

Revitalising heritage through food

The social greenhouse

An example of circular food production within urban areas

Revitalising heritage through food

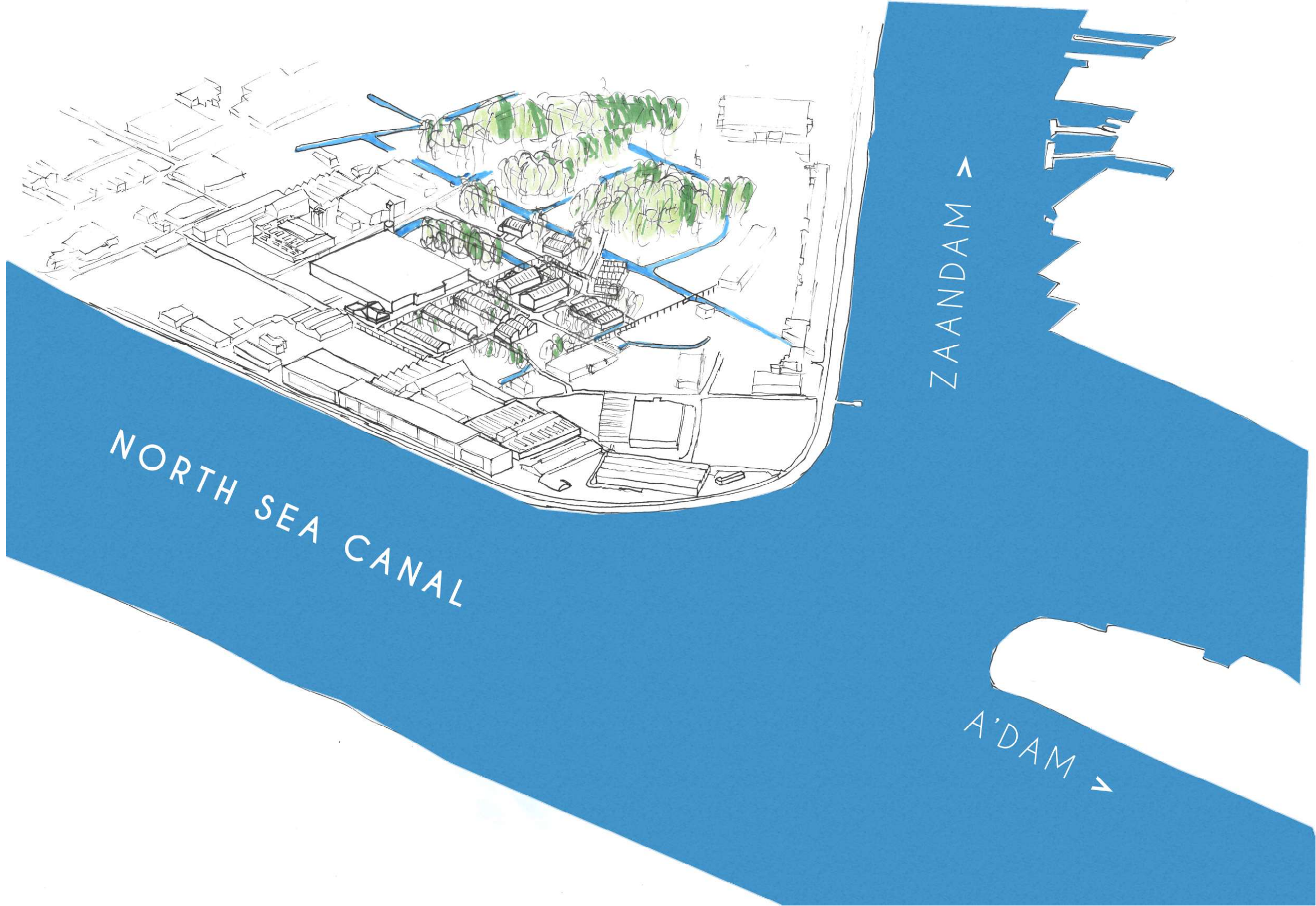
The social greenhouse

An example of circular food production within urban areas

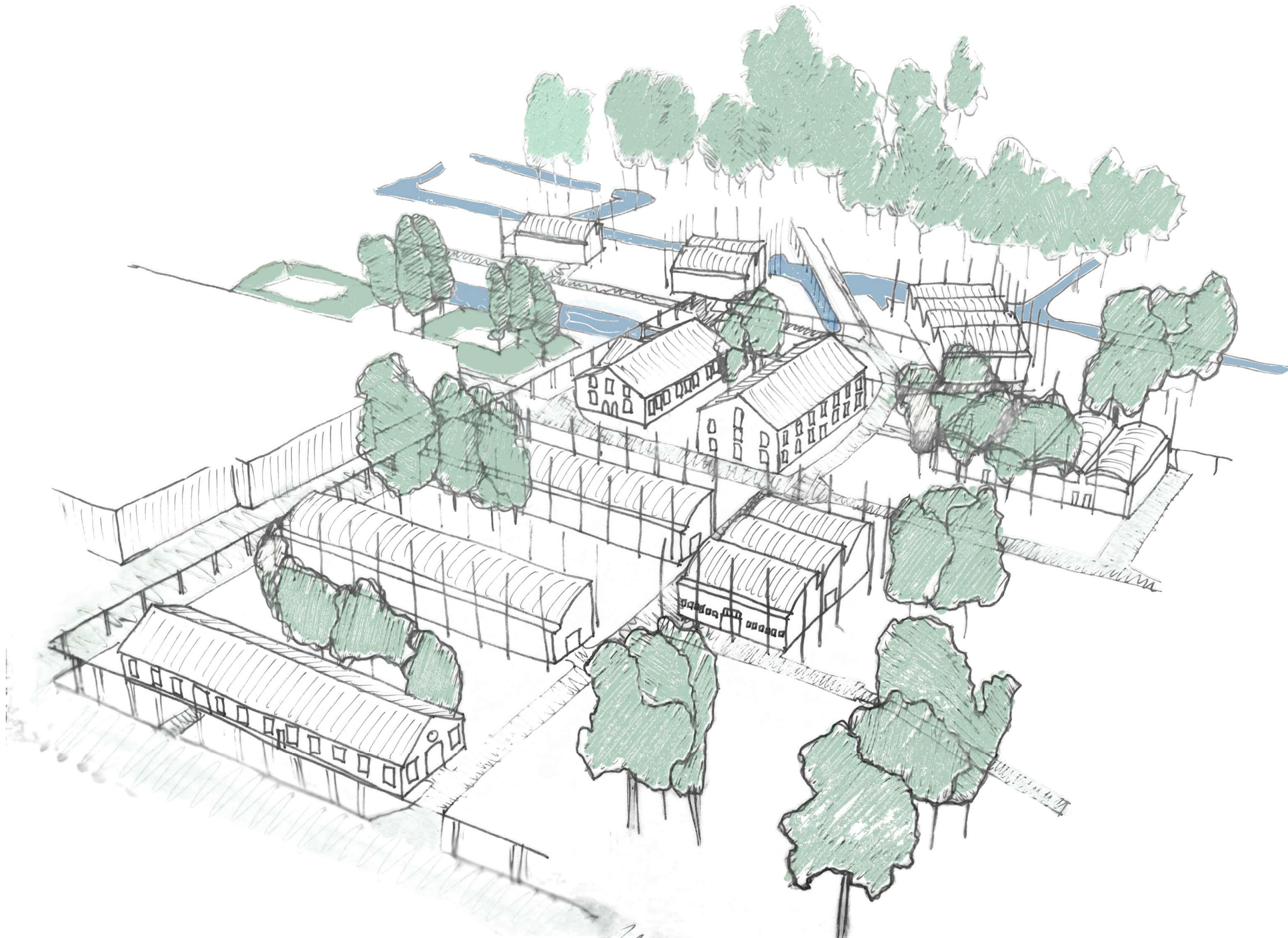
Amanda Verschuur
4636694

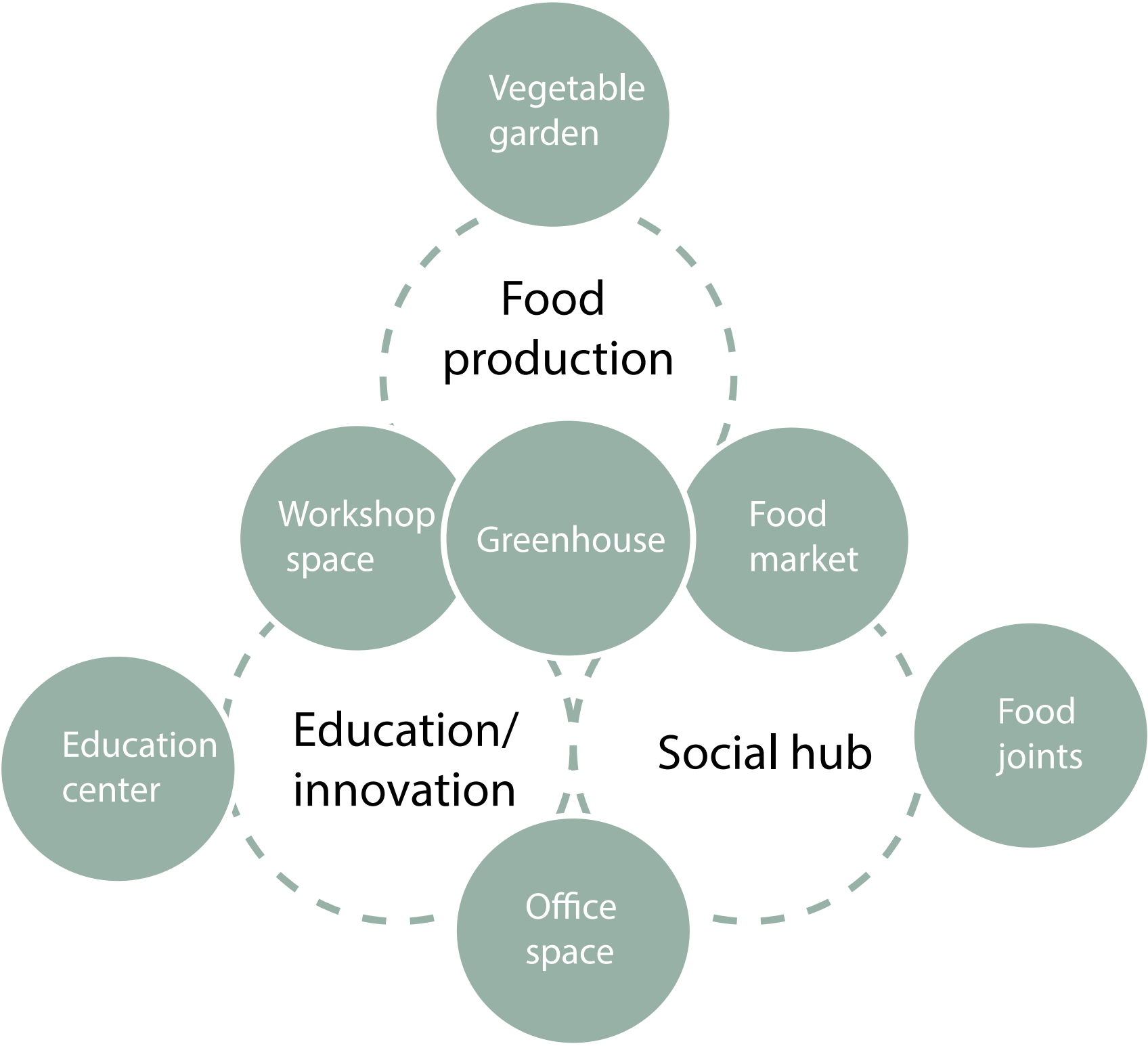
Graduation studio
Architecture & Heritage

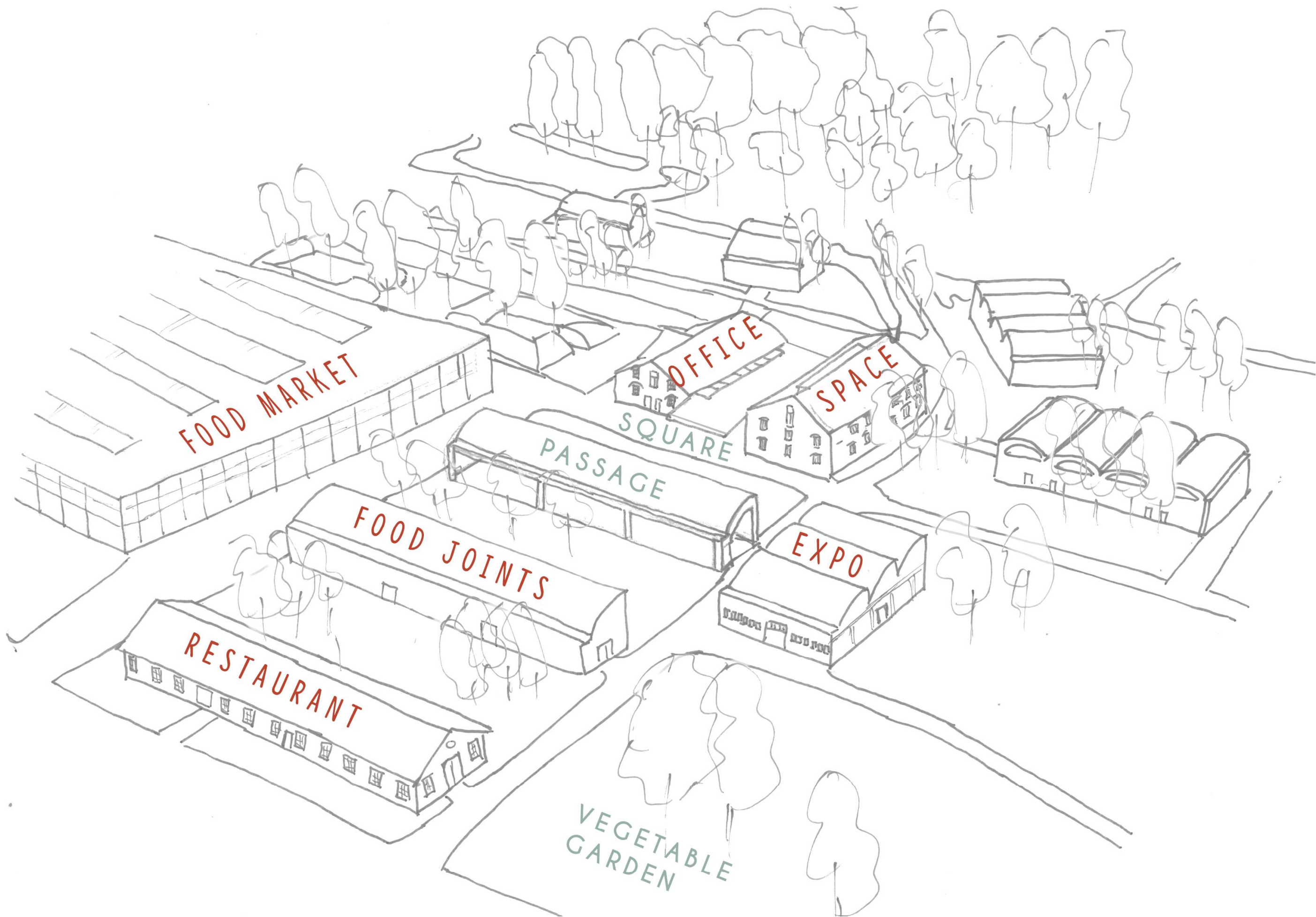
Ir. A. Marx
Ir. F.W.A. Koopman
Dr.ir. C..I.C. van Emstede



