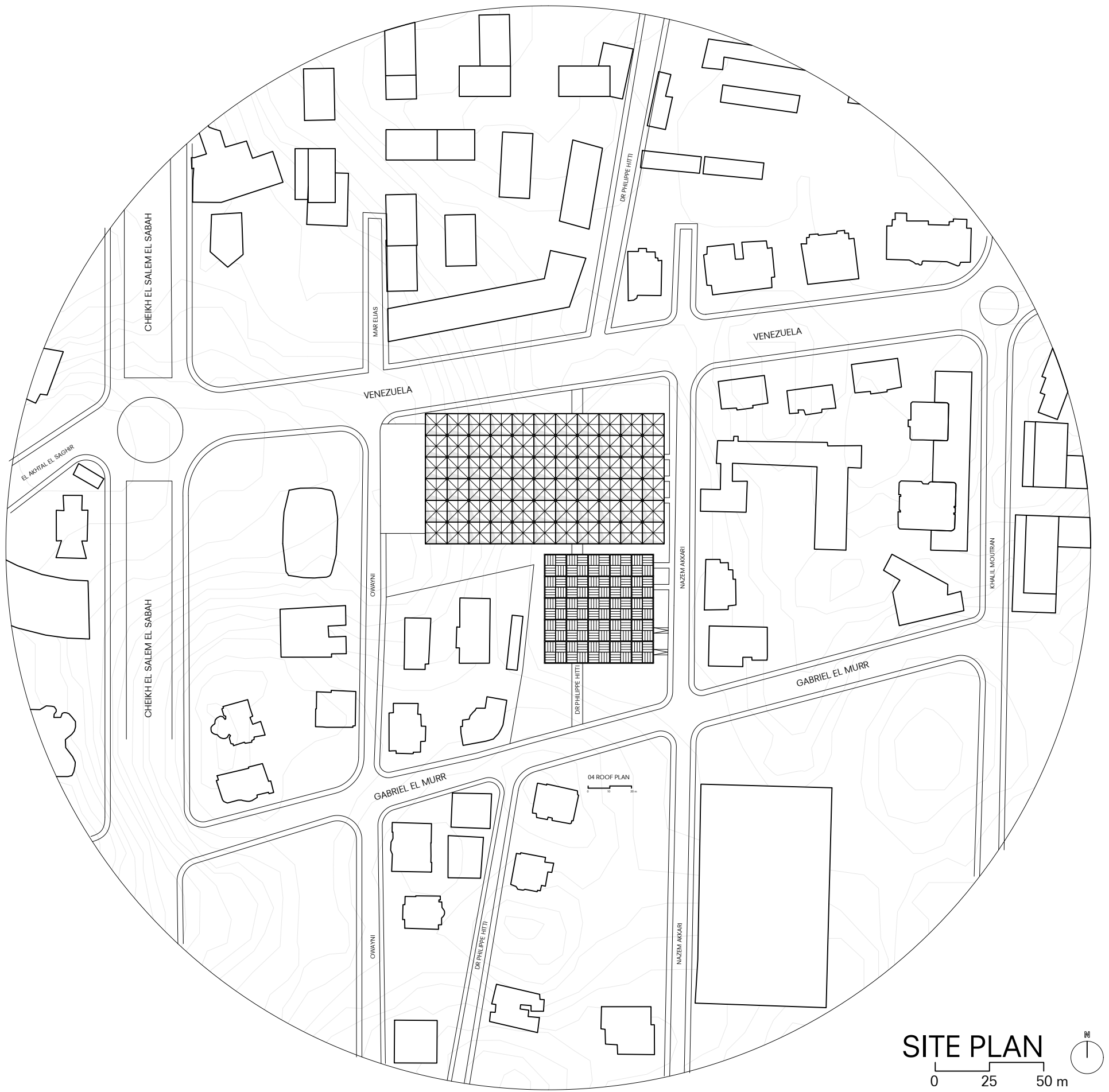
DESIGN AXONOMETRY

poster

BEIRUT MOSAIC SITE PLAN COLLAGE | 1:10 000

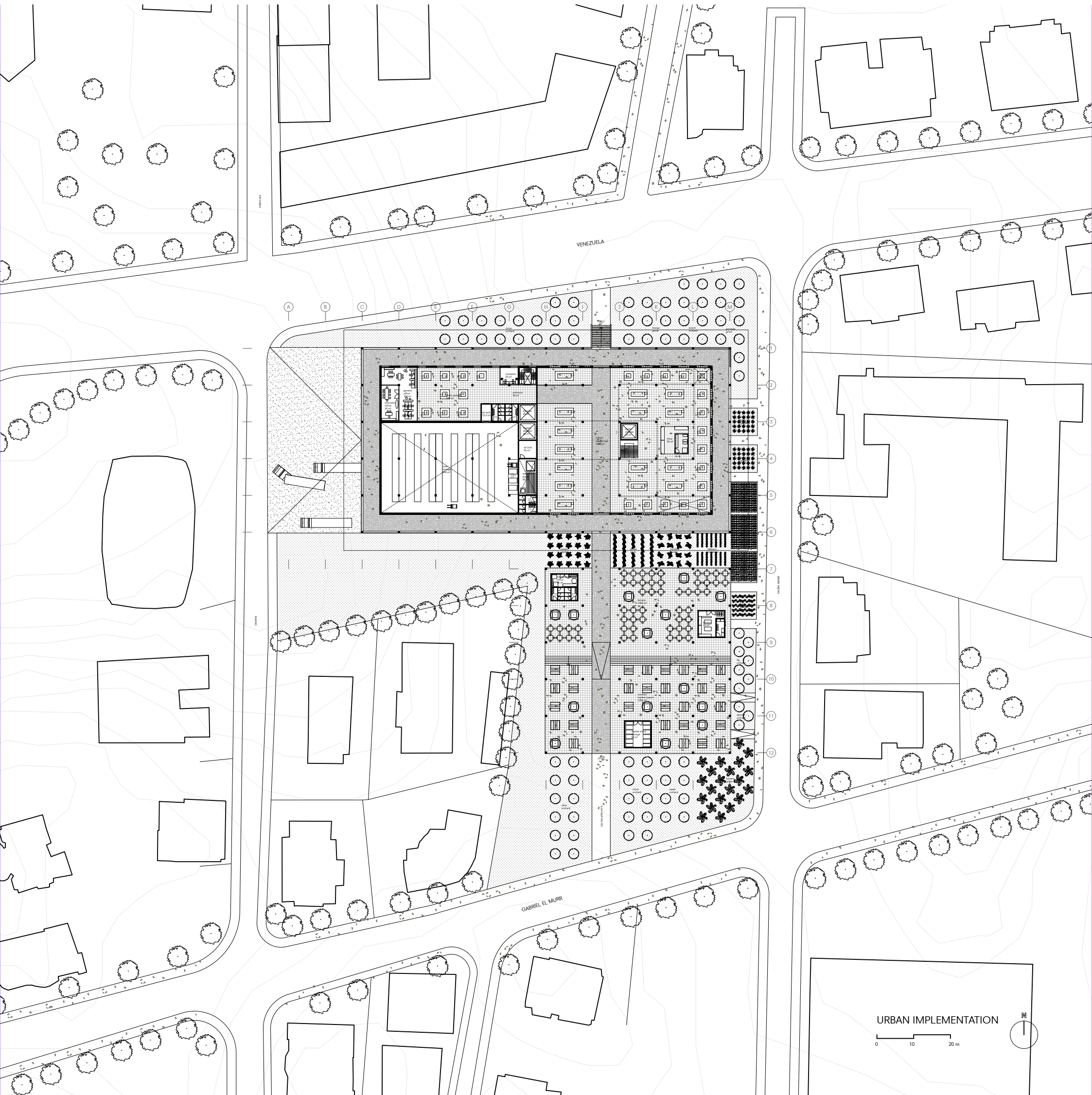


SITE PLAN | 1:1000 ON A1

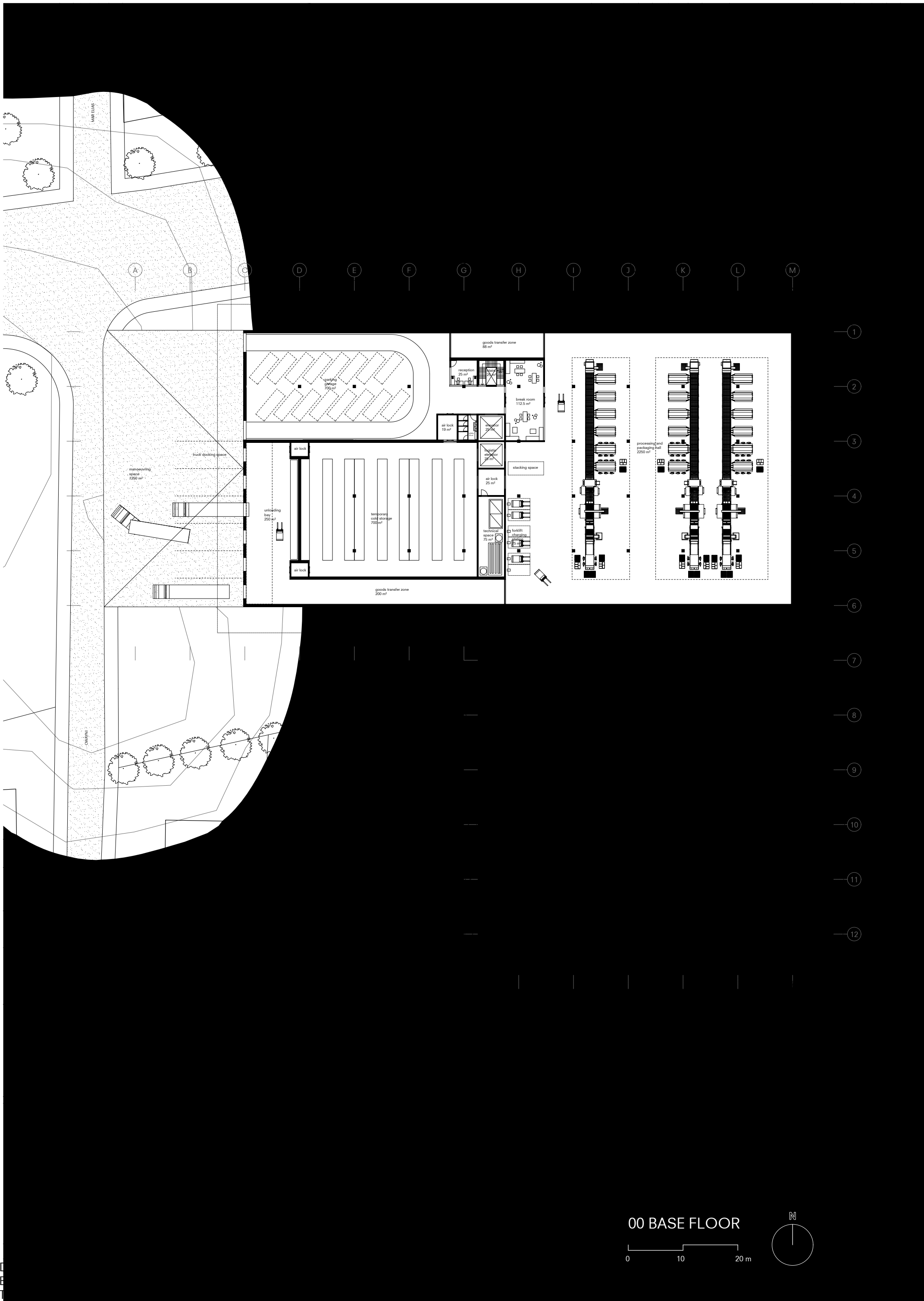


SITE PLAN
0 25 50 m

URBAN IMPLEMENTATION | 1:500 ON A1

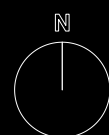


00 BASE FLOOR | 1:200 ON A0

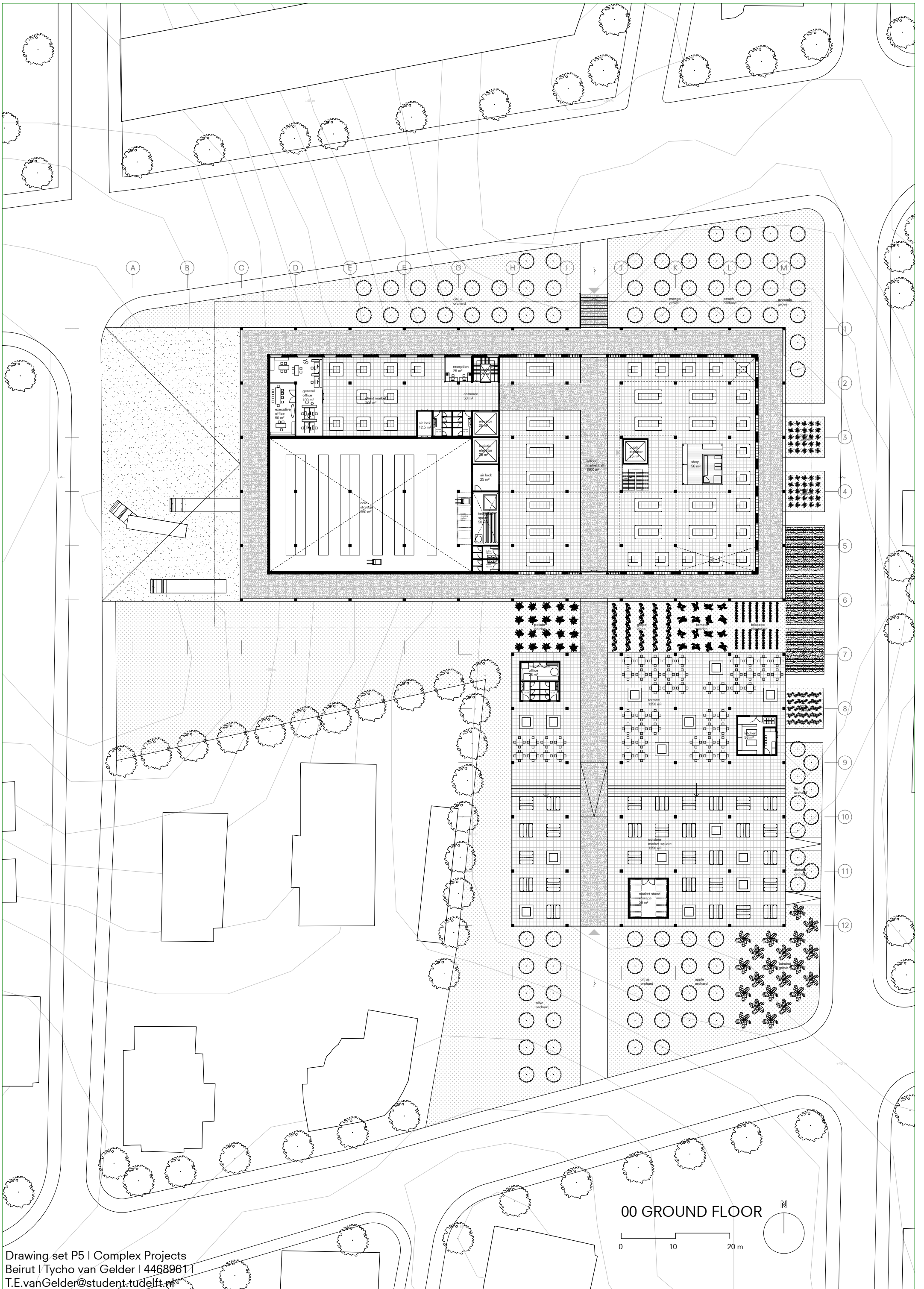


