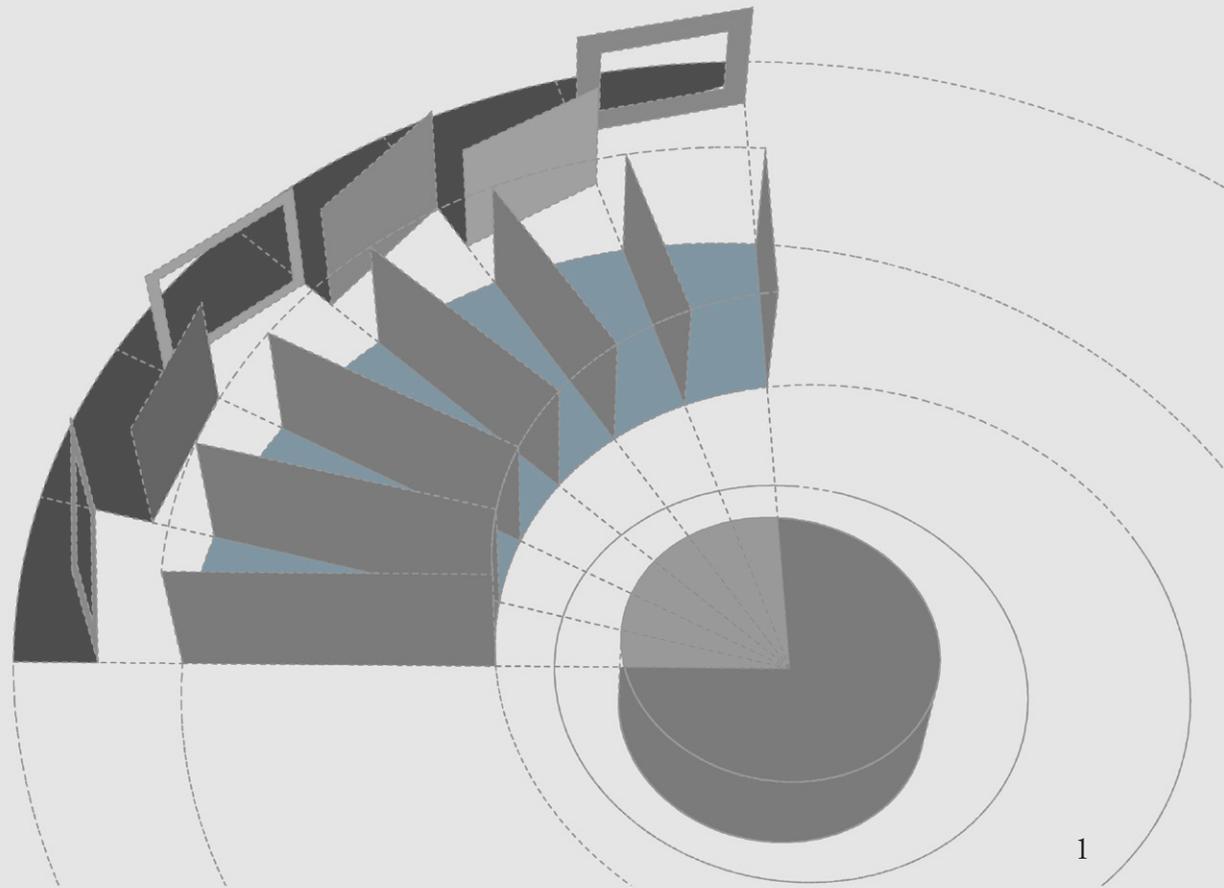


AN 'OFFLINE' VIRTUAL COMMUNITY

TO DESIGN A PUBLIC CONDENSER AS A 'SYSTEM'



YINGDA SUI
Public Building MSC 3&4
P5 Presentation
2020.7.6

PUBLIC CONDENSER

Public: maximize user inclusion
Condense: 30+ functions within 5-10k m²
Multiplicity: multiple use / users / relations

VIRTUAL COMMUNITY

A conceptual tool

CITY & TRANSPORT

PEOPLE & POWER

RESEARCH

Insufficiency of Morgestond
as a community

Lifestyle change
in the digital era

Potential
for specific site location

Inspiration
from virtual community

CONCEPT

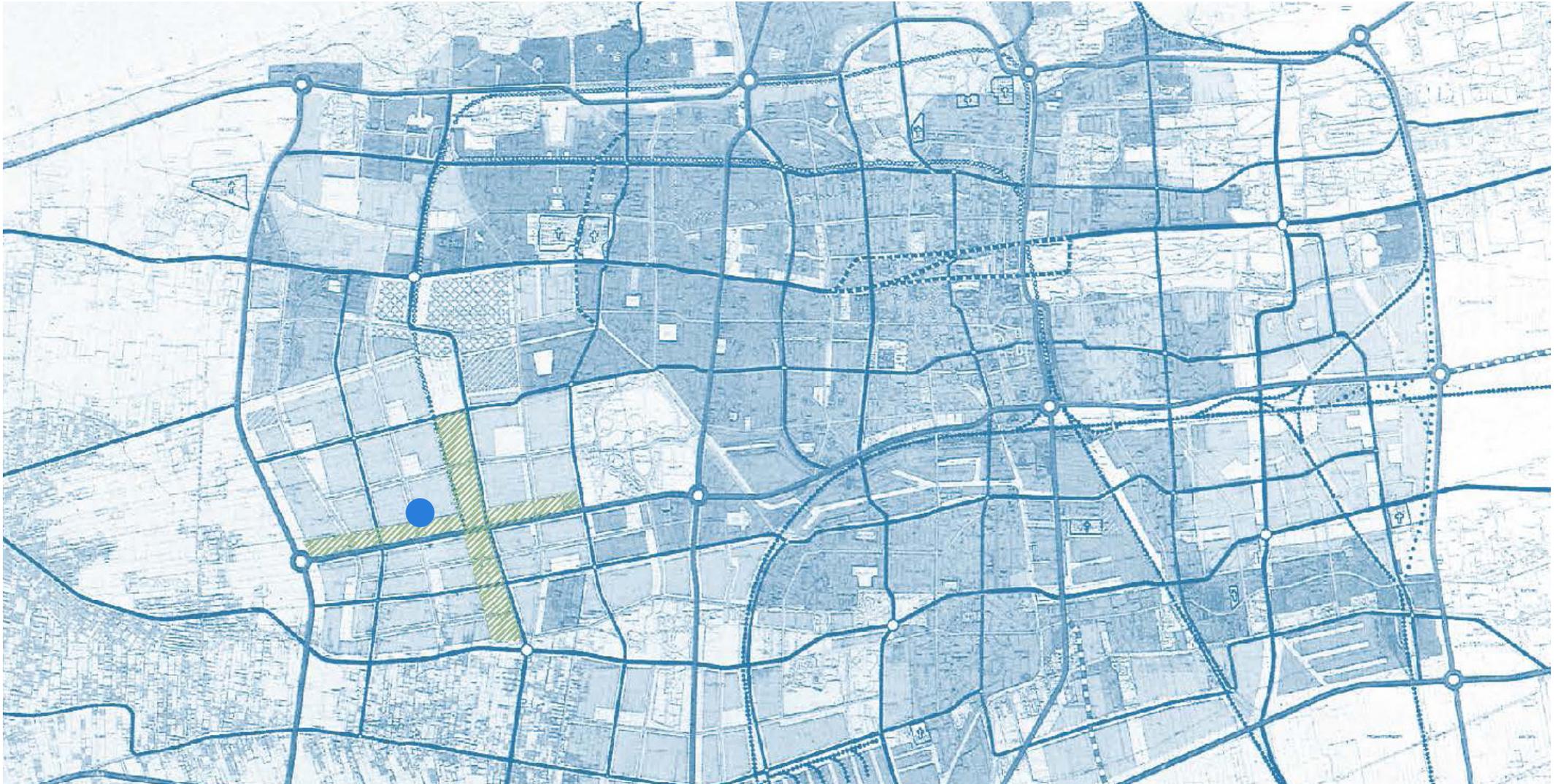
Concept
urban narrative

Concept
architectural narrative

Generation process

DESIGN

The building



A Semi-independent unit of The Hague

Insufficiency of Morgestond as a community



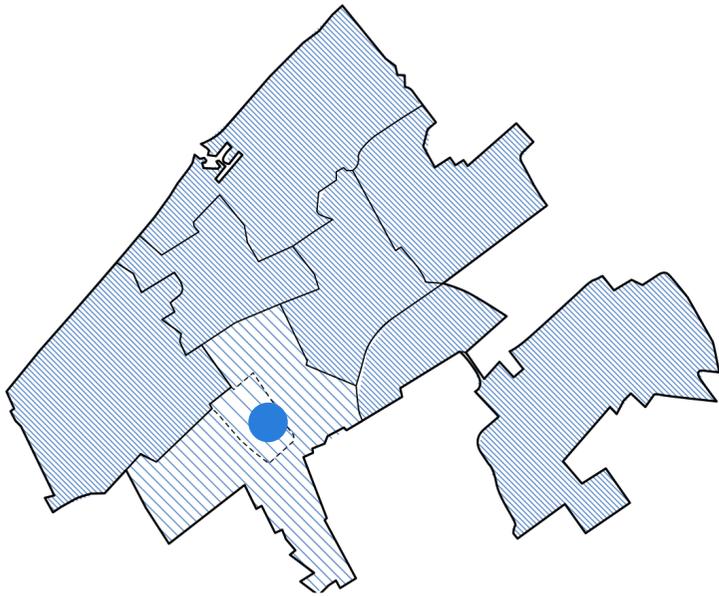
Urban Development Plan for The Hague South-West by W. Dudok, 1935



Key feature:
grided plan
international style
placelessness.

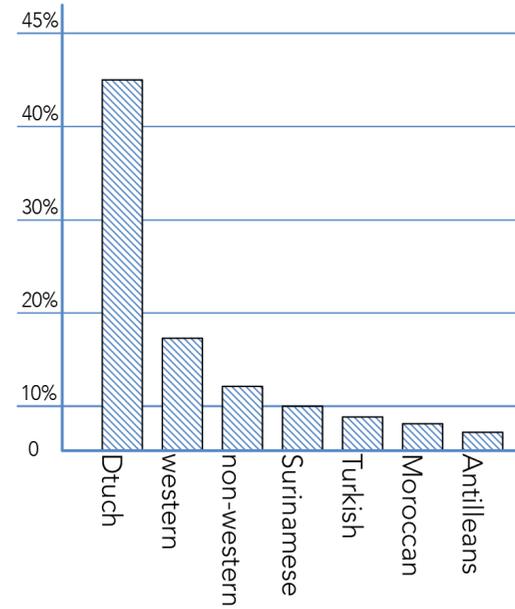
Typical post-war city without much place identity

Insufficiency of Morgestond as a community

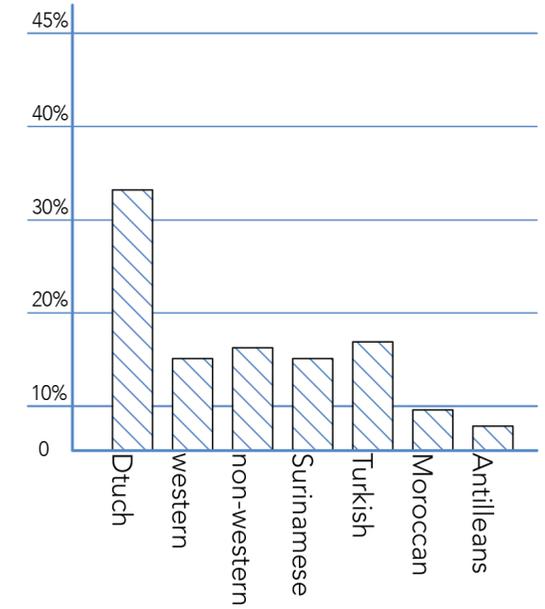


2 waves of migration: 1950s-1970s, 2010s-now

The Hague



Morgestond

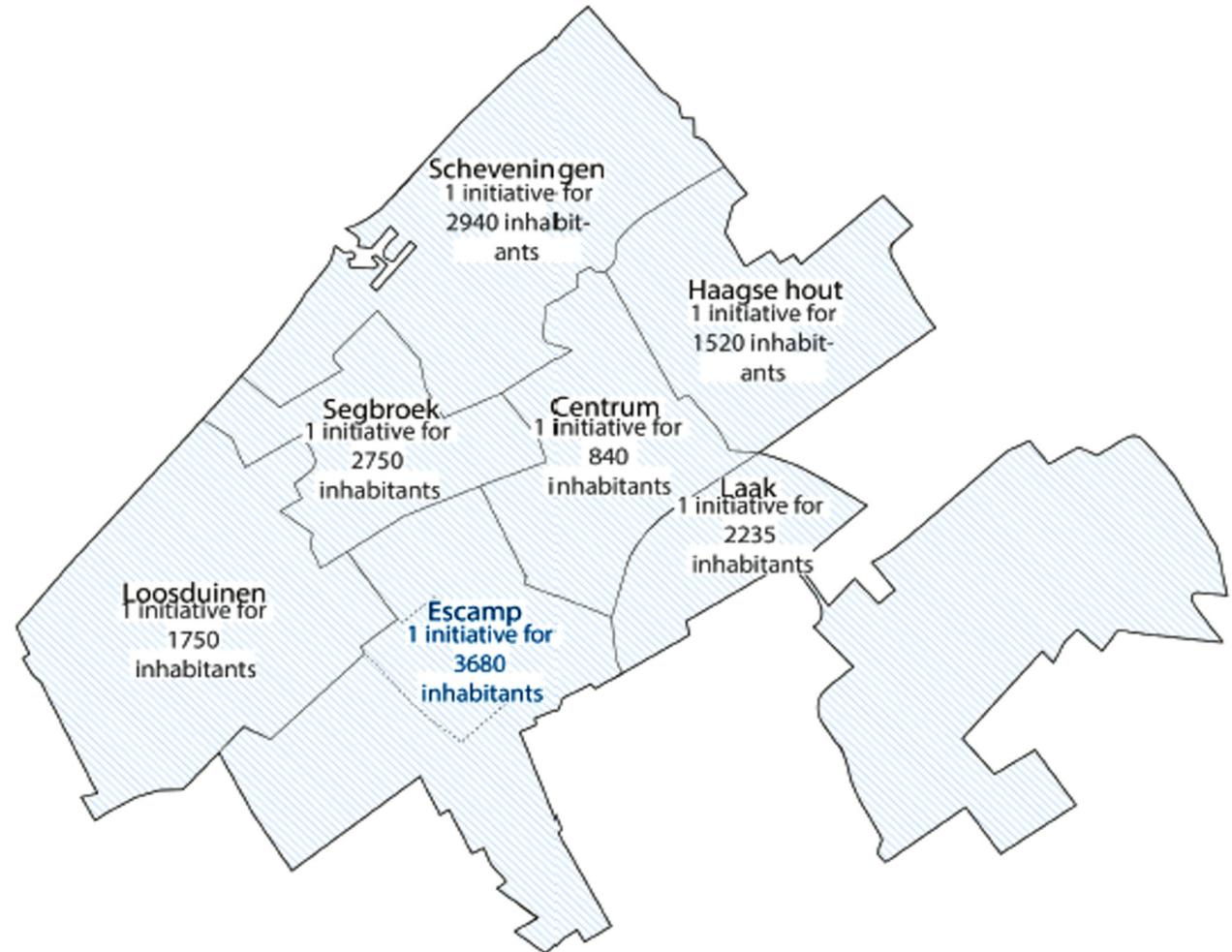


A 'city of arrival'

Insufficiency of Morgestond as a community

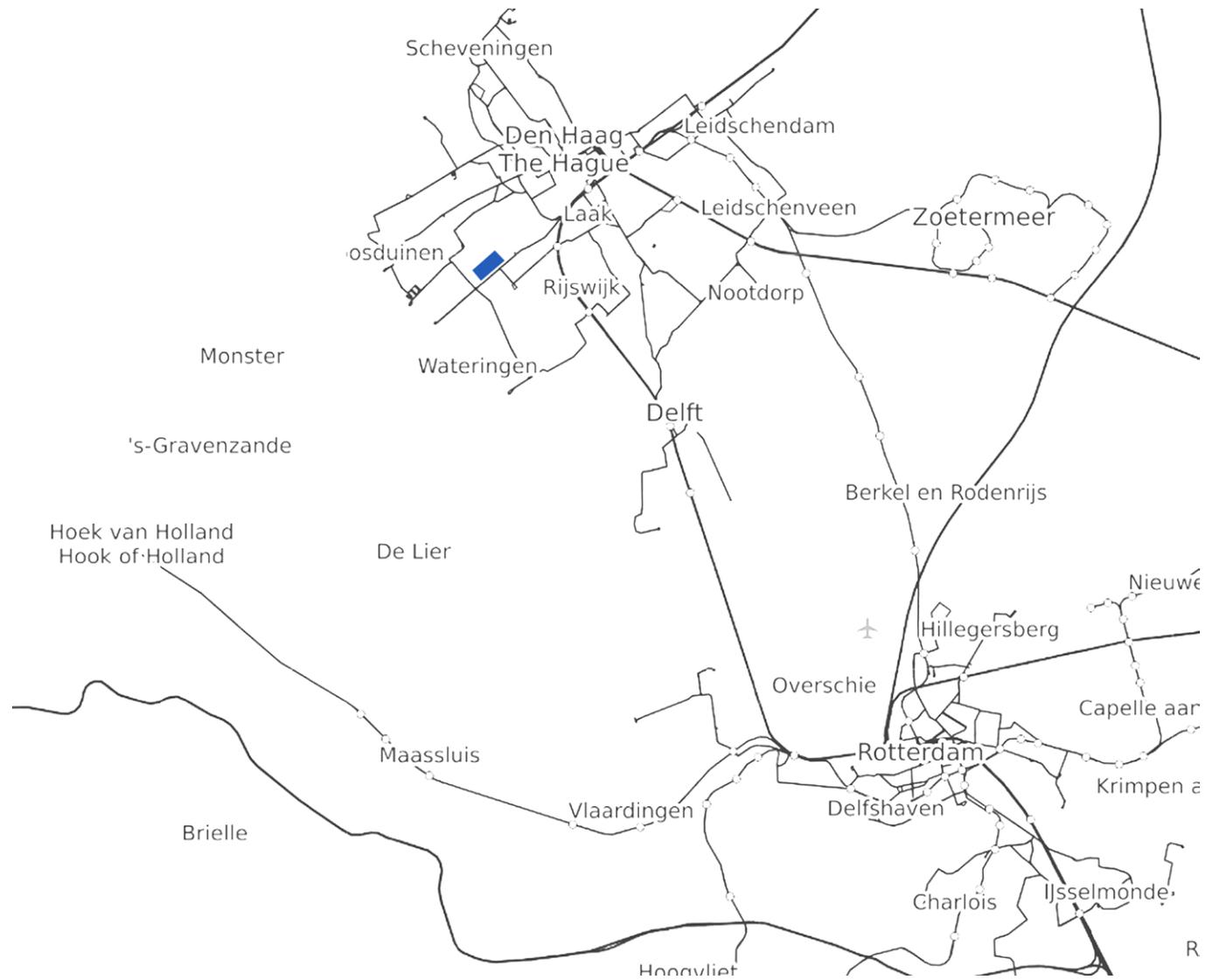
LOW:

- Political participation
- Sense of belonging
- Sense of security
- Employment
- Income



A city lack of common social life

Insufficiency of Morgestond as a community



One node of an urban agglomeration on lightrail

Insufficiency of Morgestond as a community

MORGESTOND: A DISPERSED COMMUNITY

PLACELESSNESS
MIGRATION
INTER-CITY COMMUTE

.....