Current character







PLOTS IN THE WOODS

Existing situation
1:1000

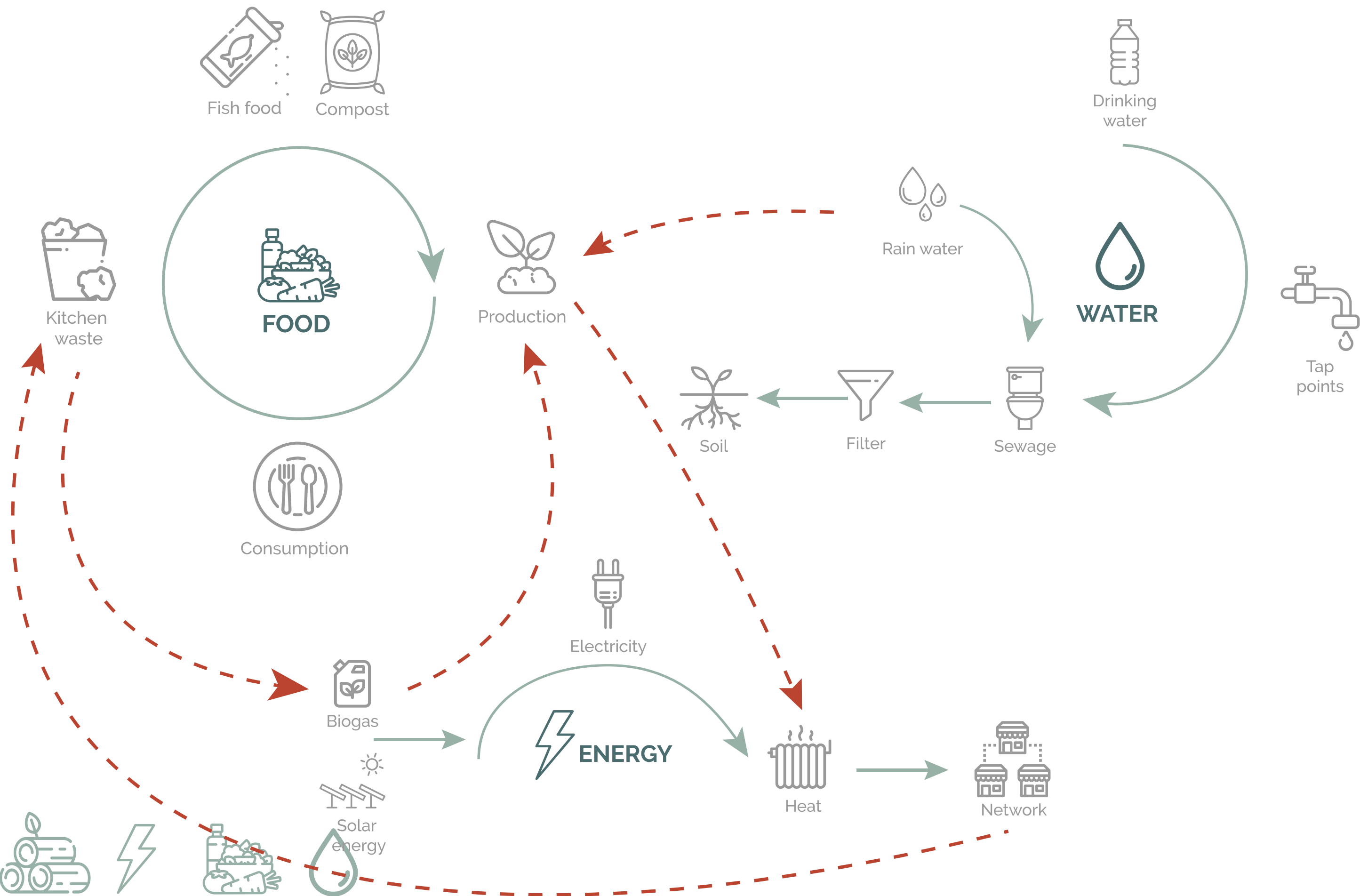


PLOTS IN THE WOODS

New masterplan
1:1000



Circularity

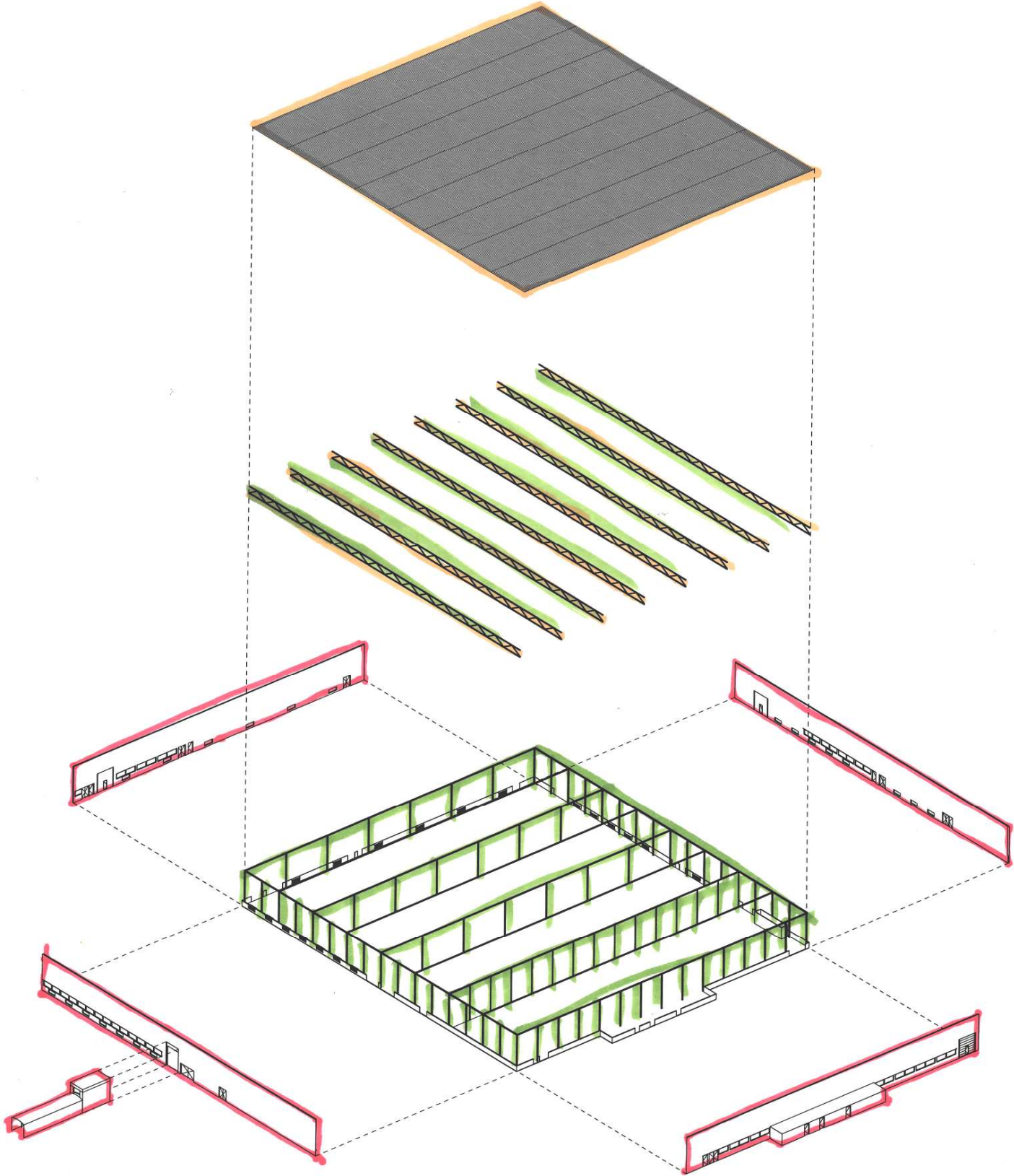


Building 01

Greenhouse with food hall

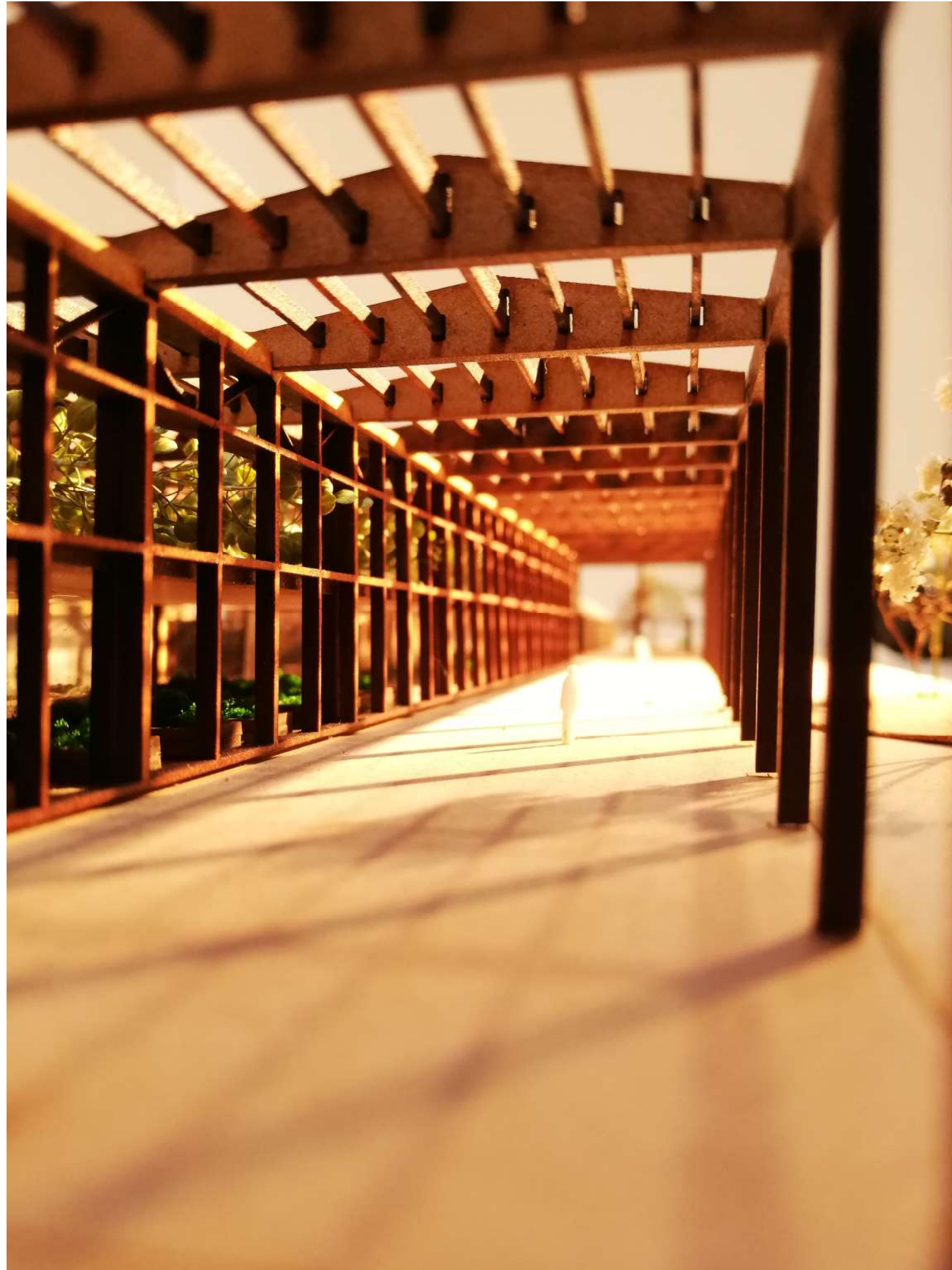


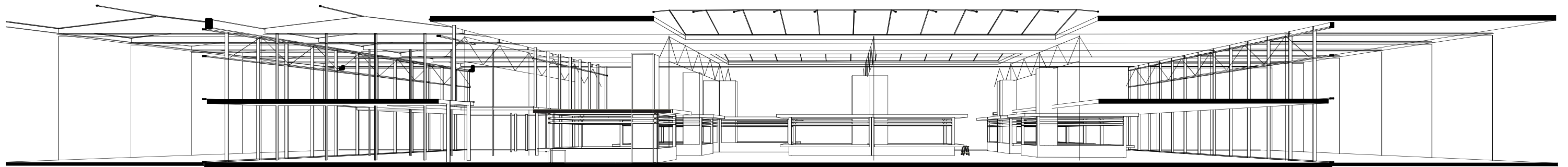




- Maintain
- Maintain if possible
- Little significance

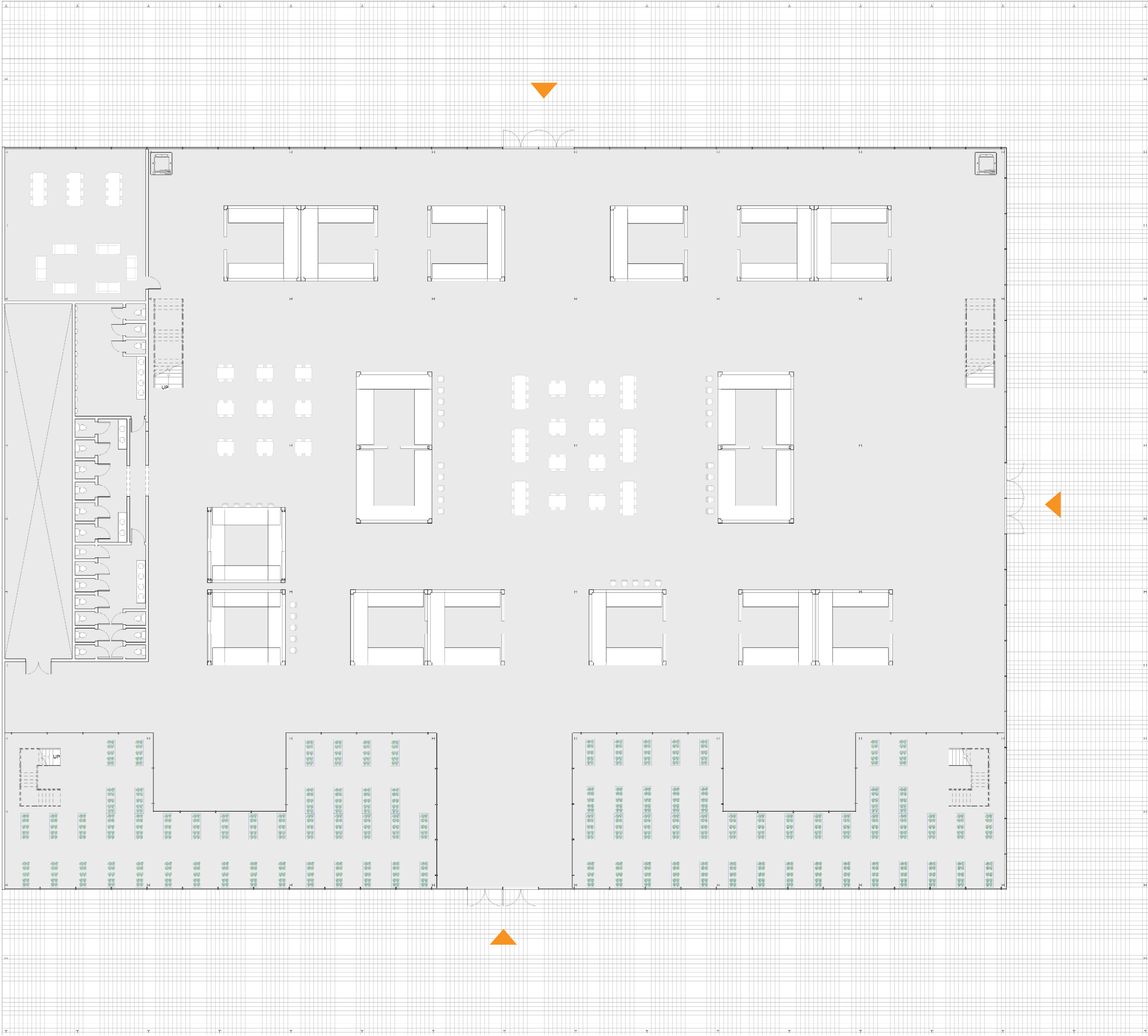






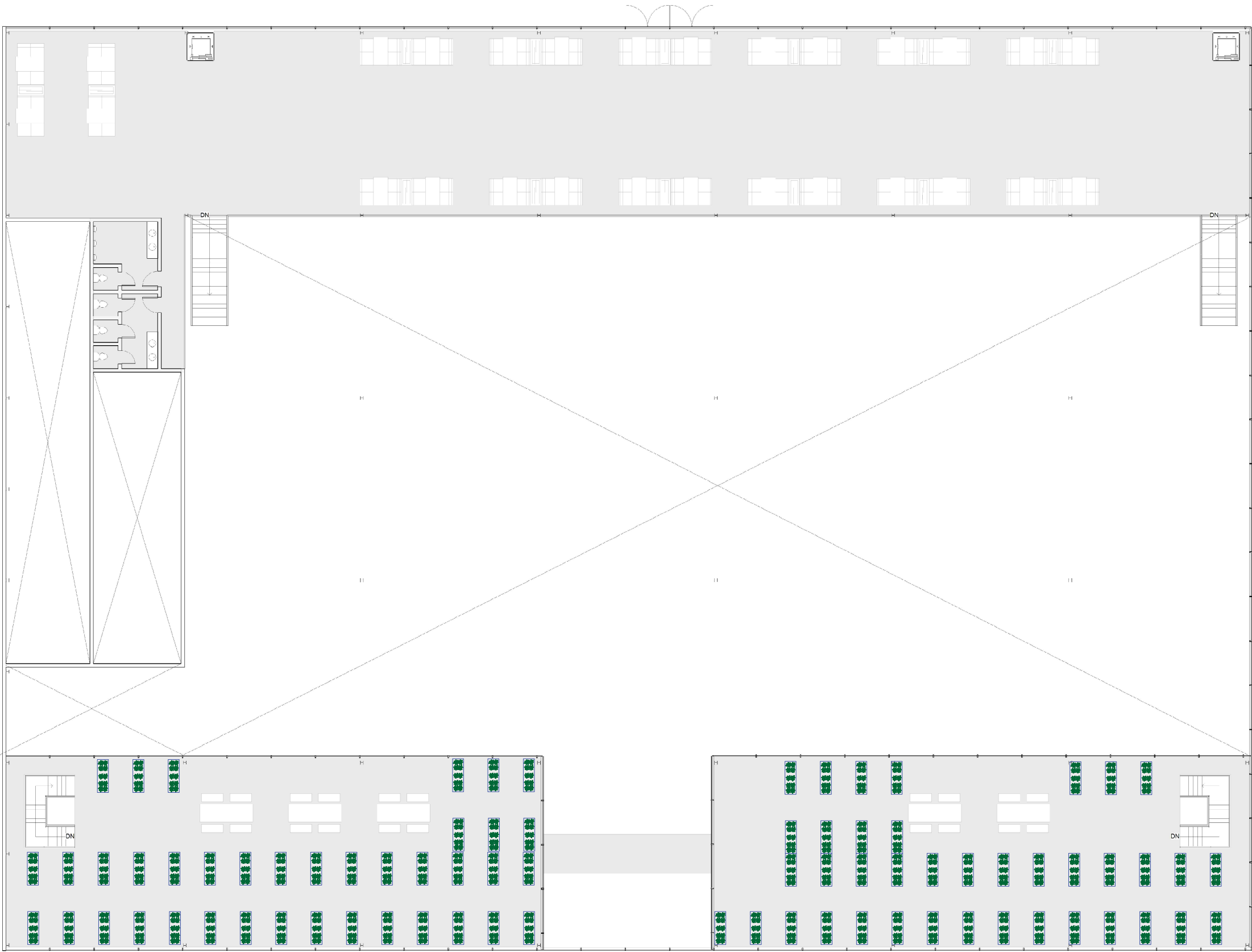
BUILDING 01

Floorplan ground floor
1:250



BUILDING 01

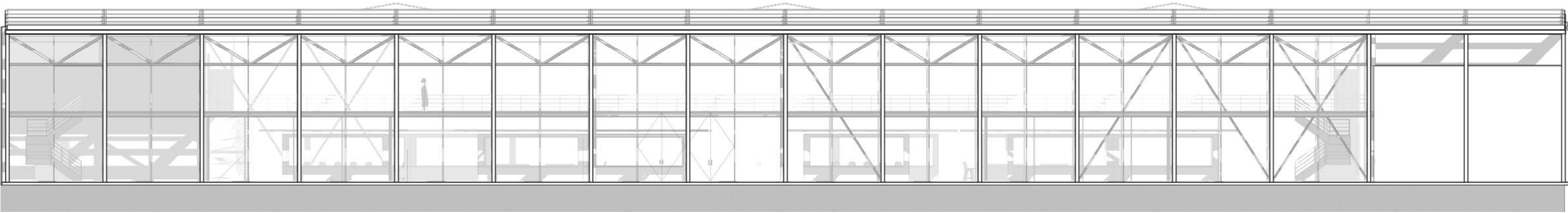
Floorplan first floor
1:250



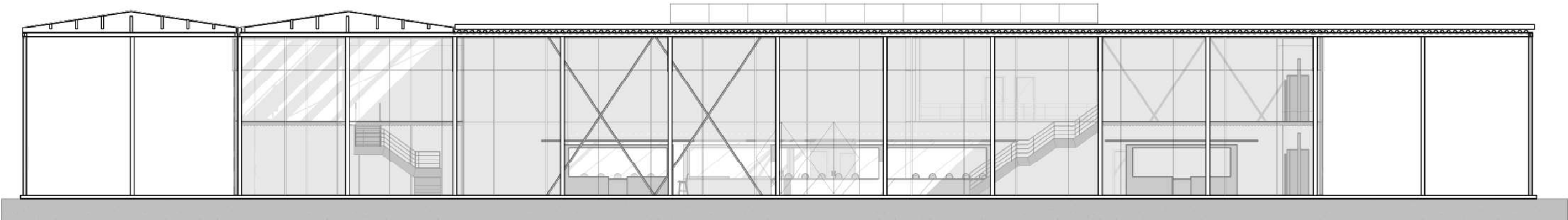


