

CoCuReSp Center

Parya Khodaeiani

Public Realm Studio - Rotterdam

31 October 2012

Index

Site Analysis

Group Research - Temporality

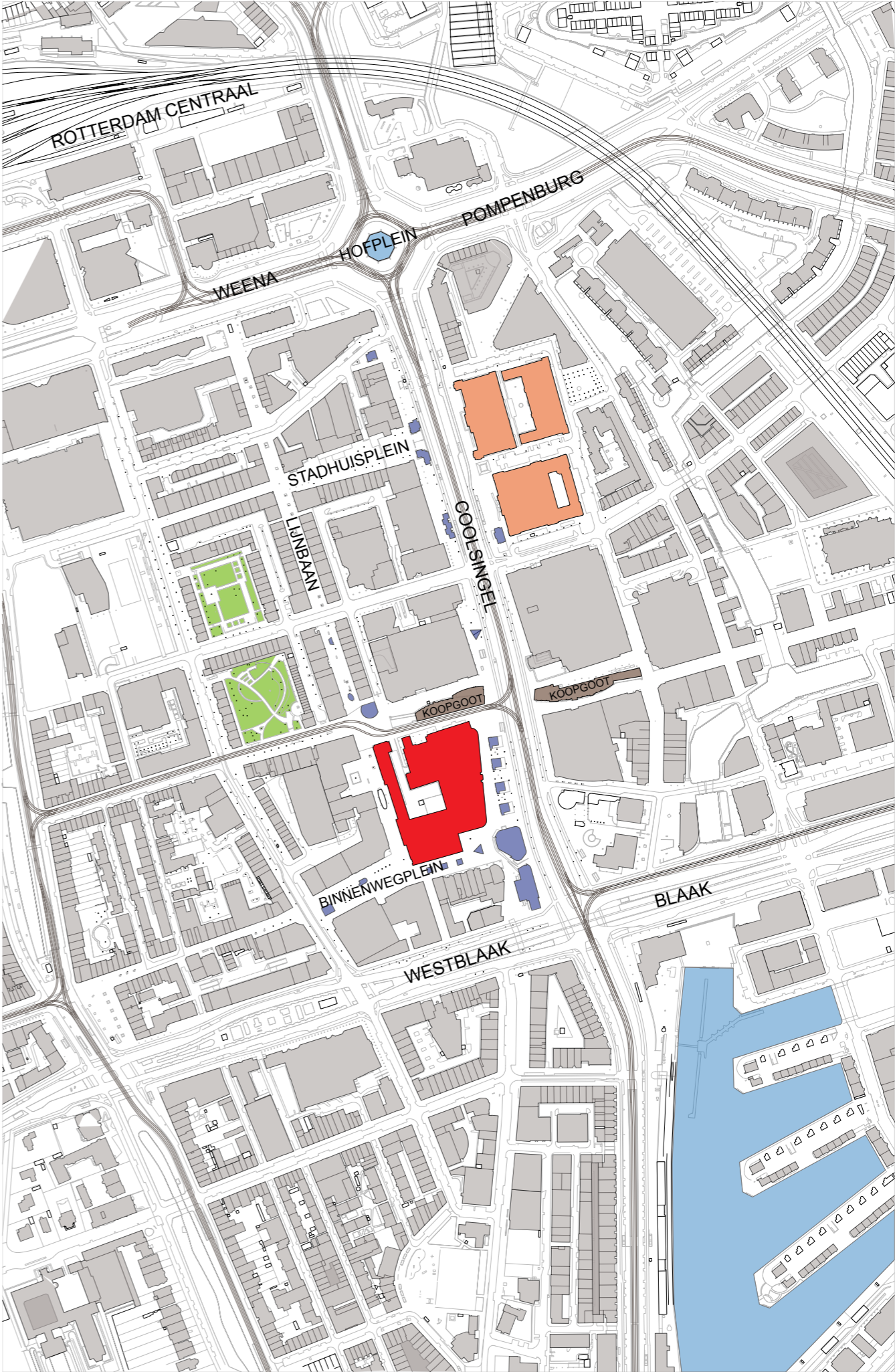
Urban & Building Masterplan

Process Review

Design

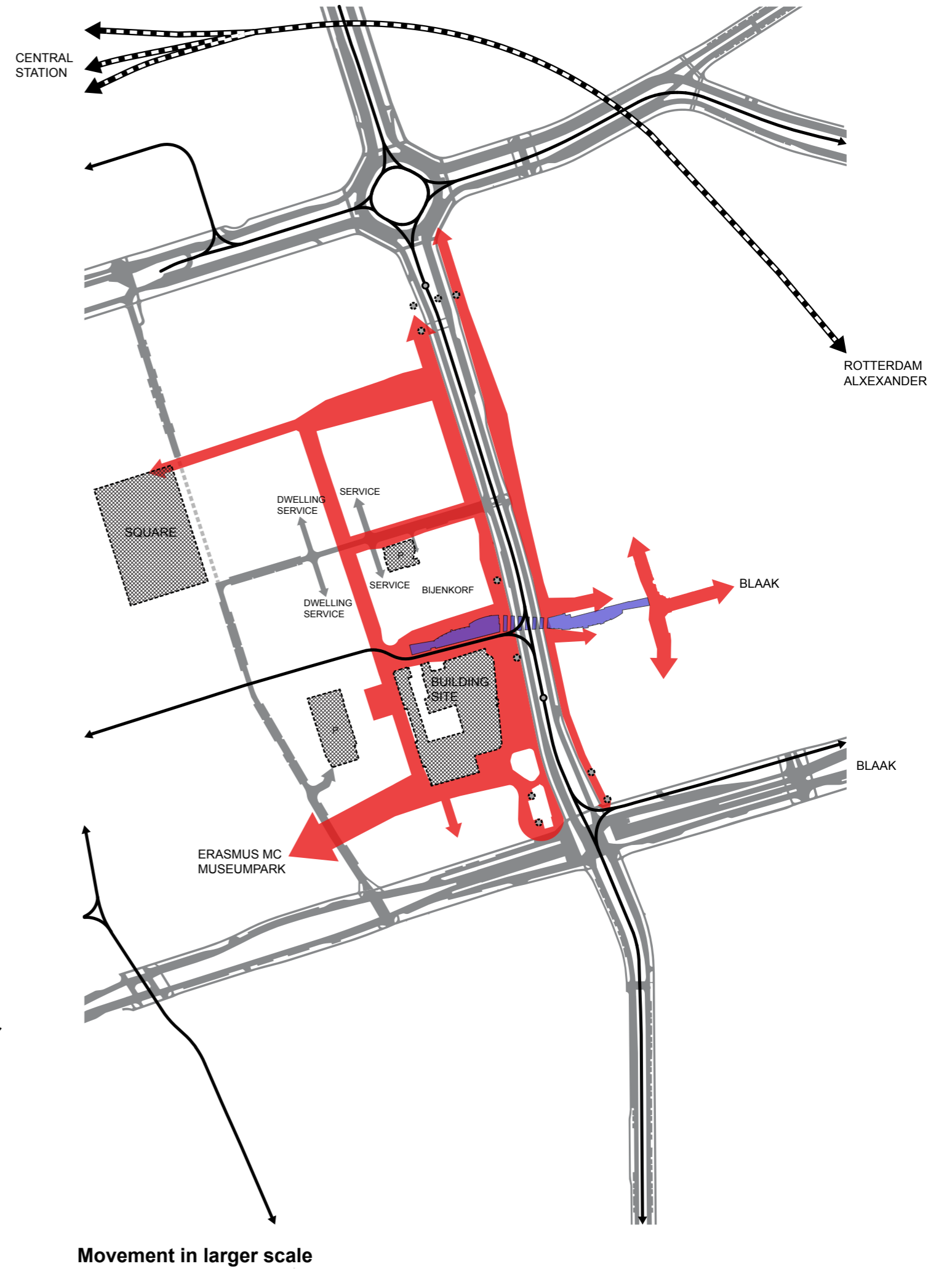
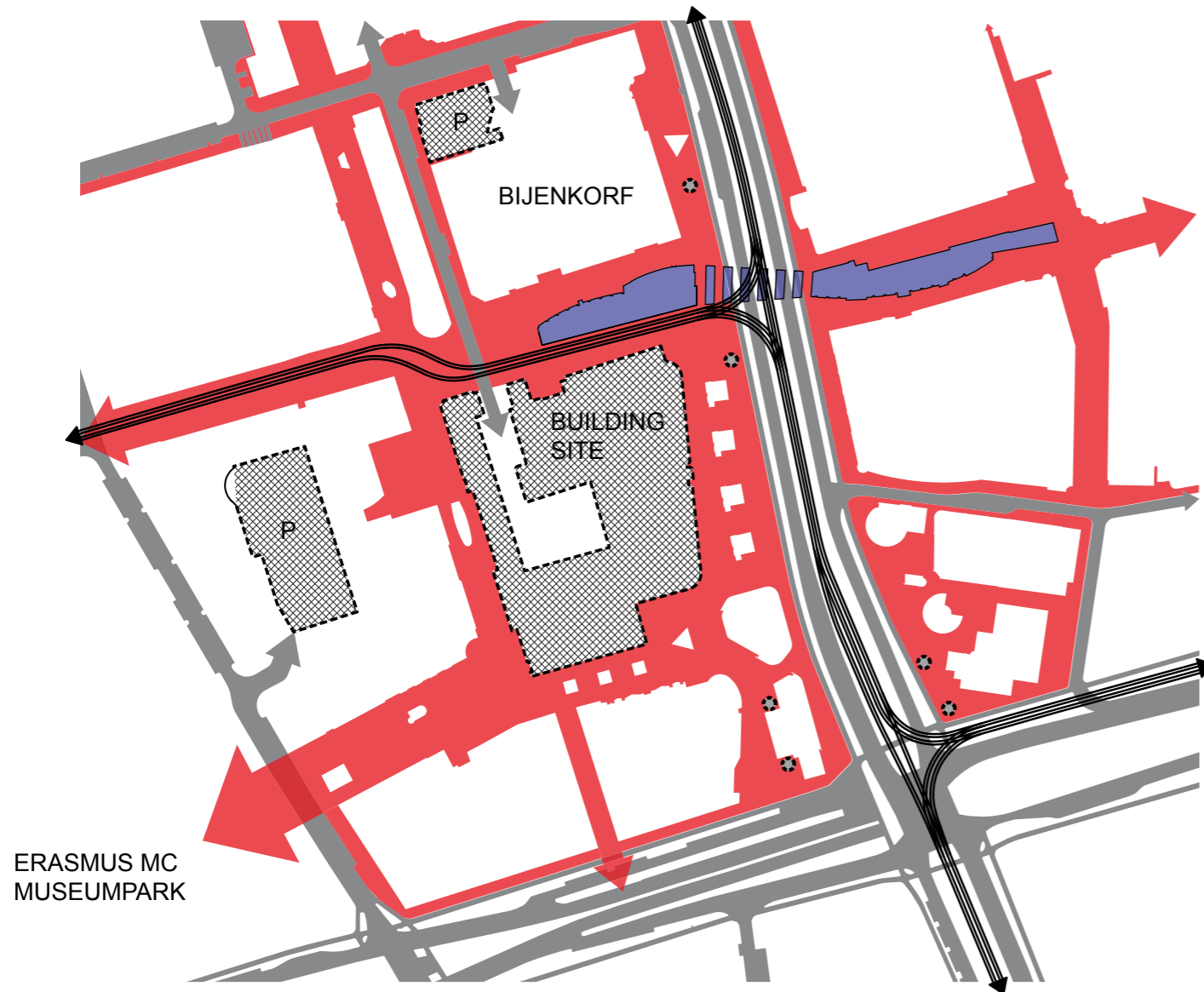
Technical Drawings

Site Analysis



Accessibility

Movement in smaller scale



Movement in larger scale

Public Spaces around the Site



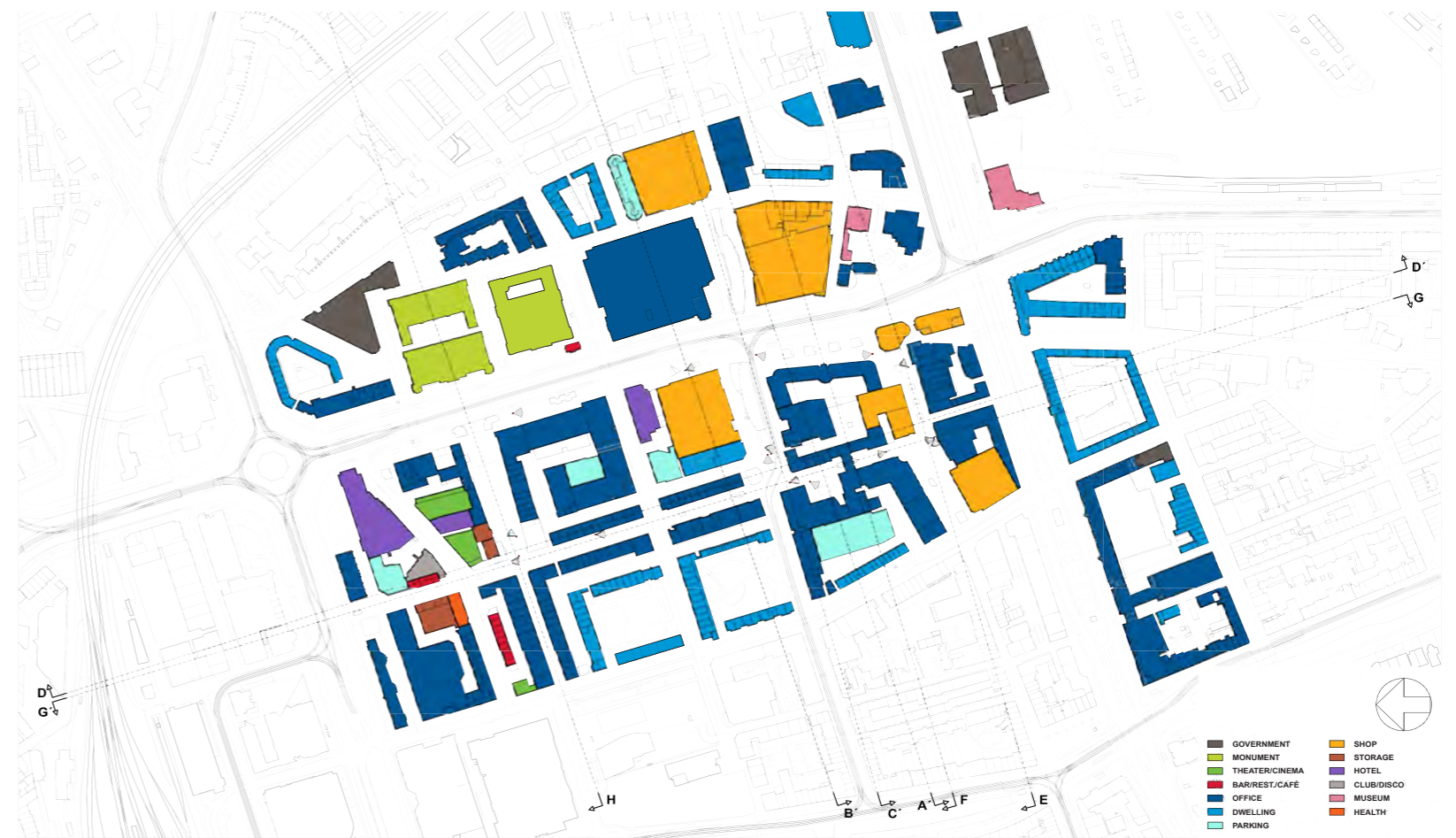
- Block
- Public Square
- Public Passage
- Pavilion
- Green

Programmatic Studies

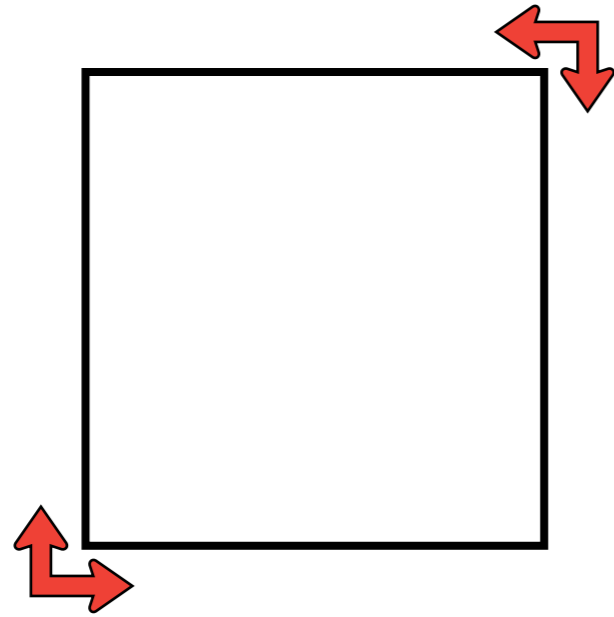
Ground Floor



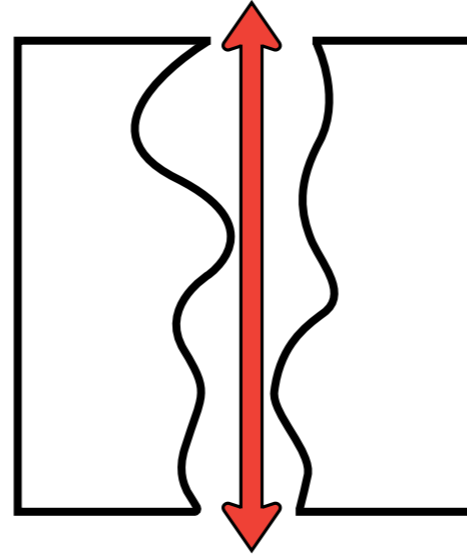
First Floor



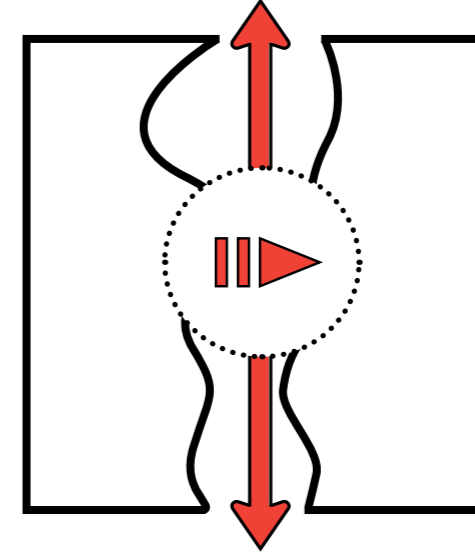
Block Studies



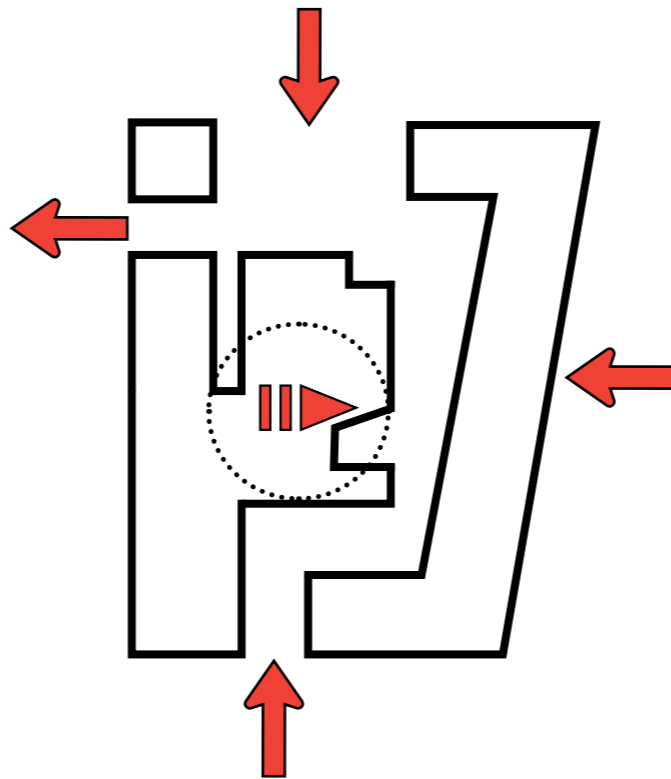
A. Blocks are mainly accessible from the edges



B. Breaking through the blocks



C. Defining a pause space inside the block



D. Providing connection from public squares and main streets around the block

Research

Temporality

Structuring Temporalities

Temporality is a term often used in philosophy in talking about the way **time** is.

The traditional mode of temporality is a linear progression of **past**, **present**, and **future**.

However, some modern-century philosophers have interpreted temporality in ways other than this linear manner such as Martin Heidegger's "Being and Time".

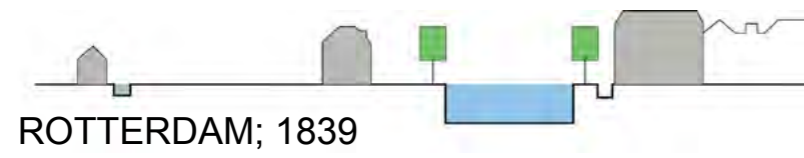
Temporality is a study of social, spatial and programmatic situation of different scales of spaces in time.

The focus of the research differs from the **smaller scale** that shows the urban artifacts and how they would produce or reduce a quality of space to the **larger scale** that is the Rotterdam center and how it works in different times of the **days**, **seasons** and **years**.