The new normal: multiple use of attention

Community life in the digital era

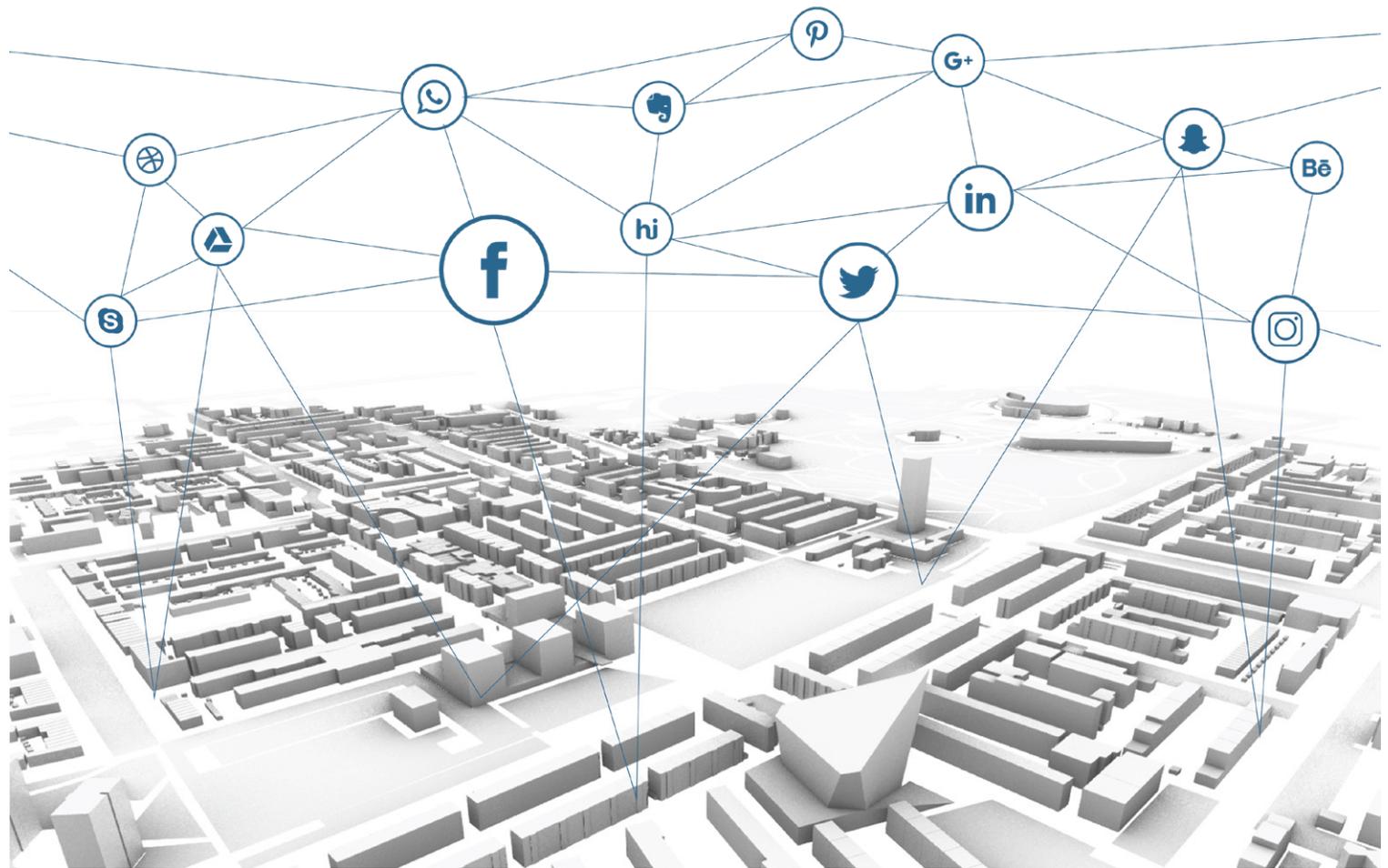
A: 'Is there a community center in your neighborhood?'

B: 'Yes.'

A: 'How often do you go there?'

B: '...I don't go there much, maybe... twice a year?'

Lack of motivation in community life

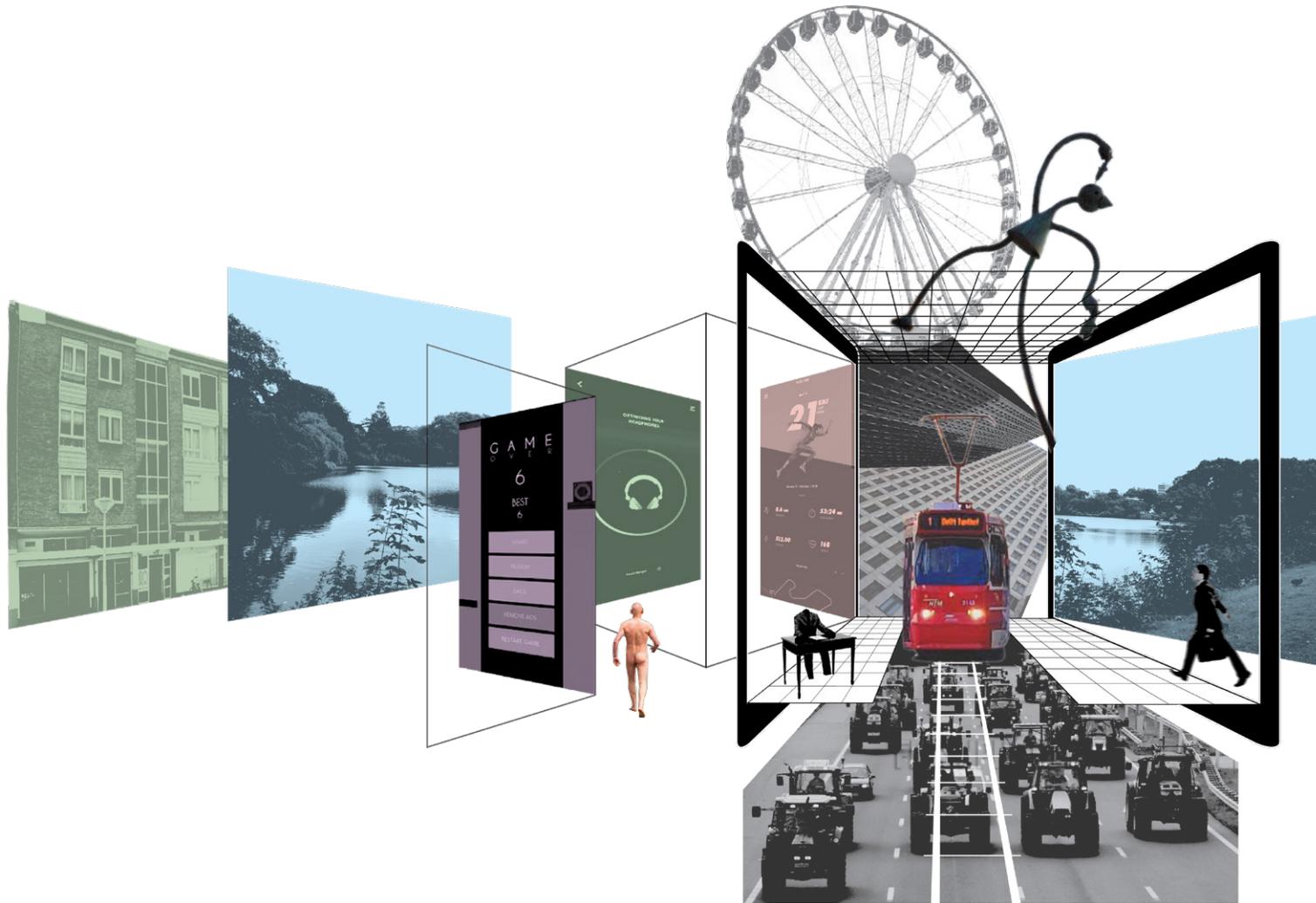


'Virtual community: the real form of community today'



The most used public space in the area but too dull

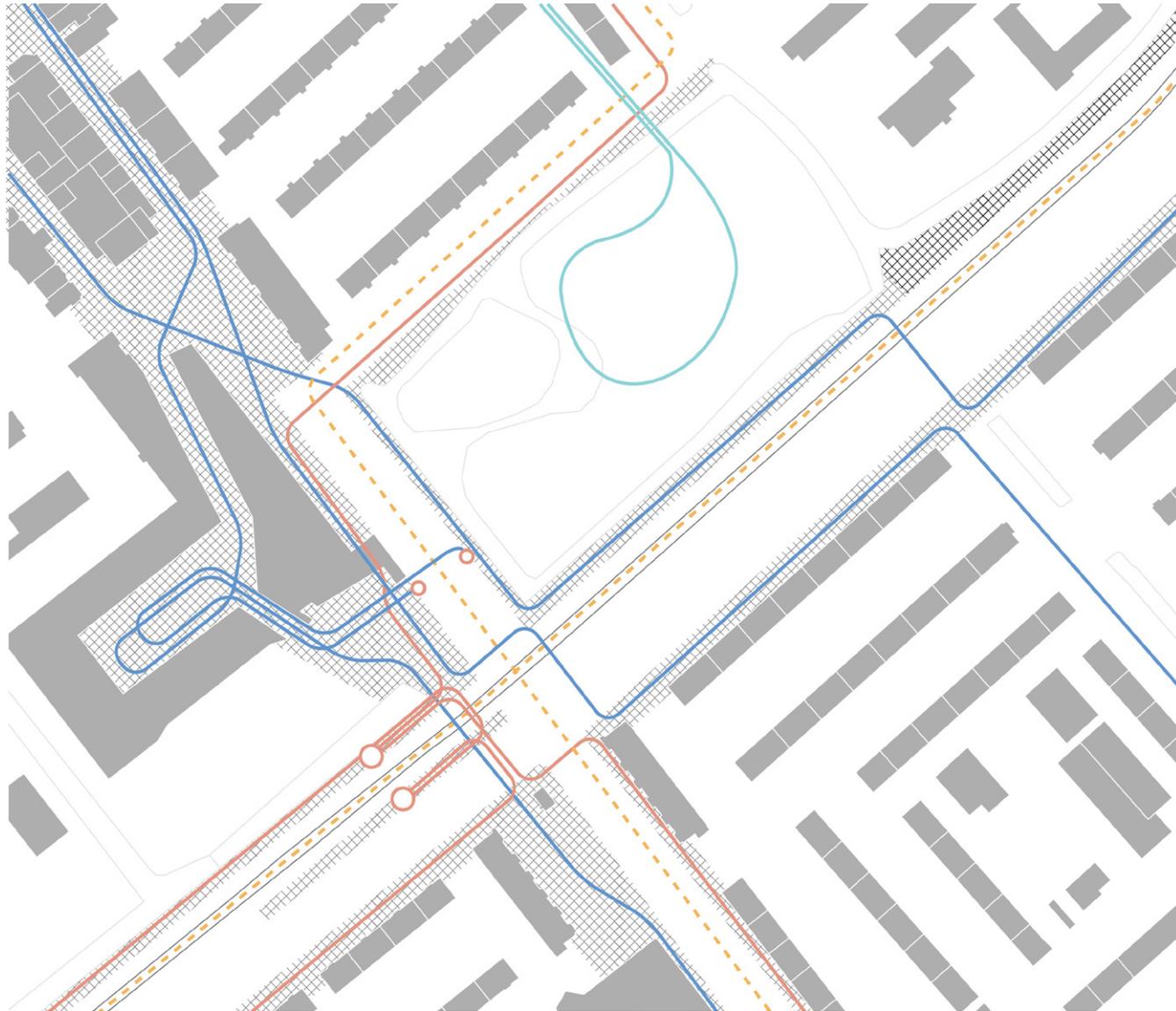
Potential of the place: station Den Haag Leyweg



Getting off the tram:
Starting point of community life

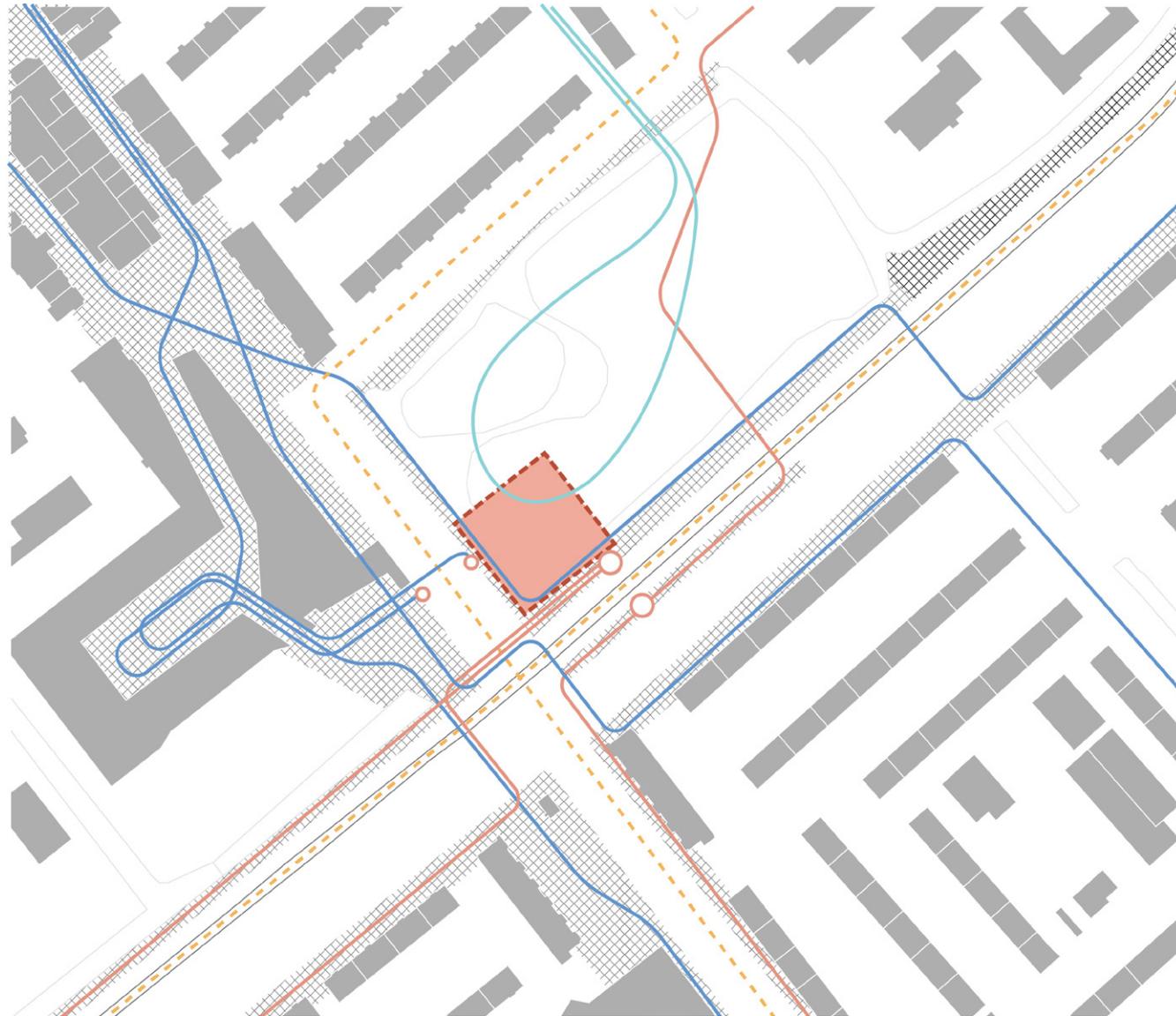
10-min tram waiting time:
Chance for transient activities

Potential of the place:station Den Haag Leyweg

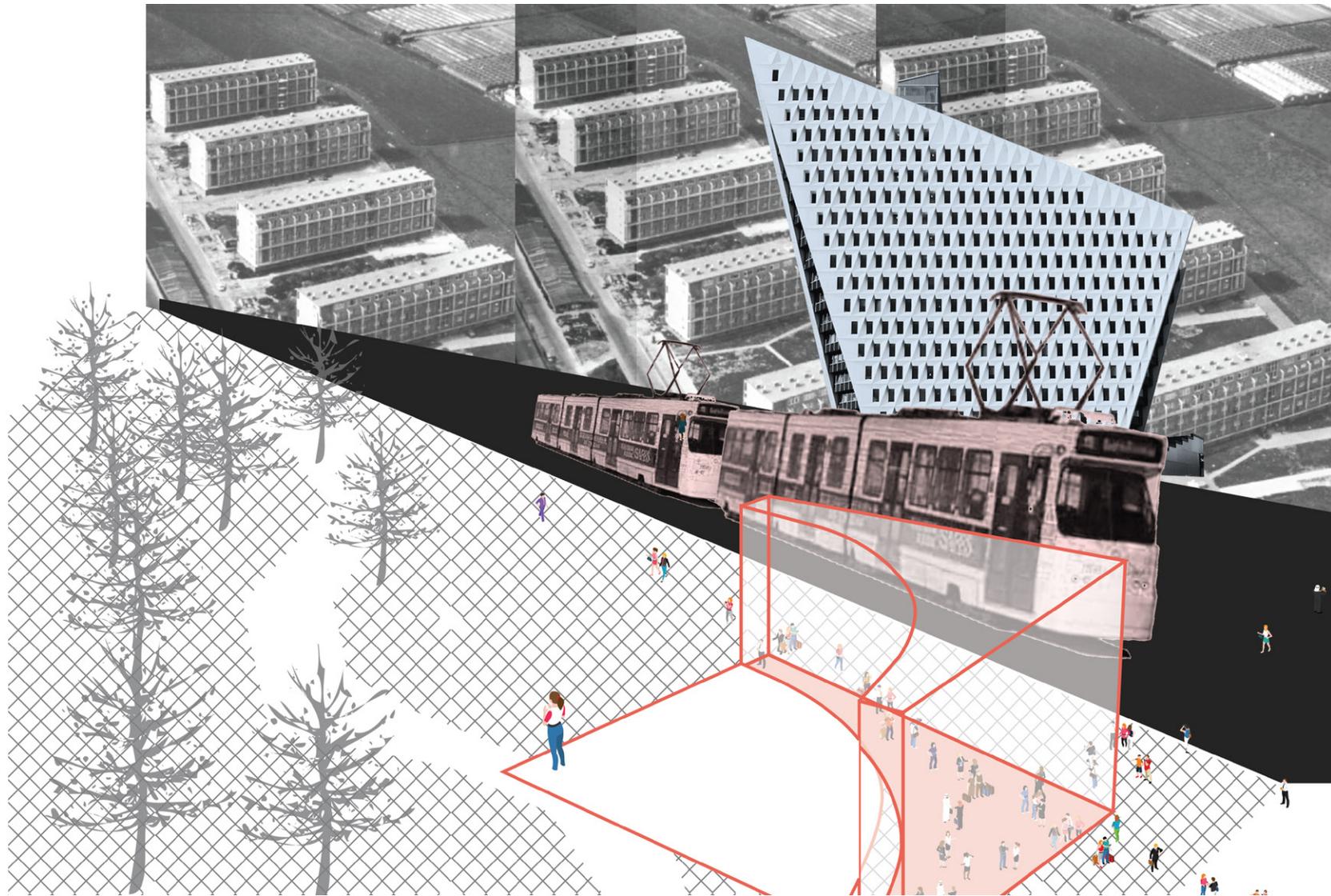


Current site circulation: the park isolated

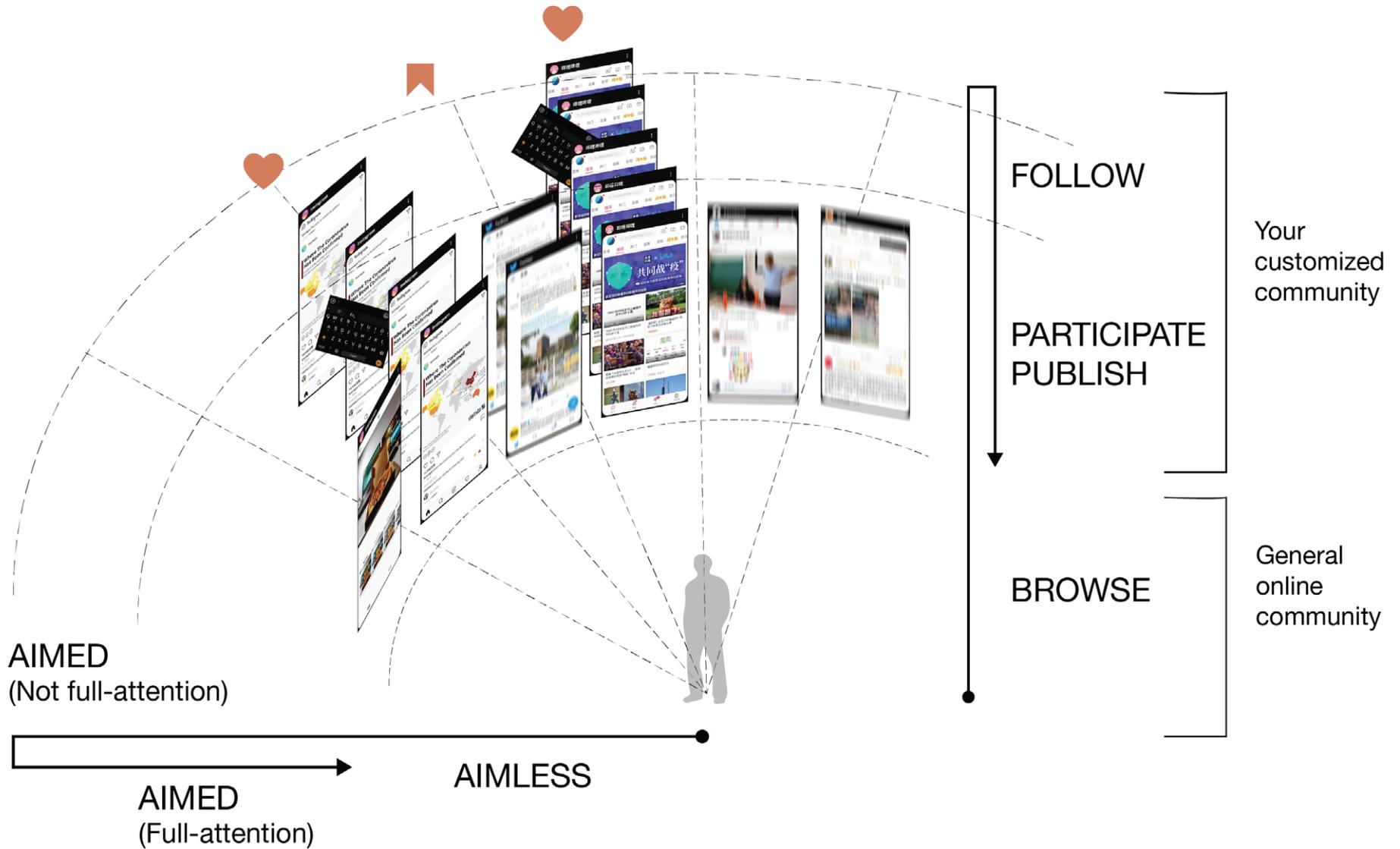
Potential of the place: station Den Haag Leyweg