BUILDING 01 - THE BOX

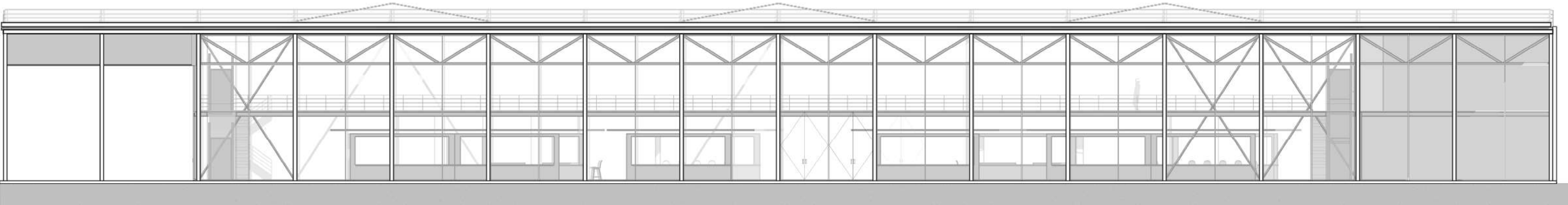
South Elevation
1:200



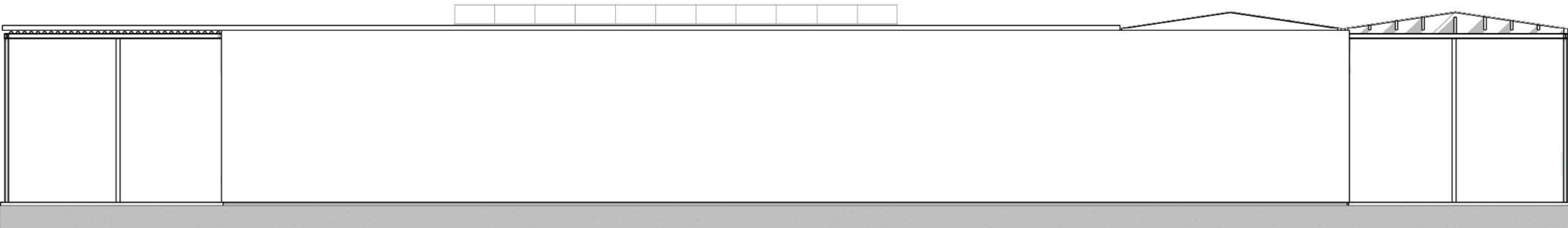
Subtitle
Scale



East Elevation
1:200



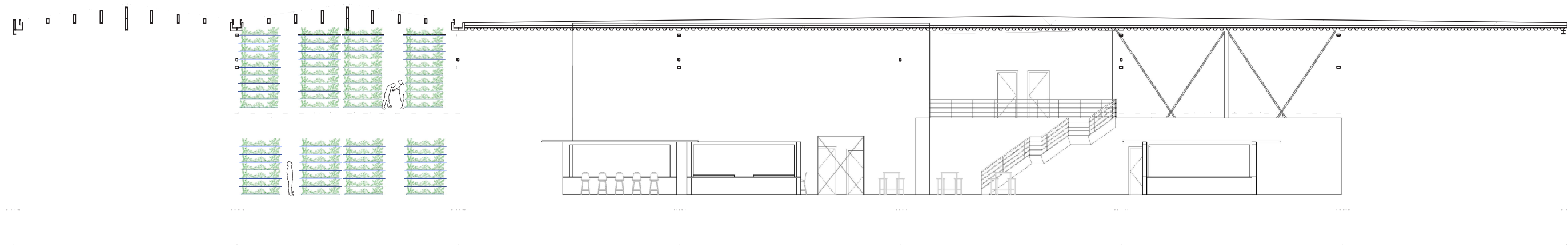
North Elevation
1:200

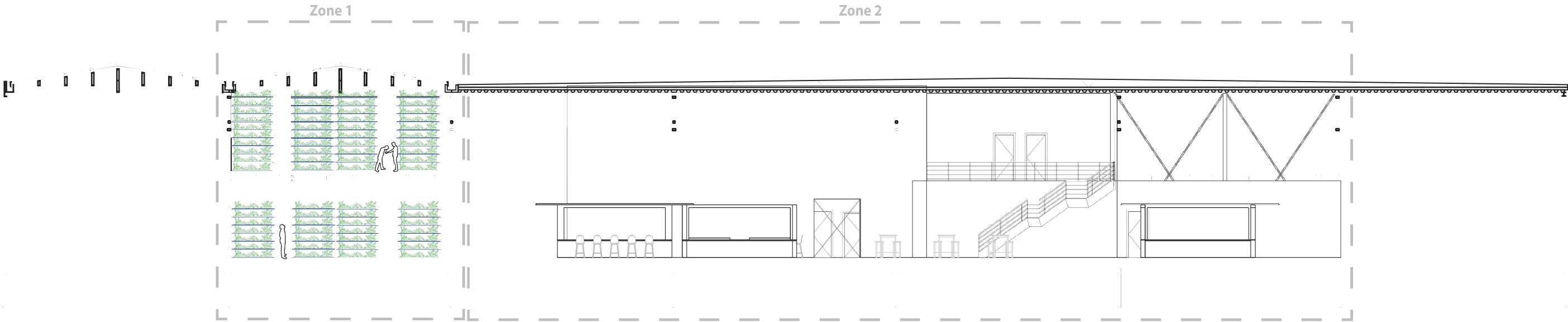


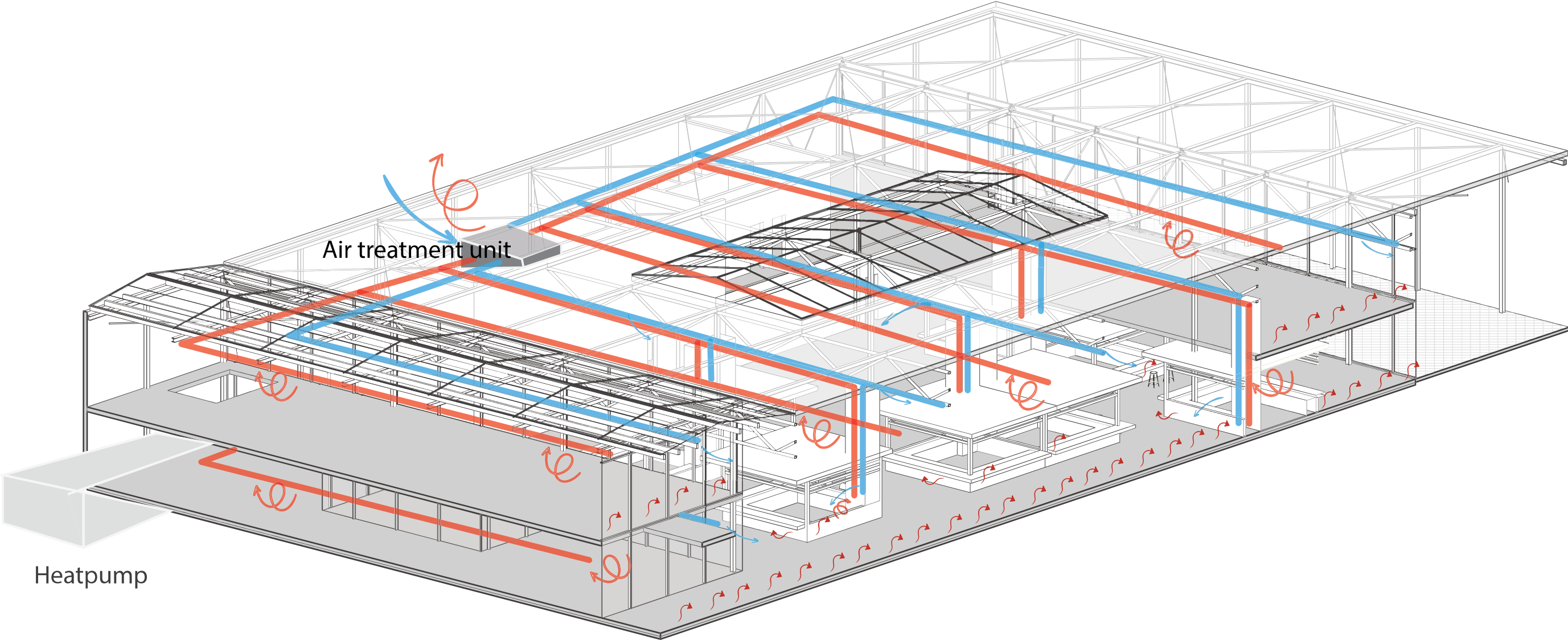
West Elevation
1:200

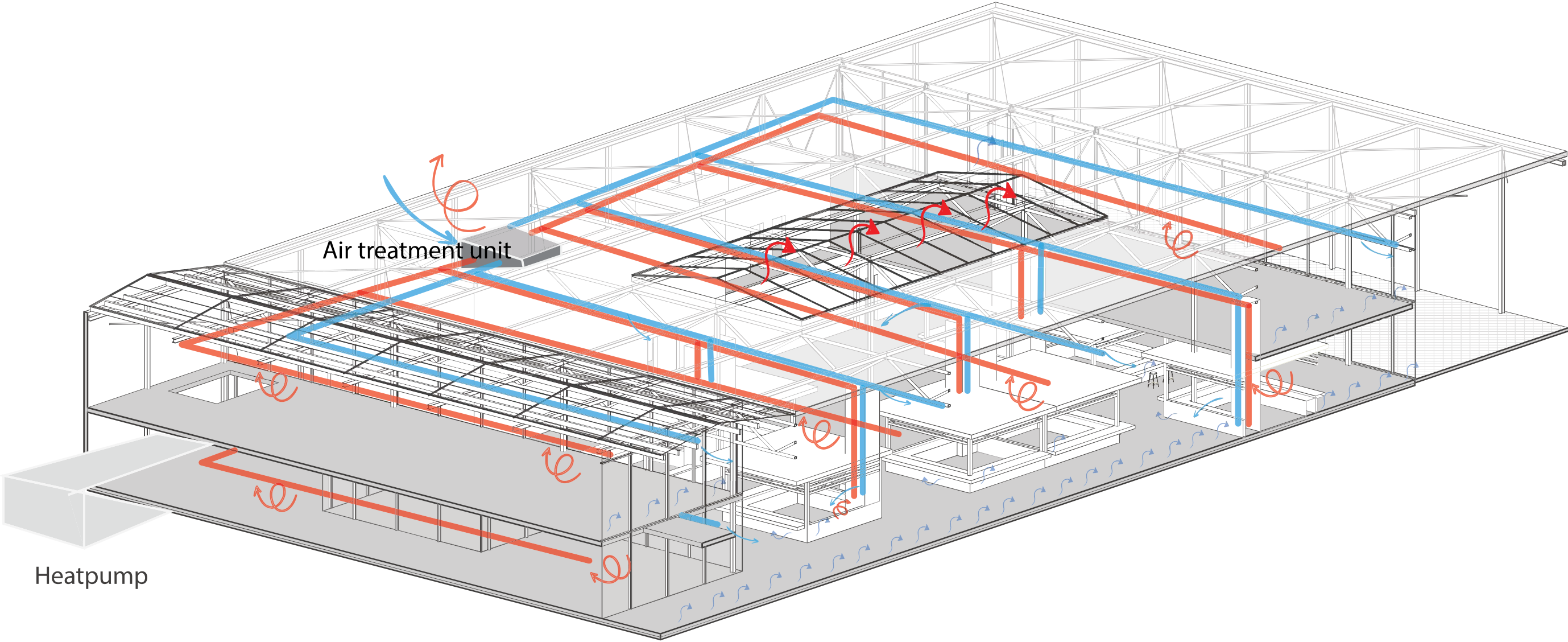
BUILDING 01

Cross section
1:200

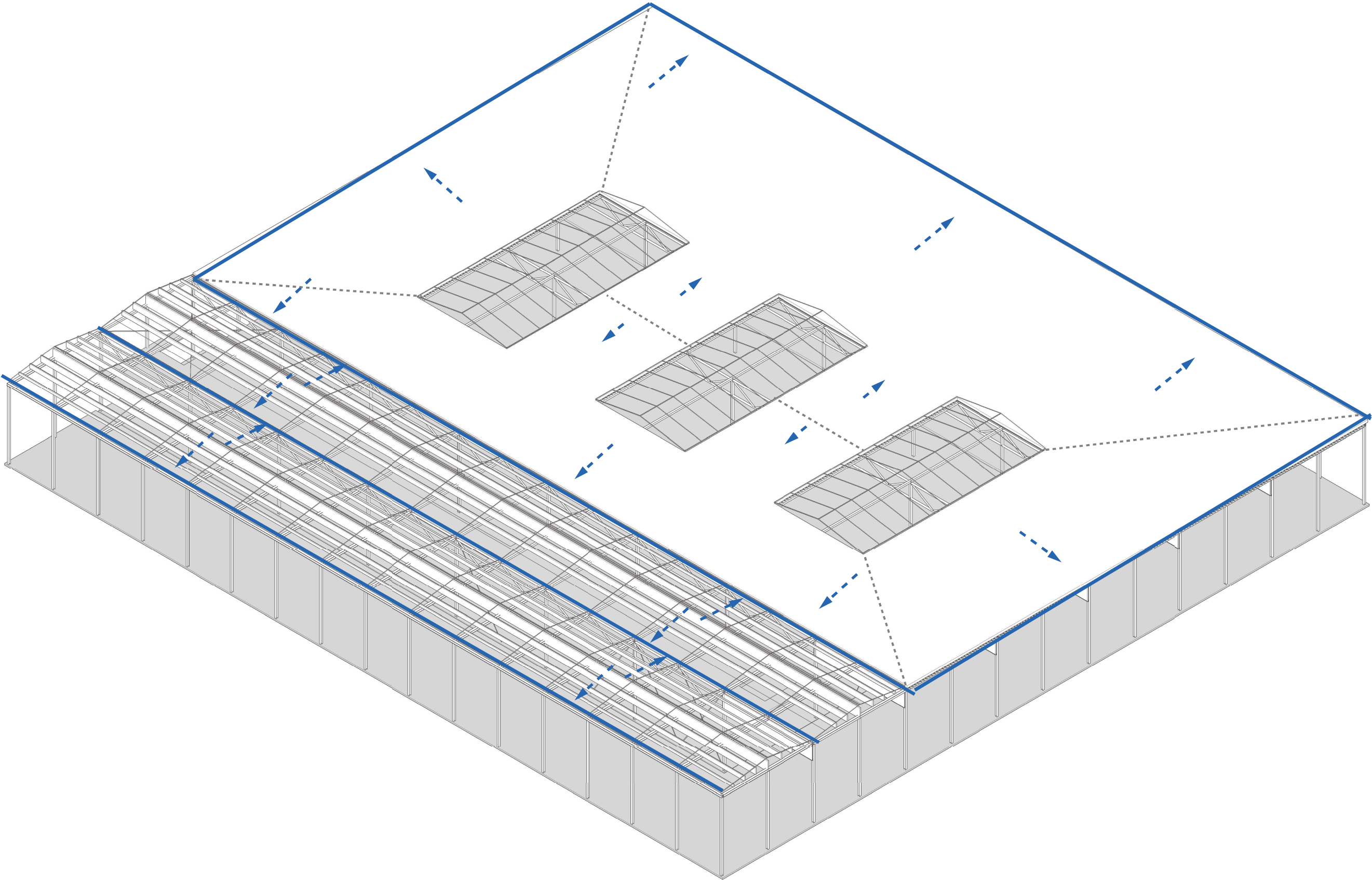




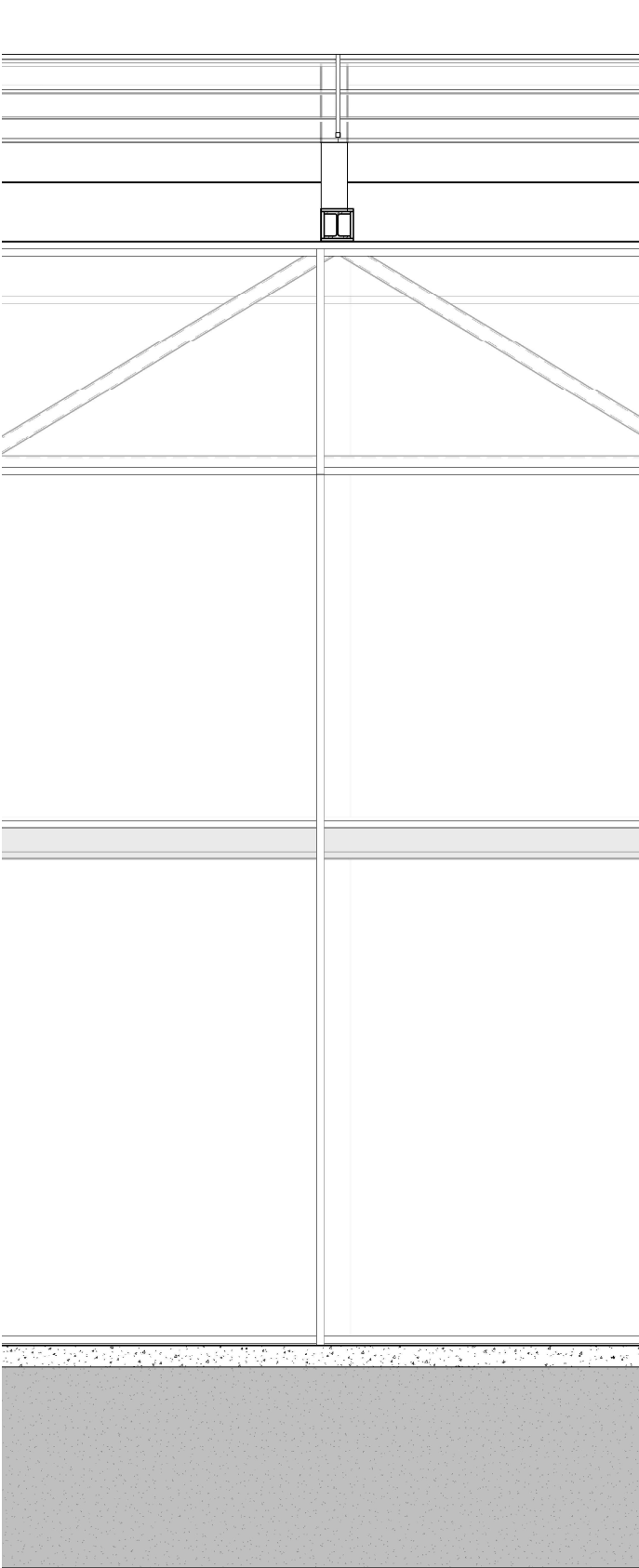


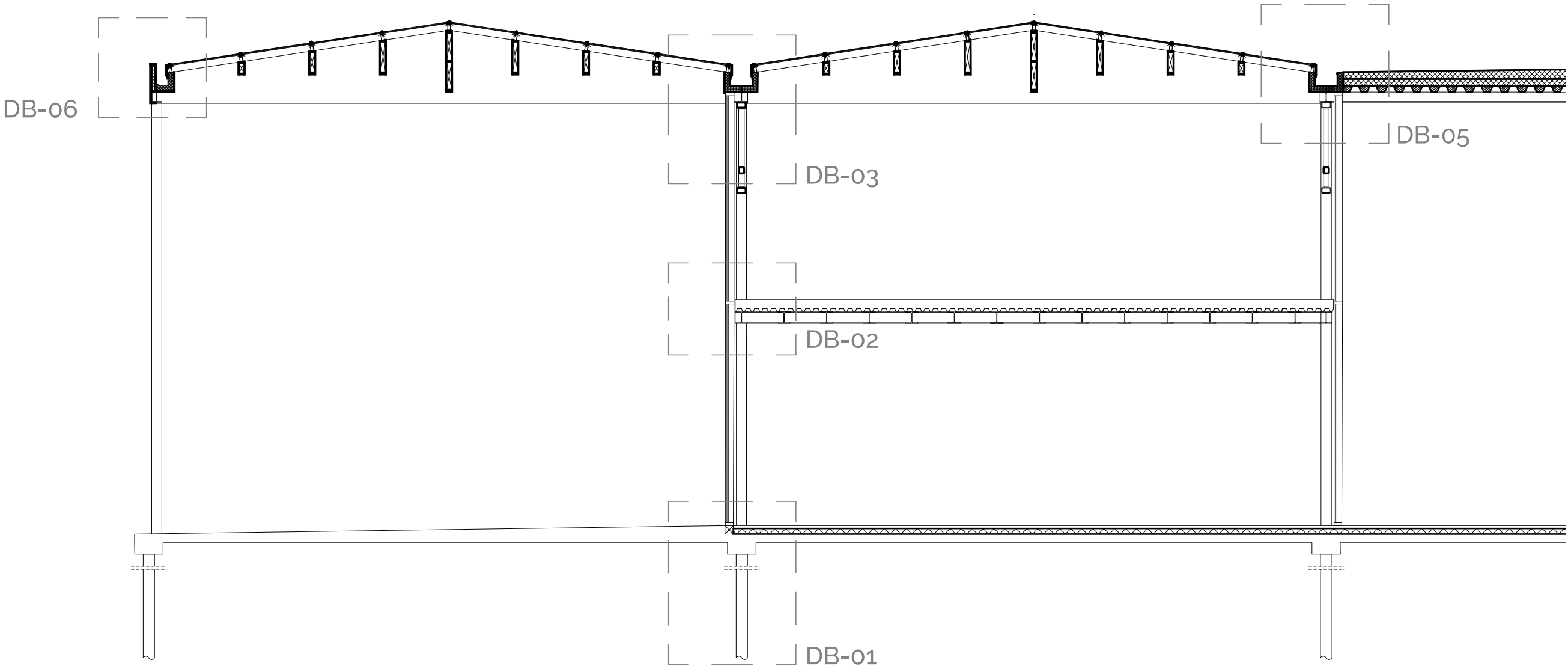


Climate - Rainwater



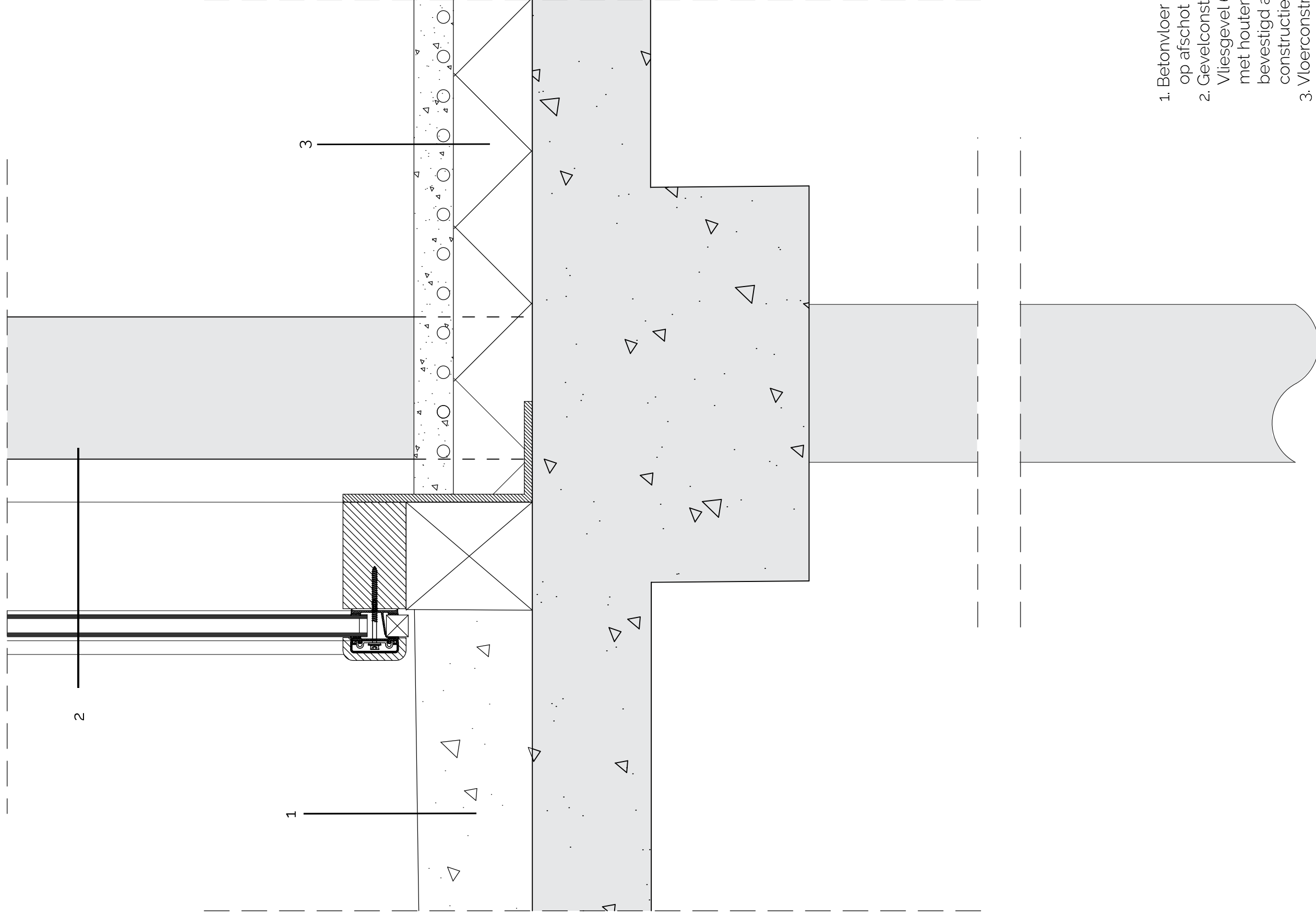
