

# **Project Journal**

## **Information Theater**

Expansion and Renovation of Stockholm Public Library

Liuying Chen

2023-2024 Msc3

Interiors Buildings Cities



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Archival photograph of the exterior.

## PREPARATION

### Brief 1: Thinking and doing

This year, the Graduation Studio will undertake a design project for a public library in relation to the existing Stockholm City Library by Erik Gunnar Asplund. The opening weeks of the Graduation Studio engage in a collective period of design research as preparation for the main project, establishing the contexts in which it will develop through a process of thinking and doing across the Design Studio and Research Seminar. As students, themes, questions and your developing positions oscillate between these two spaces, each informing the other. These weeks are critical in establishing the terms through which we engage with one another and from which your individual projects will emerge. This is emphasised through collective teaching and group work. The conclusion will be a set of drawn and modelled outcomes. These are situated in a body of thinking and articulated through collective research documents and individual research plans that will, together, begin to establish the concerns and ambitions of your graduation project. Previous examples of each will be available for consultation and discussion. The weeks up to the P1 will be arranged as two periods in the Research Seminar and Design Studio. The first, Looking Carefully, will be followed by the second, First Thoughts.

## LOOKING CAREFULLY: Weeks 1-4

### Asplund

The first weeks of the Research Seminar will explore the world from which Stockholm City Library emerged by examining the work and thinking of its architect, Erik Gunnar Asplund. Working in groups of four, you will carefully study and describe eight buildings from different periods of his practice to begin to understand the ideas, methods and aesthetic, compositional and material concerns that characterised his developing architectural concerns. These will also provide the lens through which you will gain a collective understanding of the wider social, political, cultural, physical and architectural contexts in which Asplund worked. Considering the individual position that will begin to emerge from your early design work and study of the City Library itself, the questions raised through these studies will help inform your individual research plans.

*Villa Snellman, 1917-1918*  
*Woodland Chapel, 1918-1920*  
*Lister County Courthouse, 1917-1921*  
*Skandia Cinema, 1922-1923*  
*Stockholm Exhibition Main Entrance & Exhibition Hall for Transport, 1930*  
*Bredenberg Department Store, 1933-1935*  
*Göteborg Law Courts Annex 1934-1937*  
*Woodland Crematorium 1935-1940*



Archival photograph of the Rotunda.



Archival photograph of the stairs.

Each group will prepare a succinct presentation in which you will introduce the project. This will be accompanied by collating a complete set of drawings and a selection of images to describe its key characteristics. Alongside an investigation of the building itself, you will situate the project within wider architectural and societal developments in Sweden and Scandinavia, considering its relation to other projects from beyond Scandinavia and, perhaps, from different times.

Finally, you will make a set of drawings in which you investigate the project with regard to the following themes:

*Spatiality*  
*Ornament*  
*Composition (plan and/or elevations)*  
*Landscape or urban setting*

These are drawings you make yourself; they could be sketches or digital drawings. From them, you will produce one presentation drawing representing what you consider to be the essence of the project. Defining what kind of drawing would best describe your critique of the building is part of the exercise.

## Scenes from a Public Library

In parallel, the first weeks of the Design Studio will focus on the Stockholm City Library itself.

You will collectively draw the building and construct a three-dimensional digital model. Alongside this, working in the same groups of four at the Research Seminar, you will research, study and make models of key spatial moments in the library. These will relate to four key spatial themes:

*The Rotunda*  
*The poche which surrounds it, including the stairs*  
*The children's library*  
*The perimeter halls*

Each of these will be represented by one or two models, which might encompass the following key spaces to be agreed upon:

*The central rotunda reading room*  
*The lobby and staircases*  
*The erotica library*  
*The Head librarian's office*  
*The Children's entrance, reading room and storytelling room*  
*The North and South Halls*

The models will be made at a consistently large scale, to be agreed upon, and will depict the rooms as they were first designed and opened. They will include the furnishings and colour schemes of the original interiors as well representations of any decorative artworks. They will therefore record both the library as it was



conceived and, speculatively, how it might feel once restored. When you visit the library on the field trip you will carefully record adjustments and changes that have happened to the spaces you studied since. The models should be made to be displayed as physical artefacts as well as through photography. Alongside the models, you will present your studied rooms in plan and section through developed surface drawings. Both will be exhibited in the Department.

## FIRST THOUGHTS: Weeks 5-9

### The Modern Public Library

In the second period, the research seminars will look more broadly at the development and possibilities of the modern public library. Working again in groups you will investigate eight precedents in detail. Through research and careful recording, you will explore the thinking that informed the design of each of these libraries, considering their situation and how their architecture addresses its public and represents its function. This will be recorded through a series of black and white two-dimensional drawings, in plan and section, across a series of scales. From this, the studio will develop methods of explaining systems and relationships, creating a body of analytical material and diagrams for each building, which can subsequently be adapted, co-opted and applied to individual projects.

*Salie de Lecture, Bibliothèque Nationale de France, Henri Labrouste, 1875*  
*Vilpuri Library, Alvar Aalto, 1935*  
*National and University Library, Jozse Plecnik, 1943*  
*Beinecke Library New Haven, SOM, 1959*  
*Berlin Statsbibliothek, Hans Scharoun, 1967*  
*British Library, Colin St John Wilson, 1962-1997*  
*Exeter Library, Louis Kahn, 1972*  
*Seattle Public Library, OMA, 2004*

### A Room in a Library

Following on from your careful and detailed study of Asplund's library, and in parallel with your investigations into other public libraries, you will make your first design project. At the same scale as the models made of the Stockholm Library interiors, you will each individually make, in model form a proposal for a room in a library or, potentially, a significant fragment of it: What will happen in your room? Who will use it and what can they use it for? How will it engage their senses? What scale is it? How fixed or modelled is its form? Do you conceive it in relation to Asplund's room or contrast to it? Do you imagine it within an existing space or a new piece of architecture? The scale, purpose, character and furnishing of this room, or its potential relationship with a notional exterior, will allow you to begin to develop your attitude and position in relation to the larger design project to come.

While working on your designs, the Research seminar will give you a grounding in the project's historical, architectural, and theoretical context. The seminar will be focused on close reading and discussing projects and texts related to the assignment in small groups. Finally, a series of lectures will address parts of the wider context of the particular assignment. Through this combination of lectures and group research into Asplund's oeuvre and precedent studies of libraries, we ask you to formulate your position with regard to the design assignment and its various contexts.

### Project Journal

The research seminar will introduce the Project Journal, a document made by each of you individually. The purpose of this is to record your process of researching, thinking, making, development and reflection throughout the graduation studio and, finally, to form a key body of evidence against which research and process can be marked at the end of the year, in the P5 examination. The Journal should be developed continuously, within a form and structure chosen individually. It should record and communicate the process of the project, including outcomes and reflections on tutorials and reviews, while offering a space for reflection and critique of the work being made and the issues that define it.

### Research Plan

The Research Plan course (AR3A010) is integrated within the Research Seminar. However, the outcome differs from what is written in the Study Guide and Syllabus for this Department-wide course. Within the Interiors Buildings Cities Graduation Studio, the majority of the Research Plan is made collectively and consist of the edited outcomes of the investigations into Asplund's architecture and the precedent studies of libraries. Only a concise, individual reflective statement, which you will also present at the P1, is added to this collective work. This will be discussed in more detail with your tutors.



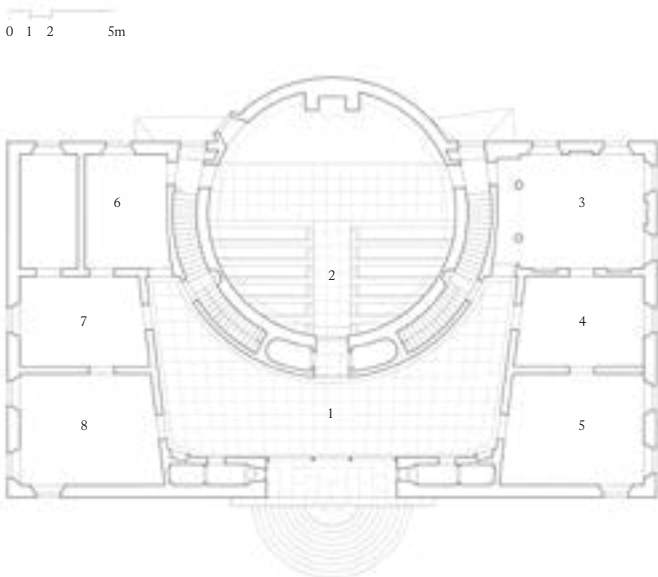
# Research-Case Study

Lister County Courthouse/ Gunnar Asplund



By the time Asplund designed the Lister County Courthouse, he was already well established in Sweden and known for building the Woodland Chapel. The courthouse was realised between 1917 and 1921 in Sölvesborg, a small town in the south of Sweden. The courthouse functioned for the whole Lister district, a peninsula adjacent to Sölvesborg.

A grand gesture for a small town village expressed by the juxtaposition of the monumental, vaulted entrance and the more modest windows.



In this case, asplund demonstrated his use of symmetry and order, and emphasized the core courtroom by nesting the core space of the cylinder in the form and the surrounding space, which was also extended to the subsequent design of the Stockholm public library.

First floor plan

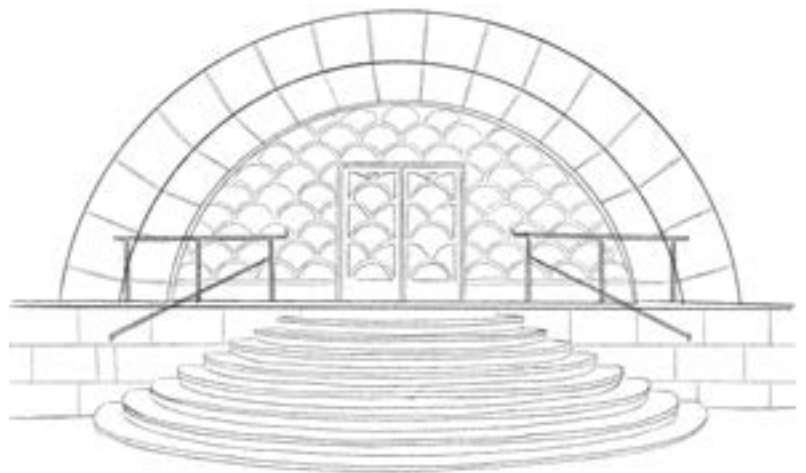
1. Entrance hall
2. Courtroom
3. Meeting room
4. Defense attorney's room
5. Prosecuting attorney's room
6. Judge's chambers
7. Clerk's chambers
8. Reception area



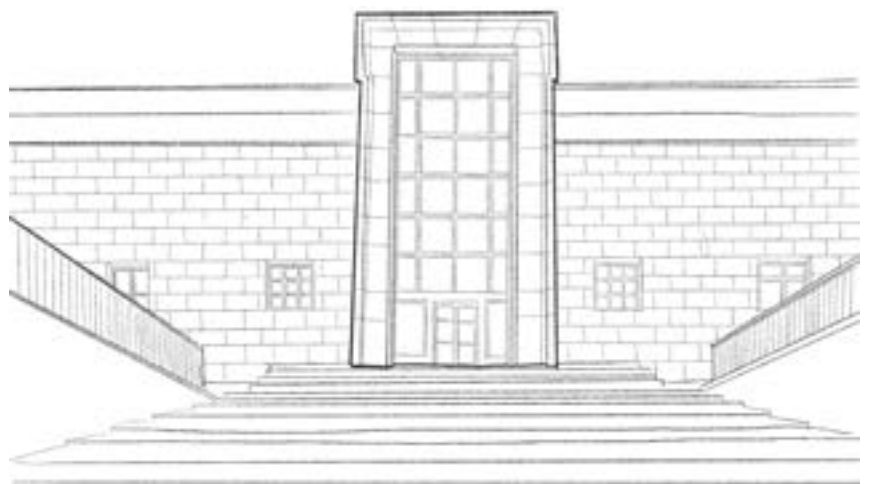
## Week 1.1

Many solutions used by Asplund in the County Courthouse were then developed and applied in the building of the Public Library of Stockholm.

One of them is the entrance to the building placed on the pedestal and emphasised by the stone frame around the doors. The same solution can be noticed in the building in Stockholm. It's another reference to the classical architecture used by Asplund in his building. However, the monumentality of this gesture is consciously broken by the detailing inside the frame.



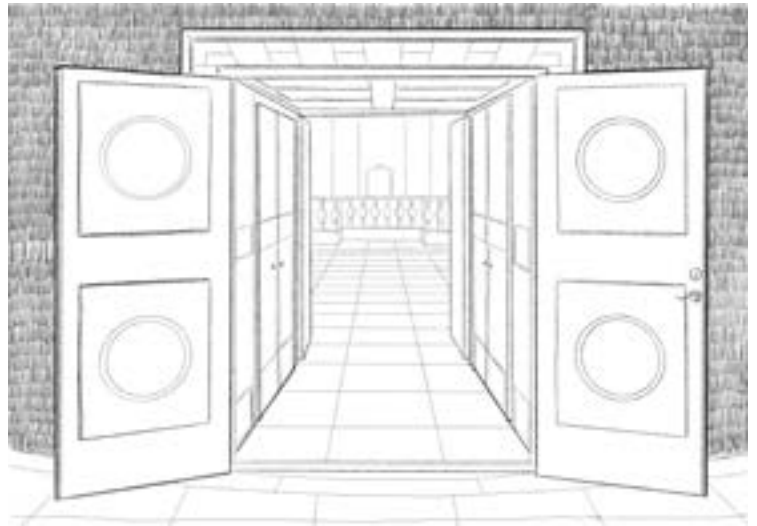
Entrance to the County Courthouse



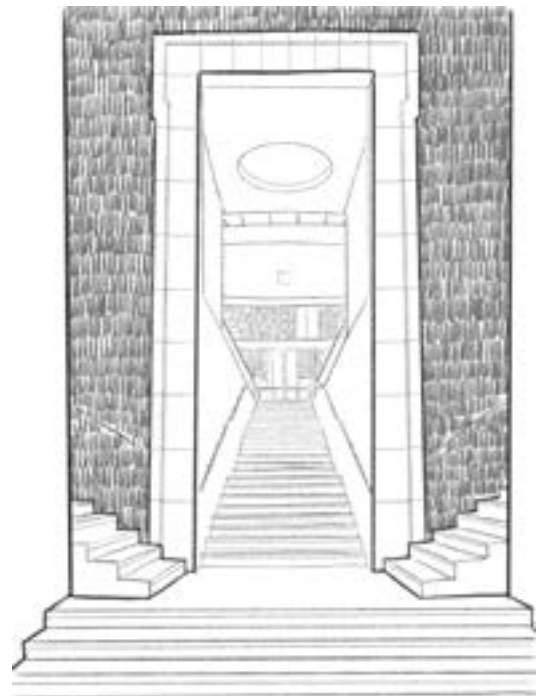
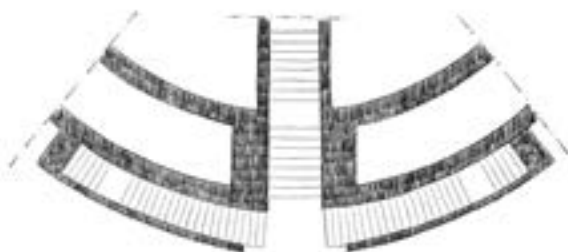
Entrance to the Stockholm Public Library

Another connection between the two buildings can be noticed in the entrance to the main space of both buildings. In the Country Courthouse Asplund is using the space between the walls of rotunda to fit staircases and other facility rooms. The same idea was then developed and used in the Public Library of Stockholm where between layers of walls of rotunda architect placed vertical circulation and storages.

The entrance to the central spaces in both buildings is placed on the axis directly from the main entrance. This also can be considered as a reference to Palladian floor plans.



Entrance to the courtroom  
in the Country Courthouse



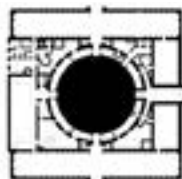
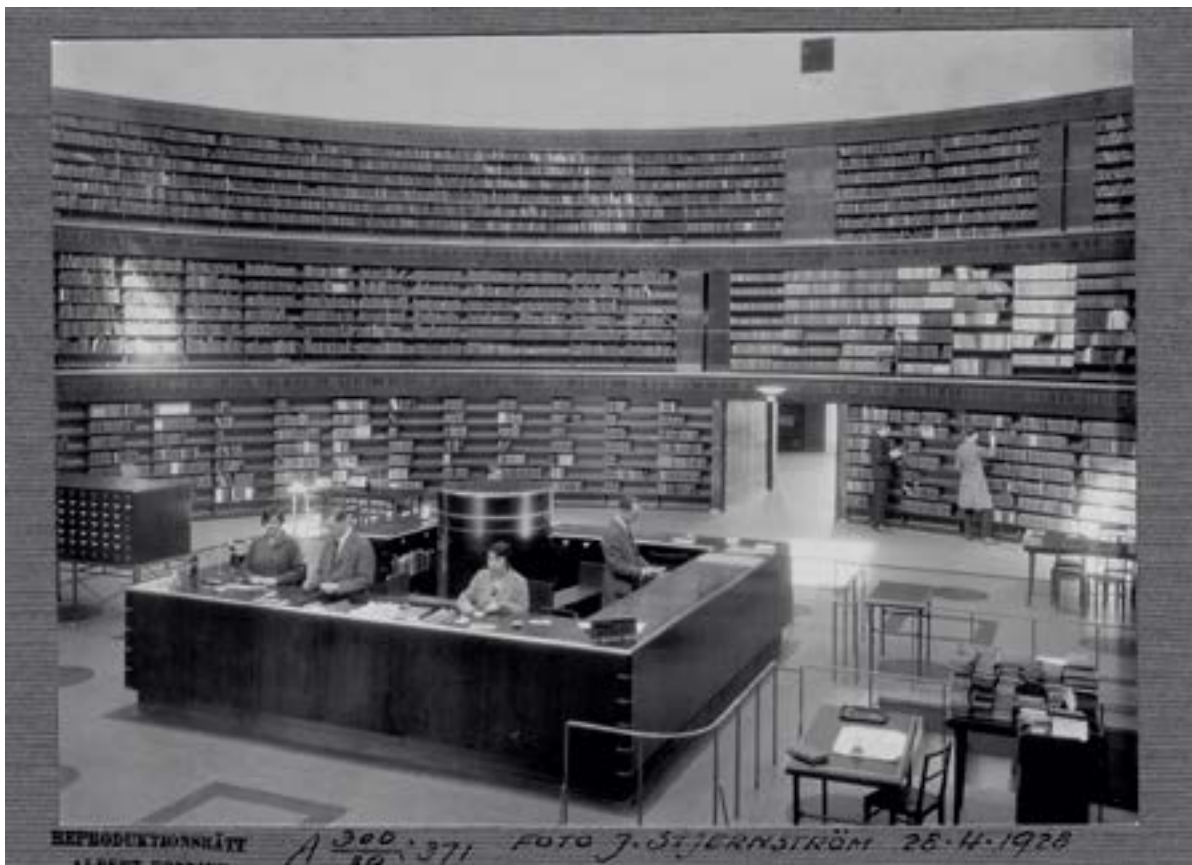
Entrance to main reading room  
in the Stockholm Public Library

# Modeling-group work

Stockholm Public Library



# Rotunda



# Research

Reference modeling



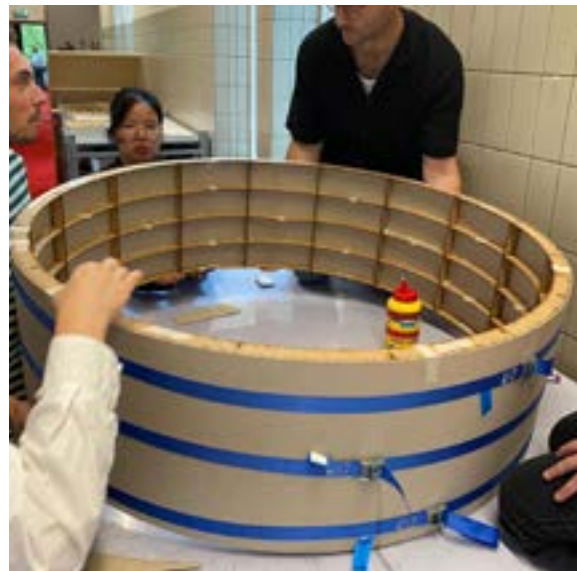
Gate/ 2004  
Thomas Demand



Gate/ 2004  
Thomas Demand

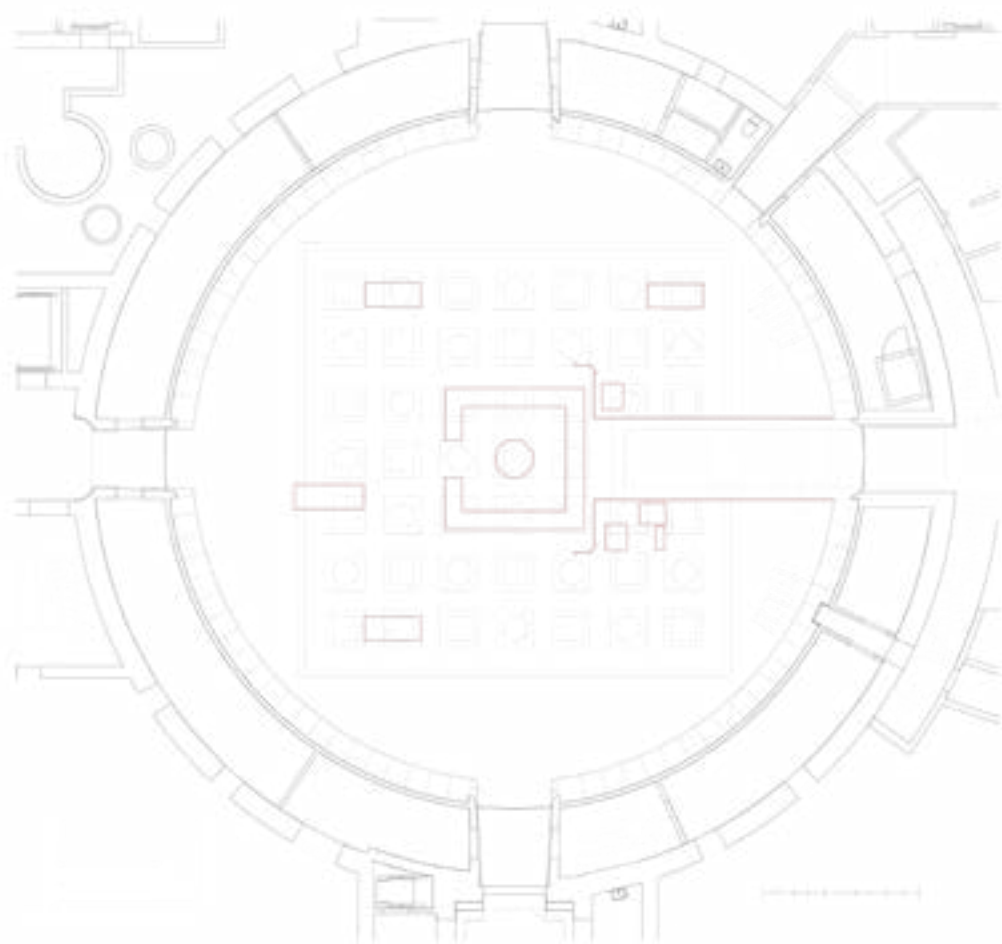




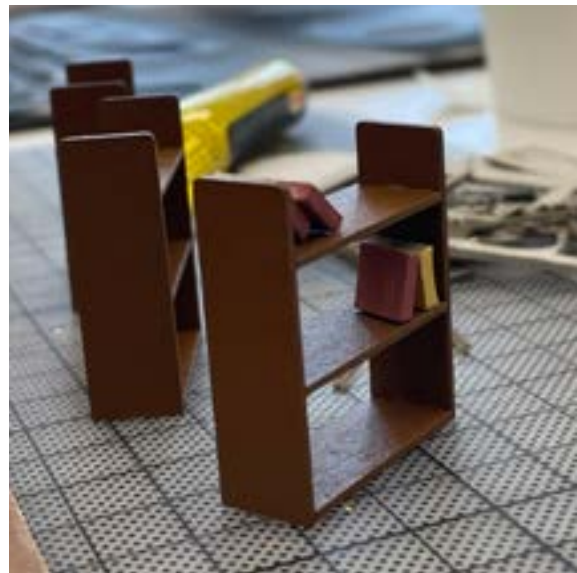














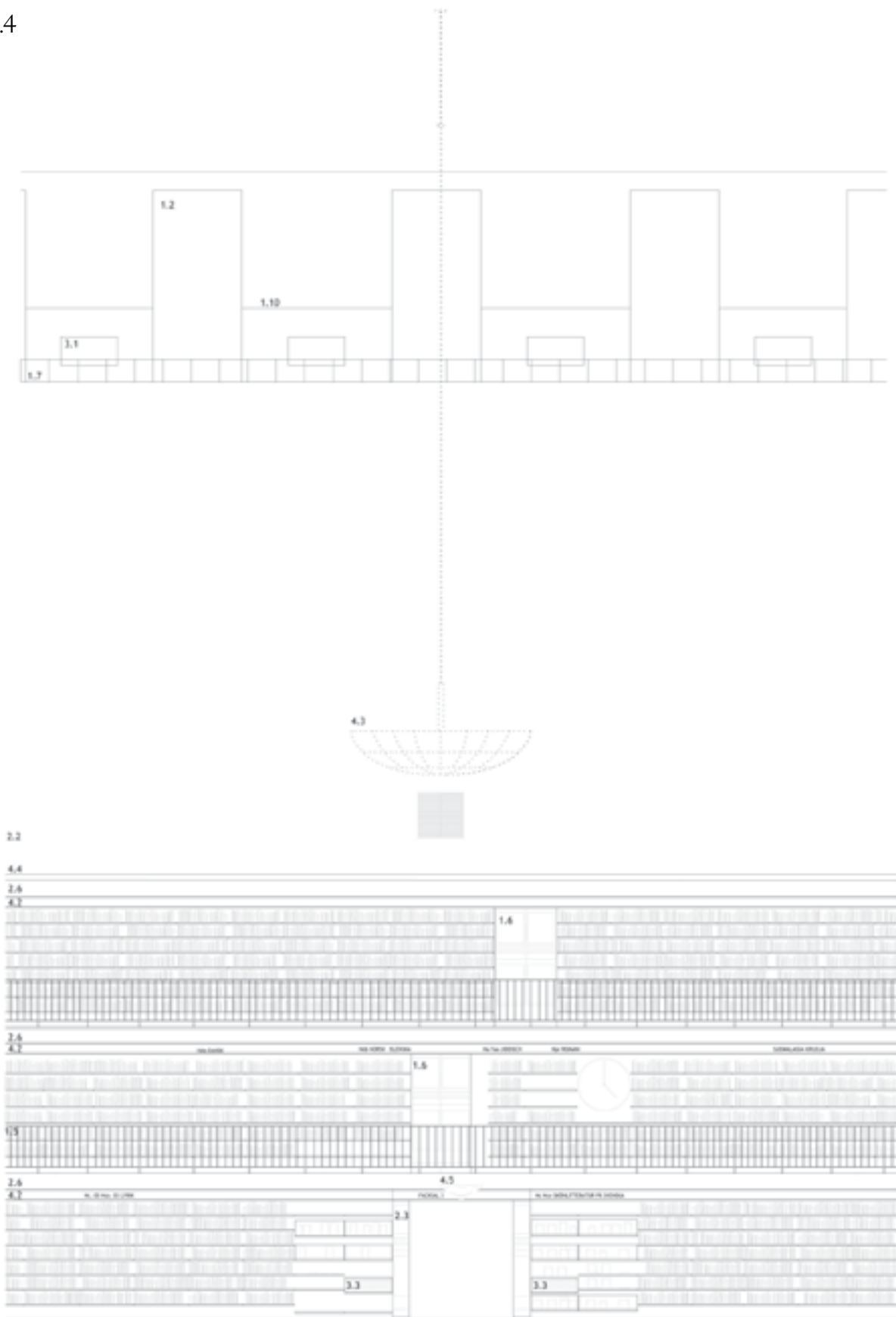




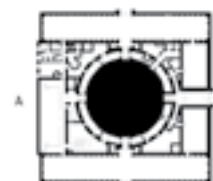


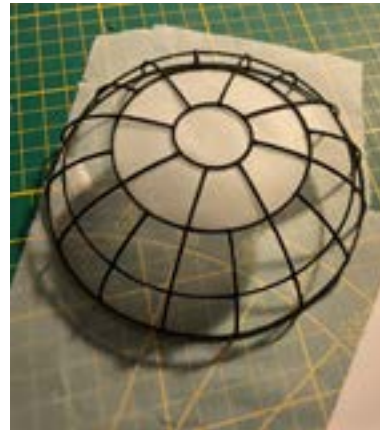
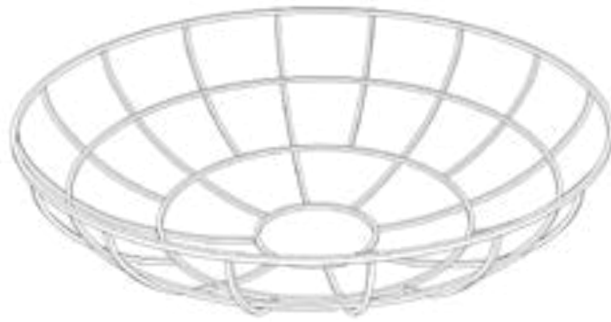






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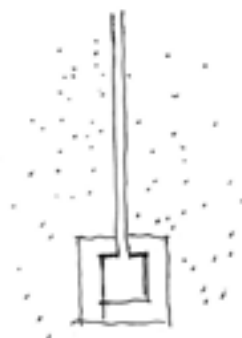








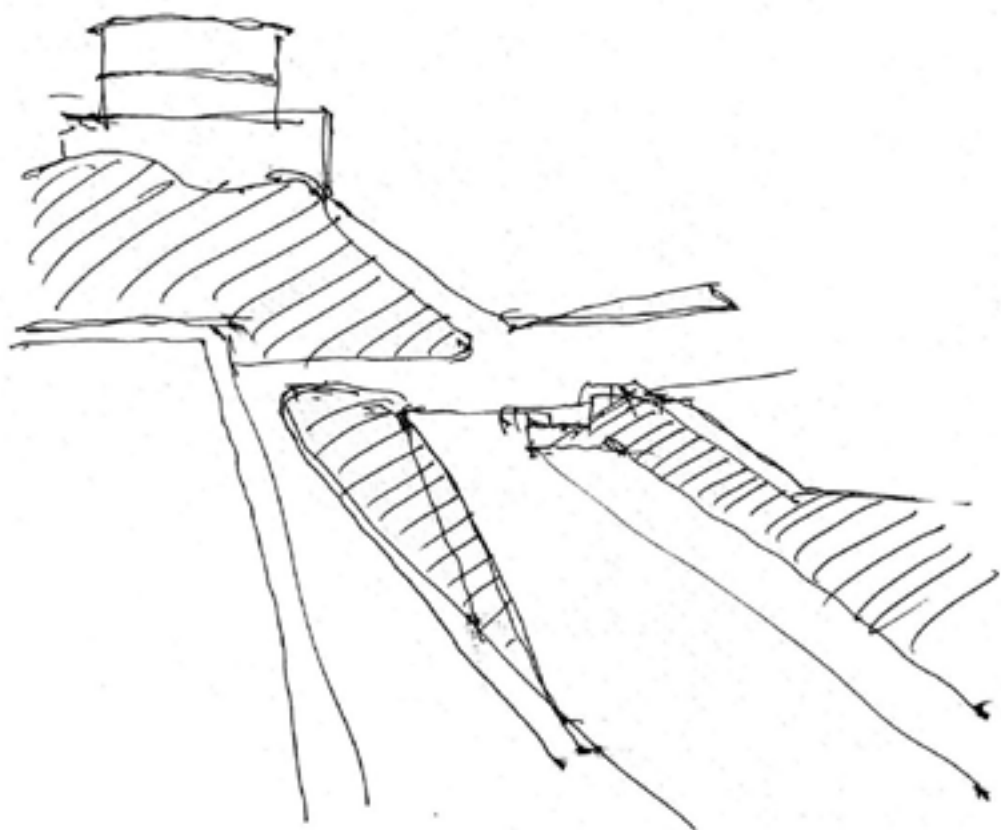


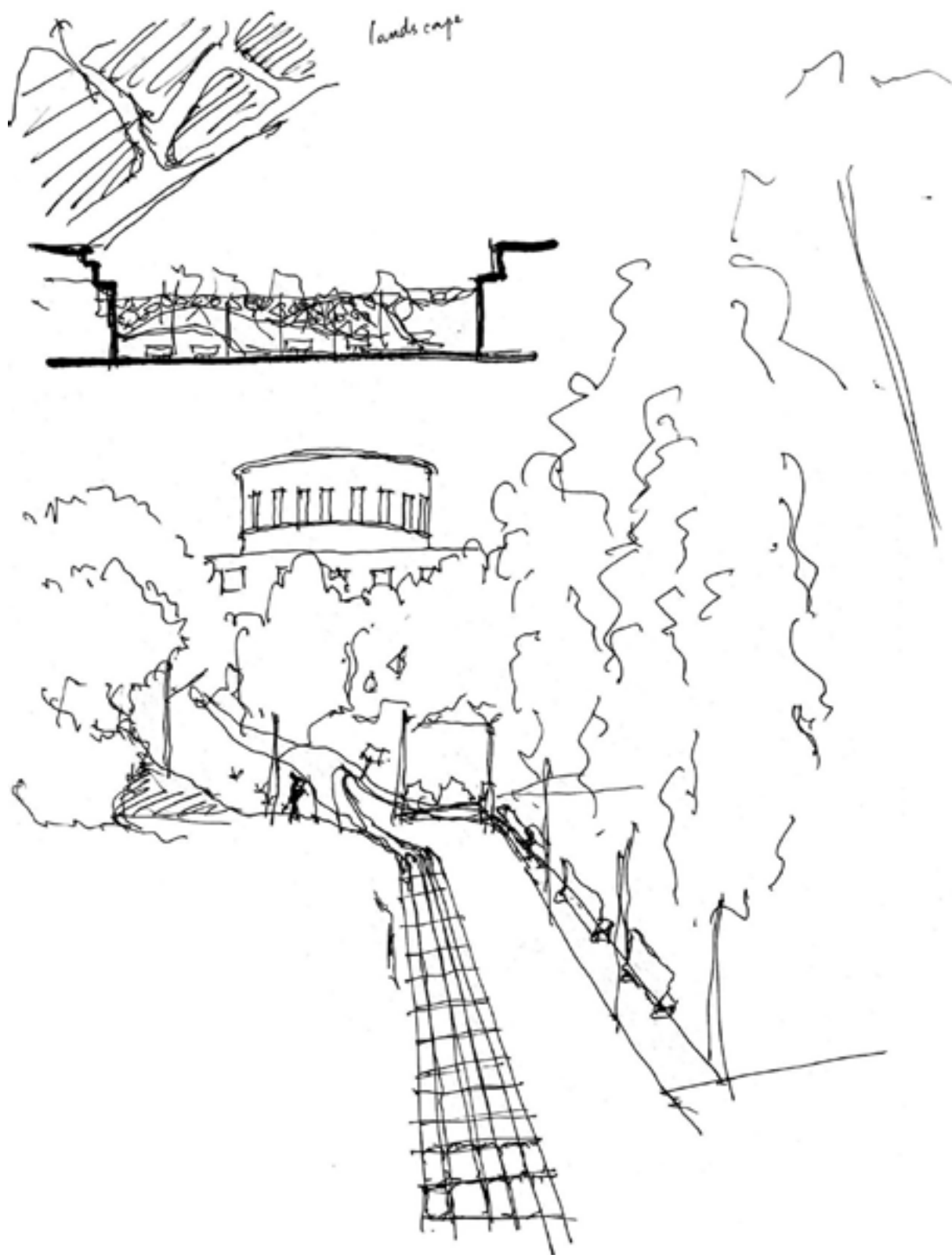






skyline



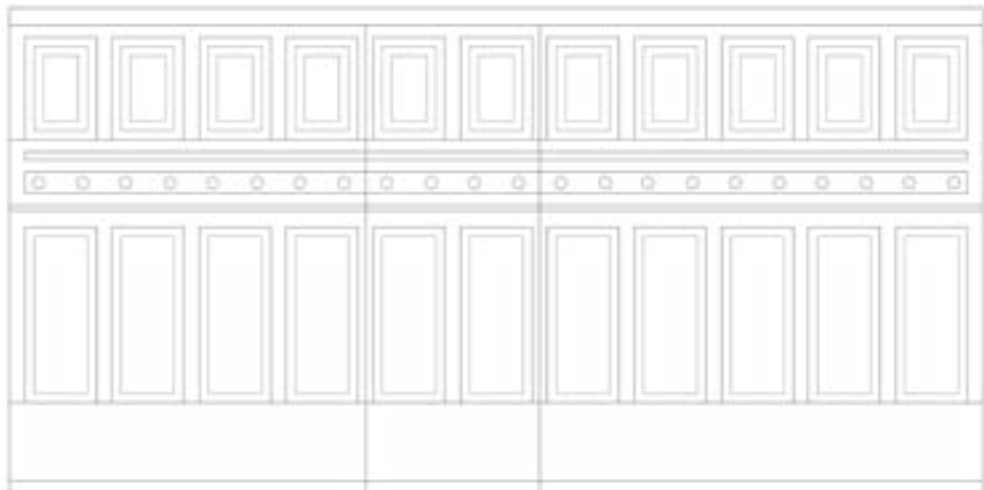


















# **Information Theater**

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P2 Project Journal

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2023-2024 Msc3

Interiors Buildings Cities





2010s Aerial View

## Developing a Library

This brief introduces the project you will each focus on for the remainder of the academic year. It asks you to individually consider how you can develop and transform the Stockholm City Library, by Erik Gunnar Asplund, into a contemporary public library, serving the needs of a diverse, Twenty-First Century society, almost 100 years after its inauguration. As you already know, this question is a complex and disputed one, an elaboration of an ongoing critique that began almost as the building opened and has evolved significantly in the last 20 years. Already in 1931, while it was still new, the building was considered too small. It was extended by Asplund himself, in a manner which counterpointed the architectural concerns of both the original interior and exterior, reflecting his reinvention of himself as a modernist architect in the short, intervening period. Significant areas of the library have changed their function since then. Smaller physical adjustments undertaken by his son have densified the existing structure and changed how both the public and staff used it, while further adjustments in the 1970s sought to make it more accessible.

## Competitions

In 2006, a major international competition was announced, with the intention of reinventing the library through a significant new addition which, alongside the existing building, would have delivered a net usable floor area of 24.000m<sup>2</sup>. This project, which

attracted enormous interest from the architectural profession, was abandoned in 2009 due to public and political disquiet. In 2012, a brief focused on care for the existing building was produced, detailing its heritage concerns. This was followed in 2014 by another brief, which sought to both re-establish the questions of the failed 2006 contest, while critiquing some of its assumptions and, simultaneously, acknowledging the much-reduced circumstances in which the project would now take place. In seeking to deliver a version of the original aspiration within a total floor area of approximately 15.000m<sup>2</sup>, which the combination of the existing library and bazaar offers, this brief asked a more open question than its predecessor. Instead of listing prescribed areas, as required in 2006, it challenged the architect to consider how they might make best use of the original building, in order to accommodate as much of those original intentions as possible, but in a more flexible manner, while also proposing that various elements could be reduced or removed. In doing so, it emphasised issues of diversity, questioned the necessity to accommodate large areas for new media, proposed a shift in the provision of study spaces to smaller group and individual work environments, and opened up the possibility for overlapping uses, in time as well as space.

# Stockholm City Library

Caruso St John, the British practice that was awarded the project, reinforces this negotiative position in their response to the task: “In a completely new building it is possible to devise a functional programme that, in the abstract, prescribes sizes and adjacencies and to ask the design team to meet these requirements. In an existing building the development of the brief goes hand-in-hand with the spatial opportunities and connections that are possible. And in the case of a listed building this process is even more intimate, where the aspirations for improvement and change must be reconciled with the quality of the existing architecture.”

In 2019, Caruso St John’s project was halted. Now, close to 20 years after the original competition, it is your turn to devise an appropriate response to the Stockholm City Library and to consider how it might best serve the needs of today, and into the future.

## Requirements

Working up to the P2 examination and following careful interrogation of both the 2006 and 2014 briefs, you will each develop an individual attitude to the library, which you will test through the development of both an architectural strategy and an accompanying programmatic brief. In communicating your intentions, you will need to engage not only your knowledge of this library but also the wider research you have been conducting as individuals and a group in relation to the public library as a type, in order to address the larger questions facing it. Amongst many, the following issues are of particular concern:

- **What are the responsibilities and expectations of a contemporary public library now?** How are these situated in relation to the particular concerns of Swedish society, within its capital city, and how might the redeveloped library acknowledge and engage the already established network and infrastructure of libraries in Stockholm?
- **Who is the library for?** How does it serve the needs and aspirations of a complex and highly diverse contemporary society, which includes a shifting demographic and many for whom Sweden has become their home, but is not their place of birth and for whom Swedish is not a native language?
- **What is an appropriate response to the existing building?** Should one create a more or less autonomous building, as the 2006 competition suggested, allowing the monumental status of Asplund’s library to be reinforced; should one work within that monumental building, densifying and optimising it, as was suggested in 2014; or is there a possibility somewhere in between, where the existing library might be extended or added to in a more limited way?

Taking the intellectual premise of the 2014 brief as our collective starting point, you will each, individually, establish your response

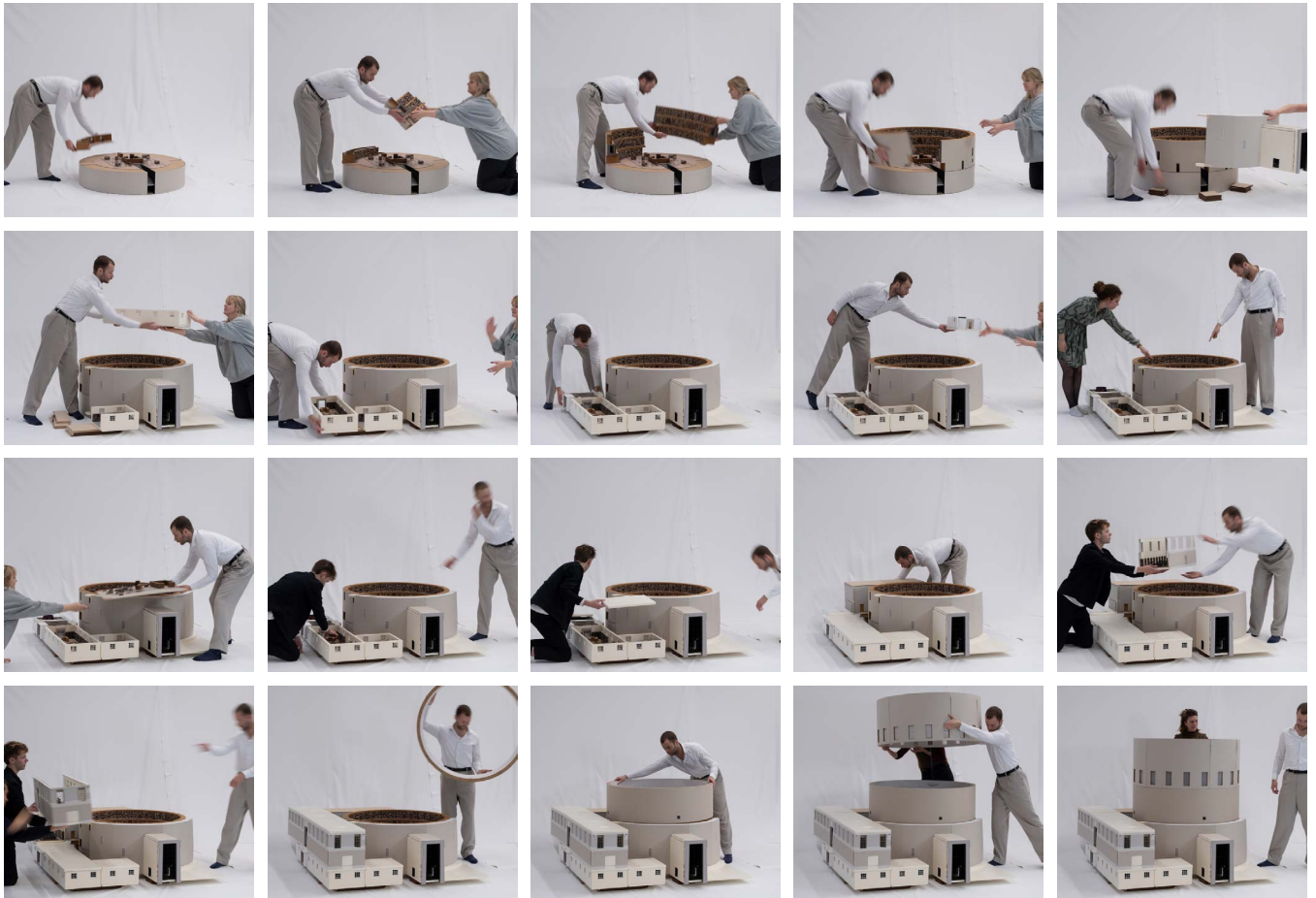
to these questions and those that ensue from them. You will then go through a process of testing and critiquing the original terms and scale of the 2006 brief in order to consolidate your attitude and conclusions in response to your premise for what the resulting library might be. The outcome, as a functional brief, will depend on your concerns and how you conceive these being translated into built form and space.