00 BASE FLOOR

0 10 20 m



00 GROUND FLOOR | 1:200 ON A0



01 FIRST FLOOR | 1:200 ON A0



02 SECOND FLOOR | 1:200 ON A0



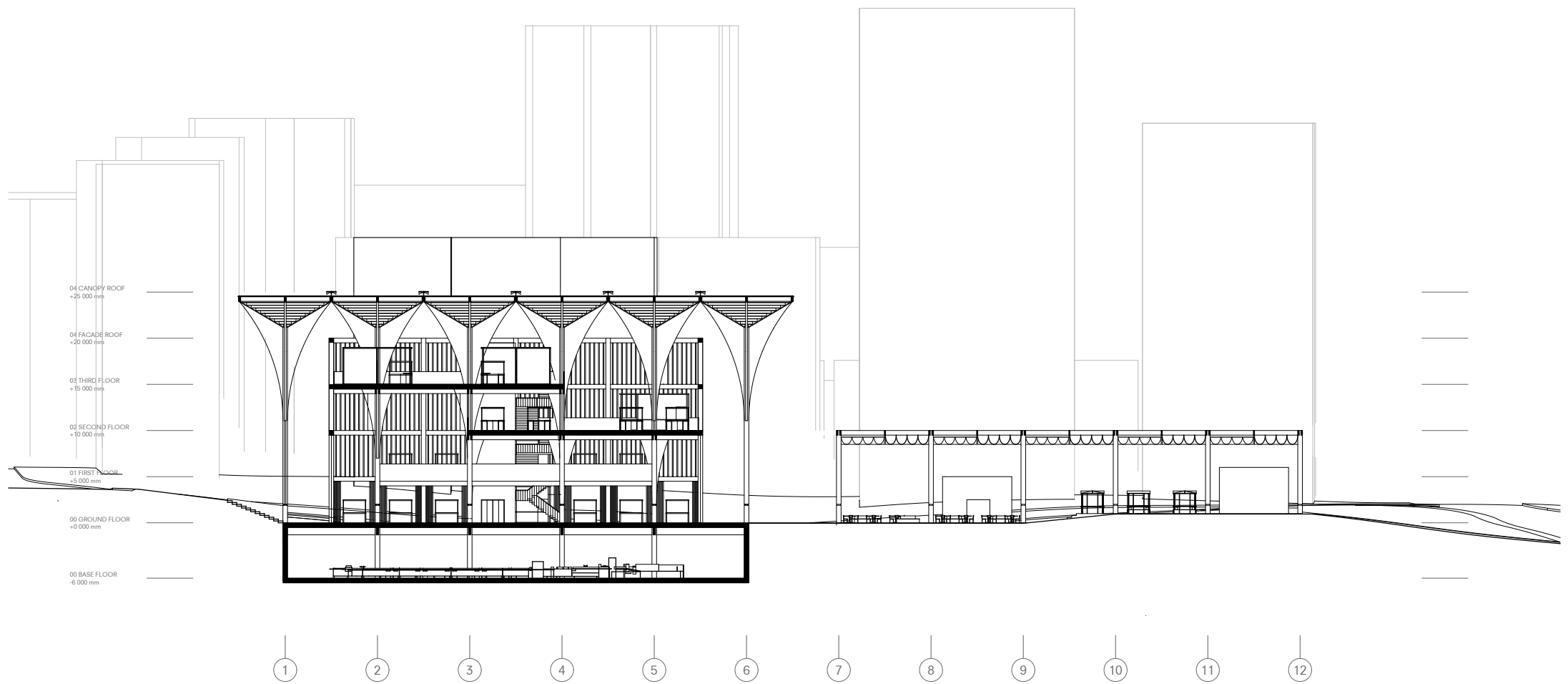
03 THIRD FLOOR | 1:200 ON A0



04 ROOF PLAN | 1:200 ON A0

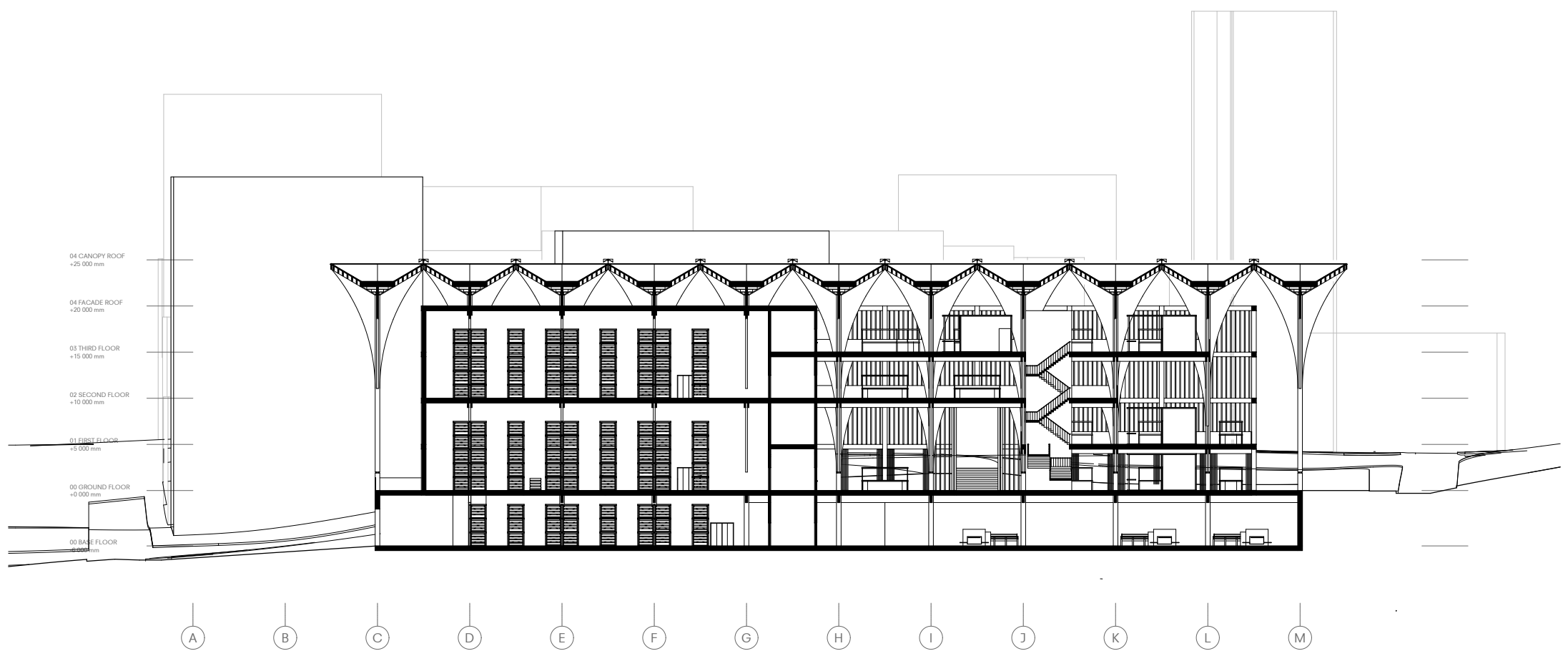


SECTIONS | 1:200 ON A1



SECTION A – A'

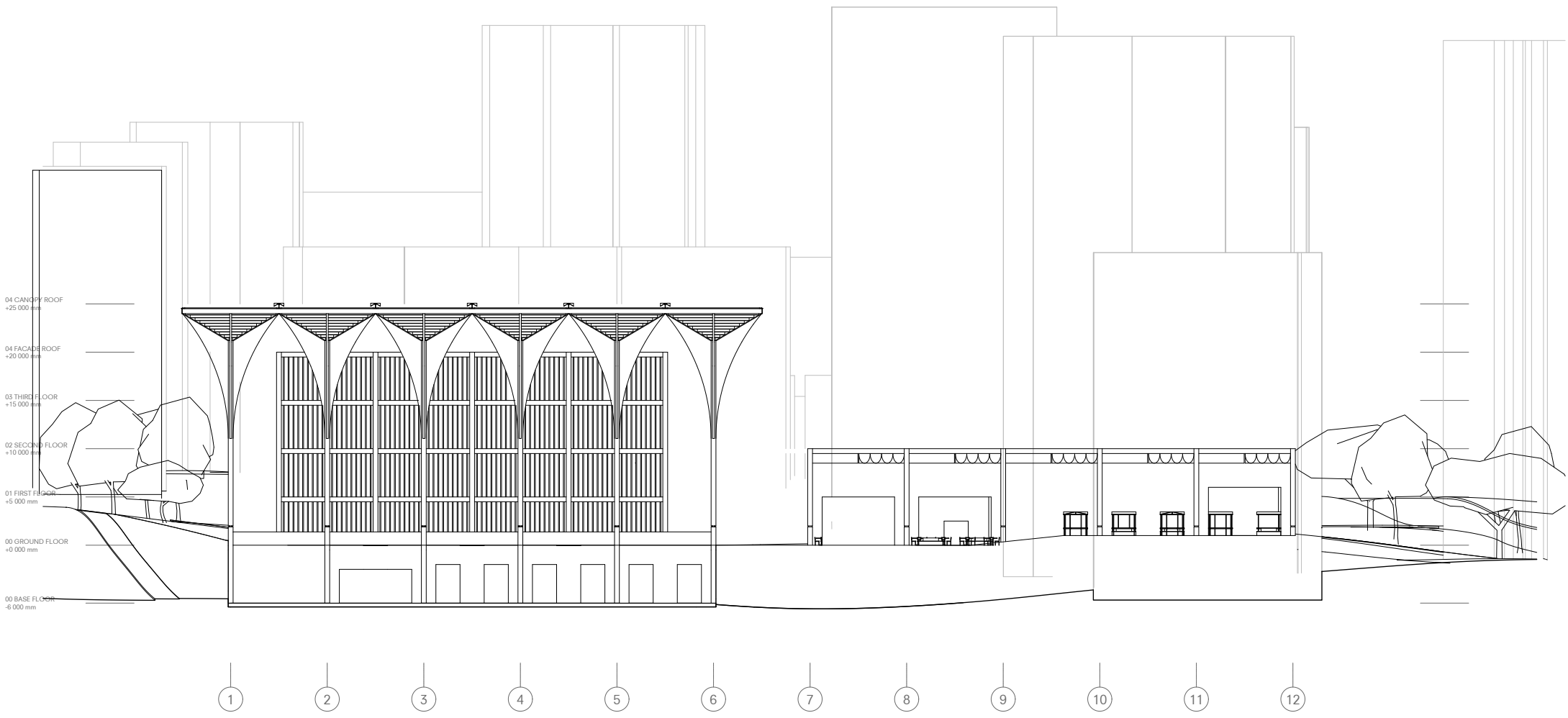
0 10 20 m



SECTION B – B'