Fragment of south facade





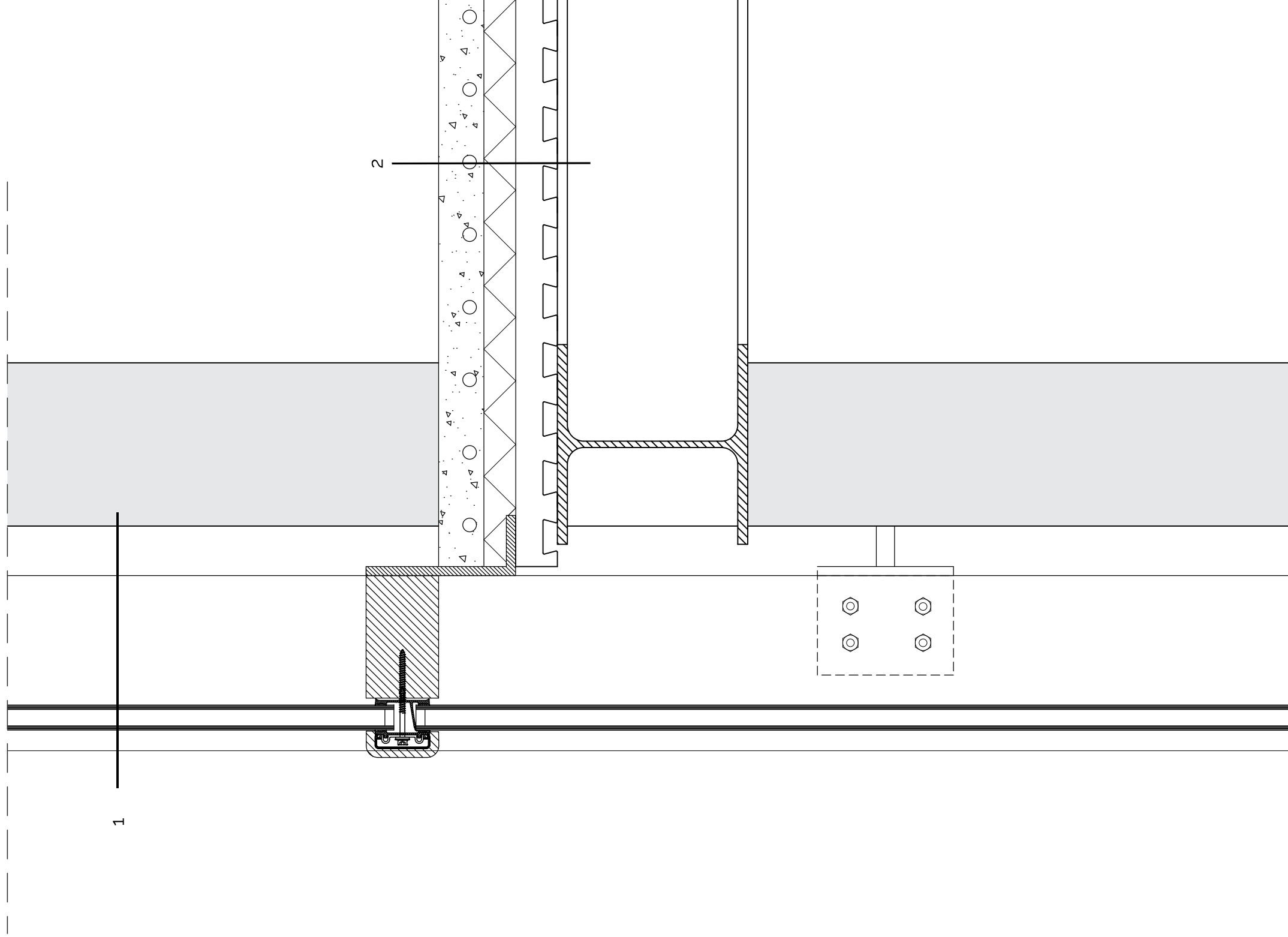
Detail B.1

Begane grond vloer
Schaal 1:5



1. Betonvloer 150 mm,
op afschot
2. Gevelconstructie:
Vliesgevel 6-12-6 mm
met houten stijlen en regels,
bevestigd aan bestaande
constructie
3. Vloerconstructie
Dekvloer 35 mm
Noppenplaat 18 mm
Isolatie 120 mm
Betonvloer 150 mm (best.)

Detail B.2
Verdiepingsvloer
Schaal 1:5

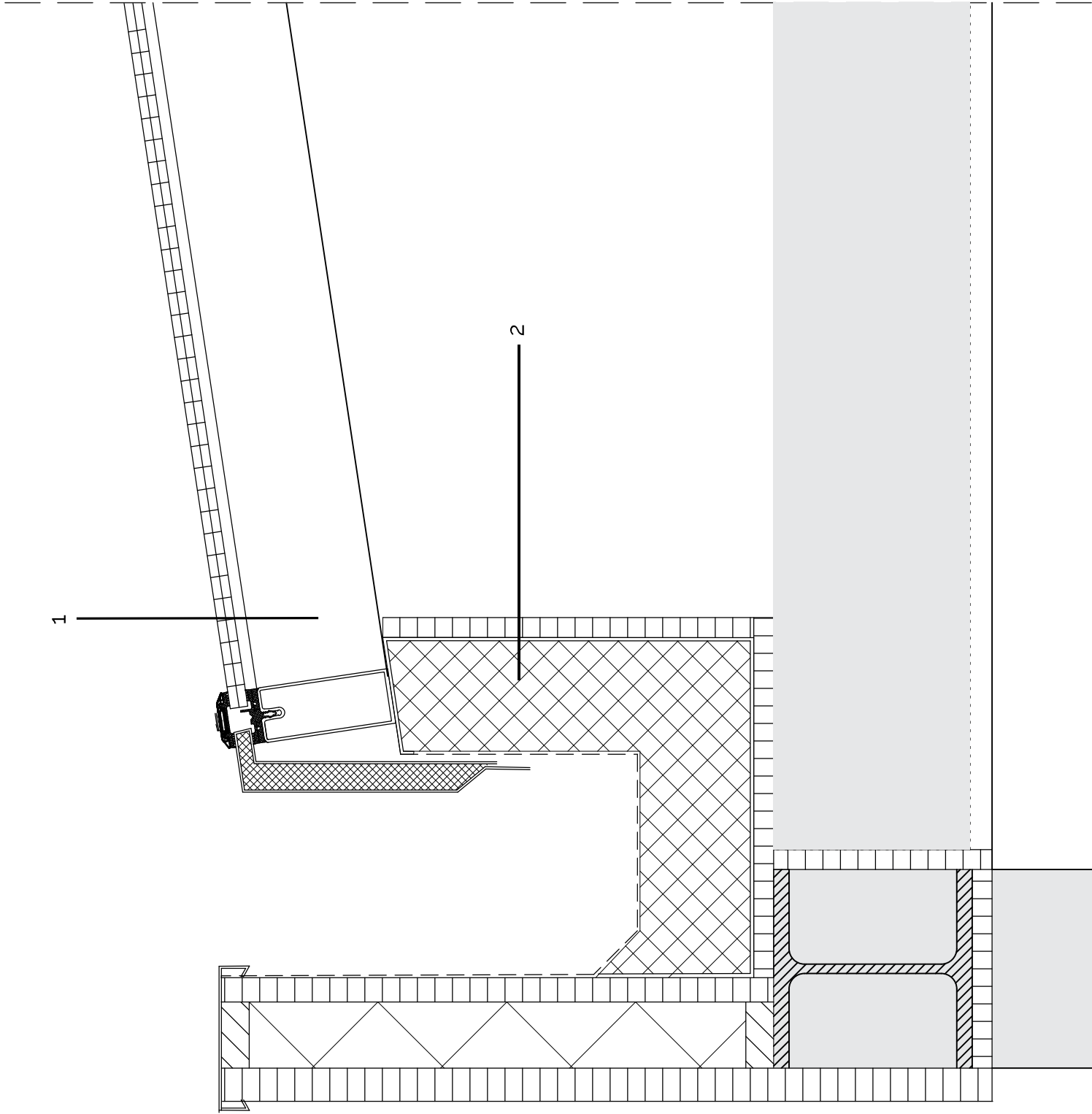


1. Gevelconstructie:
Vliesgevel 6-12-6 mm
met houten stijlen en regels,
bevestigd aan bestaande
constructie
2. Vloerconstructie:
Dekvloer 30 mm
Noppenplaat 18mm
Isolatie 35 mm
Zwaluwplaatbetonvloer
46 mm
HEA-200 liggers