We should also remember that the questions asked of the original brief by its successor in 2014, are now themselves a decade old. Since then the world has changed fundamentally in many ways: it has become far more cognisant of the planet-wide environmental crisis that we collectively face, and the need for both wider society, and for architects and architecture in particular, to respond to it proactively and effectively; mass migration, often as a direct result of environmental change, has become a major social and political question and a driver for change; we have been through a global pandemic, one of the effects of which has been to transform the way many people approach their working environment and their public lives; both the outcomes and aftermath of colonialism and the priorities that underpin traditional social hierarchies have been fundamentally called into question; there is an ever wider understanding that learning and education is a life-long activity; there is far more scepticism about the concerns of neoliberalism in response to these and other questions. How can your own reflections on the role of this library, in this city, and in relation to the contemporary culture it fosters, incorporate such questions?

## Outcomes

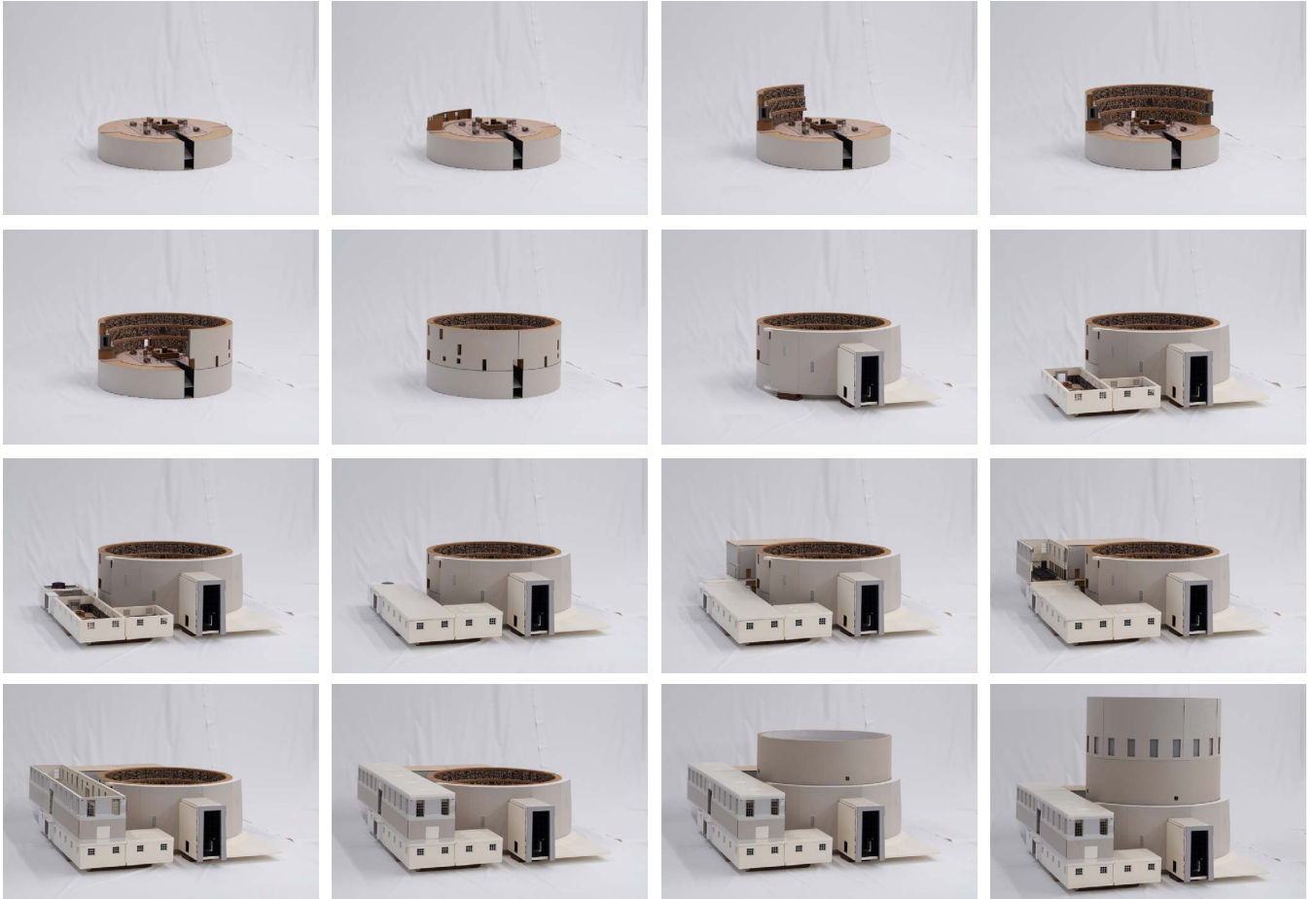
By P2, you will be able to evidence and represent your concerns and conclusion through the following:

- **A statement of your attitude to the role of the library**, its situation in society and the city, the qualities and character of the existing monumental building and the ways in which you propose to transform it, in order to address the questions and issues you have raised.
- **An architectural proposition in relation to the existing library**, defining whether you intend to densify it, extend it, or see it as part of an ensemble, with a new building or buildings. This needs to be presented within either or both the site model (1:500), physical building model (1:100) or the digital model, each of which you are already preparing as a studio.
- **A series of clear diagrams**, expressed in plan, section and three dimensions, which describe how this proposition works, in response to the brief, the site and the existing building. Ideally the graphical language of these diagrams should correlate with those used in the analysis of existing library precedents to allow for comparison.
- **A consolidated room or area programme**, as a spreadsheet but also graphically represented and compared with the 2006 brief, translated through the aforementioned diagrams into the architectural proposal, in strategic terms.



Construction of model

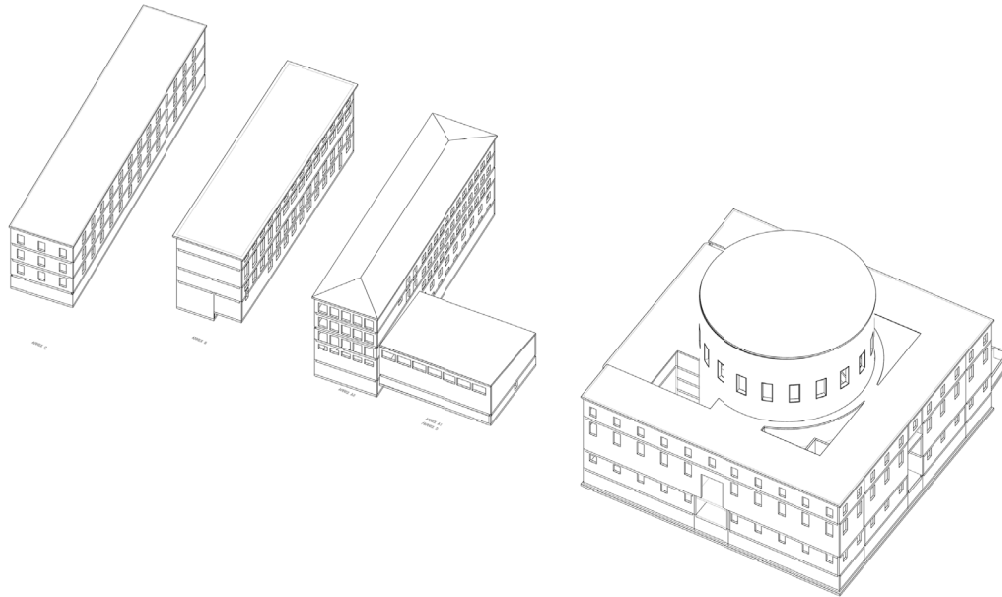




Construction of model



# Groupwork

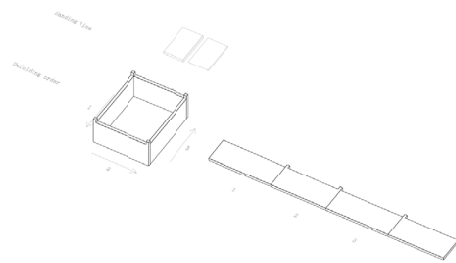


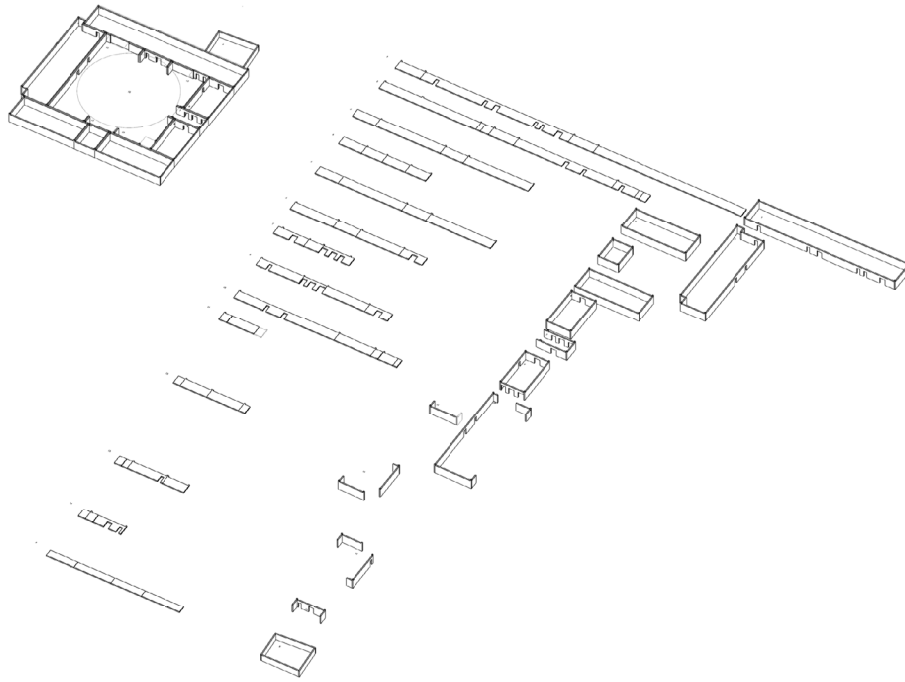
1:100 model

In the 1:100 scale model, the buildings are dissected into individual boxes, facilitating meticulous adjustments to specific rooms later on.

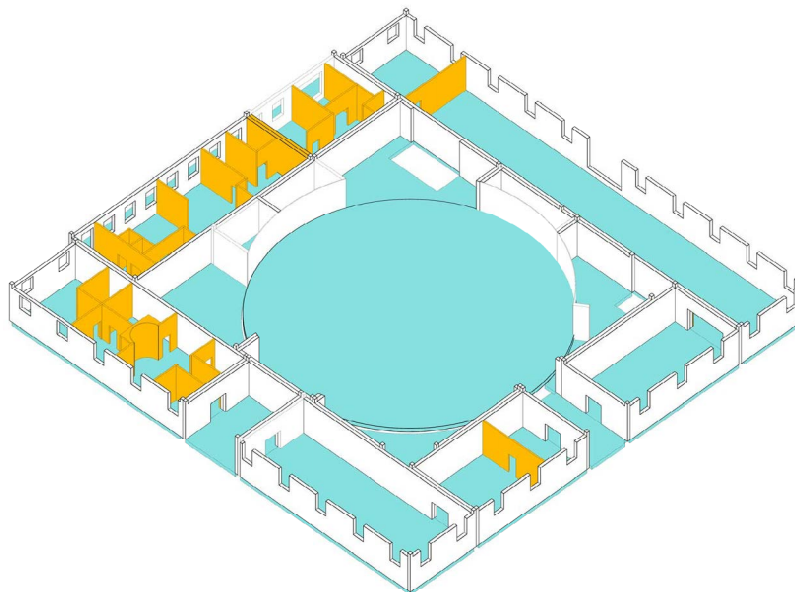
## Principle:

1. All Rooms are numbered at the bottom right. Boxes when aligned create double-walled spaces. Vertically the boxes mount on top of one another.
2. Standard floor thickness used is 4mm on MDF and wall thickness is 3mm on MDF.
3. Curved surfaces are 0.5 mm Cardboard attached to Rotunda.
4. Internal Rooms have walls which are to be sanded to incorporate the slight curve of the Rotunda.



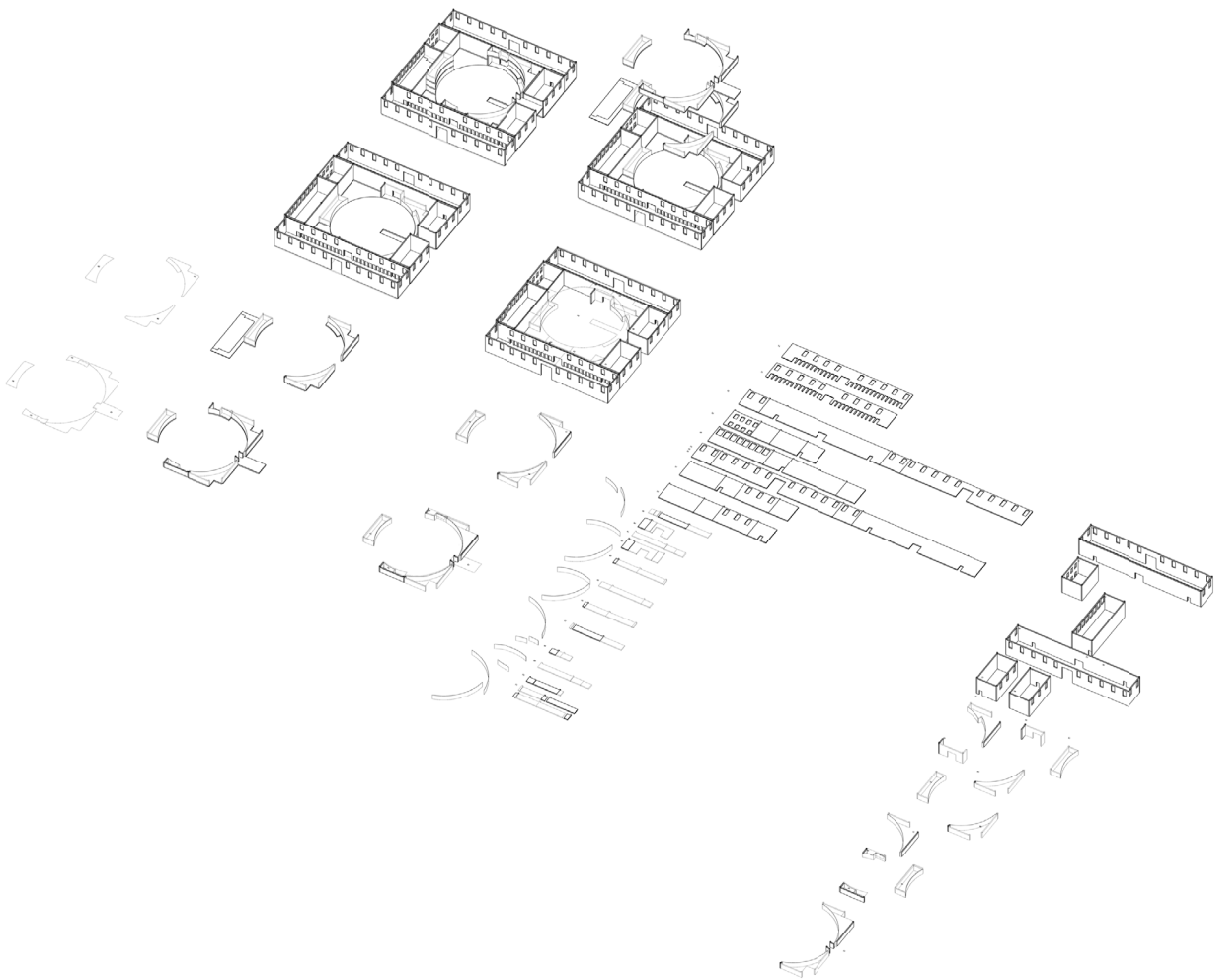


Basement floor

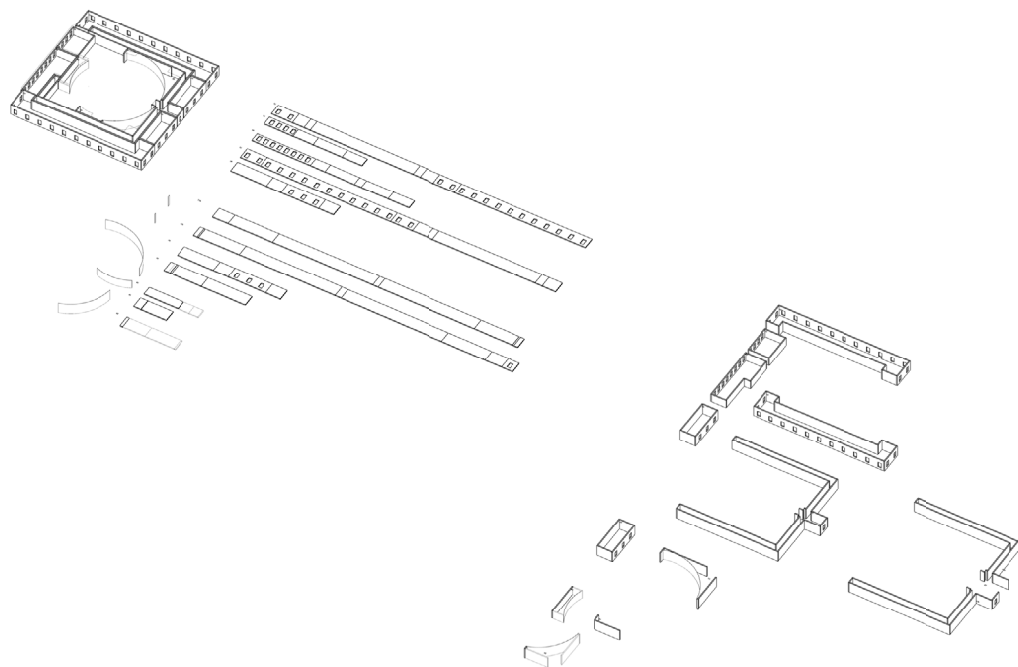


Ground floor

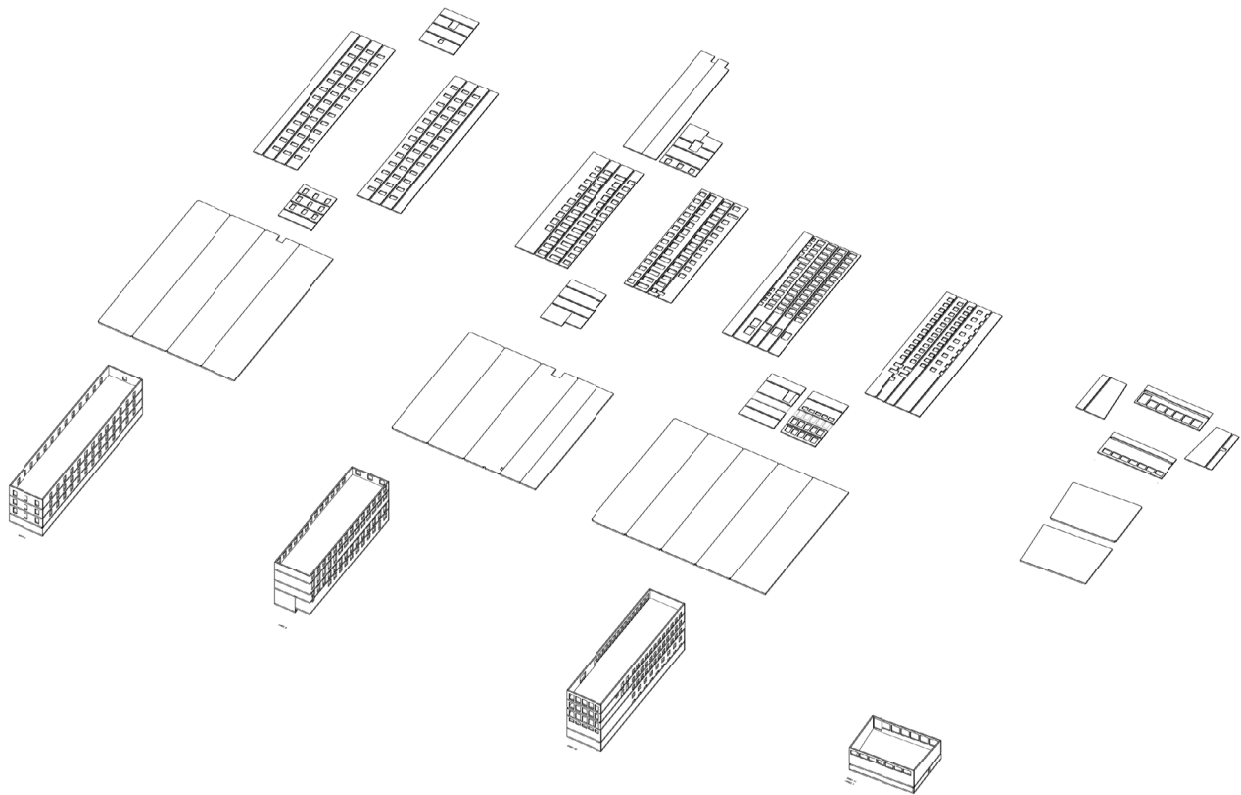




1st floor



2nd floor



Annex buildings



Modeling photo



# Research

1920s-1930s



Nowadays



Urban surroundings-adjacent buildings

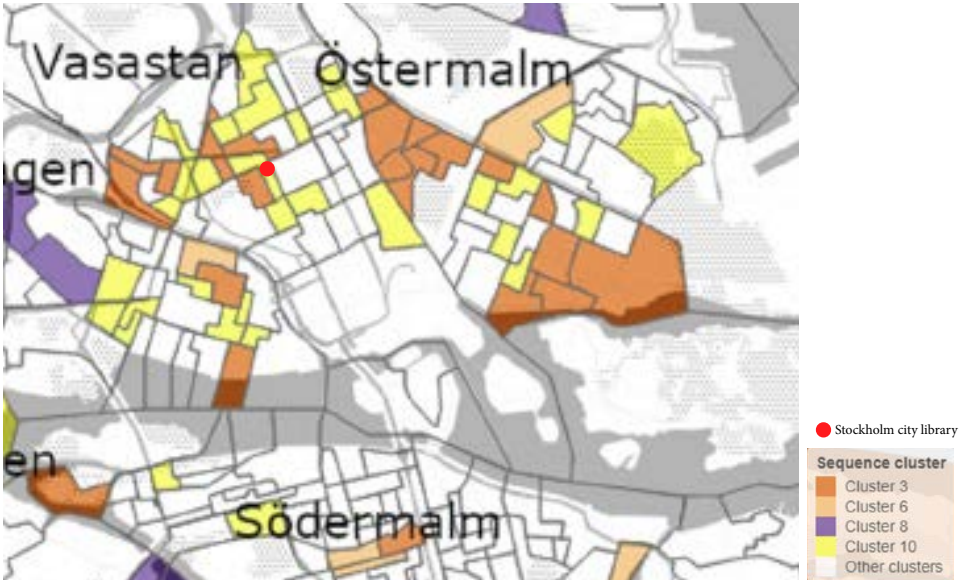
By comparing historical photos with current photos, it is evident that more and more high-rise buildings have appeared around the library. This development is somewhat out of sync with the library's style, and the openness and vibrancy of the square facing the west wing have significantly decreased.



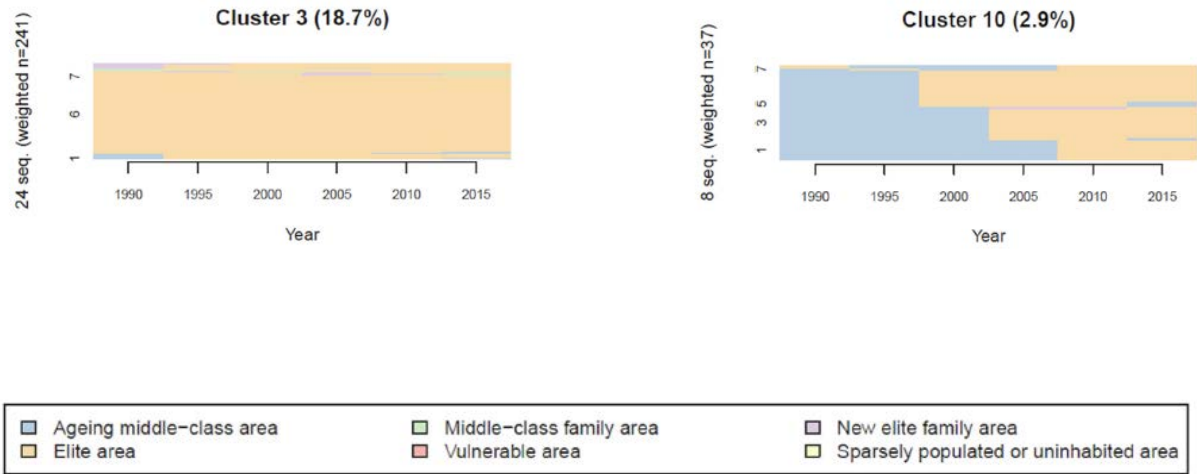




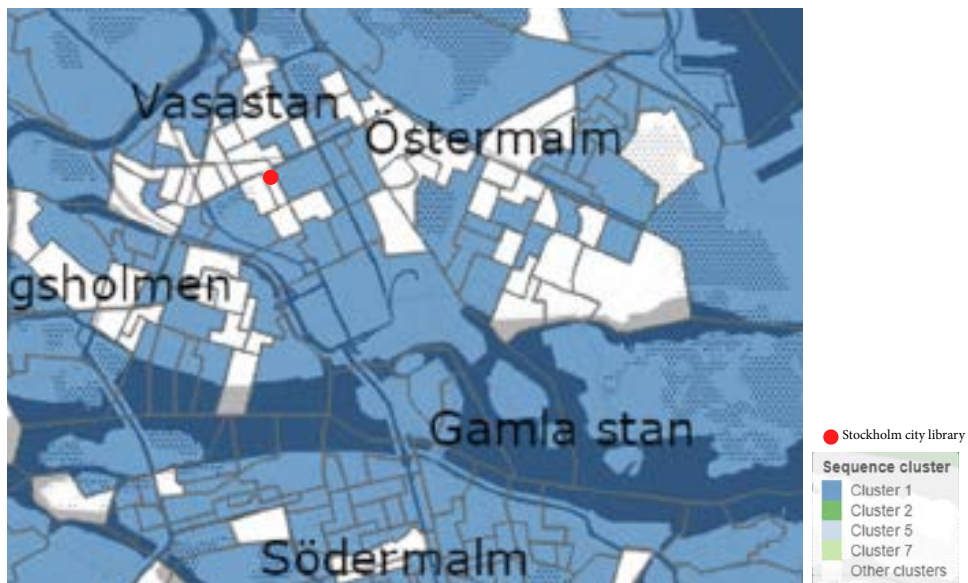
# Research



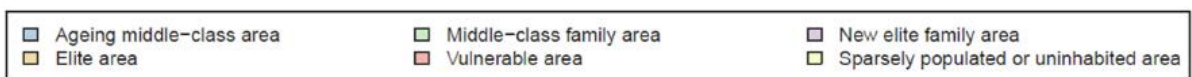
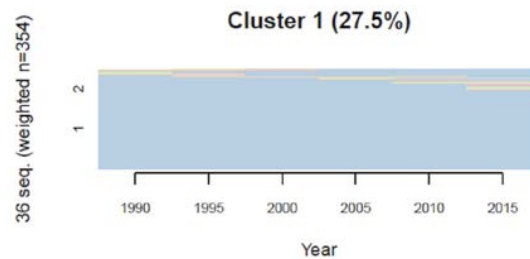
Map of neighbourhood trajectory clusters, elite areas in Stockholm city center



Vogiazides, L., & Mondani, H. (2023, January). Neighbourhood trajectories in Stockholm: Investigating the role of mobility and in situ change. Applied Geography, 150, 102823. <https://doi.org/10.1016/j.apgeog.2022.102823>



Map of neighbourhood trajectory clusters, middle-class areas in Stockholm city center



According to the author's analysis, Stockholm City Library is situated in a relatively elite community, and the population in both this area and the surrounding regions demonstrates a trend of upward mobility from the middle class towards the elite class.

According to a comparison of data from 1965 and 2014, the proportion of students among the customers of the Stockholm Public Library has decreased. Based on my on-site observations, the majority of customers are middle-aged individuals. As a city public library complementing educational institutions, its appeal to the student demographic is declining. However, in comparison to campuses, urban public libraries have an advantage in providing a space that attracts a diverse population.

1

The largest public library, however, within Greater Stockholm is the Stockholm Public Library. Its main library contains a book stock of 333,000 volumes and in 1963 had a circulation of 650,000 volumes. About half of the users at the main library are university and secondary school students. There are thirty branches for adult borrowers and thirty-eight for children and young people throughout the Stockholm city area both in downtown and suburban districts. Bookmobile service is organized for districts with a scattered population. The Library has

2

The customer survey shows that the city library is both a local library for those who live and work in the neighbourhood and a library where people come from other parts of the city and county. 42% of those who use the City Library live in Stockholm, outside the Norrmalm district, 33% live in Norrmalm. Of those who visit the city library, 33% are students at different levels (for IB only). the corresponding figure is much lower, with 16% stating that they are students).

1. Hornwall, G. (1965). Public Libraries in Greater Stockholm.

2. Stockholmstad. (2014). Renewed City Library in Stockholm.

3. Stockholmstad. (2014). Renewed City Library in Stockholm.

4. Aabø, S., & Audunson, R. (2012, April). Use of library space and the library as place. *Library & Information Science Research*, 34(2), 138–149.



3

Stadsbiblioteket/Asplundhuset is both a local library - just over 33% of visitors live in the Norrmalm neighbourhood - and a library for the public.

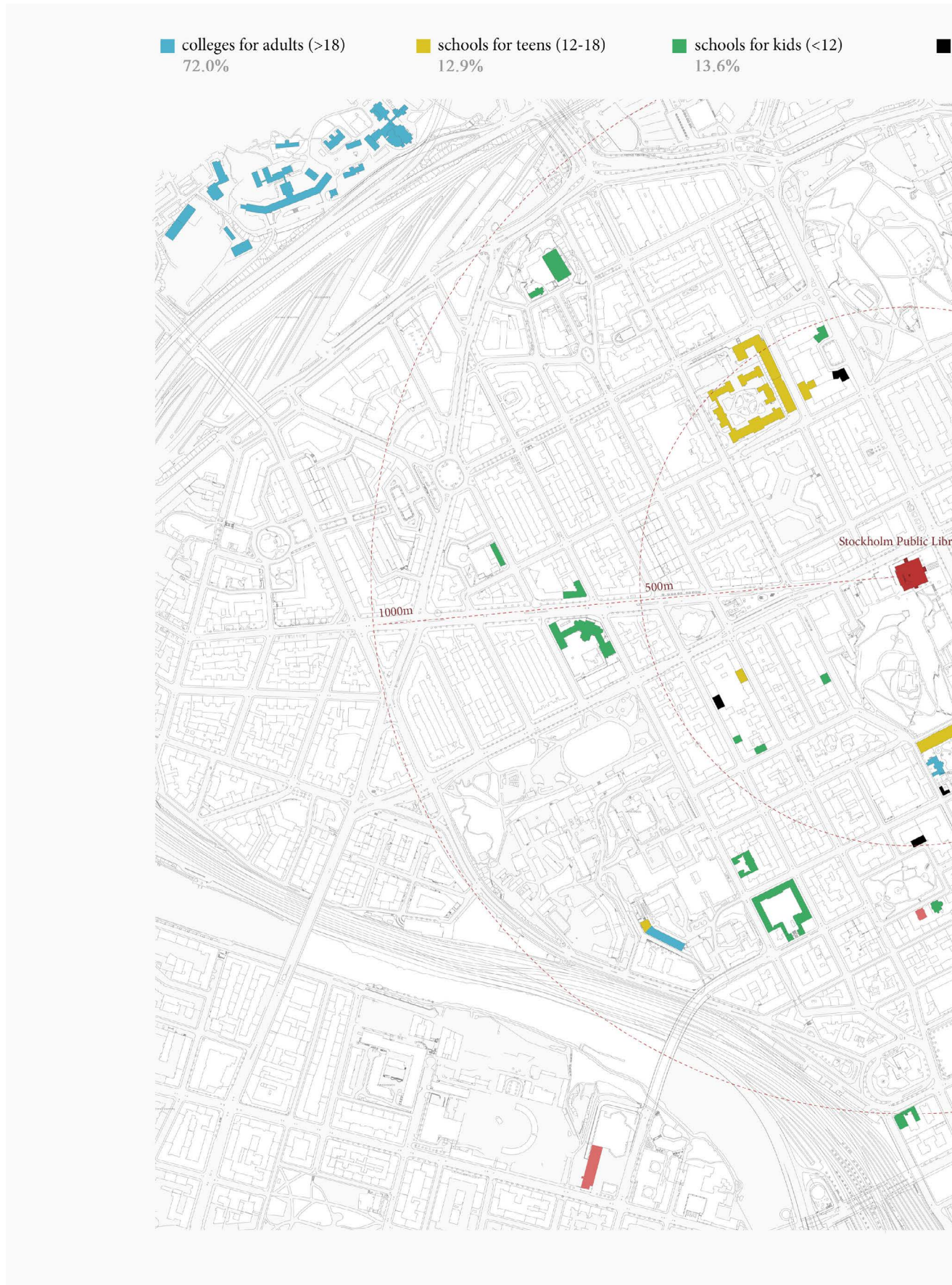
all Stockholmers, about 40% of visitors come travelling from other parts of the city and the rest, more than 25% come from other parts of the region, the country and the world. Those who visit the International Library (IB) have often travelled further. More than 50% live in Stockholm, but not in the Norrmalm district, again a quarter of the visitors come from outside the city of Stockholm.

4

In a high percentage of the observations, the users tended to weave a private net around themselves to engage in private projects, for example, educational projects. Can people in these private bubbles nevertheless recognize people that are different from themselves? It seems as if the answer to that question is yes. When people who were studying in the library were interviewed and asked about the reason for studying there instead of using a university or a college library, the rewarding experience of observing the pluralism in the public library was one of the reasons referred to. One female student reported that she sometimes engaged in small-talk with strangers about what they were doing, and that she also had gotten to know another student quite well. Other students preferred to study in quiet zones but also took breaks and strolled around in other parts of the library, where they noticed and recognized otherness among the users.

The interactions observed between users with different cultural backgrounds were in most cases indirect and nonverbal. Users be-





I list the schools within a 500-meter radius centered on  
ident that the surrounding schools are primarily for



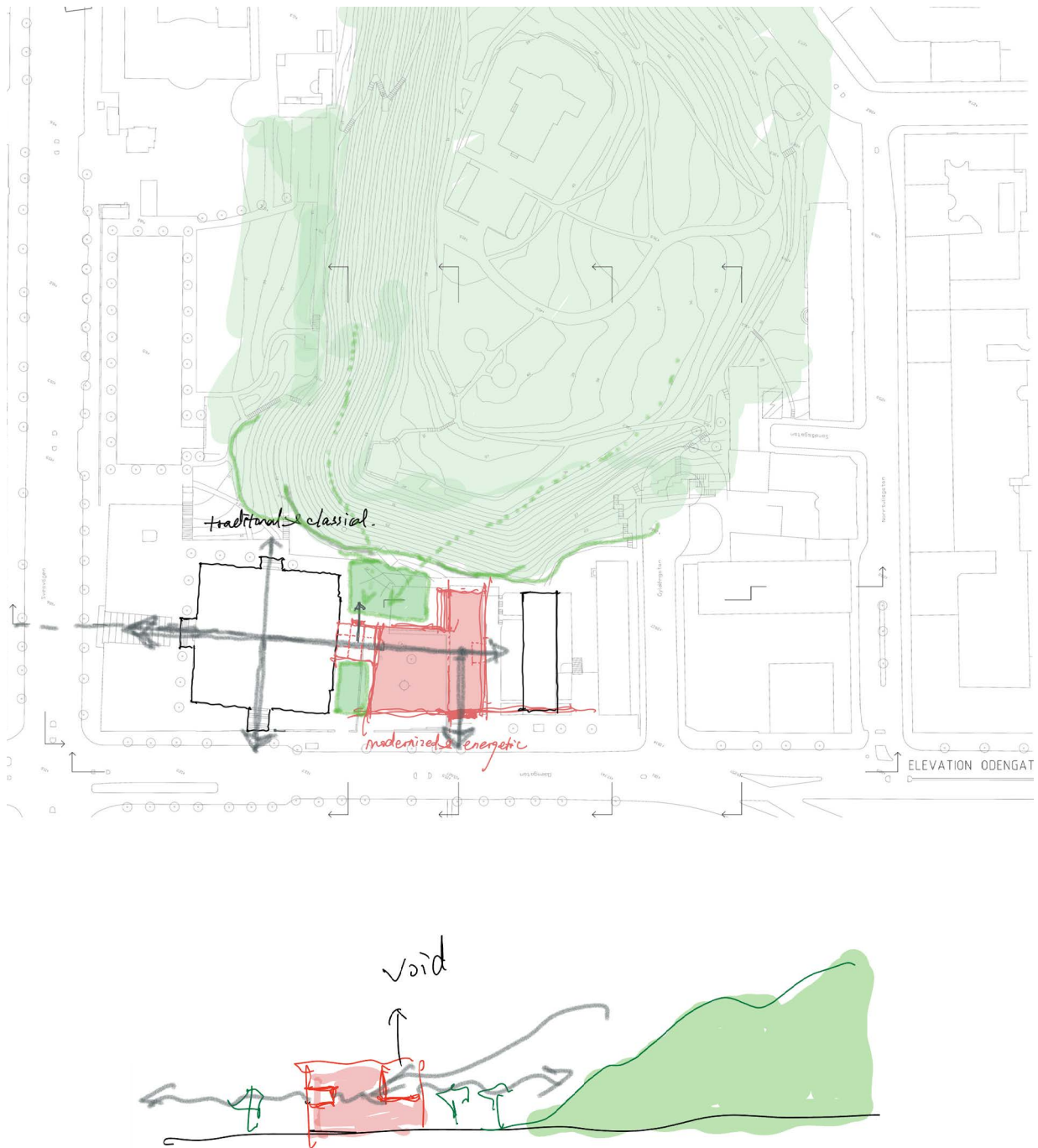
skills training institutions  
1.5%

public libraries

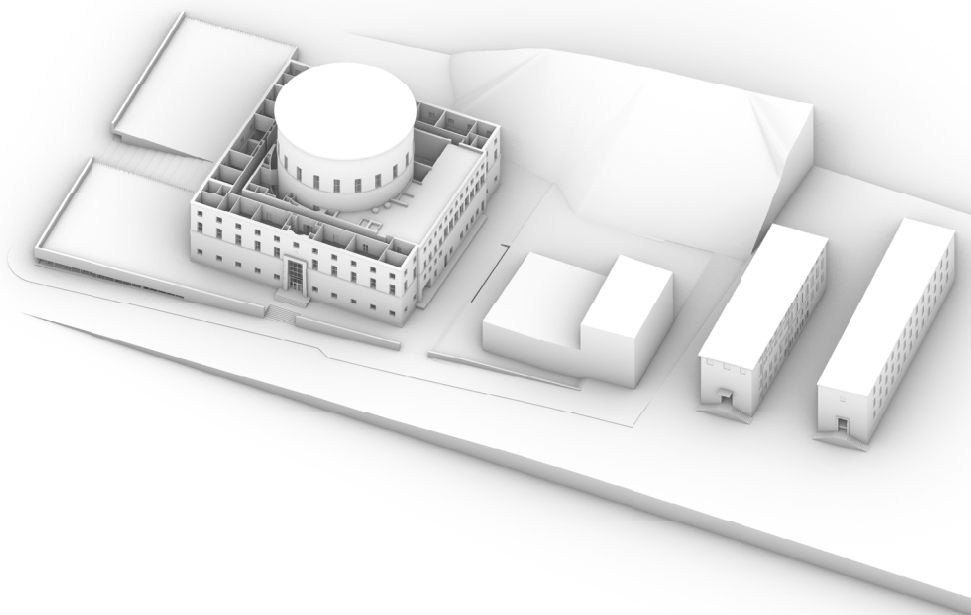
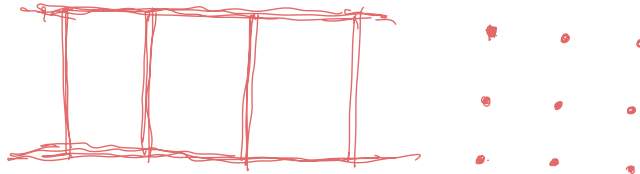
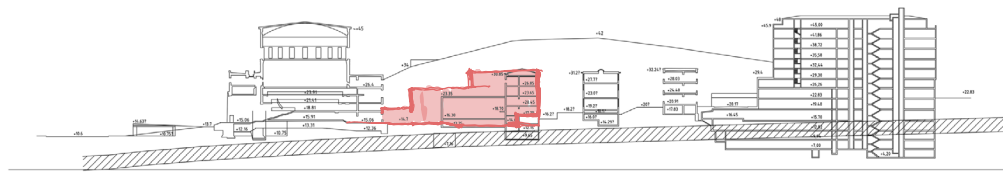


in the library, focusing on different age groups. It is ev-  
university students, followed by those for teenagers.

# Design

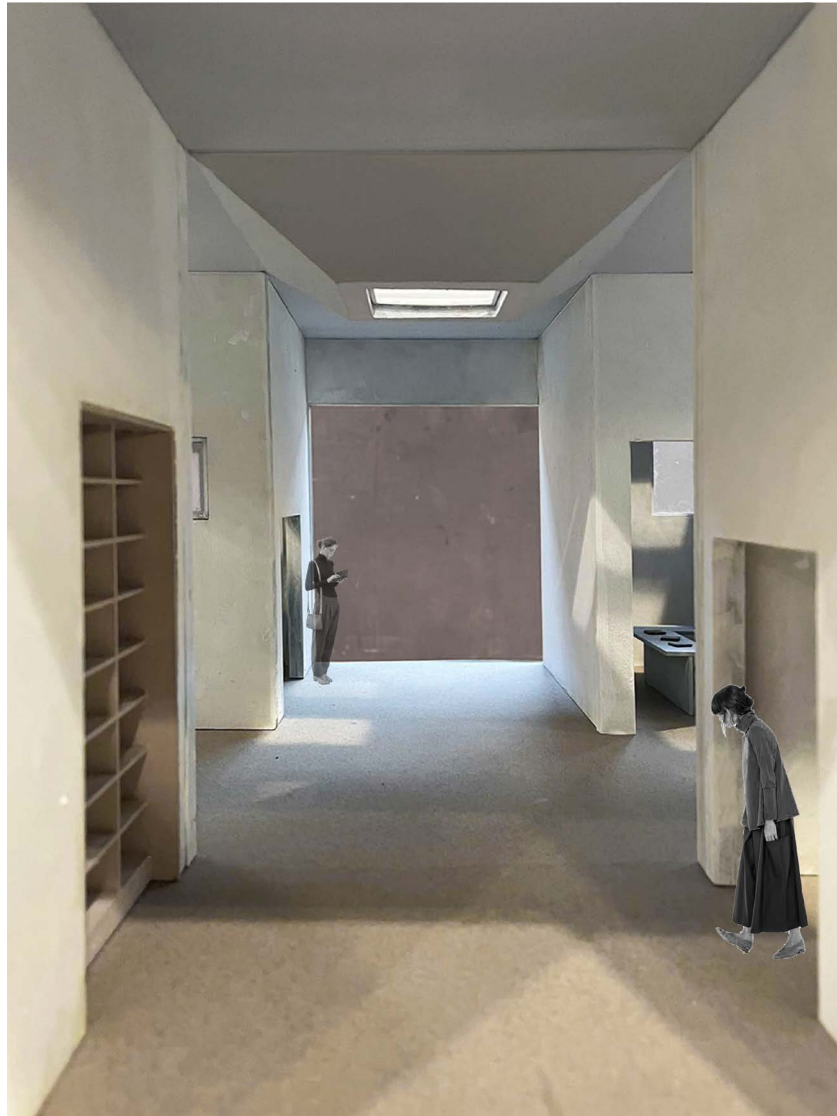


The existing architectural volume, which is intended to retain a more traditional functional block, is complemented by newly added structures designed to attract younger demographics, such as students, and enhance interactive forms with e-media. The functions of the old and new blocks complement each other, creating a contrast. The northern side, embraced by the natural terrain, forms a courtyard.