Potential site circulation: more inclusion



Accommodating passersby / open to the park / balance forces



Layered, addictive customizing system

Inspiration by virtual community

NOTIFICATIONS

SOCIAL DISTANCED / NOT TOTALLY ISOLATED
(Relation to Susanne Hall's migration integration study)



Keep up with updates

Keep vigilance



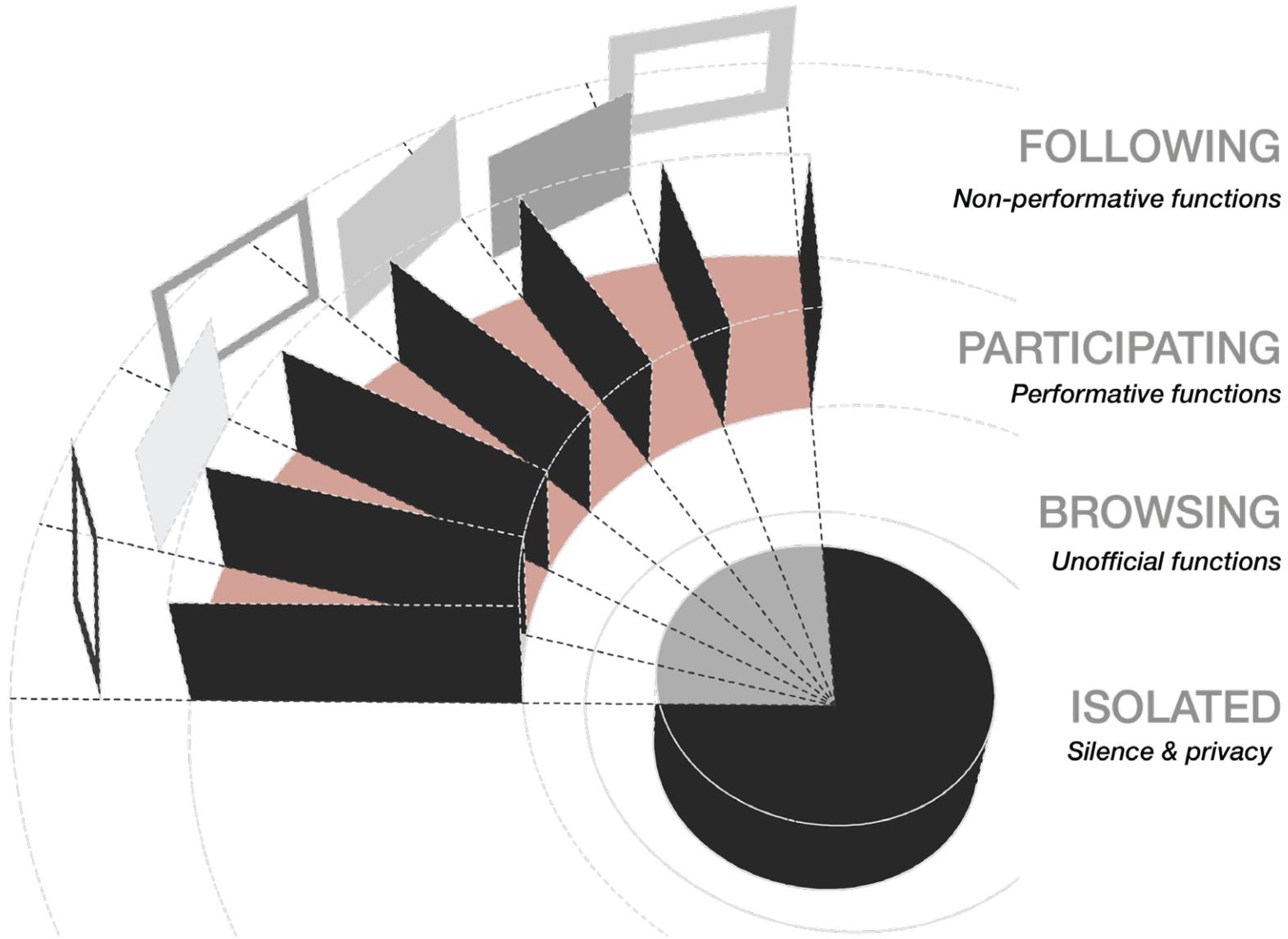
Encounter with inspiration



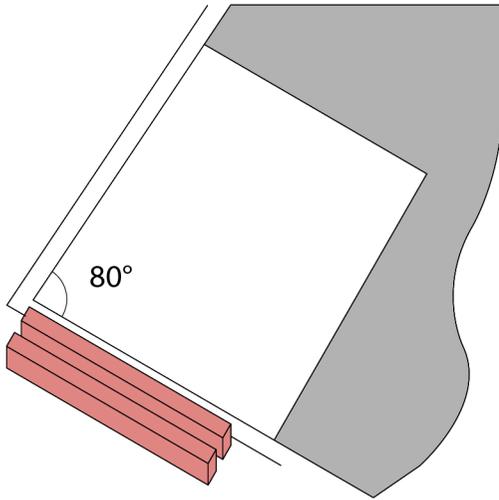
Expense spare attention



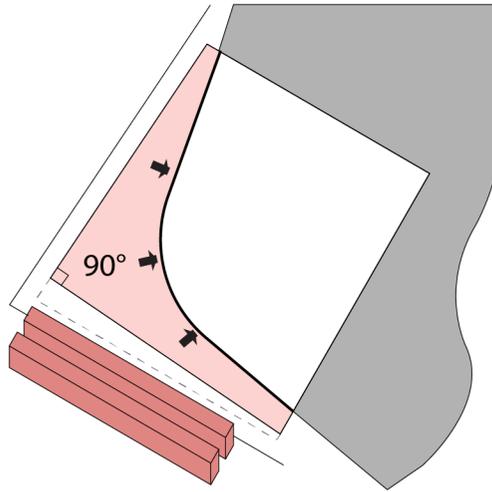
Following: aimed, but without full-attention



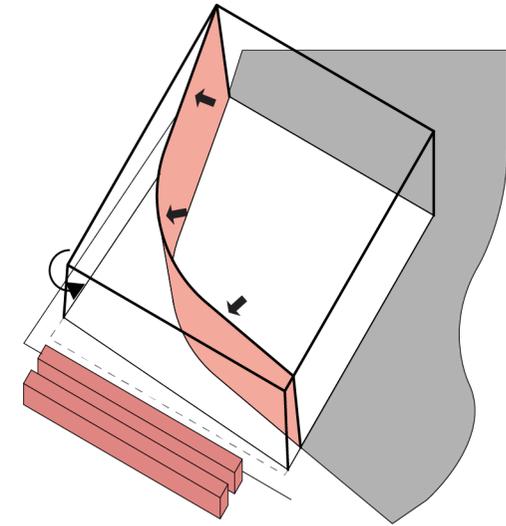
Applying the order of virtual community to space / program



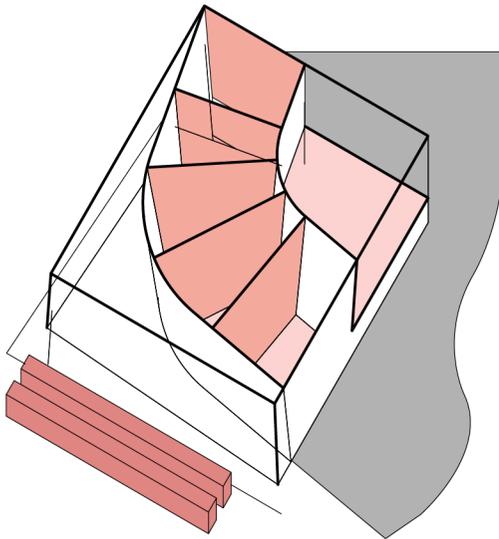
A plot at the street corner



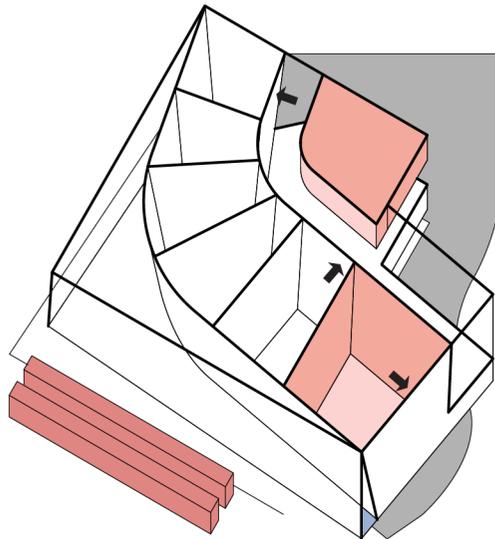
Extend the street corner into the building, make an internal facade



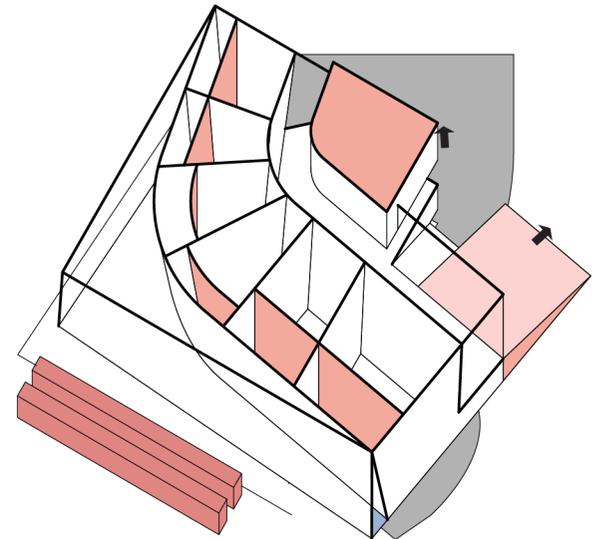
Extrude the internal facade inclined, rotate the external facade by 10°



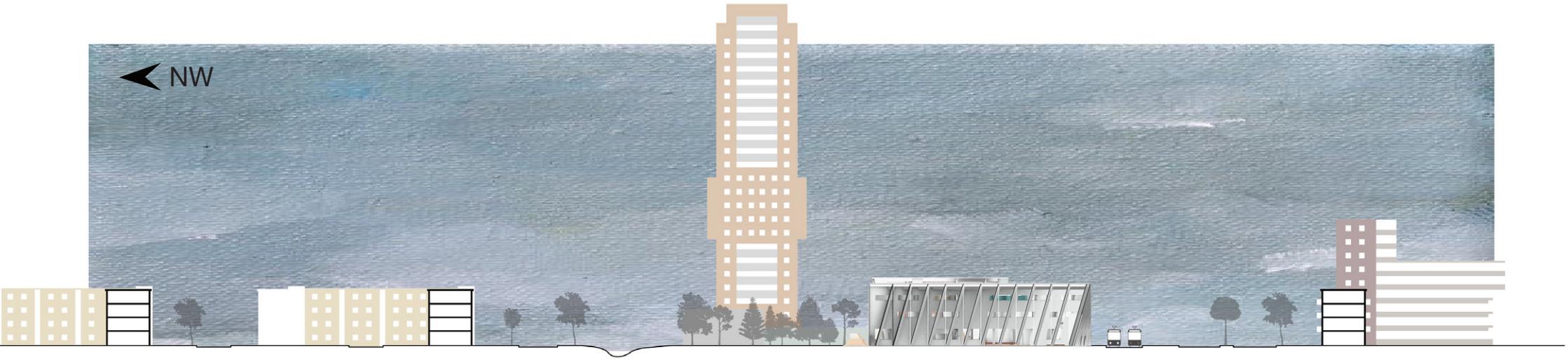
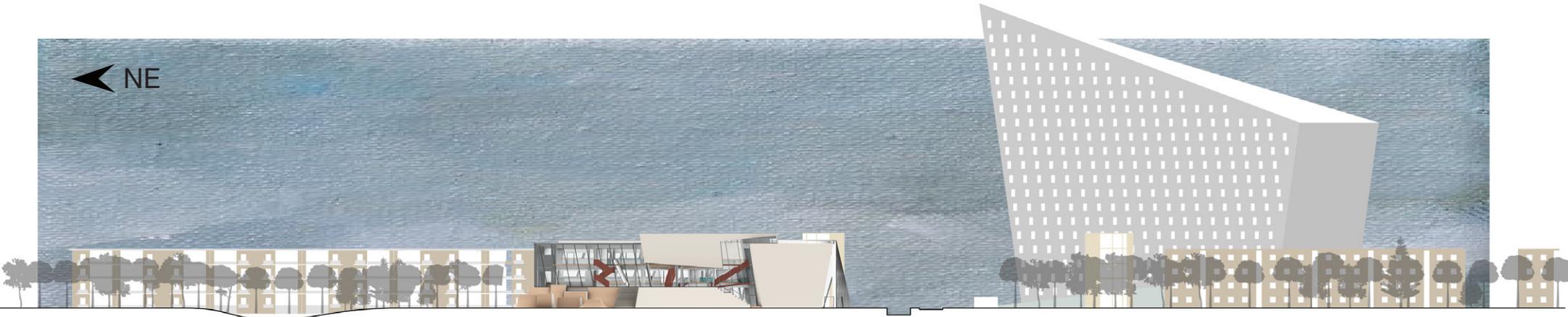
Charge with browsing layer and participating cells



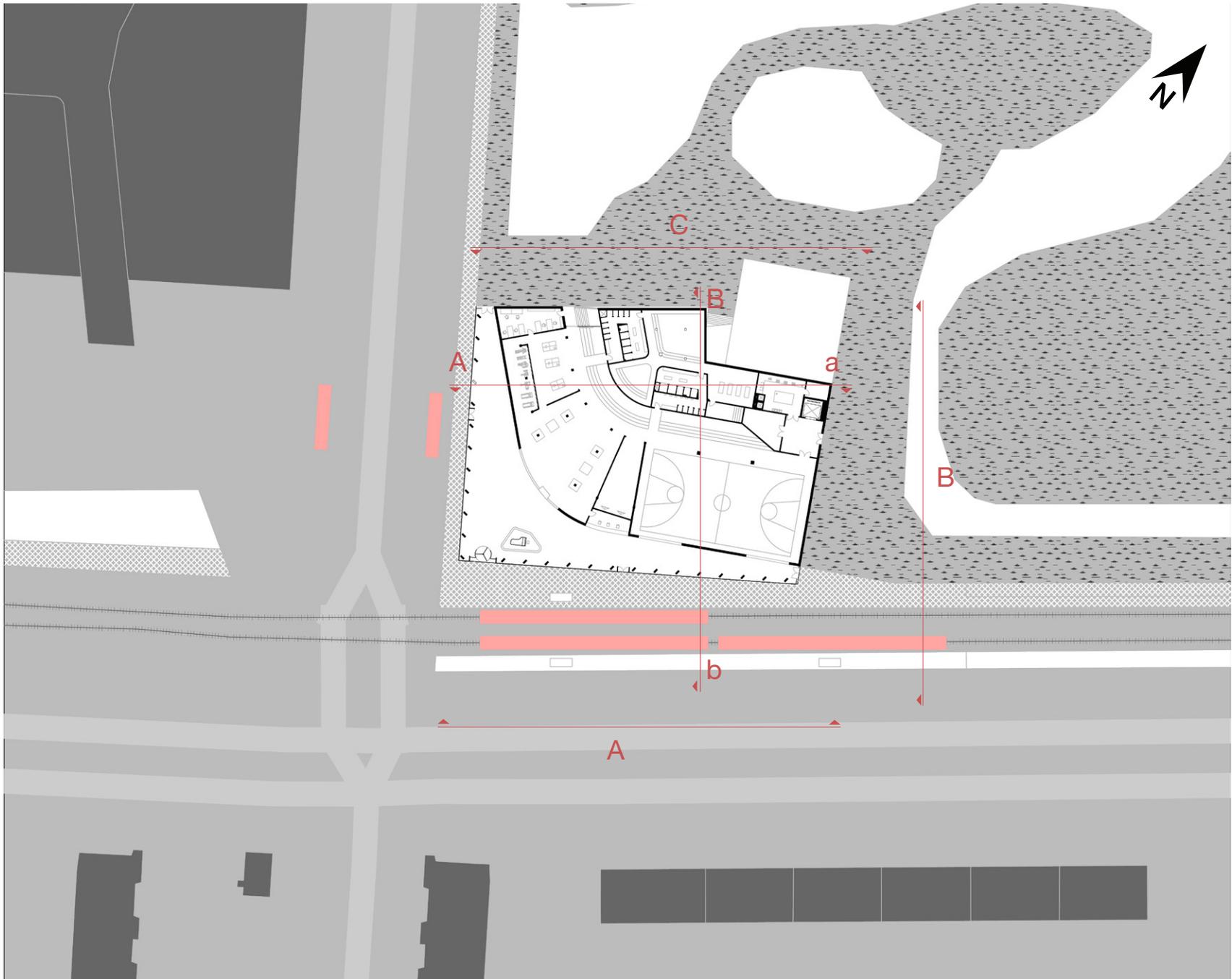
Vary layer width & extend the length, according to program