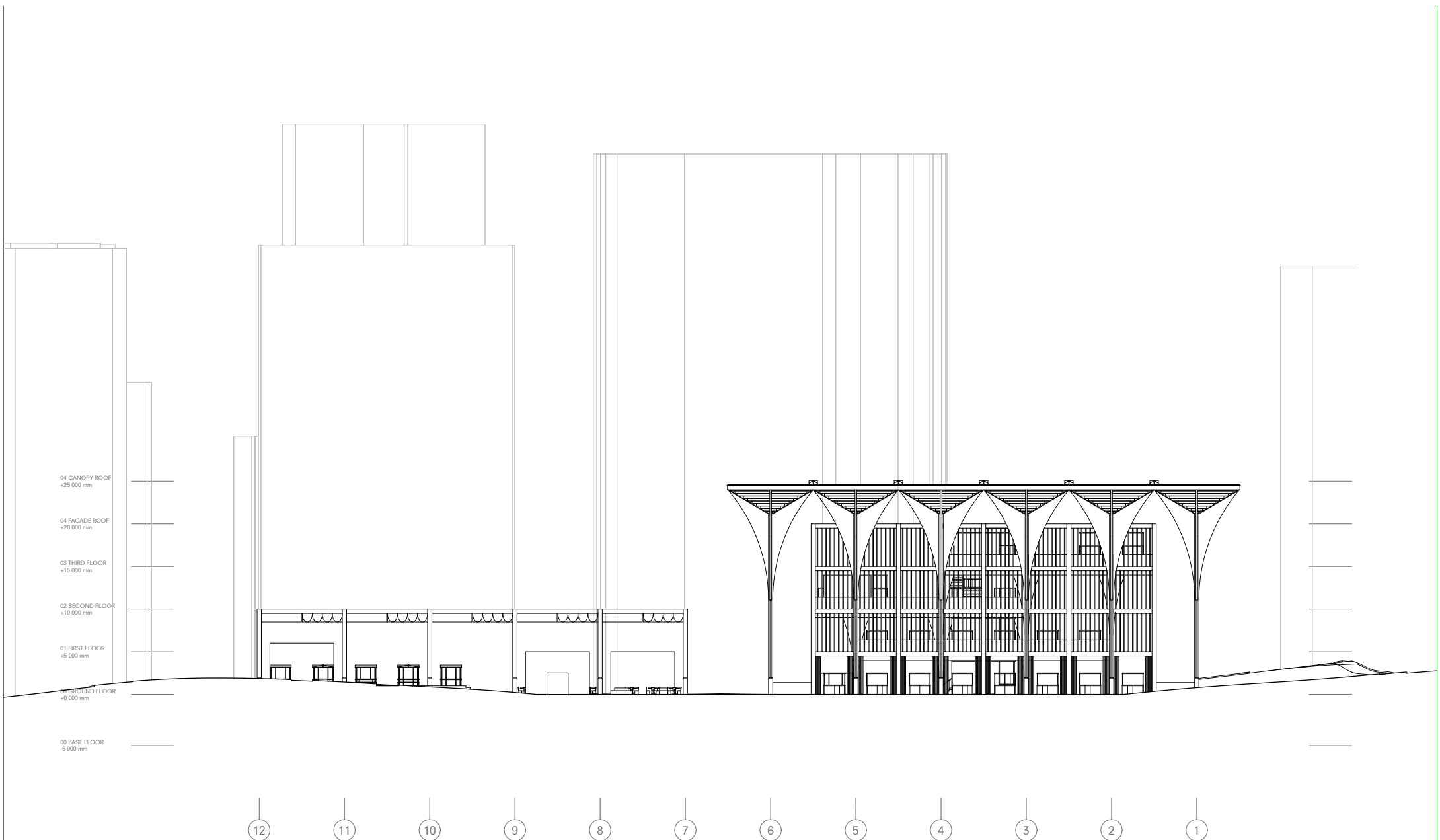
0 10 20 m

FAÇADES | 1:200 ON A1



WEST FACADE

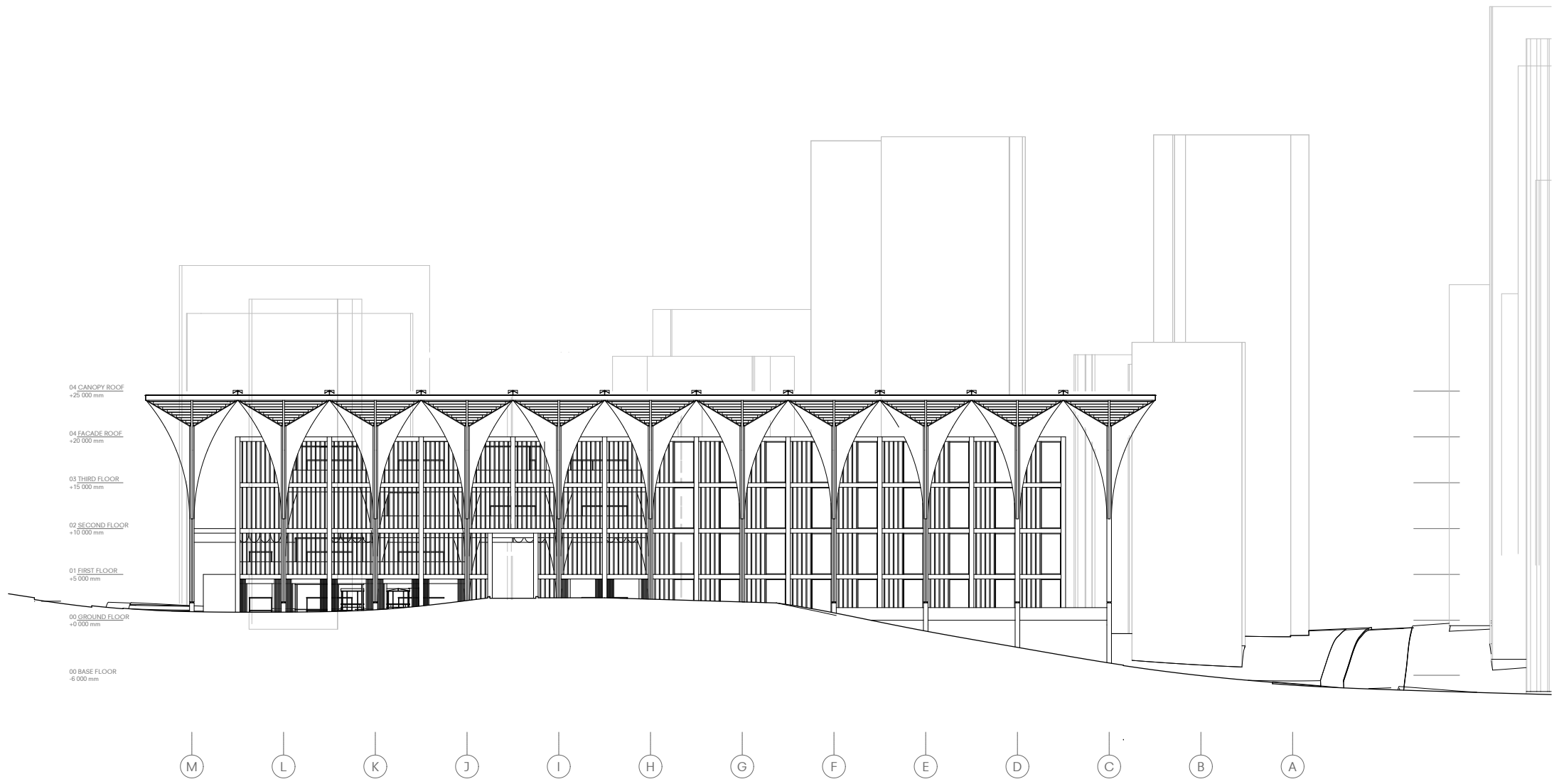
0 10 20 m



EAST FACADE

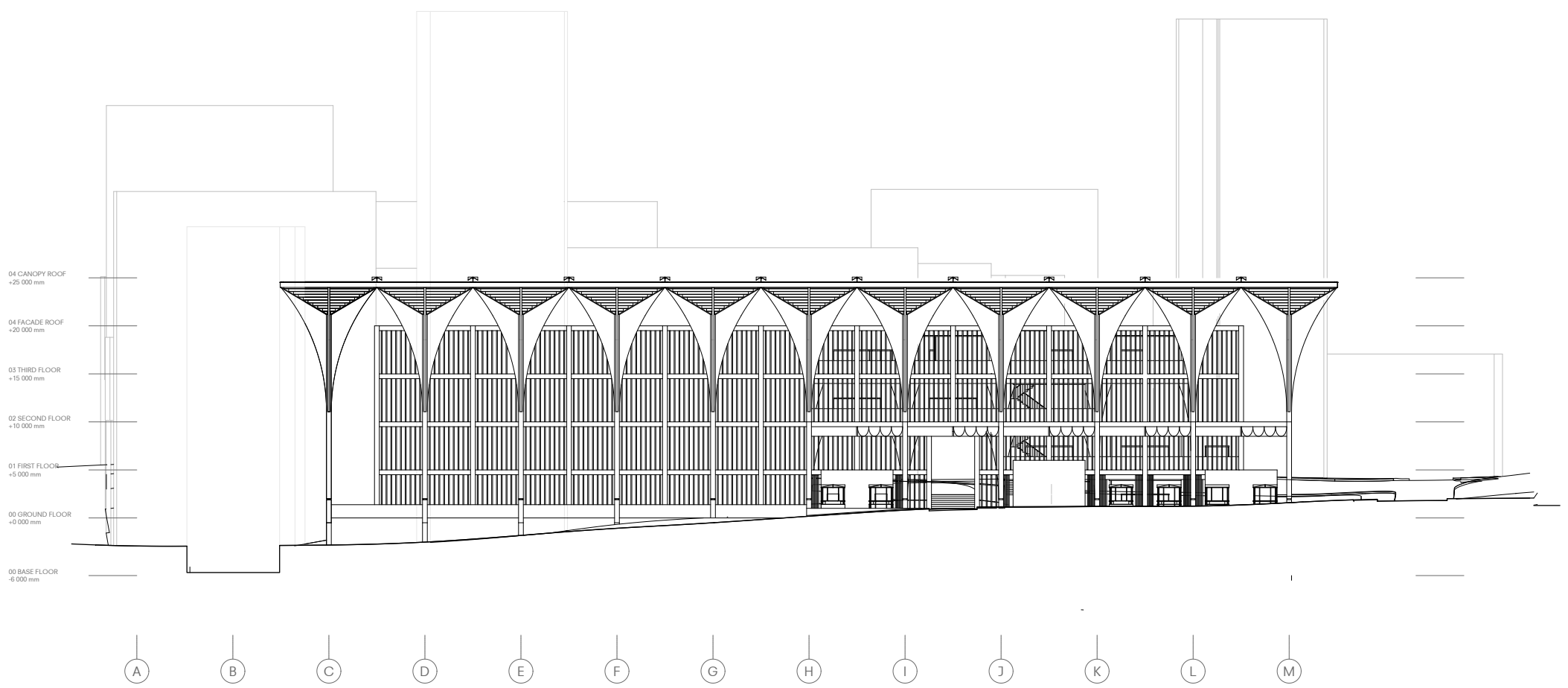
0 10 20 m

FAÇADES | 1:200 ON A1



NORTH FACADE