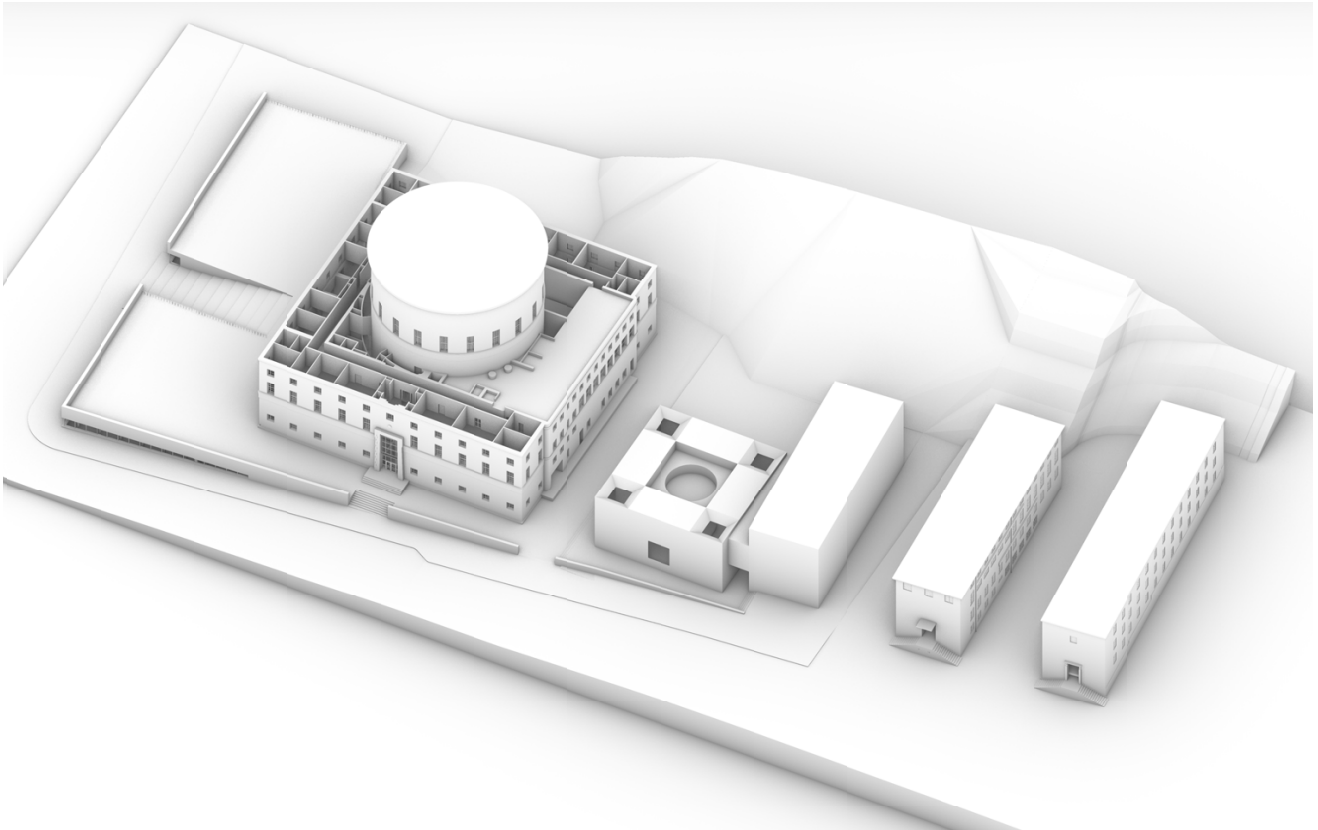


In section, the creation of setbacks and cantilevered volumes serves to reduce the sense of mass, aiming for a more lightweight appearance for the new library compared to the substantial original structure. For instance, a grid of slender steel columns could be employed, and new materials like glass and metal could be introduced to contrast with the existing building.



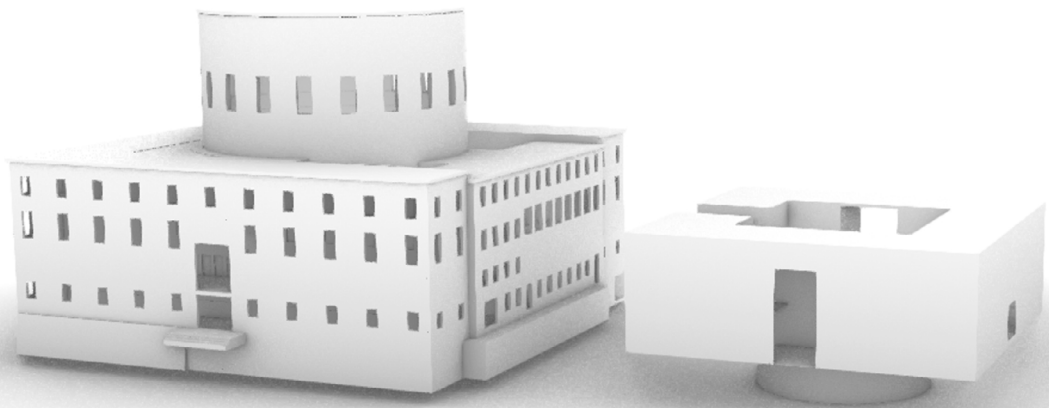


P1 modeling photo

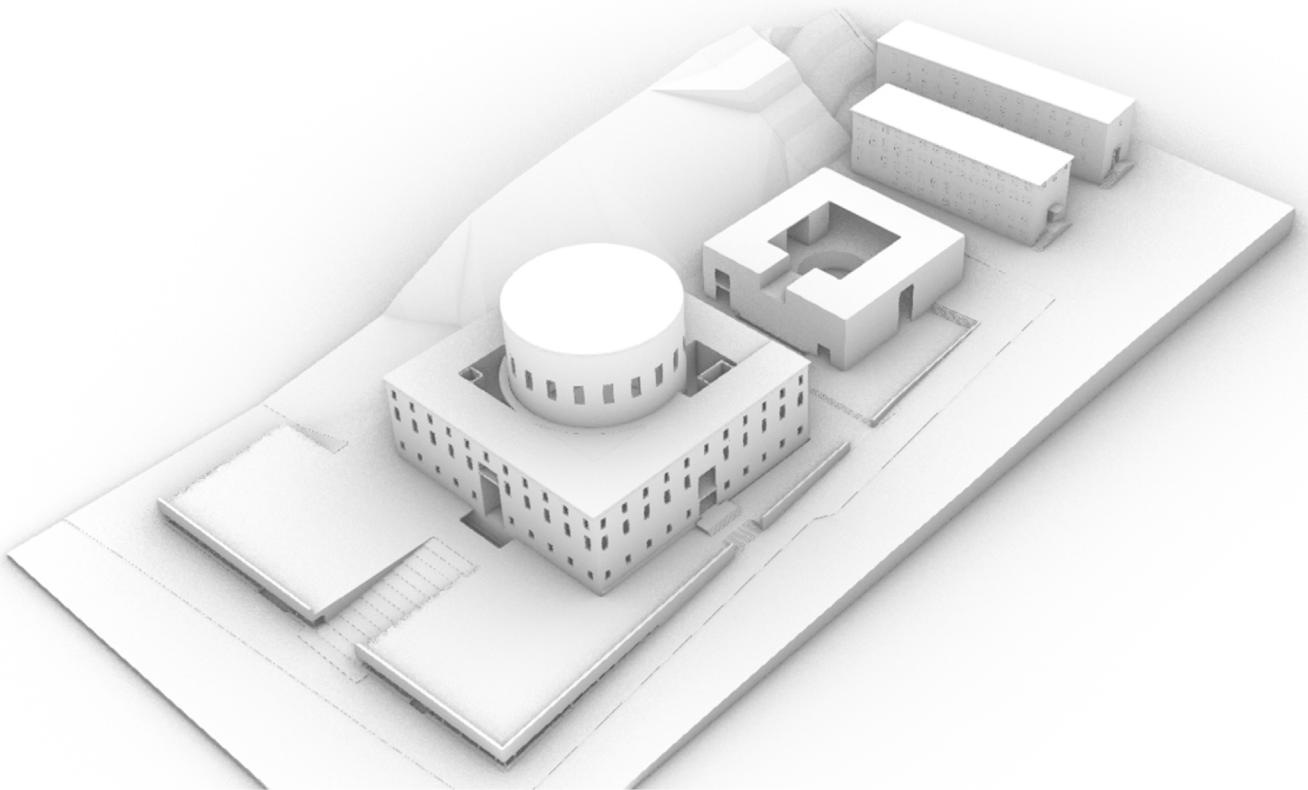


Adjacent to the annex, an additional building is positioned, transforming the adaption space from P1 into a larger-scale adaption space. Light cones are placed at the four corners, creating a distinctive space with unique lighting and shadows.





The new building responds to the existing structure in terms of volume by inverting the original building and the towering rotunda. The new rotunda is placed underground, creating both a contrast and an indirect connection between the two core spaces.



The architectural mass within the environment

With the advancement of technology, the ways in which we acquire and interact with knowledge are evolving. The development of e-media contributes to the creation of spaces conducive to self-directed learning. Existing interactive methods may still be somewhat rigid, and expanding the library provides an opportunity to explore more possibilities in this regard.

**abstract:** The transformation of information from a scarce to a superabundant commodity has driven three paradigms in the design of library space. These are the reader-centered, book-centered, and learning-centered paradigms. The first two competed inconclusively with one another throughout most of the twentieth century. Revolutionary changes in information technology have only recently made a third design paradigm possible, one focused on intentional (or autonomous) learning. This paradigm frees us from a schoolwork approach to learning and from mere trafficking of information. The challenge before us is to align library space design with the transformational character of intentional learning.

## E-media & databases



**E-books** – Download and read e-books on your mobile, tablet or computer. Find e-book tips and get help borrowing e-books.



**Audiobooks** - Listen to audiobooks on your mobile, tablet or computer. Get help borrowing audiobooks. You will also find audio books on CD to borrow at home.



**Free e-books, audiobooks and other e-resources** - Here you get tips on how to find free e-books and audiobooks in different languages.



**Bibblix** – the library's own e-book app for children. Free to download in the App Store or Google Play.



**Speech books in Legimus** – for those who find it difficult to read ordinary books.



**Stockholmskällan** - Stockholm's history in pictures and text. Search through photographs, archival documents, maps, literature and more.



**Article search** – references to Swedish articles from newspapers, magazines and yearbooks.



**Retriever Media Archive** - Database with full-text articles from approximately 460 newspapers and magazines. In Swedish.



**Pressreader** – read over 7000 newspapers and magazines in about 60 languages from a large number of countries.

## Existing E-media approaches in Stockholm City Library



## Existing information interaction modes in E-media

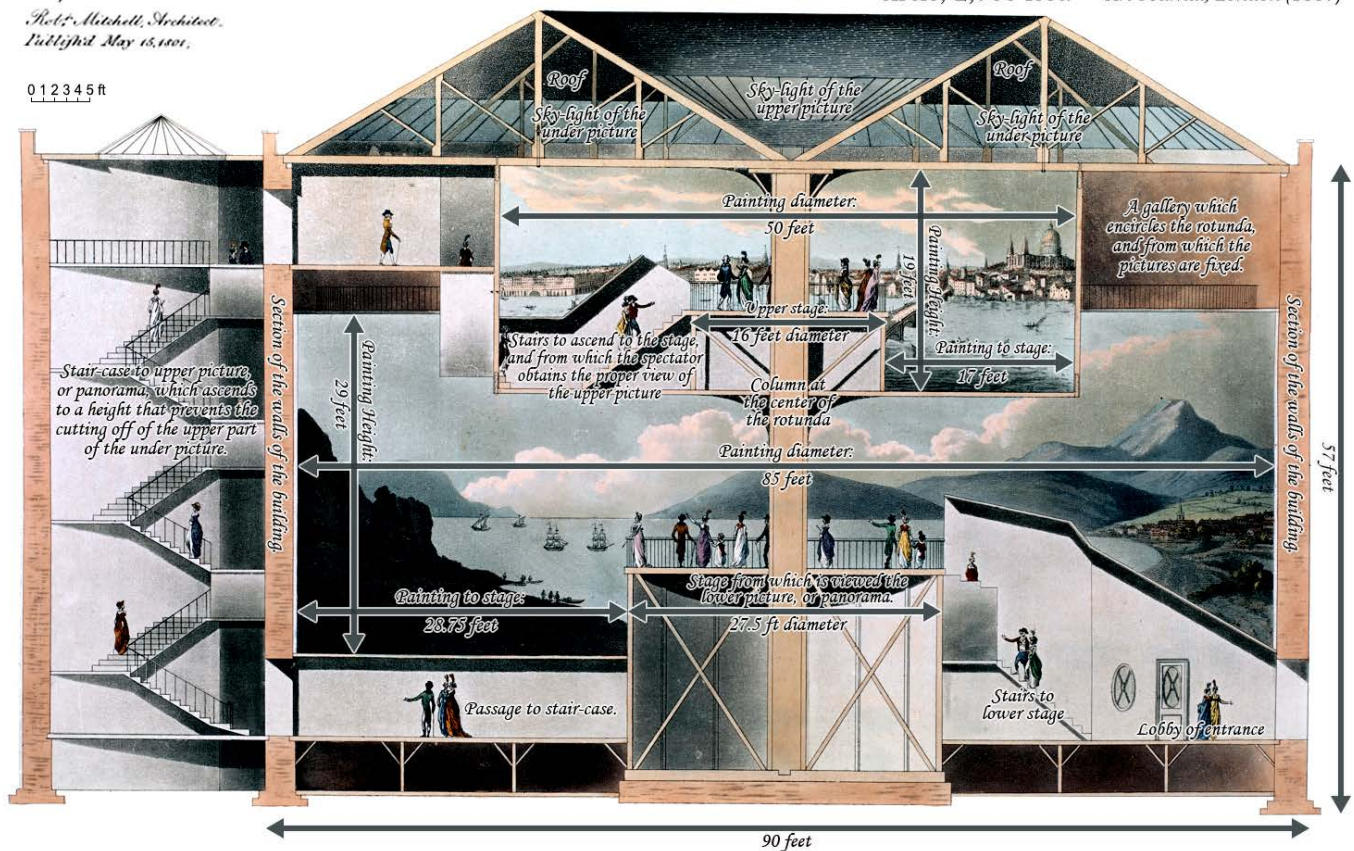


Plate 14

*Section of the Rotunda, Leicester Square, in which is exhibited the PANORAMA.*  
*Coupe de la Rotonde, dans laquelle se l'exhibition du PANORAMA. Leicester Square.*

*Rebt. Mitchell, Architect.*  
*Publicist May 15, 1801.*

"Each of the large circle pictures averaged 10,000 square feet of canvas; the small circle, 2,700 feet." - Art Journal, London (1857)



Adapted from Mitchell, R. (1801). Plans, and in perspective, with descriptions, of buildings erected in England and Scotland: etc. London: Printed by Wilson & Co. for the author.  
 Sources: [https://archive.org/details/gri\\_33125008065258/page/n14/](https://archive.org/details/gri_33125008065258/page/n14/) | British Library, shelfmark 56.i.12. (Plate 14)



## Mitchell Leicester Square Rotunda

A cylindrical space is an excellent medium for creating an immersive exhibition. The 360-degree surround experience can fully engage the senses, and the addition of pathways at different heights inside can enhance the overall experience's interest and enjoyment.



Panorama of the Battle of Waterloo





2. Storytelling Room  
Storyteller's chair and semi-circular background featuring paintings by Nils von Dardel depicting the Land of Nod.



3. Children's Section – Entrance  
Old entrance to the Children's Section with the inner glass porch preserved in its original form.

## Existing children's library



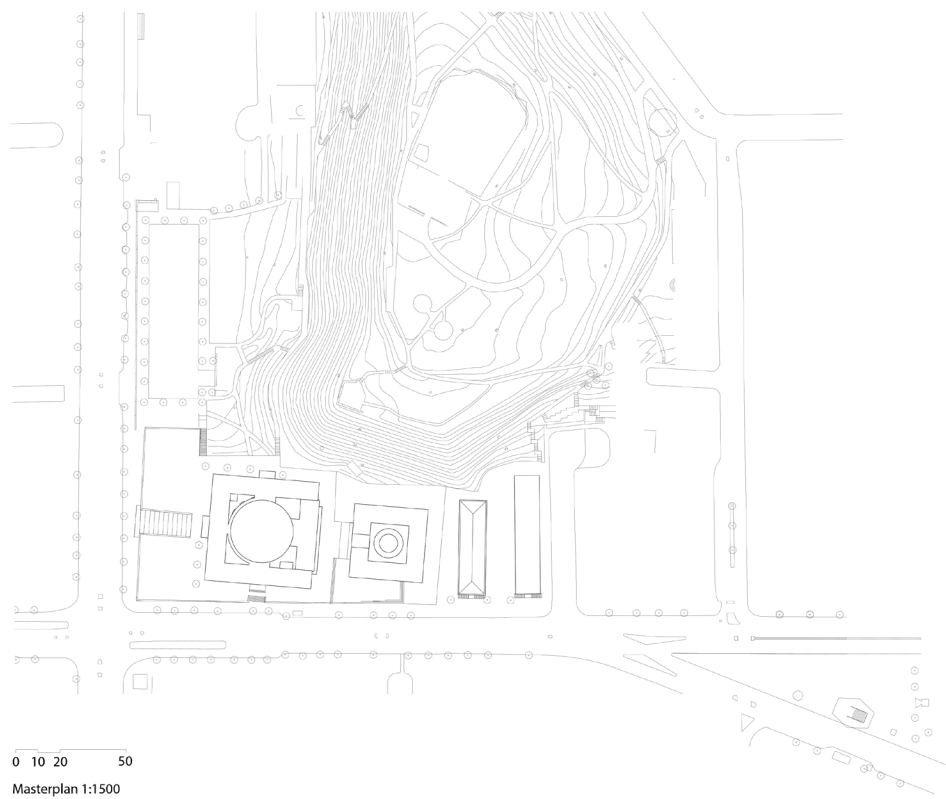
4. Children and Young People's Section  
Entrance to the Children and Young People's Section with text (Barn och Ungdom) and wall relief over the top.



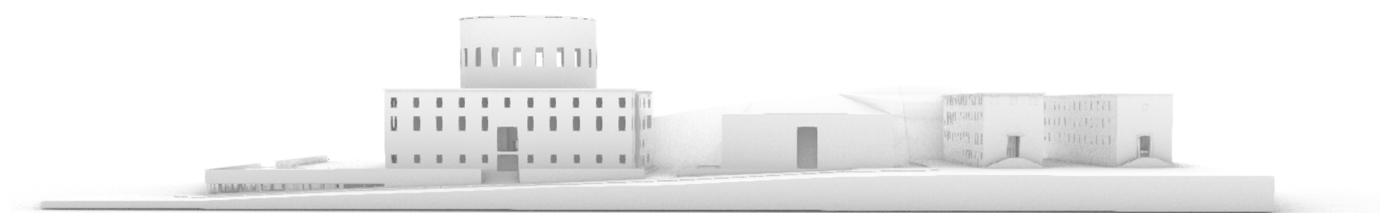
5. Children's Section  
Room with ceiling painting of Alf Munthe, depicting the firmament surrounded by the twelve signs of the Zodiac.

## Existing children's library

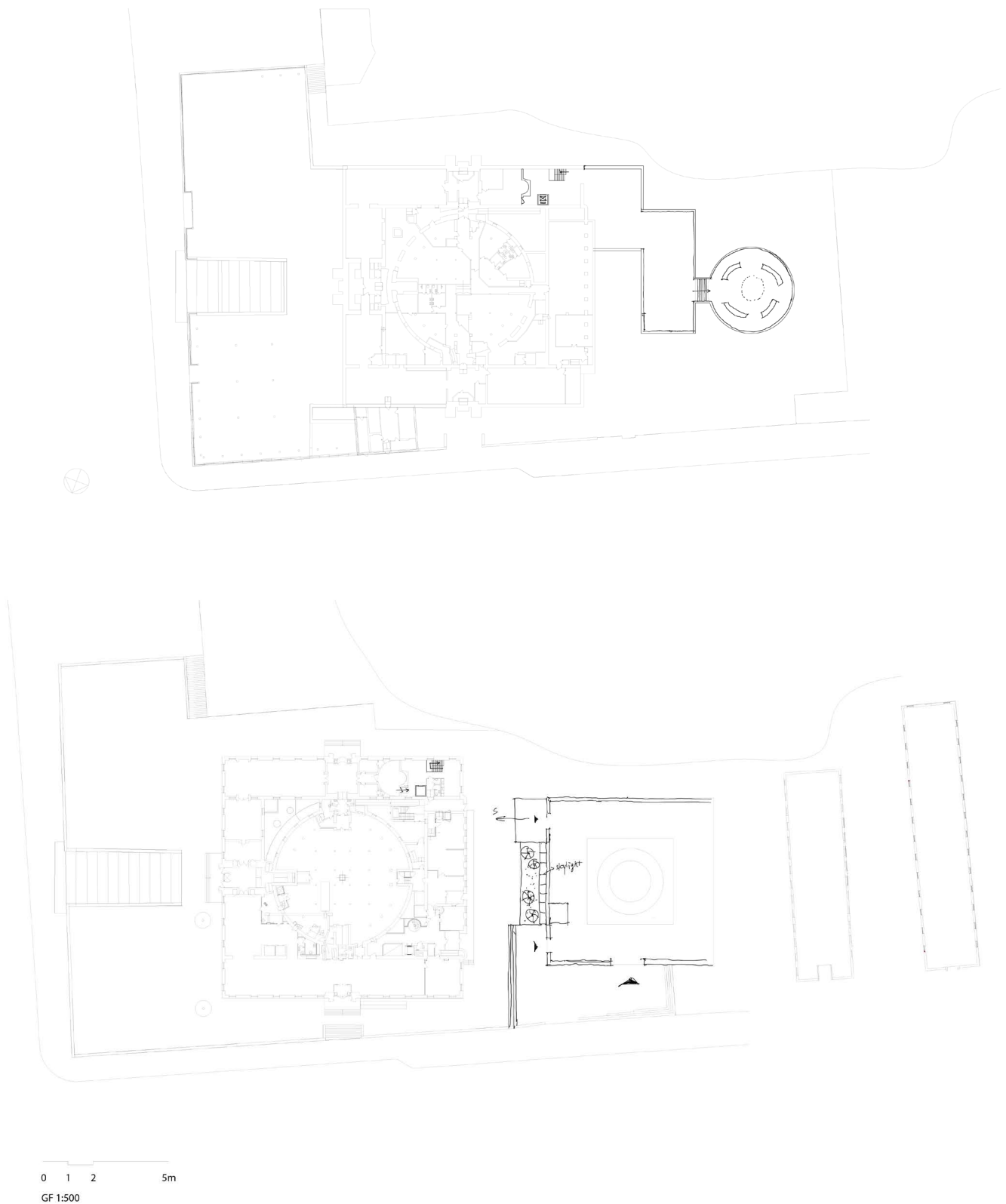
# P2 Critic



Master plan

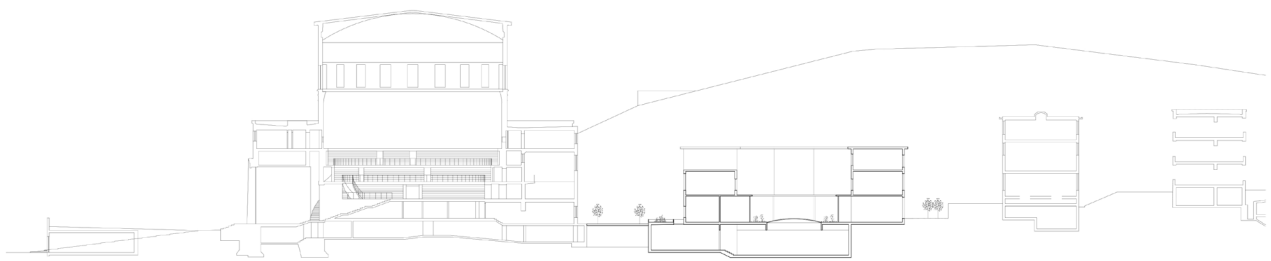


Elevation



Plan

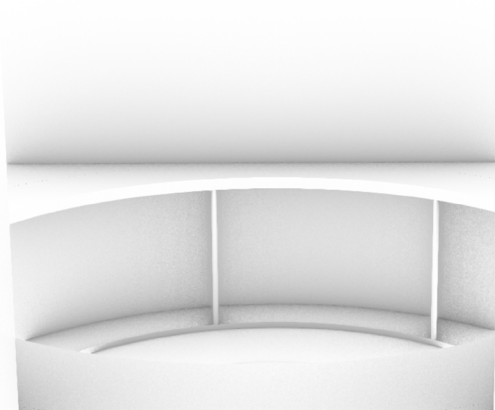
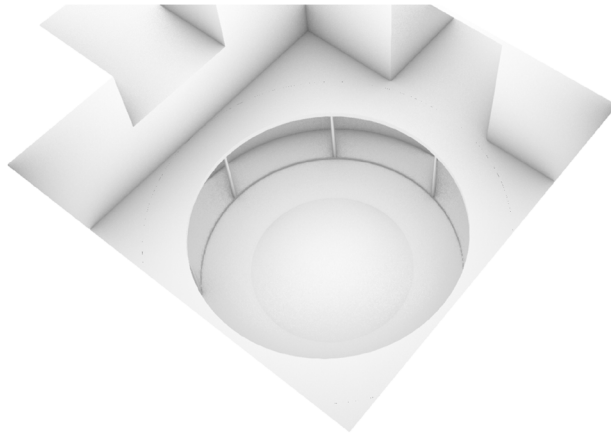
By using the element of circles/arcs, the original rotunda, the original children's library, and the new rotunda are interconnected.



0 1 2 5m  
Section 1:500

Section





## Scenes

Feedback:

why reversed?

reiterating?

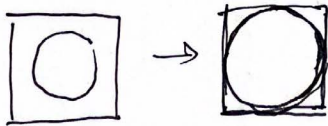
same room

Maybe offer

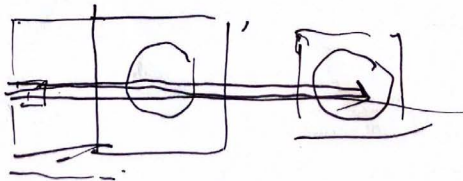
different type of room.

The scale of the circle  
~~to~~ can be bigger.

How does the space around the  
circle meet the circle.



new floor same level as  
the piazza.



new technology. <sup>children's adult</sup> library.  
feel as important as the original  
library but for the children

Don't make it too complicated.  
~~perforation~~ perforation → show.

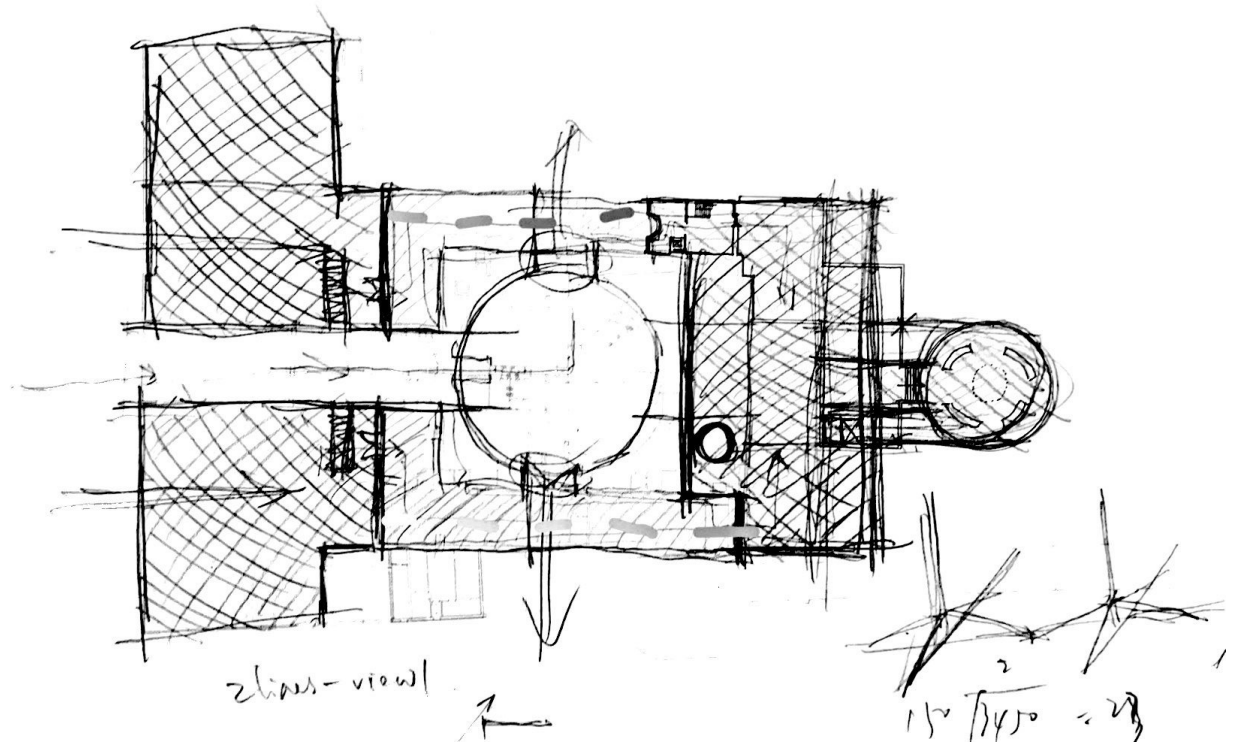
Inverting the patché  
what's the figure.

All rooms on ~~the~~ have roof light  
walls filled with books.

# Design

## Circulation

In response to the feedback on P2, I am considering expanding the circulation area. By creating an underground connection from the street at the bazaar, the street, the old library, and the new library will form a large integrated complex.



## Elevation

In the initial considerations for the facade, since the new library is derived from the old library, I also plan to adopt some of Asplund's designs by using large doors or windows in the center of the facade. Smaller windows will be symmetrically distributed on both sides.

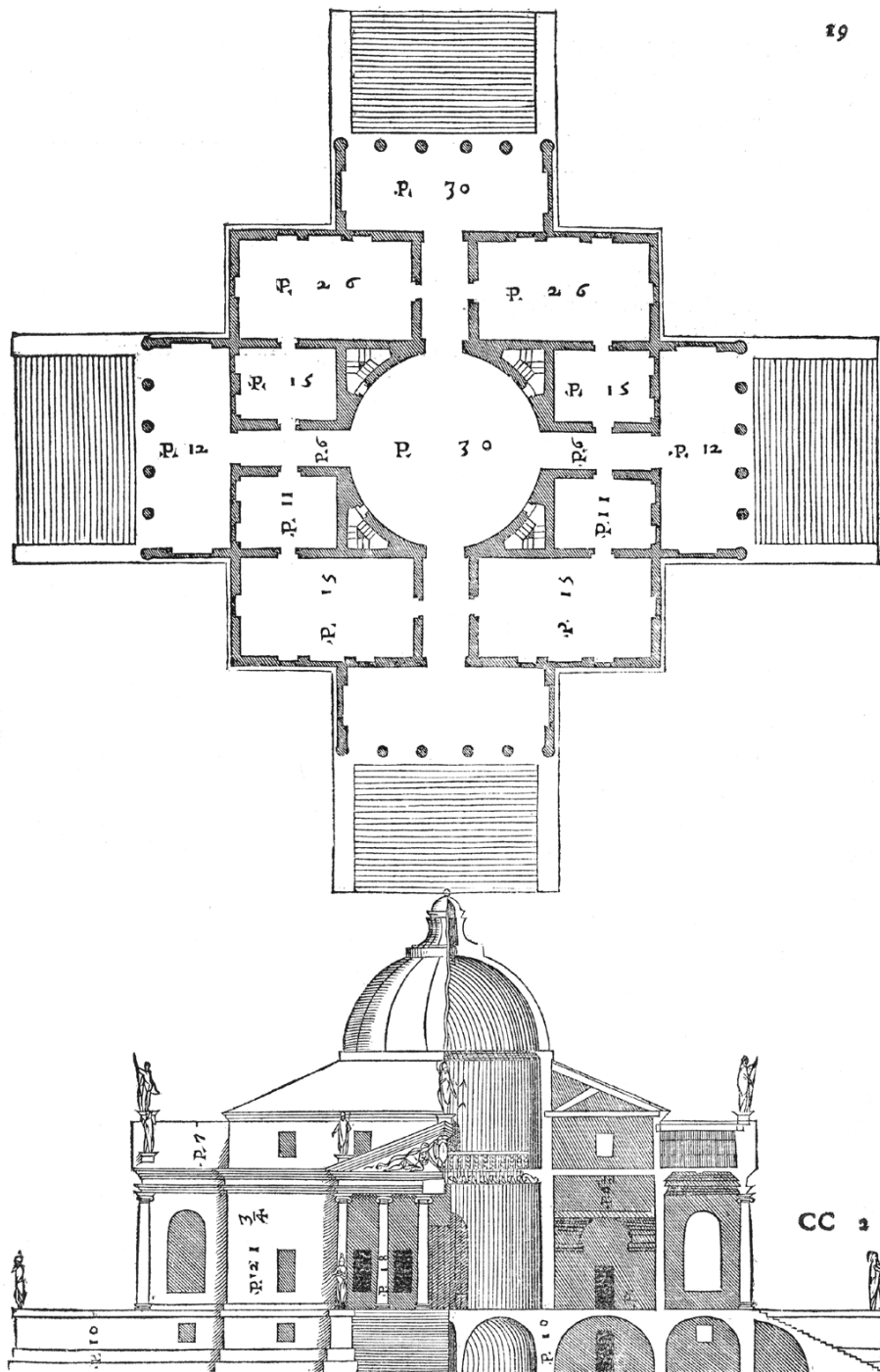


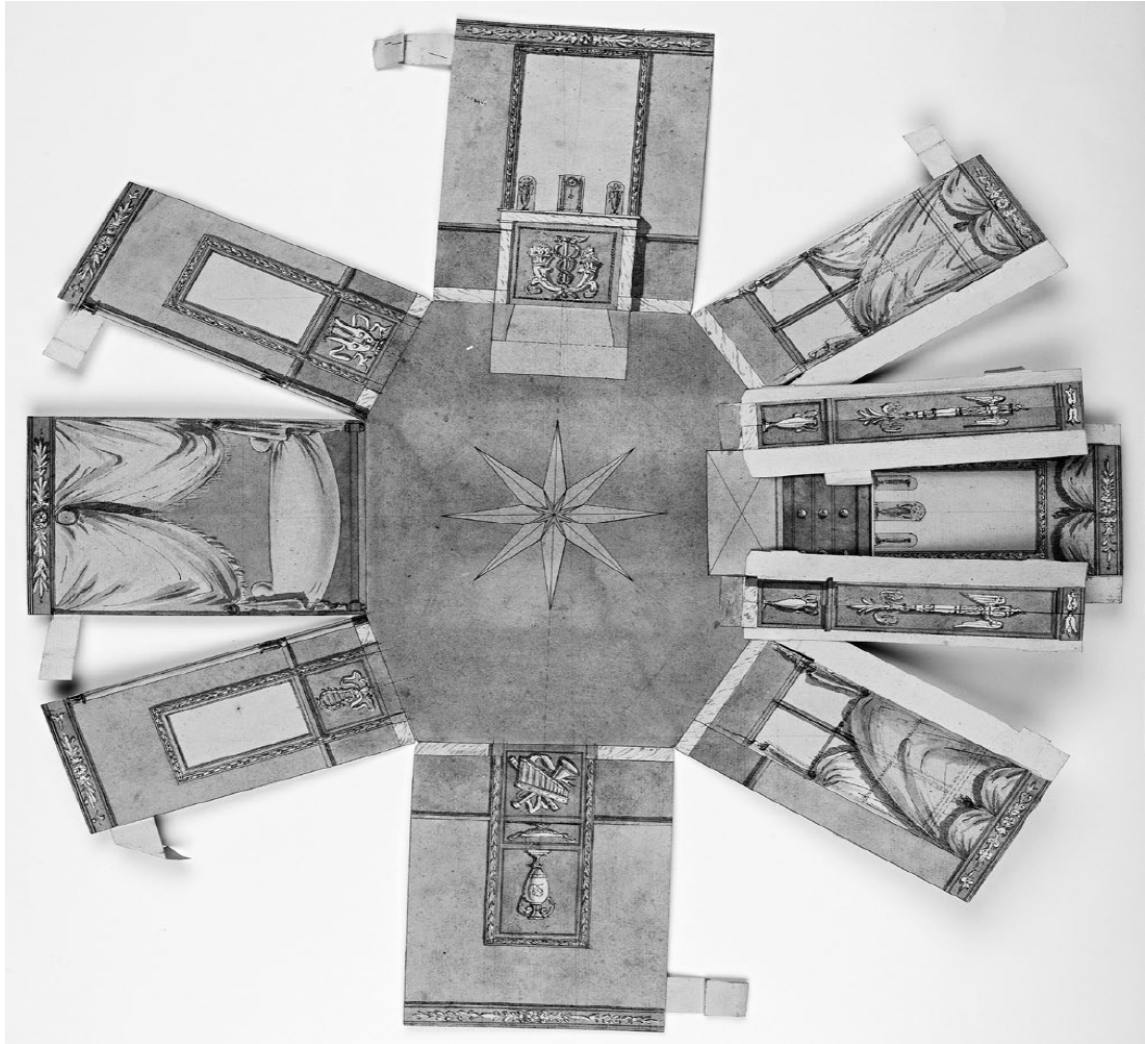
# Manifestes 1

*Javier Fernández Contreras*  
Manifest of Interiors:  
Thinking in the  
Expanded Media



[Fig. 1] Villa Almerico (Villa Rotunda)  
from: Andrea Palladio. *I quattro libri  
dell'architettura* (Book 2, 19), 1570





instant reshaping as remote offices, ubiquitous gyms, assembled party rooms, or ready-made restaurants, they propose *a city of interiors*, an endless accumulation of rooms that are connected in the way they are successively performed, switched on and switched off. This is an understanding of the urban condition where the dominance of the plan through navigation tools, the objectualisation of buildings from bird's-eye views or the exteriority of façades are no longer sufficient to visualise what we understand by 'city'.