Subdivide following layer from the cells, add skateboard field

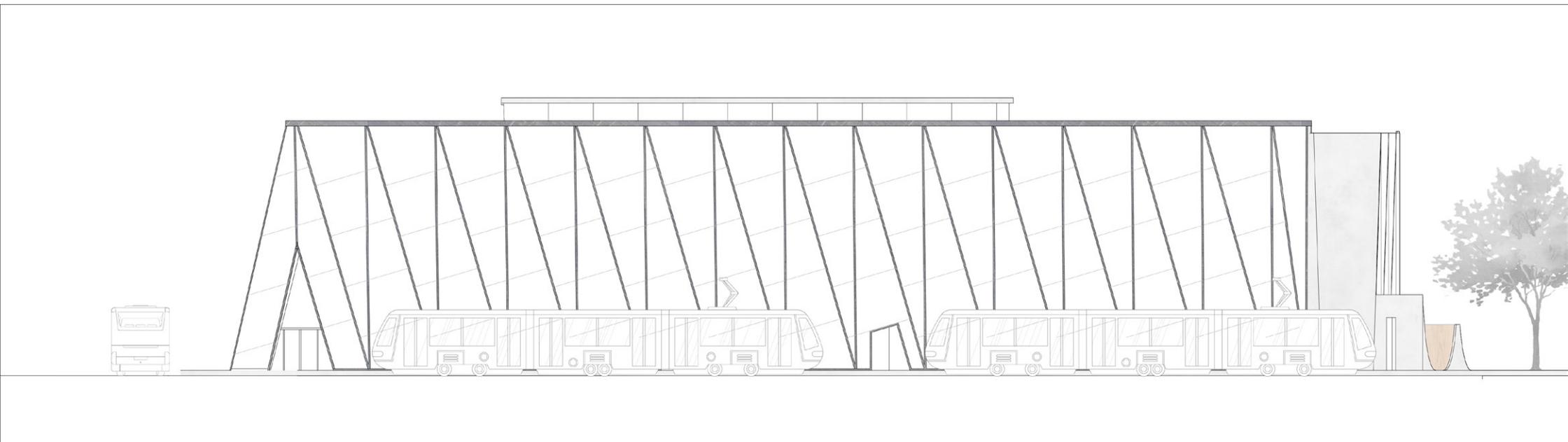


Site Plan



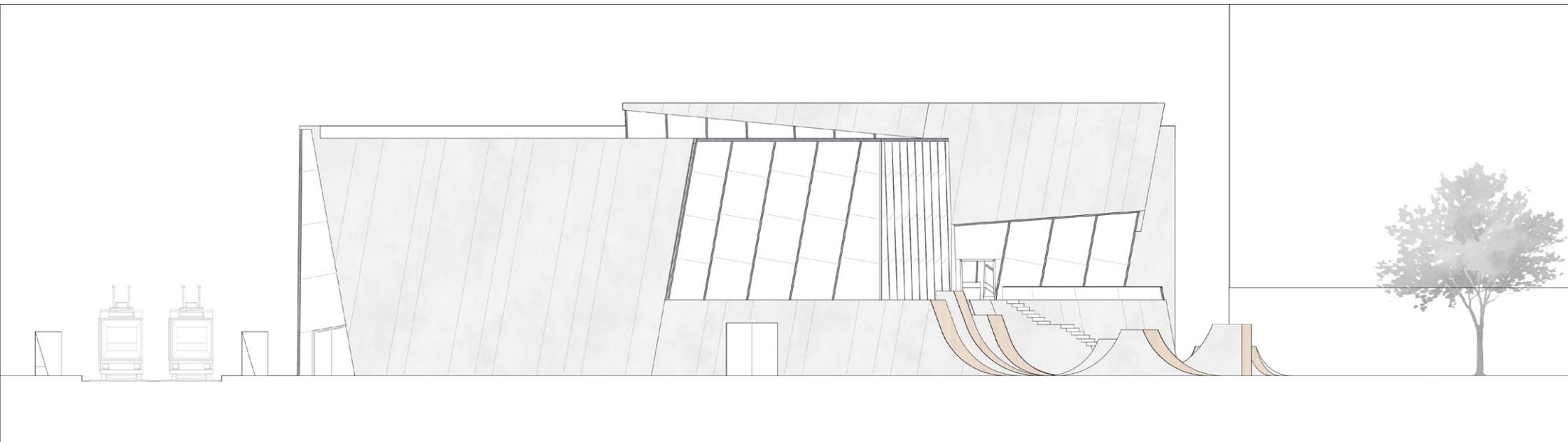
Elevation A

NE ➤



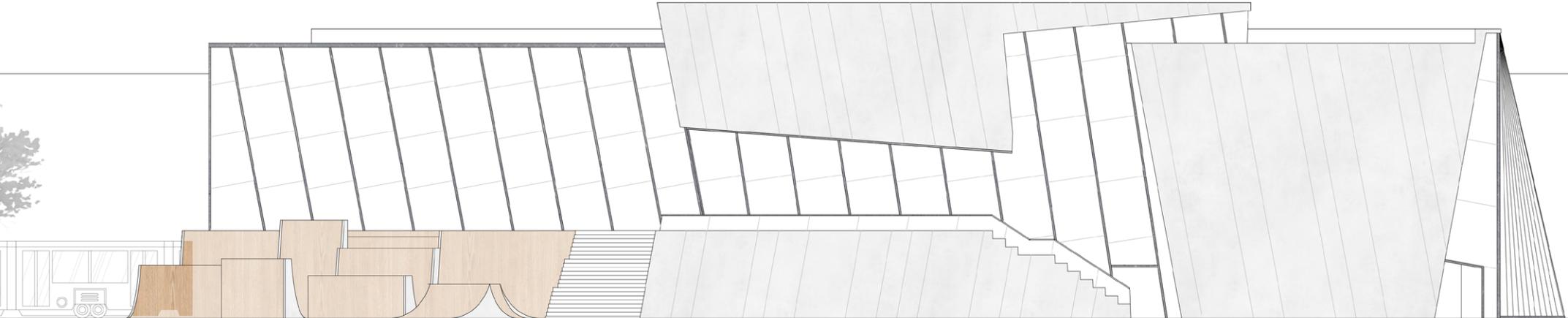
Elevation B

NW ➤

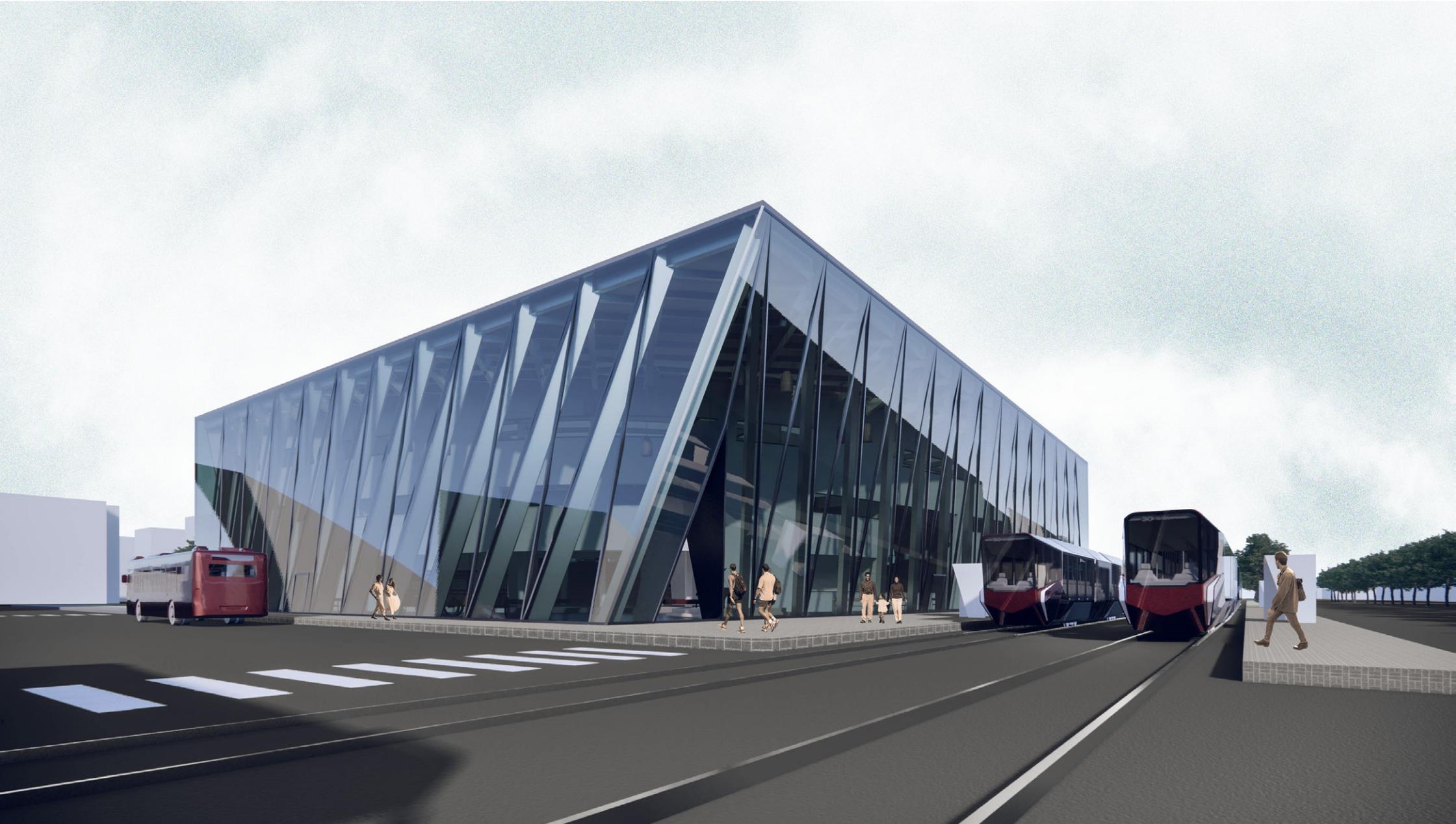


Elevation C

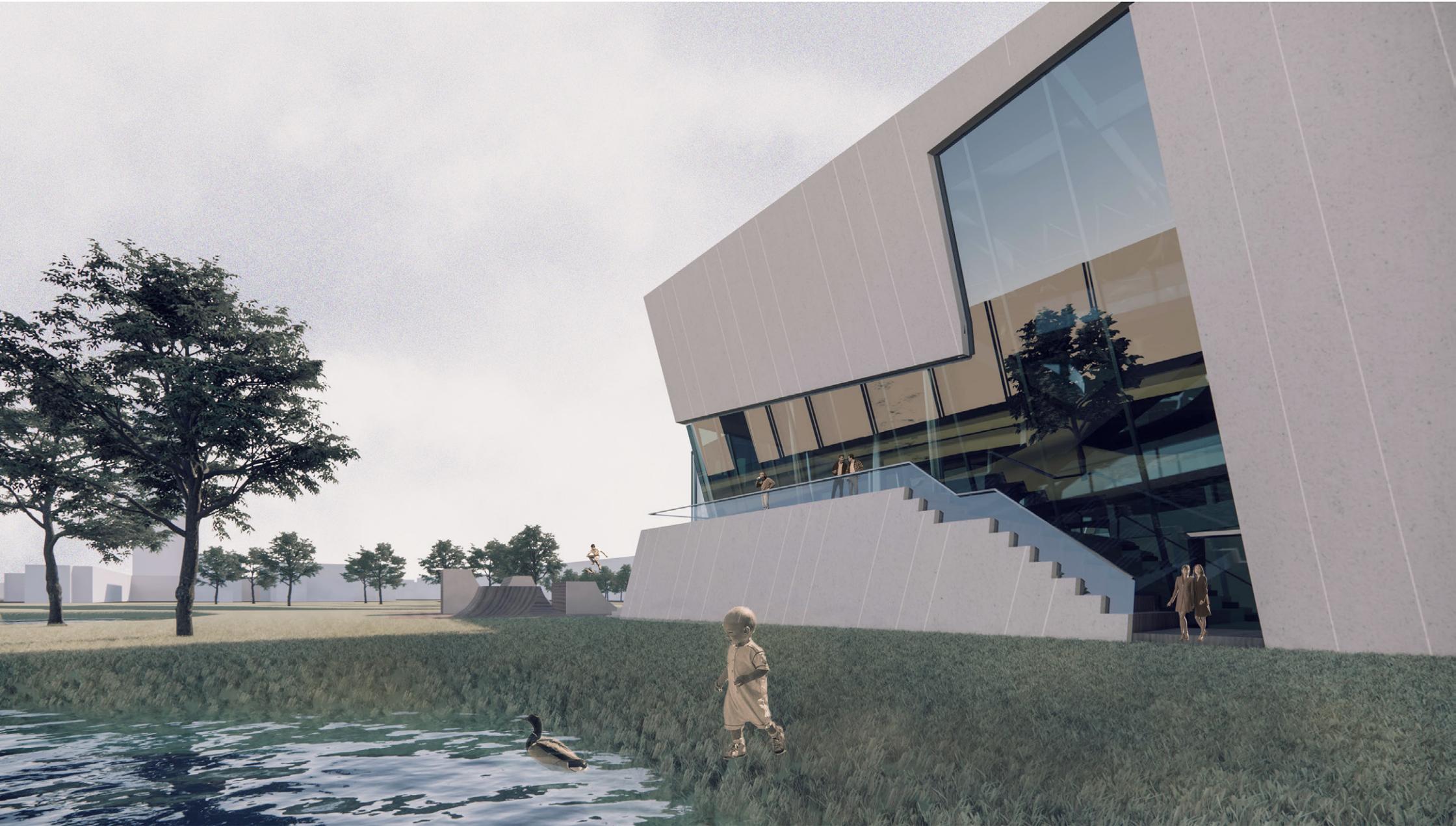
SW ➤



Exterior views



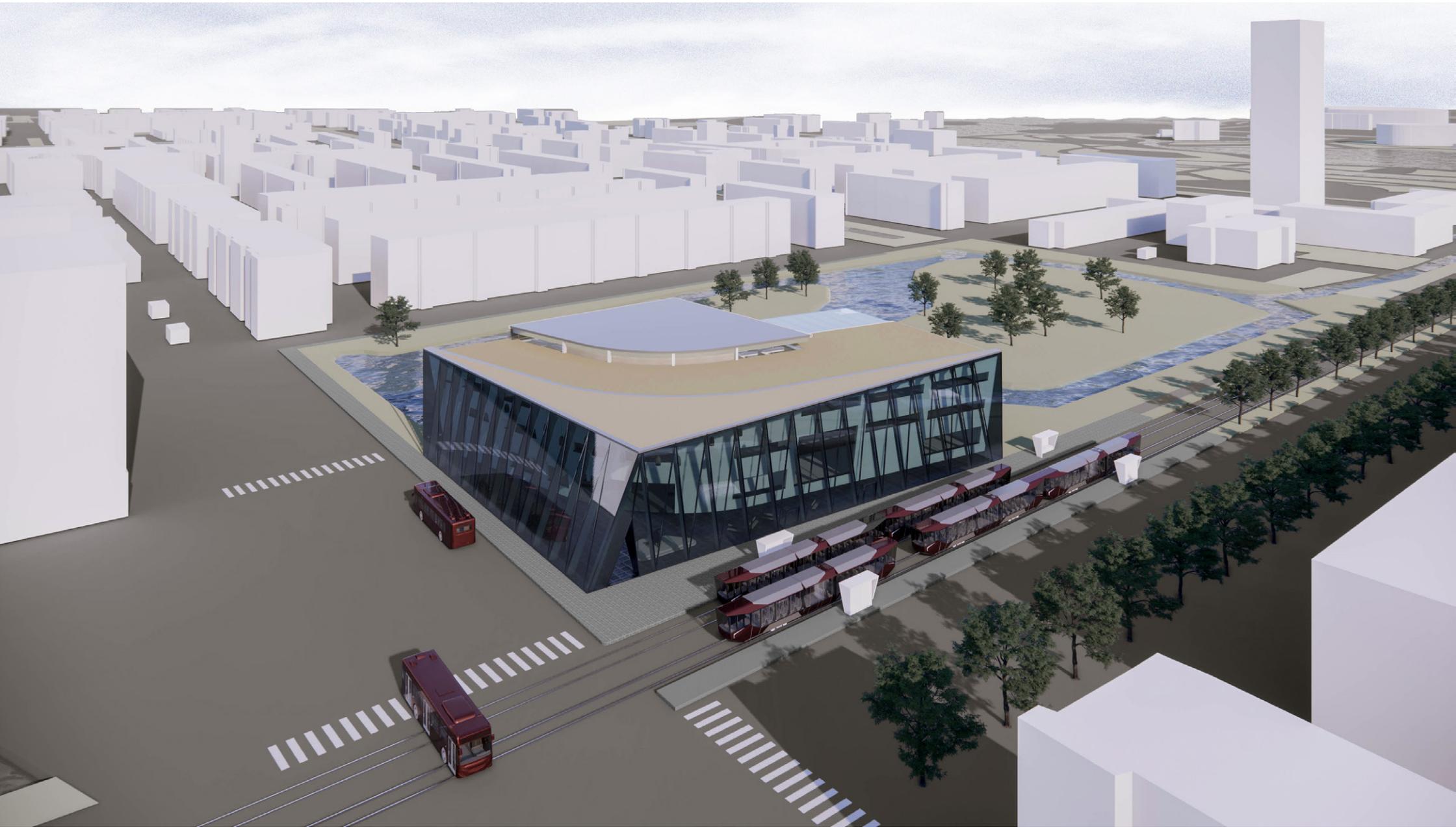
Exterior views

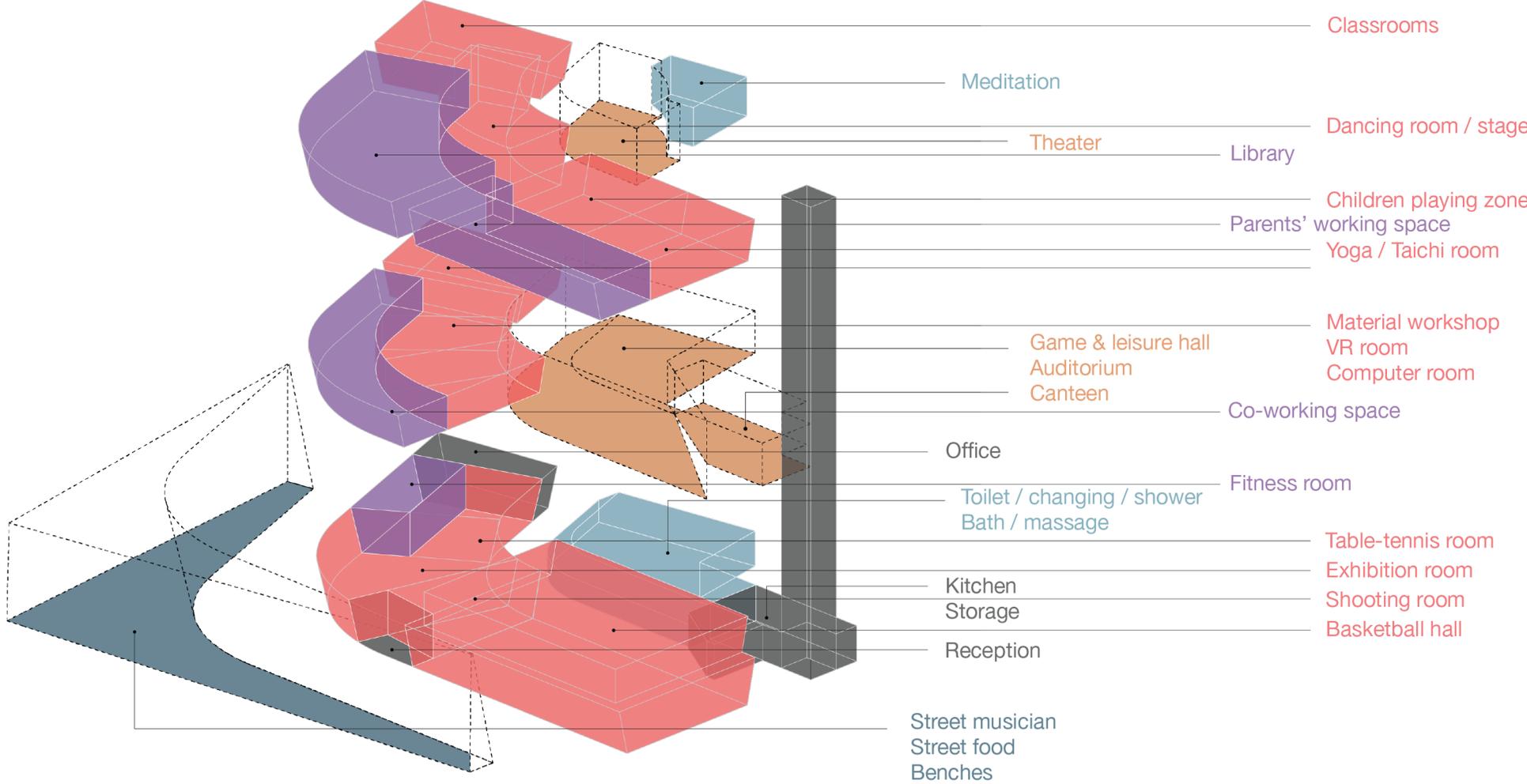


Exterior views



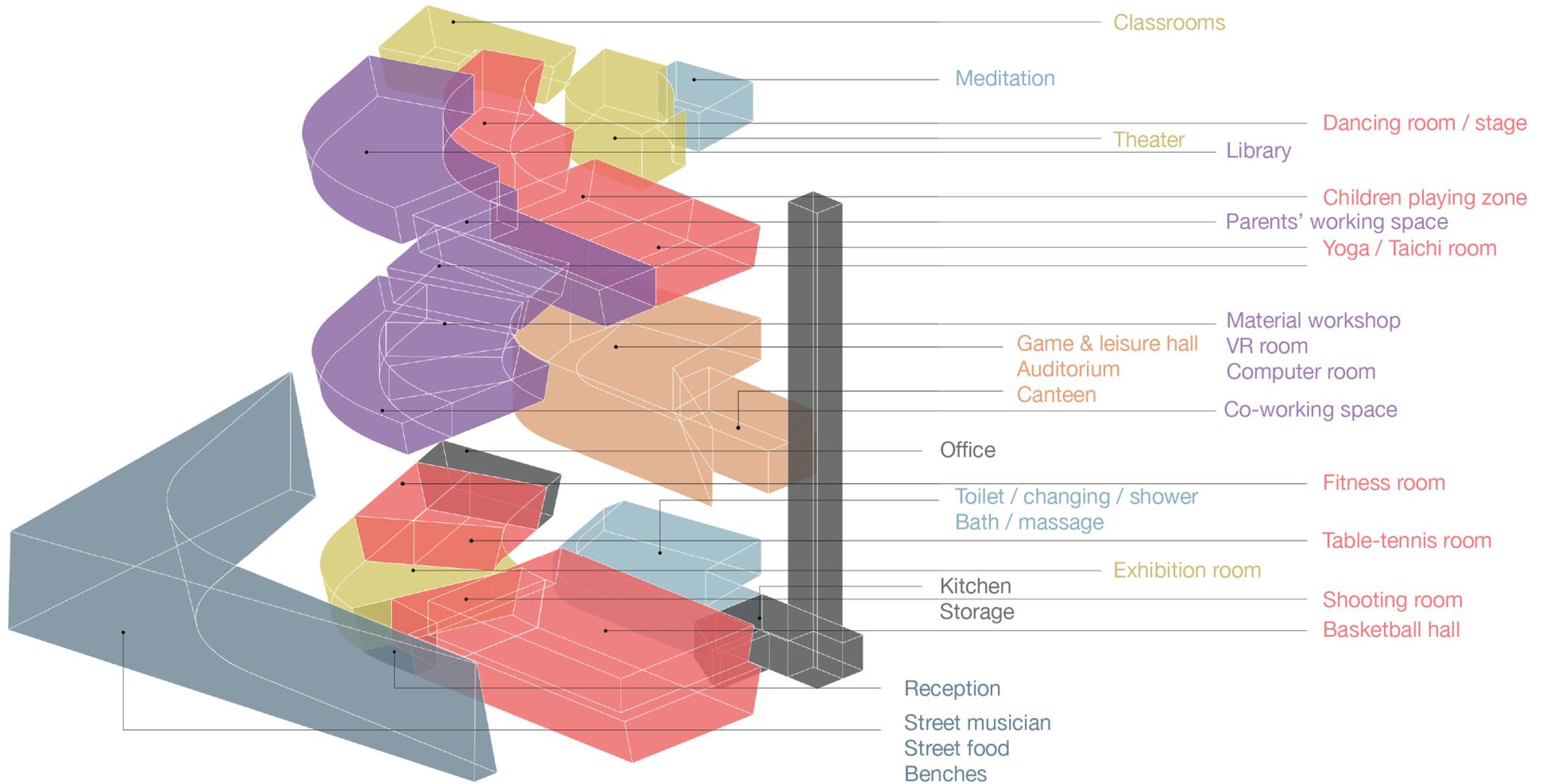
Exterior views





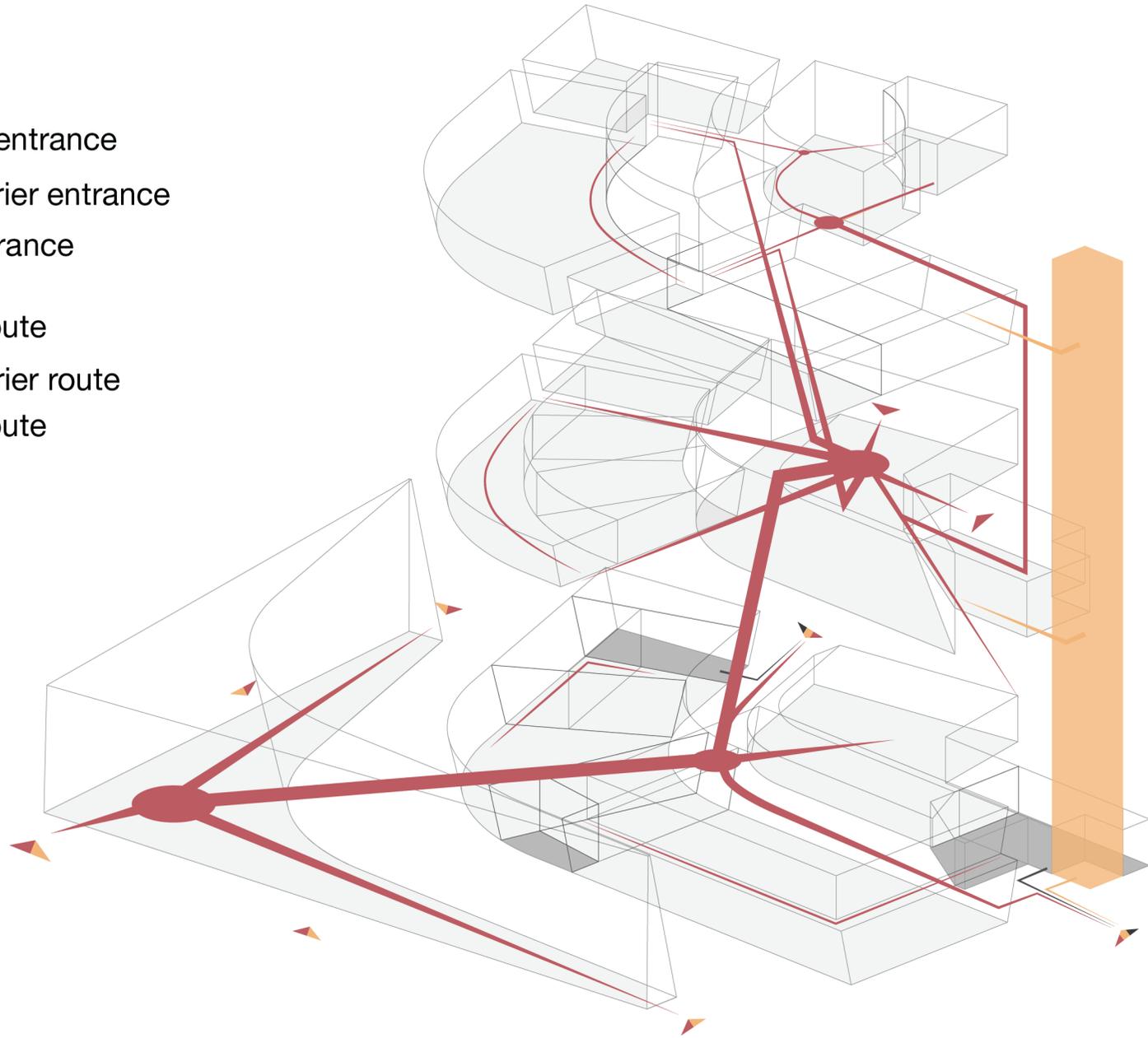
 PASSING BY	 BROWSING	 PARTICIPATING / PERFORMING
 FOLLOWING	 ISOLATED	 SERVICE

Program by function



Circulation

- ▲ Regular entrance
- ▲ Non-barrier entrance
- ▲ Staff entrance
- User's route
- Non-barrier route
