P5

AMS MID-CITY

Shushen Zhang
16/02/2018

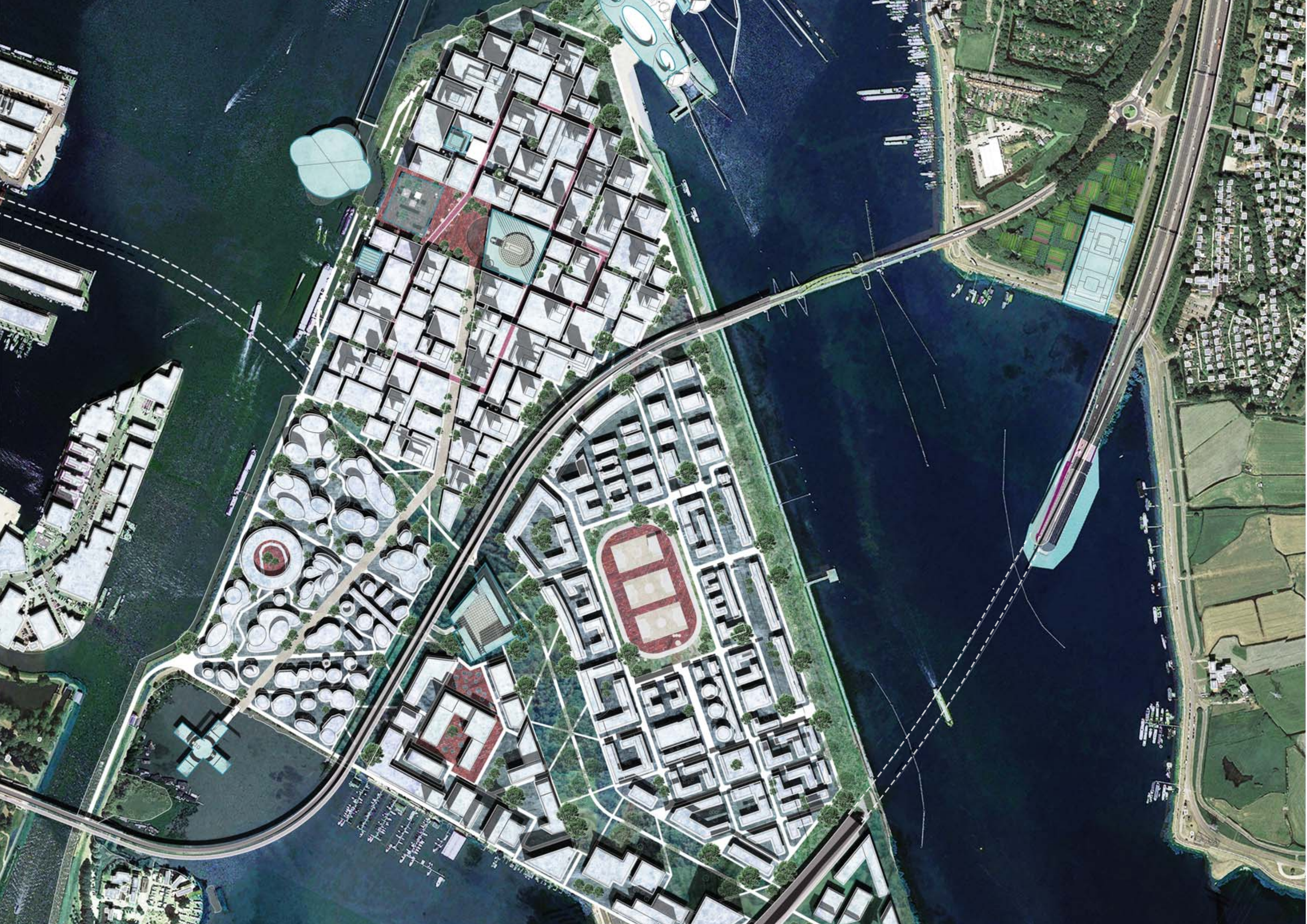
2050 AMSTERDAM

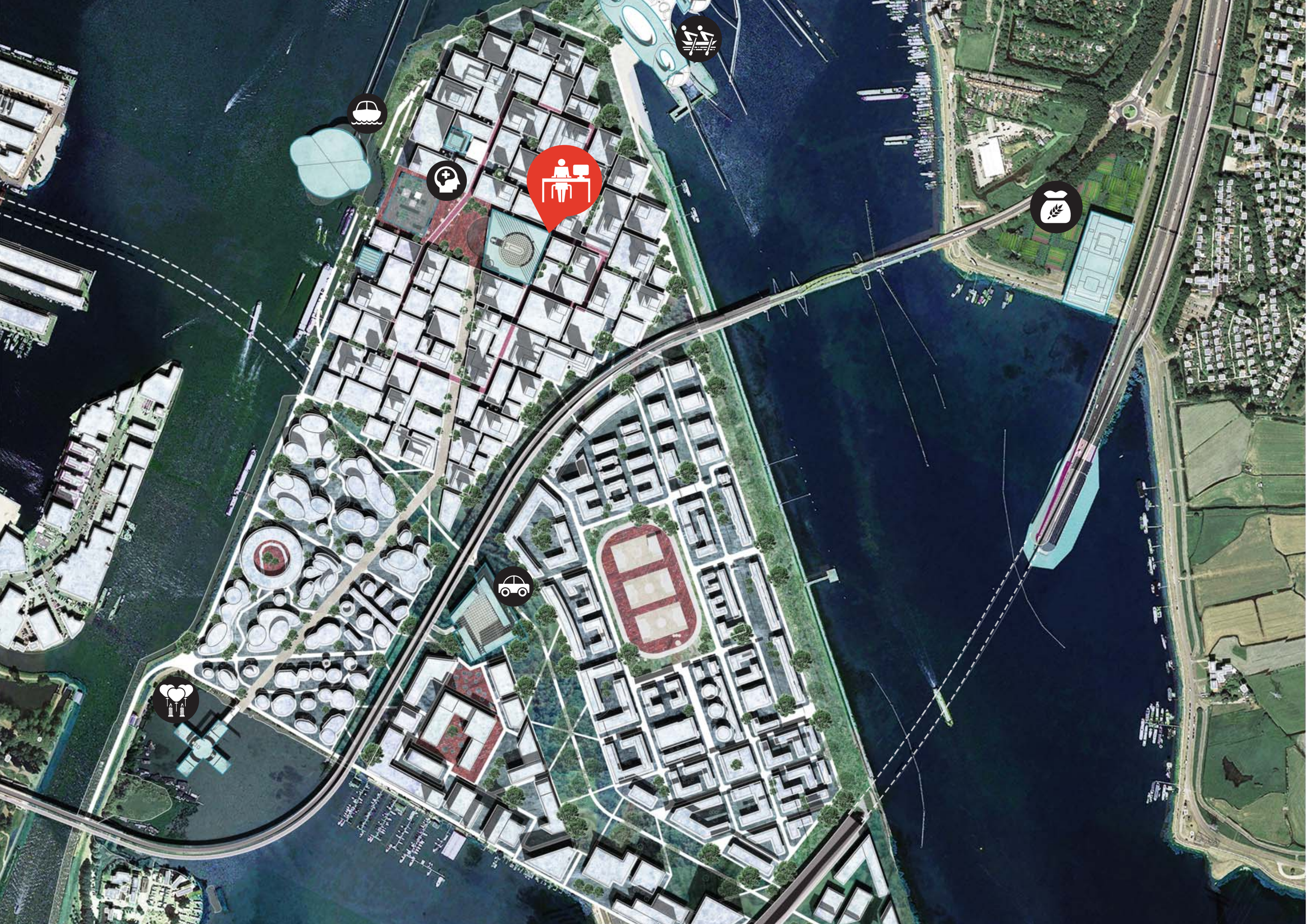
Amsterdam

Zeeburg

ISOLATEDLAND

URBAN LAB





How will we Work in 2050？

HUMAN WORK — From handmade to machine made — ROBOTS WORK

Jobs are **KEEPING** being replaced by new Technologis.

THE **REPLACEMENT** OF JOBS

Industrial Revolution

Information Revolution

WE ARE HERE

AI Revolution

Handycraft Age

Physical Work

Steam Age

Steam Engine

Repetitive Work

Information Age

Computers

Technical Work

AI Age

Artificial Intelligence

?

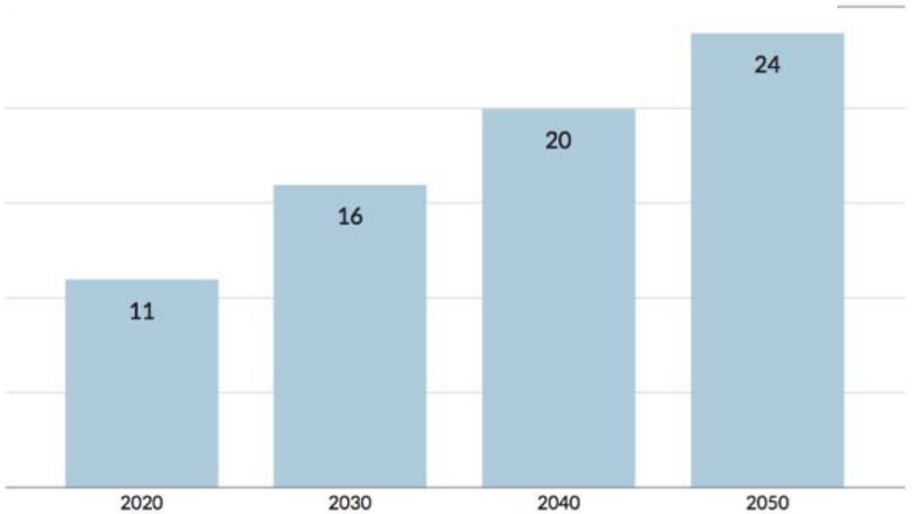
"FACTORS" Lead to job obsolete

LOW/SINGLE-SKILLED

LOW CREATIVITY

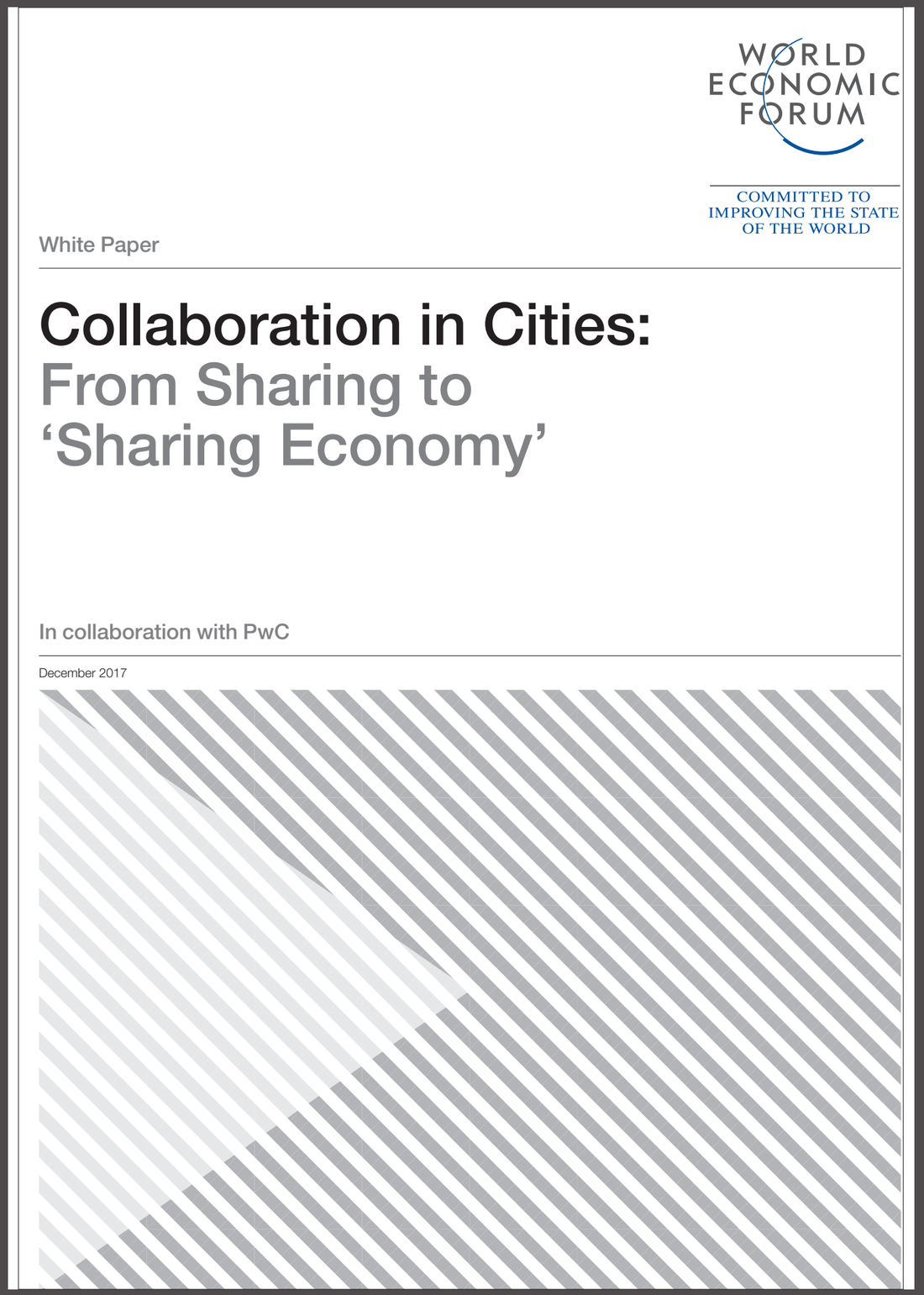
LOW PRODUCTIVITY

MP Delphi: Expected development of global unemployment rates (%)



- The world **unemplyment rate** will keep rising to 24 percent in 2050.

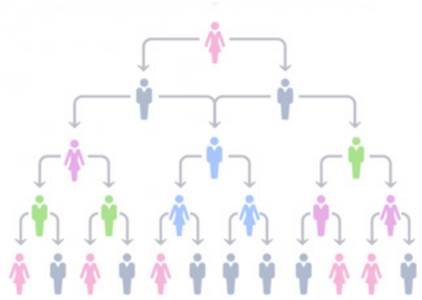
How can architecture support the unemplymental situationin Zeeburg in 2050?



Collaboration & Sharing

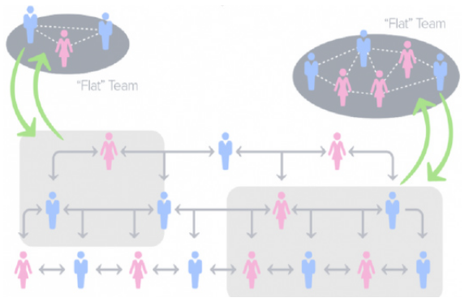
"A broader economic change from corporate culture to more **flexible** environment based on ideas of **sharing economy**, **collaboration and networking**, fostered by information technologies."

"SCENARIO" of work-mode in 2050

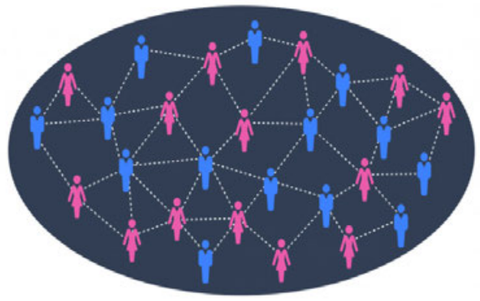


STYPE 1: **The Hierarchy**

PAST



STYPE 4: **Flatarchies**

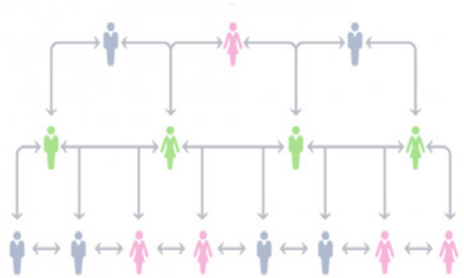


STYPE 3: **Flat organizations**

FUTURE

TODAY

STYPE 2: **Flatter organizations**



STYPE 5: **Holacratic organizations**

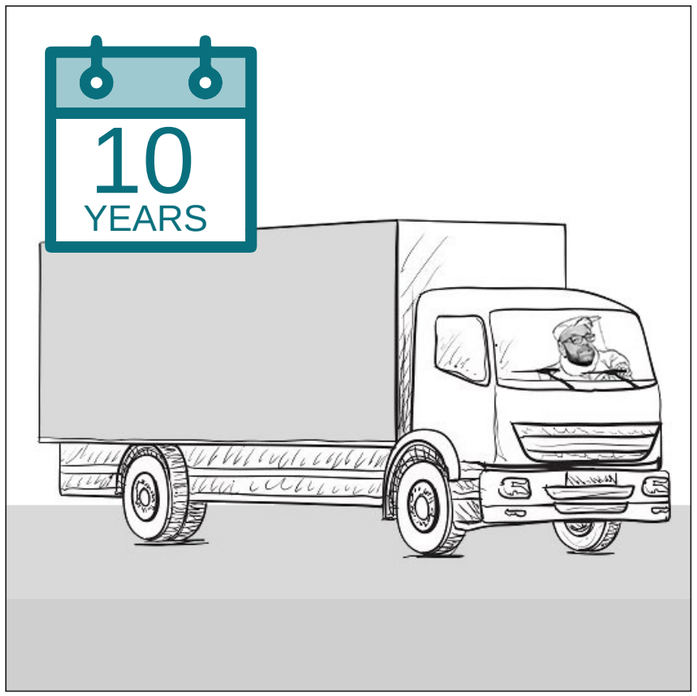
- The organizational border will be **blurred**.
  People will work in **freelancing and cooperative** ways.

■ How can the replaced workforce **RESTART UP** under 2050 Scenario ?

A truck Driver's process to

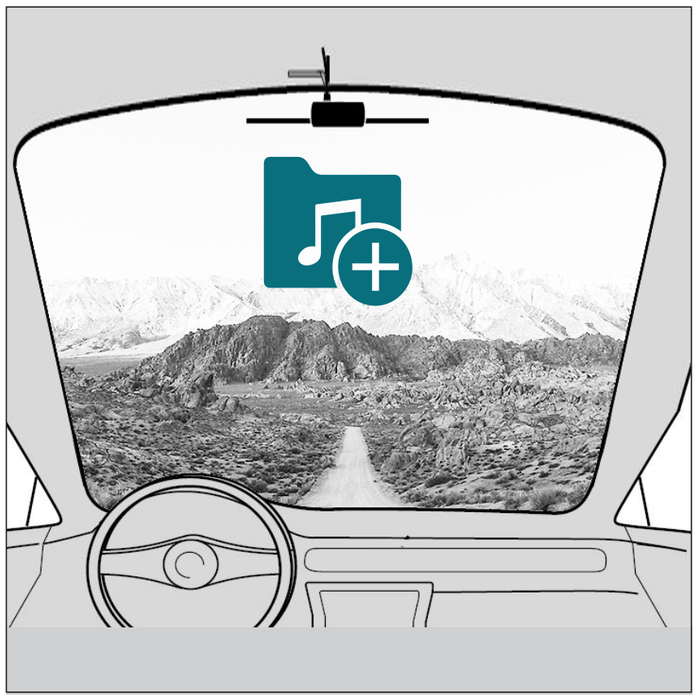
Re-employment

He Lives on the island.

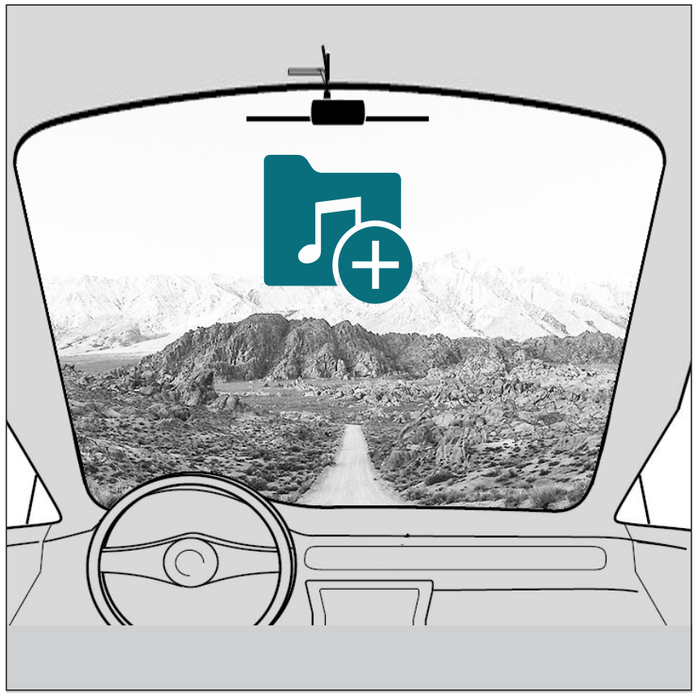


Have drove for 10 years. Driving is his only life-earning-skills.

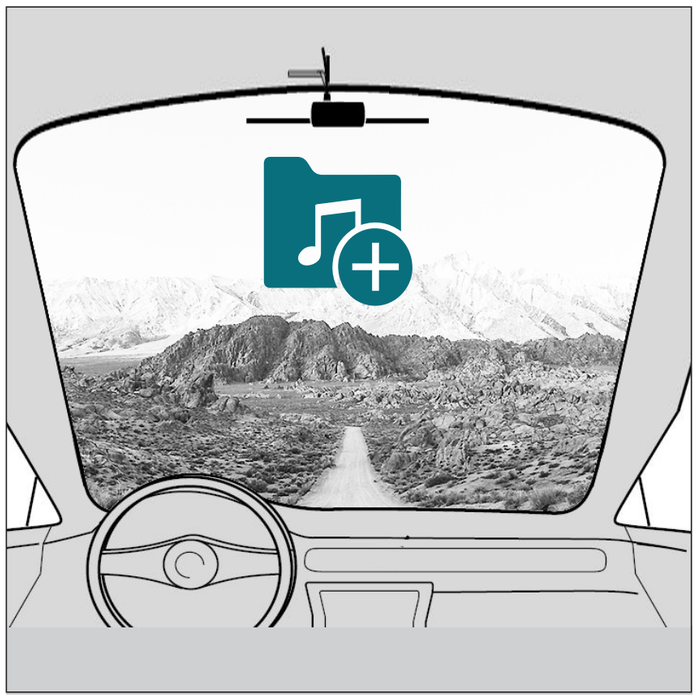
His loves to sing since he was a child, that he always singing while driving every day.



Singing was also a way he record his live by making original songs.



However, one day, His job was took over by self-driving robots.



Now it is the time, he re-think about working as an musician.

HOWEVER

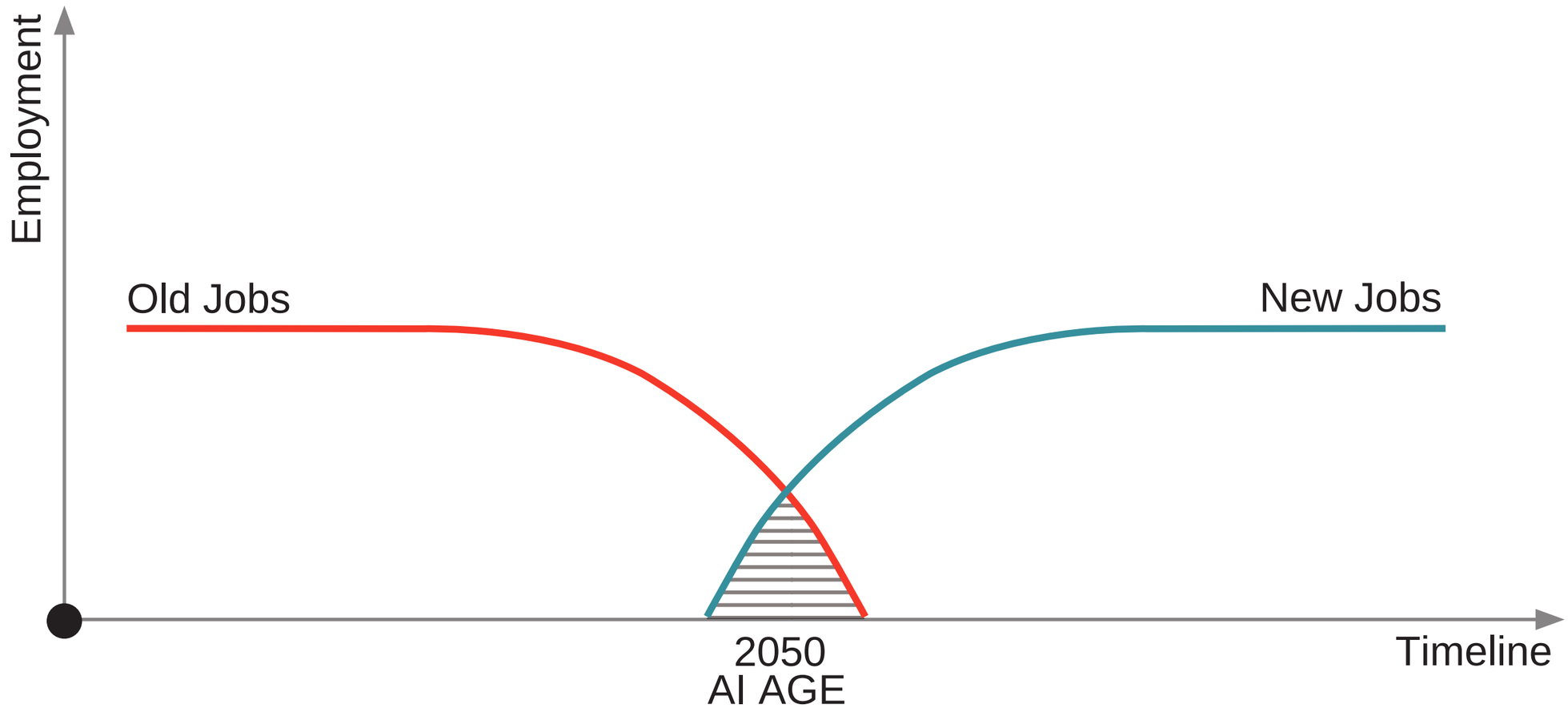
- His **professional knowlege** is scarce.
- He **cannot afford to learn** music at a collage.
- He doesn't know **how to be** a full-time musician, so that he cannot be docked upstream and downstream.
- He doesn't have **confidence** and do not know whether his song is special enough.
- He doesn't have the **opportunity to communicate** with professional musicians,
- He also does not know how to **make profit** from his songs….

Remember the Truck driver.
This is just one example of 300,000 ca of population who will face the problem in Amsterdam in 2050 .

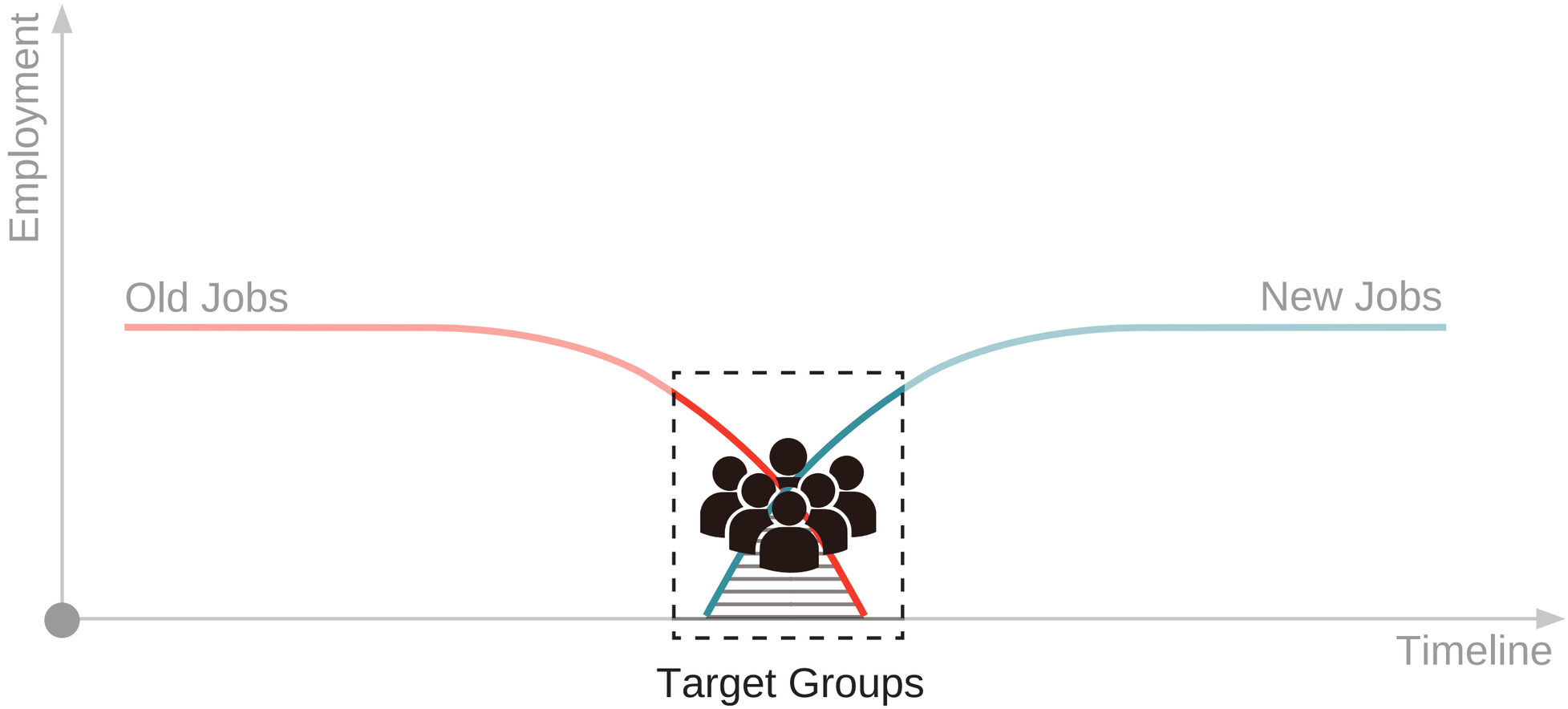
What's the FUTURE for them?

A [Re]Start-up Hub will be here to offer all of these people

a [re]Start



The Transition Period.



Restart-ups

- Transition-needed people

Start-ups

- Newly-emerging-field Start-ups
- Small Company's entrepreneurs
- College Students

NEEDS LIST

Educational	Social	Financial	Mental
Updating into future-proof skills. Re-skilling in a new field Soft skills Career planning	sources of newly emerging jobs. getting in touch with professional people. Job opportunities in other field.	ways of life-earning	being respected Sense of Self-value Initiatives to be re-skilled being supported confidence Sense of Hope
Professional knowledges Enlightment	collaboration partners Project Opportunities Career Expanding	Laborfoce Workspace & Studios	Feeling relaxed sense of self-actualization
Career planning Professional knowledges Soft skills	getting in touch with professional people. Job opportunities	Part-time jobs Intership	Sense of Self-value being supported sense of self-actualization

Restart-ups

Transition-needed people

Start-ups

Newly-emerging-field Start-ups
Small Company's entrepreneurs

College Students

SOLUTION

Educational

- Updating into future-proof skills.
- Re-skilling in a new field
- Soft skills
- Career planning

- Professional knowledges
- Enlightment

- Career planning
- Professional knowledges
- Soft skills

Social

- sources of newly emerging jobs.
- getting in touch with professional people.
- Job opportunities in other field.

- collaboration partners
- Project Opportunities
- Career Expanding

- getting in touch with professional people.
- Job opportunities

Financial

- ways o[illegible]rning

- Lab[illegible]
- Wo[illegible]e & Studios

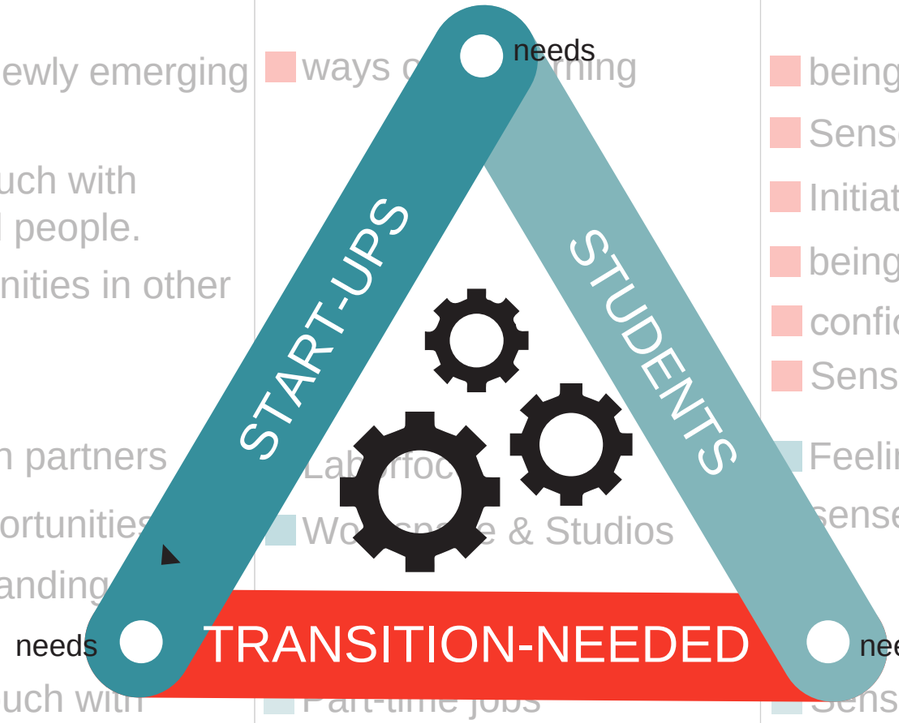
- Part-time jobs
- Intership

Mental

- being respected
- Sense of Self-value
- Initiatives to be re-skilled
- being supported
- confidence
- Sense of Hope

- Feeling relaxed
- sense of self-actualization

- Sense of Self-value
- being supported
- sense of self-actualization



SOLUTION

Education
(Life long learning/ skills)

+

Integrating
(skills and abilities of different people)

So they can learn from each other, and create job opportunities.

SOLUTION

Education
(Life long learning/ skills)

+

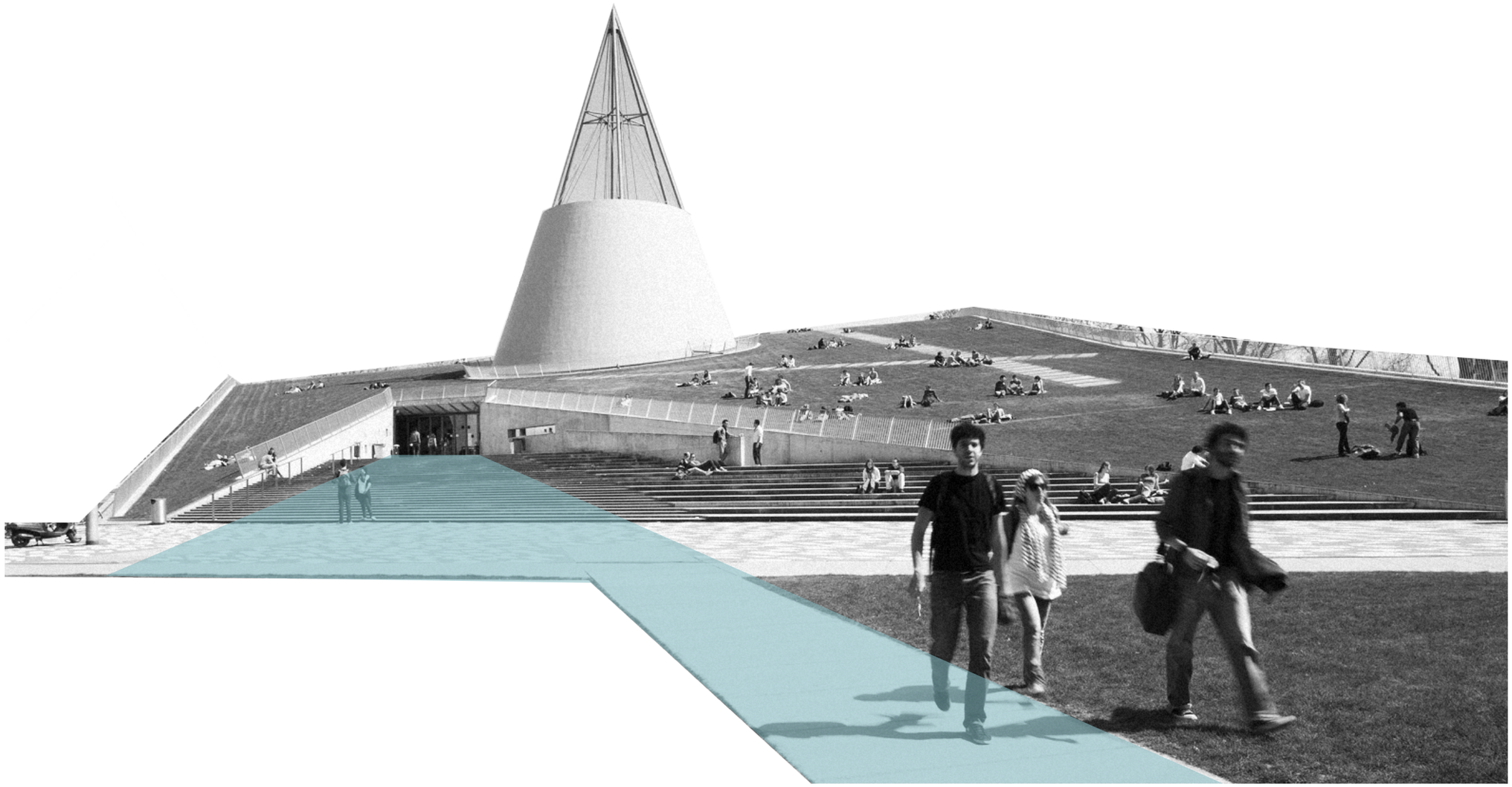
Integrating
(skills and abilities of different people)

So they can learn from each other, and create job opportunities.

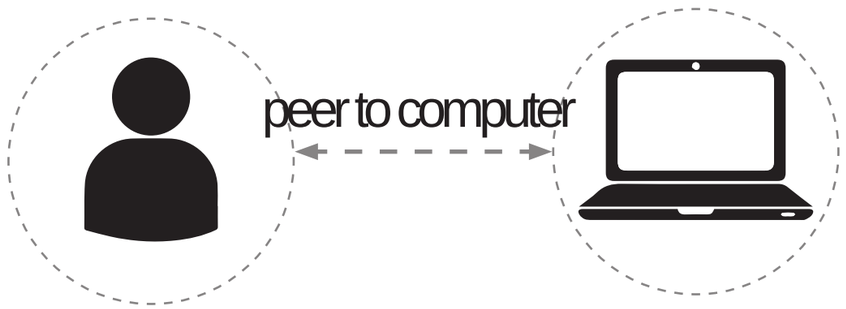
EDUCATION

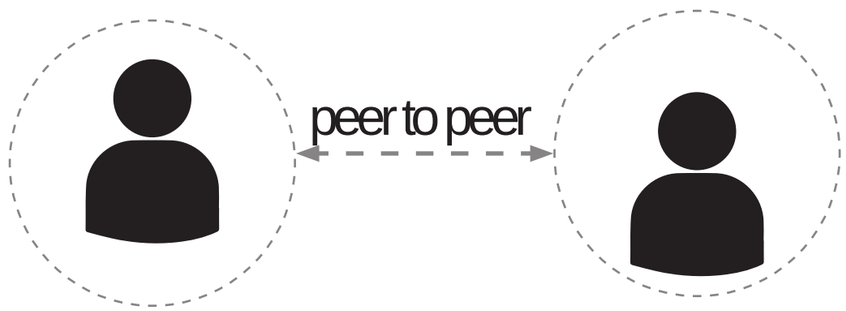
- **Universities** will be the **source** of Skill and Knowledges.

- However, **Individuals and Internet** will be the main way to spread it.



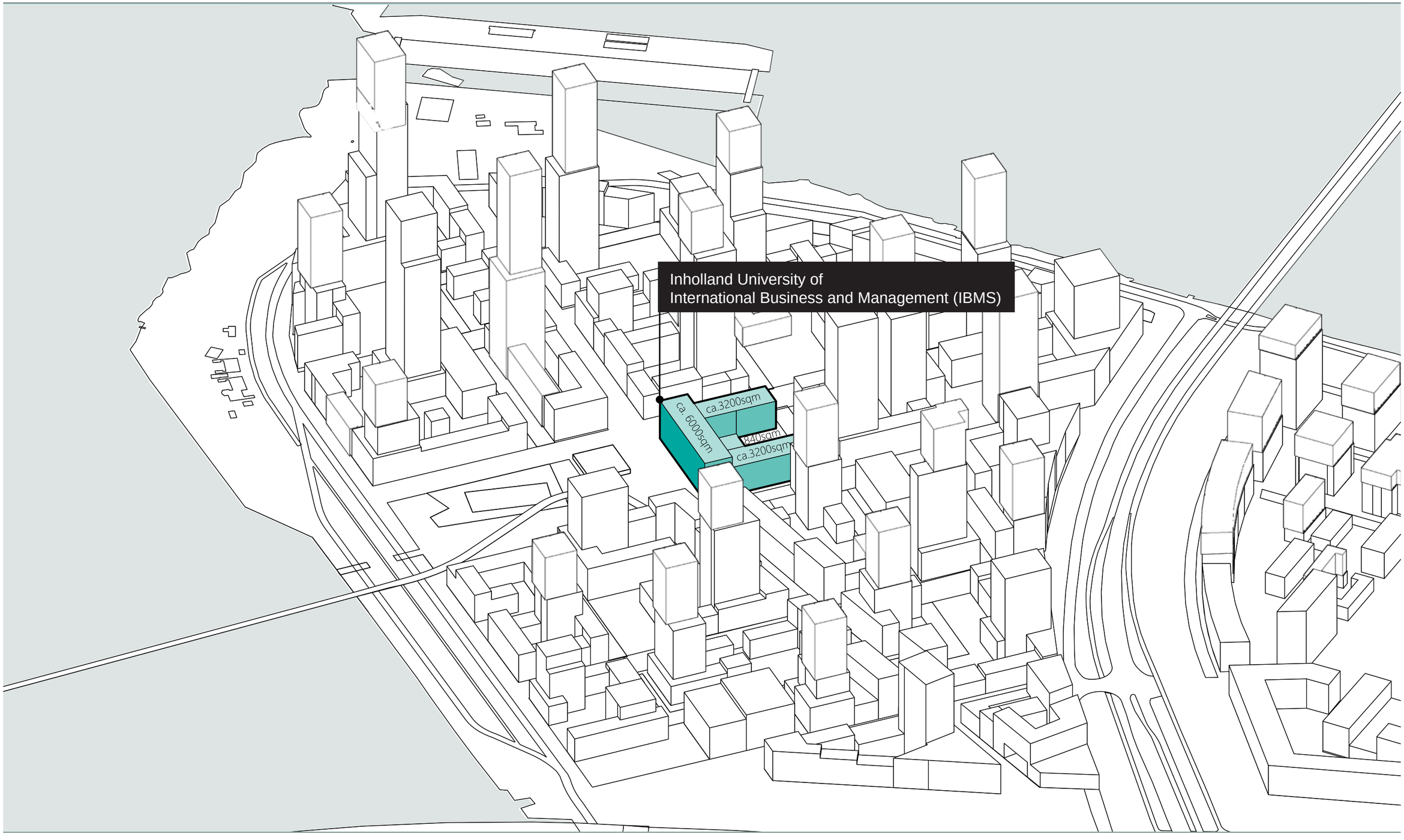
EDUCATION



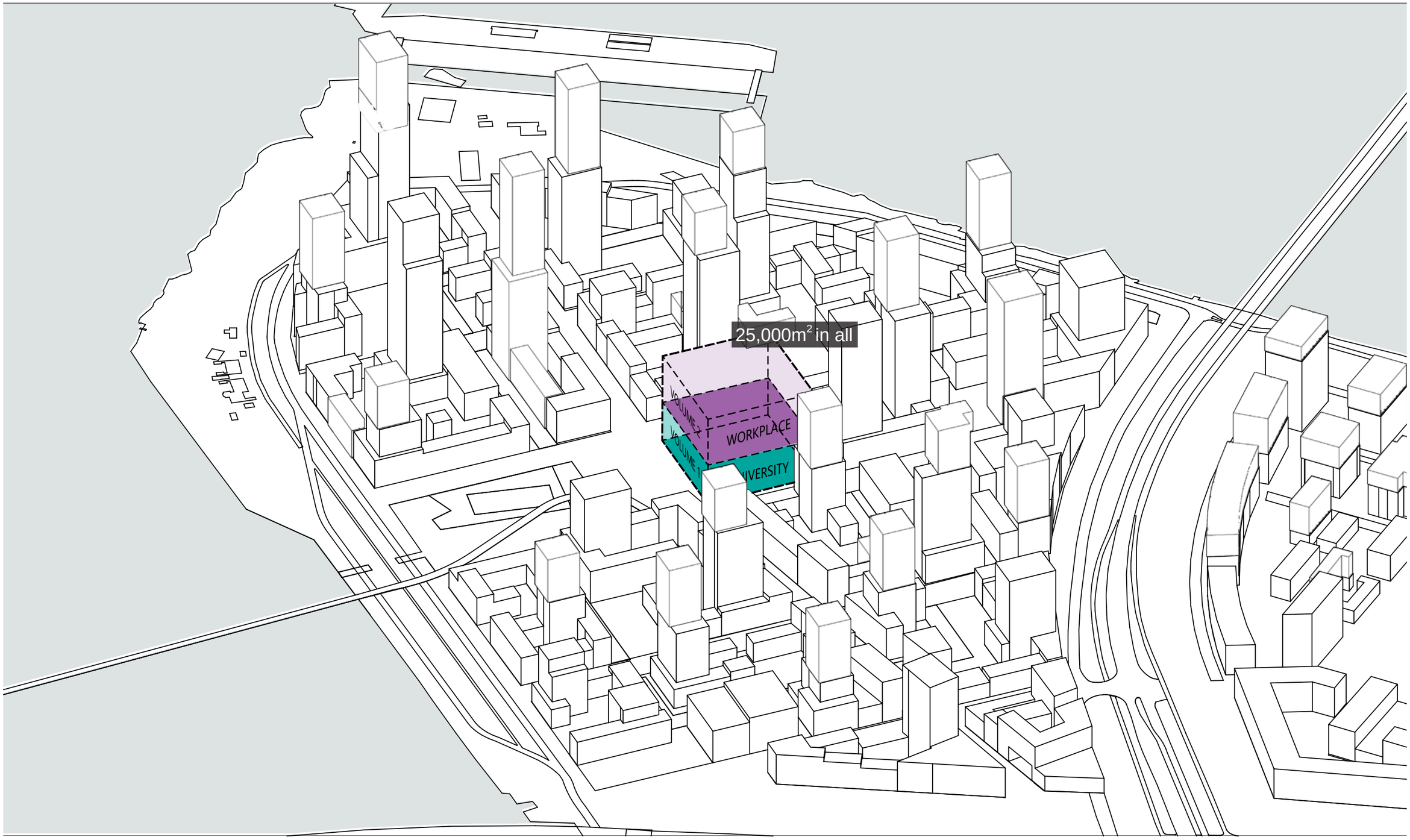


- **STEM Knowledge**(Science, Technology, Engineering and Mathematics) Education will transite to **Peer-to-Computer**.

- **Meta Skills**(Self-organization, Job-crafting, Collaboration) and **lifelong-skills** will be focus more **Peer-Peer**."



Faculty of IBMS of Inholland University has already been planned on the island, which can be used as the source of knowledge.



The [Re]start-up Hub will be designed **integrating** with the faculty of the university.

SOLUTION

Education
(Life long learning/ skills)

+

Integrating
(skills and abilities of different people)

So they can learn from each other, and create job opportunities.

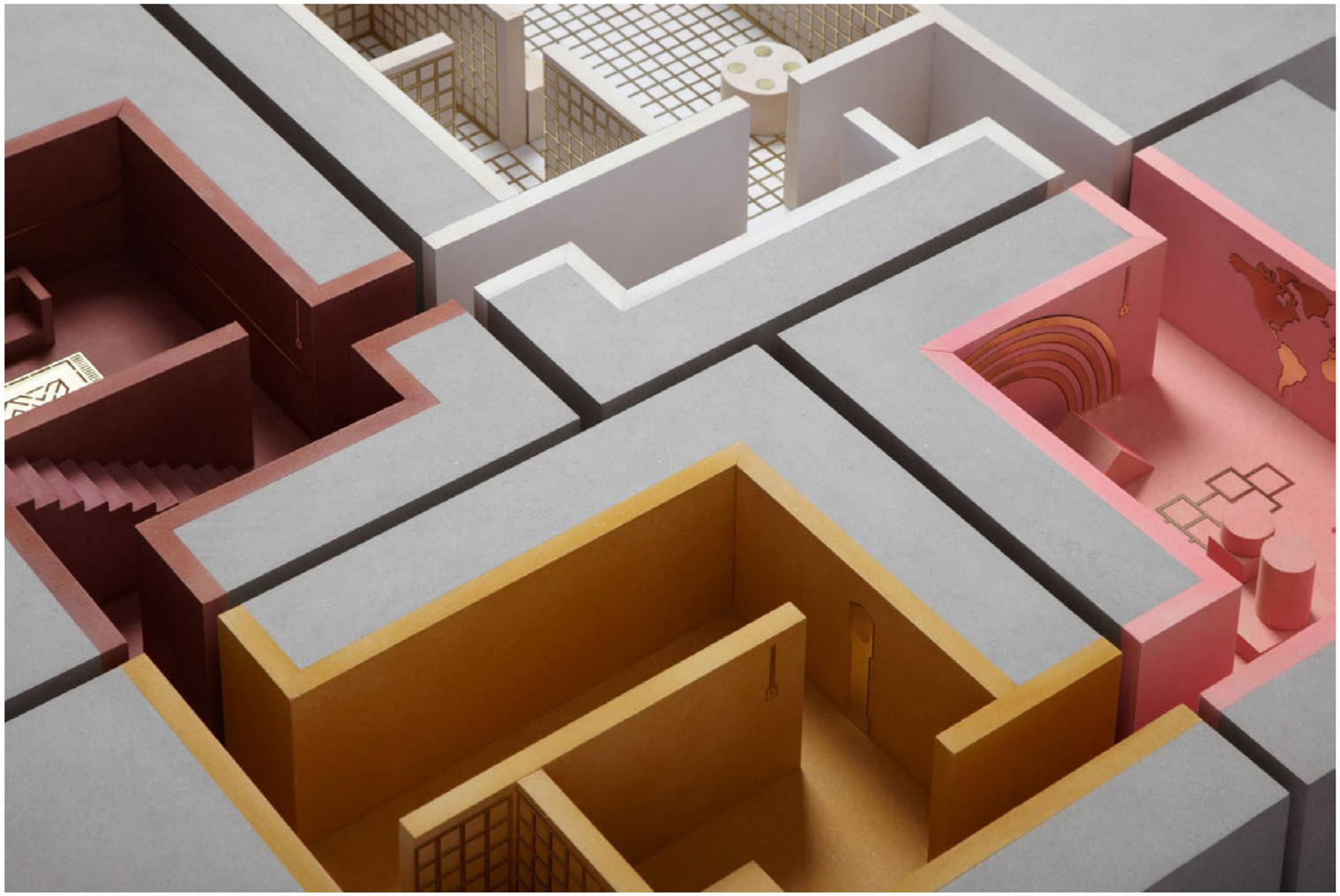
“in an age where digital work can be performed anywhere, architecture takes on the critical role of **bringing people together**”
-----Ole Scheeren(Architect)

promoting encounters,opportunities,coincidences..
encouraging diversity activities,communication,creativity.

INTEGRATING PROGRAMS

Program including:
Social Bar
Library
Collaboration Room
Workshop
Meeting Room
.....

