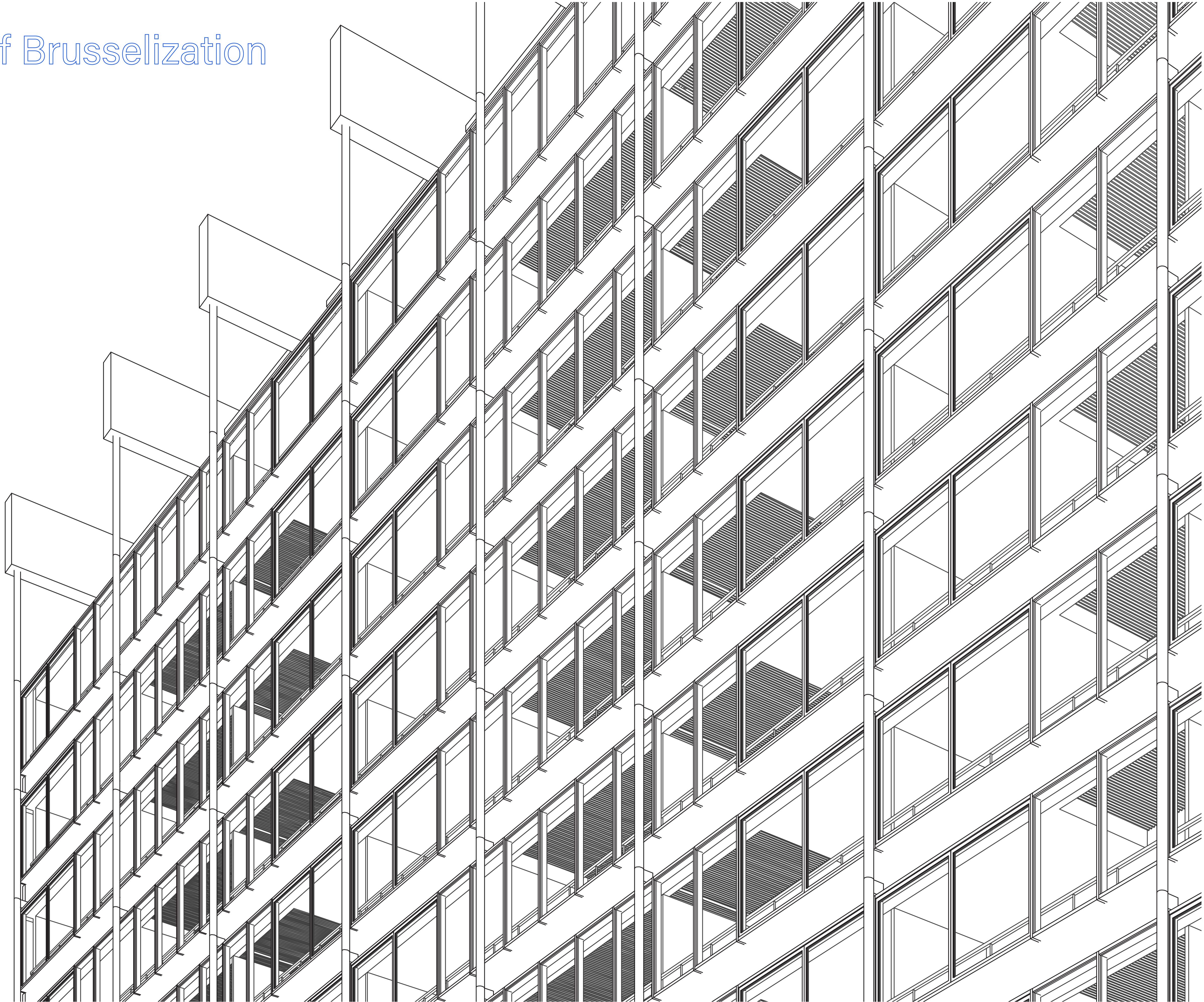


On the frontline of Brusselization

P5

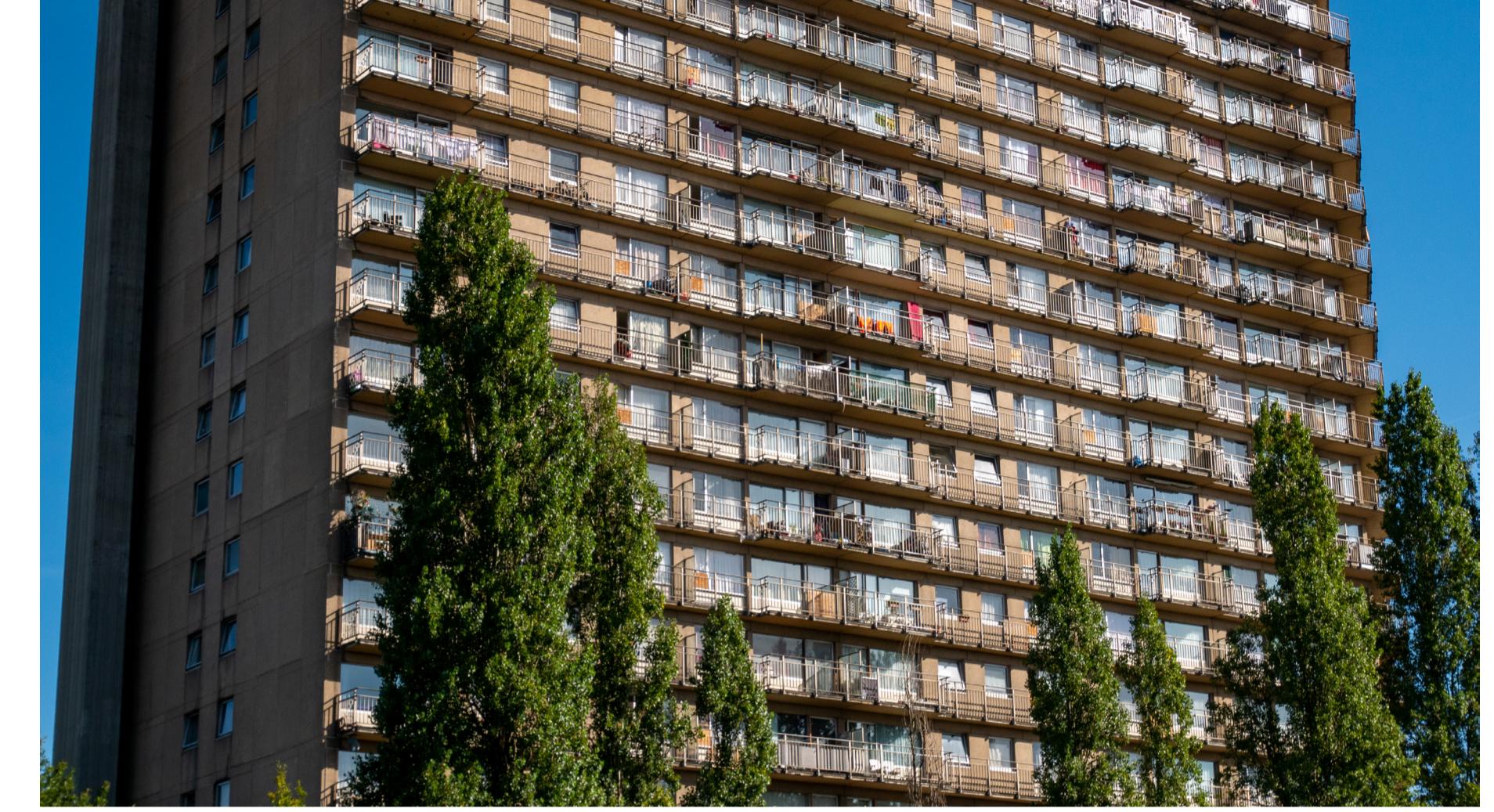


SPOLIA

BJARNE VAN DER DRIFT

DESIGN STUDIO URBAN ARCHITECTURE

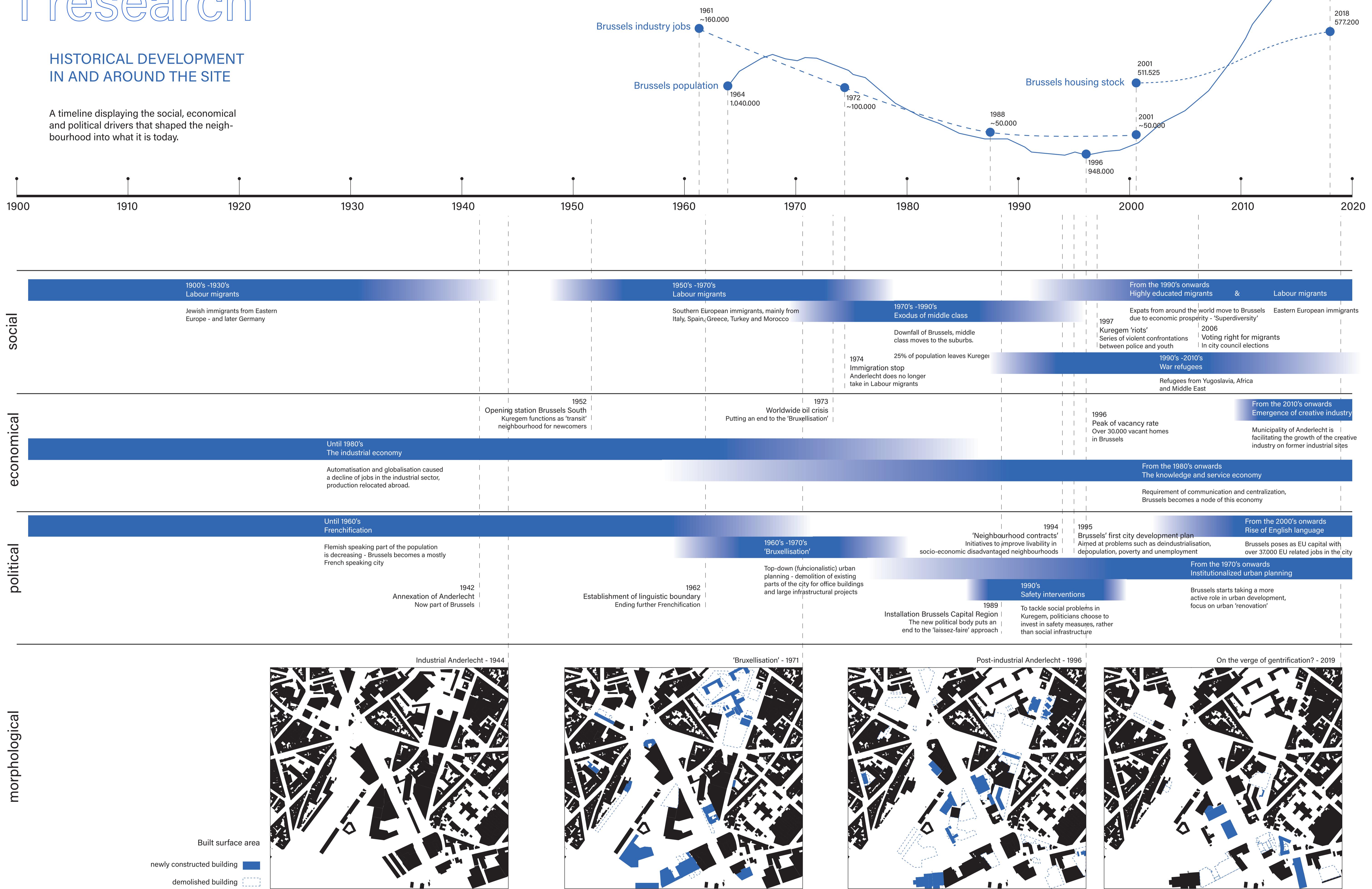
SITE & PROJECT AREA: LES GOUJONS, ANDERLECHT, BRUSSELS



1 research

HISTORICAL DEVELOPMENT IN AND AROUND THE SITE

A timeline displaying the social, economical and political drivers that shaped the neighbourhood into what it is today.



CONFICTING CONSTRUCTS - FREMDKÖRPER OR NOT?



Noordwijk / Quartier Nord



Residence Pacific



Leopoldwijk / EU Quarter



De Brouckèreplein



La Dalle



European Parliament

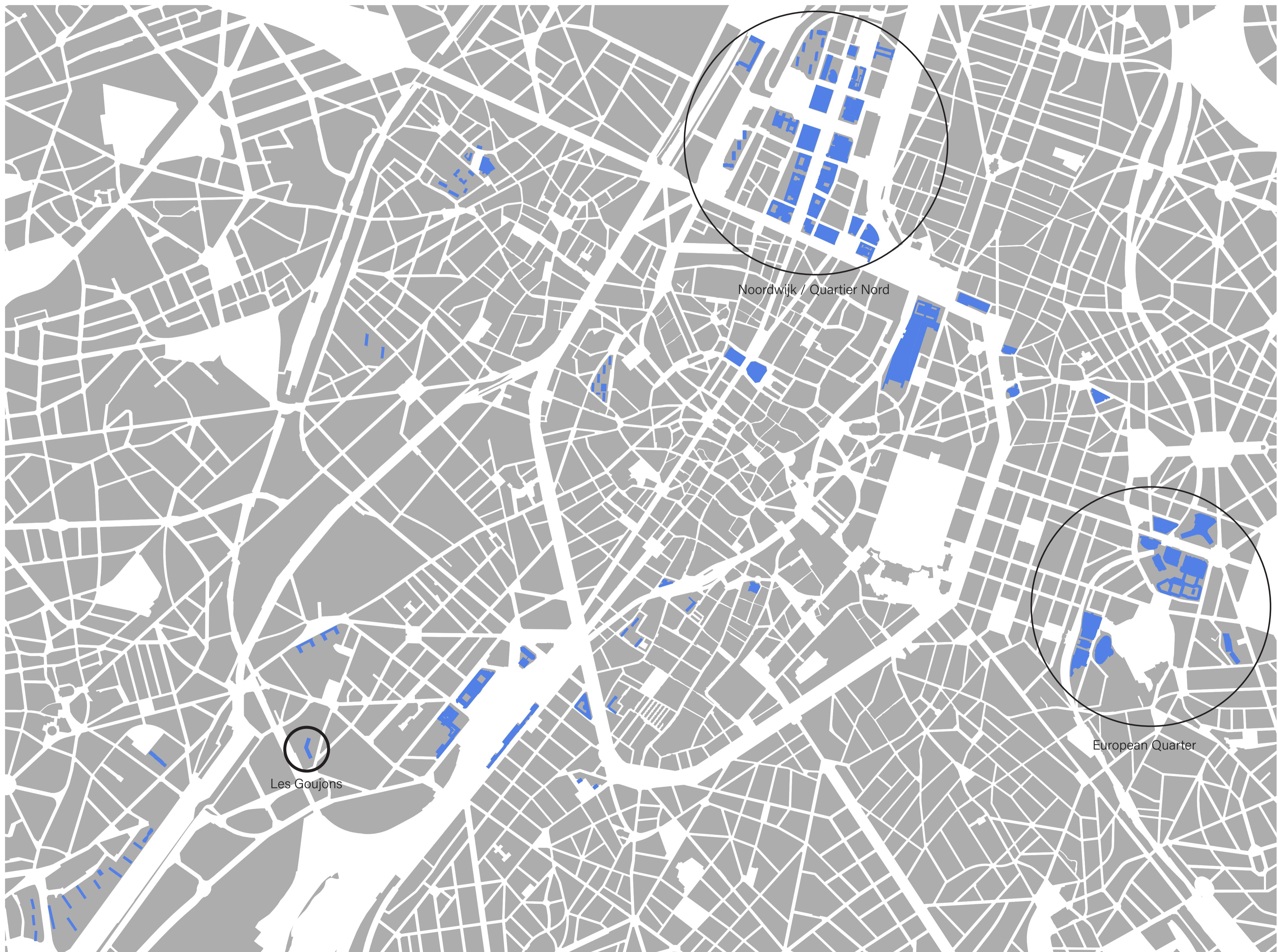


Zuidertoren / Tour du Midi



Les Goujons

CONFLICTING CONSTRUCTS - FREMDKÖRPER OR NOT?



MAKING A CITY WITH WORDS - WAR & CRIME ANALOGIES

"Shell-shocked"

"As destructive as a bombing"

"The urban trauma"

"Urban Villains"

"Quartier Nord, Quartier Mort"

"A crime against Brussels"

"Brutal attack on the urban fabric"

"Battle of the Marolles"

"Skieven Architek"

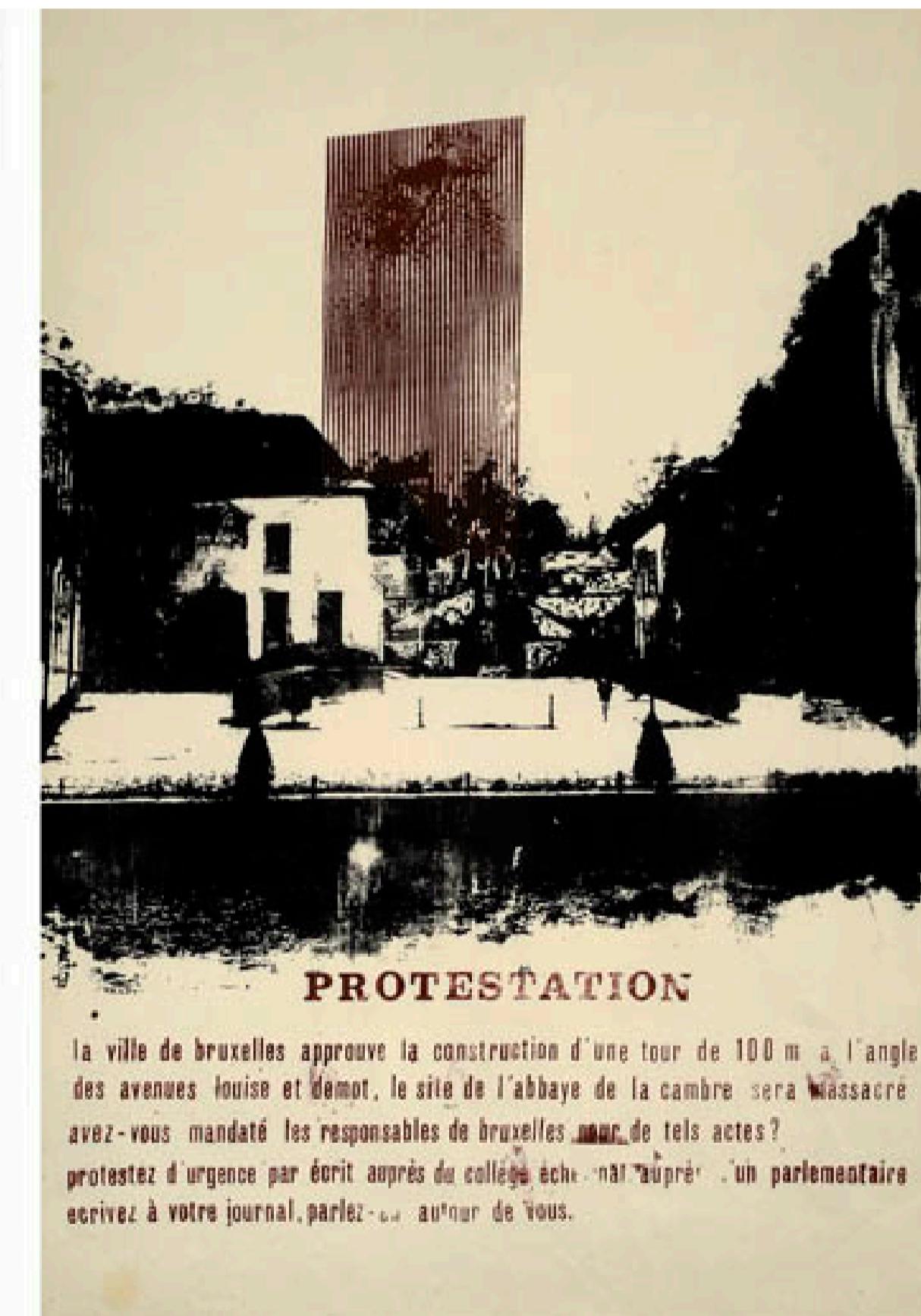
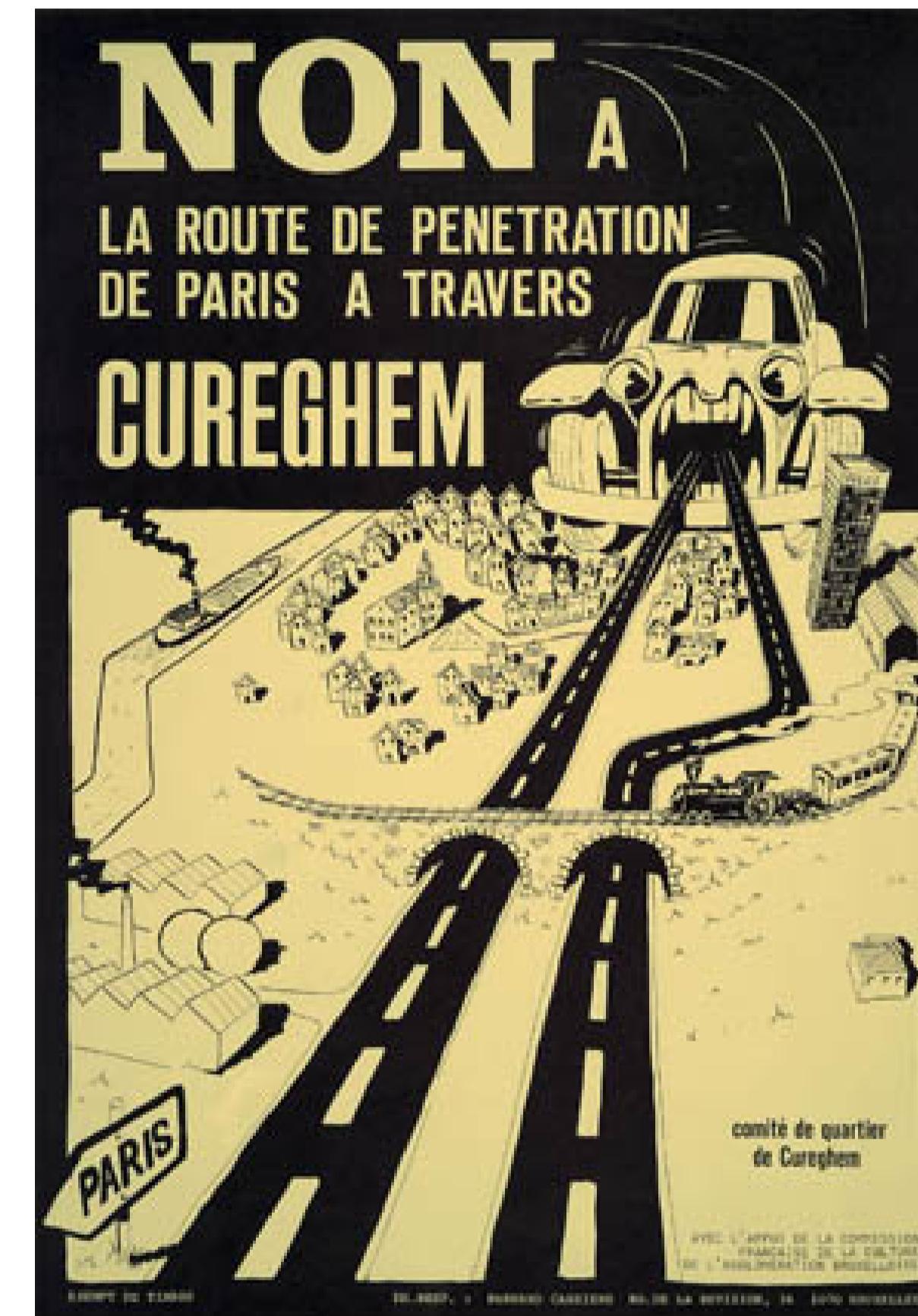
"Modern urbanism destroyed more than all preceding wars put together"

"A gaping hole in the heart of the city"

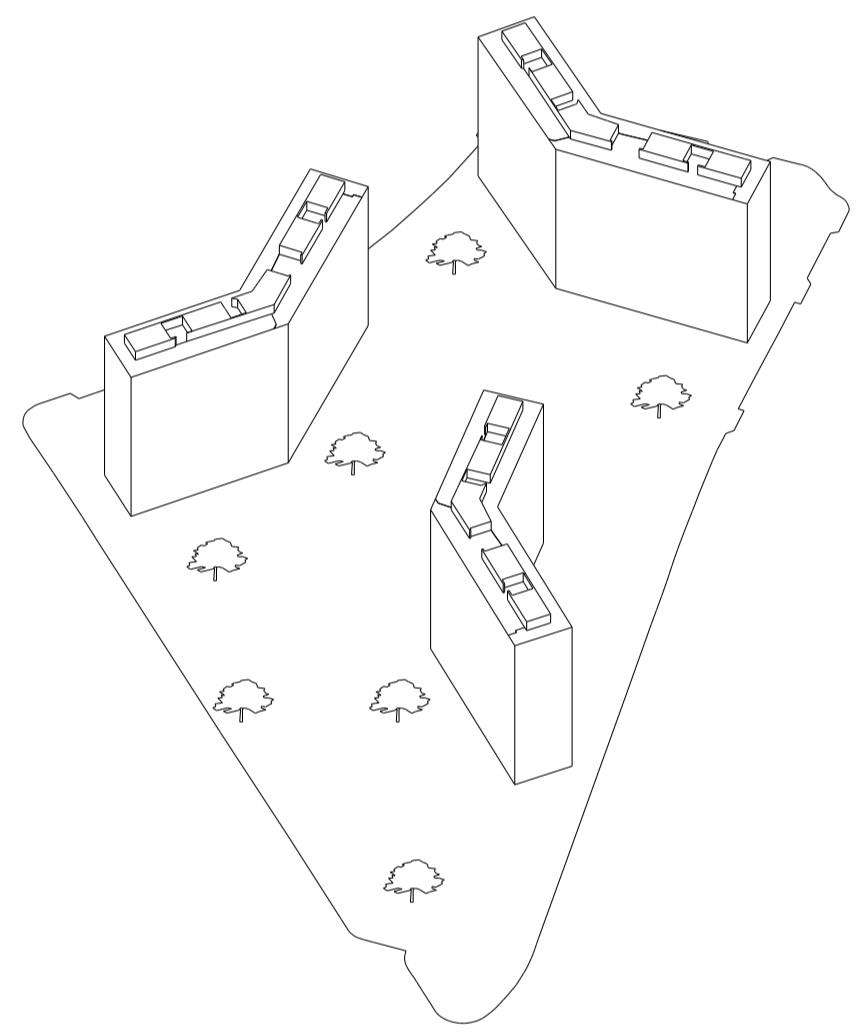
"All signs of life are sucked out of the neighbourhood"

"Fear of the new"

MAKING A CITY WITH WORDS - WAR & CRIME ANALOGIES

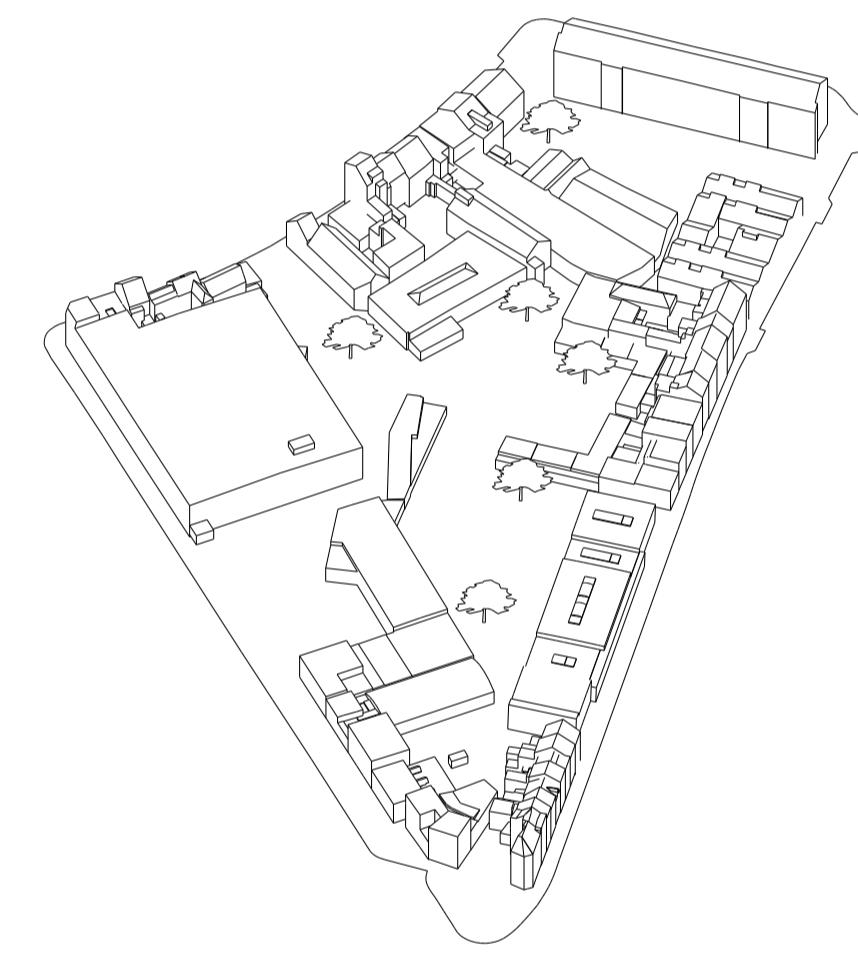


WHAT IT COULD HAVE BEEN



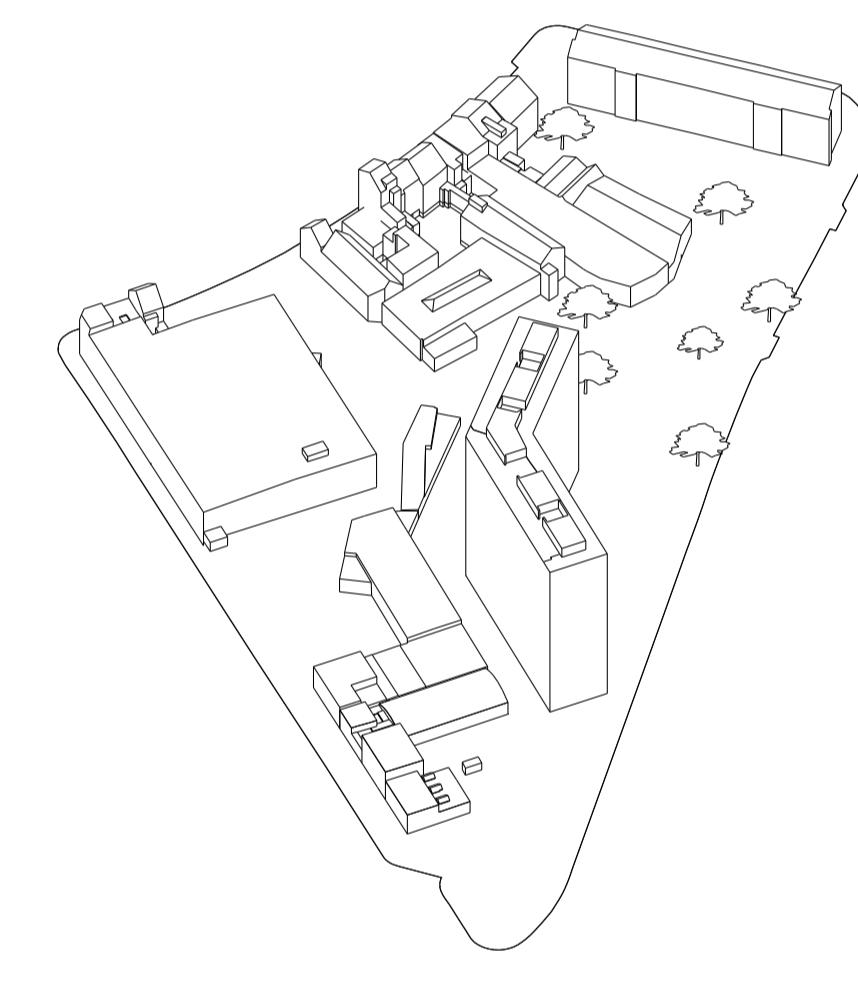
modernist ensemble - triplicate

WHAT IT IS 'SUPPOSED' TO BE



'debruxellisation'

WHAT IT BECAME



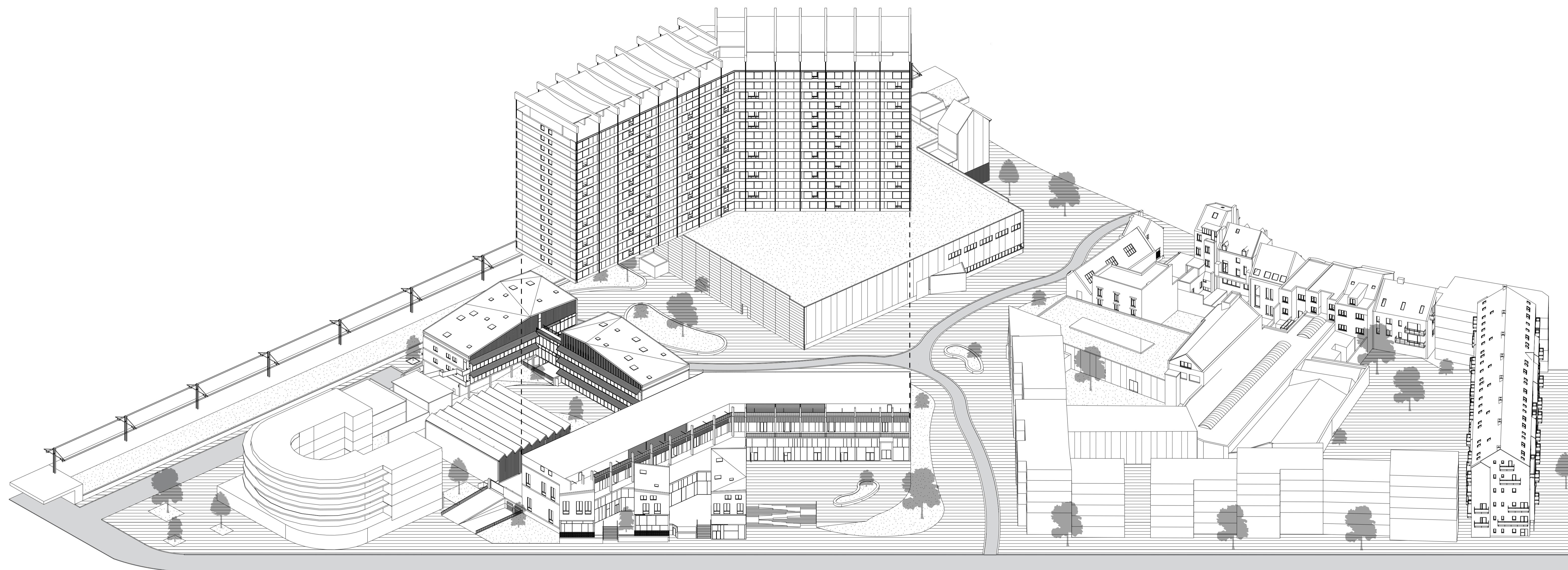
existing site

2 urban design

P5 UA

Bjarne van der Drift

AXONOMETRIC OVERVIEW



2 urban design

P5 UA

Bjarne van der Drift

KEY POINTS ATELIER ZENNEVALLEI

Cherish the generosity of existing buildings and structures.

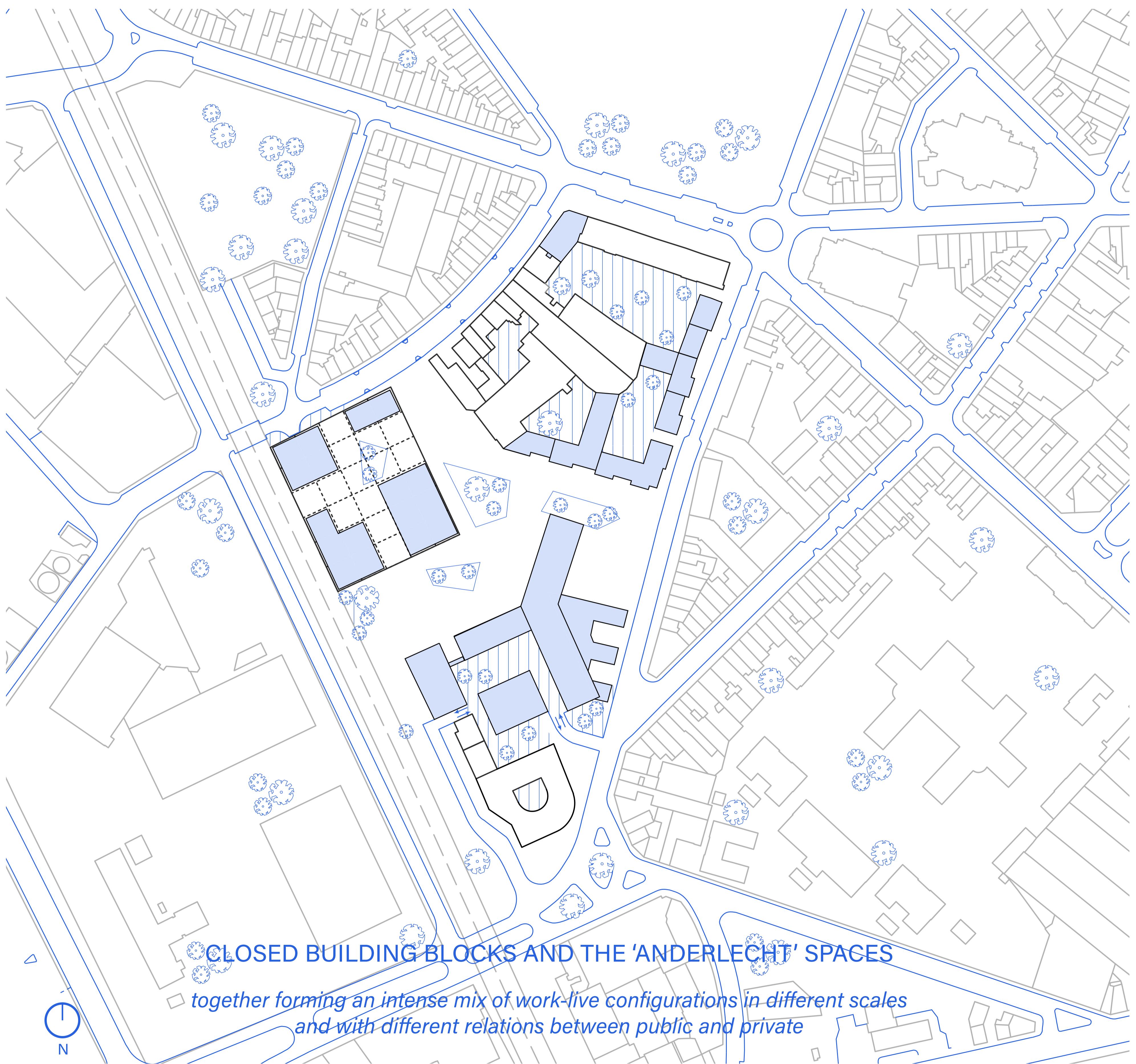
Small initiatives will make the next urban economy.

Combining housing with industry asks for new architectural compositions.

Make industrial activity visible in the public space.

Sharing infrastructure and facilities liberates extra space for the public.

Organize manufacturing and logistics into shorter chains and closed cycles, so the value will remain in the metropolitan system.