Detail F.3

Dakrand

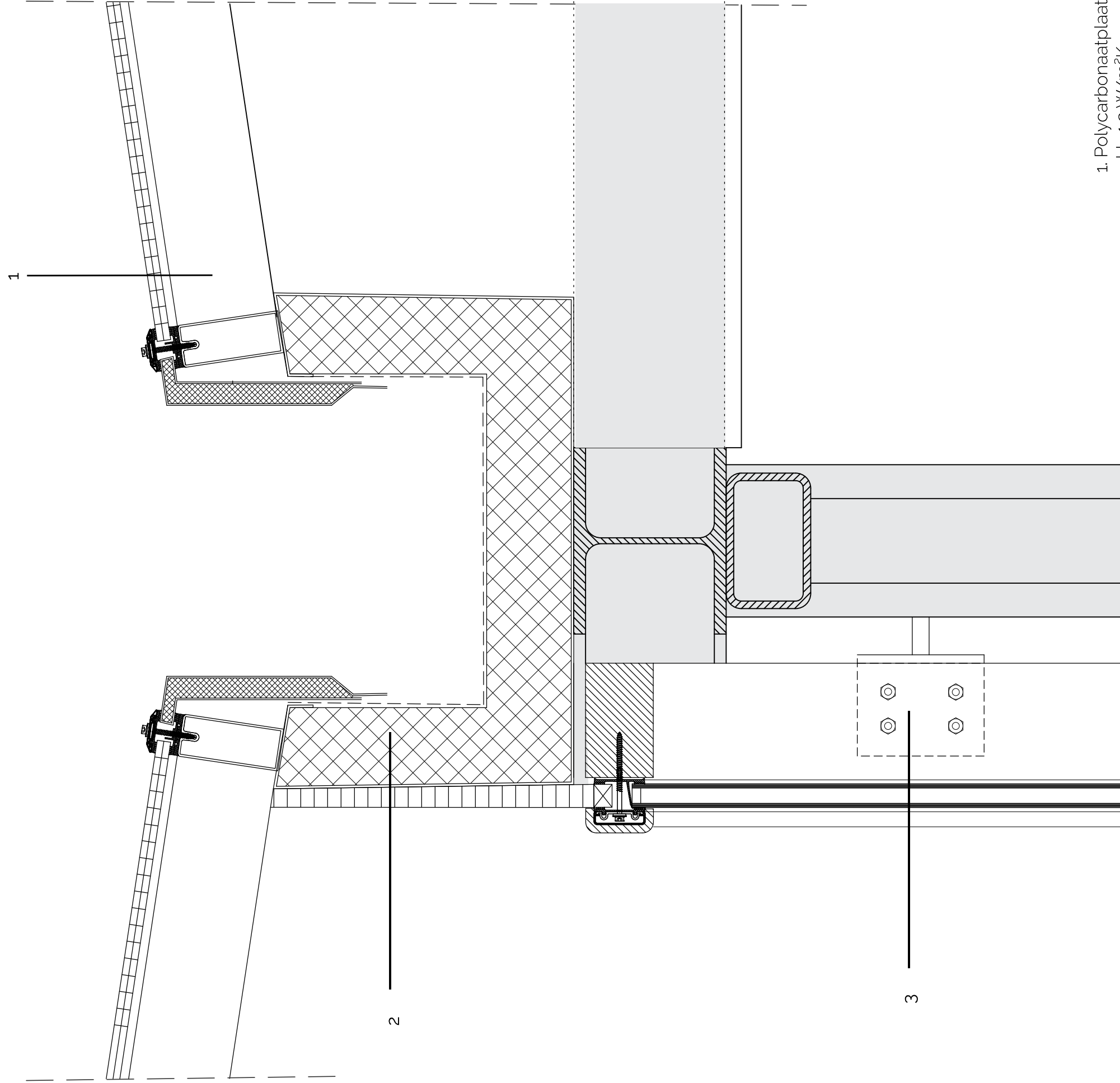
Schaal 1:5



- 1. Polycarbonaatplaat 16 mm
U= 1,2 W/m²K
Aluminium profielen,
50 mm breed
- 2. EPDM laag
Isolatieplaat 100 mm
Gebogen plaatstaal 3mm
Houten beplating 18 mm

Detail B.4

Aansluiting dak - gevel
Schaal 1:5

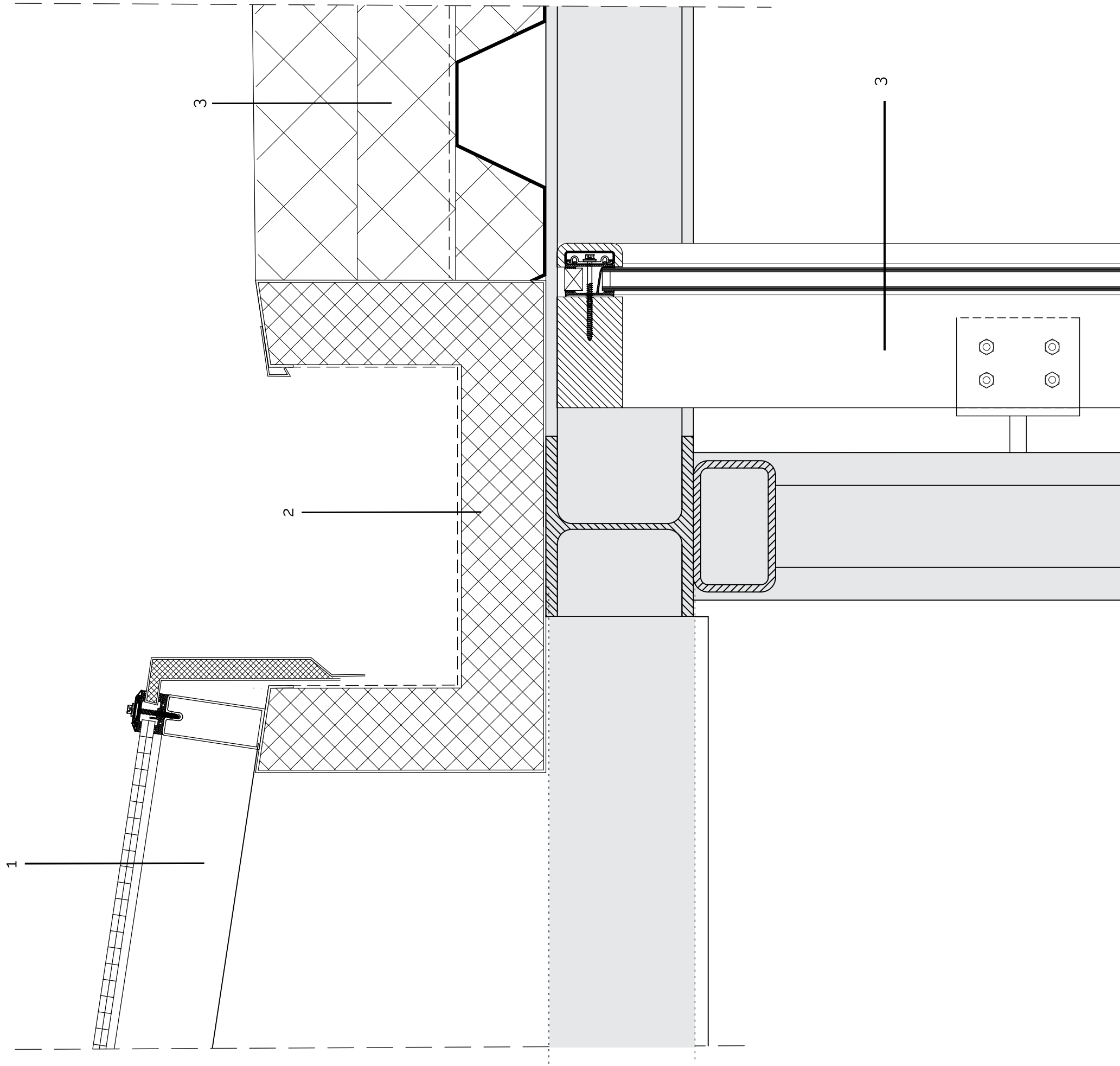


1. Polycarbonaatplaat 16 mm
 $U = 1,2 \text{ W/m}^2\text{K}$
Aluminium profielen,
50 mm breed
2. EPDM laag
Isolatieplaat 100 mm
Gebogen plaatstaal 3mm
Houten beplating 18 mm
3. Gevelconstructie:
Vliesgevel 6-12-6 mm
met houten stijlen en regels,
bevestigd aan bestaande
constructie

Detail B.5

Overgang open - gesloten
dak

Schaal 1:5



1. Polycarbonaatplaat 16 mm
U= 1,2 W/m²K
Aluminium profielen,
50 mm breed
2. EPDM laag
Isolatieplaat 100 mm
Gebogen plaatstaal 3mm
3. Greenhouse wand
Vliesgevel 6-12-6 mm met
houten stijlen en regels,

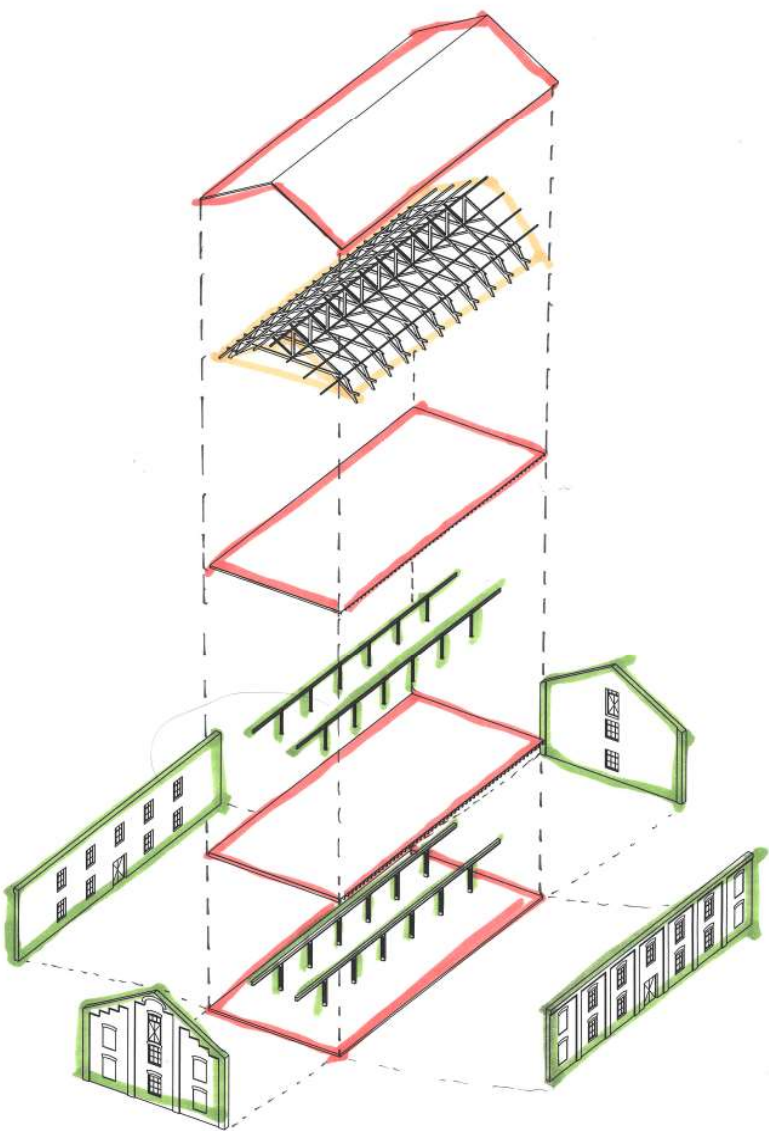
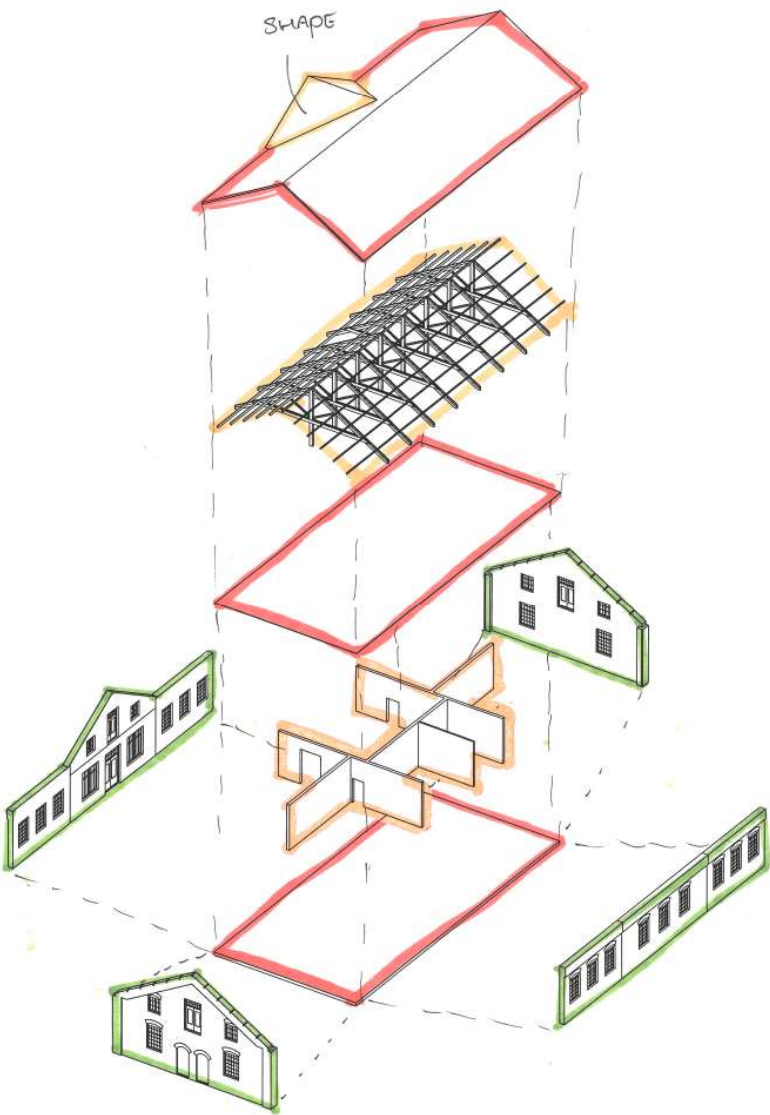
- bevestigd aan bestaande
constructie
4. Dakconstructie
Bitumen 5mm
Isolatie 120 mm op afschot
Isolatie 120 mm
Dampremmende laag
Metaldeck gevuld met
akoestische isolatie



Current situation



Cultural value



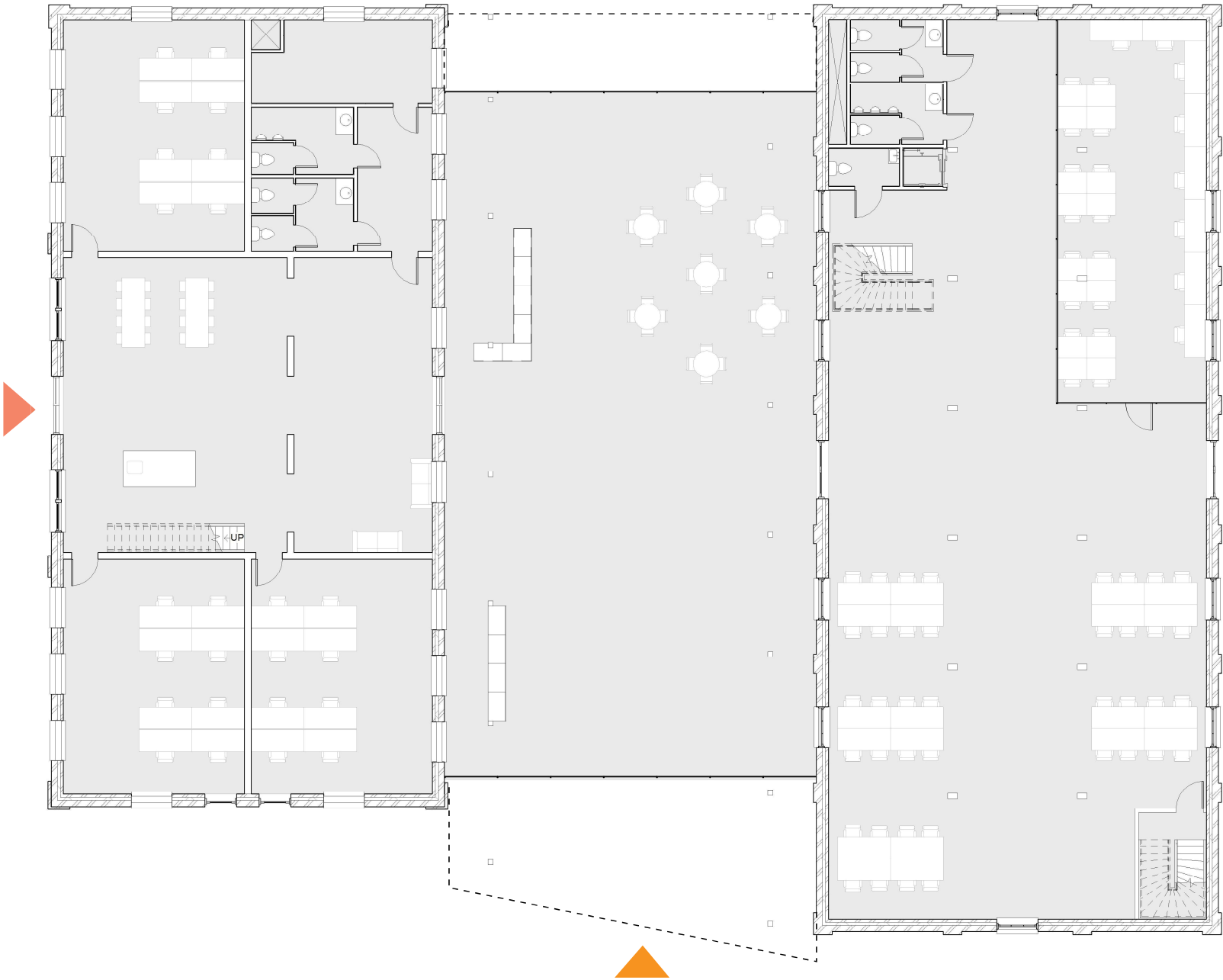
- Maintain
- Maintain if possible
- Little significance