ENCOURAGE ATTENDING ACTIVITIES



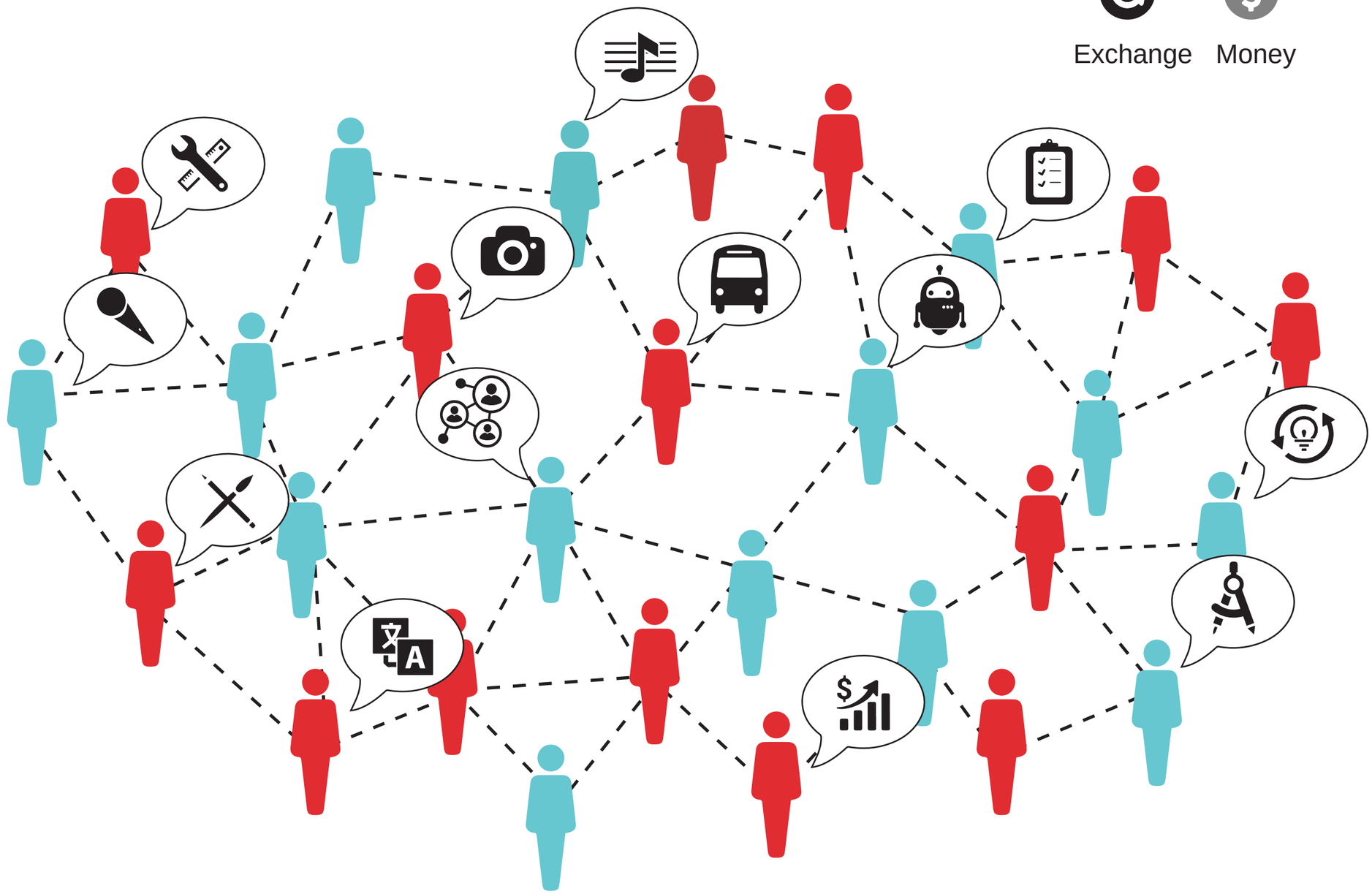
Small intense space networks,
Force people walk through different
founction parts.

INTEGRATING

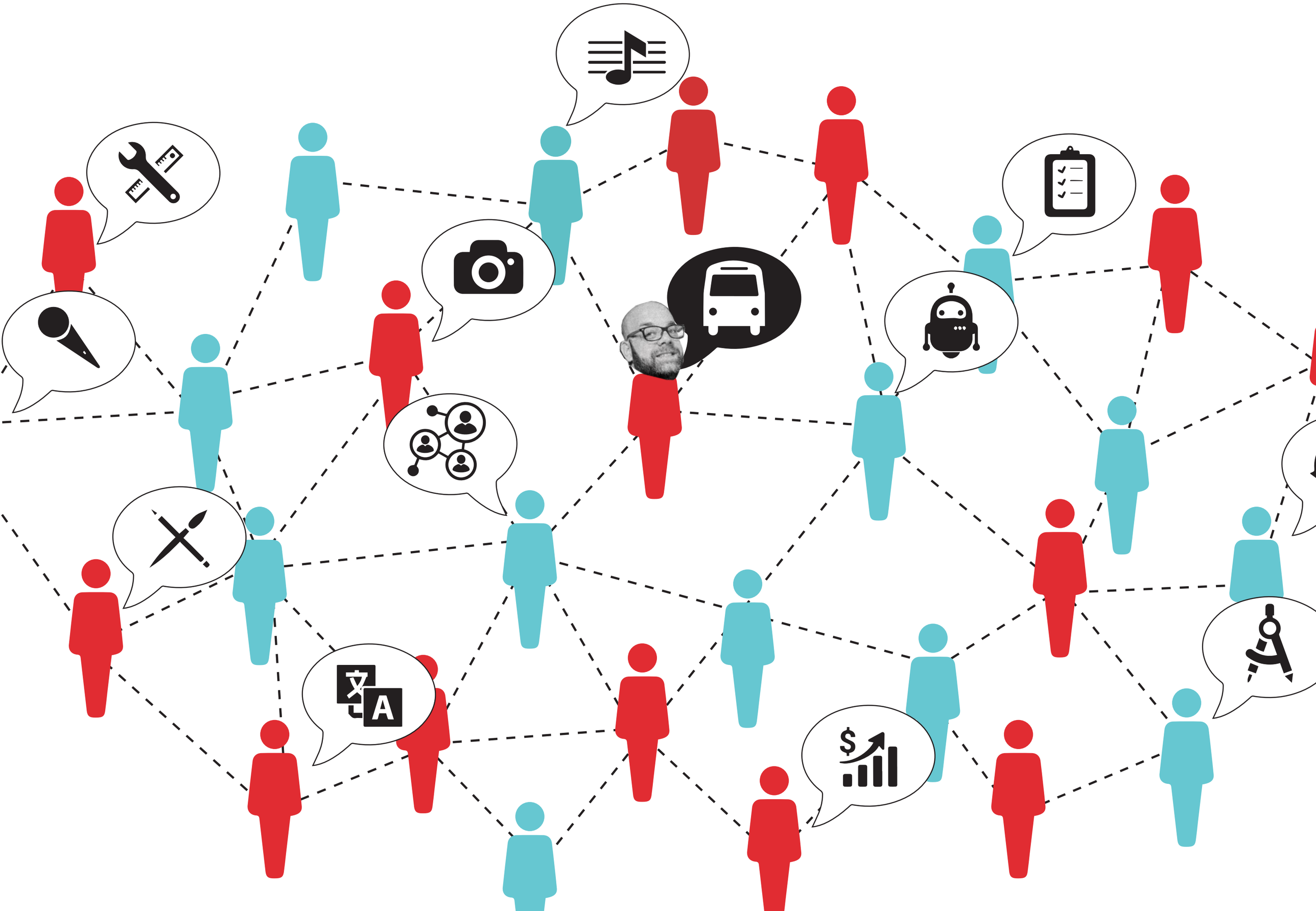
NETWORK WAY.

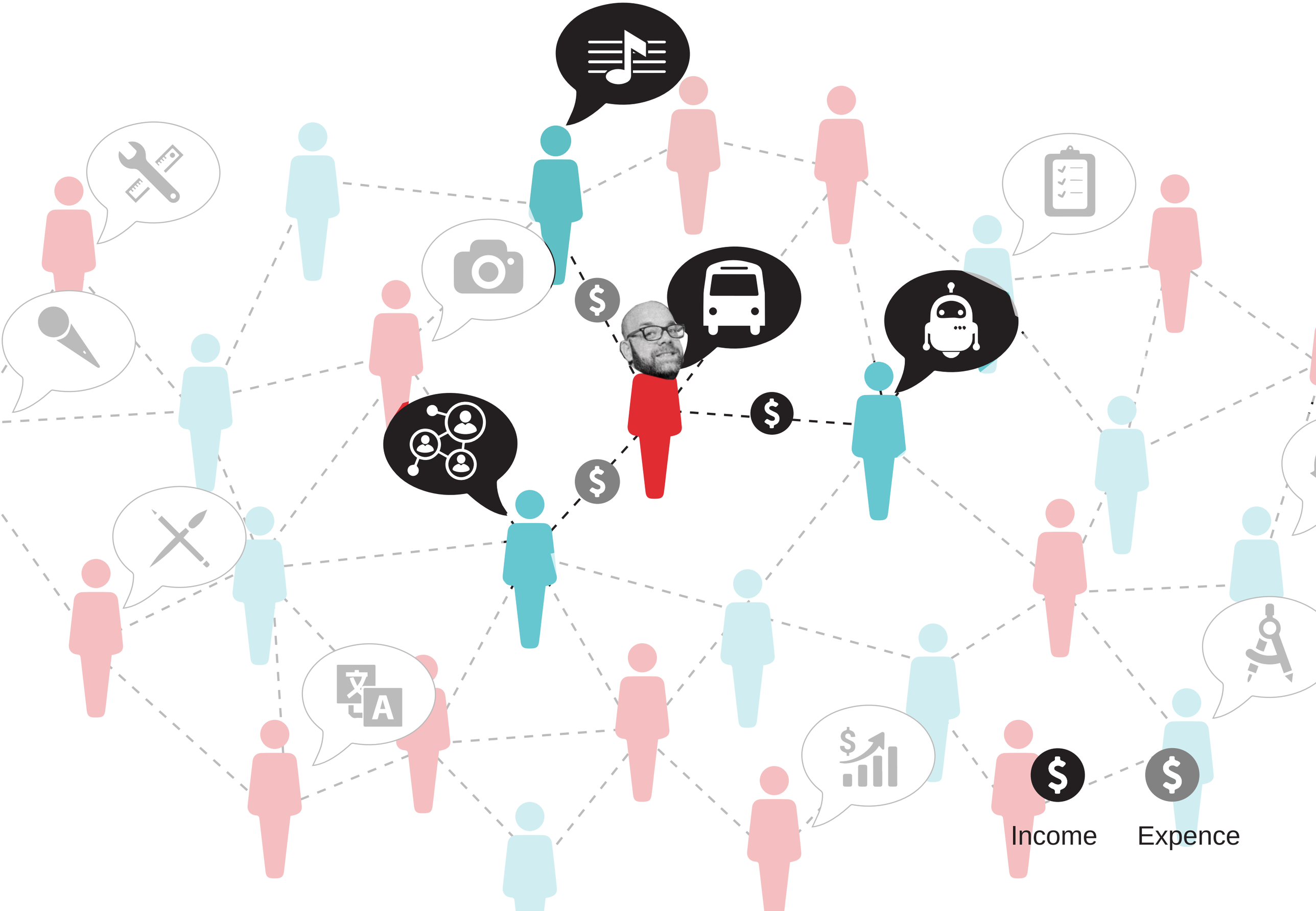
Knowledge & skills can be selled by

Exchange Money



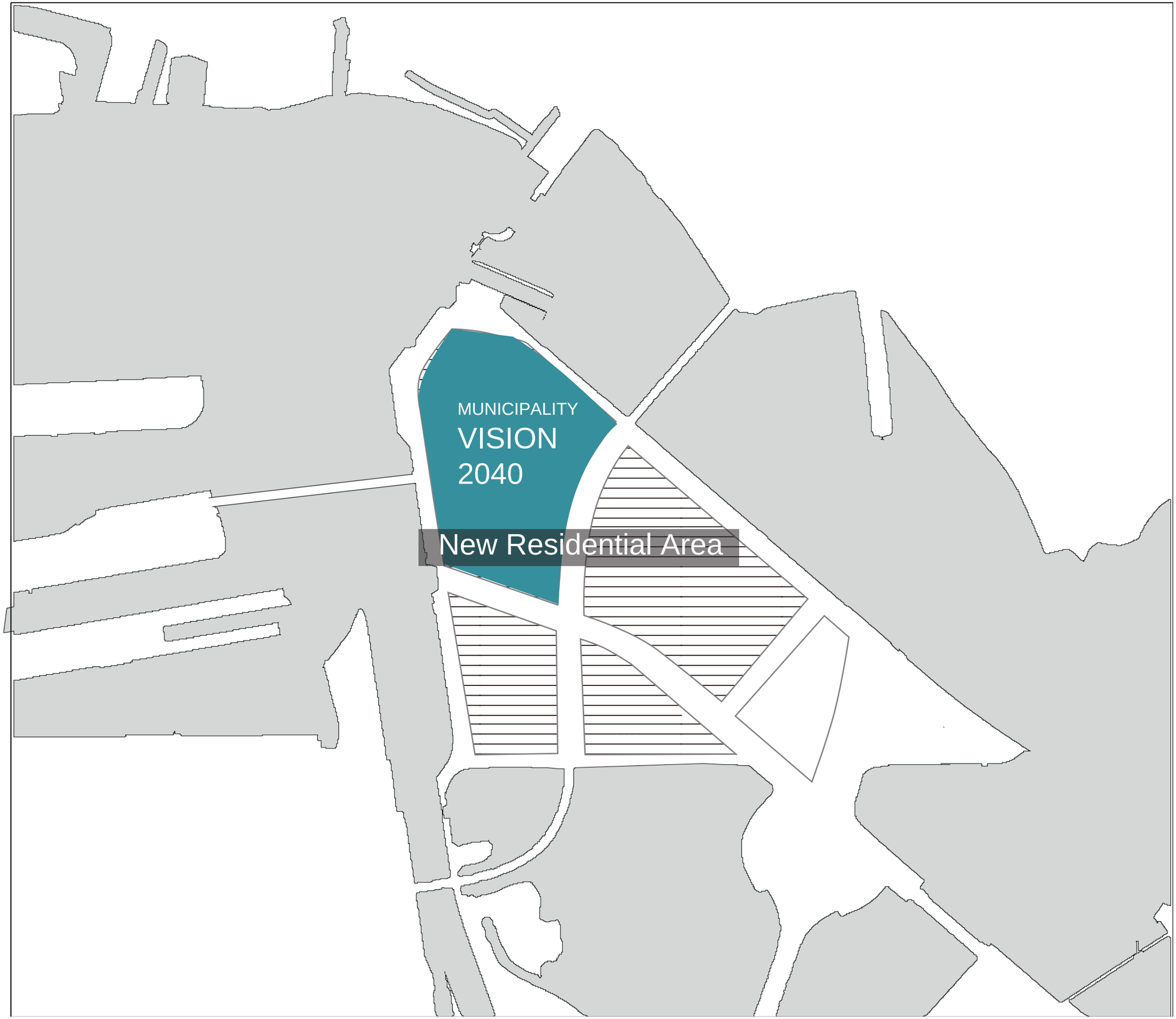
Still remember the **TRUCK DRIVER**?




Income
Expence

I want to be
a singer
Income
Expence

ZEEBURGEREILAND


MUNICIPALITY
VISION
2040
New Residential Area

Residential Area

NON

15%

HOUSING

85%

5.500 dwellings
average **60m²**

municipality vision

Mixed, Self-sufficient Urban Lab

NON-HOUSING

35%

HOUSING

65%

11.000 dwellings
average **30m²**

group vision

Increase of the amount of **1-person households.**

More **young people,** fight for their career start-up period will move here, they need places to start up.

Residential Area

NON

15%

HOUSING

85%

5.500 dwellings
average **60m²**

municipality vision

Mixed, Self-sufficient Urban Lab

NON-HOUSING

35%

HOUSING

65%

11.000 dwellings
average **30m²**

group vision

Increase of the amount of **1-person households.**

Increased amount of **offices.**

More **young people,** fight for their career start-up period will move here, they need places to start up.

More **work opportunities** on the site. **People in restart-up period** could easier to find a job near by.

Residential Area

NON-HOUSING 15%

HOUSING 85%

5.500 dwellings
average **60m²**

municipality vision

Mixed, Self-sufficient Urban Lab

NON-HOUSING 35%

HOUSING 65%

11.000 dwellings
average **30m²**

20% **expensive** rent and buy

40% **regularated** rent

40% **Social Housing**
rent and buy

group vision

Increase of the amount of **1-person households.**

Increased amount of **offices.**

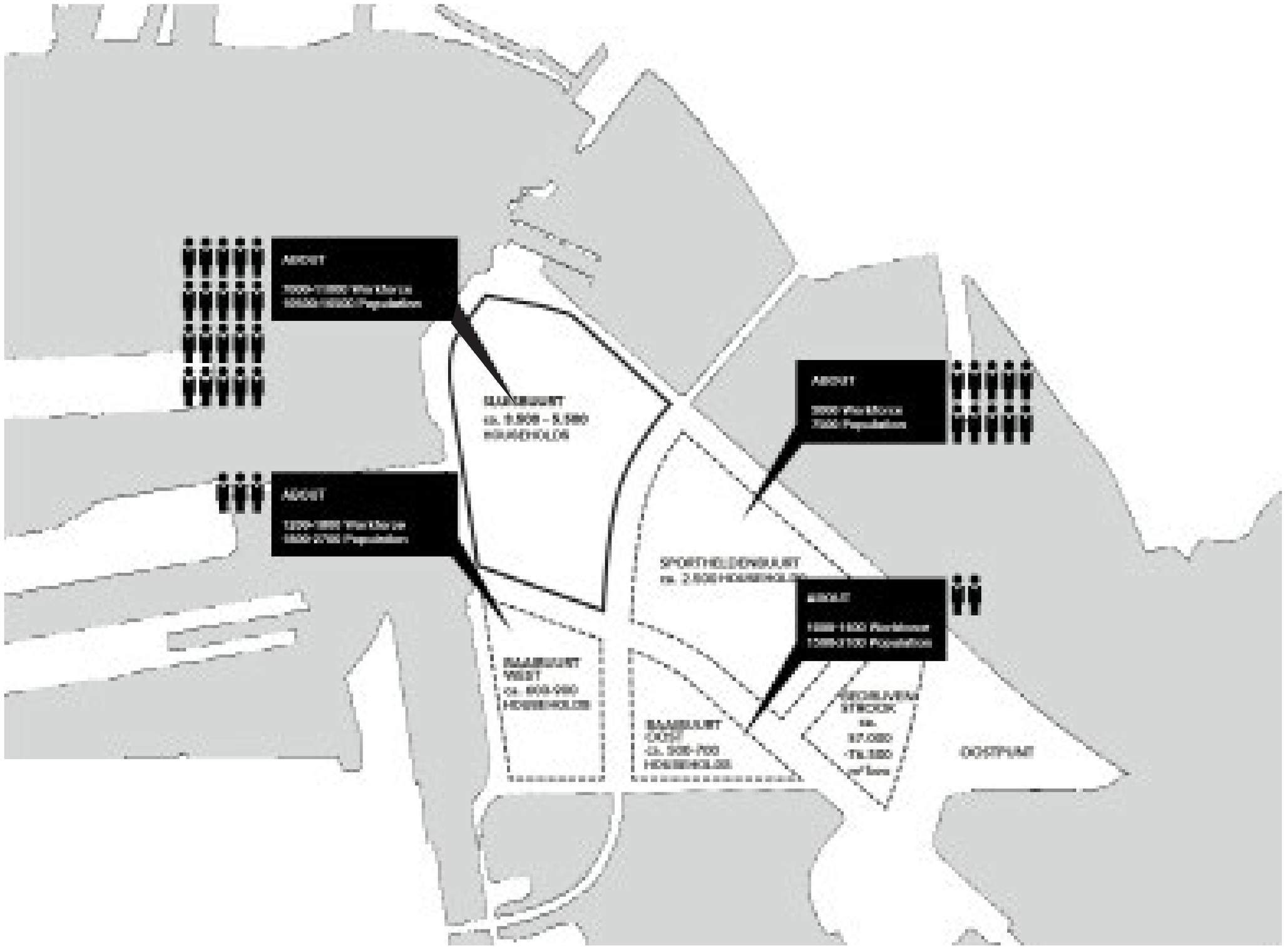
Increased **rentad housing**

More **young people,** fight for their career start-up period will move here, they need places to start up.

More **work opportunities** on the site. **People in restart-up period** could easier to find a job near by.

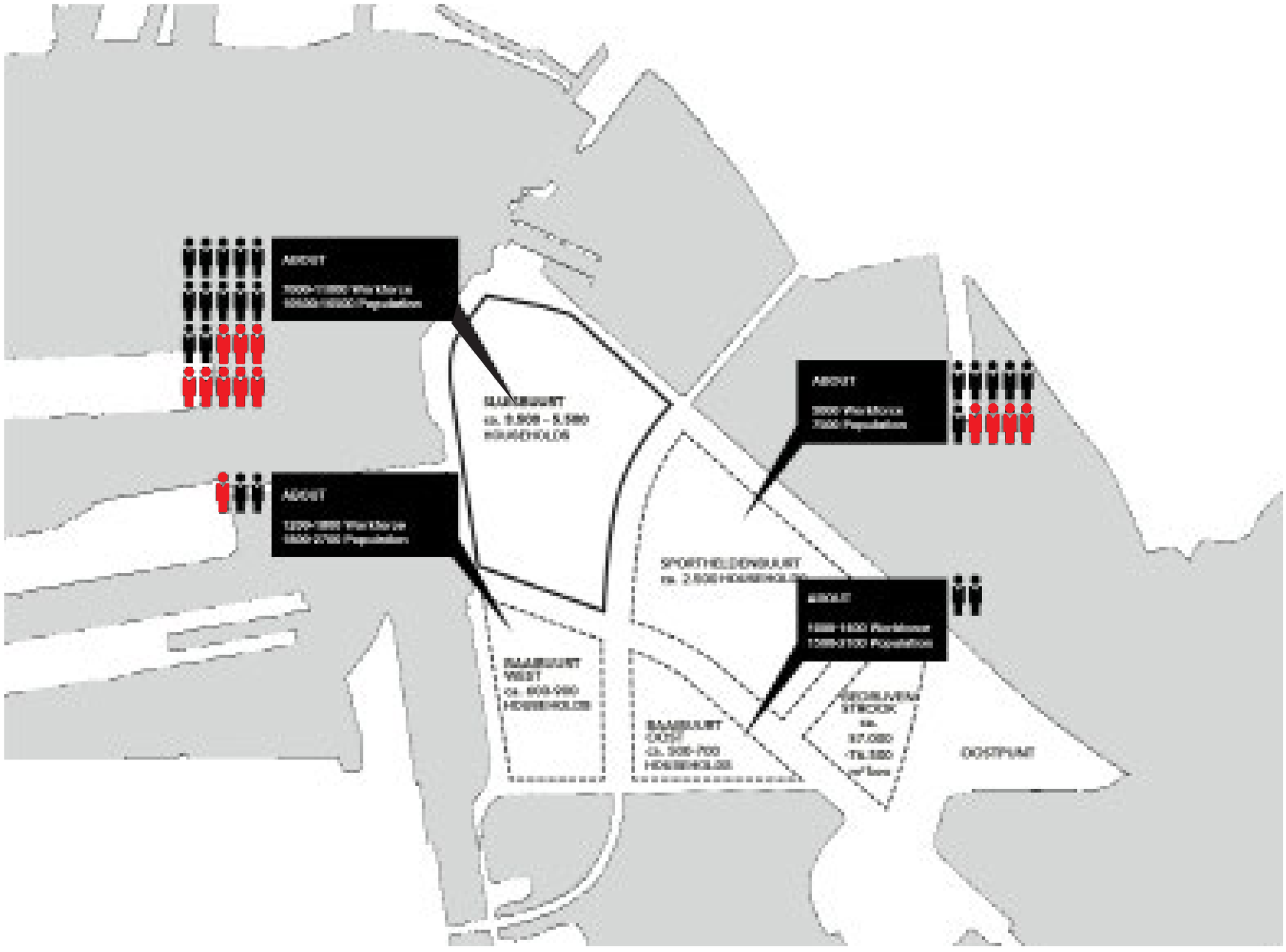
More temporary population will bring vitality here.

TILL 2050

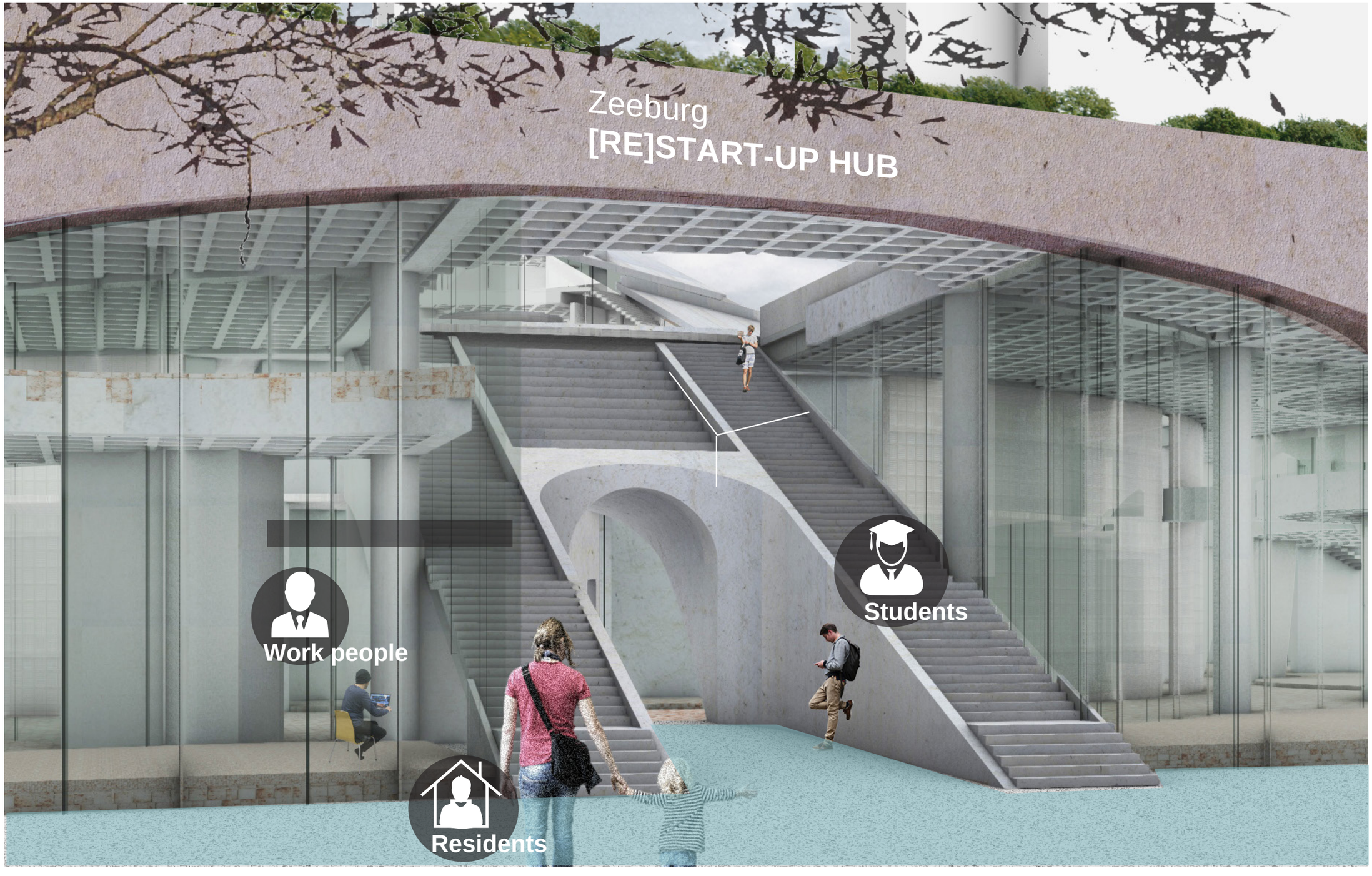


About **13.000** workforce will living on the island. (Rate of 40% social housing)

TILL 2050



Among them, about **5000** population are low-waged, and more possible to lose their work.



Different groups of people will be gathered here, collaborating and learnig between each other.

Zeeburg

[Re]Start-up Hub

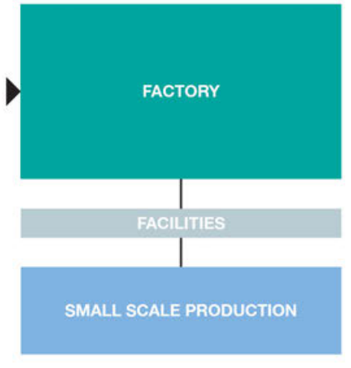
TRENDS

OFFICE TYPOLOGY

PROGRAM RELATIONS & RATIO

1909 industrial era | 1958 capitalist era | 1973 post-industrial era | 2005 information era | 2018 AI era

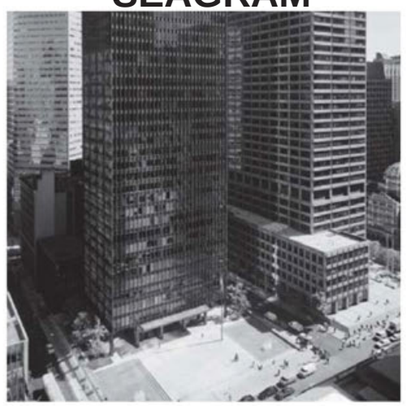
AGE

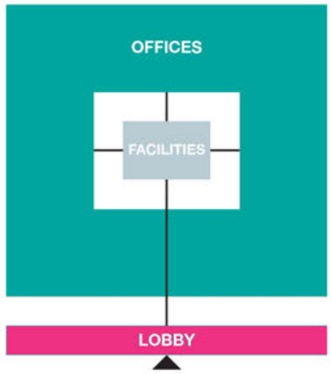


90% FACTORY

10% FACILITIES

SEAGRAM



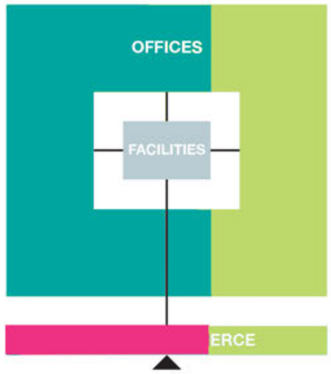


70% OFFICE

20% FACILITIES

5% FOYER

SEARS



50% OFFICE

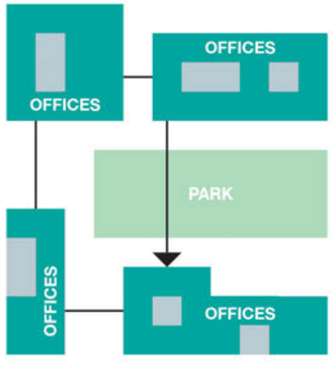
10% VACANT

20% COMMERCE

10% FOYER

10% FACILITIES

GOOGLEPLEX



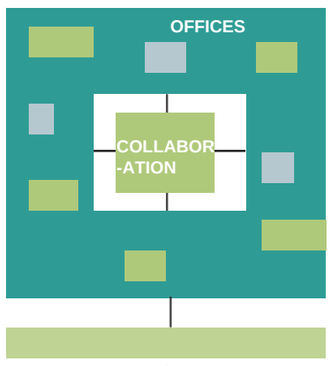
40% OFFICE

40% AMENITIES

10% PARK

20% FACILITIES

THE COLLABORATIVE CLOU



50% OFFICE IN ALL
(35% FORMAL
15%INFORMAL)

40% AMENITIES

20% FACILITIES

OFFICE TYPOLOGY

PROGRAM RELATIONS & RATIO

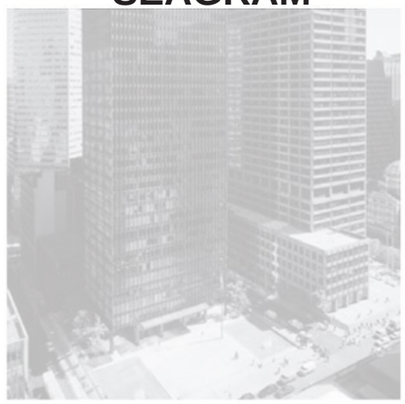
1909 industrial era | 1958 capitalist era | 1973 post-industrial era | 2005 information era | 2018 AI era | 2050

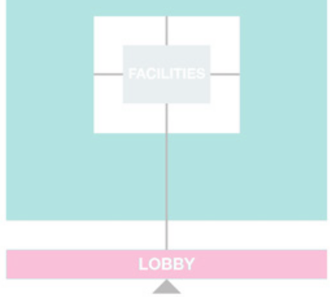
AGE

90% FACTORY

10% FACILITIES

SEAGRAM



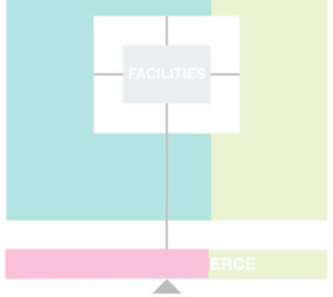


70% OFFICE

20% FACILITIES

5% FOYER

SEARS



50% OFFICE

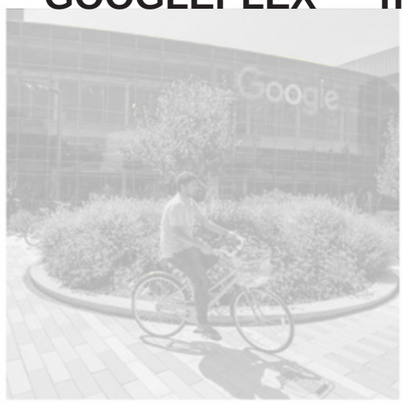
10% VACANT

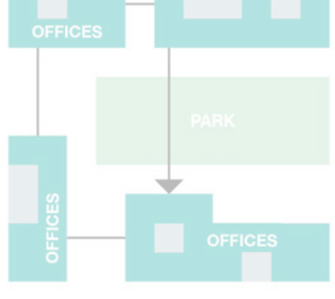
20% COMMERCE

10% FOYER

10% FACILITIES

GOOGLEPLEX





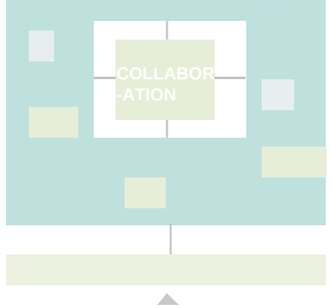
40% OFFICE

40% AMENITIES

10% PARK

20% FACILITIES

THE COLLABORATIVE CLOUD



50% OFFICE IN ALL
(35% FORMAL
15%INFORMAL)

40% AMENITIES

20% FACILITIES

?

35% OFFICES
(FORMAL AND INFORMAL)

30% AMENITIES

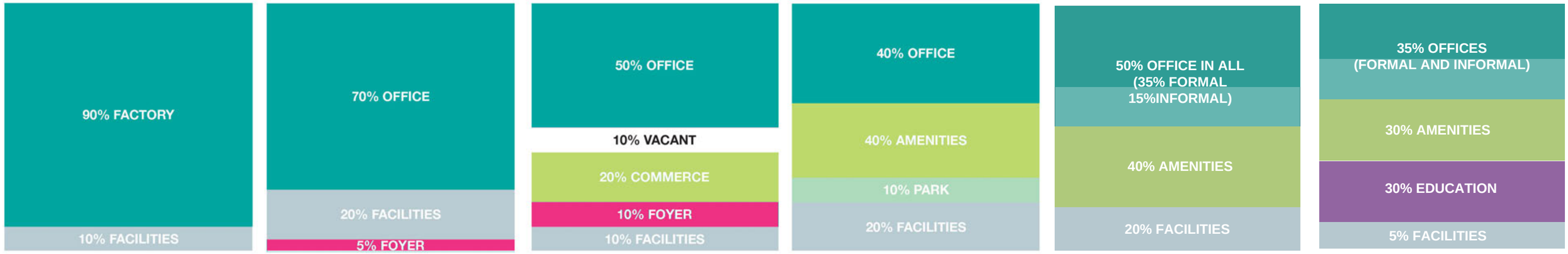
30% EDUCATION

5% FACILITIES

PROGRAM BAR

10,000sqm
6700sqm
8300sqm
40%
OFFICE
27%
AMENITIES
33%
UNIVERSITY

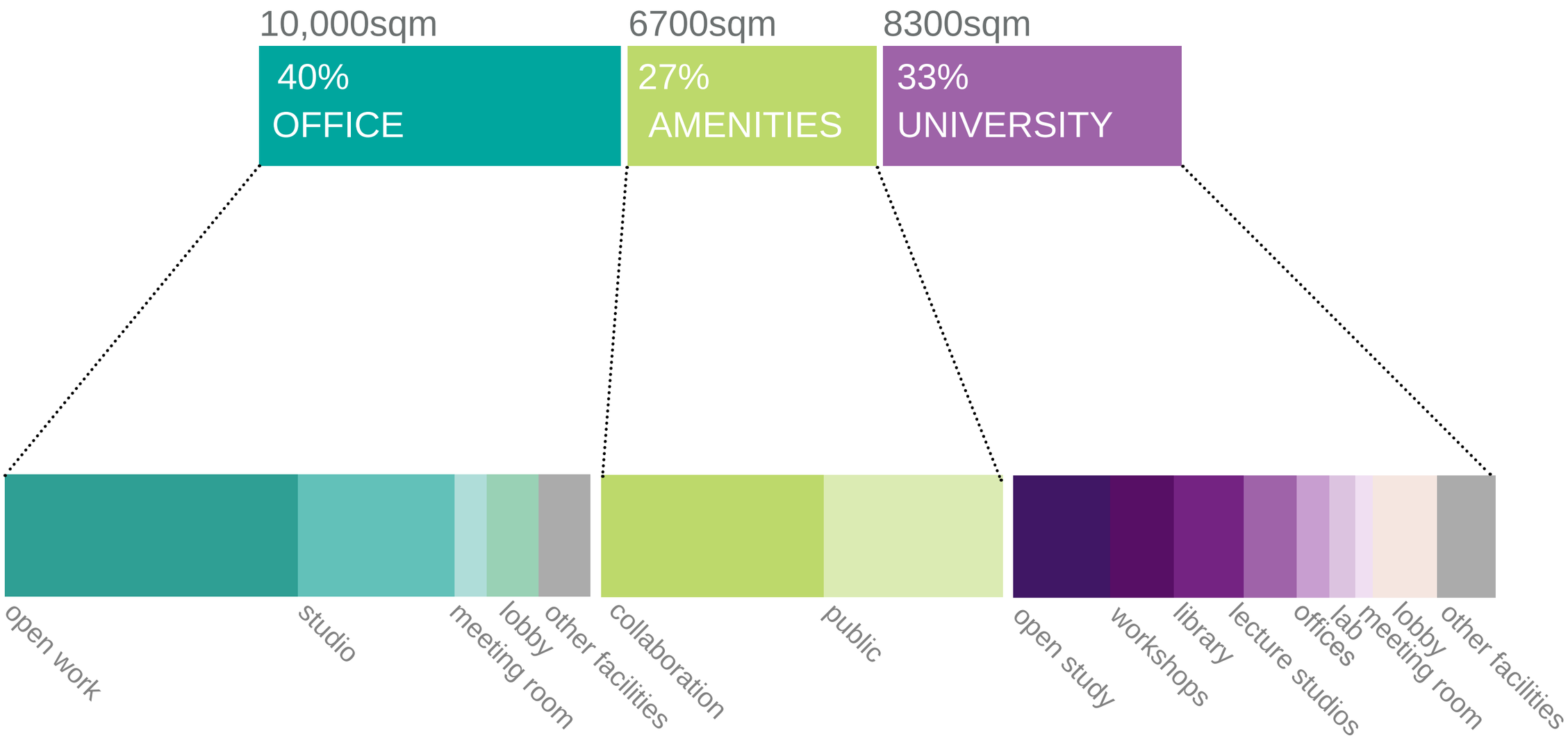
CONCLUSIONS



TRENDS

- Office building is becoming **hybrid**.
- People need **less area** for working. Due to the portable facilities.
- Office focus more on **mental efficiency**. People are more willing to work in the **informal offices**. The **amenities** and **collaboration** will be encouraged.
- **Educational space** will be necessary to be added into office building, with the coming of lifelong-learning age.

PROGRAM BAR


10,000sqm
40%
OFFICE
6700sqm
27%
AMENITIES
8300sqm
33%
UNIVERSITY
open work
studio
meeting room
lobby
other facilities
collaboration
public
open study
workshops
library
lecture studios
offices
lab
meeting room
lobby
other facilities

How will people spend A DAY there, in the Building?

Switching

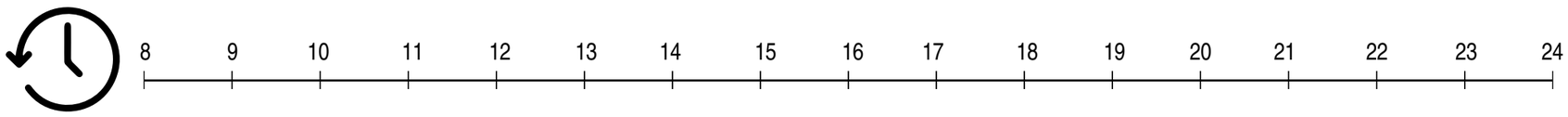
FORMAL WORKING ⟷ **INFORMAL WORKING**

A DAY

formal working/ leaning

Informal working/ learning

recreations/ work-out



RESTART-UPs

START-UPs

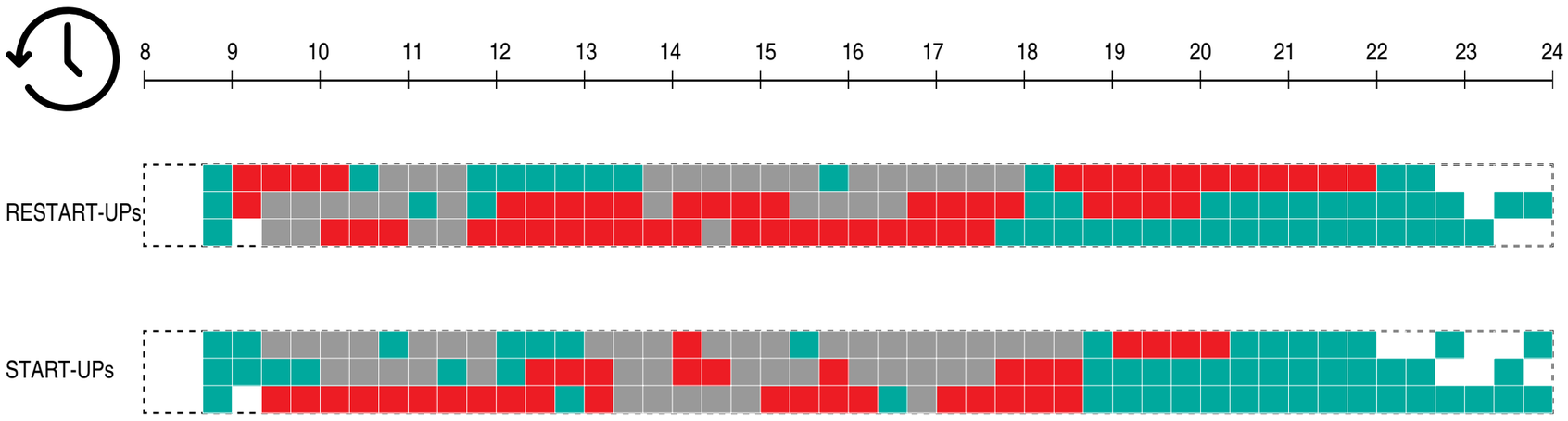
STUDENTs

A DAY

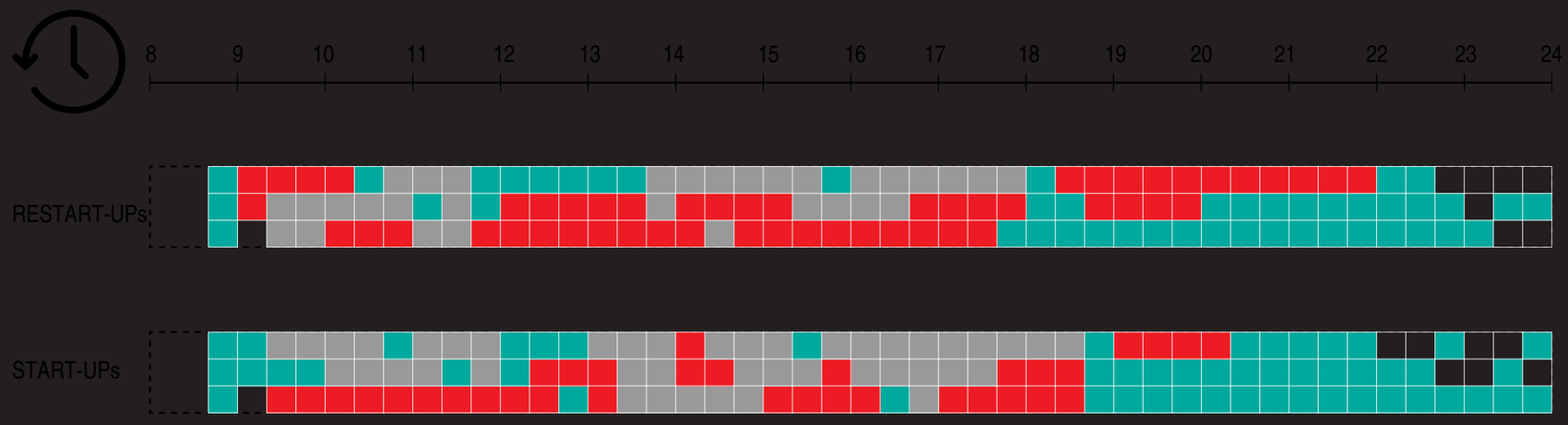
formal working/ leaning

Informal working/ learning

recreations/ work-out



Mixed Activities



Needs of Accessibility

Low

Lecture rooms

Recreation
Social space

Library
Gallery

Auditorium

Co-working space

Clubs
Event Zone
Urban Plaza
Urban Axes

Service facilities

Campus offices

Start-up Studios
Offices

Meeting rooms

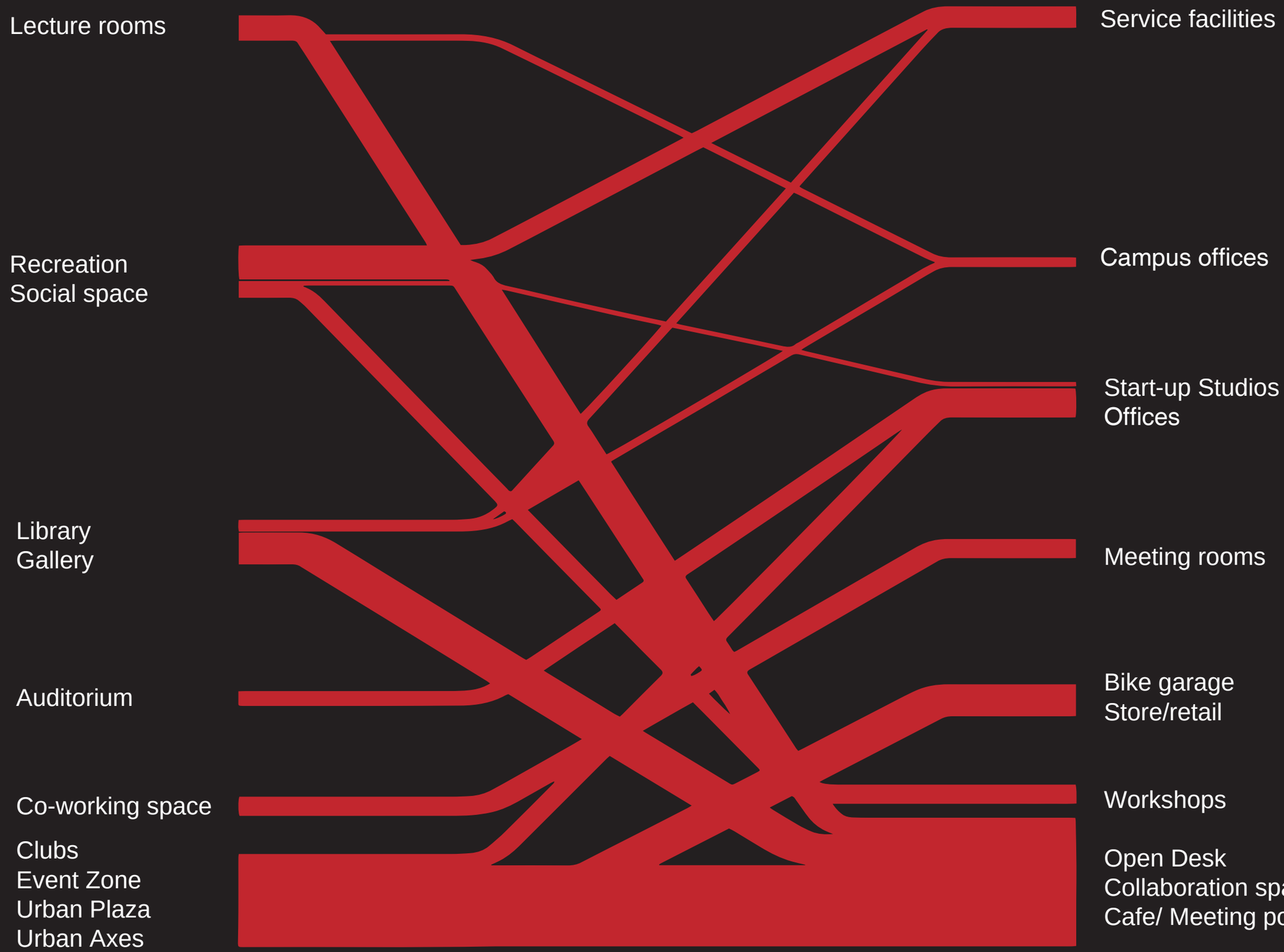
Bike garage
Store/retail

Workshops

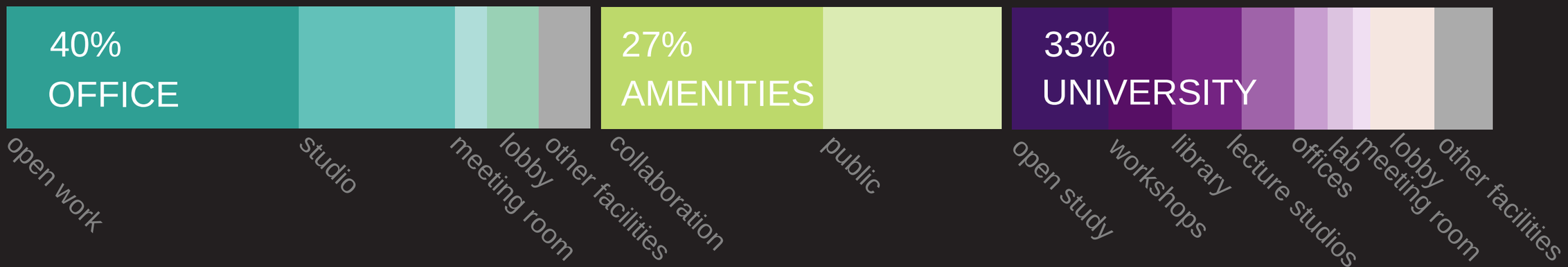
Open Desk
Collaboration spaces
Cafe/ Meeting points

High

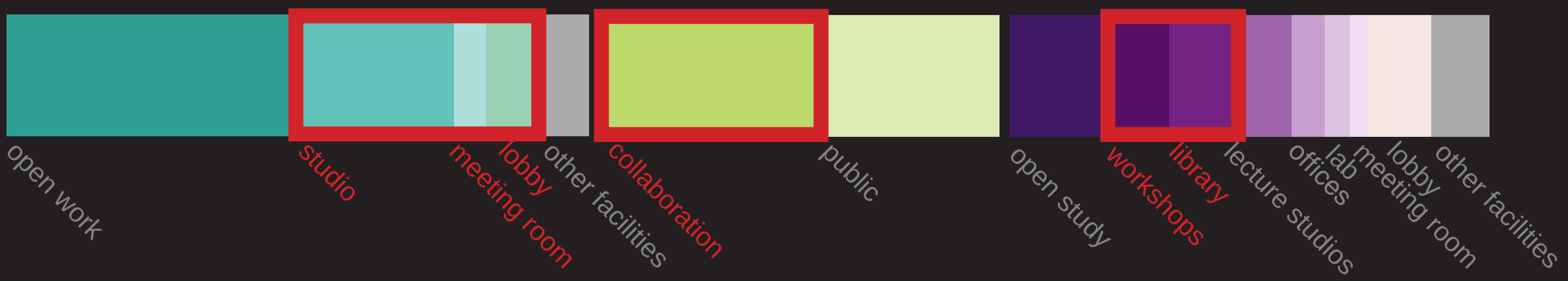
Mixed activities lead to **Mixed Circulations**