At the start of this essay, Magritte's quote refers to the capacity of painting to articulate the relationship between objects and words, things and thinking, through representation. We inhabit a pictorial moment, understanding the pictorial as not medium-specific, in the way the surface of representation, with its endless capacity to assemble fiction and reality, is fundamentally reshaping the episteme of space design. Architecture has a long tradition of obliterating human presence in its representation. People are not normally represented in plans or sections, and their recurrent role in models is to give scale. Examples of this absence in architectural photography are countless. History books rarely refer to human behavior, not to mention emotions, when describing interior spaces. But in media that are not specifically architectural, from cinema to commercial magazines, painting to literature, human beings are in most cases right at the centre of the image, the narrative, or the frame. Objects and spaces

# Graduation Plan

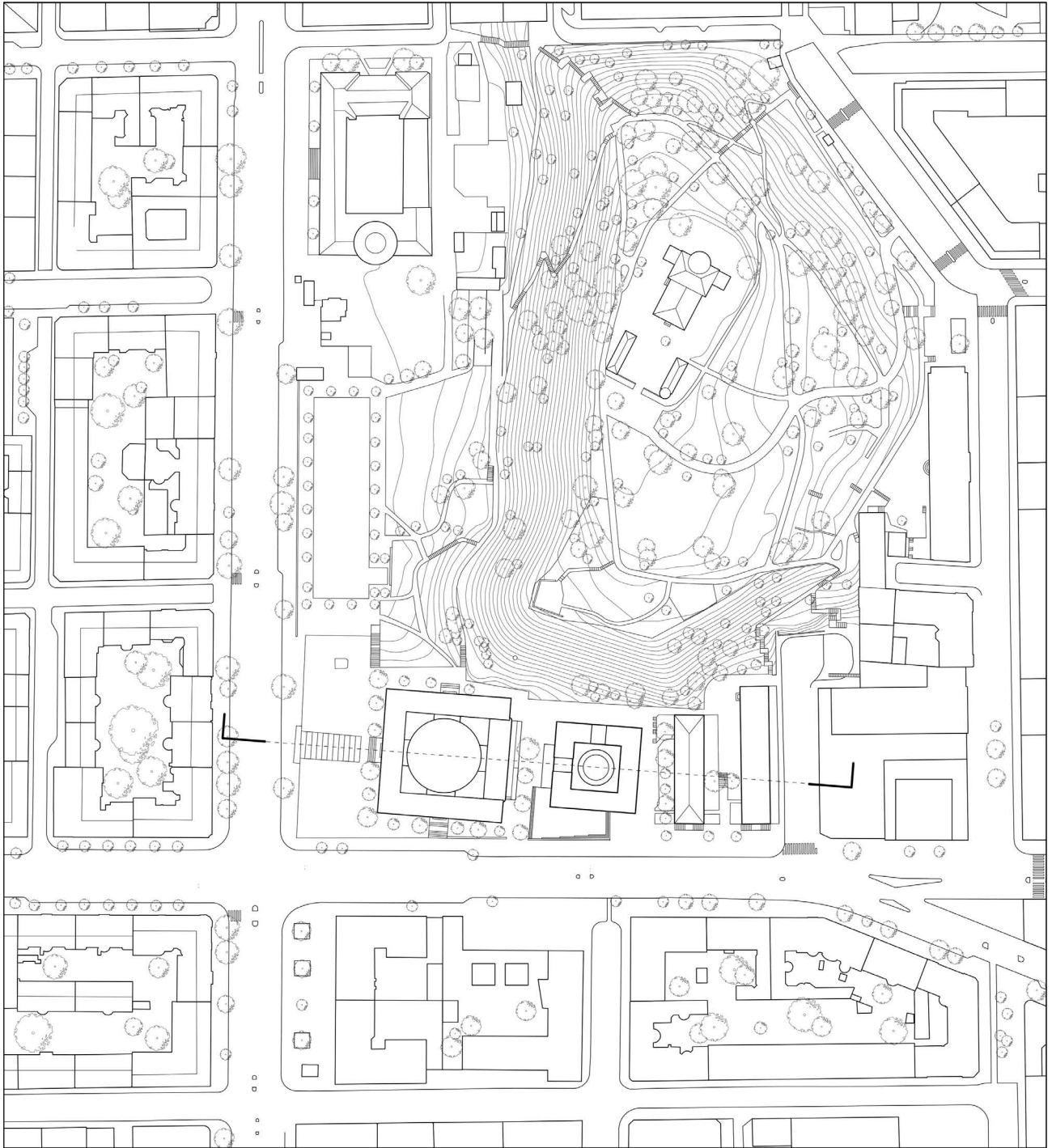
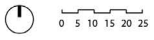
<p>The posed problem,</p>	<p>This year's IBC's theme is "Palace," exploring new development approaches for urban public functional spaces such as libraries, which originated from palace architecture, in the context of contemporary times.</p> <p>When libraries were closely associated with palace architecture, their existence channels of knowledge and information dissemination, along with the grand and meticulously ordered palace-style architecture, led to a one-way output and a sense of "control" towards the public. However, with the development of democratization, the awakening of civic consciousness, and the diversification of communication channels, libraries gradually transformed into service-oriented structures.</p> <p>Stockholm Public Library, as a library from the 1920s, pioneered the use of architectural elements such as the Rotunda and open bookshelves, which softened the oppressive nature of traditional library architecture at that time. It embraced a humanistic approach, fostering a sense of active participation and community vitality among its visitors. However, after a century, the original library's space and knowledge dissemination methods are no longer sufficient to meet the diverse needs of society. This project, based on a failed competition held in 2006 for the expansion and renovation of the library and the advisory brief proposed in 2014 based on the 2006 competition, explores the new social functional positioning and service direction of the library in the face of a multicultural audience and is rooted in the unique political and cultural context of Stockholm.</p>
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<p>research questions and</p>	<p>Over the past century, Stockholm City Library has attracted a significant portion of the local middle-class population. However, its target audience has shifted from a large student population to predominantly older age groups. Additionally, Stockholm is experiencing the impact of increasing immigration and a trend towards racial diversity. While the existing library has dedicated areas, such as the children's section, that showcase collections of multicultural books, the quality of these collections is relatively low. How to expand and renovate the library to encompass a broader age range and a more diverse cultural background is a crucial question for discussion.</p> <p>Moreover, in the 21st century, information dissemination is not confined to traditional media such as books and paper. Modern means like E-media leverage electronic networks for efficient and flat communication, enhancing the dynamism of interaction between people and information. This new mode of information dissemination reflects trends in the physical space and opens up new possibilities for the establishment of a novel library. Given these circumstances and needs, the research question for the library project is: <i>How can the expansion and renovation of Stockholm Public Library attract a younger and more culturally diverse audience, integrating with the evolving trends in new forms of information interaction?</i></p>
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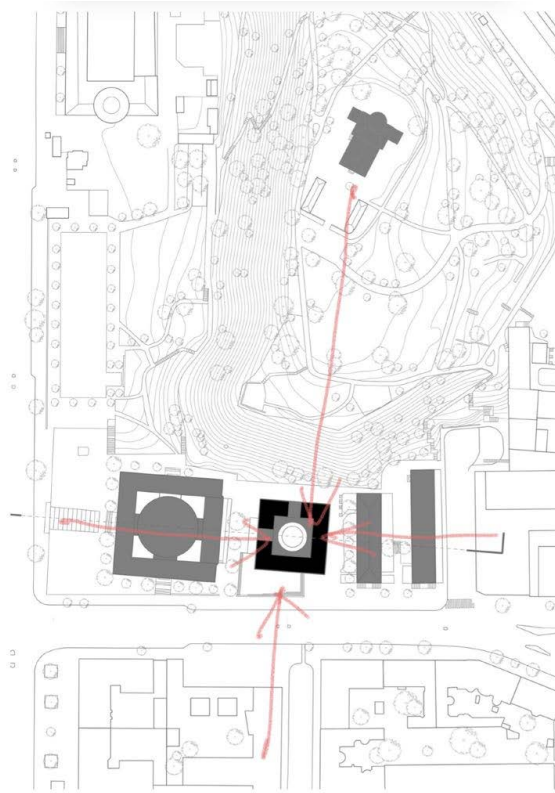


<p>design assignment in which these result.</p>	<p>Stockholm Public Library is situated at the foot of the mountains in the city center of Stockholm, becoming a visual focal point alongside the Observatory, Stockholm School of Economics, and Teaterverket Sve. It harmonizes with the surrounding urban environment through a slightly off-axis alignment, emphasizing its prominence. Additionally, on the west side of the site, three annex buildings serve as complementary structures and are included in the design scope.</p> <p>Considering the real conditions of the site and the developmental needs, the project aims to construct a new library with an approximate area of 4000 m<sup>2</sup>. It will encompass diverse functional spaces such as an Immersive E-media room, a multilingual reading room, and an urban activity lounge to cater to a variety of audiences. The design also involves the transformation and activation of the existing urban library's bazaar and underground spaces, facilitating communication and connection between the new and old libraries. The goal is to create an interactive entity that radiates into the urban space.</p>
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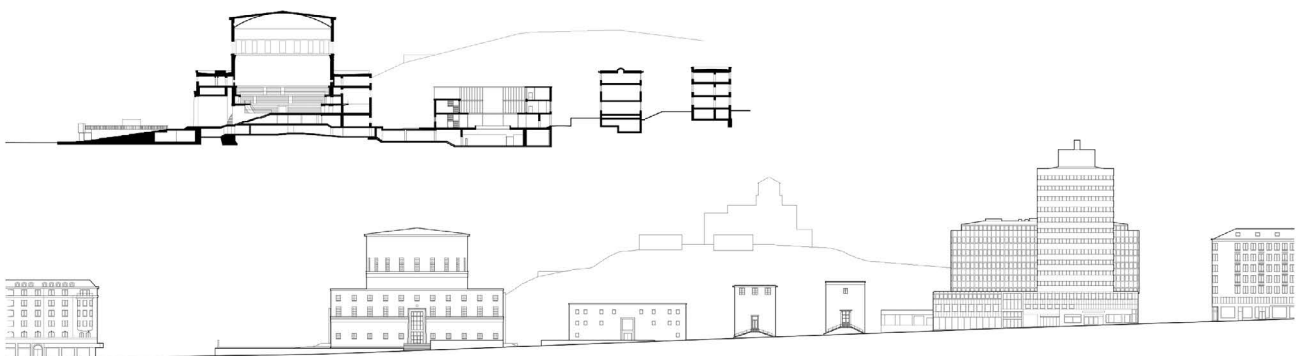




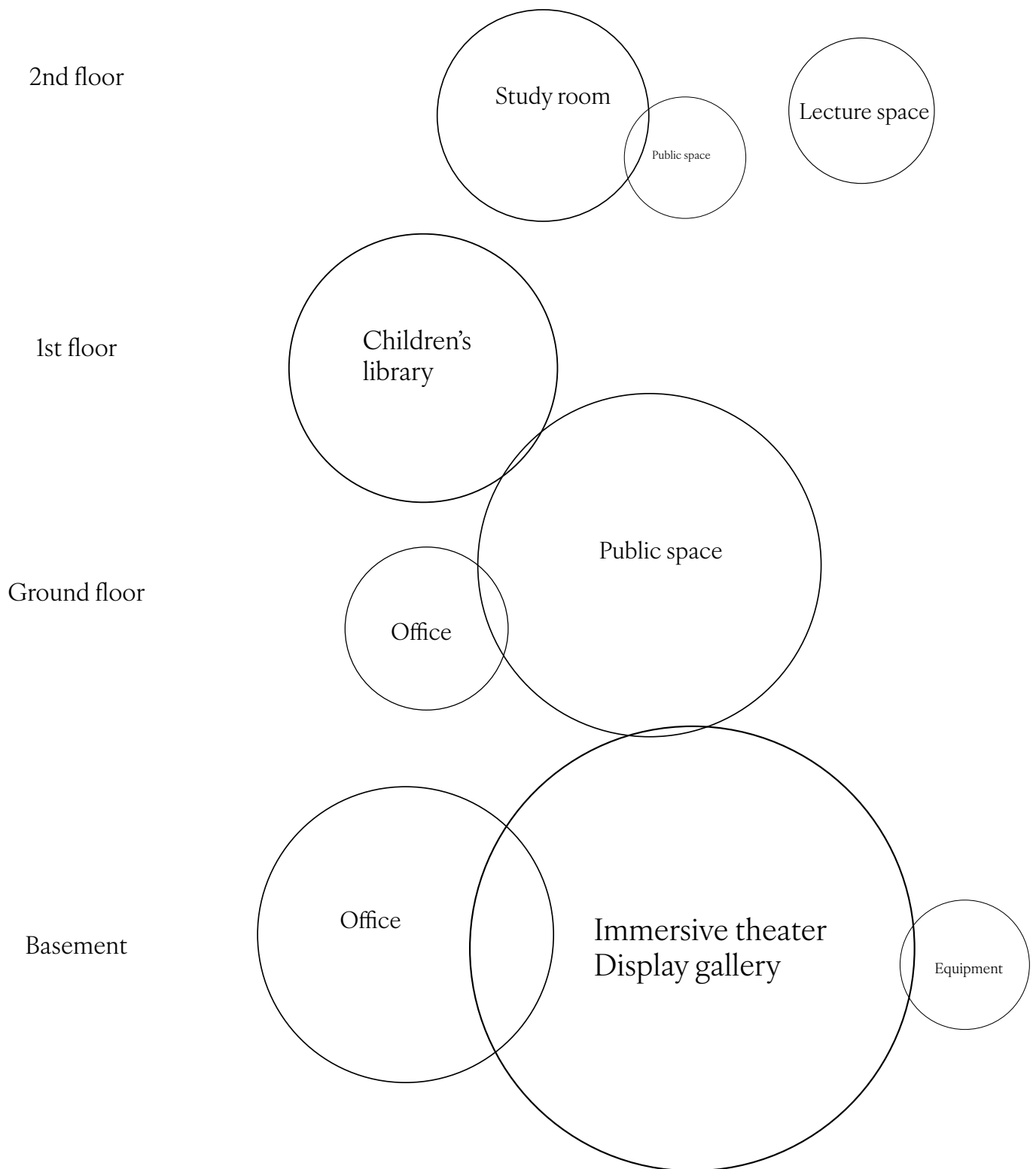
Masterplan



By lowering the height to form a depression, the new library will become a gathering place for people and a focal point for sightlines.



Section and elevation in an urban scale





In the new building, the ratio of the children's library to the all-age library is approximately 1:3. A significant portion of office space is located underground, public spaces are situated on lower floors, and private reading spaces with a higher level of privacy are placed on upper floors.

Circulation: 187 sqm  
Restroom: 134 sqm  
Management: 482 sqm  
Equipment: 53 sqm  
Children's library: 149 sqm  
Library for all ages: 365 sqm  
Leisure space: 214 sqm  
Public space: 825 sqm  
Lecture space: 80 sqm  
Immersive theater: 233 sqm  
Display gallery: 480 sqm

In total: 3200 sqm

#### Basement:

Archives: 94 sqm  
Office: 200 sqm  
Equipment room: 53 sqm  
Storage room: 70 sqm  
Restroom: 50 sqm  
Display gallery: 480 sqm  
Immersive theater: 233 sqm  
Bazar: 1780 sqm  
Circulation: 52 sqm

#### Ground floor:

Selfstudy: 46 sqm  
Archives: 32 sqm  
Office: 43 sqm  
Coffee bar: 50 sqm  
Circulation: 55 sqm  
Restroom: 28 sqm  
Public space: 710 sqm  
Courtyard: 150 sqm

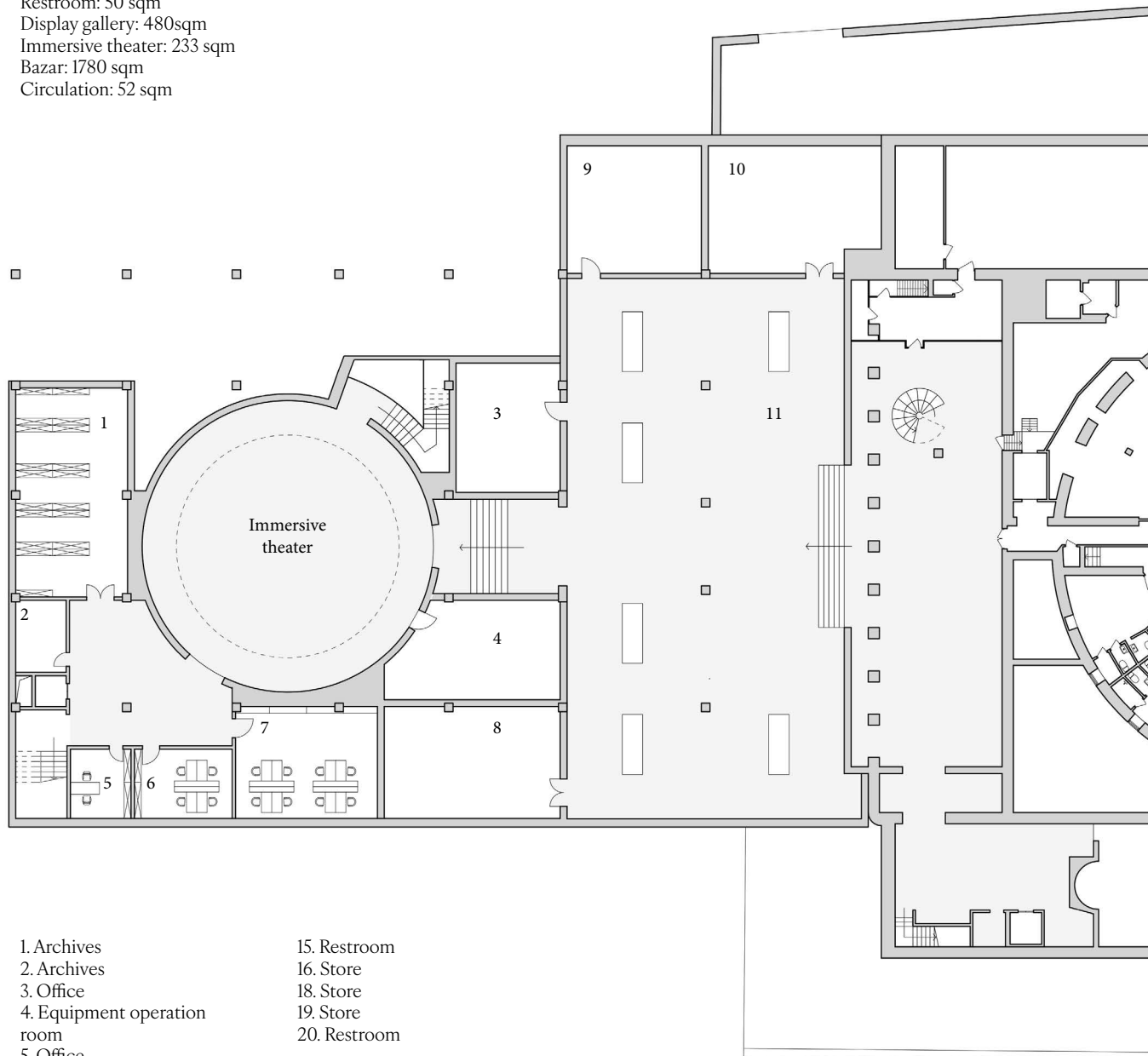
#### 2nd floor:

Leisure space: 84 sqm  
Children's library: 107 sqm  
Parent-child reading room: 42 sqm  
Talking-allowed reading room: 84 sqm  
Archives: 12 sqm  
Printing room: 15 sqm  
Office: 15 sqm  
Computer room: 80 sqm  
Circulation: 40 sqm  
Restroom: 28 sqm  
Public space: 40 sqm

#### 3rd floor:

Reading hall: 75 sqm  
Archives: 16 sqm  
Leisure space: 80 sqm  
Salon/ Lecture room: 84 sqm  
Coffee bar: 30 sqm  
Study room: 80 sqm  
Circulation: 40 sqm  
Restroom: 28 sqm  
Public space: 75 sqm

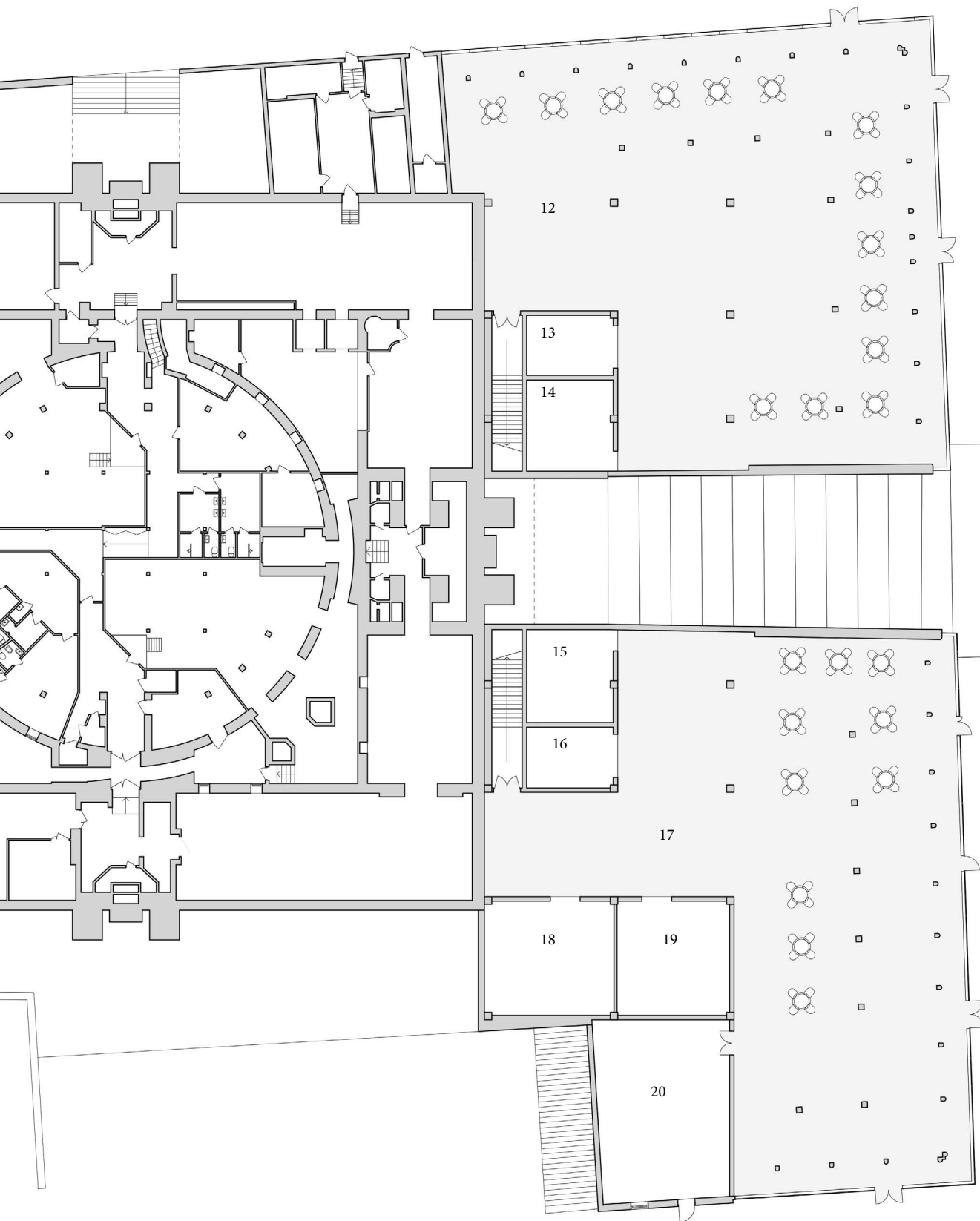
Archives: 94 sqm  
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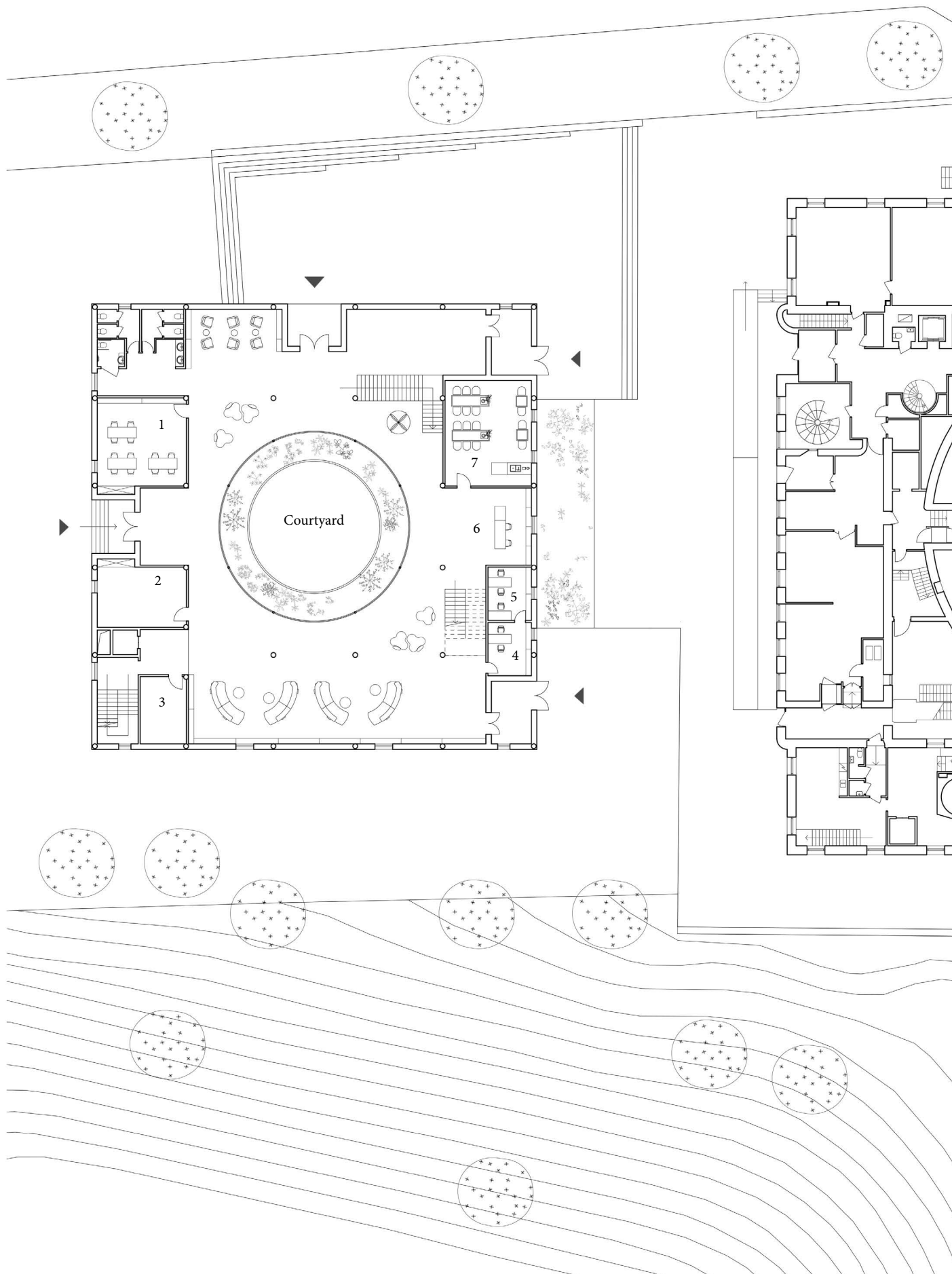


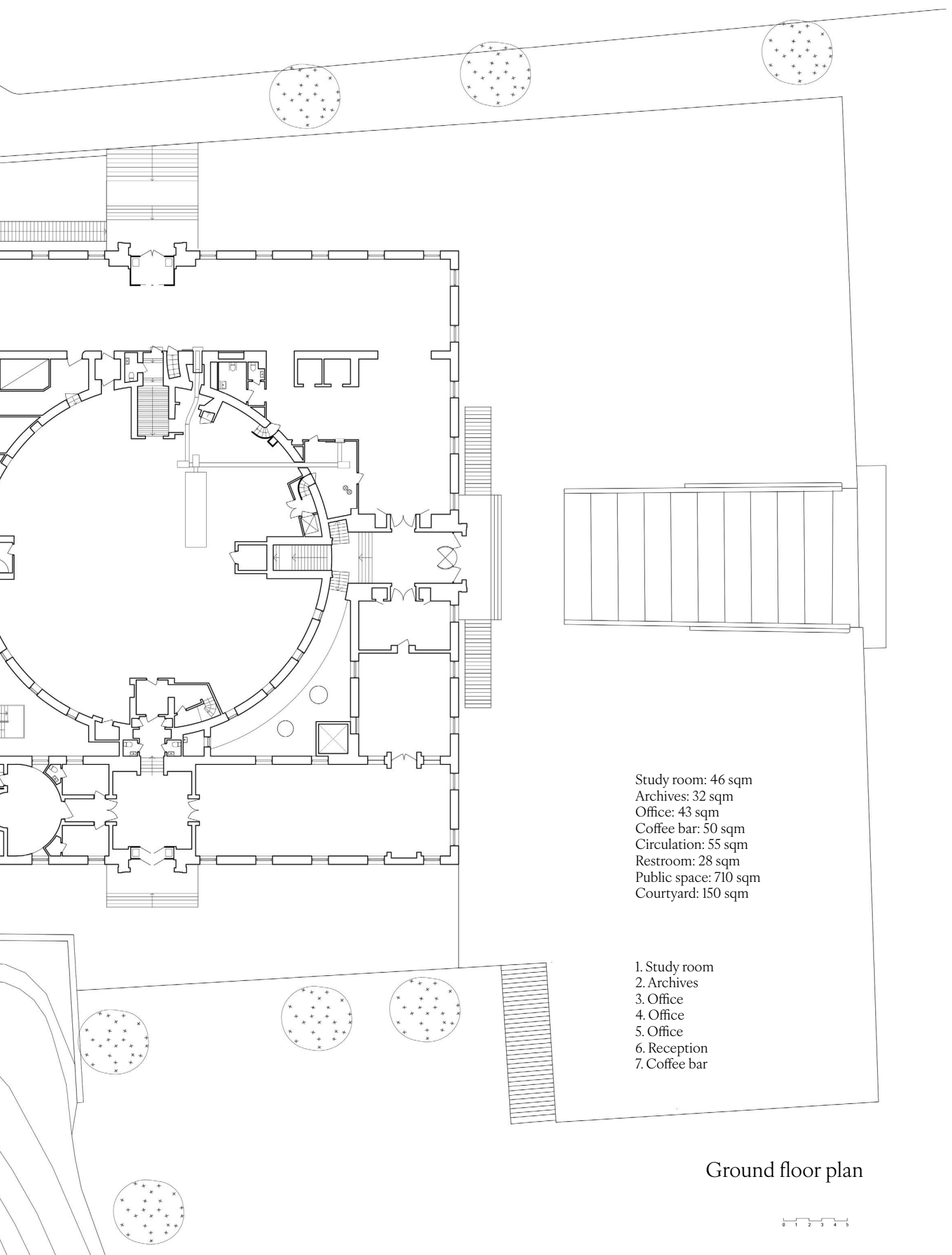
- |                             |              |
|-----------------------------|--------------|
| 1. Archives                 | 15. Restroom |
| 2. Archives                 | 16. Store    |
| 3. Office                   | 18. Store    |
| 4. Equipment operation room | 19. Store    |
| 5. Office                   | 20. Restroom |
| 6. Office                   |              |
| 7. Office                   |              |
| 8. Office                   |              |
| 9. Restroom                 |              |
| 10. Storage                 |              |
| 11. Display gallery         |              |
| 12. Bazar                   |              |
| 13. Store                   |              |
| 14. Restroom                |              |

0 1 2 3 4 5

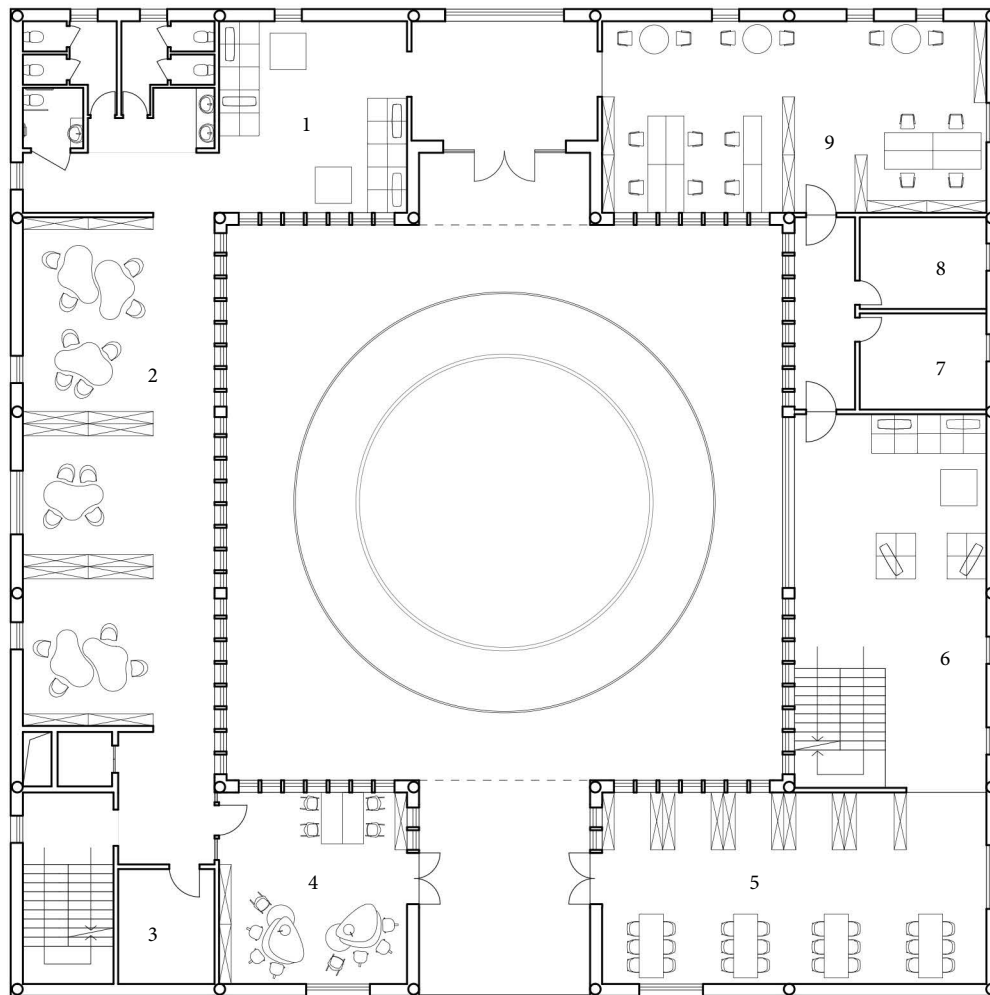
Basement plan









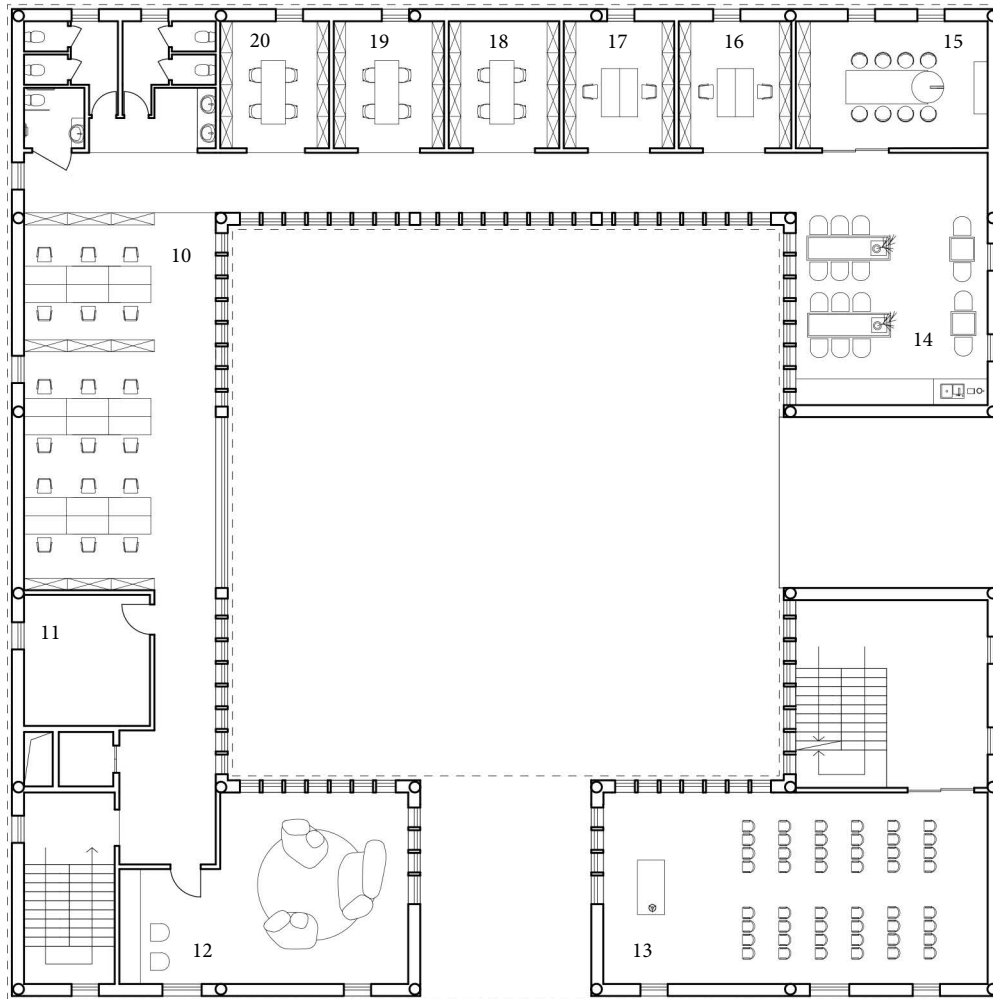


## 1st floor plan

0 1 2 3 4 5

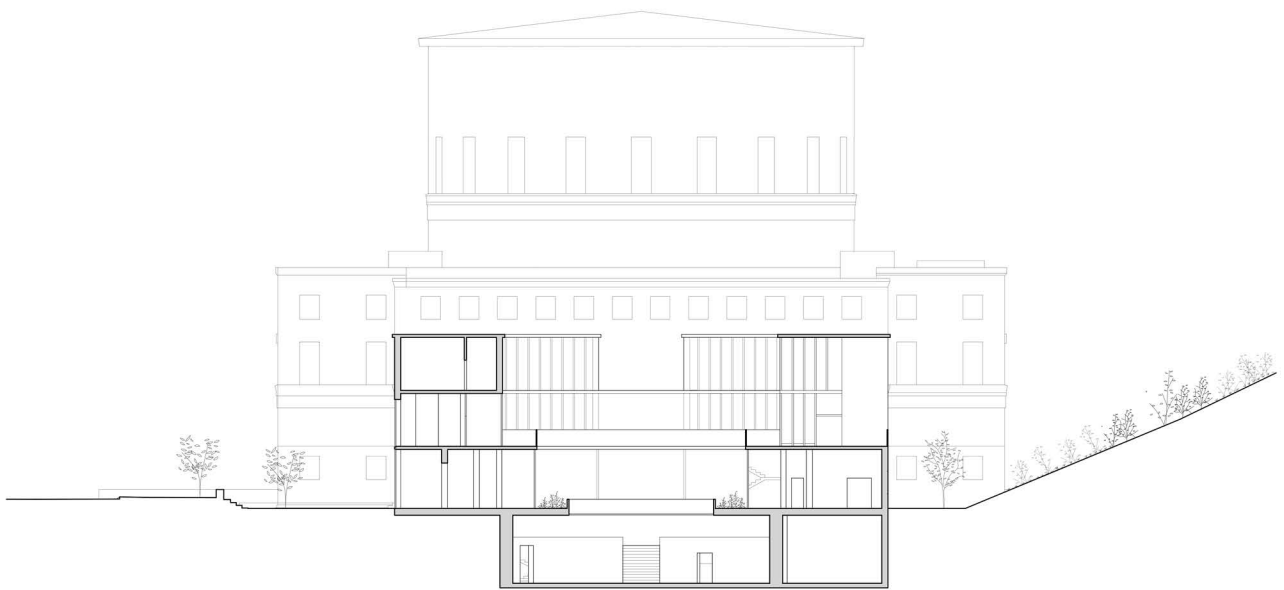
Leisure space: 84 sqm  
 Children's library: 107 sqm  
 Parent-child reading room:  
 42 sqm  
 Talking-allowed reading  
 room: 84 sqm  
 Archives: 12 sqm  
 Printing room: 15 sqm  
 Office: 15 sqm  
 Computer room: 80 sqm  
 Circulation: 40 sqm  
 Restroom: 28 sqm  
 Public space: 40 sqm

1. Leisure space  
 2. Children's library  
 3. Archives  
 4. Parent-child reading room  
 5. Talking-allowed reading room  
 6. Leisure space  
 7. Office  
 8. Printing room  
 9. Computer room



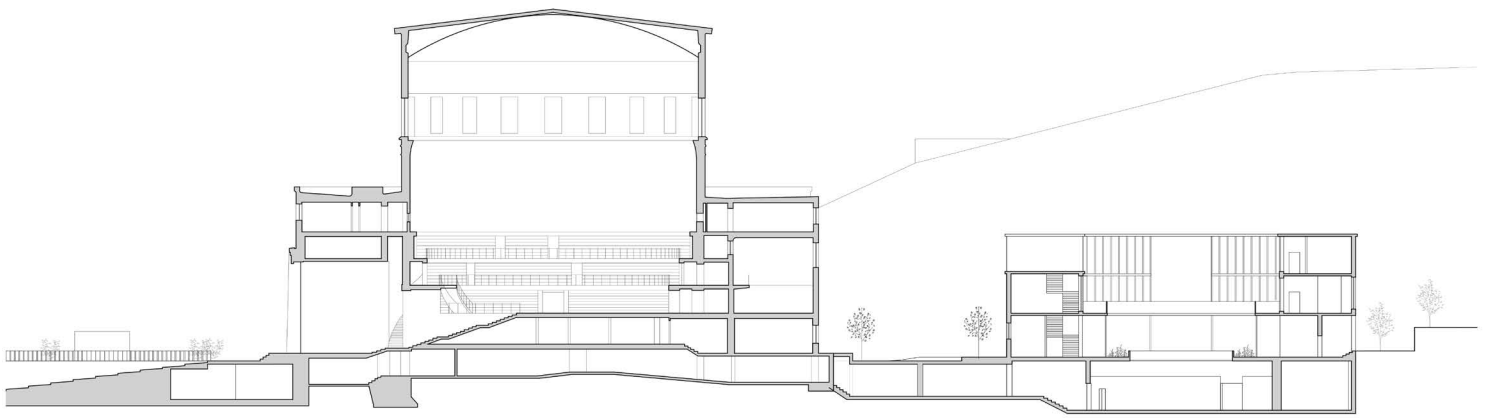
## 2nd floor plan

Reading hall: 75 sqm	10. Reading hall
Archives: 16 sqm	11. Archives
Leisure space: 80 sqm	12. Leisure space
Salon/ Lecture room: 84 sqm	13. Salon/ Lecture room
Coffee bar: 30 sqm	14. Coffee bar
Study room: 80 sqm	15. Study room
Circulation: 40 sqm	16. Study room
Restroom: 28 sqm	17. Study room
Public space: 75 sqm	18. Study room
	19. Study room
	20. Study room



1 2 3 4 5

Section

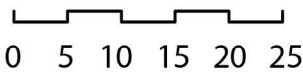


1:100

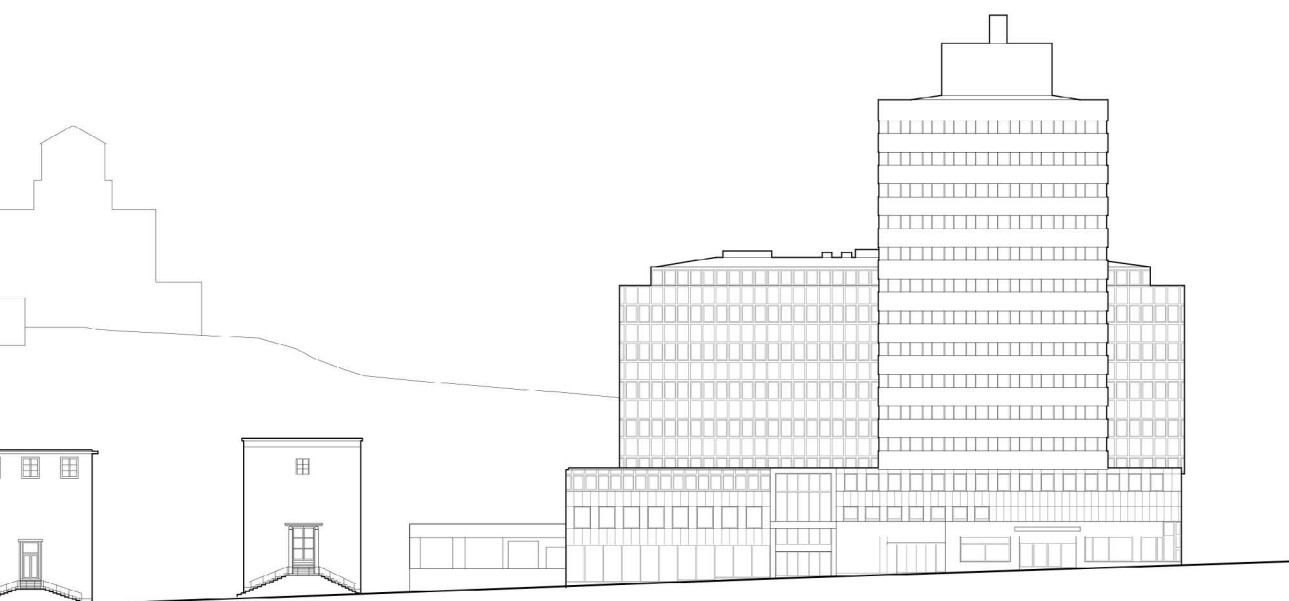
Section

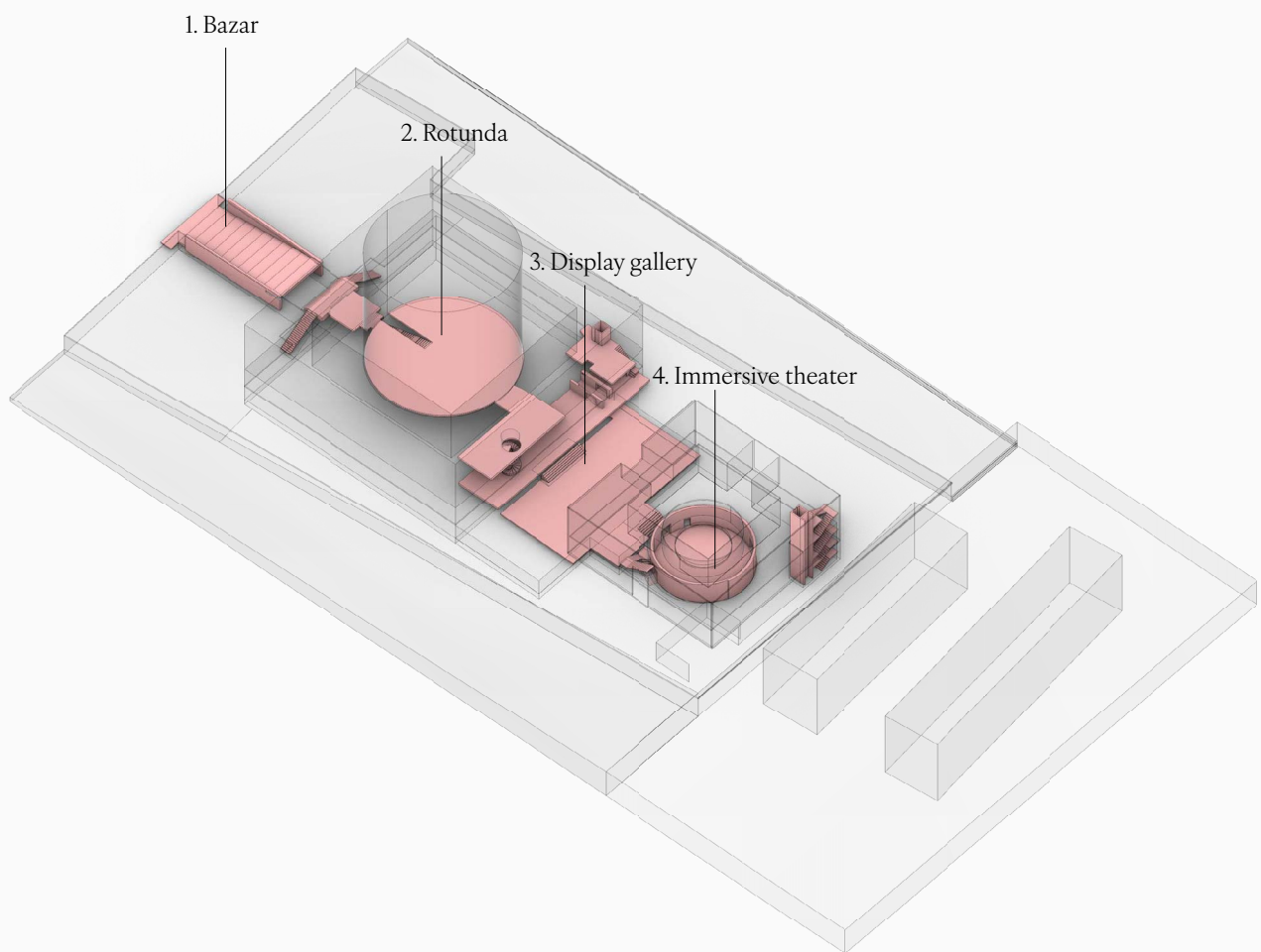


Elevation

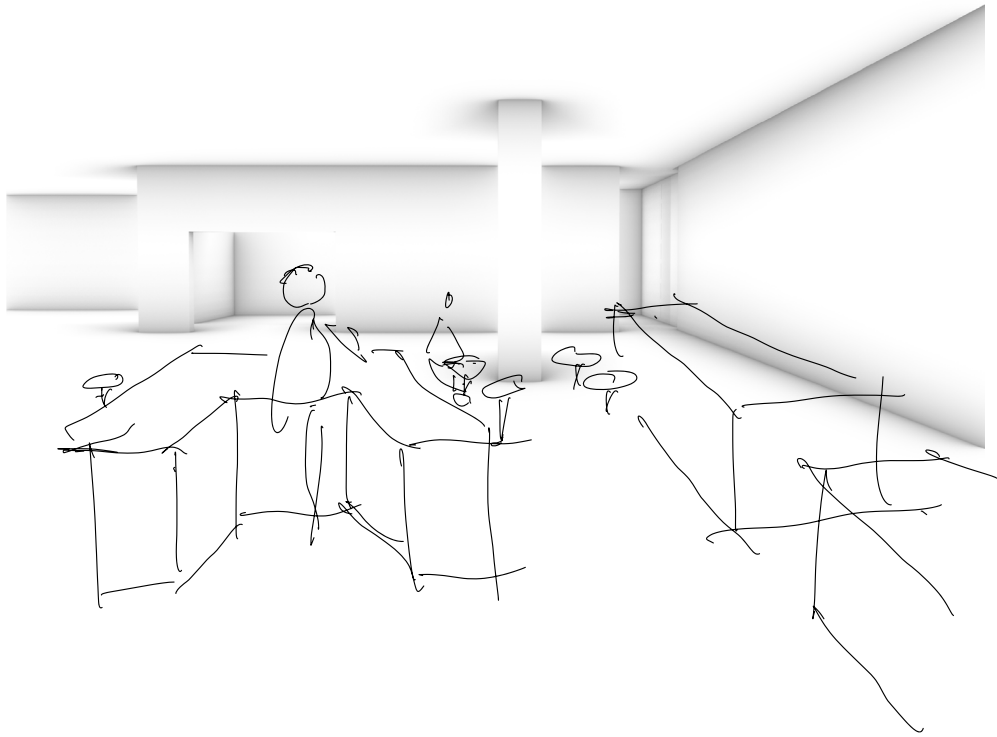
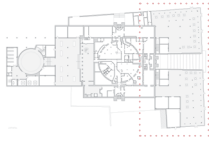
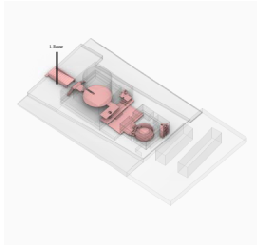