New situation

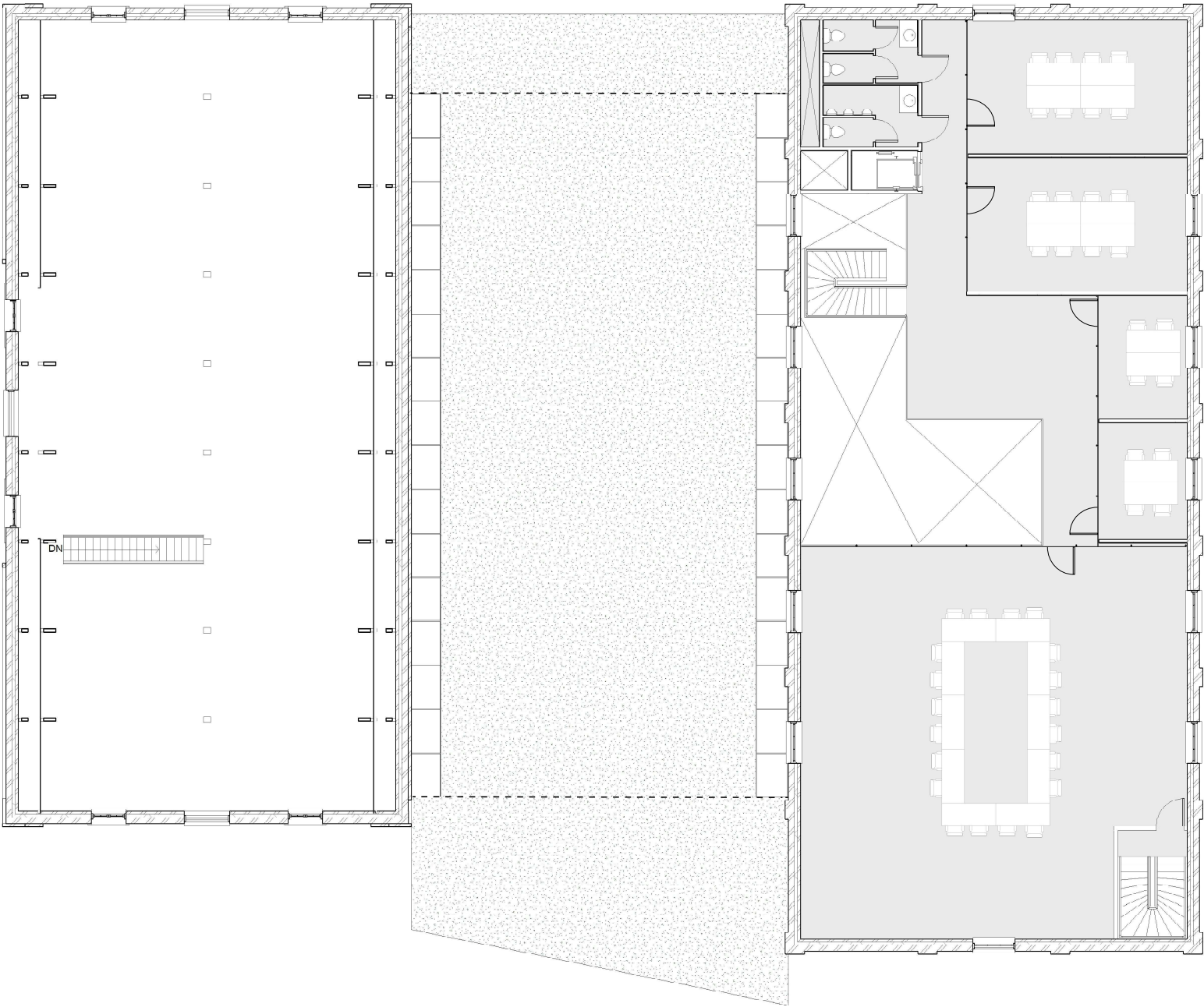




Ground floor
1:200



First floor
1:200

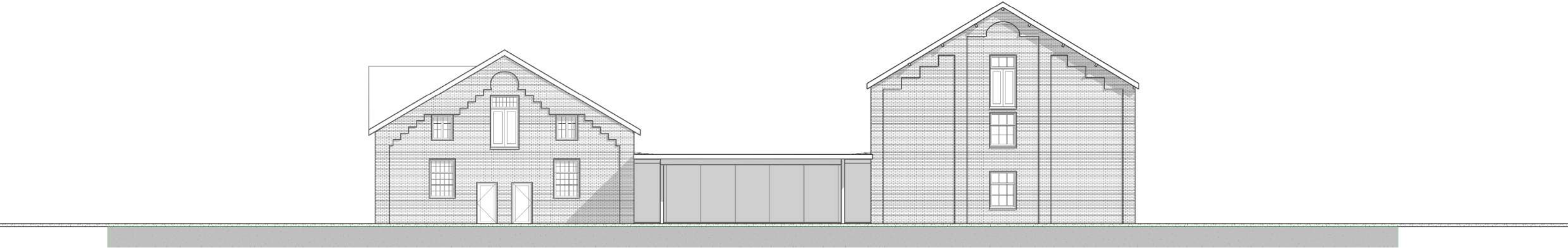




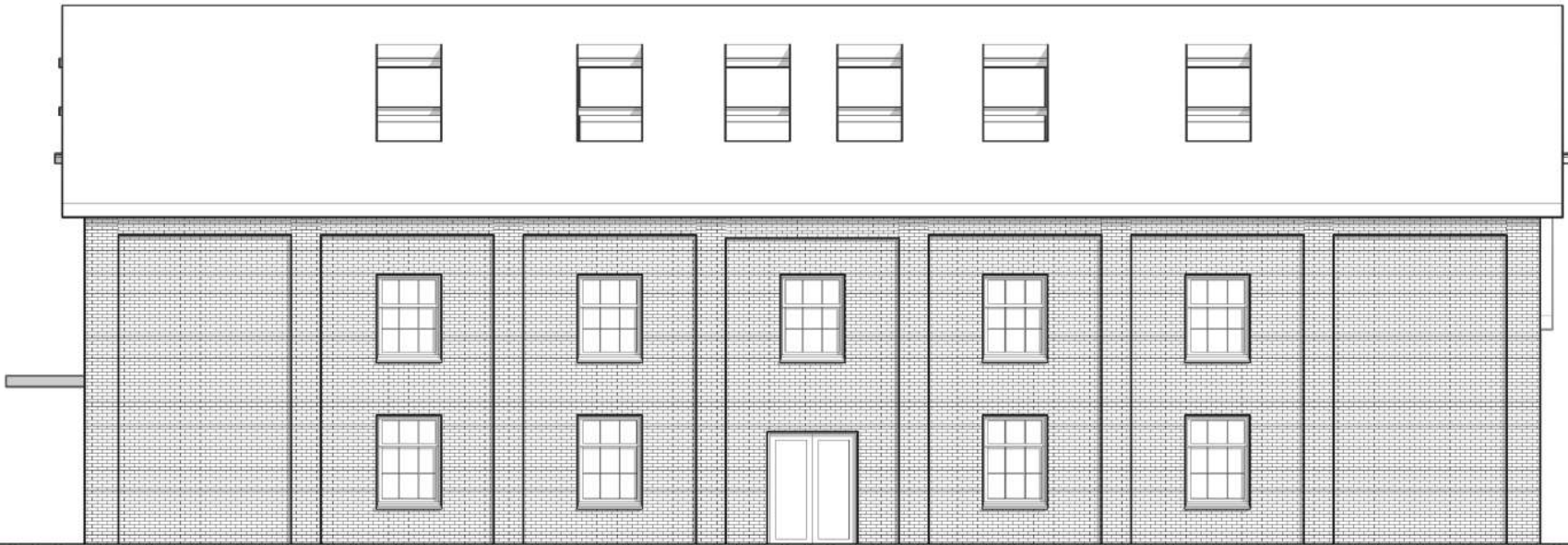




South Elevation
1:200



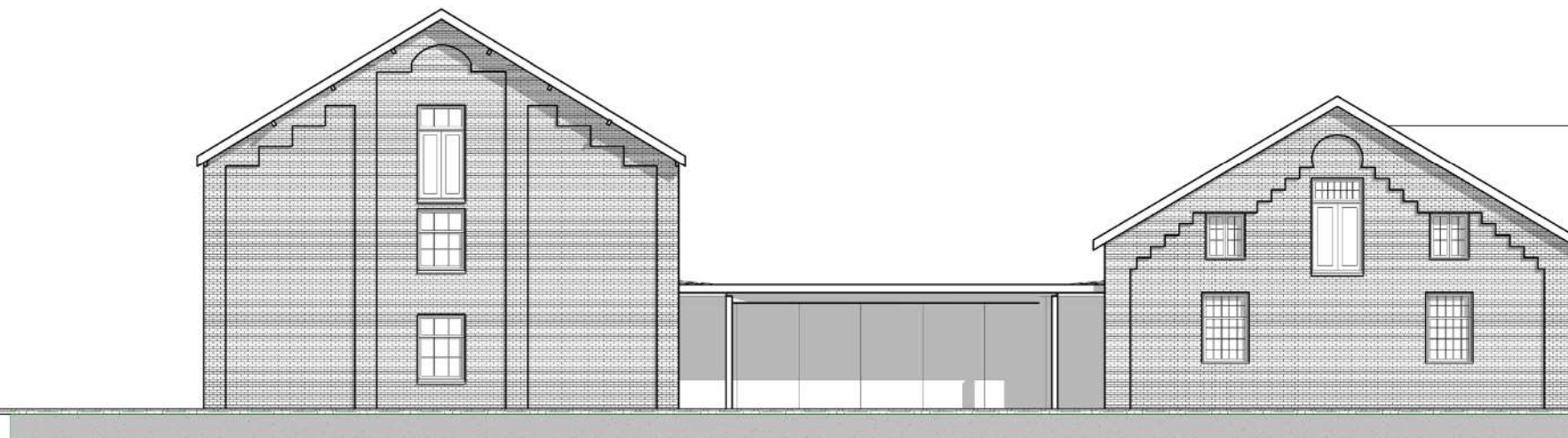
East elevation
1:200



BUILDINGS 69 & 85

North elevation

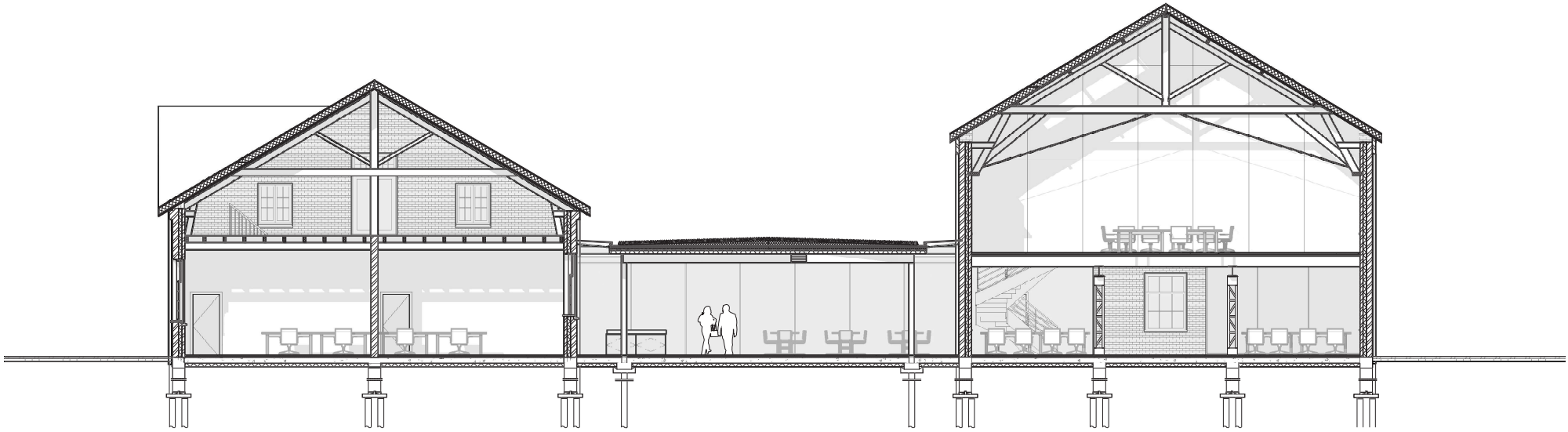
1:200