Temporality in years

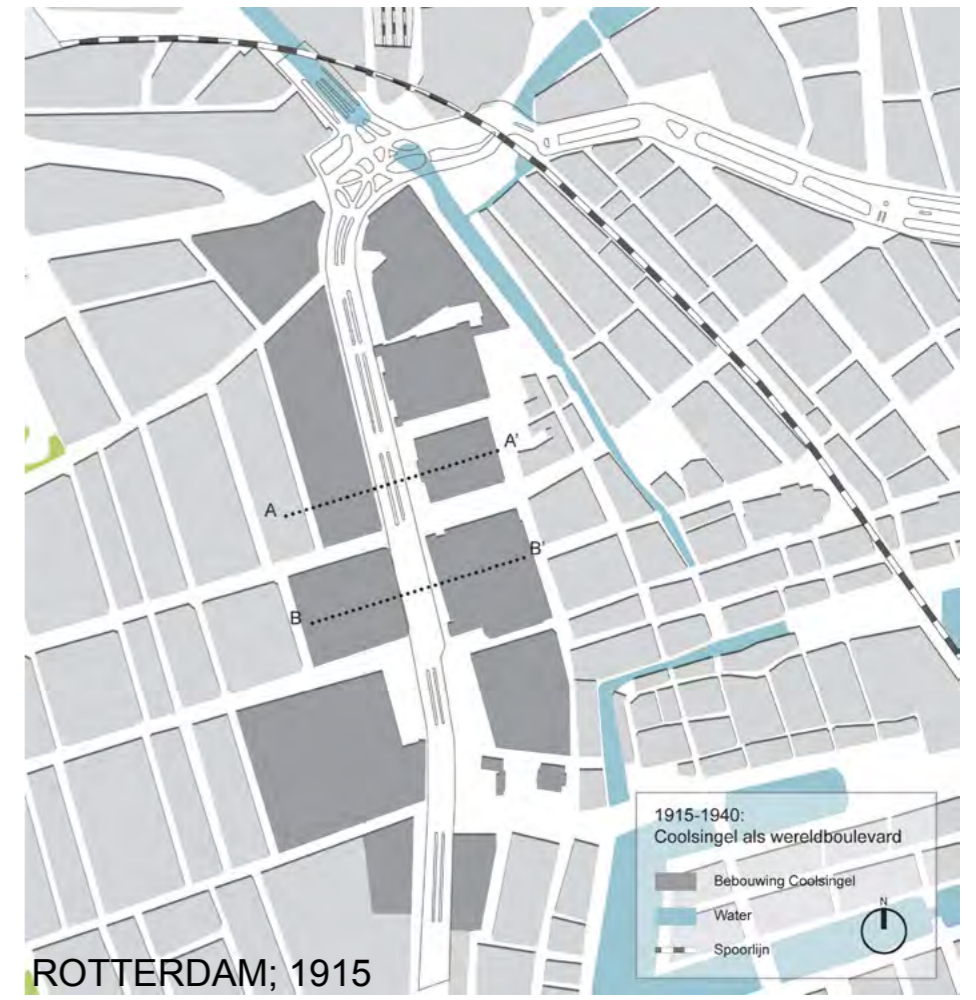
HISTORICAL ALTERATIONS



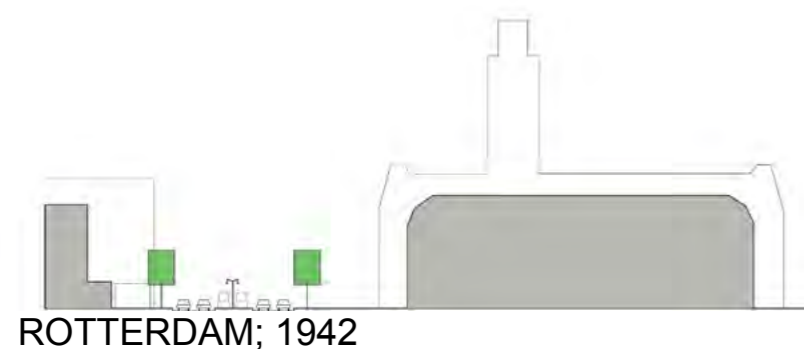
ROTTERDAM; 1839



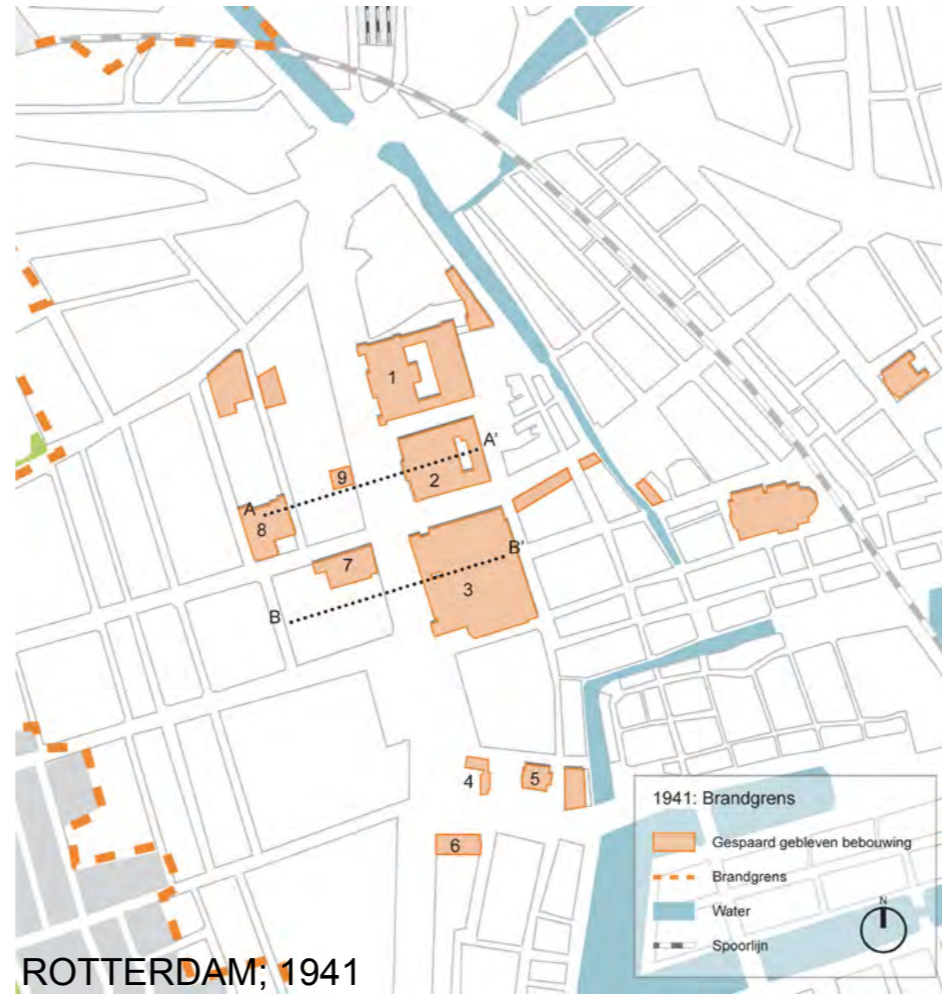
ROTTERDAM; 1839



ROTTERDAM; 1915



ROTTERDAM; 1942



ROTTERDAM; 1941



ROTTERDAM; 1942



COOLSINGEL; 1880



COOLSINGEL; 1930



COOLSINGEL; 1946



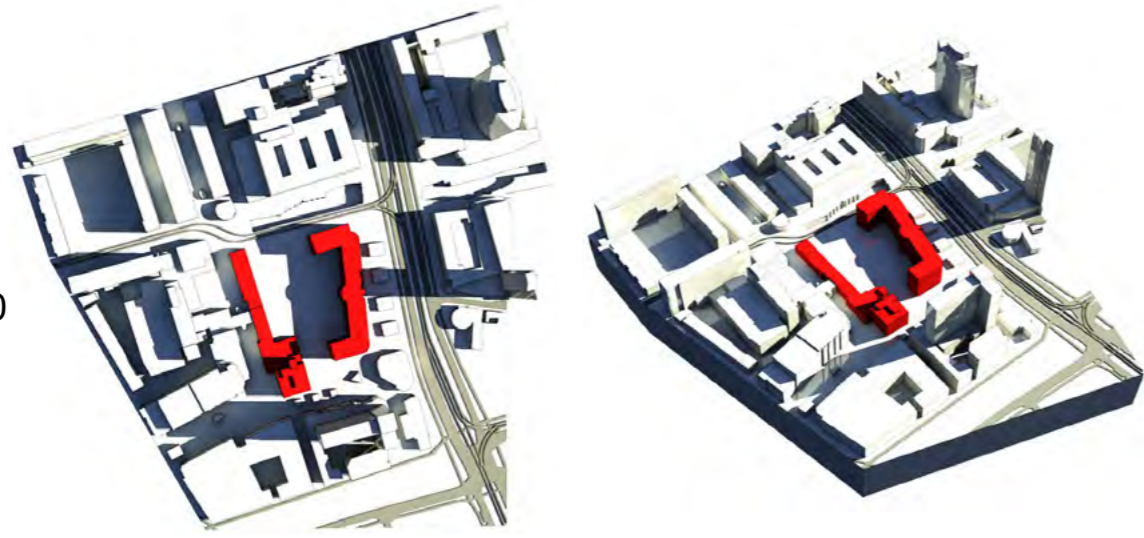
COOLSINGEL; 1970

Temporality in seasons

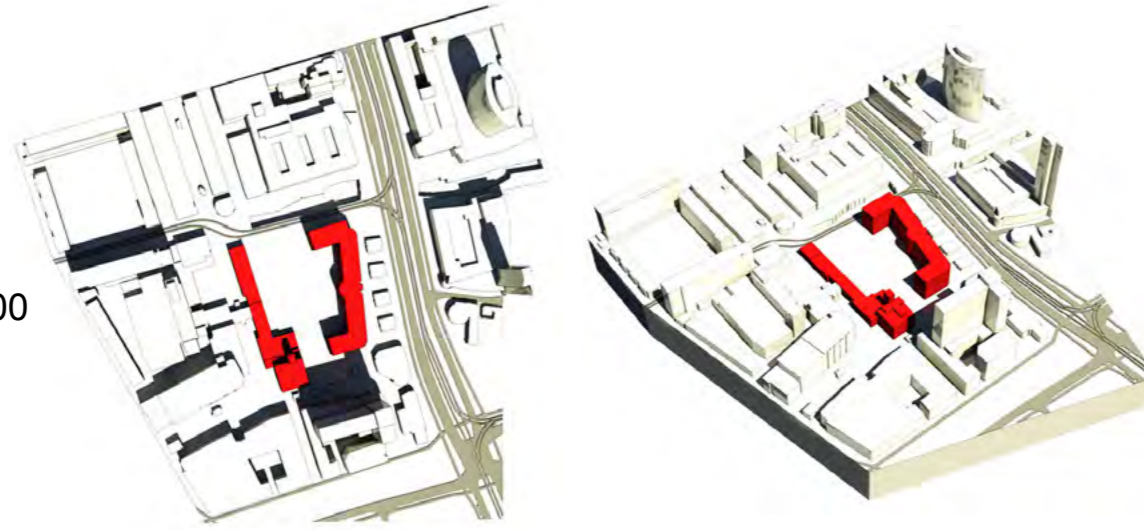
LIGHT STUDY

LIGHT AND SHADOW ALTERATIONS IN SUMMER

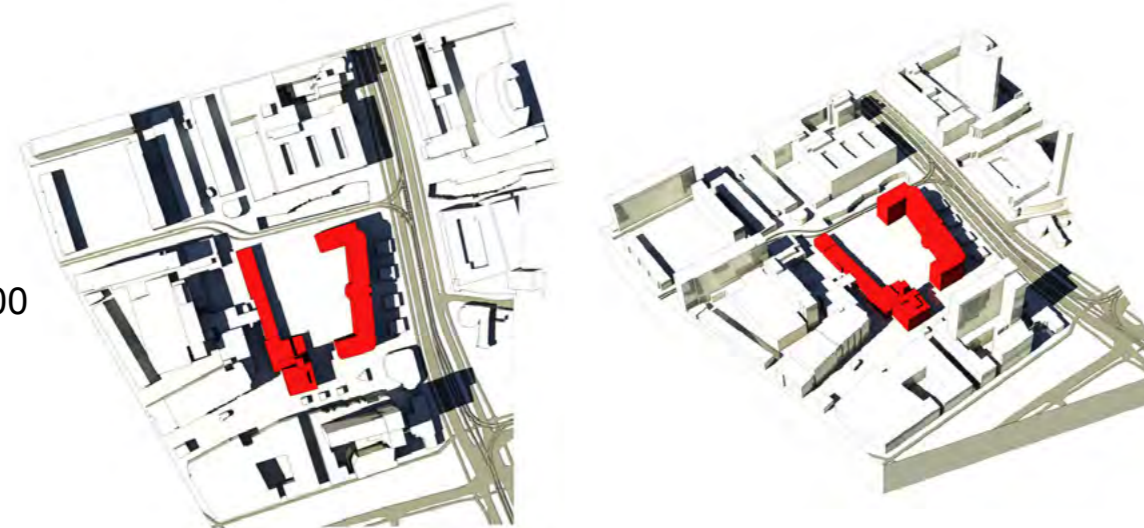
SUMMER 9:00



SUMMER 13:00

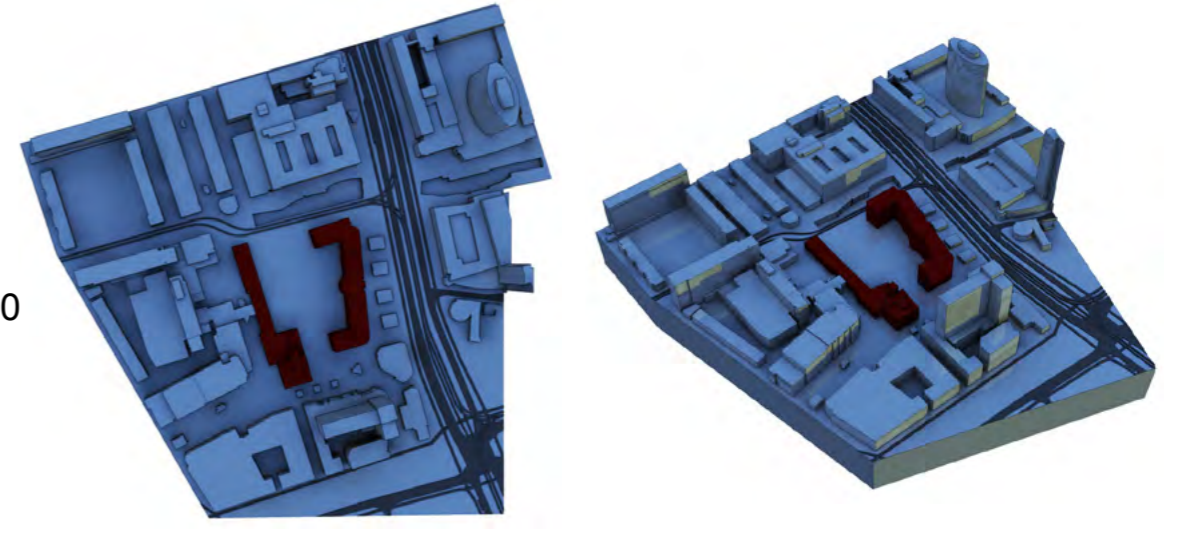


SUMMER 17:00

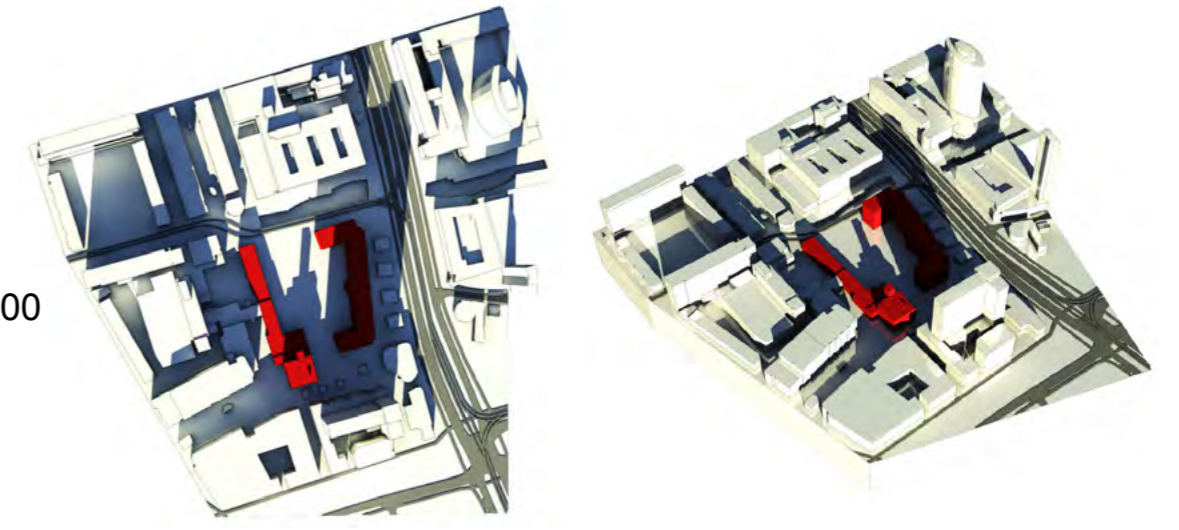


LIGHT AND SHADOW ALTERATIONS IN WINTER

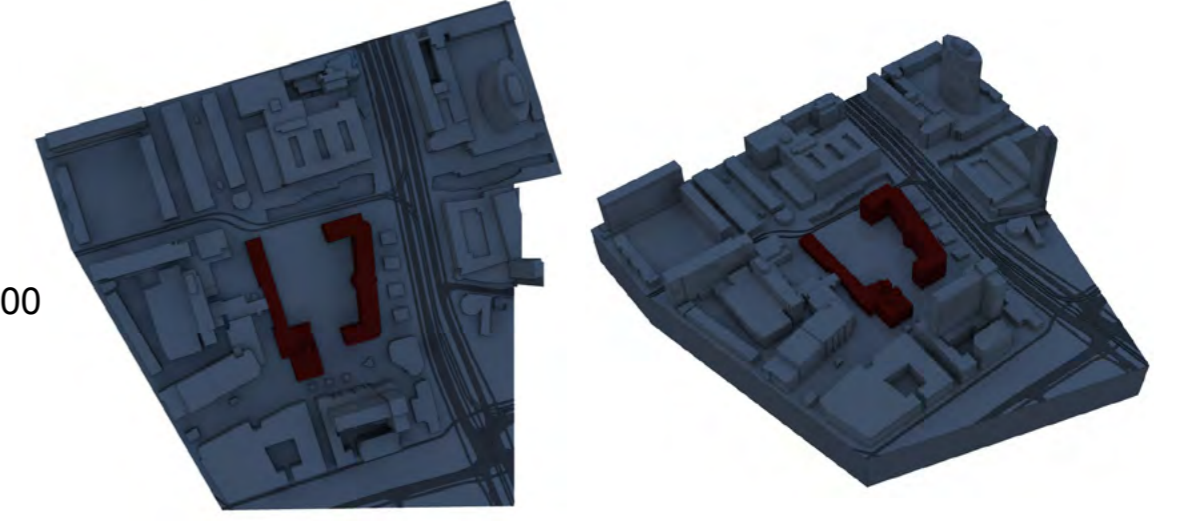
WINTER 9:00



WINTER 13:00



WINTER 17:00

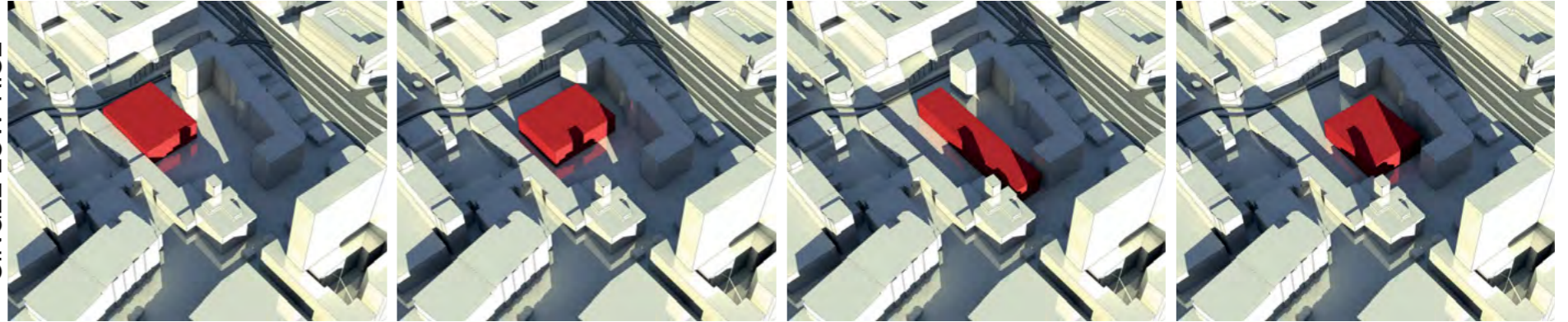


Temporality in seasons

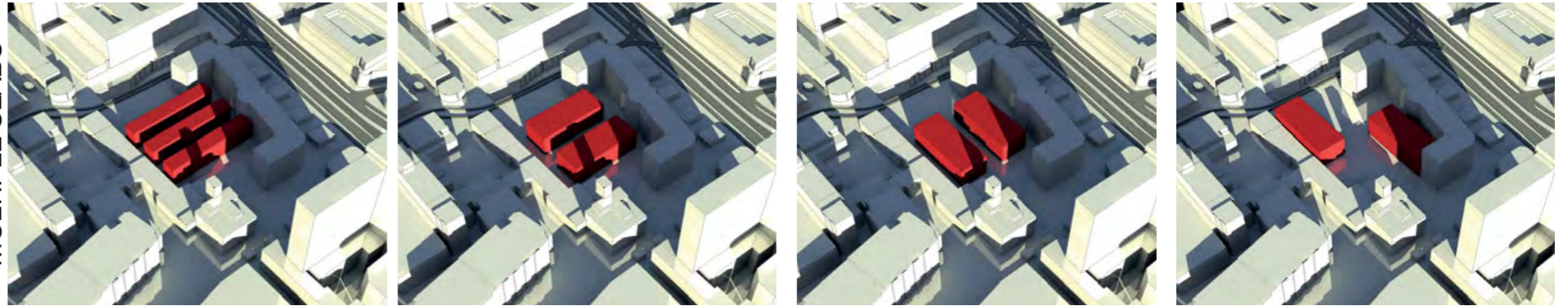
LIGHT EXPOSURE

LIGHT
EXPOSURE

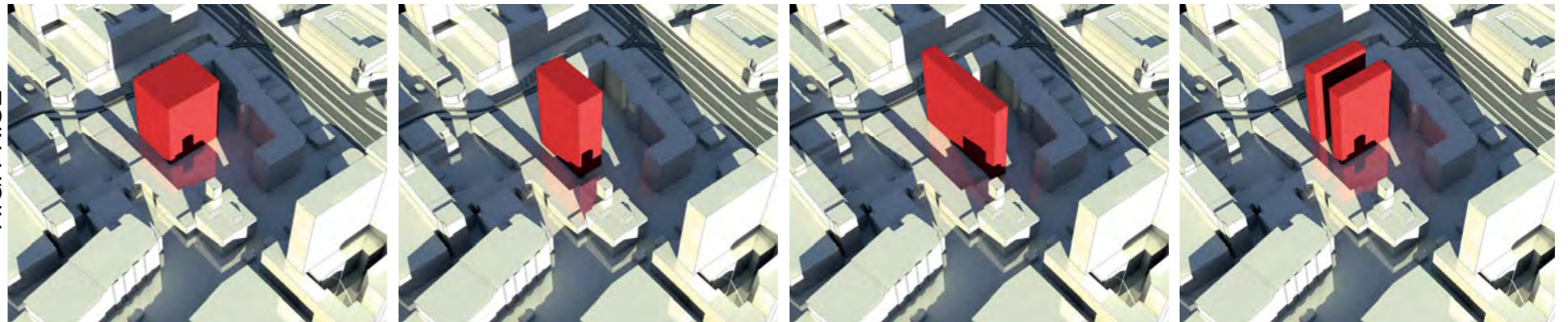
SINGLE LOW-RISE



MULTIPLE SLABS



HIGH-RISE



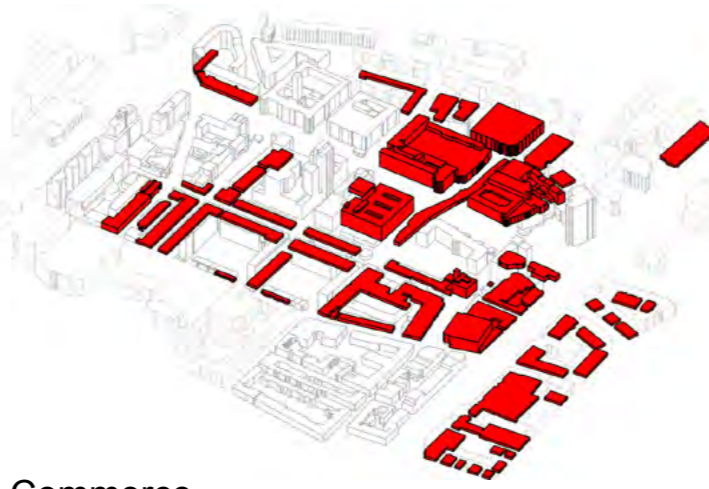
VOLUME ALTERNATIVES AND THEIR INFLUENCES ON THE SURROUNDINGS

Temporalities in Days

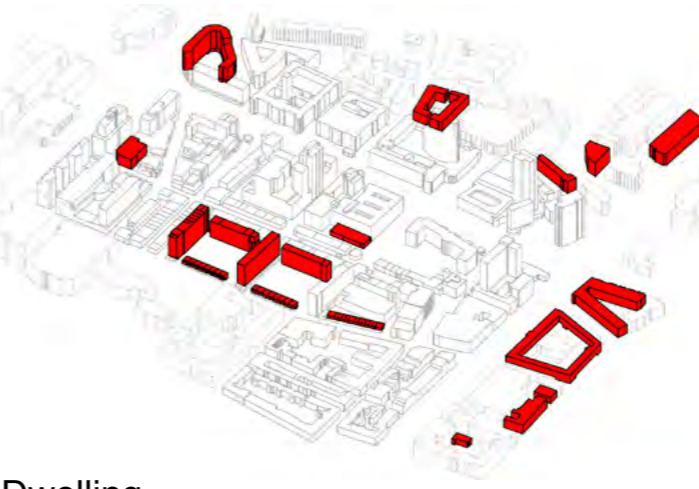
PROGRAMMATIC STUDIES



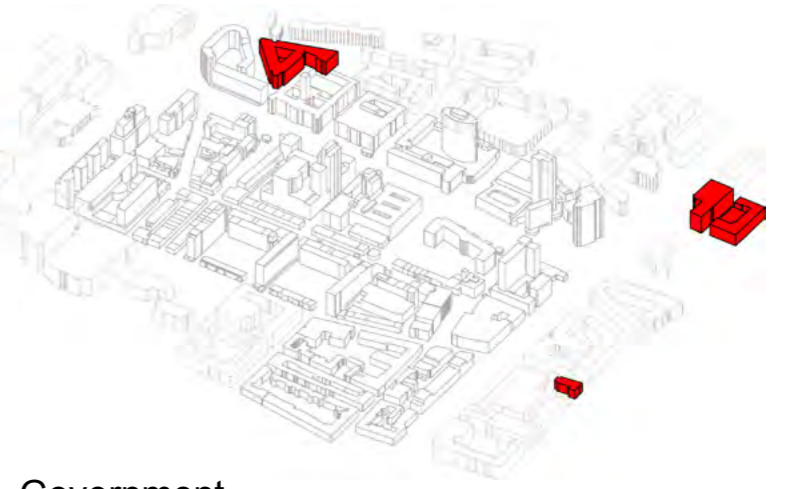
Clubs



Commerce



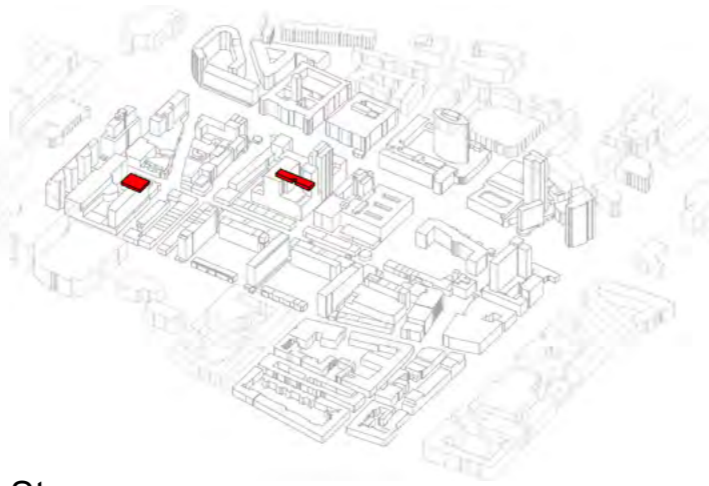
Dwelling



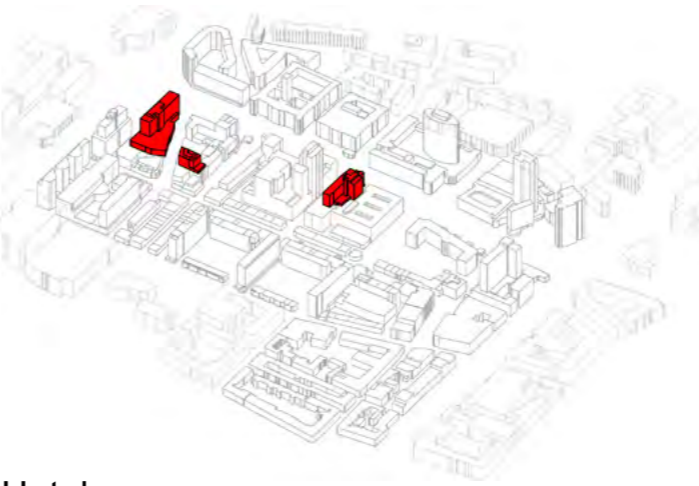
Government



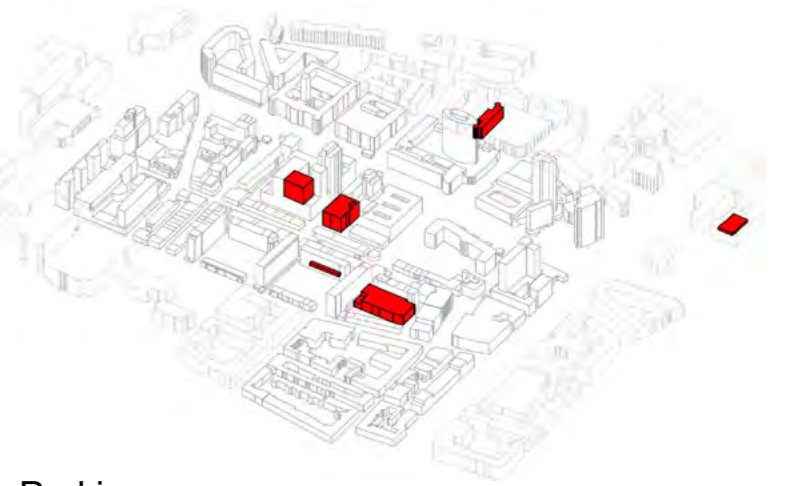
Restaurants



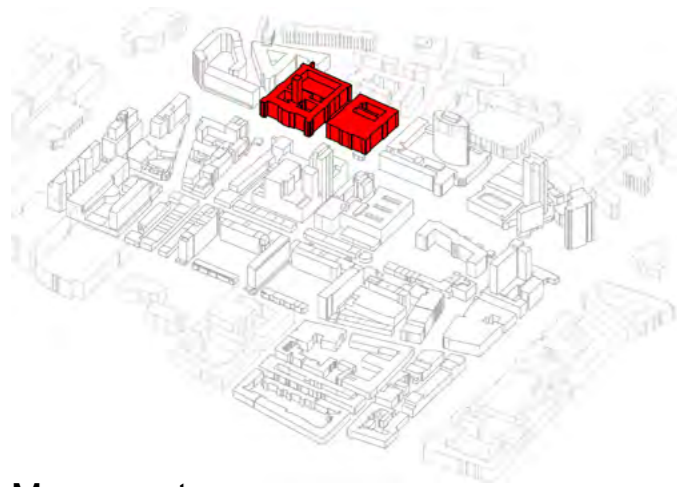
Storages



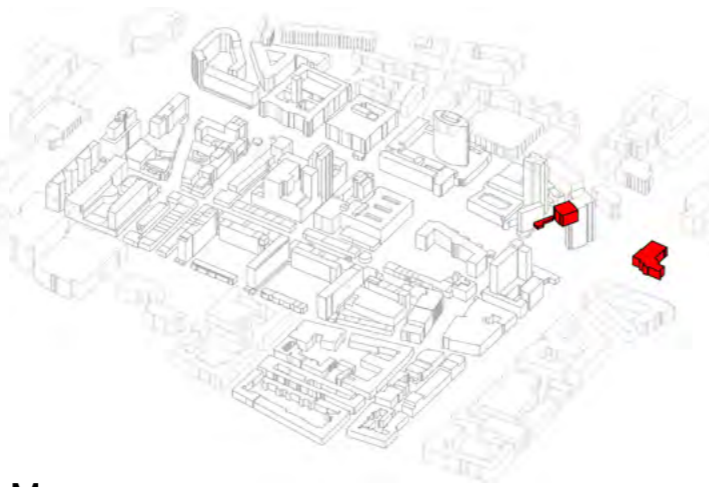
Hotels



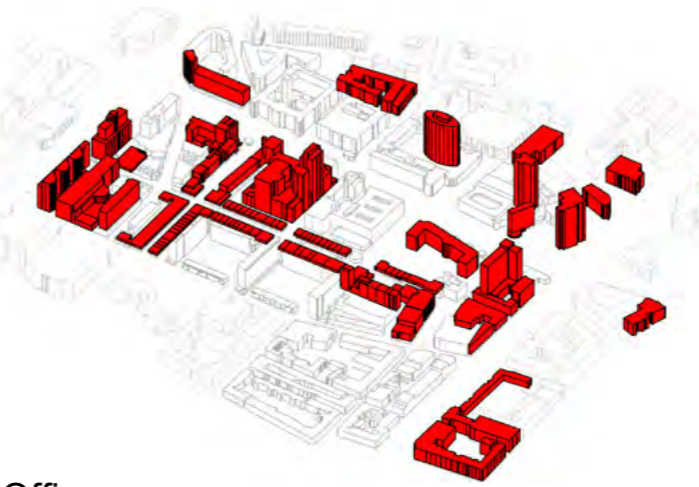
Parking