- Staff's route



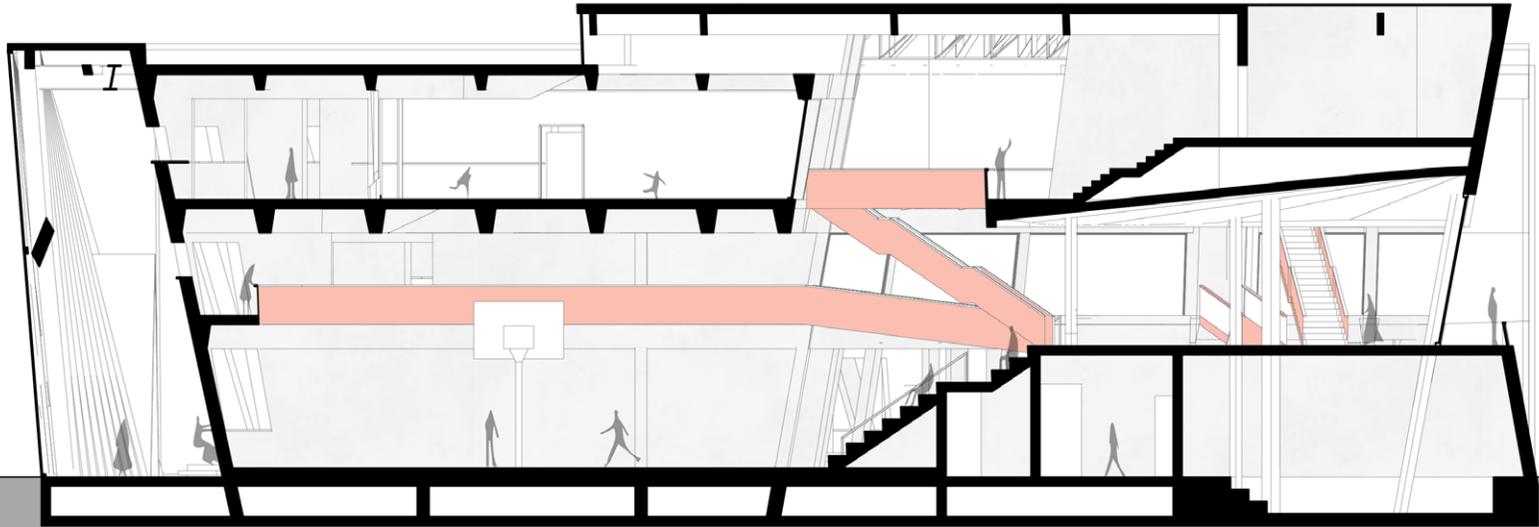
Section Aa

SW ➤



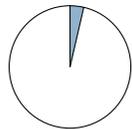
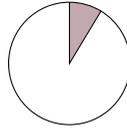
Section Bb

NW ➤

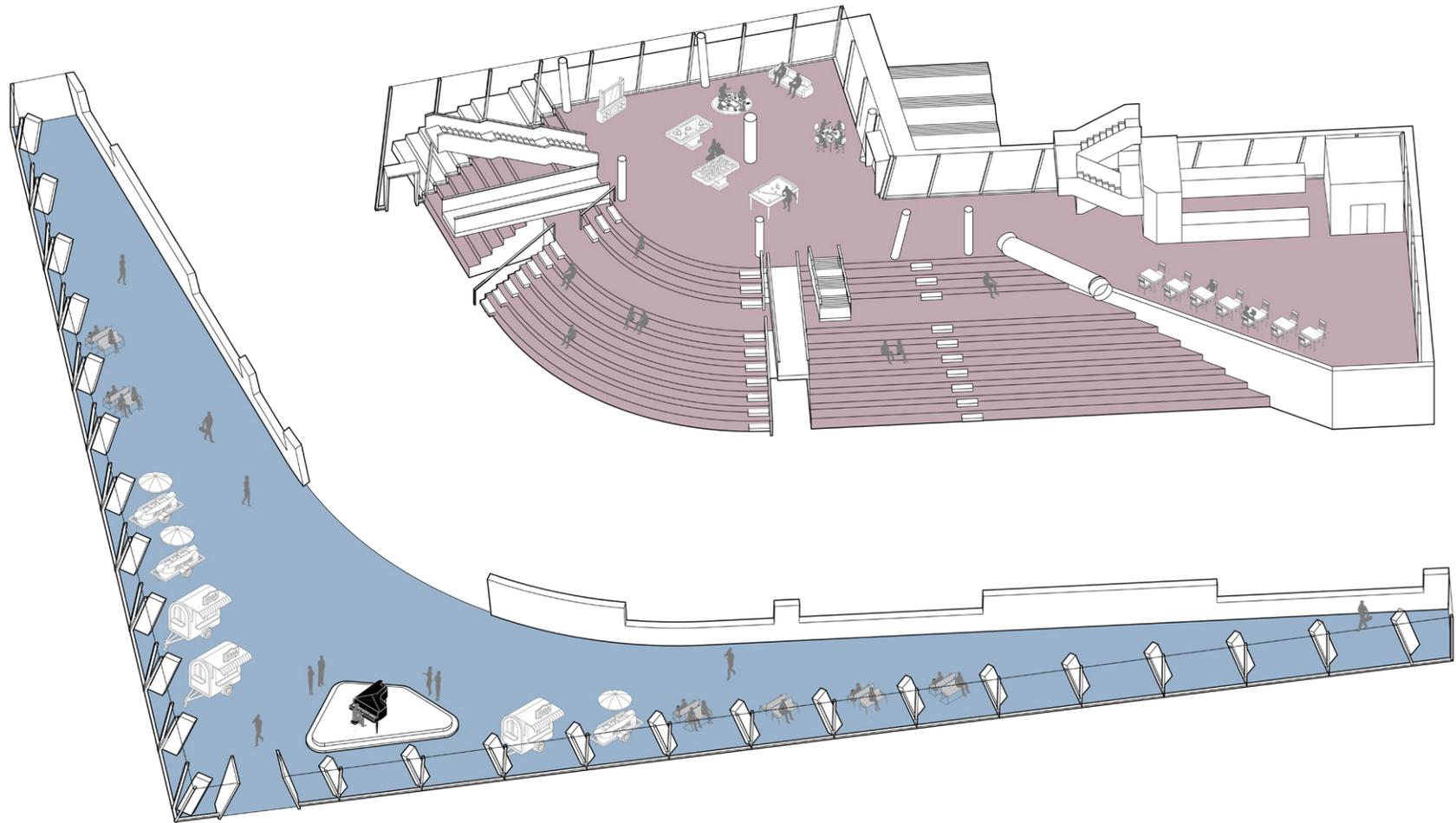


Building parts I: passing by & browsing

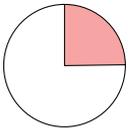
BROWSING
30-60min stay
Spontaneous activity



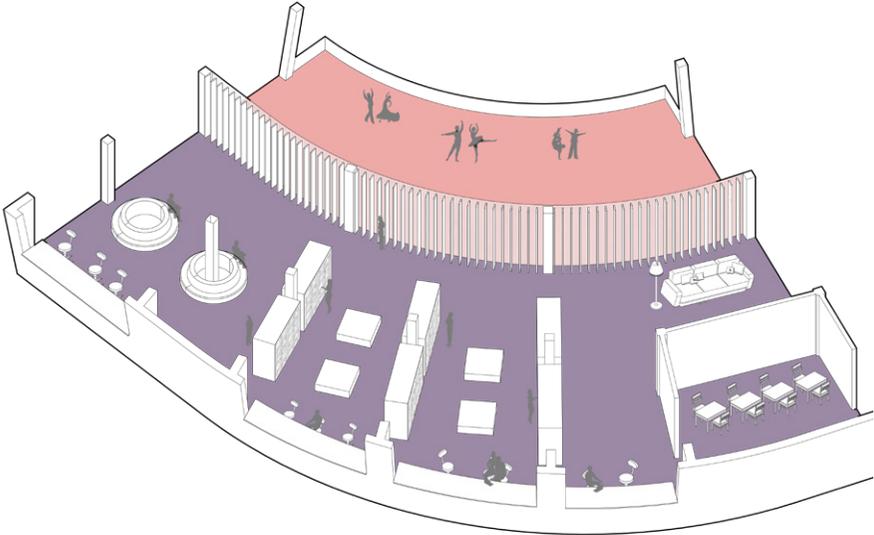
Passing
1-15 min
Passing by and encounter



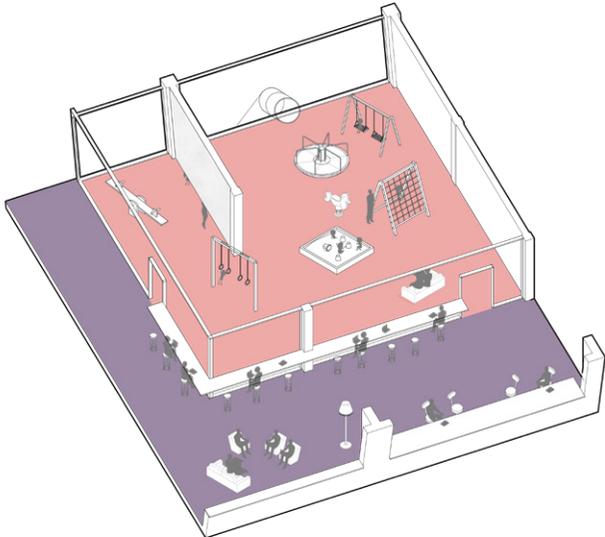
Building parts II: participating & following



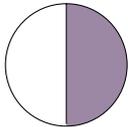
PARTICIPATING
1-3 hr stay
Specific scheduled activity



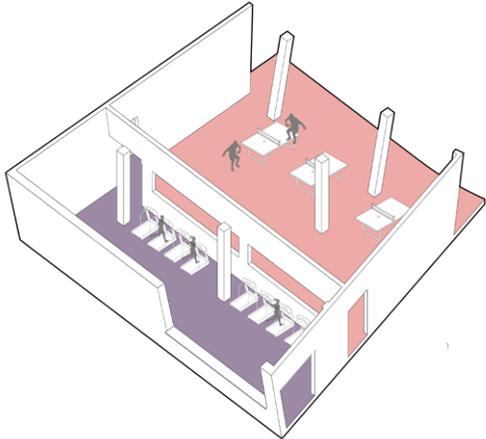
Keep up with updates



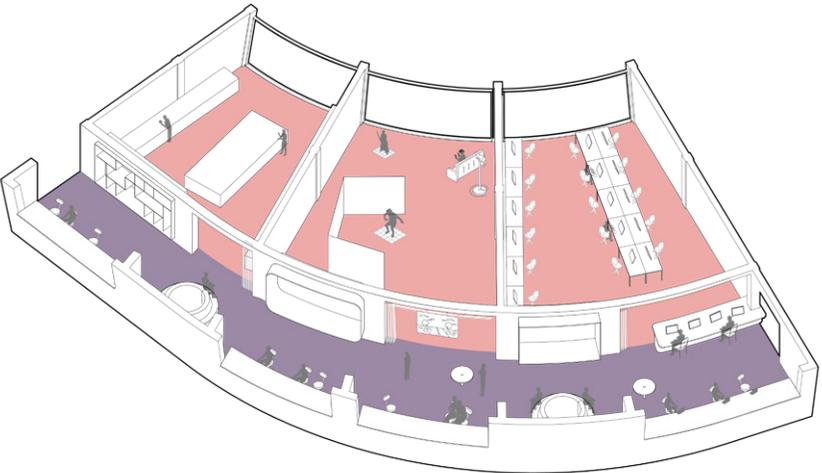
Keep vigilance



Following
Several hours
Specific activity and 'keep an eye on'