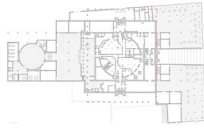
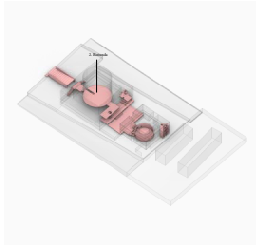




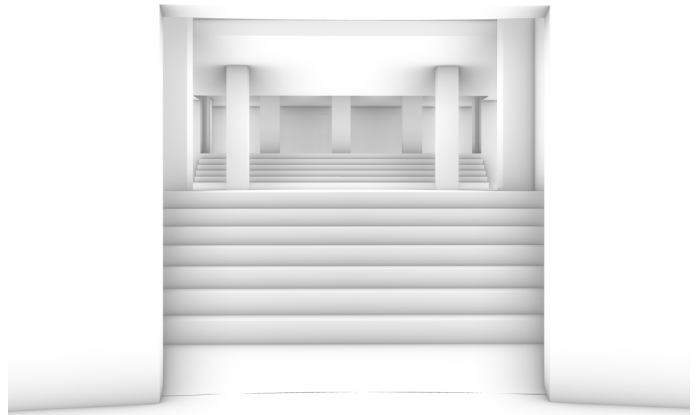
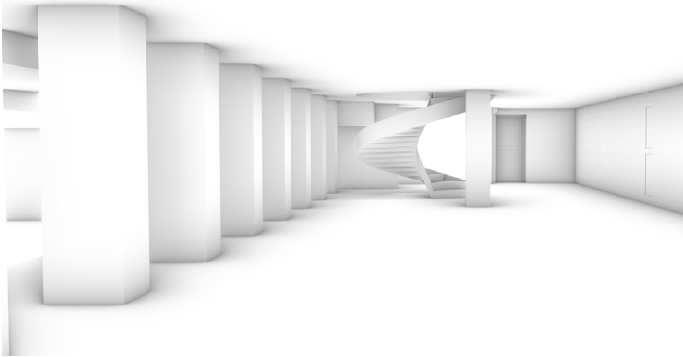
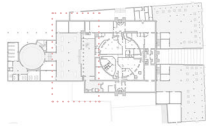
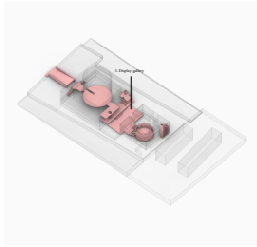
Circulation



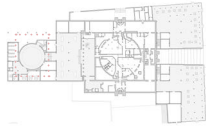
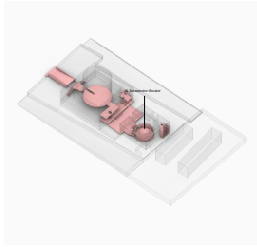
1. Bazar



2. Rotunda



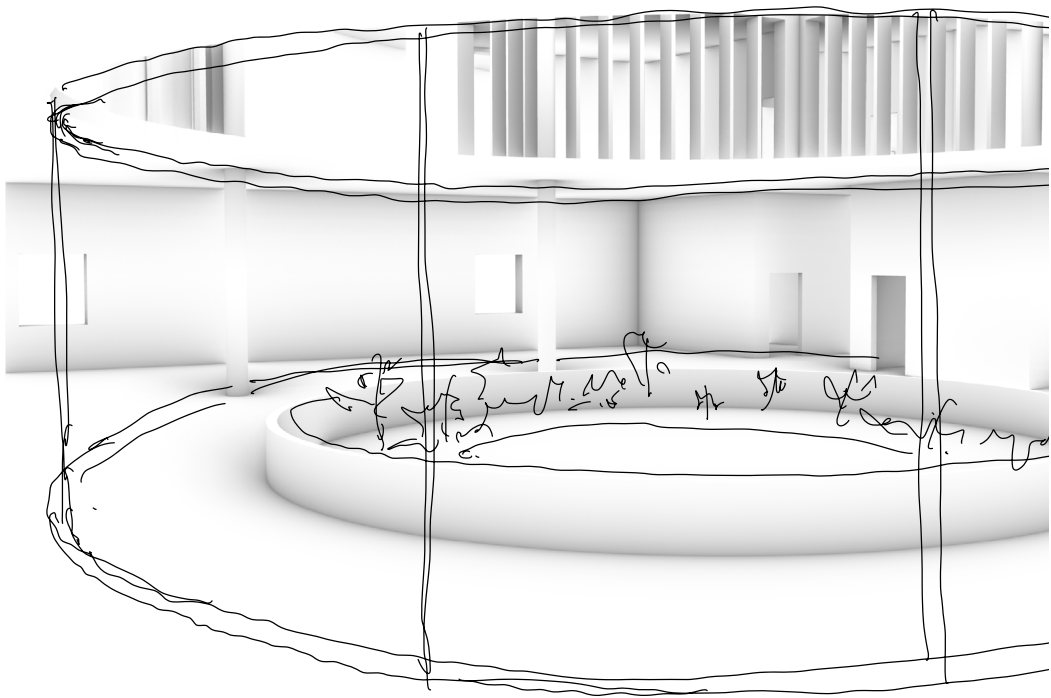
### 3. Display gallery

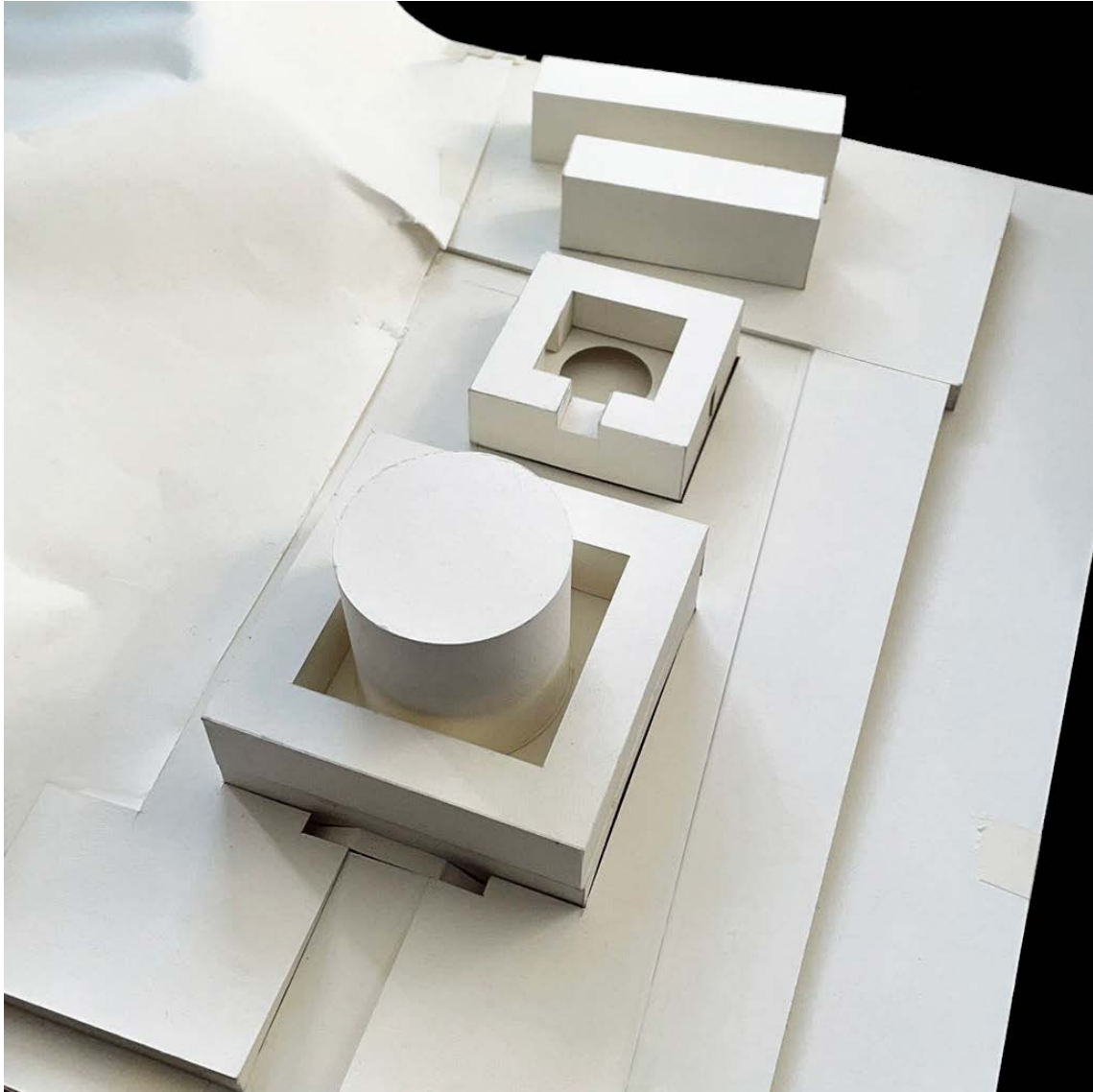


#### 4. Immersive theater

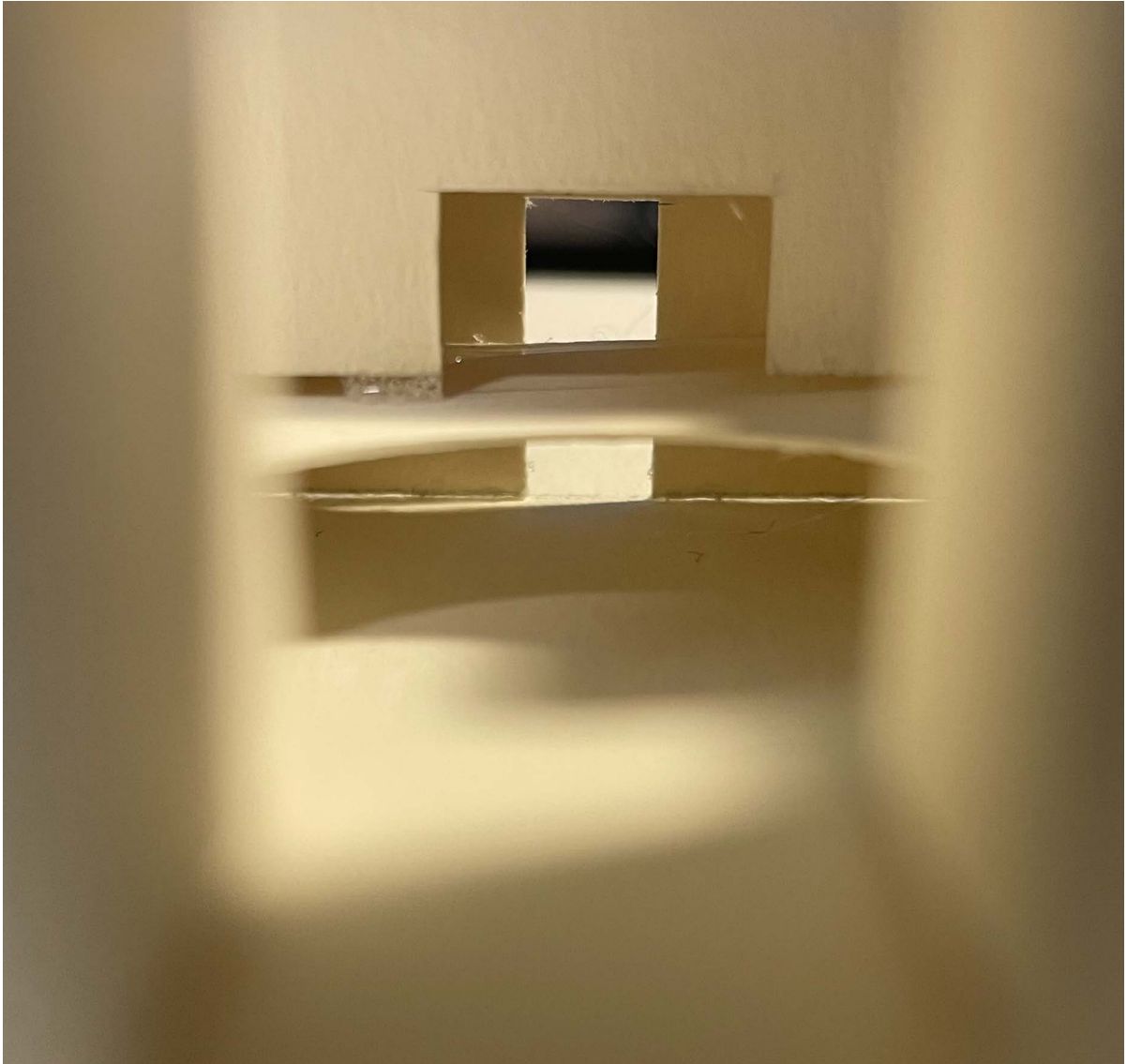
Reference: Claude Monet and Camille Lefèvre, Nymphéas [Water Lilies] Gallery, first room, facing east wall







Modeling photo



Modeling photo

Week 2.10

P2 feedback

Questions and comments Sam

Introduction to the existing building to build a story. What sits in the bazaar currently? What does the library look like currently? Show pictures and bring us all to Stockholm! I miss the atmosphere of the library, both the current as well as your extension to it (immersive theatre). Make use of the models that you have built as a group (you can!)

I'm happy to see you have a model. It could be a bit more accurate with regard to the South side of the hill (now the hill overflows onto the pond area)

The model is somewhat different from the initial idea, but also from the plan that you show on the slide before the program slide (slides are not numbered!)

Do you have a section of your building? Could you zoom in, please?

Focus on new media isn't in your presentation. Atmospheres are not in your project.

The orientation of the plans should always be the same.

You could give more importance to the P1 presentation; you made a really nice space, and you didn't show it to the jury.

Your plans don't have a north arrow, so the building technology teacher cannot address orientation (sustainability)

Total square metres of your program?

# **Information Theater**

Expansion and Renovation of Stockholm Public Library

P3 Project Journal

Liuying Chen

2023-2024 Msc3

Interiors Buildings Cities



Gothenburg Law Court Annex by E.G. Asplund.

## A Difficult Whole

*“An architecture...able to admit the paradox of the whole fragment: the building which is a whole at one level and a fragment of a greater whole at another level...It is the difficult unity through inclusion rather than the easy unity through exclusion.”*

– Robert Venturi, *The Obligation Toward the Difficult Whole*, in *Complexity and Contradiction in Architecture*

Confronted with the messy realities of the contemporary city, engaged in fragments of the past and addressing the uncertainties and challenges of the future, the thoughts of the American architect Robert Venturi on the possibilities of *the difficult whole*, written half a century ago, continue to have resonance. Beyond the, sometimes failing, formalities manifested in the work of Venturi and Denise Scott-Brown, it might represent the possibility of a negotiative architecture: one that looks outwards with a welcoming gesture, which enjoys what it finds; which searches for wholeness, rather than unity; which is open and political and has agency.

The Stockholm City Library might, on first glance, be considered a kind of unity – the circle in the square – but in reality it might be considered the embodiment of the difficult whole of which Venturi speaks, expressed in its geometrical offset to the city grid; through the frictions evident in its forth side; in the radically different architectural expression of its plinth; in the transformed whiteness of its interior; in the clutter of its voids. Stepping beyond it, the similarities and differences of the three lamellae, or the constructed picturesqueness of the surrounding landscape can all be understood as fragments, whose disjunctions and tensions

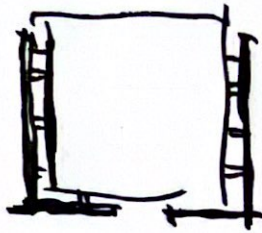
elaborate on this complex whole, as well as offering both qualities and challenges to the ways in which it is experienced. Your project will add yet another new fragment or fragments to the ensemble. Through this brief we would like you to begin to explore the creative tensions in the moments where things meet through volume, ground, façade, colour, material or composition for example. Many of you are struggling to escape the tyranny of the plan diagram.

This brief asks you to think at the scale of the fragment in a more traditional sense, elaborating in detail upon a moment where your project must negotiate its relationships with other things - whether existing buildings or landscape or both, while also exploring its own scale, proportion, structure, order and materialisation in more detail. The outcome will take the form of a physical model of a fragment of your building and the existing element or elements that it engages, made with an equivalent level of detail and care. The model might include spatial or structural components and more than one surface – for example roof and wall. The model may be made in any material or technique you wish but should be precise in its form and relationships. It should be supported by drawings of varying scales and projections which establish in the context of your wider project, through a description of the whole, while also exploring the constructional relationships you seek to resolve, through detailed elaboration of the external face in plan and section. The elaboration of the building section will be particularly important in developing the way in which the interiors of new and existing relate to one another. The moment you are looking at should be agreed upon by next week's tutorial with a sketch version of the model completed the week after. The final, photographed version, and its accompanying drawings, should form part of your P3 presentation.





200

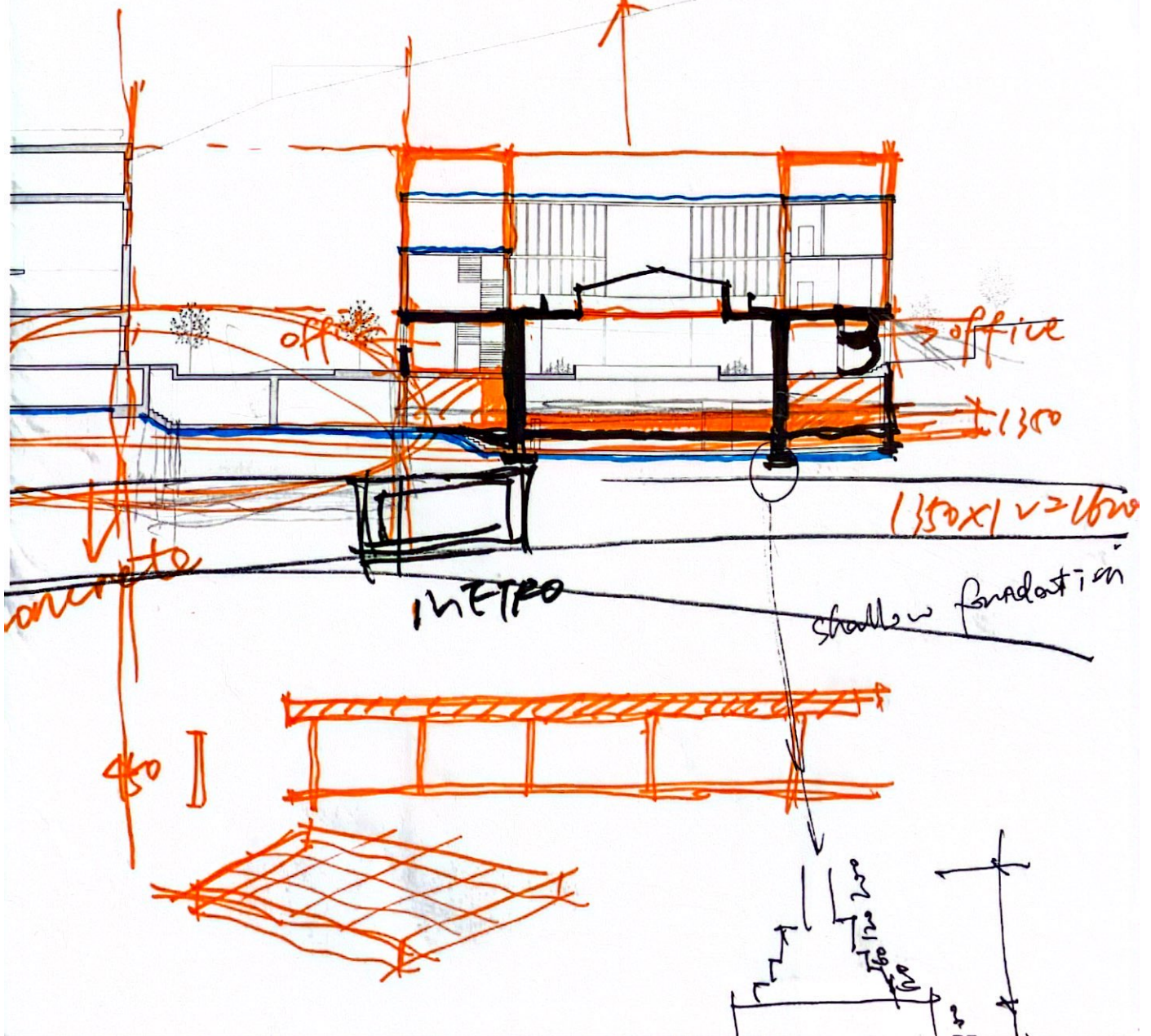


$$1.35 \times 12 = 16.2$$

$$1.35 \sqrt{0.10} = 9$$

$$4.28/1.2$$

STEEL

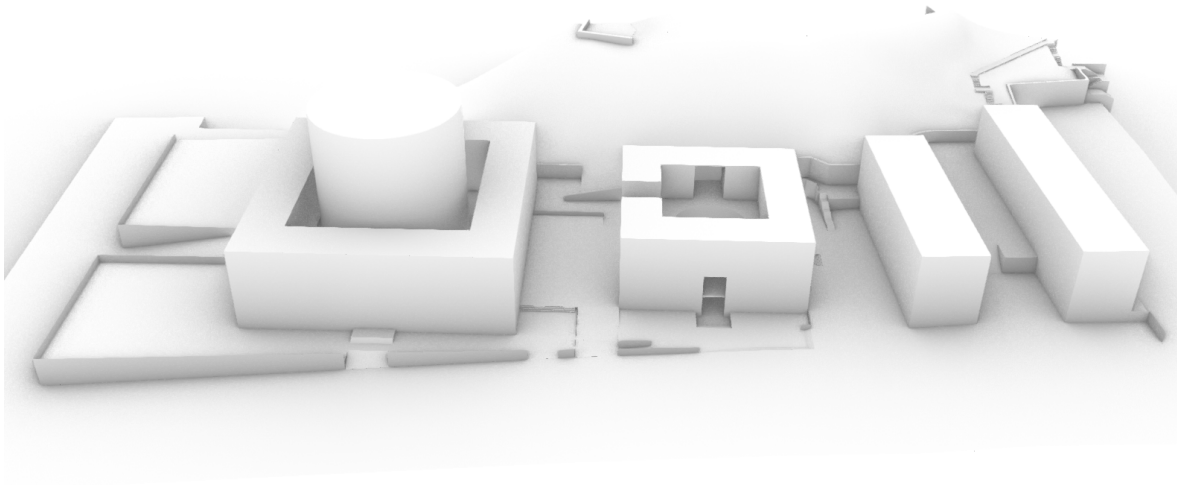


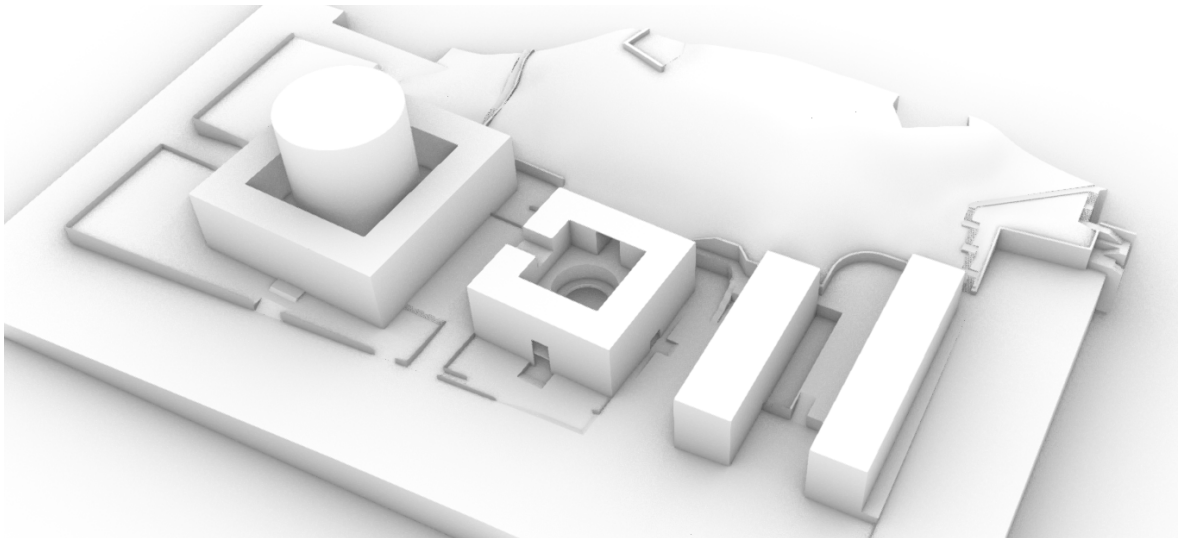
To avoid the metro, I elevated the new library by 3 meters from P2, and based on this, reorganized the circulation and functions across different levels.

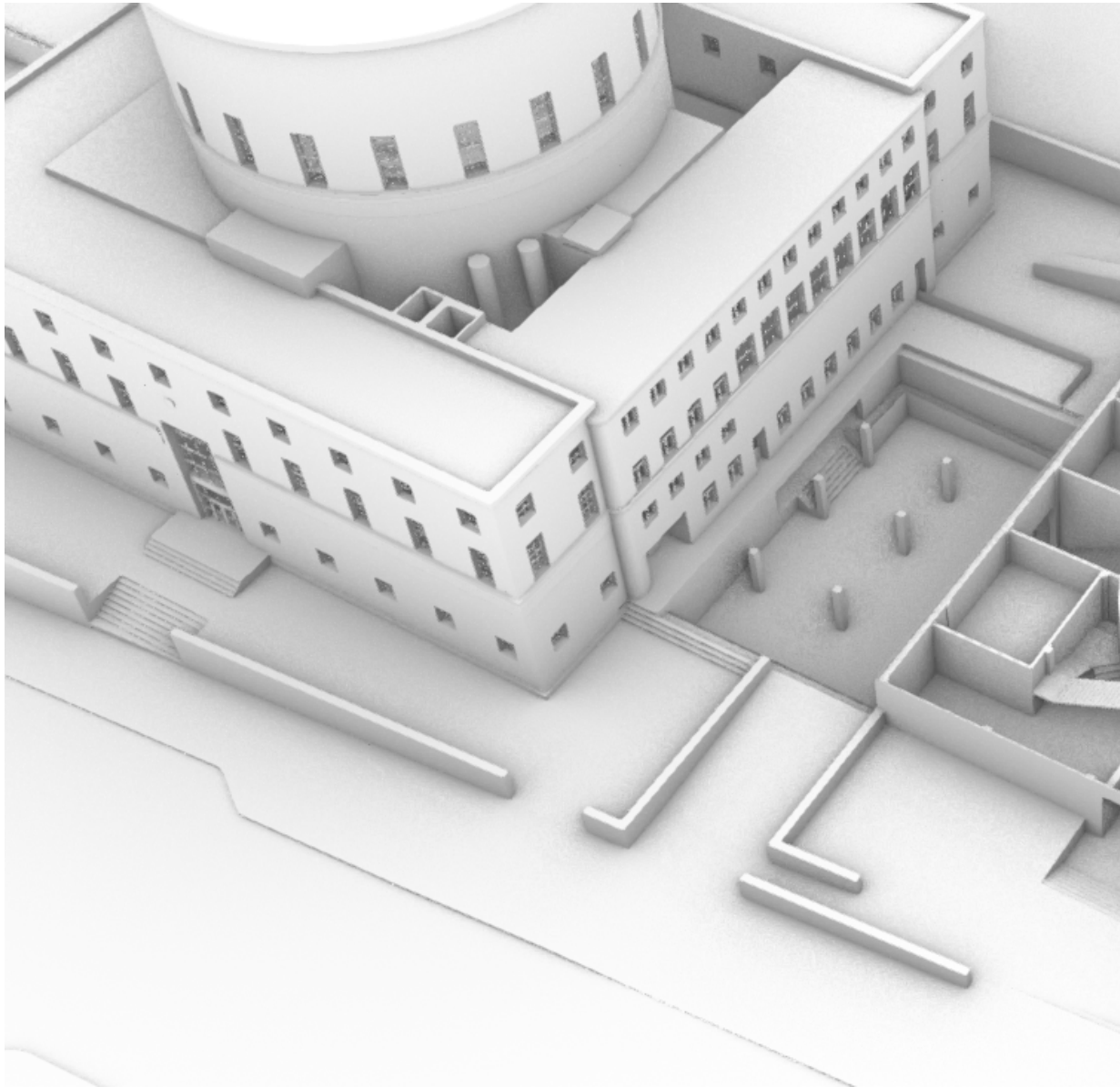
Week 3.2

# Design

Massing

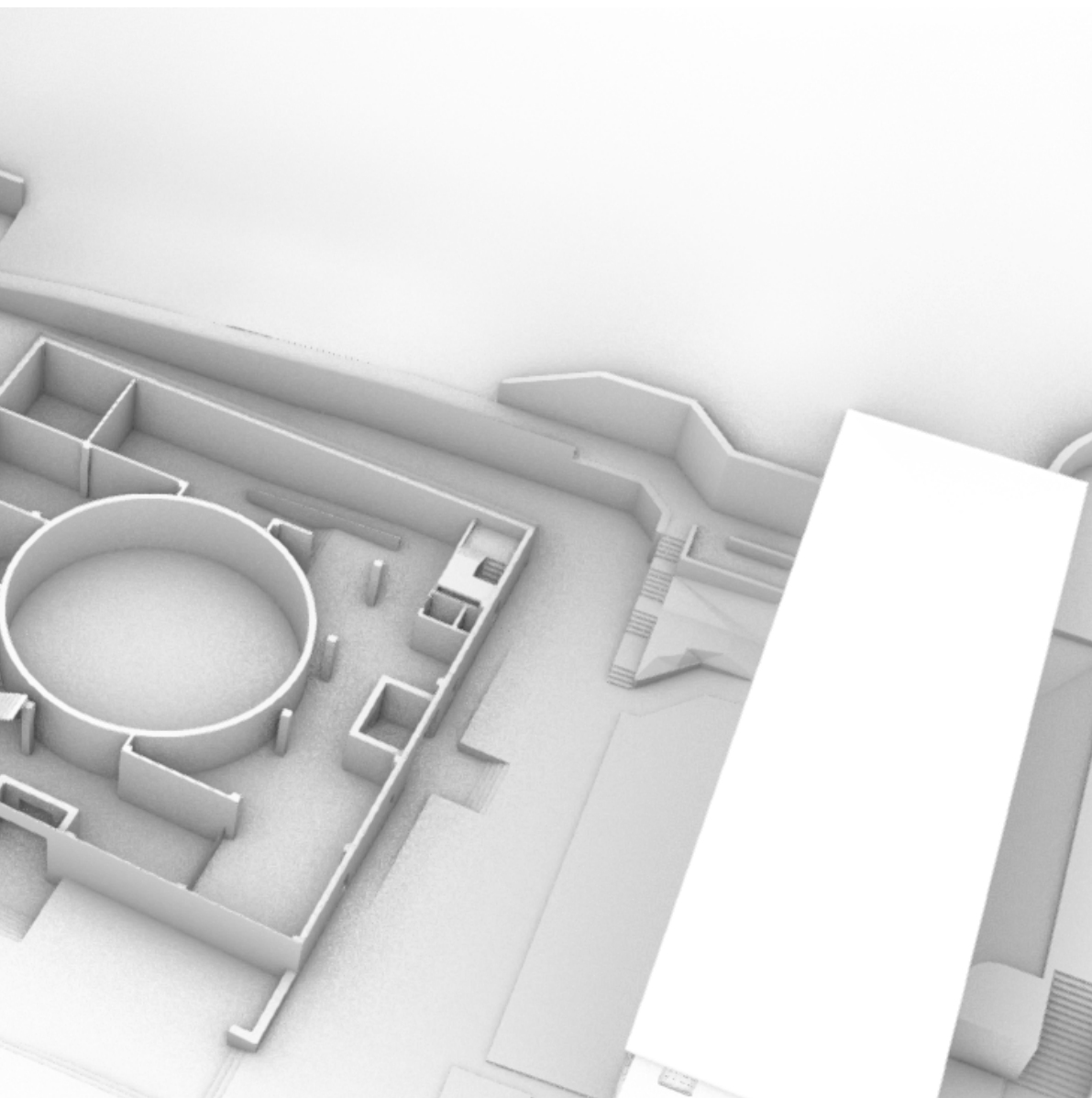


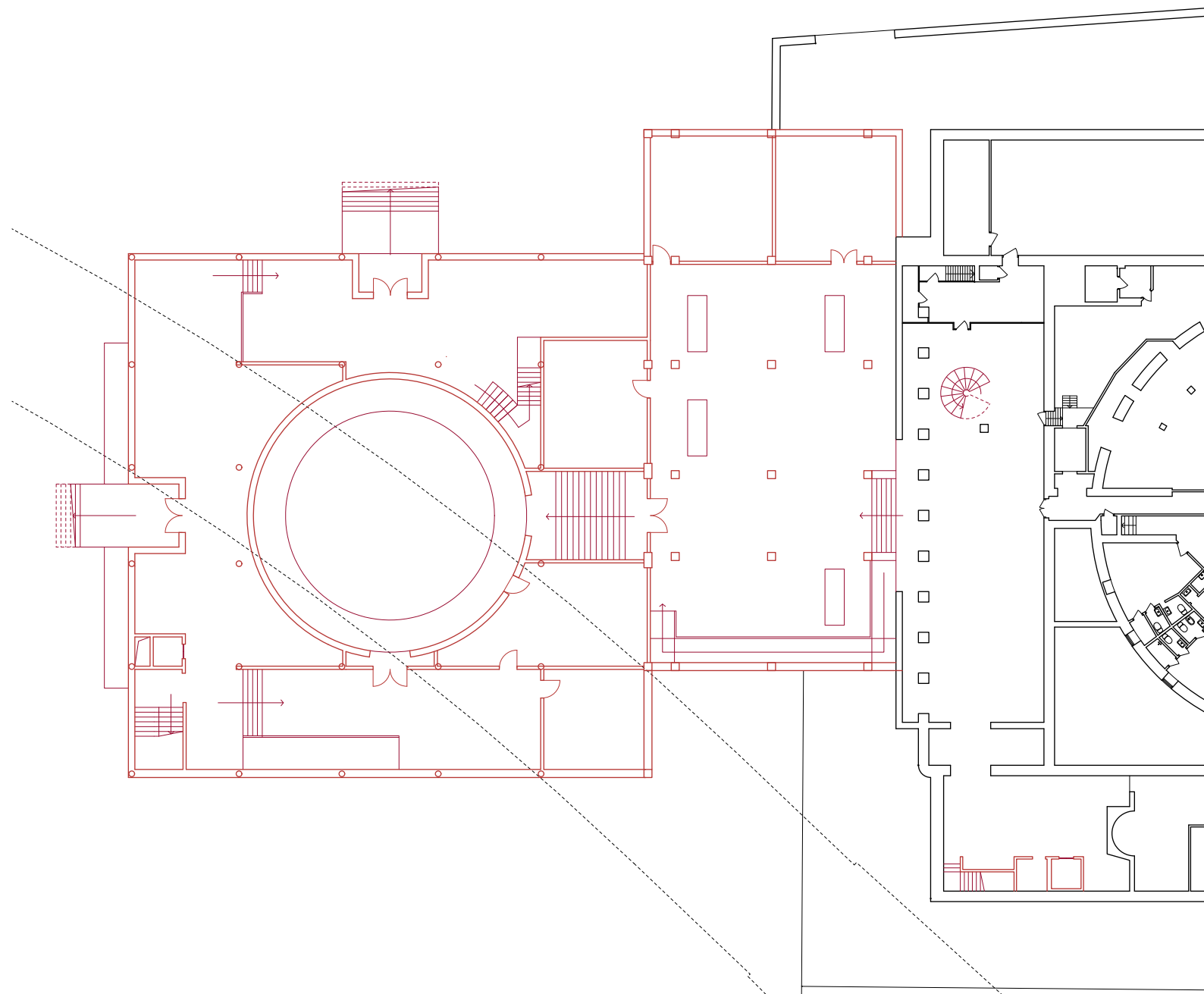


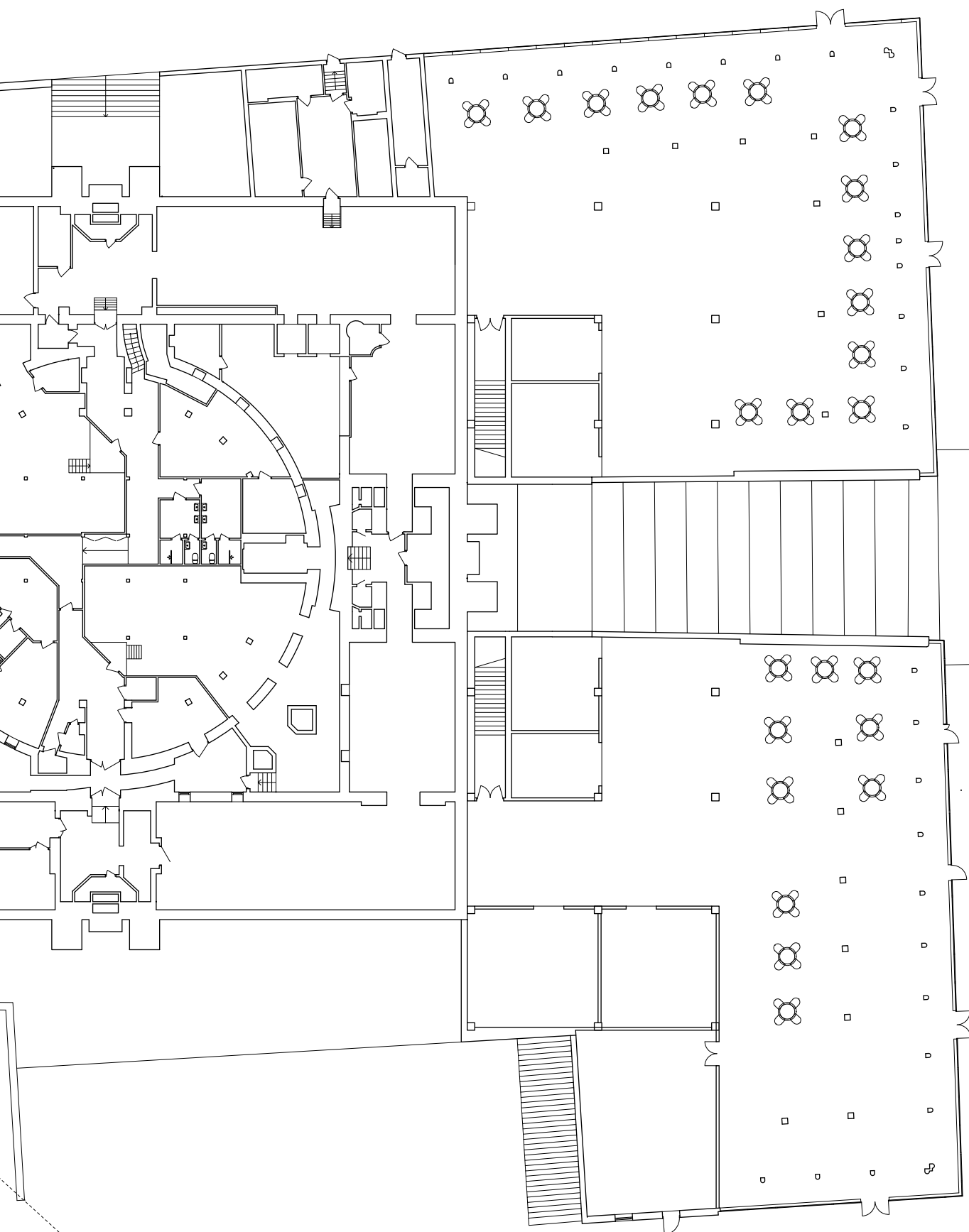


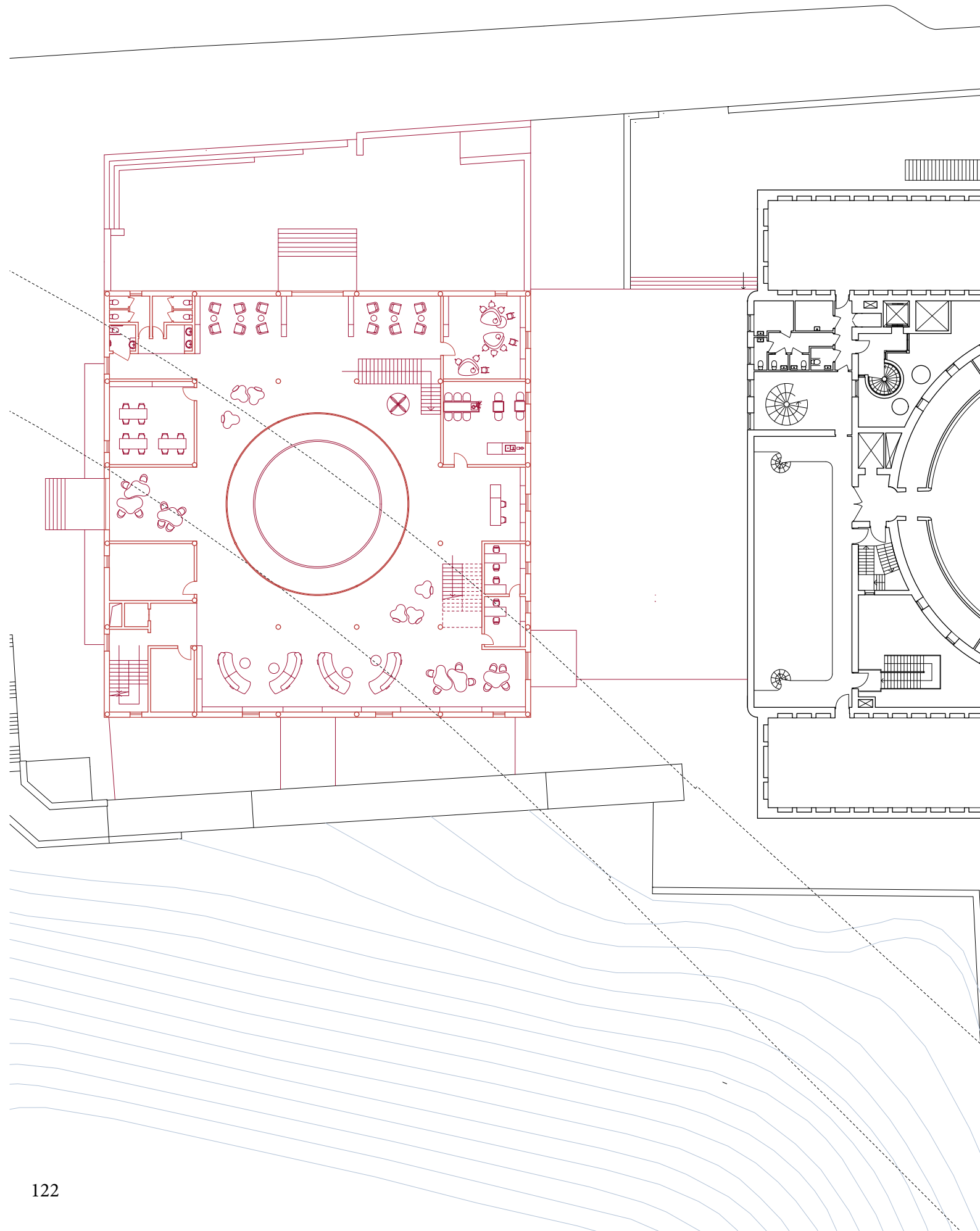
Due to raising the entire building by 2 meters, height differences have been created both inside the building and in the surrounding terrain. I addressed this issue with a series of ramps and steps, but the frequency of these height differences is also something worth considering.