Mixed Circulations lead to Mixed Programs



Mixed Circulations lead to Mixed Programs



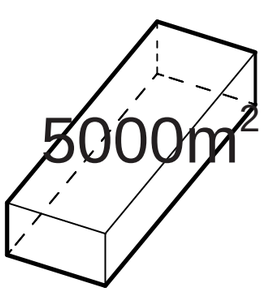
Mix and Combine for better activity-switching

Rearrangement base on accessibilities

Part 1

COLLABORATION CORE

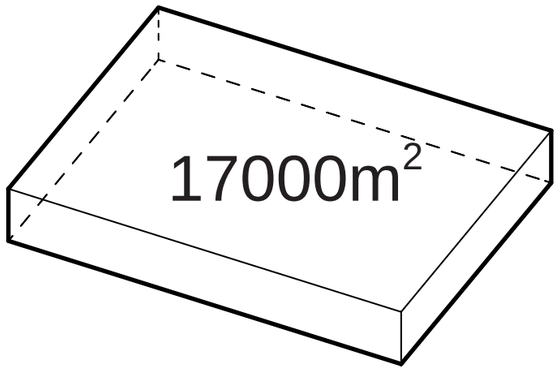
Library+Collaboration room+meeting room+Workshop+ Gallery+Cafe+Lunch bar



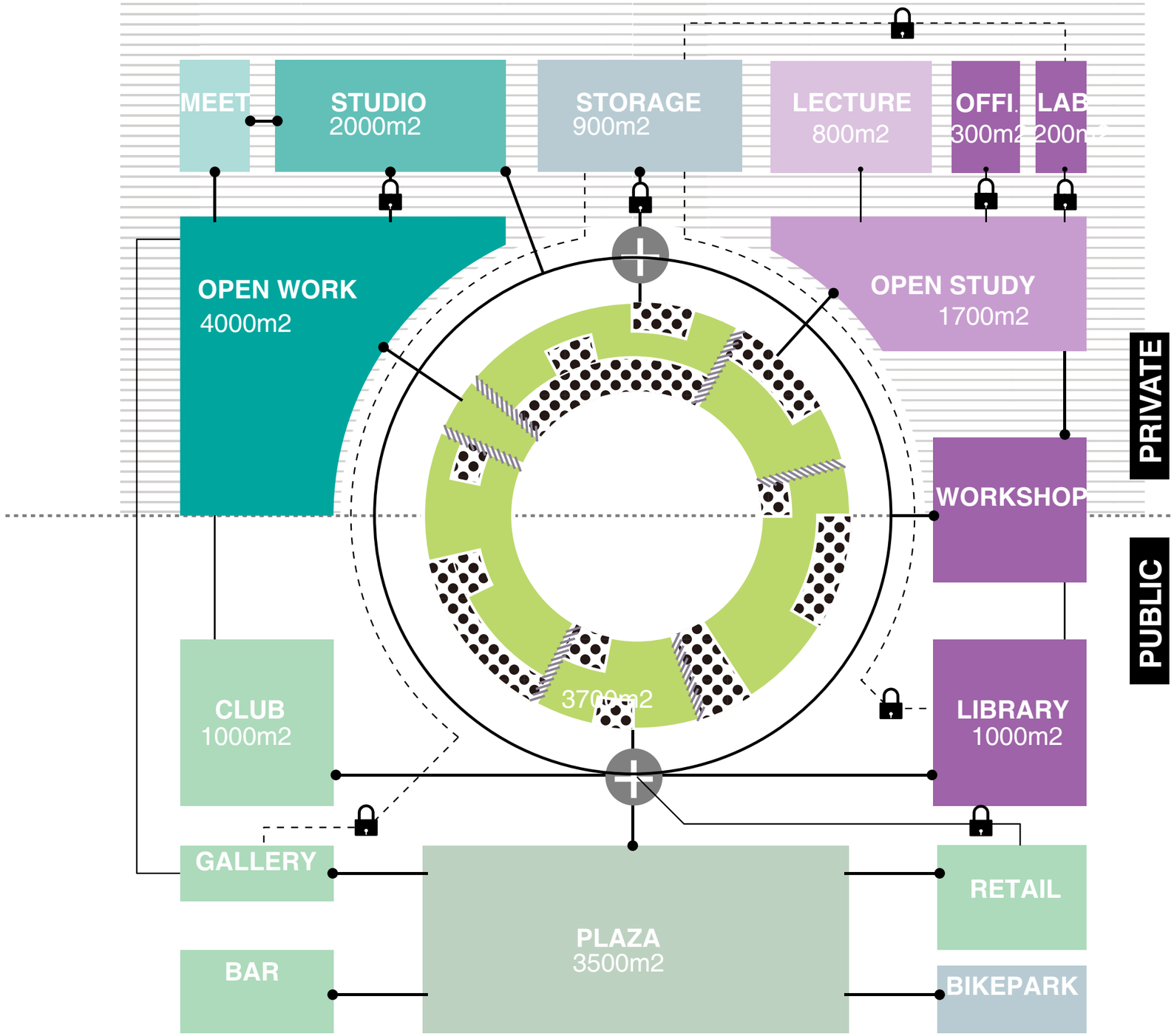
Part 2

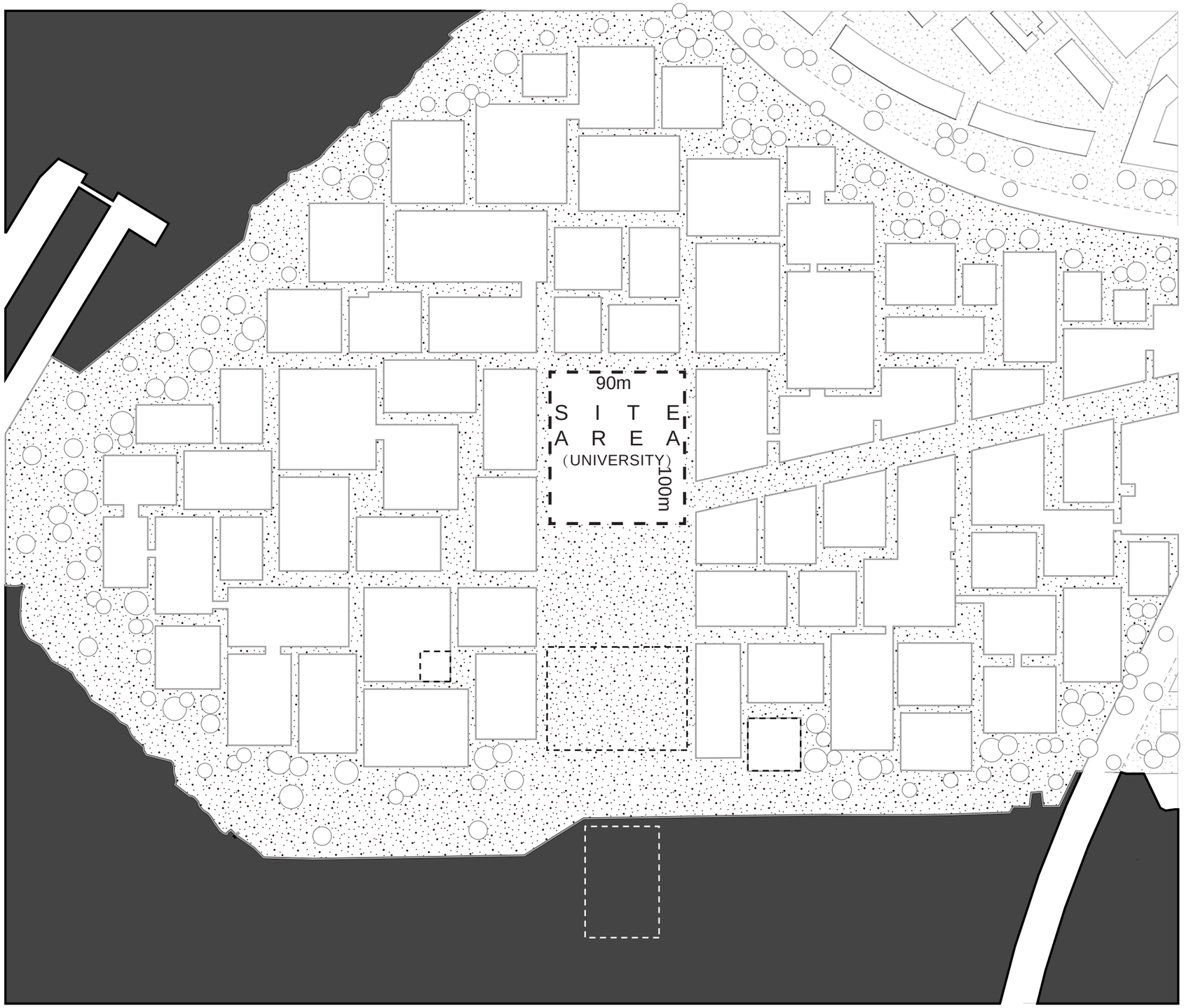
OTHERS

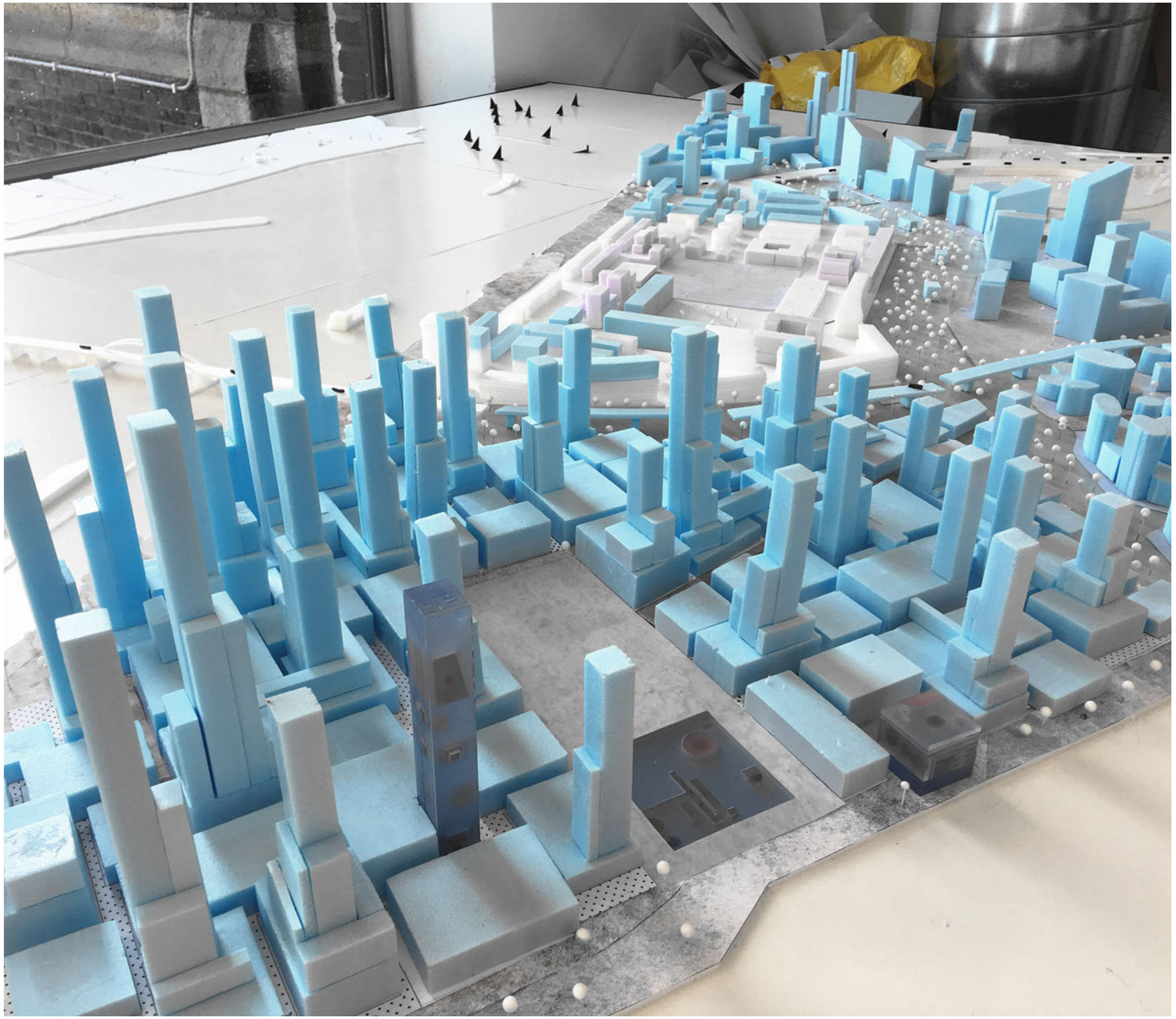
University+Work studios+Open desks+Retails

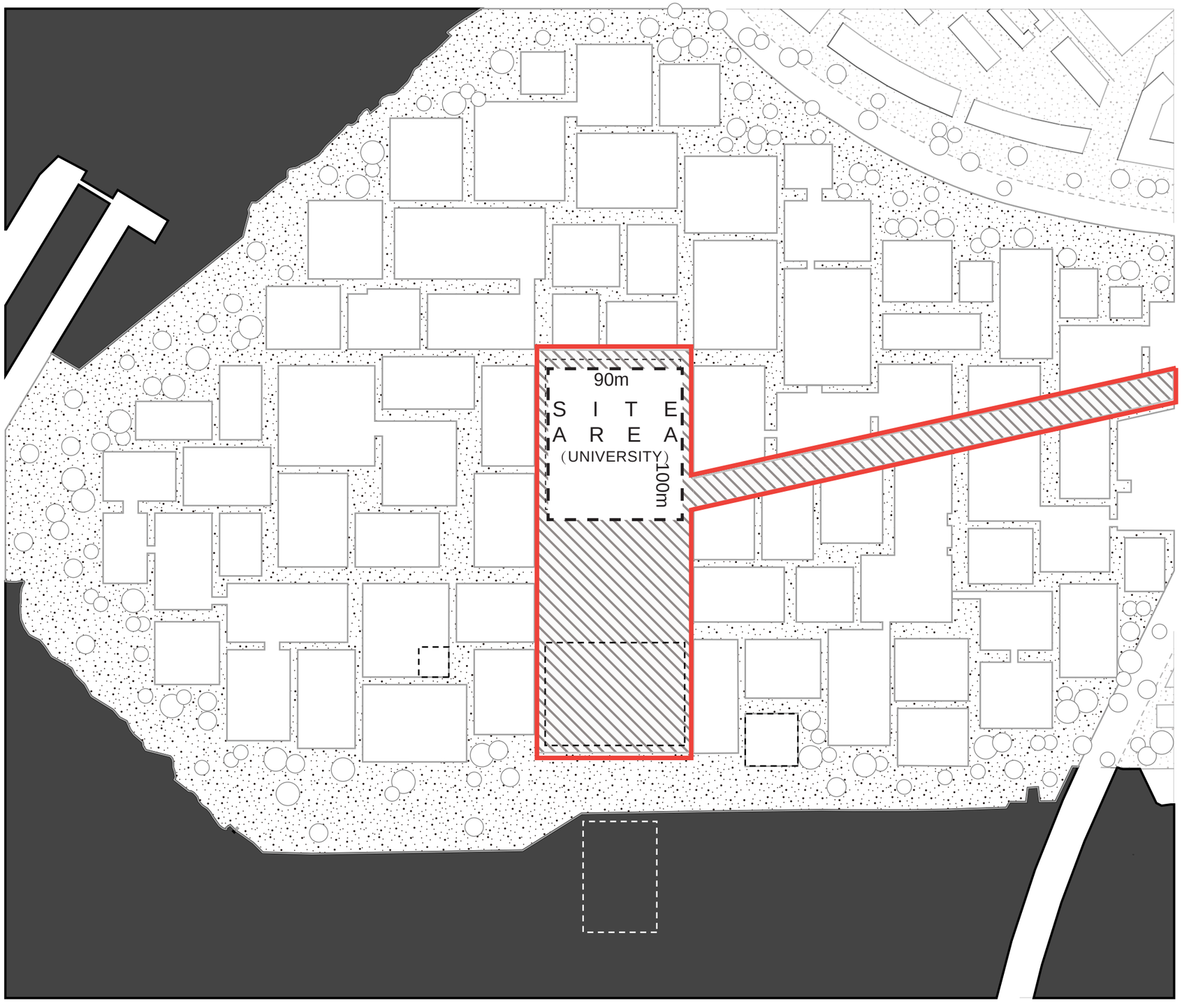


PROGRAMATIC RELATIONS

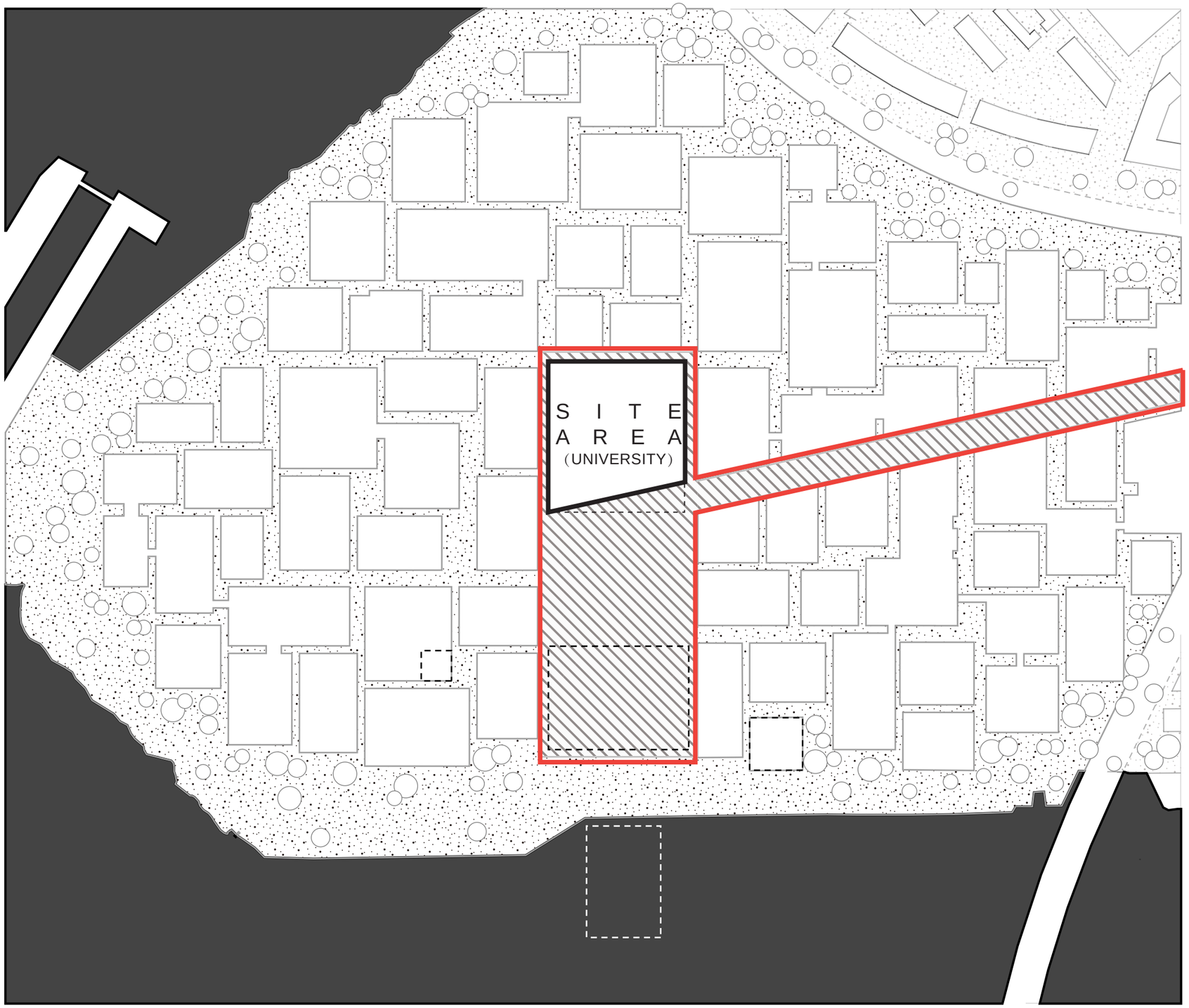



90m
S I T E
A R E A
(UNIVERSITY)
100m

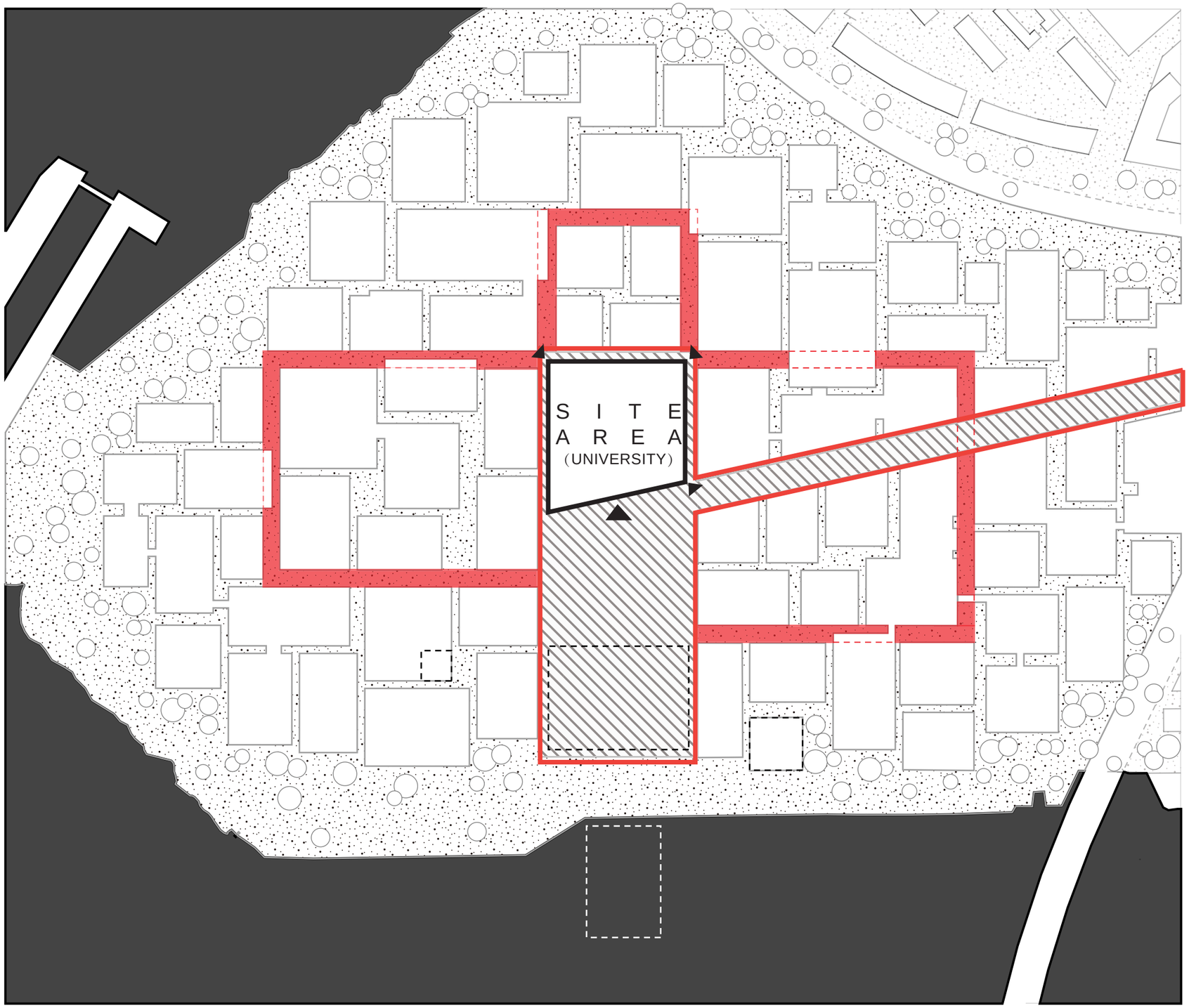




New axis ends at the urban square, bring people from transfer hub.

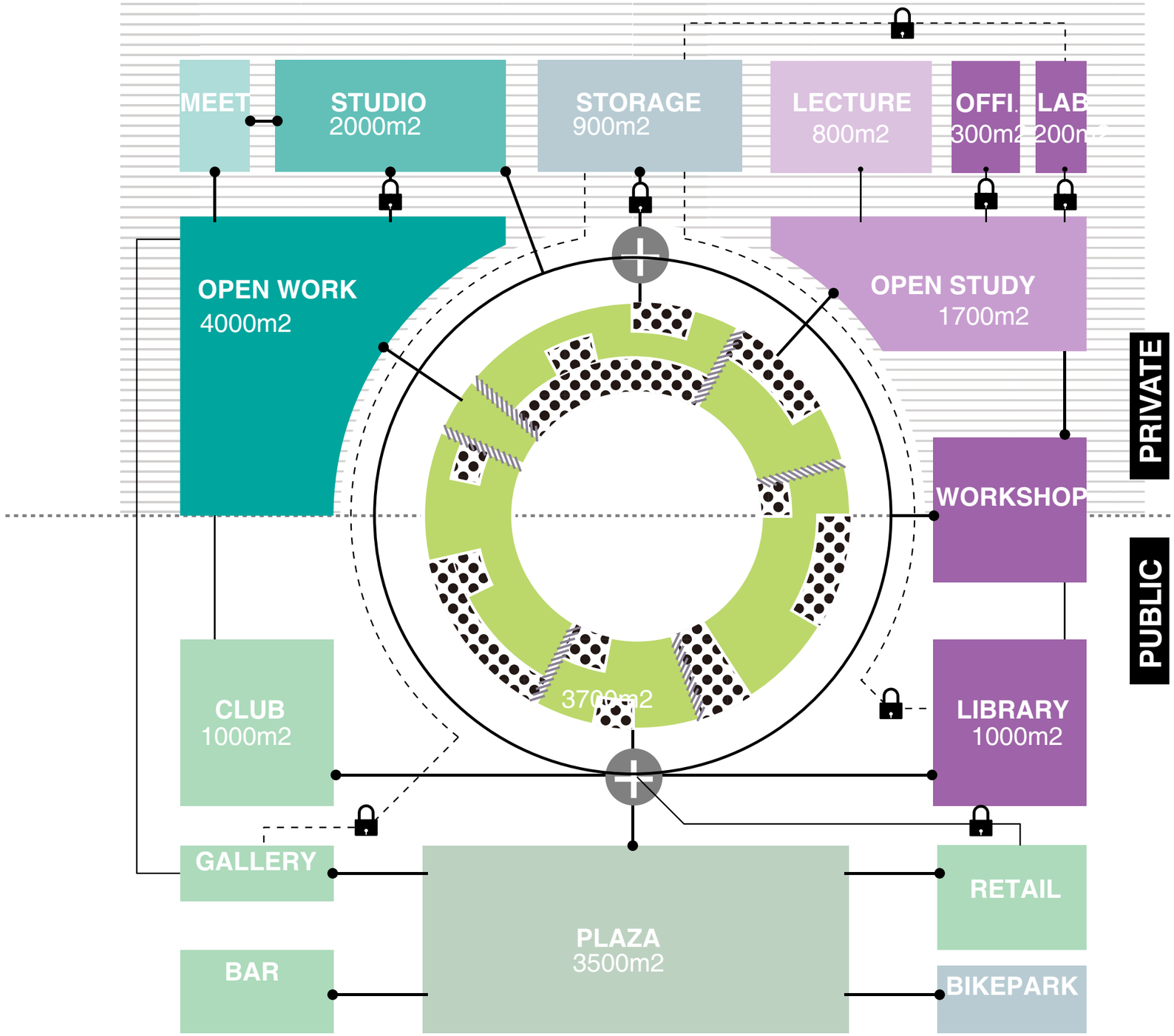


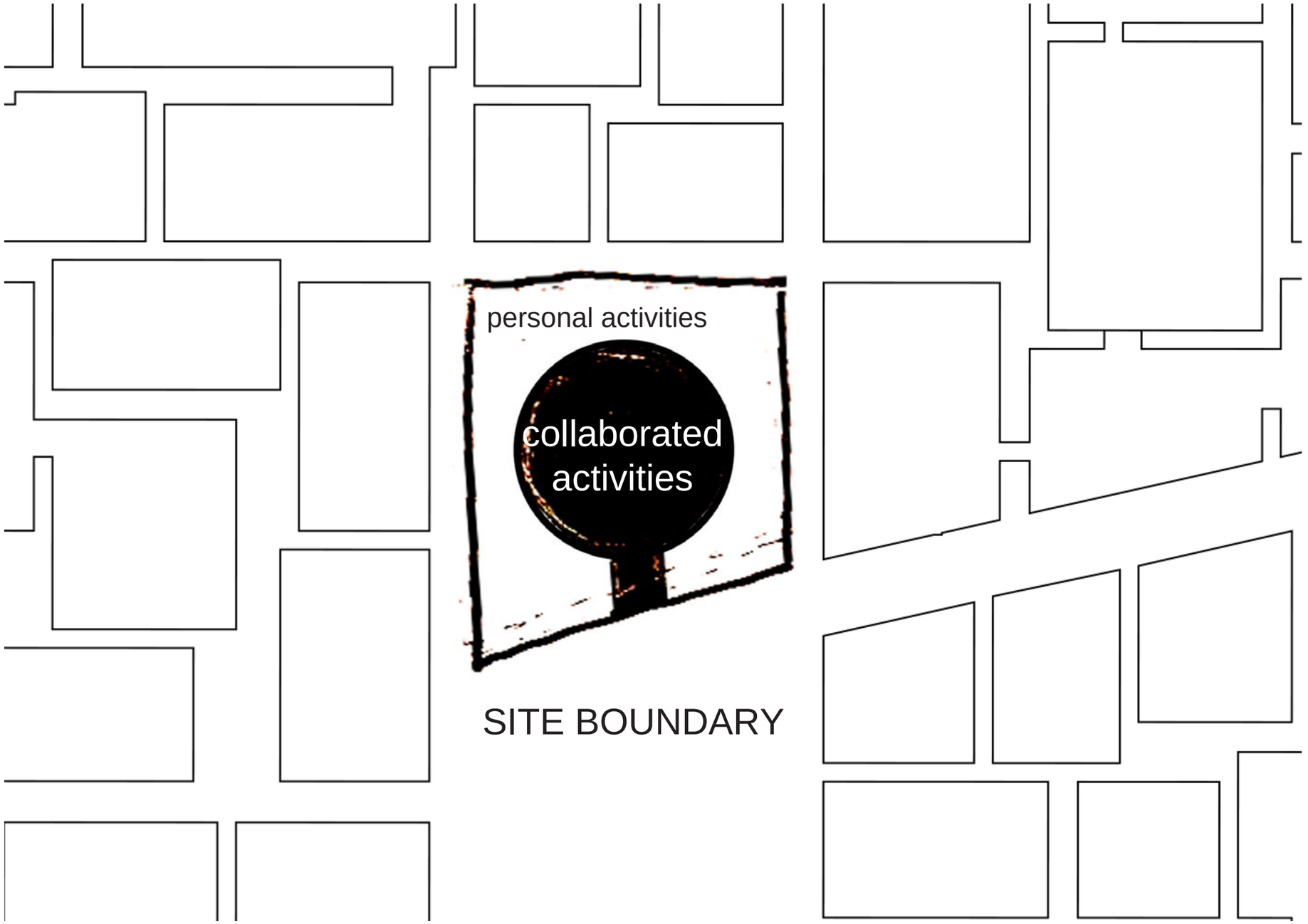
The main facade as an extension of axes.

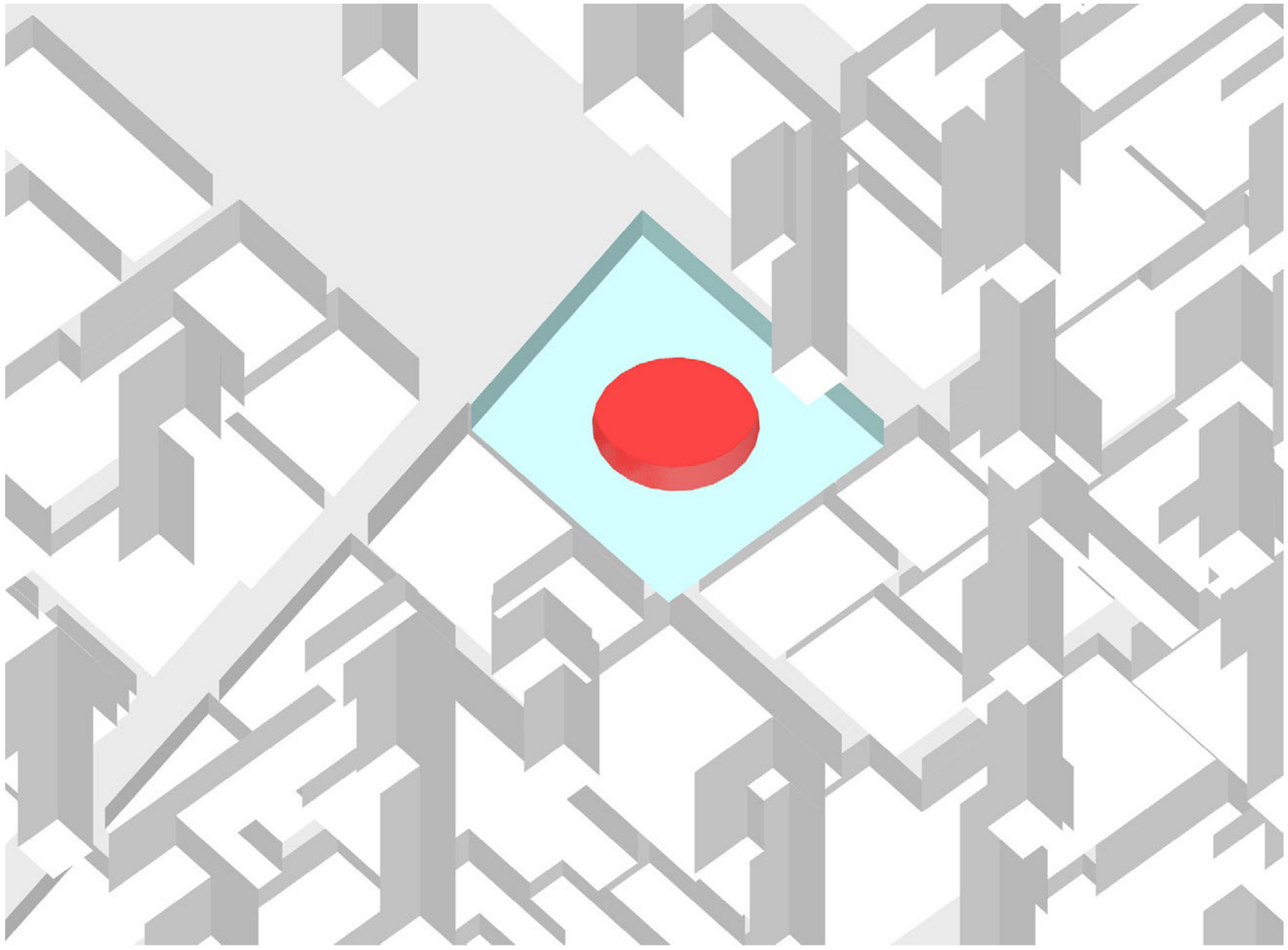


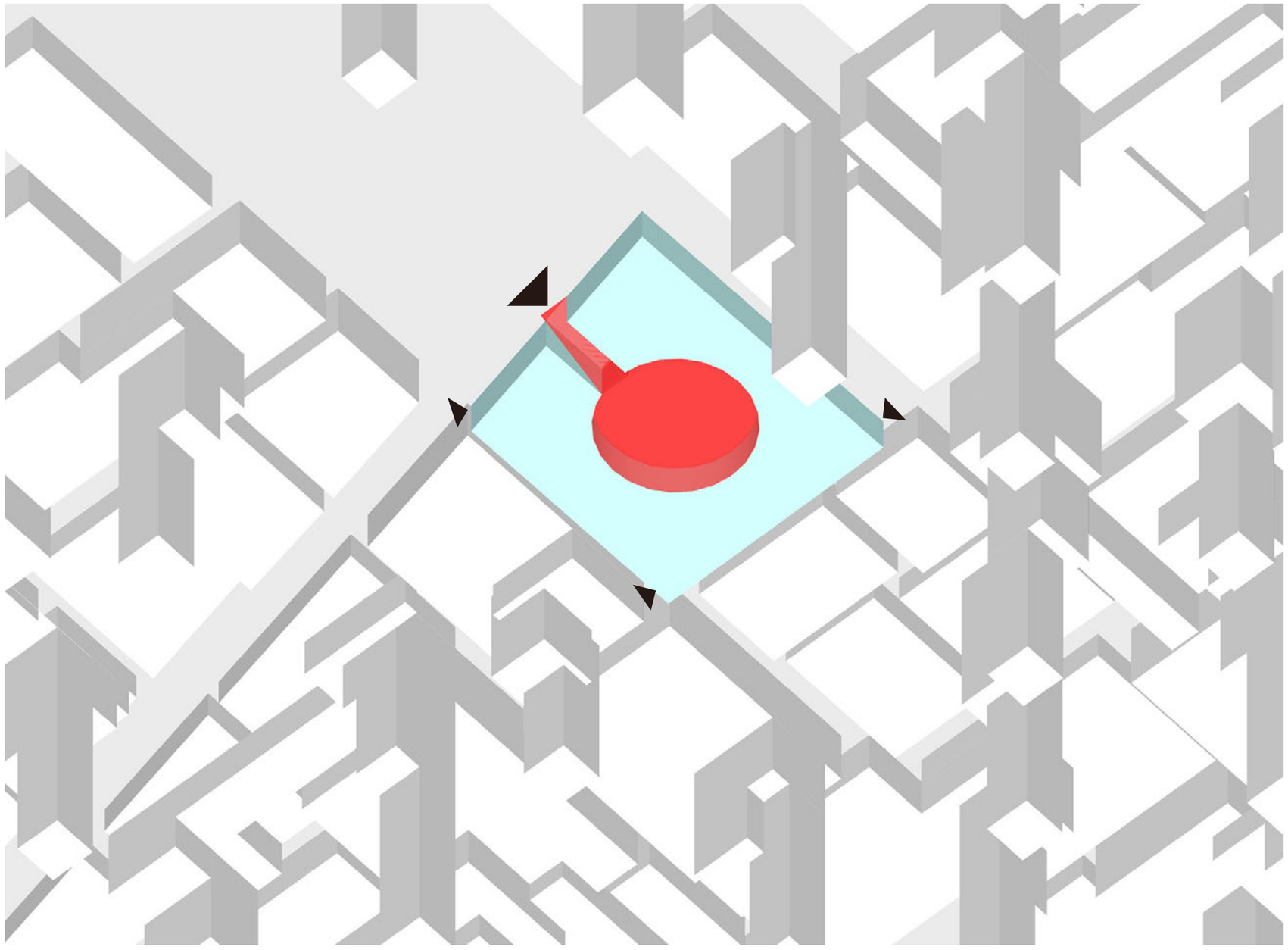
An urban loop service for the main traffic connections in the area, providing a fast way for people and electrical cars.

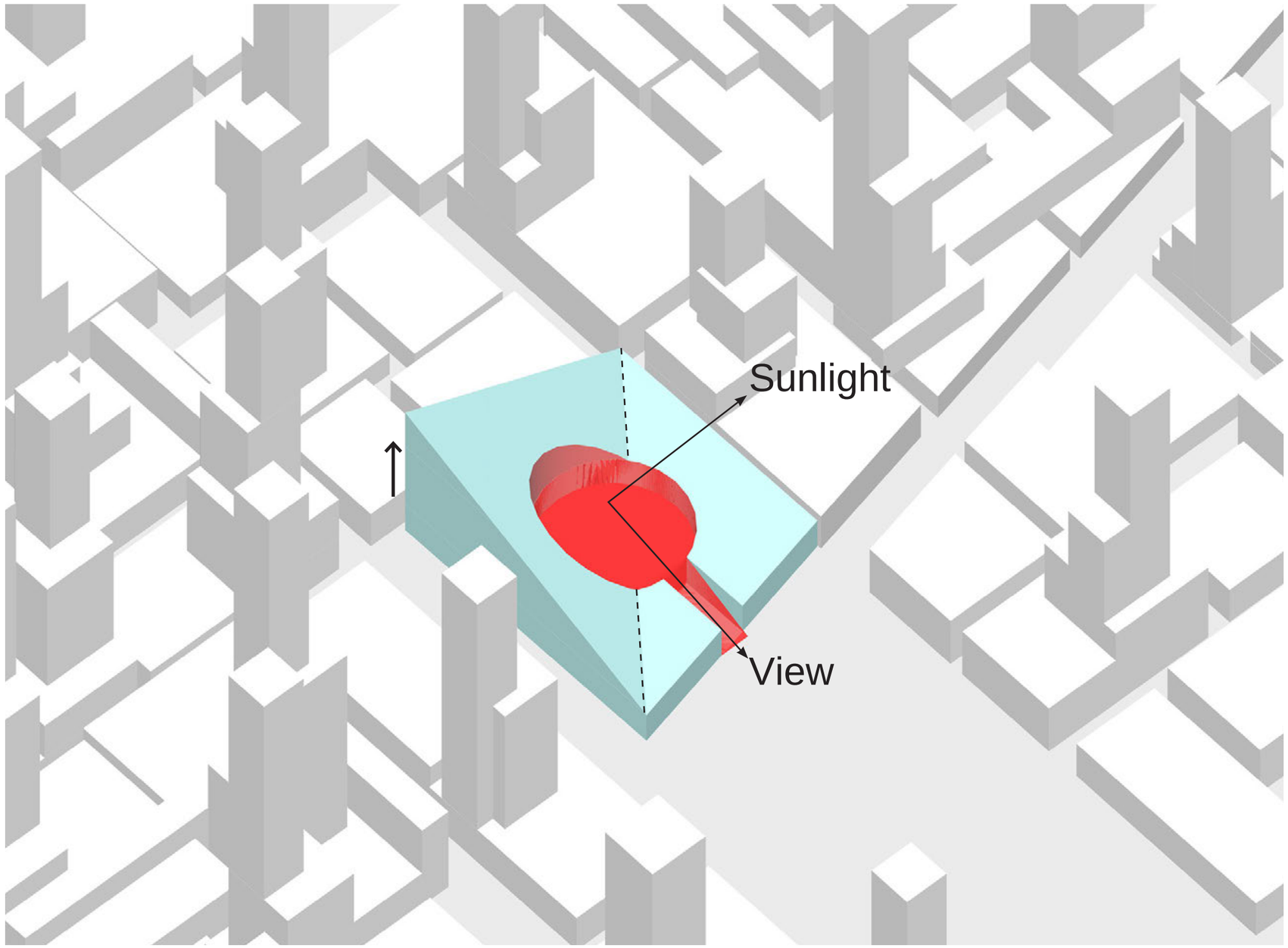
PROGRAMATIC RELATIONS

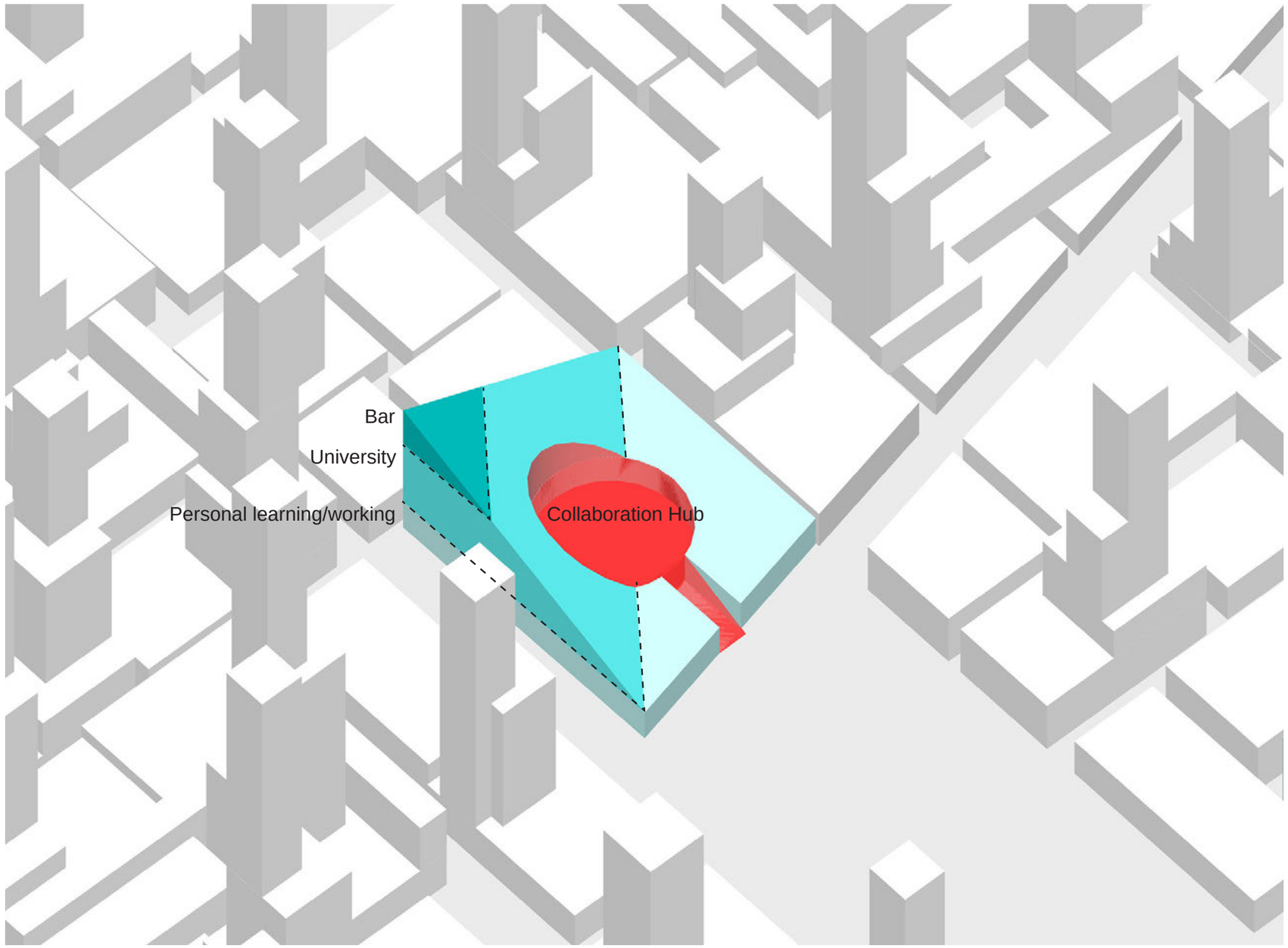



personal activities
collaborated activities
SITE BOUNDARY

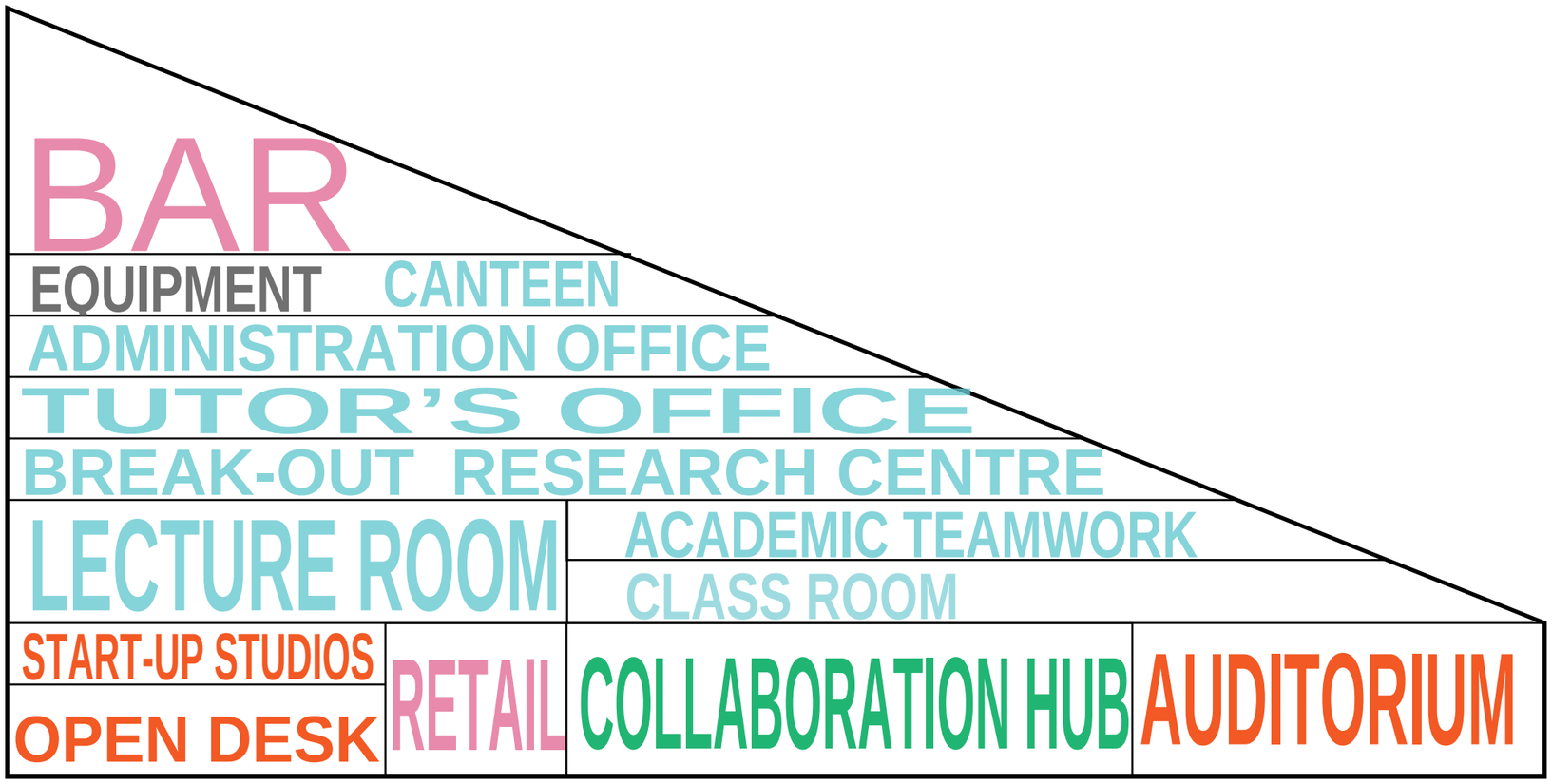





Sunlight
View


Bar
University
Personal learning/working
Collaboration Hub

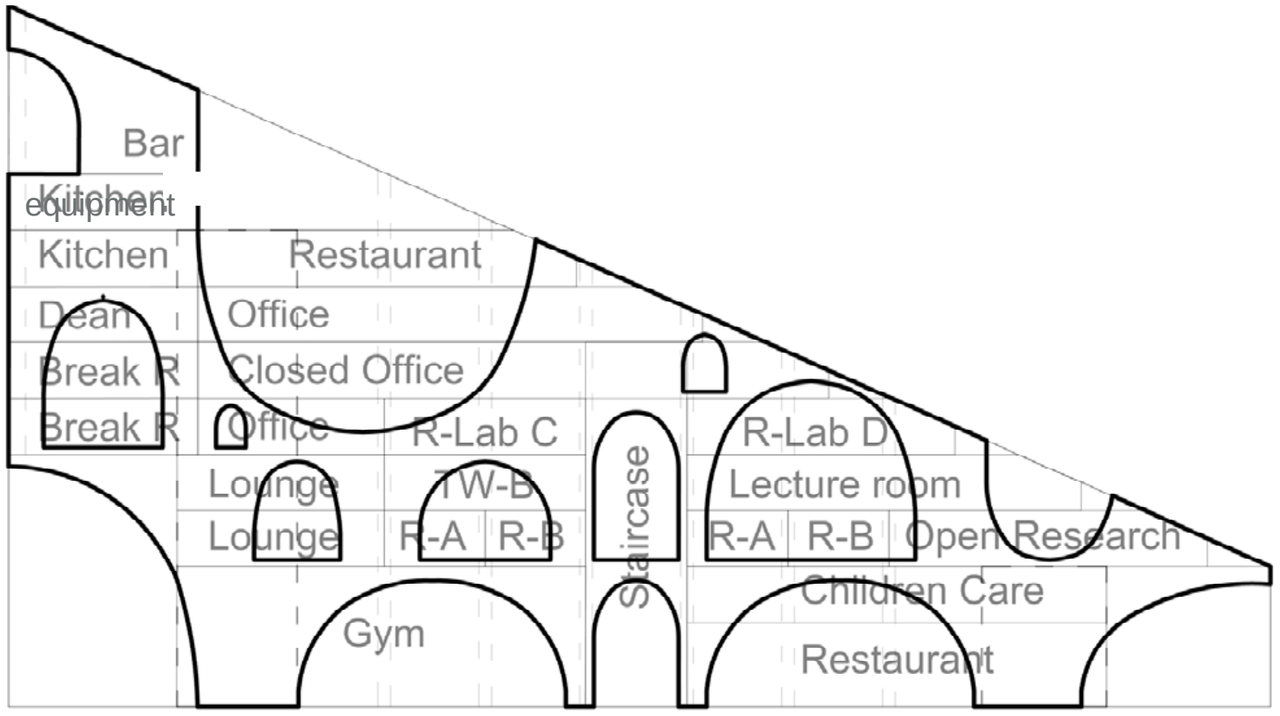
Function Layout



open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

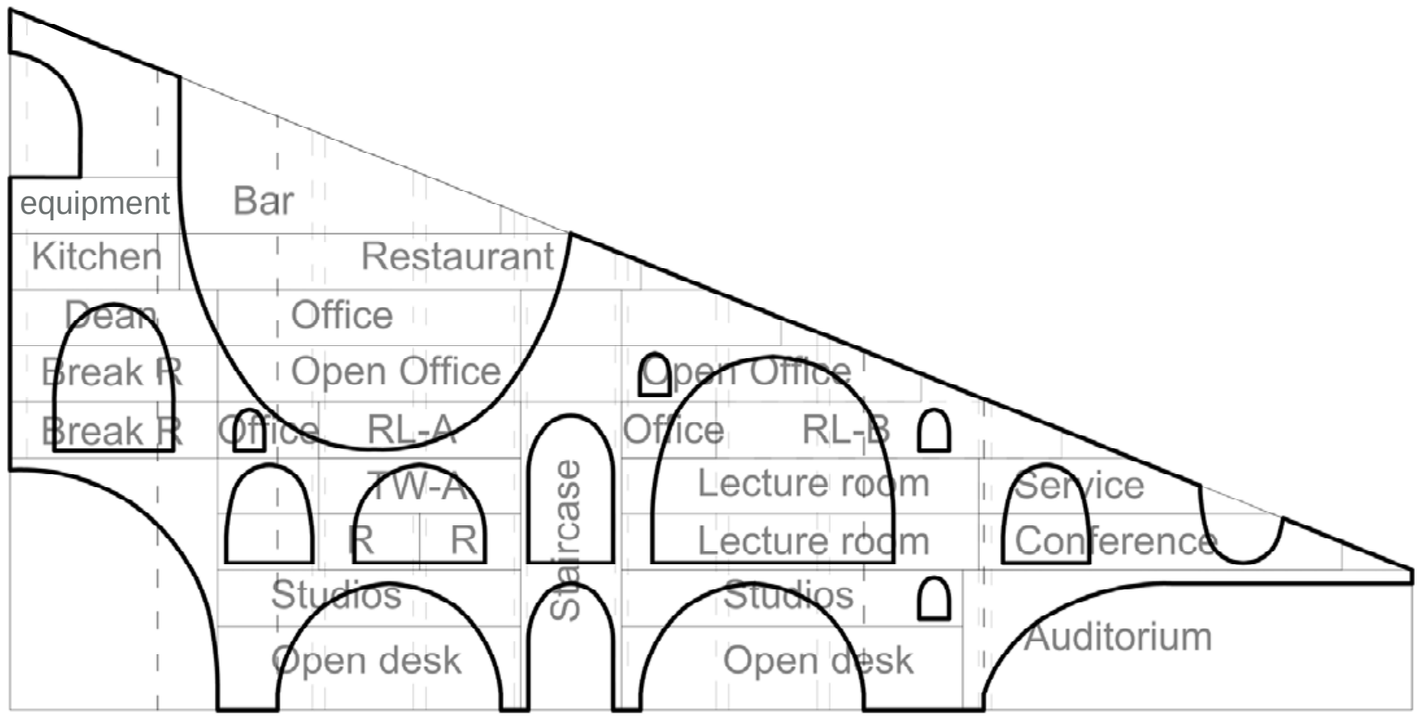
lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