2 urban design

CLUSTERS & COALITIONS IN A FINE-GRAINED PATTERN OF THE URBAN ECONOMY

P5 UA

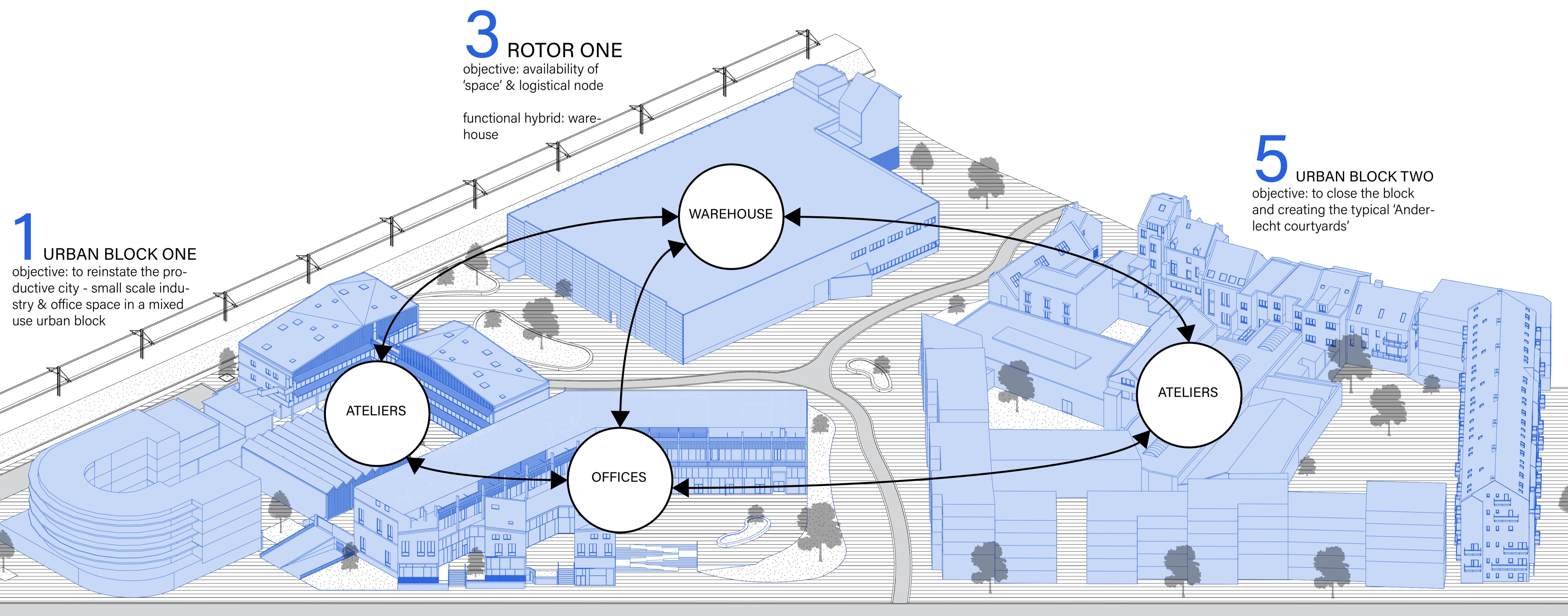
Bjarne van der Drift

POTENTIAL PROGRAM FOR CLUSTERS IN THE PRODUCTIVE CITY

CHAIN CLUSTER

OFFICES, ATELIERS AND WAREHOUSES

1,3,5



2 urban design

CLUSTERS & COALITIONS IN A FINE-GRAINED PATTERN OF THE URBAN ECONOMY

P5 UA

Bjarne van der Drift

POTENTIAL PROGRAM FOR CLUSTERS IN THE PRODUCTIVE CITY

NEIGHBOURHOOD CLUSTER
RESIDENTIAL AREAS & PRODUCTION
1,2,5,6

1 URBAN BLOCK ONE
objective: to reinstate the productive city - small scale industry & office space in a mixed use urban block

PRODUCTION

RESIDENTIAL

2 LES GOUJONS
objective: to maintain urban density, housing accessibility and iconic value

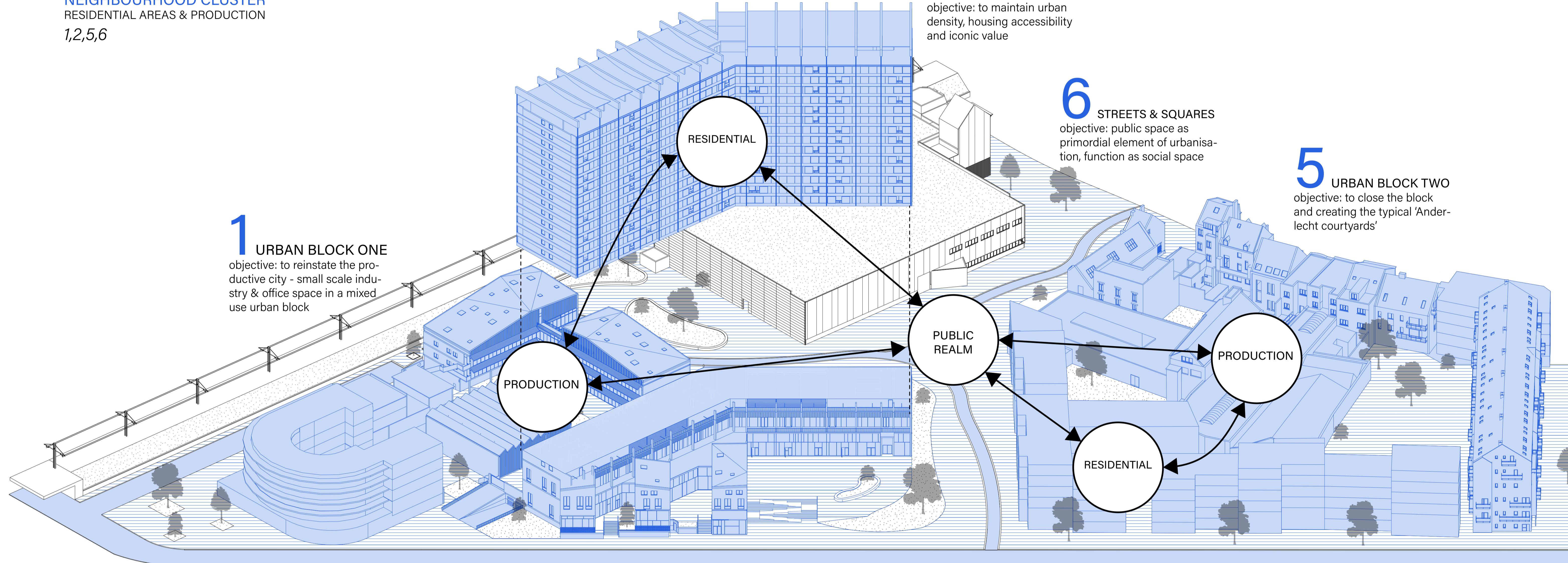
PUBLIC
REALM

6 STREETS & SQUARES
objective: public space as primordial element of urbanisation, function as social space

PRODUCTION

RESIDENTIAL

5 URBAN BLOCK TWO
objective: to close the block and creating the typical 'Anderlecht courtyards'



2 urban design

CLUSTERS & COALITIONS IN A FINE-GRAINED PATTERN OF THE URBAN ECONOMY

P5 UA

Bjarne van der Drift

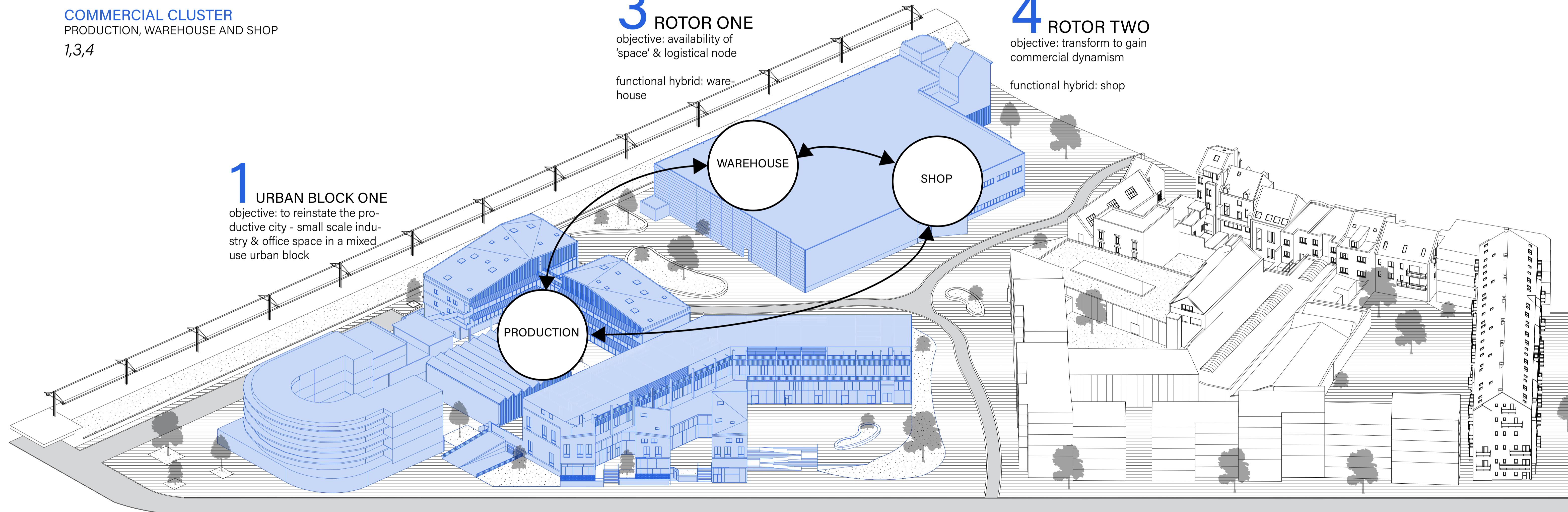
POTENTIAL PROGRAM FOR CLUSTERS IN THE PRODUCTIVE CITY

COMMERCIAL CLUSTER
PRODUCTION, WAREHOUSE AND SHOP
1,3,4

1 URBAN BLOCK ONE
objective: to reinstate the productive city - small scale industry & office space in a mixed use urban block

3 ROTOR ONE
objective: availability of 'space' & logistical node
functional hybrid: warehouse

4 ROTOR TWO
objective: transform to gain commercial dynamism
functional hybrid: shop



2 urban design

CLUSTERS & COALITIONS IN A FINE-GRAINED PATTERN OF THE URBAN ECONOMY

P5 UA

Bjarne van der Drift

POTENTIAL PROGRAM FOR CLUSTERS IN THE PRODUCTIVE CITY

INNOVATION CLUSTER

FABLAB, CO-WORKING & PRODUCTION

1,5

1 URBAN BLOCK ONE

objective: to reinstate the productive city - small scale industry & office space in a mixed use urban block

PRODUCTION

CO-WORKING
OFFICE

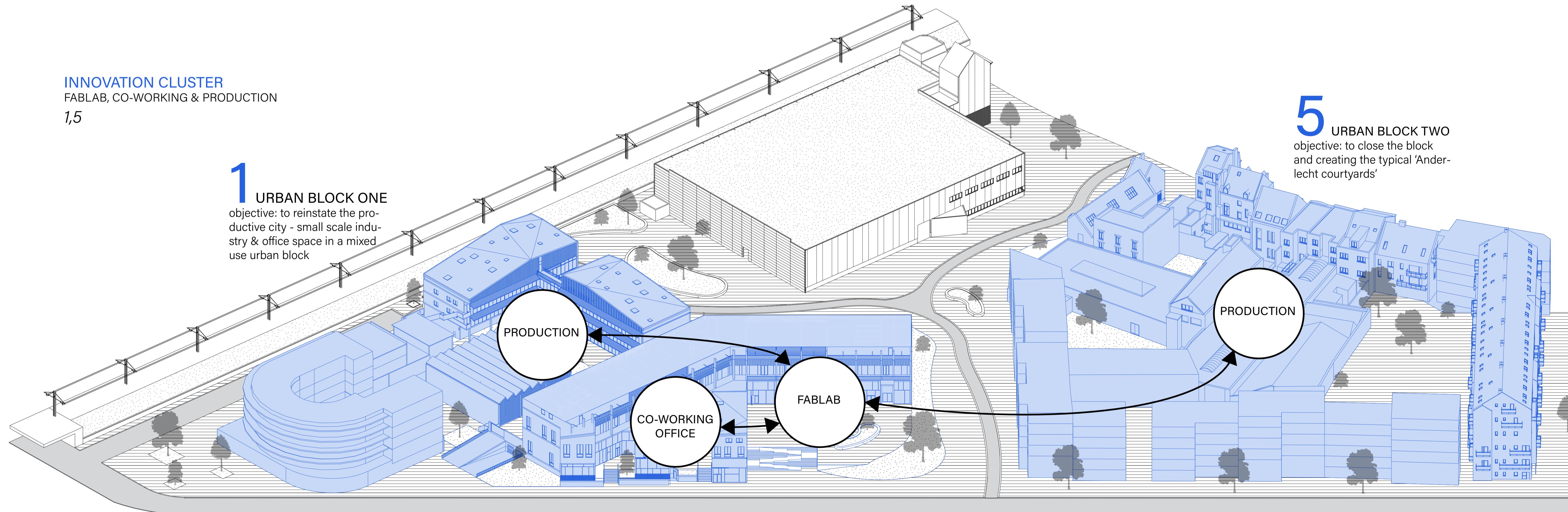
FABLAB

PRODUCTION

5

URBAN BLOCK TWO

objective: to close the block and creating the typical 'Anderlecht courtyards'



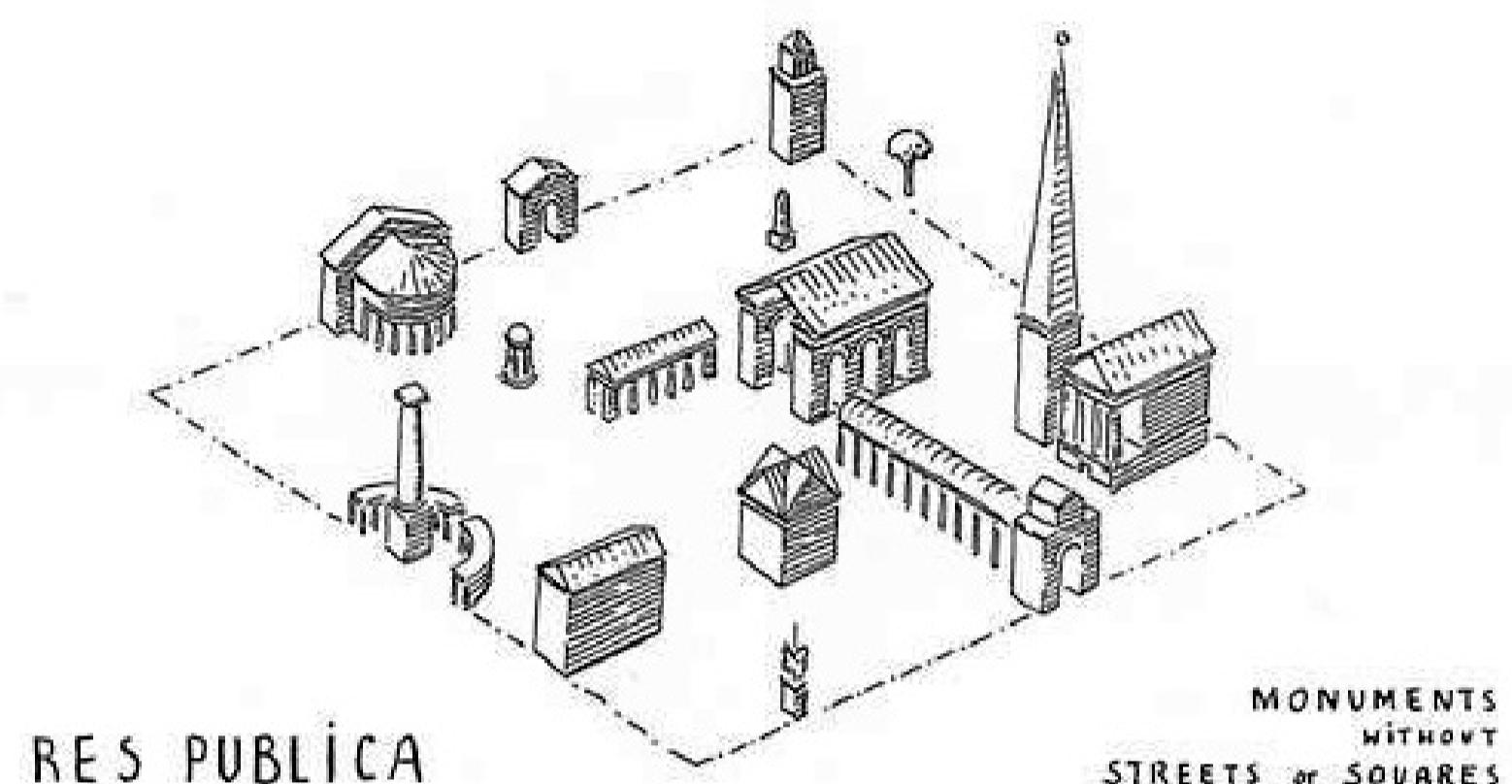
2 urban design

P5 UA

Bjarne van der Drift

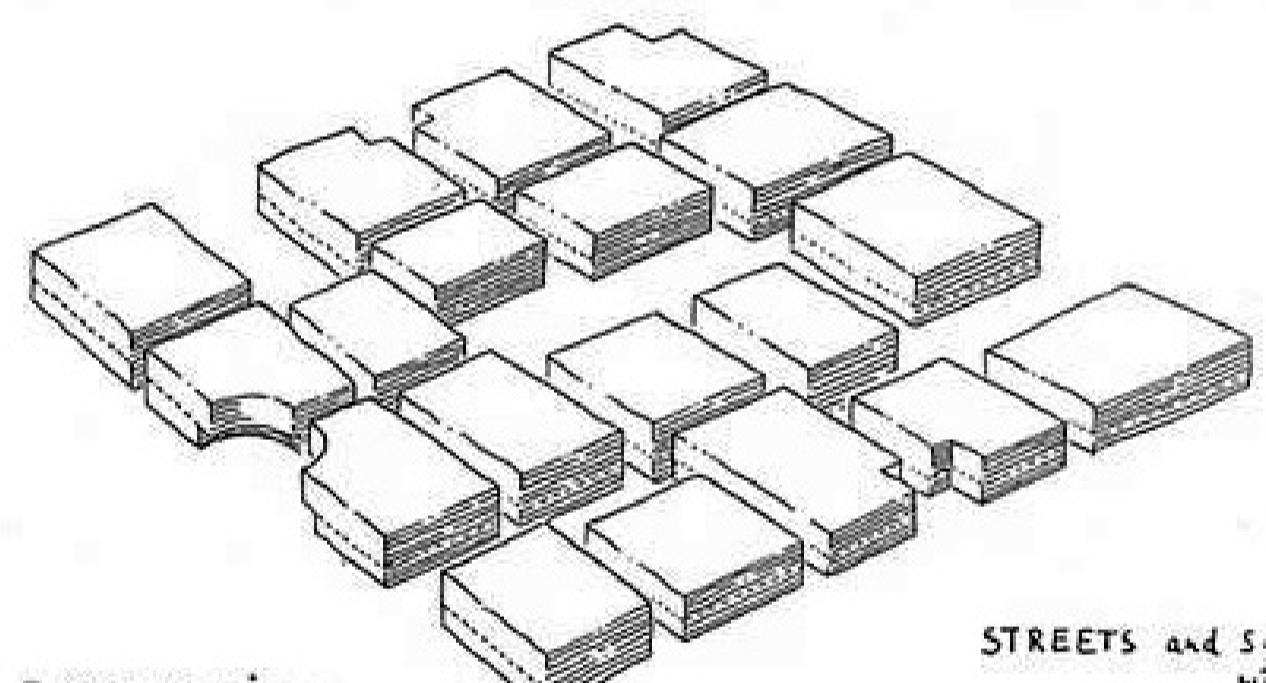
VALUES OF THE TRADITIONAL CITY

LÉON KRIER



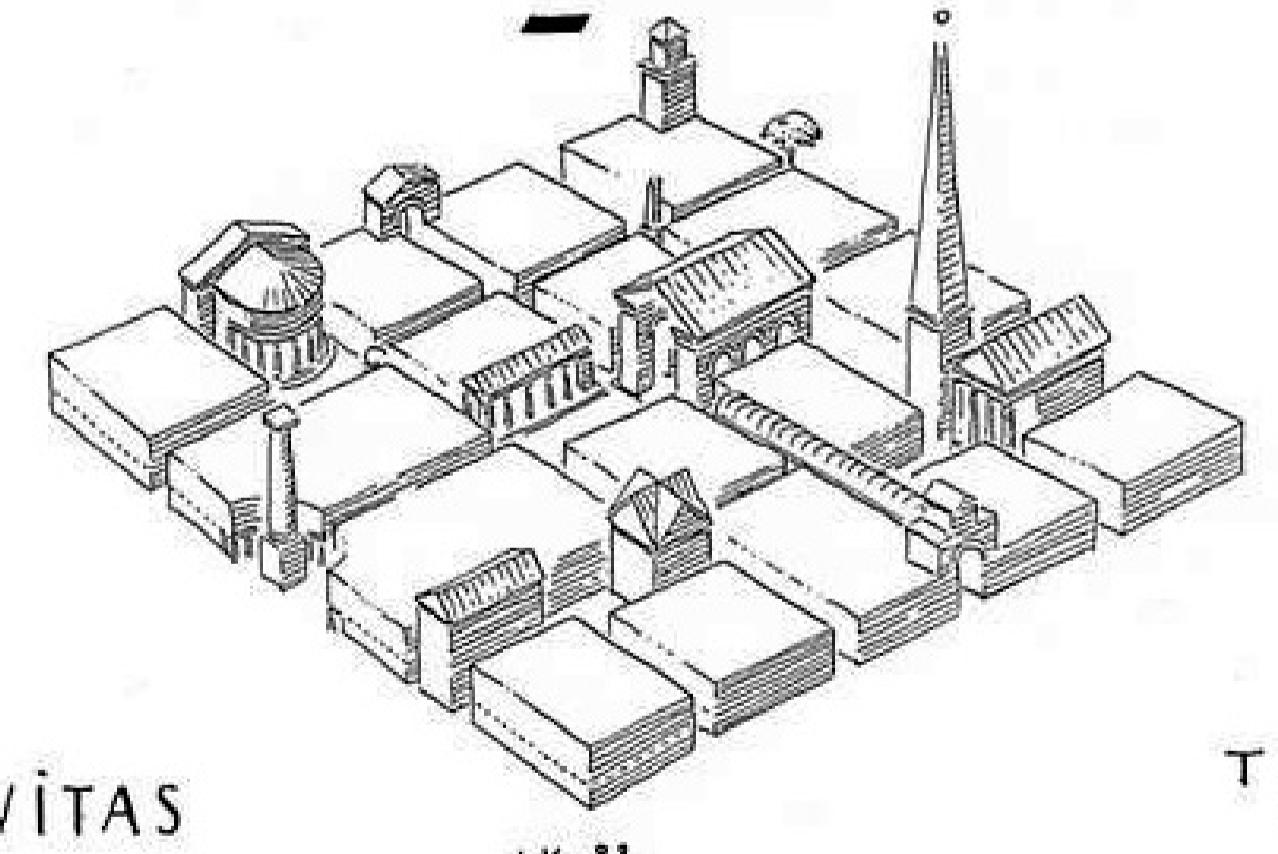
RES PUBLICA

+



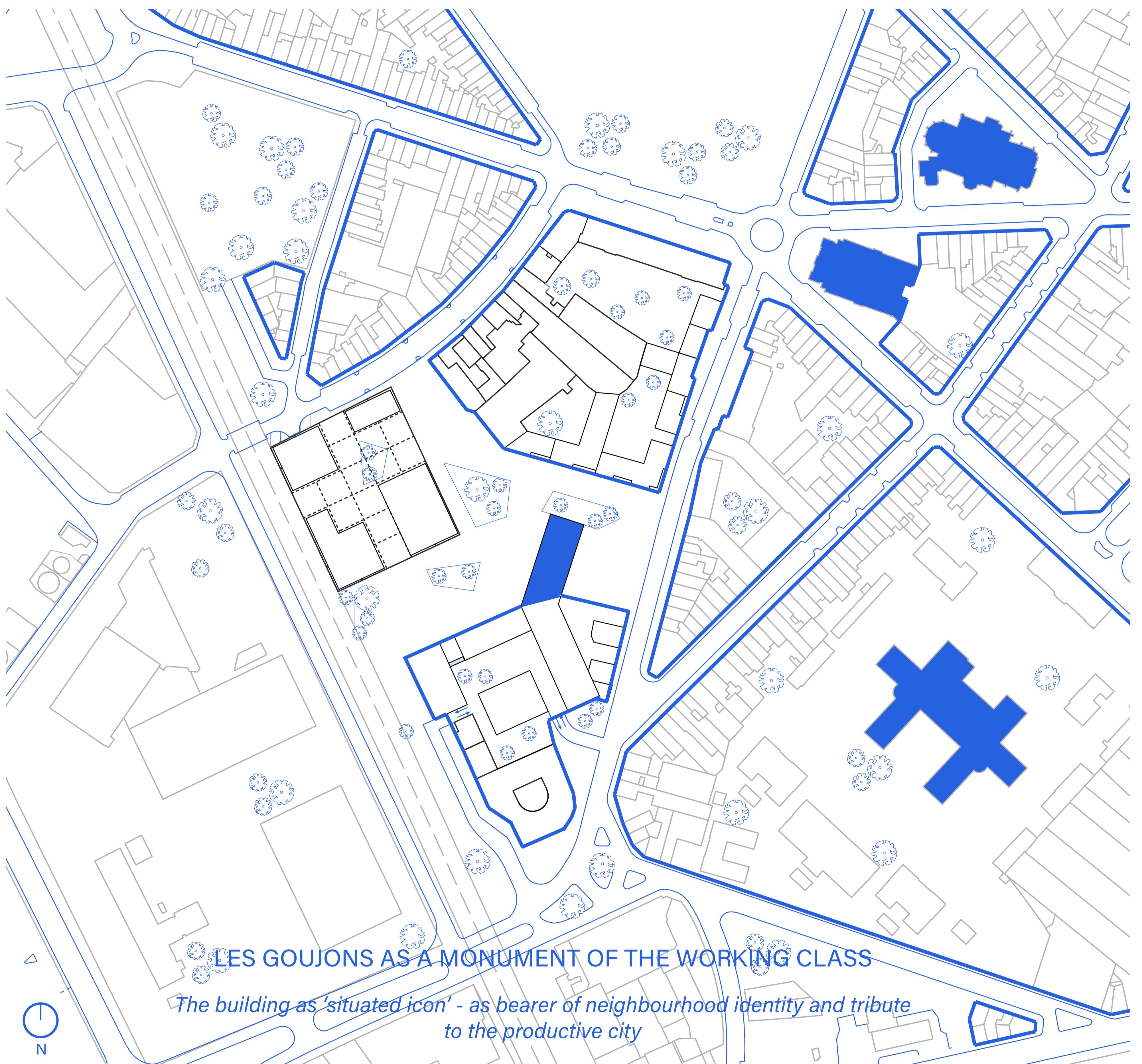
RES ECONOMICA

=



CIVITAS

LK 83



2 urban design

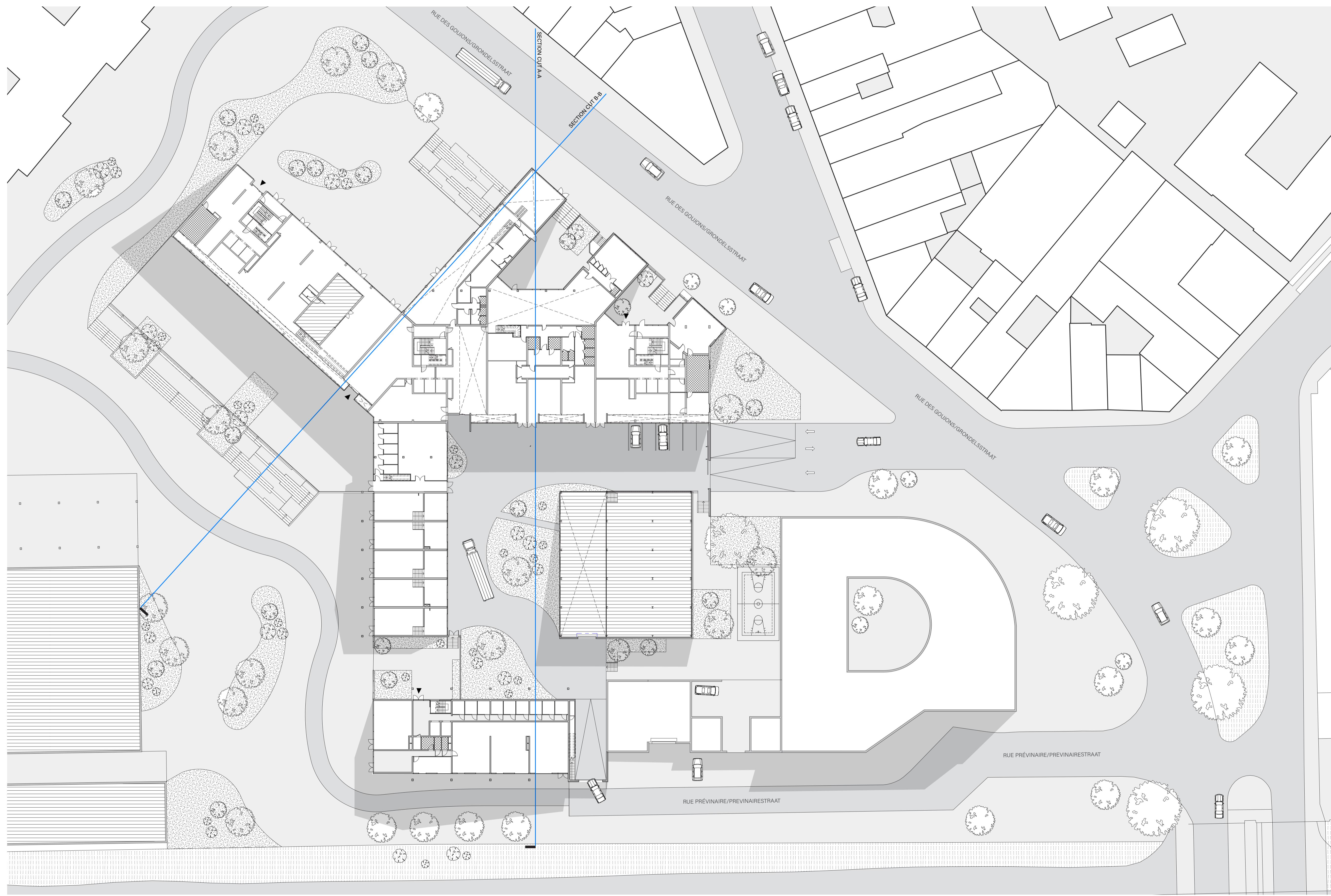
P5 UA

Bjarne van der Drift

SITE PLAN



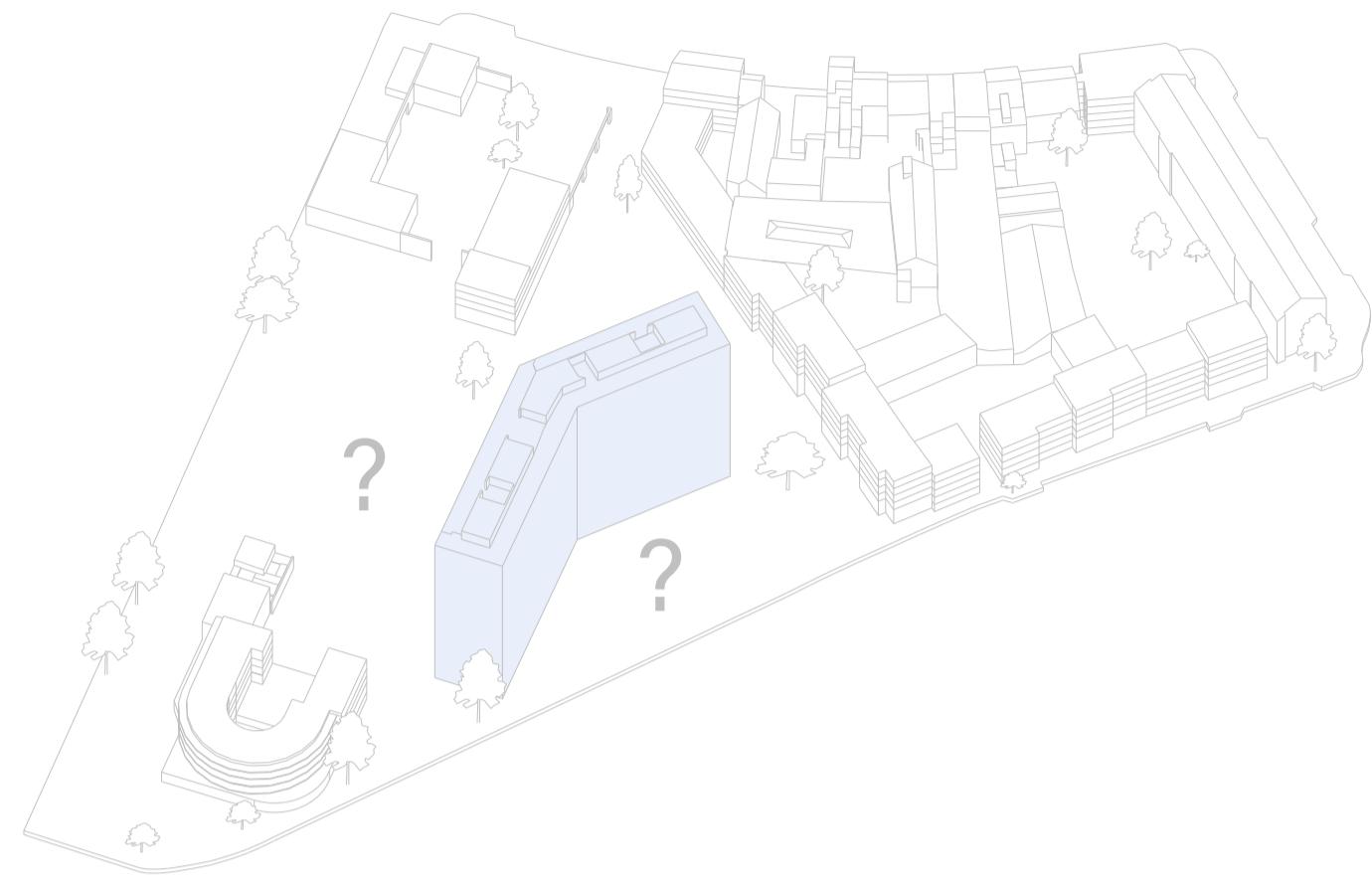
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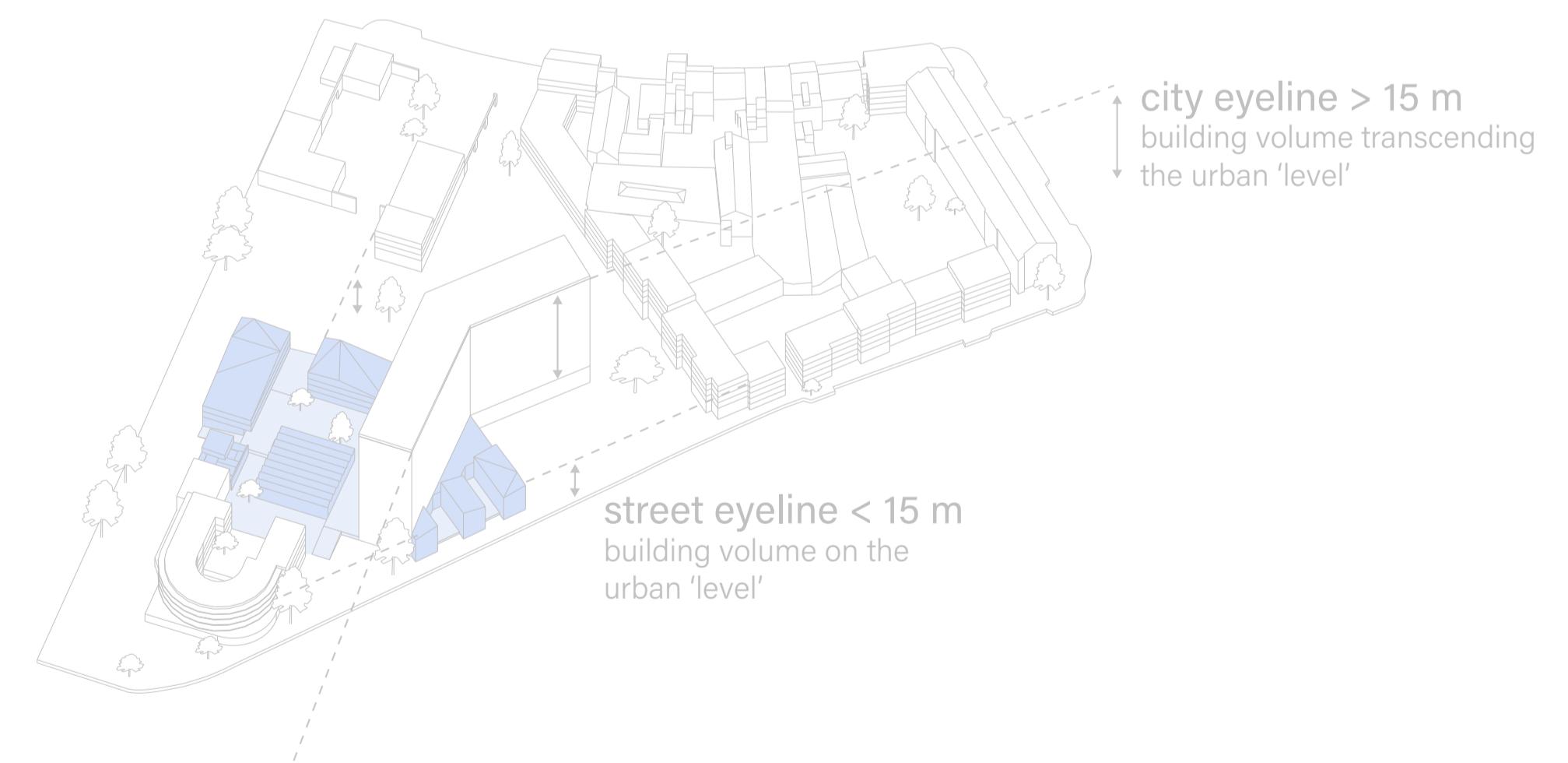
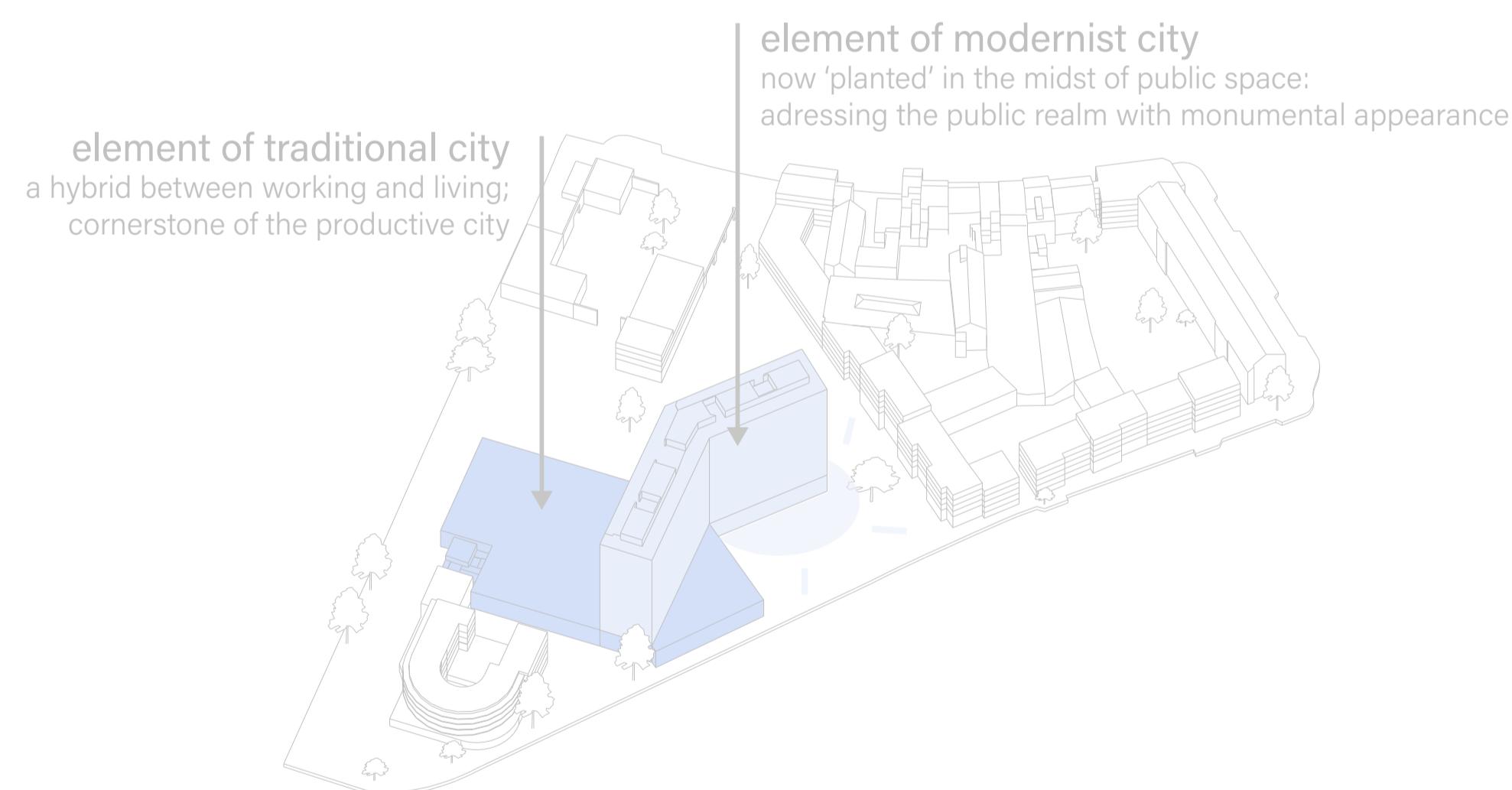
3 concept

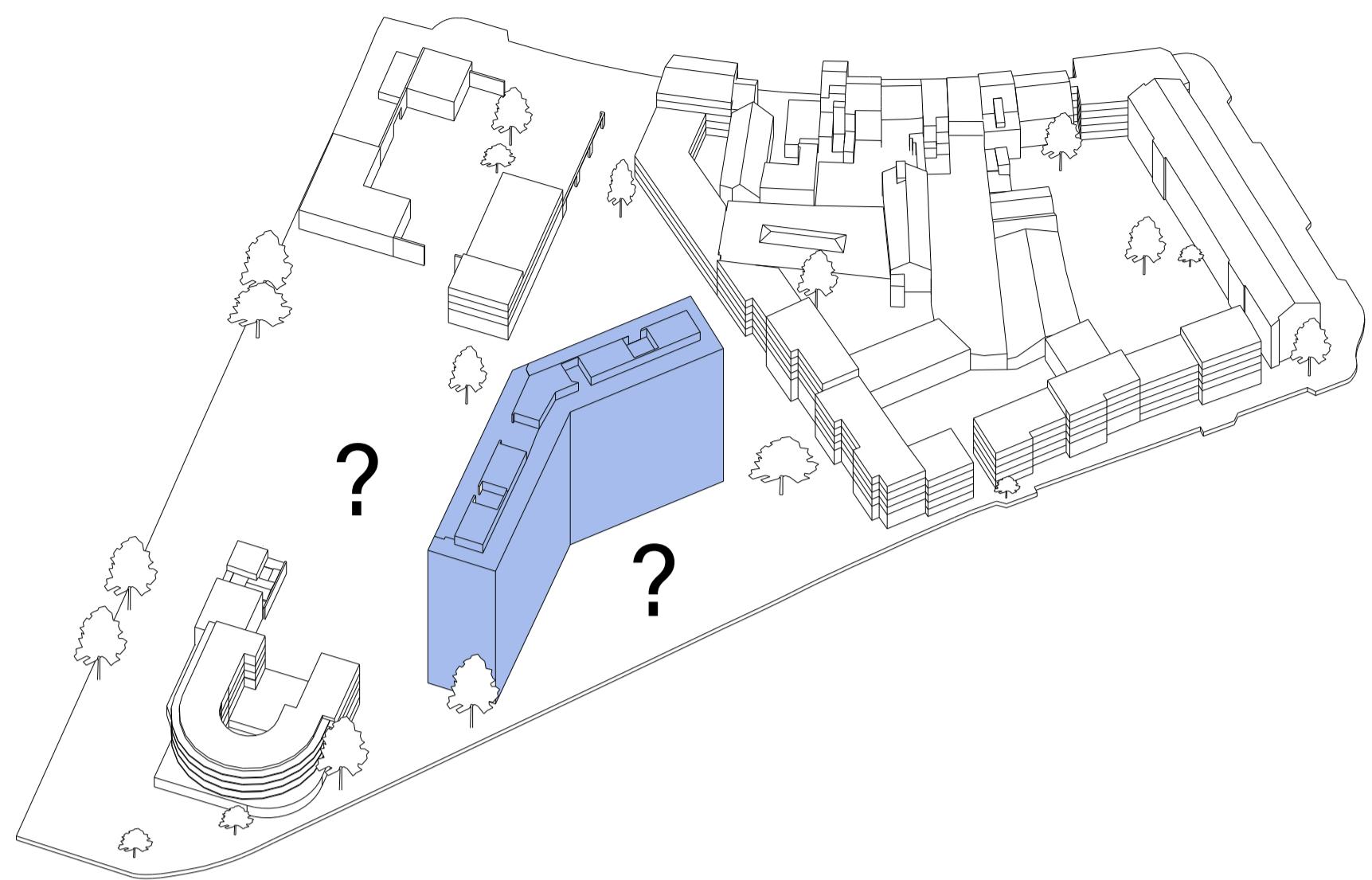
P5 UA

Bjarne van der Drift



TOWARDS A STATE OF COEXISTENCE

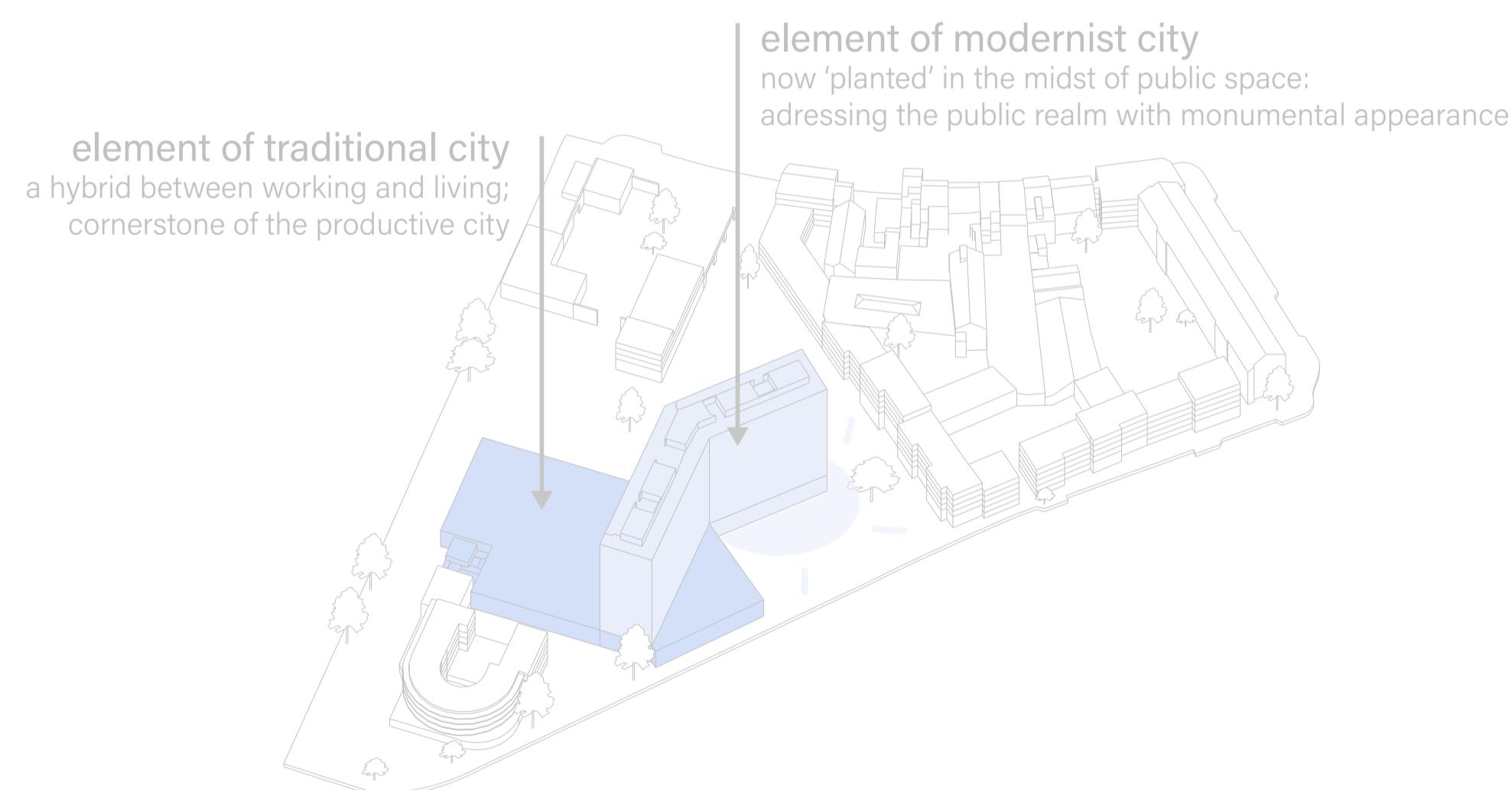




1

site of choice

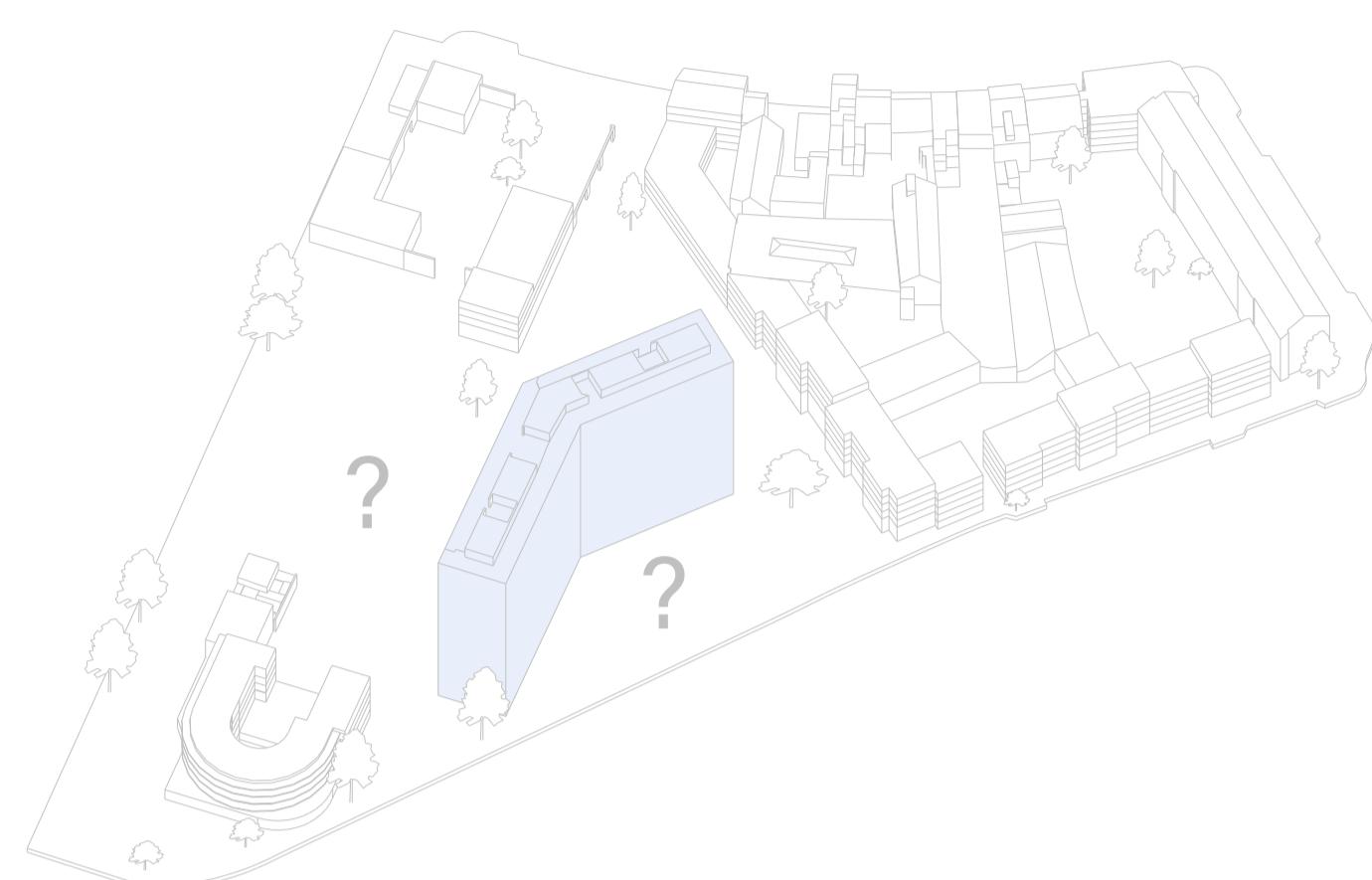
Les Goujons as a spolia of *brusselization*;
failed modernism undermining the values of the traditional city