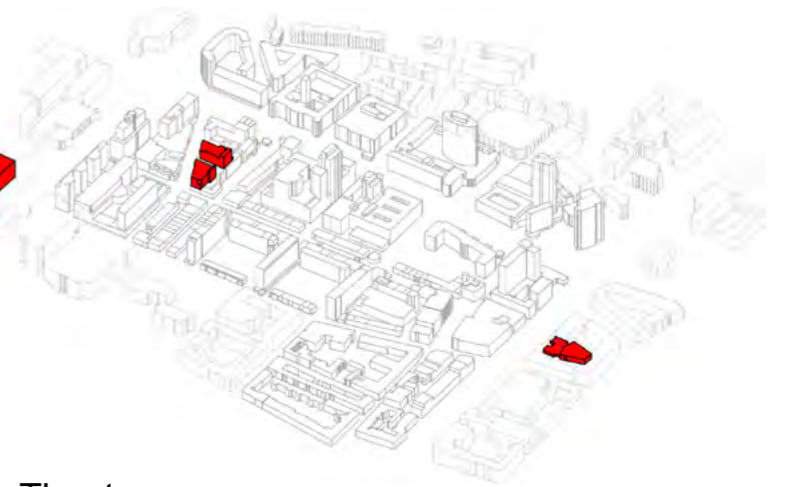
Monuments



Museums



Offices



Theatres

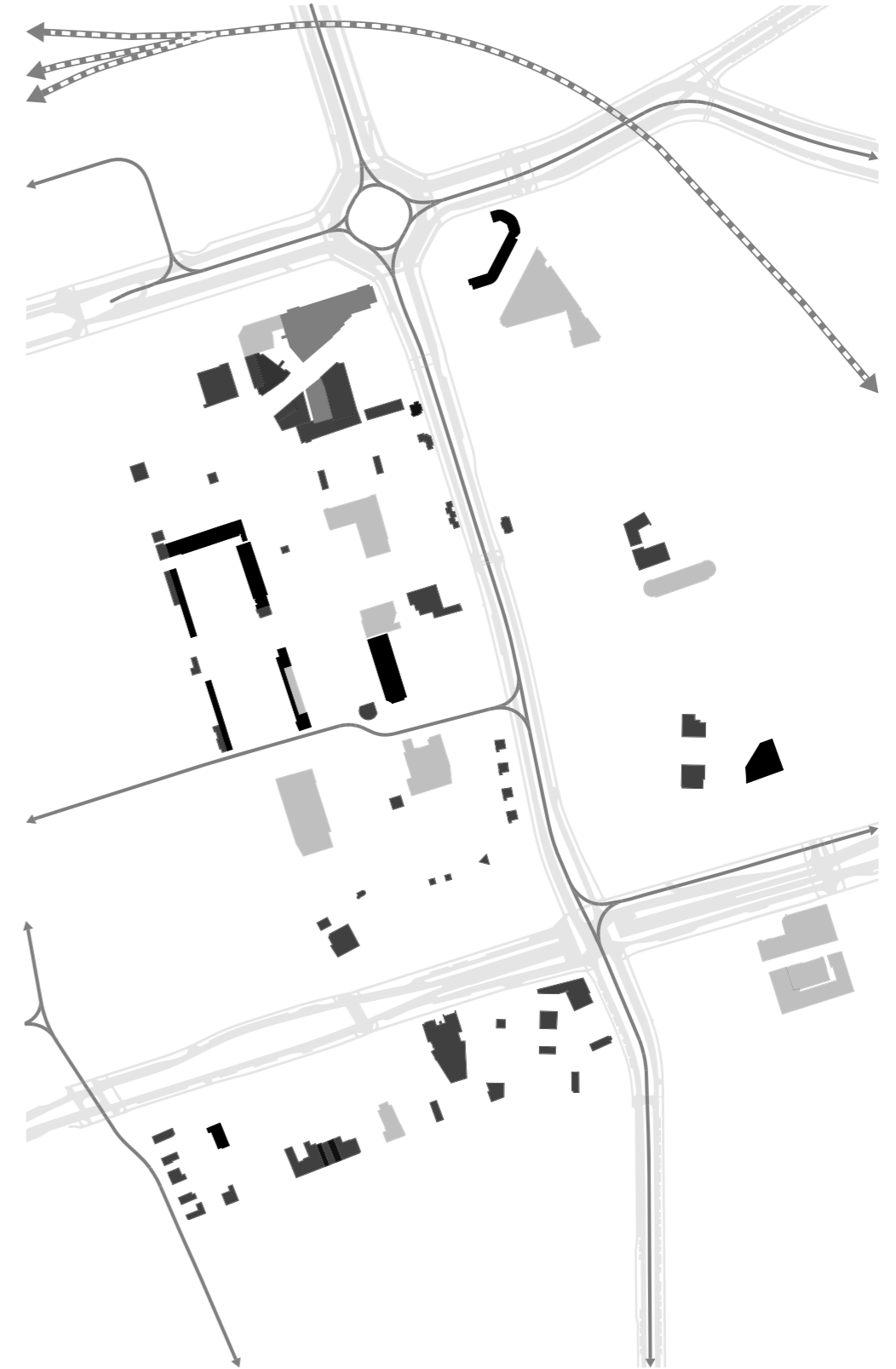
Functional clusters shown in city perspective

Temporality in Days

INTENSITY AND ACTIVITY OF USE



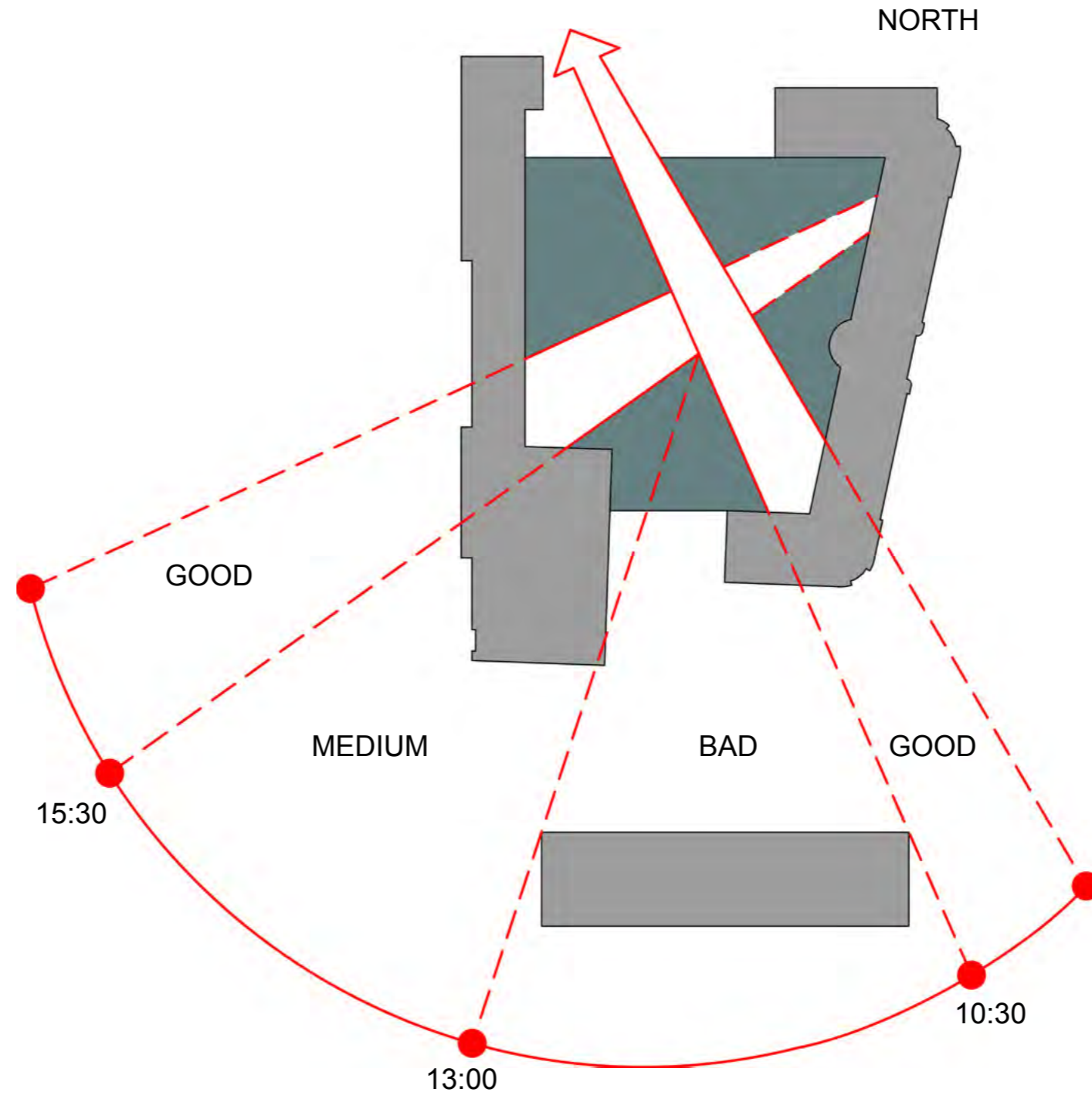
Intensity and Activity of Use_Day



Intensity and Activity of Use_Night

Research Conclusion

LIGHT CONDUCTION



LIGHT EXPOSURE DIAGRAM

Research Conclusion

TEMPORAL STRUCTURES



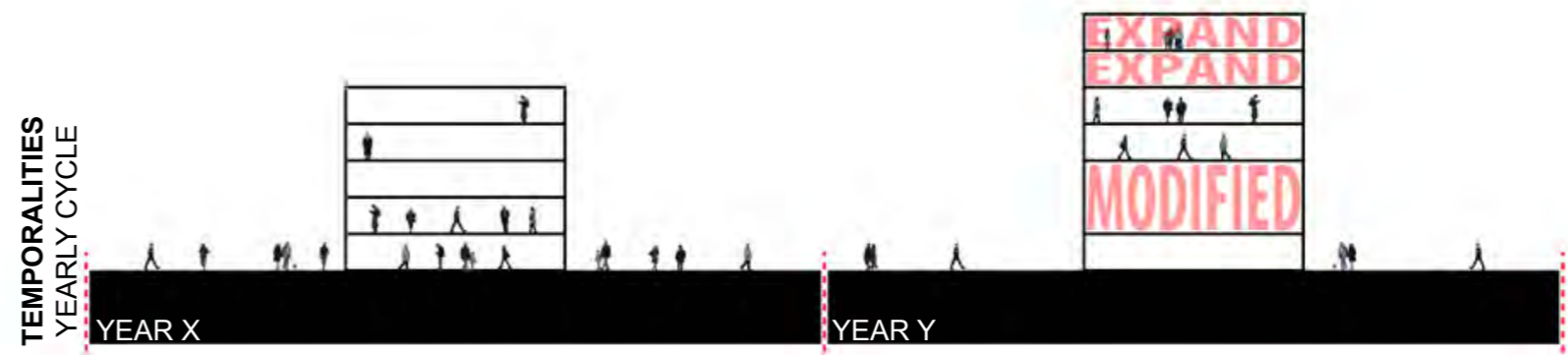
CHANGE OF ACITIVITY LEVELS



CHANGE IN USE OF SPACE THROUGH DIFFERENT SEASONS



PROGRAMMATIC MODIFICATIONS

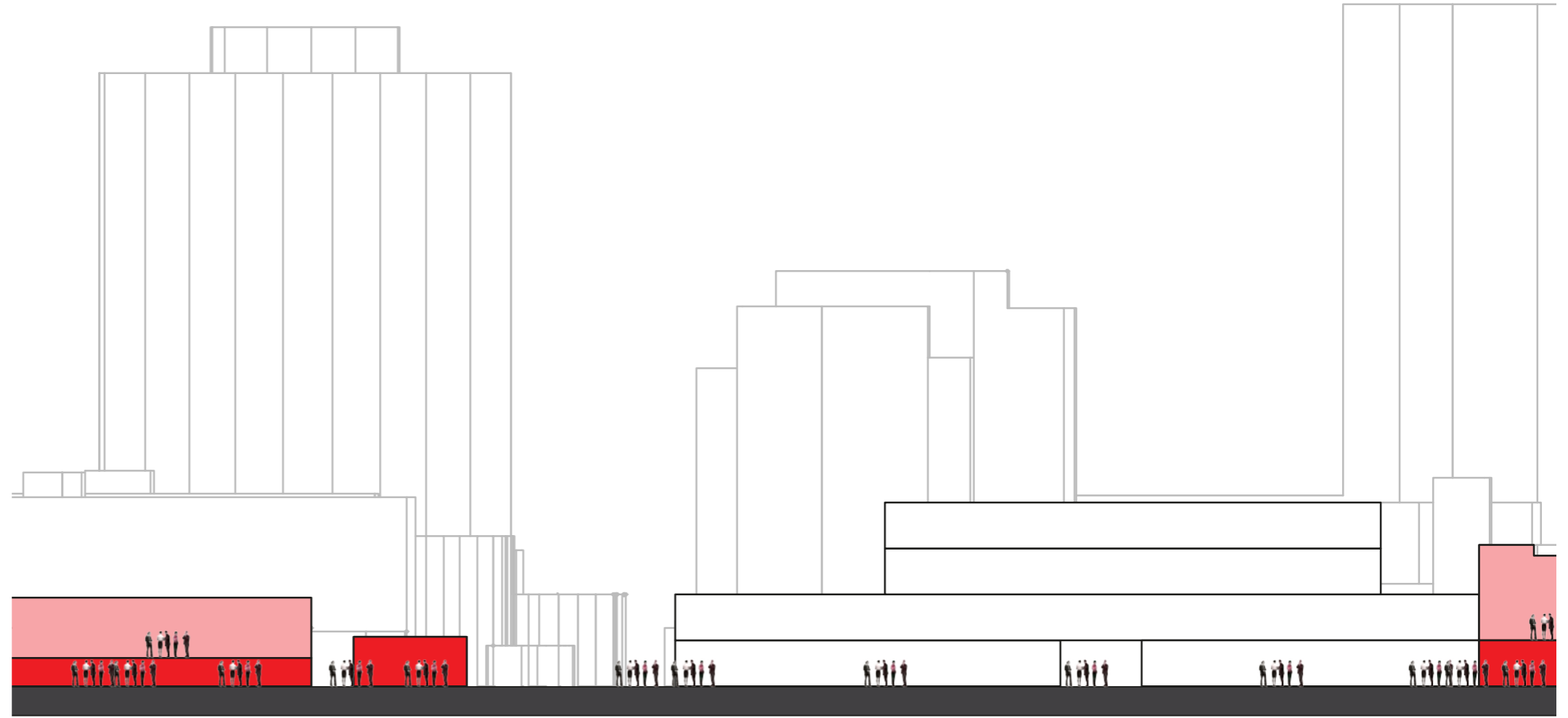


SPATIAL MODIFICATIONS / SPATIAL EXPANSIONS

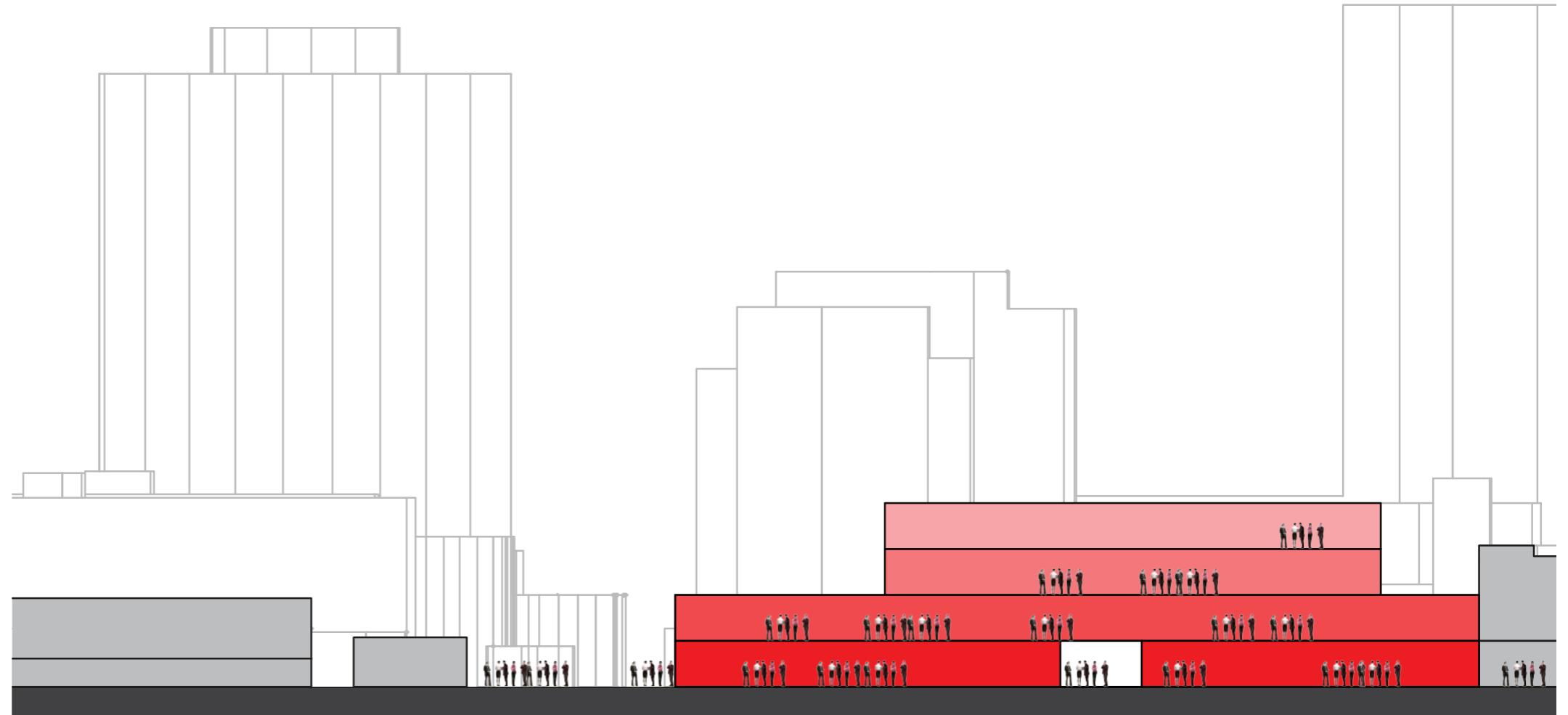
Masterplan

Public and Private

CURRENT SITUATION & PROPOSAL



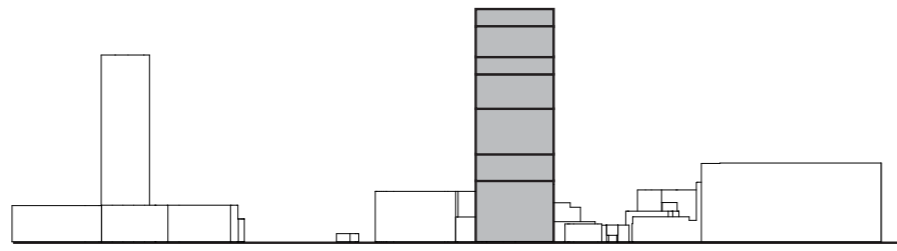
Current Situation - Public Plinth + Private Upper Floors



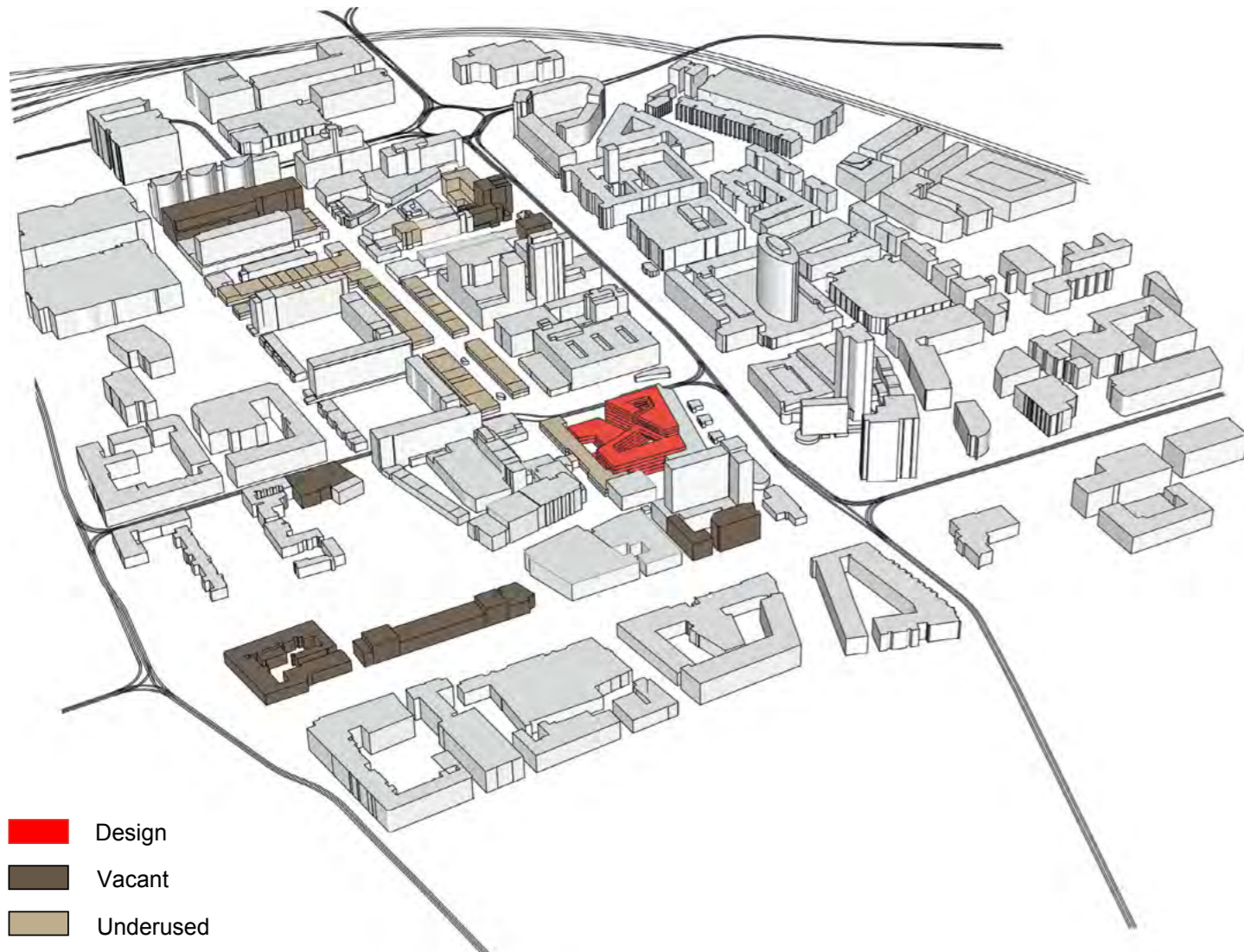
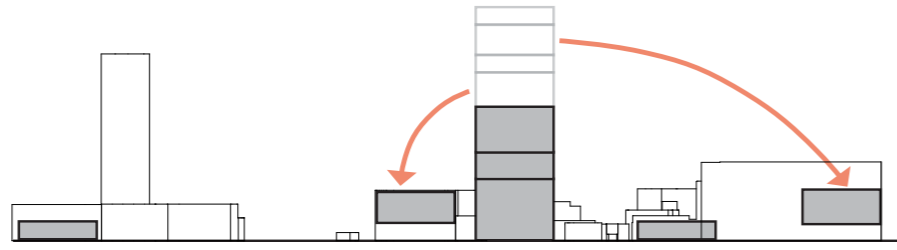
Proposal - Transition between Public to Private through height

Urban Masterplan

CURRENT SITUATION & PROPOSAL

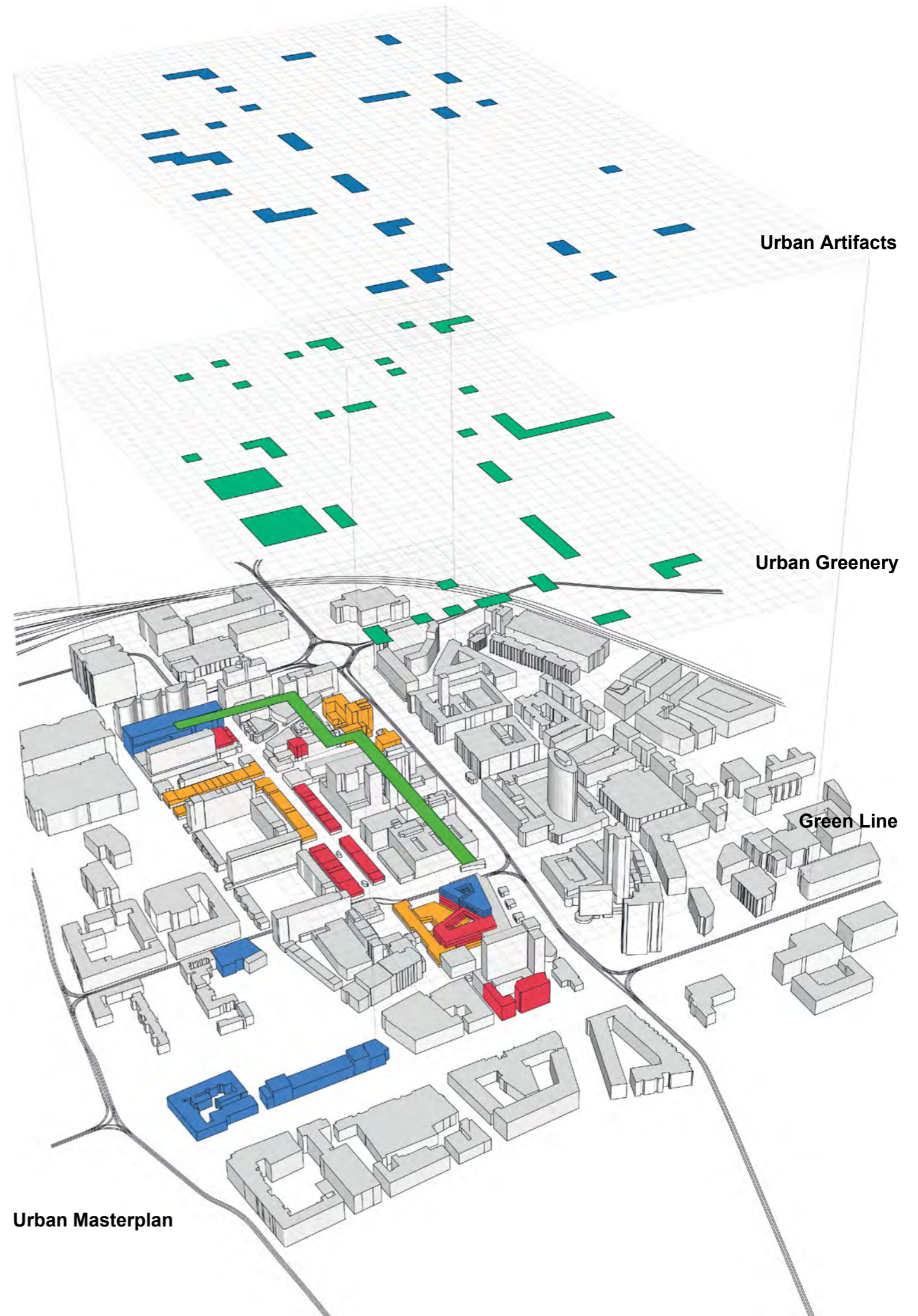


Approach towards density



- Design
- Vacant
- Underused

Current situation - intensity of vacant and underused buildings in city center



Urban Artifacts

Urban Greenery

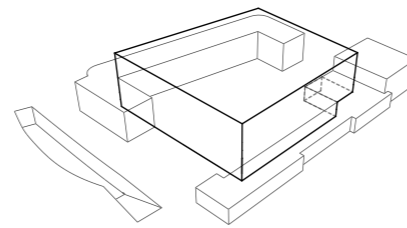
Green Line

Urban Masterplan

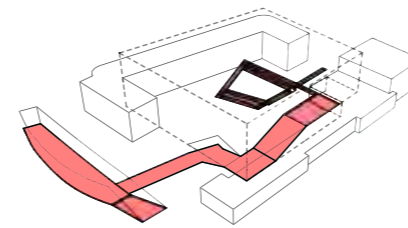
Articulating Building Mass

Process of articulating the building mass

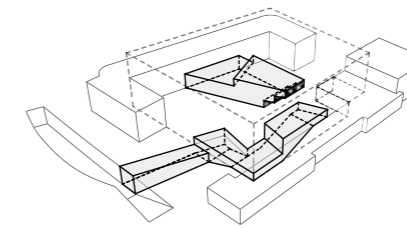
1. Filling the block with a mass
2. Defining the Route
3. Defining the voids
4. Carving through the mass