- University
- (Re)start-up
- Collaboration hub
- Public functions



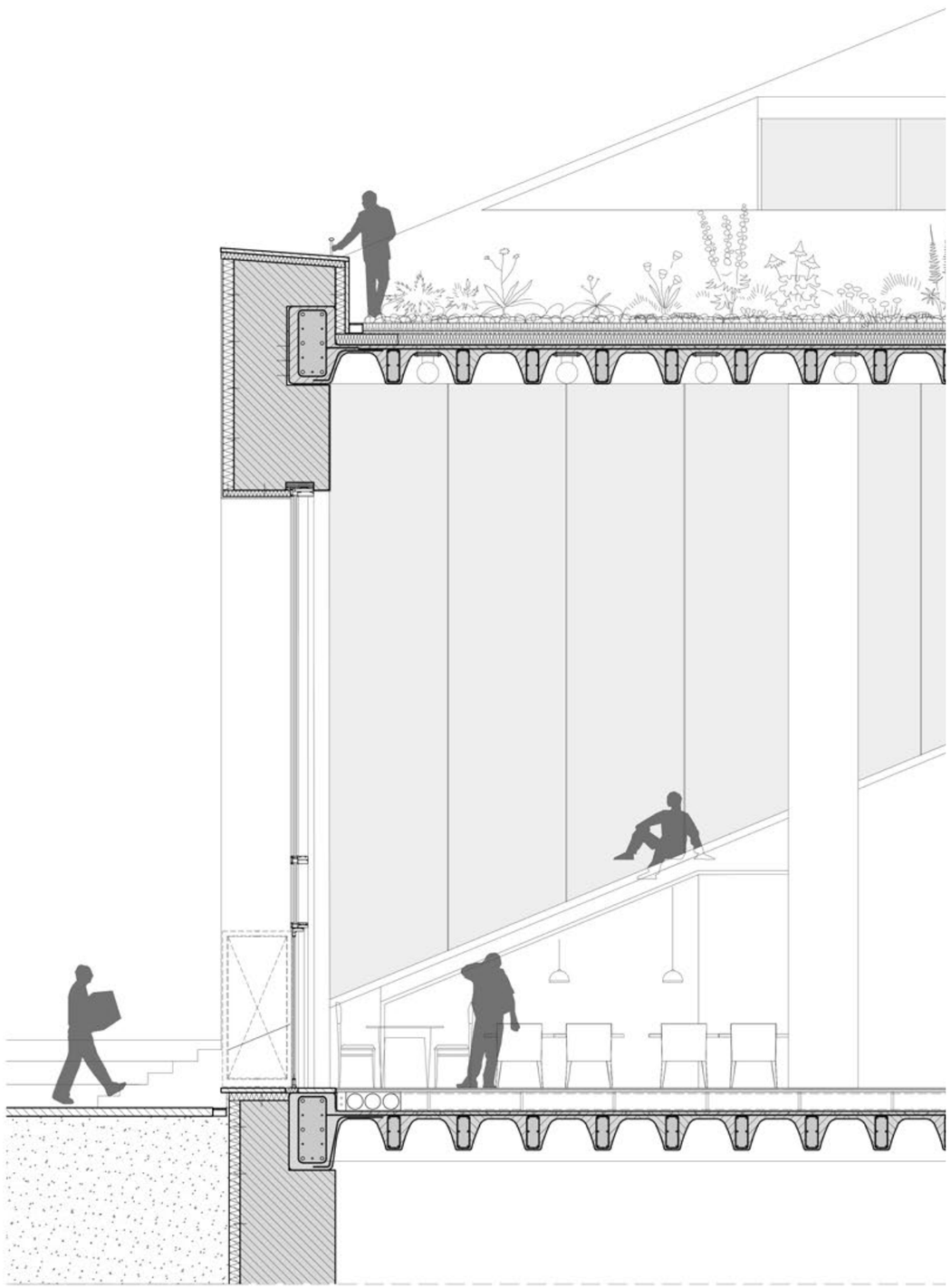
East Elevation

Big windows are made to space need more sunlight.



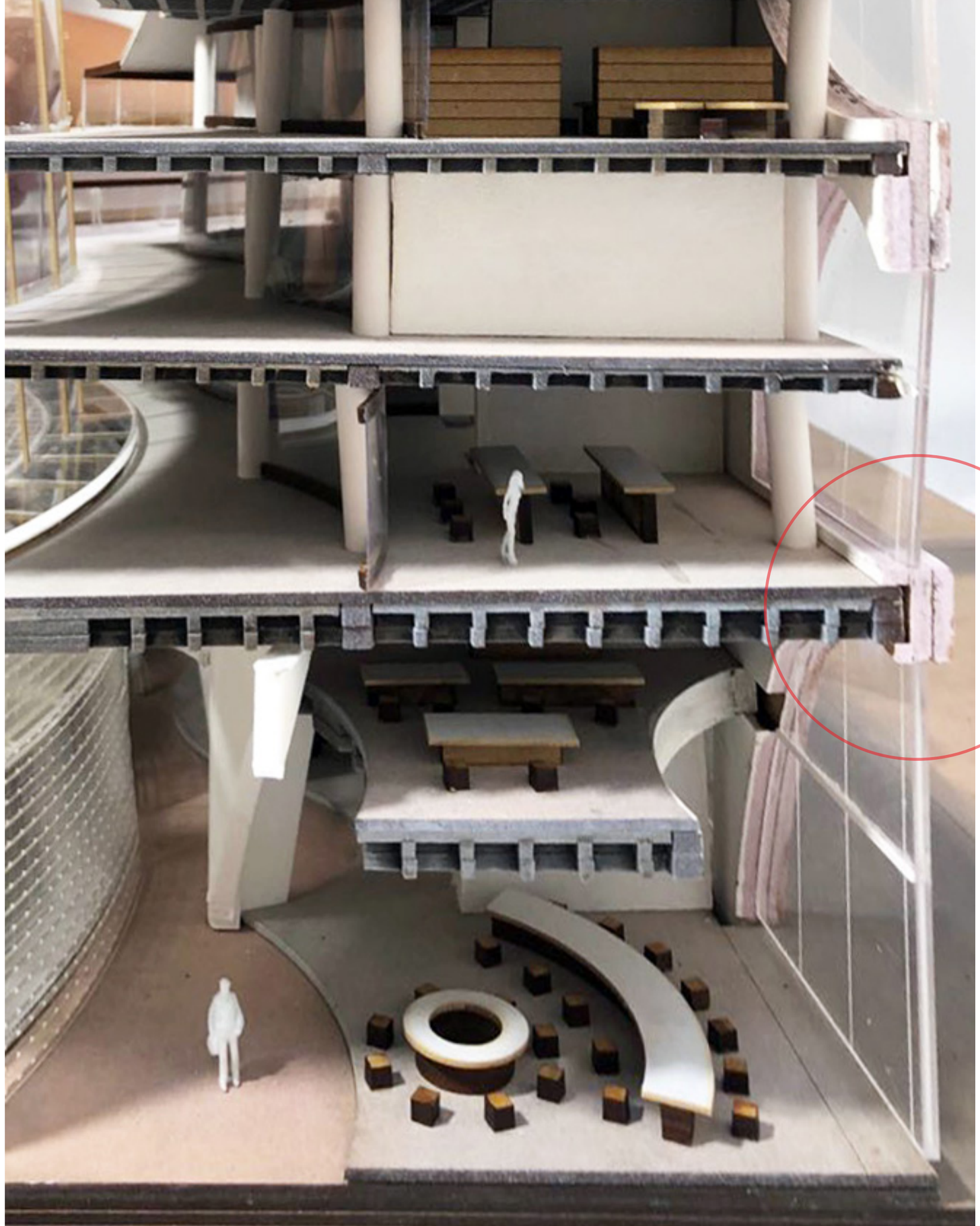
North Elevation

The concrete facade also functions as an important load bearing structure.

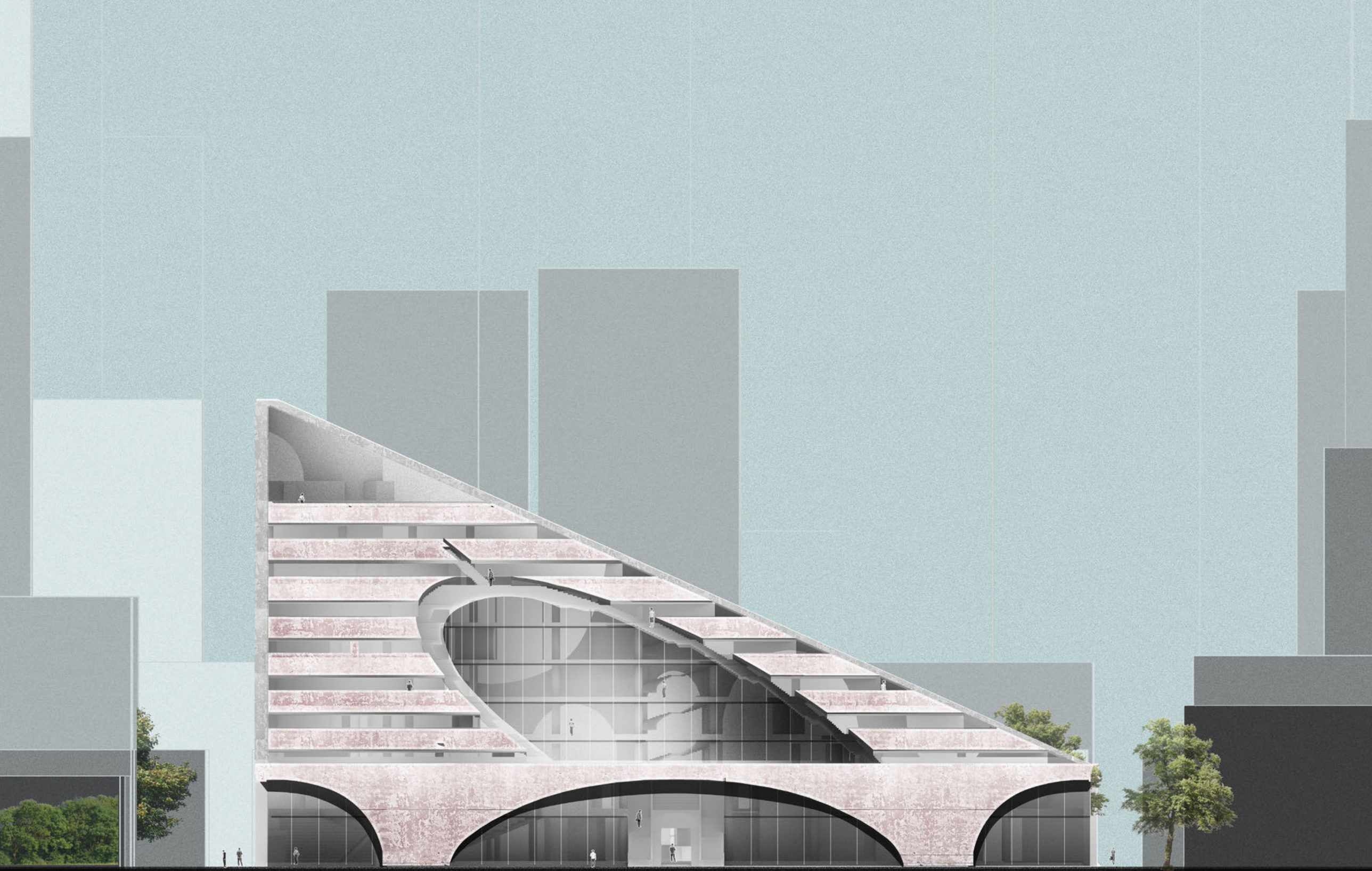


DETAIL FACADE

1:50



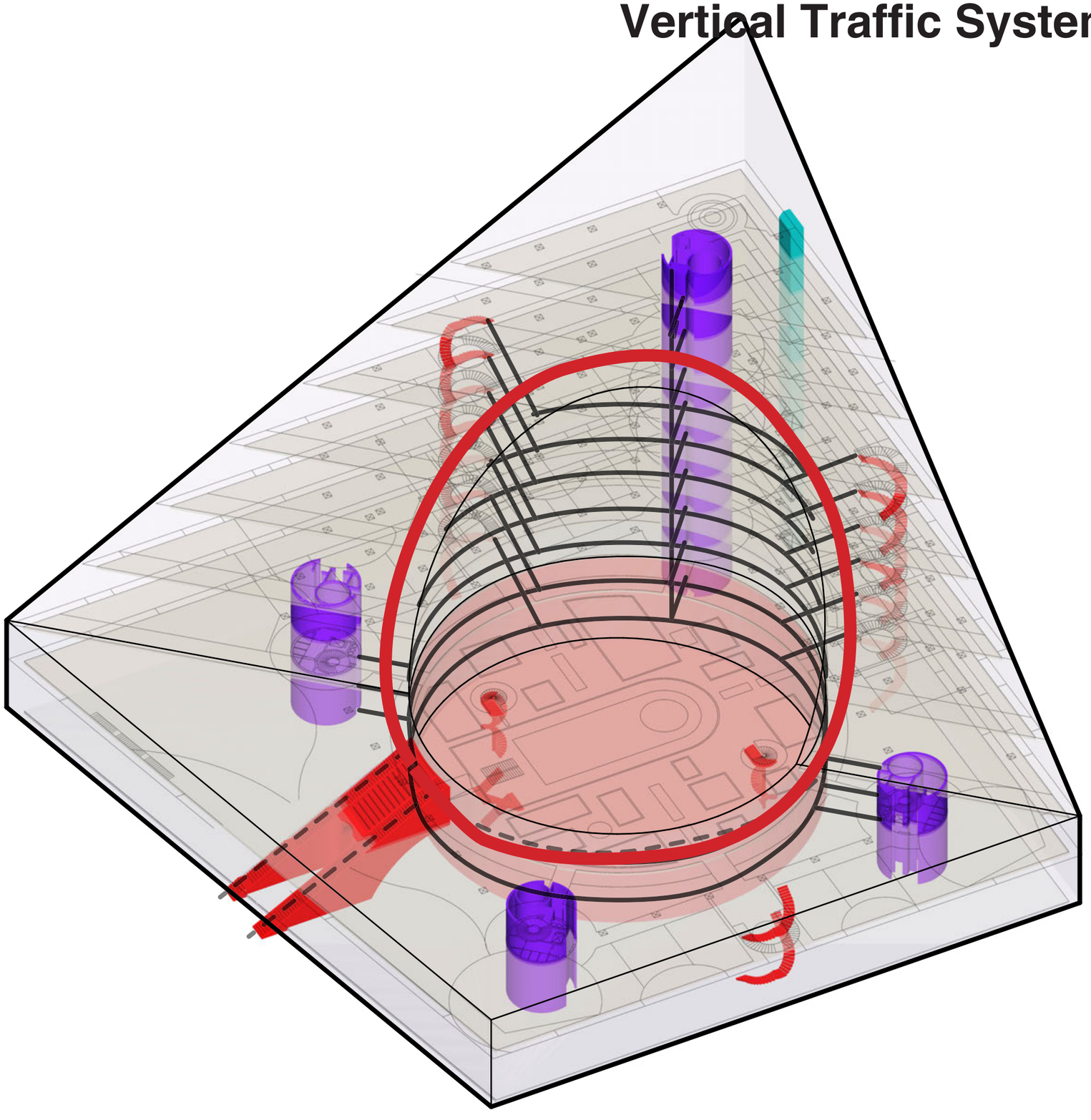
It's 1.4 thick, with 600mm groove to carry beams.



West Elevation
S=1:200

North Elevation
S=1:200

Vertical Traffic System



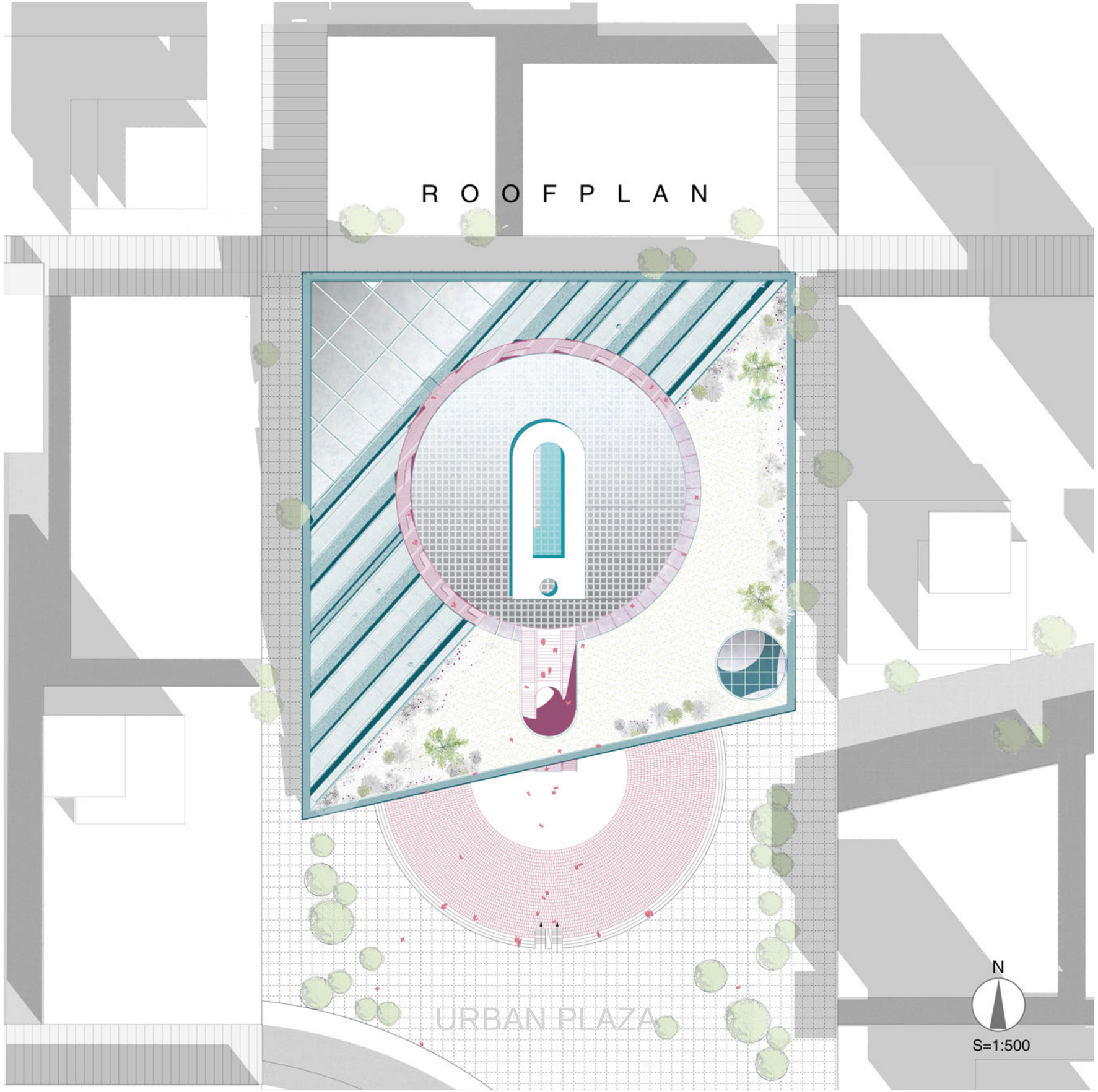
Elevator & Stairs & Toilets

Stairs for fire escape

fire escape stairs all connect to the outdoor roof stair.

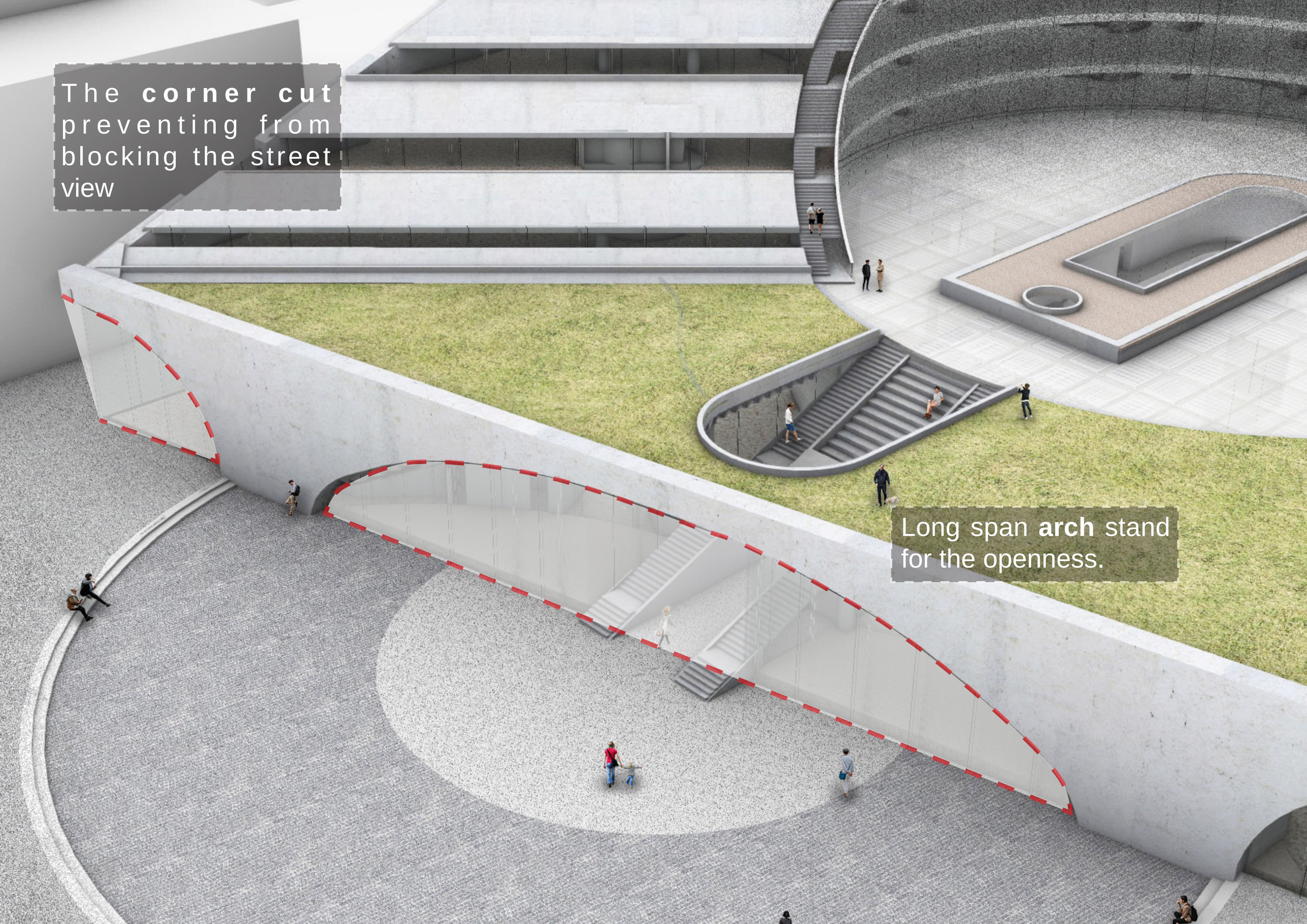
Goods Elevator

ROOFPLAN



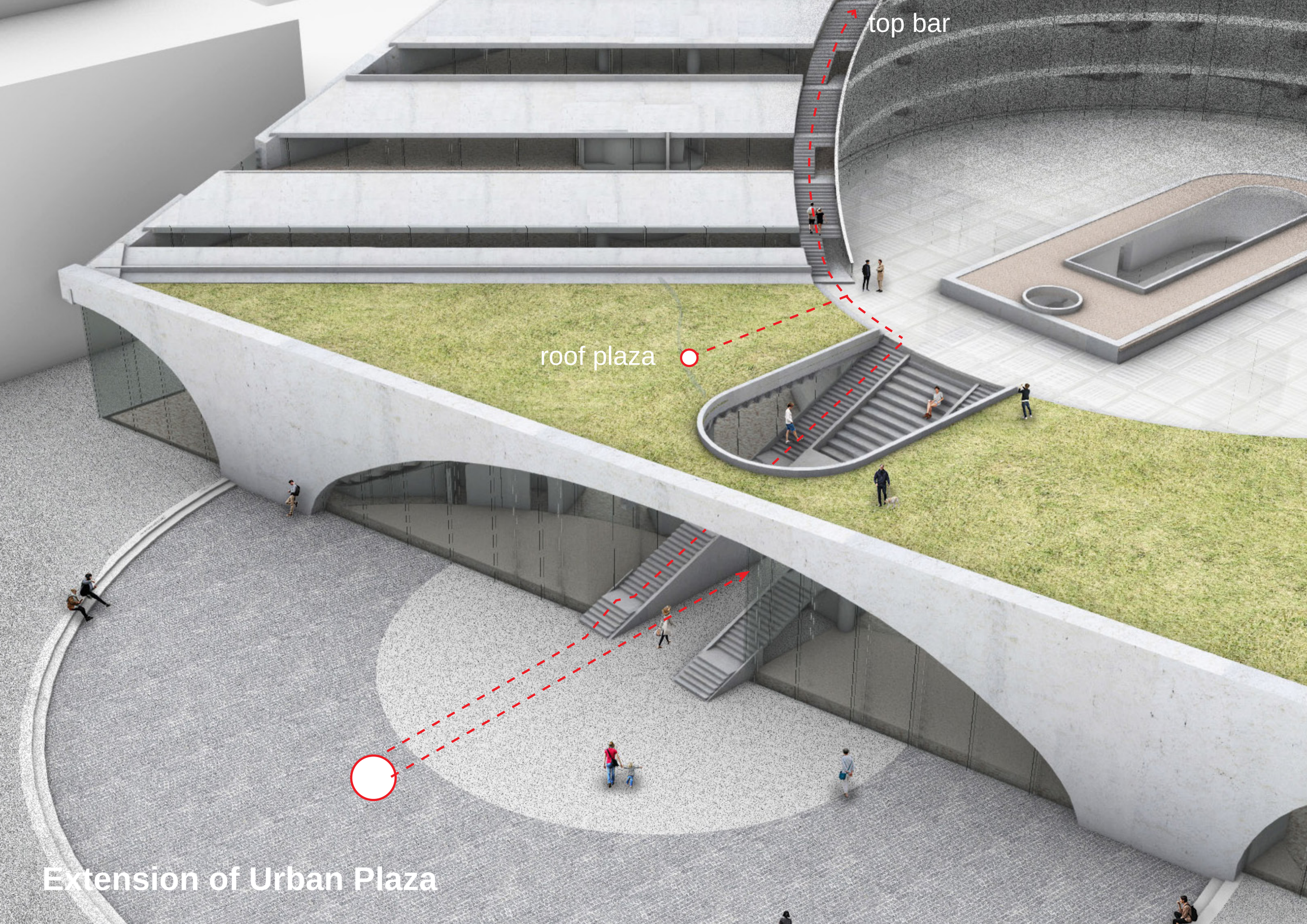
ROLE IN THE CITY

The building its self shows an open attitude to the whole public.


The **corner cut** preventing from blocking the street view
Long span **arch** stand for the openness.

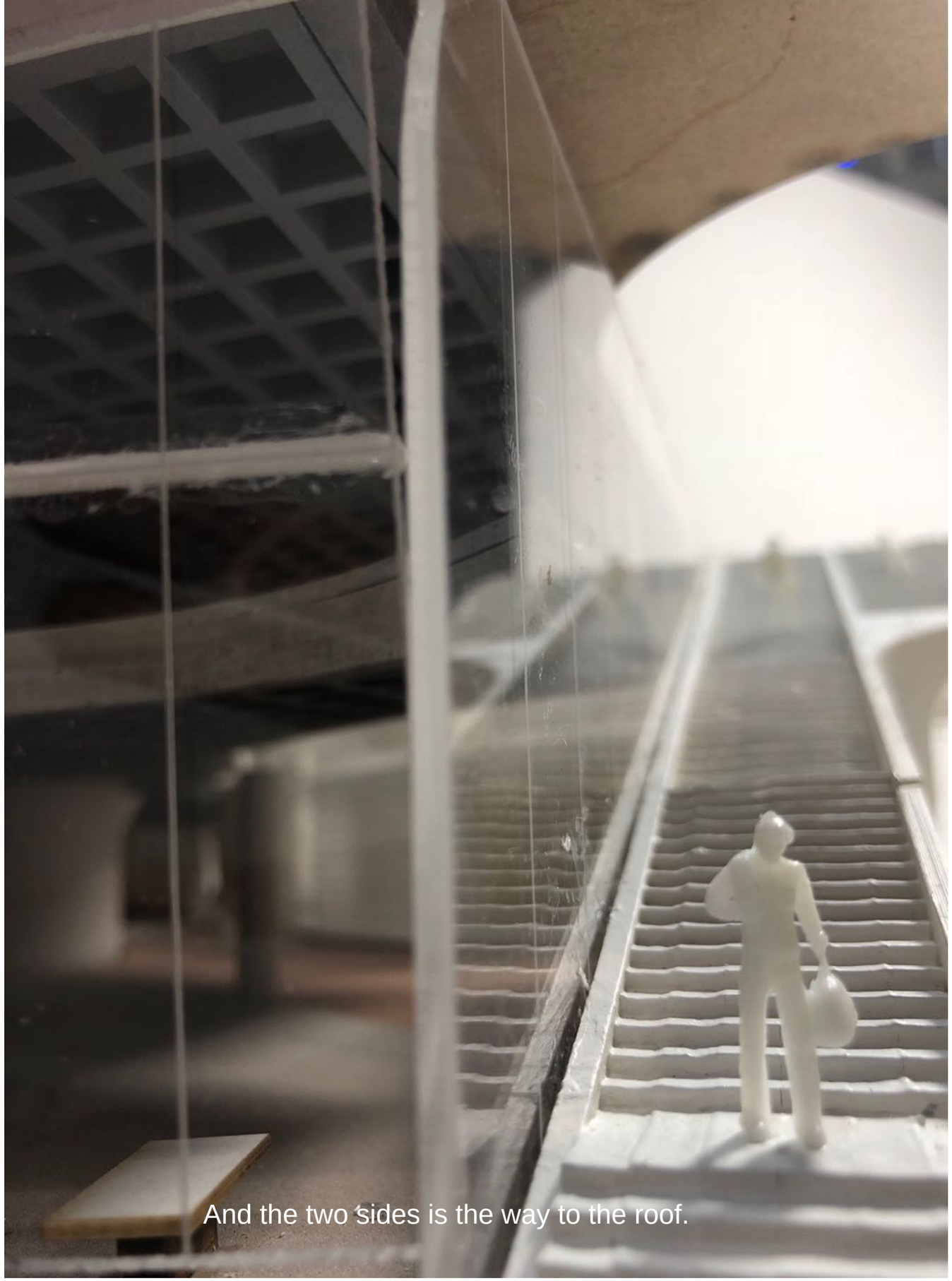
Roof Plaza for the urban view.

Circle sunken plaza to attract people entre the building.



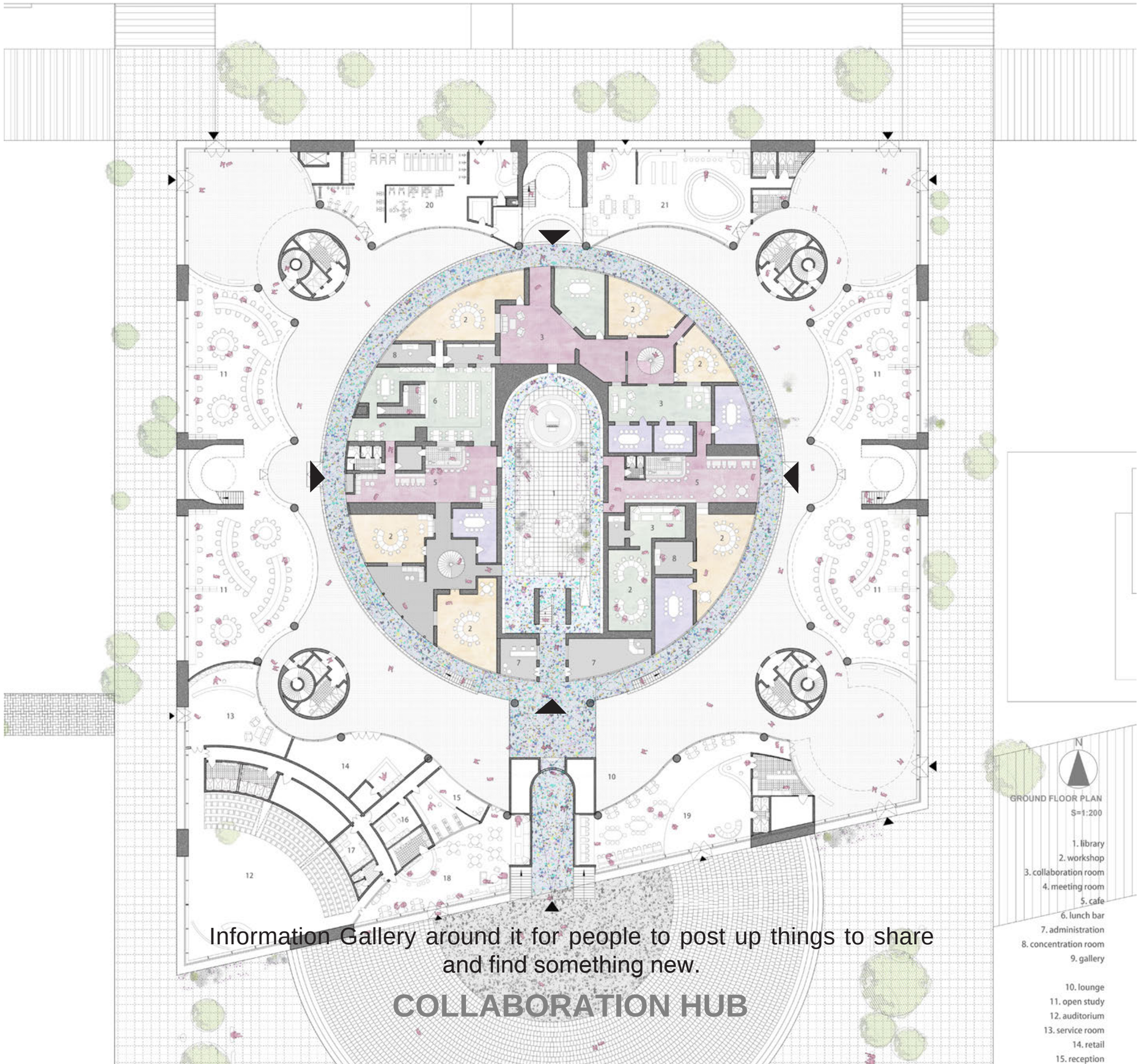
Extension of Urban Plaza

The middle part of the stairs is 300mm high, can be sit on.


And the two sides is the way to the roof.

Collaboration Hub

Small & colourful space
Involving people to attend different activities.

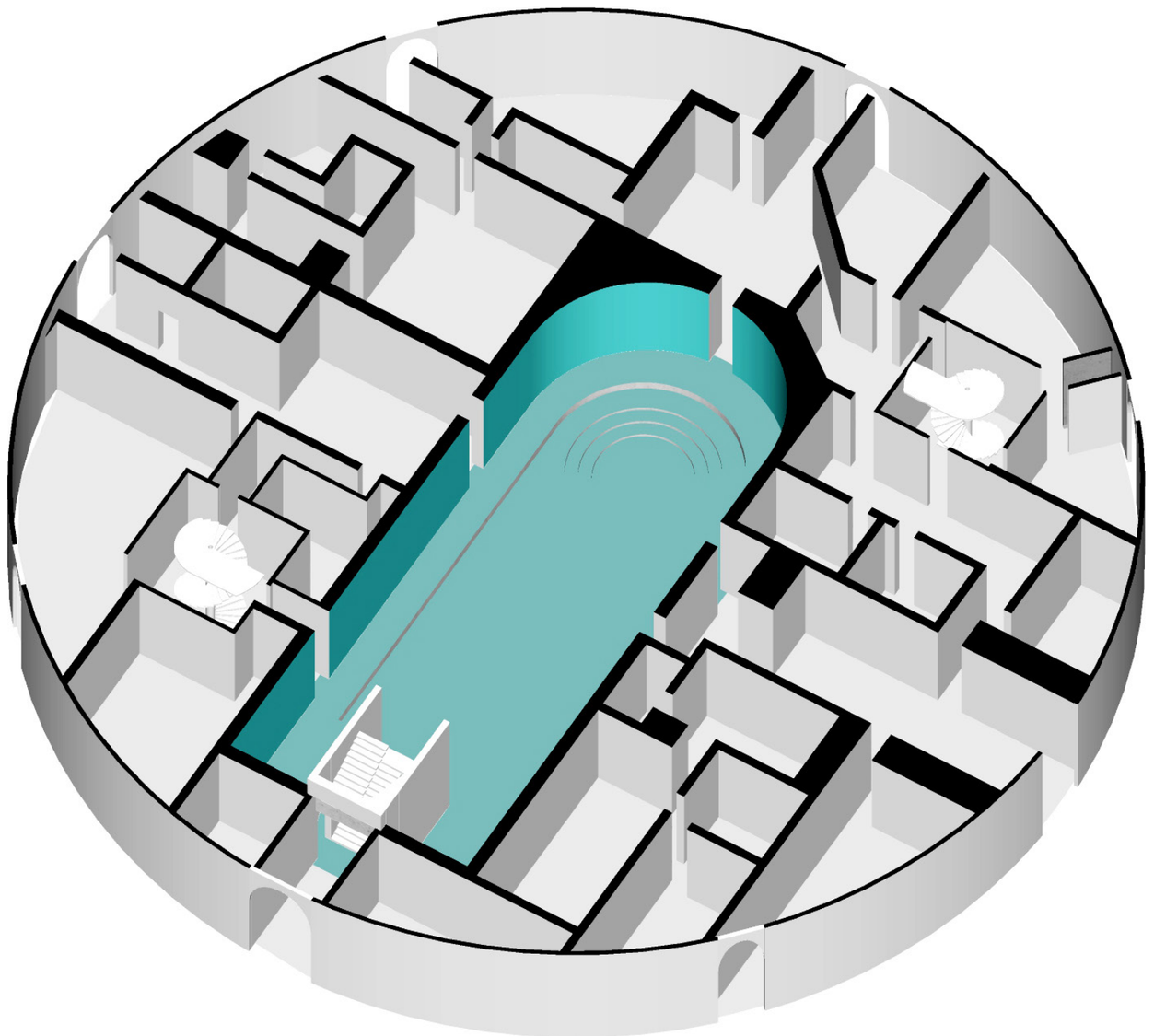


Information Gallery around it for people to post up things to share and find something new.

COLLABORATION HUB

The blue terrazo Flooring lead people entre directly into the core and the gallery from main entrance.

The gallery is enclosed by glass block walls.

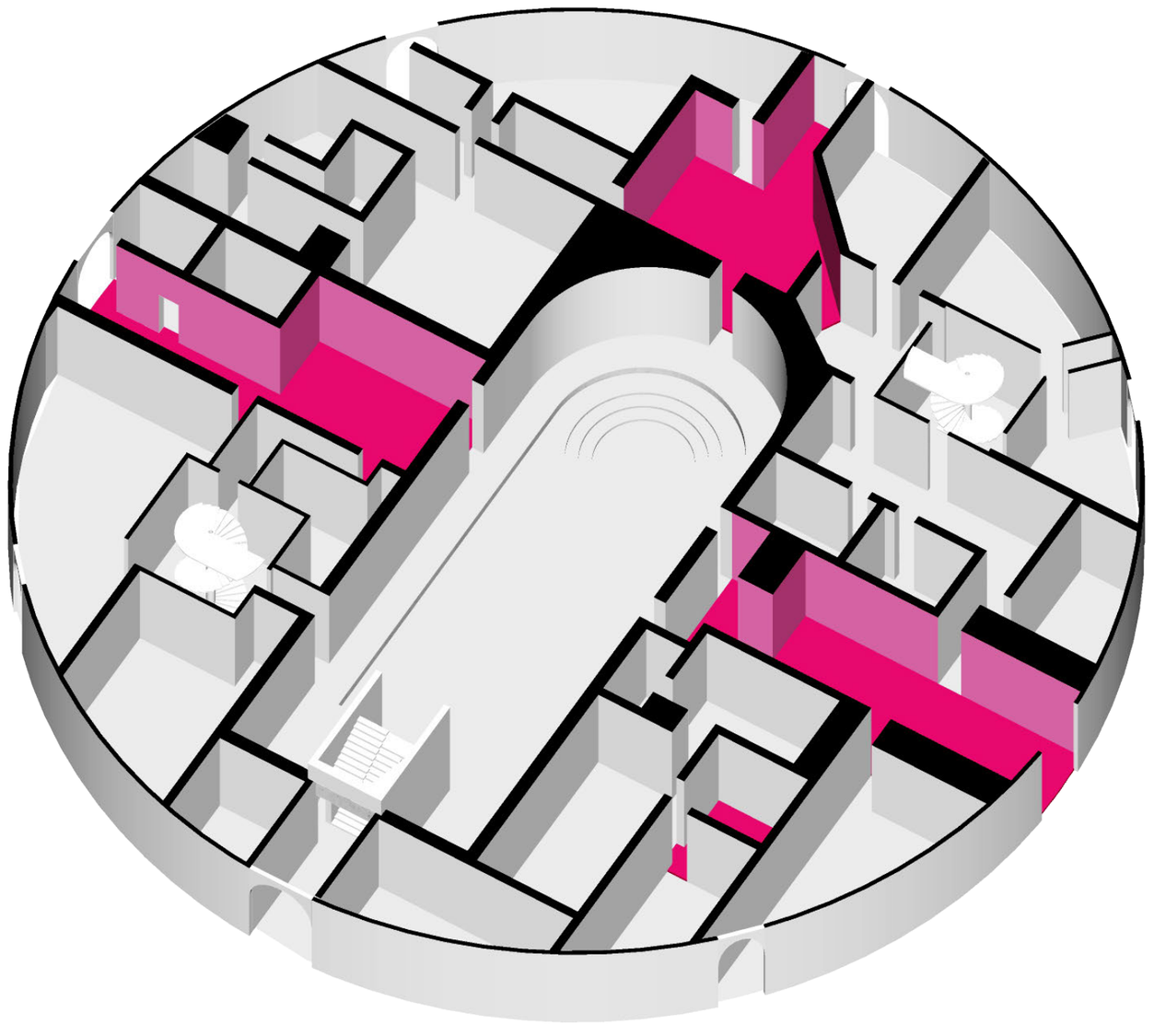


Library

Central Core

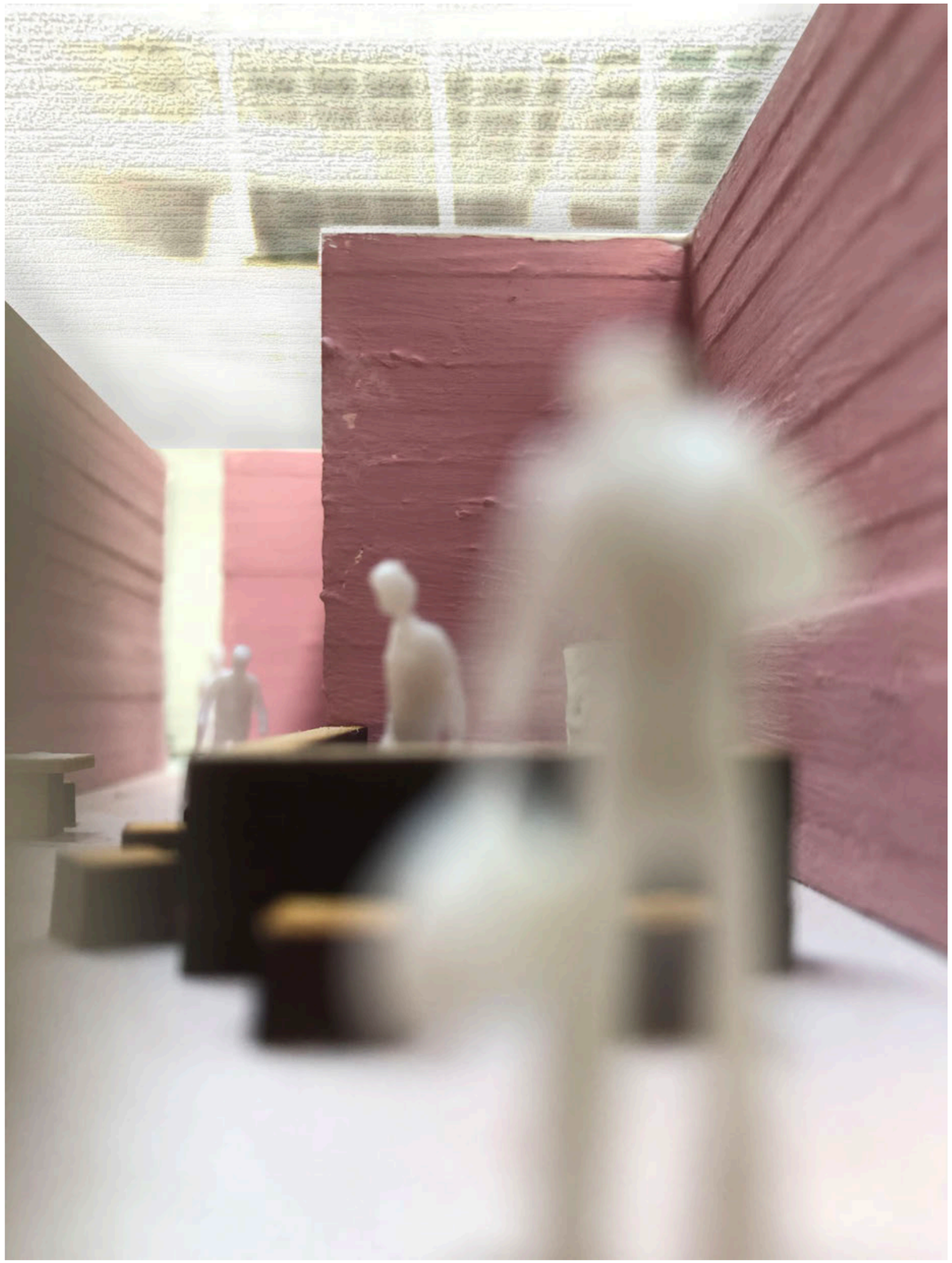
The library is painted all white and with white tiles to help you calm down.

You can pick a book you want from the book walls, and site casually at the atrium to read it.



Social Bar

Meet some new people while having your coffee.
Main Connection on two axes



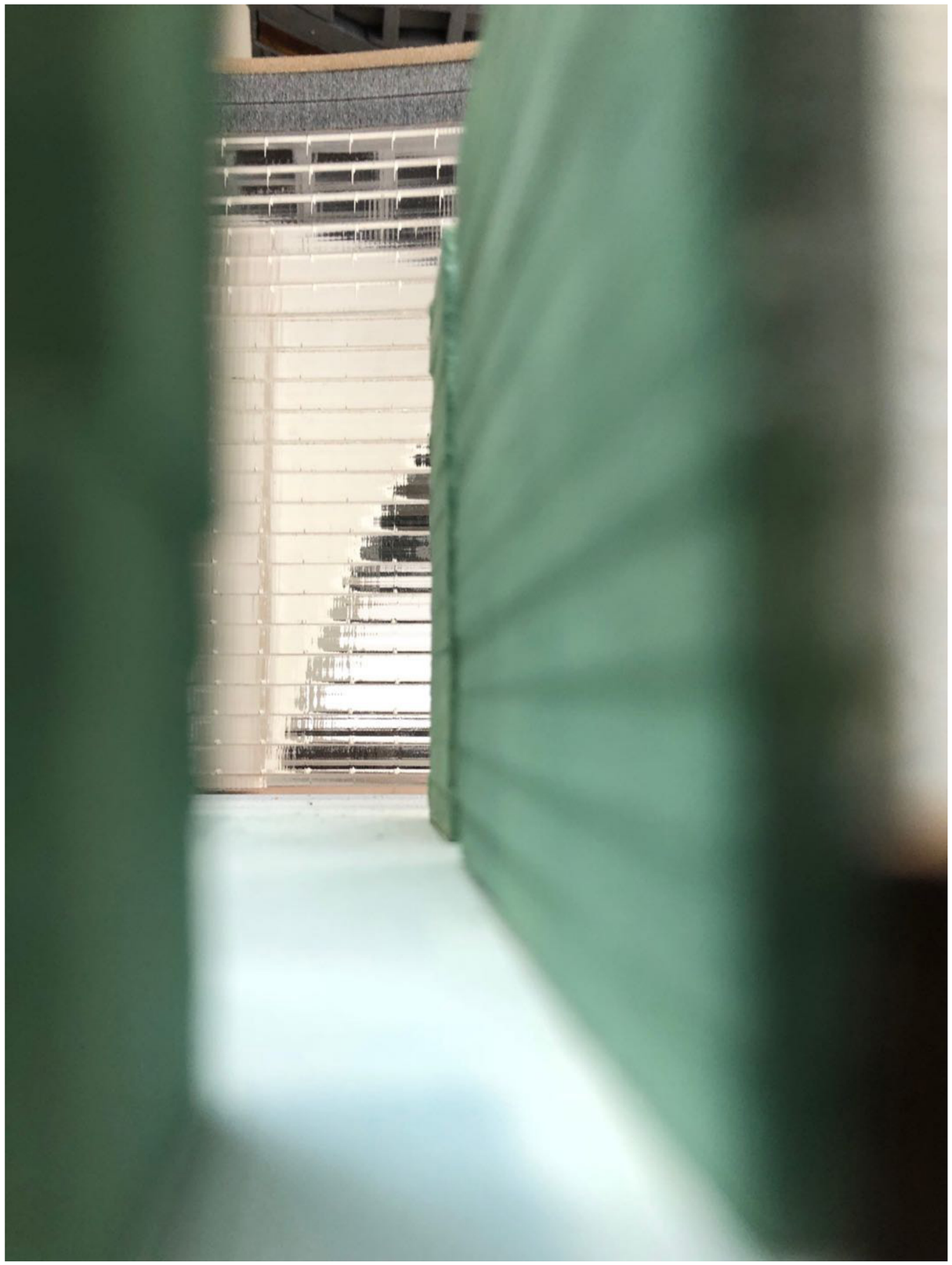
The social bars are in pink walls to create an impassioned atmosphere. Pink will make people more willingly to talk to others.