Expend spare attention



Encounter with inspiration

Interior tour GF



Interior tour GF



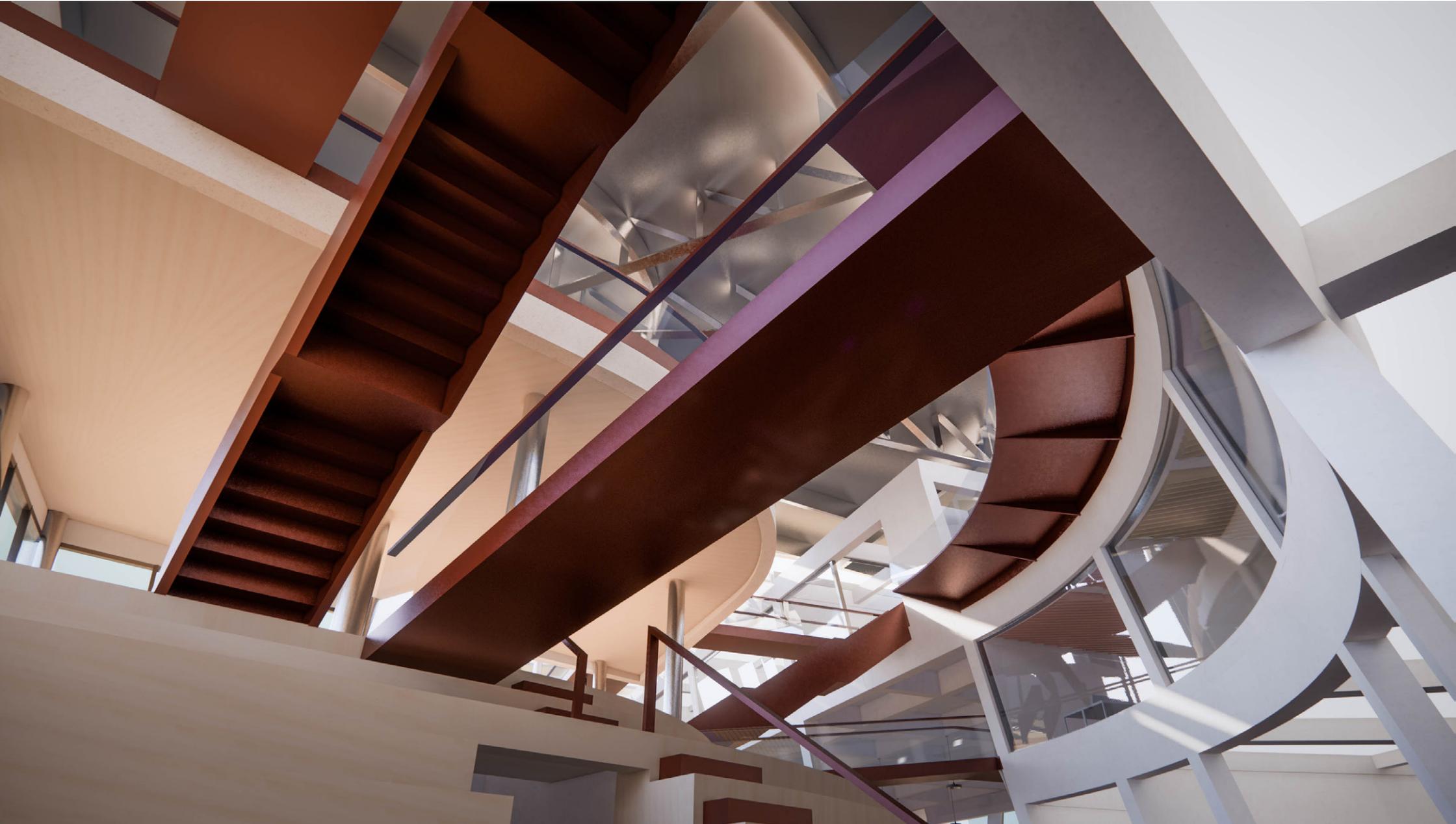
Interior tour GF



Interior tour GF

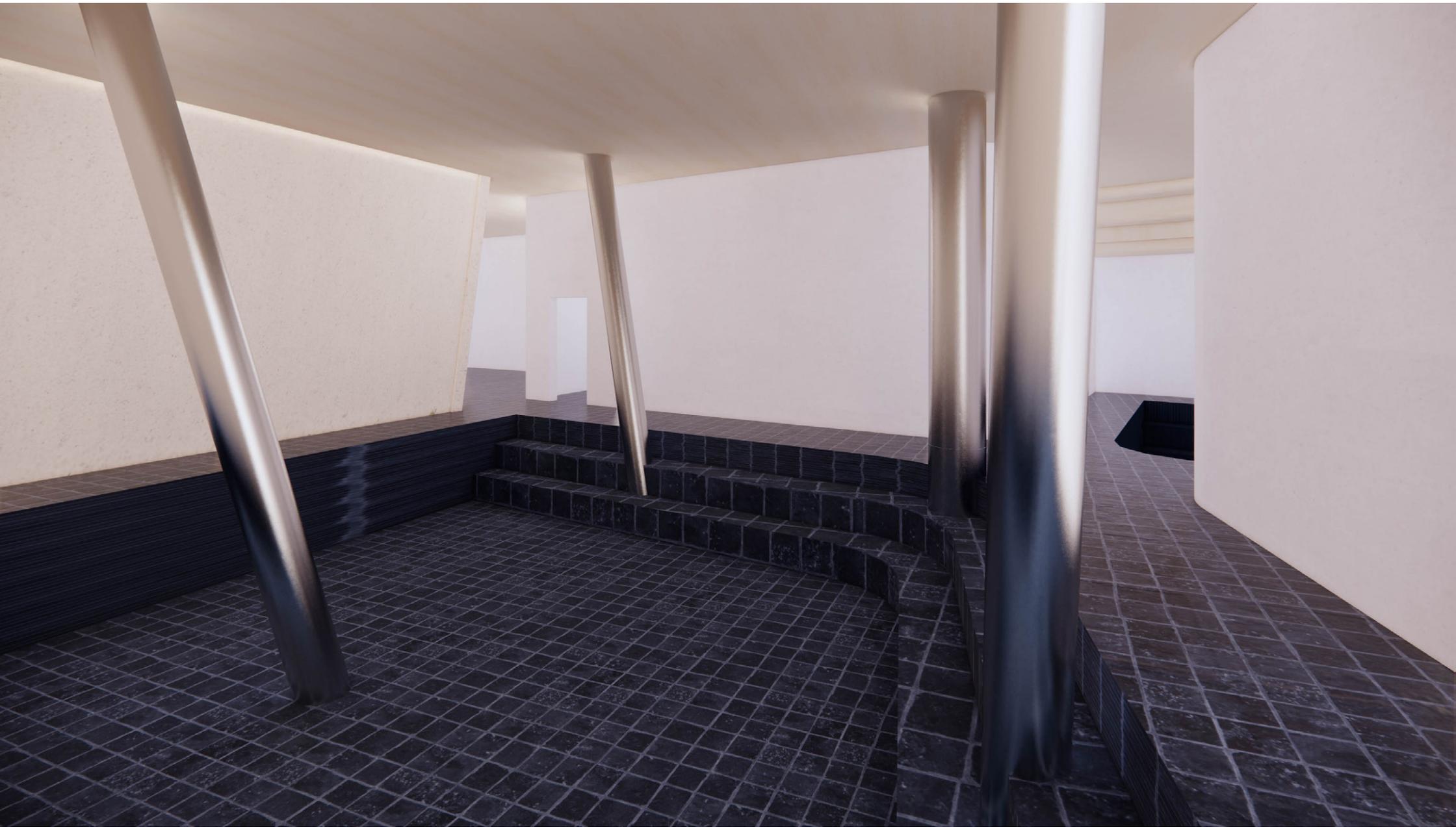


Interior tour GF

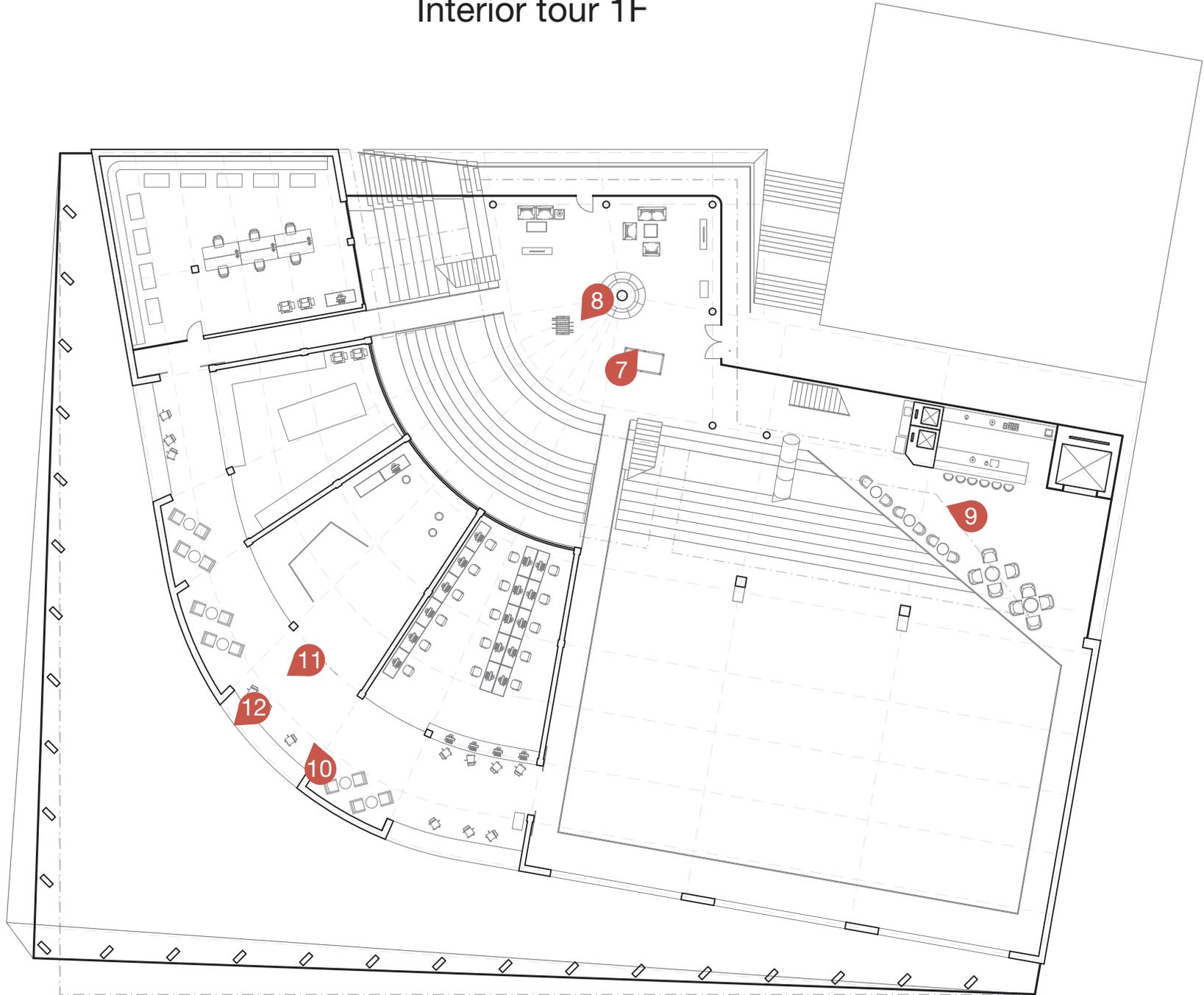


Interior tour GF





Interior tour 1F



Interior tour 1F



Interior tour 1F



Interior tour 1F



Interior tour 1F



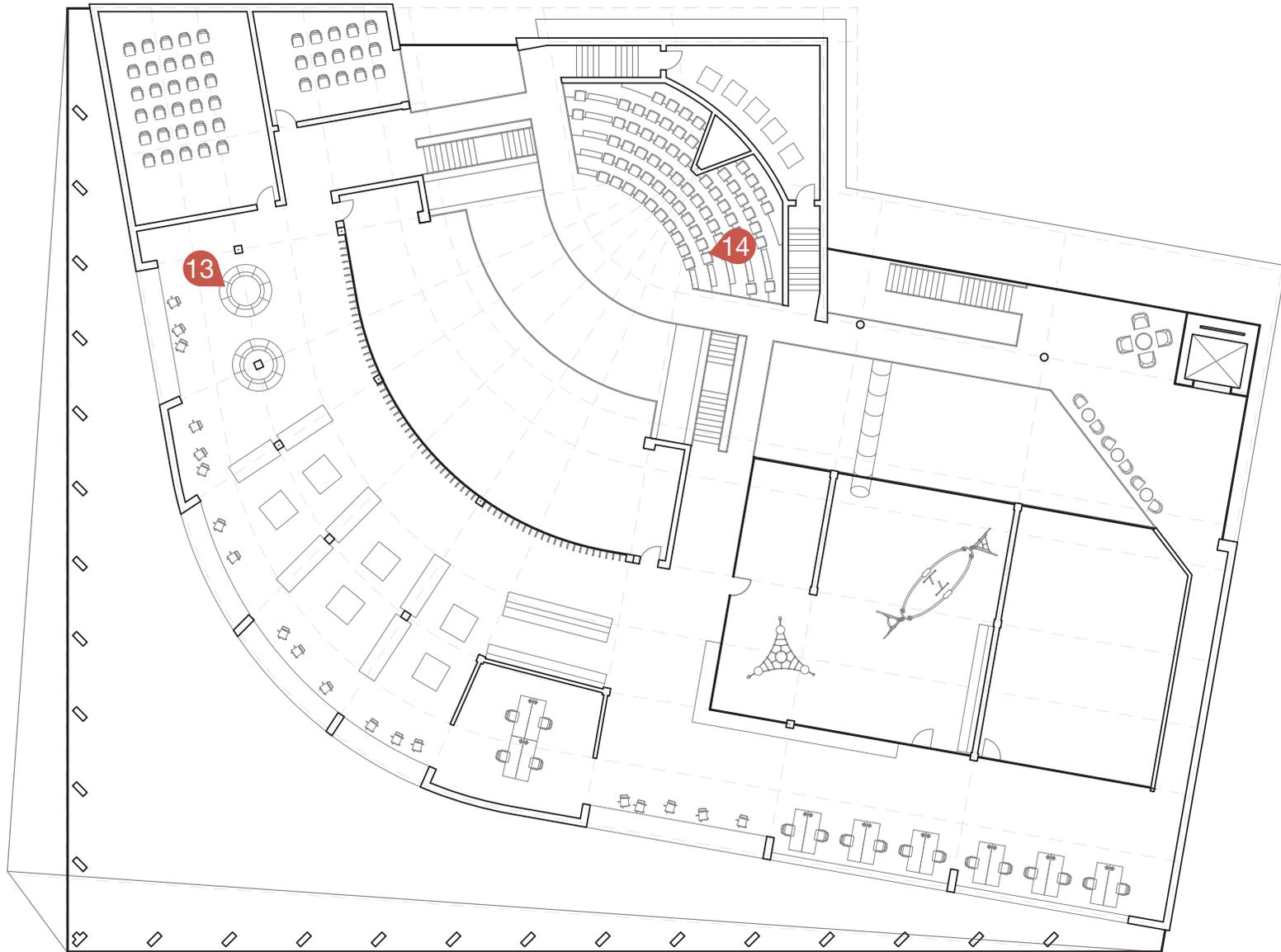
Interior tour 1F



Interior tour 1F



Interior tour 2F

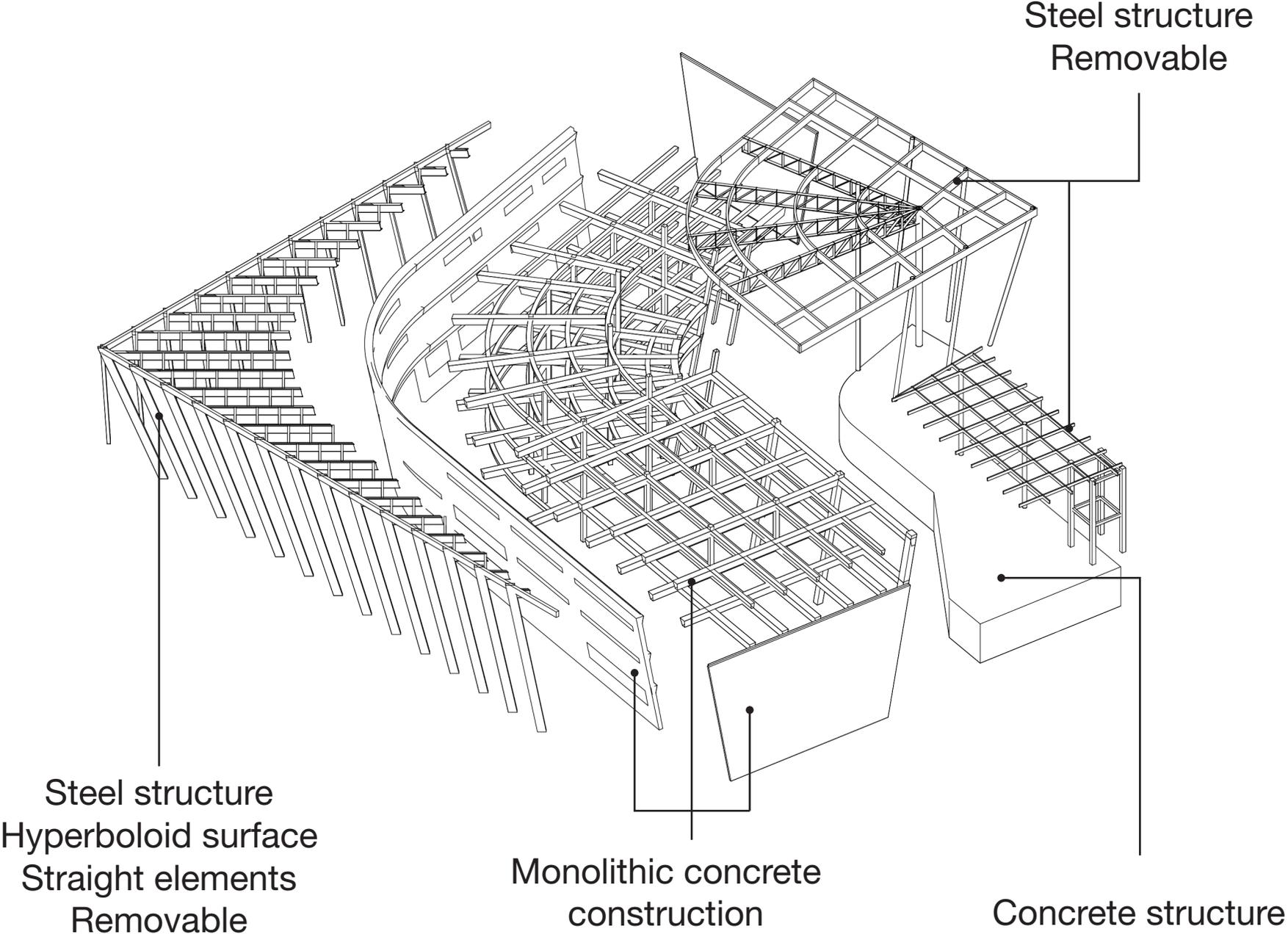


Interior tour 2F

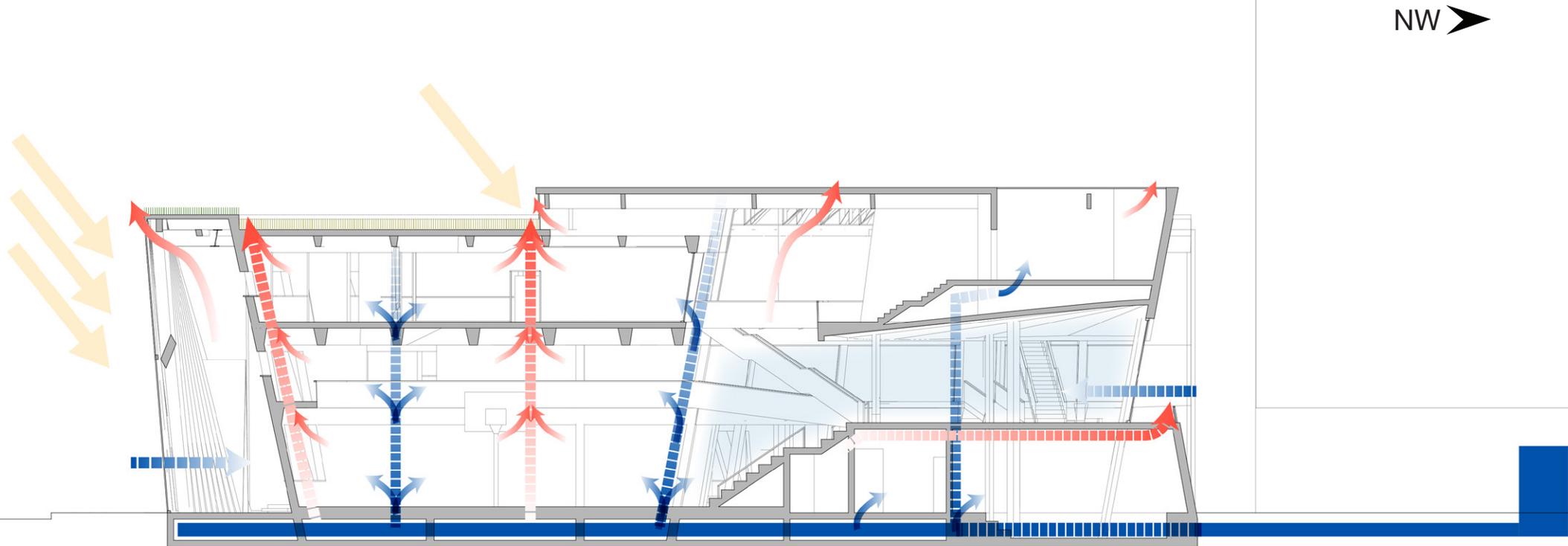


Interior tour 2F





Summer Climate

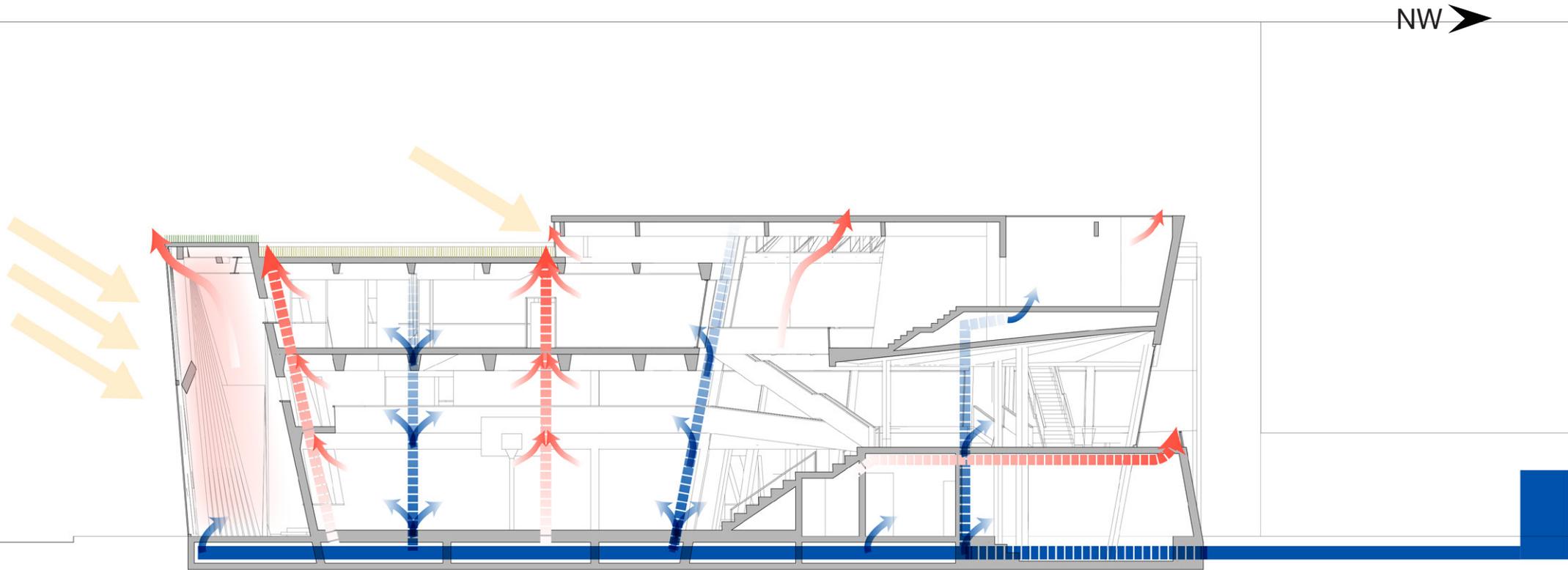


Machine air-exhausting

Fresh air partly by air-catcher, and pipes through crawl space, partly from facade

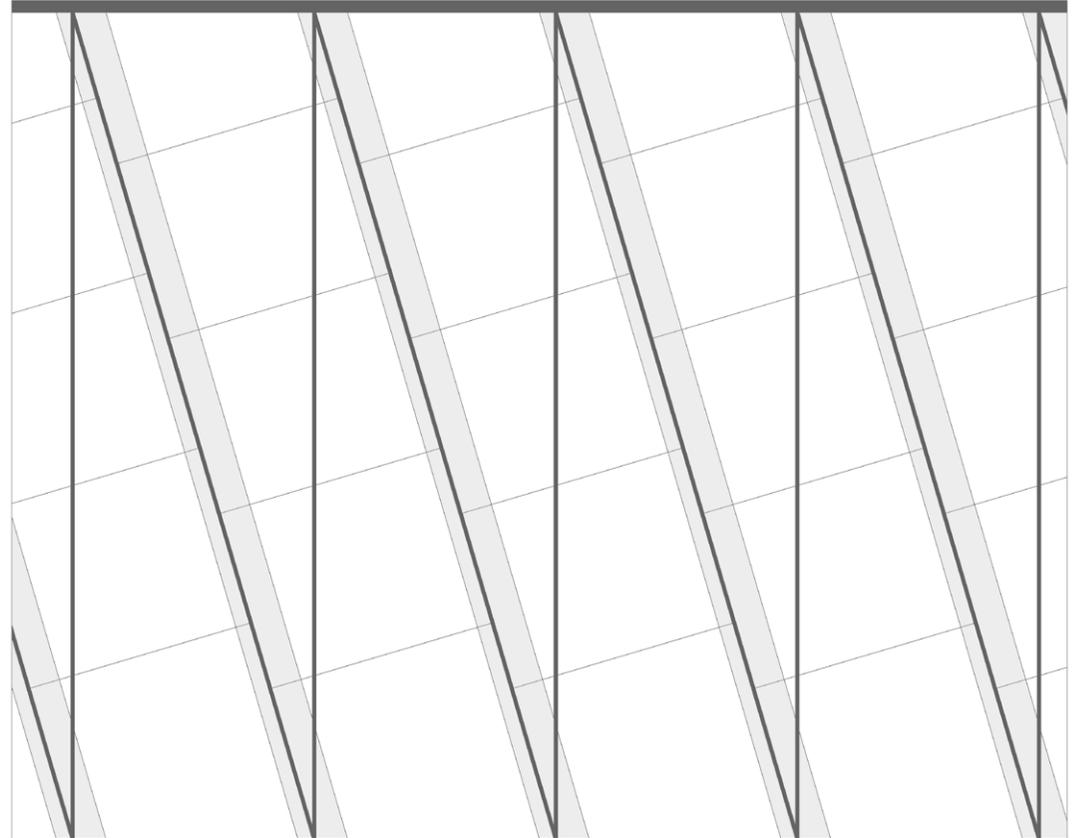
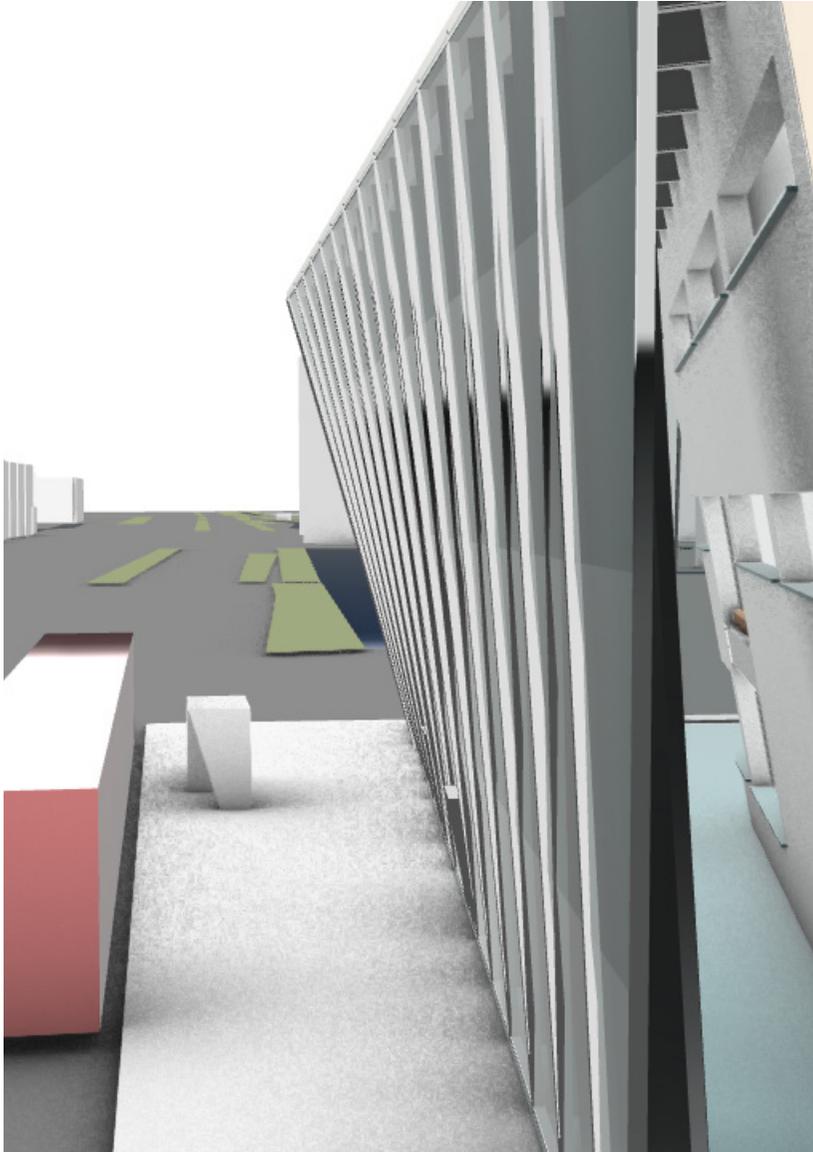
Game hall as a cool shelter of the park in extremely hot days

Winter Climate

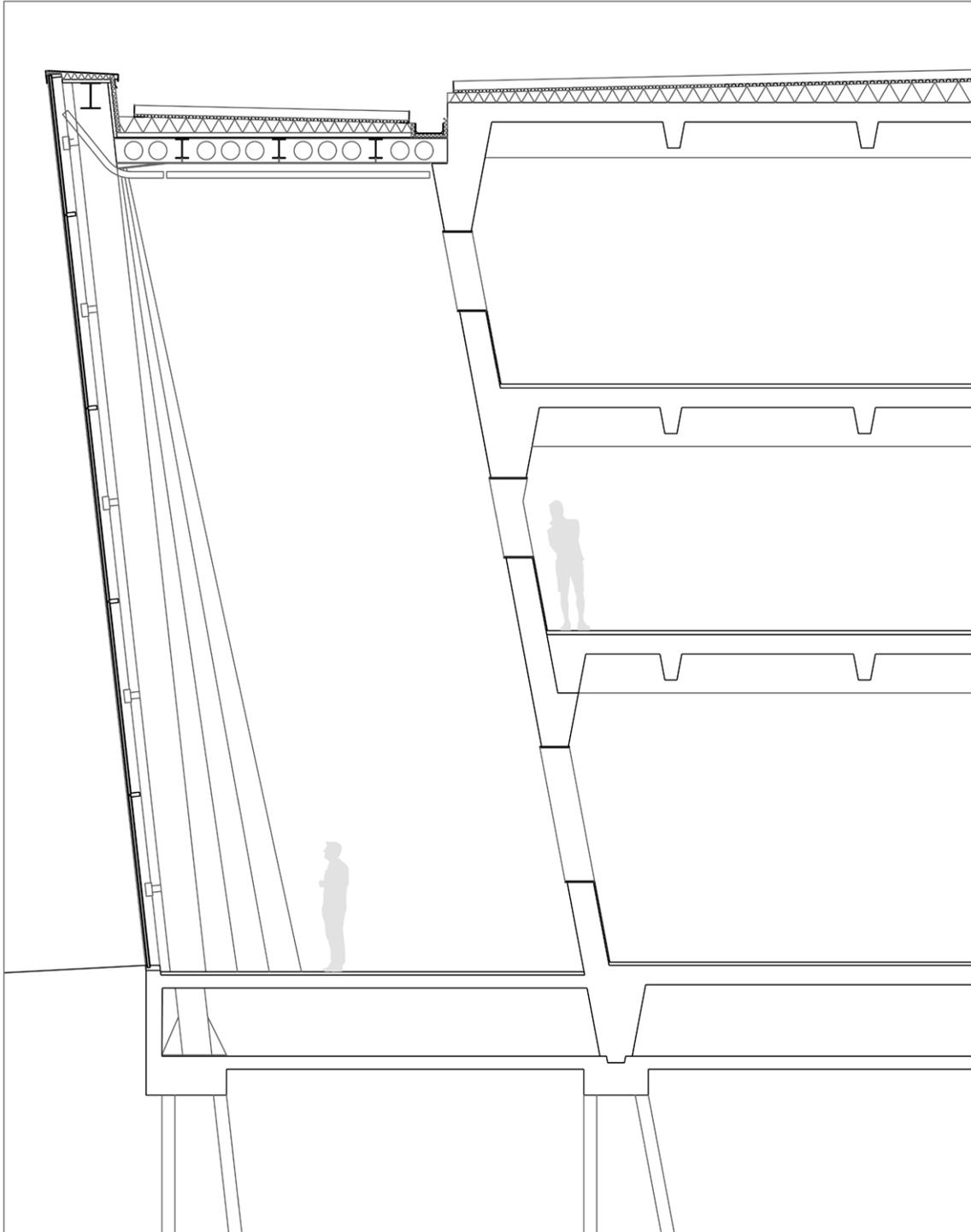


Natural Air-Exhausting