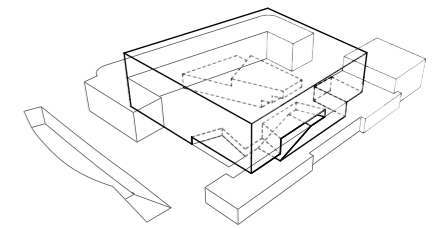
1



2

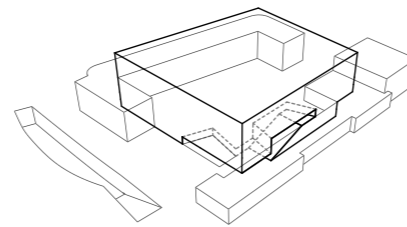


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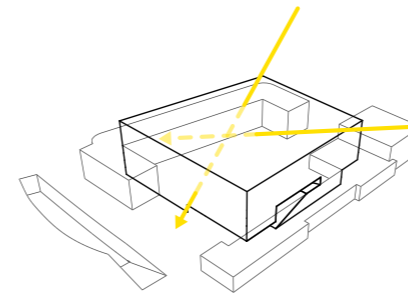


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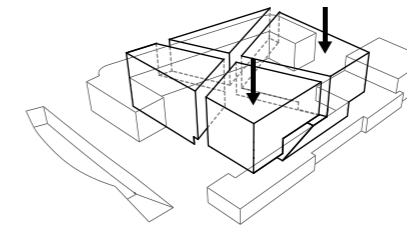
5. Carving the routing out
6. The best light cutting the mass into pieces
7. The pieces shifting down according to light
8. Carving the mass according to light and routing



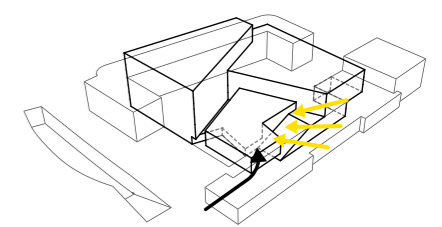
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6

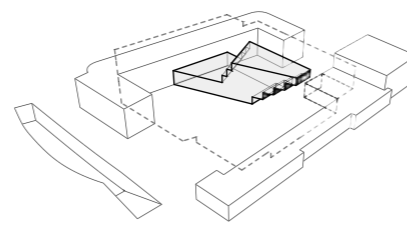


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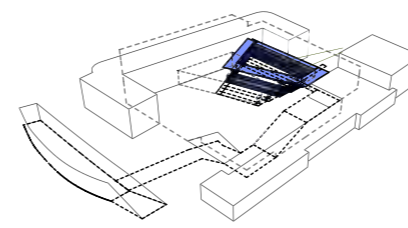


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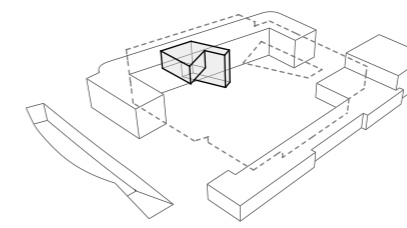
9. The first void
10. The circulation in the void
11. The second void
12. The second circulation system through the void



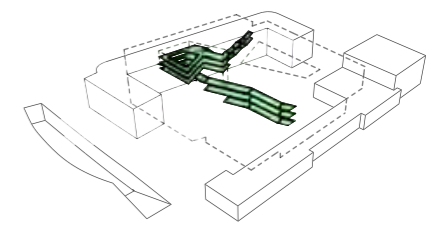
9



10

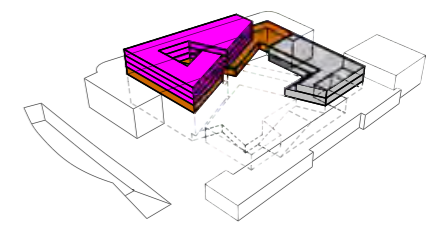
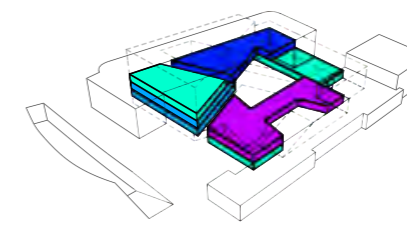
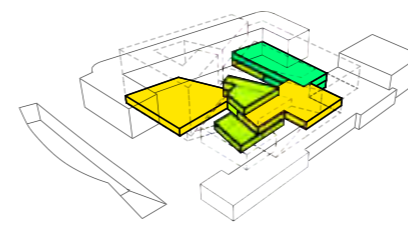
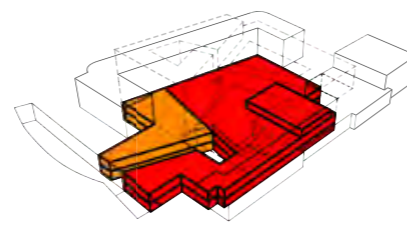


11

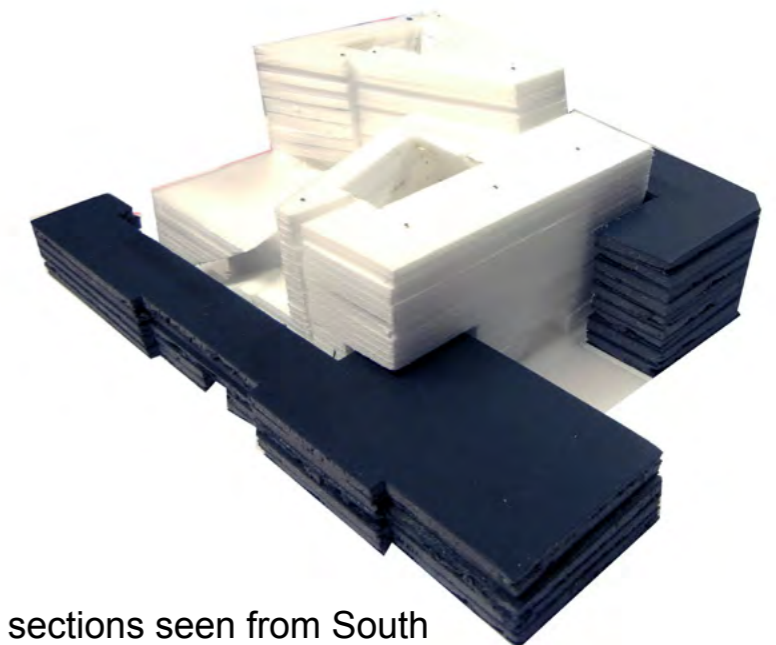
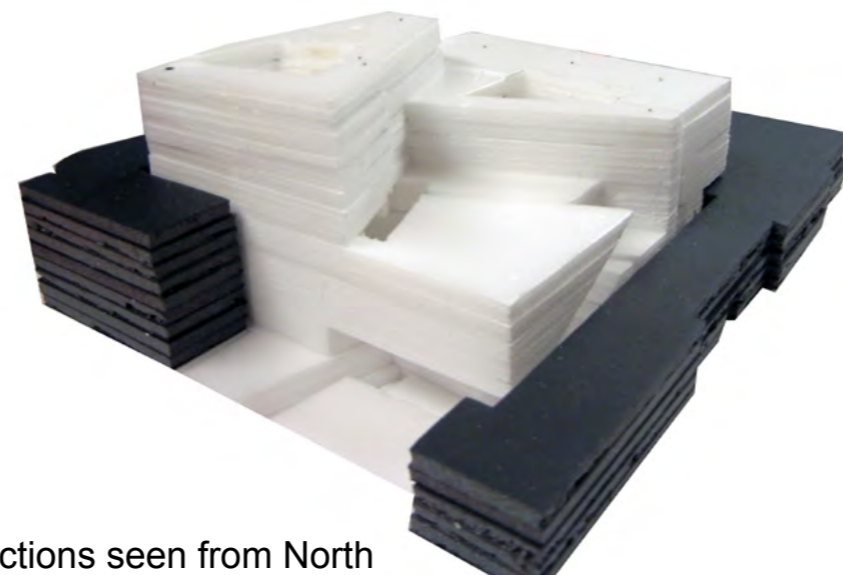
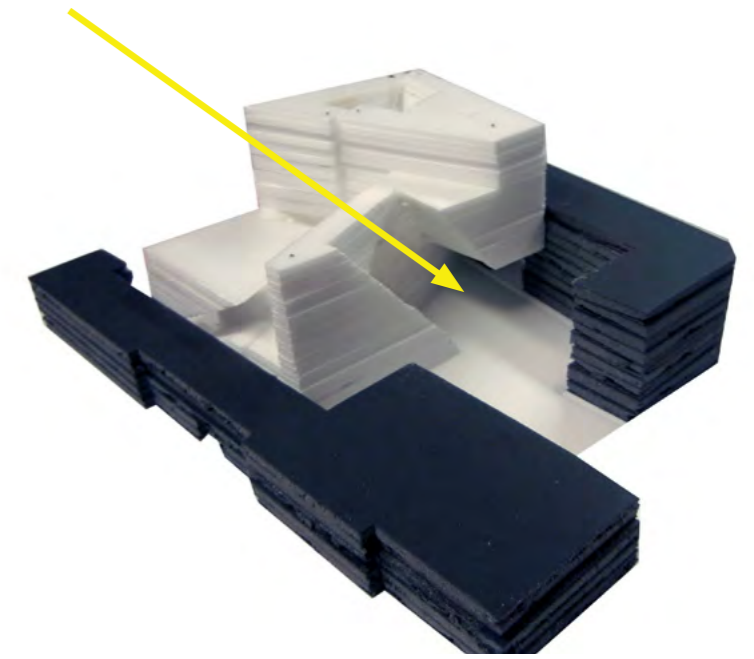
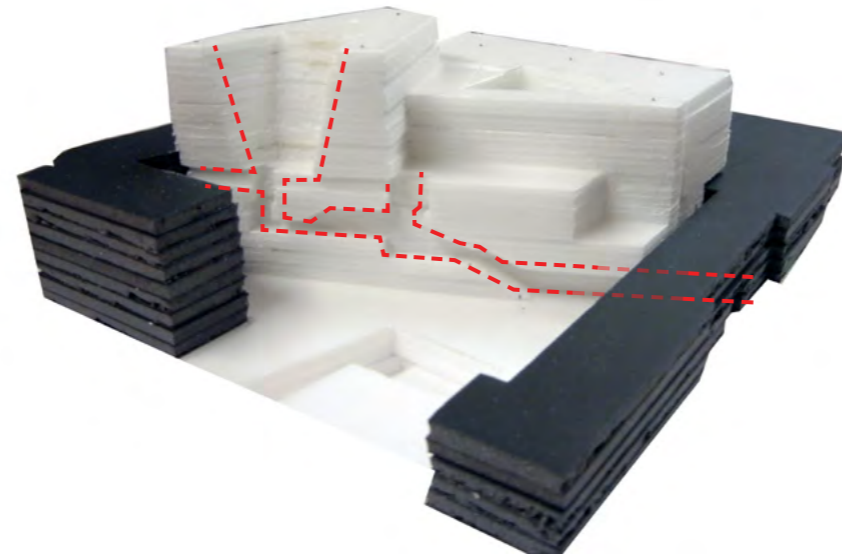
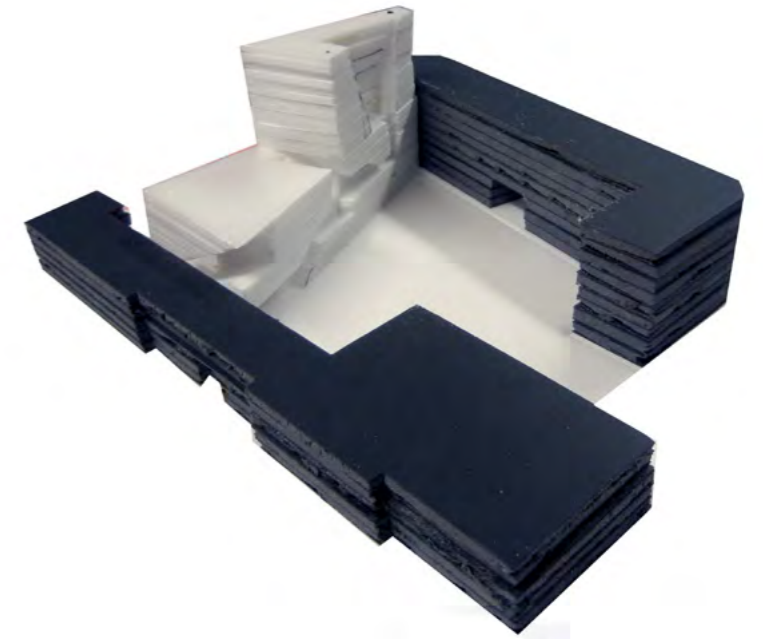
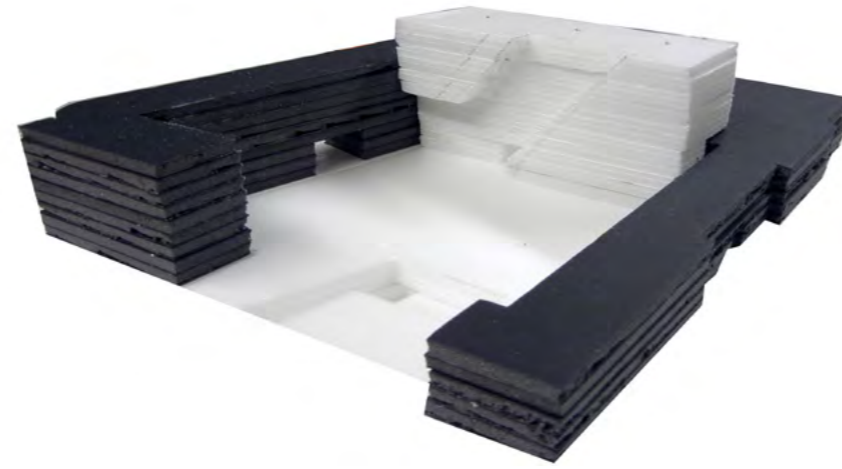


12

- | | |
|---|---|
| ■ Commerce | ■ Dance studios |
| ■ Clubs | ■ Theater |
| ■ Media | ■ Dwelling |
| ■ Bars and restaurants | ■ Educational |
| ■ Interactive Arts | ■ Sports center |
| ■ Playground | |