3 concept

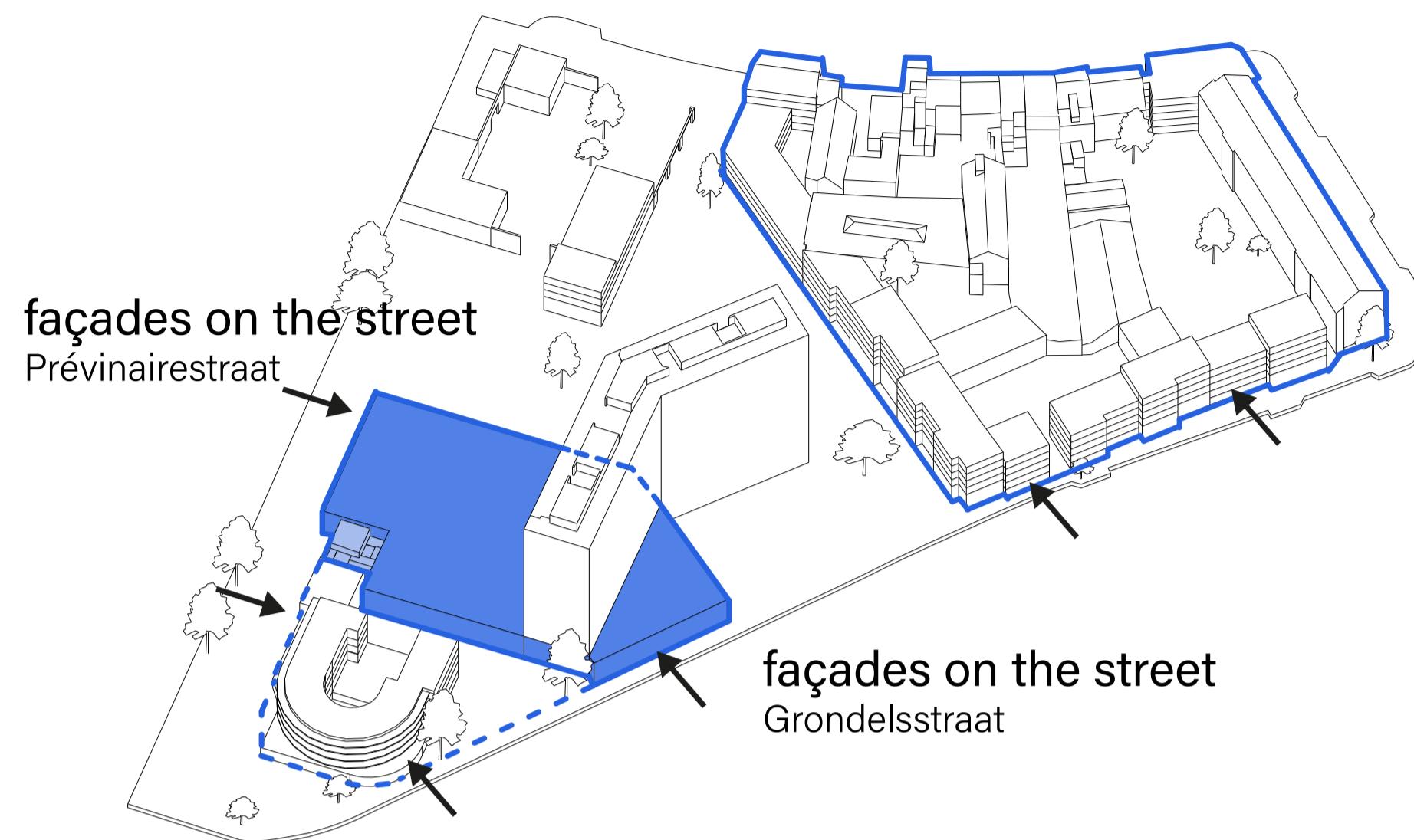
P5 UA

Bjarne van der Drift



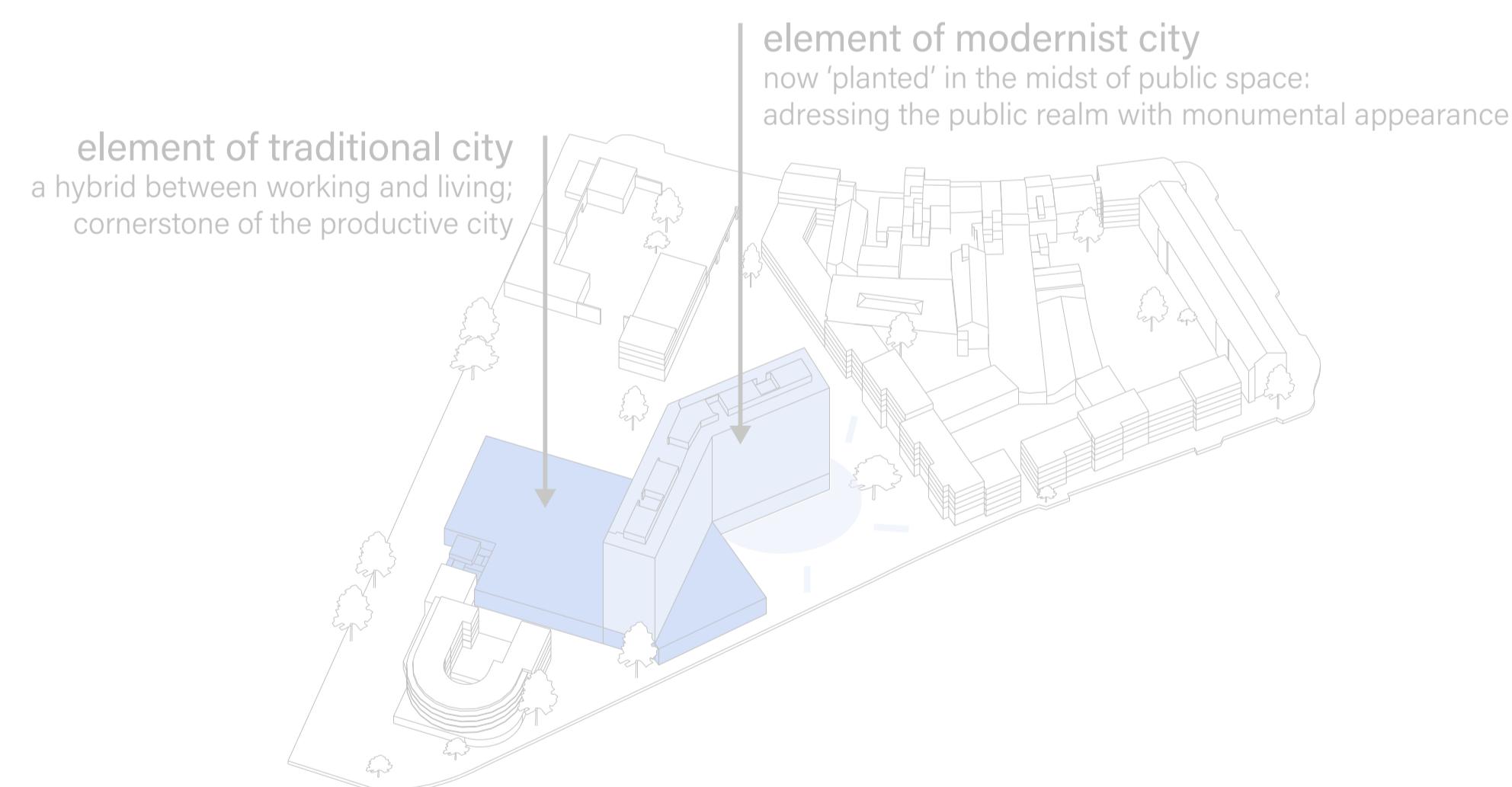
site of choice

Les Goujons as a spolia of *brusselization*;
failed modernism undermining the values of the traditional city



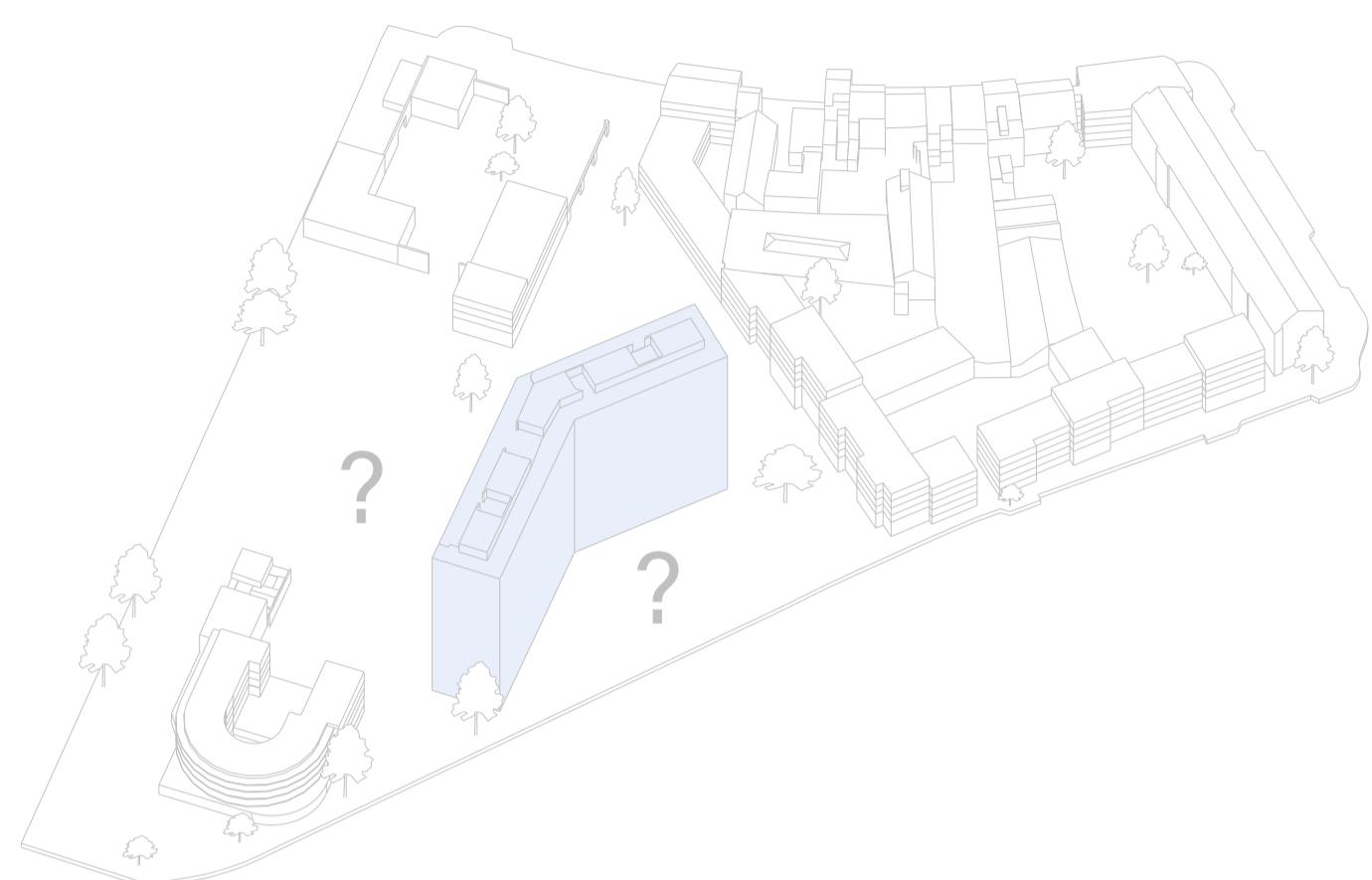
re-establishing the traditional city

new volumes close the urban block accordingly
to the typical Anderlecht 'model'



2

3 concept



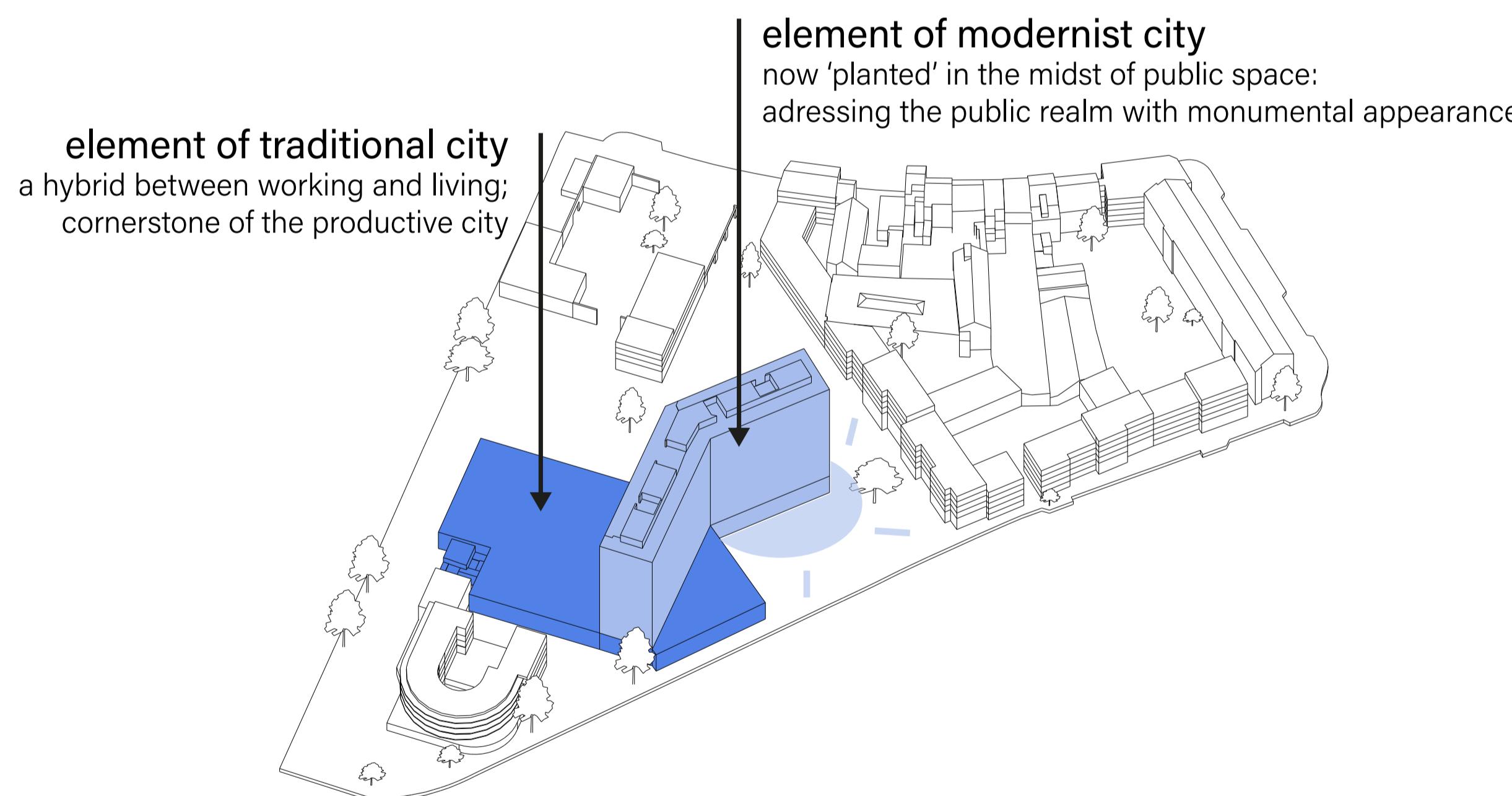
site of choice

Les Goujons as a spolia of *brusselization*:
failed modernism undermining the values of the traditional city



re-establishing the traditional city

new volumes close the urban block accordingly
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3

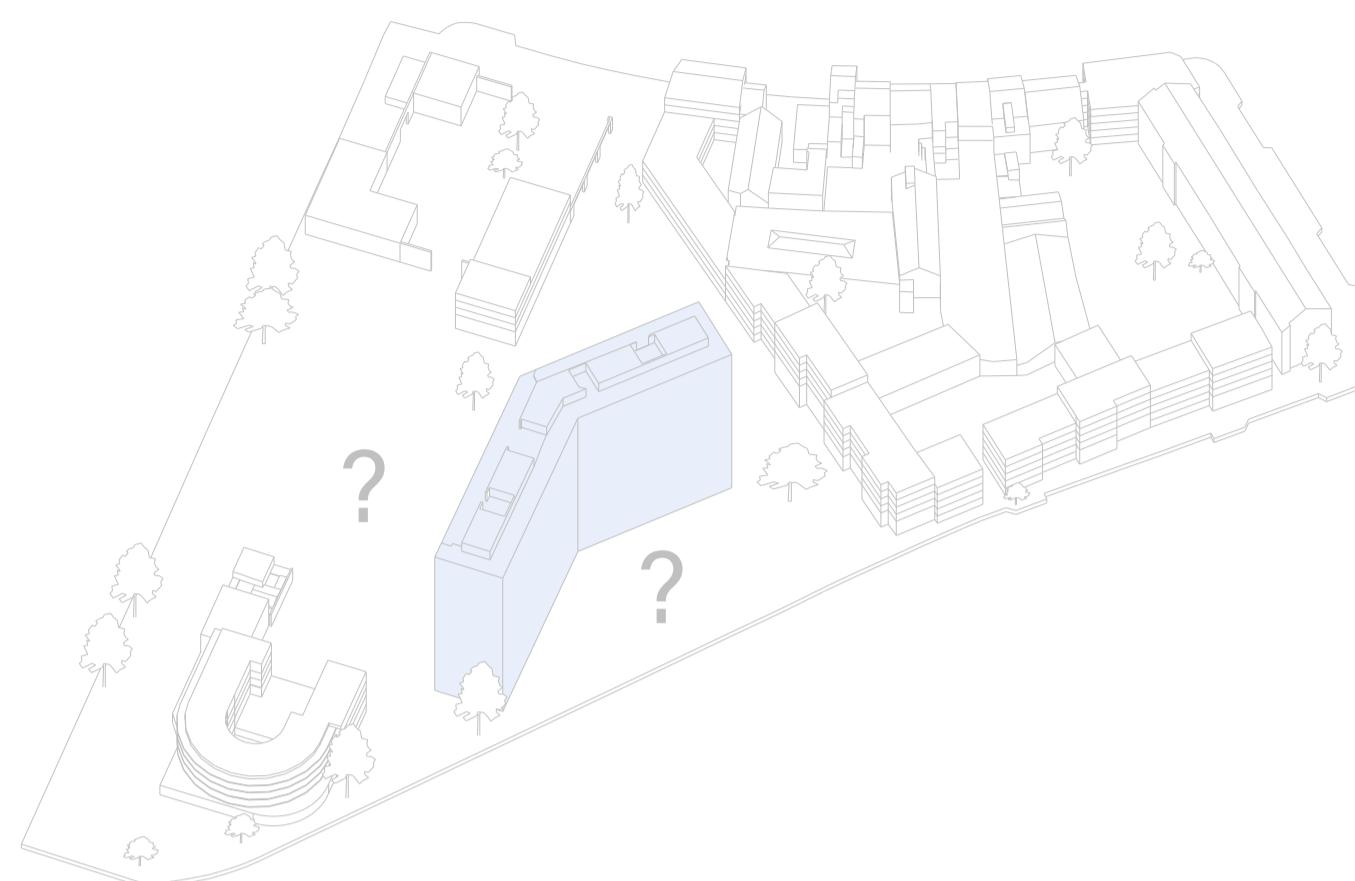
aligning ideologies

assessment of *brusselization*:
negotiating between two opposites

3 concept

P5 UA

Bjarne van der Drift



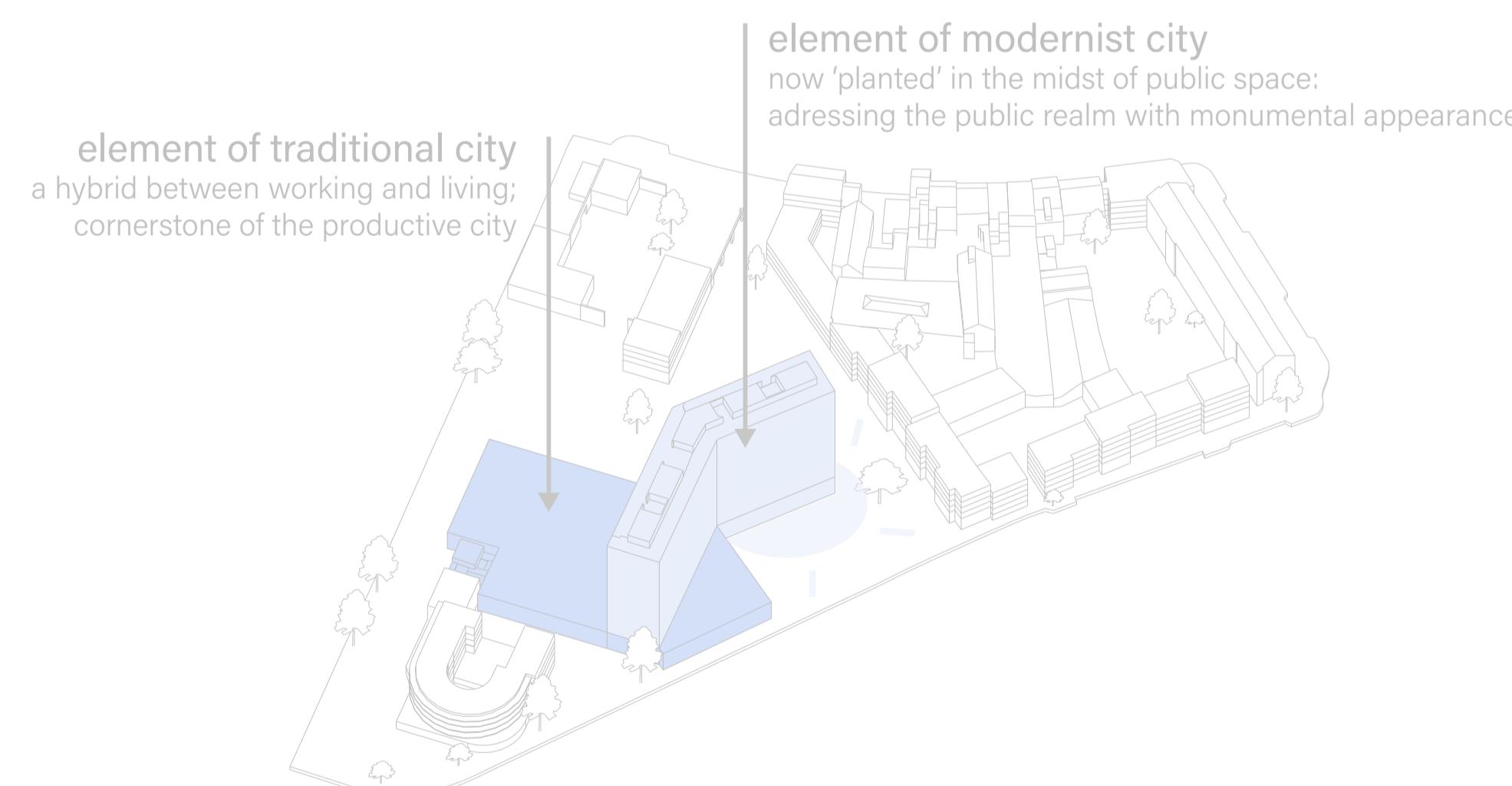
site of choice

Les Goujons as a spolia of *brusselization*:
failed modernism undermining the values of the traditional city



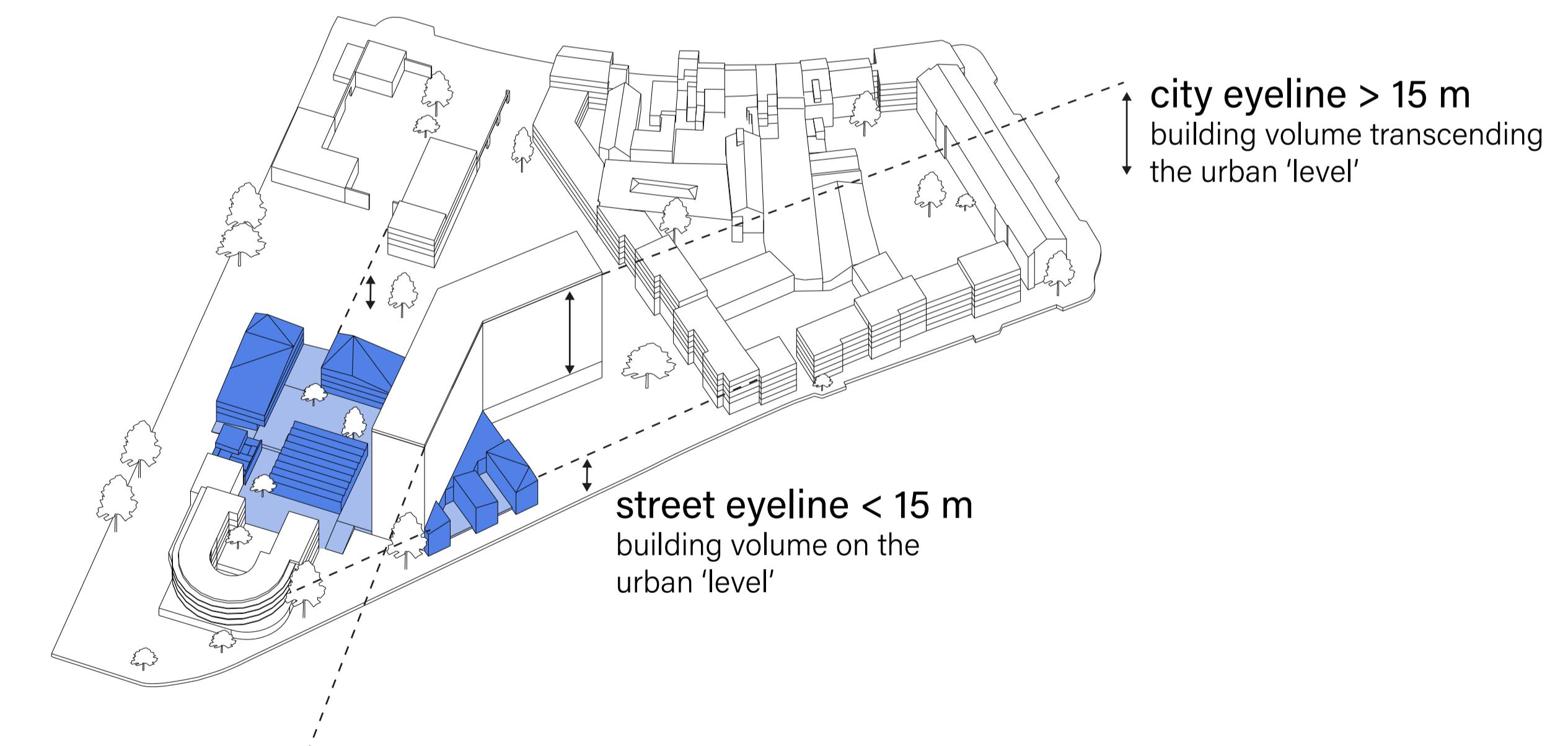
re-establishing the traditional city

new volumes close the urban block accordingly
to the typical Anderlecht 'model'