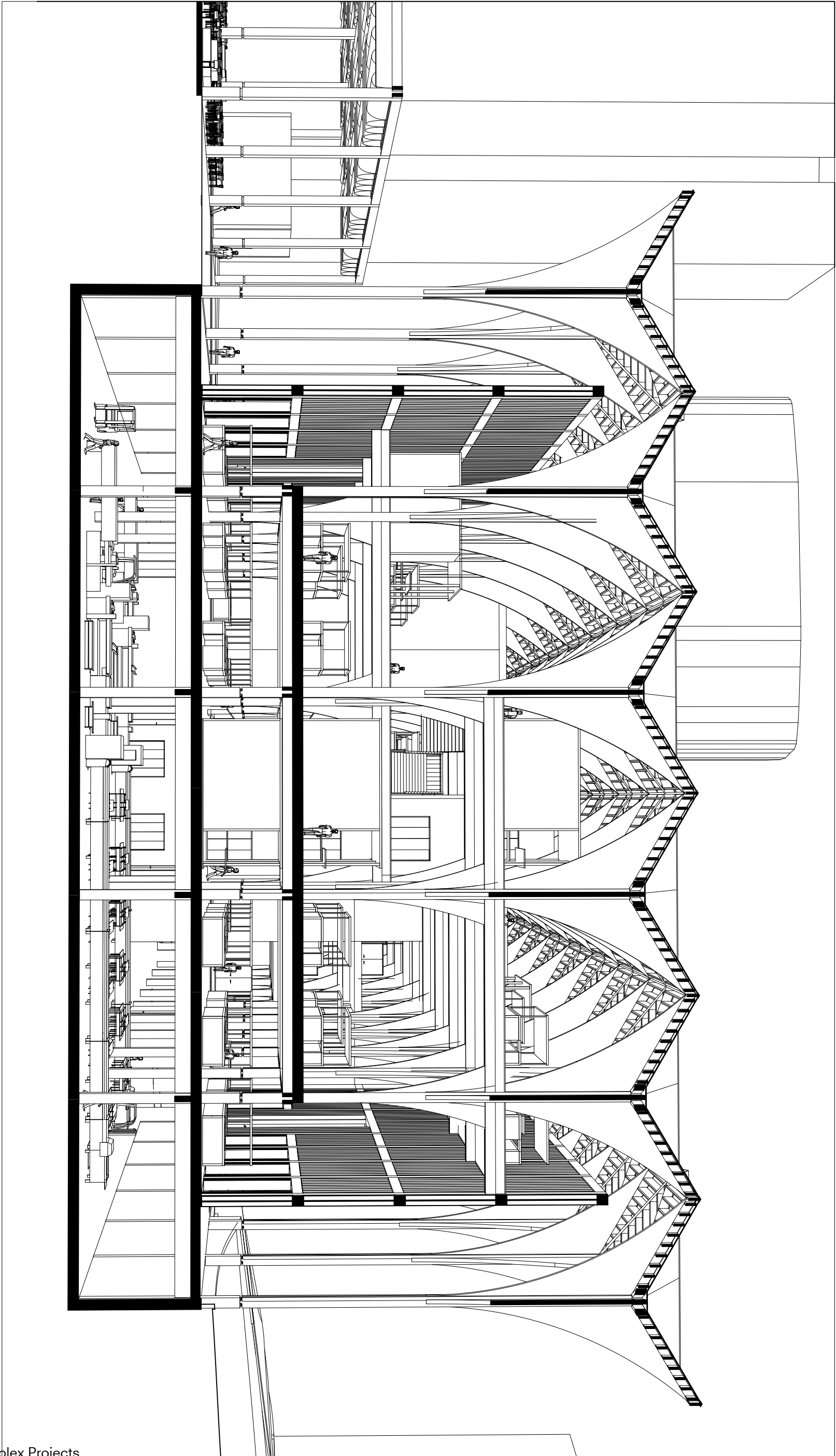
0 10 20 m



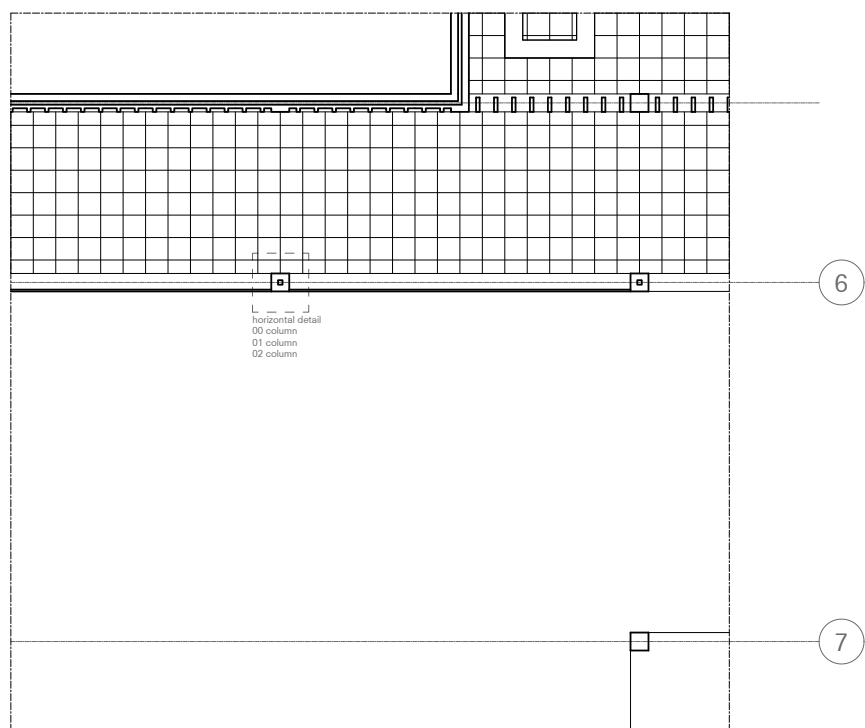
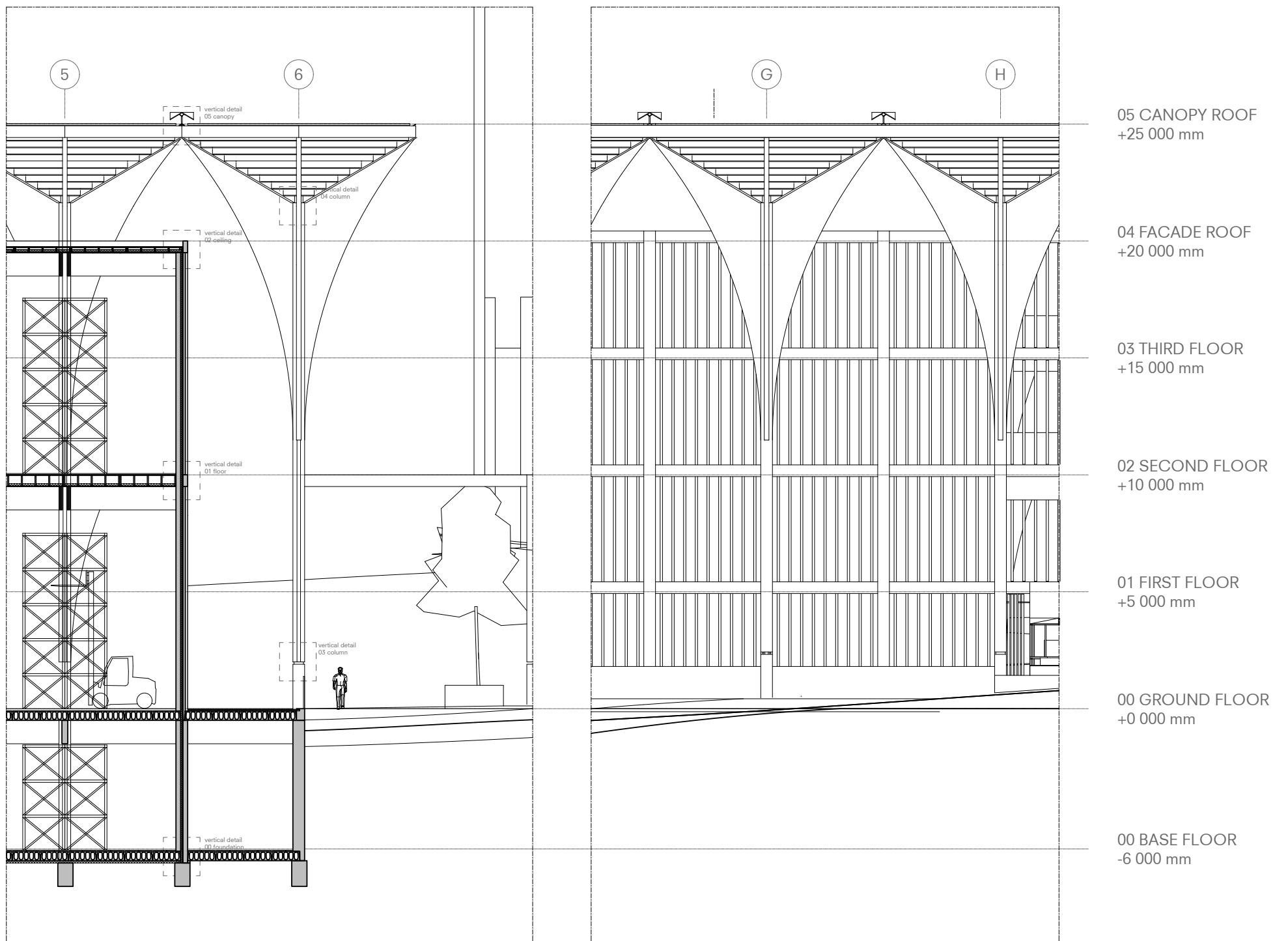
SOUTH FACADE

0 10 20 m

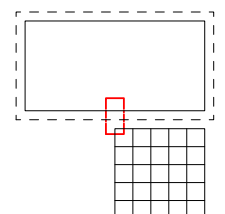
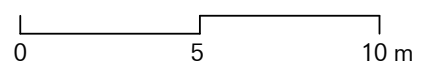
INTERIOR FRAGMENT | 1:100 ON A0