Fresh air by air-catcher, and pipes through crawl space
Entrance hall as a warm house

Facade Principal



Breaking hyperboloid surface into flat triangle surfaces
Curtain frame aligned with inclinent columns
Semi-hidden frame (horizontal ones hidden)
Minimized Eave



Cross-cut principal

Monolithic concrete construction
Reinforced floor slab carrying lateral force

Steel structure load on a concrete wall
Green roof
Parapet ventilation
Changing beam depth

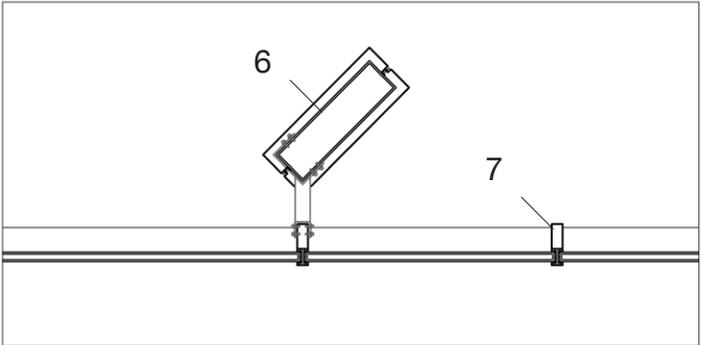
Crawl space
Deep poles

1:20 Details

- 1 140mm mud; substrate layer
40mm humidity mat; drainage layer; root-proof layer; bitumen seal
Water proofing mat
150-250mm XPS thermal insulation
Moisture insulation
70mm profiled steel sheet decking
300-800mm perforated steel beam with bracing
Bracket & cable
100mm ceiling aluminum strips

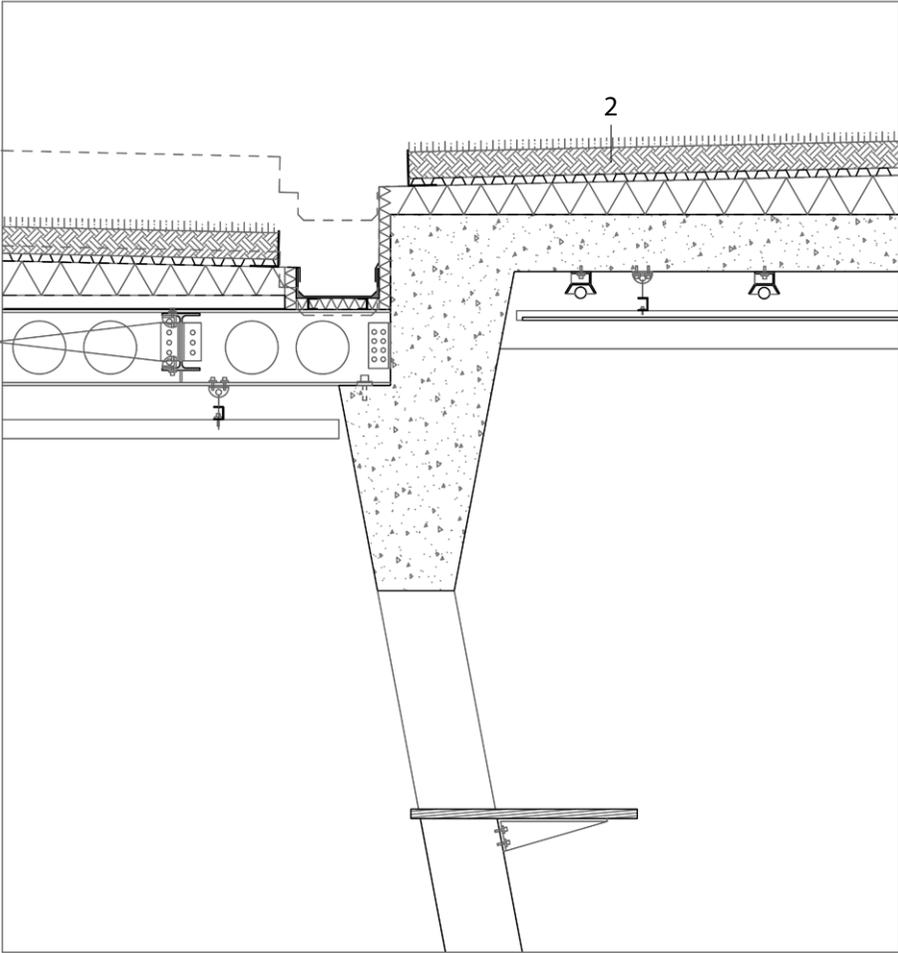
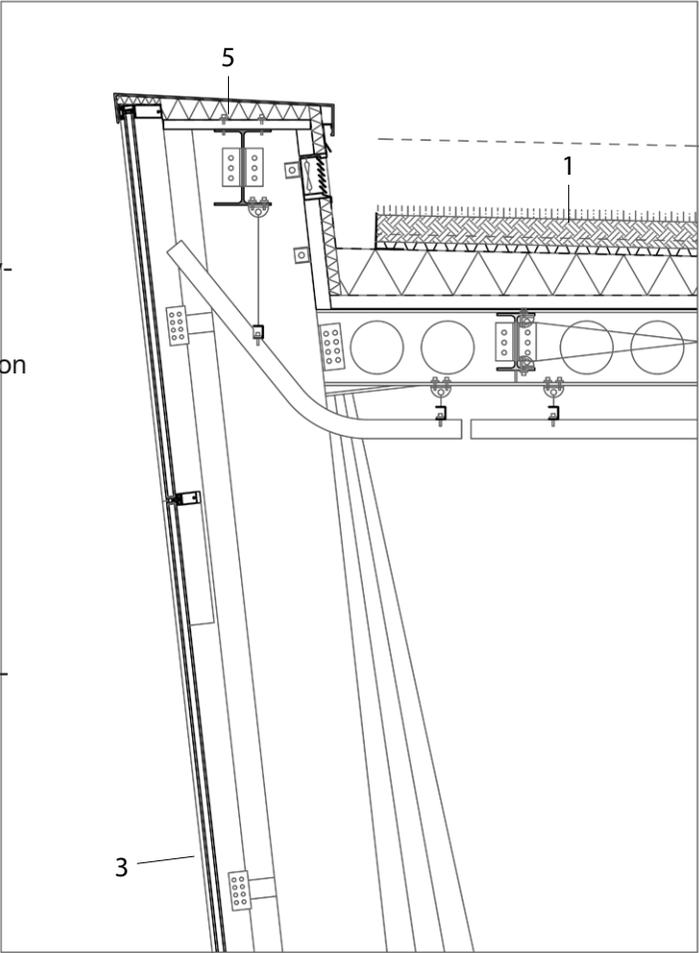
- 5 10mm aluminum honeycomb
80-110mm XPS thermal insulation
Moisture insulation
50mm plywood
400mm I beam