aligning ideologies

assessment of *brusselization*:
negotiating between two opposites



defining building outlines

creating intermediate zones & courtyard
- strategical access and circulation

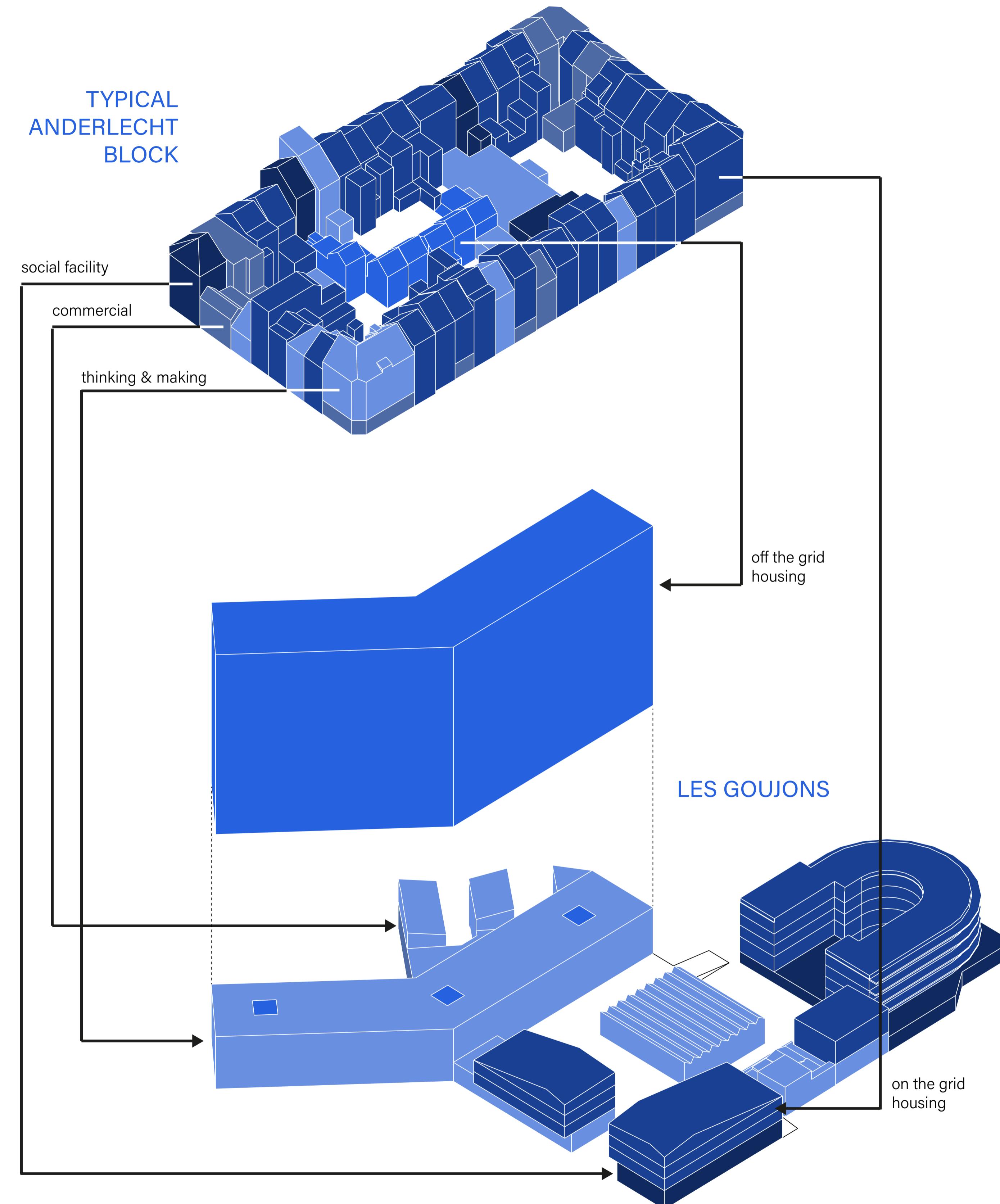
4

4 program

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION



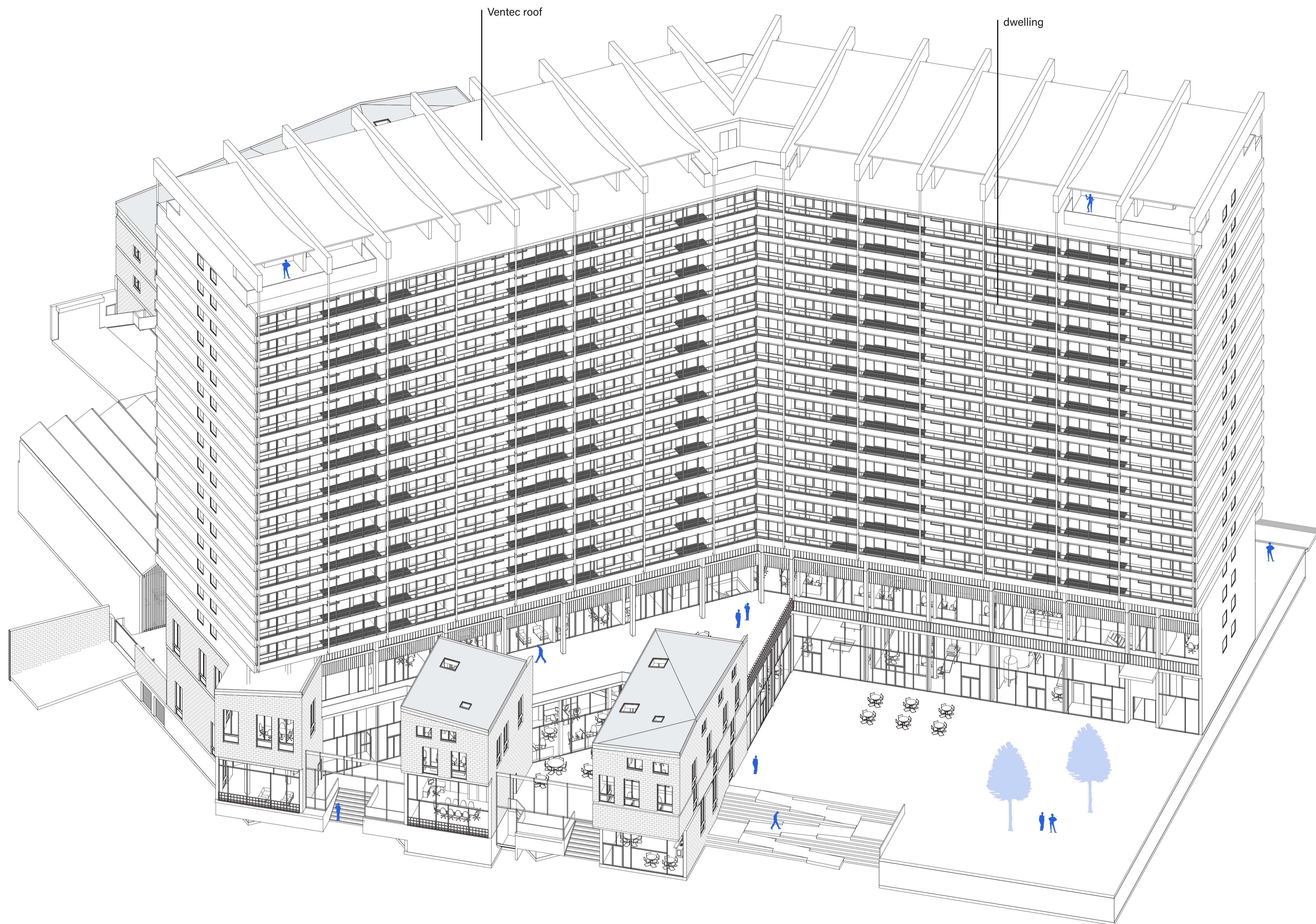
Living and working in close proximity

4 program

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

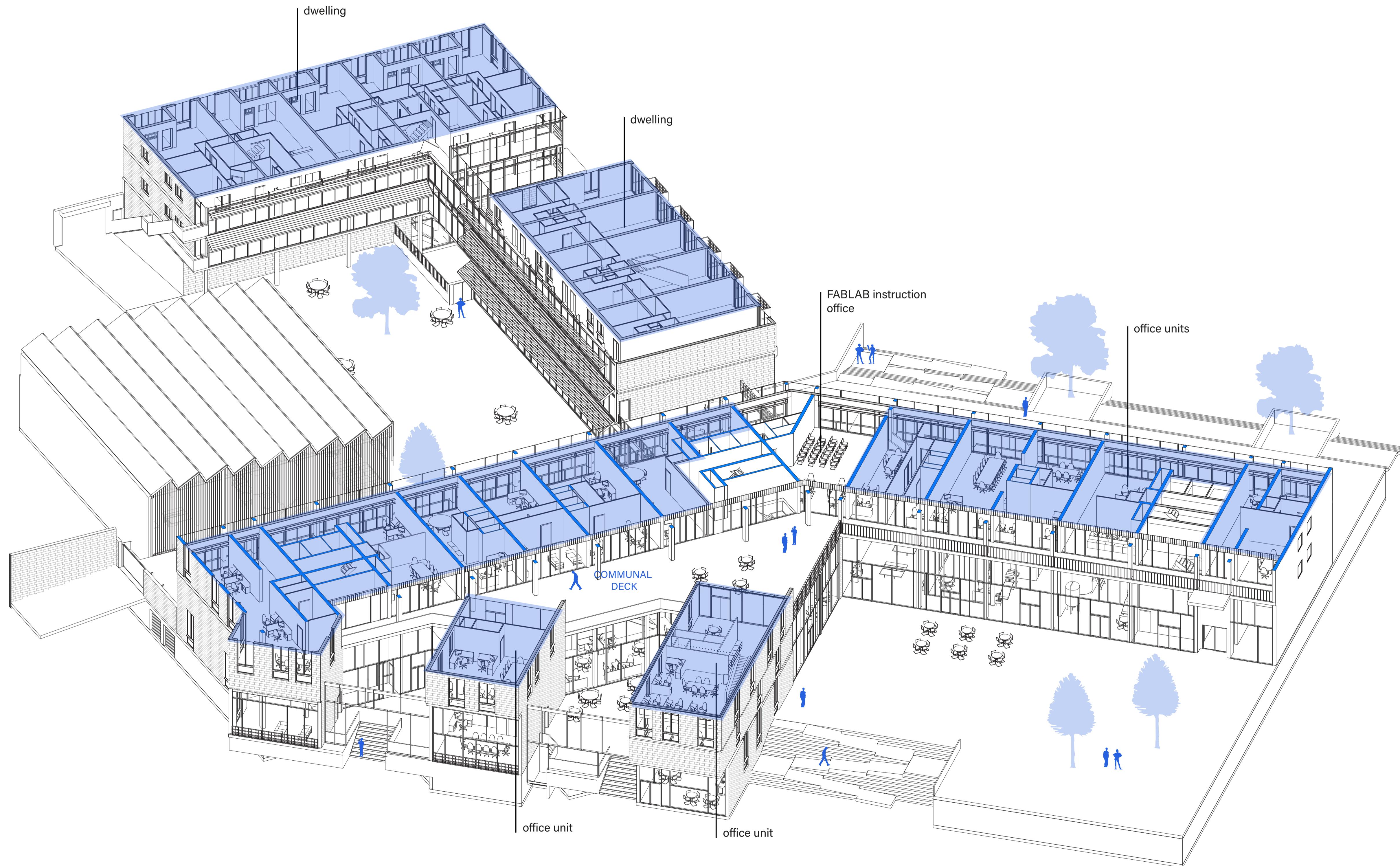


4 program

AXONOMETRIC PROJECTION

P5 UA

Bjarne van der Drift

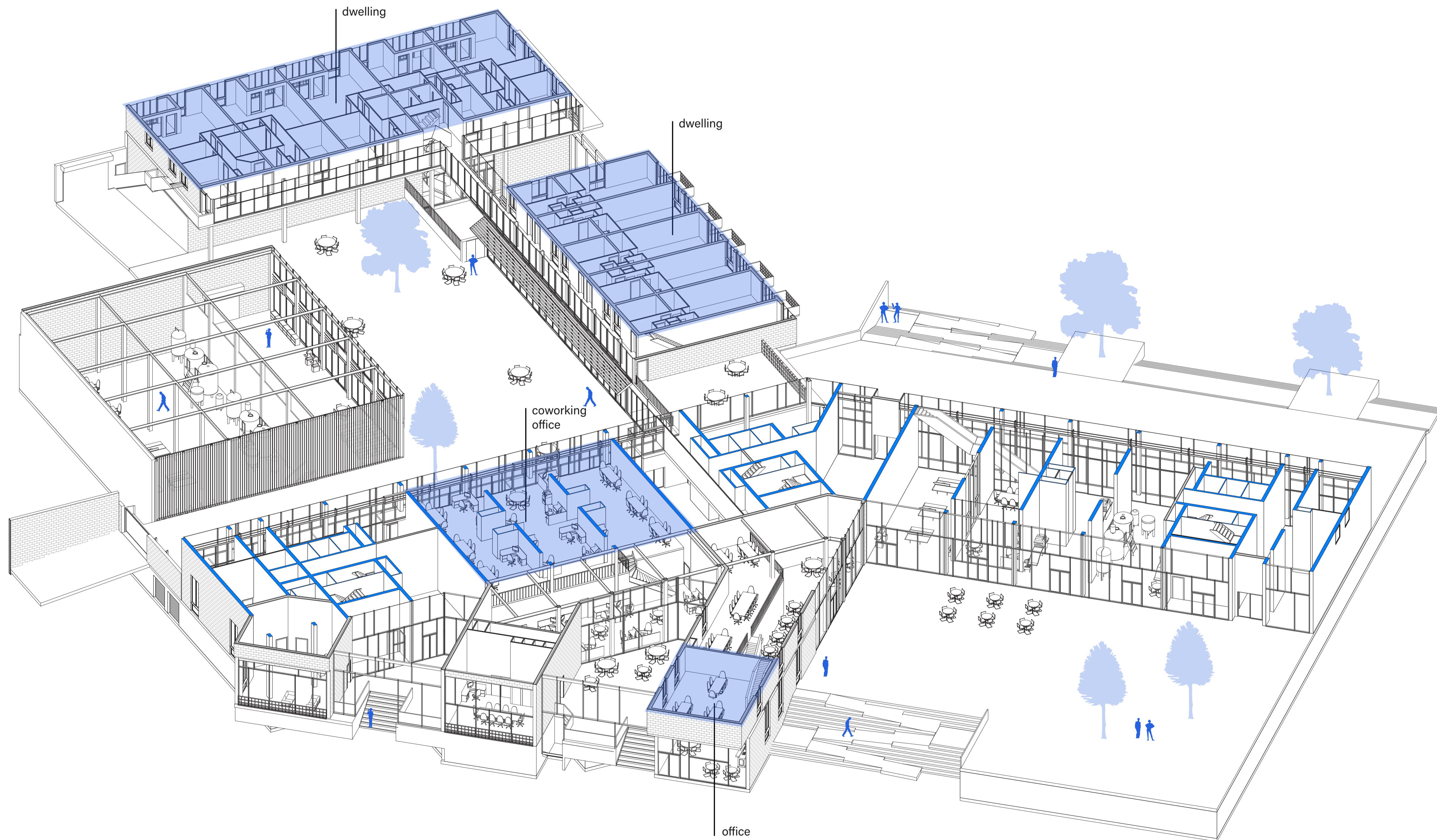


4 program

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

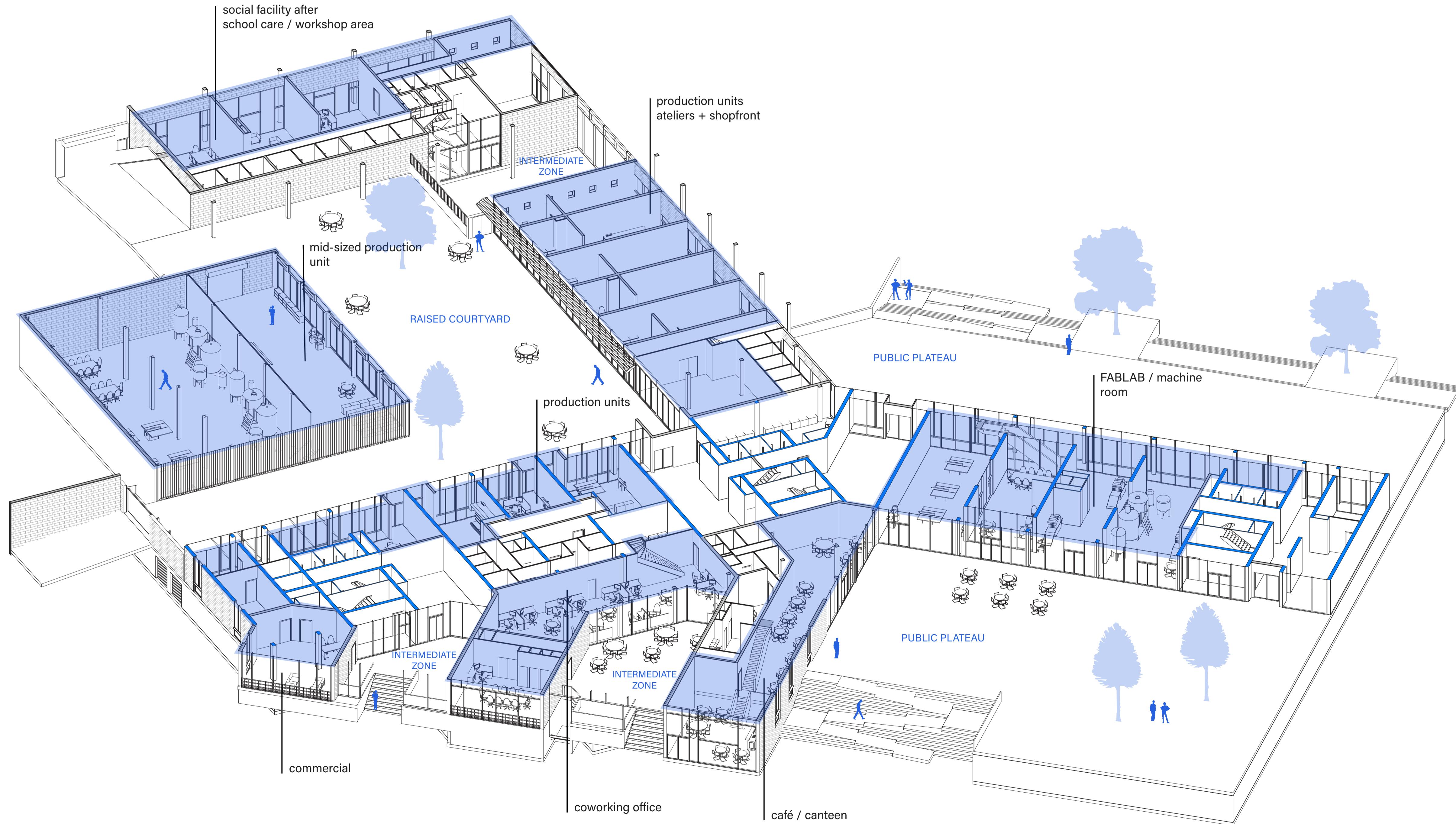


4 program

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

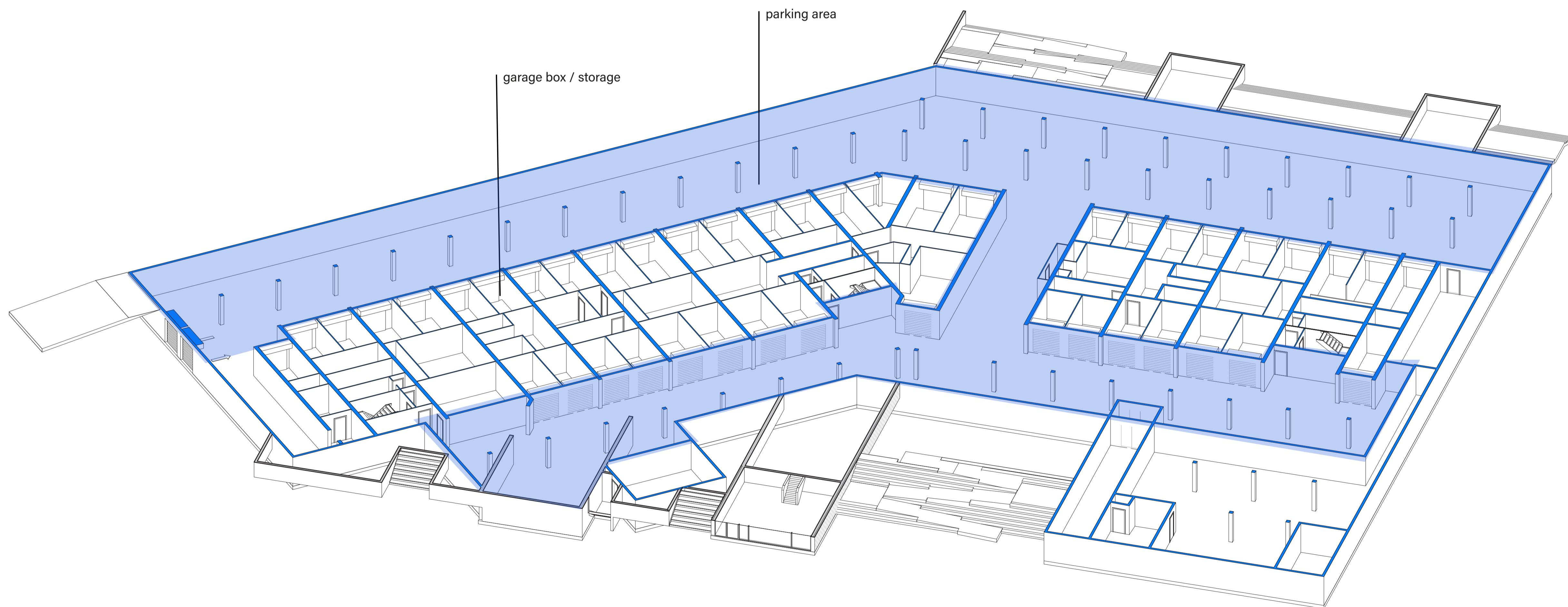


4 program

AXONOMETRIC PROJECTION

P5 UA

Bjarne van der Drift

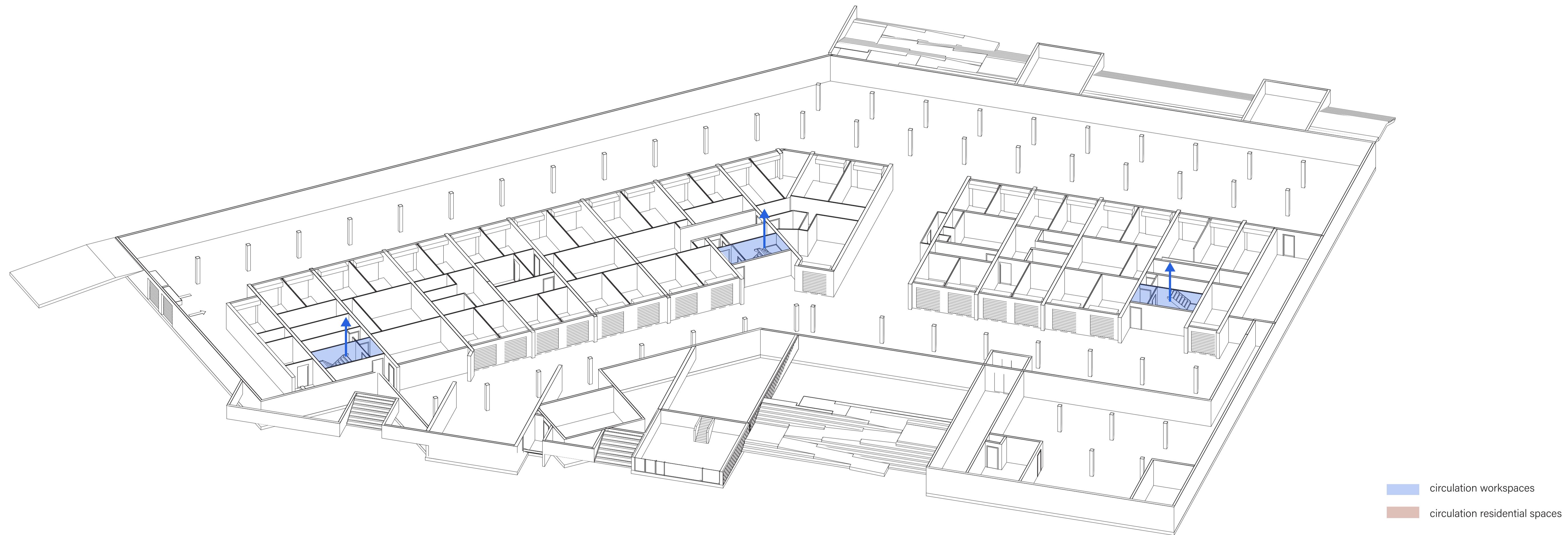


5 circulation & organisation

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

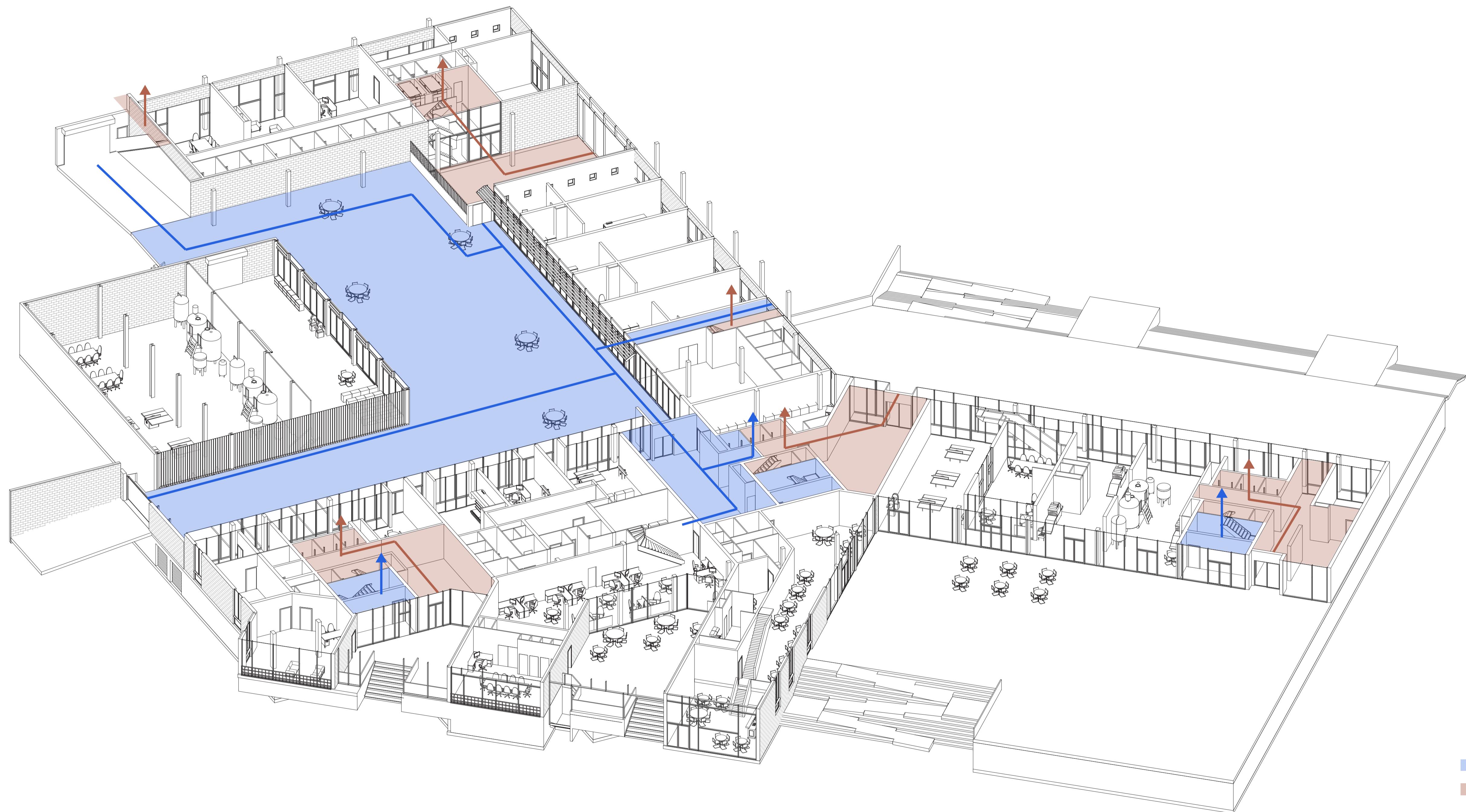


5 circulation & organisation

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

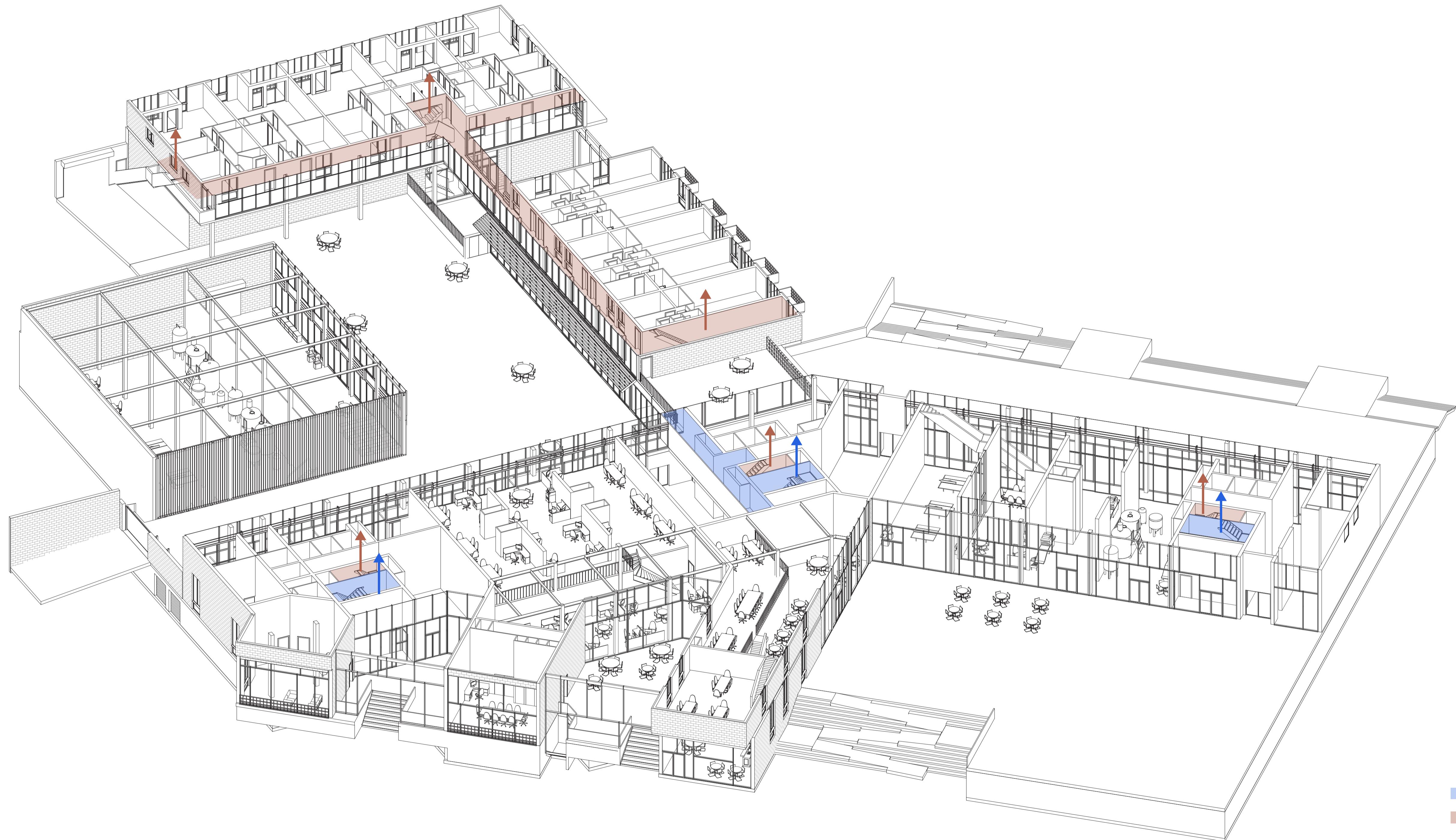


5 circulation & organisation

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION



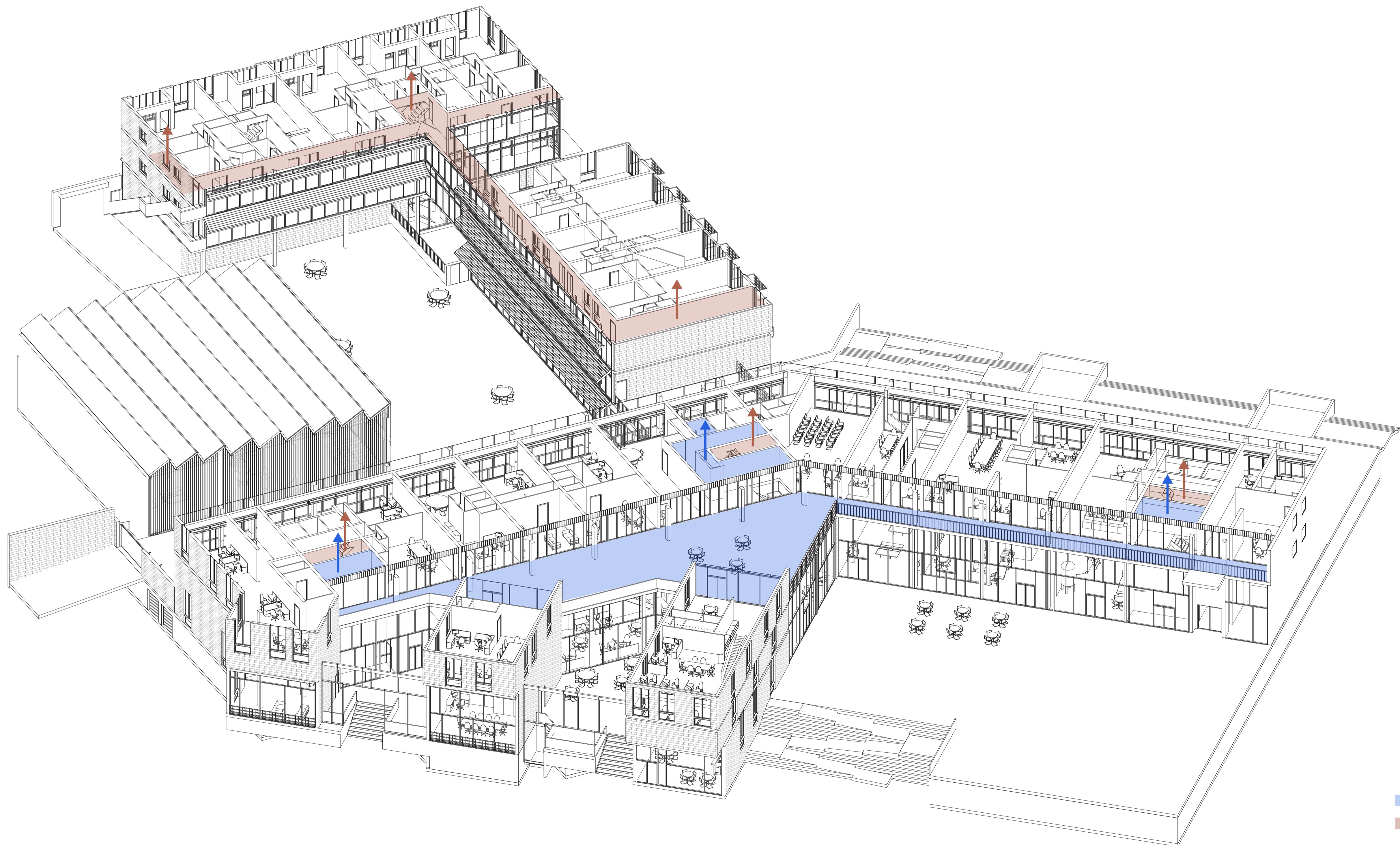
circulation workspaces
circulation residential spaces

5 circulation & organisation

P5 UA

Bjarne van der Drift

AXONOMETRIC PROJECTION

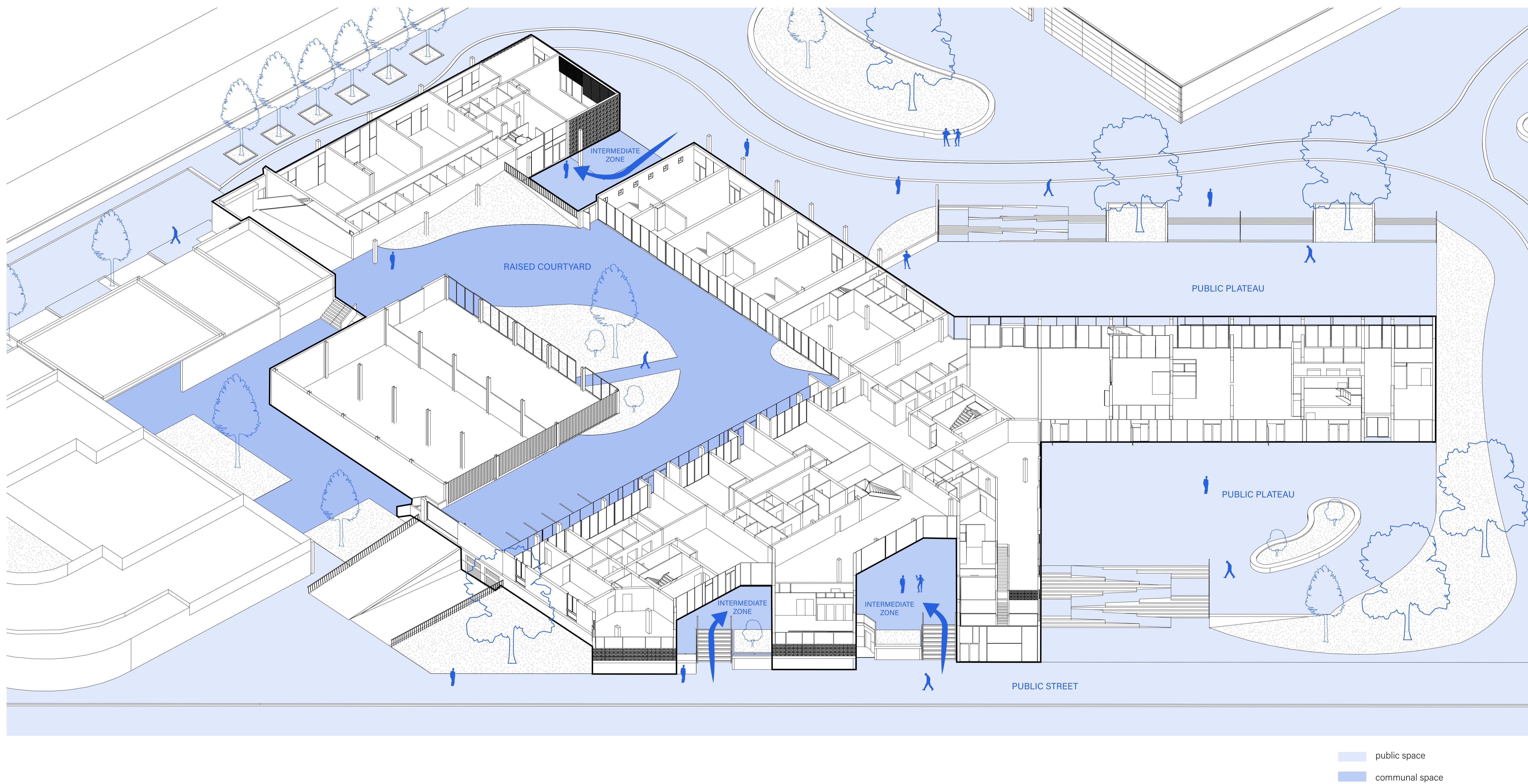


5 circulation & organisation

P5 UA

Bjarne van der Drift

THE 'ANDERLECHT SPACE'