ENVELOPE FRAGMENT | 1:100 ON A1



FACADE FRAGMENT



COLUMN POSTER | 1:100 ON A0

MAR ELIAS C
the column - climat

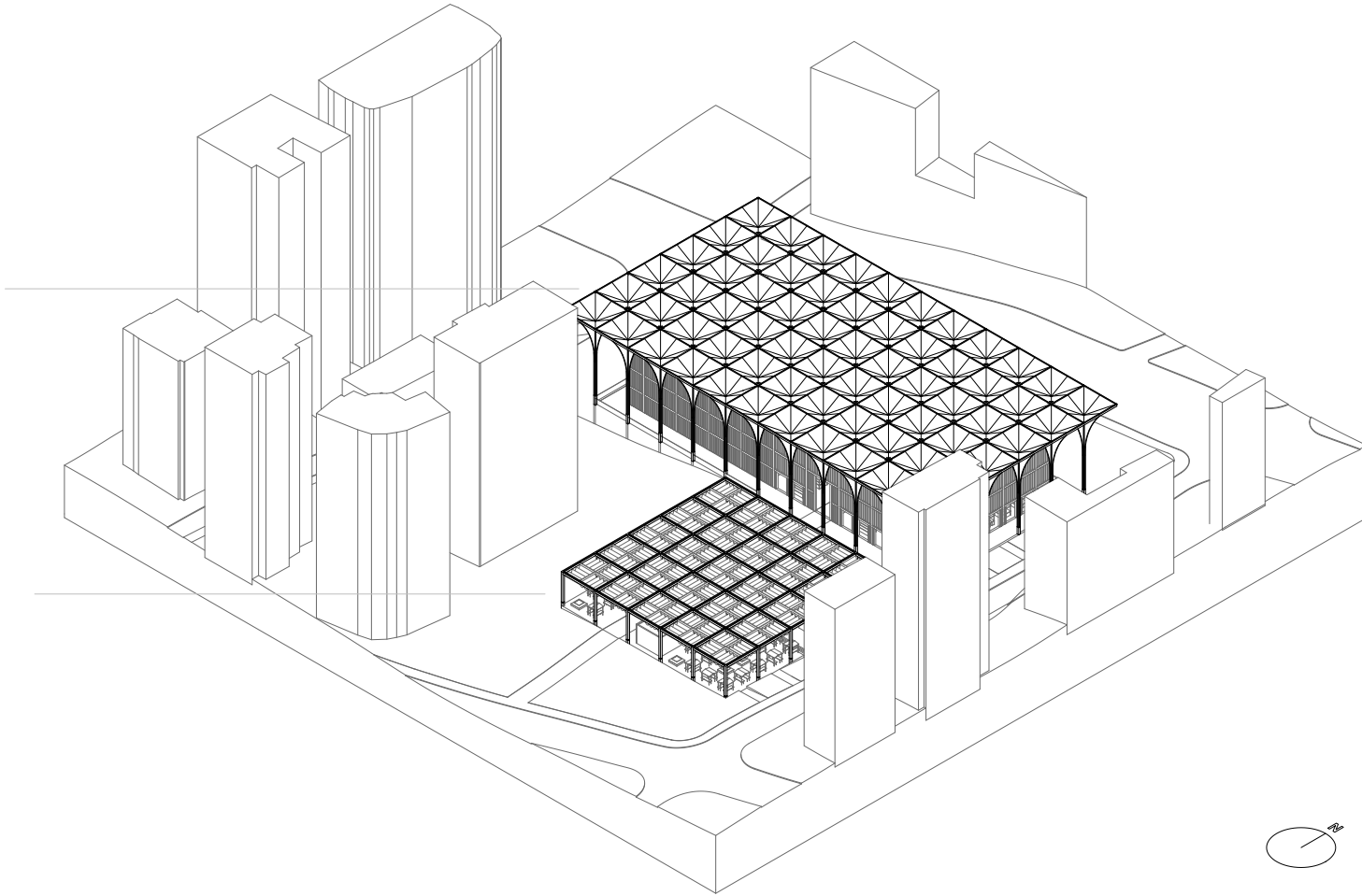
Tycho van
4468
Complex Pro

building mass

- 100 x 50 meter plan surface with 10 x 10 meter grid
- columns placed on 66 grid intersections
- columns support 6600 m² canopy enveloping the program functions

outdoor square

- 50 x 50 meter plan surface with 10 x 10 meter grid
- columns placed on 36 grid intersections
- informal 2500 m² pergola structure with textile canopy enveloping the program functions
- pergola main structure 500 x 500 LVL hollow column steel connector element on 500 x 500 concrete base with 150 x 500 LVL beams



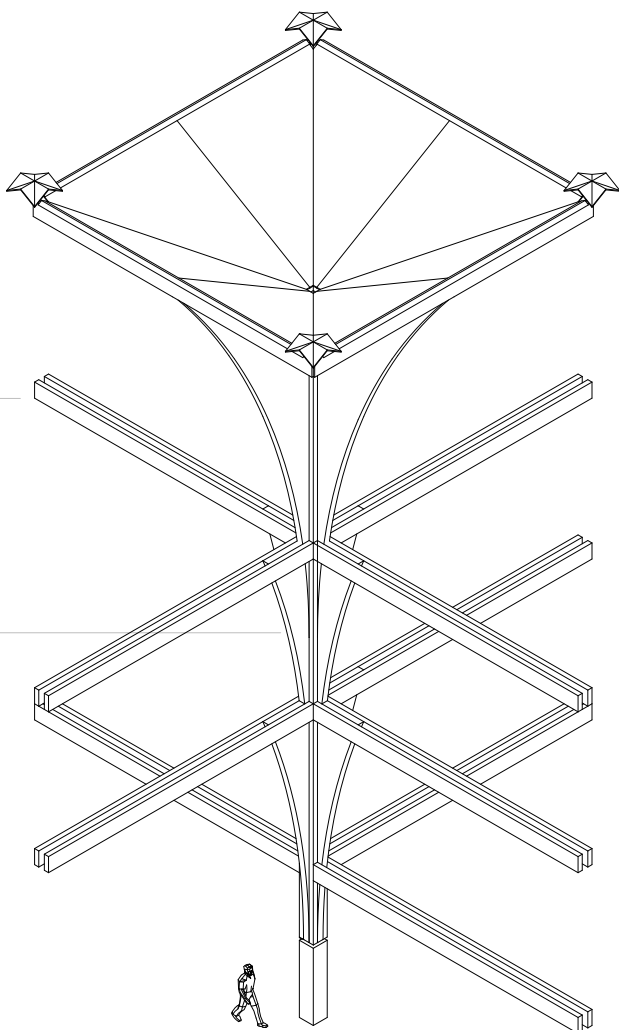
DESIGN
axonometry

beams

- branching out from the column
- main load bearing structure bolted to flanges
- light elements in between beams creating atmosphere

flanges

- mimicking branching of a tree
- inserted in column milling seam, shortening the span of the beams



chalice canopy 10 x 10 m

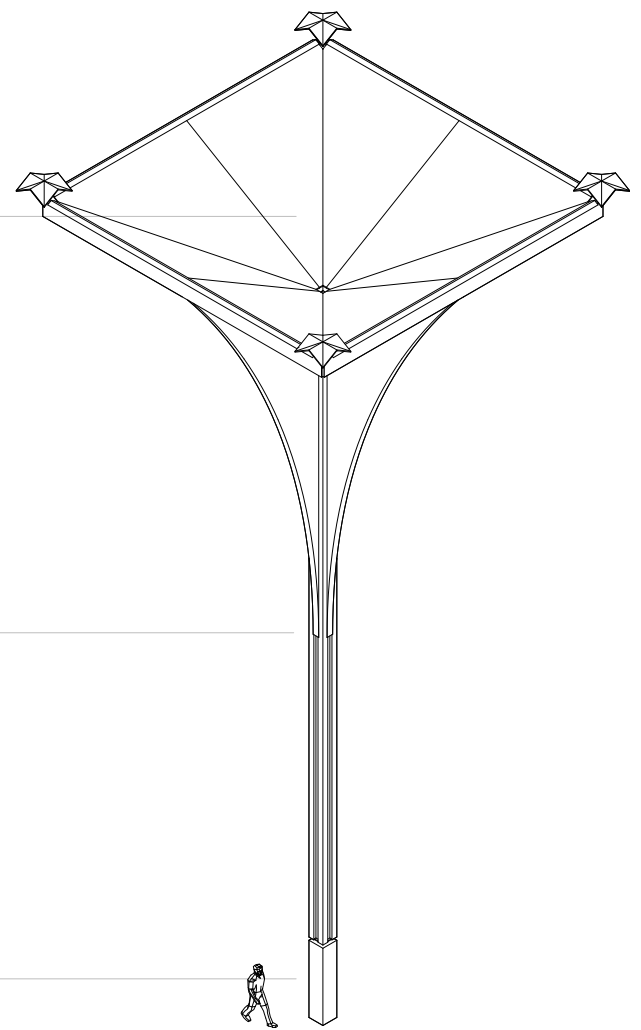
- collecting rainwater 730 mm/year
- collecting solar energy 300 sunny days per year 8-9 hours of sun a day
- ventilation chimneys natural ventilation in market hall

column 500 x 500 mm

- laminated veneer lumber (LVL) pre-fabricated elements
- hollow core containing water drain pipe electricity cables
- column flanges connect to other columns forming a rigid portal

base 500 x 500 mm

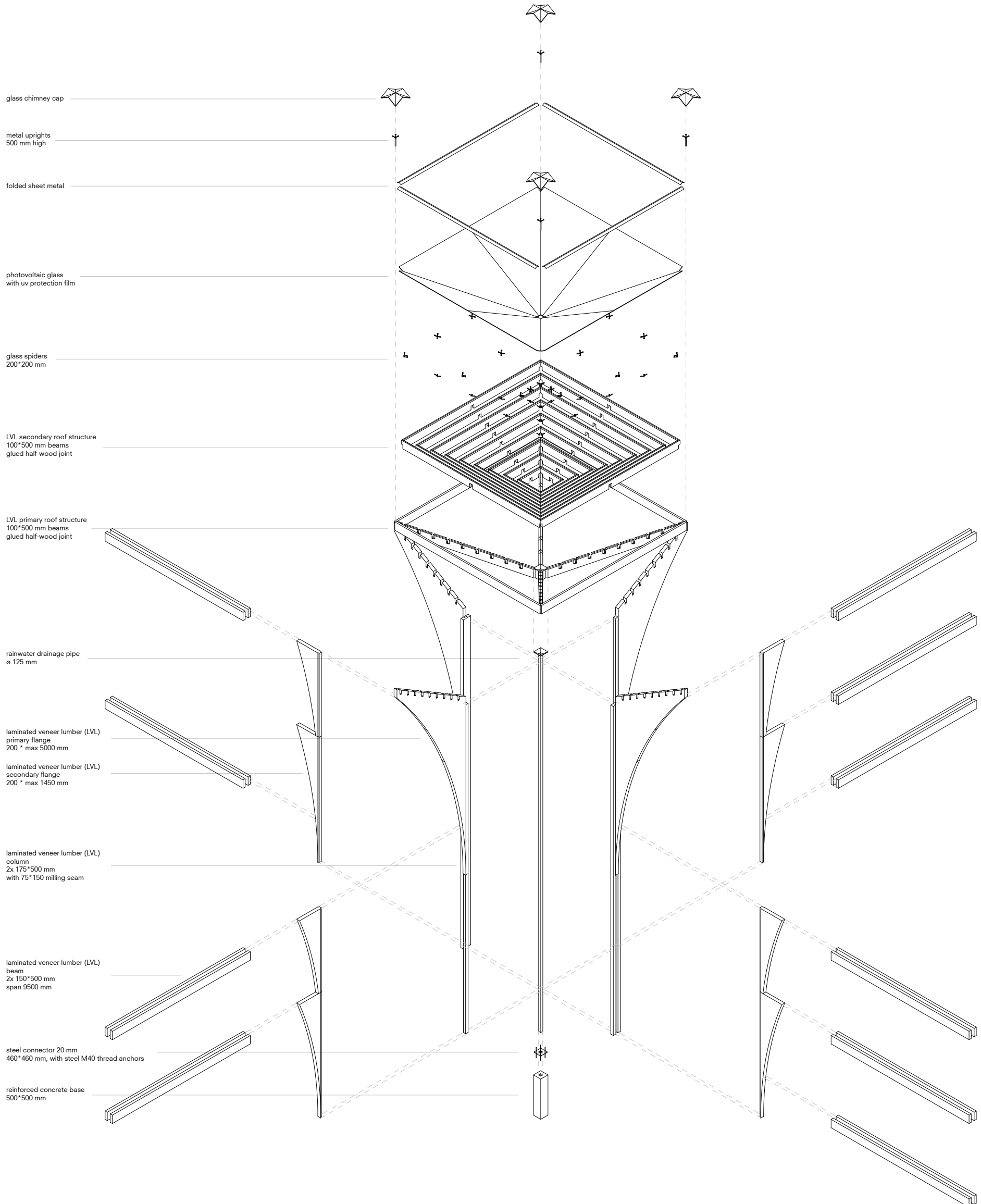
- pre-cast concrete element with hollow core for water drain pipe
- adding human scale to the structure