Building Masterplan



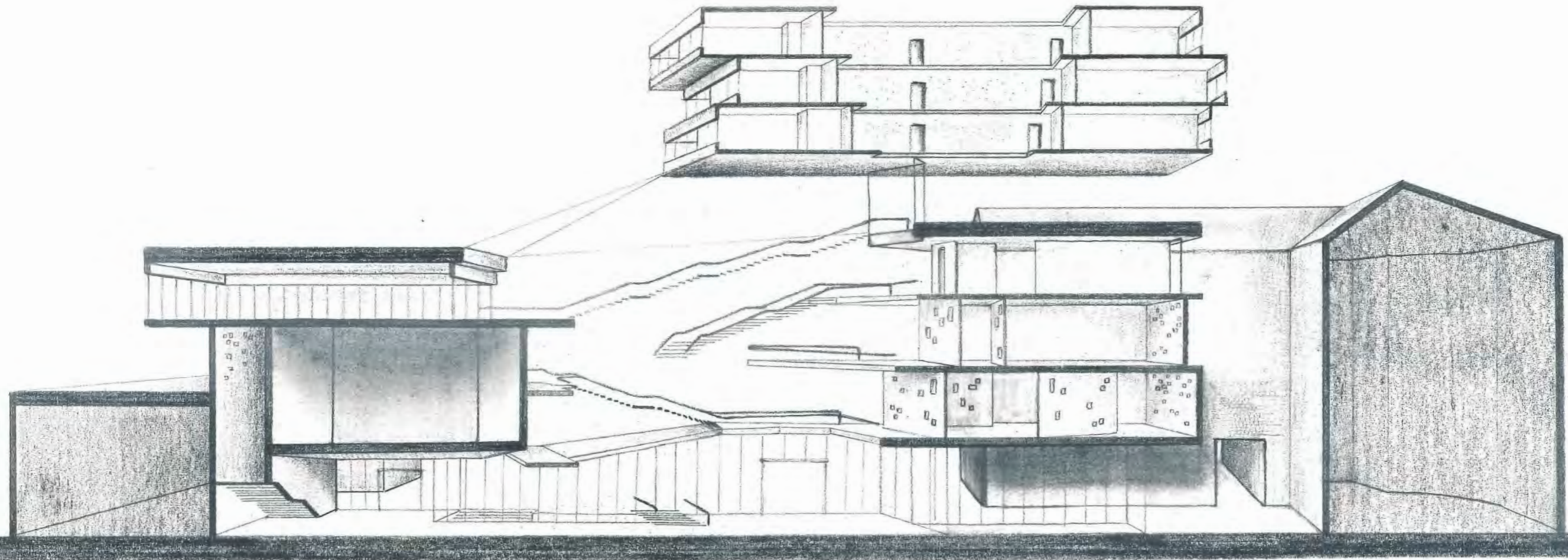
Sequence of sections seen from North

Sequence of sections seen from South

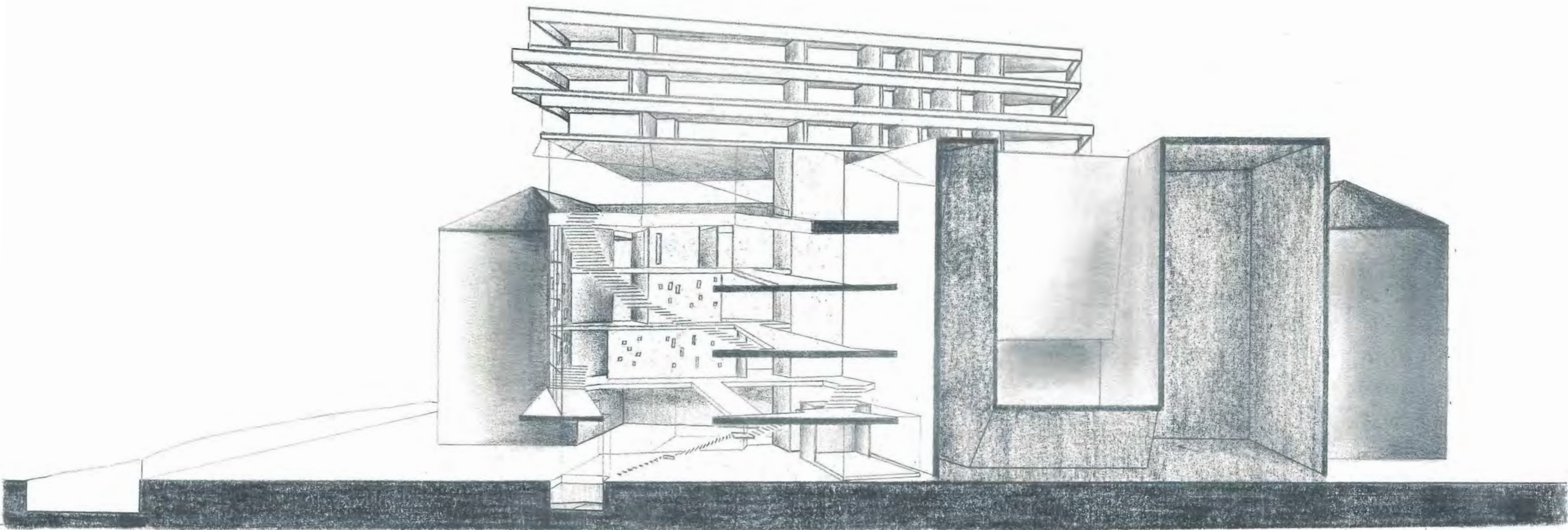
Process Preview

First Spatializaion

HAND DRAWINGS



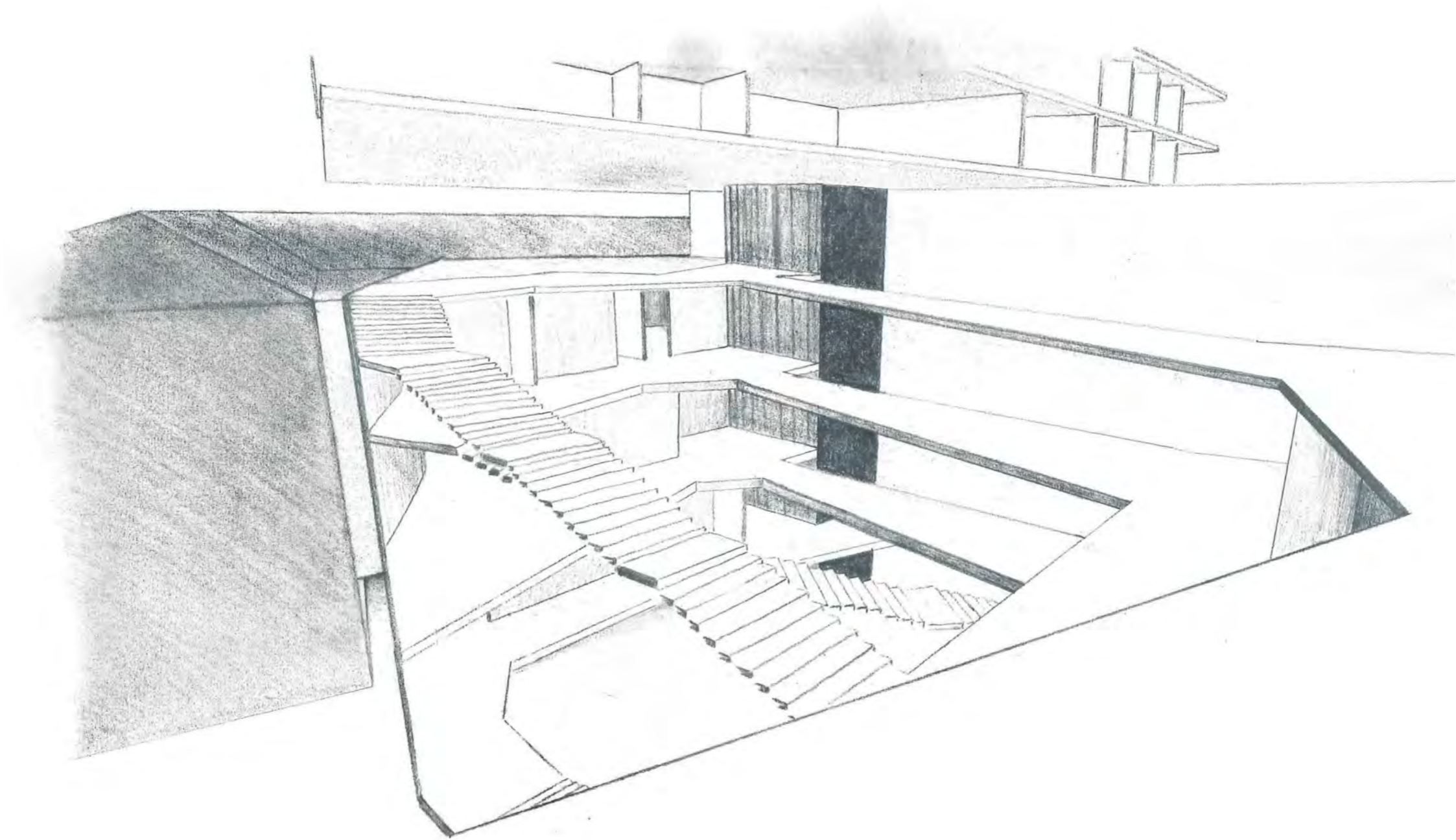
A-A



B-B

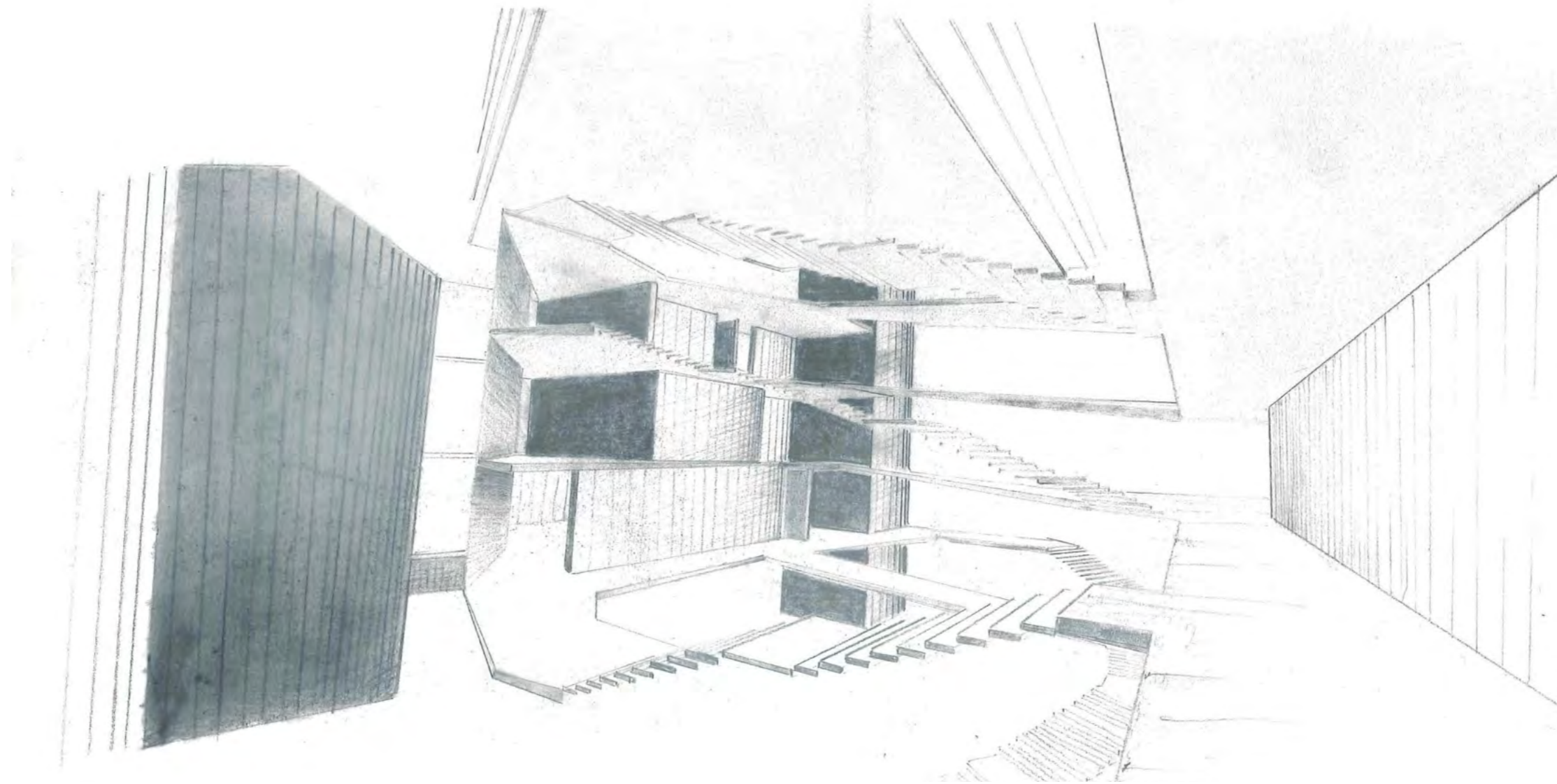
First Spatializaion

VIEW FROM THE ROOFTOP



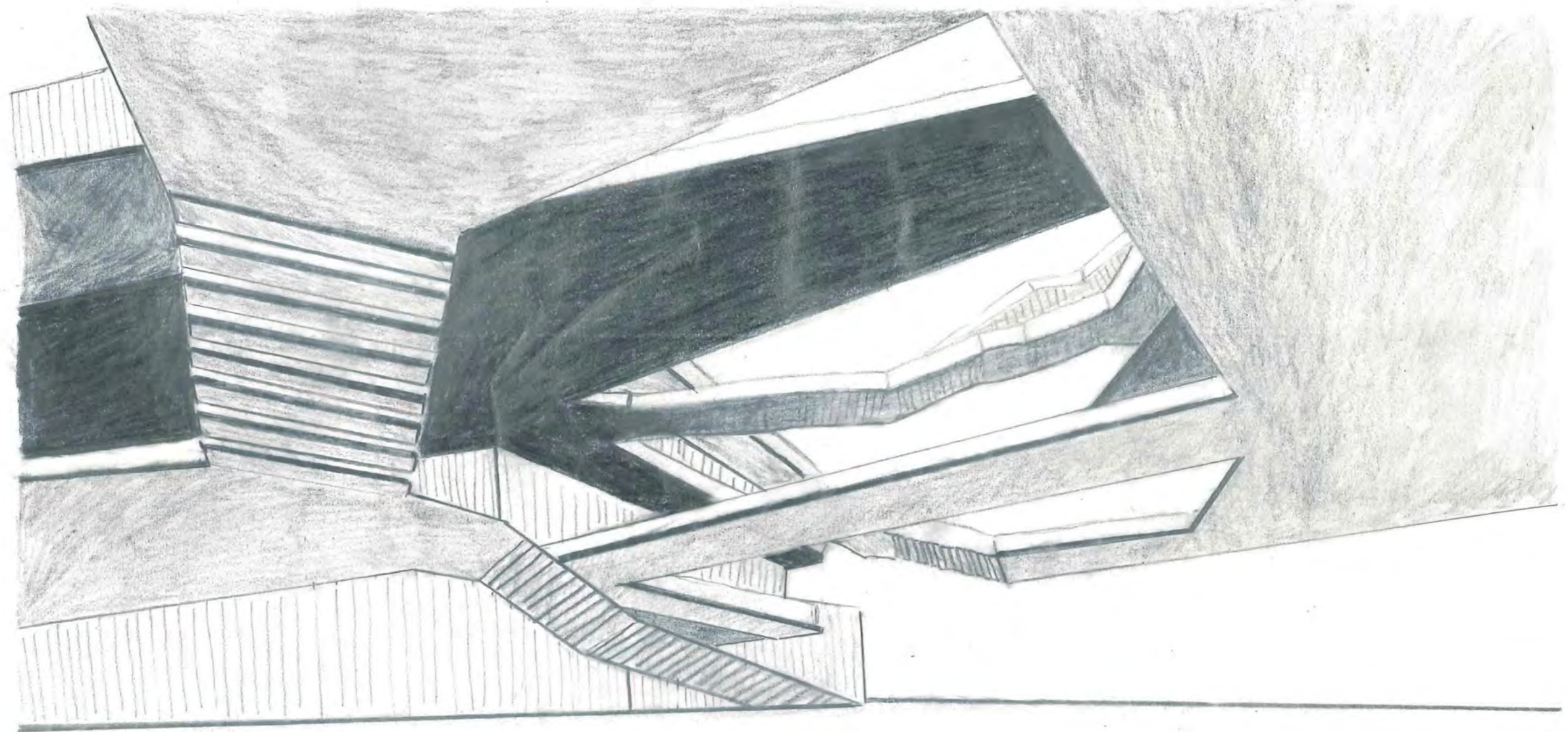
First Spatializaion

VIEW FROM THE SECOND FLOOR

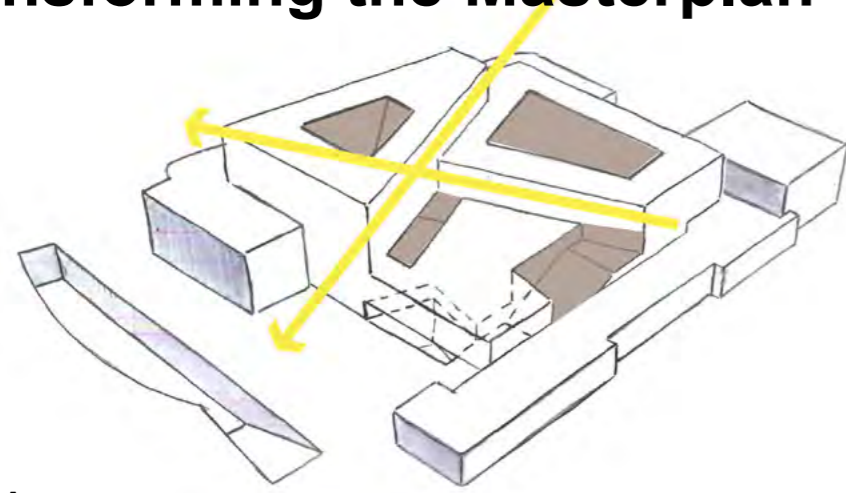


First Spatializaion

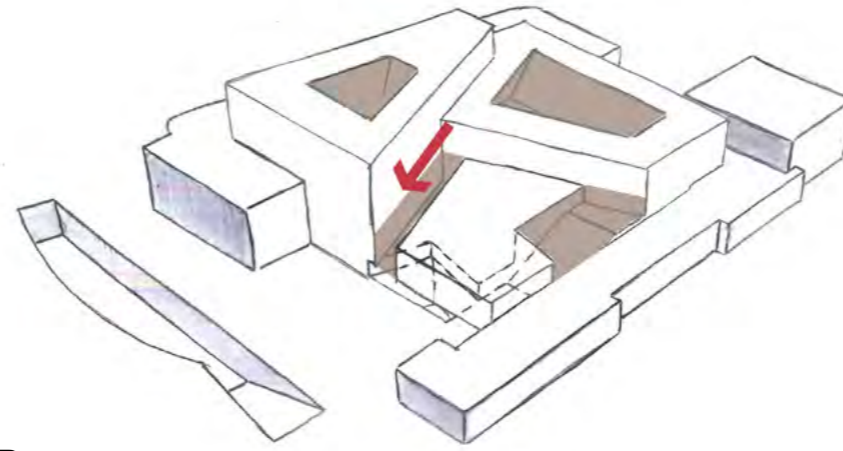
VIEW FROM THE GROUND FLOOR



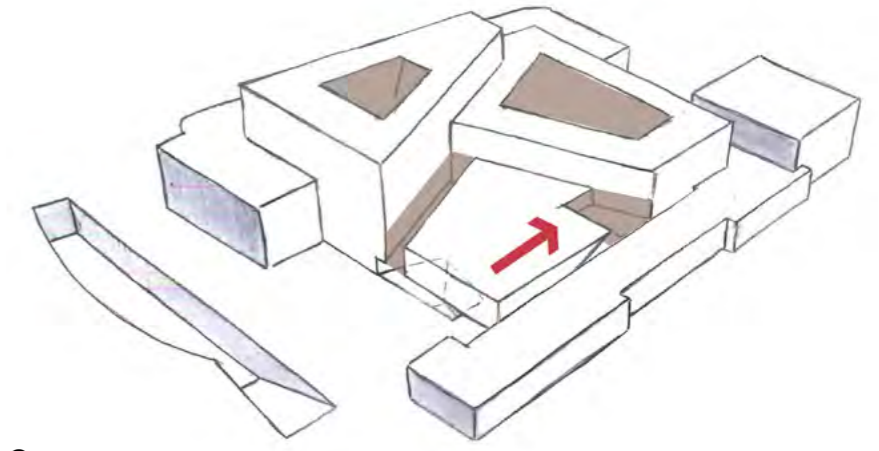
Transforming the Masterplan



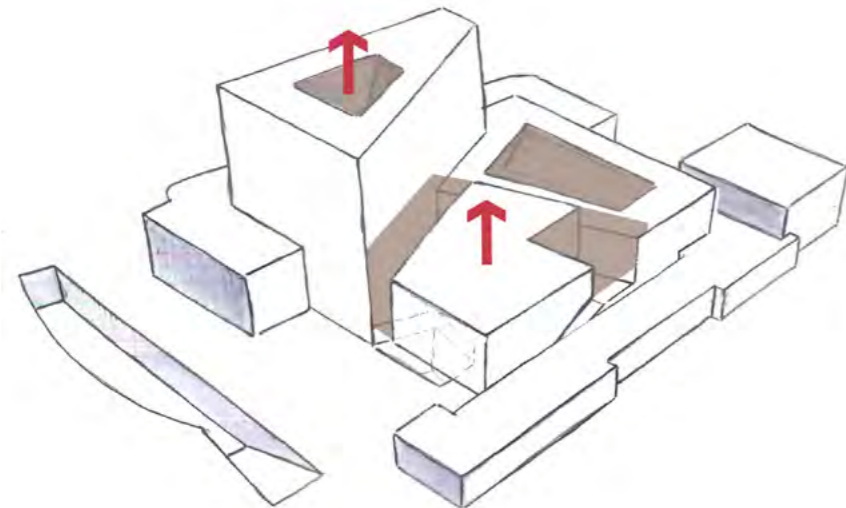
A. Masterplan with cuts according to light transmission



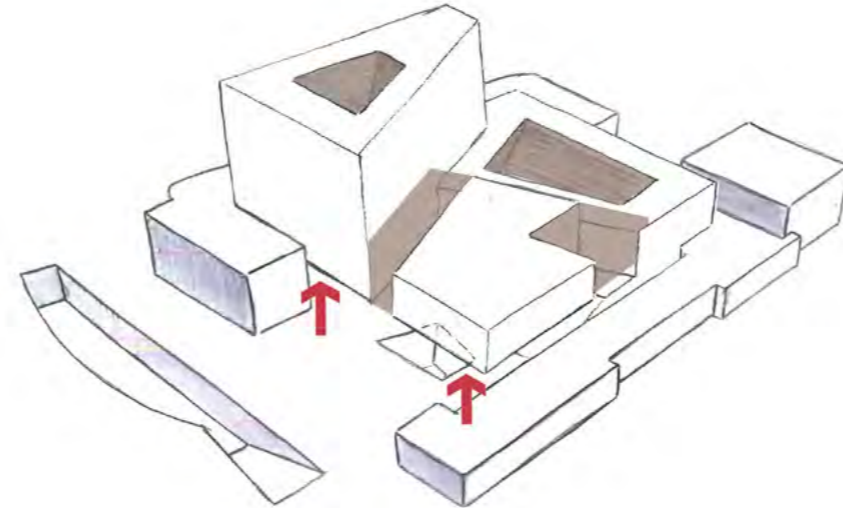
B. Moving the void towards the facade



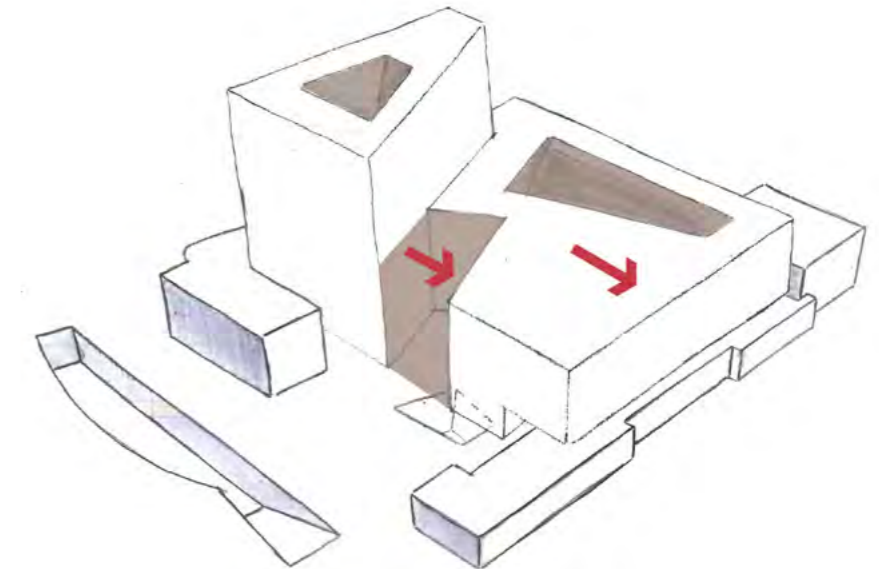
C. Covering the stairs to Lijnbaan Rooftop



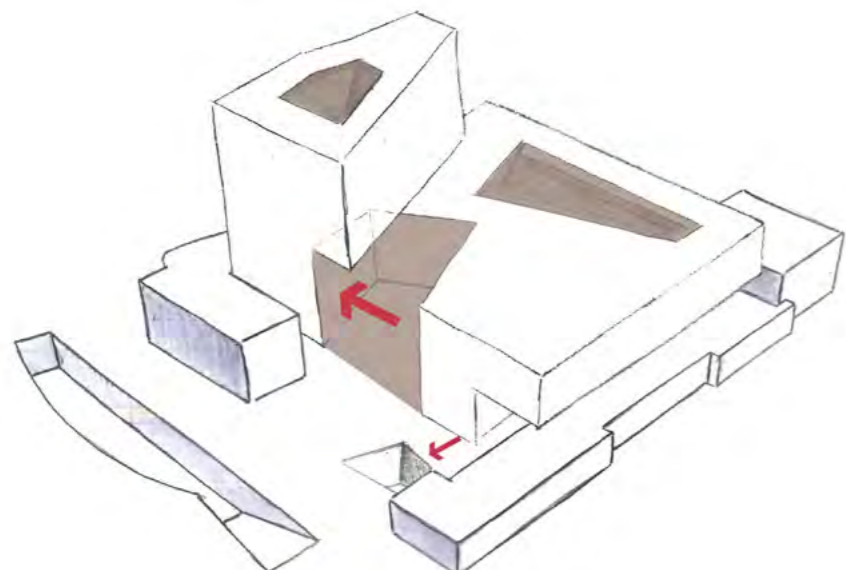
D. Increasing the height of the public levels



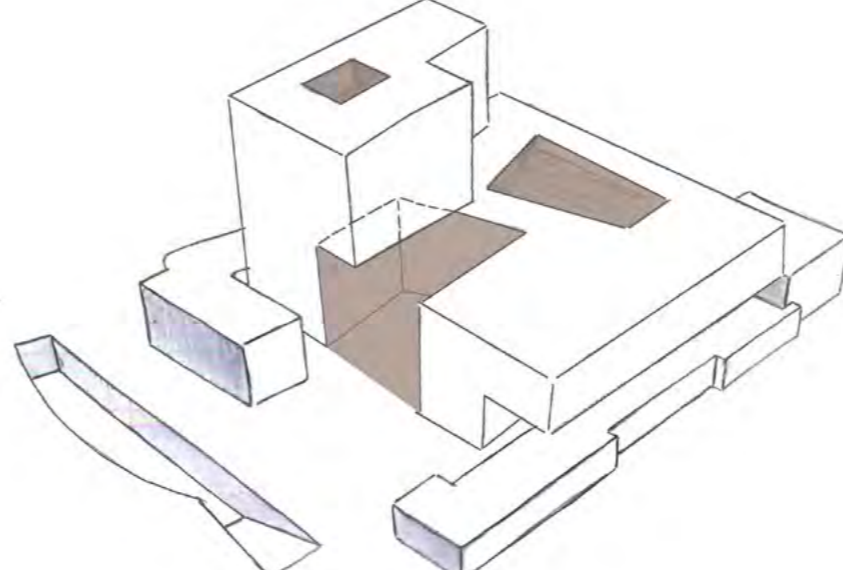
E. Lifting volumes to provide a pause space in the plinth