Collaborating Room

Along the way from social bar to the library, you can stop by the collaborating room next to it.

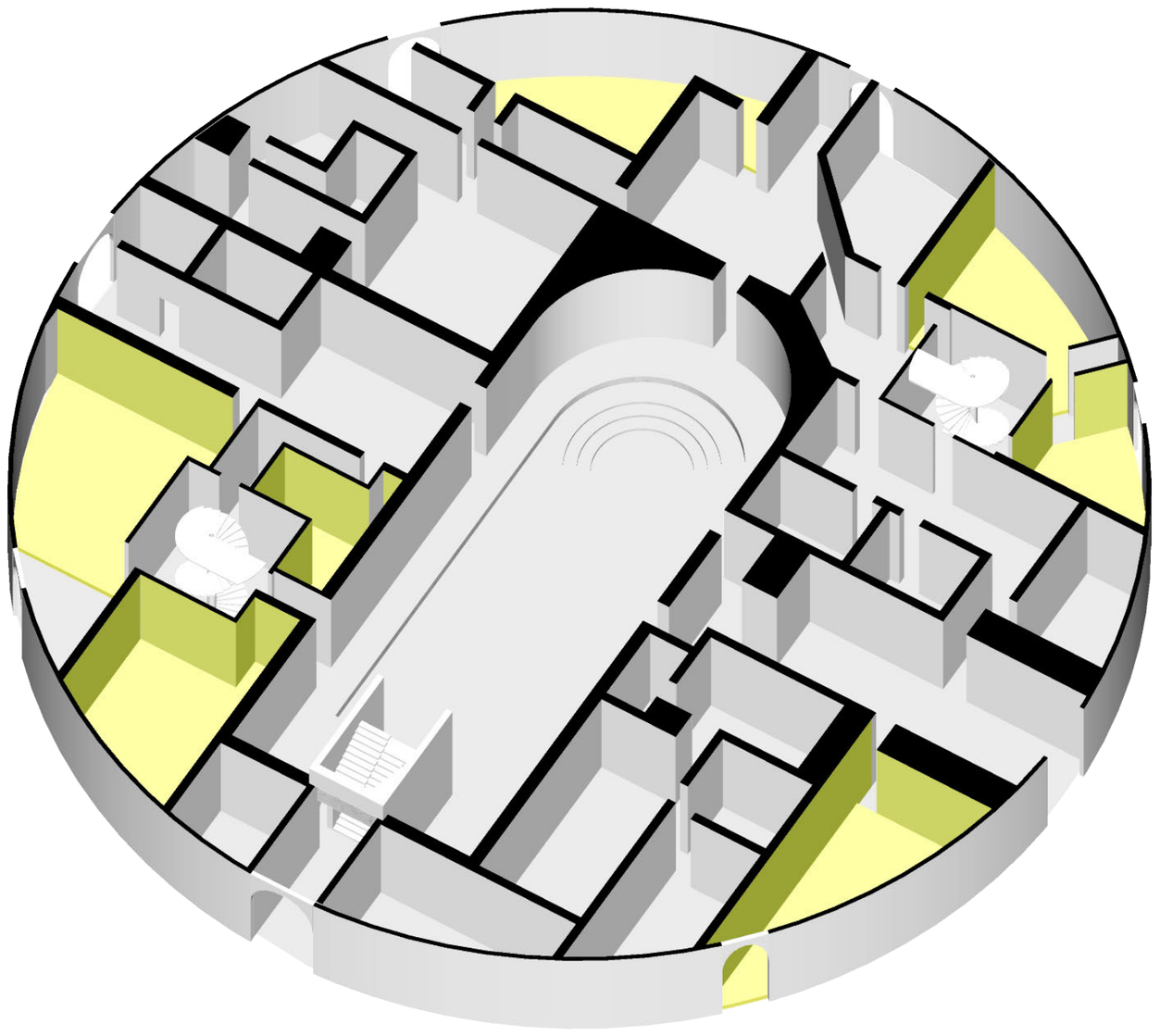
The rooms are in green walls, make people calm down and feel relax. You can start a business talk here as well as talk with friends.

There are two or more entrances in the room. you can also easily pass through it.



The rooms are in green walls, make people calm down and feel relax. You can start a business talk here as well as talk with friends.

There are two or more entrances in the room. you can also easily pass through it.



Workshop

The space for skill exchange or selling.
Encourage interested people to attend
(1 or two entrance)

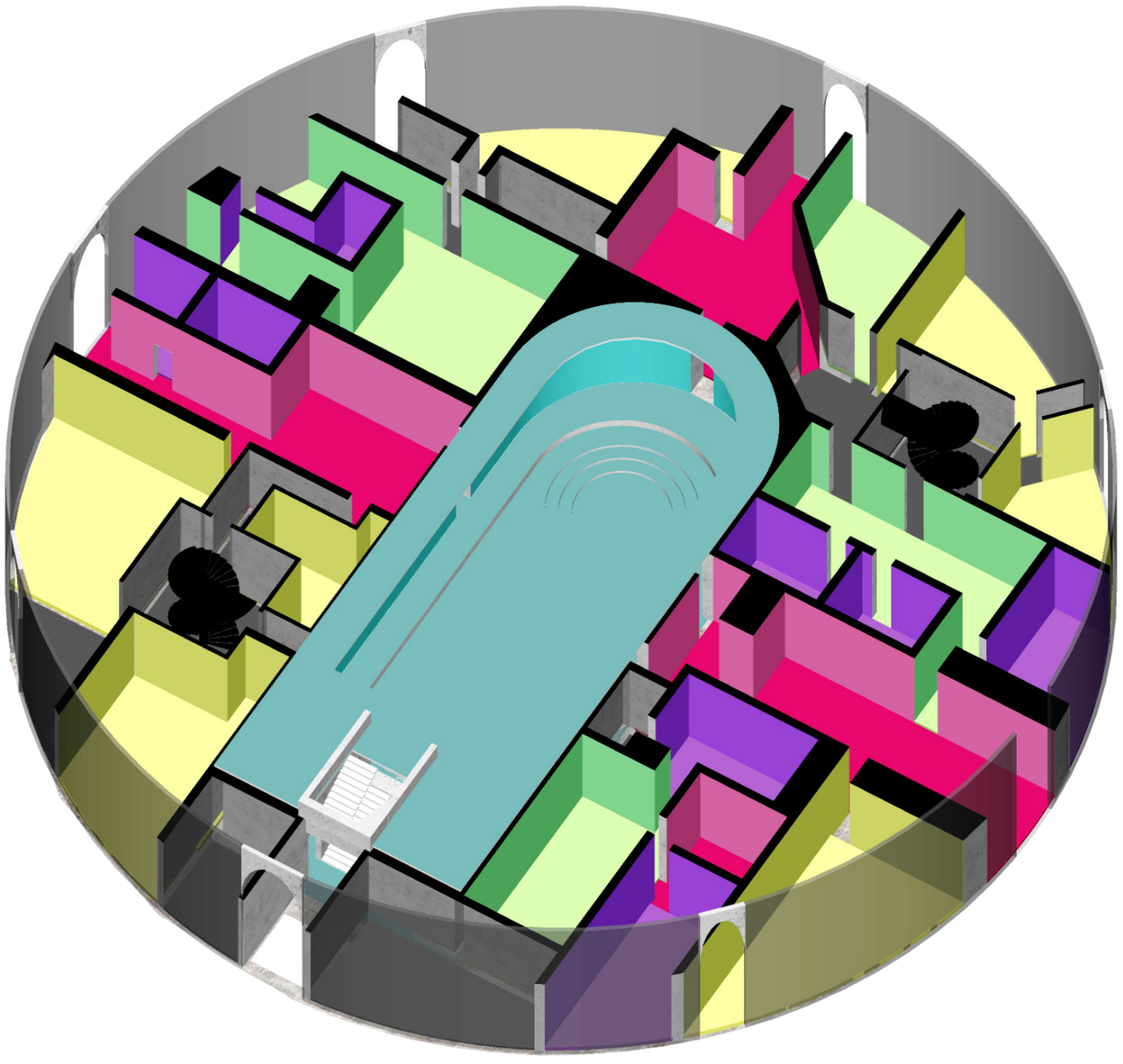
Workshops are coloured in yellow. they are located around the circle. People from outside can also see through what they people are doing inside. They can join them at any time if they found themselves interest in it.

There are sharing meeting rooms in the collaboration hub arranged at the end of each route. You can book it online or at the counter if you need. To keep privacy, there are only one entrance for each. Purple shows their higher level of pravicy.

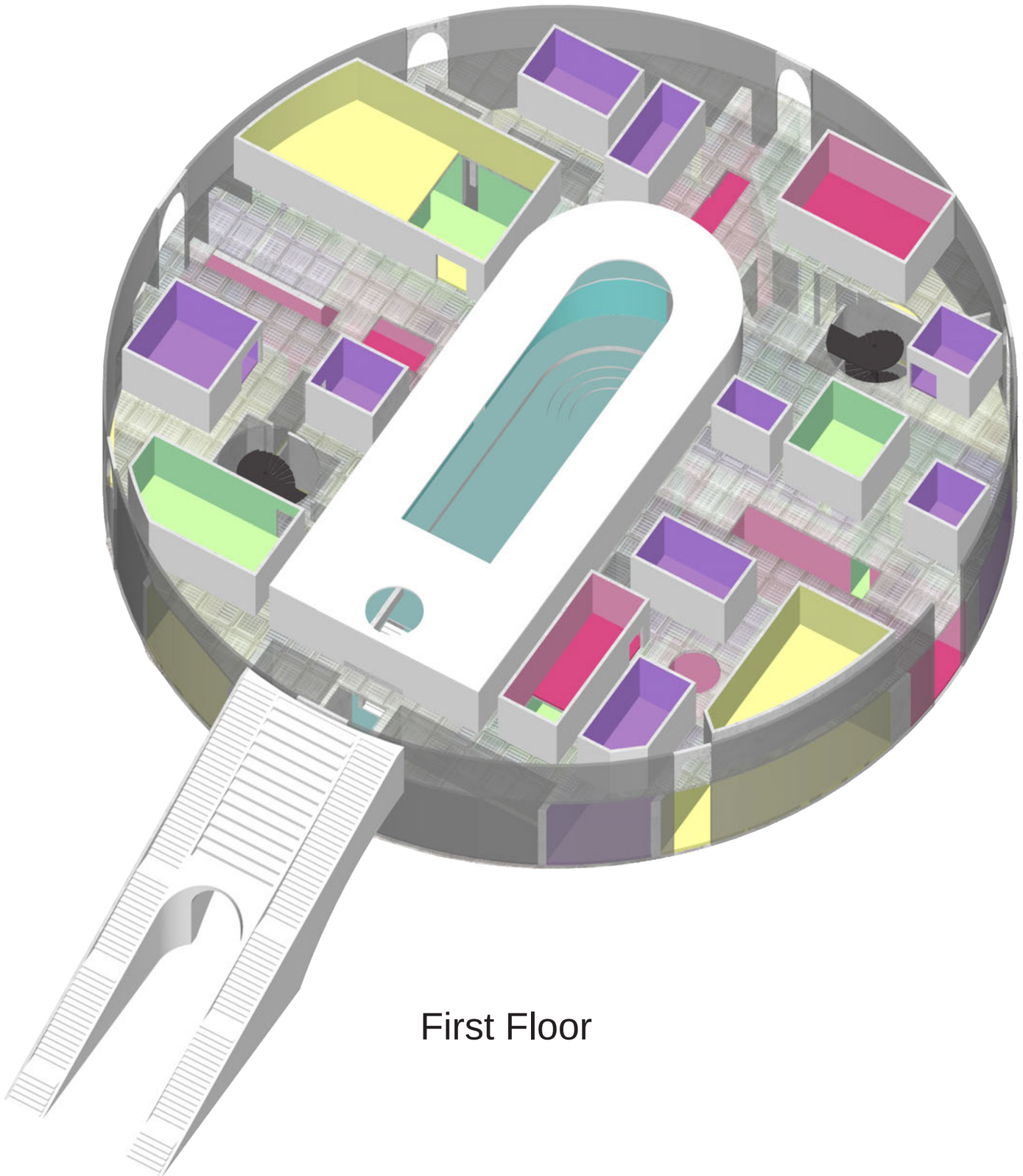
Meeting Room

Keep pravicy while being used
(One entrance)

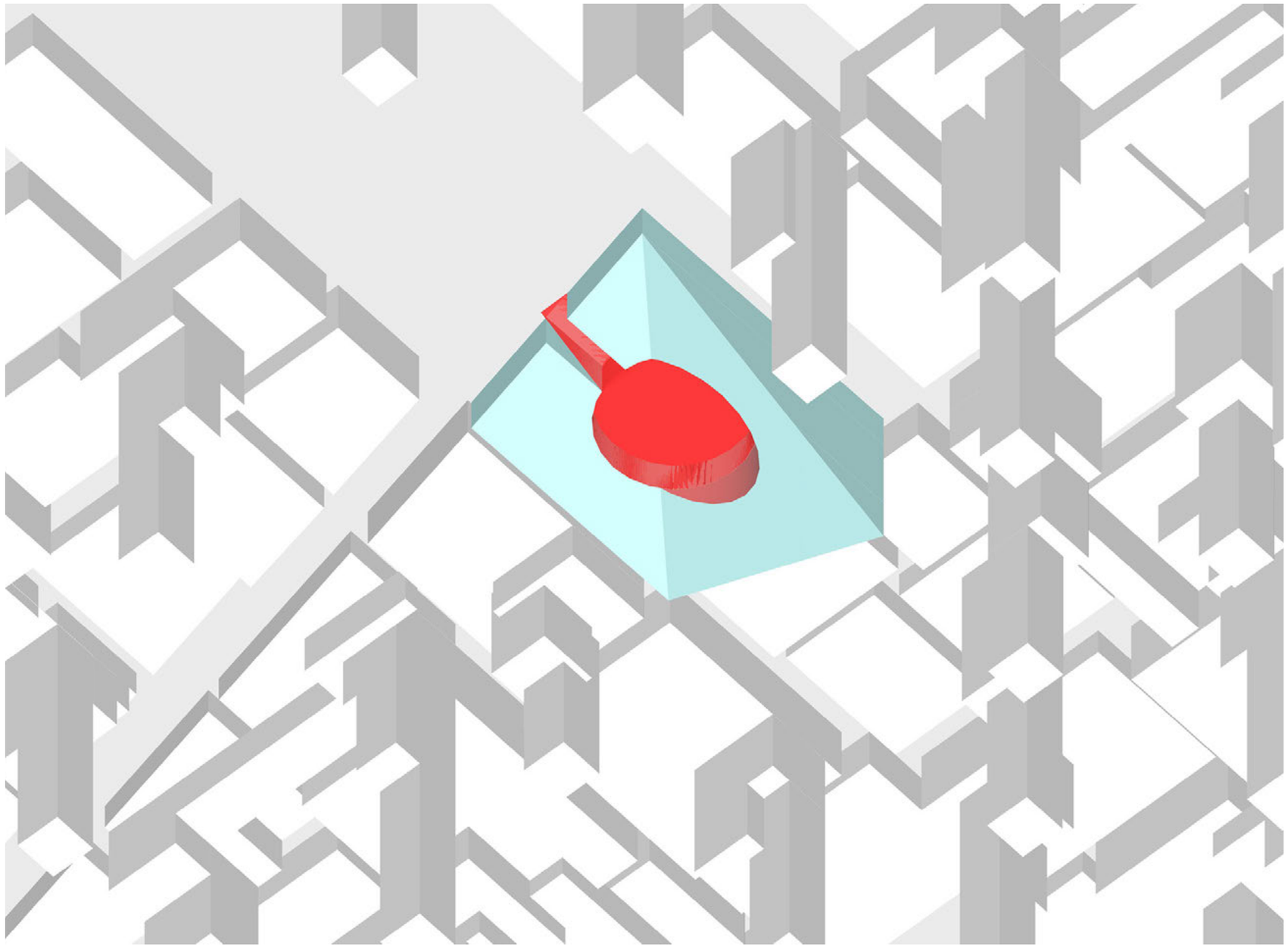
Although the rooms are organized as a maze. you will never get lost because of the colors.

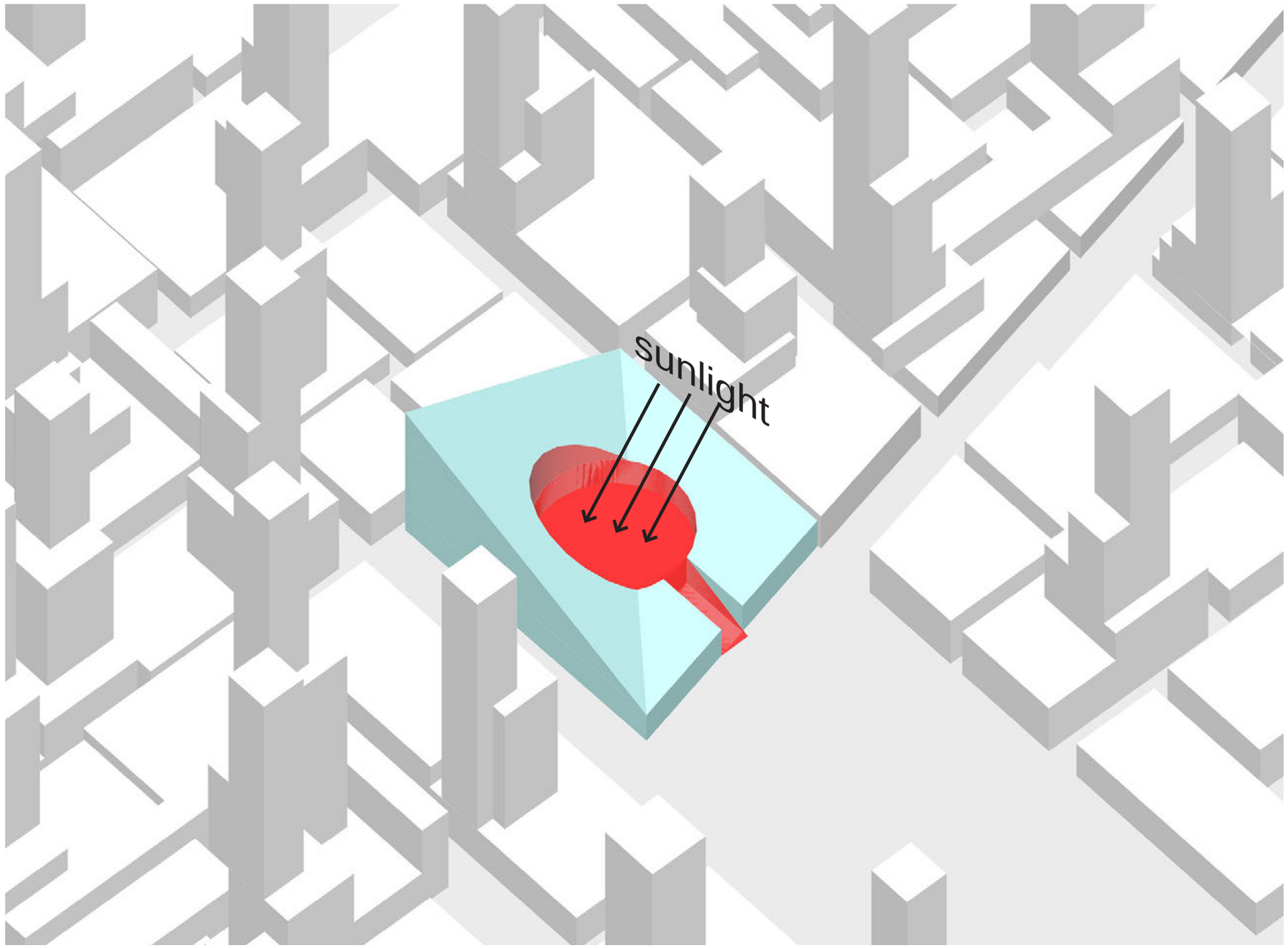


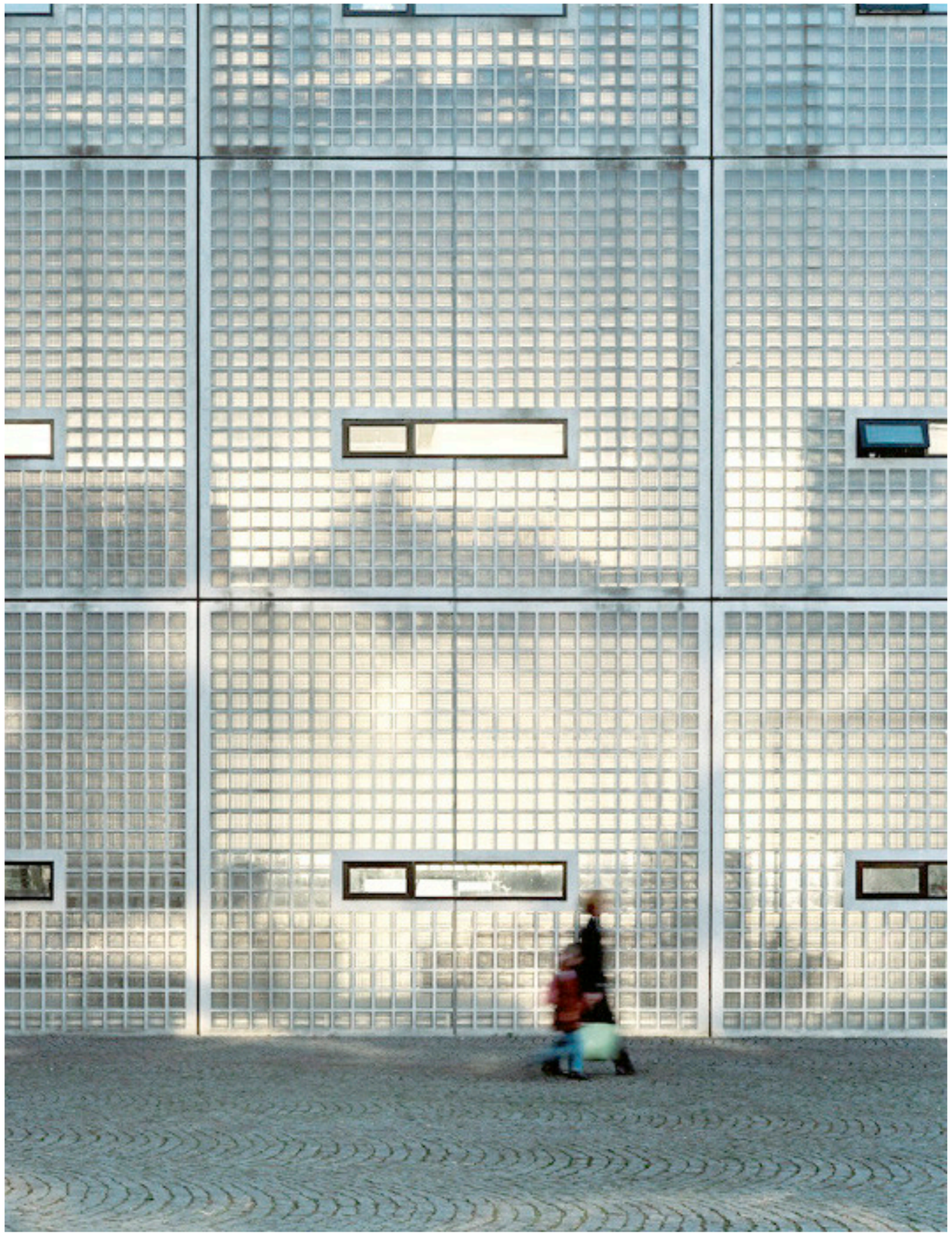
Ground Floor



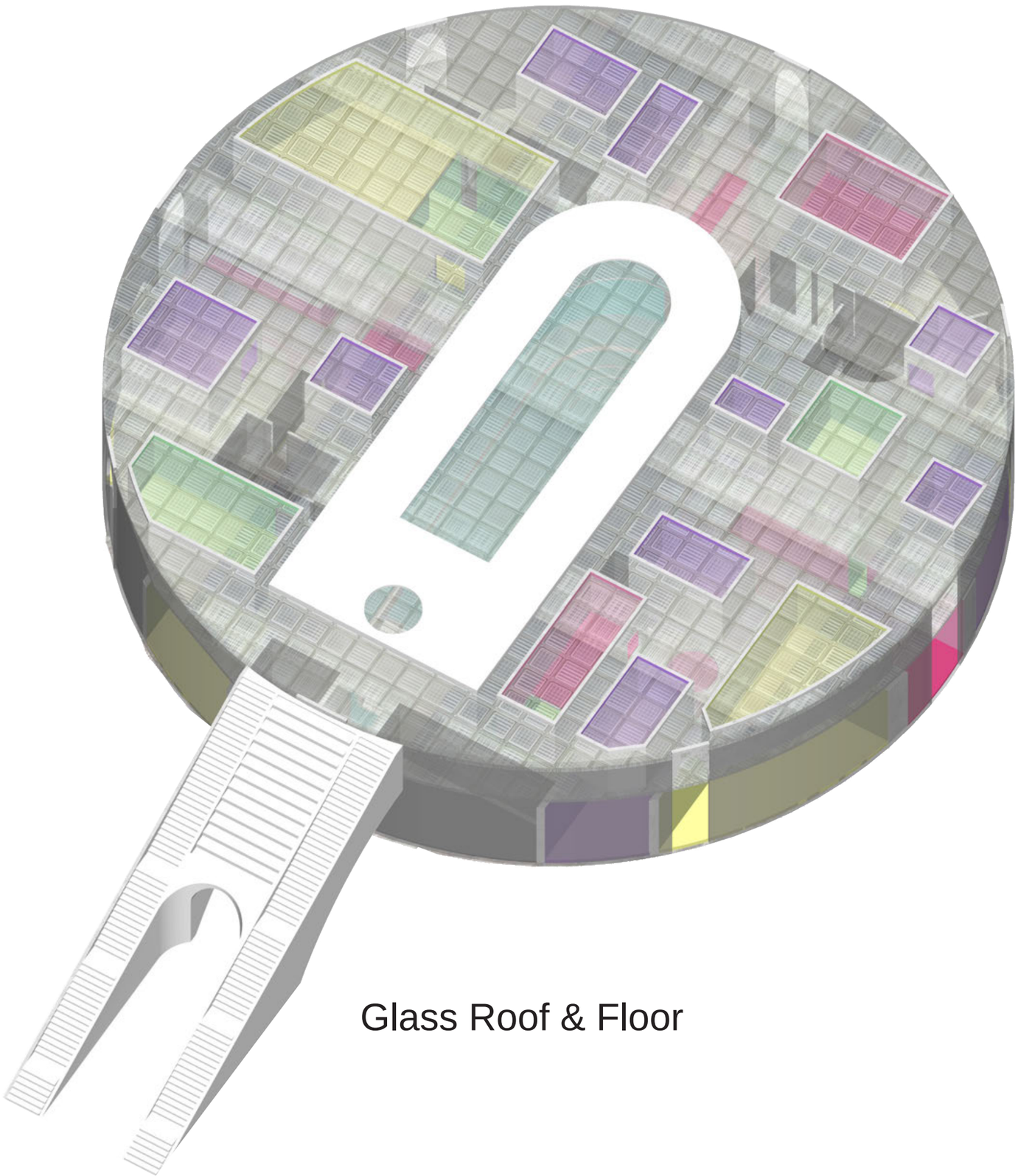
First Floor




sunlight

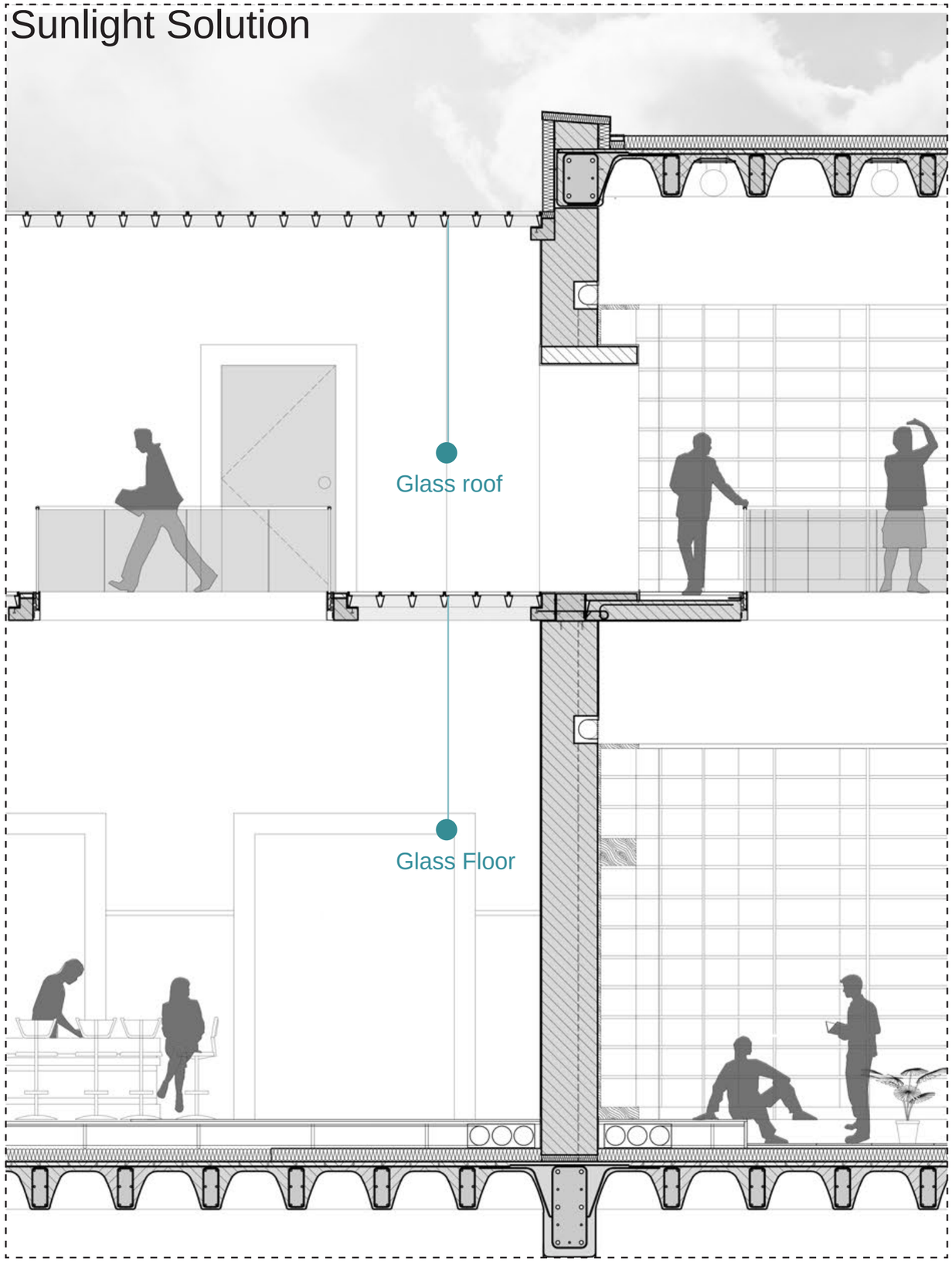


Reference: Maastricht Academy of Art & Architecture

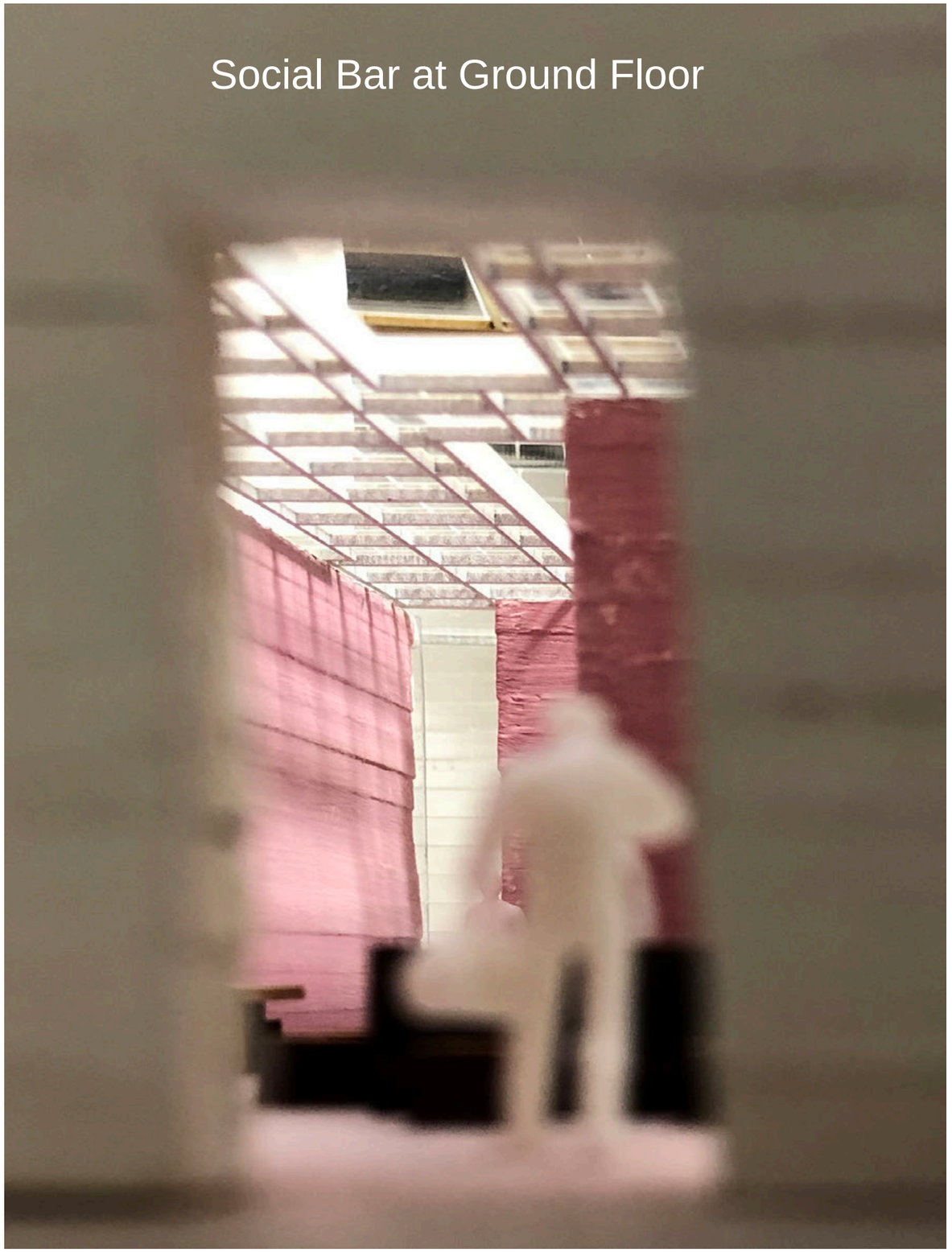


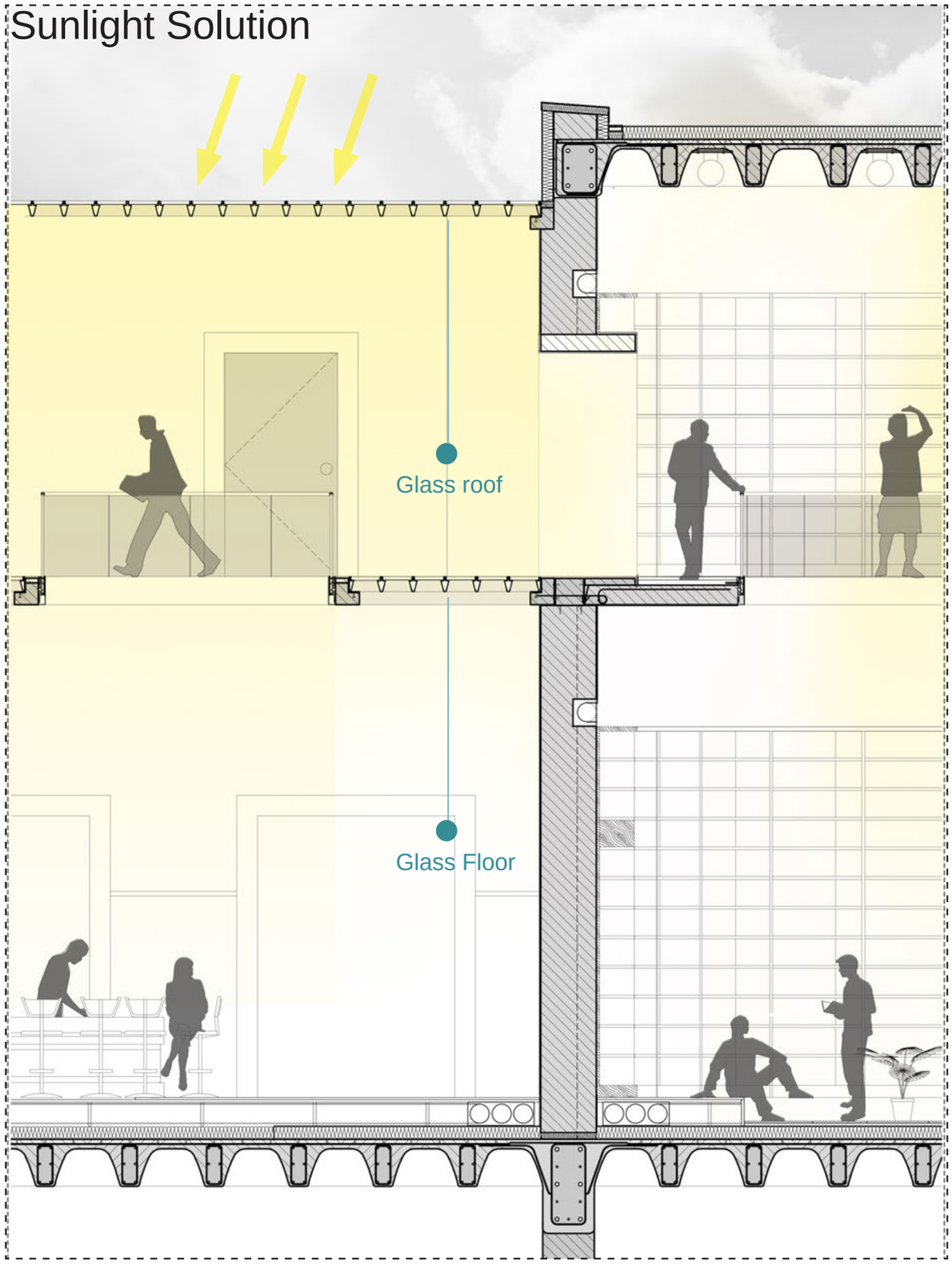
Glass Roof & Floor

Sunlight Solution



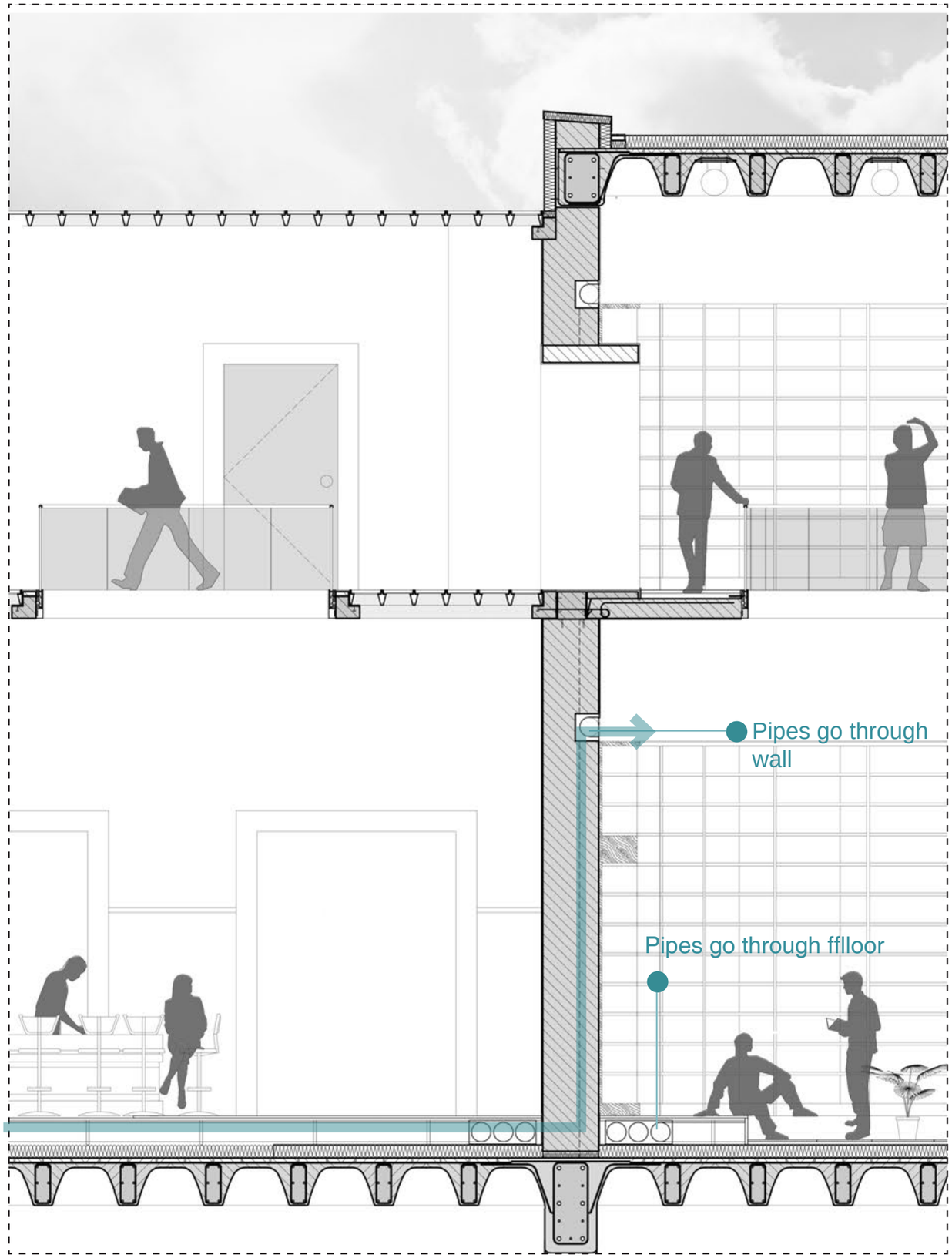
Sunlight Solution

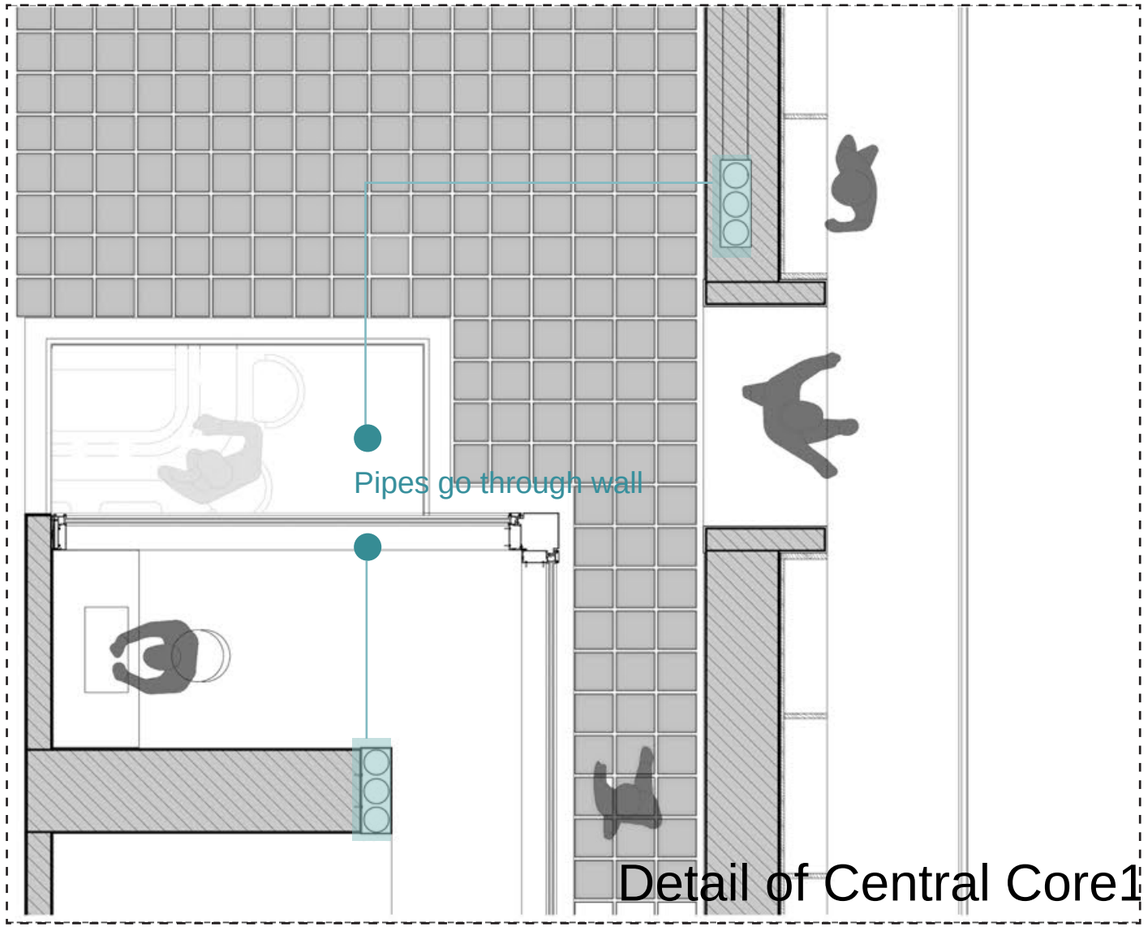



Sunlight Solution
Glass roof
Glass Floor

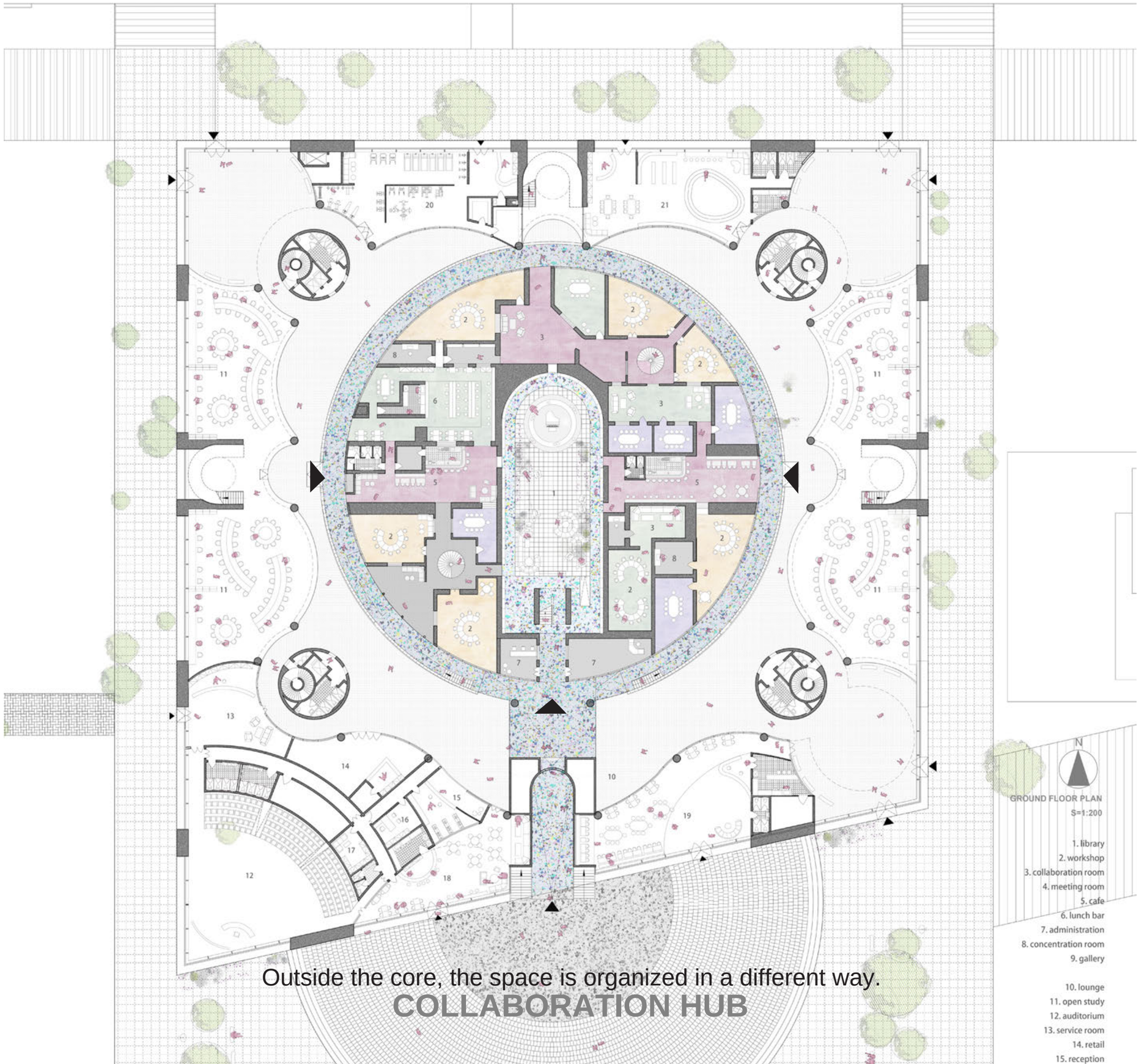
Collaboration room at Ground Floor

Pipe Solution





Detail of Central Core1

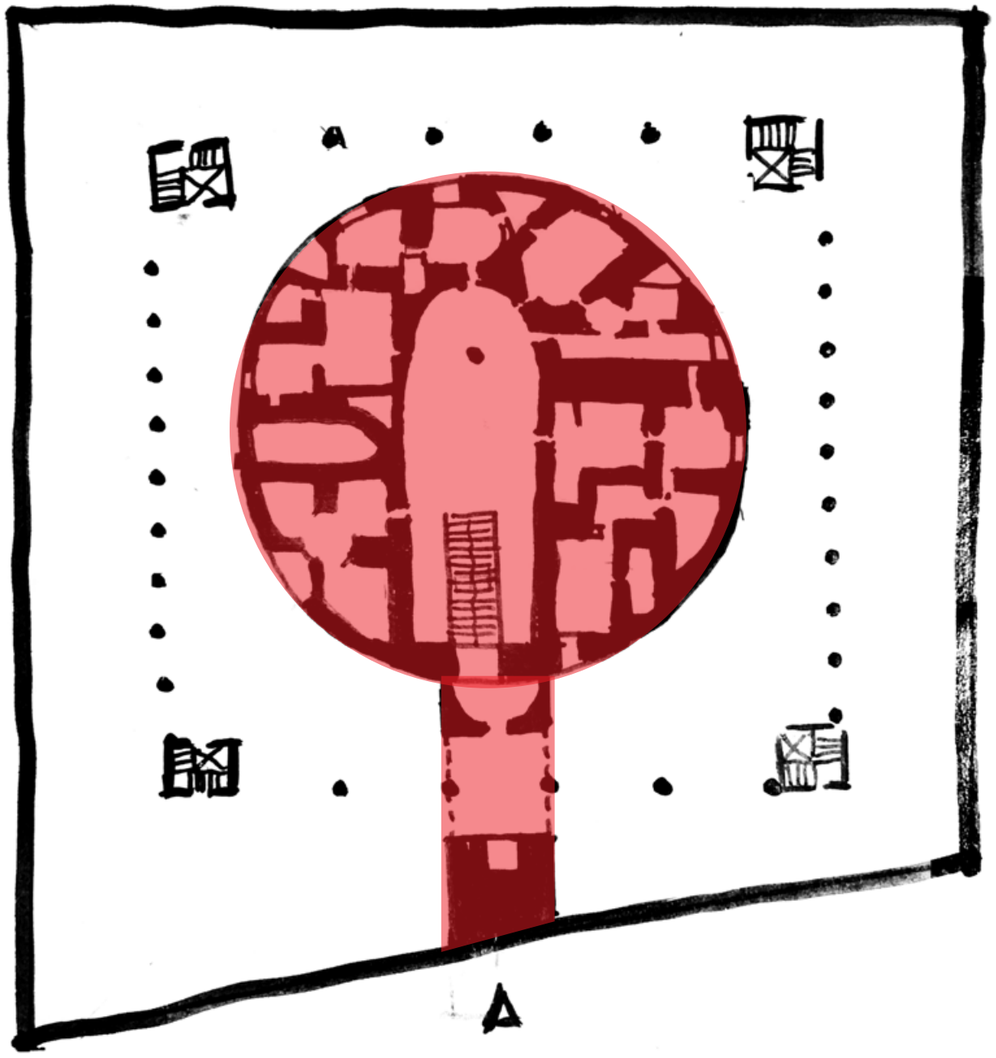


Outside the core, the space is organized in a different way.