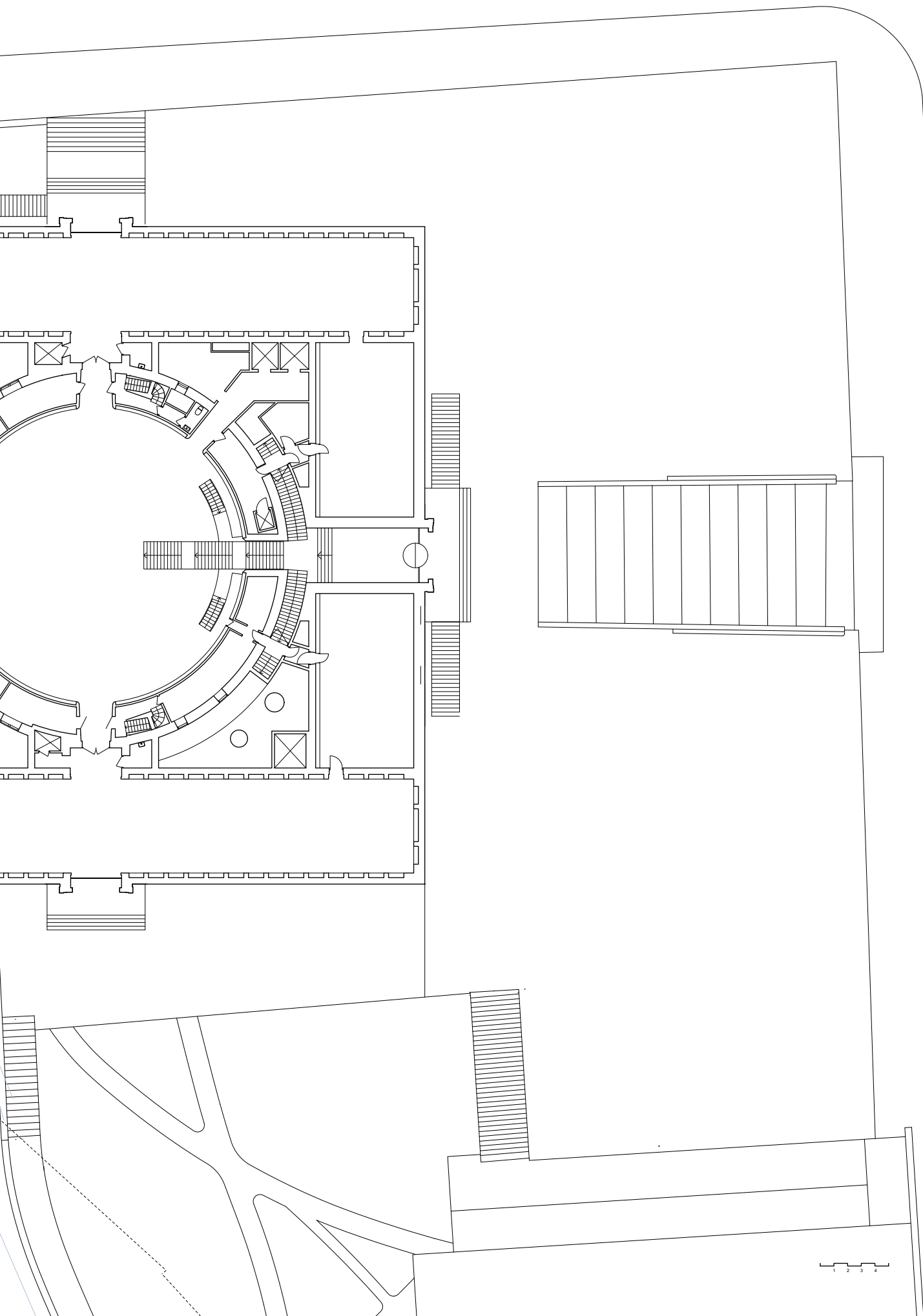


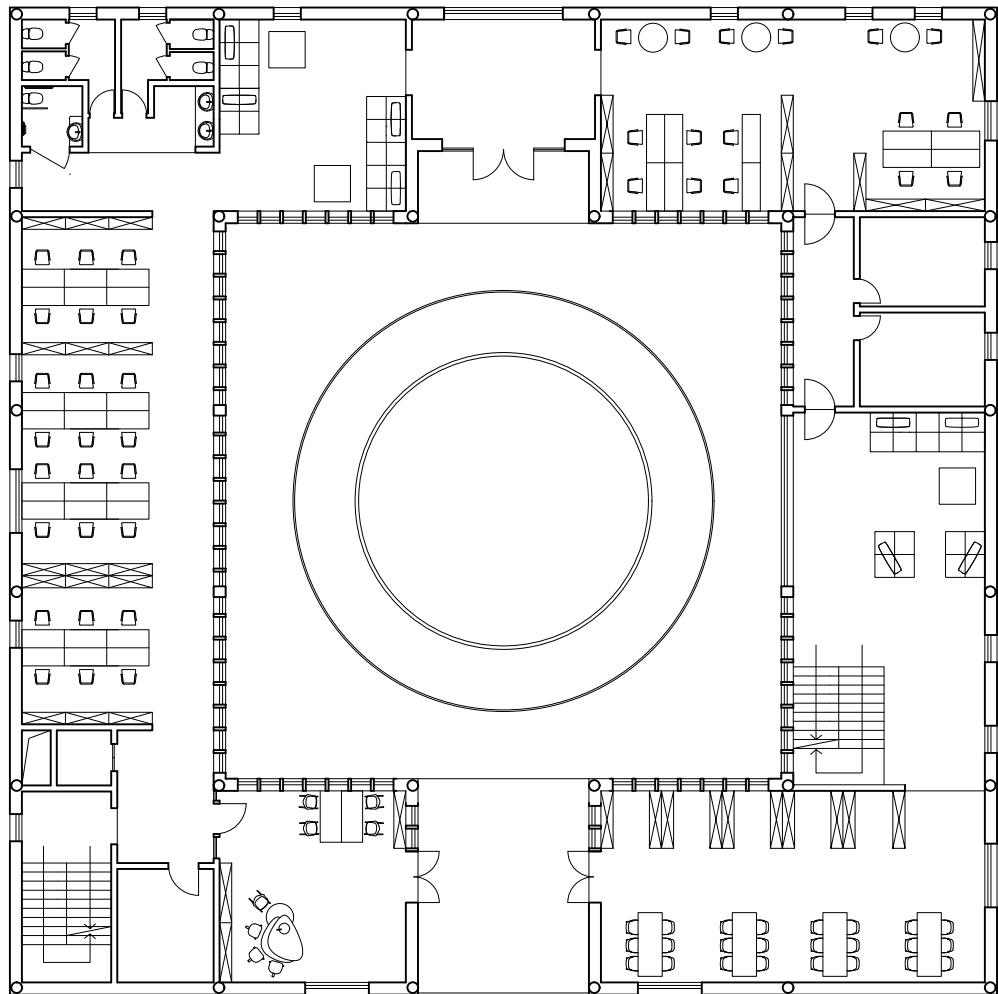




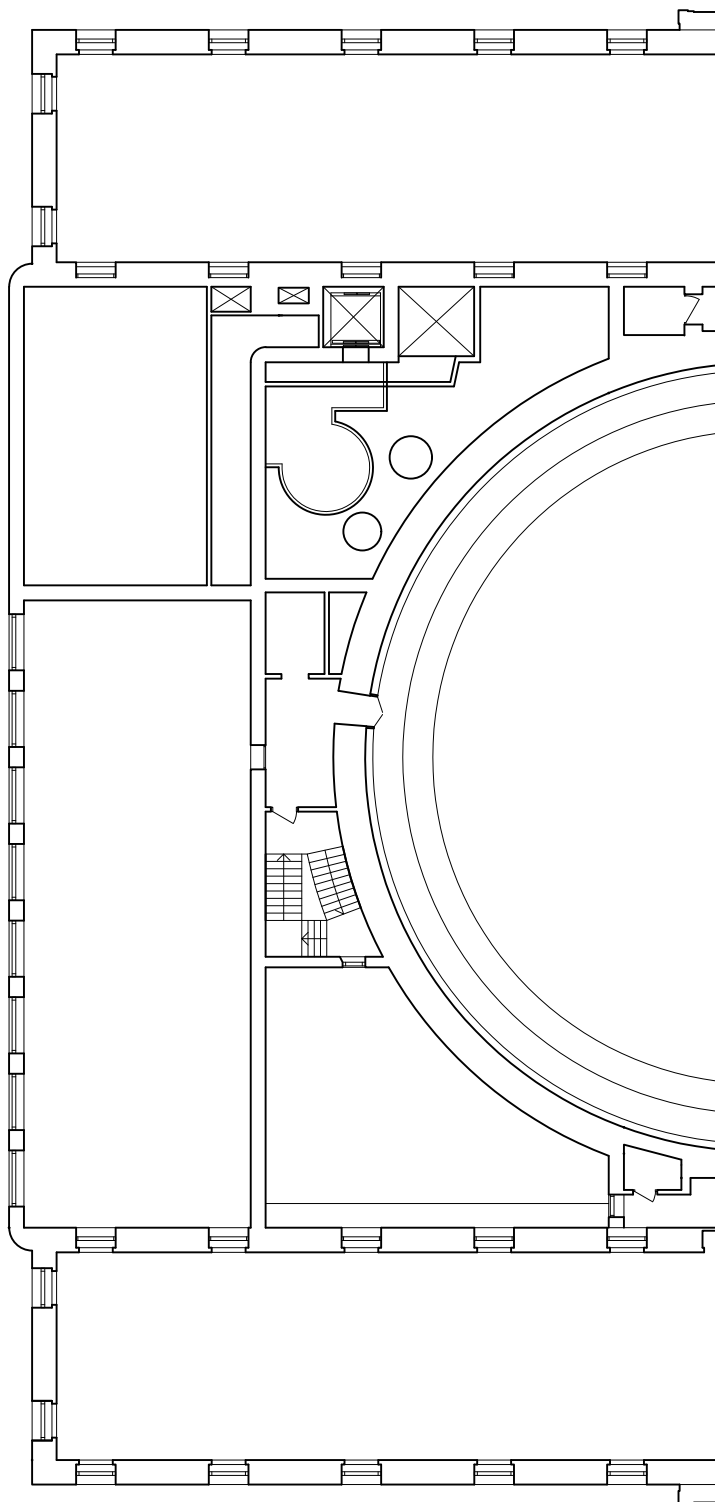


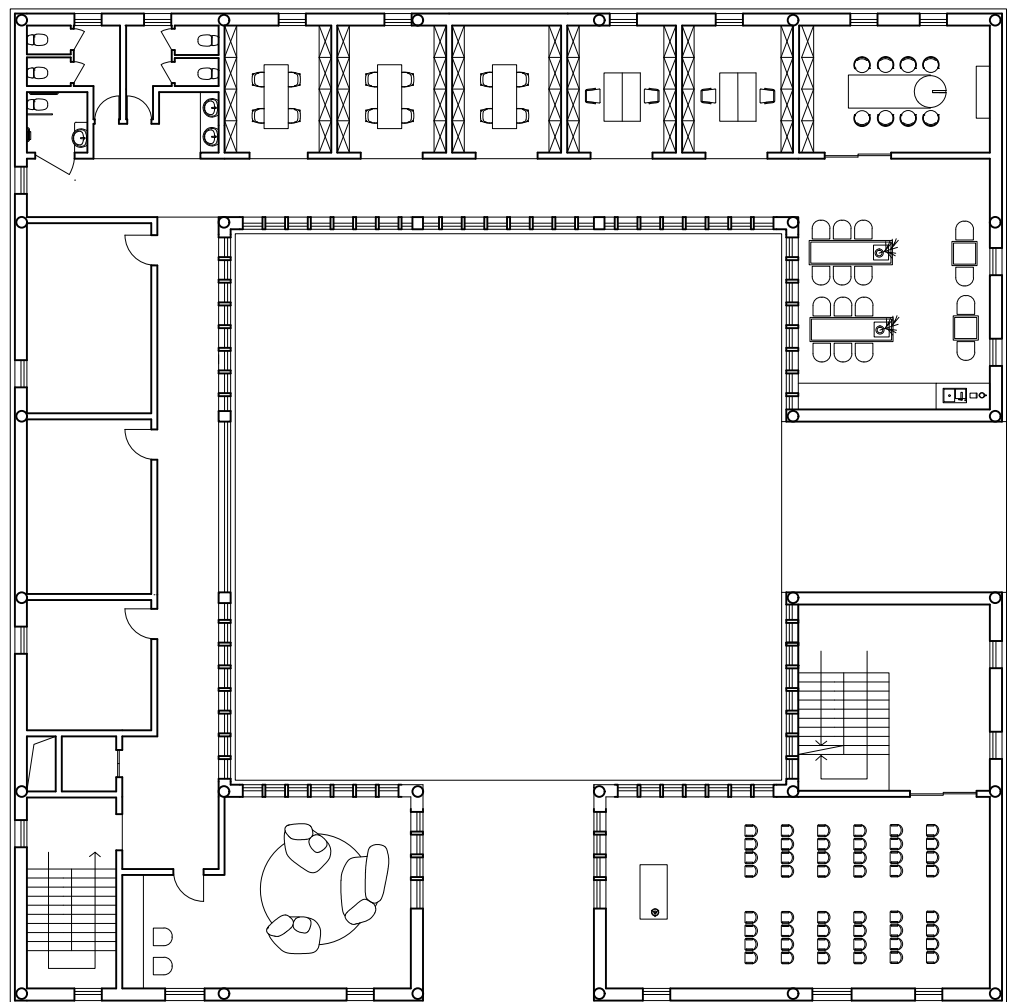


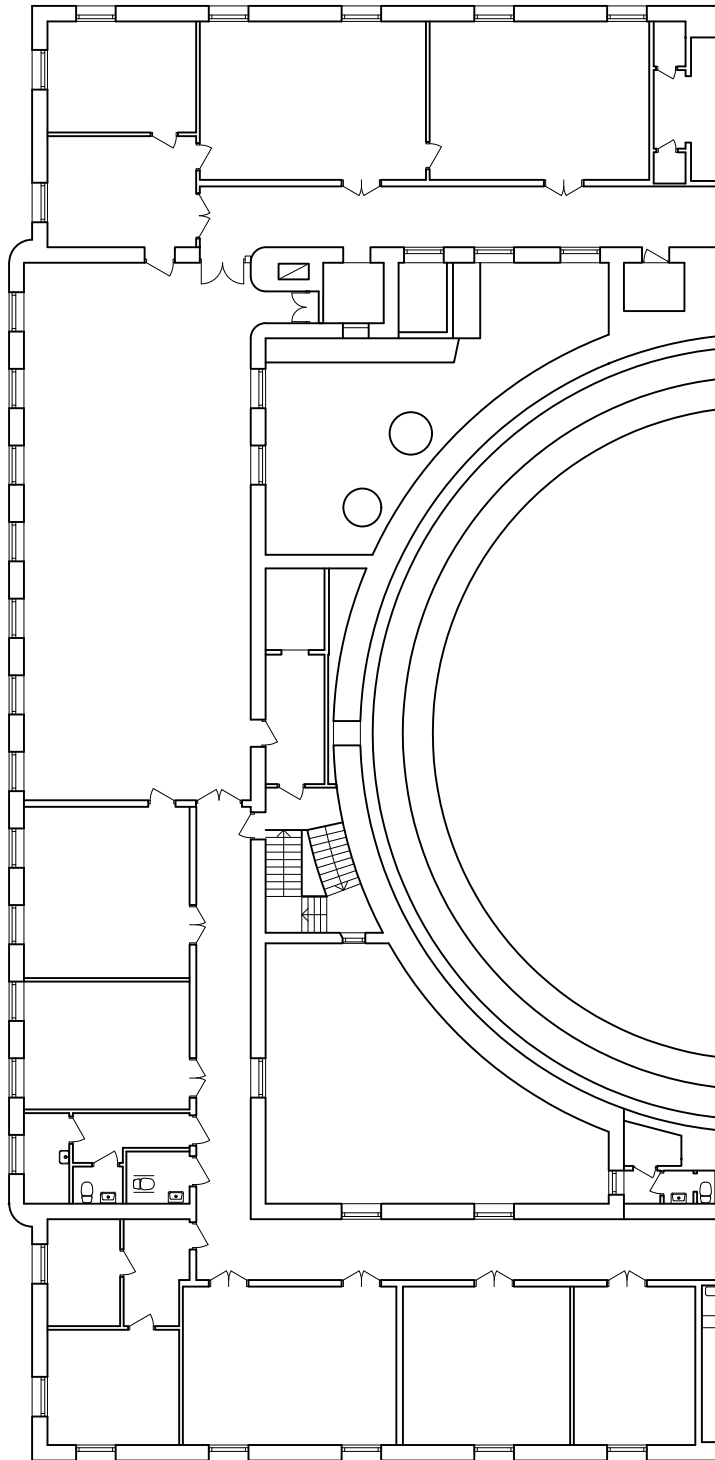


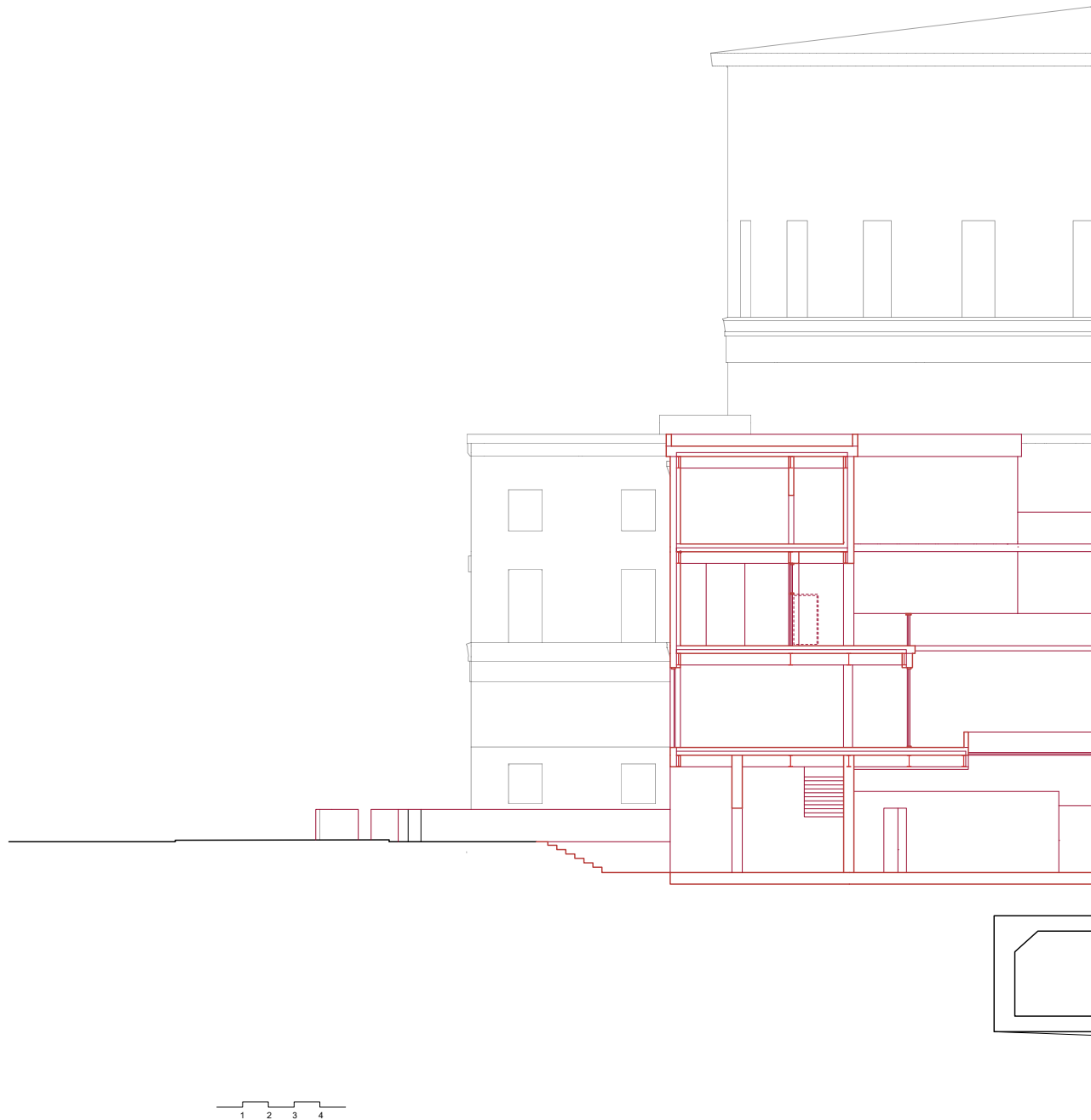




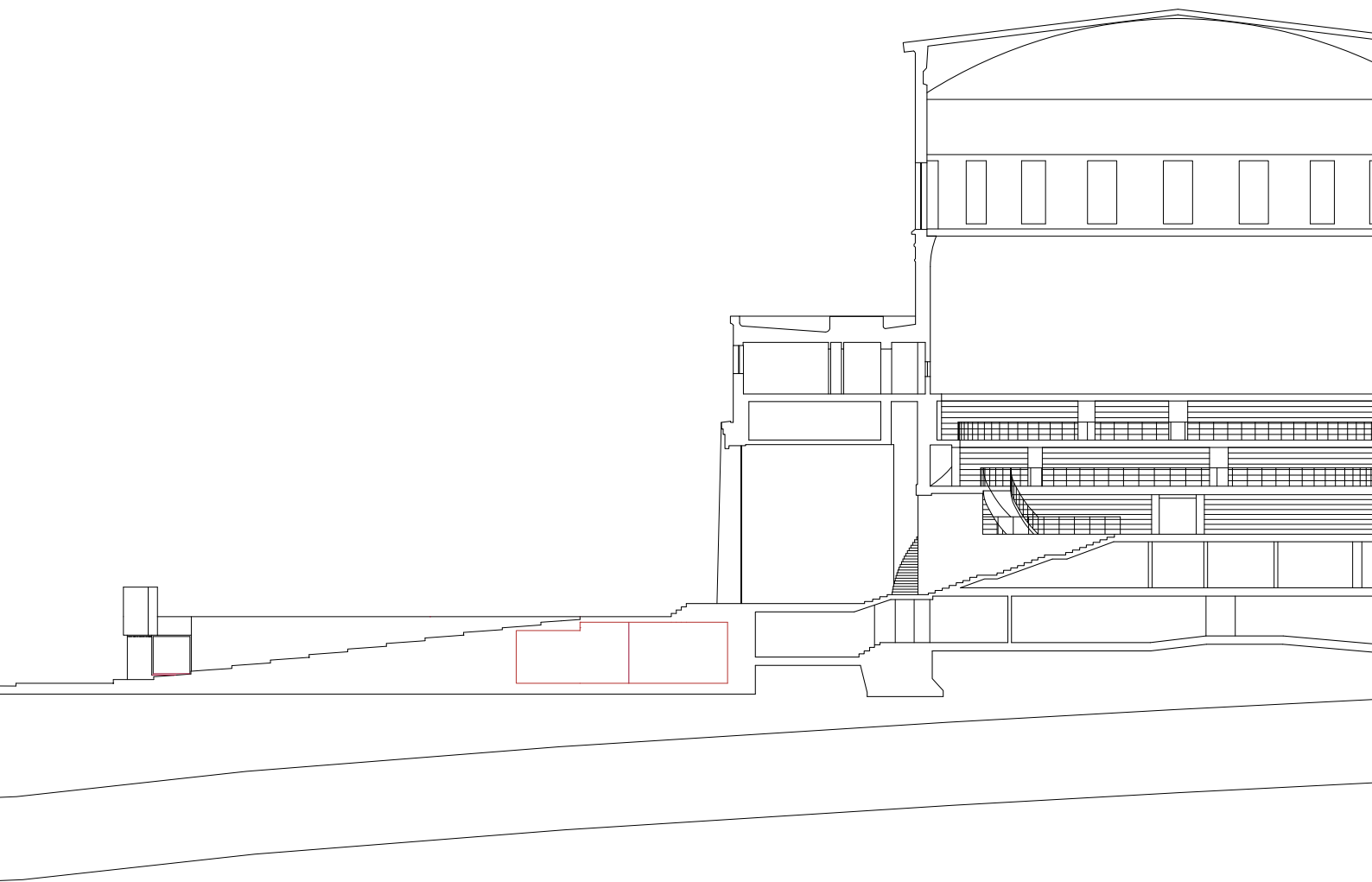




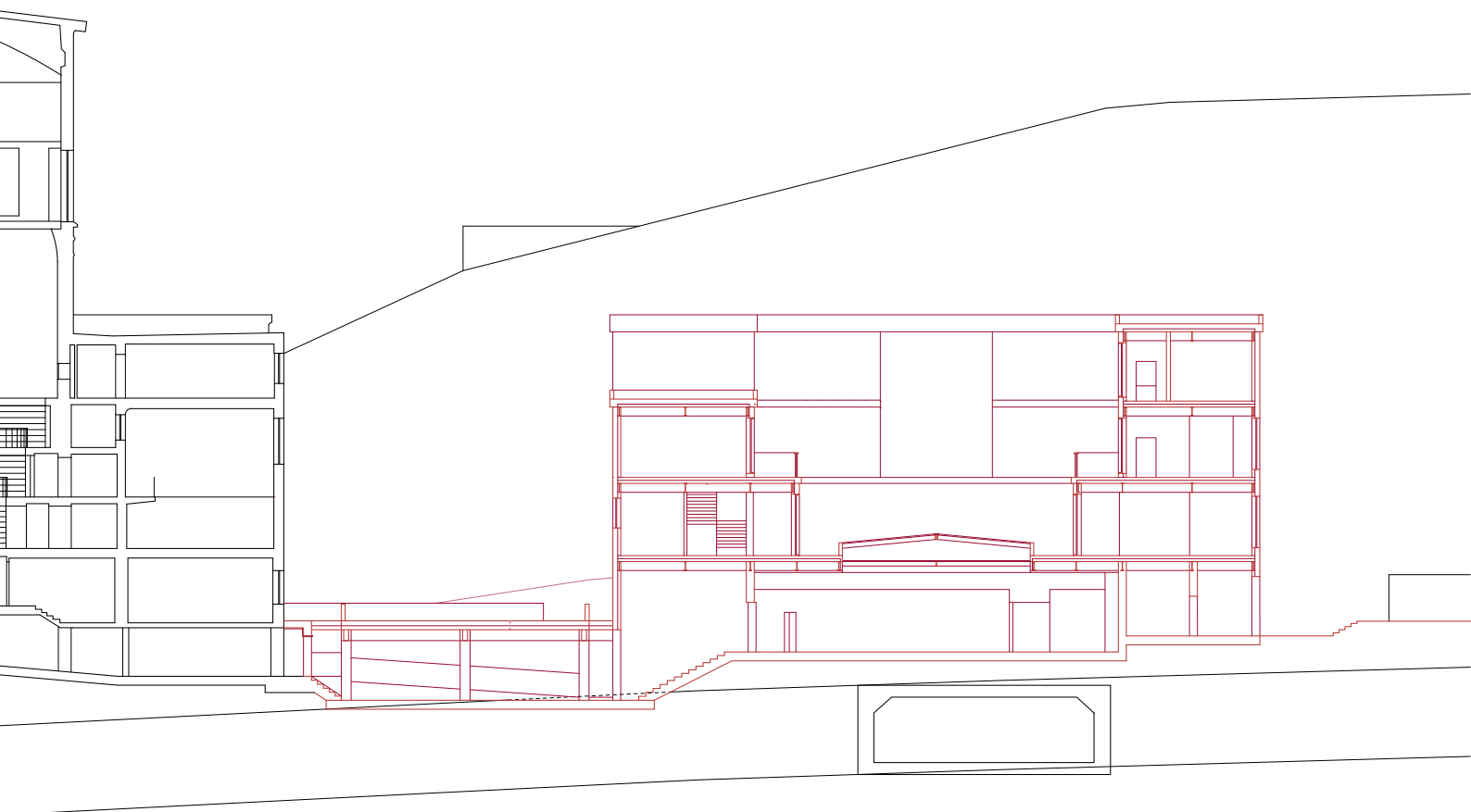












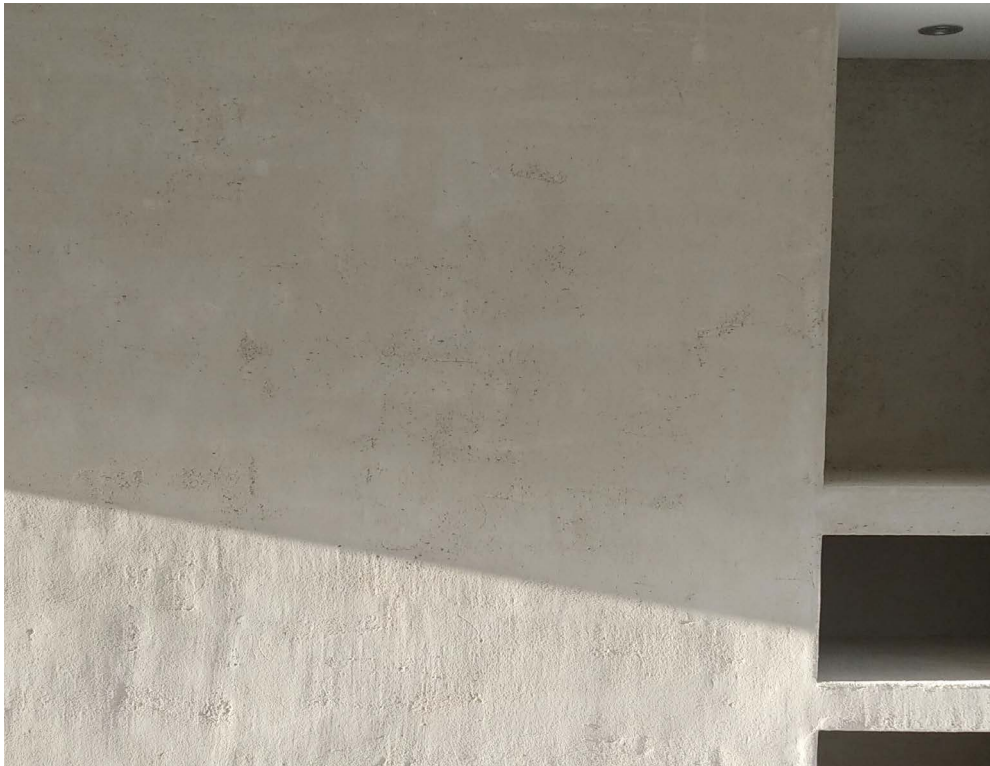
## Week 3.3

### Materiality and Construction Reference

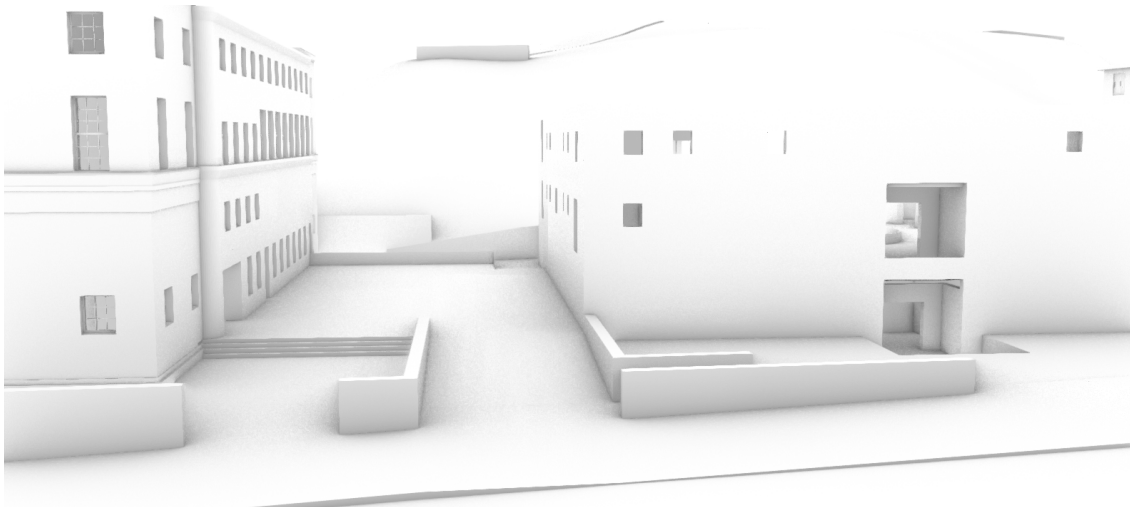
In terms of structural and material choices, I plan to use concrete structures for the underground part and a combination of steel columns, steel beams, and concrete slabs for the new library section. This approach will make the structural components inside the new library more lightweight and provide greater possibilities

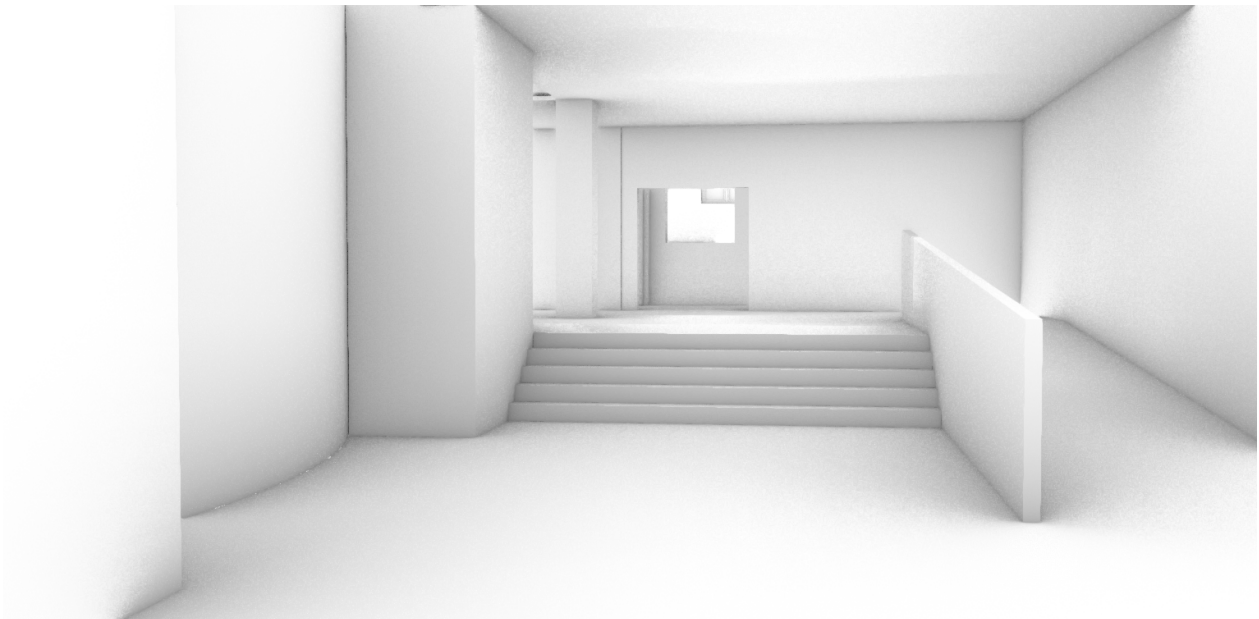
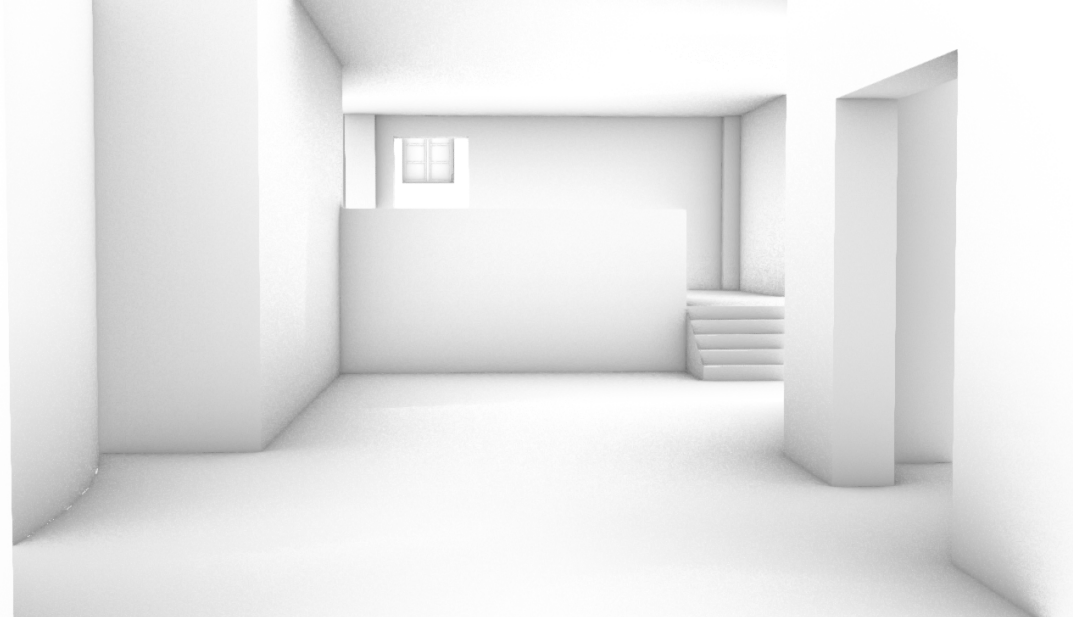






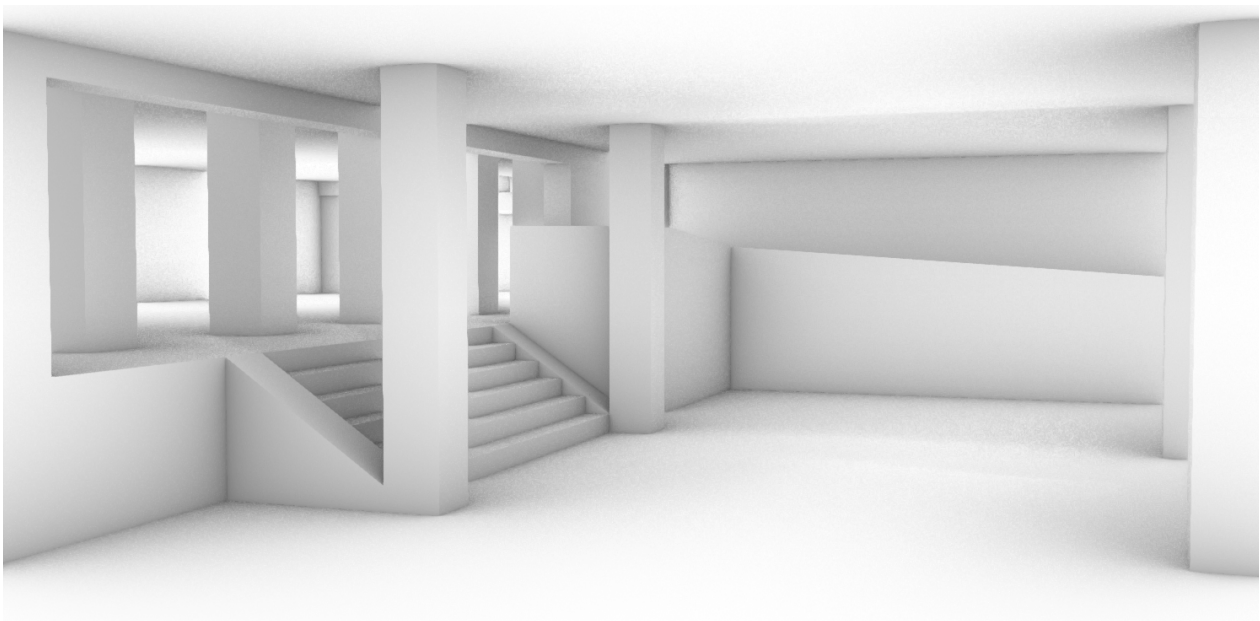
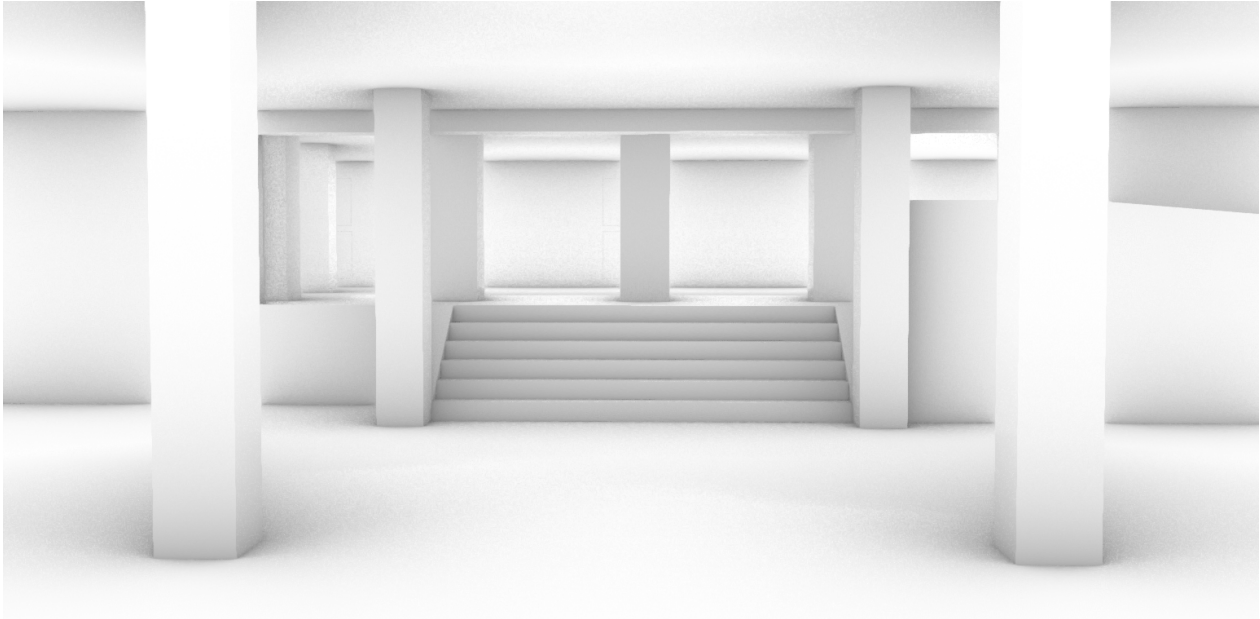
Materiality reference for underground art gallery