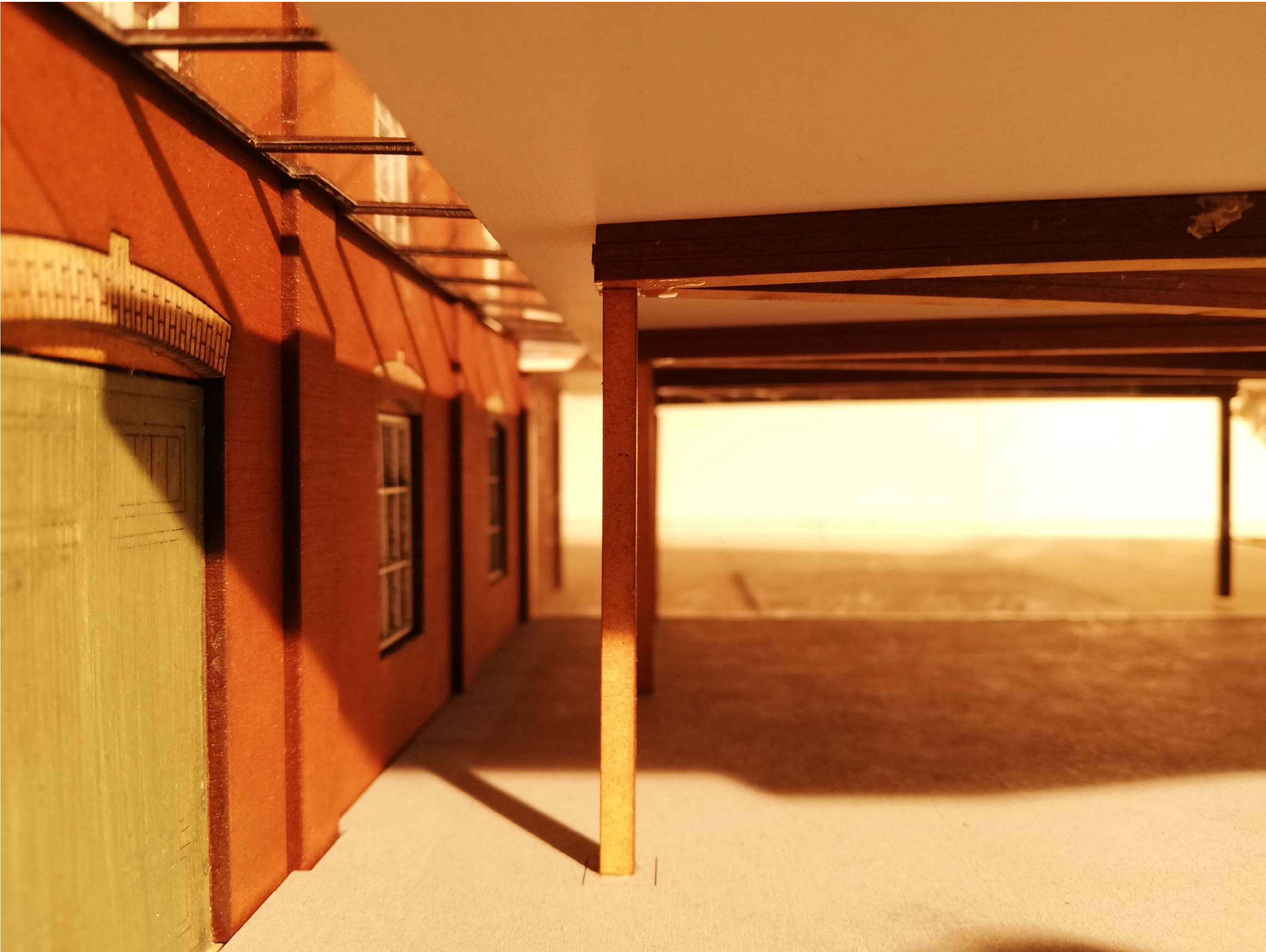
West elevation
1:200



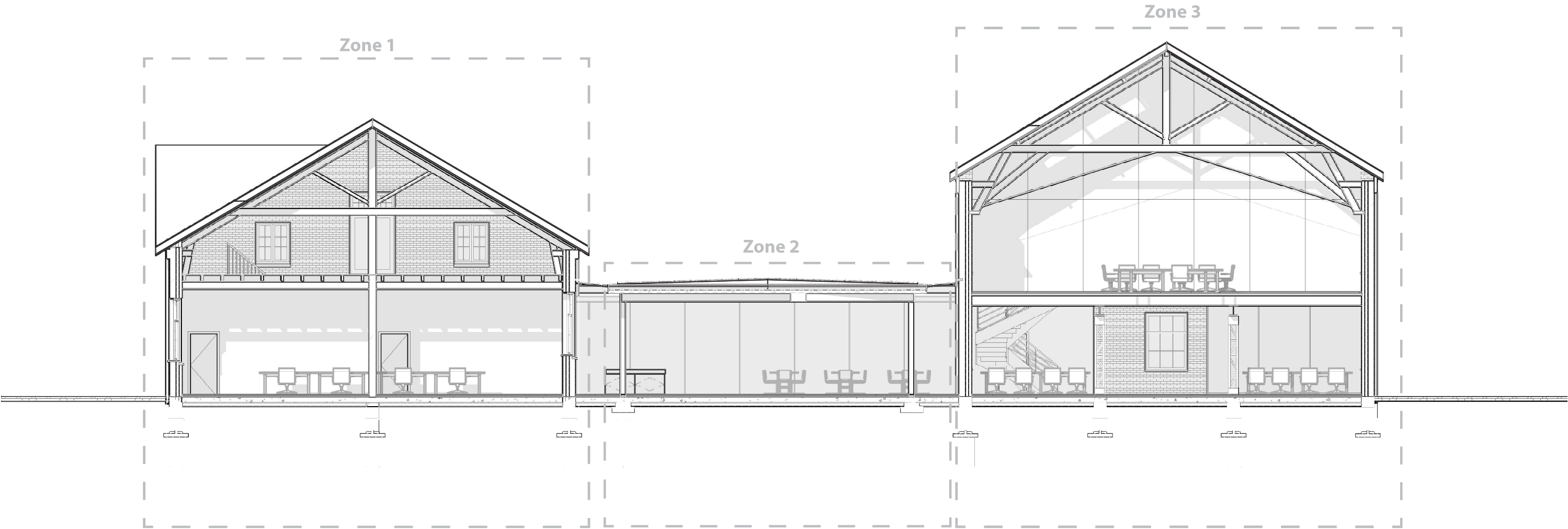
Cross section
1:200



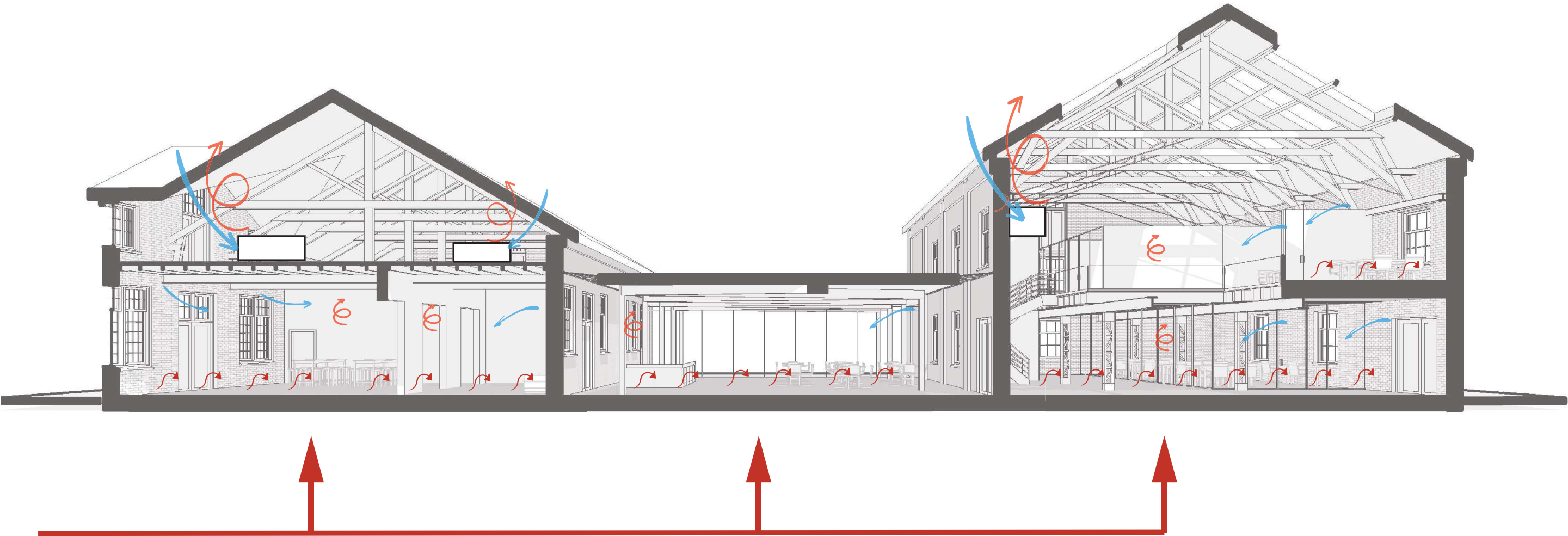




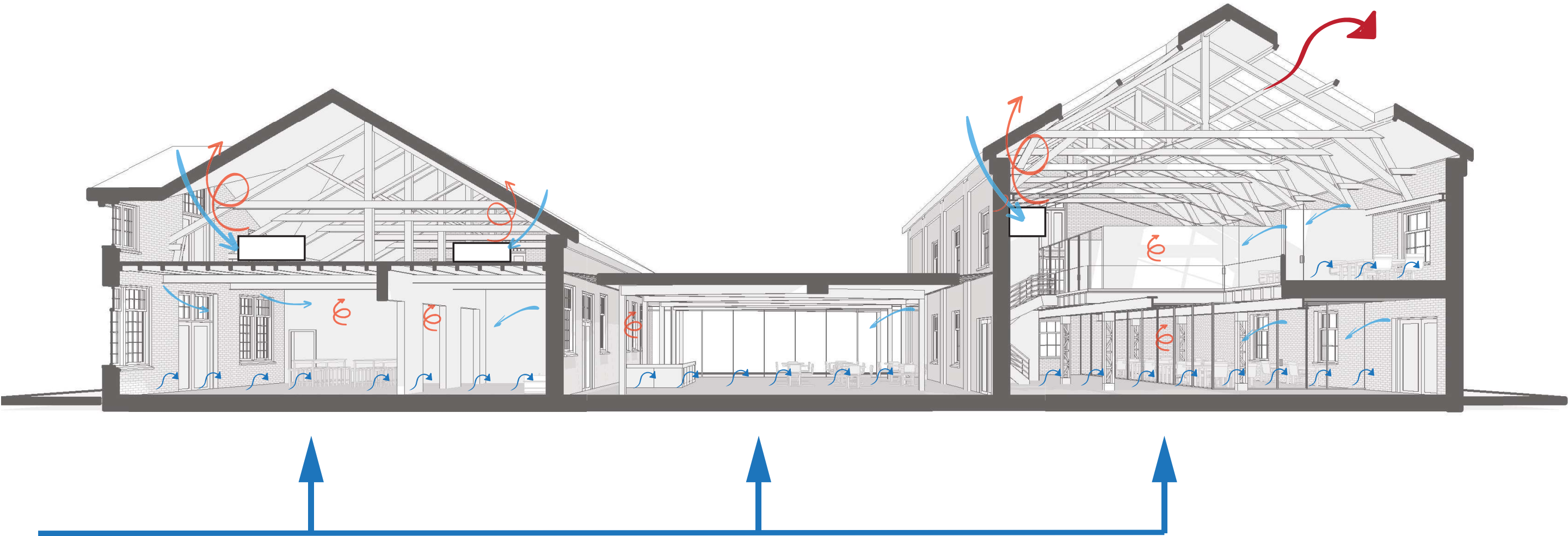
Climate - heating/cooling

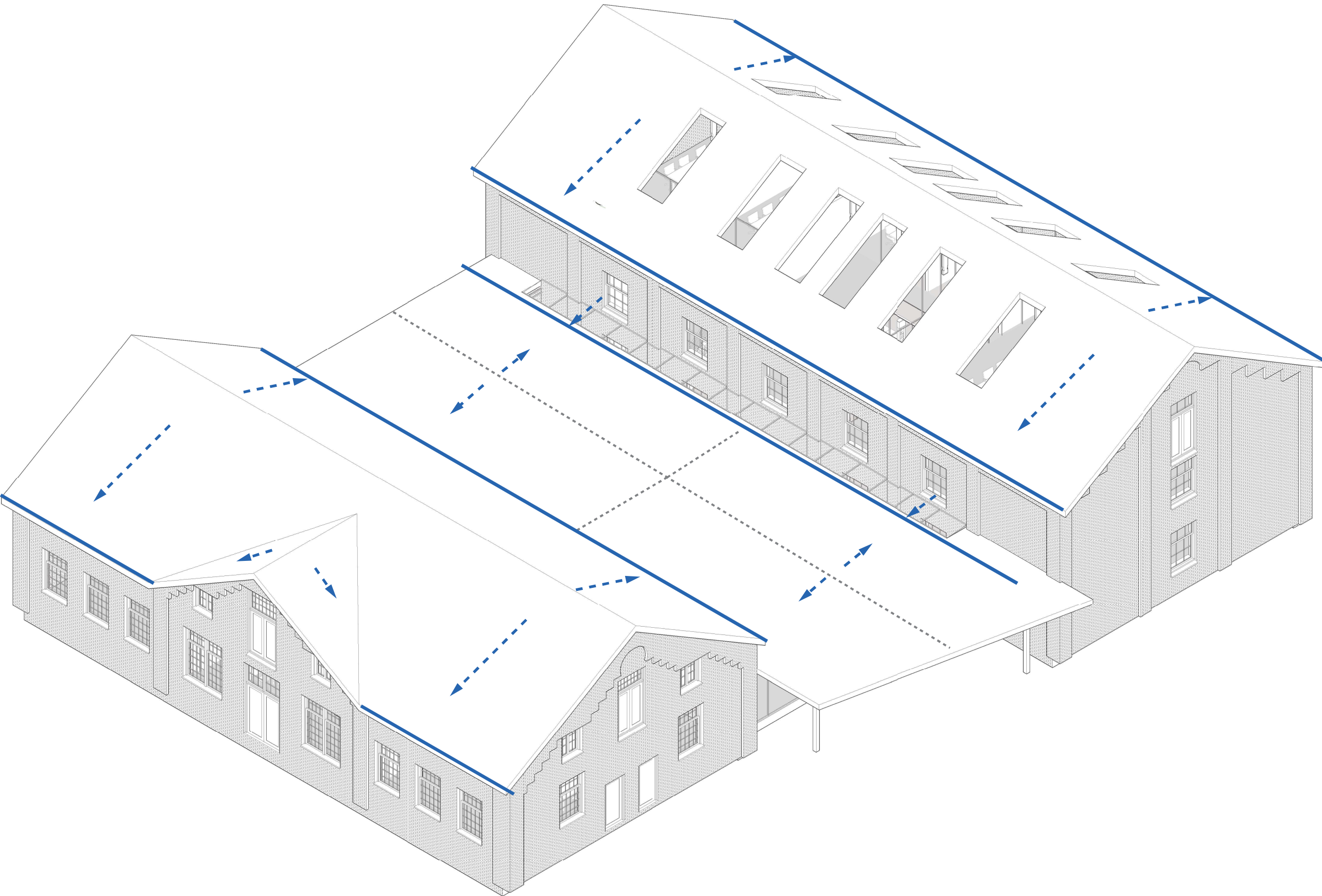


Climate - winter

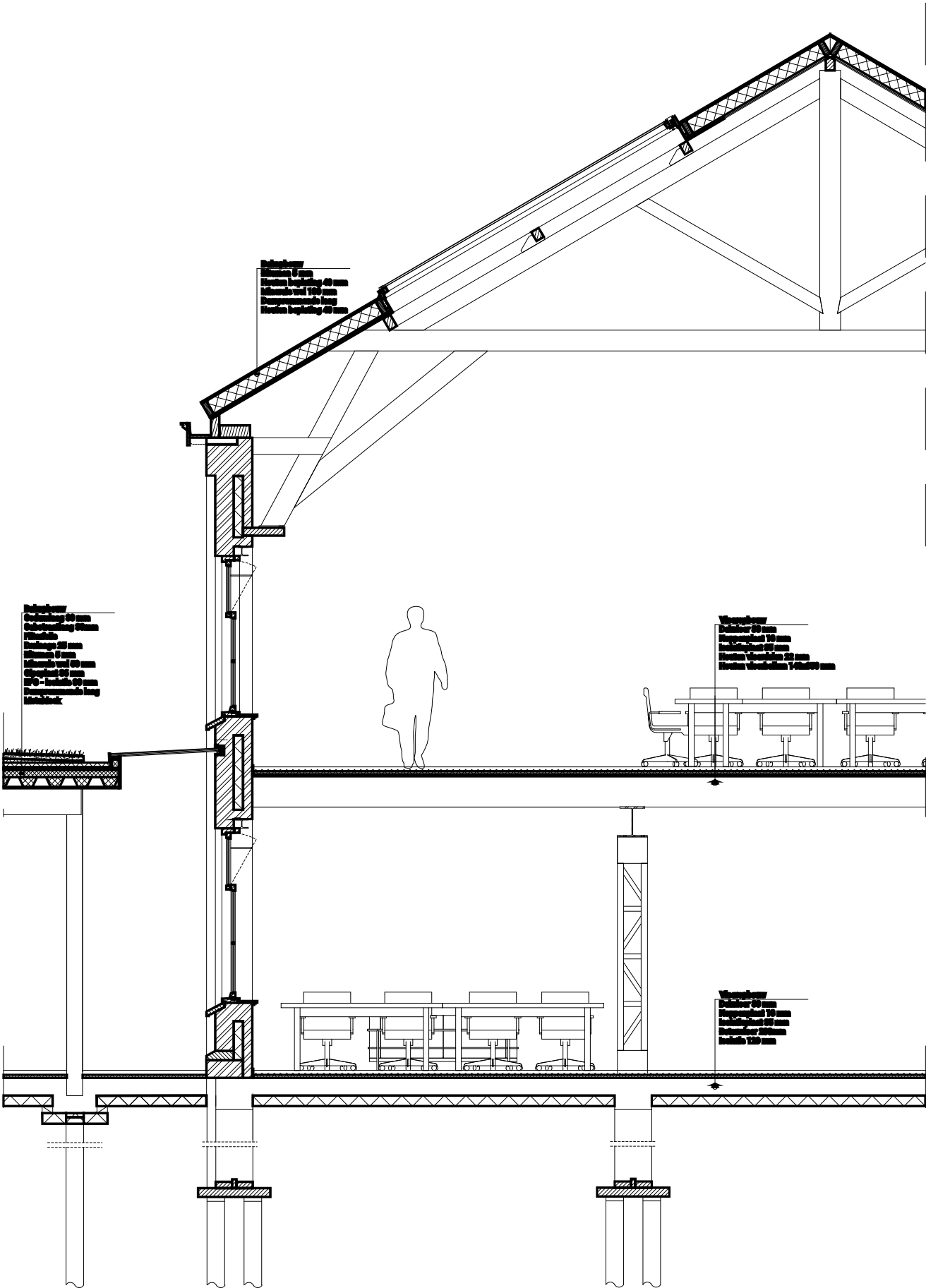
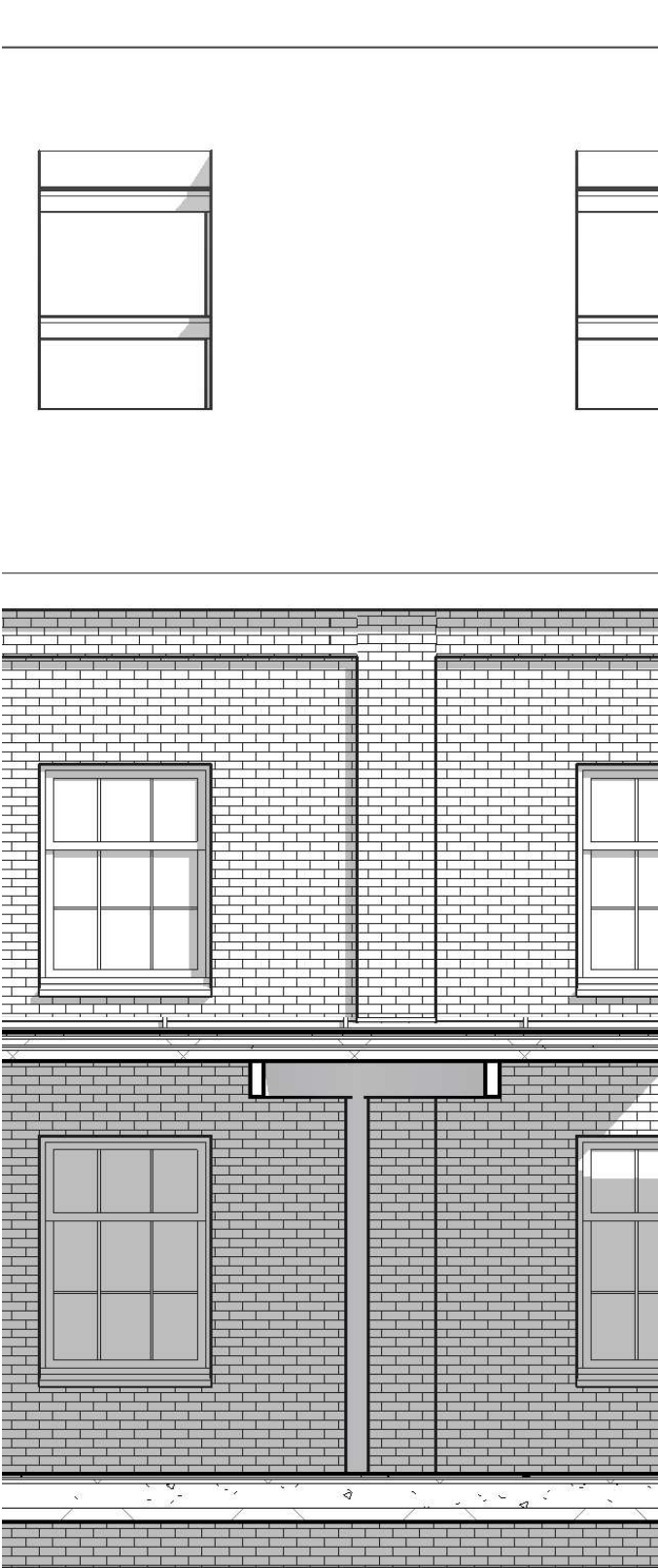