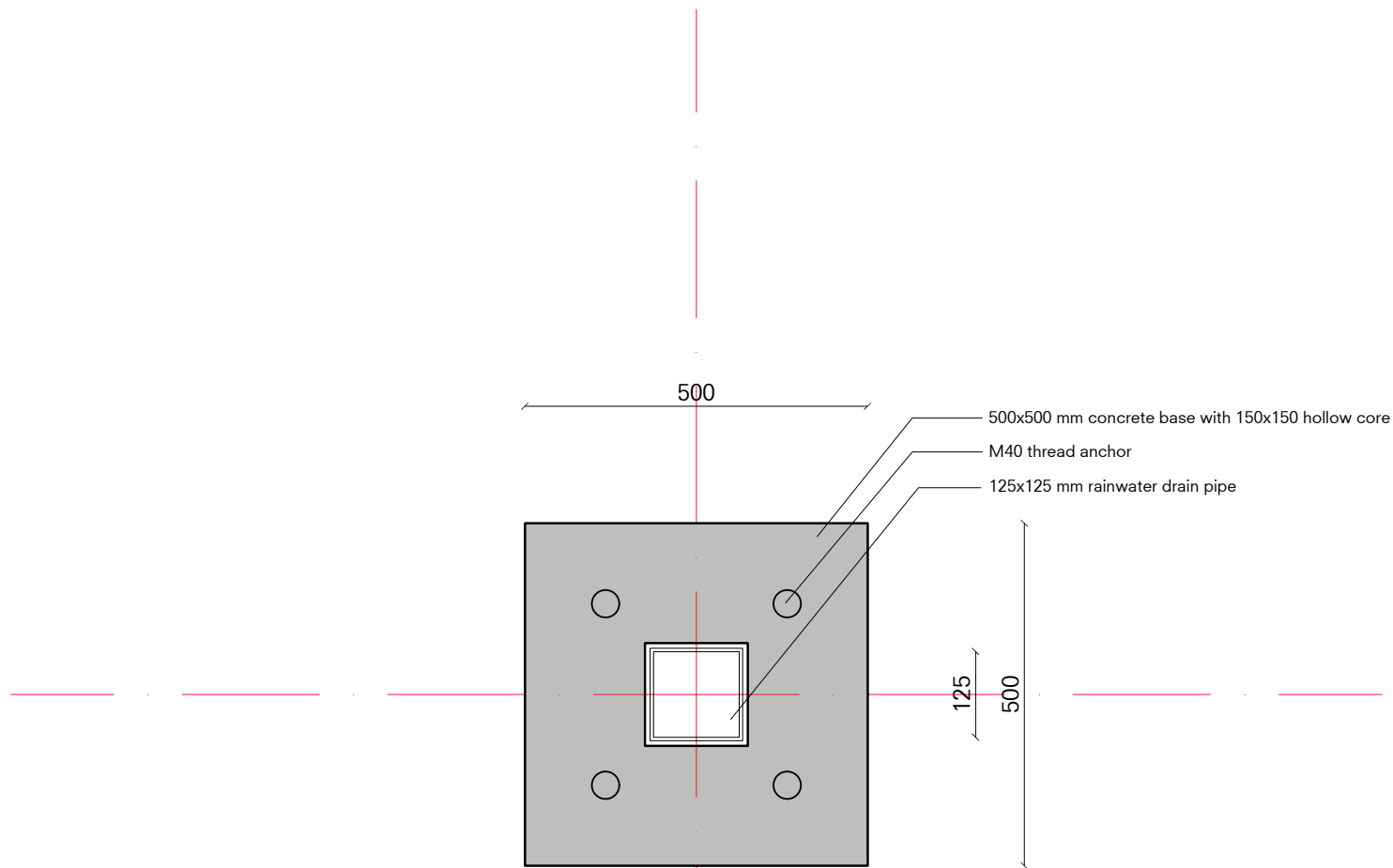
ROOF MARKET

Design and construction

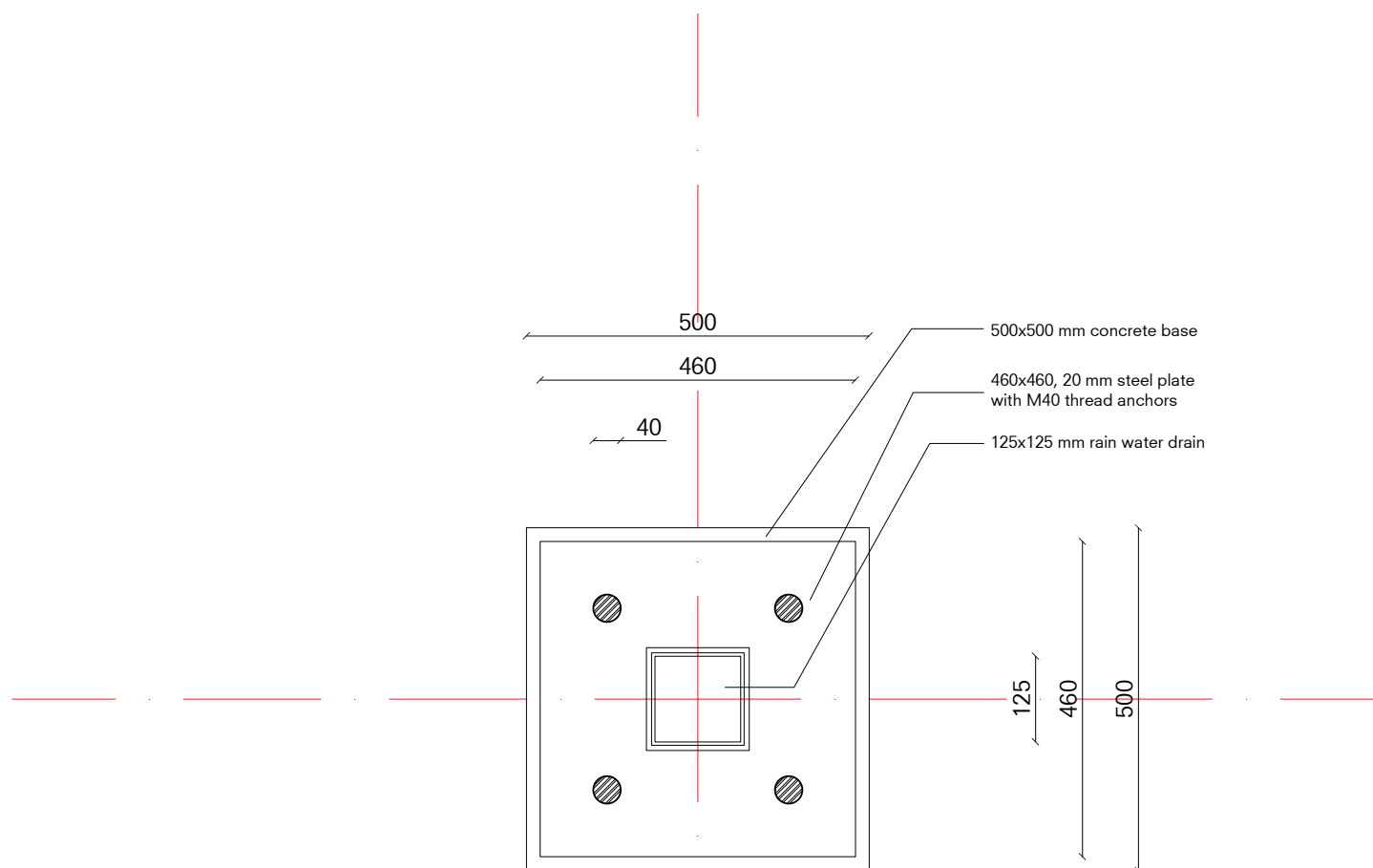
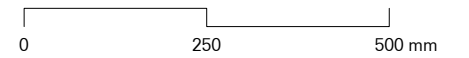
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Complex Projects Beirut



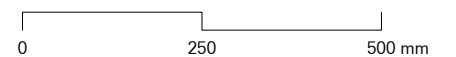
DETAILS | 1:5 ON A2



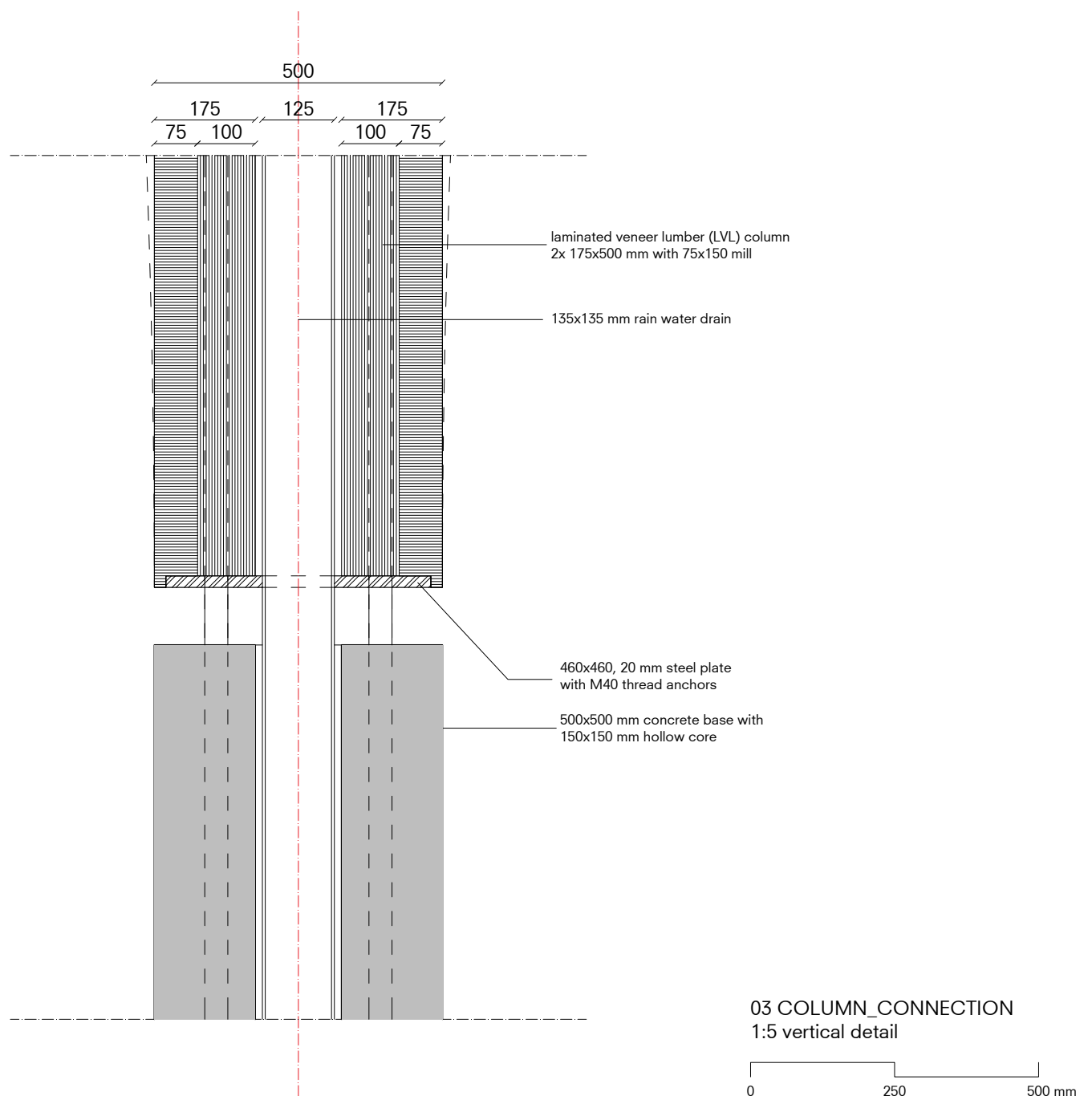
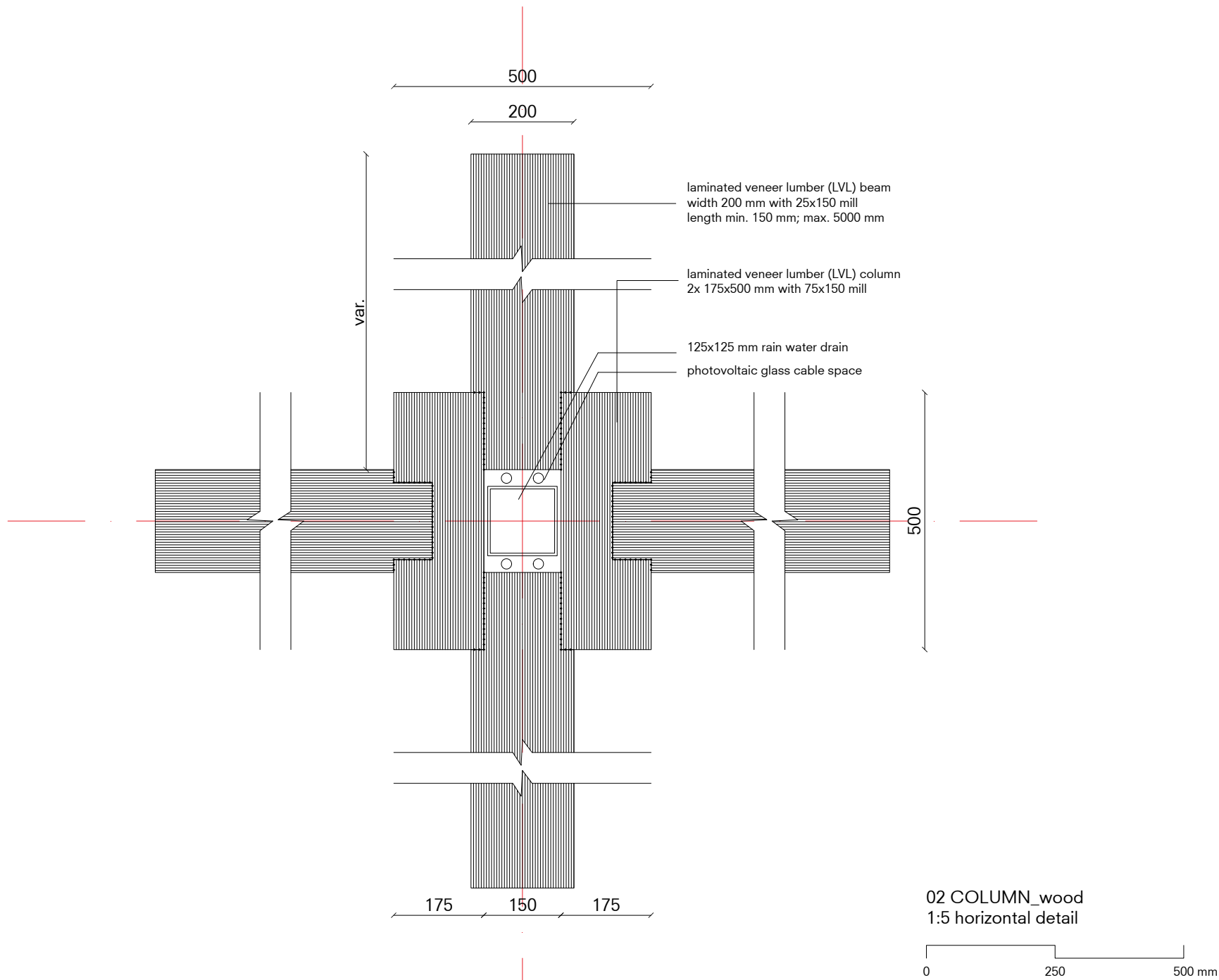
00 COLUMN_concrete
1:5 horizontal detail