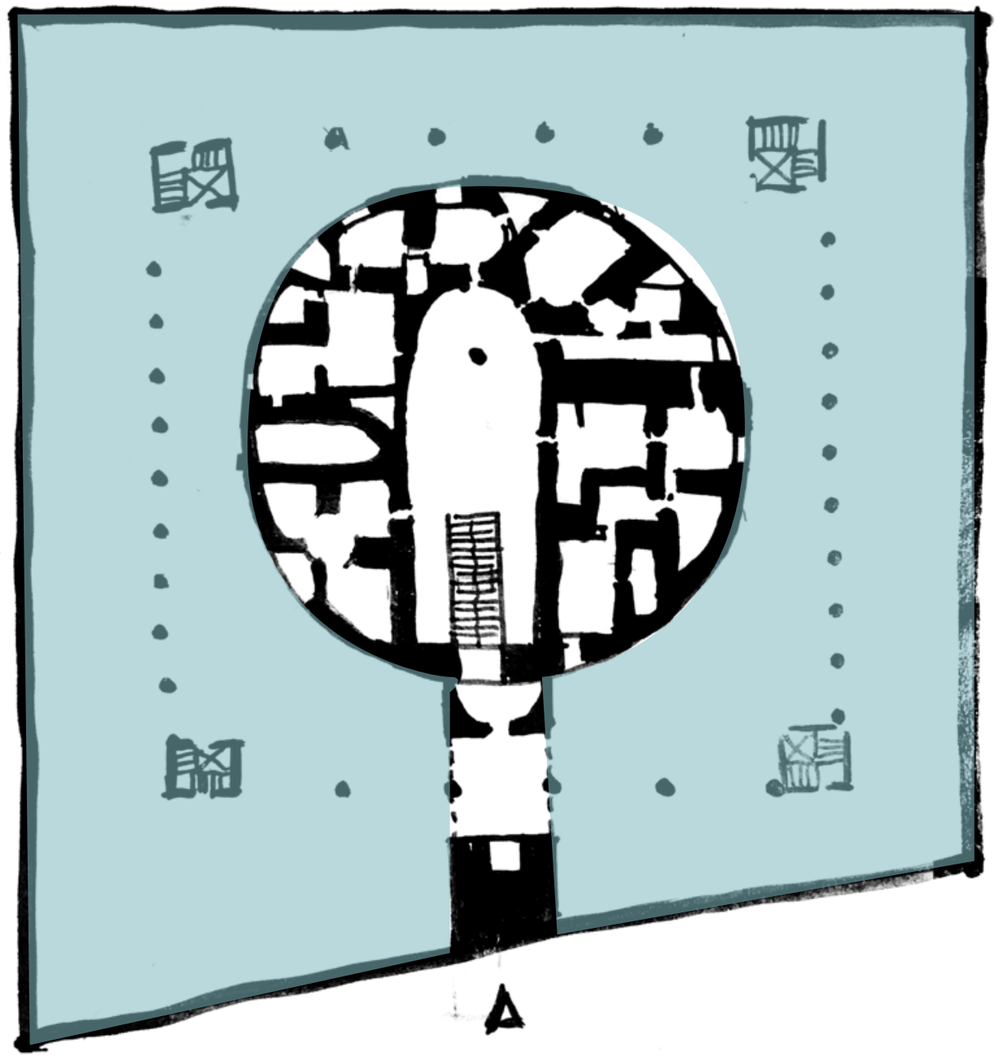
COLLABORATION HUB

The two massings functions totally **different**. I hope the **atmosphere could help people** to shift their role while doing personal activities and collaborative activities in different space.

MAKING CONTRAST



Small intense space



Big free space with soft division.
Better space quality for longer stay.

The two parts are divided by the glass block walls.

The pink shinny epoxy Floor for the lounge provide people a sense of FLOWING.

Four concrete cores at the corner and big arches in between provide the ground floor free spaces with less columns.

open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

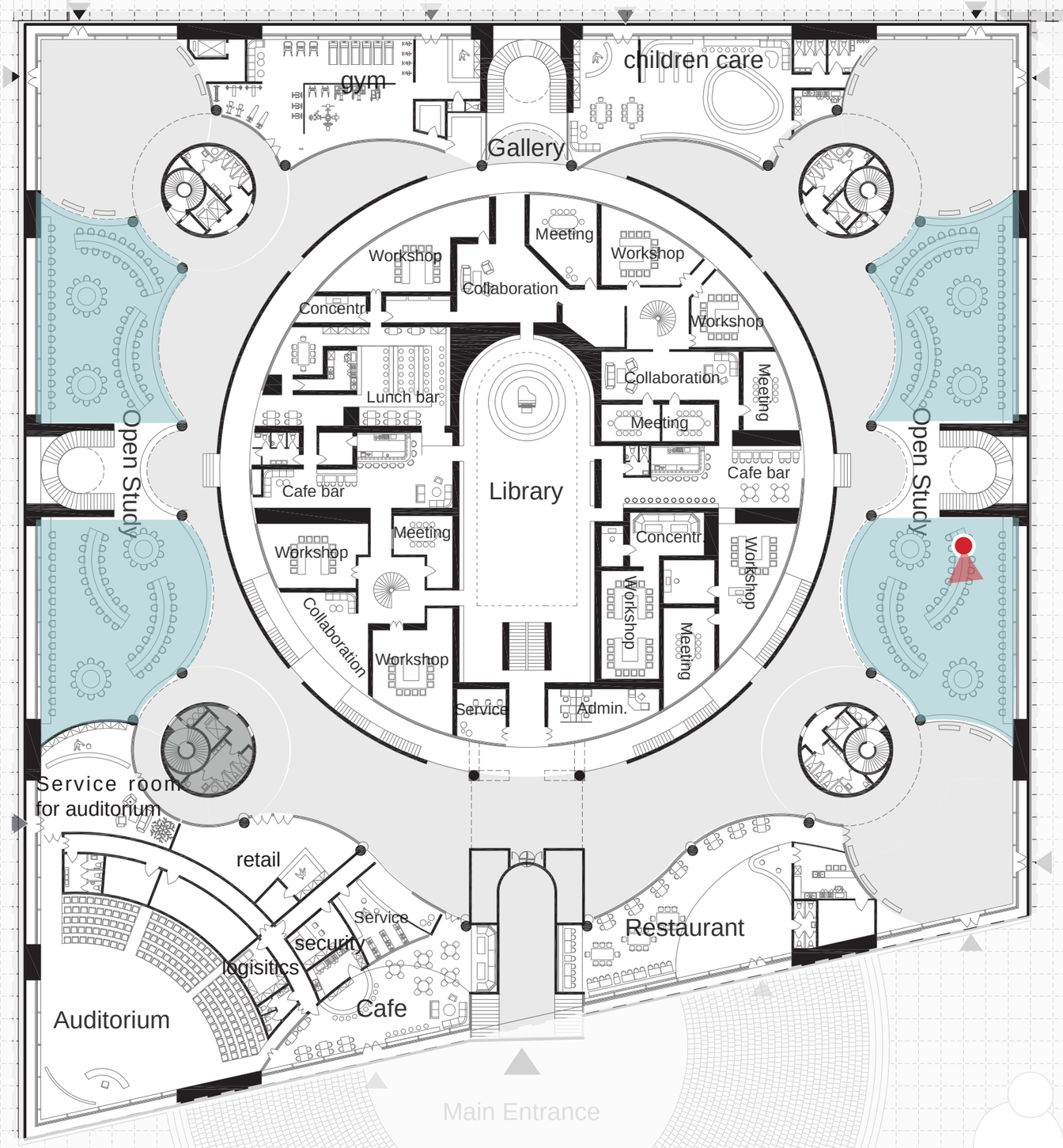
lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

University

(Re)start-up

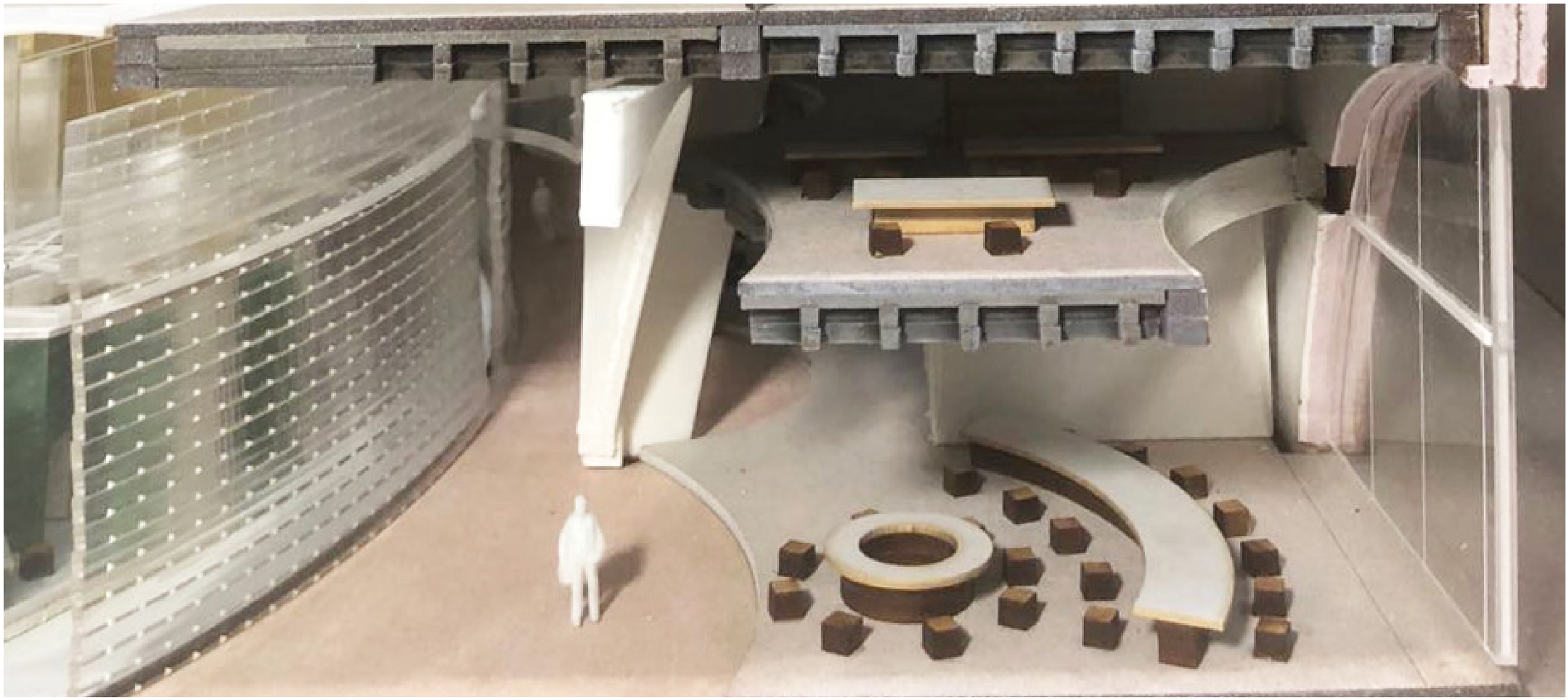
Collaboration hub

Public functions

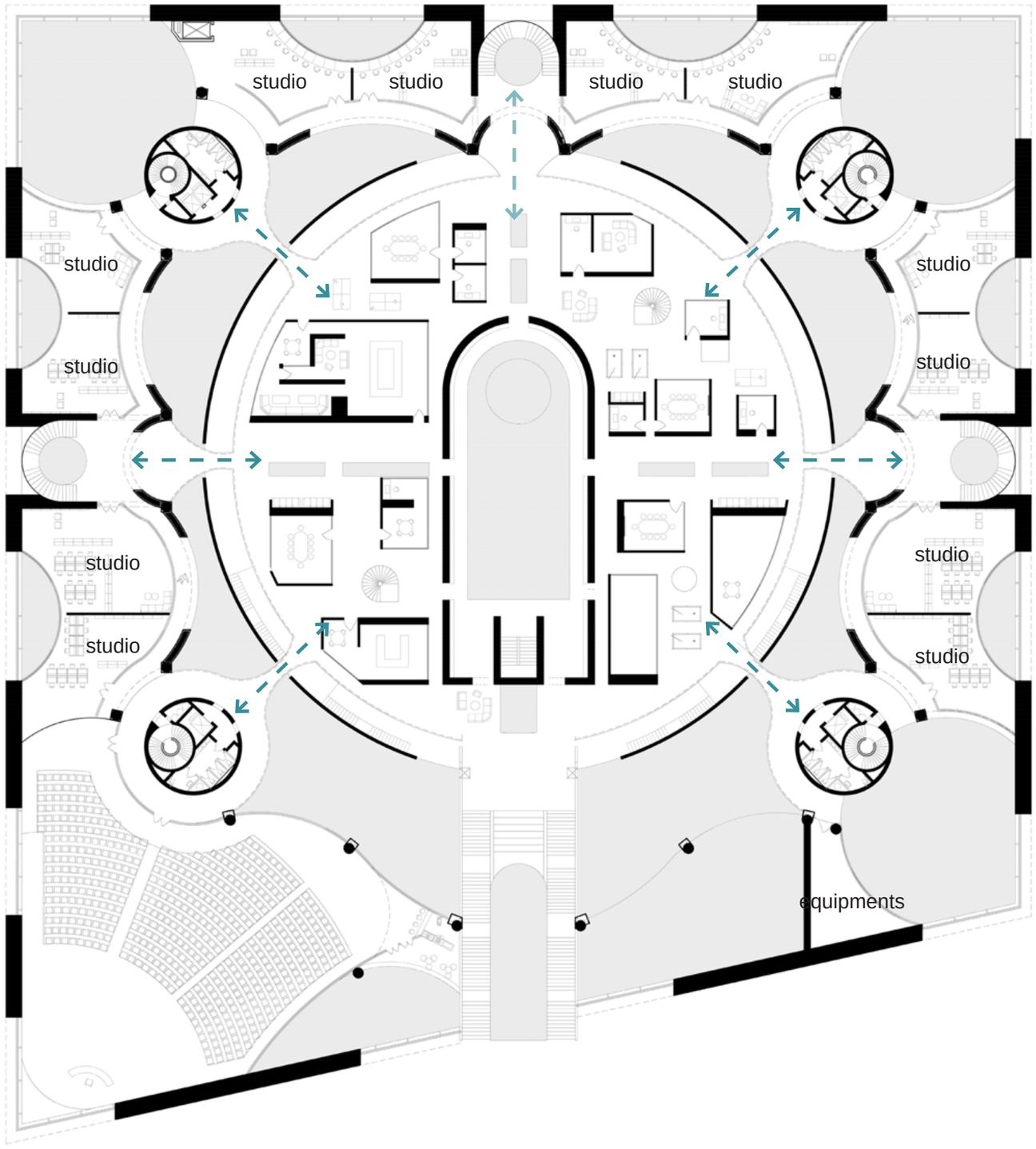


The open desks and startup studios ontop are the place where people spend the most time here.

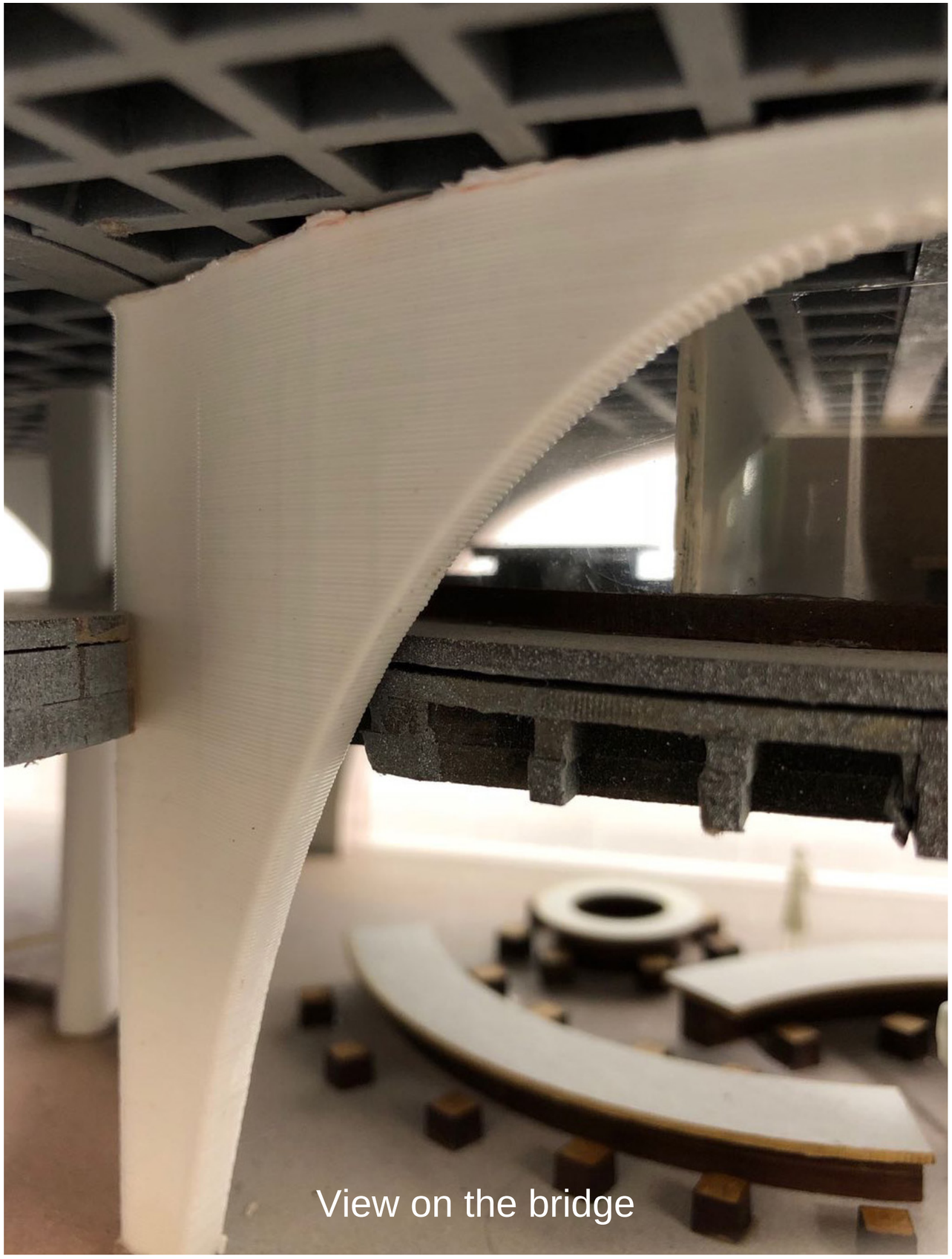
you can sit in the sunshine for all day, fighting for a better future.



Upstairs of the open desk are the studios.


studio
studio
studio
studio
studio
studio
studio
studio
studio
studio
studio
studio
studio
equipments

1st FLOOR



View on the bridge

Glass bridge

open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

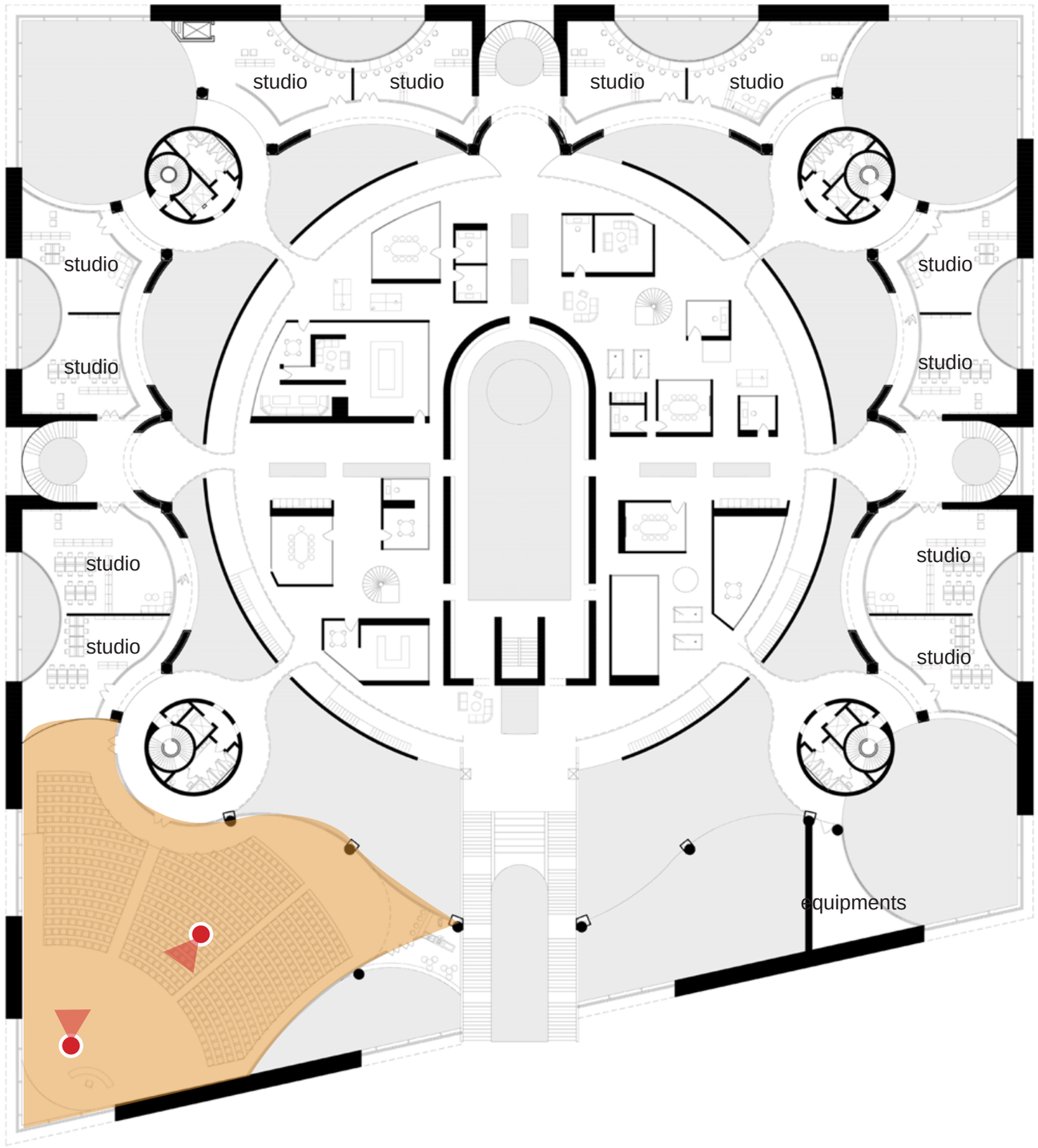
lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

University

(Re)start-up

Collaboration hub

Public functions



There is an auditorium for about 600 people.

The auditorium has the view to the street.

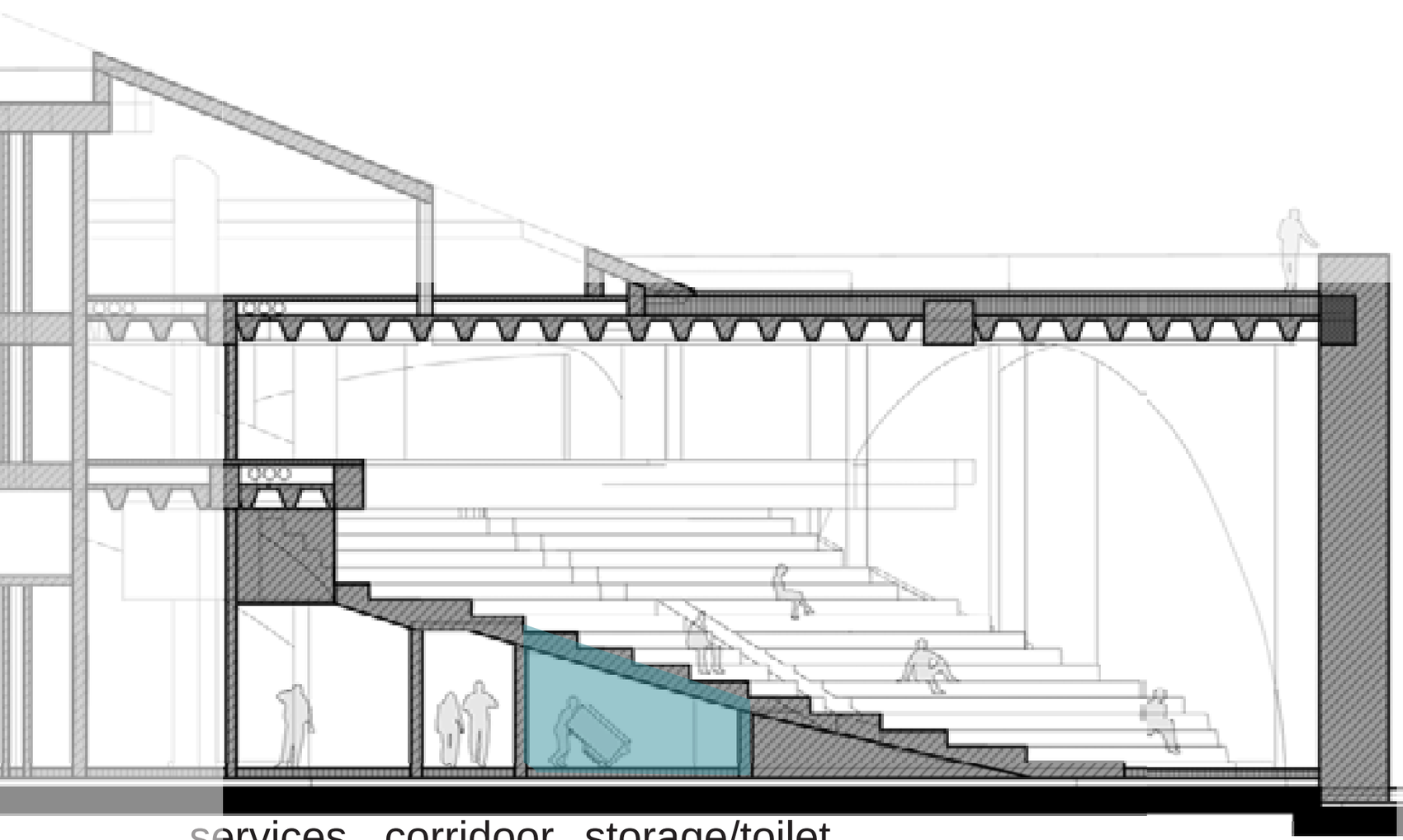
BUSINESS ADMINISTRATION

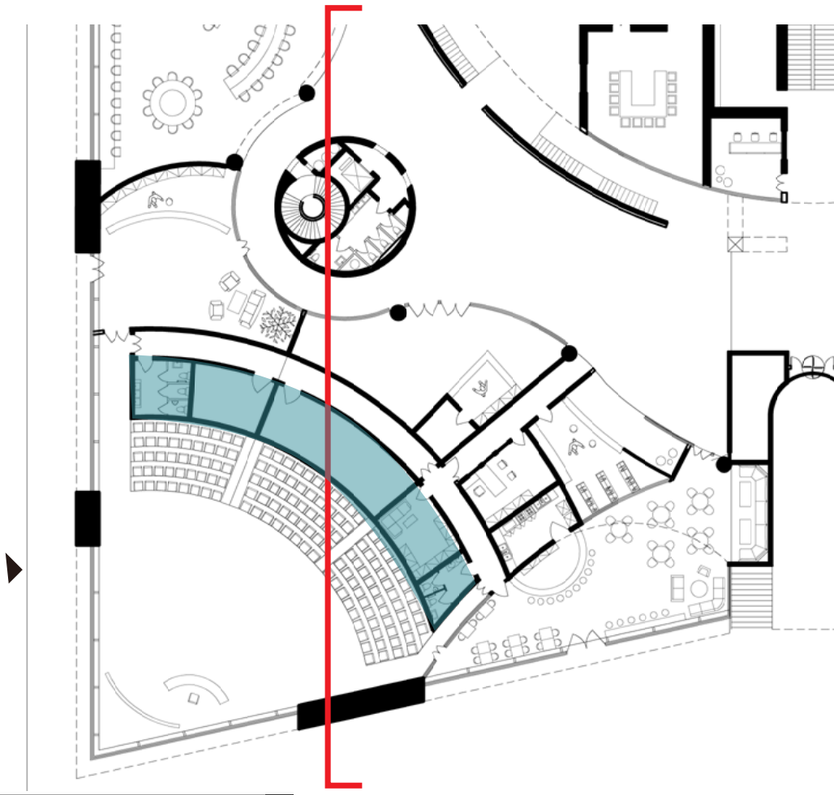
Open courses

The faculty of International Business and Management

nholland
university of
applied sciences

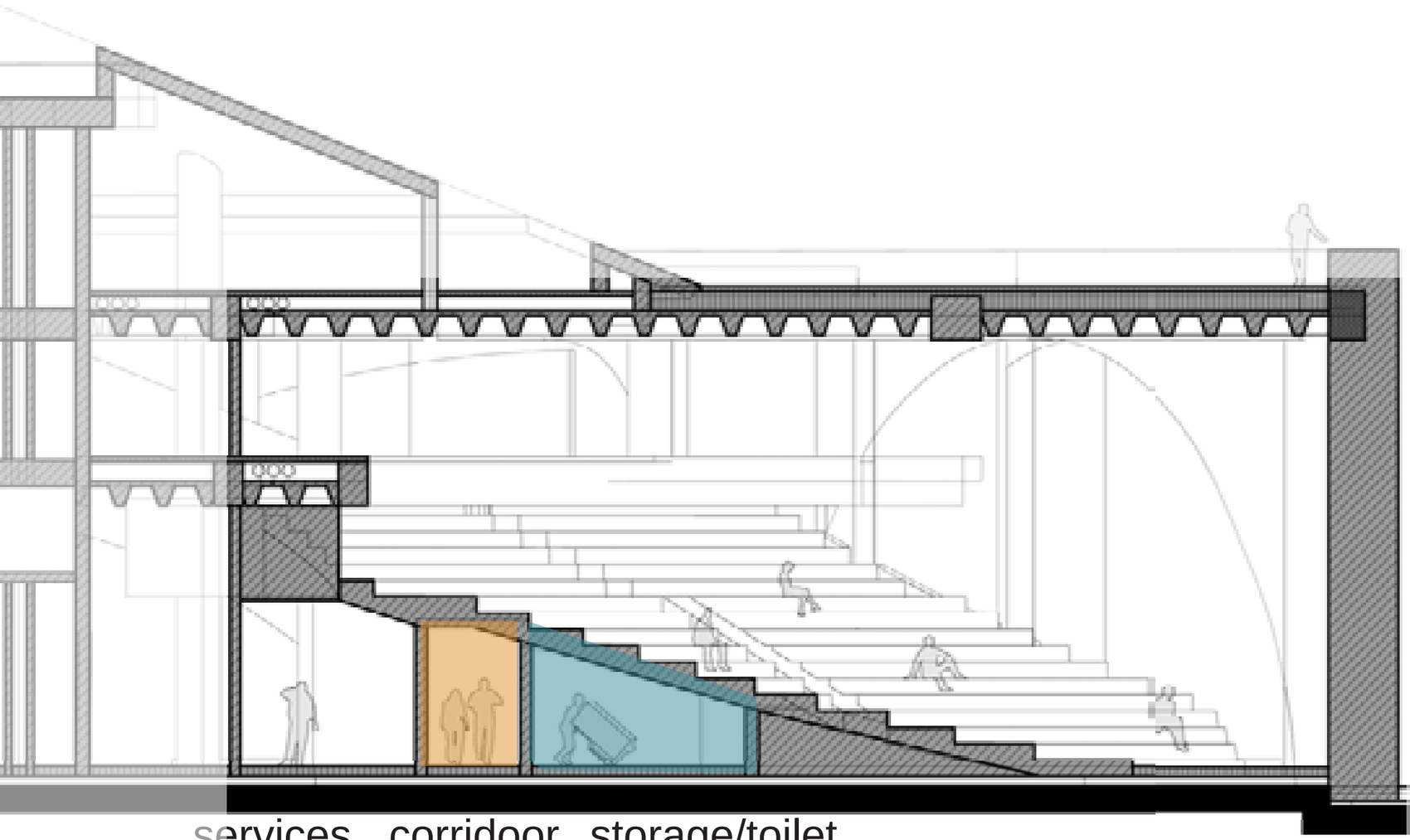
The faculty of international Business and Management usually give open courses and free lectures to the public. People can attend them after applying for it.

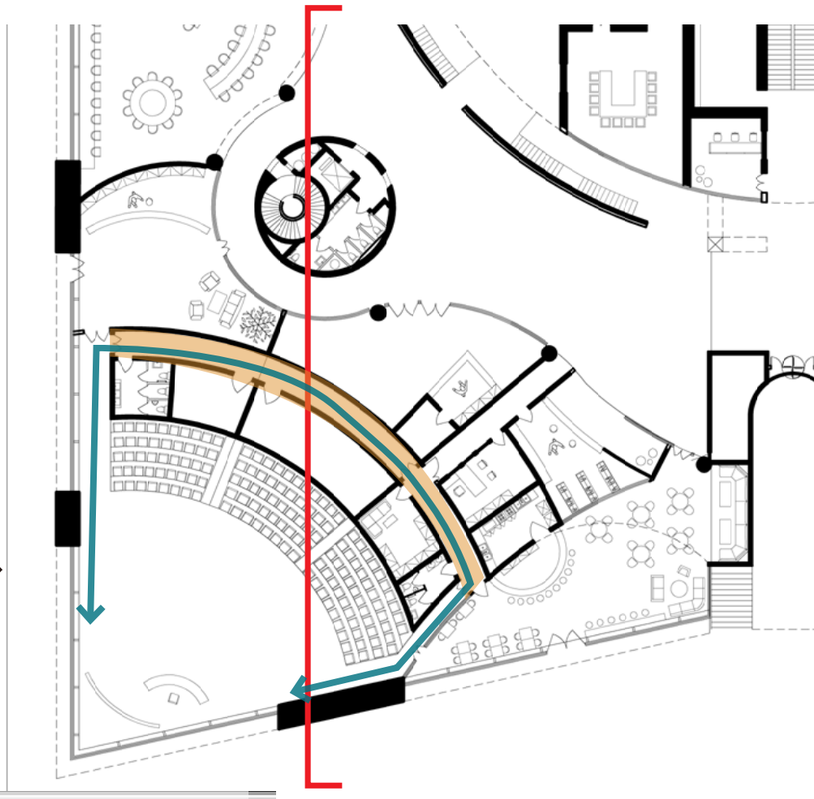




services corridoor storage/toilet

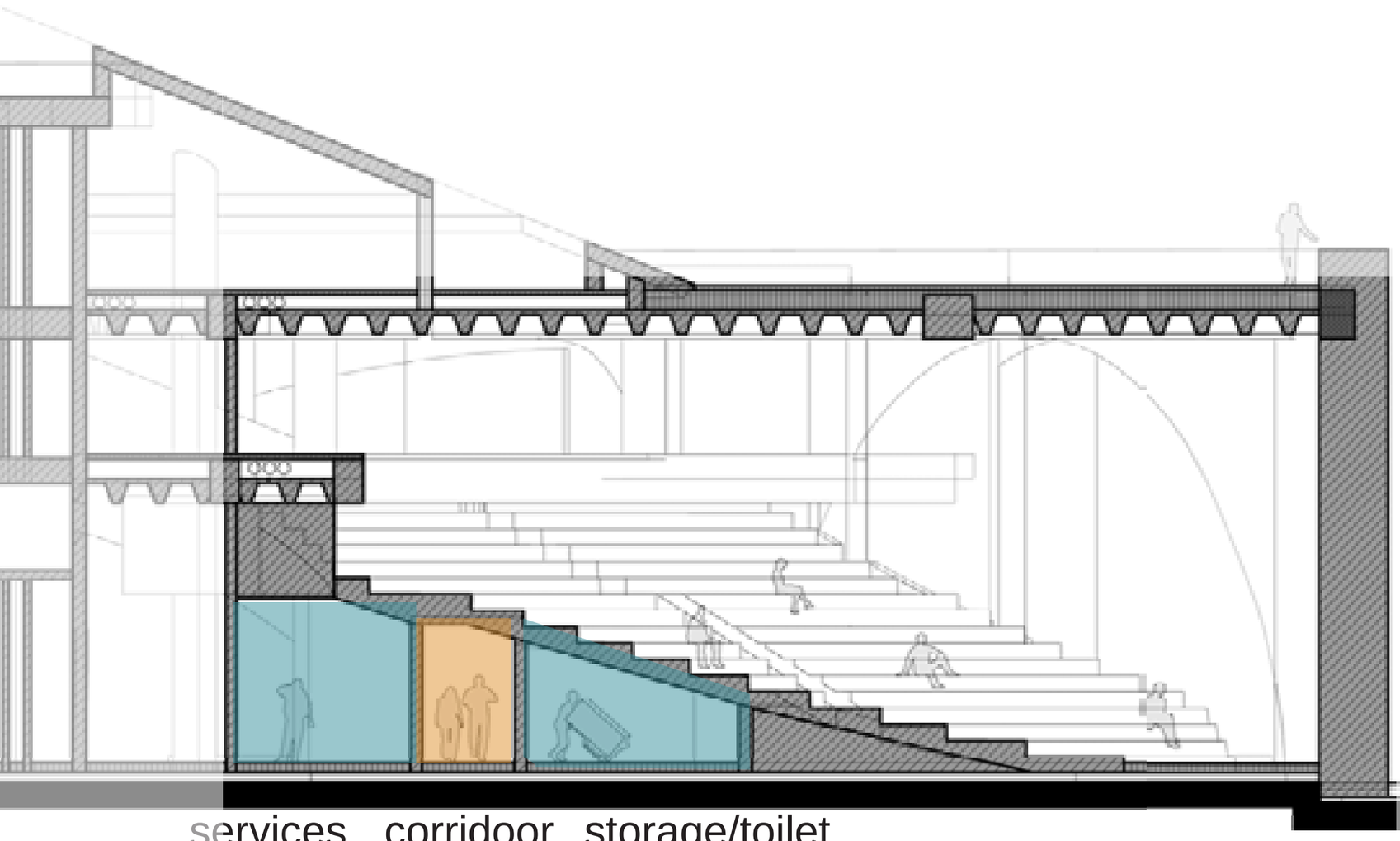
The Auditorium is **9 meters high**. The space underneath is also well used. The **lowest part** is used as the toilet and storage.

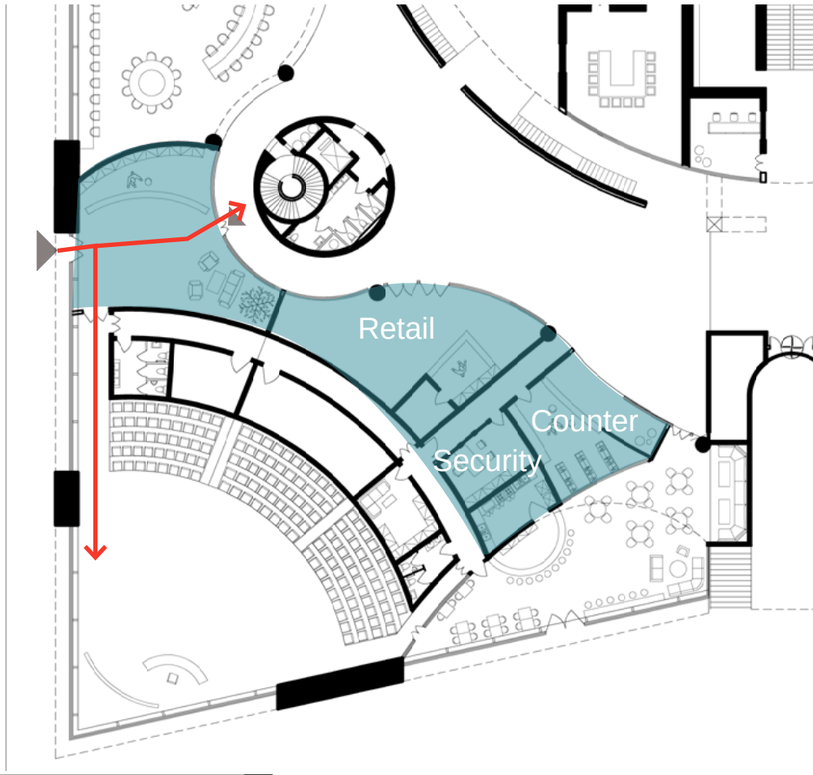




services corridoor storage/toilet

Medium height work as the corridor.
People can reach their seat easily no matter entre from which direction.





services corridoor storage/toilet

The **heighest one** is used for the entrance and service room for the auditorium and other functions for the building. It is also connect to the lounge.

open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

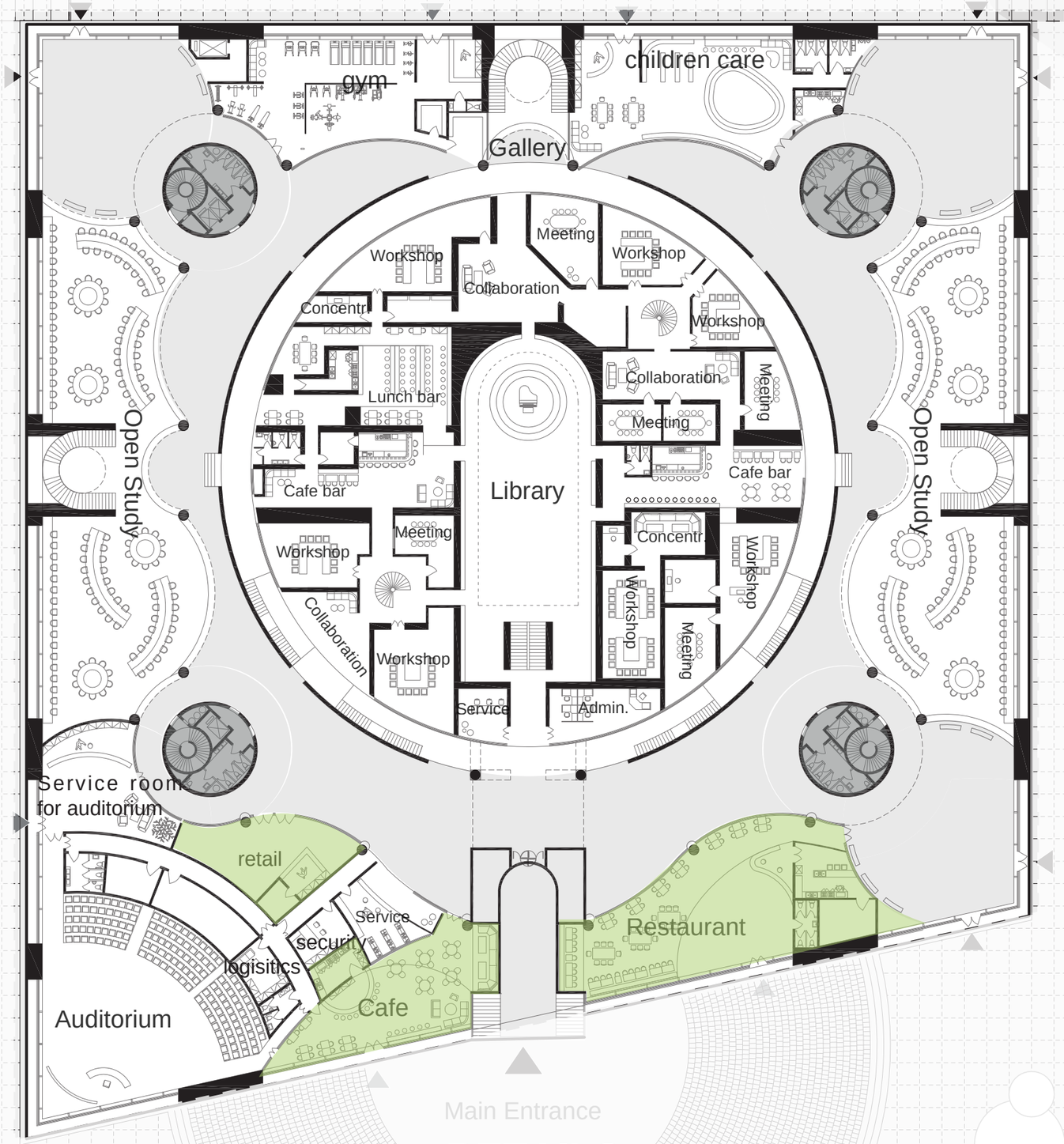
University

(Re)start-up

Collaboration hub

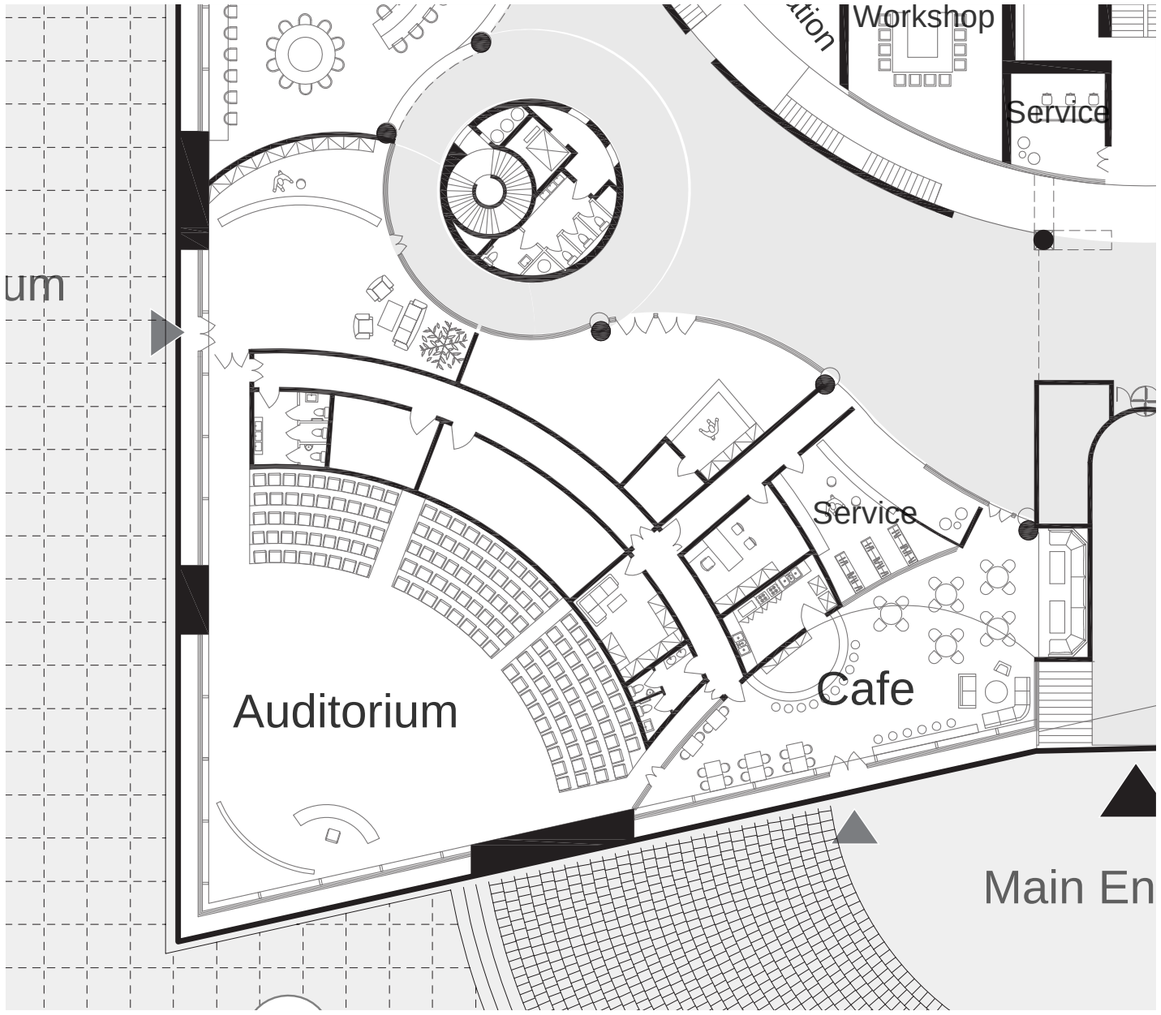
Public functions

You may want to have a cup of coffee during the break of lectures

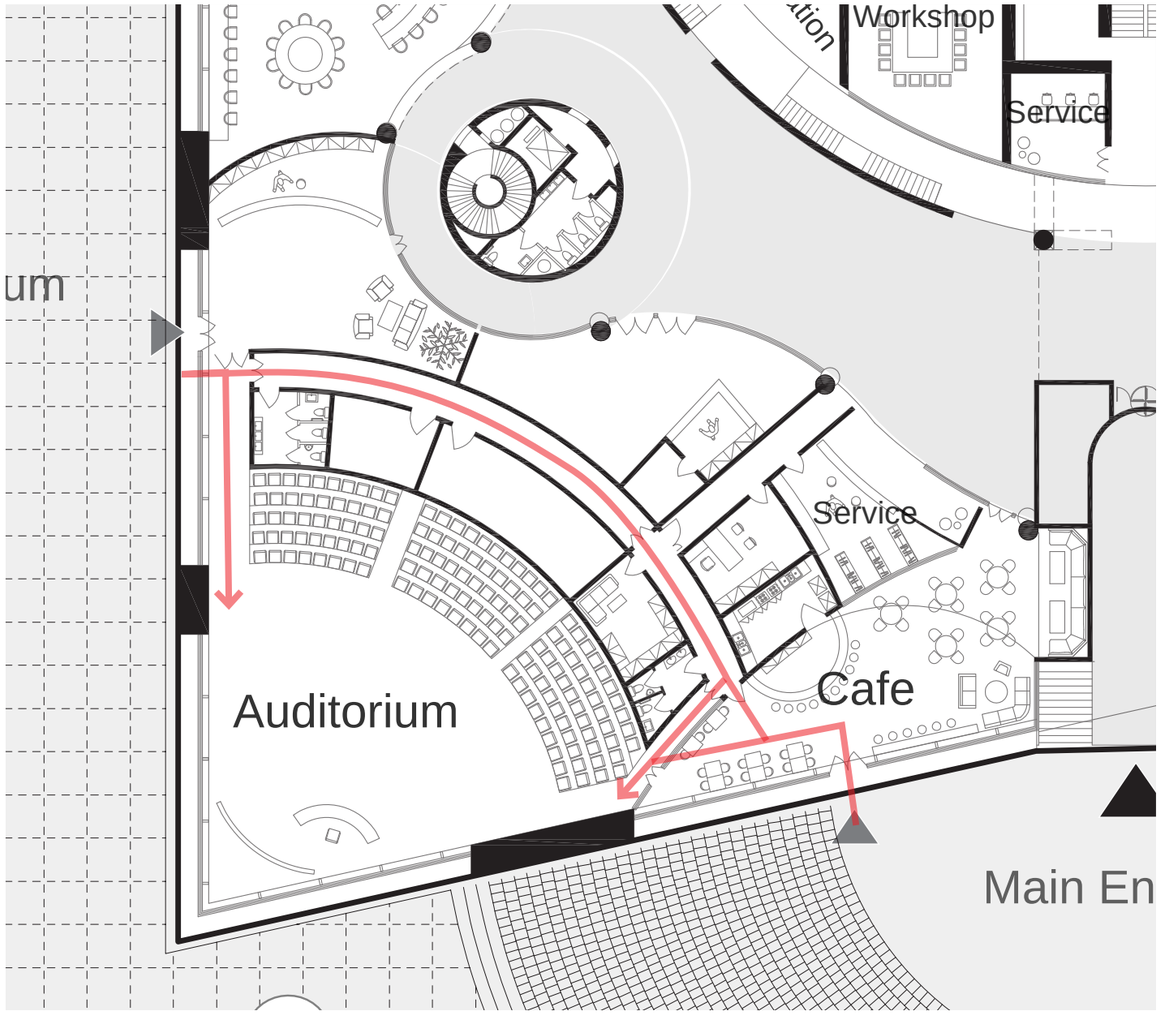


Entrance for Auditorium

MAIN AXIS

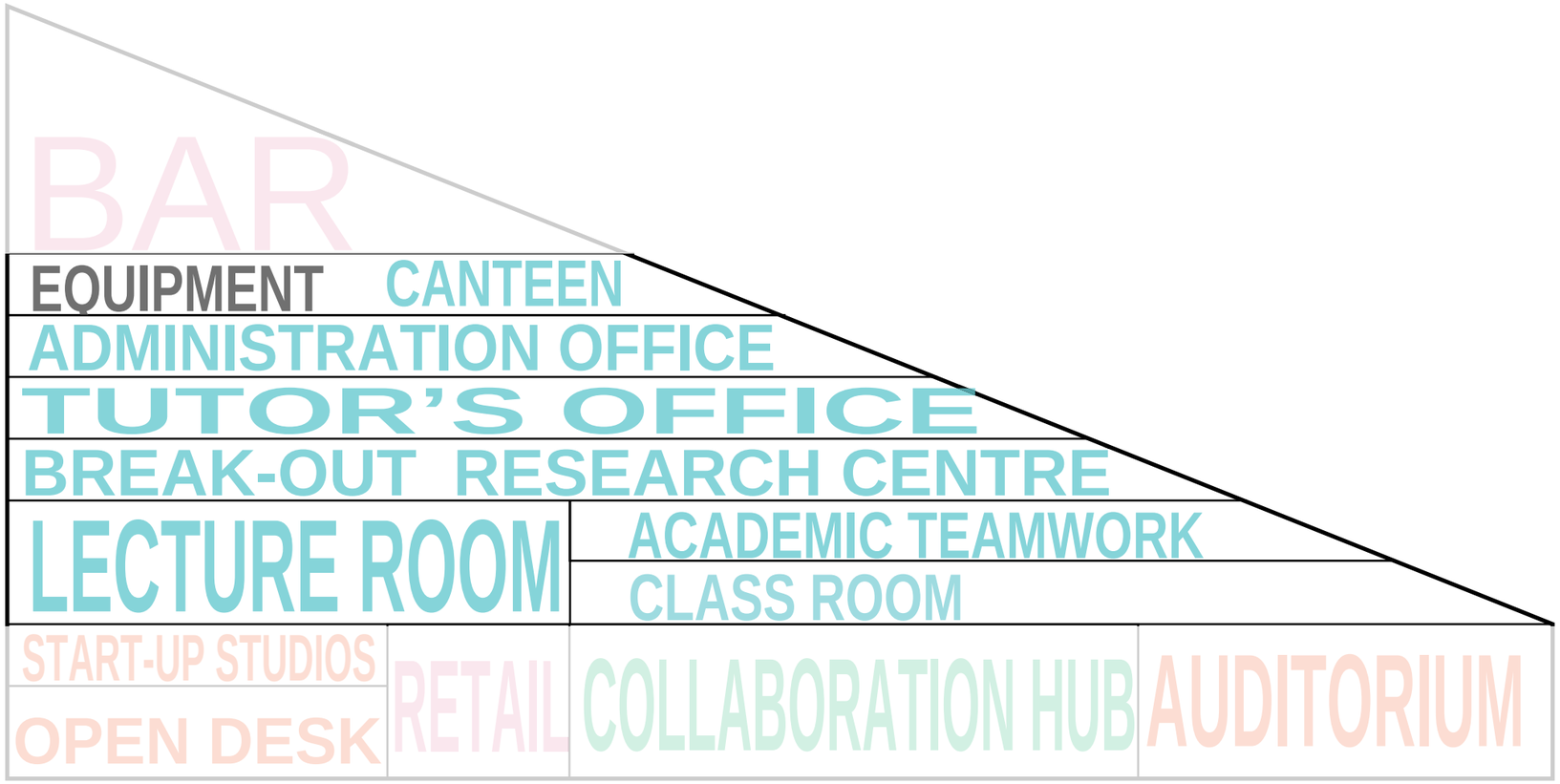


You can entre the cafe from the urban plaza, auditorium and the lounge.