Climate - summer

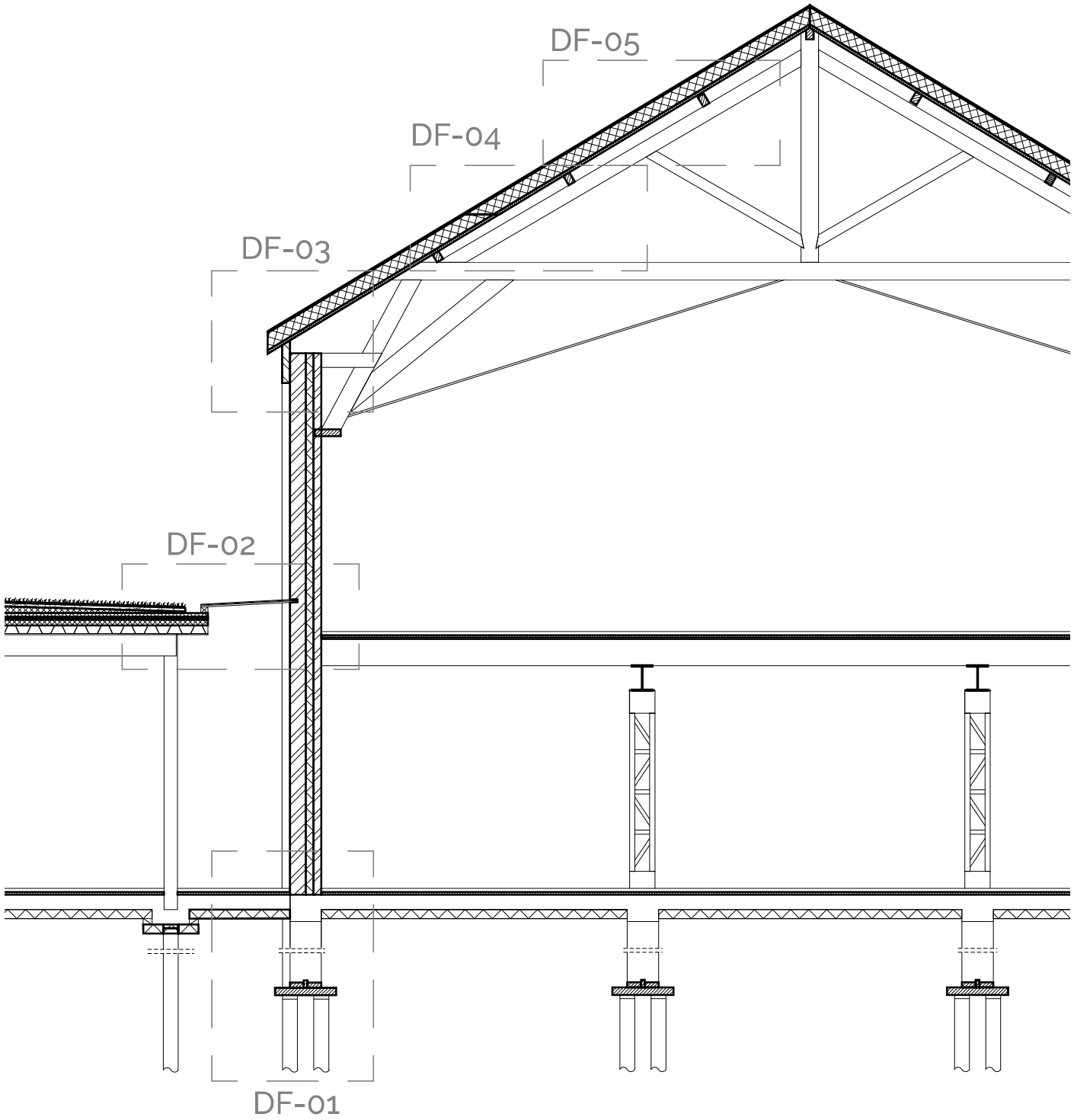




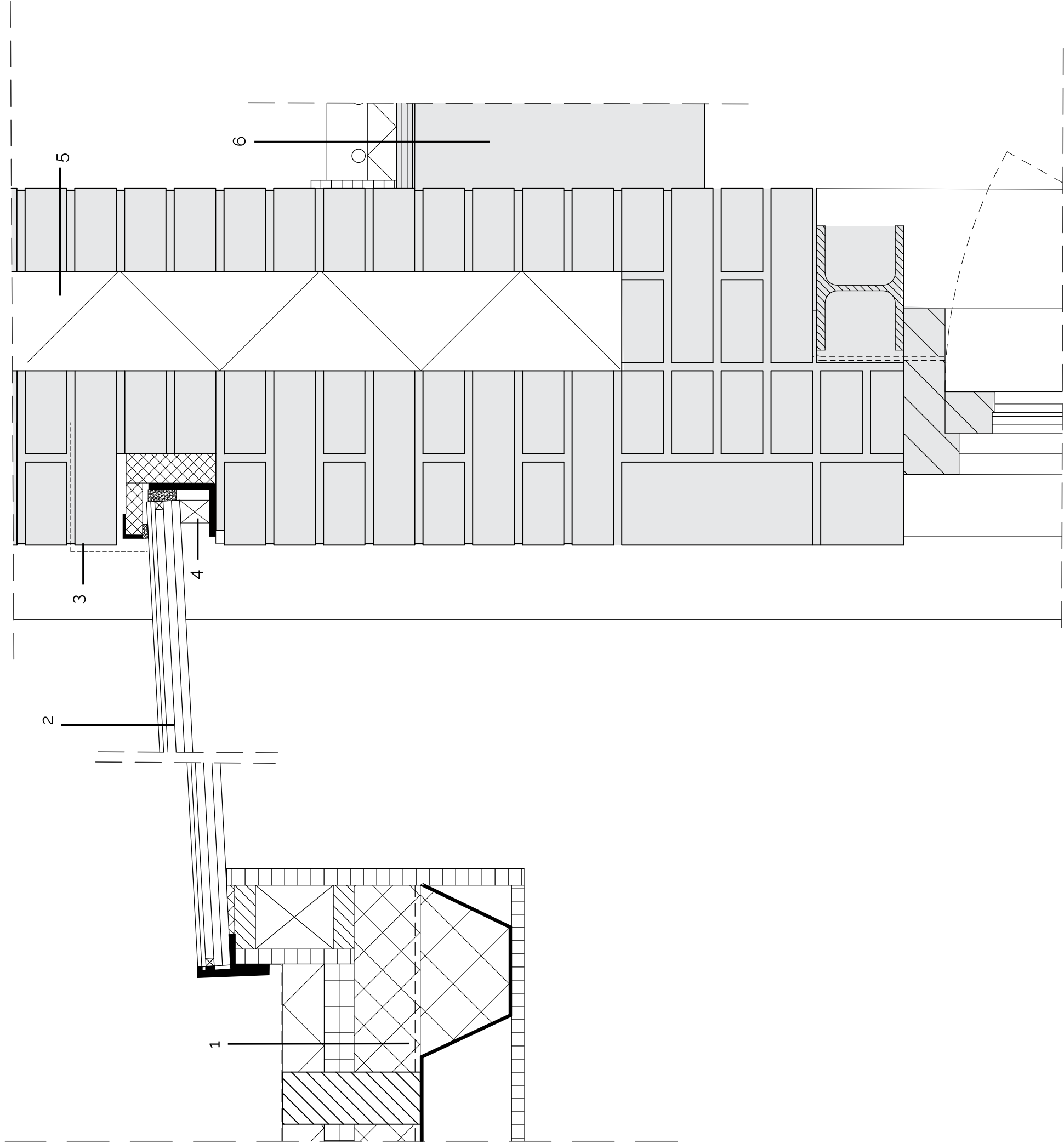
Fragment of the west facade of the big farm



Detail overview



Detail F.2
Aansluiting oud-nieuw
Schaal 1:5

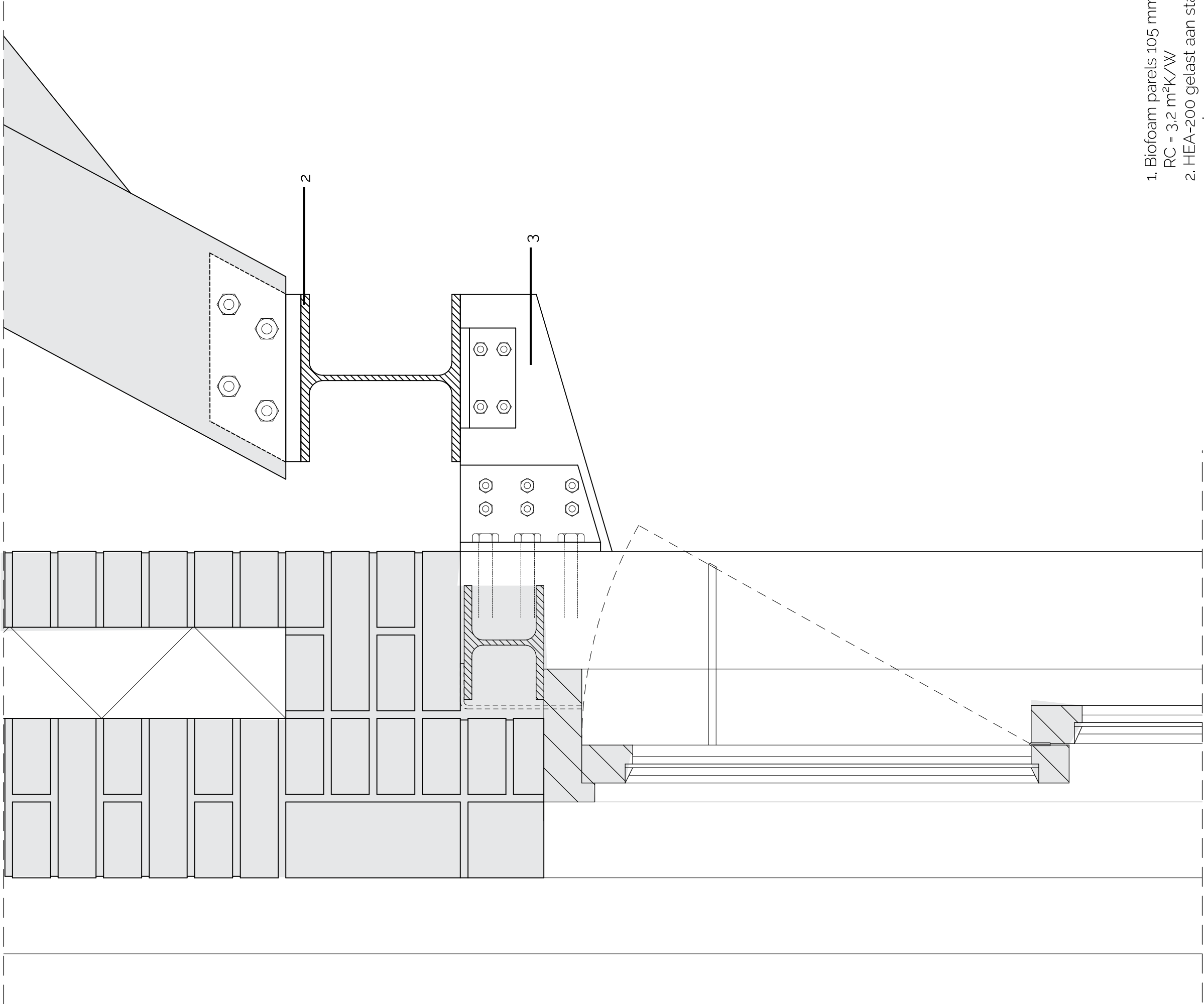


1. Dakconstructie
Bitumen 5 mm
Minerale wol 50 mm
Gipsplaat 36 mm
EPS 80mm
Houten balklaag 160x 63 mm
Dampremmende laag
Metaldeck opgevuld met akoestische isolatie
Akoestische gipsplaat 18 mm

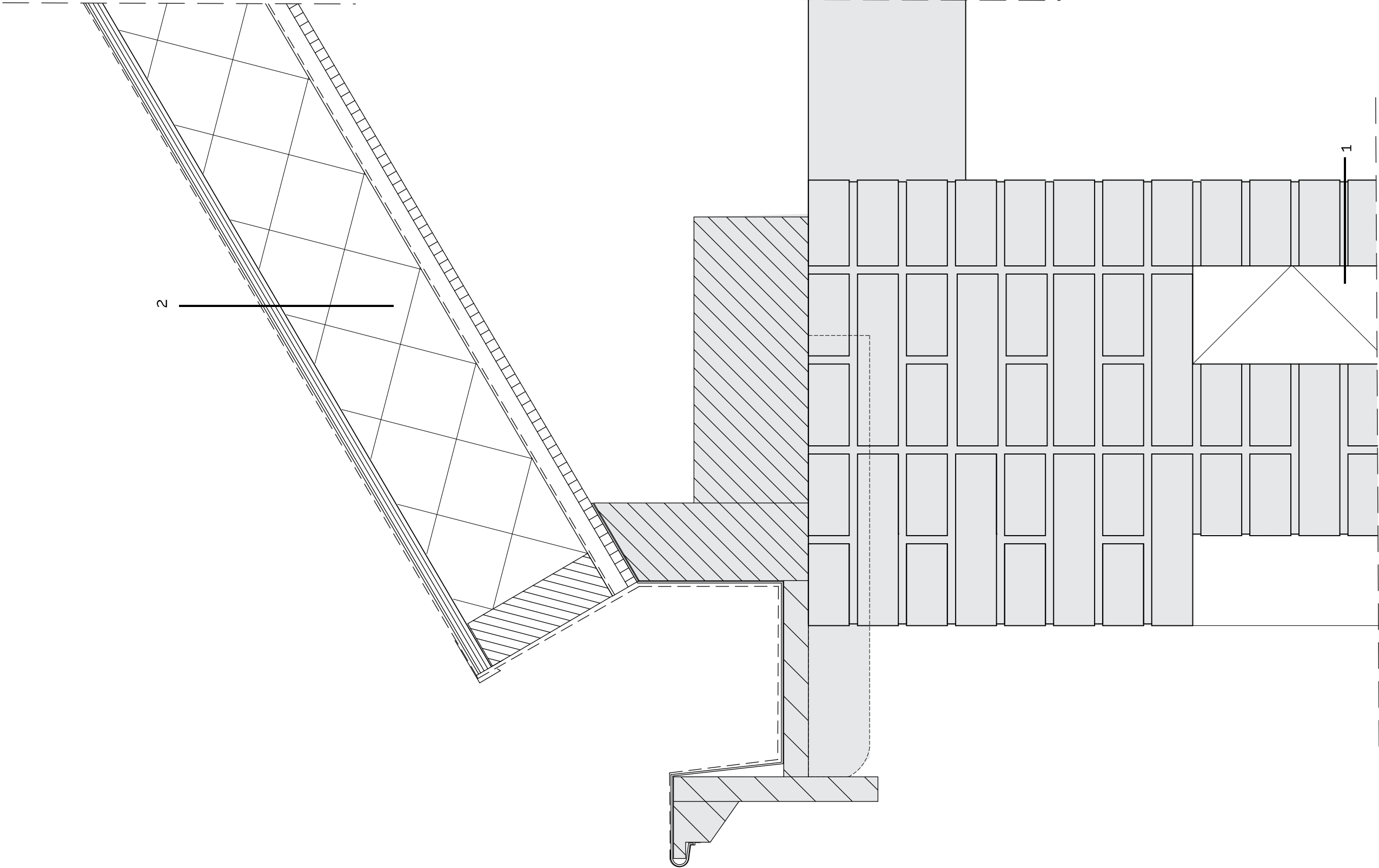
2. Lichtstraat; geïsoleerd + incidenteel beloopbaar glas, tweezijdig opgelegd in siliconenkit
3. Hoeklijn 80.65.8 gebogen in radius gevel, chemisch verankerd in metaalwerk
4. Loodslabbe, inslijpen in bestaande voeg
5. Biofoam parels 105 mm
RC = 3,2 m²K/W

6. Vloerconstructie
Dekvloer 30 mm
Noppenplaat 18 mm
Isolatie 35 mm
Houten vloerbalken 140 x 350 mm (best.)
Houten vloerdelen 22 mm (best.)

Detail F.3
Aansluiting dakconstructie
Schaal 1:5

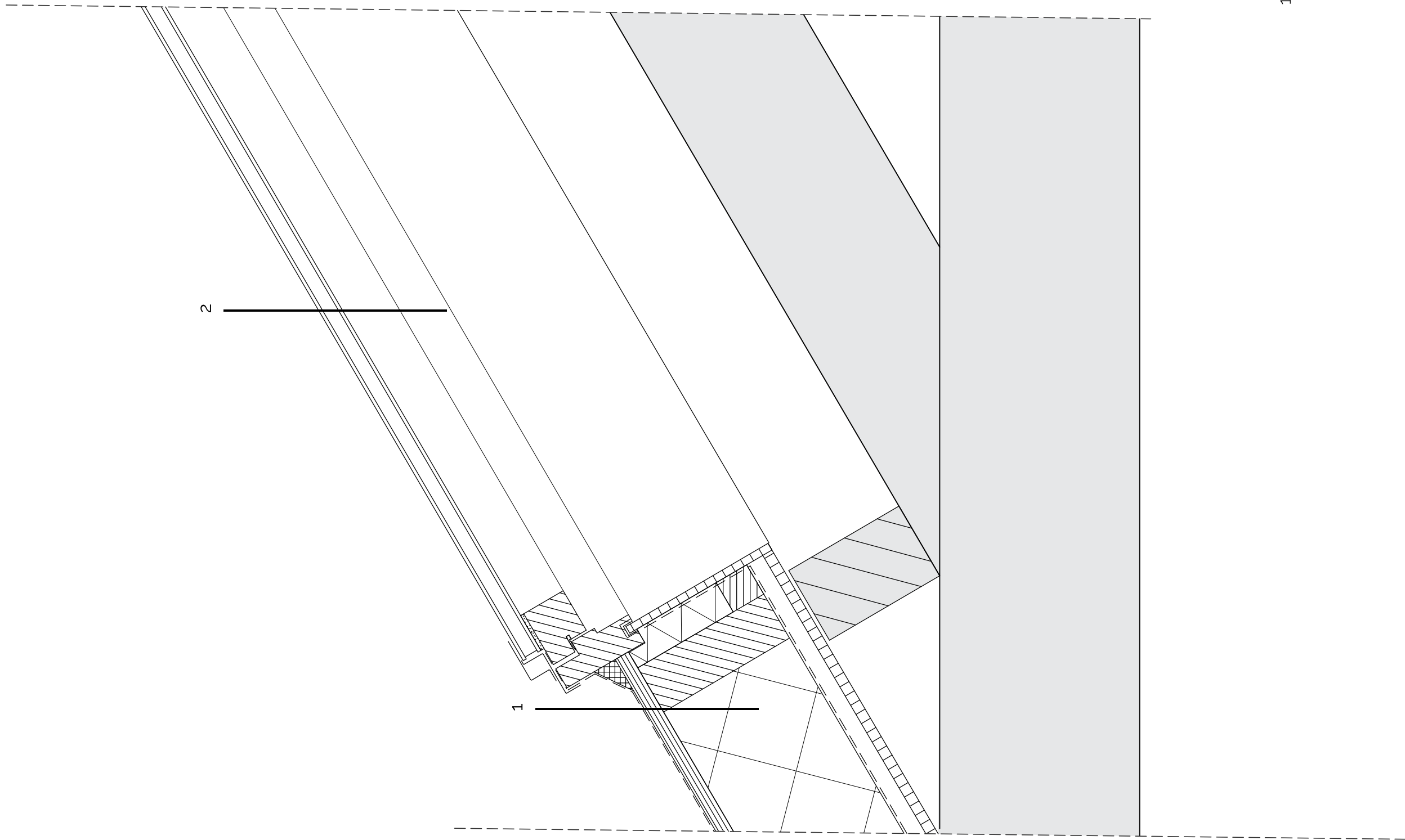


Detail F.4
Aansluiting dak - gevel
Schaal 1:5



- 1. Biofoam parels 105 mm
RC = 3,2 m²K/W
- 2. Dakconstructie
Bitumen 5 mm
Houten beplating 40 mm
Minerale wol 180 mm
Balklaag 63x175 mm
Dampremmende laag
Akoestische gipsplaat 18mm

Detail F.5
Onderaansluiting
dakraam
Schaal 1:5



1. Bakconstructie
Bitumen 5 mm
Houten beplating 40 mm
Minerale wol 180 mm
Balklaag 63x175 mm
Dampremmende laag
Akoestische gipsplaat 18mm
2. Velux dakraam

Detail F.6

Boven aansluiting
dakraam
Schaal 1:5