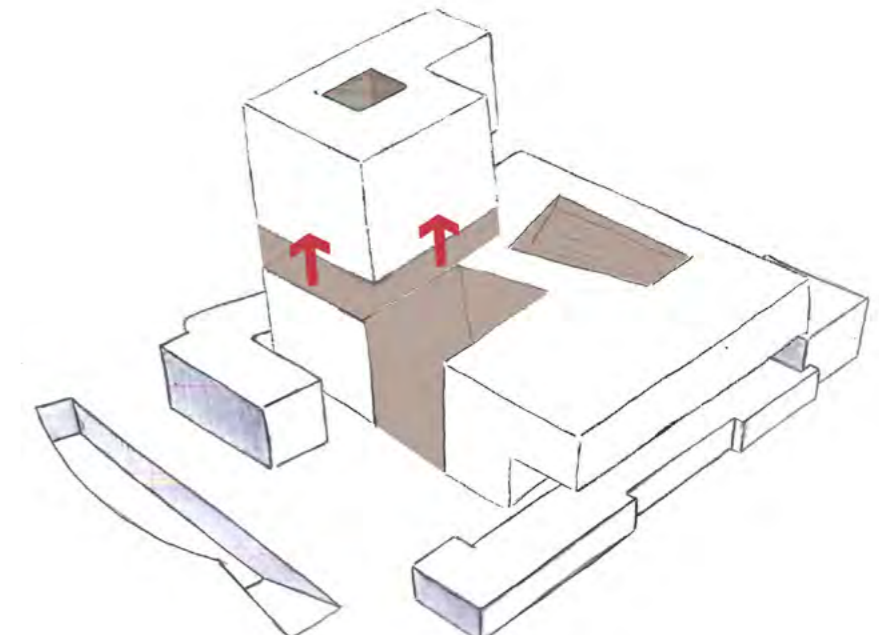
F. Moving the volume towards Lijnbaan



G. Widening the void to catch more light, moving the connection to Koopgoot to the public open space

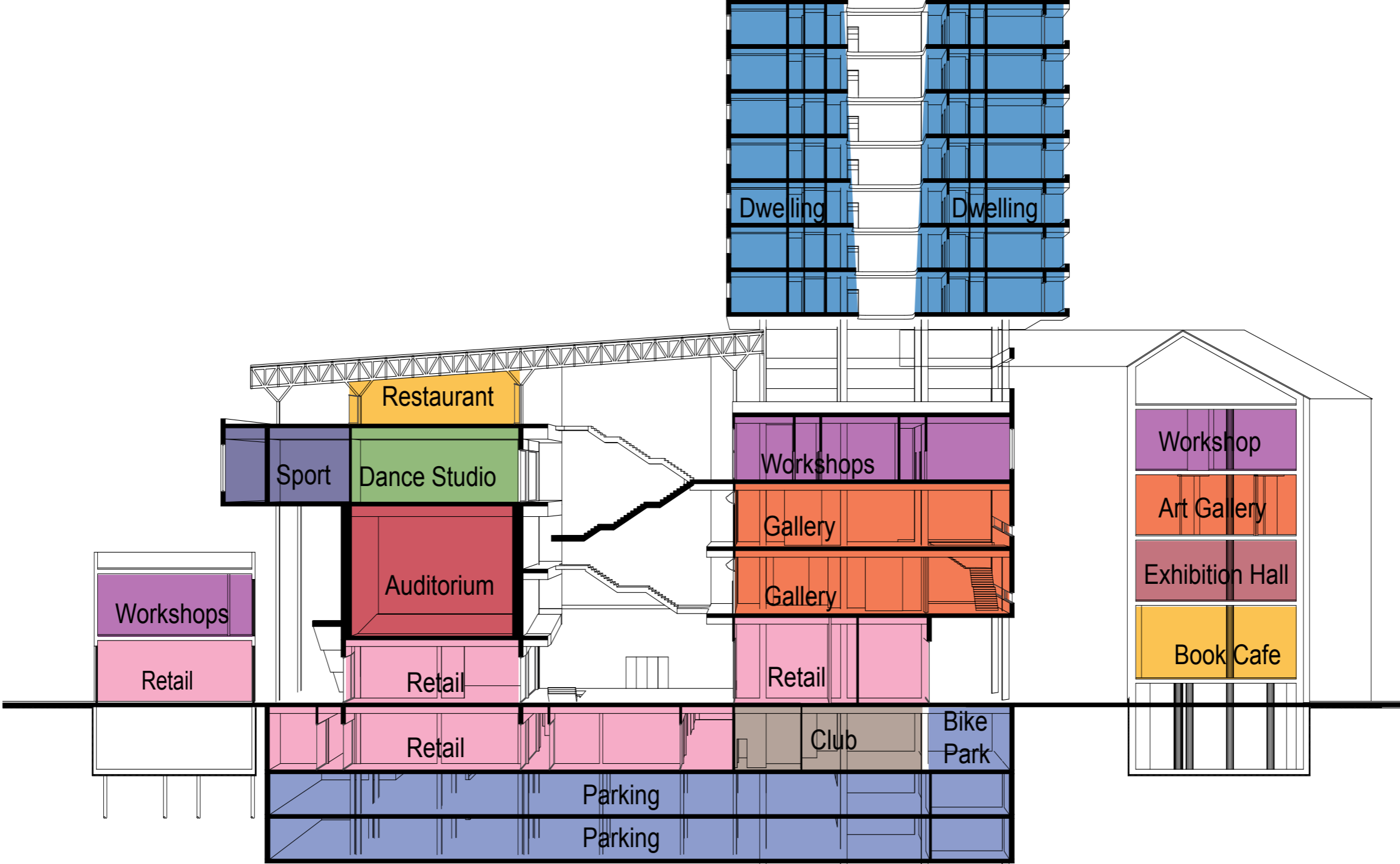


H. Transforming the residential mass for more efficient spaces

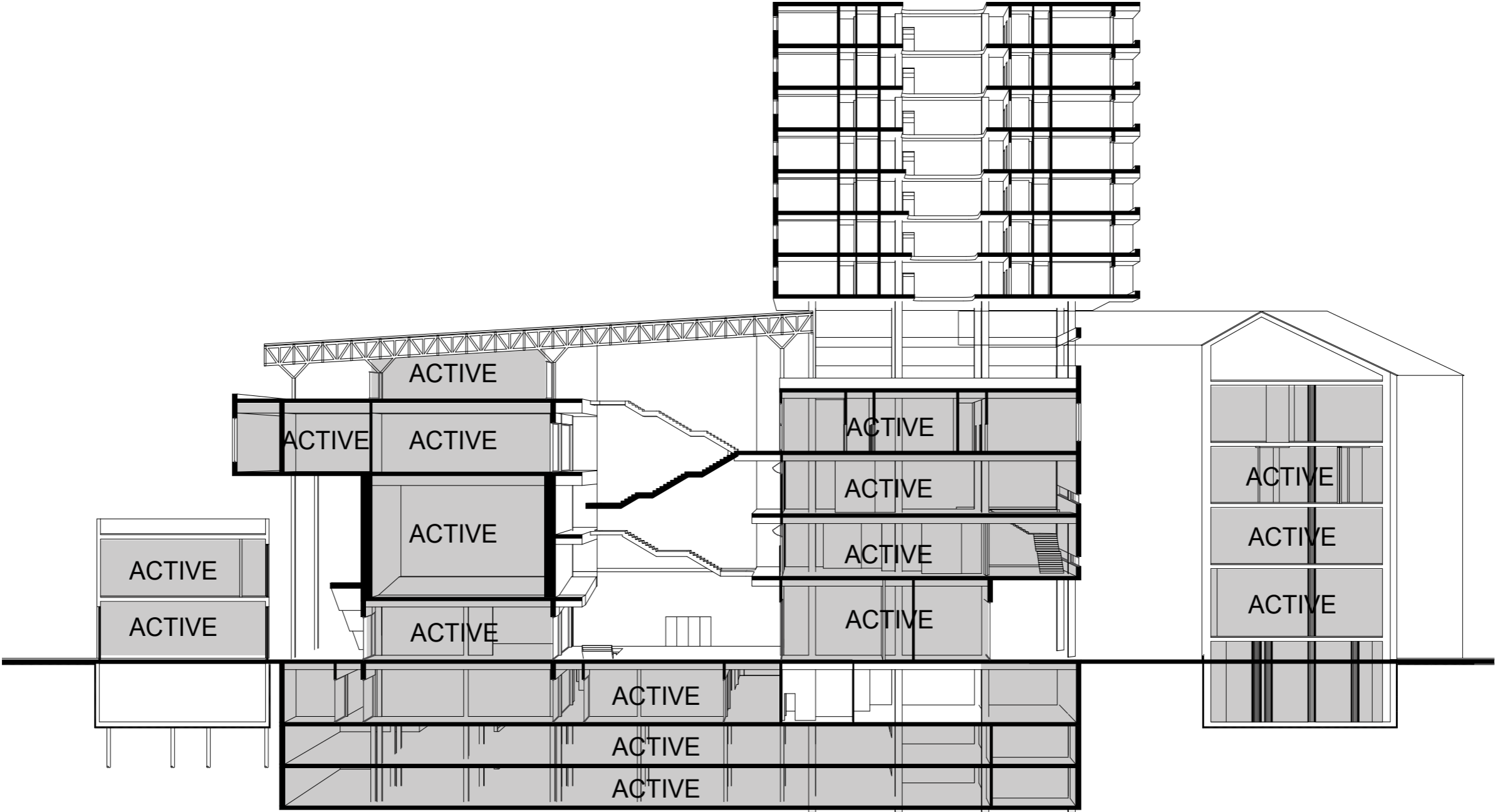


I. Lifting the residential mass to provide light for a private garden

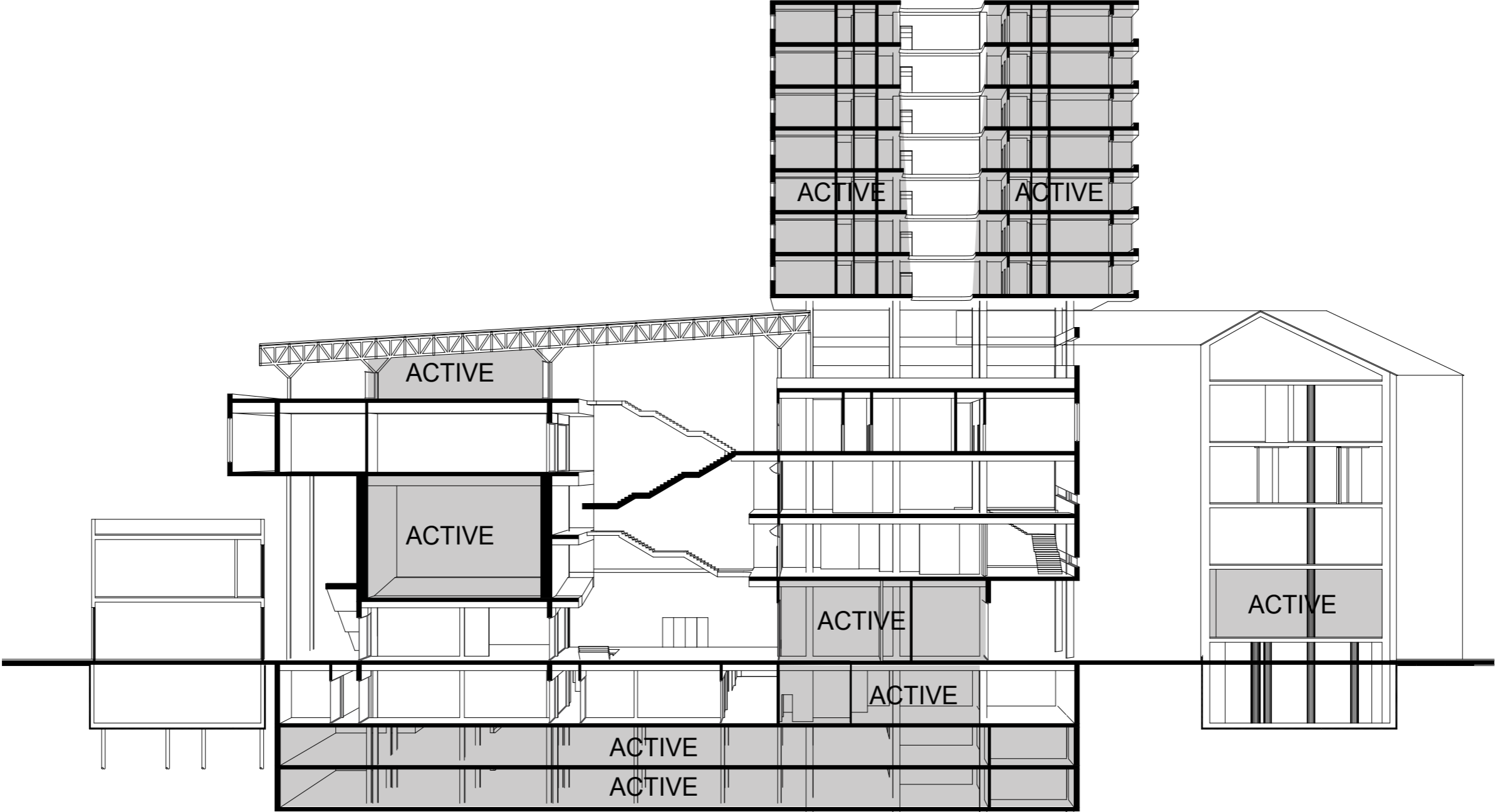
Functional Division



Intensity and Activity of Use - Day



Intensity and Activity of Use - Night

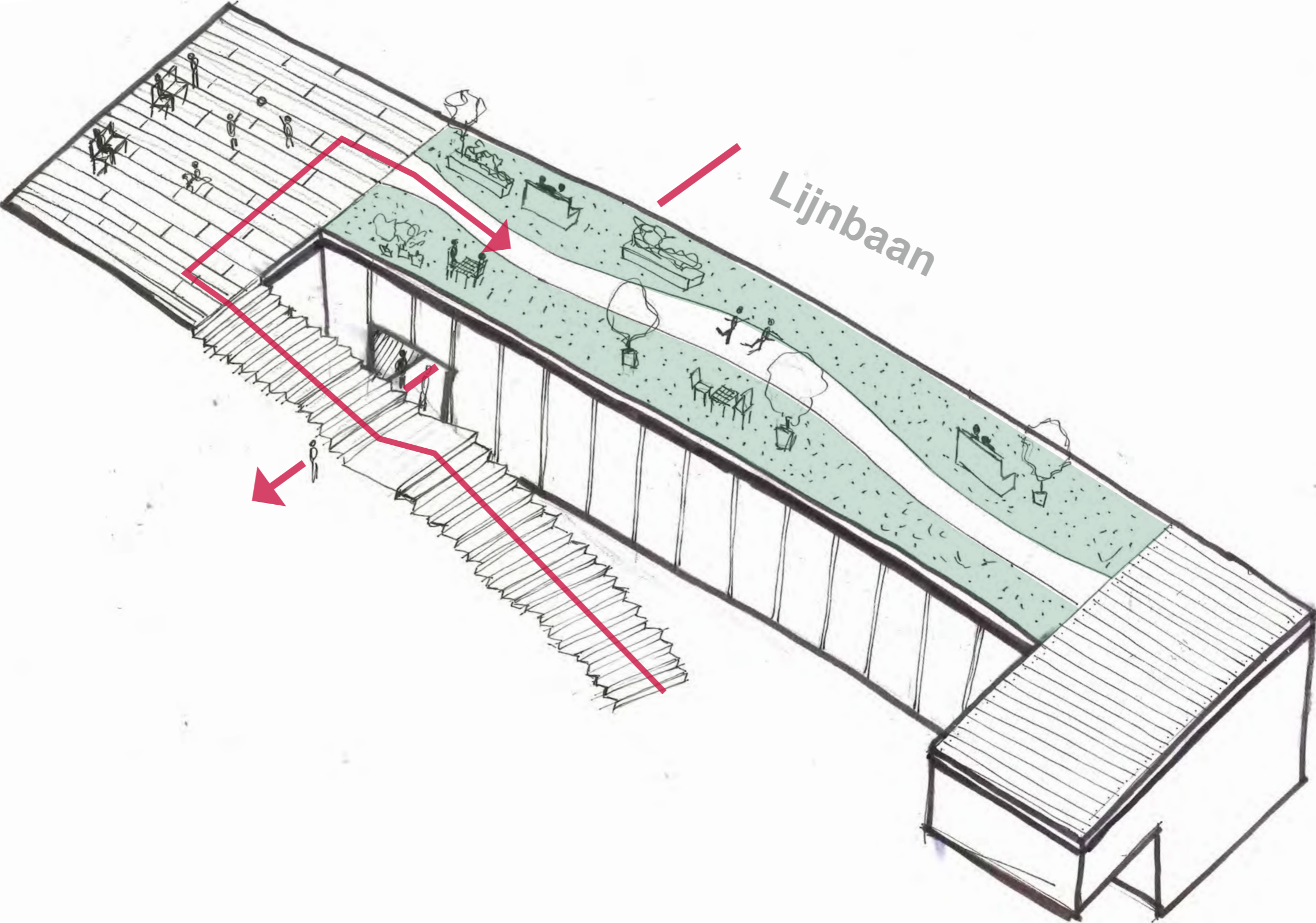


Connecting to the infrastructure and the Existing Public spaces

Sustainable Approach



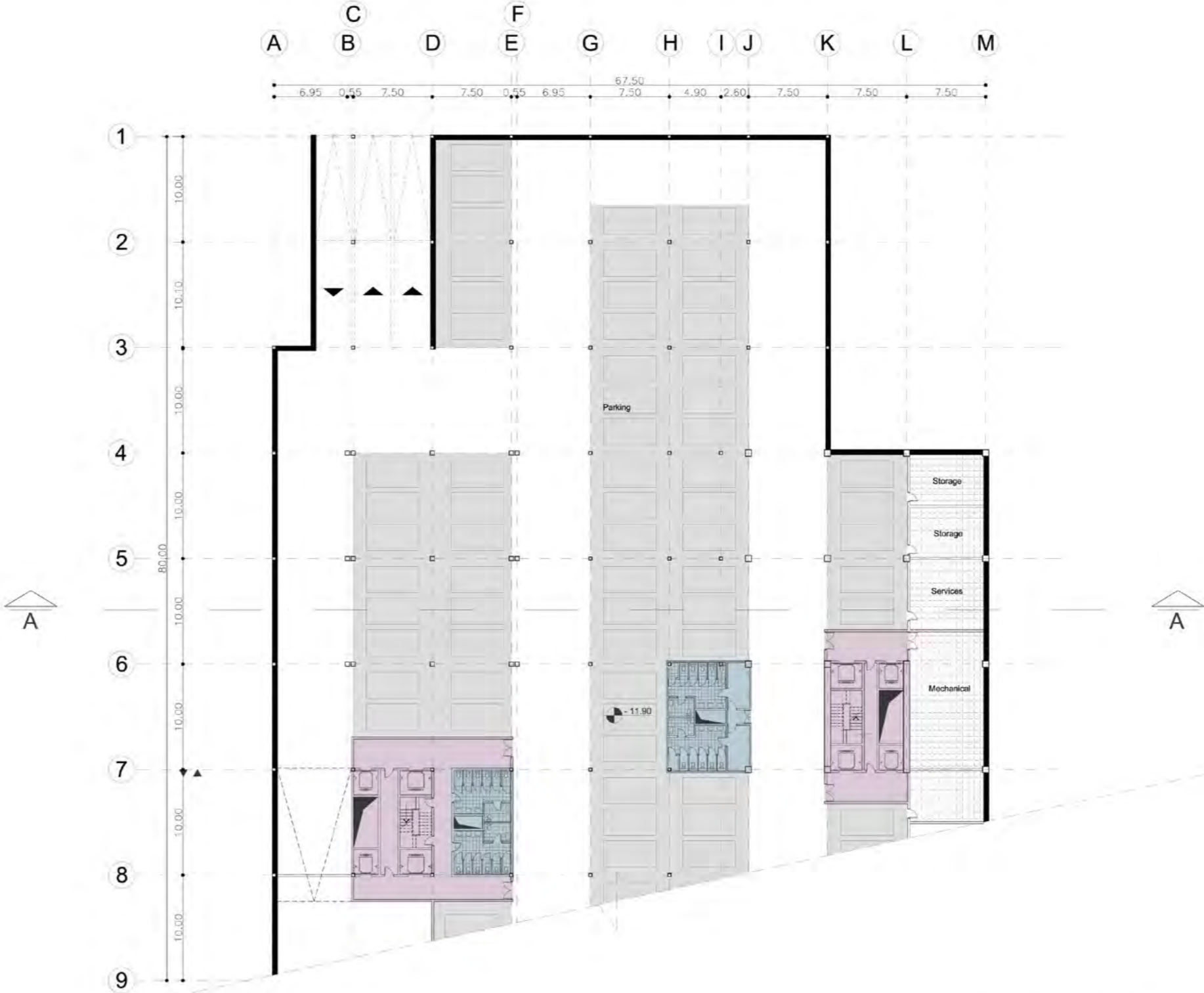
Reusing Lijnbaan Roof Top and Opening the Block for Accessibility