public space
communal space

6 plan views

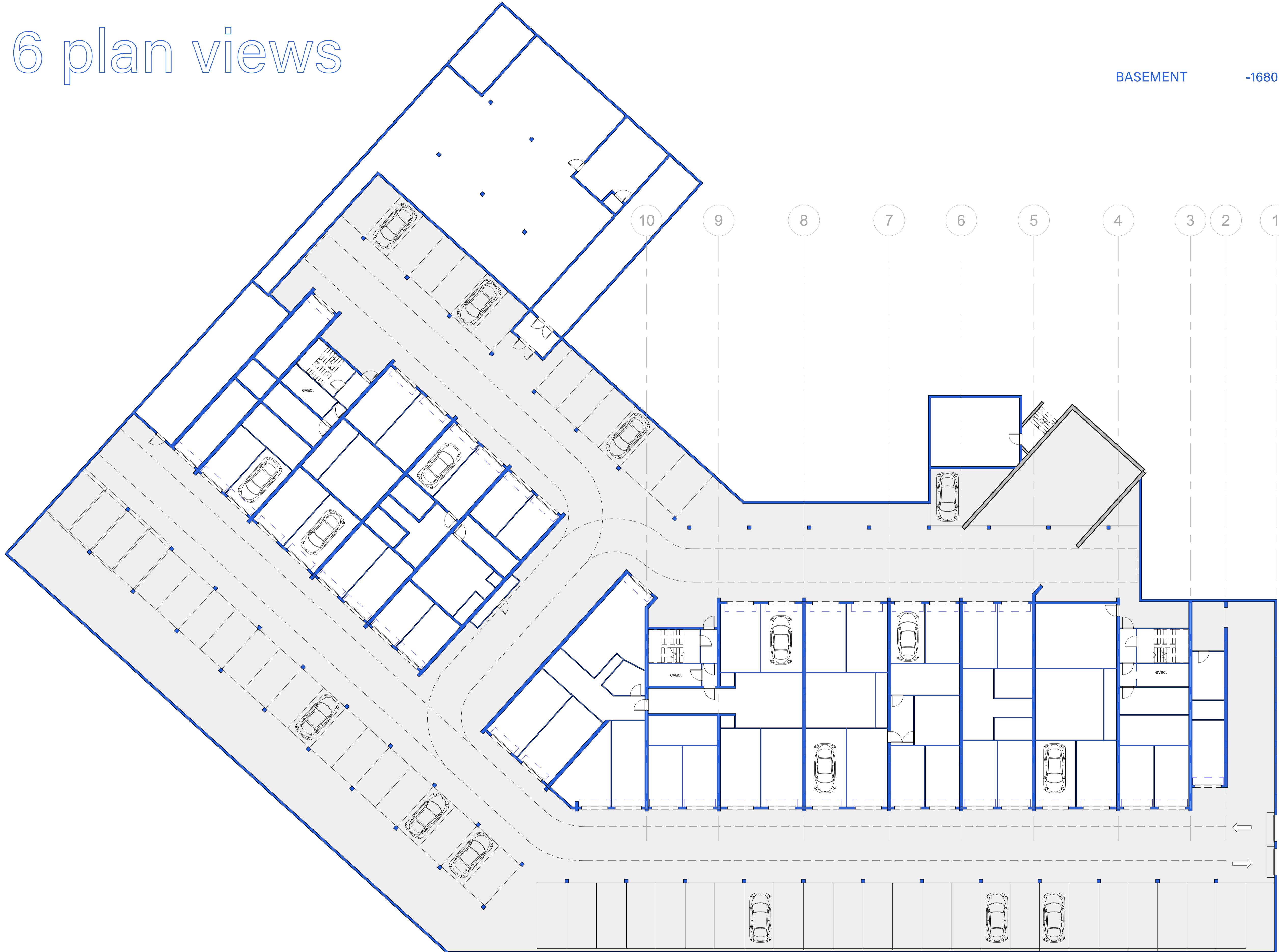


P5 UA

Bjarne van der Drift

BASEMENT

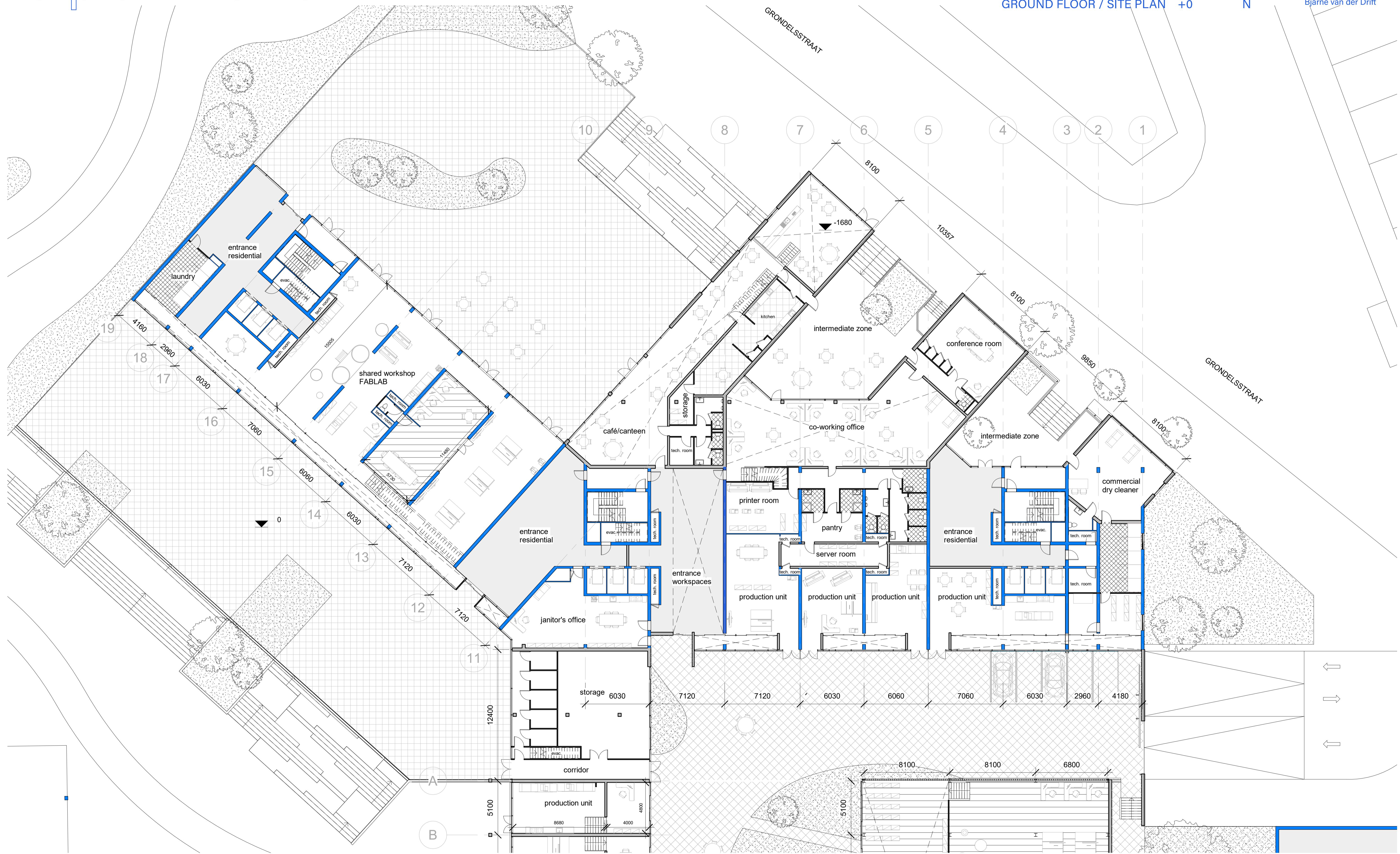
-1680



6 plan views

P5 UA

Bjarne van der Drift



6 plan views

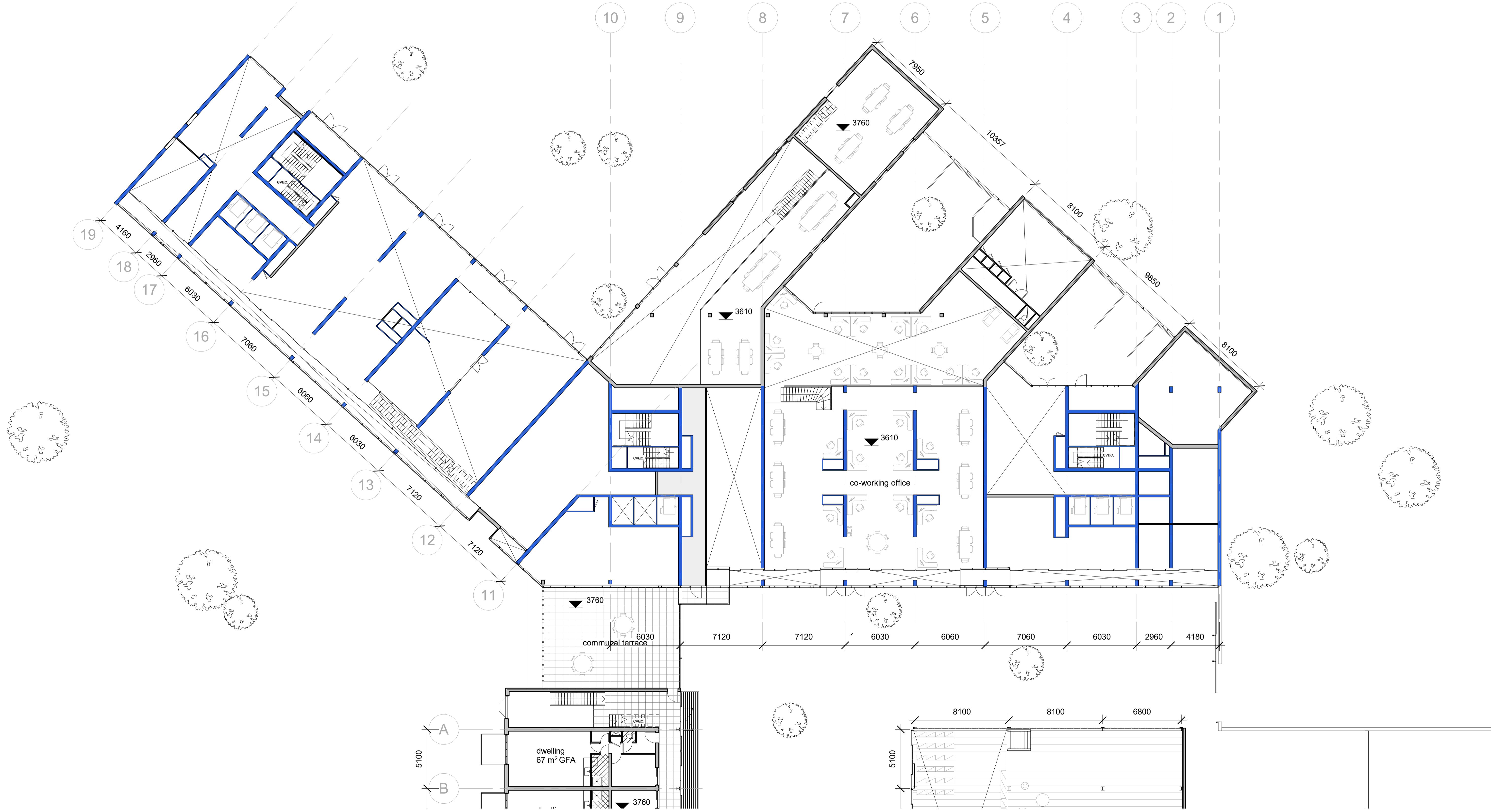
MEZZANINE LES GOUJONS

+3610



P5 UA

Bjarne van der Drift



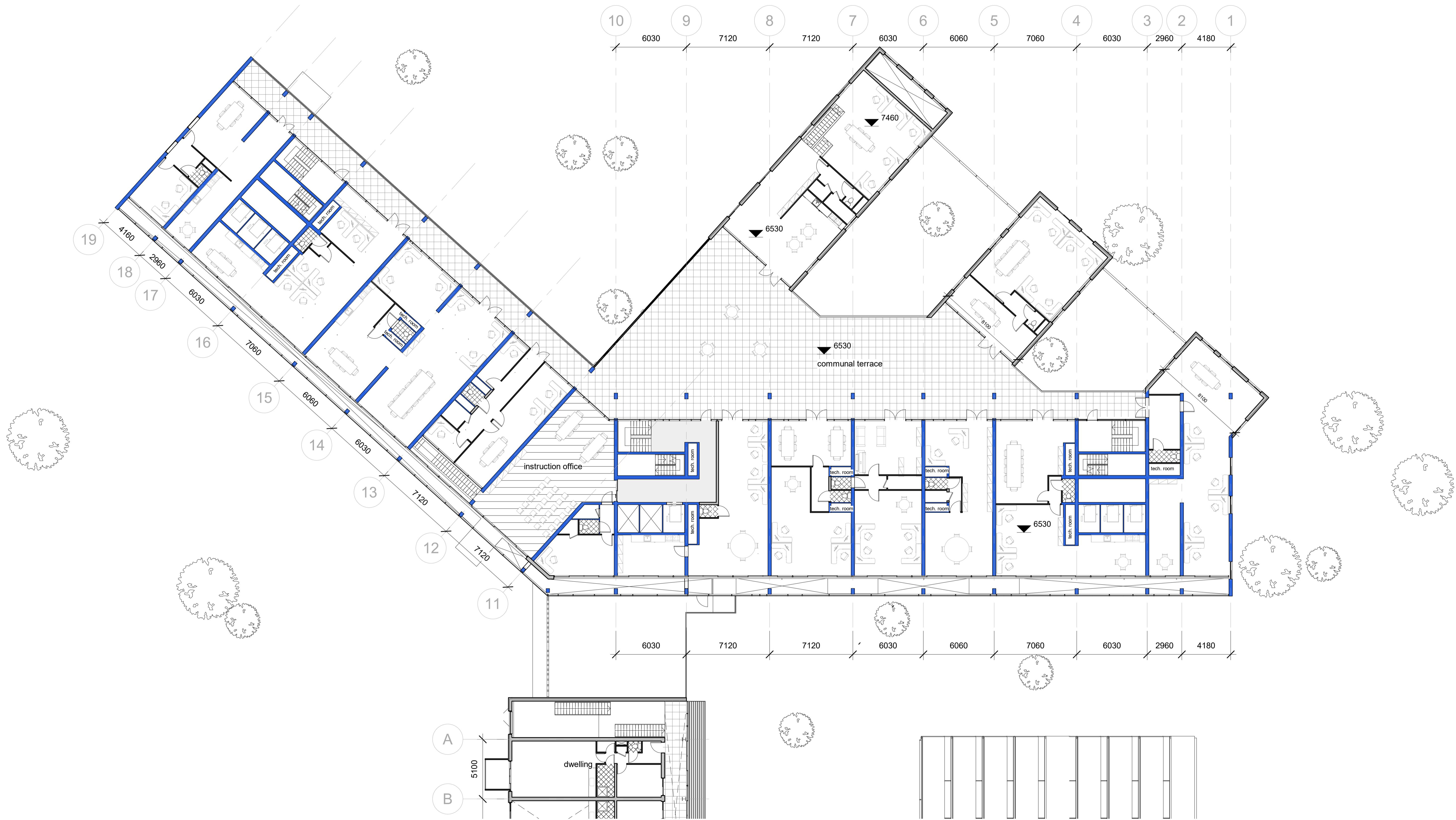
6 plan views

FIRST FLOOR LES GOUJONS +6530



P5 UA

Bjarne van der Drift



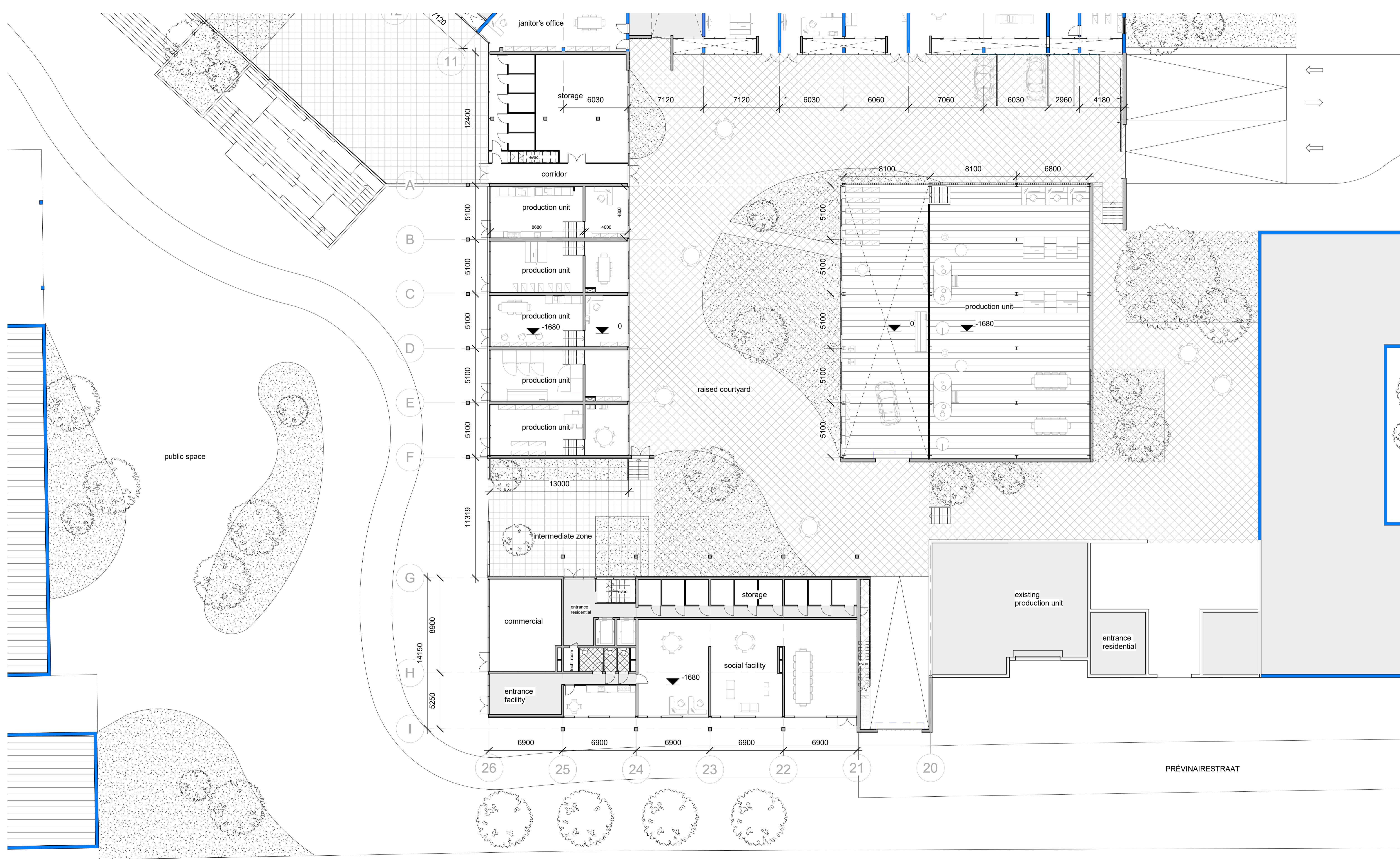
6 plan views

P5 UA

Bjarne van der Drift

GROUND FLOOR / SITE PLAN +0

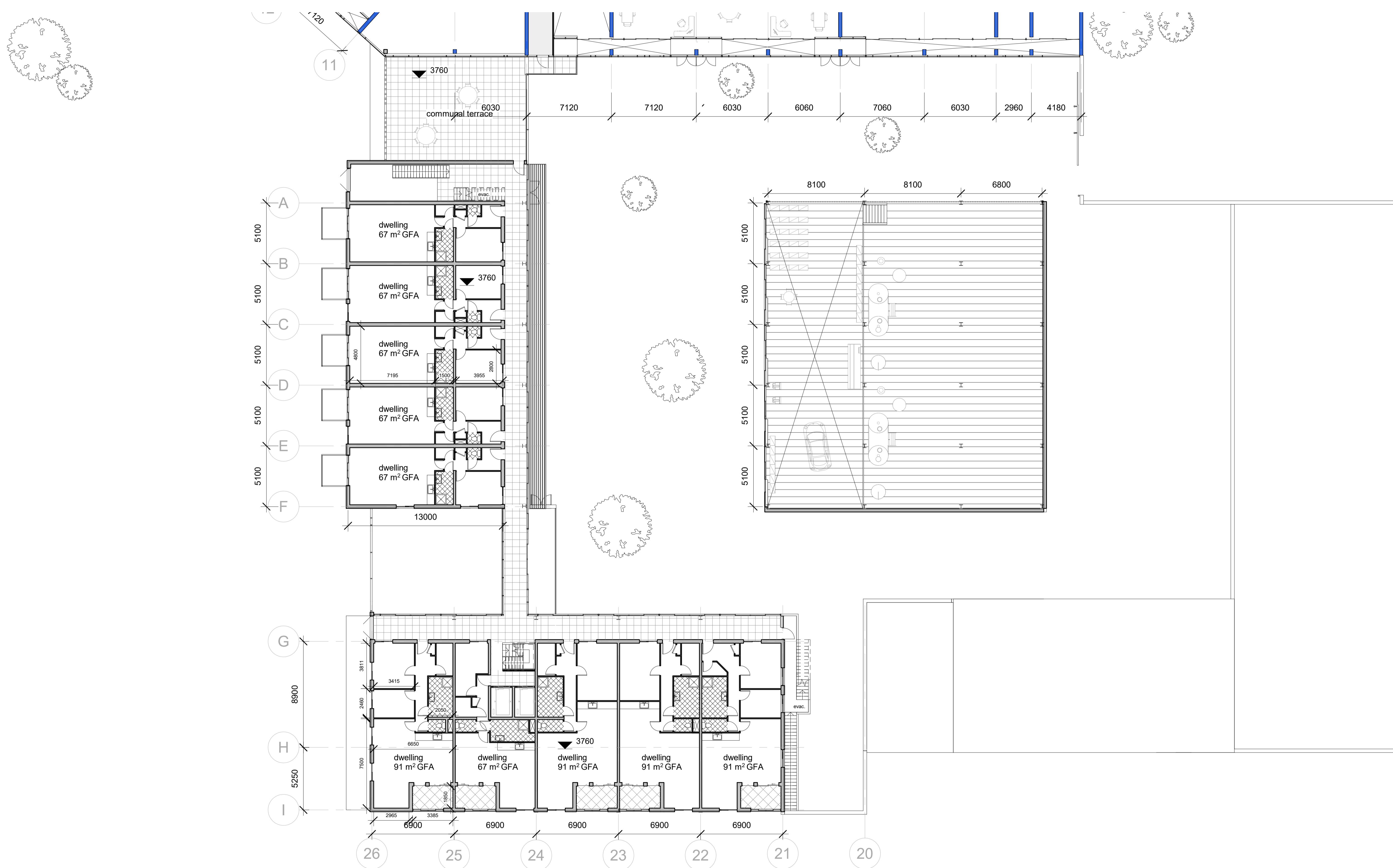
N



6 plan views

P5 UA

Bjarne van der Drift



6 plan views

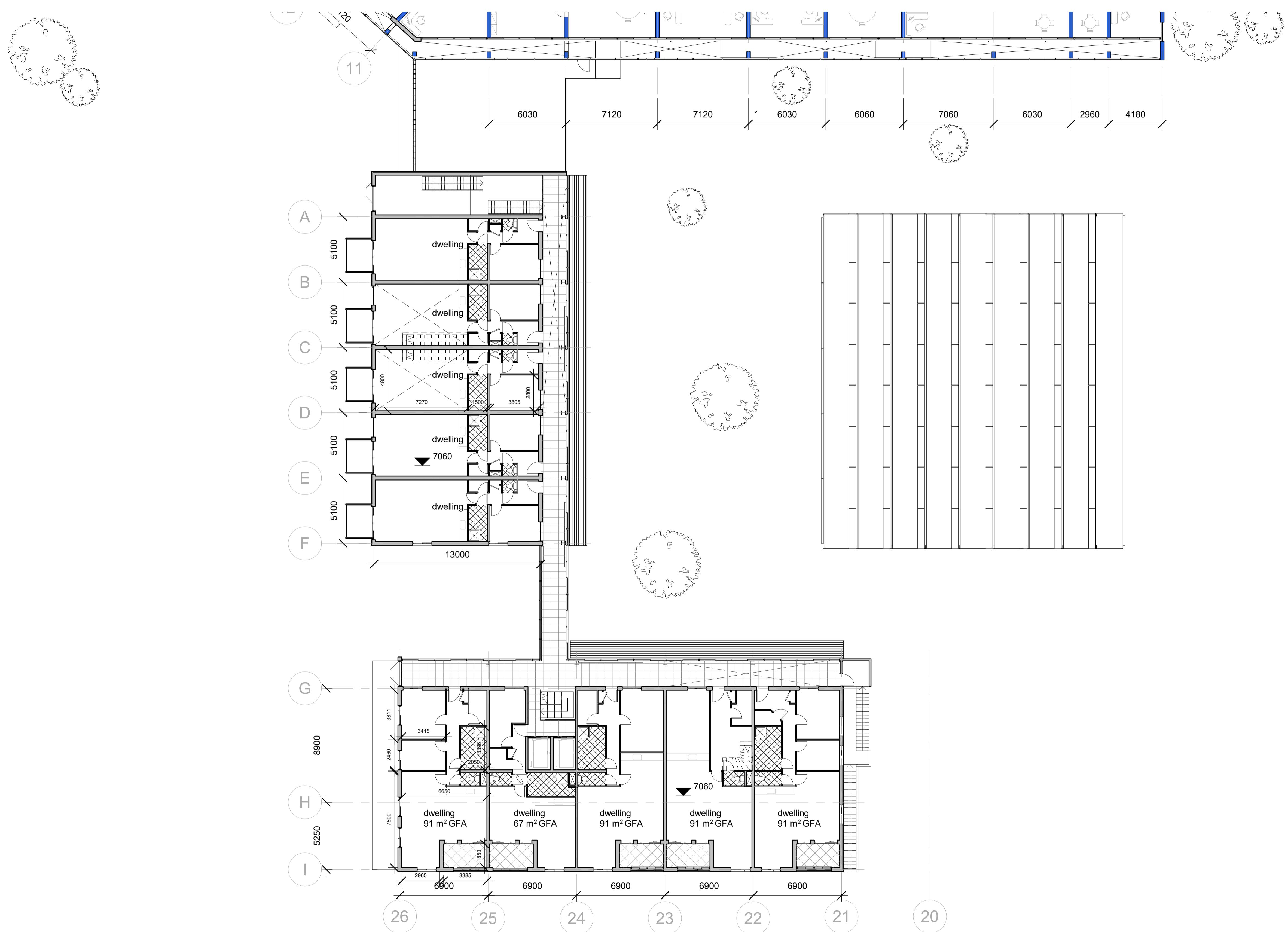


P5 UA

Bjarne van der Drift

SECOND FLOOR BLOCK

+7060



6 plan views

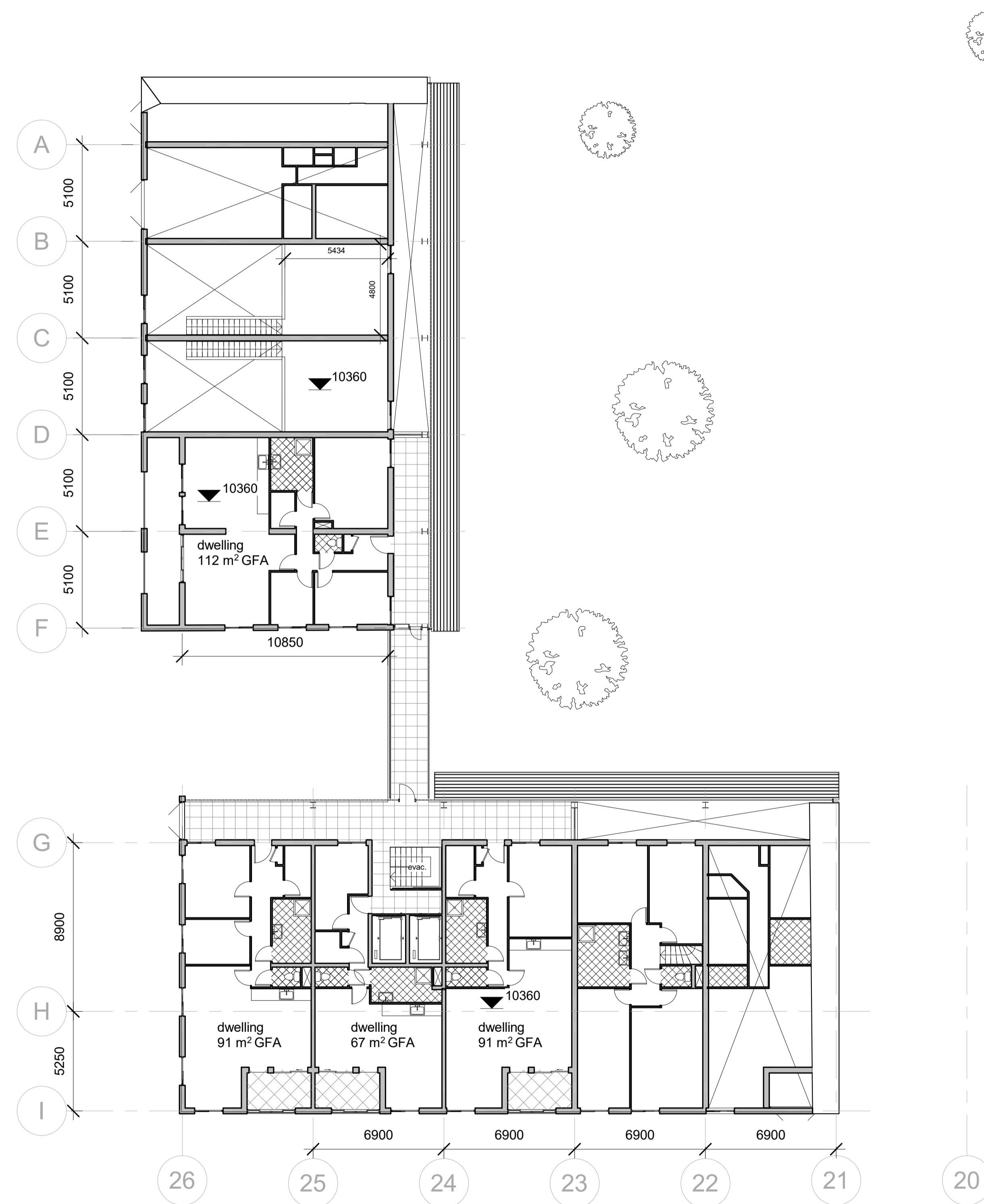
THIRD FLOOR BLOCK

+7060



P5 UA

Bjarne van der Drift

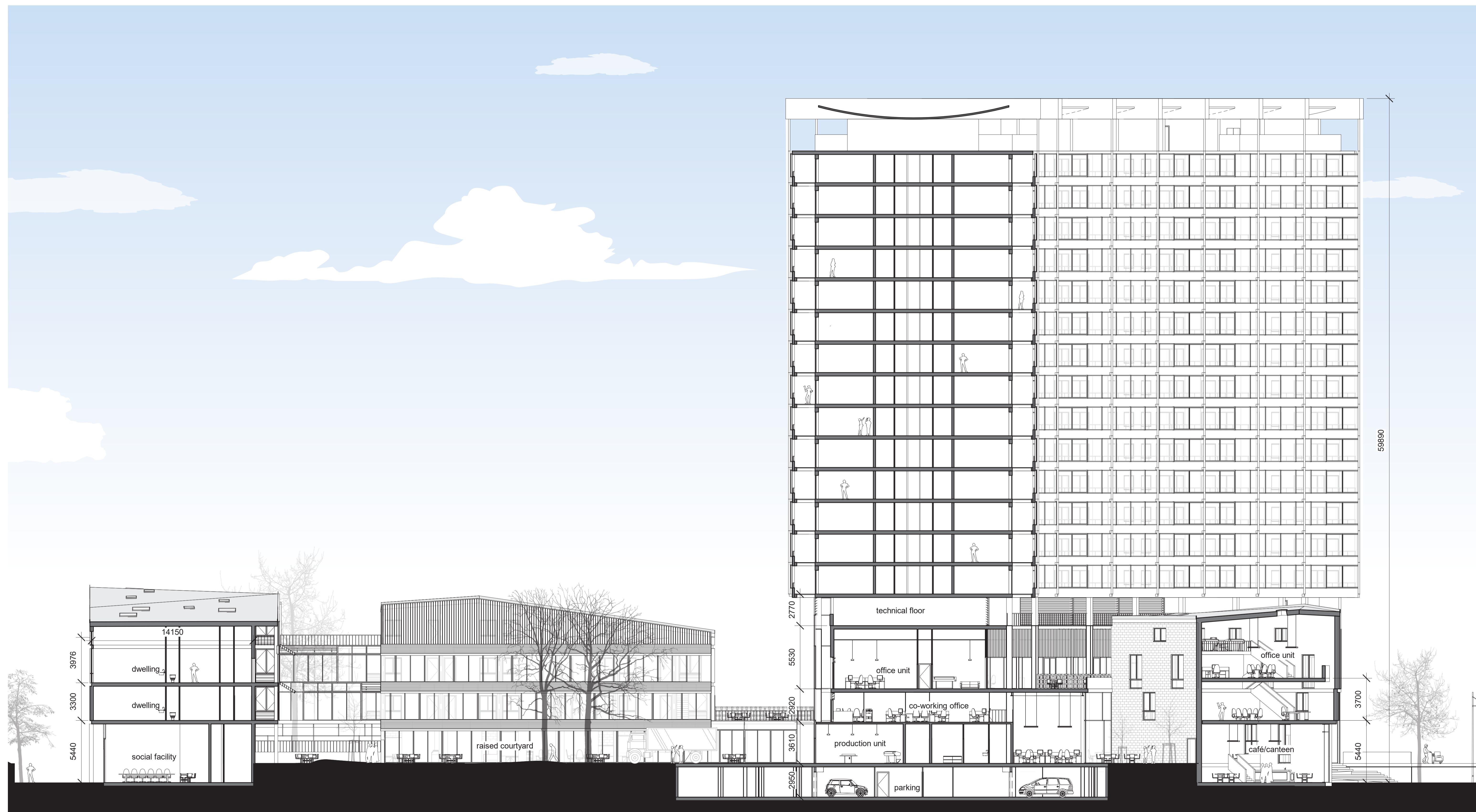


7 section

P5 UA

Bjarne van der Drift

SECTION CUT A-A

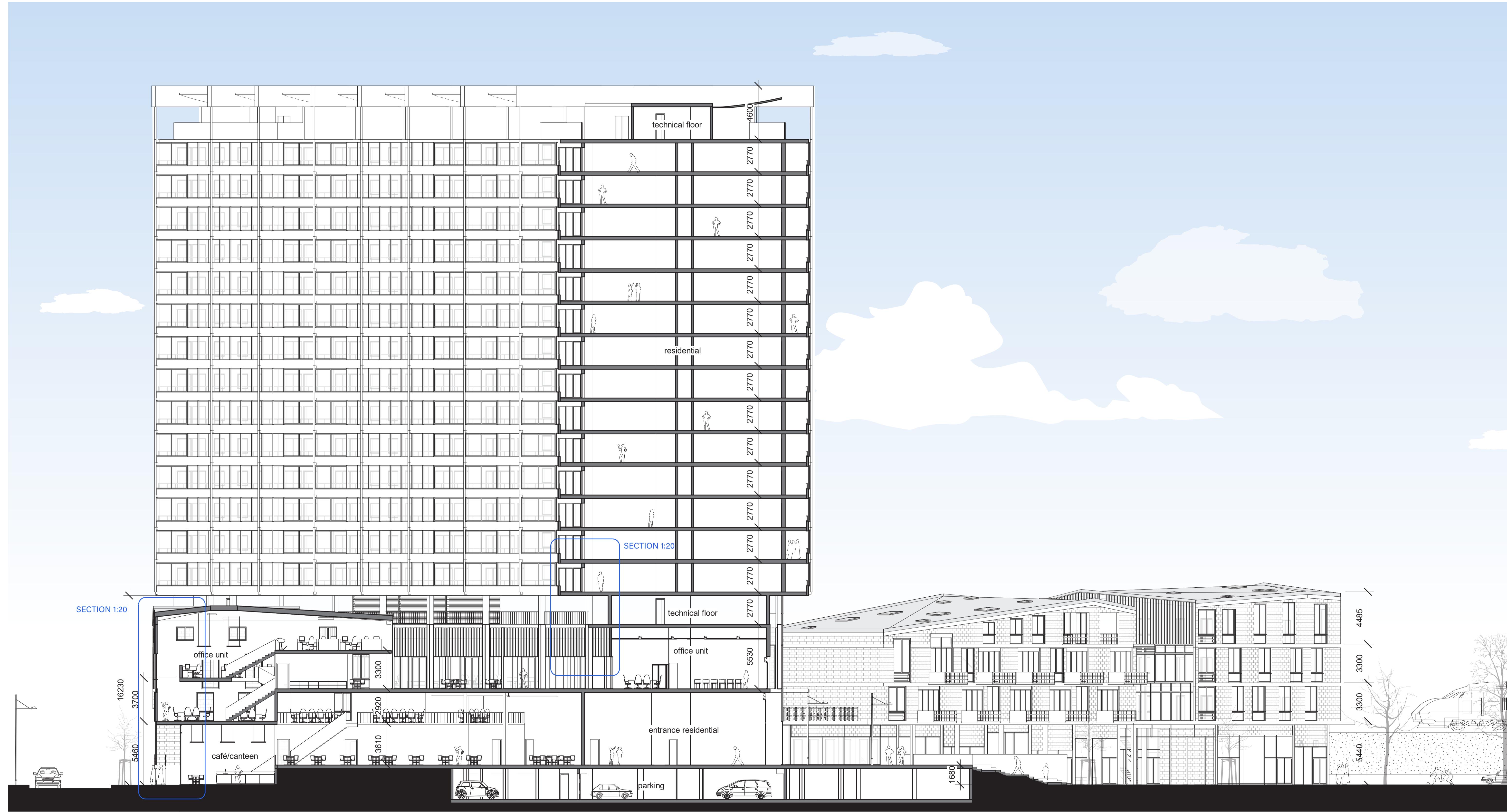


7 section

P5 UA

Bjarne van der Drift

SECTION CUT B-B

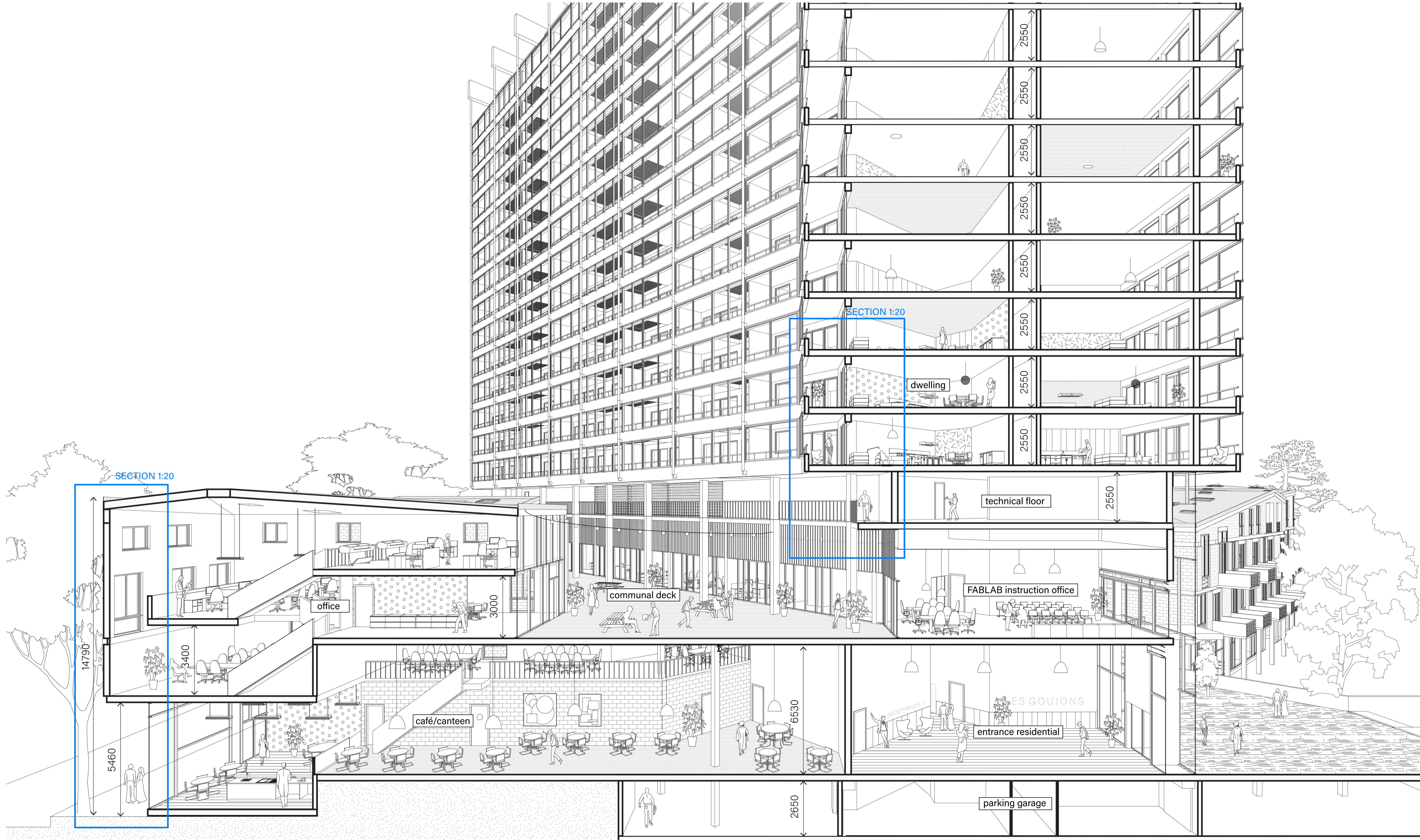


7 section

P5 UA

Bjarne van der Drift

PERSPECTIVE SECTION

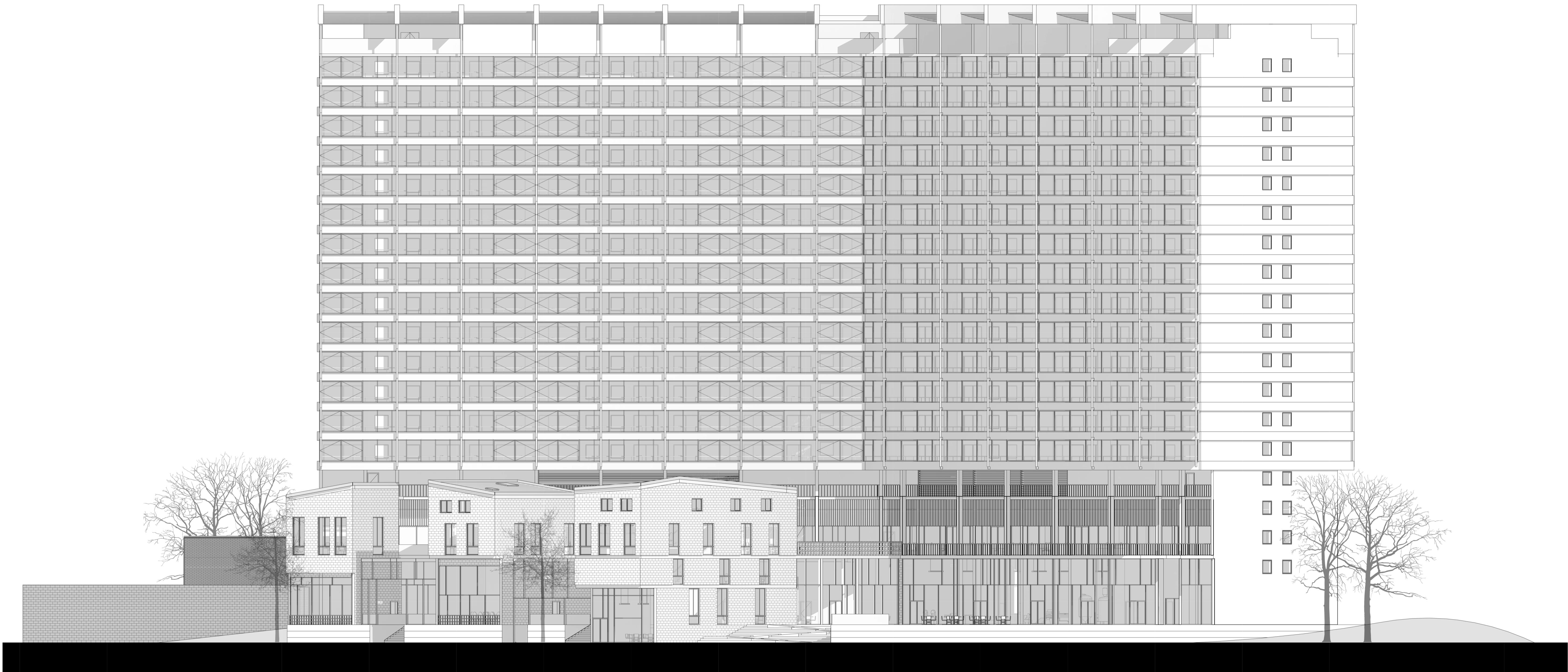


8 elevations

P5 UA

NORTH EAST / GRONDELSSTRAAT

Bjarne van der Drift



8 elevations

P5 UA

SOUTH EAST / GRONDELSSTRAAT

Bjarne van der Drift

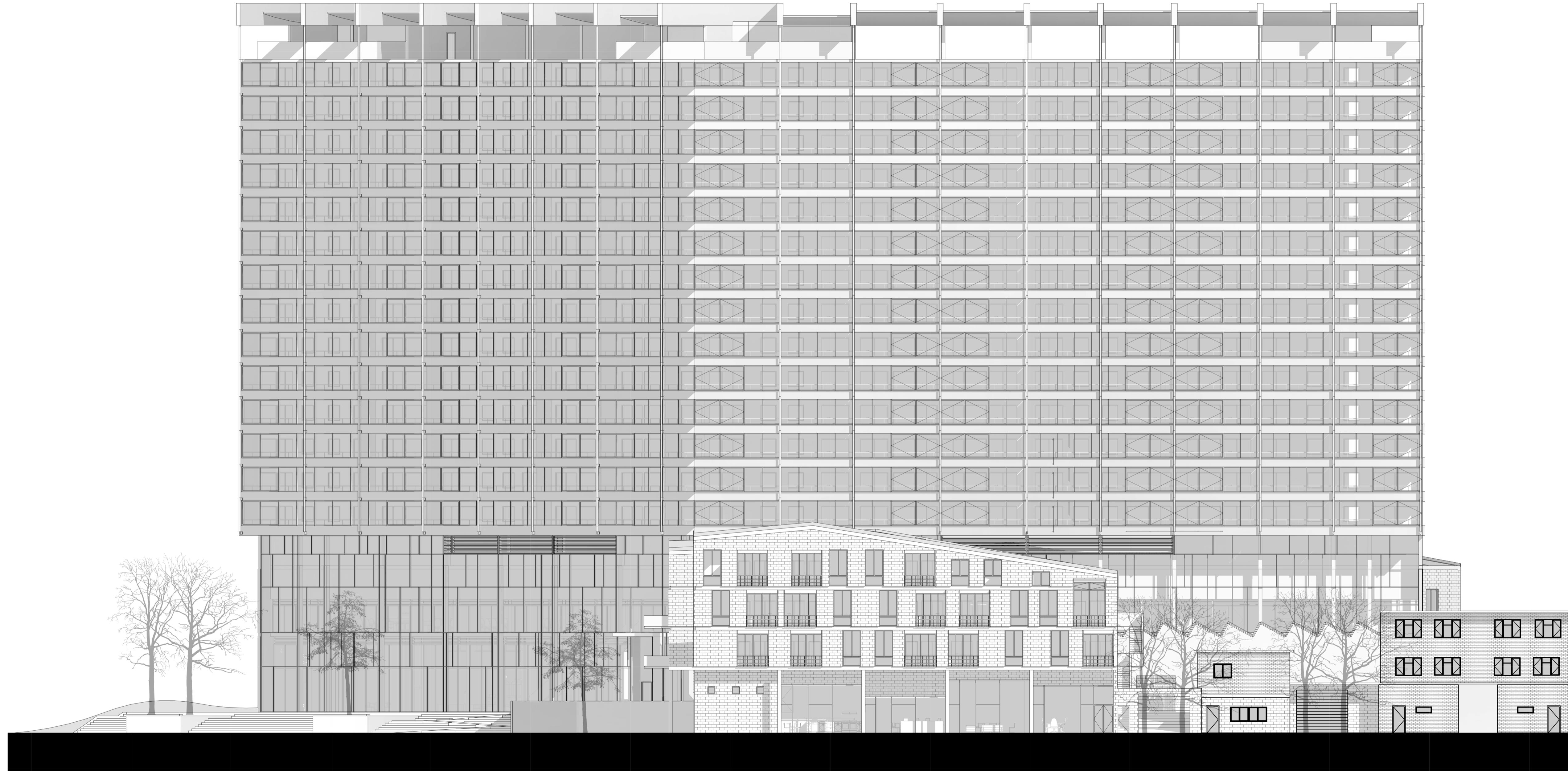


8 elevations

P5 UA

SOUTH WEST / PRÉVINAIRESTRAAT

Bjarne van der Drift



8 elevations

P5 UA

NORTH EAST / PUBLIC SQUARE

Bjarne van der Drift



9 impression

P5 UA

RUE DES GOUJONS/GRONDELSSTRAAT

Bjarne van der Drift



9 impression

P5 UA

RUE DES GOJONS/GRONDELSSTRAAT

Bjarne van der Drift



9 impression

P5 UA

Bjarne van der Drift

PUBLIC REALM



9 impression

P5 UA

Bjarne van der Drift

PUBLIC REALM



9 impression

P5 UA

Bjarne van der Drift

INTERMEDIATE ZONE



9 impression

P5 UA

FAÇADE STYLES

Bjarne van der Drift



9 impression

P5 UA

FAÇADE STYLES

Bjarne van der Drift



9 impression

P5 UA

RAISED COURTYARD

Bjarne van der Drift



9 impression

P5 UA

Bjarne van der Drift

COMMUNAL DECK



9 impression

P5 UA

Bjarne van der Drift

PRODUCTION SPACE



9 impression

P5 UA

Bjarne van der Drift

FABLAB/MACHINE ROOM

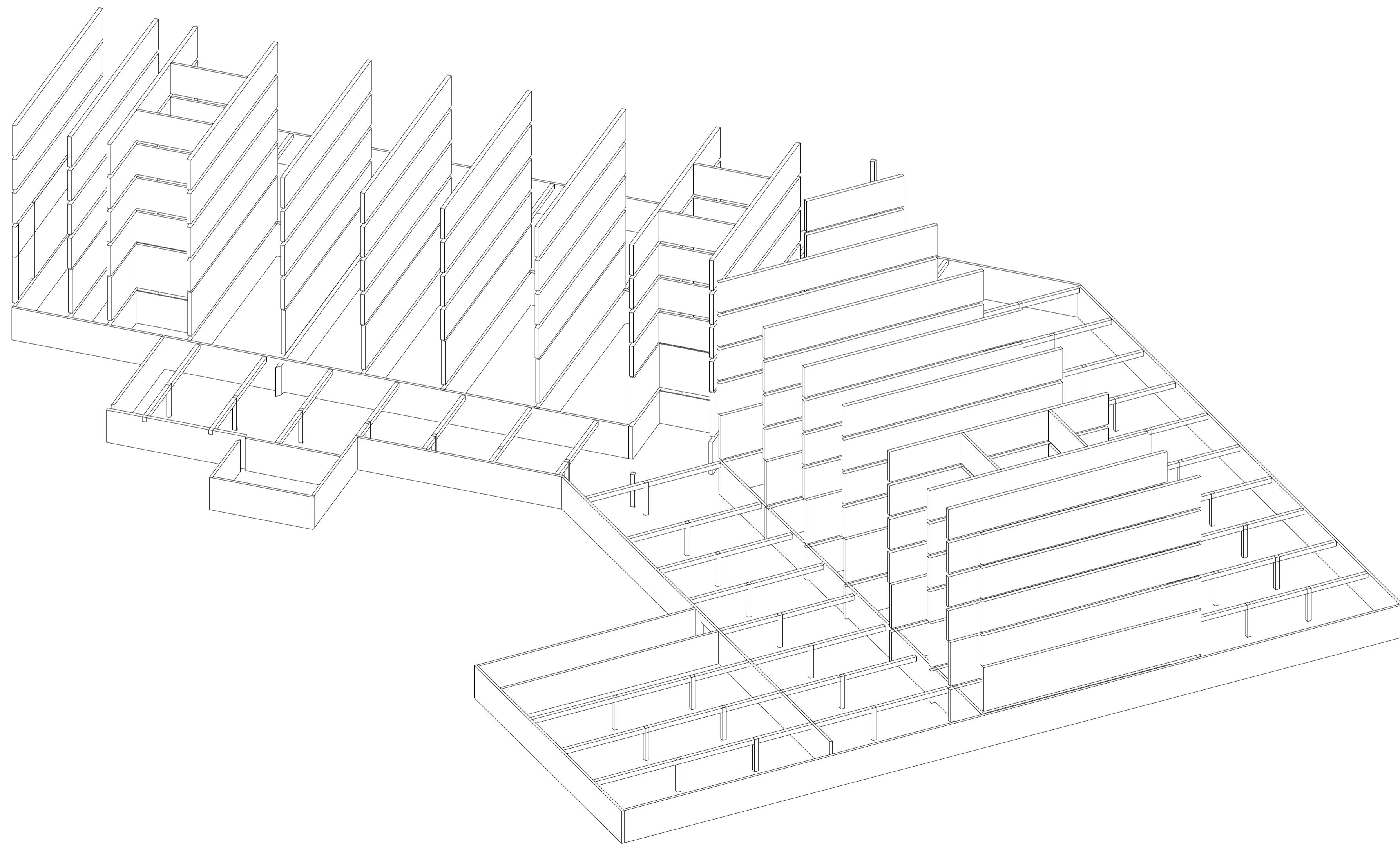


10 structure

P5 UA

BASE VOLUME - EXISTING

Bjarne van der Drift

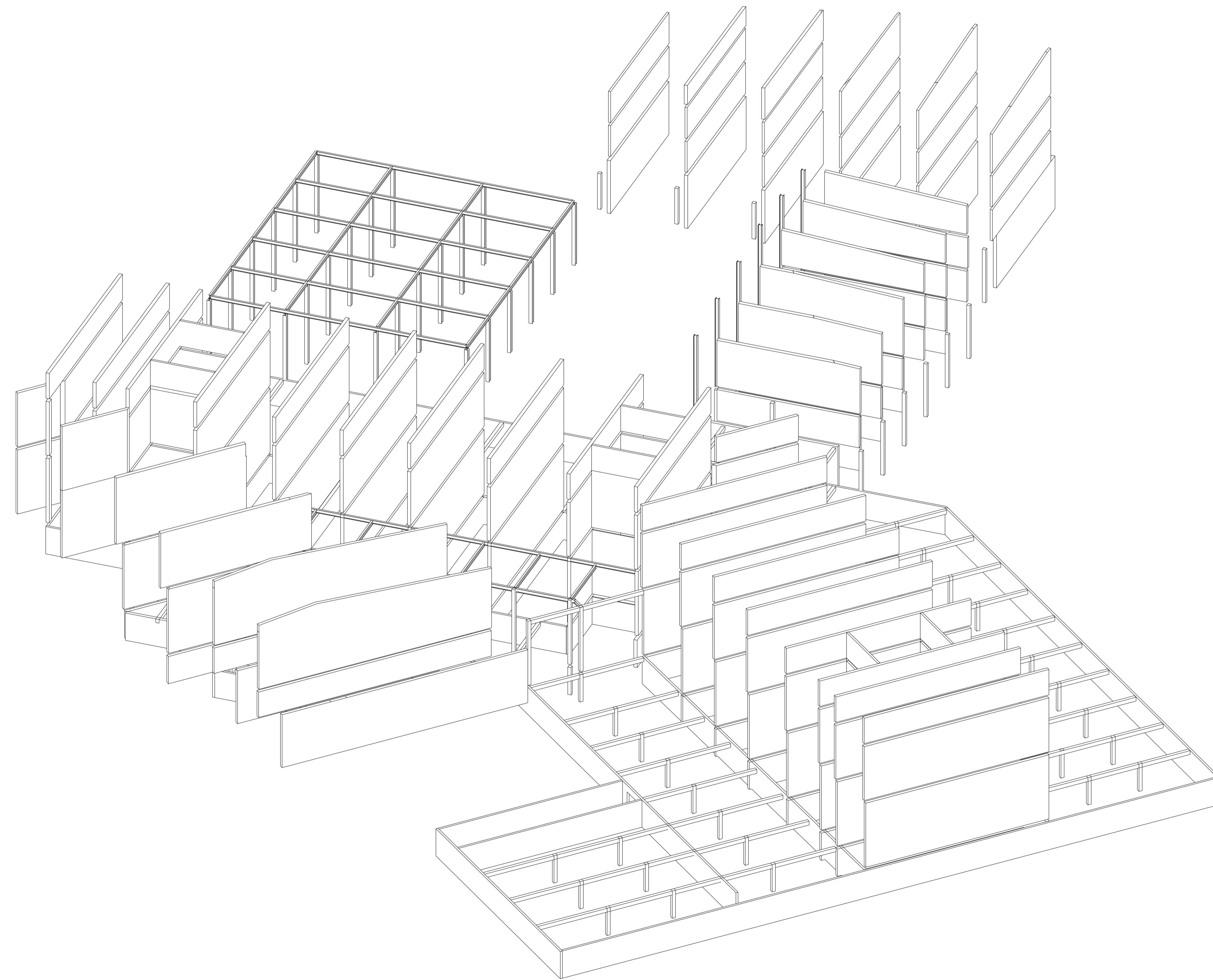


10 structure

P5 UA

BASE VOLUME - NEW

Bjarne van der Drift

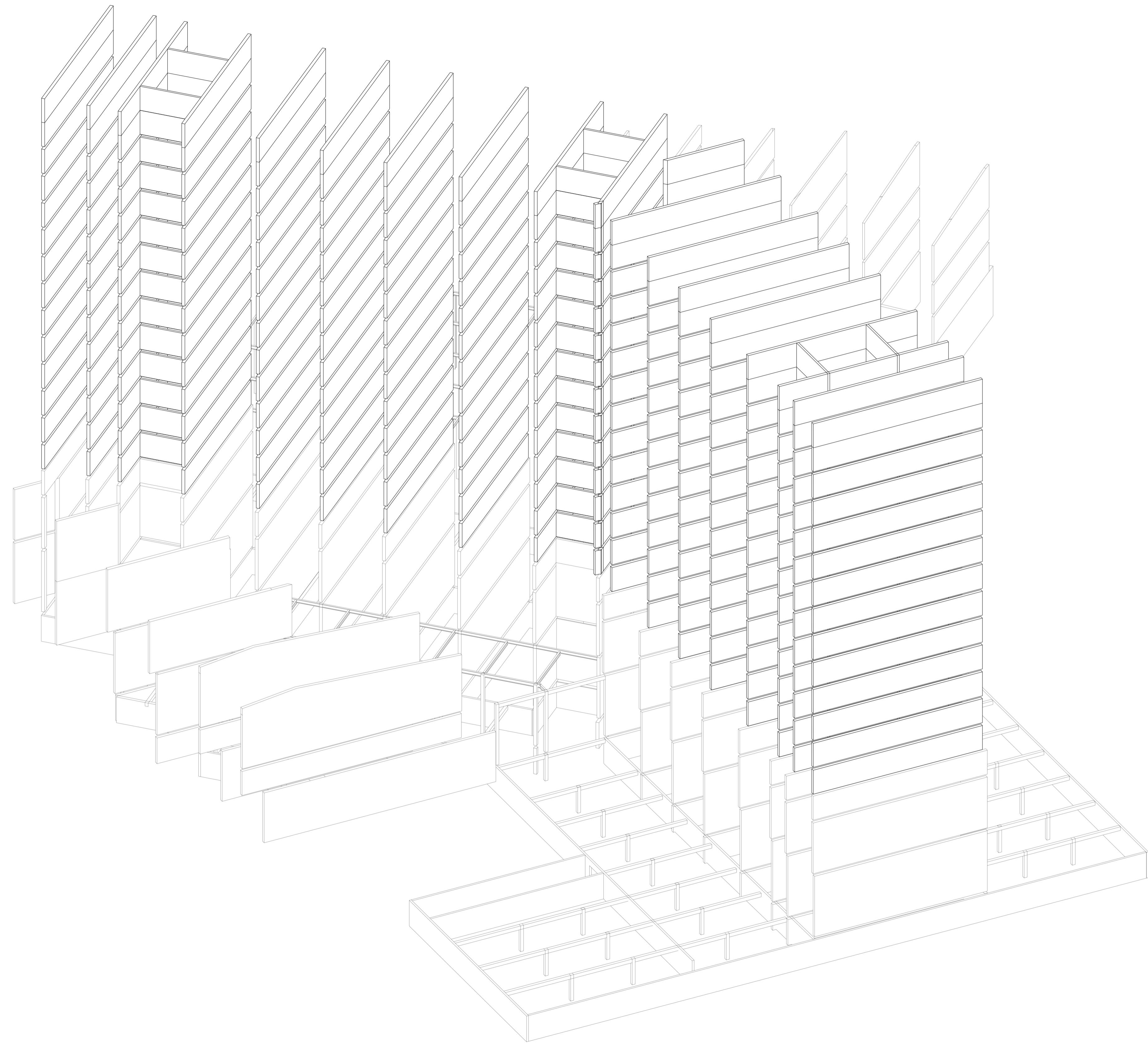


10 structure

P5 UA

TOP VOLUME - EXISTING

Bjarne van der Drift

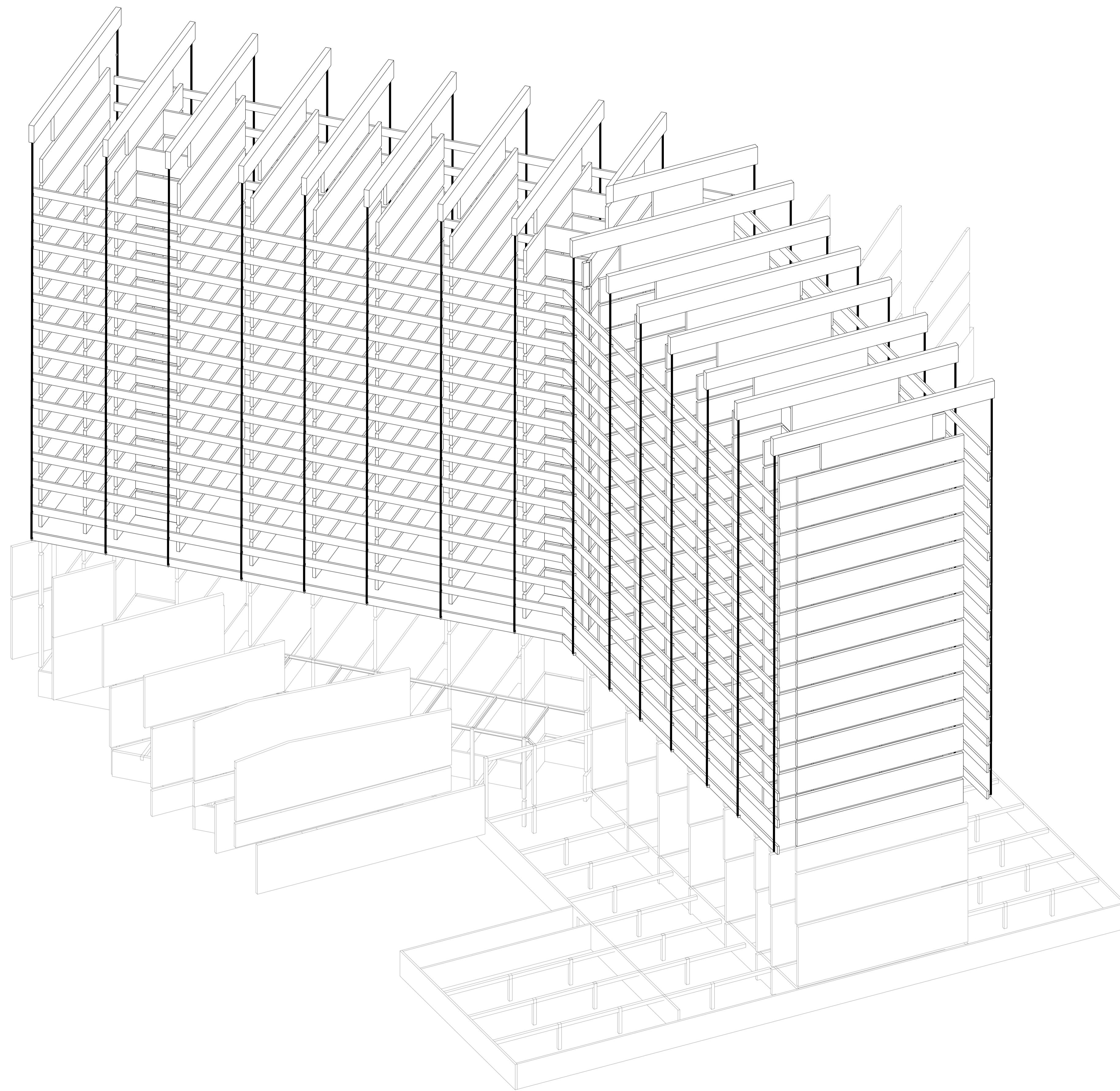


10 structure

P5 UA

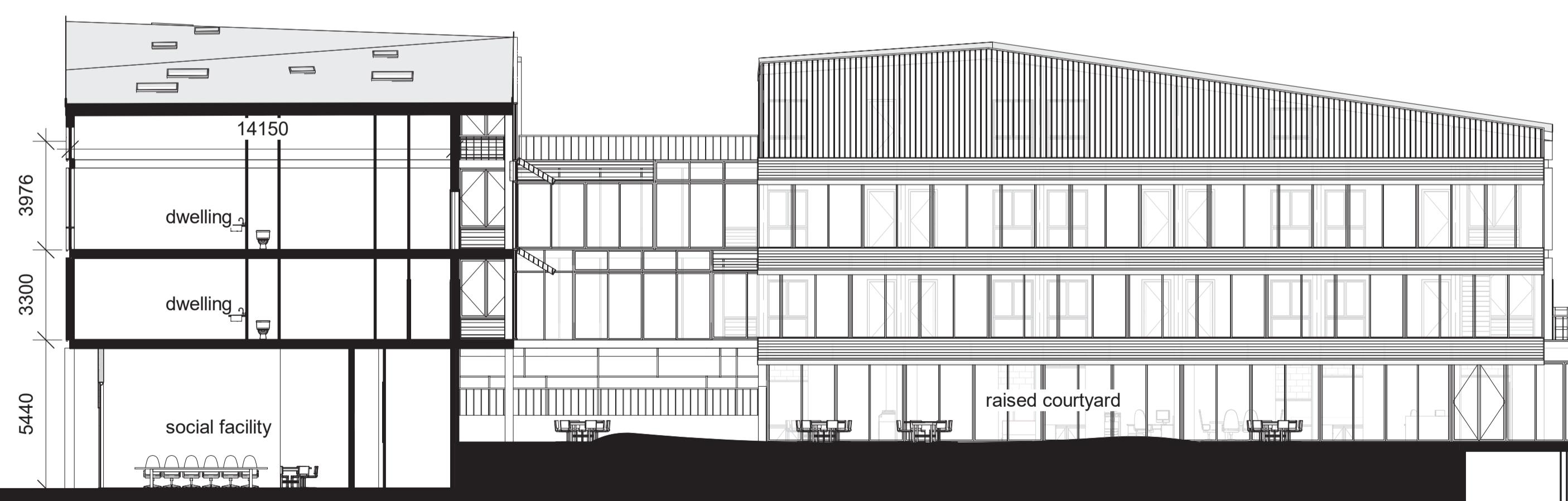
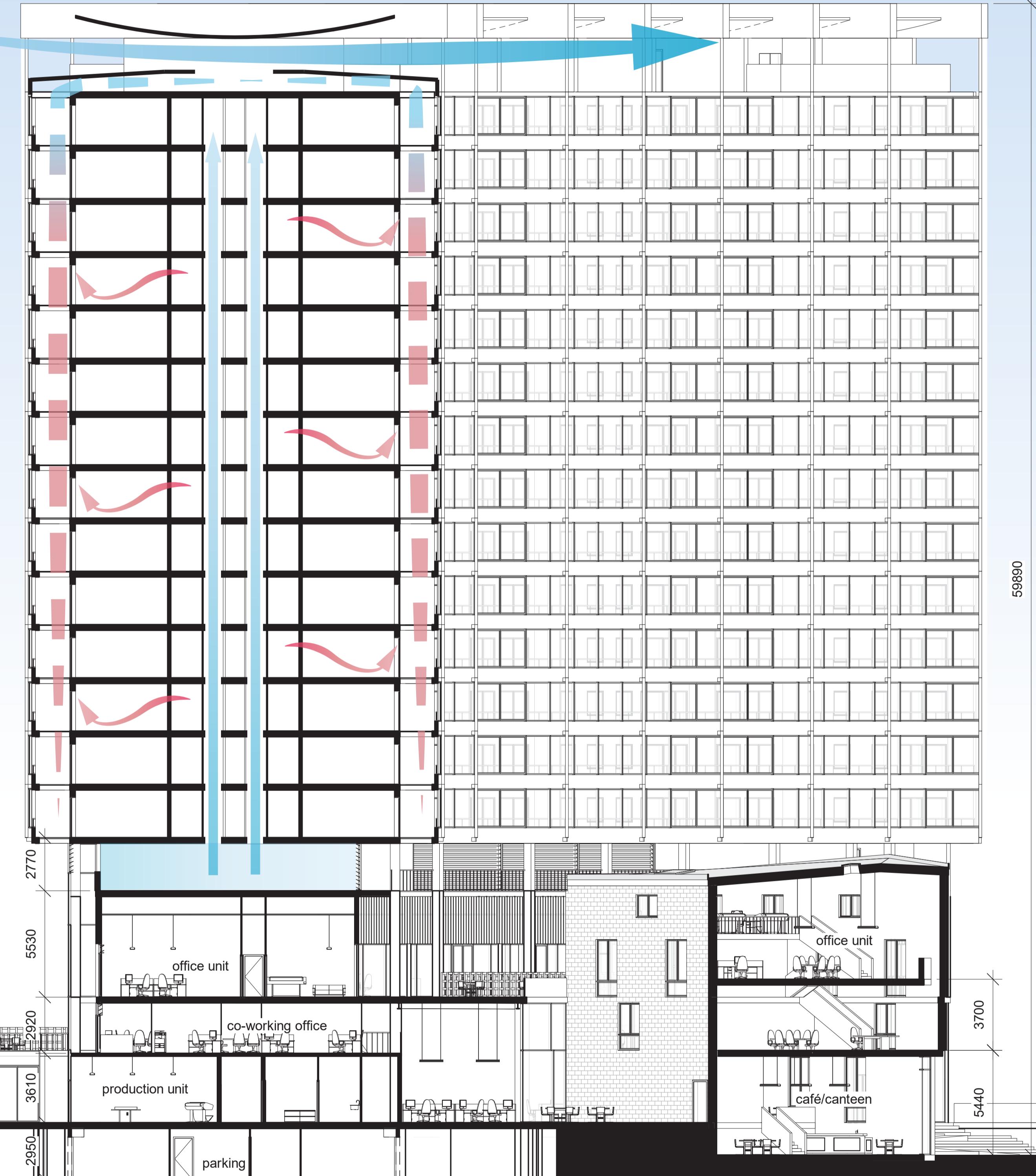
TOP VOLUME - NEW