View of the lifting space on  
ground floor





View of the sink space in the underground art gallery

# Model

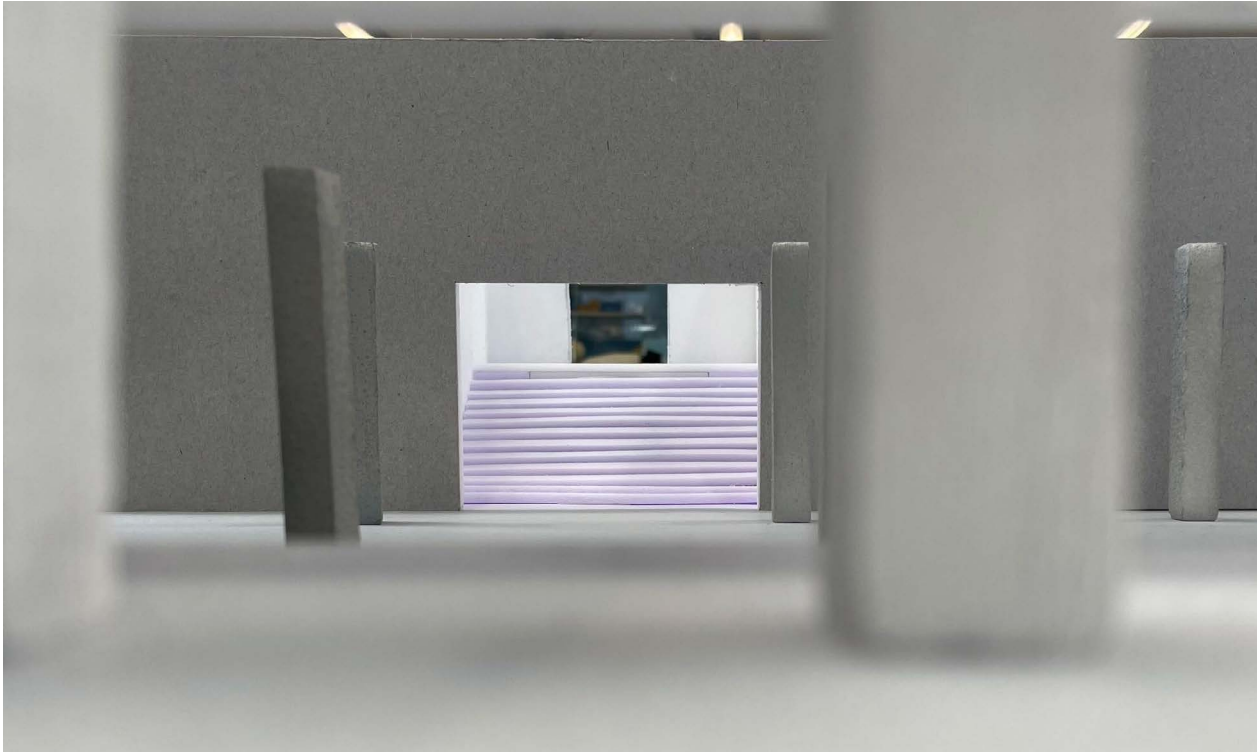


Construction of model

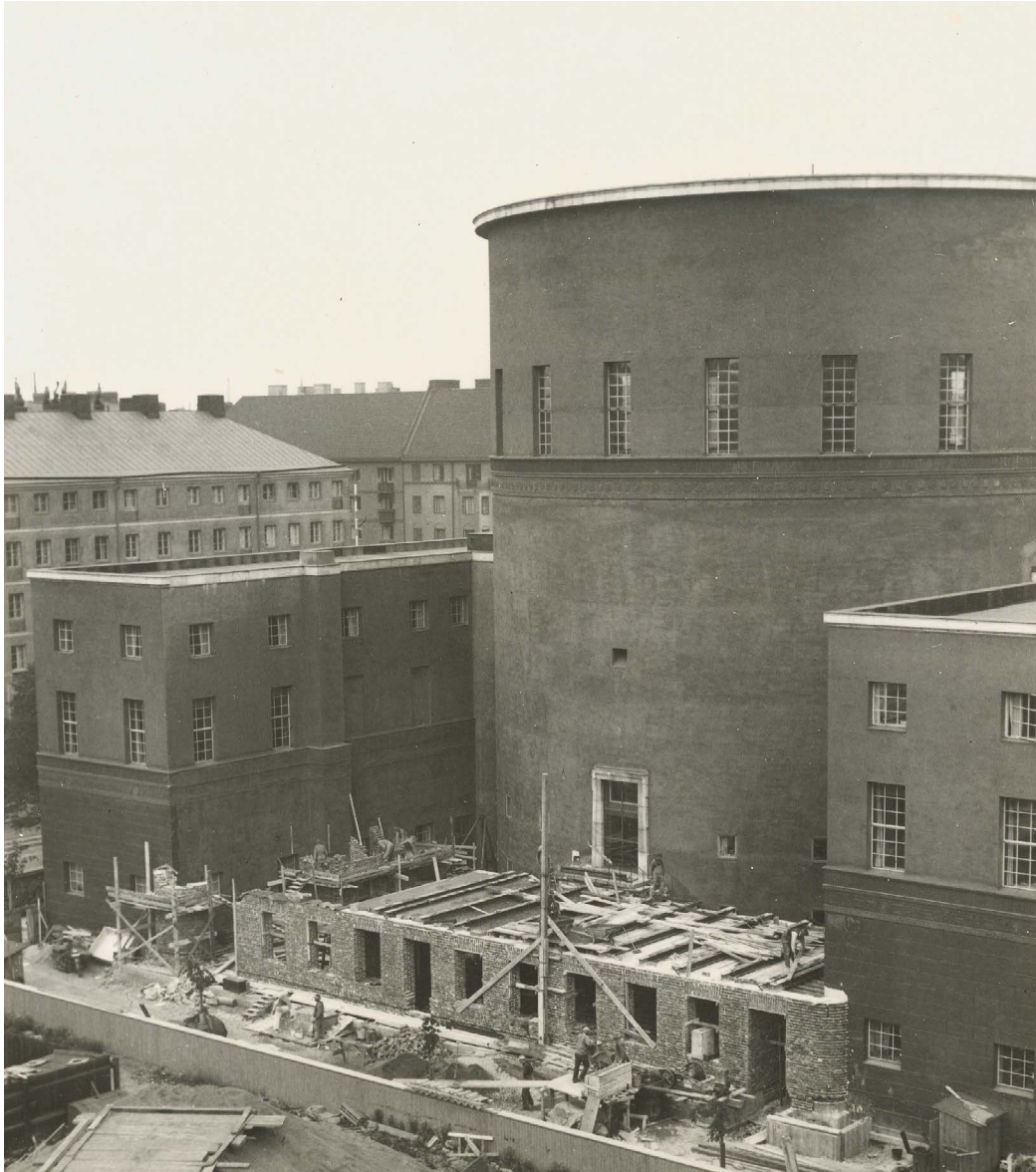


Construction of model



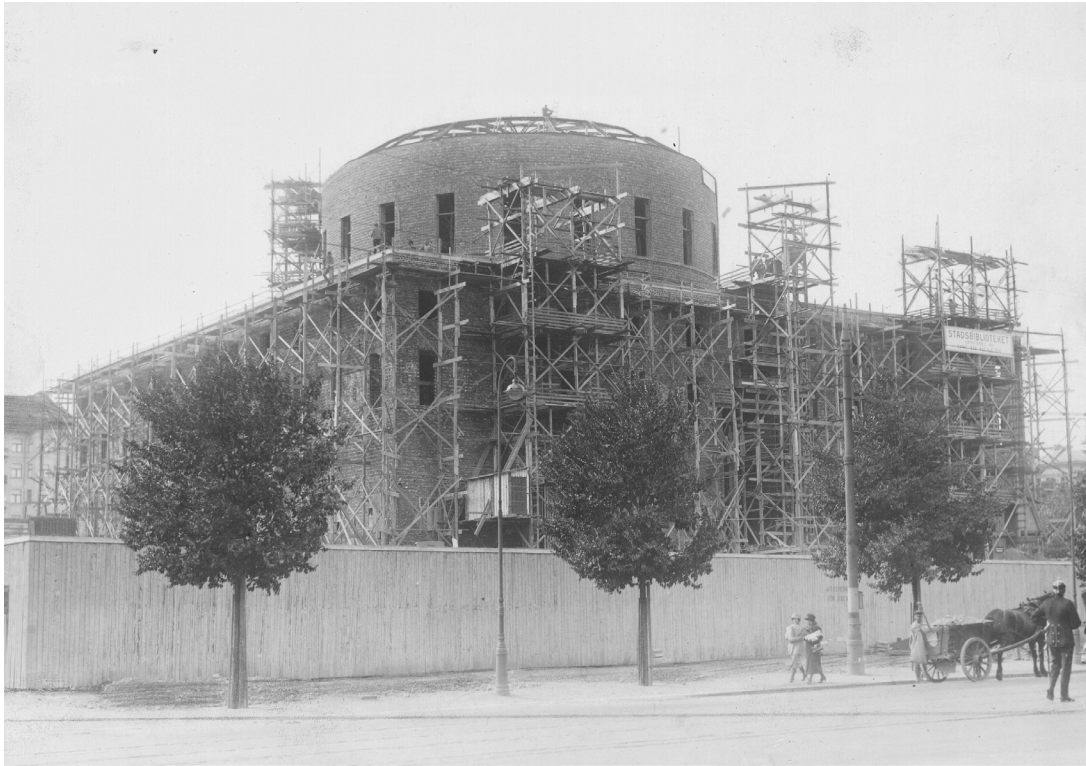


# BT Research

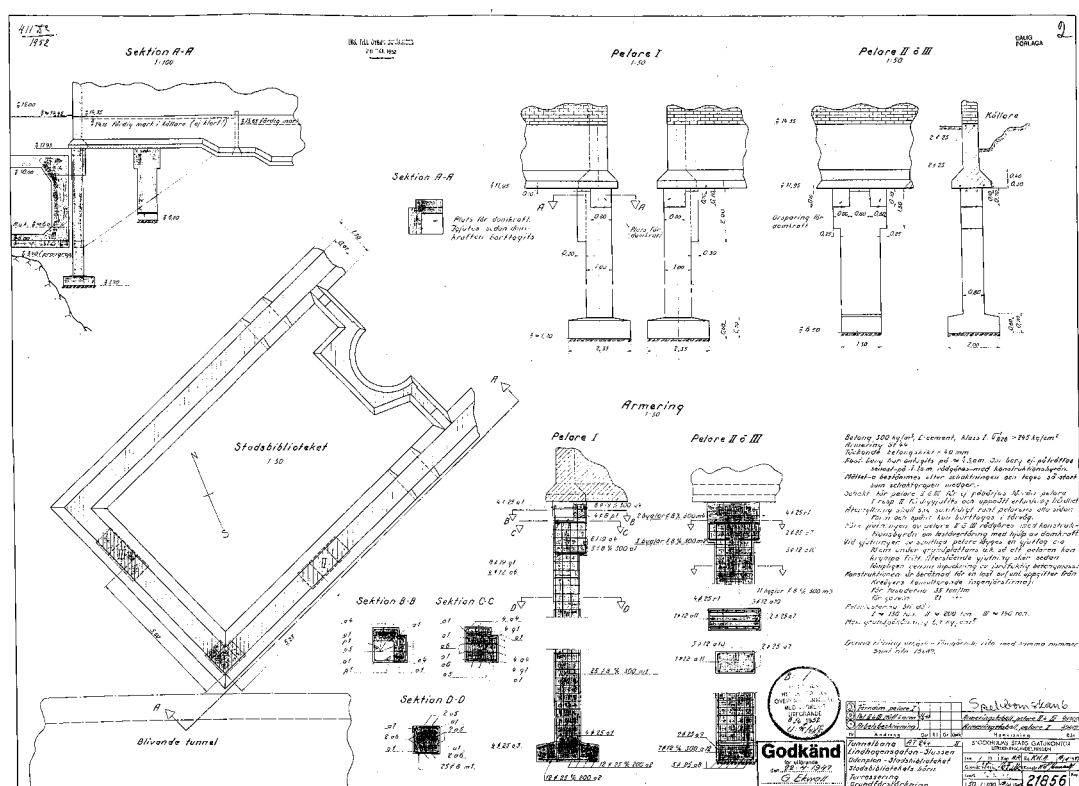


Close up of West Wing (1932)

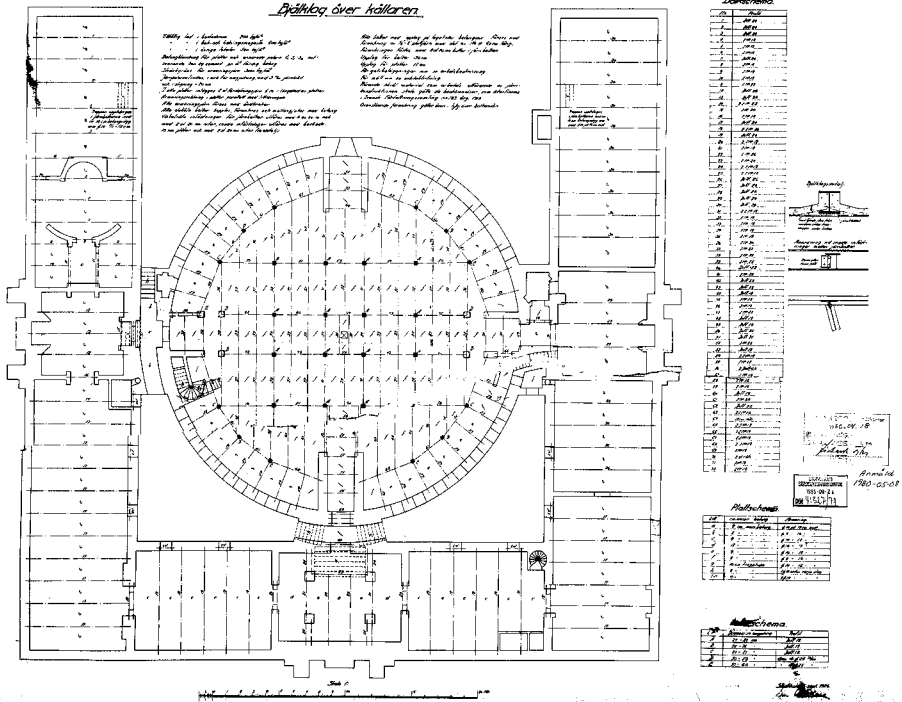




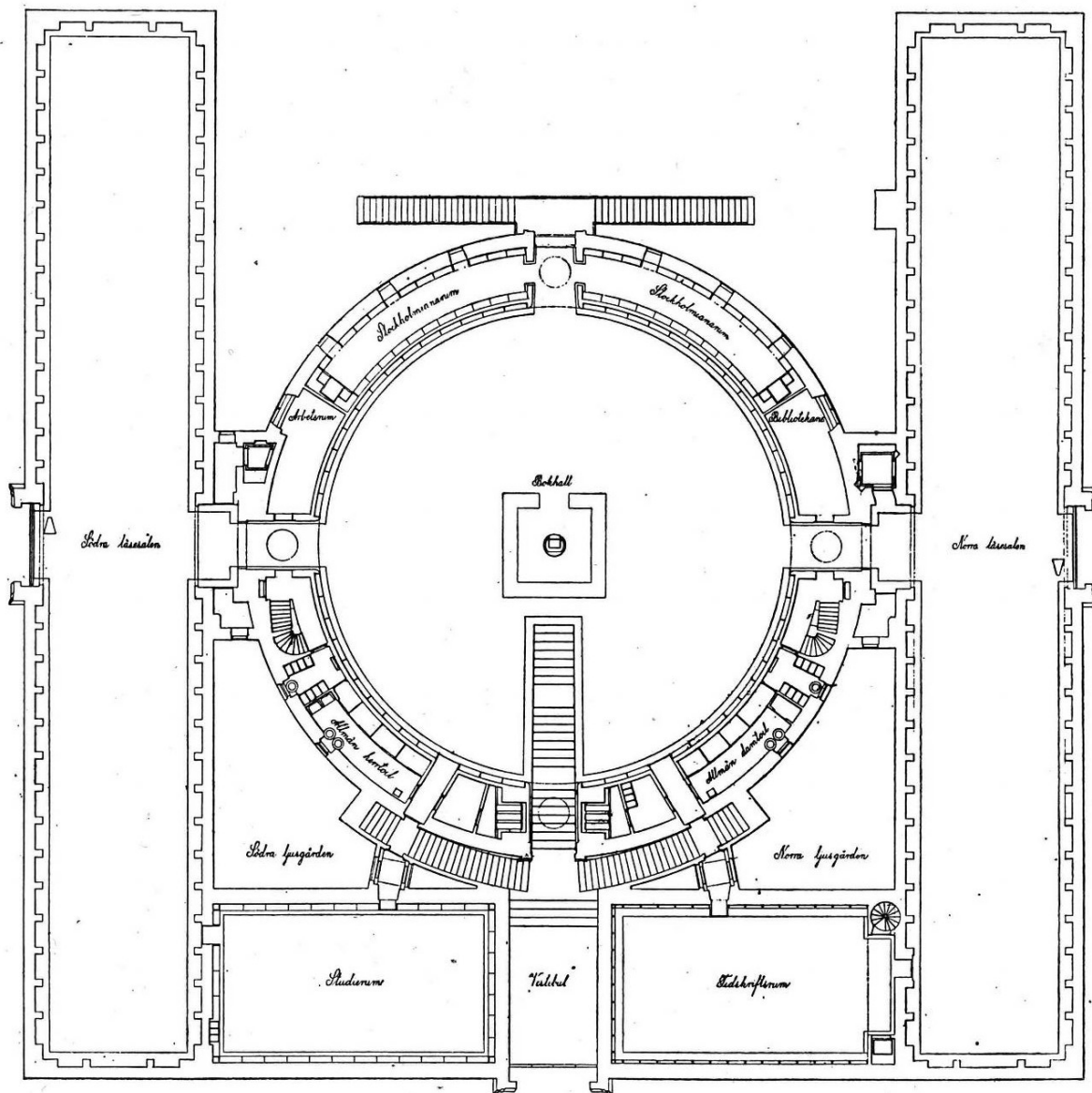
From the construction process photos, it's evident that the original library structure combines brick and steel beam elements. Therefore, in selecting materials for the new library, incorporating bricks is also a viable option.



Stockholms Stadsbibliotek. Kv. Bryggargatan.







1928

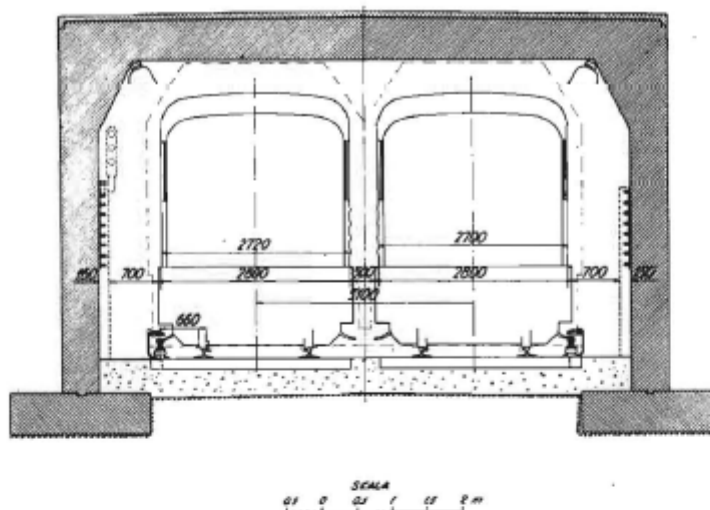


Bild 2. Normalsektion för tunneln.

tion, som alltså följes vid måttsättning av tunnlar och viadukter och vars normala utseende på raksträcka framgår av bild 2. I kurvor göres erforderliga tillägg för vagnarnas ytter- och innerhäng samt lutning på grund av rälsförhöjningen.

För att maximihastigheten 70 km/h skall kunna hållas, krävs en teoretisk minimiradie av ca 290 m, om rälsförhöjningen tillåtes bli så stor som 200 mm. I praktiken vill man dock i allmänhet ej gå så högt och det är därför önskvärt, att kurvradien ej understiger 400 m. I vissa trånga passager i innerstaden har dock kurvradier på ned till 200 m måst tillämpas, vilket medför hastighetsbegränsning. Dessutom stiger underhållskostnaden för spåret mycket kraftigt vid små kurvradier och denna kostnad bör från fall till fall vägas mot byggnadskostnaderna för att få en bättre kurvstandard. Mellan raksträckor och cirkulära kurvor inlägges övergångskurvor.

Långa och branta nedförslutningar kan minska tågens retardationsförmåga och därigenom öka den erforderliga bromssträckan vid nödbromsning, så att hastighetsrestriktioner blir nödvändiga, om den önskvärda tågtätheten skall hållas. Branta uppförslutningar, särskilt vid start från stationerna, ökar strömkostnaderna eller minskar accelerationen. Maximilutningen 1:25 bör därför tillämpas endast, då så är absolut nödvändigt. Ur driftekonomiska synpunkter bör stationerna läggas på höjdpunkter i banprofilen. Mellan olika lutningar inlägges vertikalkurvor, som helst ej bör ha mindre radie än 3 000 m.

Plattformarna har en längd av 145 m, vilket som förut nämnts ger



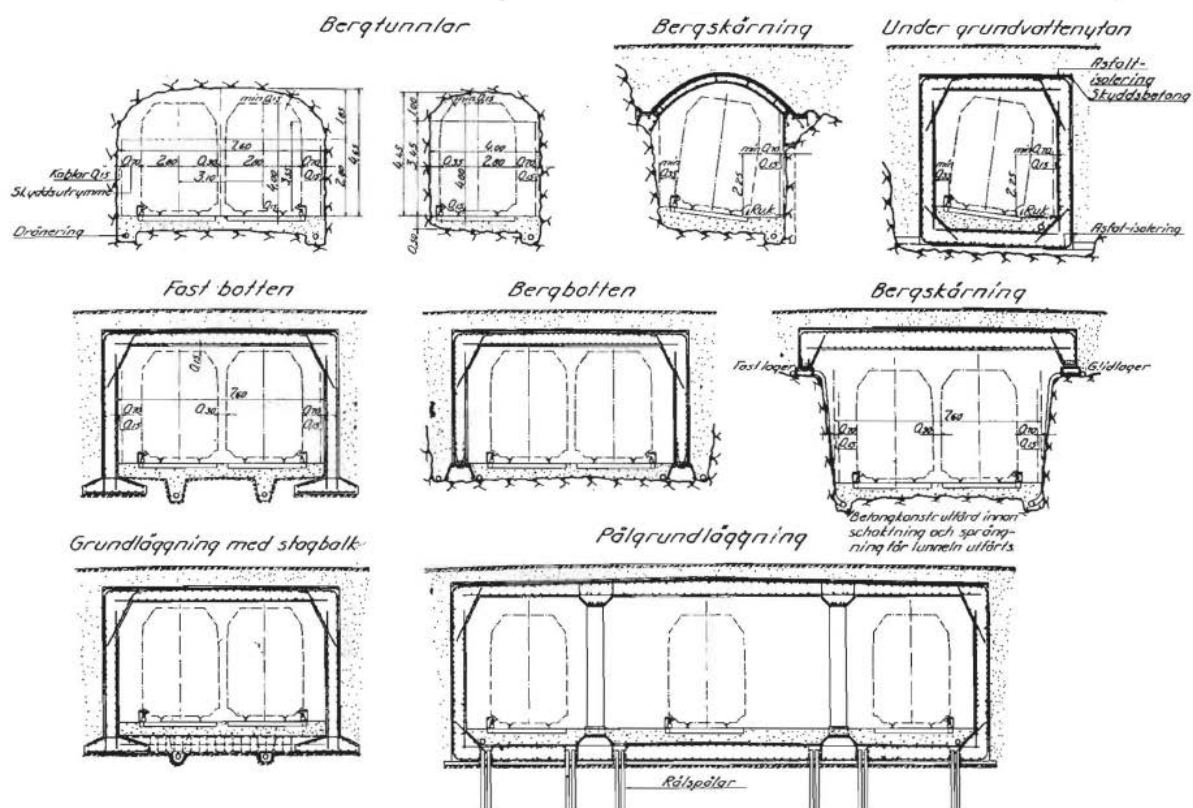


Bild 6. Typiska tvärsektioner.

Metro research

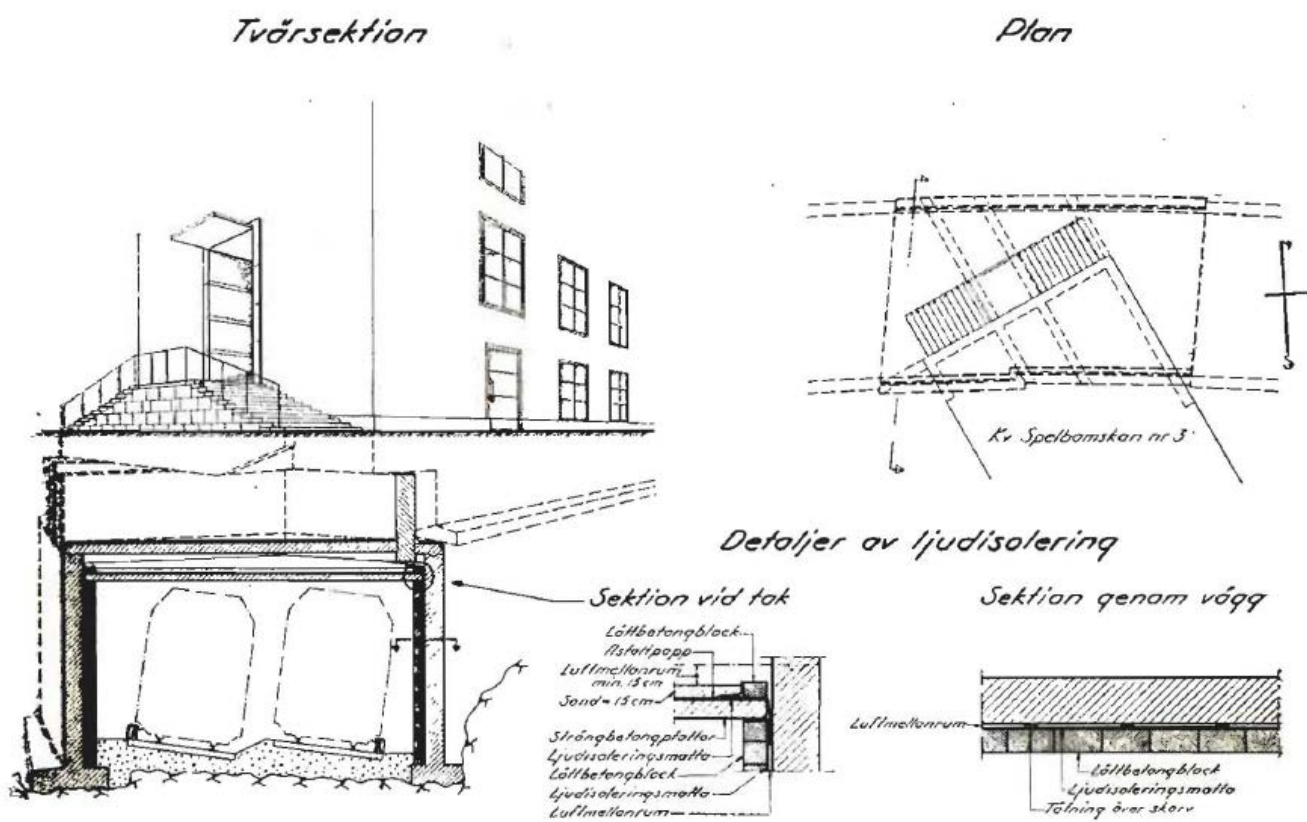


Bild 24. Ljudisolering under kv. Spelbomskan nr 3.

## Foundation and metro

When the existing metro and above-ground structures intersect, the foundation will be placed adjacent to the metro with a shallower base.



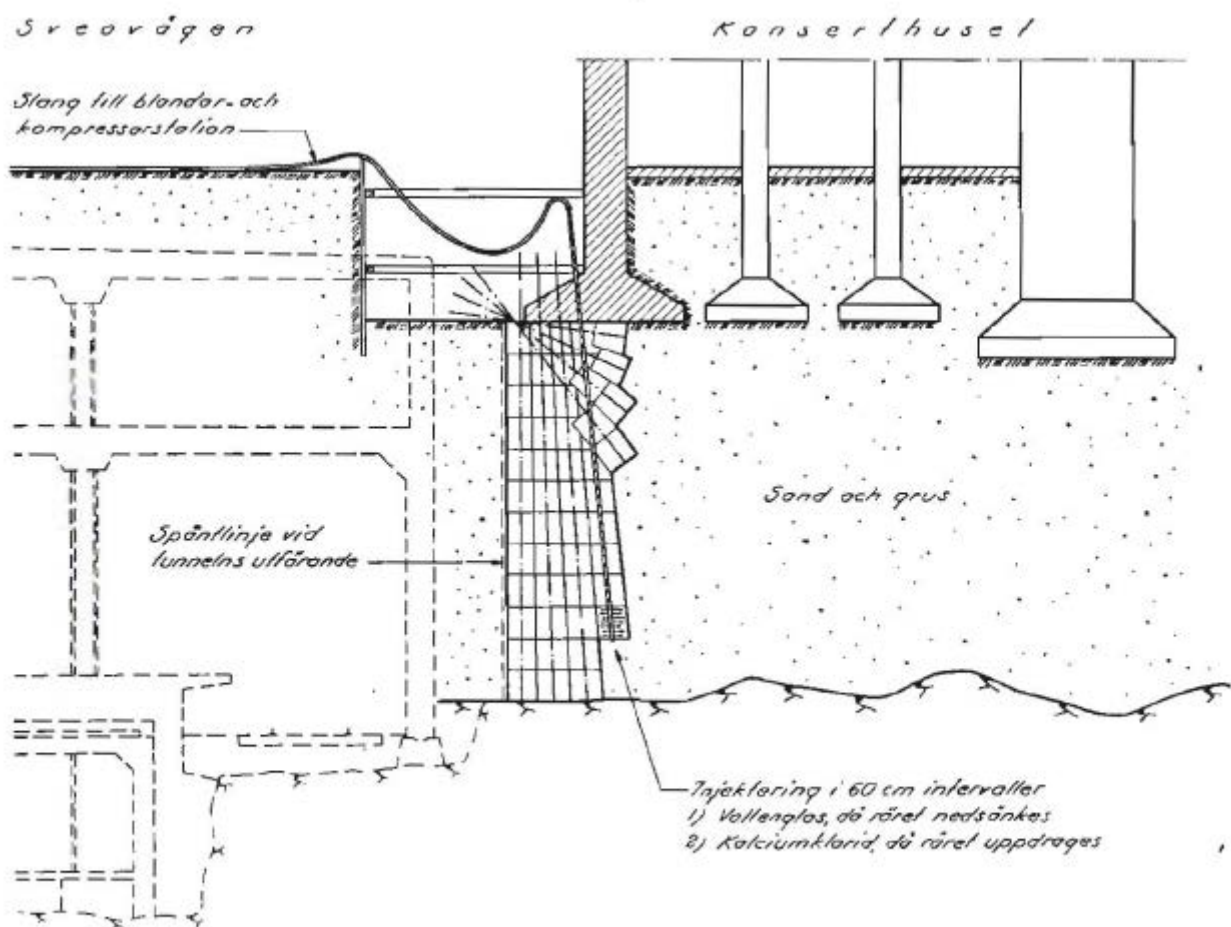
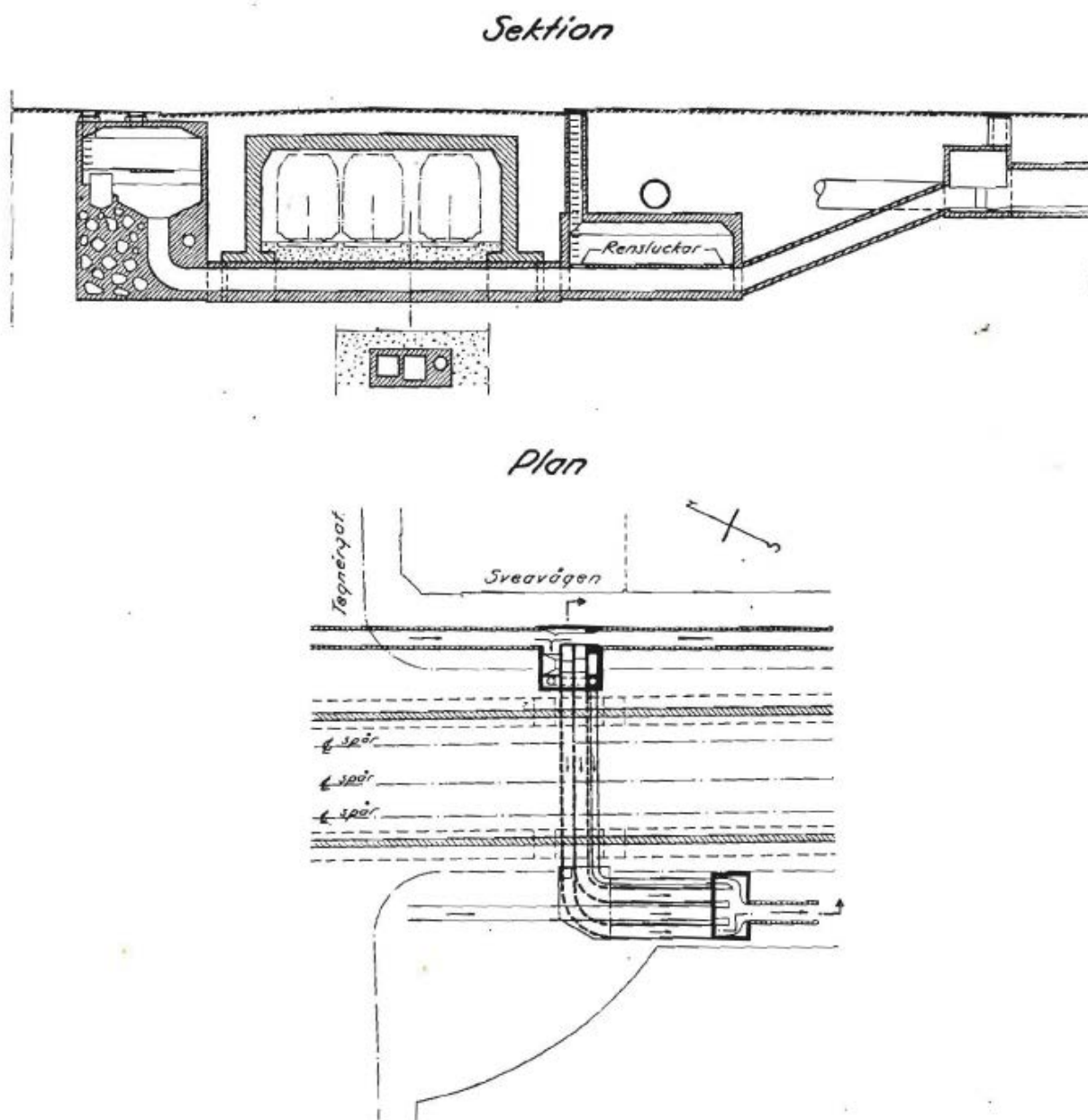


Bild 34. Kemisk grundförstening vid Konserthuset.



*Bild 35. Dykarledning för avloppsvatten vid Tegnérsgatan.*

Drainage system of metro



## EARTH SHELTER & ARCHITECTURE



Figure 1. The Nathan Marsh Pusey Library at Harvard University in Cambridge, Massachusetts, exemplifies an unobtrusive design approach in an historical setting. (Photo courtesy of Hugh Stubbins and Associates, architects)

## Design Considerations for Underground Buildings

John Carmody  
Ray Sterling  
University of Minnesota

**T**his article discusses some design concerns unique to underground buildings or deserving of special attention when applied to a below-grade design. As with any building, a wide range of functional, psy-

chological, and physiological requirements must be resolved in an aesthetically successful manner in an underground structure.

The article is divided into two major parts. In the first part some key prob-

lems inherent in underground building design are identified. These include the functional concerns of building recognition and orientation as well as psychological and physiological problems associated mainly with windowless environments. Also discussed in this part is the impact of building use on these problems. The second part of the article presents typical design responses to these problems and focuses on the exterior image of an un-

John Carmody is an architect and Associate Program Director of the Underground Space Center at the University of Minnesota, Twin Cities. Dr. Raymond Sterling is Director of the Center.

This article is a revised version of material first published in *Underground Building Design* (New York: Van Nostrand Reinhold, 1983, All Rights Reserved) and is reprinted here with permission.





UNDERGROUND ARCHITECTURE  
*Connections Between Ground-Level Public  
Space and Below-Ground Buildings*

AIMEE WRIGHT

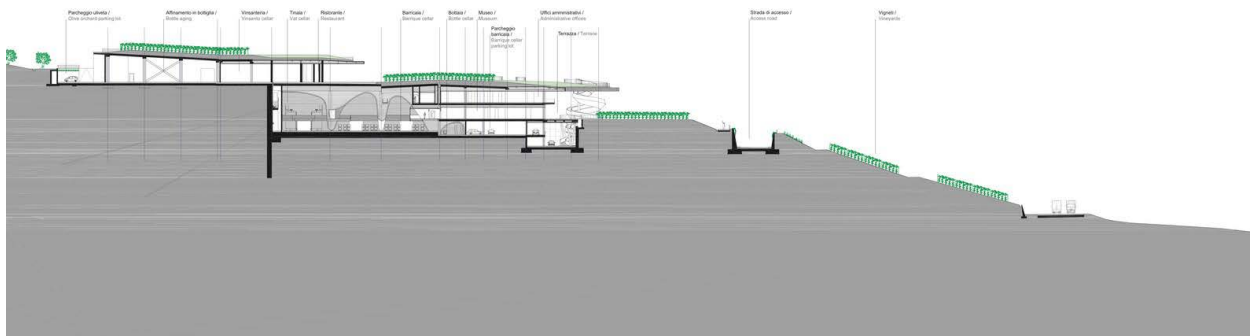
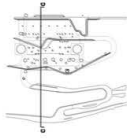
## Case Study



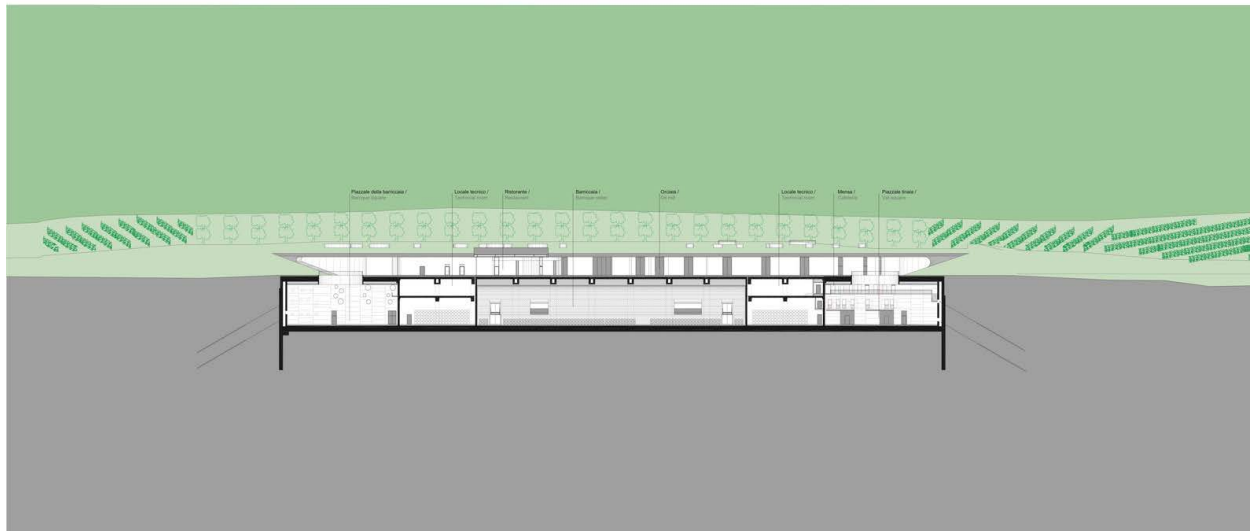
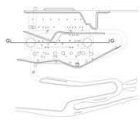
Antinori Winery / Archea Associati

The key spaces of this winery are located partially underground, where features like spiral staircases and V-shaped columns enhance the volume and sculptural quality through the play of light and shadow.

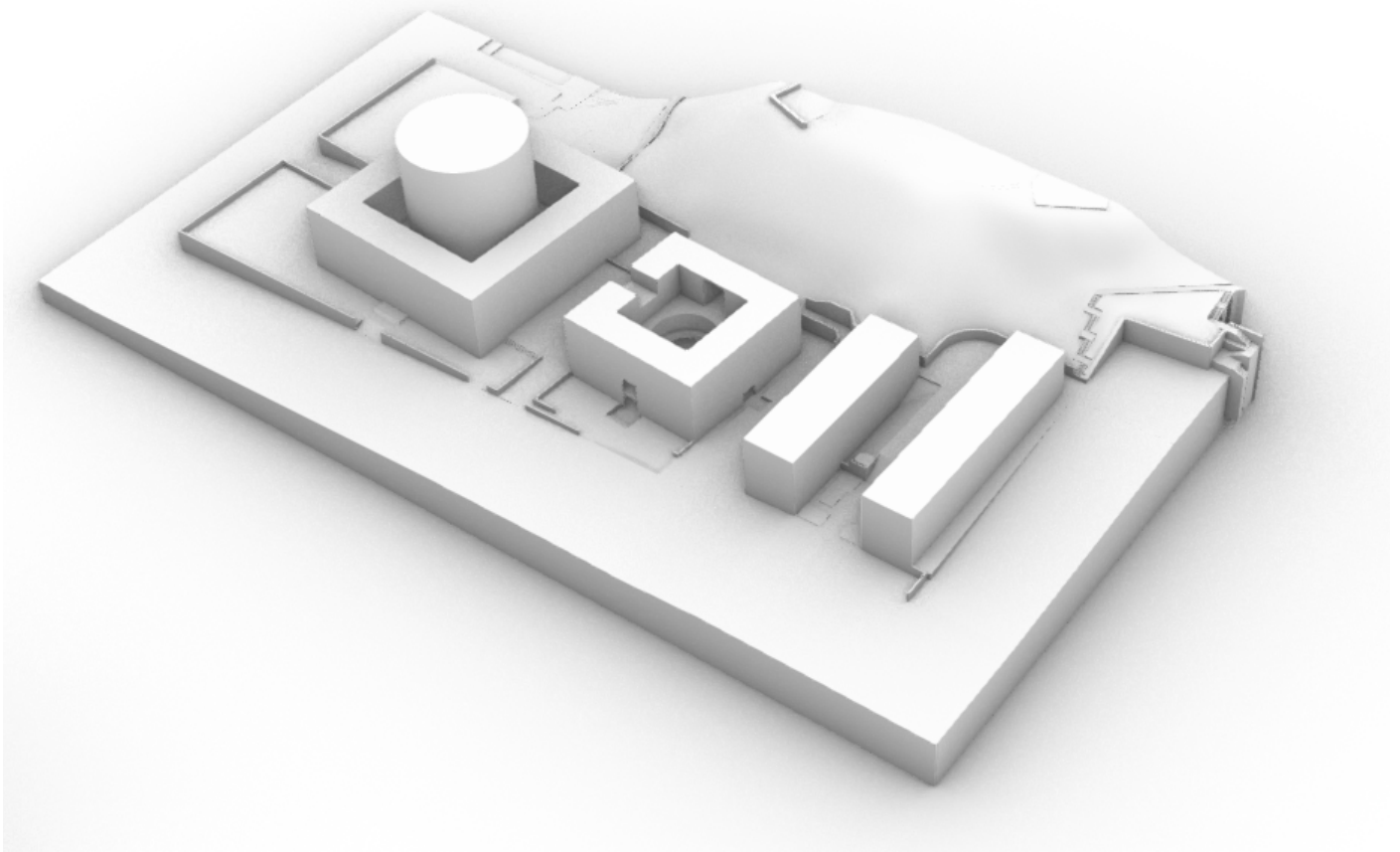
ARCHEA ASSOCIATI  
 CANTINA ANTINORI  
 ANTINORI WINERY  
 sezione BB / section BB



ARCHEA ASSOCIATI  
 CANTINA ANTINORI  
 ANTINORI WINERY  
 sezione GG / section GG



# Model

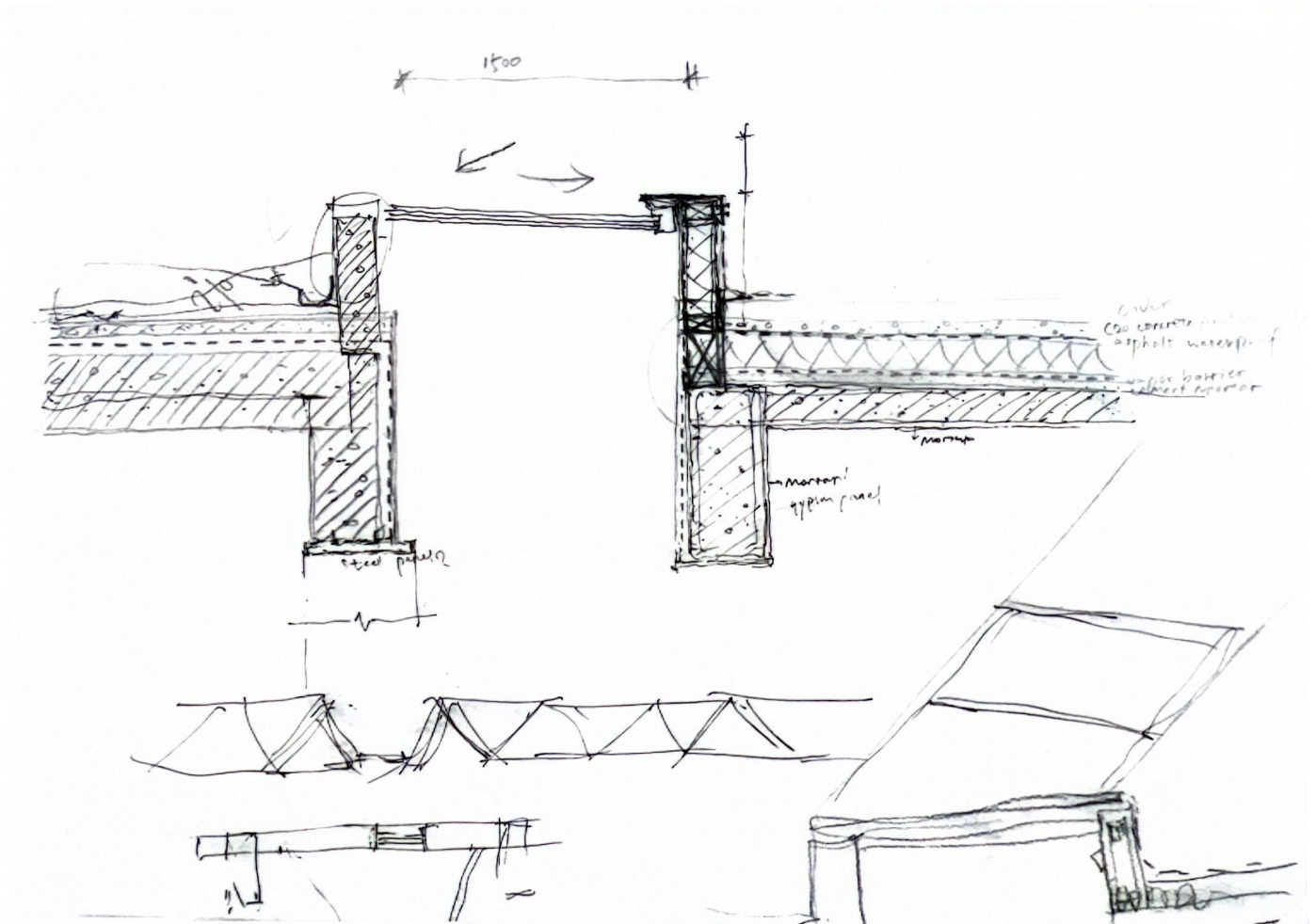
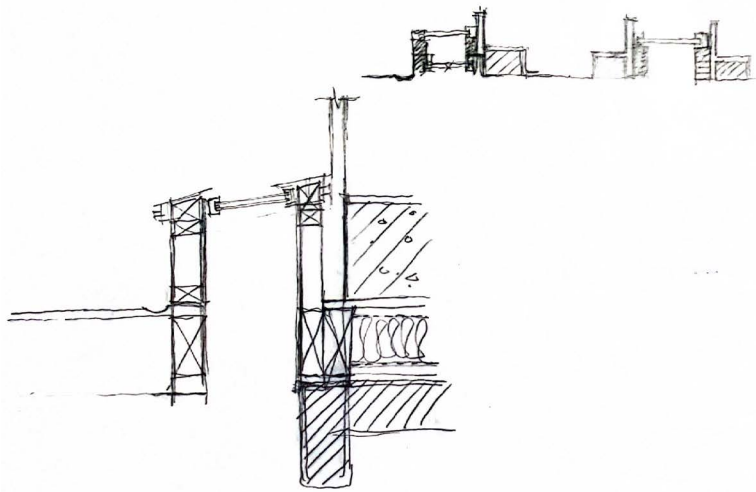




1:200 Process model

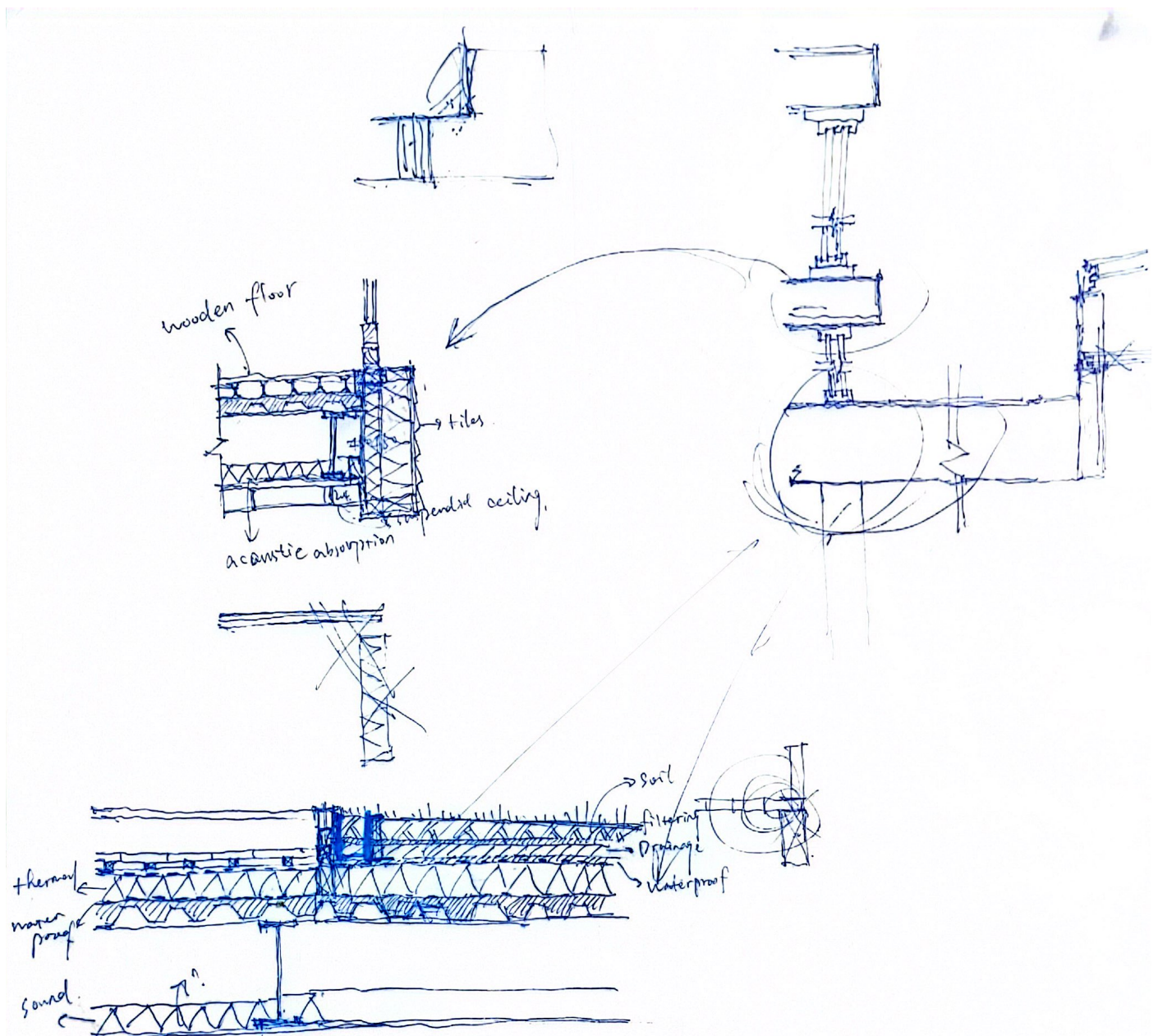


# BT Sketch



Skylight





Greenroof

# Design-Facade

## Case study

Following the tutorial's advice, my building facade should not merely mimic surrounding architecture but establish its own order, integrating variation within that order.