Design



Plans



1st. & 2nd. Parking Plan -8.50
 -11.90
 Scale 1:200

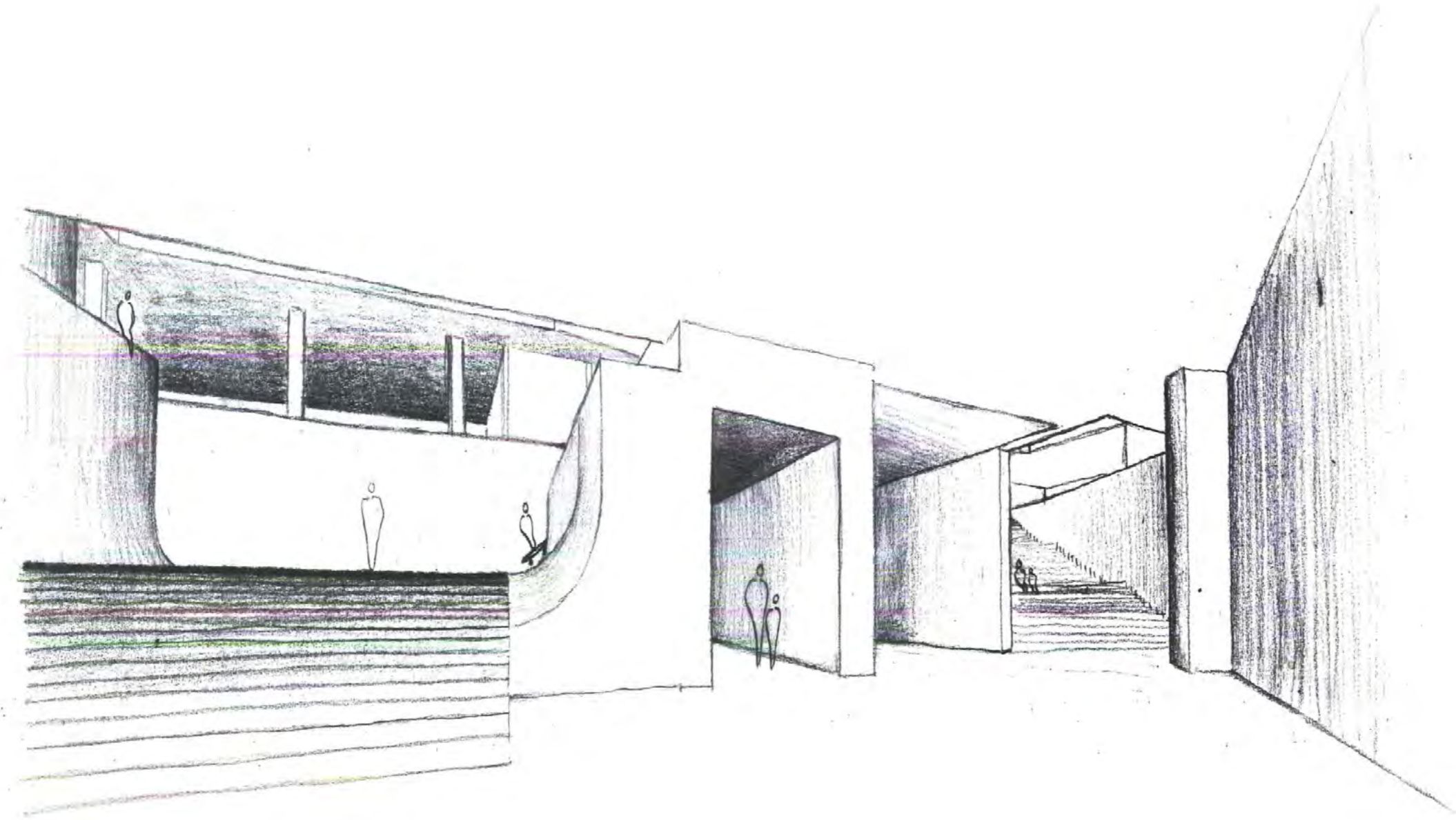
Plans



Basement Floor Plan -5.10
Scale 1:200

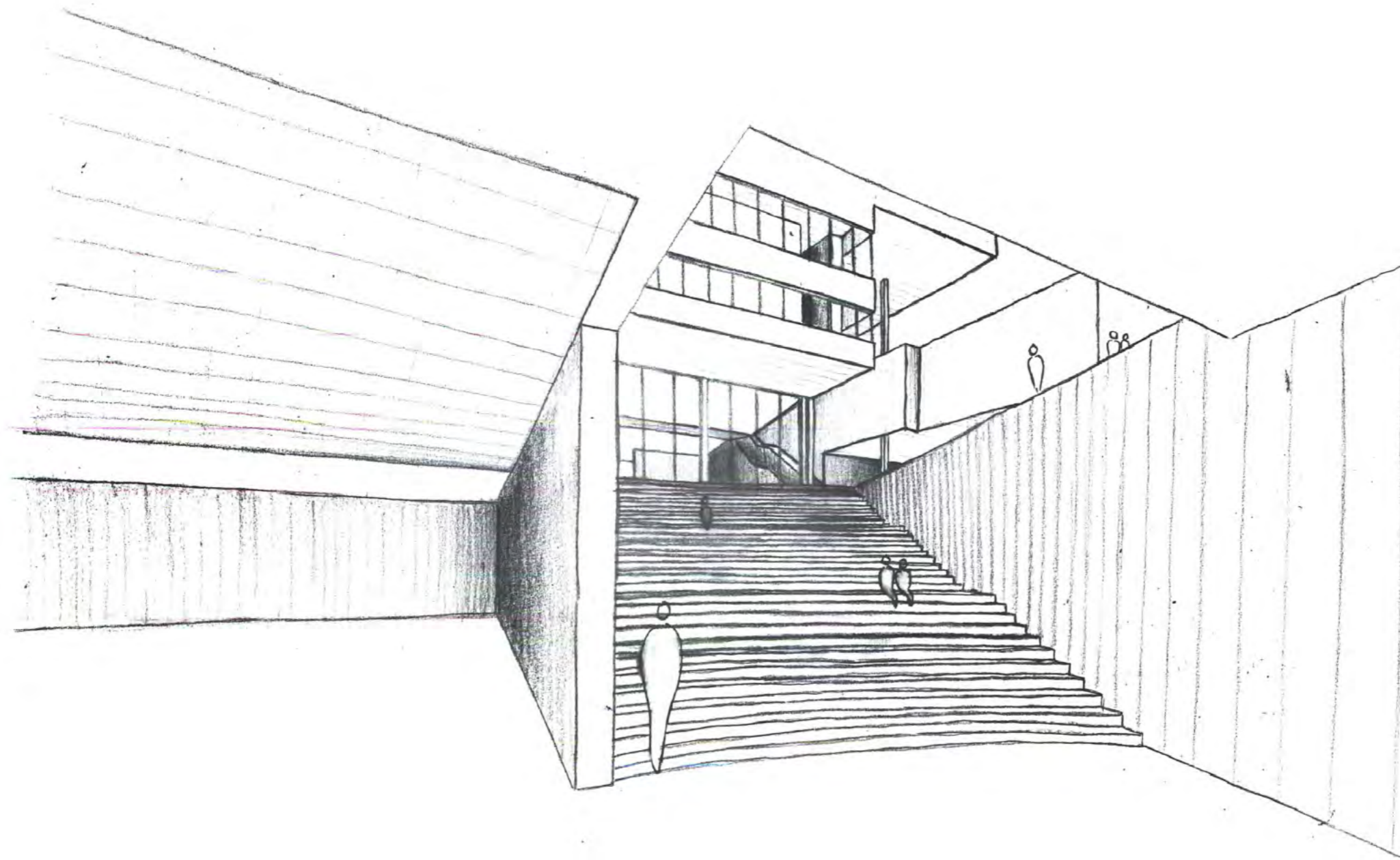
Final Design

VIEW FROM KOOPGOOT

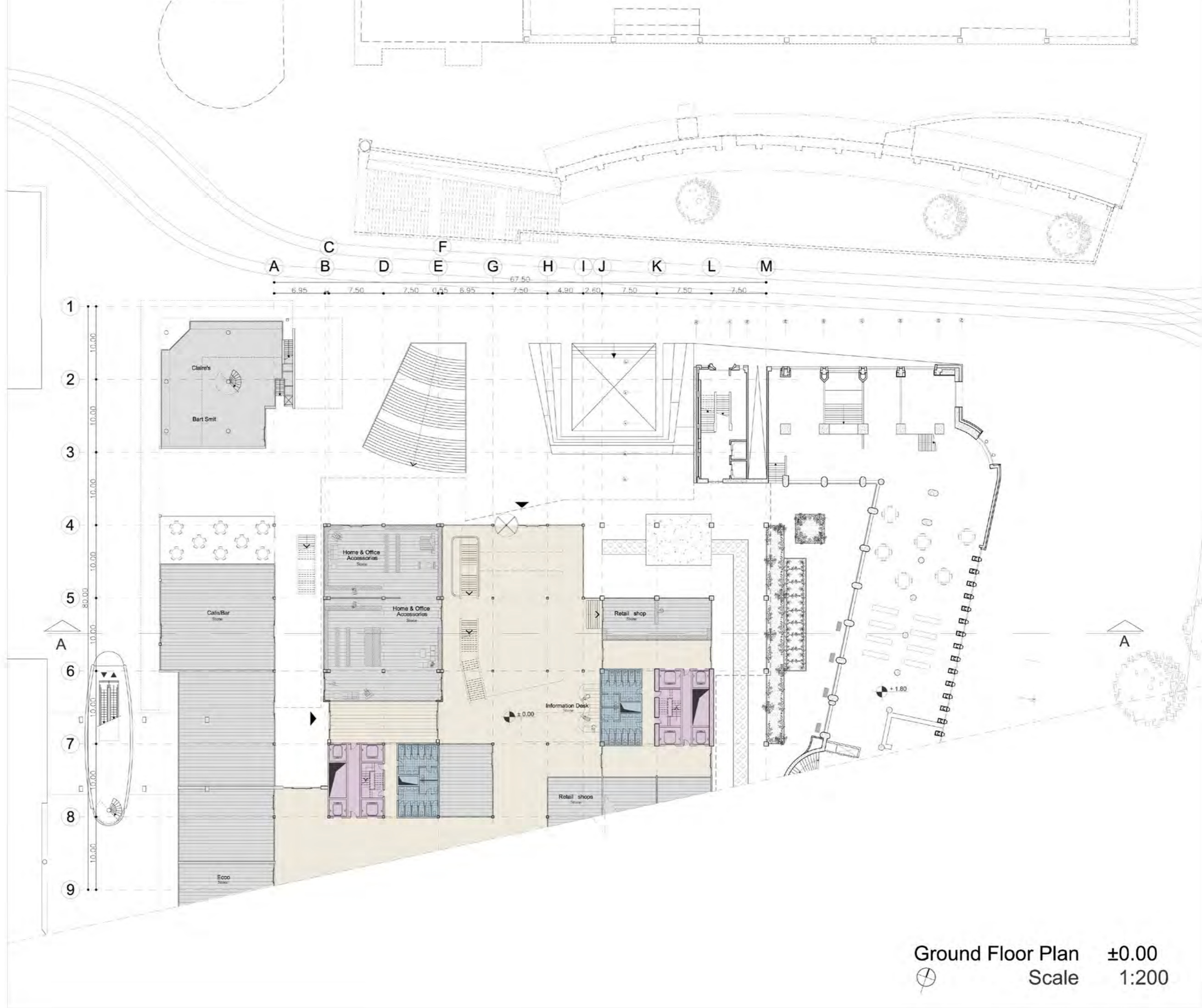


Final Design

VIEW FROM THE BASEMENT



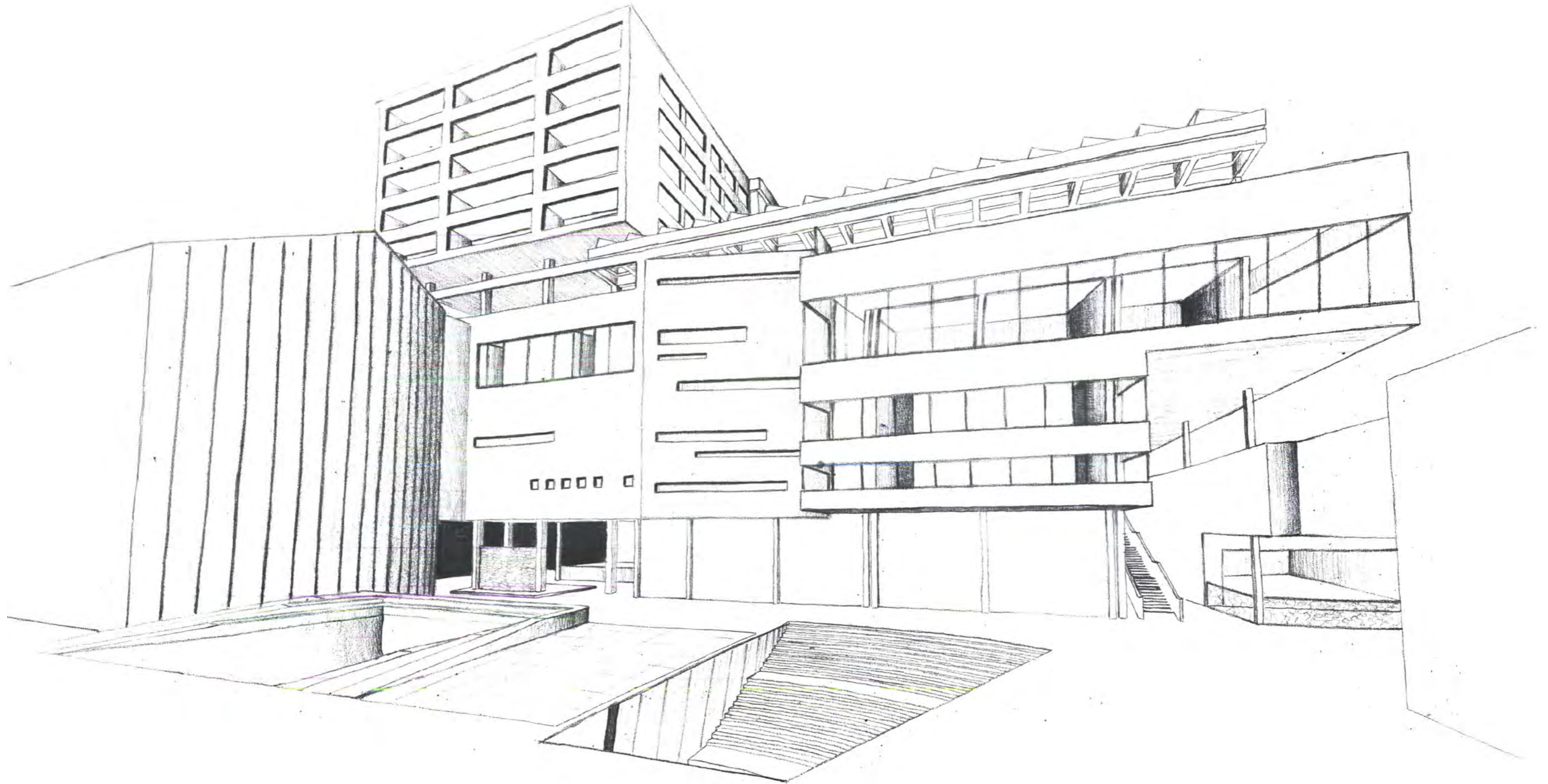
Plan



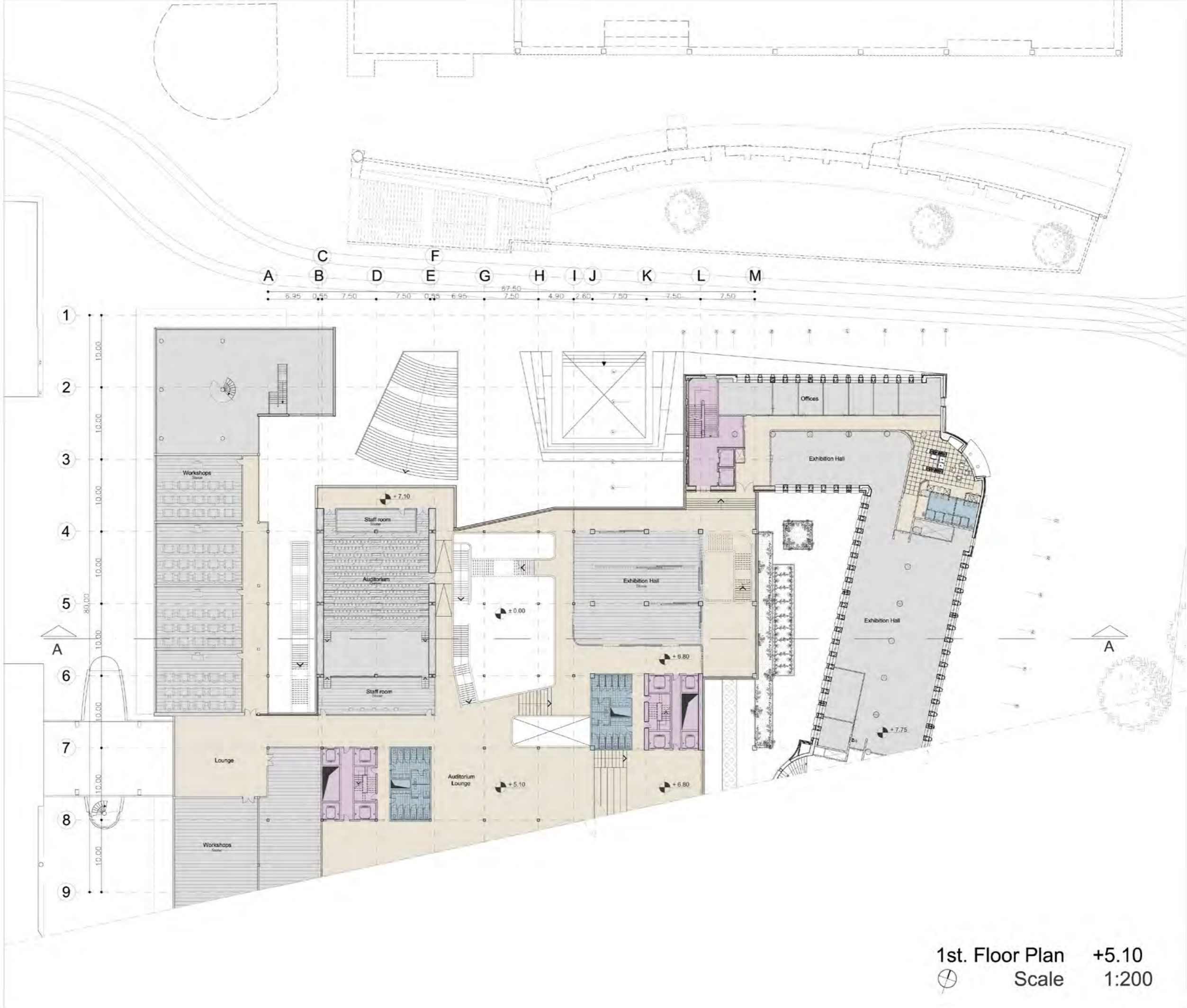
Ground Floor Plan ±0.00
Scale 1:200

Final Design

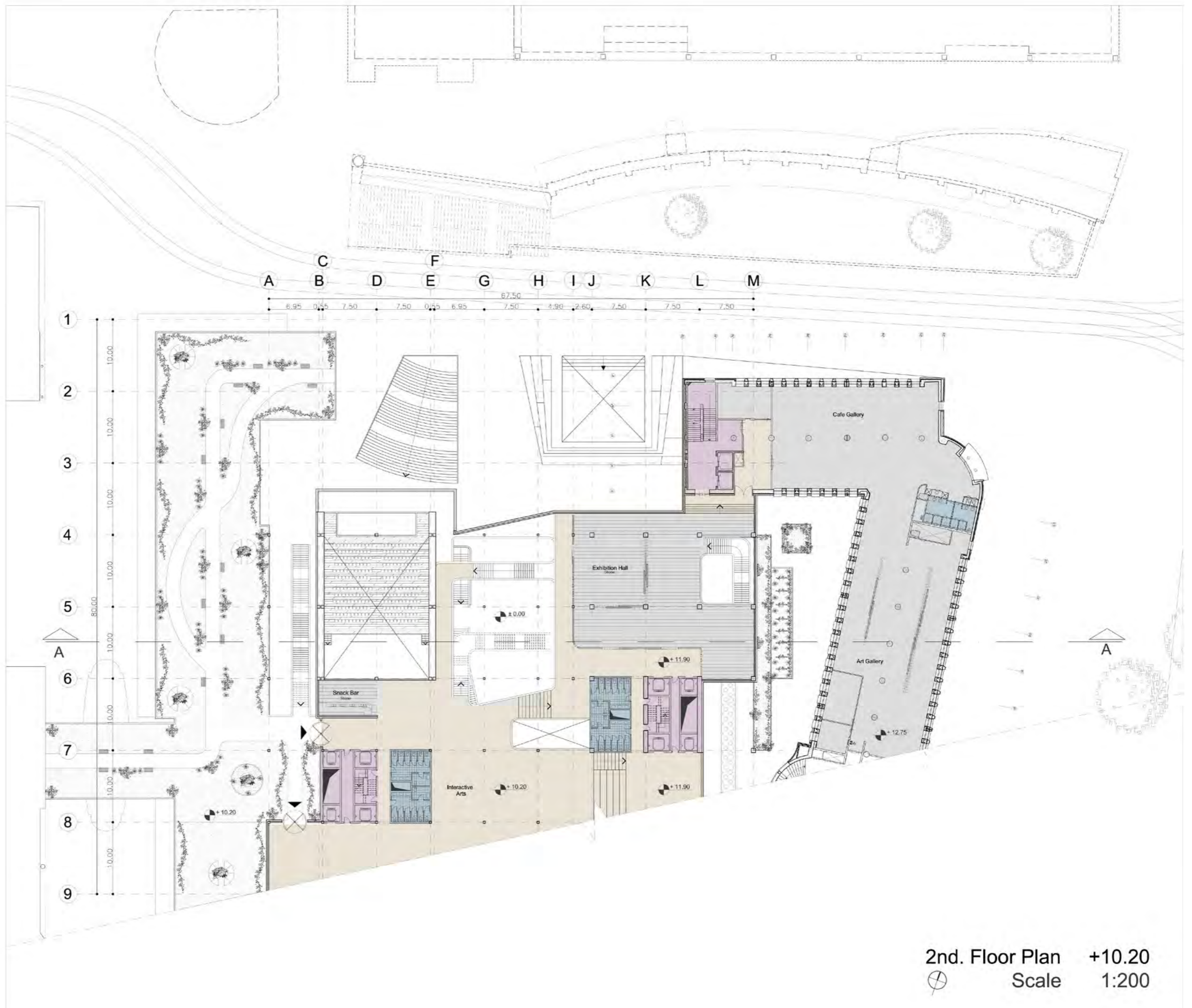
VIEW FROM MAIN STREET



Plans

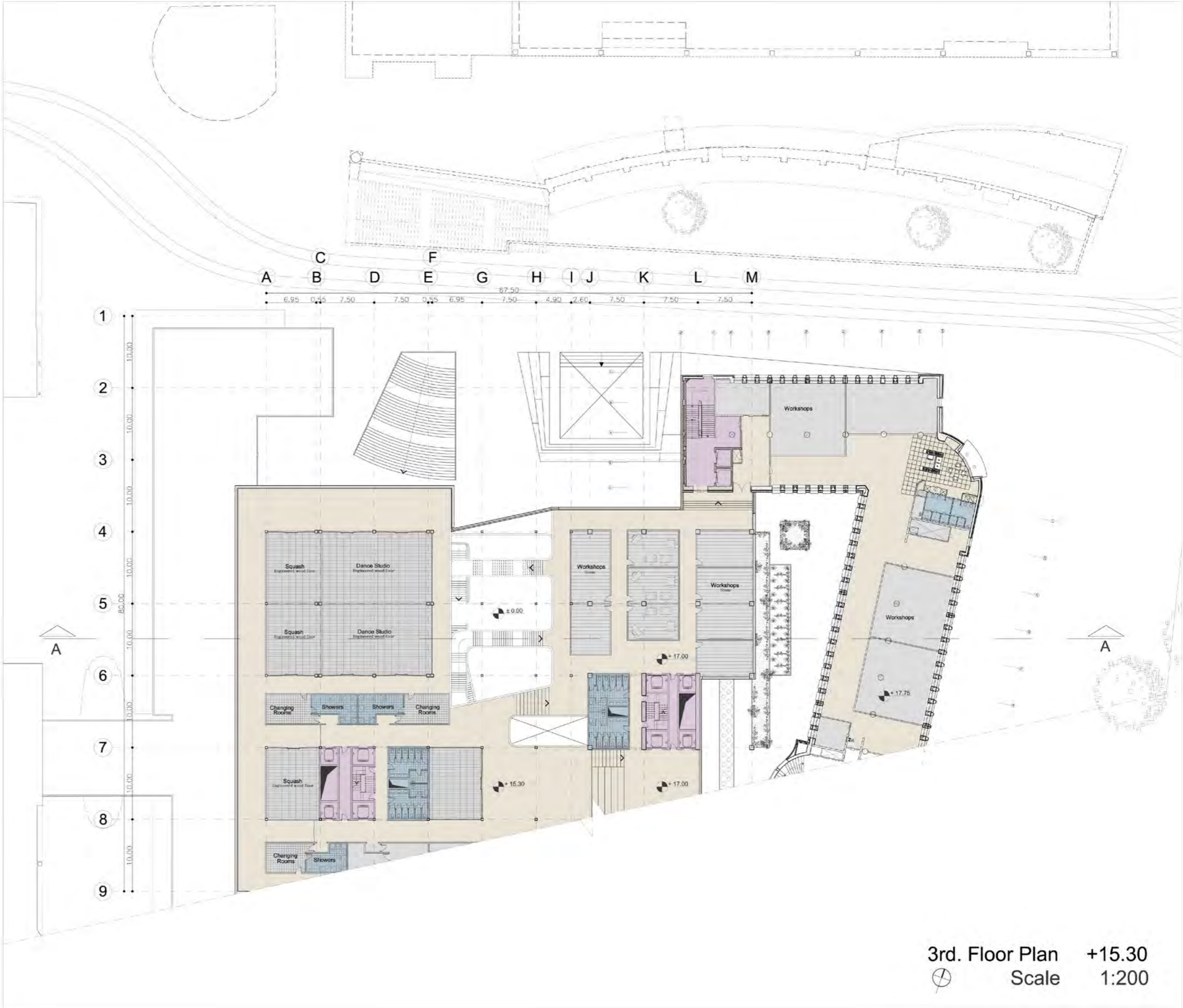


Plan



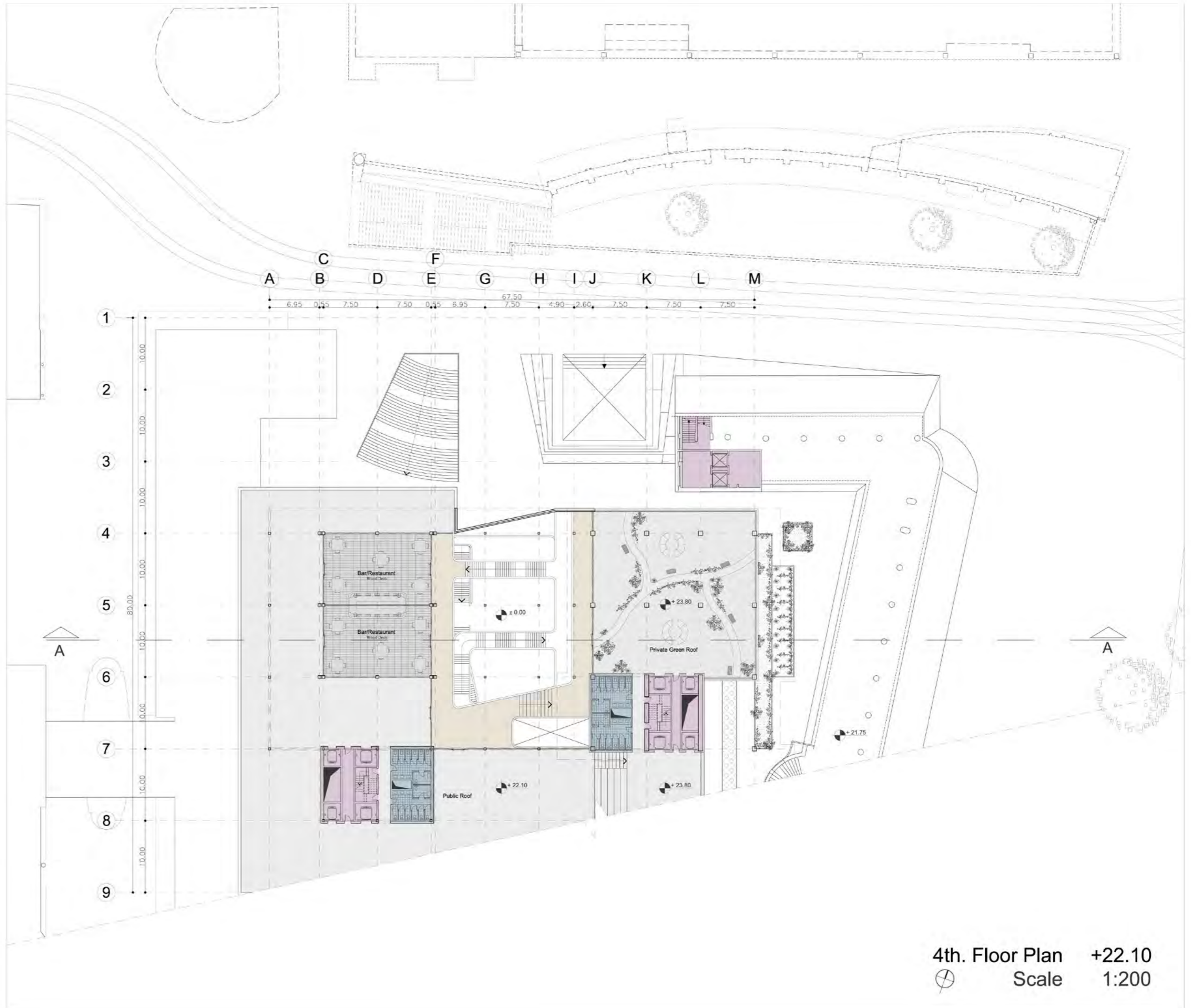
2nd. Floor Plan +10.20
Scale 1:200

Plans



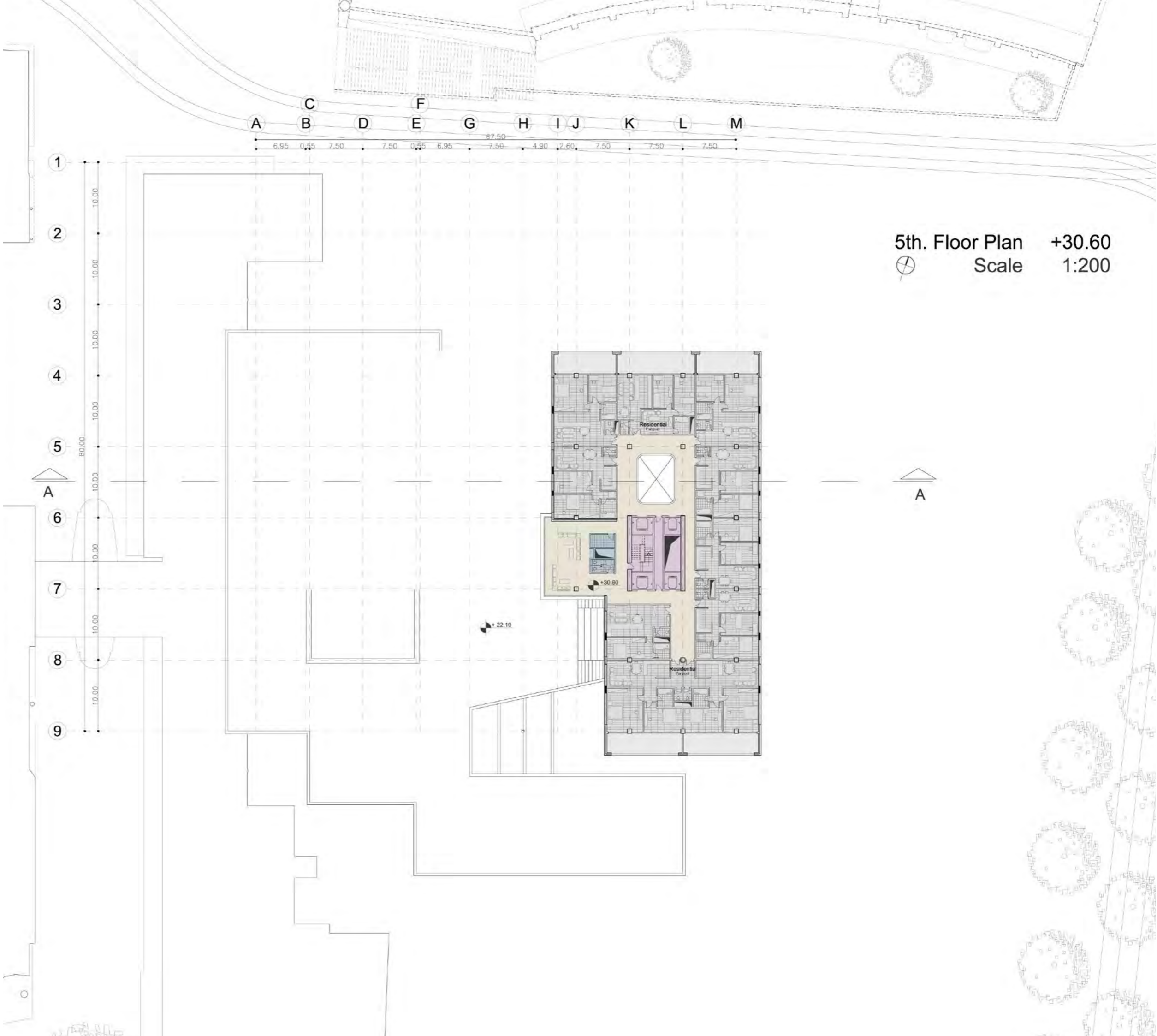
3rd. Floor Plan +15.30
 Scale 1:200

Plan

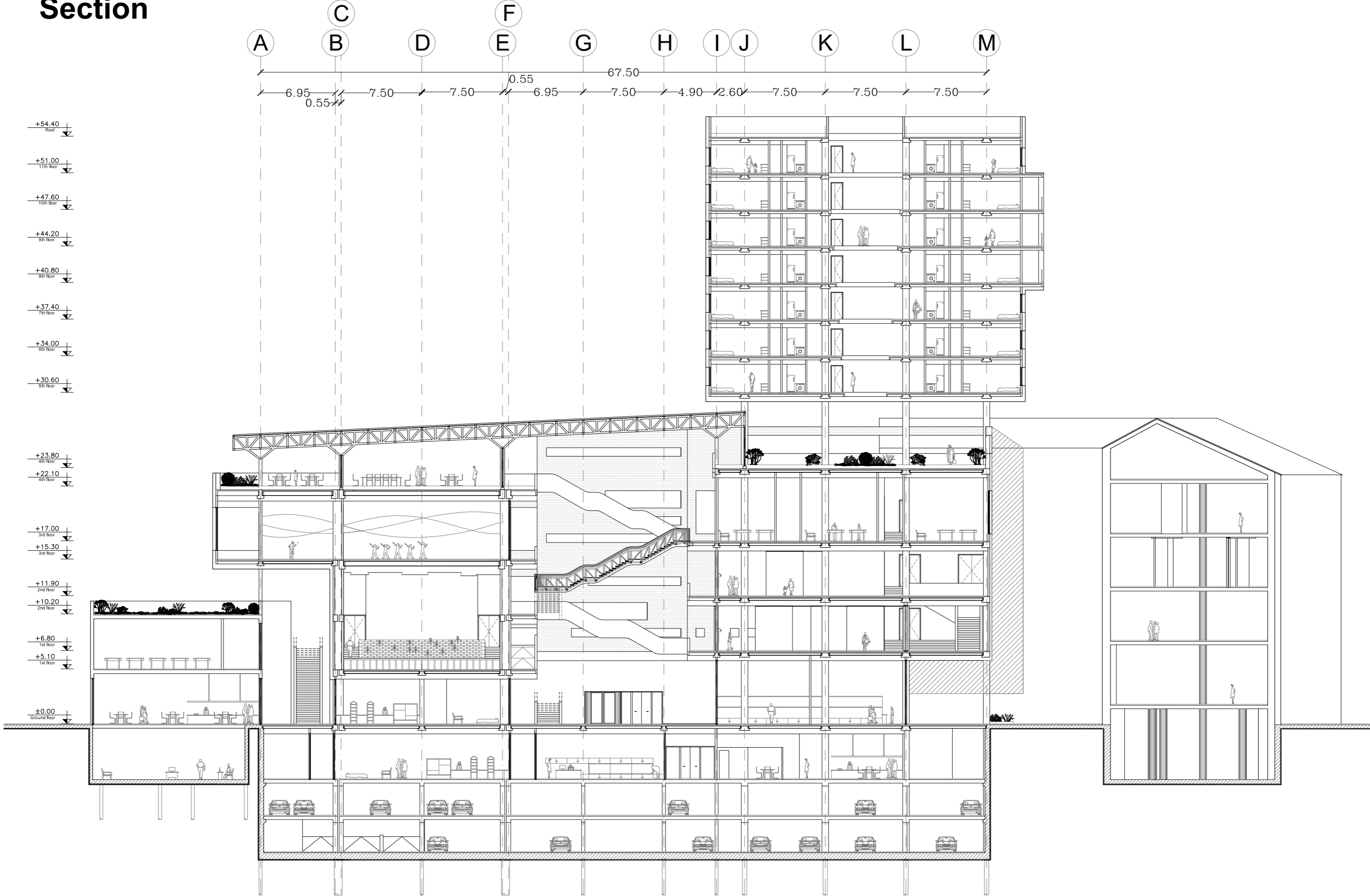


4th. Floor Plan +22.10
Scale 1:200

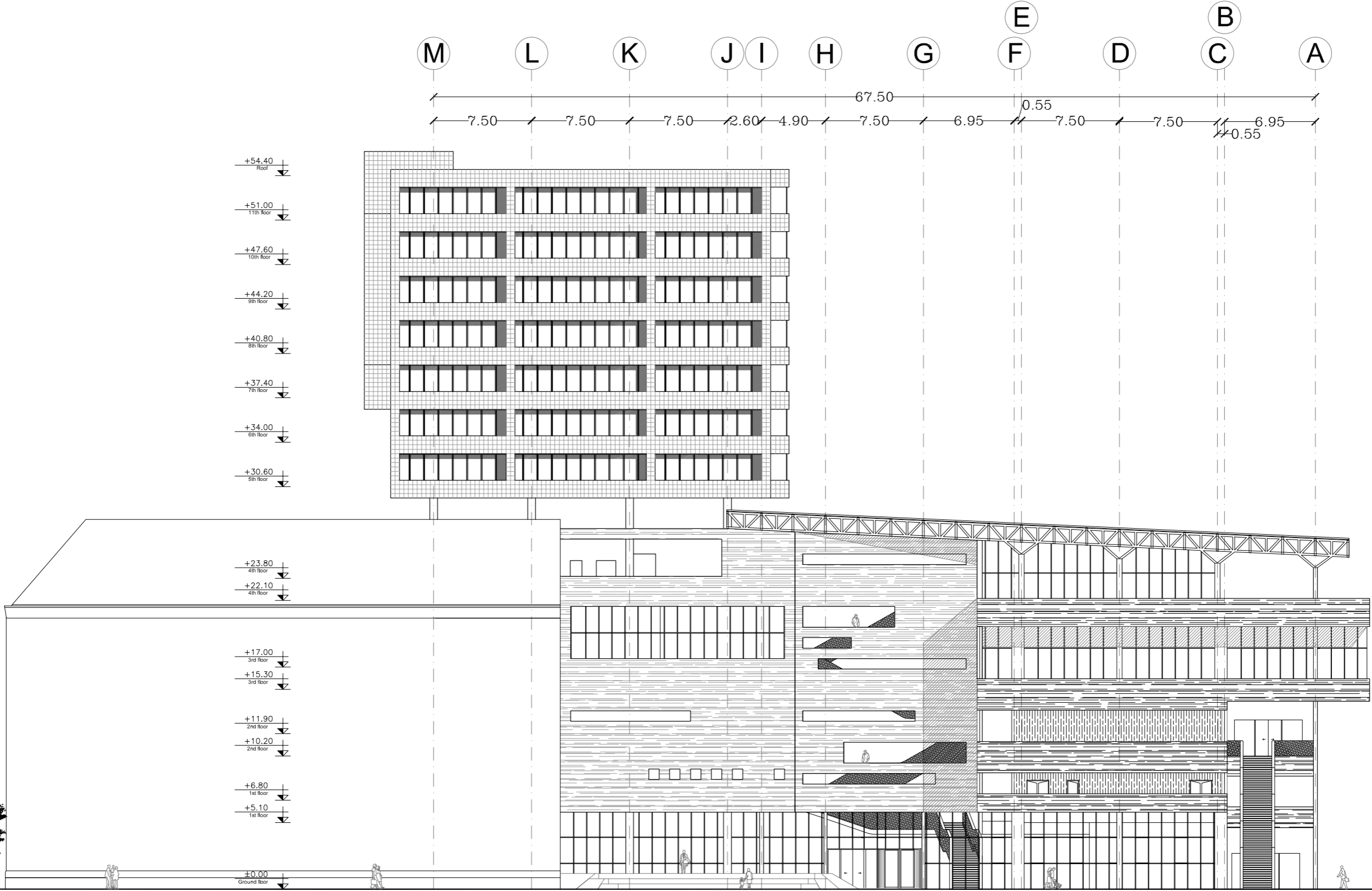
Plans



Section



Elevation