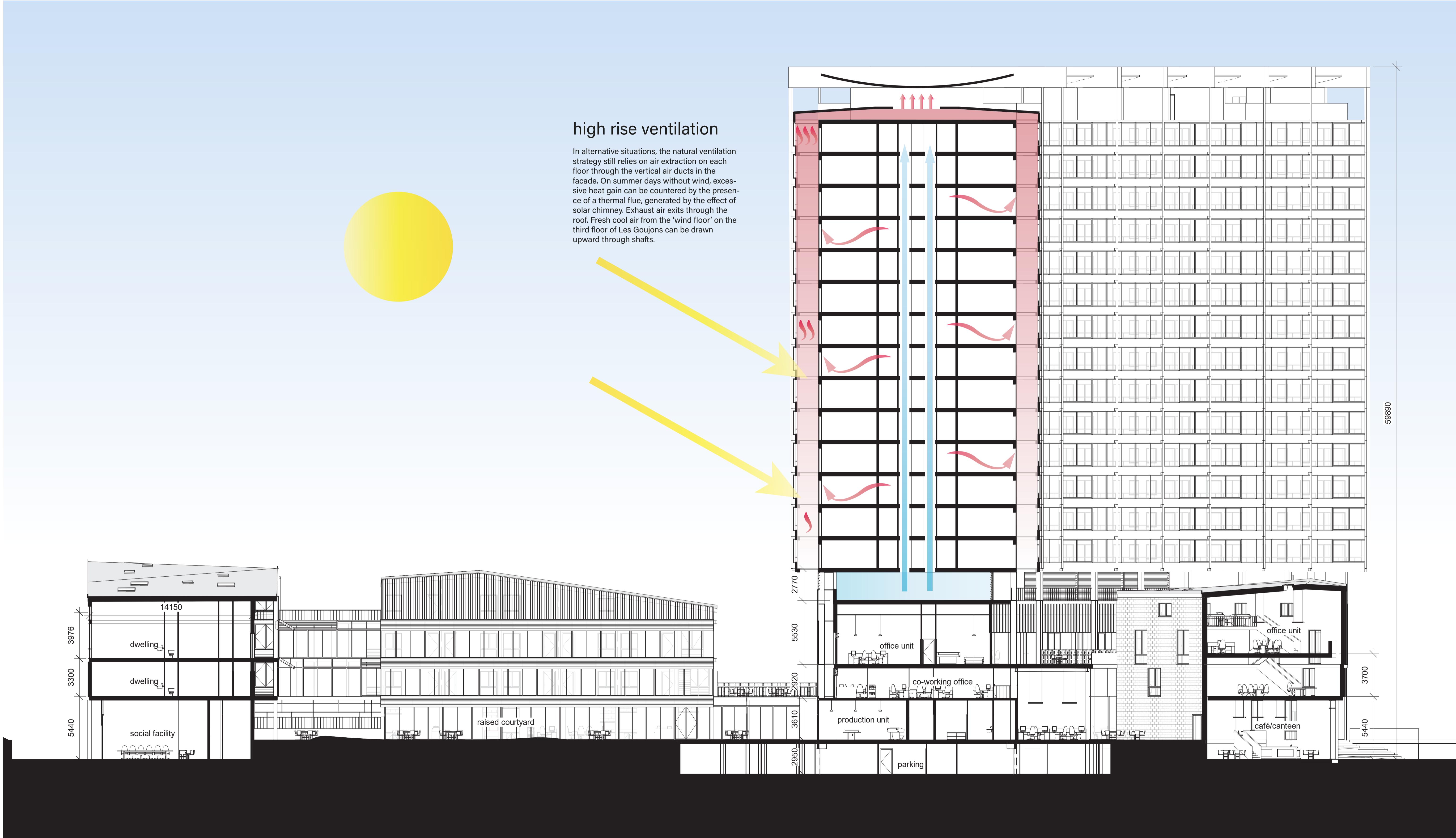
Bjarne van der Drift

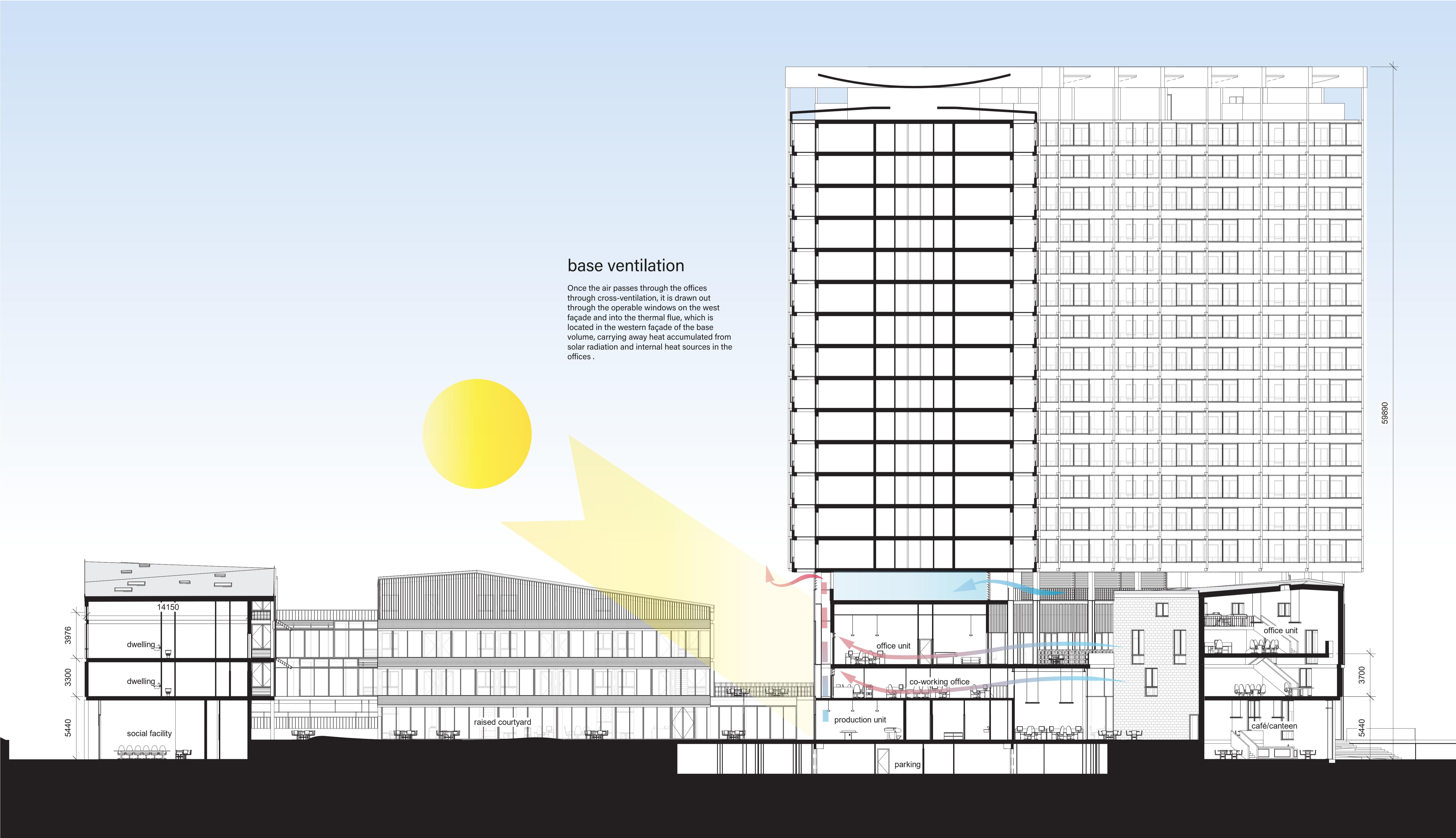


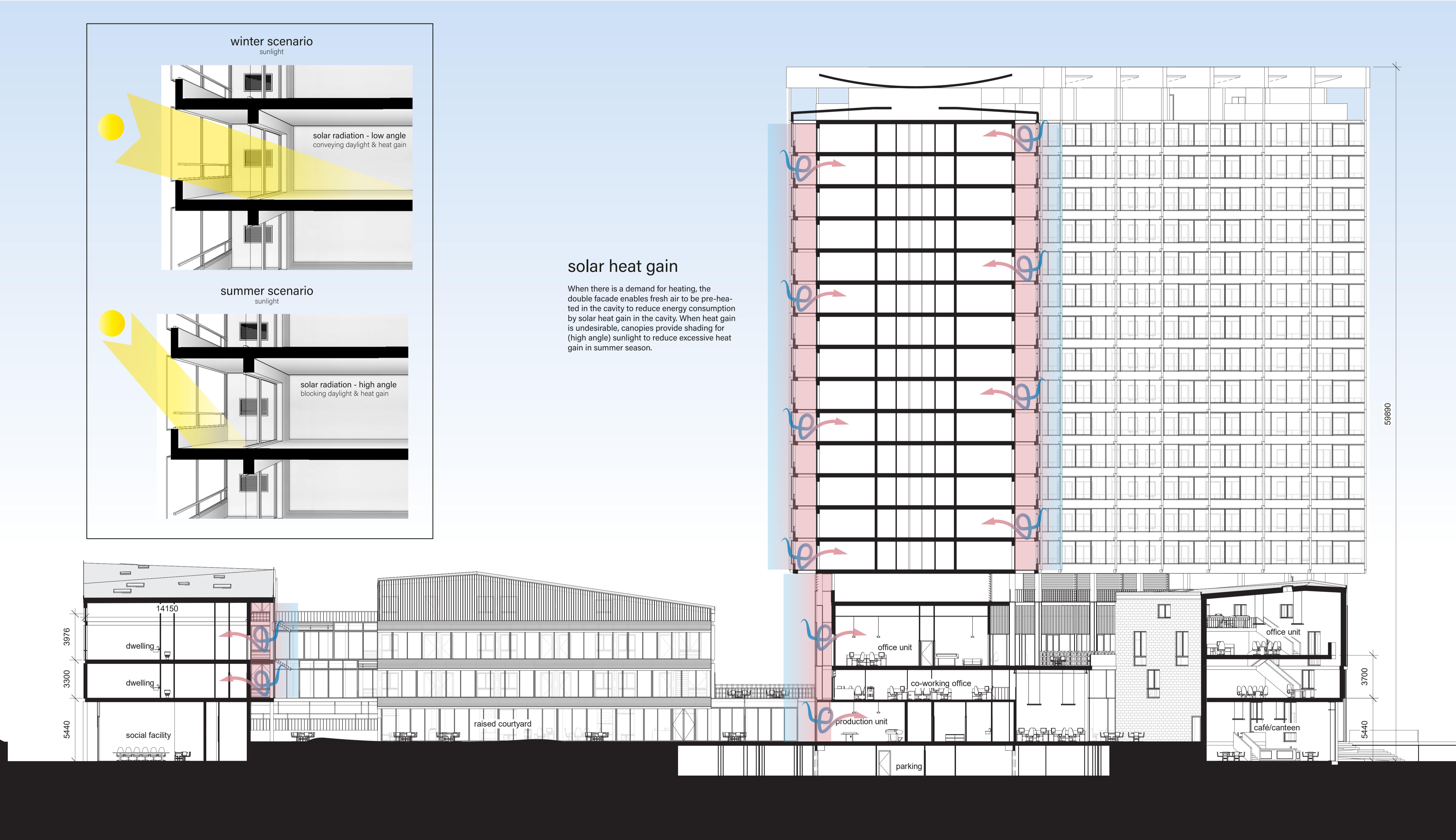
high rise ventilation

The natural ventilation strategy relies on air extraction on each floor through the vertical air ducts in the facade, induced by the Wing Roof and its Venturi effect. Fresh air is drawn through openings in the facade. The double-skin façade acts as a thermal and acoustic buffer, protecting the building against heat loss, weather influences and noise. It decreases wind pressure and velocity on the internal windows, enhancing the prospects for natural ventilation, particularly at the top floors where wind speed can be high.



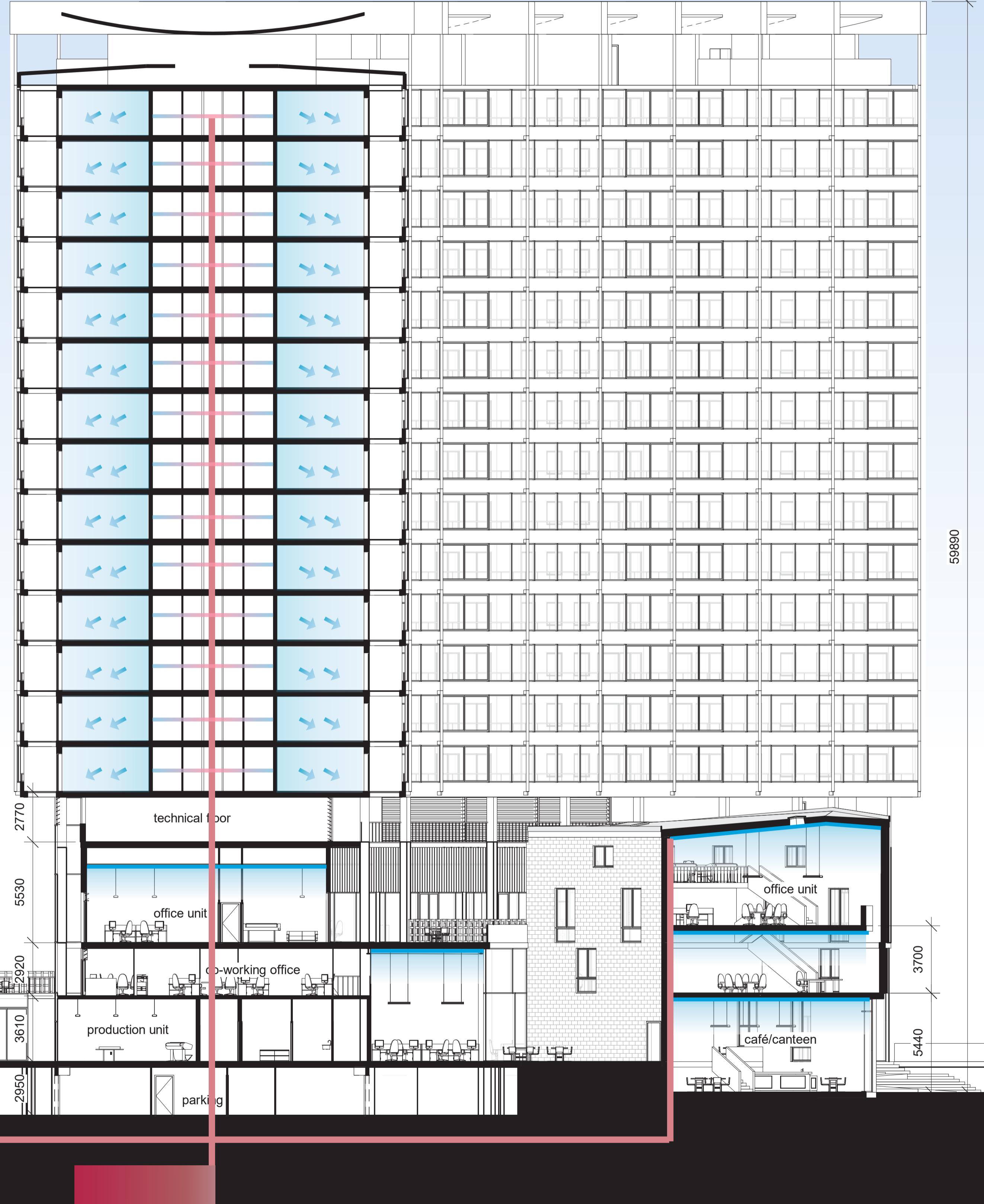






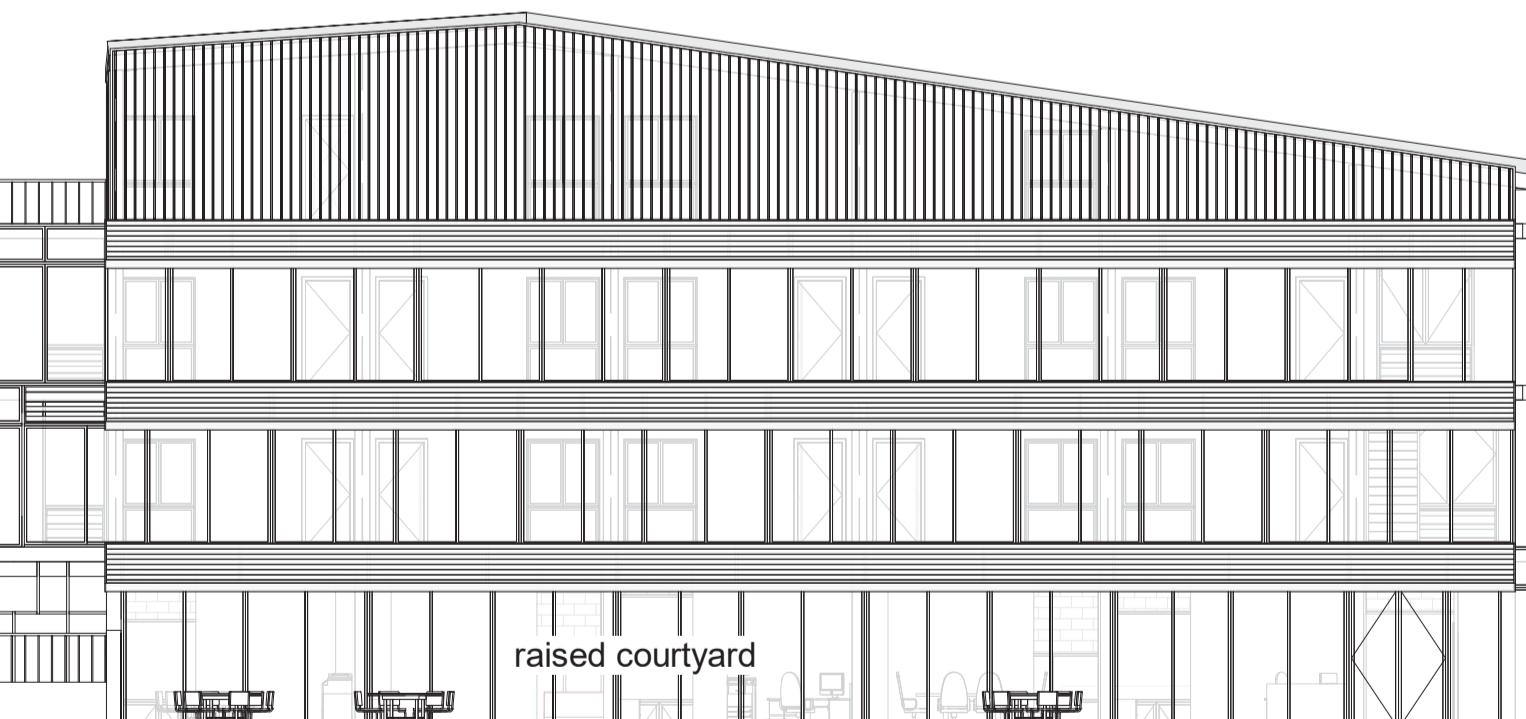
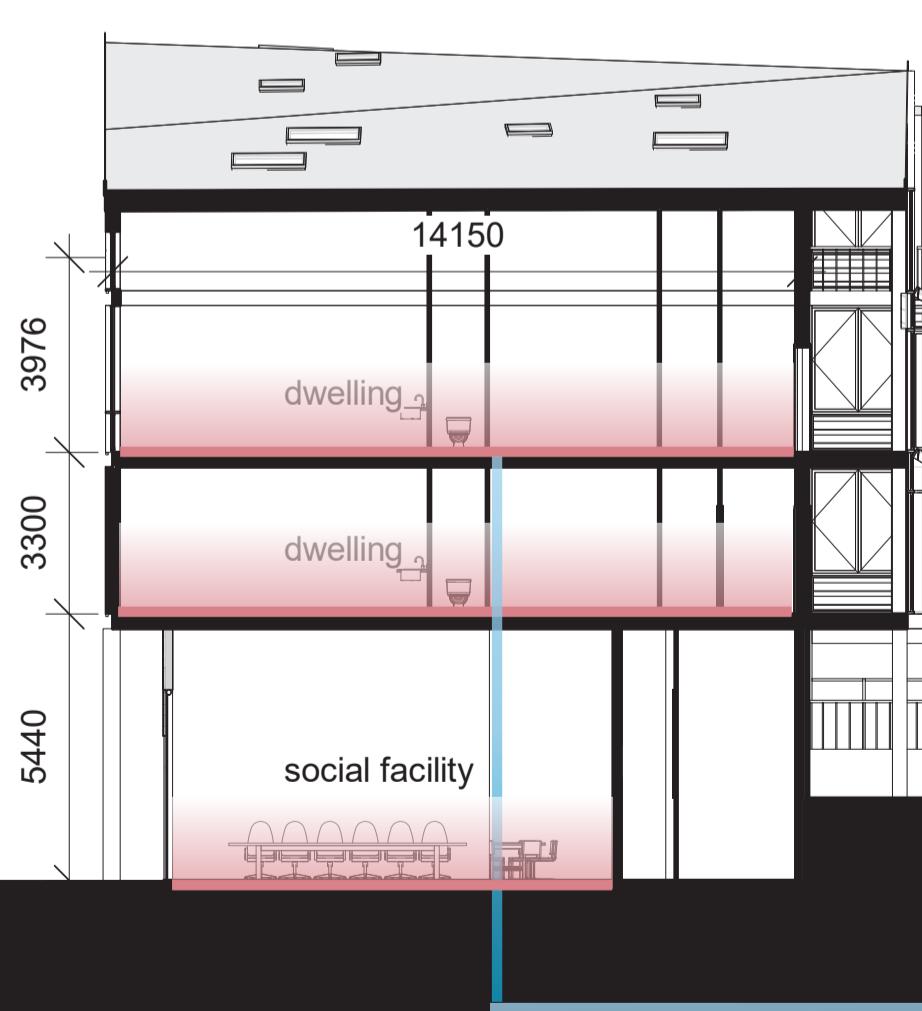
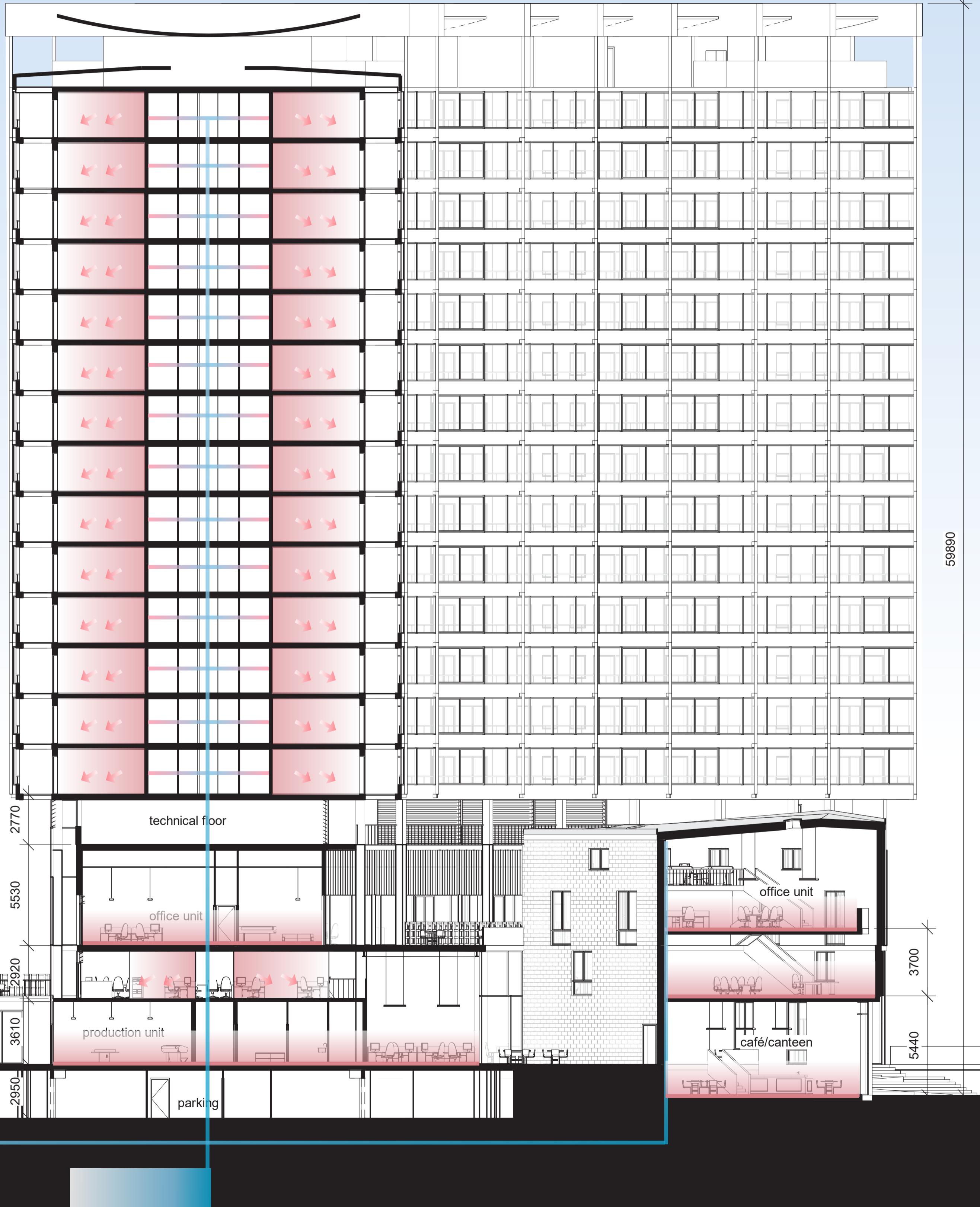
cooling

In case natural ventilation external temperatures do not allow for the use of natural ventilation enough because of limited cooling capacity, active cooling can be activated. In office spaces, cooling takes place through a water-based chilled ceiling panel system connected to a heat exchange system. In residential units, cooling takes place through floor slabs or wall systems. During the cooling season, cold water at a temperature of 18 °C flows through these pipes. The geothermal system stores draws cold water and stores excess heat to use in winter season.



heating

In winter and shoulder seasons, low temperature heating takes place through radiation from wall panel systems and integrated water pipes in floors. A heat exchange unit recovers discharged energy from exhaust air from mechanical ventilation, in case natural ventilation is not preferable or inactive. The ground coupled heat exchanger (geothermal system) draws excess summer heat stored within the soil to condition the building during winter season.

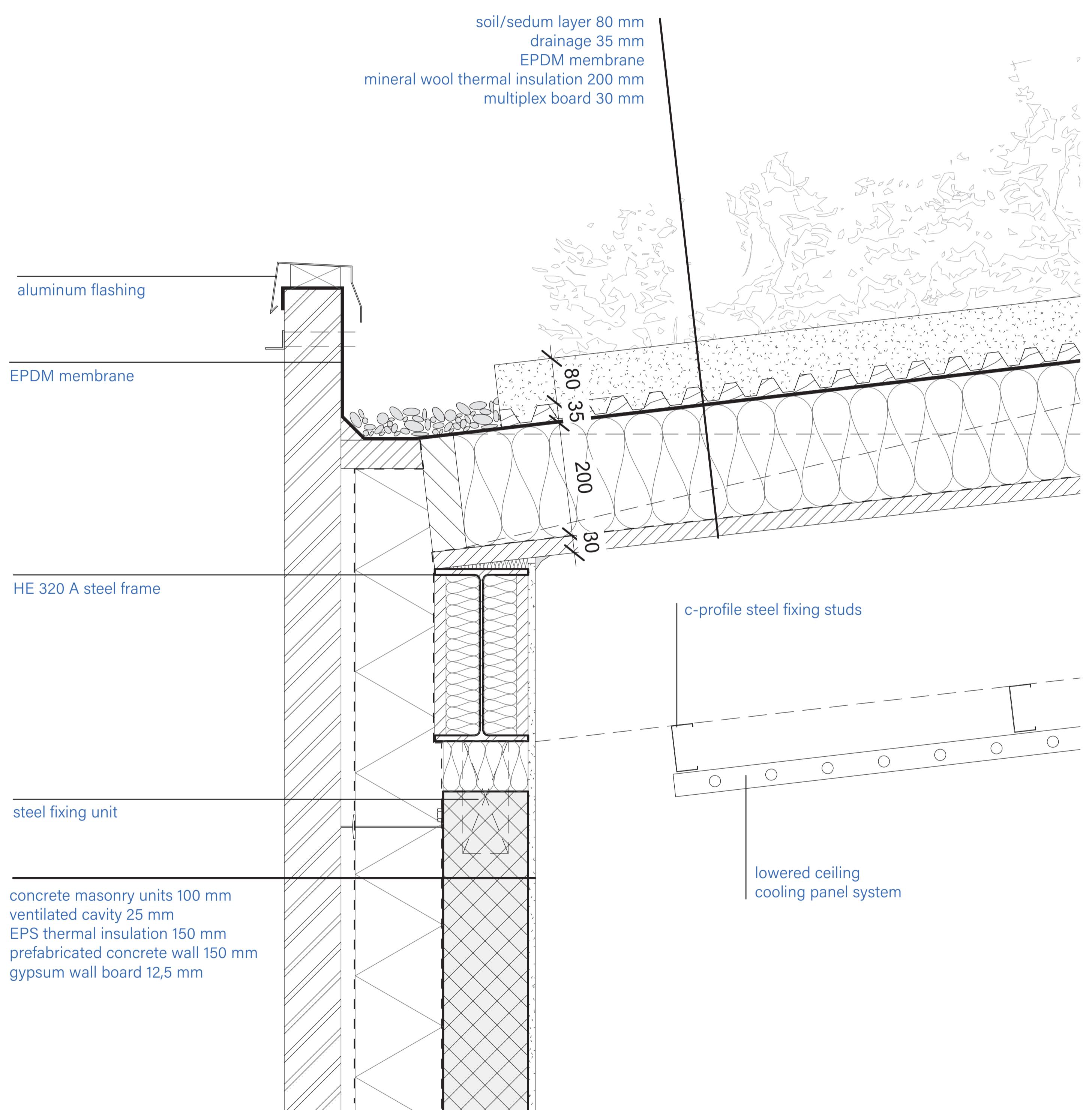


12 detail

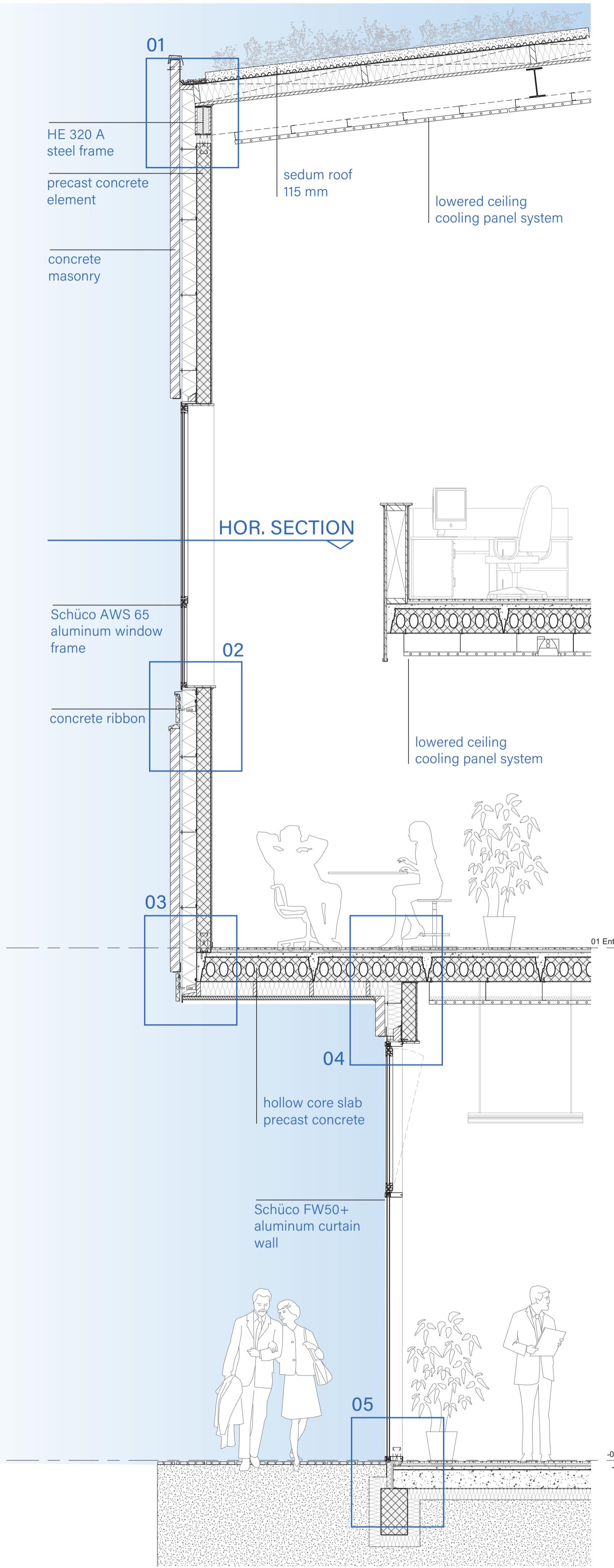
P5 UA

DETAIL SECTIONS

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DETAIL 01

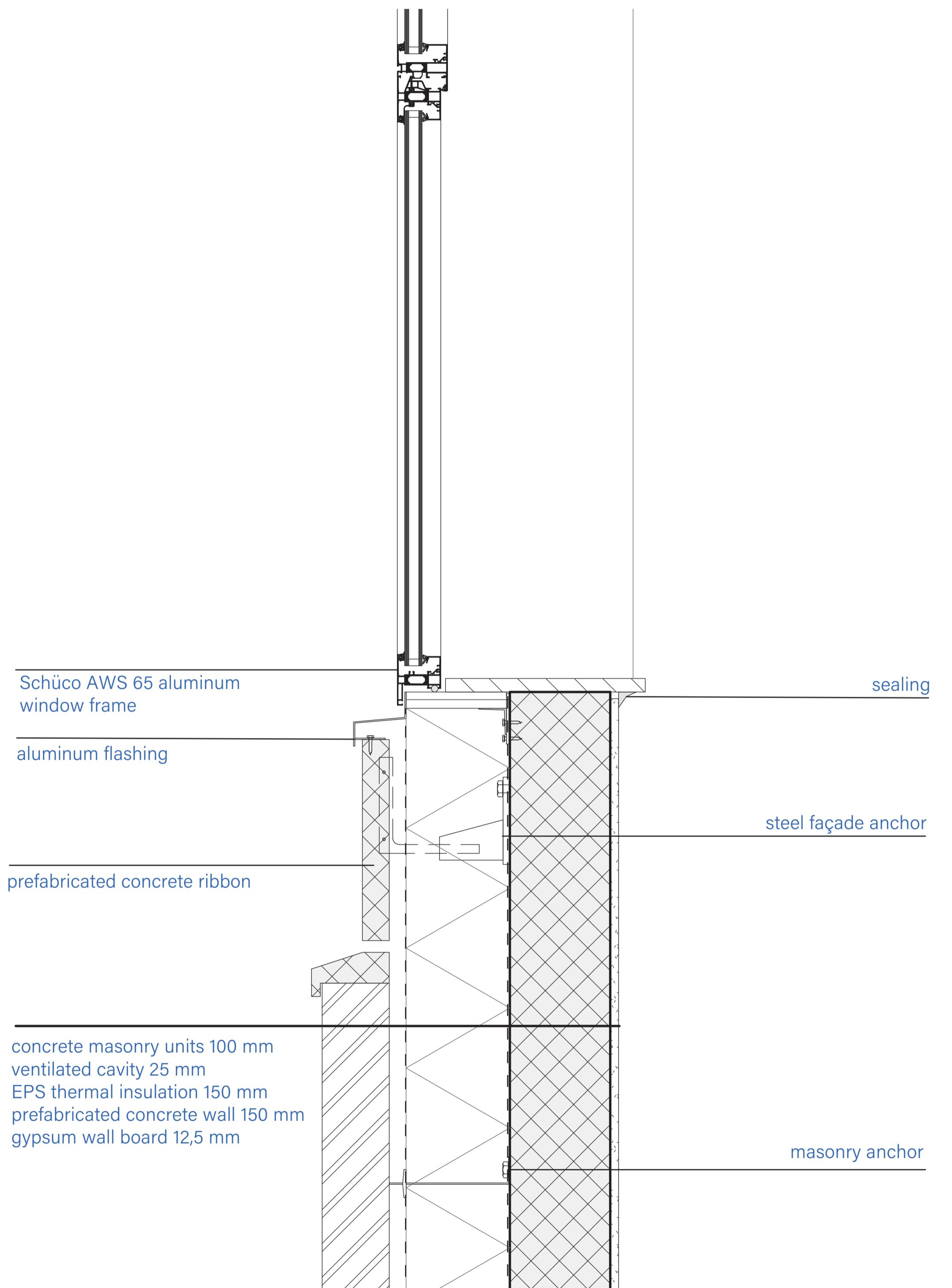


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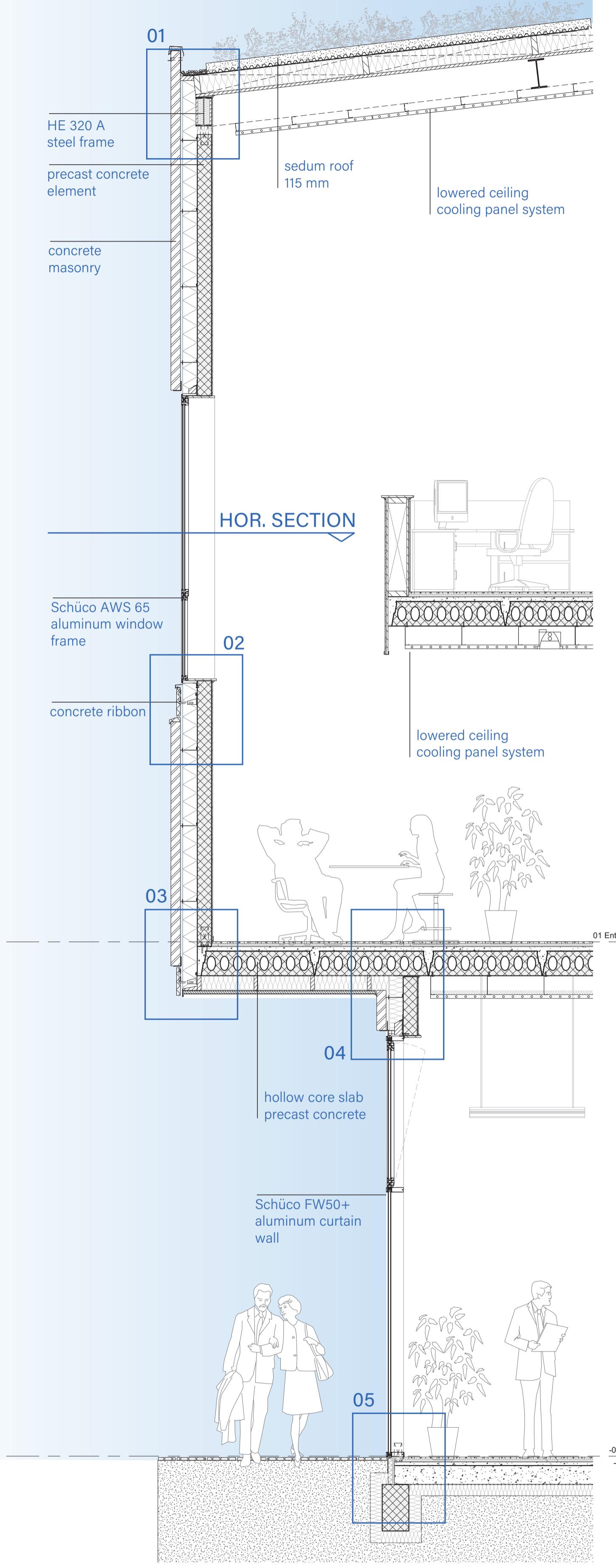
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DETAIL SECTIONS