The cafe is connected to the corridor of auditorium. You can pass by the toilet on the way you go back to your seat.

University

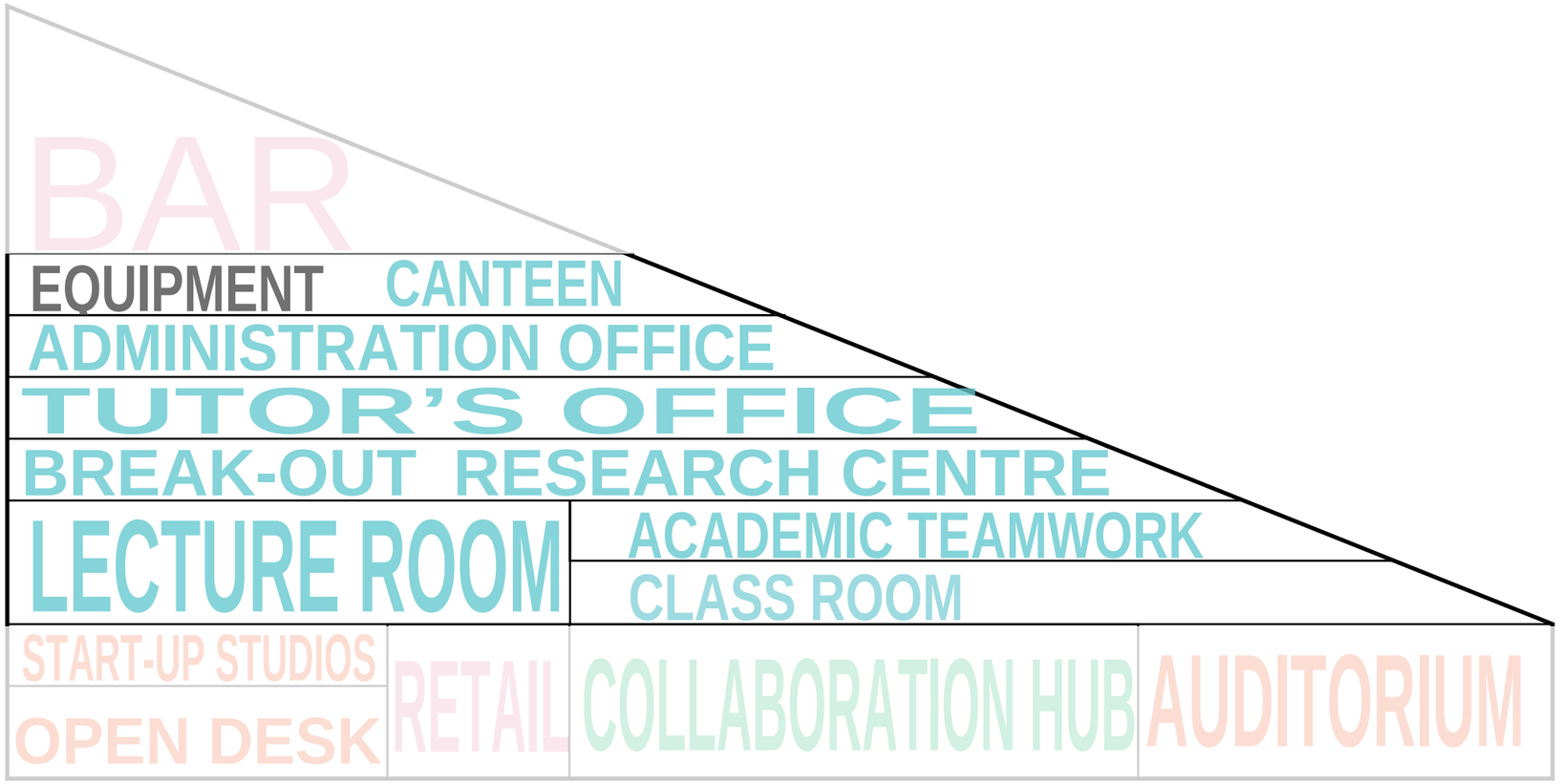


open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

- University
- (Re)start-up
- Collaboration hub
- Public functions

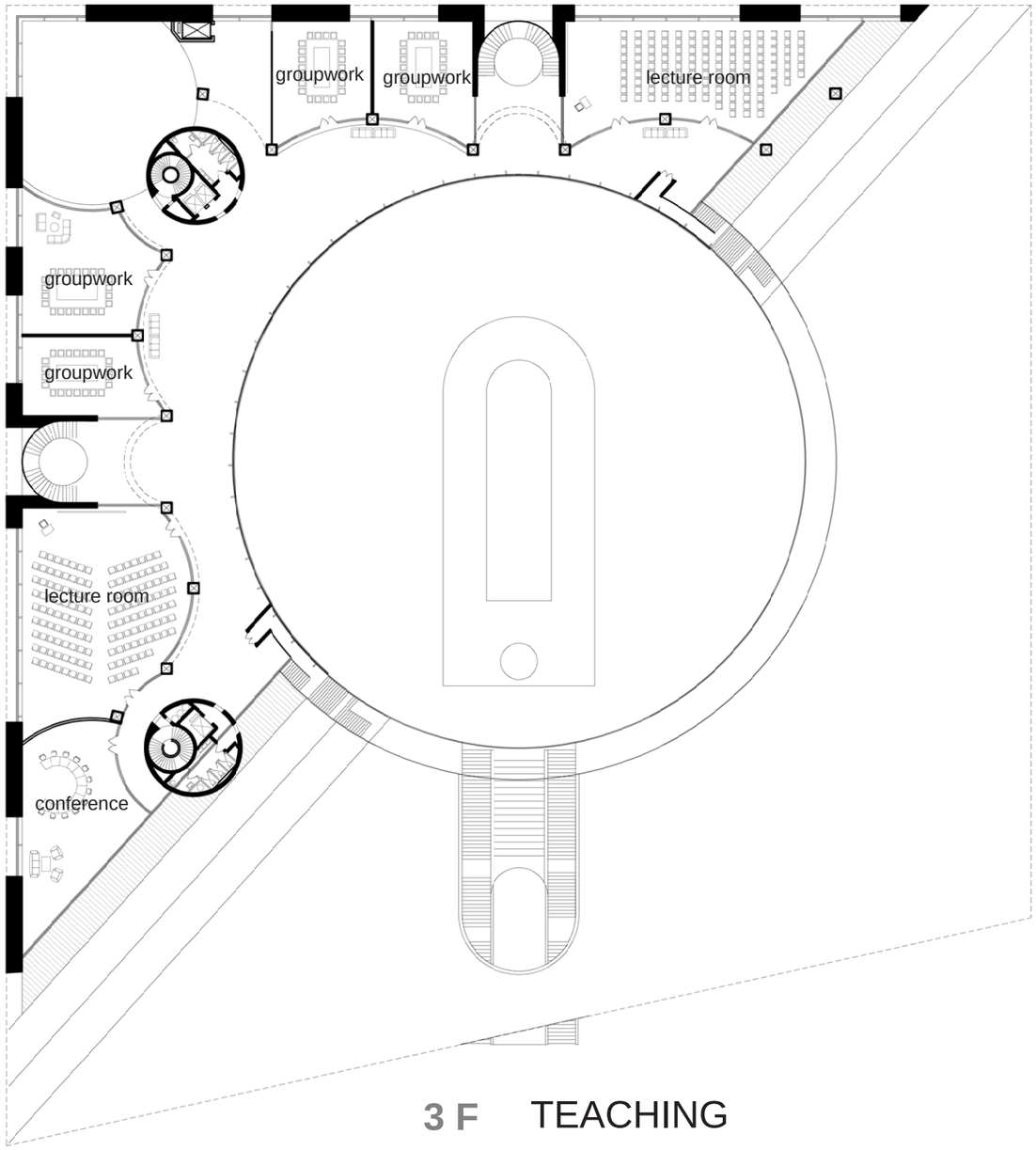
University



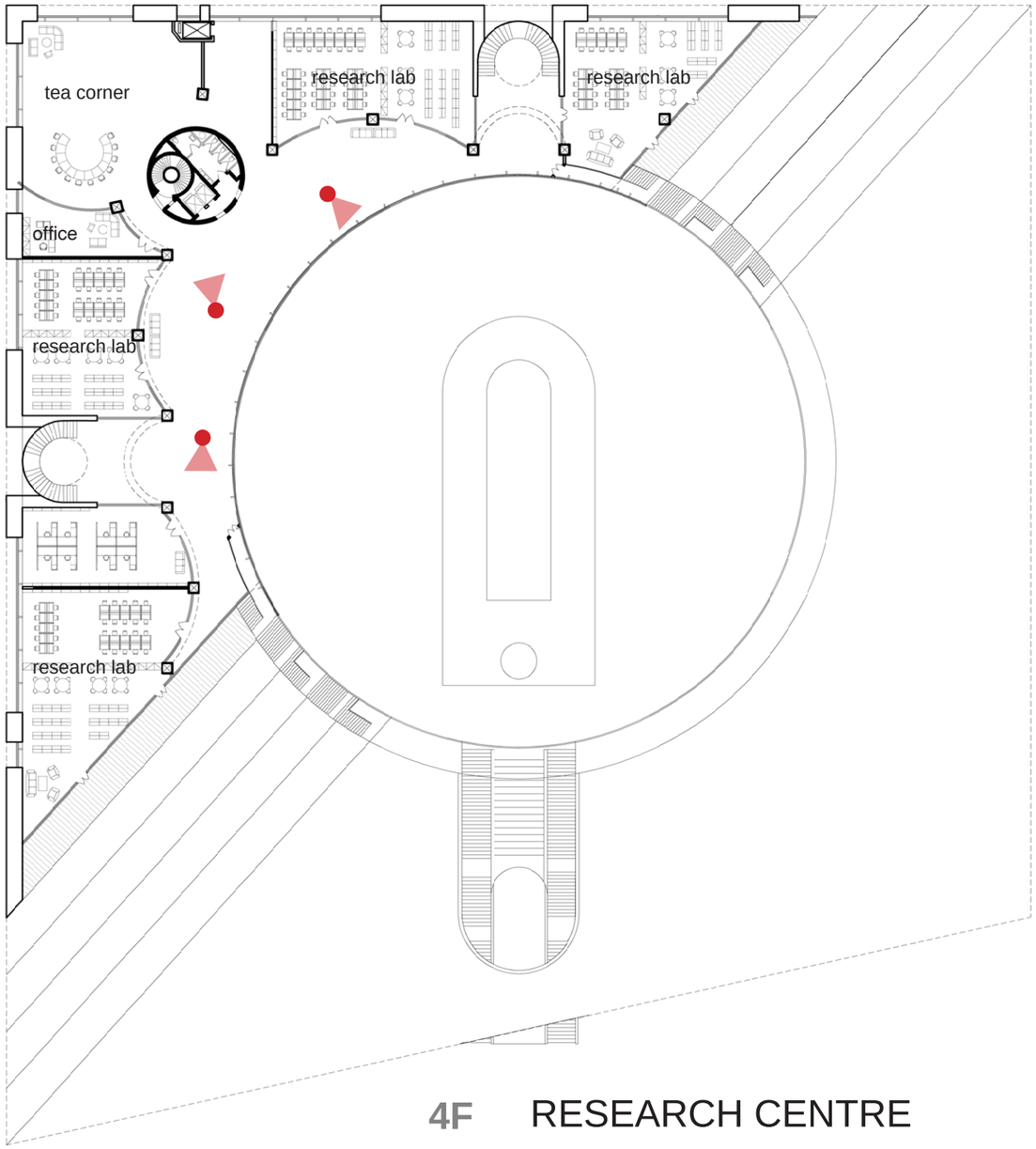
open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

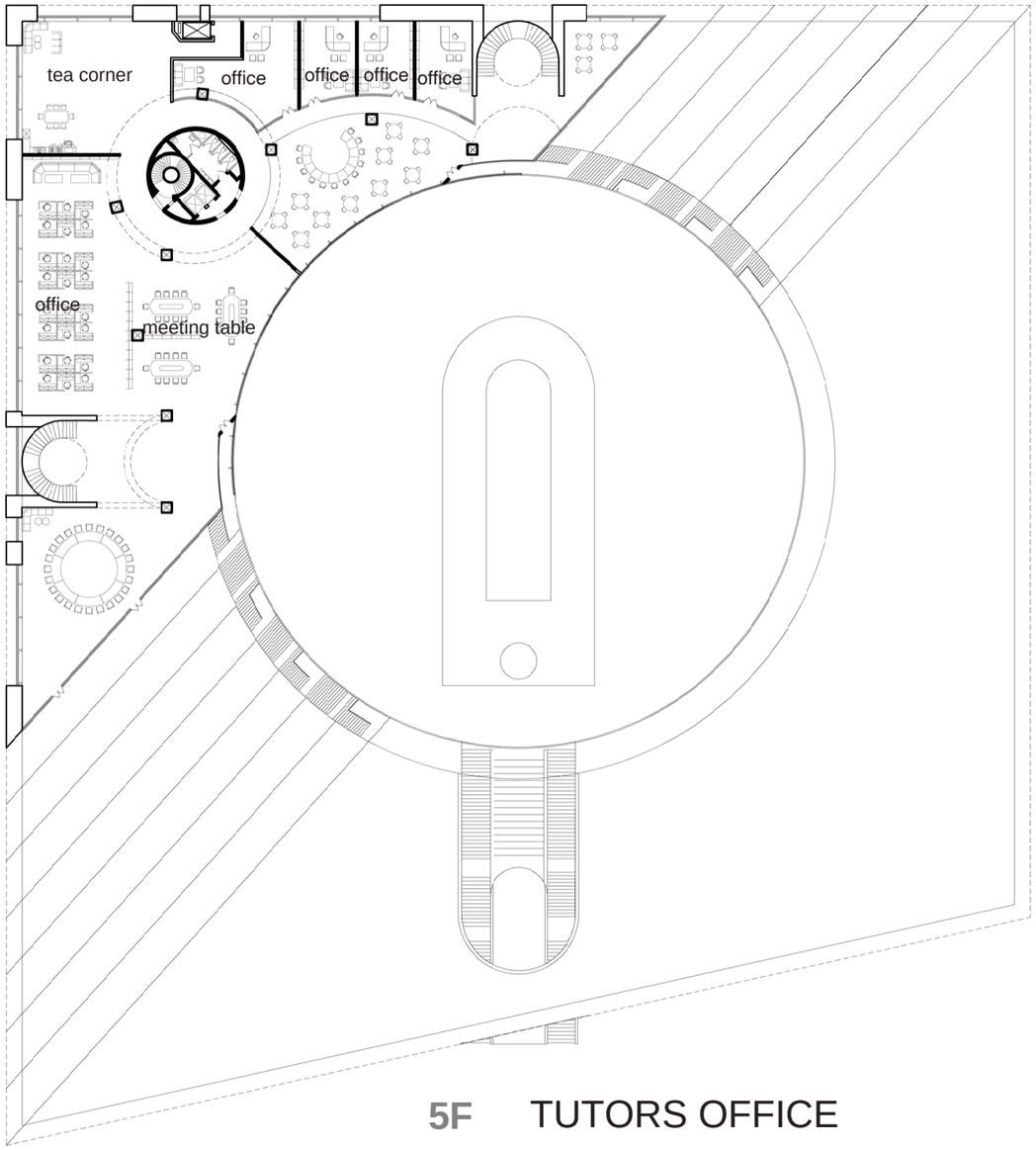
- University
- (Re)start-up
- Collaboration hub
- Public functions



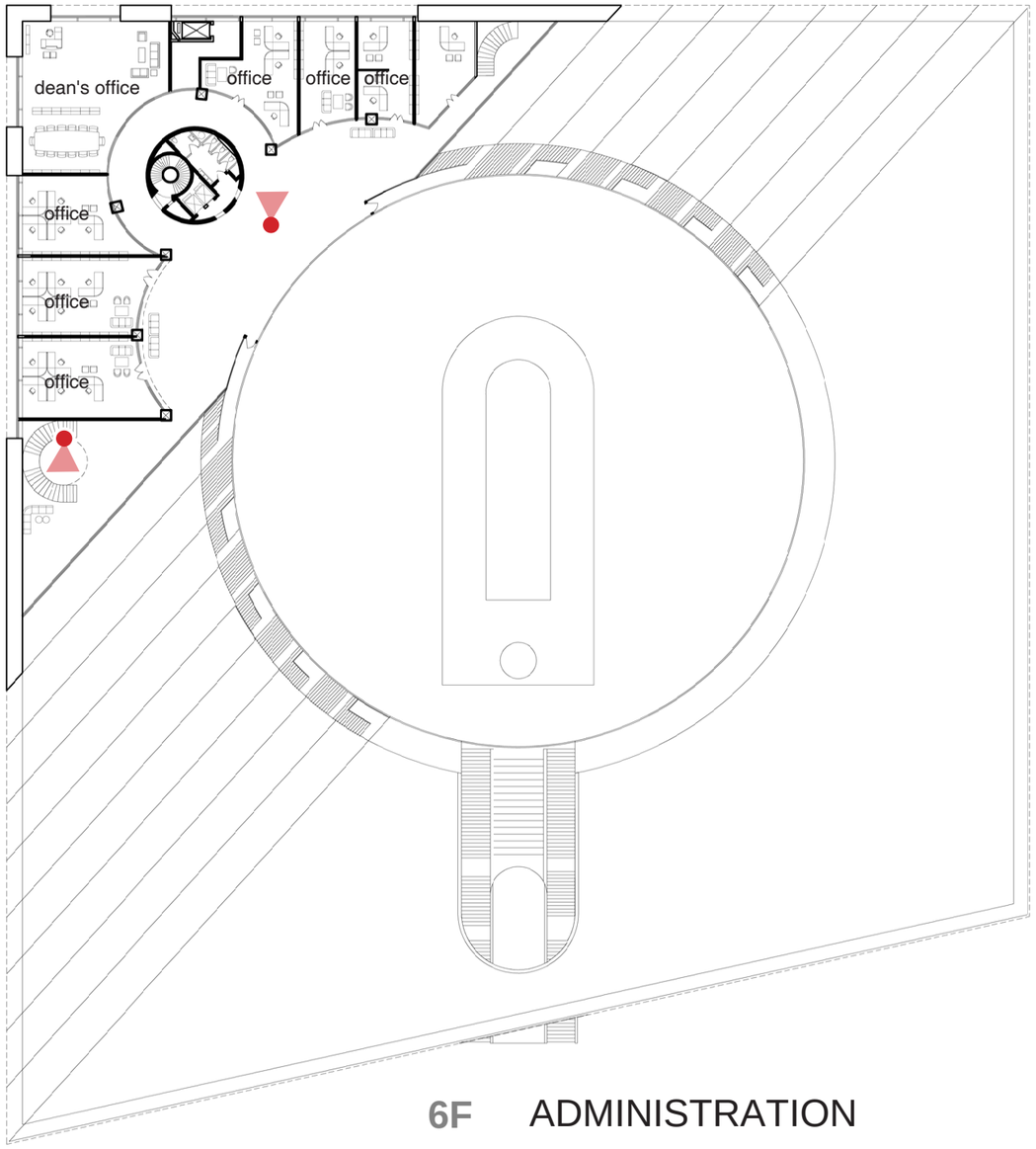
3 F TEACHING



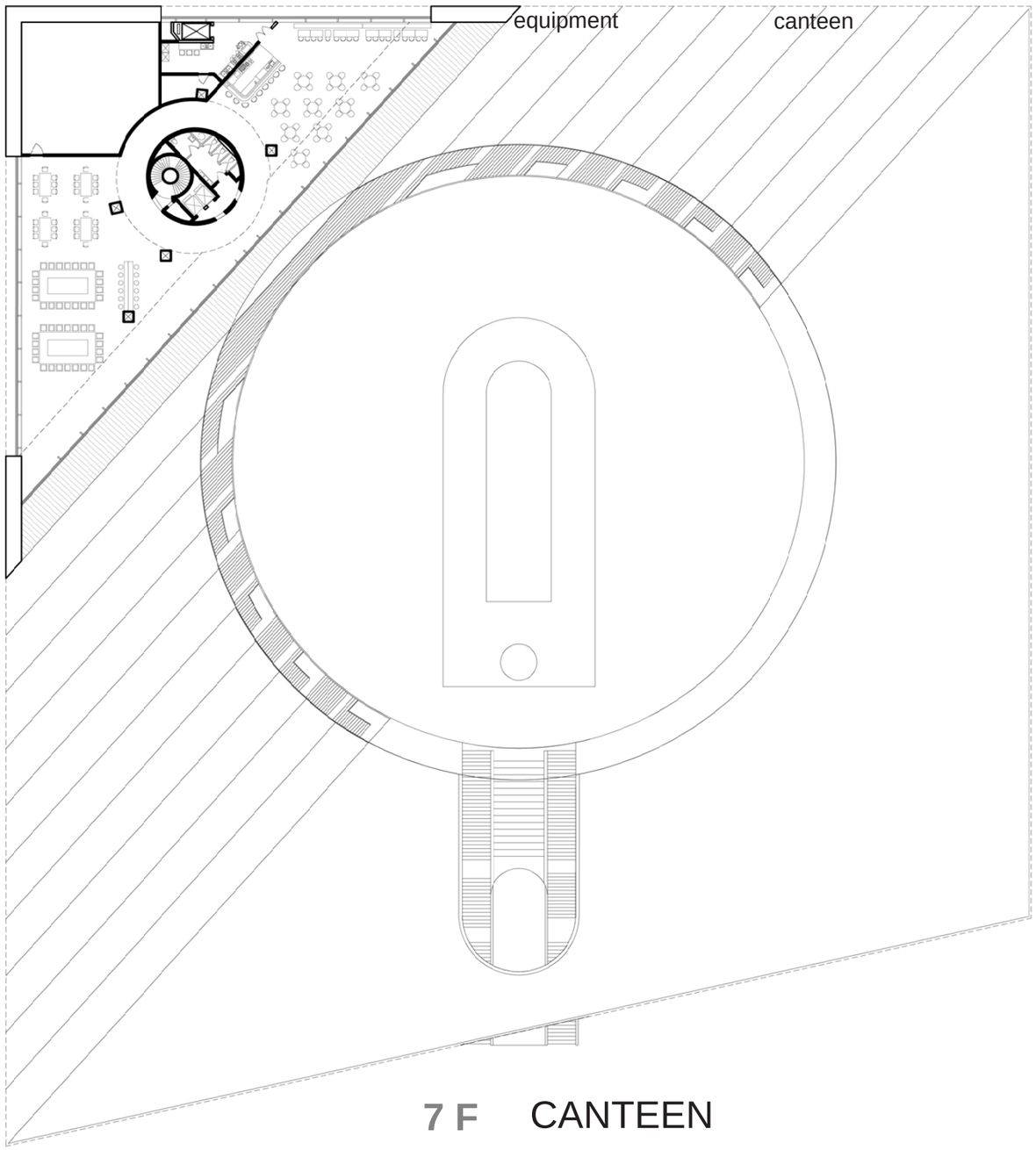
4F RESEARCH CENTRE



5F TUTORS OFFICE



6F ADMINISTRATION



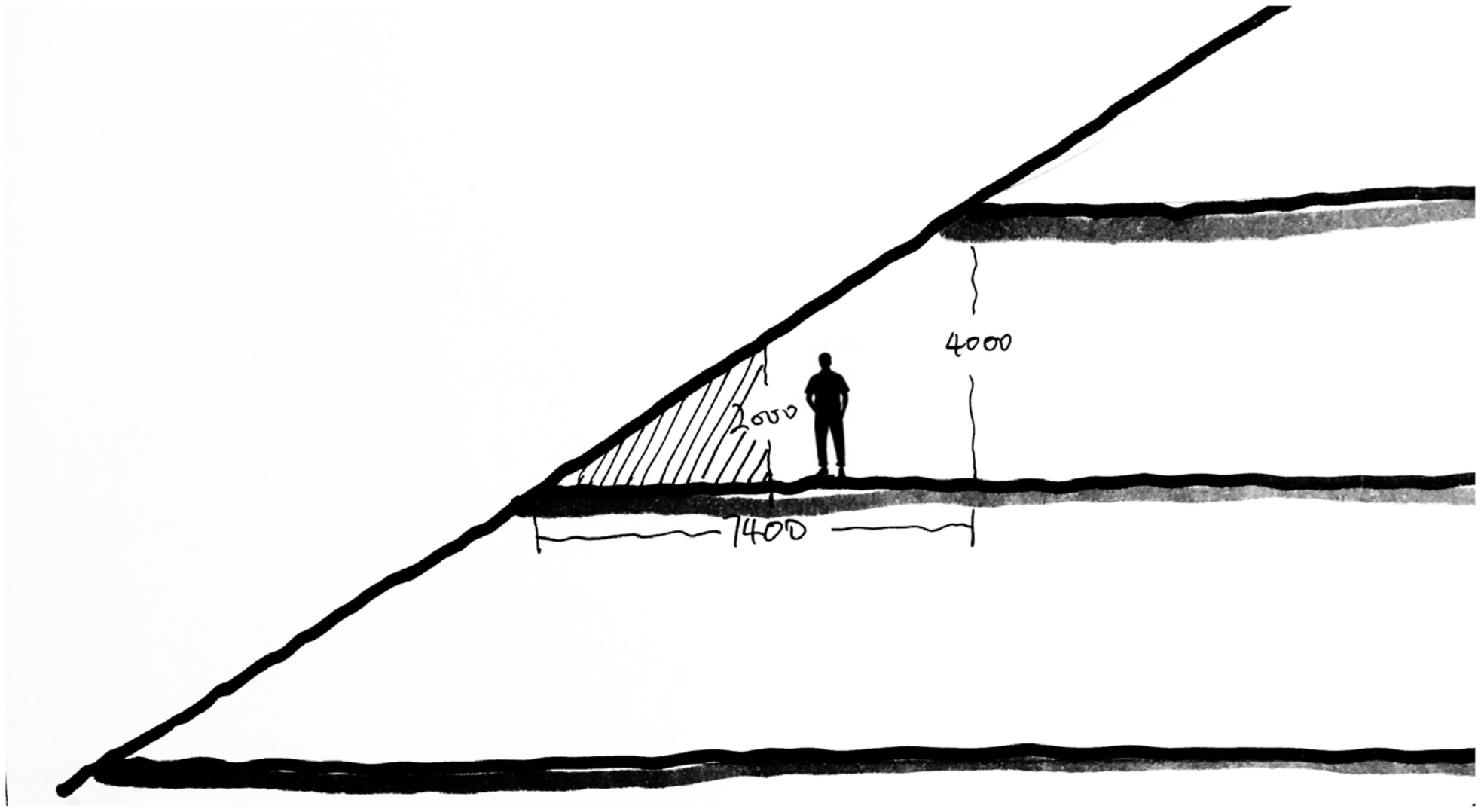
7 F CANTEEN

RESEARCHING
TEACHING

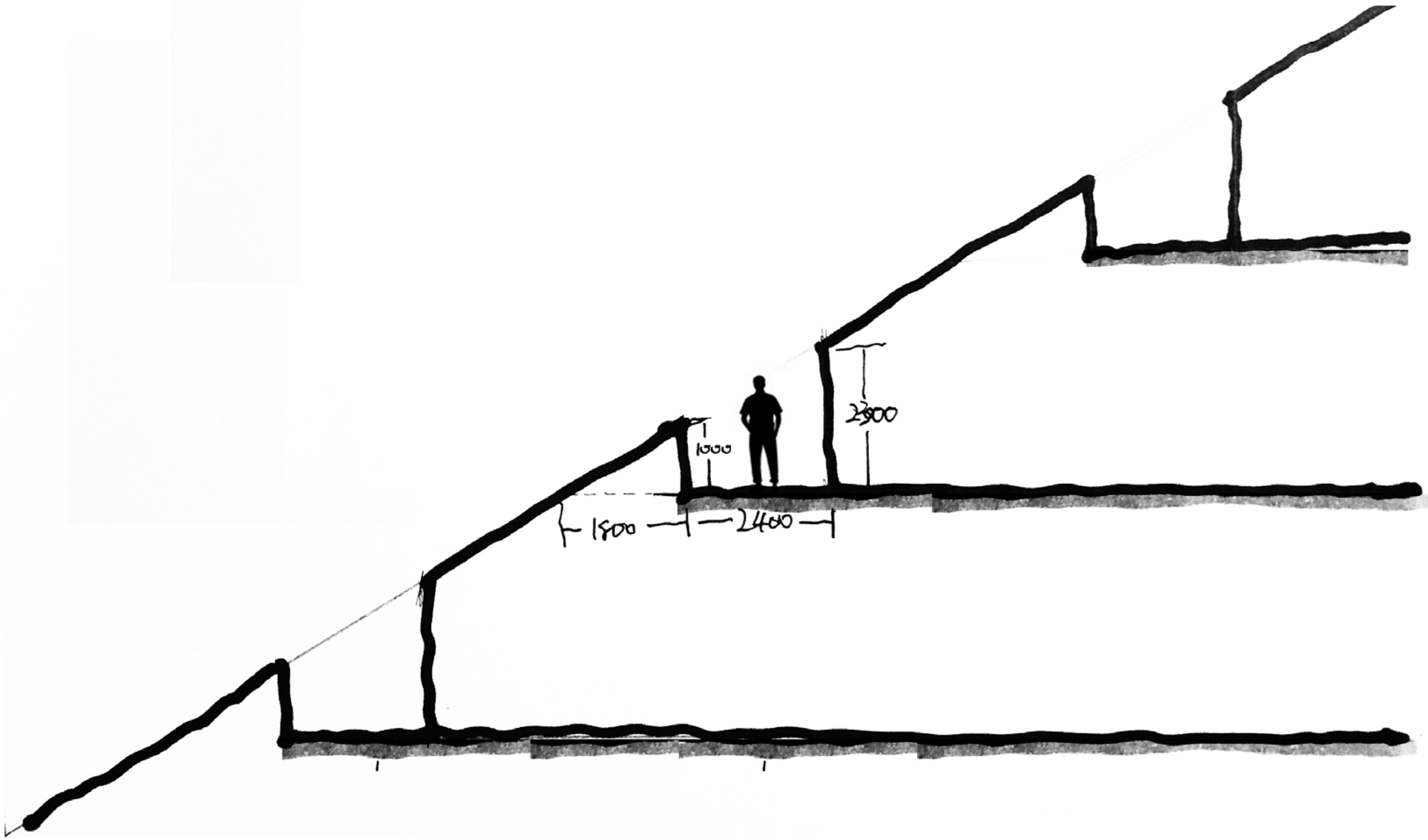
Four-Floors-Height Adutrium at the corner. To provide a nice view and bost ventilation.

The curved glass walls provides a continuation space of the lounge.

You can always find a space for group meeting and discussion somewhere.

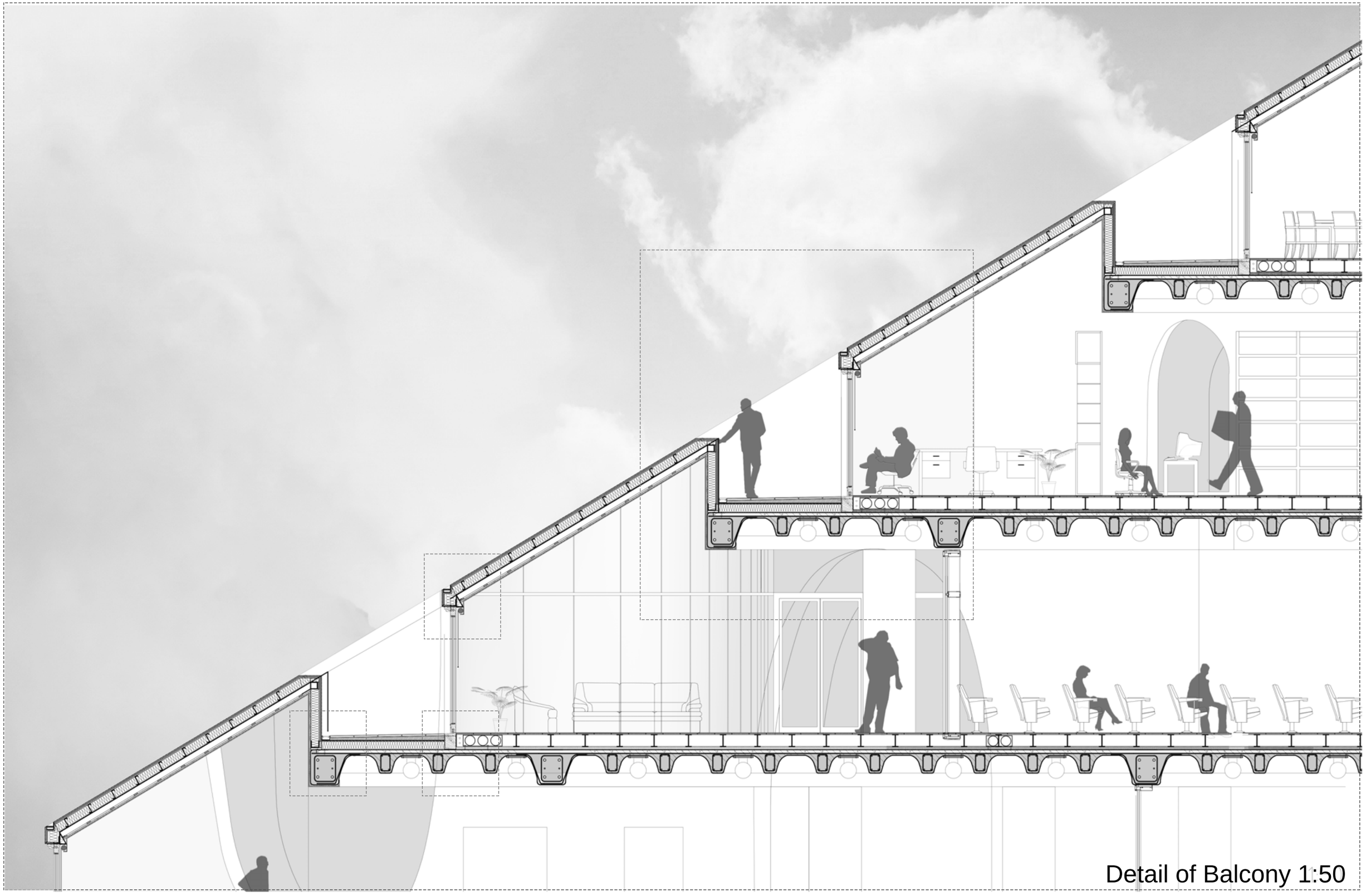


Triangle space hard to use



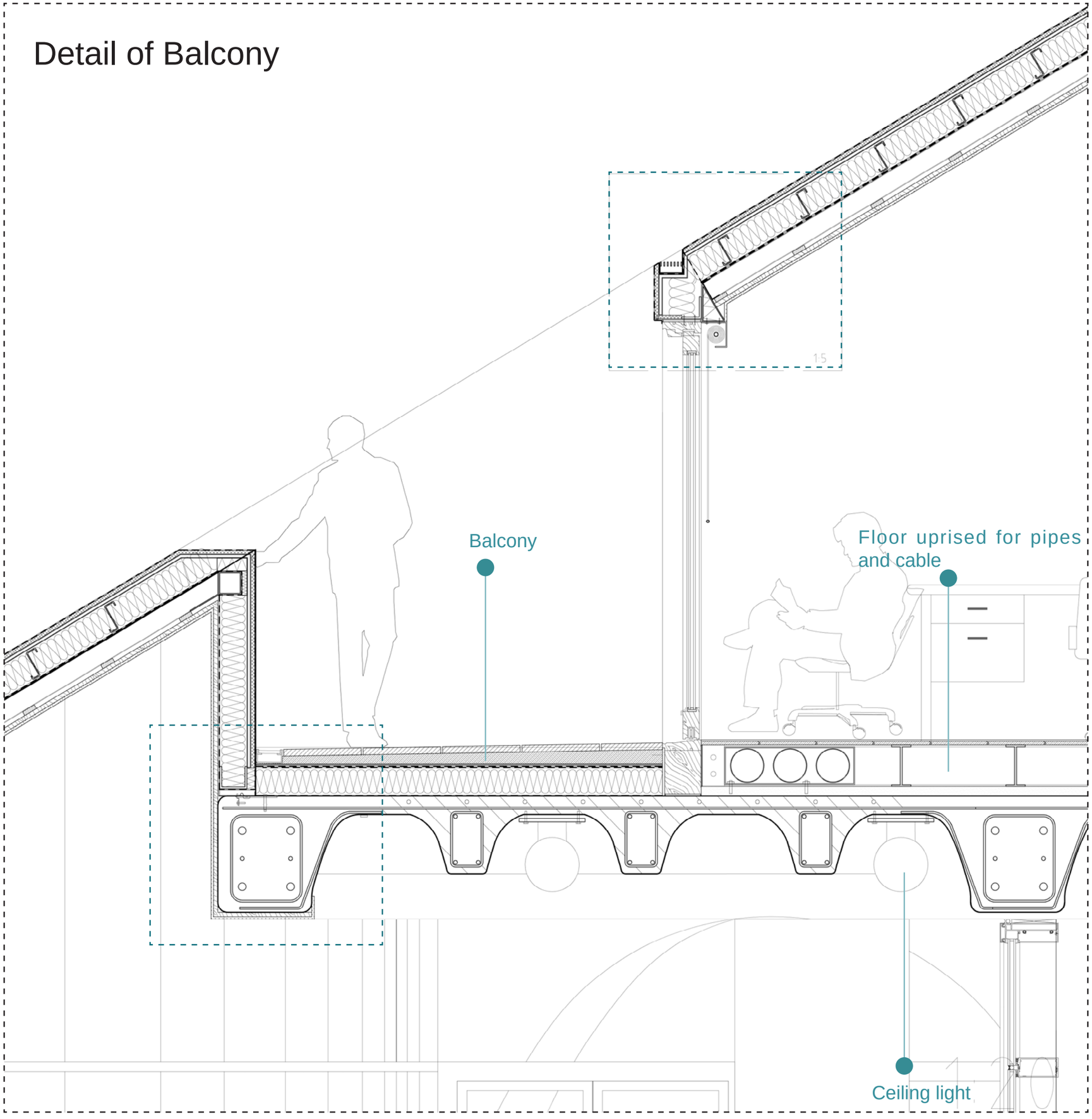
Solution

The balconies provide a good view to the roof garden and the whole city.

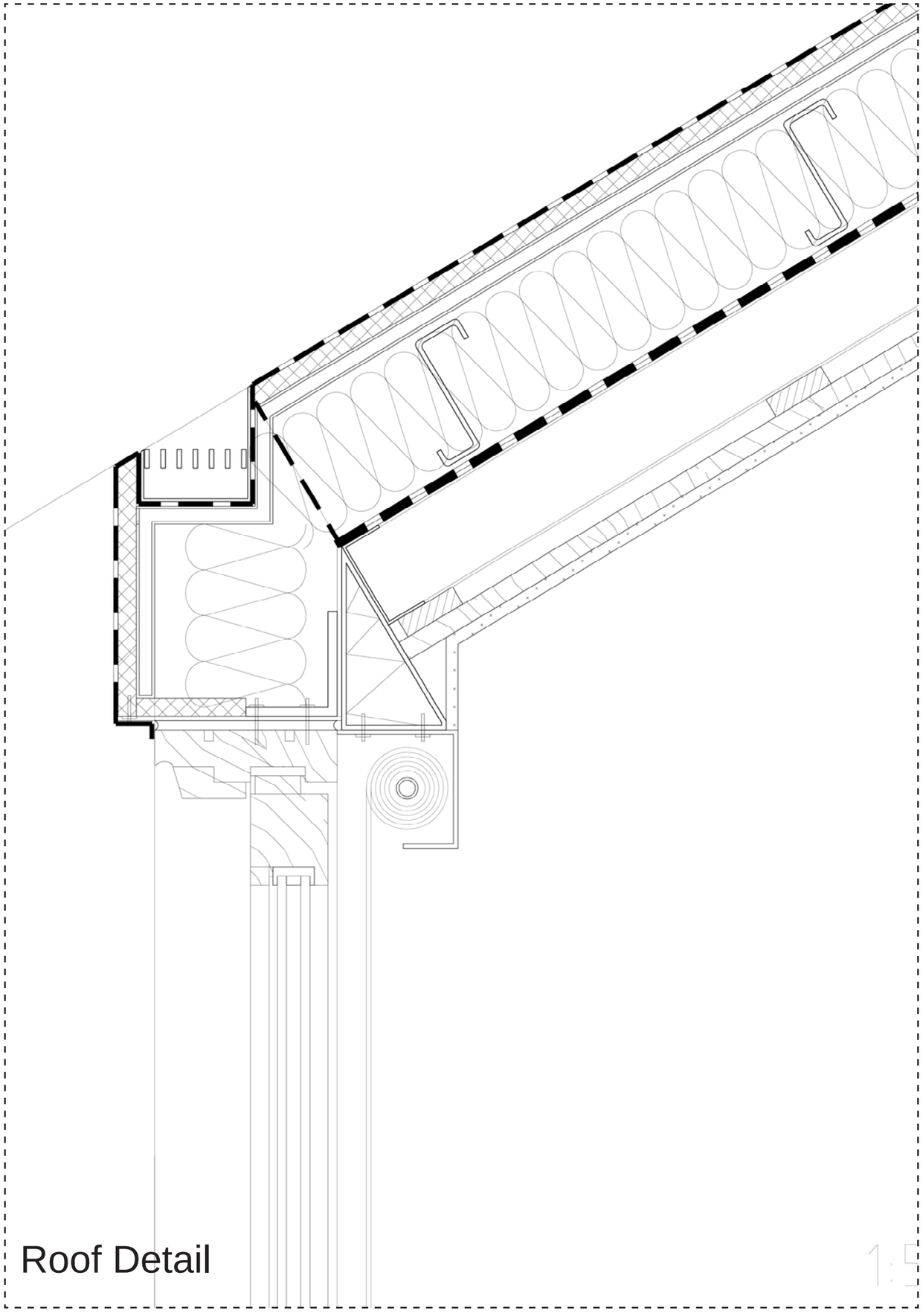


Detail of Balcony 1:50

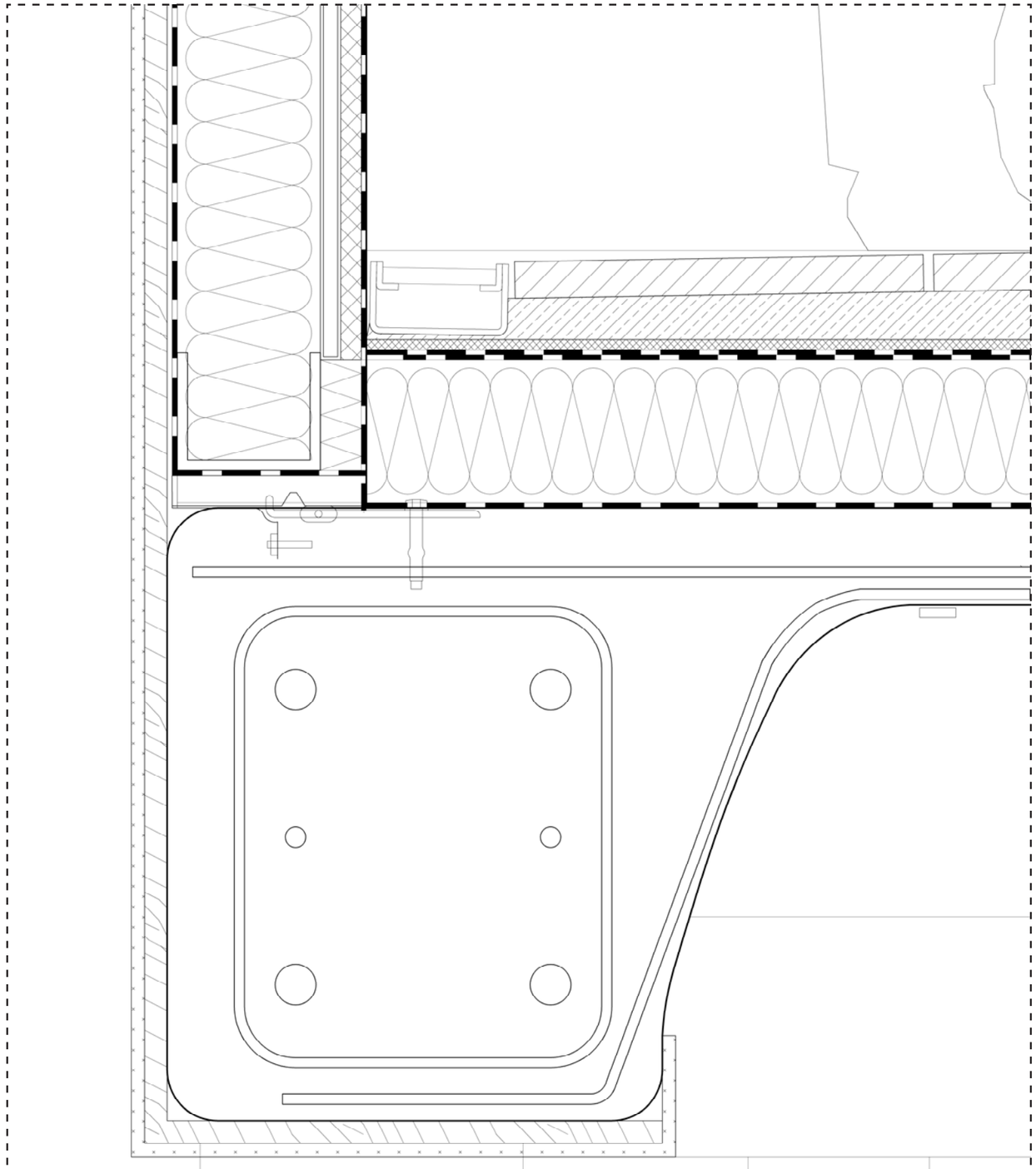
Detail of Balcony



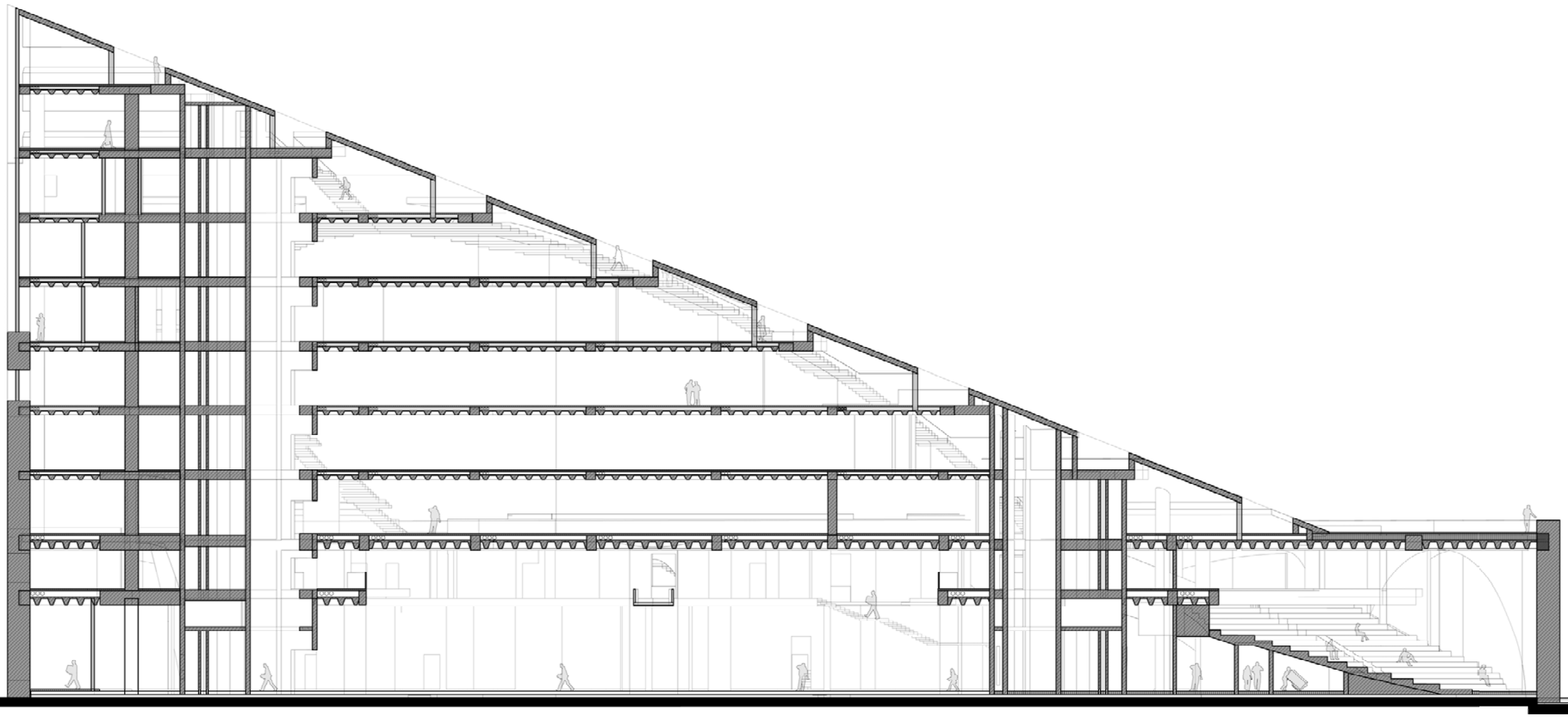
Roof reference:
Summerhouse Lagnö



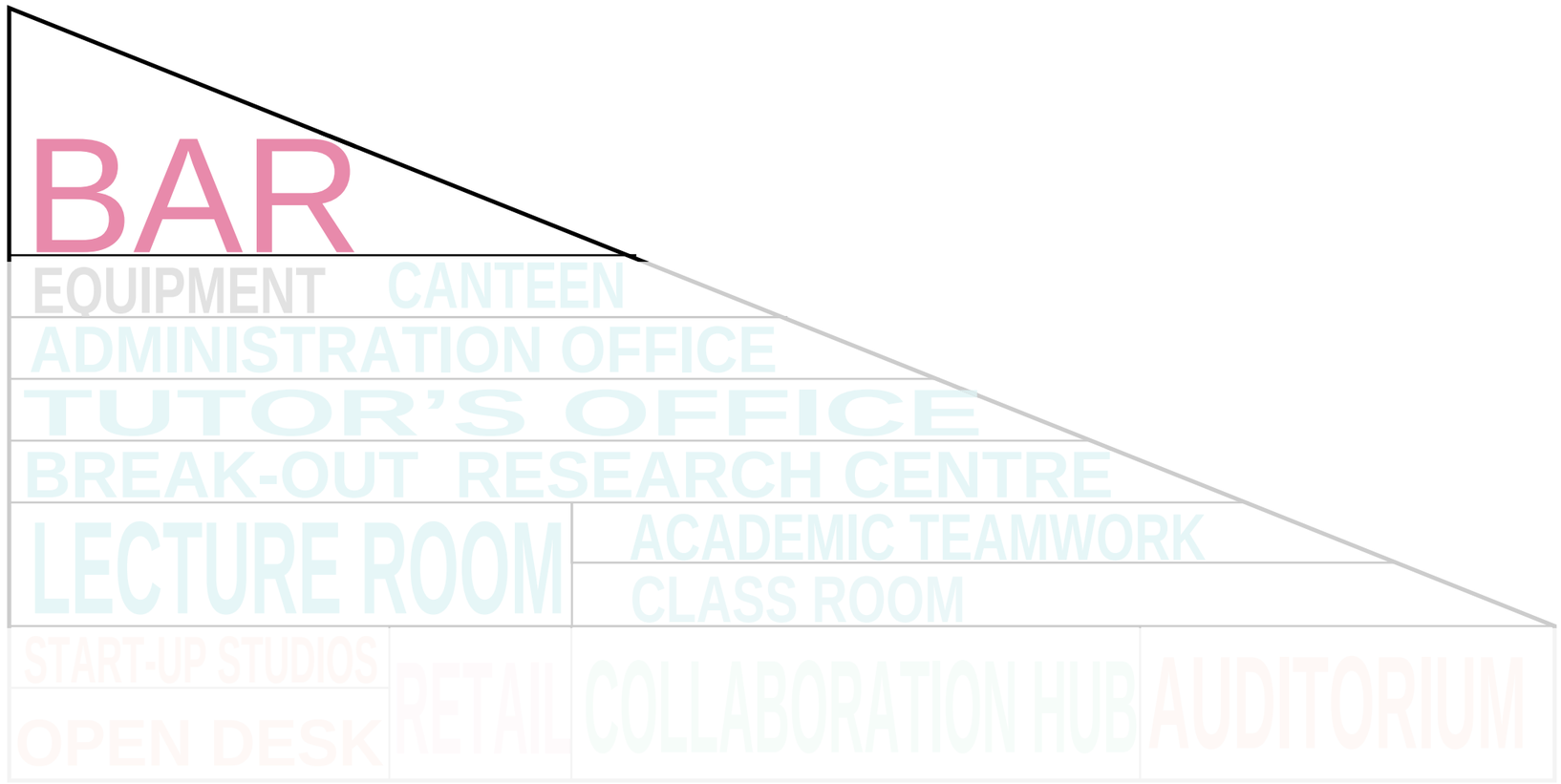
Roof Detail



Floor Detail



RECREATION



open desks	5500m2
startup studios	2000m2
meeting rooms	600m2
collaboration	1000m2
work-out area	1000m2
social corner	1000m2
workshops	1000m2
club	1000m2
library	900m2
gallery	600m2
retails	500m2
other facilities	2900m2