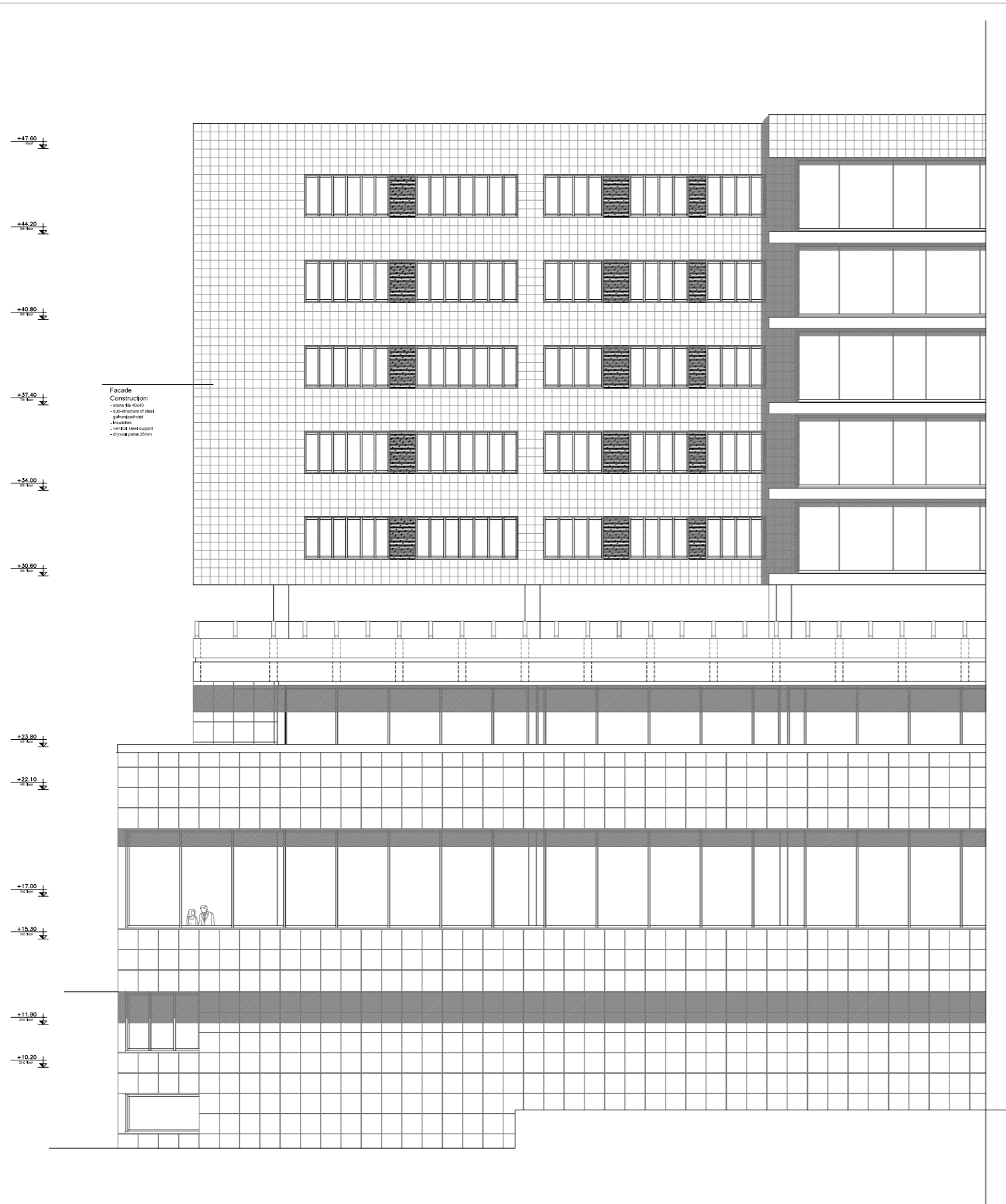




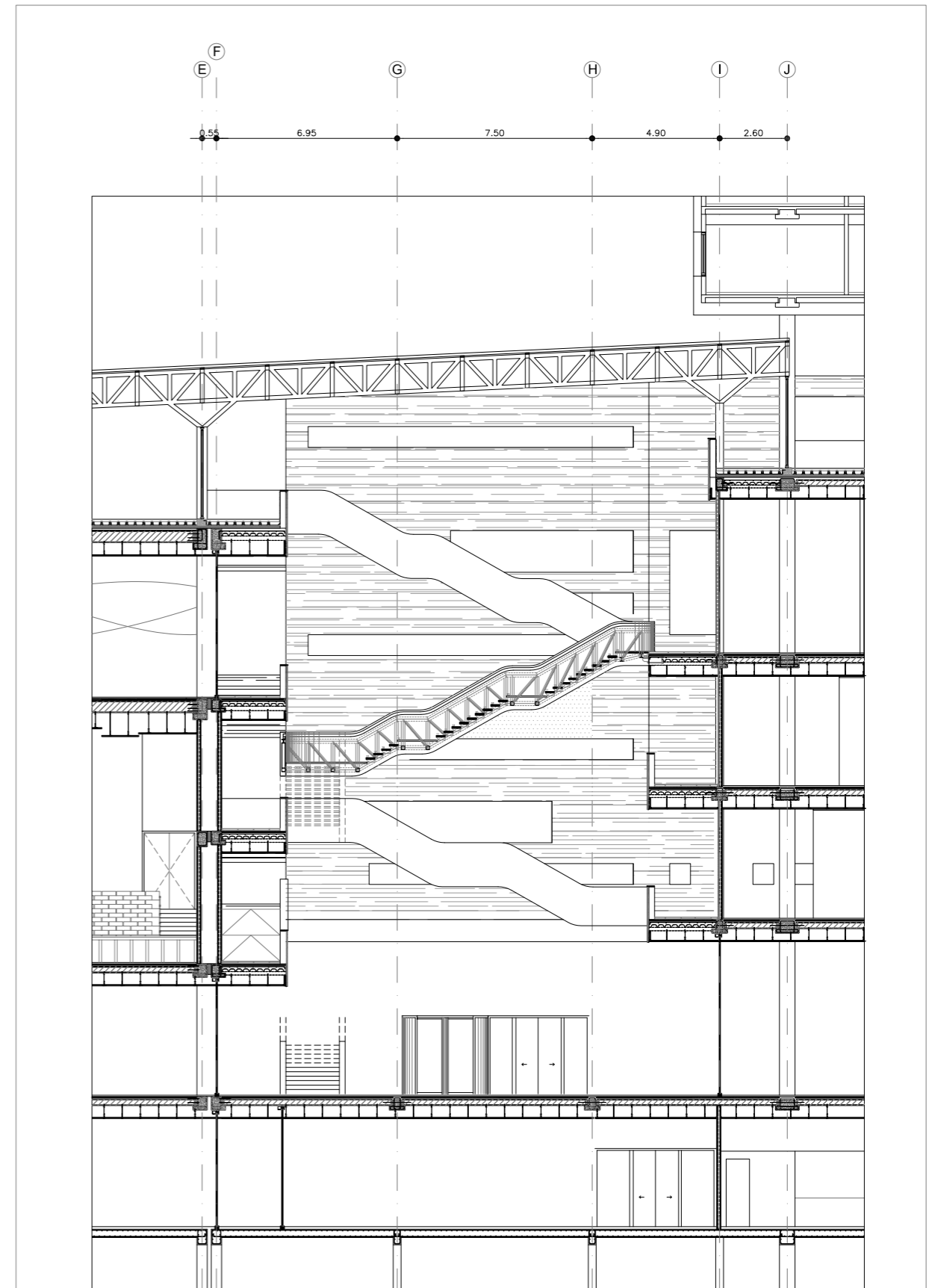




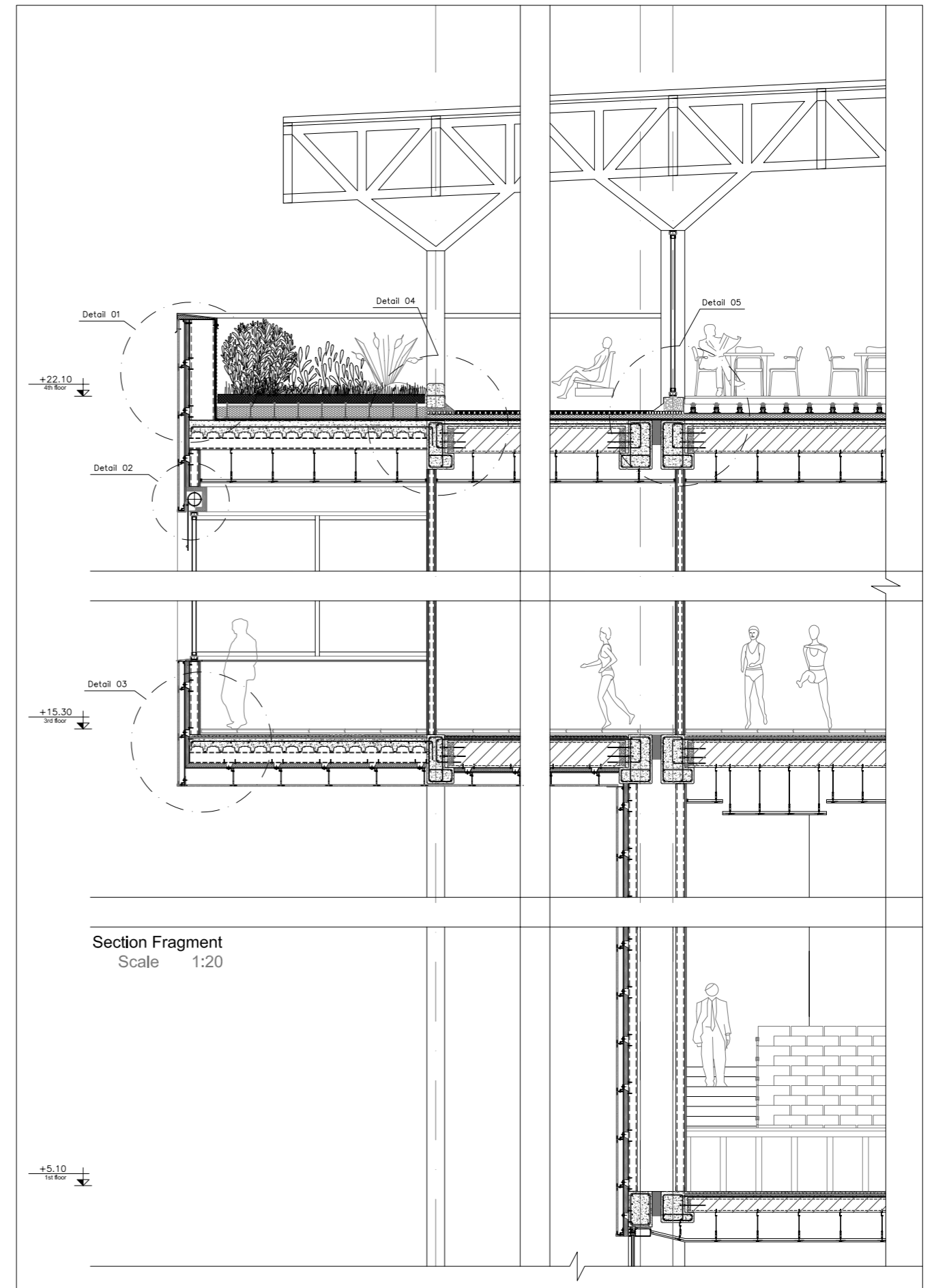
Technical Drawings



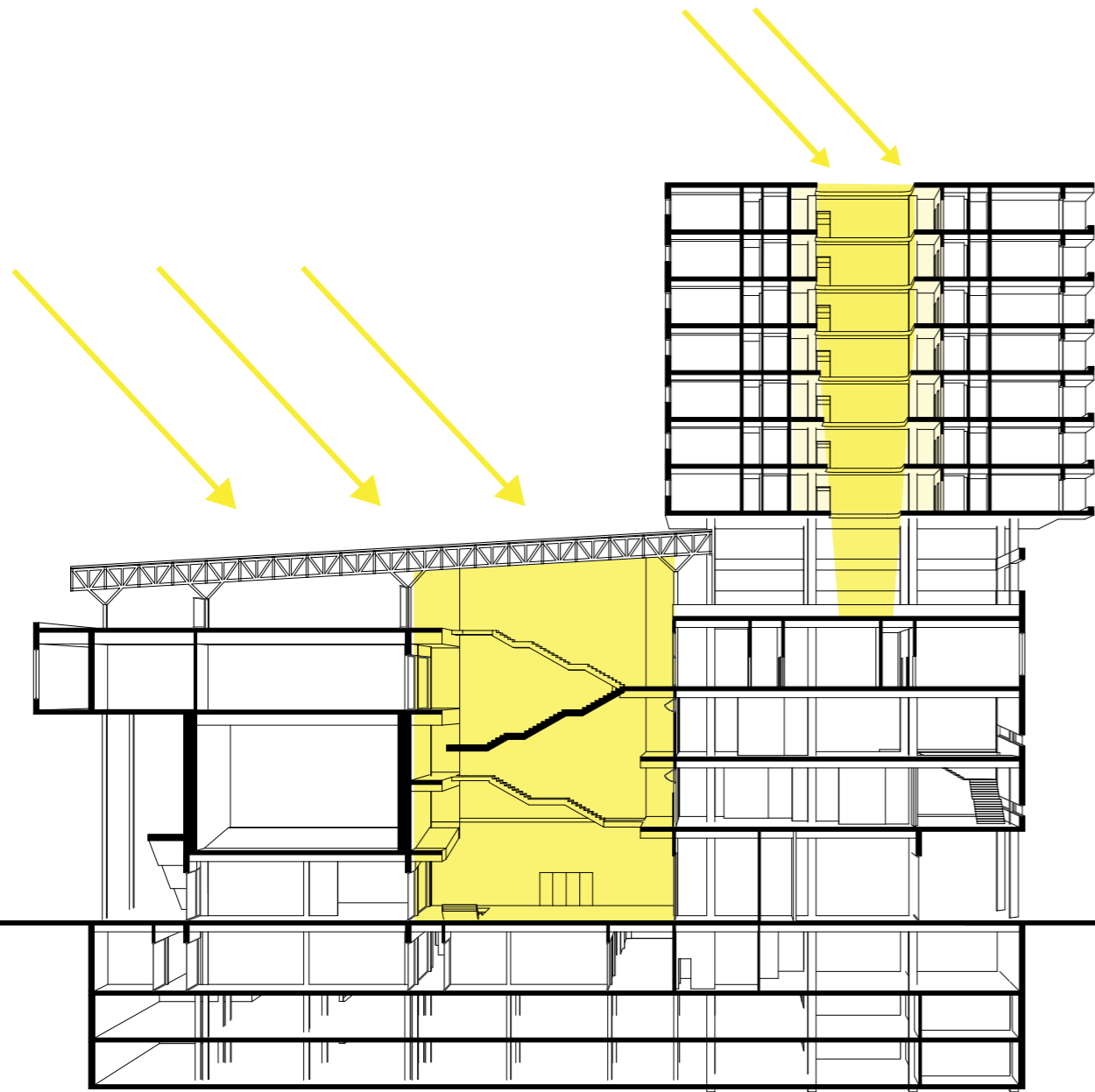
Facade Fragment
Scale 1:50



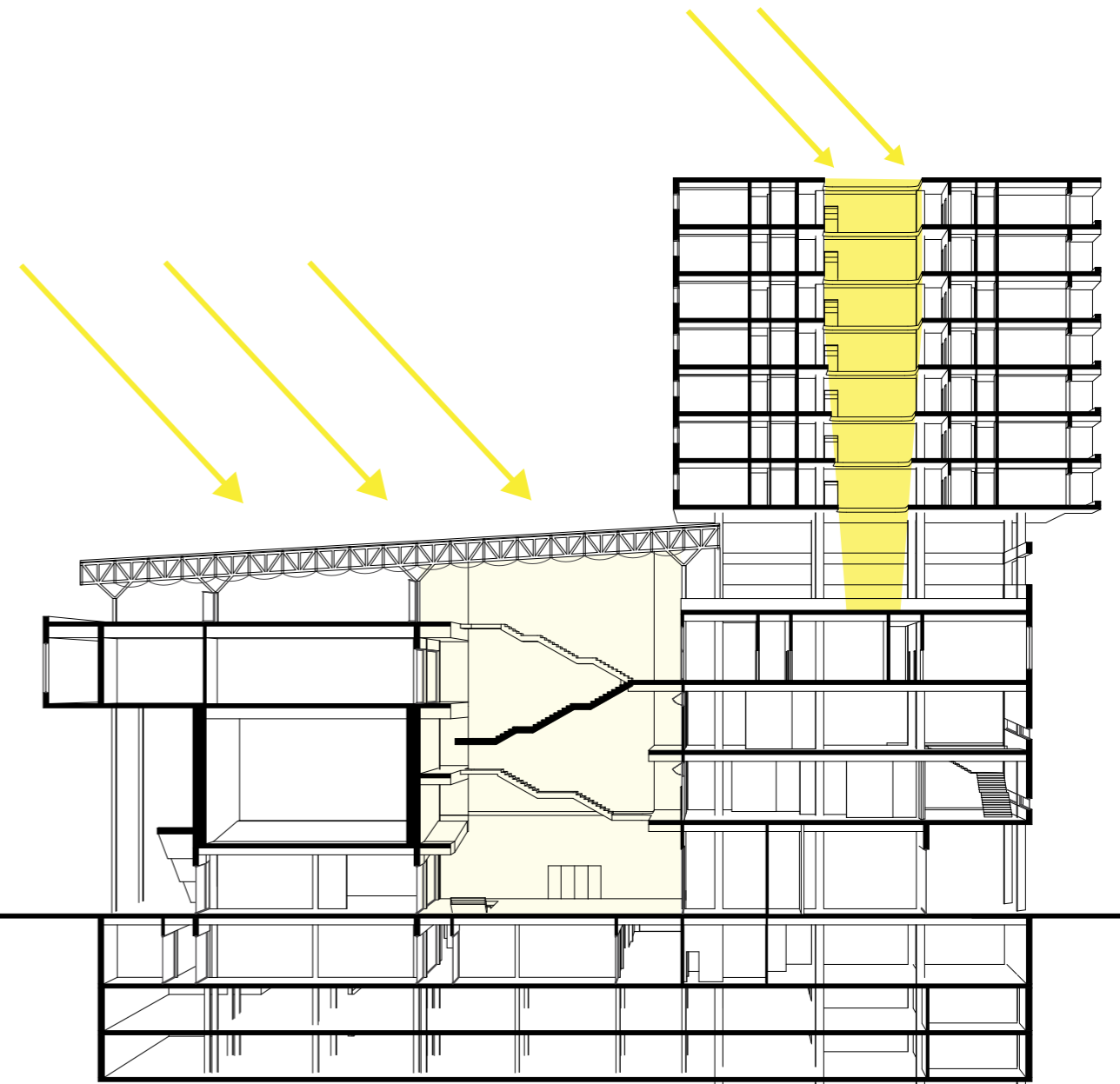
Section Fragment
Scale 1:50



Natural Lighting in Atrium and Void

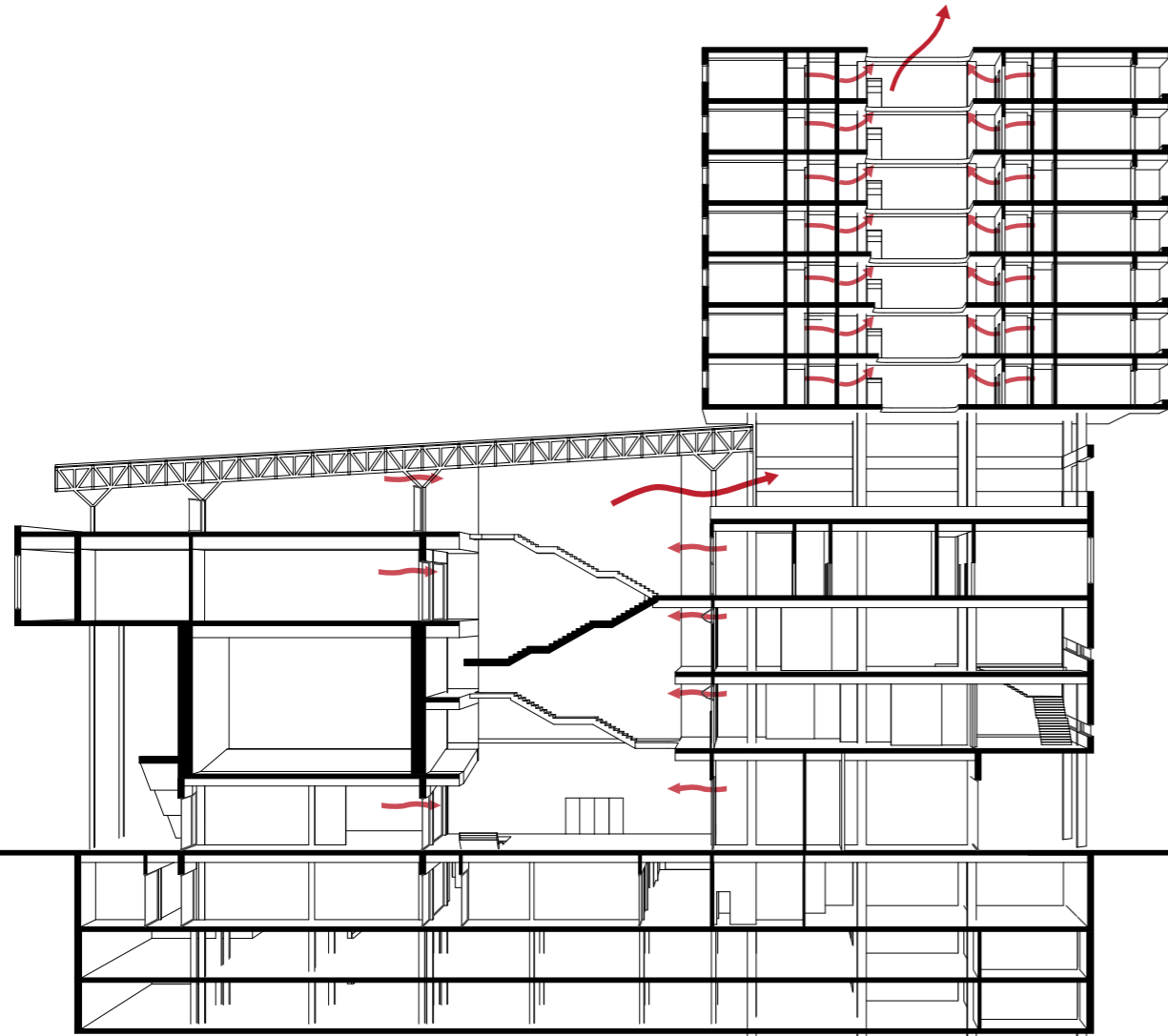


Winter

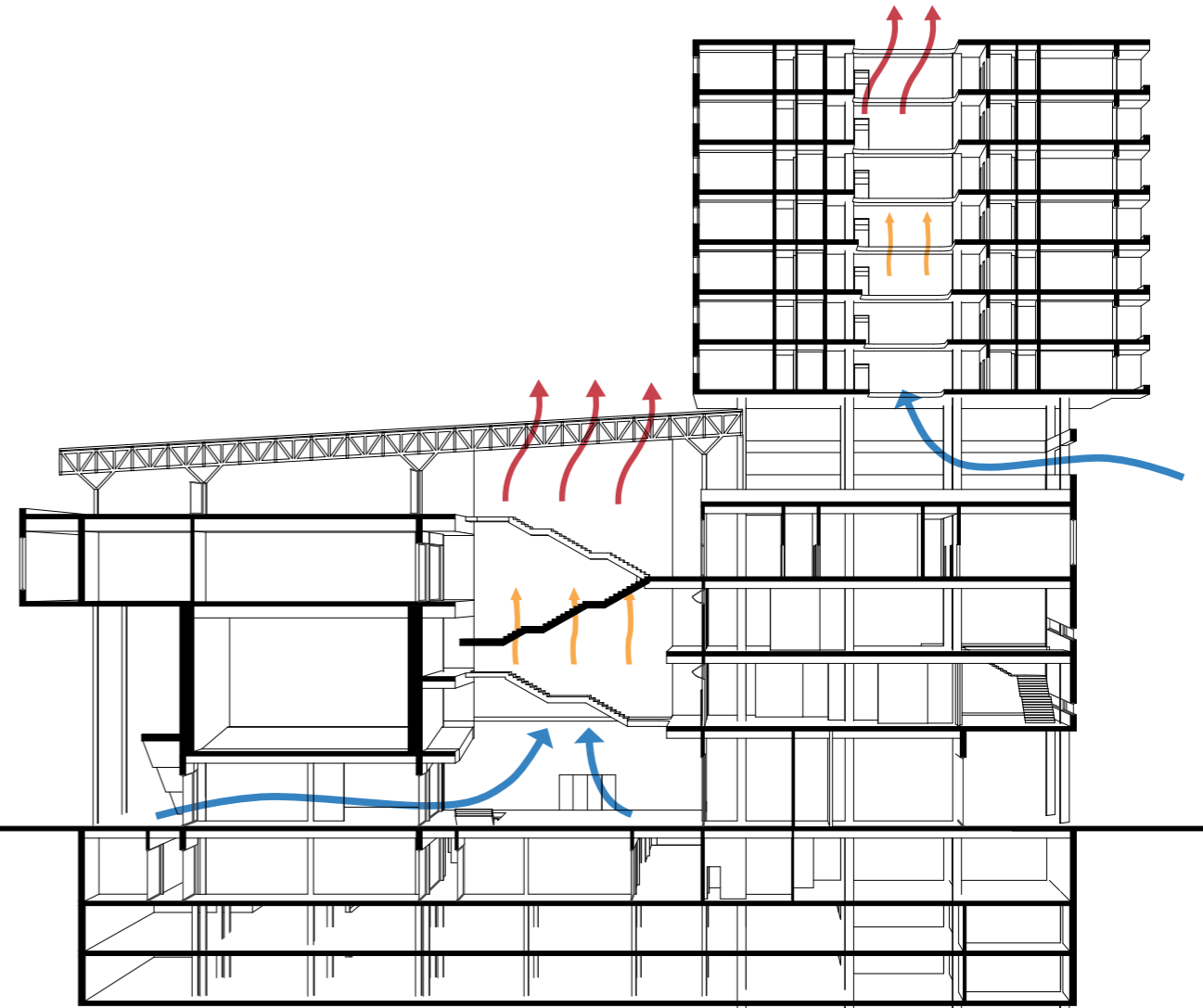


Summer

Natural Ventilation

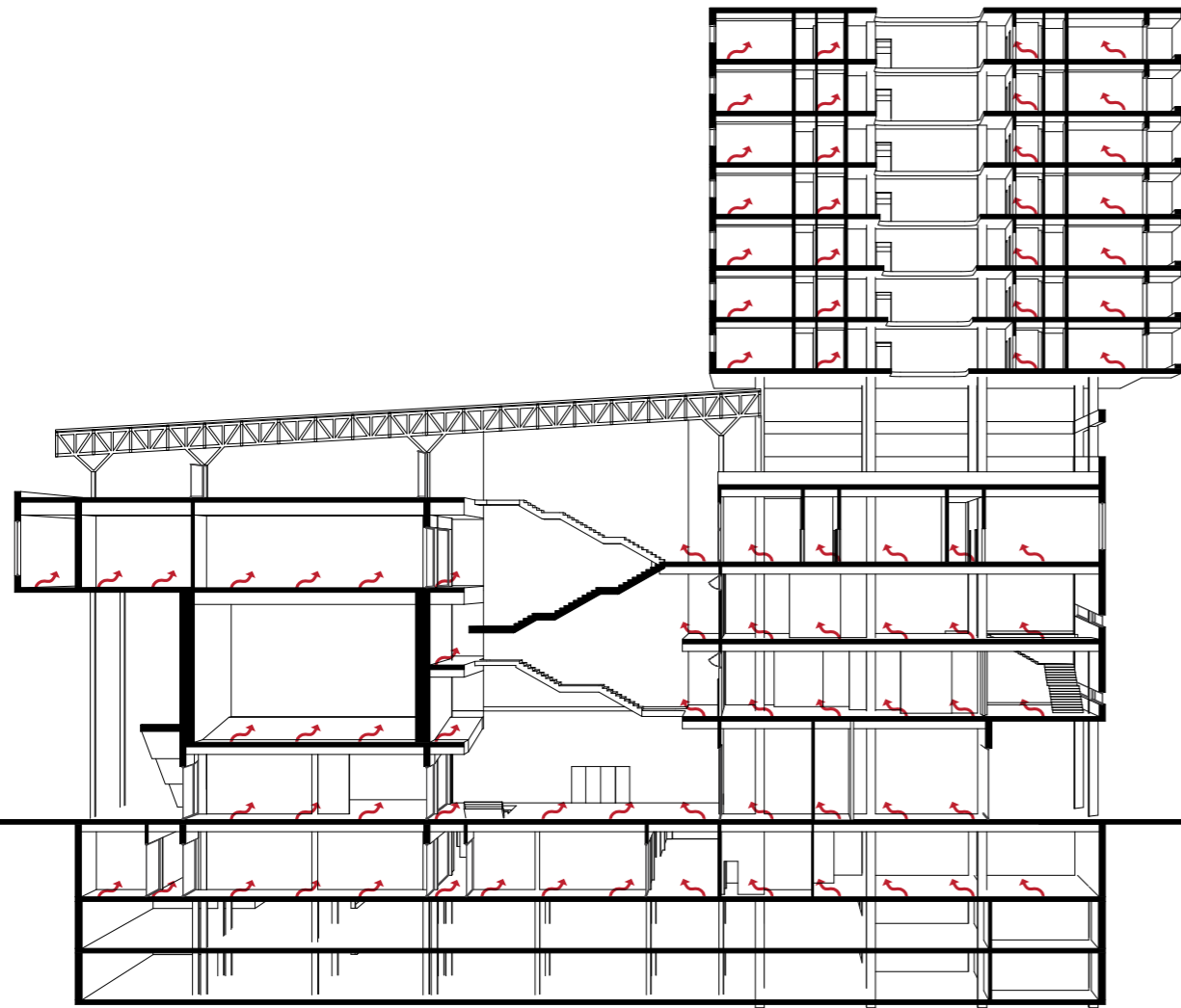


‘Overflow’ of air from different spaces to the conservatory and void heat exchange in Summer, Autumn and Winter via sensed openings

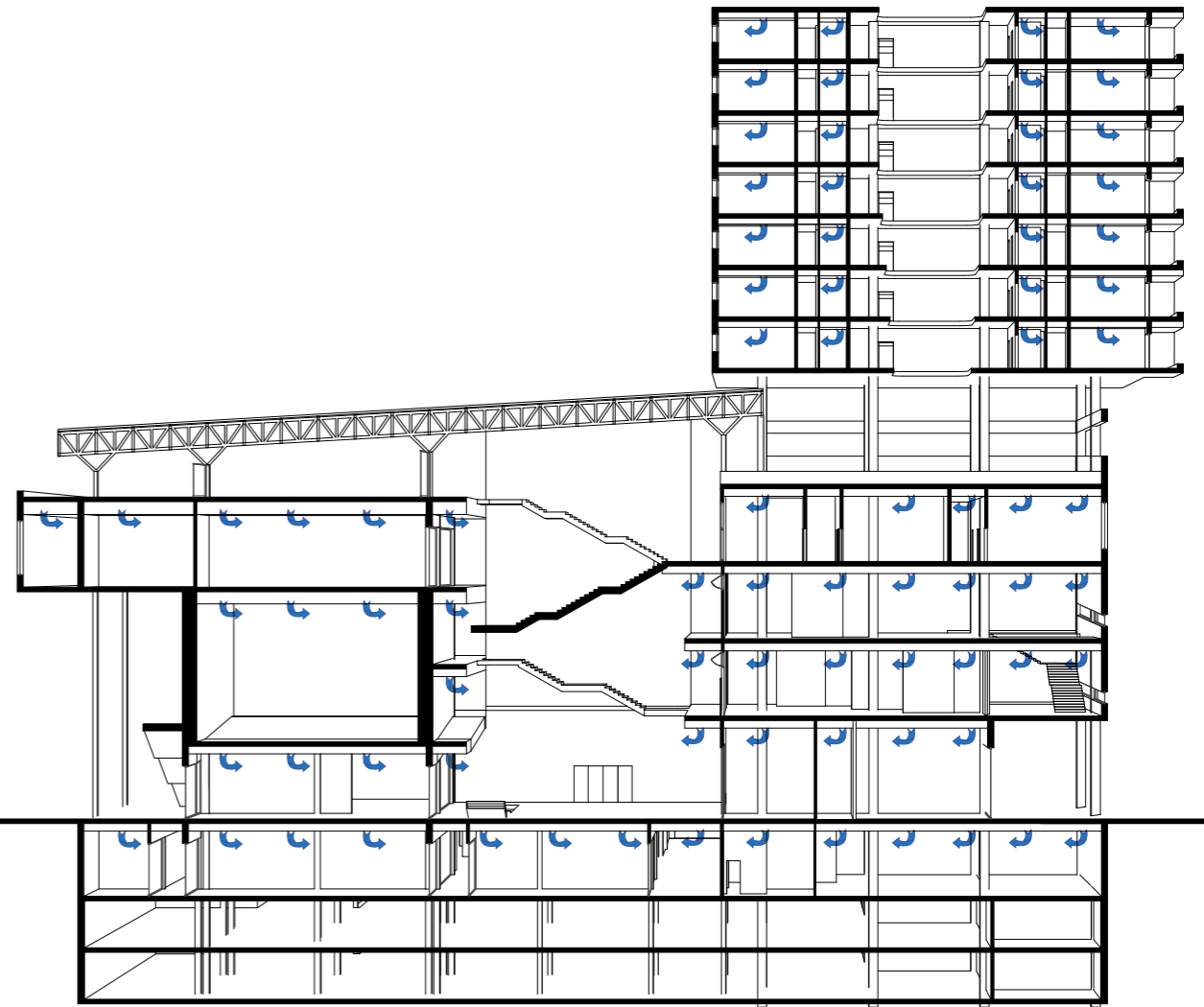


‘flushing’ of air in the conservatory and void in Spring the air is discharged directly via the roof

Mechanical Heating



hot water pipes integrated in floors



cool air blowing from the secondary ceiling

Parya Khodaeiani