Bjarne van der Drift



DETAIL 02



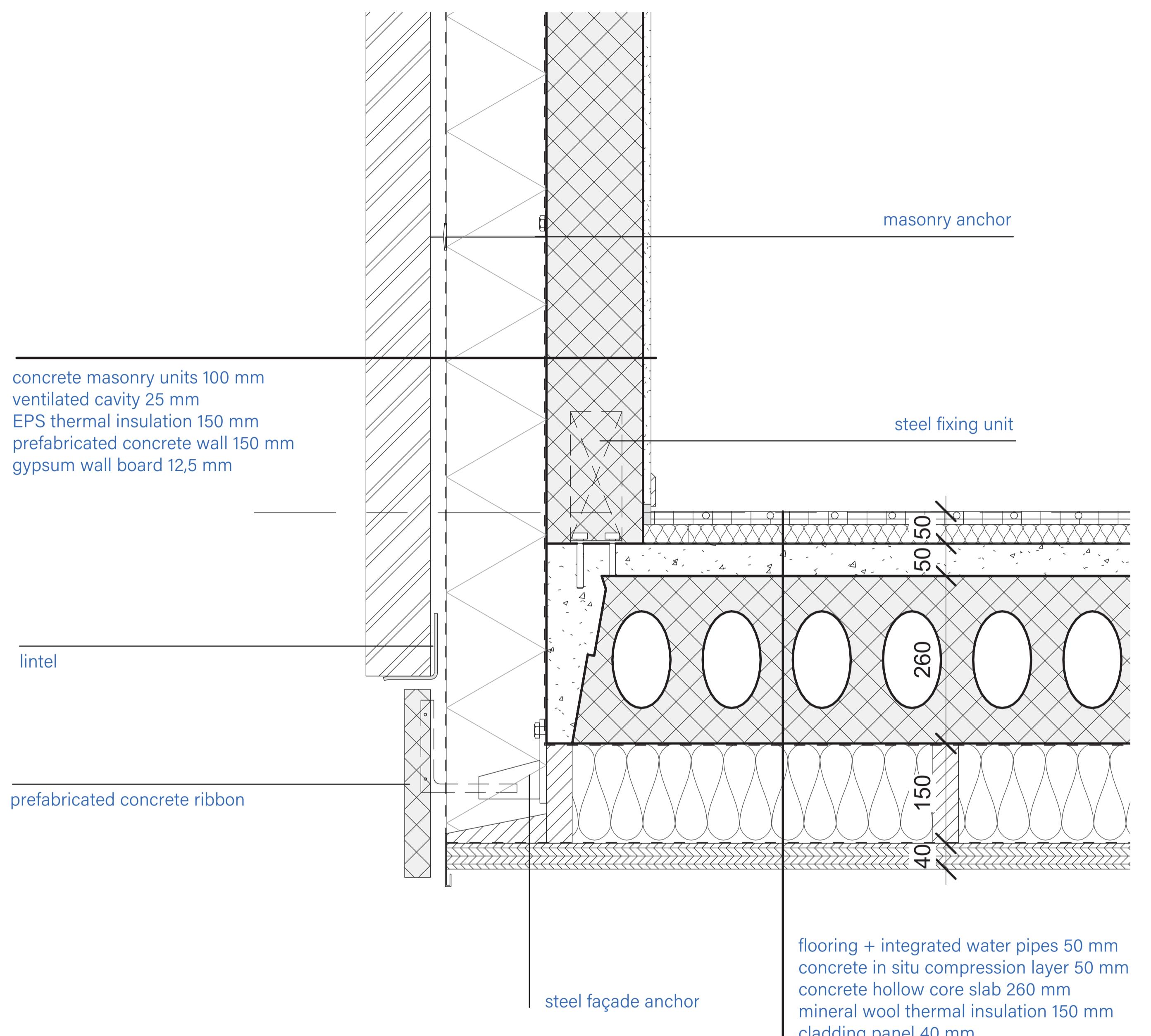
DESIGN STUDIO URBAN ARCHITECTURE

12 detail

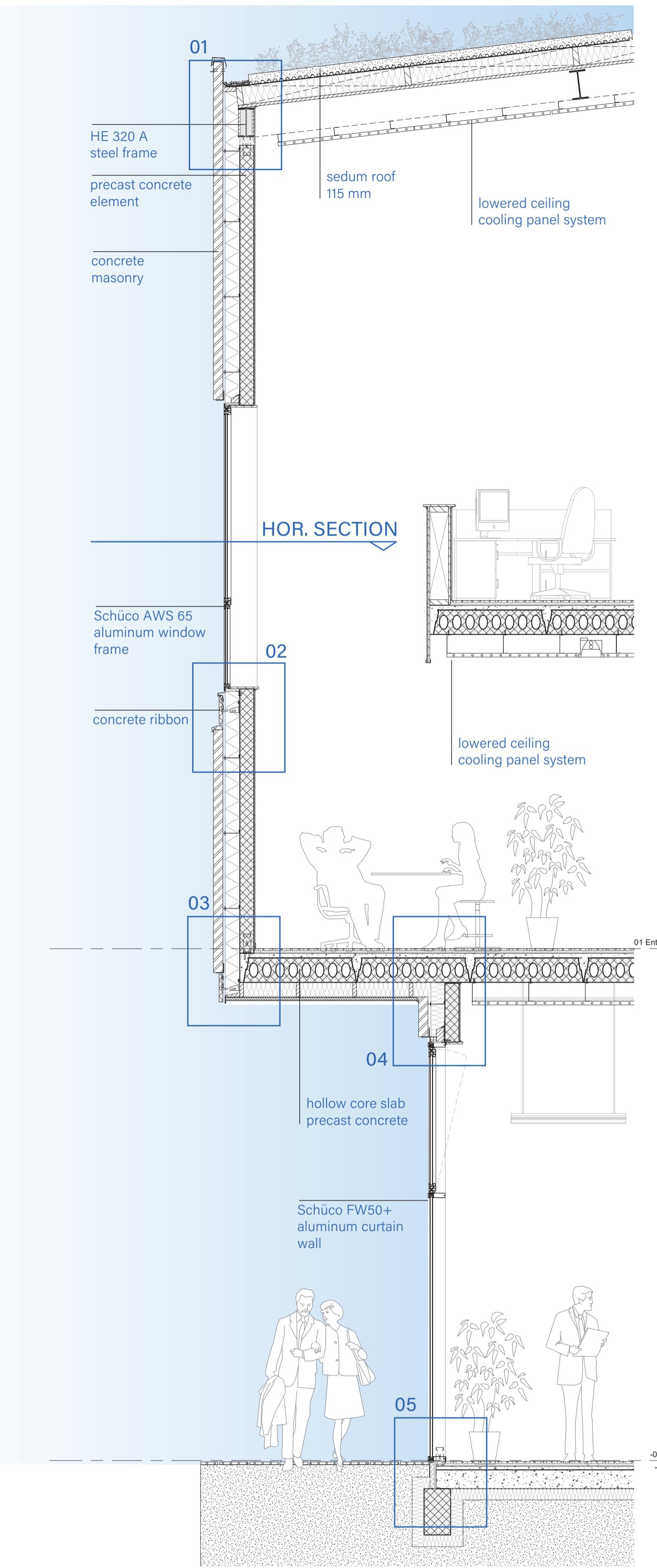
P5 UA

DETAIL SECTIONS

Bjarne van der Drift



DETAIL 03



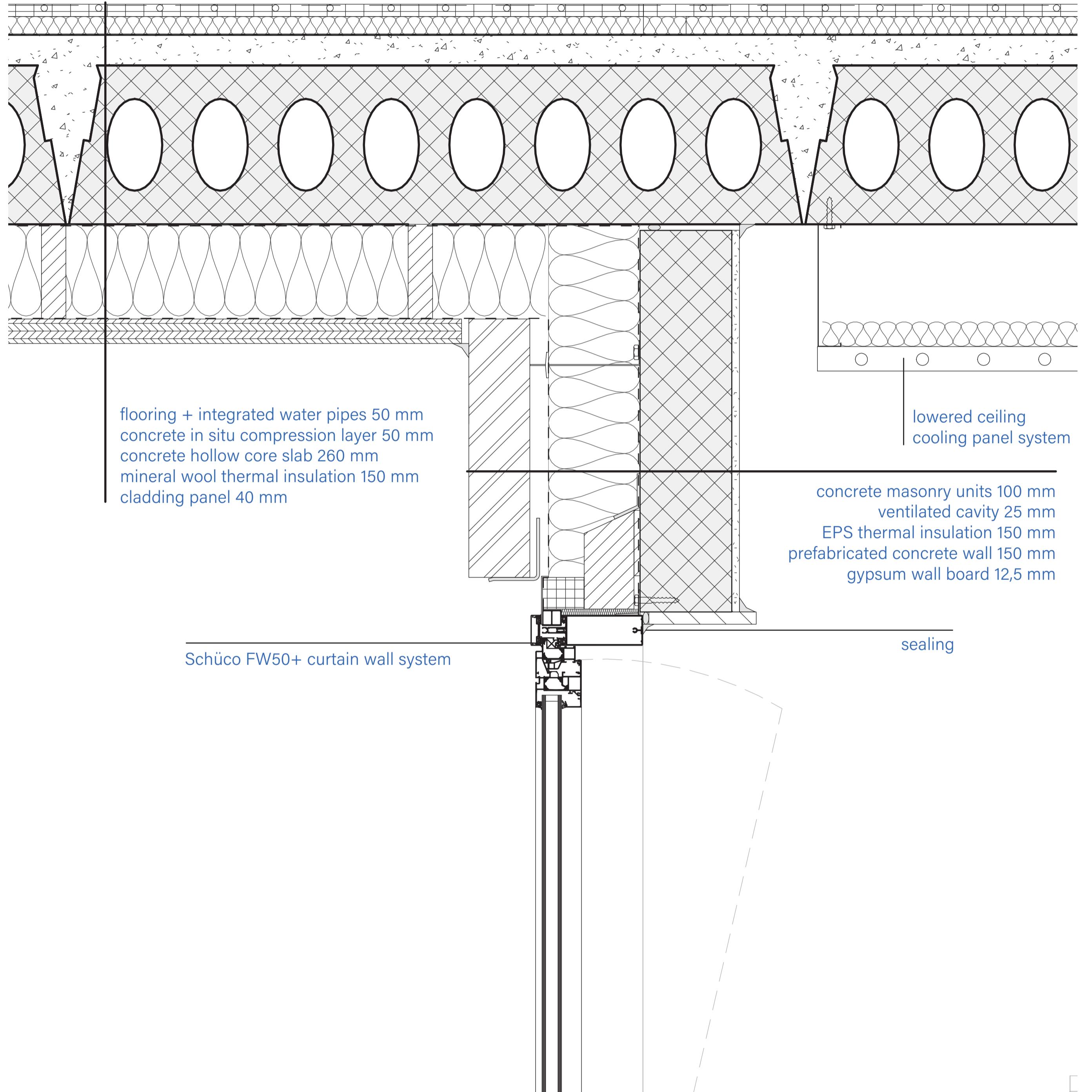
DESIGN STUDIO URBAN ARCHITECTURE

12 detail

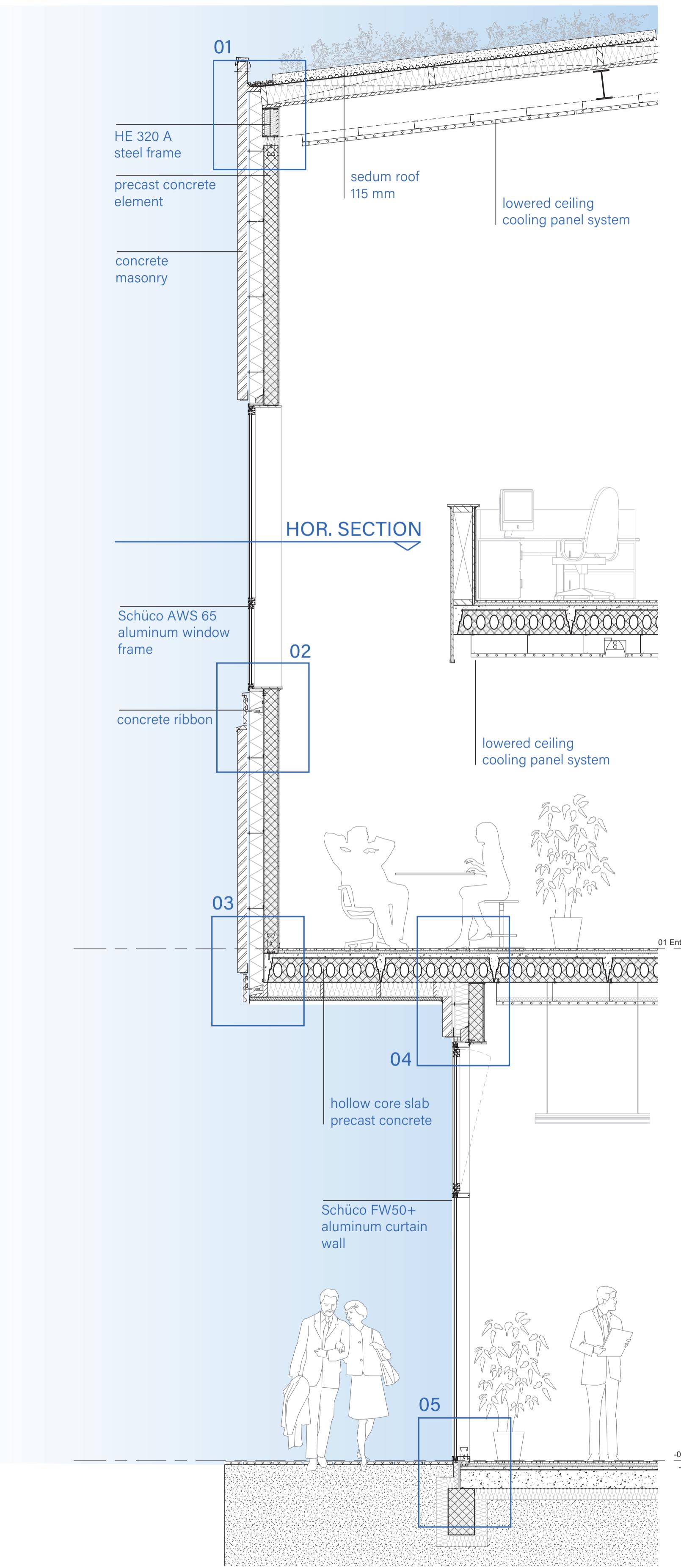
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DETAIL SECTIONS

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DETAIL 04



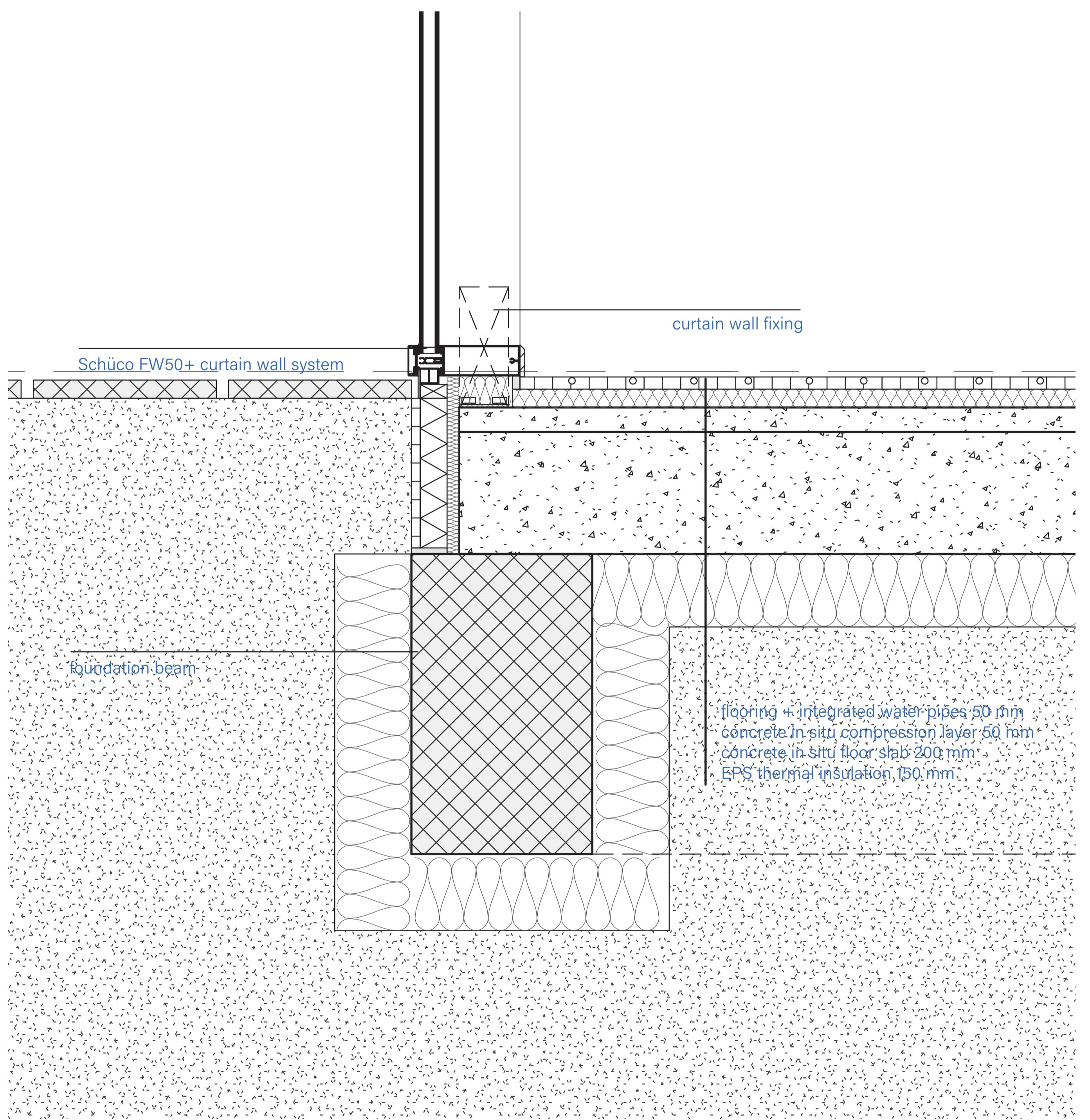
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12 detail

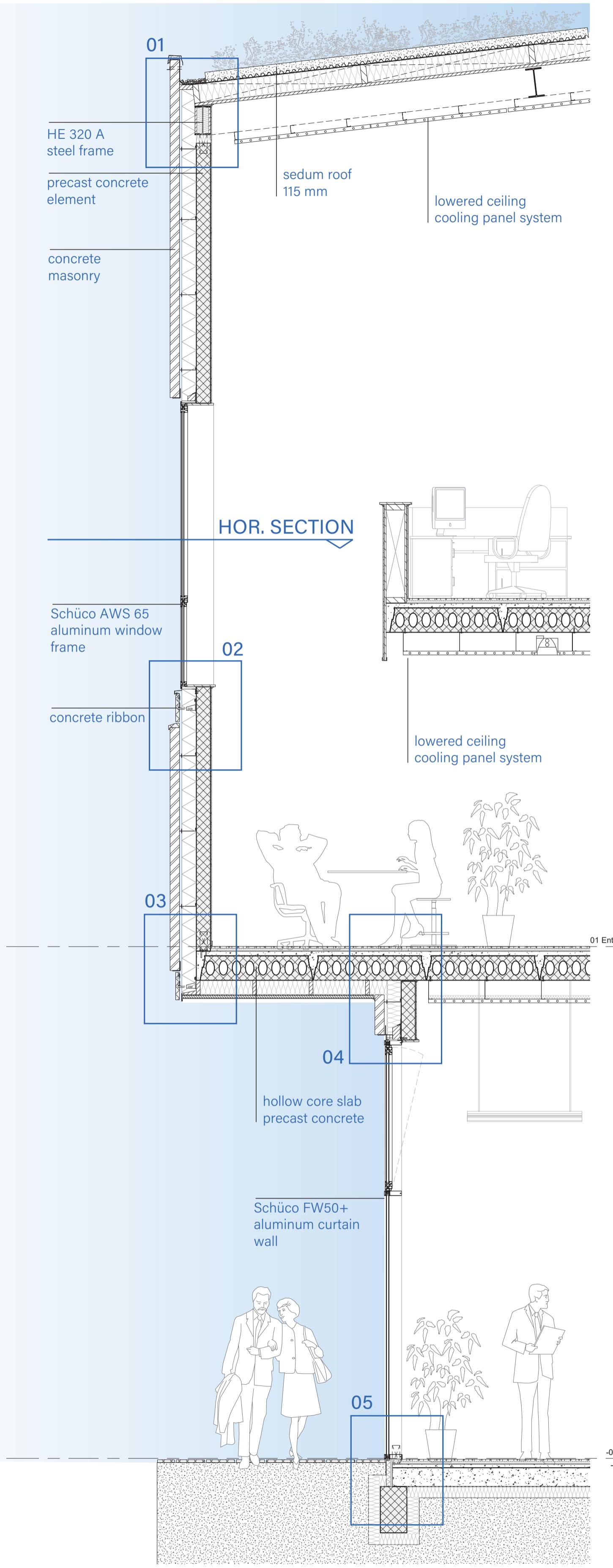
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DETAIL SECTIONS

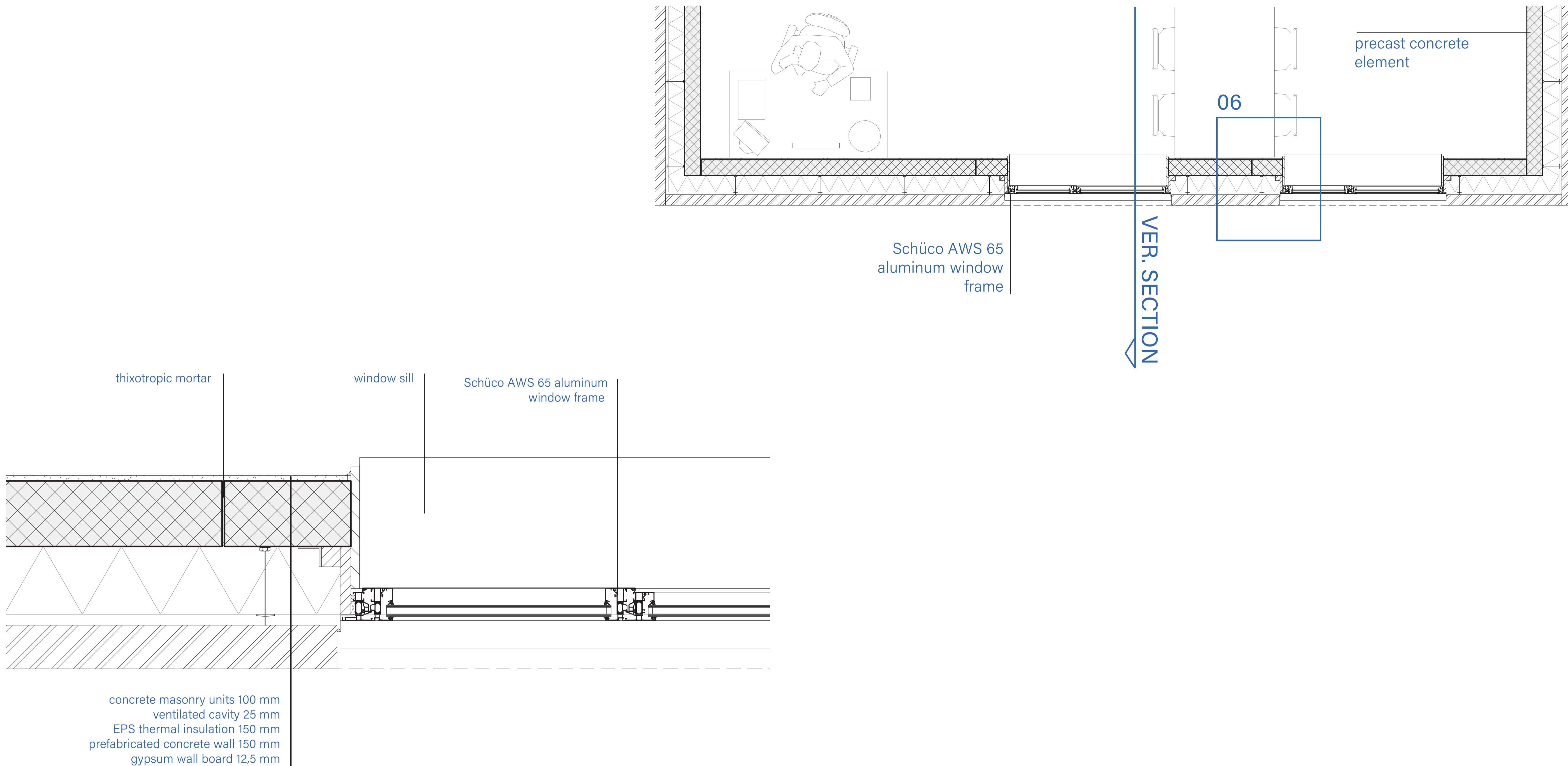
Bjarne van der Drift



DETAIL 05

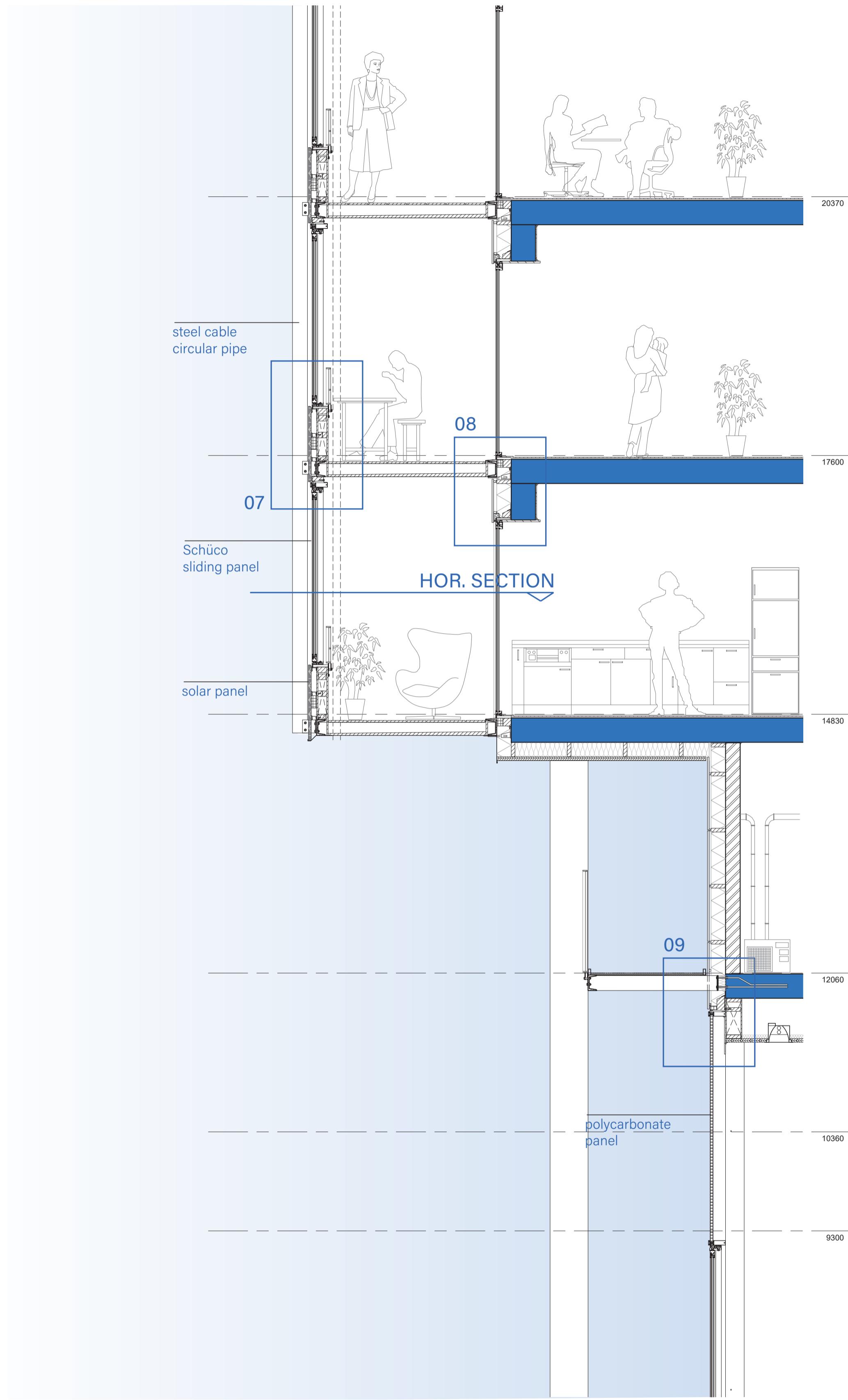
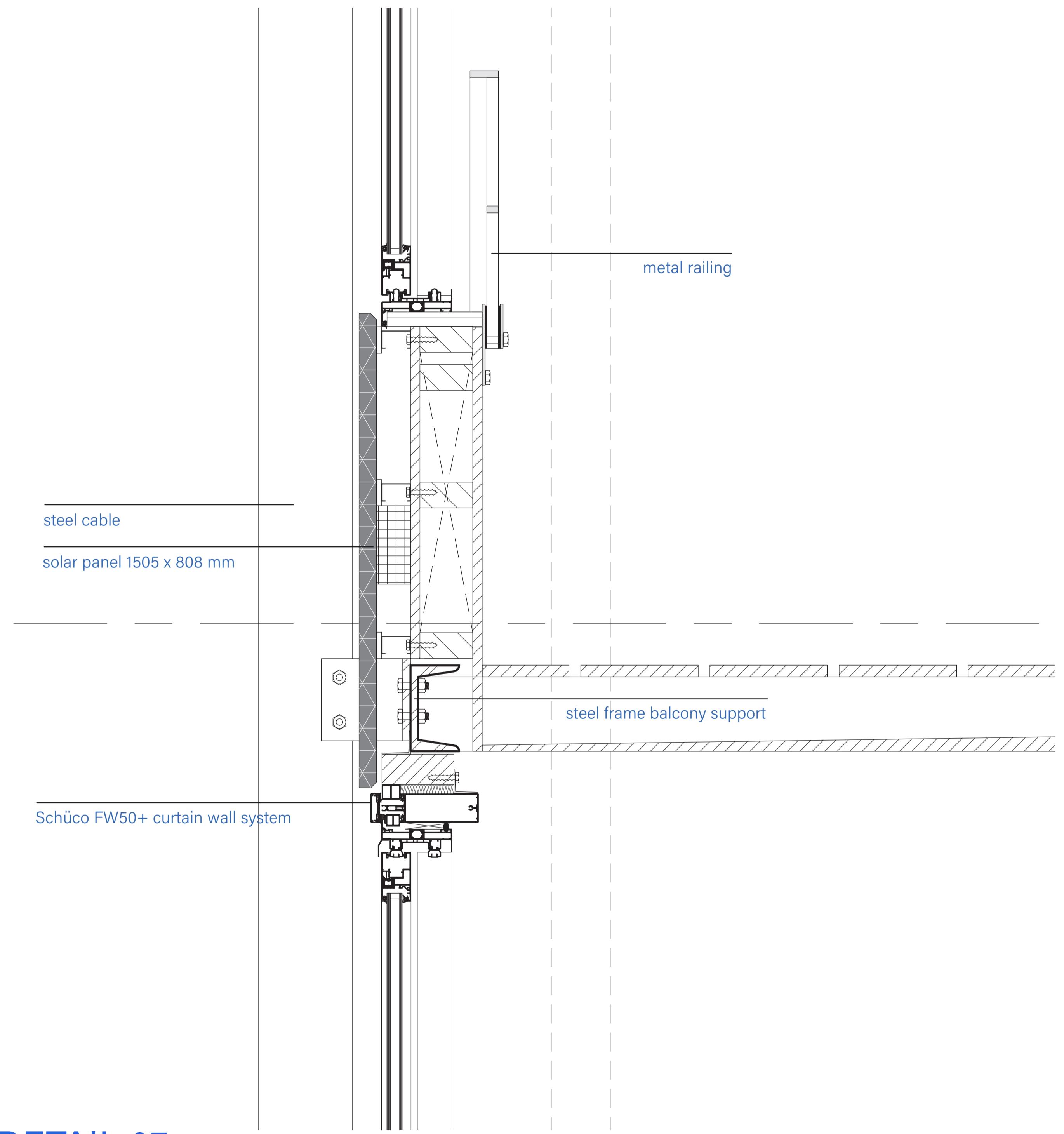


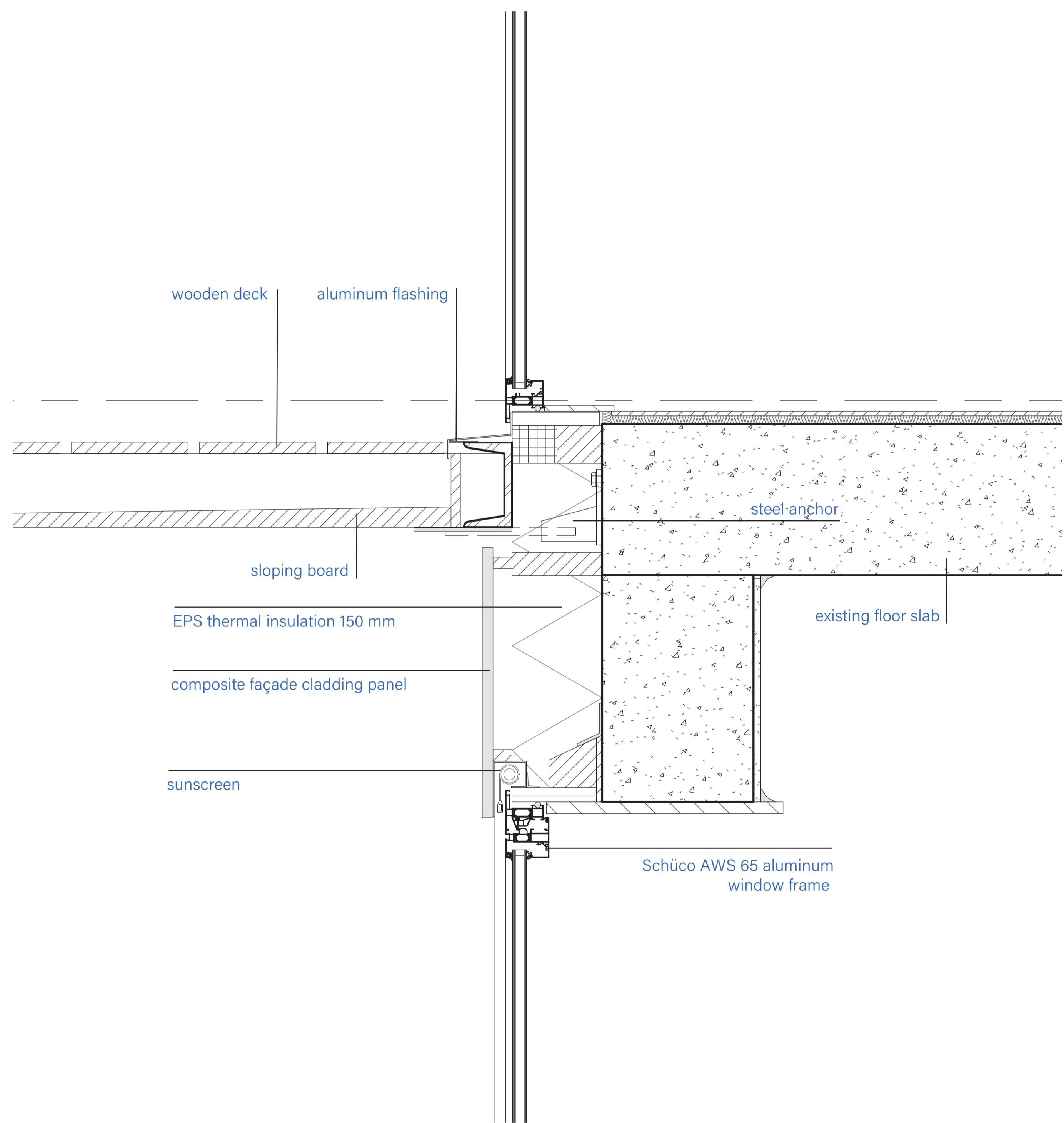
DESIGN STUDIO URBAN ARCHITECTURE



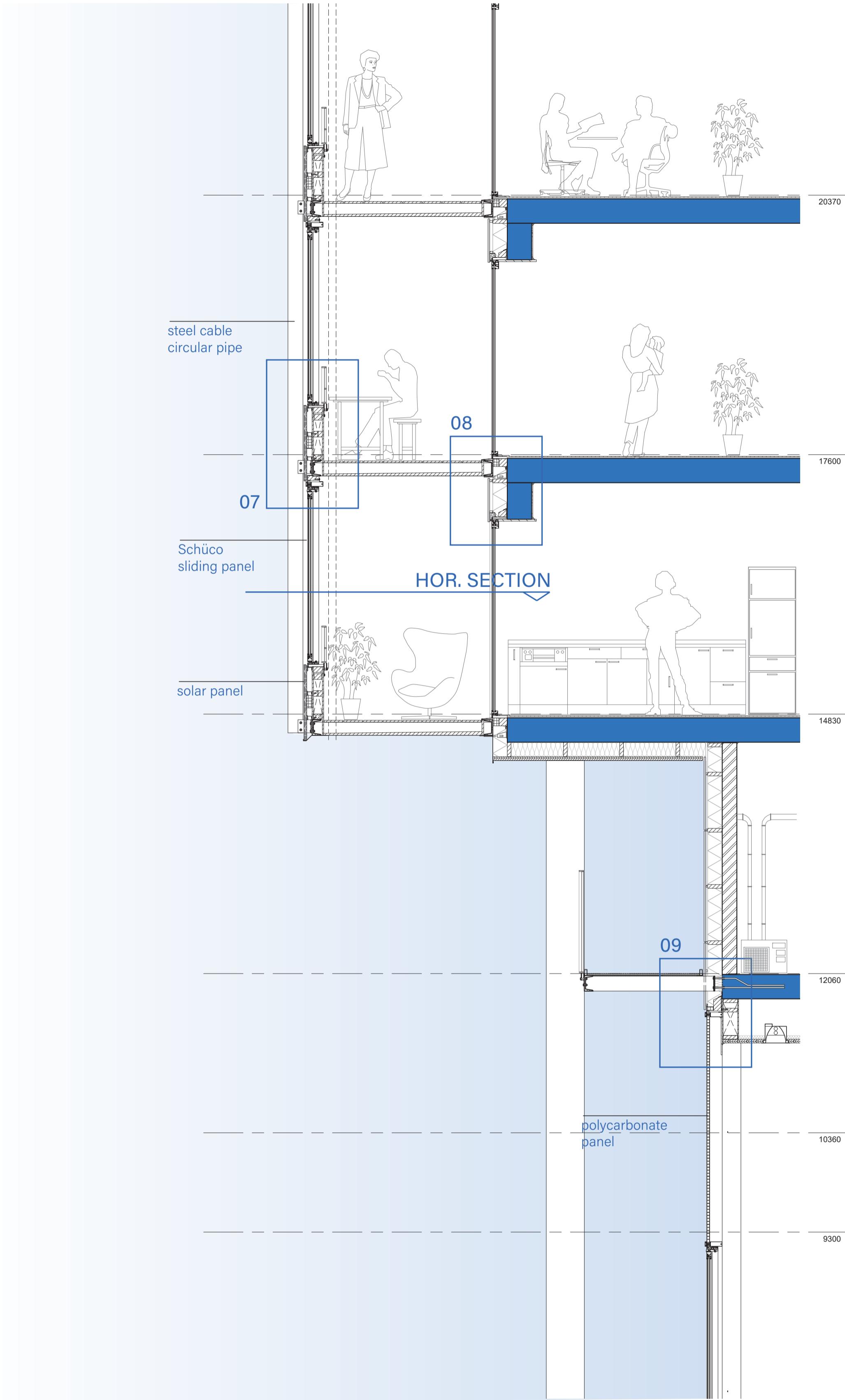
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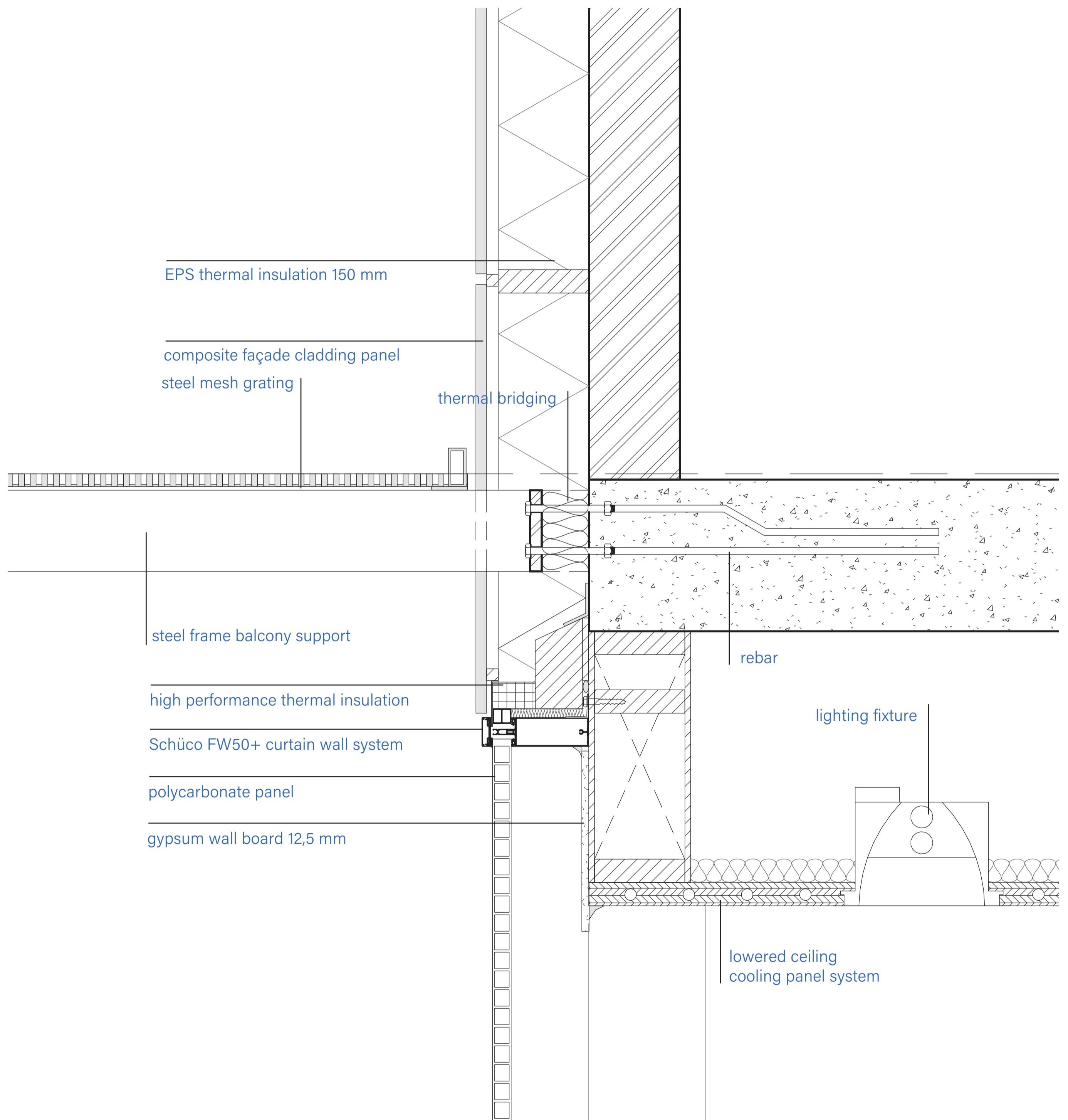
DETAIL SECTIONS



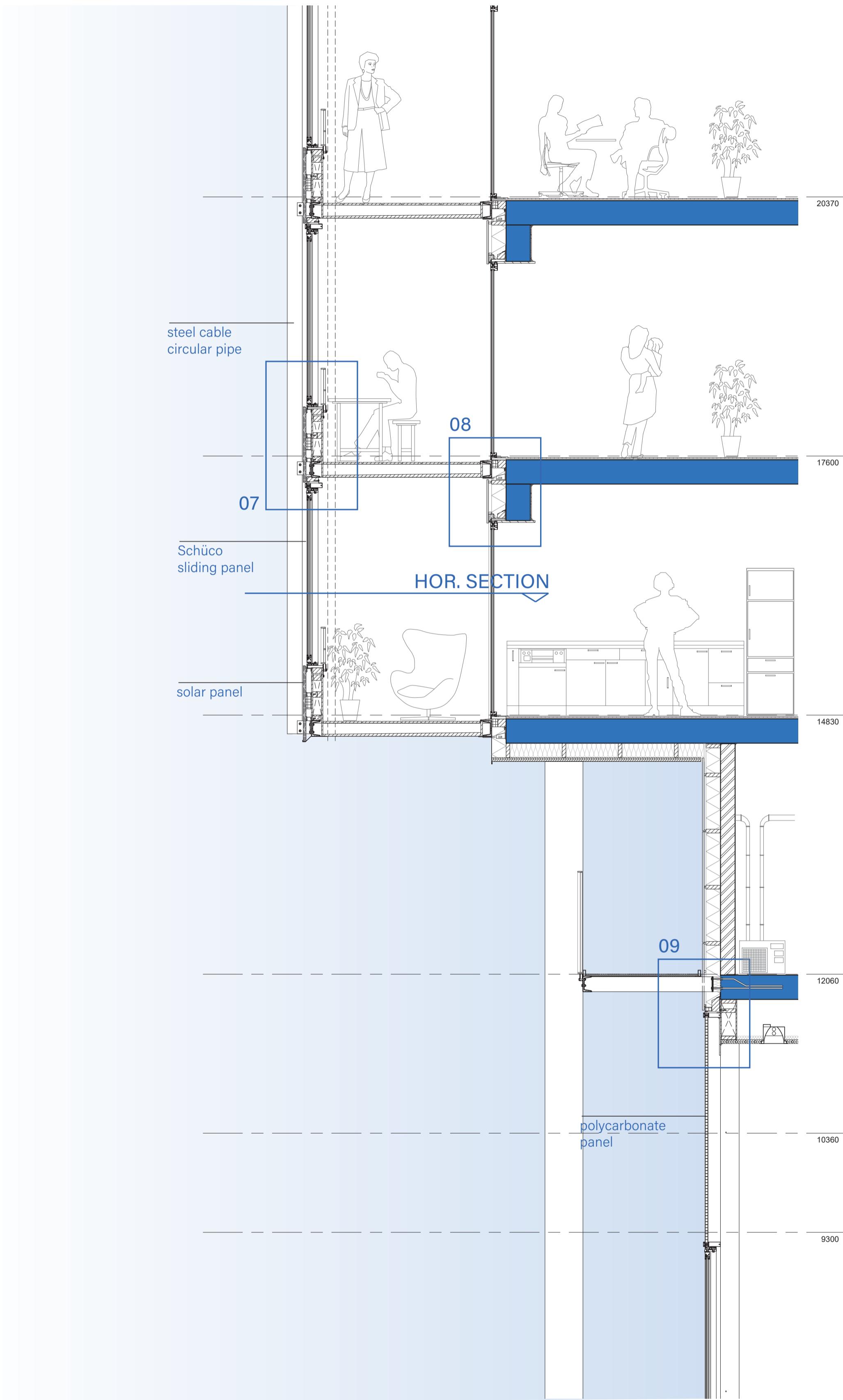


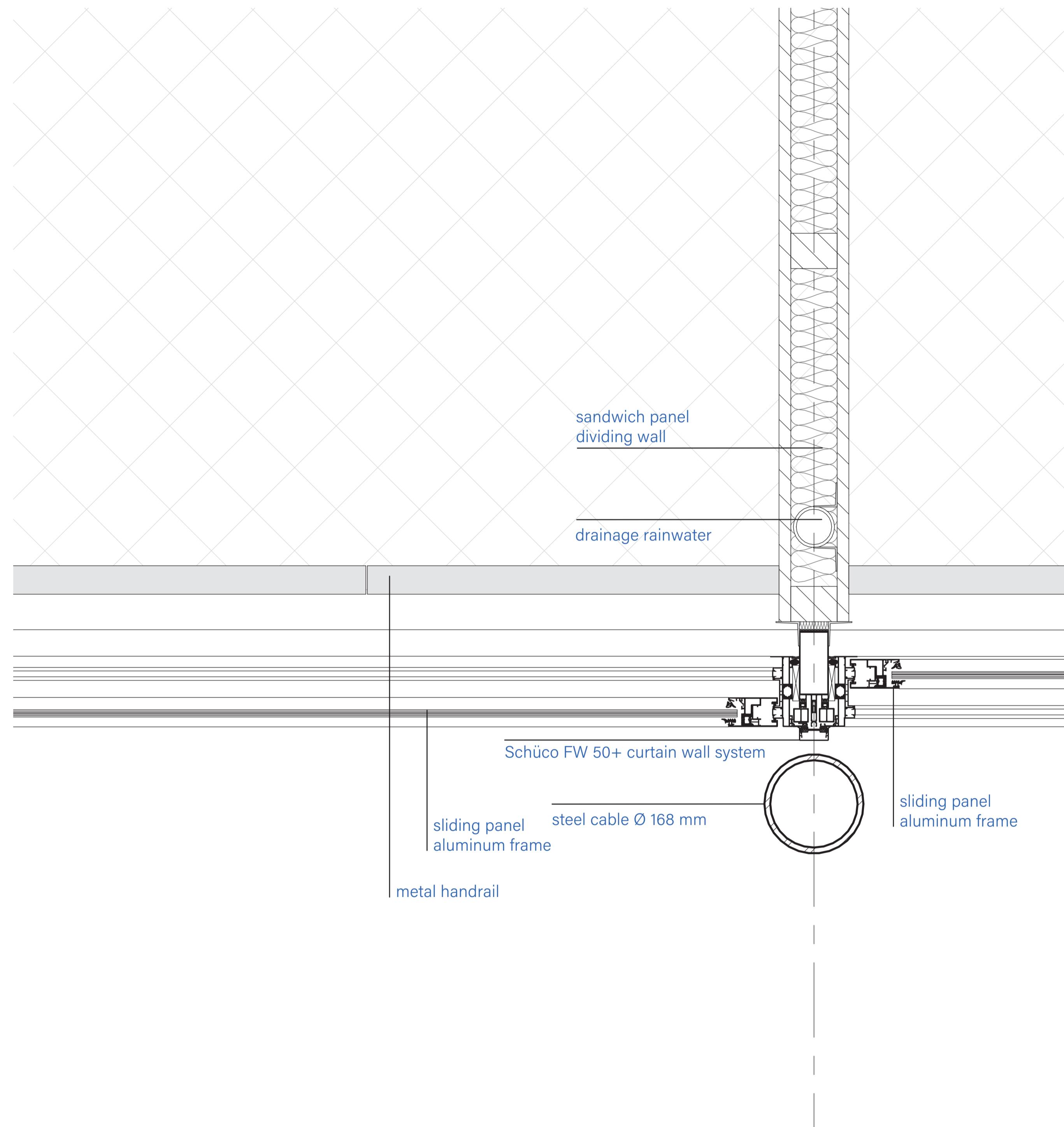
DETAIL 08



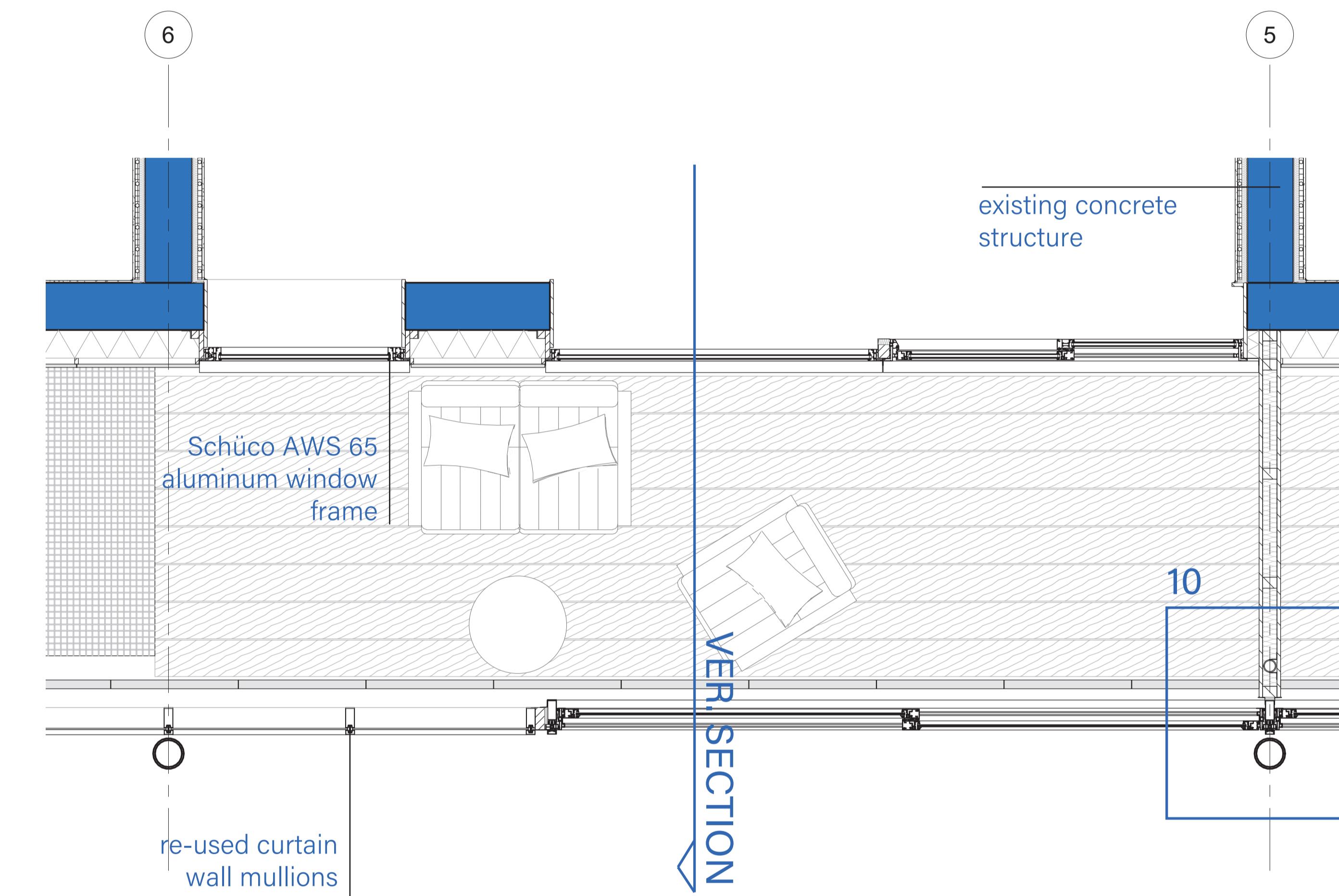


DETAIL 09





DETAIL 10



BUILDING SHELL

01 The façade of the existing building volume will be stripped, existing balconies are not safe for use and climate comfort/HVAC inside dwellings is problematic.