- 6 Stainless steel column skin
200mm*600mm steel column
- 7 200mm curtainwall frame with steel wind force resistance cable



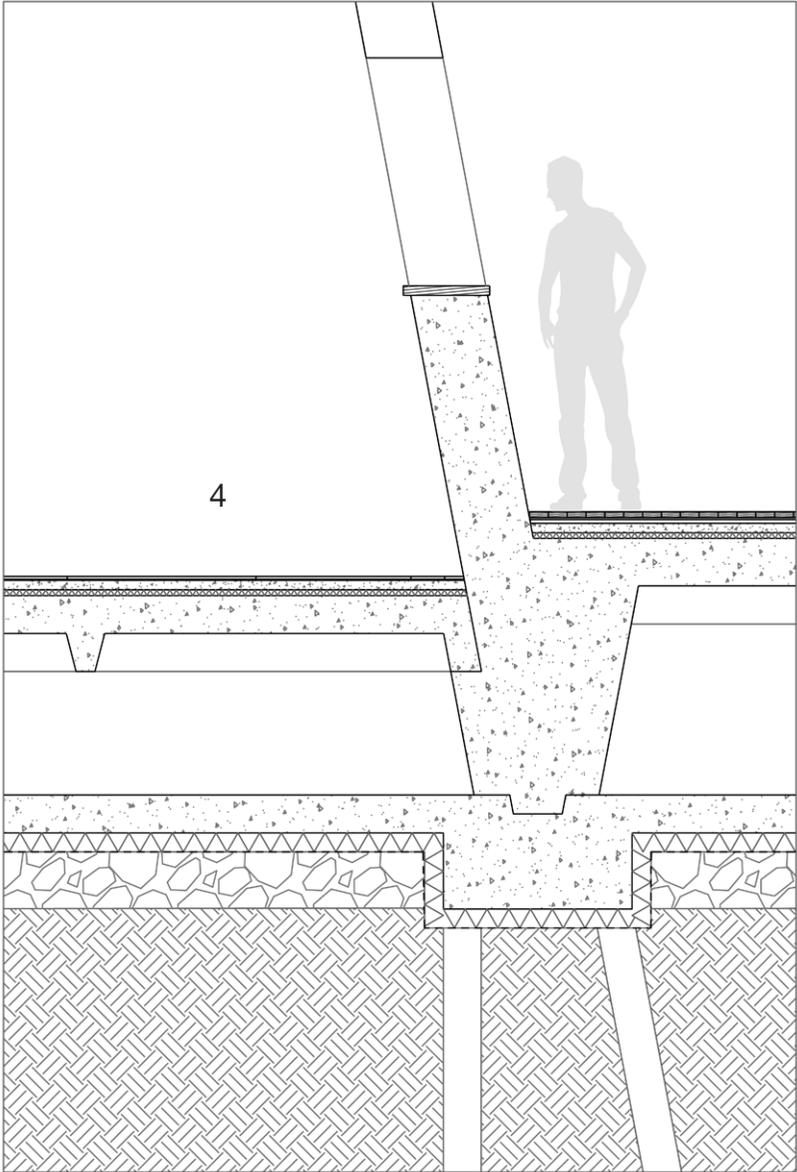
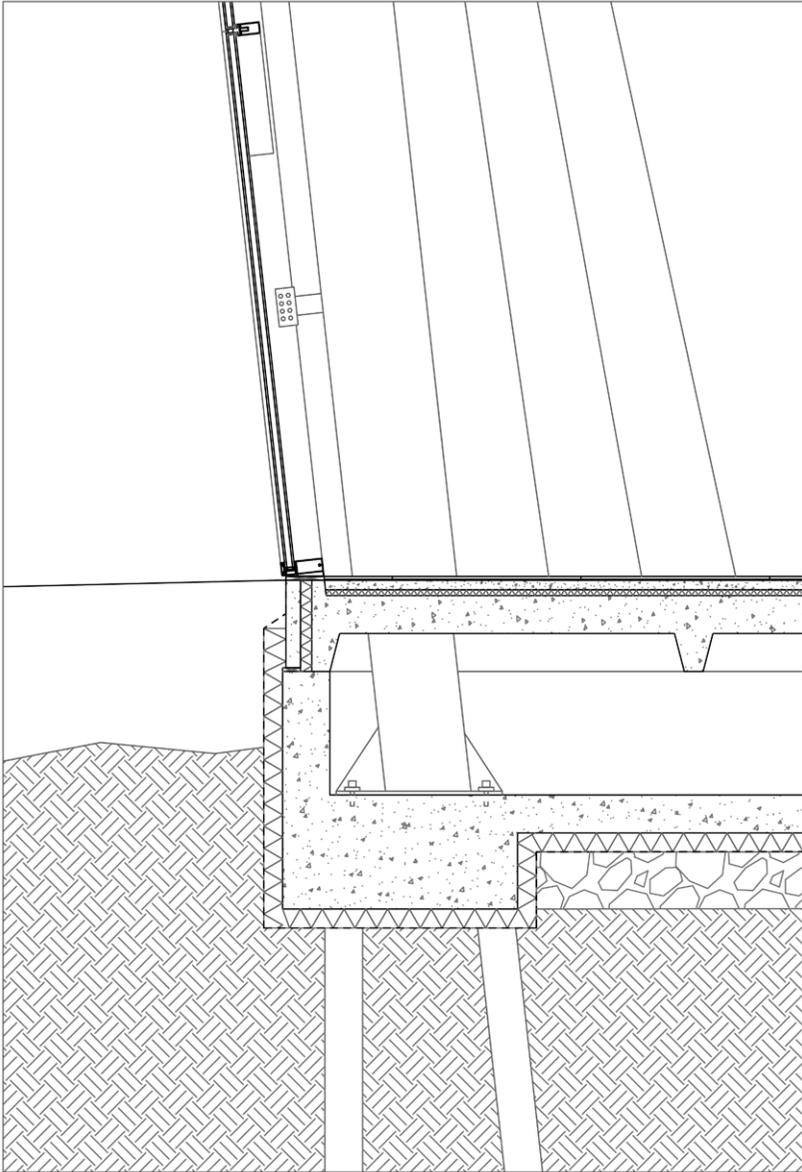
- 2 140mm mud; substrate layer
40mm humidity mat; drainage layer; root-proof layer; bitumen seal
Water proofing mat
150-250mm XPS thermal insulation
Moisture insulation
300mm reinforced concrete slab integrated with 600mm joist
300mm self illuminated ceiling

- 3 50mm double glazing, with semi-hidden framing (frame thickness 180-220mm)
Curtain wall bracket
Load bearing steel column with stainless steel skin

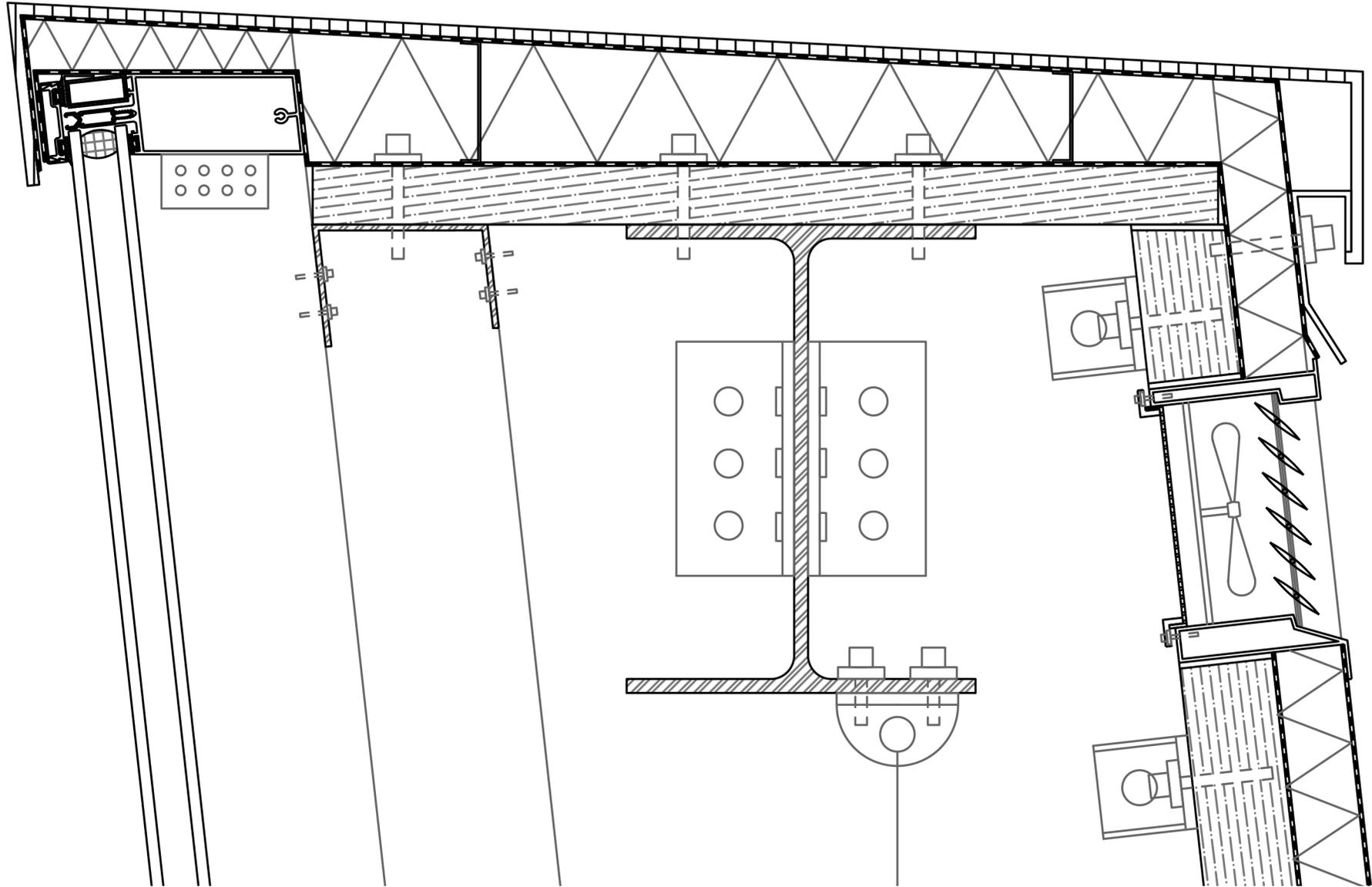


1:20 Details

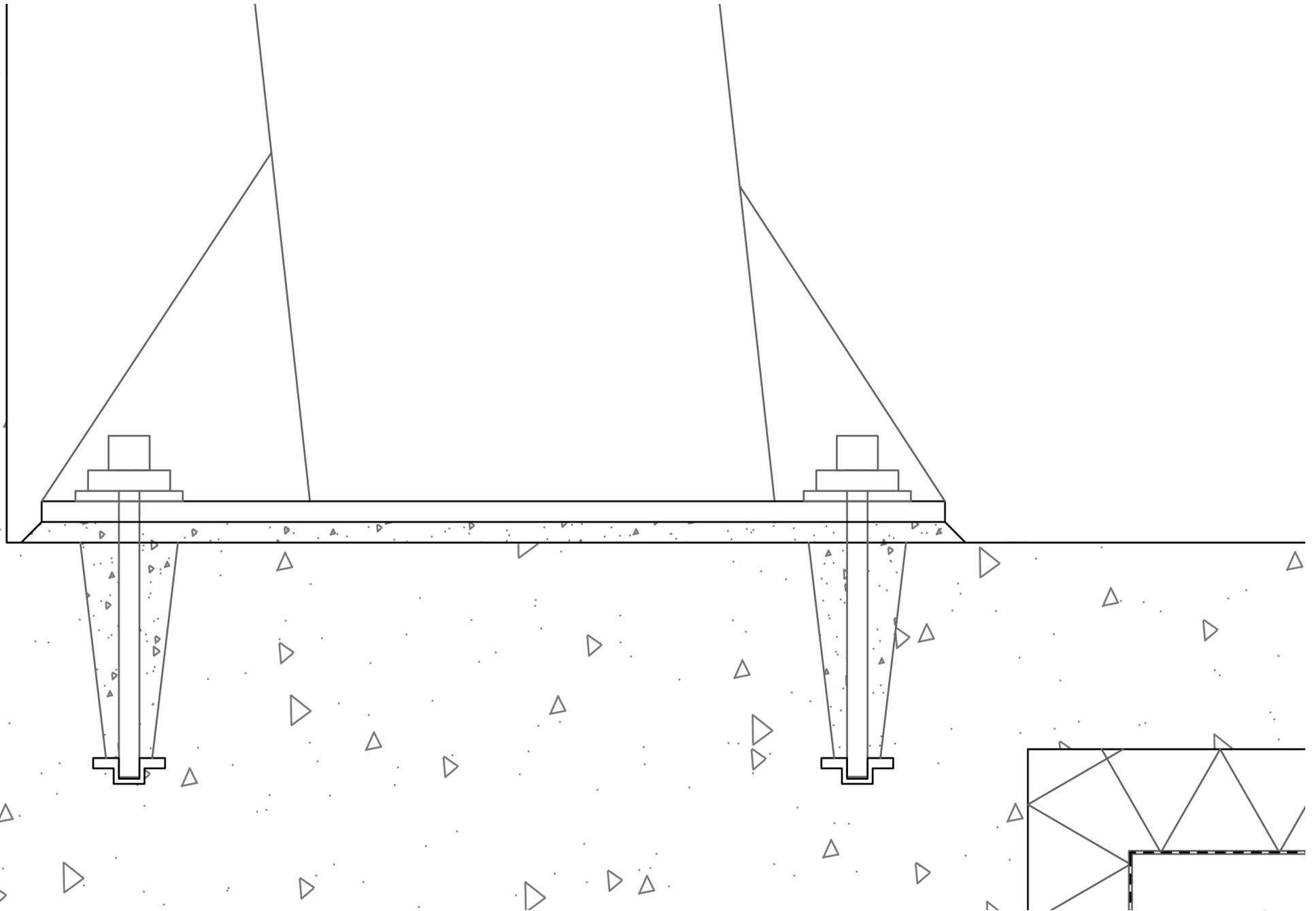
- 4 30mm pavement
- 10mm cement
- 80mm light weight concrete screed, with floor heating
- 50mm EPS sound insulation
- 300mm ground floor decking
- 1m crawl space
- 150mm external thermal insulation
- Moisture insulation
- 200mm gravel
- Earth

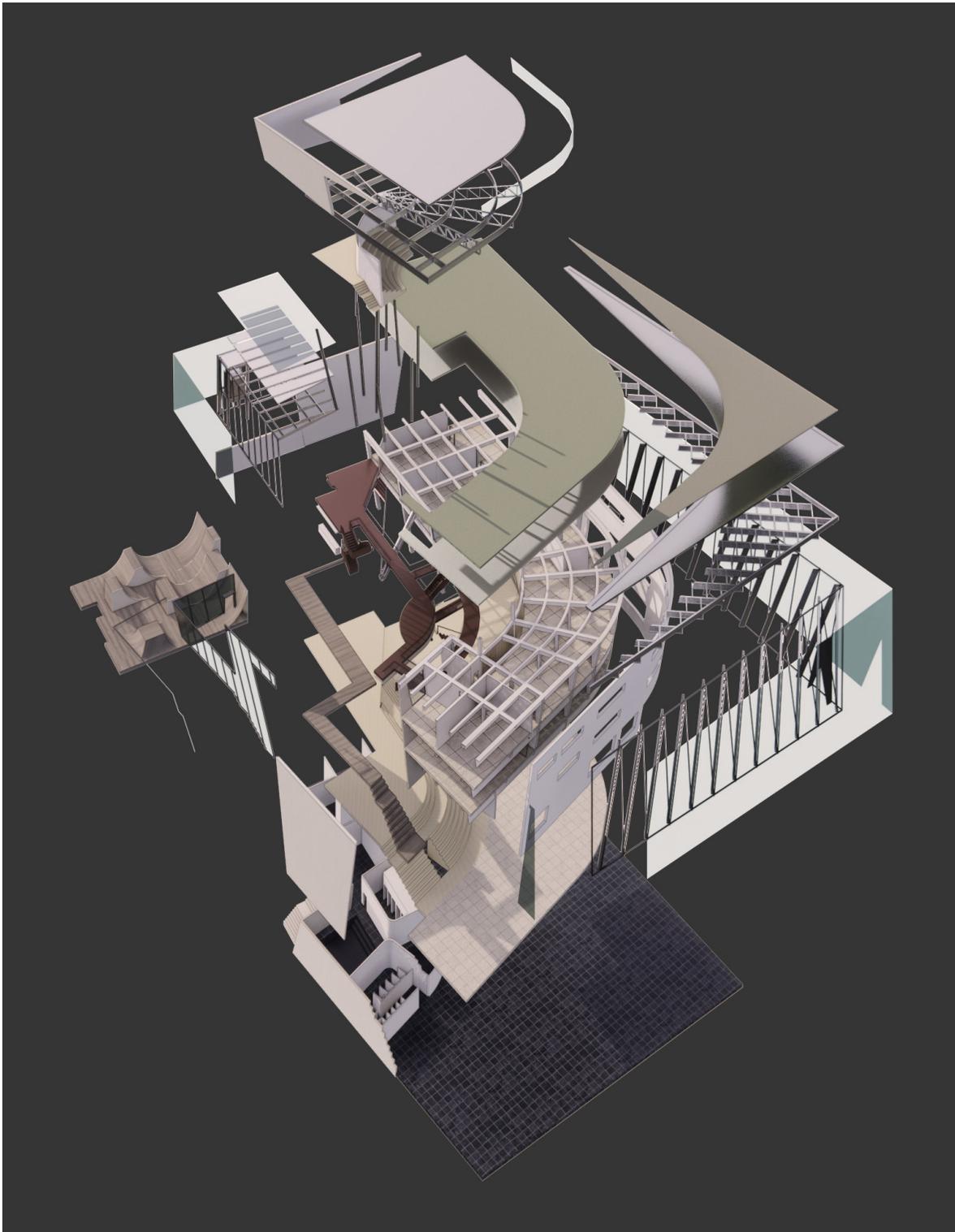


1:5 Details



1:5 Details





ON MULTIPLICITY

Multi-tasks, multi-function, multiple-use of attention are the new normals of today.

People, and everything else are constantly connected and disconnected, neither isolated, nor binded.

Thus a 'system' is needed to organize such unstable and ambiguous condition, just like your 'virtual community' already did.

DONE!! Thank all of you!!

2020.07.06