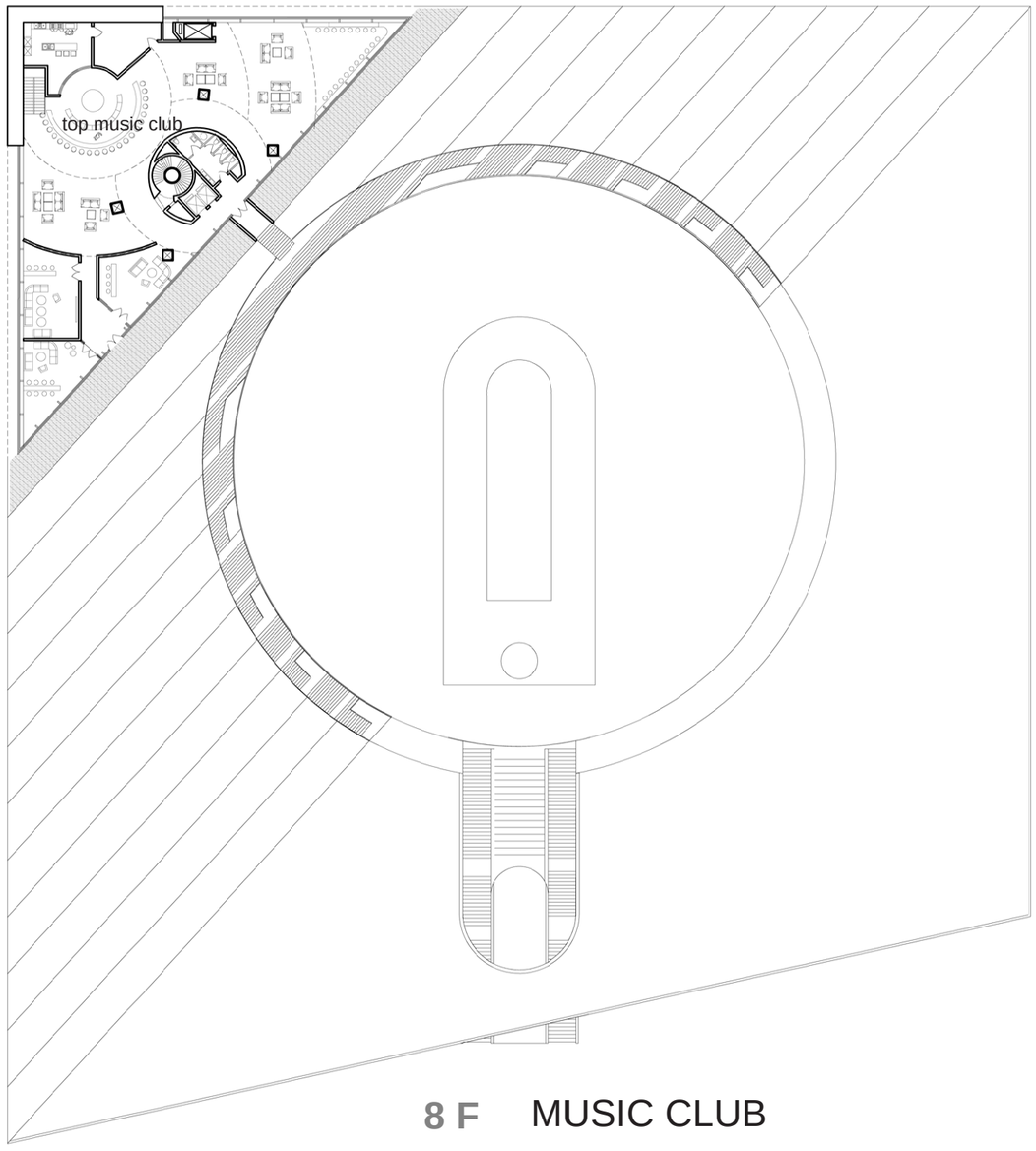
lecture rooms	800m2
auditorium	600m2
stuff offices	200m2
labs	500m2
meeting room	200m2
storage	300m2
other facilities	1400m2

University

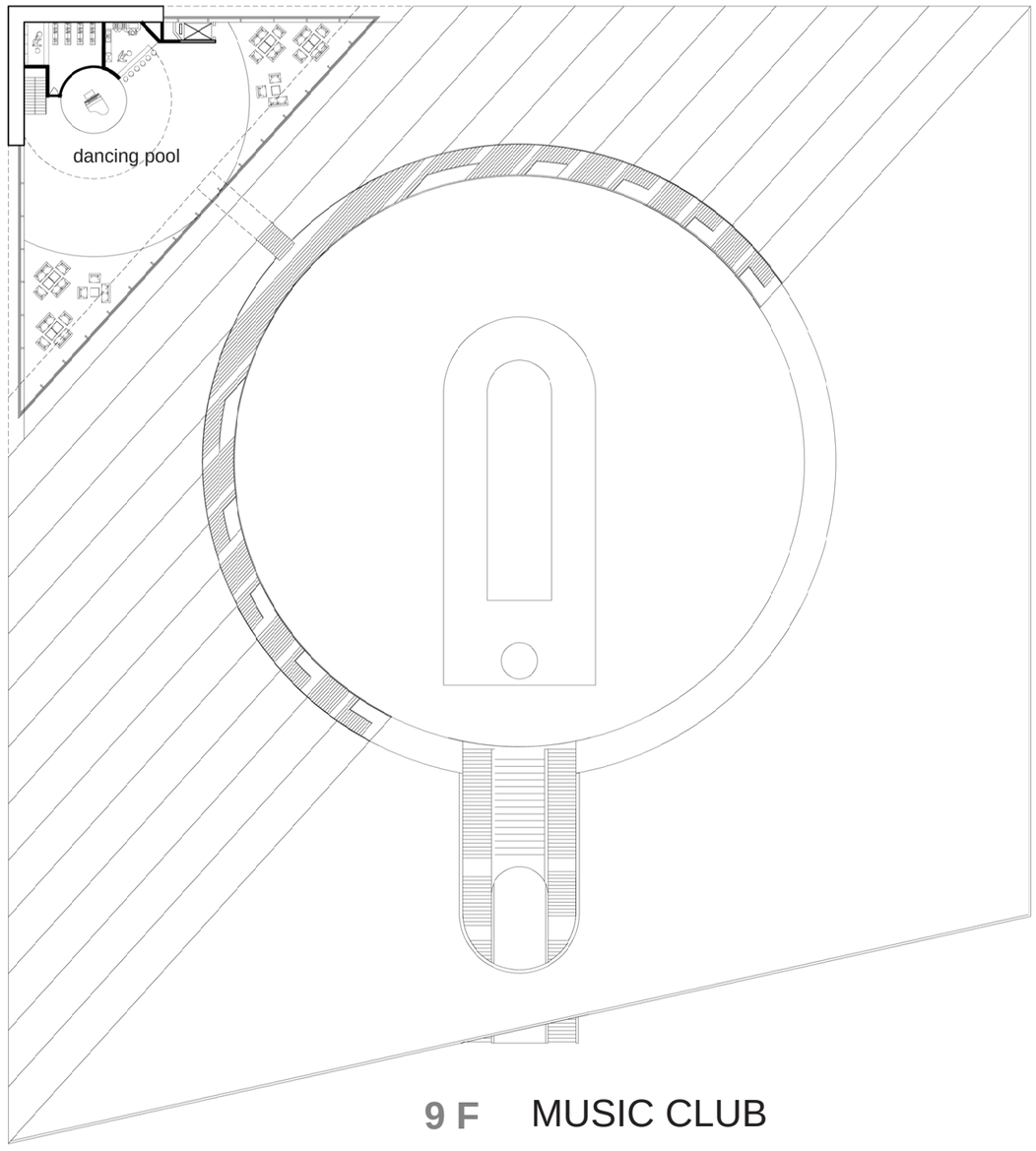
(Re)start-up

Collaboration hub

Public functions

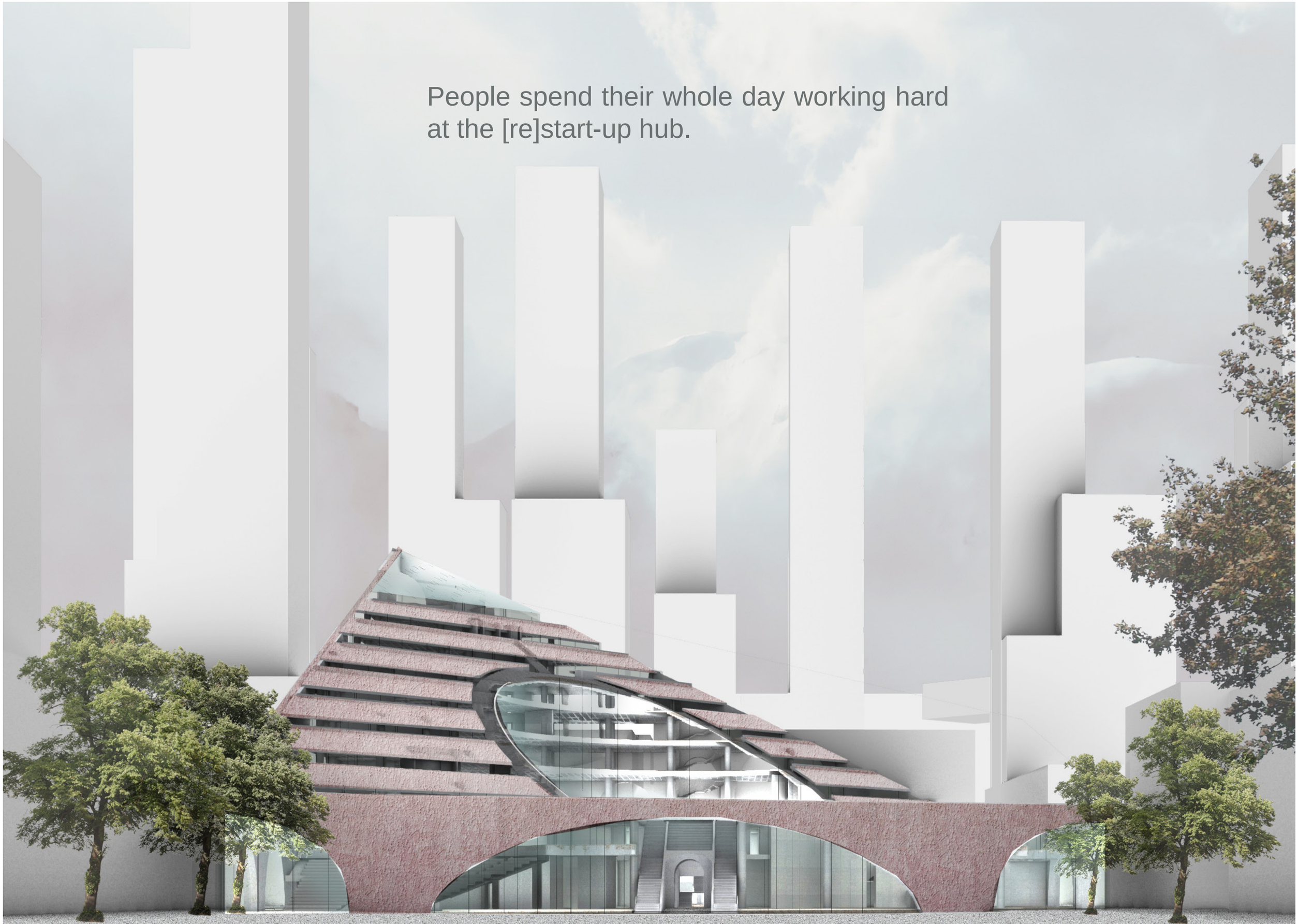


8 F MUSIC CLUB

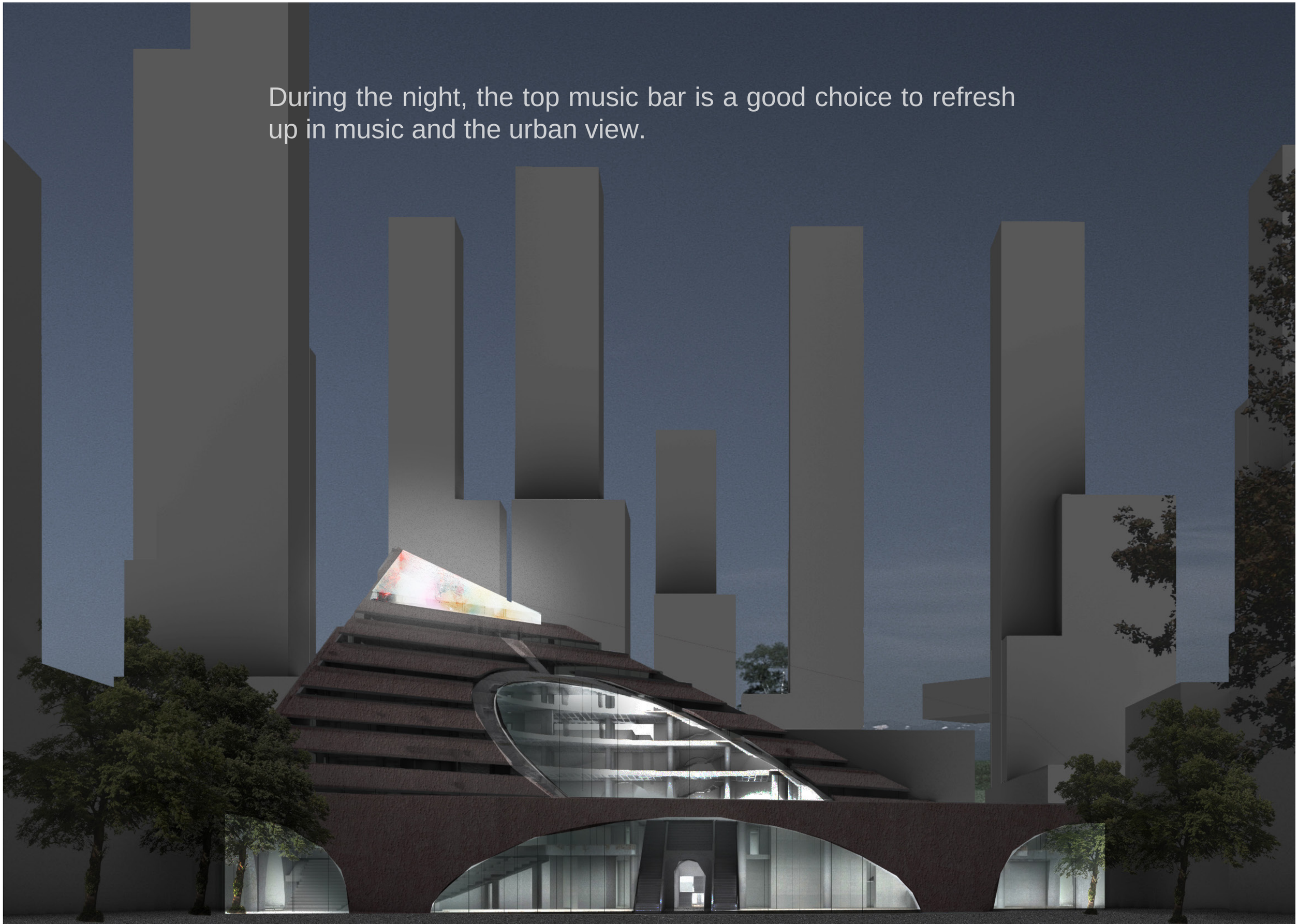


9 F MUSIC CLUB

People spend their whole day working hard
at the [re]start-up hub.

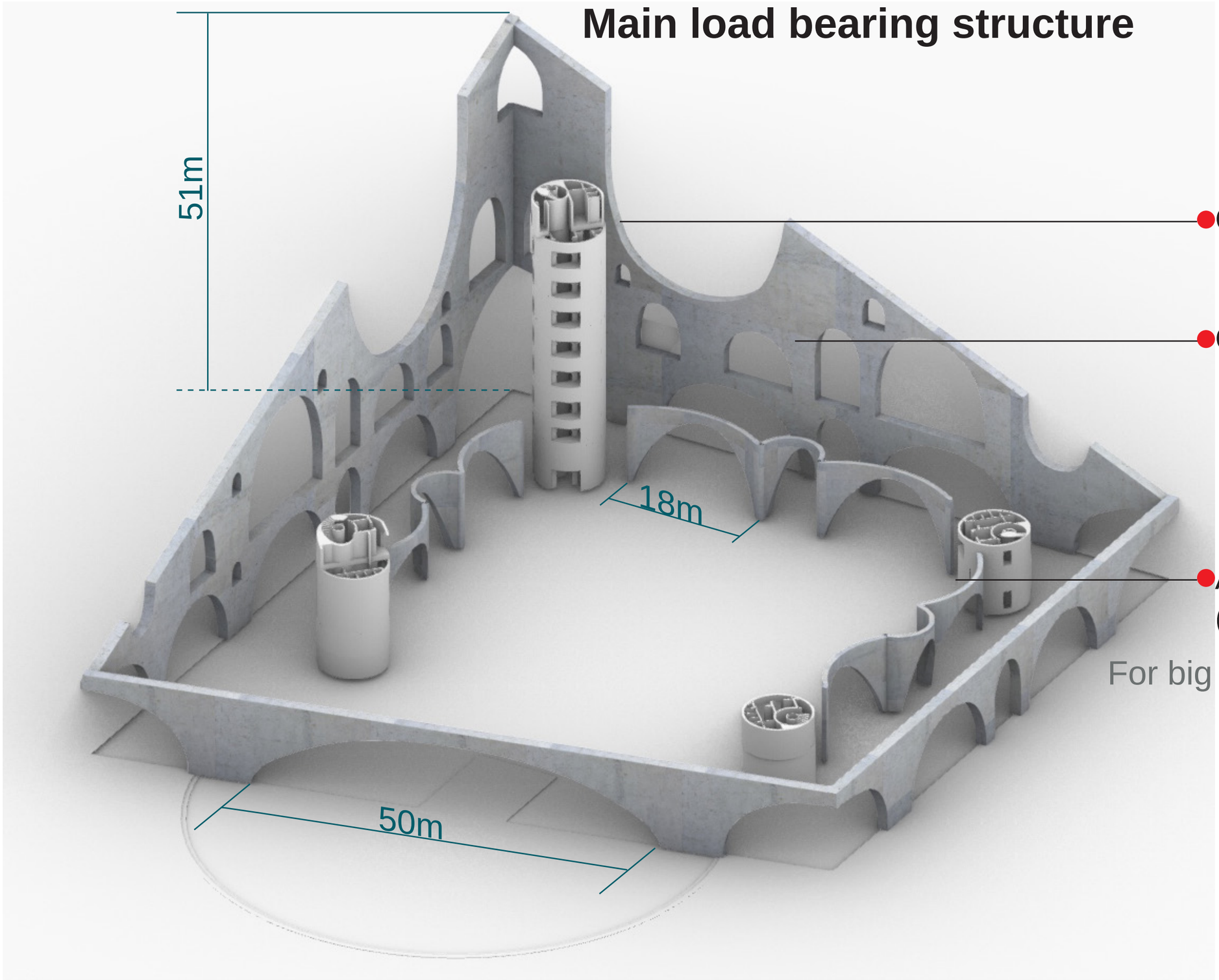


During the night, the top music bar is a good choice to refresh up in music and the urban view.



STRUCTURE
&
CONSTRUCTION DETAILS

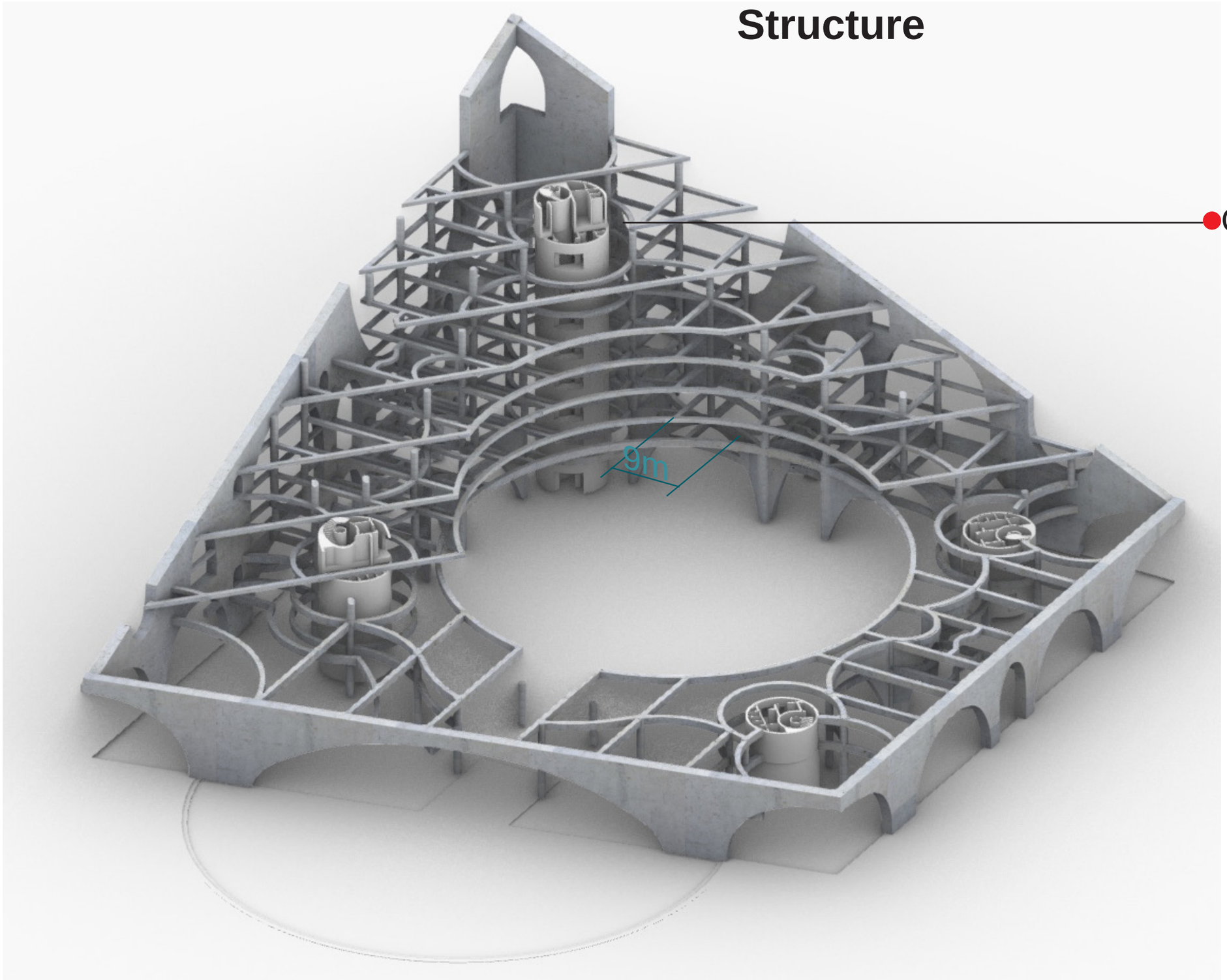
Main load bearing structure



- Concrete Core
- Concrete Wall
- Arches
  (Steel+Concrete frame)

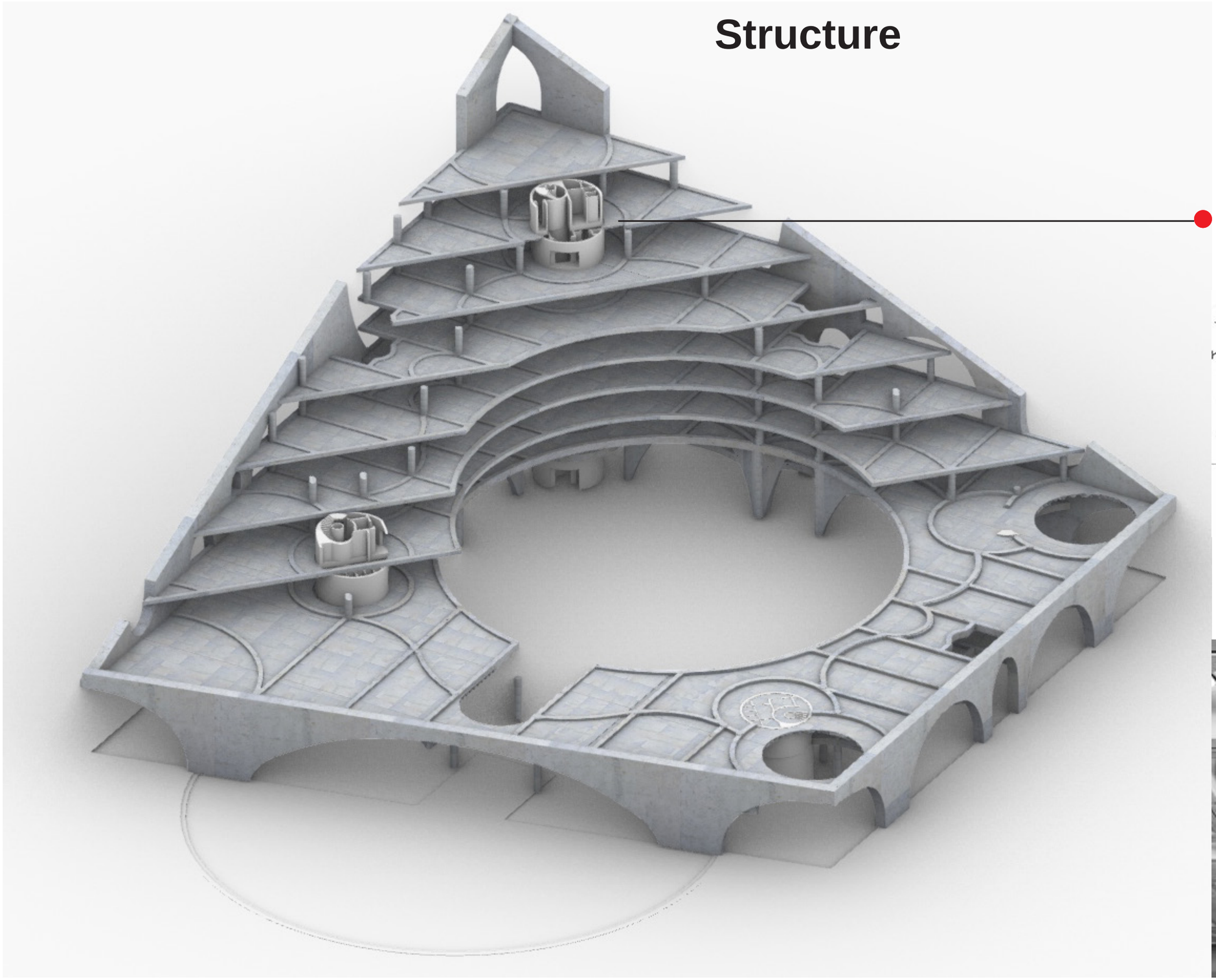
  For big space with no columes

Structure

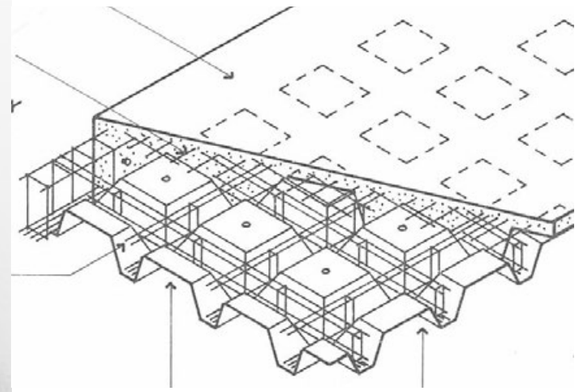


Columns and Beams

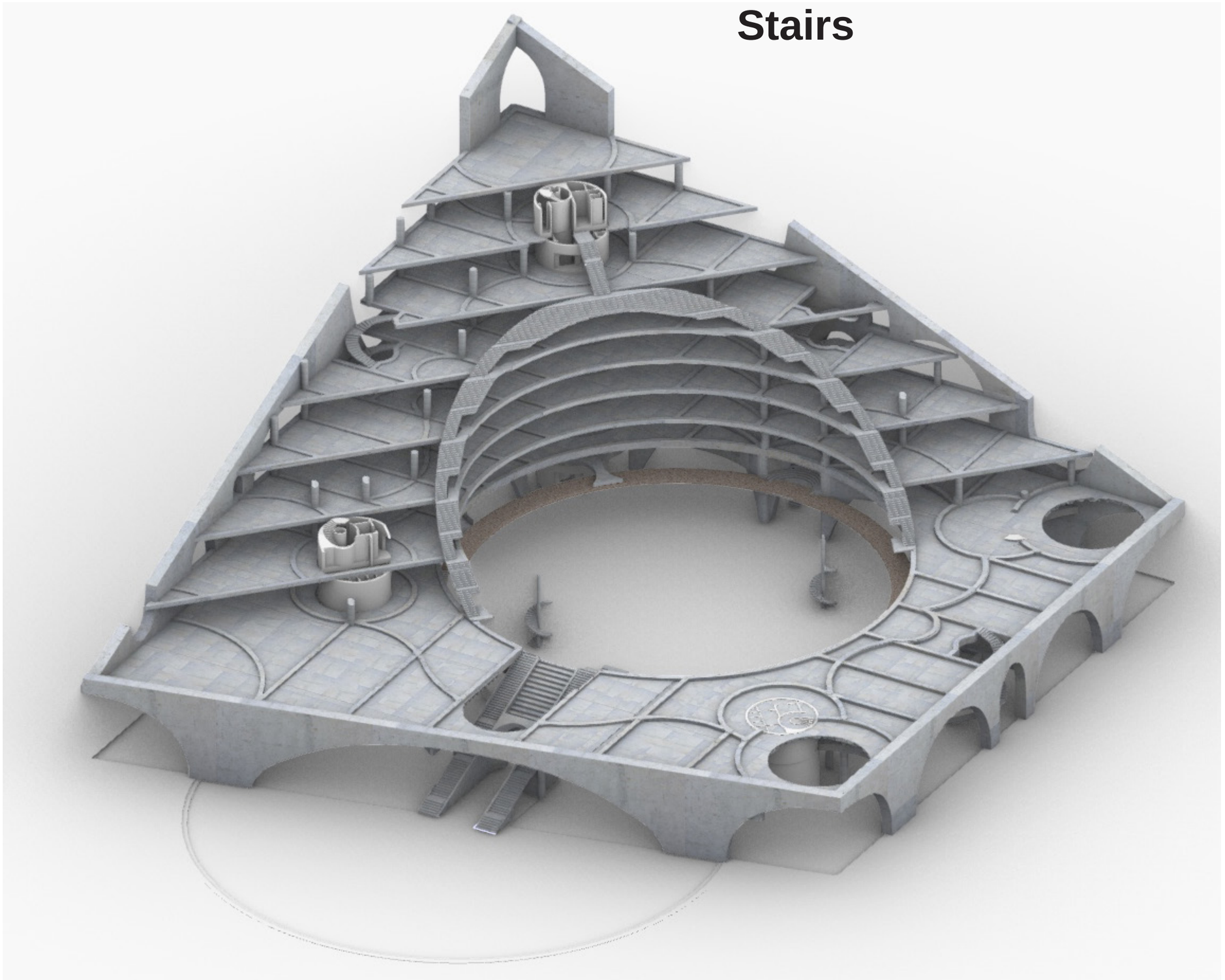
Structure



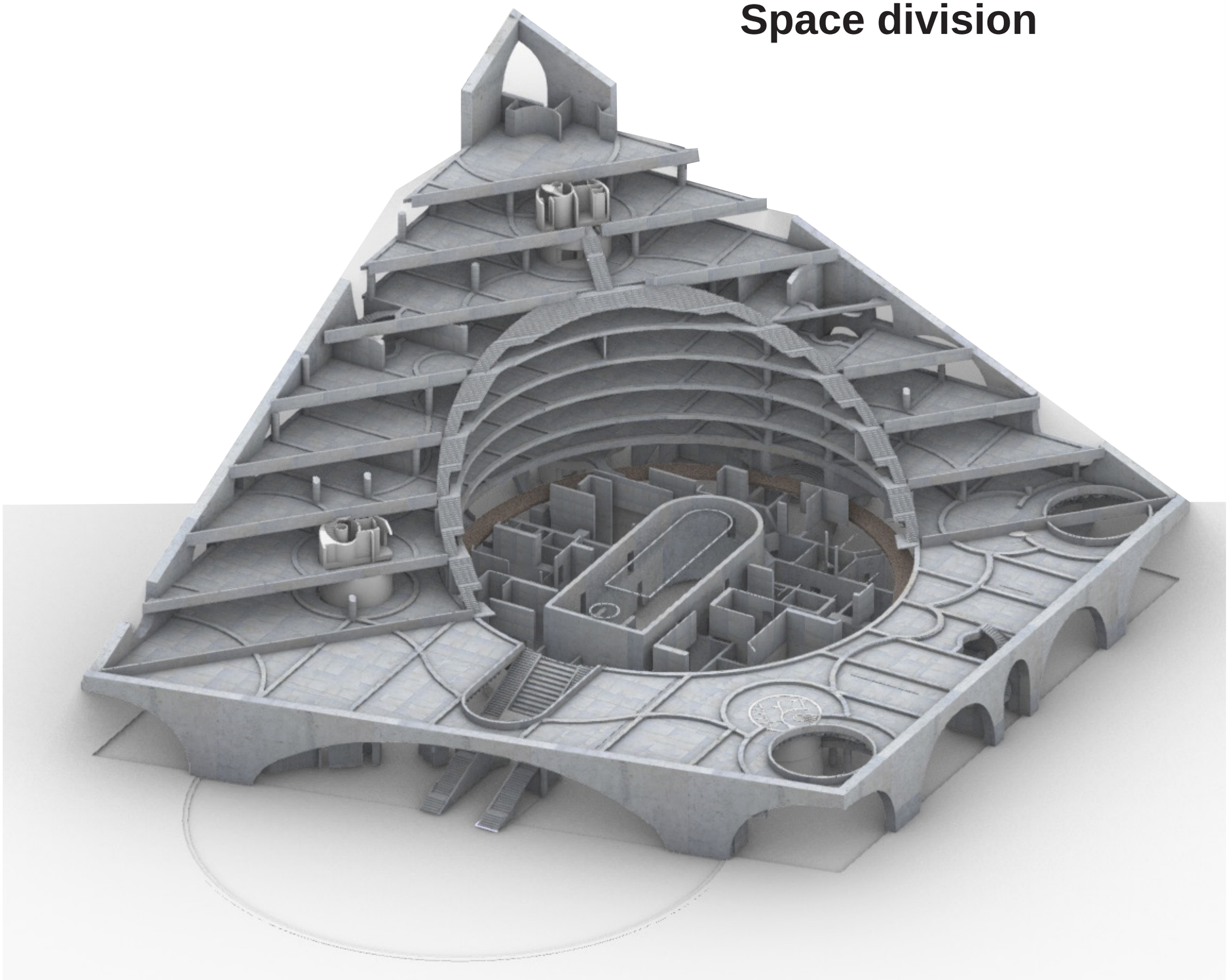
Concrete wraffle slab



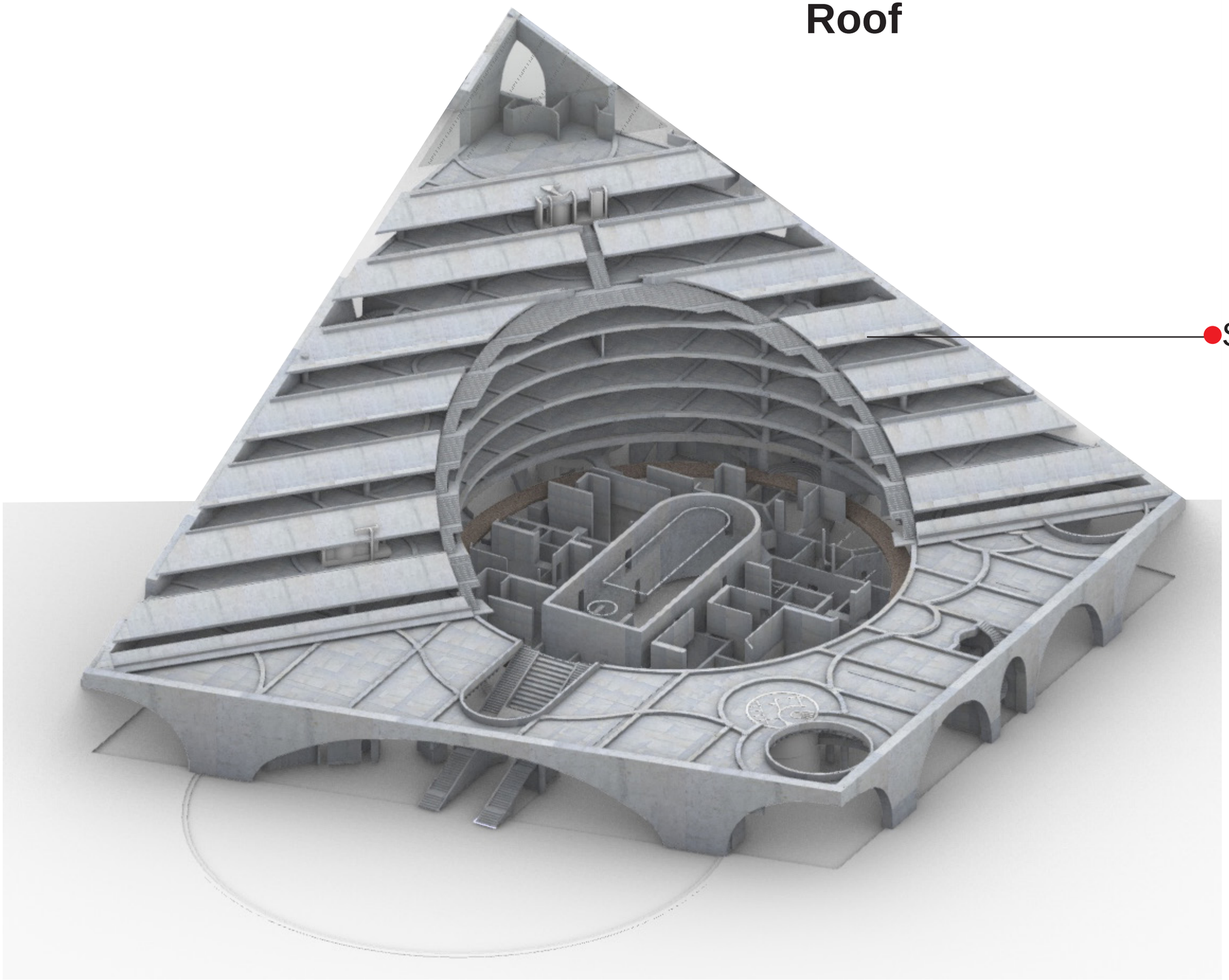
Stairs



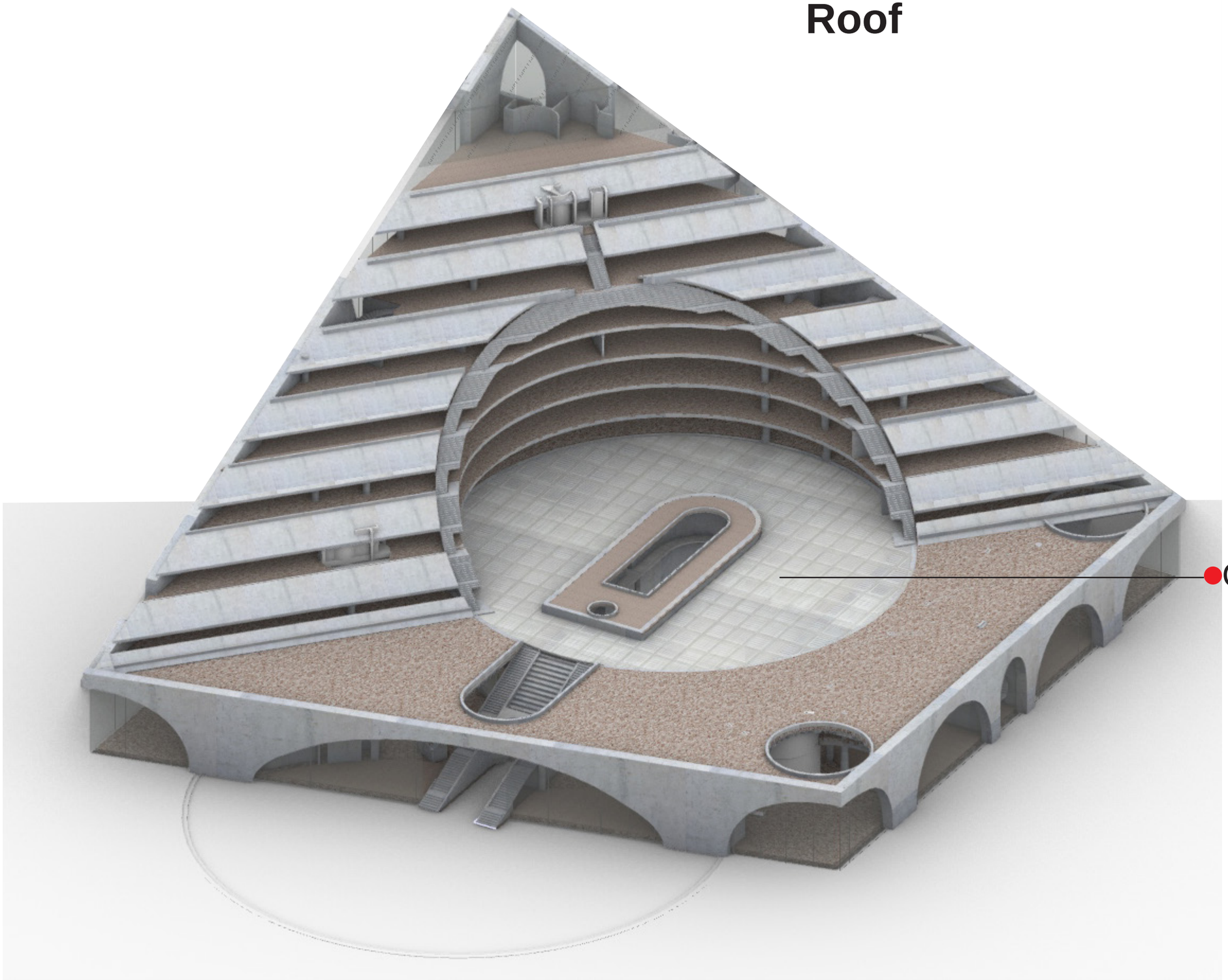
Space division



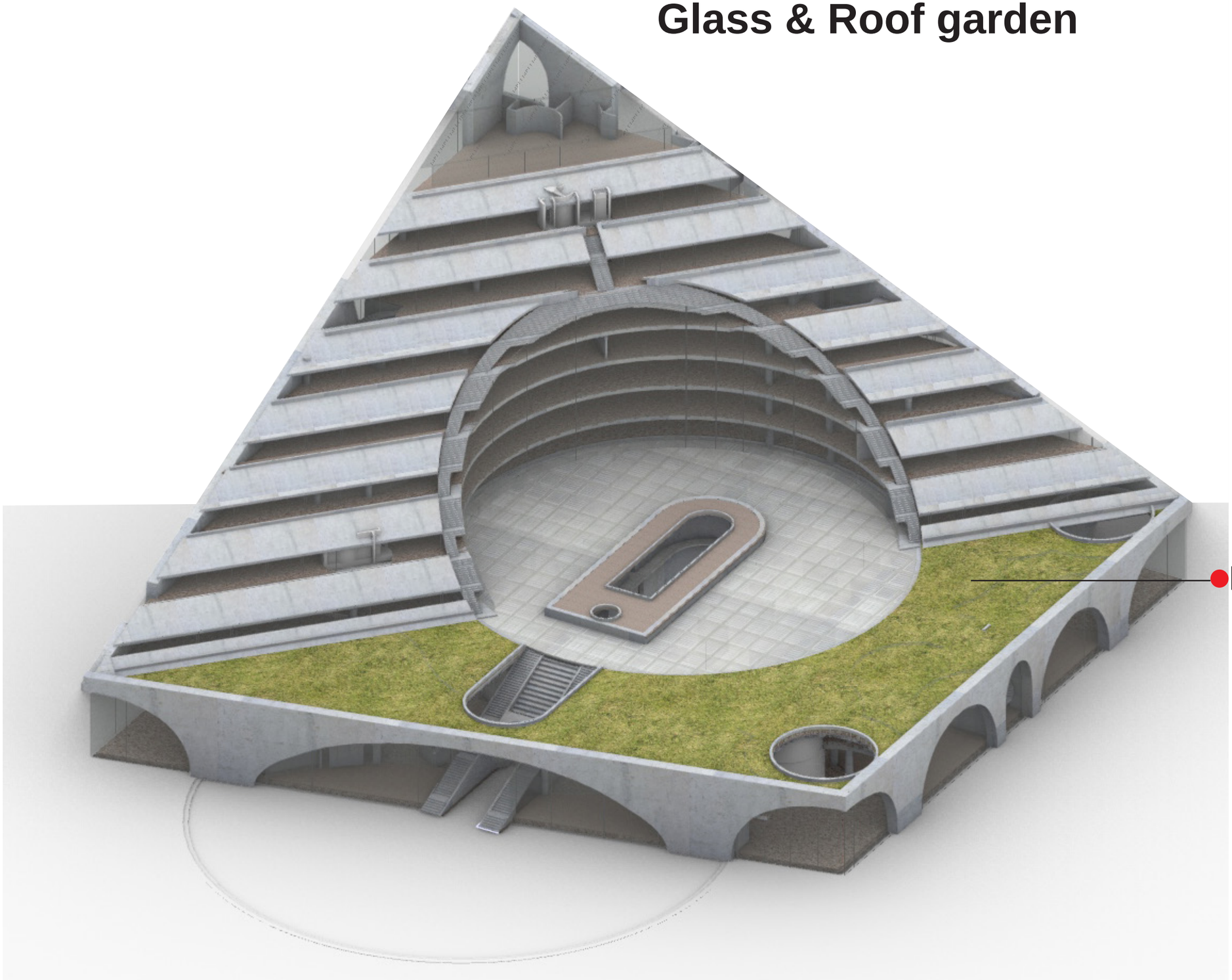
Roof



Roof



Glass & Roof garden



THANK YOU