FAÇADE APERTURES

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02 New windows/doors and support frames will be installed, meeting the requirements for current thermal insulation and quality standards. Sliding doors provide access to the new balcony.



ANCHORS

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03 Steel façade anchors are placed to anchor the new load-bearing structure to the existing structure



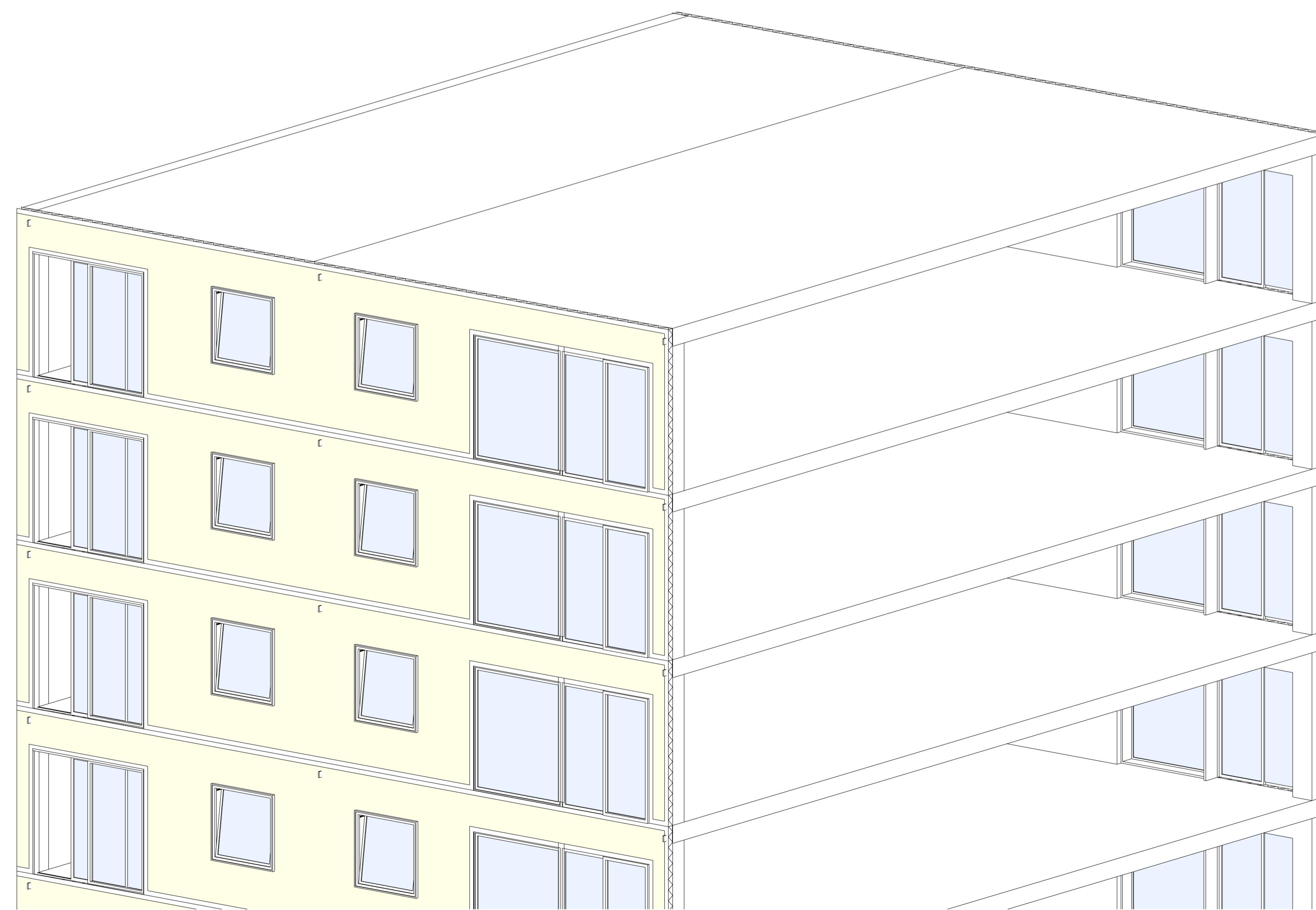
INSULATION

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SUSPENDED STRUCTURE

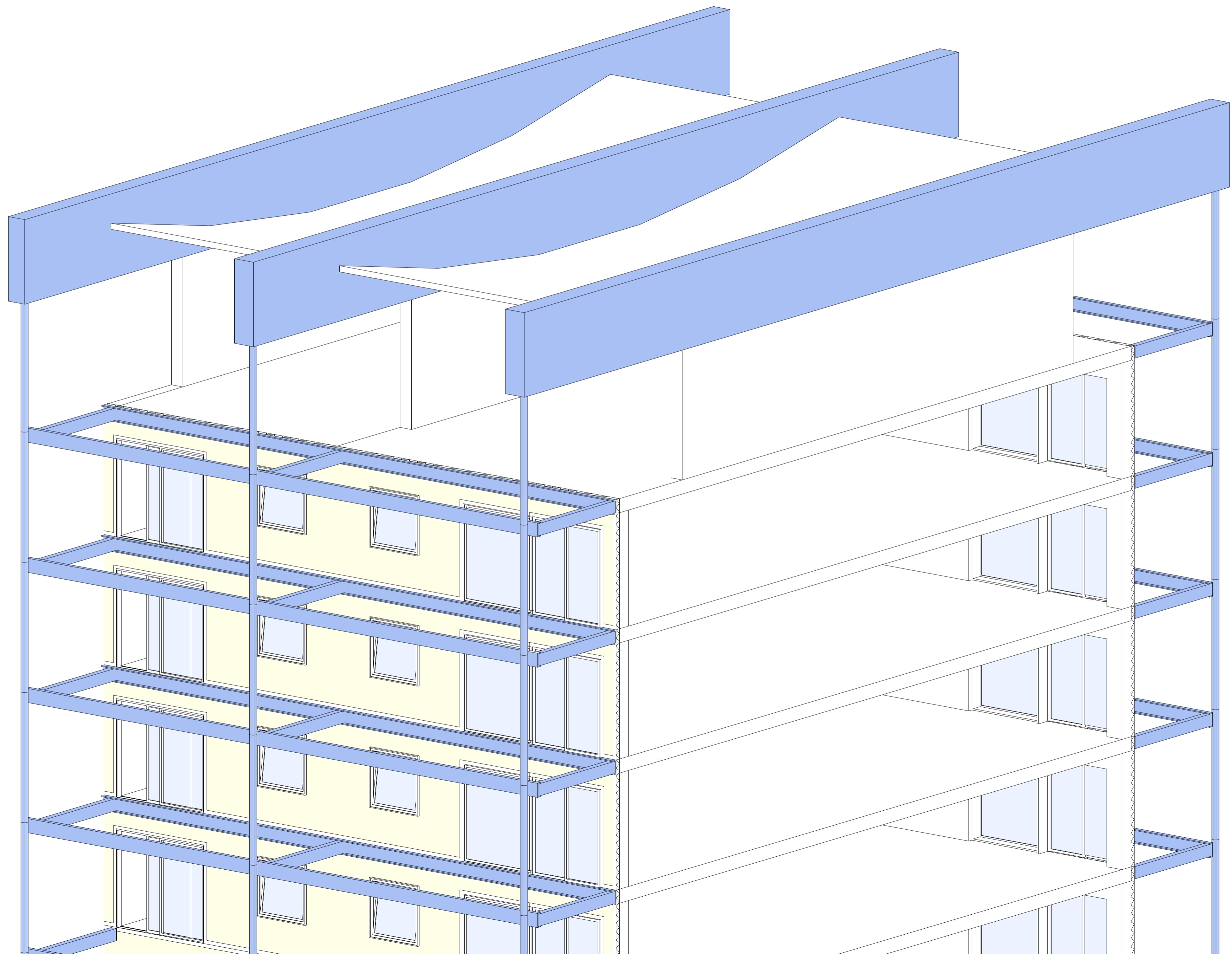
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05 A suspended structure will support the balconies, the Ventec-roof and the second skin. Steel cables hanging from the roof beams will bear the vertical loads and divert them to the existing load bearing walls.



FLOORING ELEMENT

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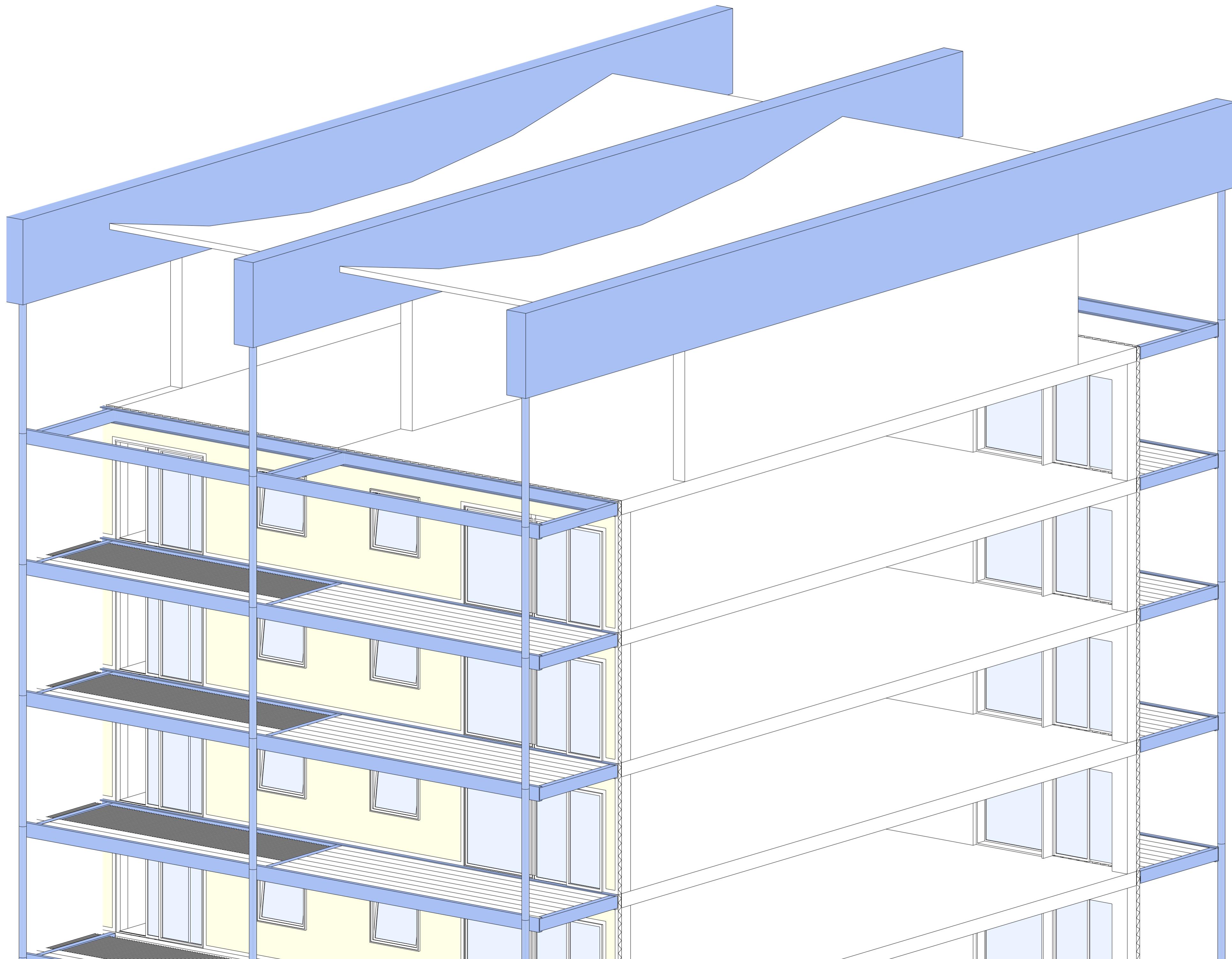
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06 The balconies will be lightweight and partially open to allow upward airflows induced by the Venturi-effect. Metal grating will still ensure accessibility of the open parts.



CLADDING

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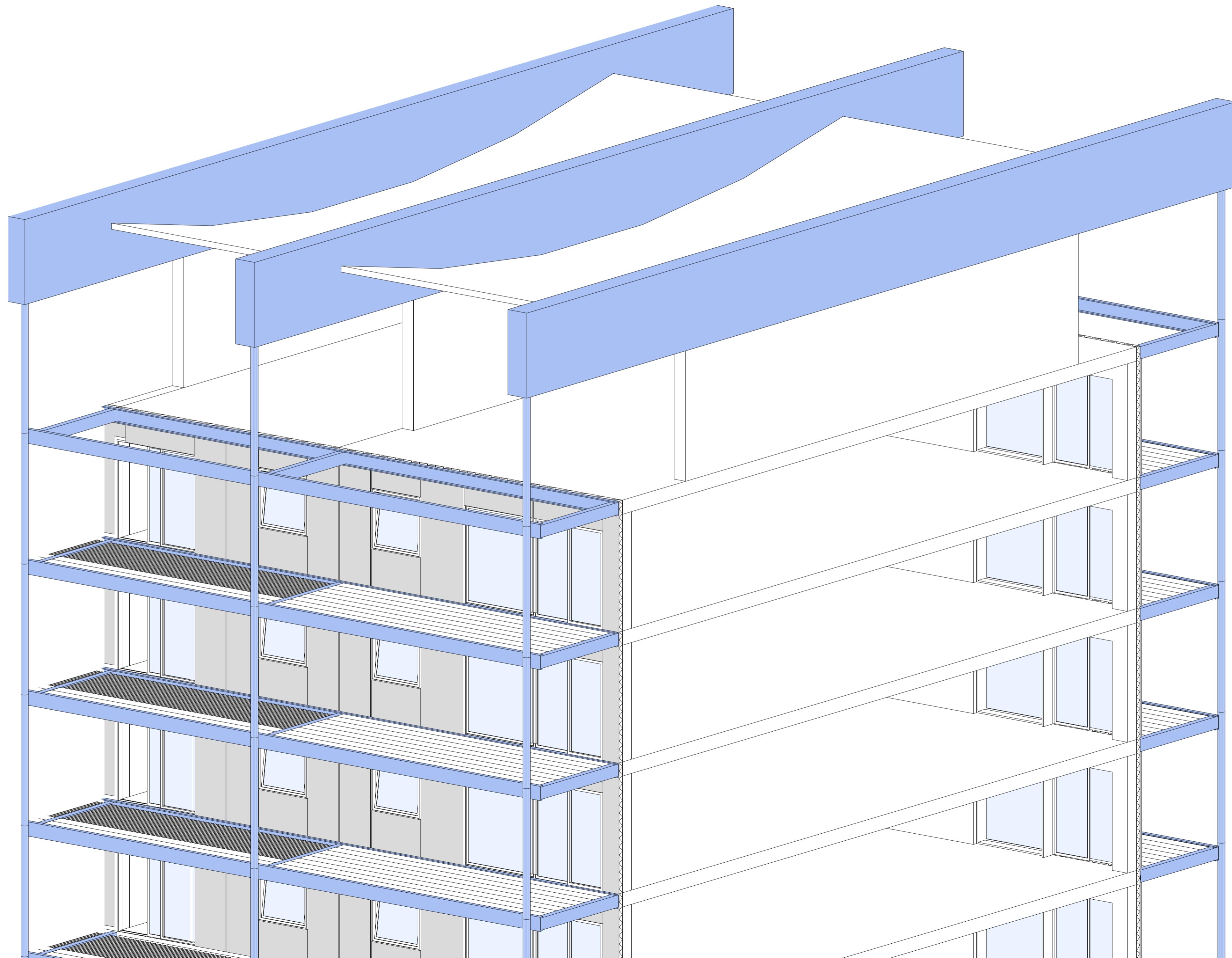
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BALUSTRADE

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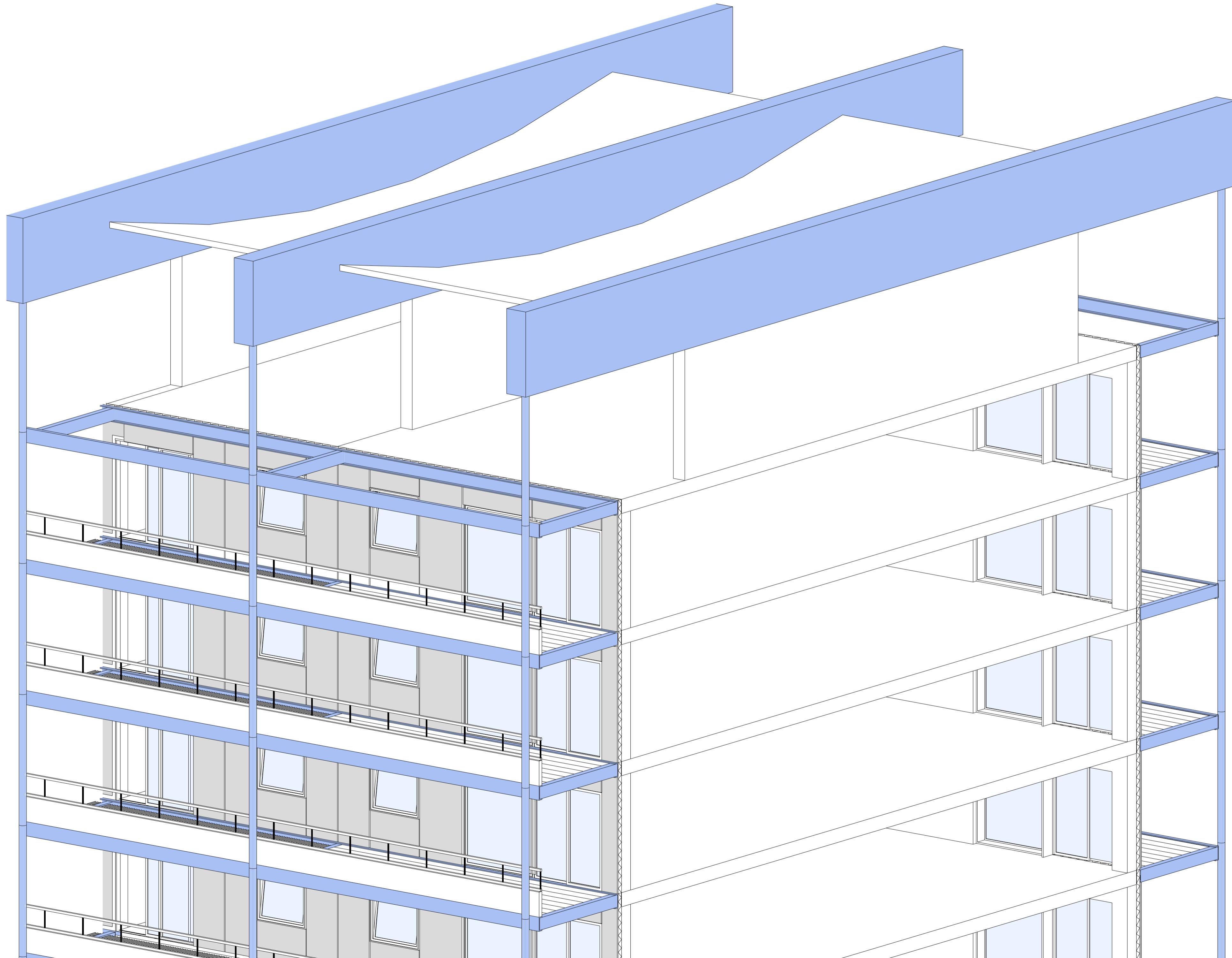
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08 The parapet will be supporting the aluminum frame of the re-used WTC curtain wall system. The metal railing will extend the height of the balustrade for safety purposes.



SECOND SKIN

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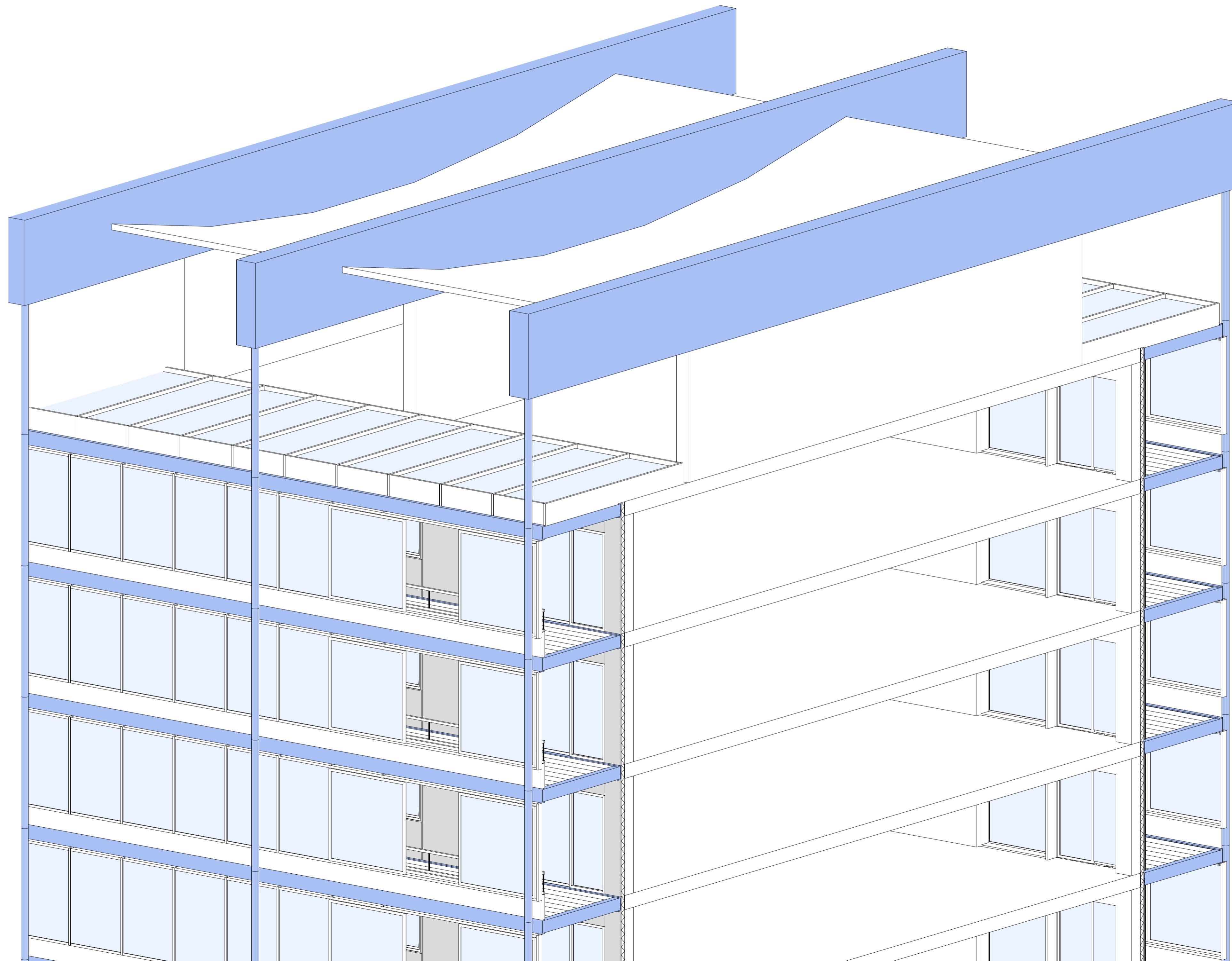
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07 Cladding will be fixed onto timber framework

08 The parapet will be supporting the aluminum frame of the re-used WTC curtain wall system. The metal railing will extend the height of the balustrade for safety purposes.

09 Re-used mullions and panels of the WTC in Brussels will be installed. The sliding panels are new. This layer will be the first barrier to weather influences.



ENERGY PRODUCTION

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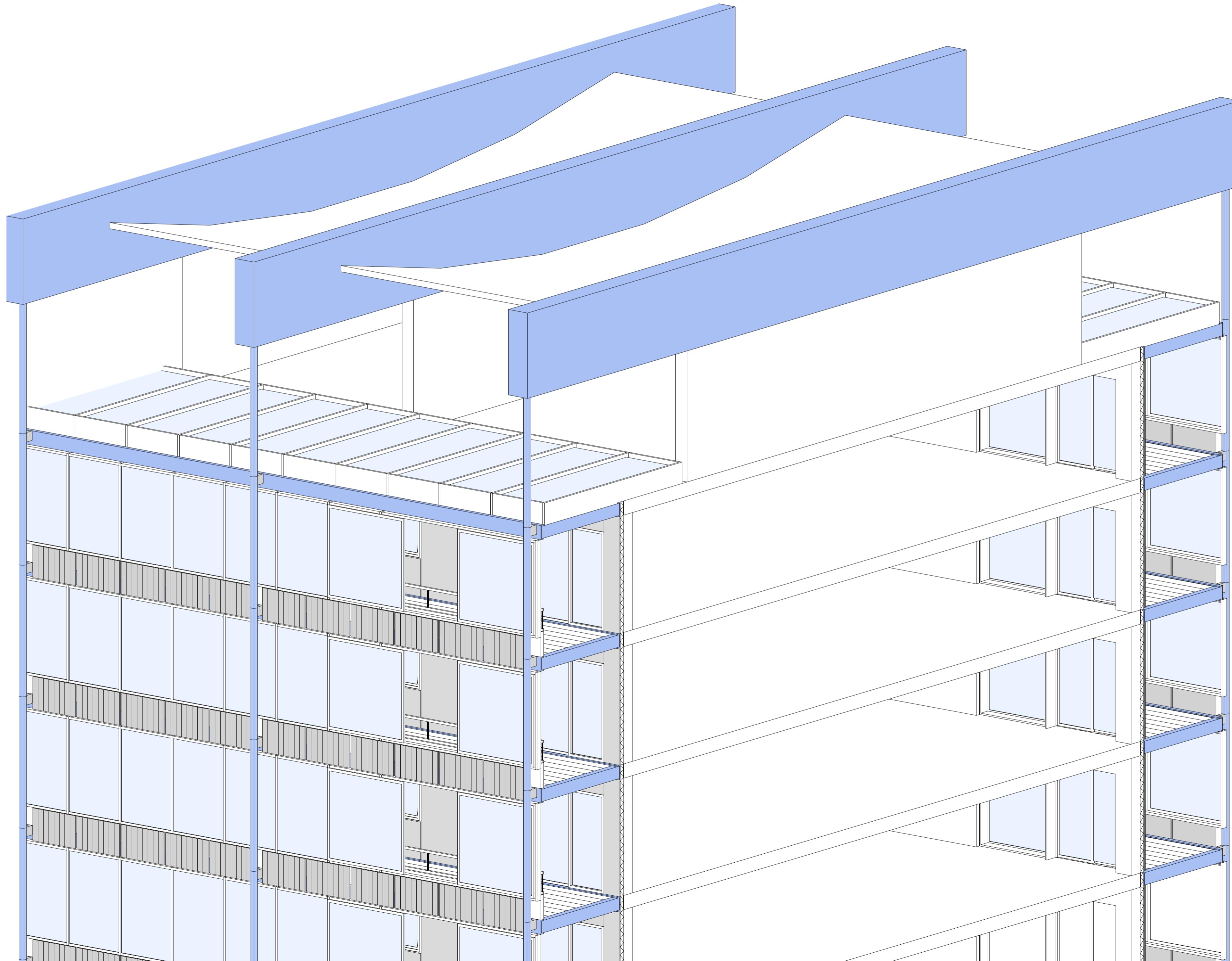
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10 The gaps will be cladded with dark panels, solar panels could be placed to increase self-sufficiency



13 spolia & reflection

SPOLIA SOURCE

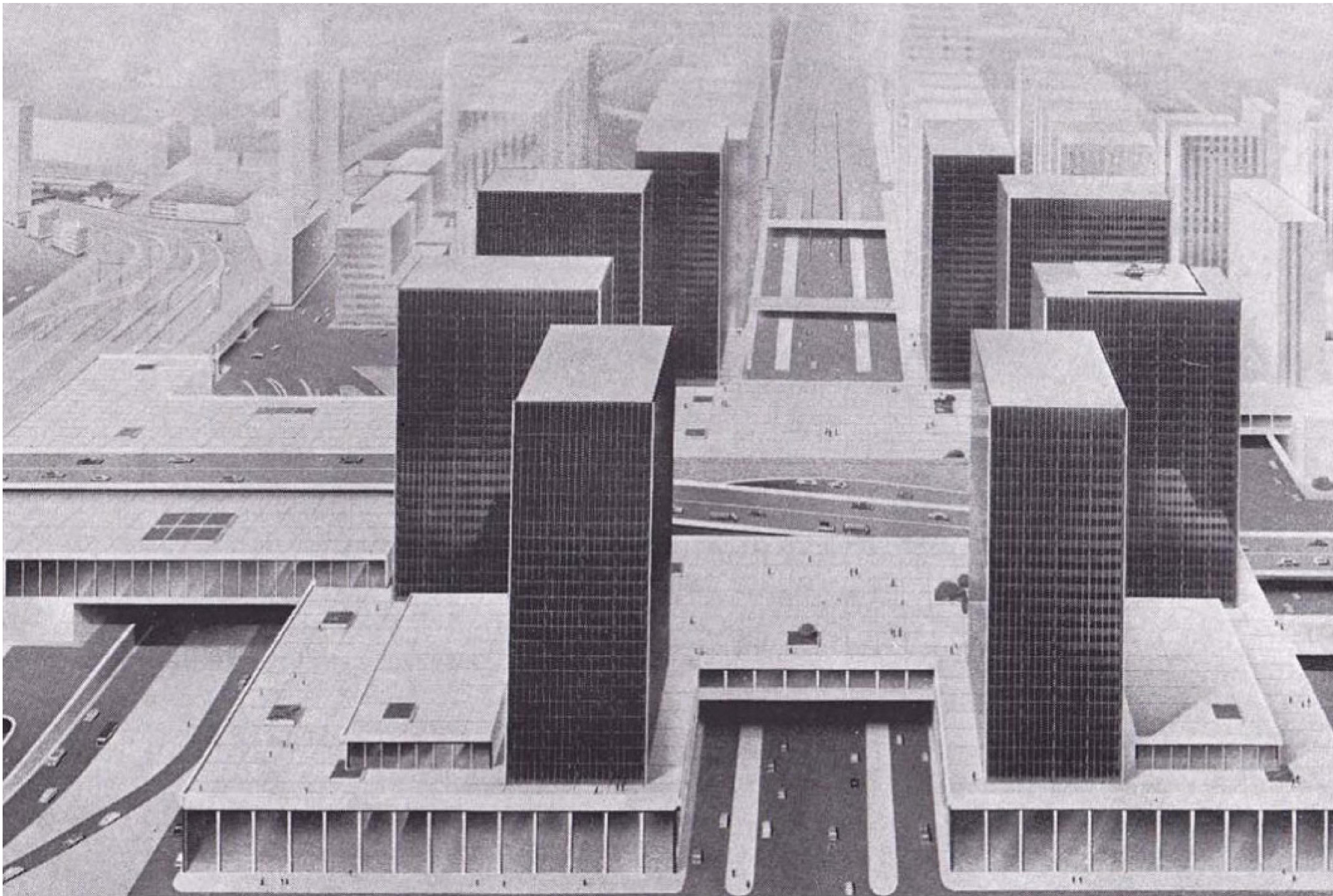
P5 UA

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WTC Brussels - Noordwijk/Quartier Nord

"in the metal curtain walls of Brussels glitters the mirage of the American city" (CERAA, 1989, p.14)



Source: ORG. <http://architecture.orgperm.com/projects/world-trade-center/>

Manhattanism in Brussels

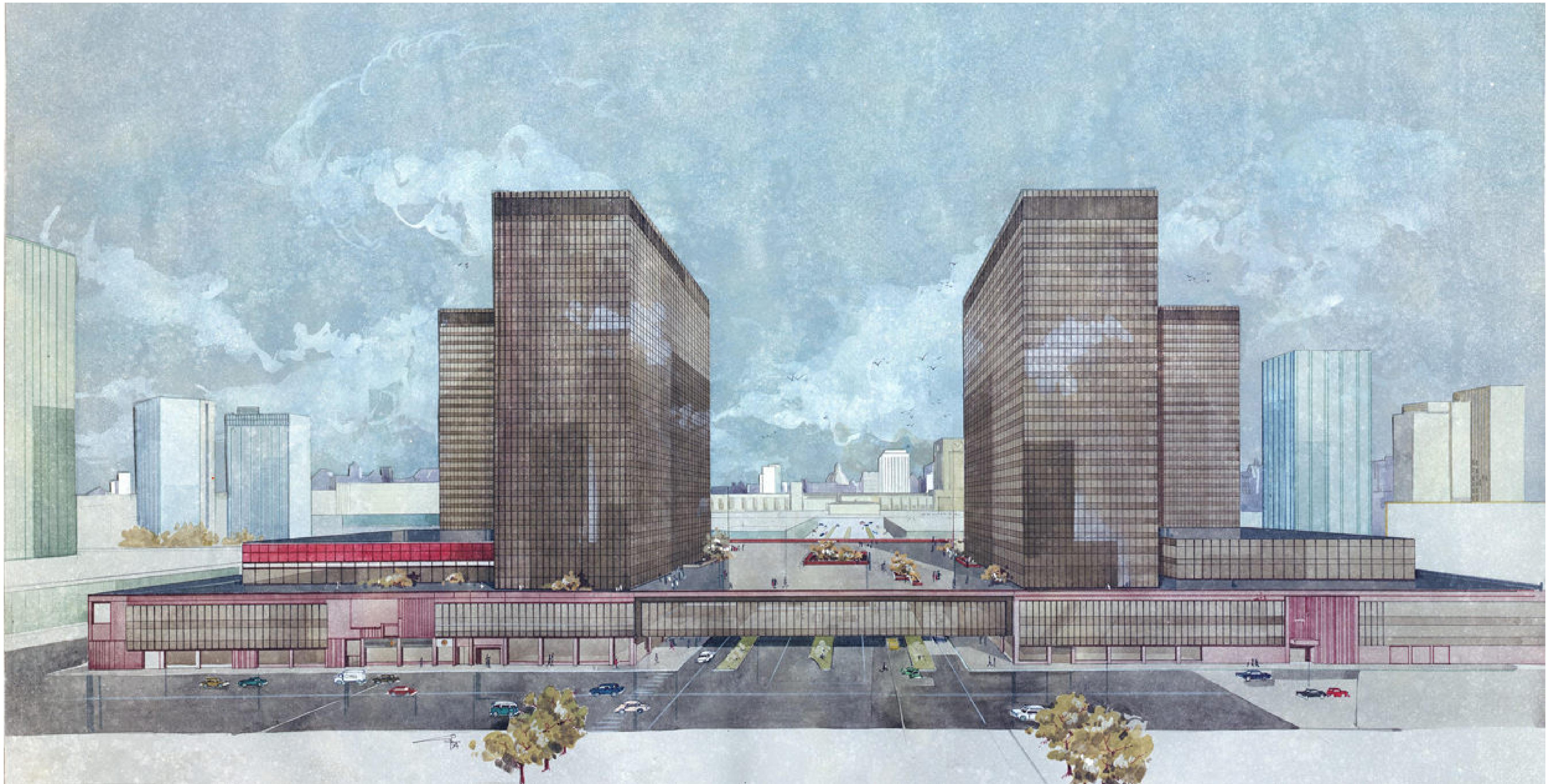
A dream to never come true / The zenith of Brusselization

13 spolia & reflection

P5 UA

SPOLIA SOURCE

Bjarne van der Drift



Source: RE&US, http://re-us.be/?page_id=8

Manhattanism in Brussels
A dream to never come true / The zenith of Brusselization

DESIGN STUDIO URBAN ARCHITECTURE

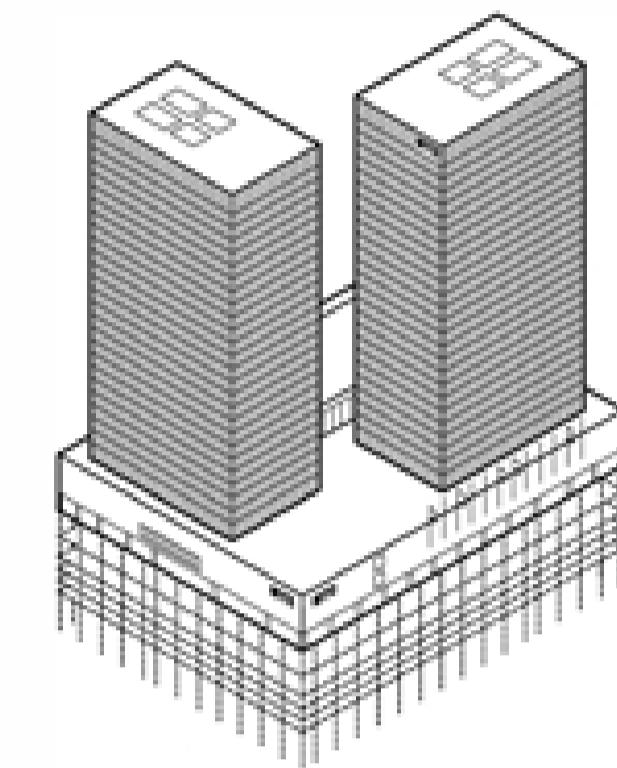
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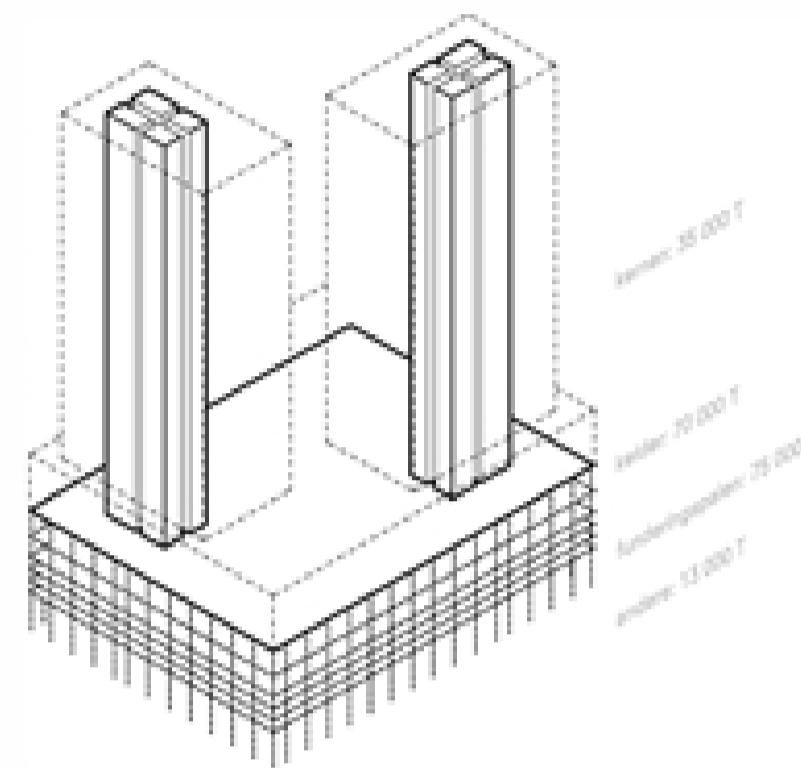
Bjarne van der Drift

RELATED PROJECT

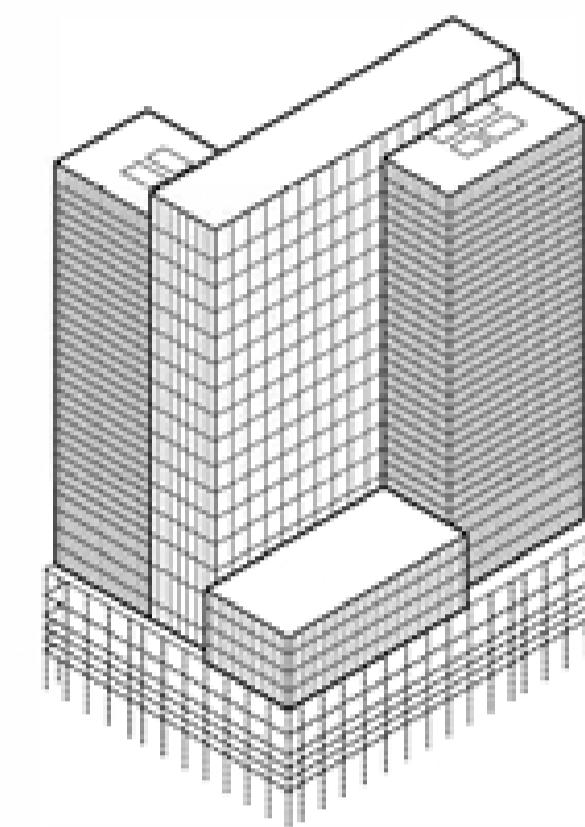
1972



2020



2023



Source: 51N4E. <https://www.51n4e.com/projects/espace-nord>