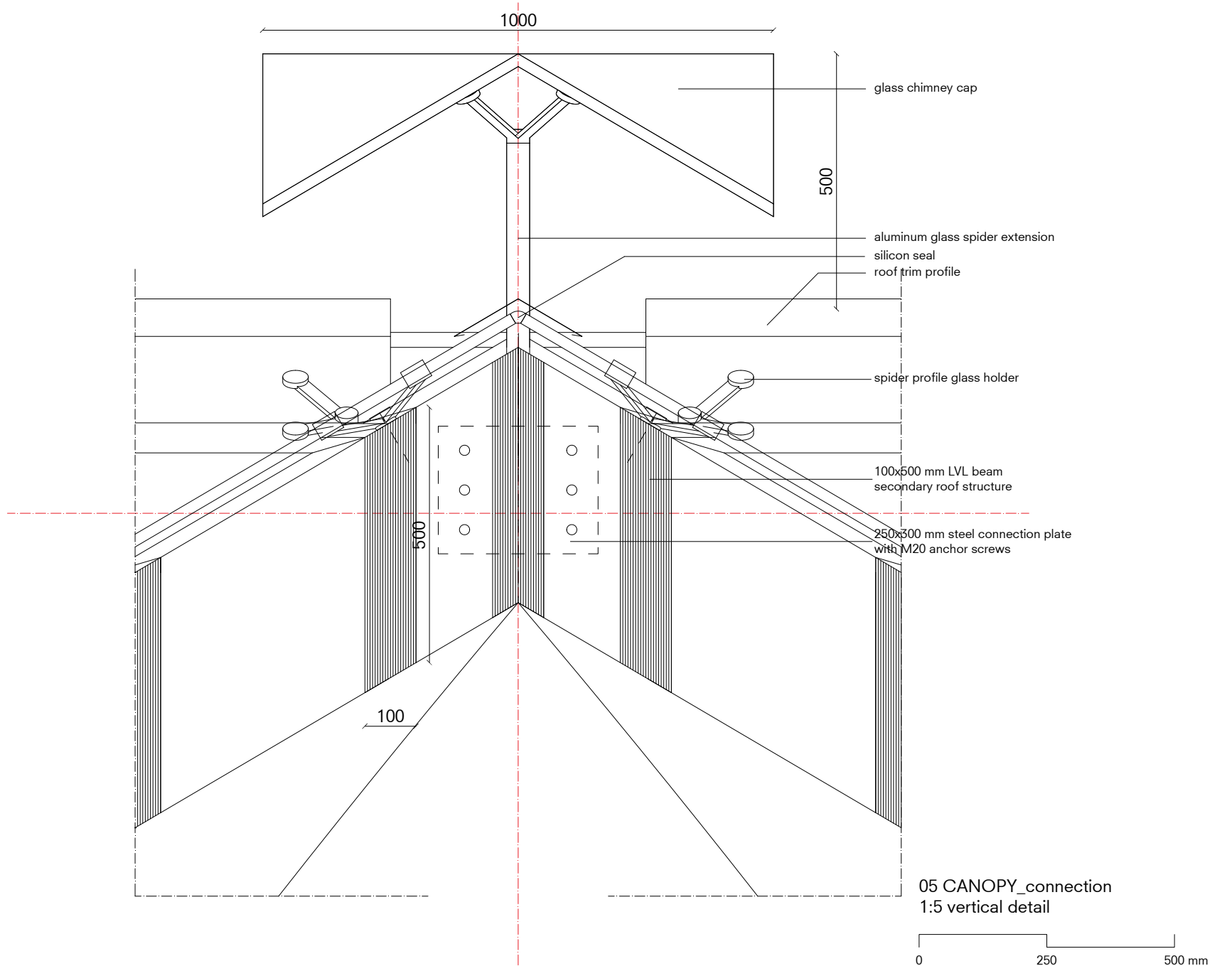
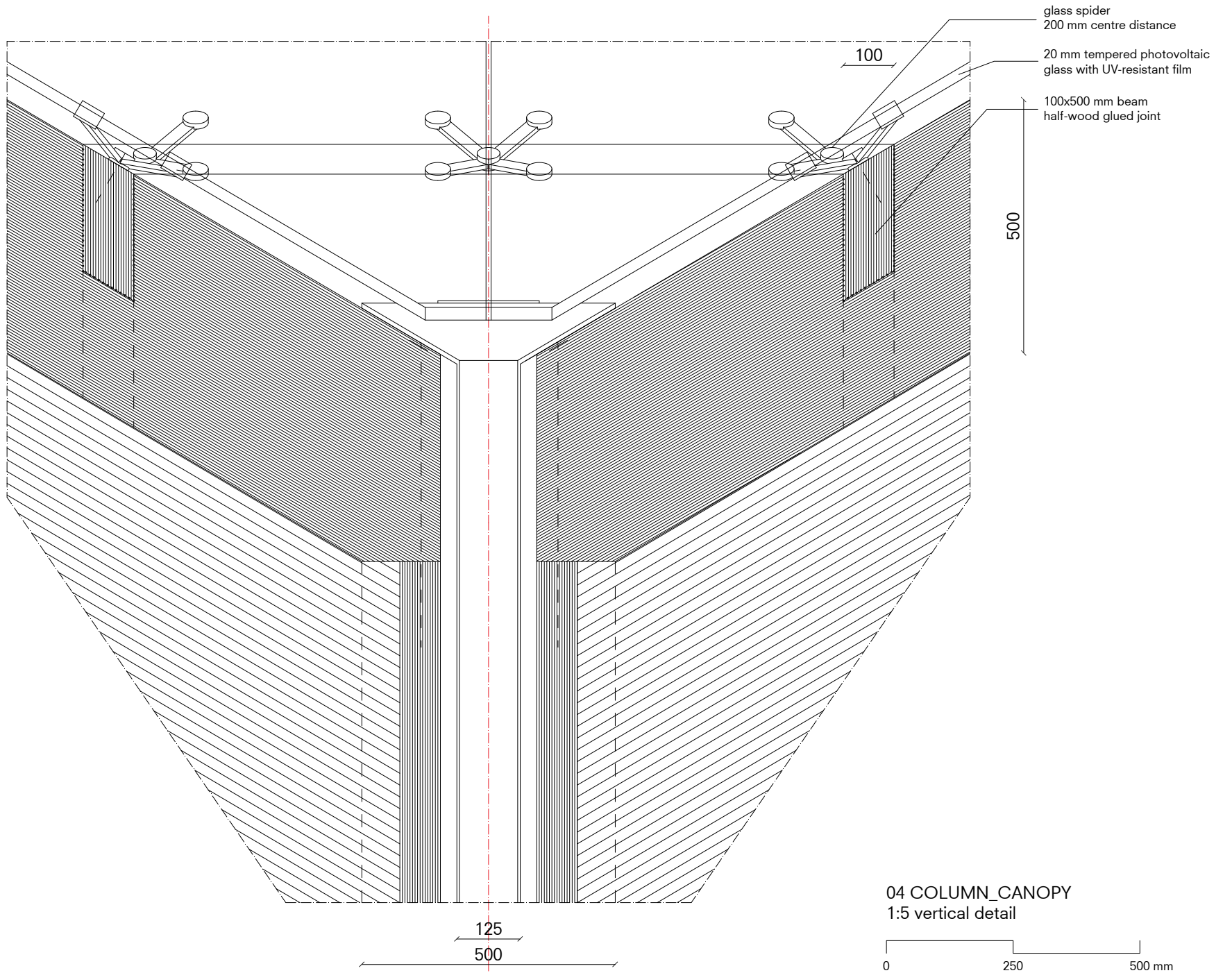
01 COLUMN_steel
1:5 horizontal detail



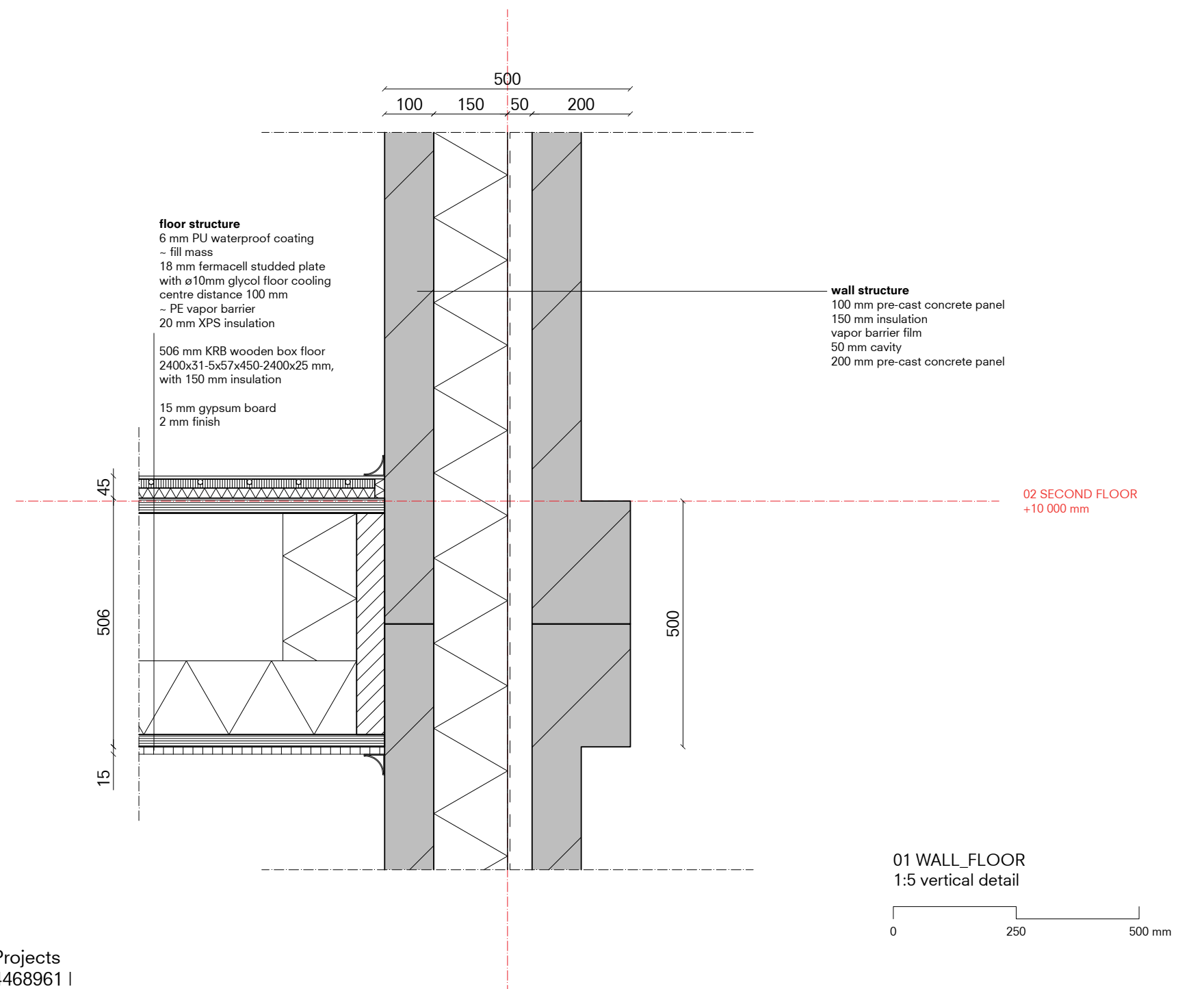
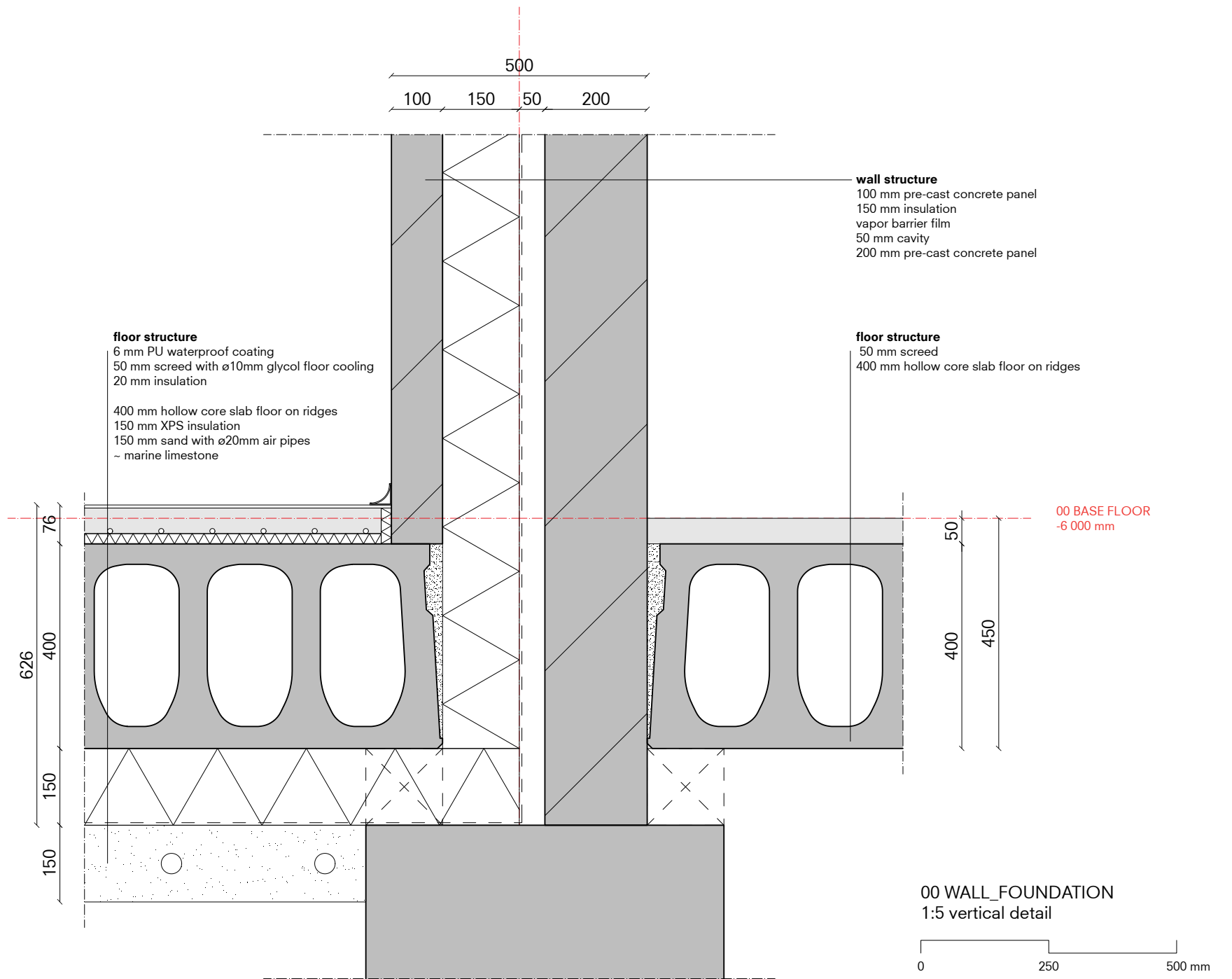
DETAILS | 1:5 ON A2



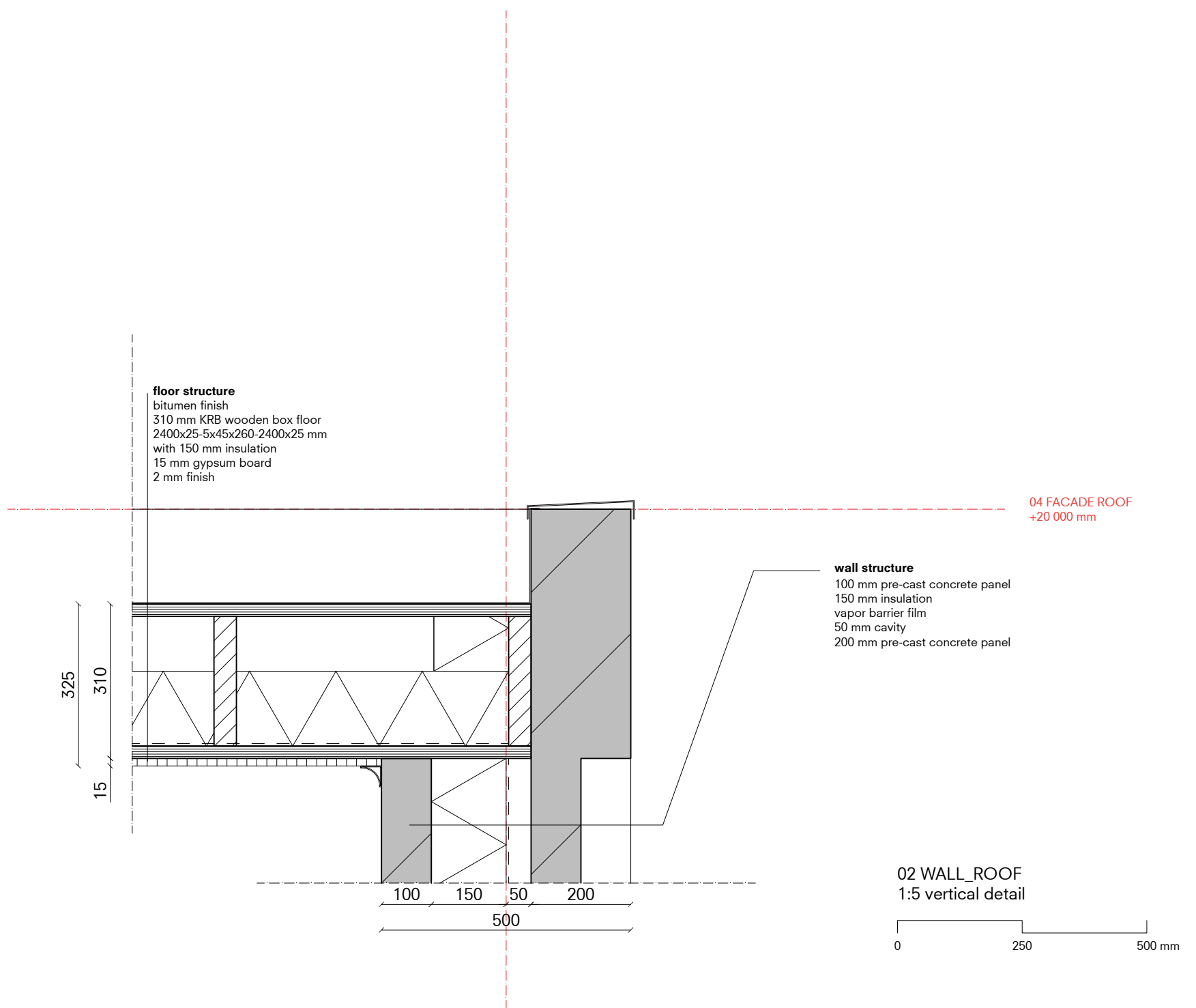
DETAILS | 1:5 ON A2



DETAILS | 1:5 ON A2



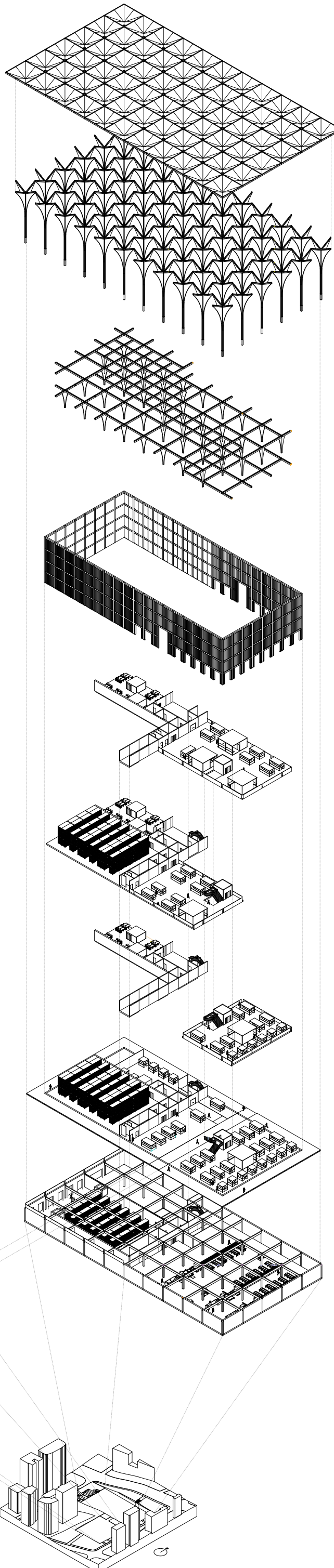
DETAILS I 1:5 ON A2



DESIGN POSTER | 1:500 ON A0

MAR ELIAS CROP MARKET the project - design and program

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CANOPY STRUCTURE
solar energy and rain
water collecting element
10 x 10 m per chalice element

STRUCTURE
columns in 10 x 10 m grid

STRUCTURE
additional flanges
main load bearing beams

FAÇADE DESIGN
5 x 5 m pre cast concrete
column and beam grid

concrete element - closed
façade enveloping
logistics program

concrete element and
façade opening - closed
façade enveloping
administrative program

olive wood vertical slats
with steel anchor - semi
open facade enveloping
public program

03 THIRD FLOOR
market hall
offices
toilets
circulation cores
technical slab

02 SECOND FLOOR
market hall
offices
cold storage
toilets
circulation cores
technical slab

01 FIRST FLOOR
market hall
offices
toilets
circulation cores
technical slab

00 GROUND FLOOR
market hall
office
client market
cold storage
reception
toilets
circulation cores
technical slab

00 BASE FLOOR
processing hall
parking garage
temporary storage
unloading and distribution
reception
toilets
circulation core
technical slab

CANOPY STRUCTURE
secondary beam structure
with traditional textile as
sun shading

STRUCTURE
open pergola structure
in 10 x 10 m grid

DESIGN
concrete pavilions
7,5 x 7,5 m placed
in the center of the grid

00 GROUND FLOOR
outdoor market
restaurant
terrace
market stall storage
toilets

EXPLODED AXONOMETRY
all elements