The New Library at Magdalene College / Niall McLaughlin Architects

The facade uses a combination of wood and brick to divide it into several homogeneous units, with subtle variations between the units.



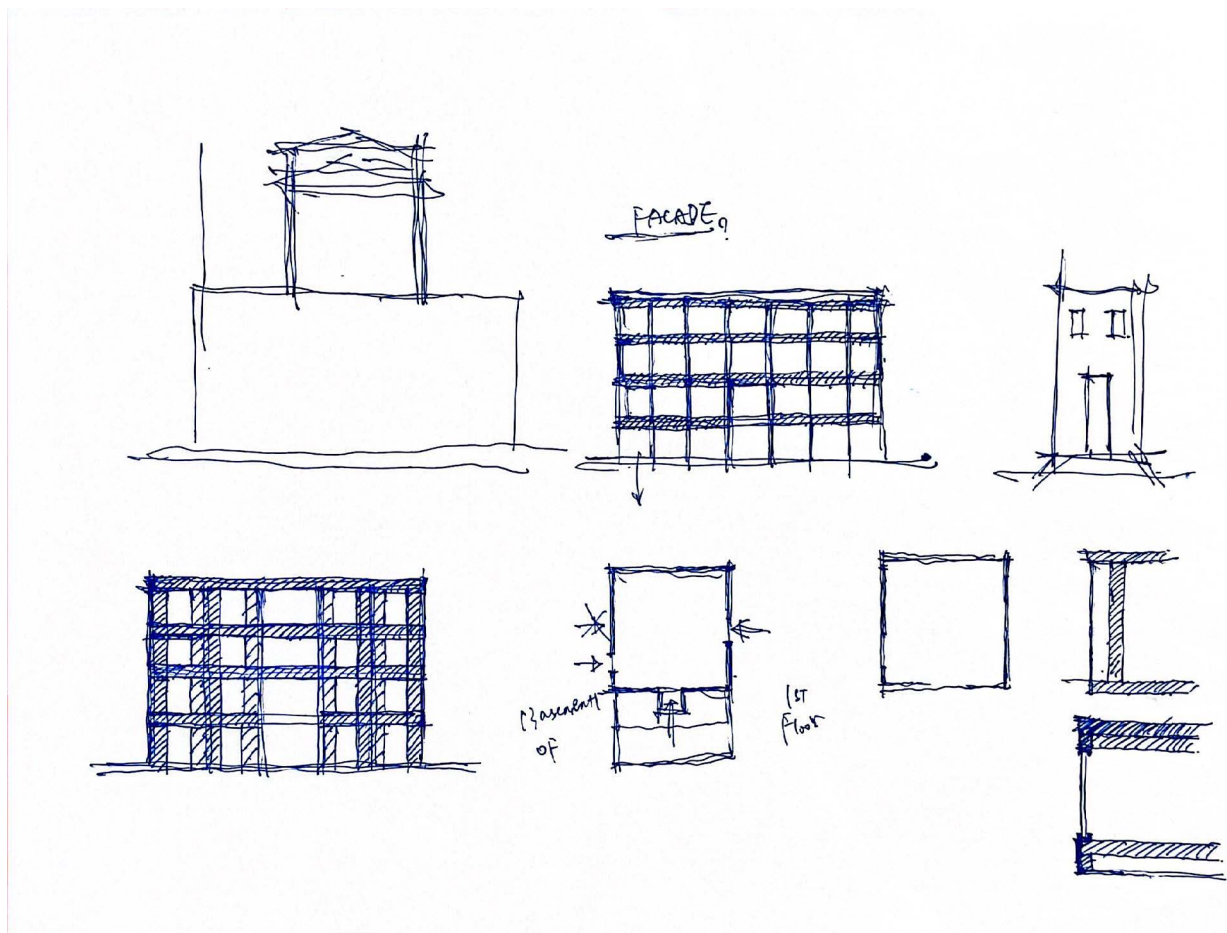




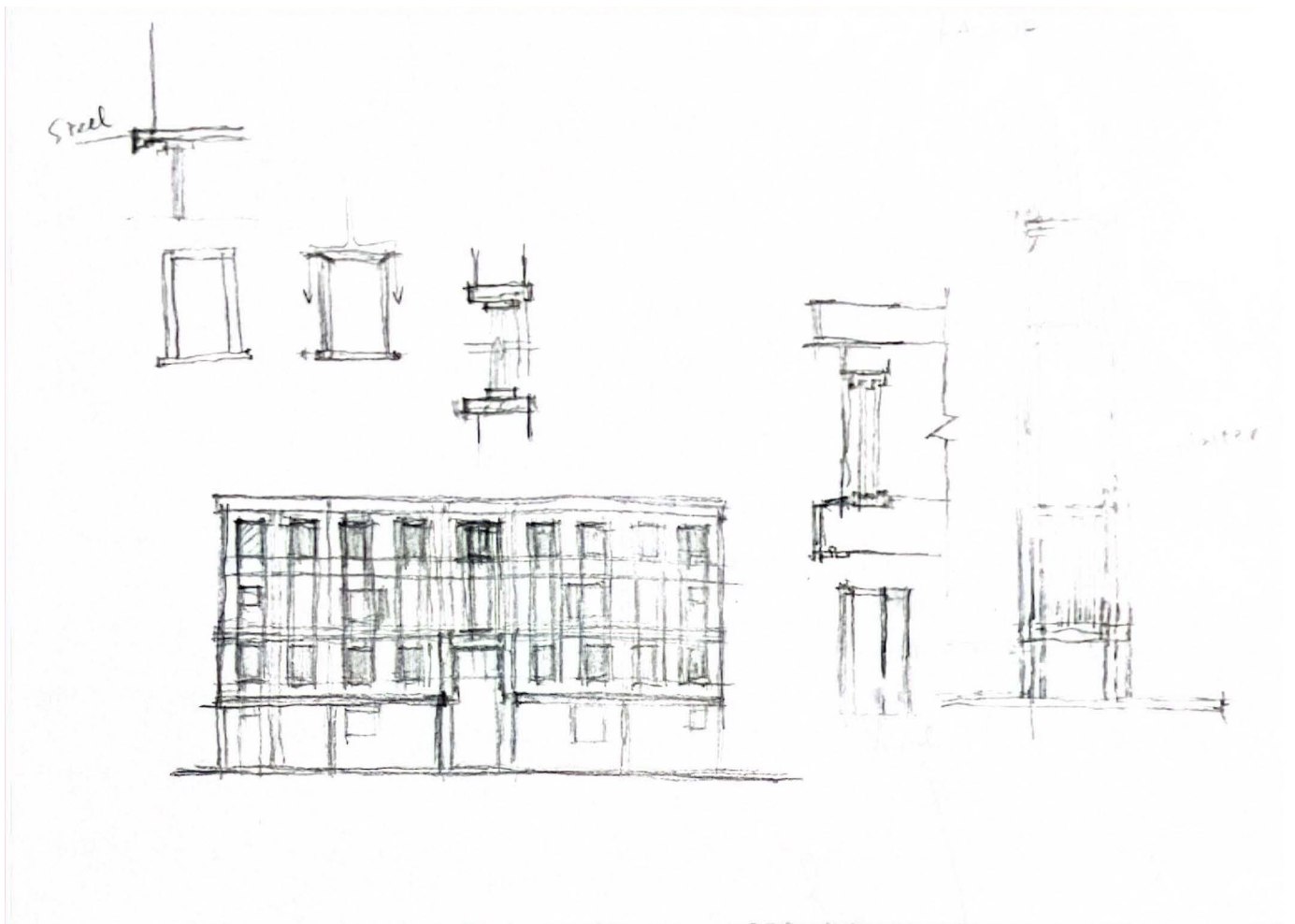
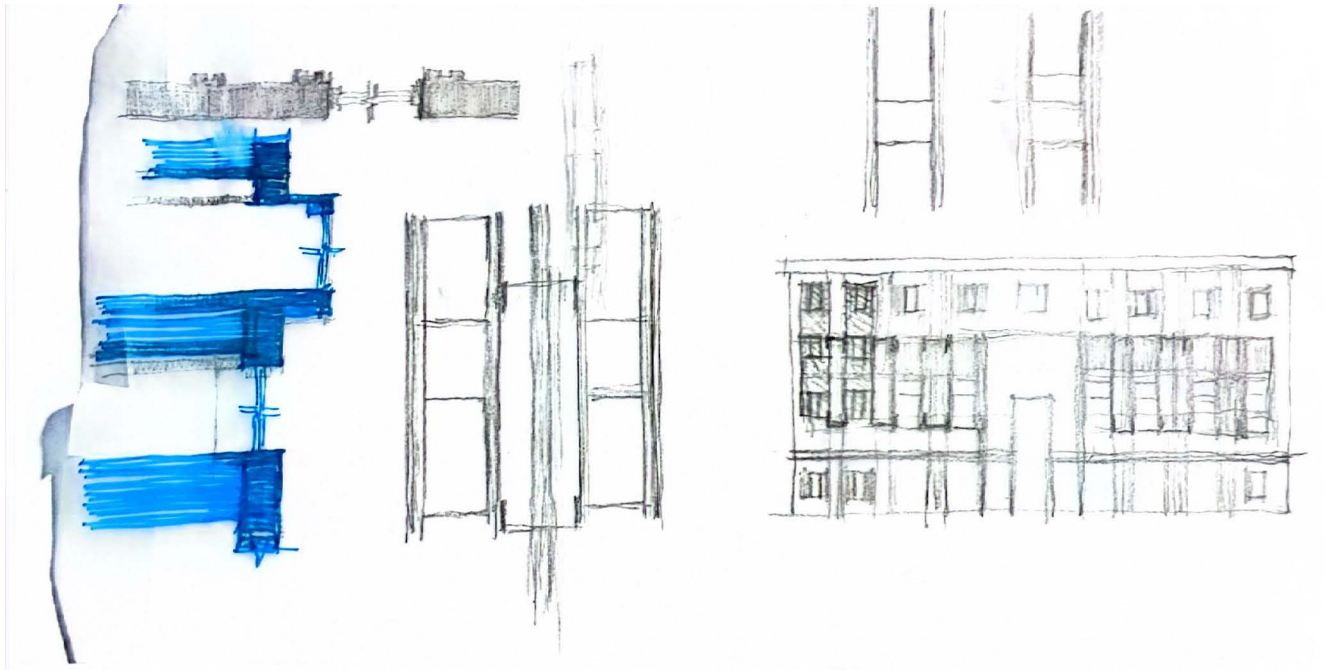
The historic facade in Cambridge College Refurbishment /  
Niall McLaughlin Architects

Another work by the same architect primarily uses wood as the facade material, creating changes in light and shadow through variations in the facade's depth. I'm also considering whether these undulating facade variations could serve as a method to control rhythm, perhaps integrating them with drainage solutions.







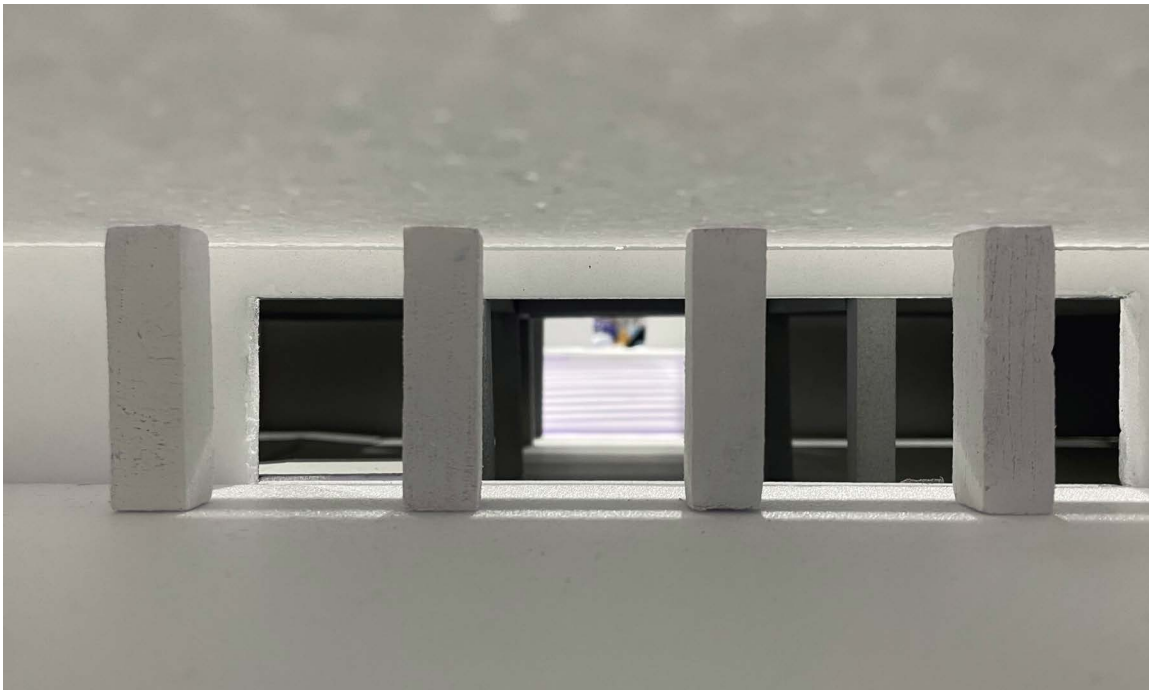


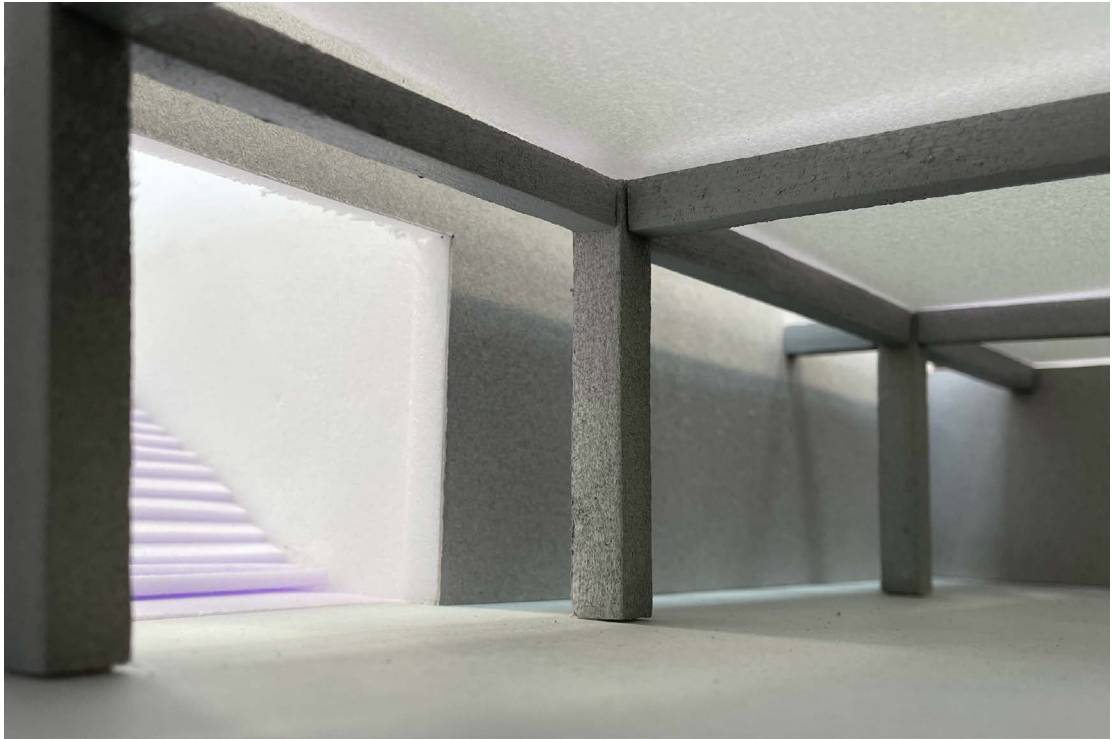
# Model











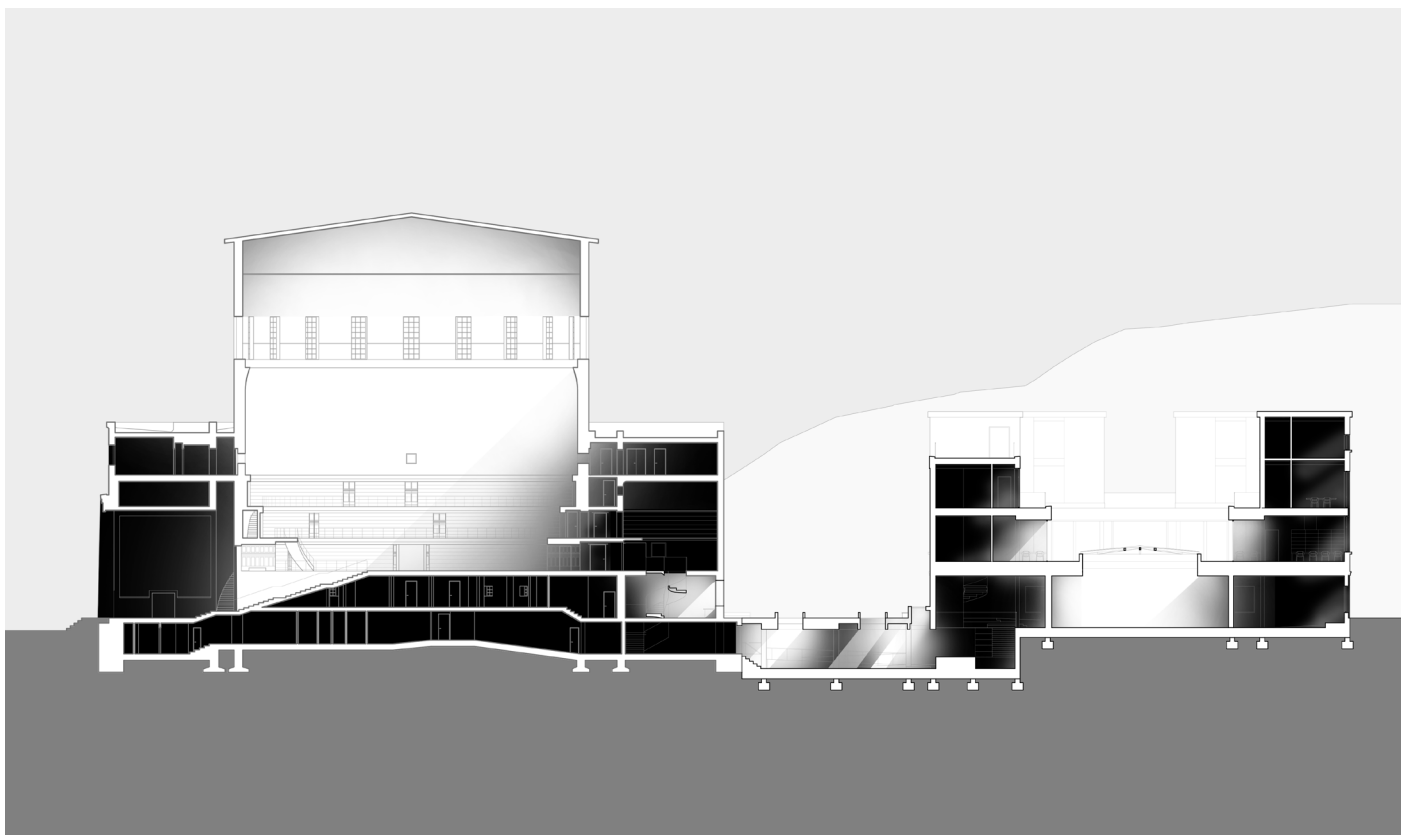




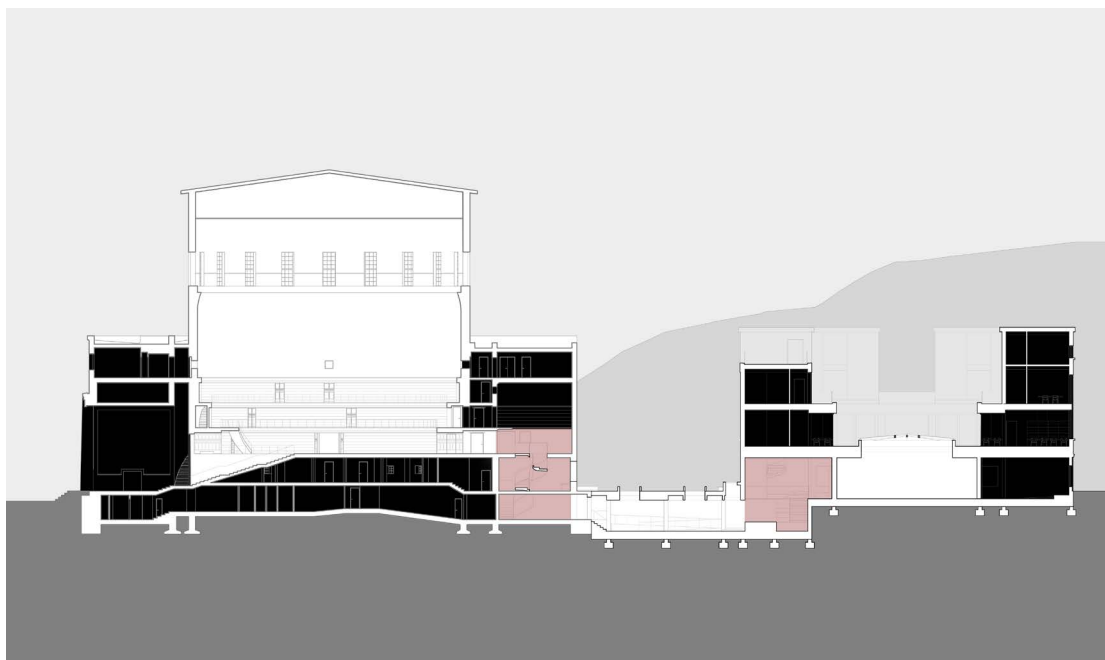




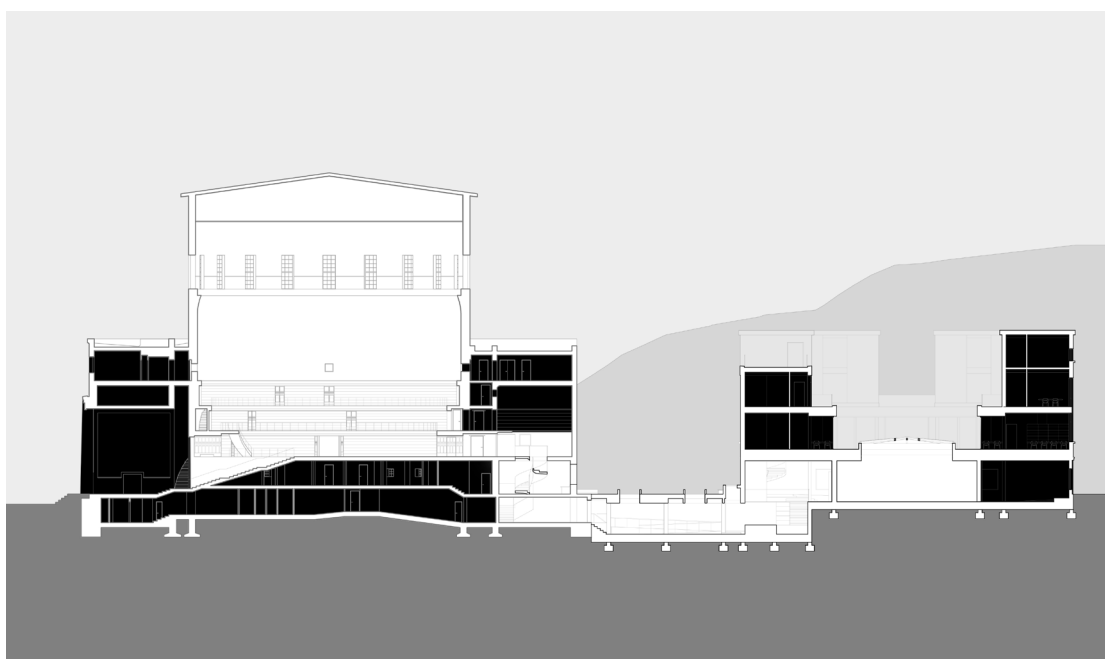
# P3



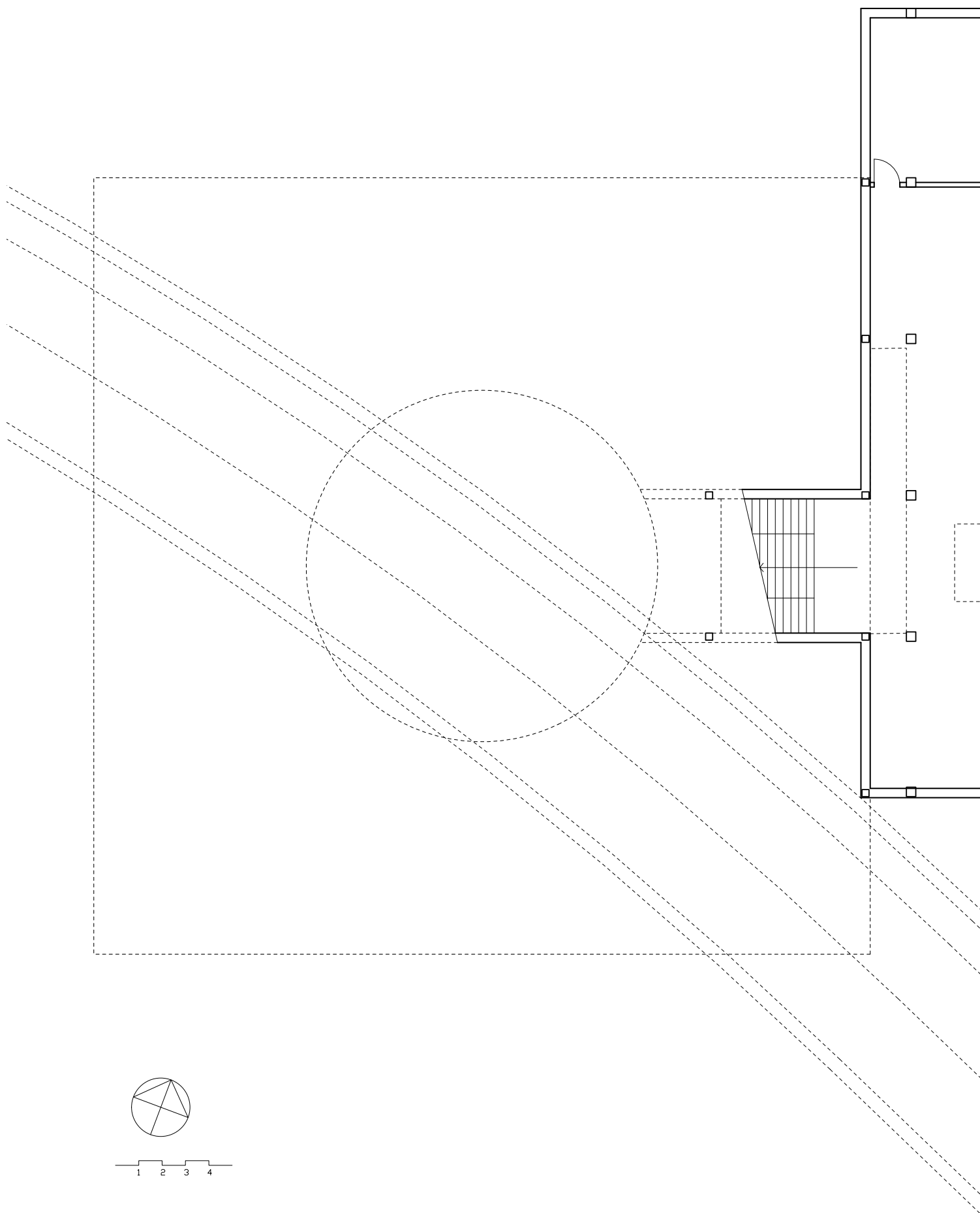
Section light and shadow rhythm



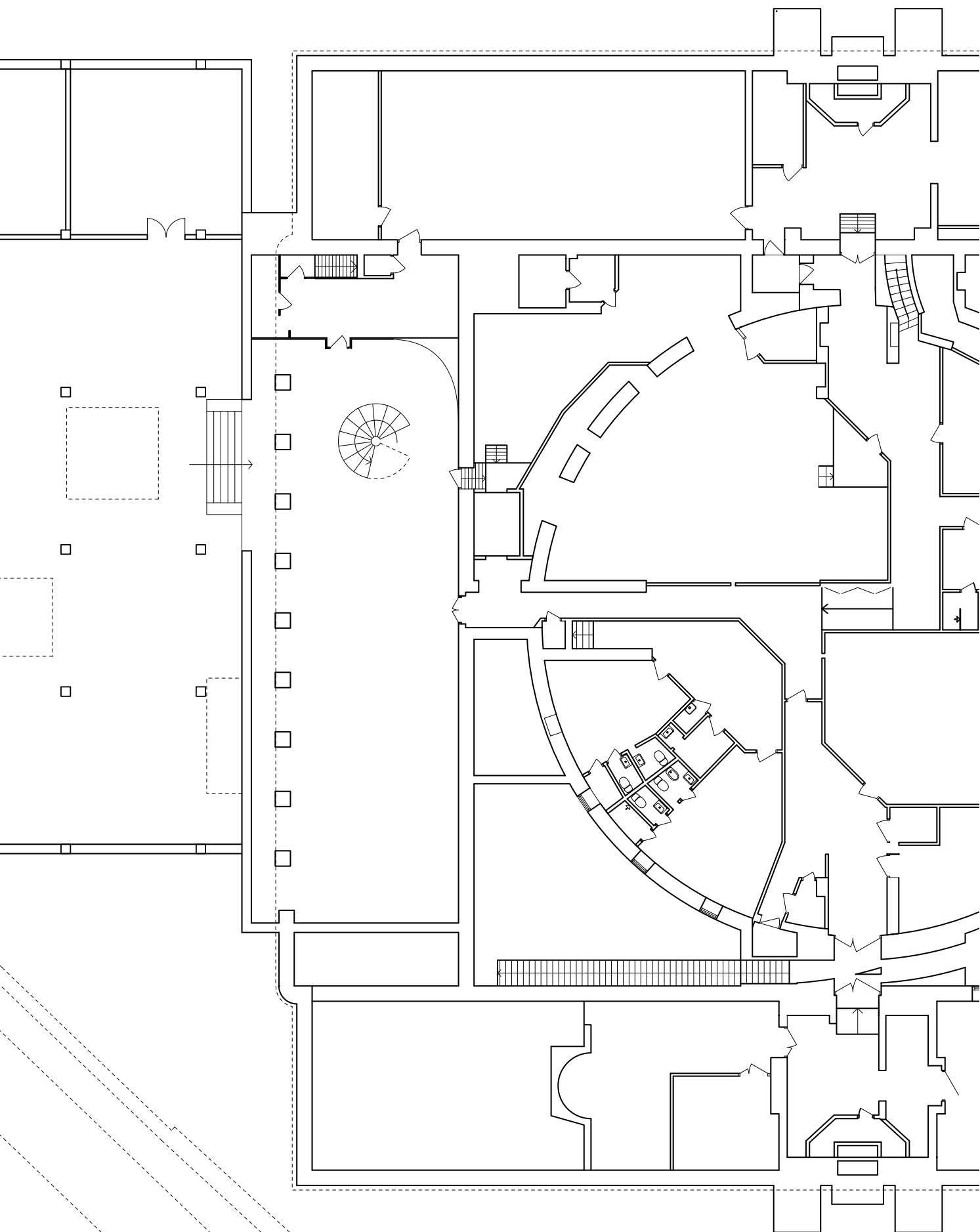
Transportation core

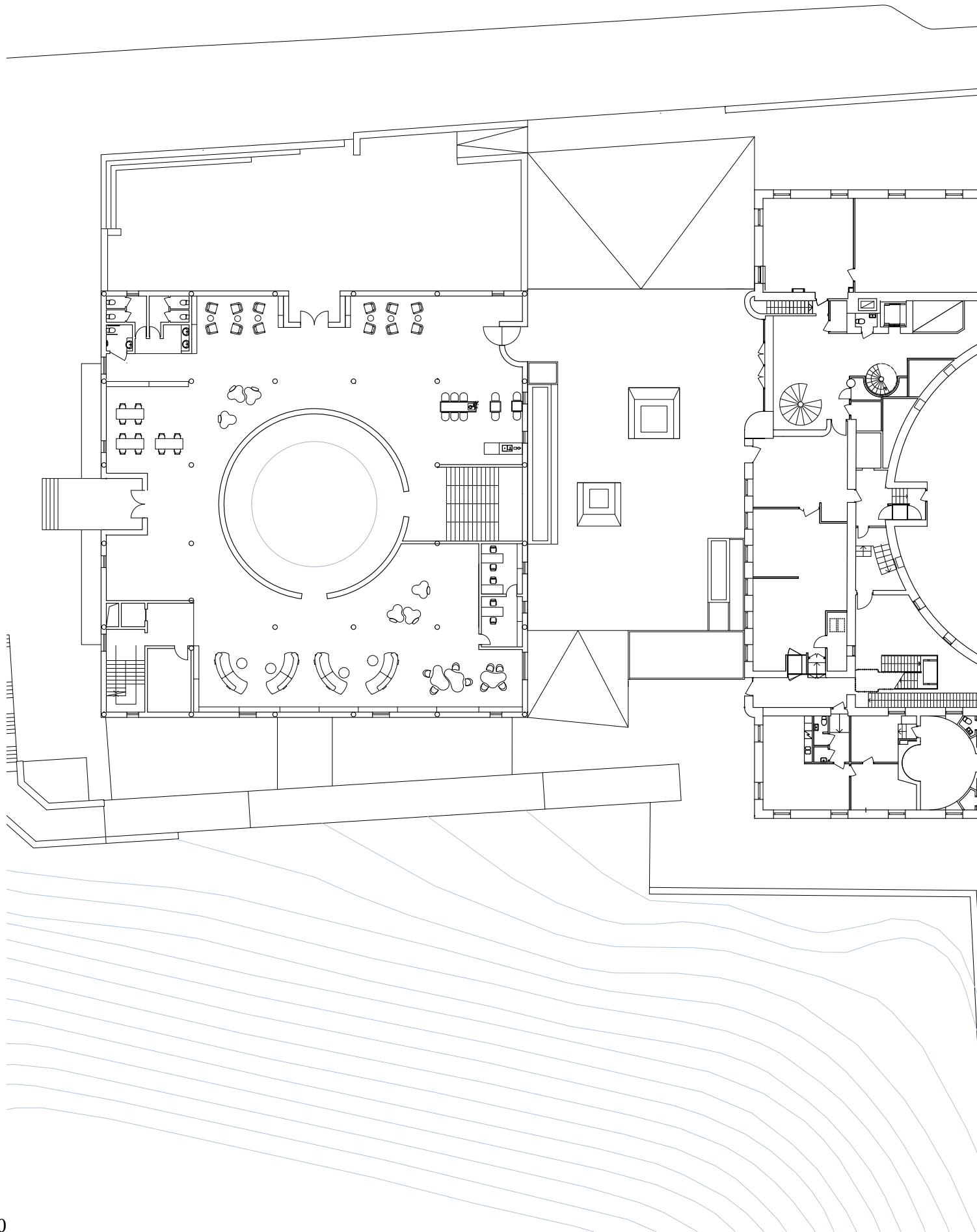


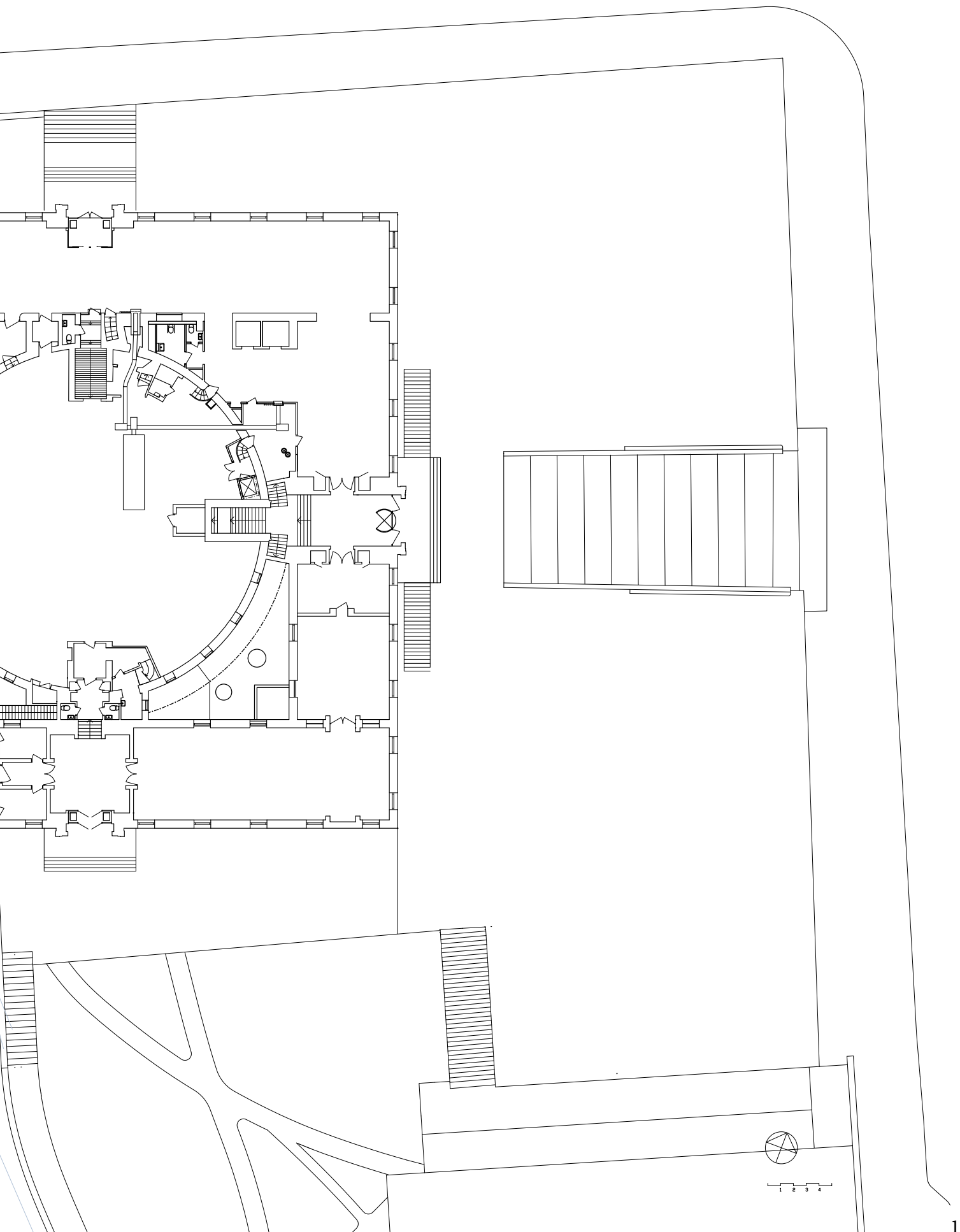
The most public areas

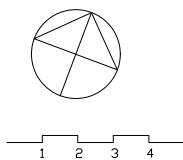
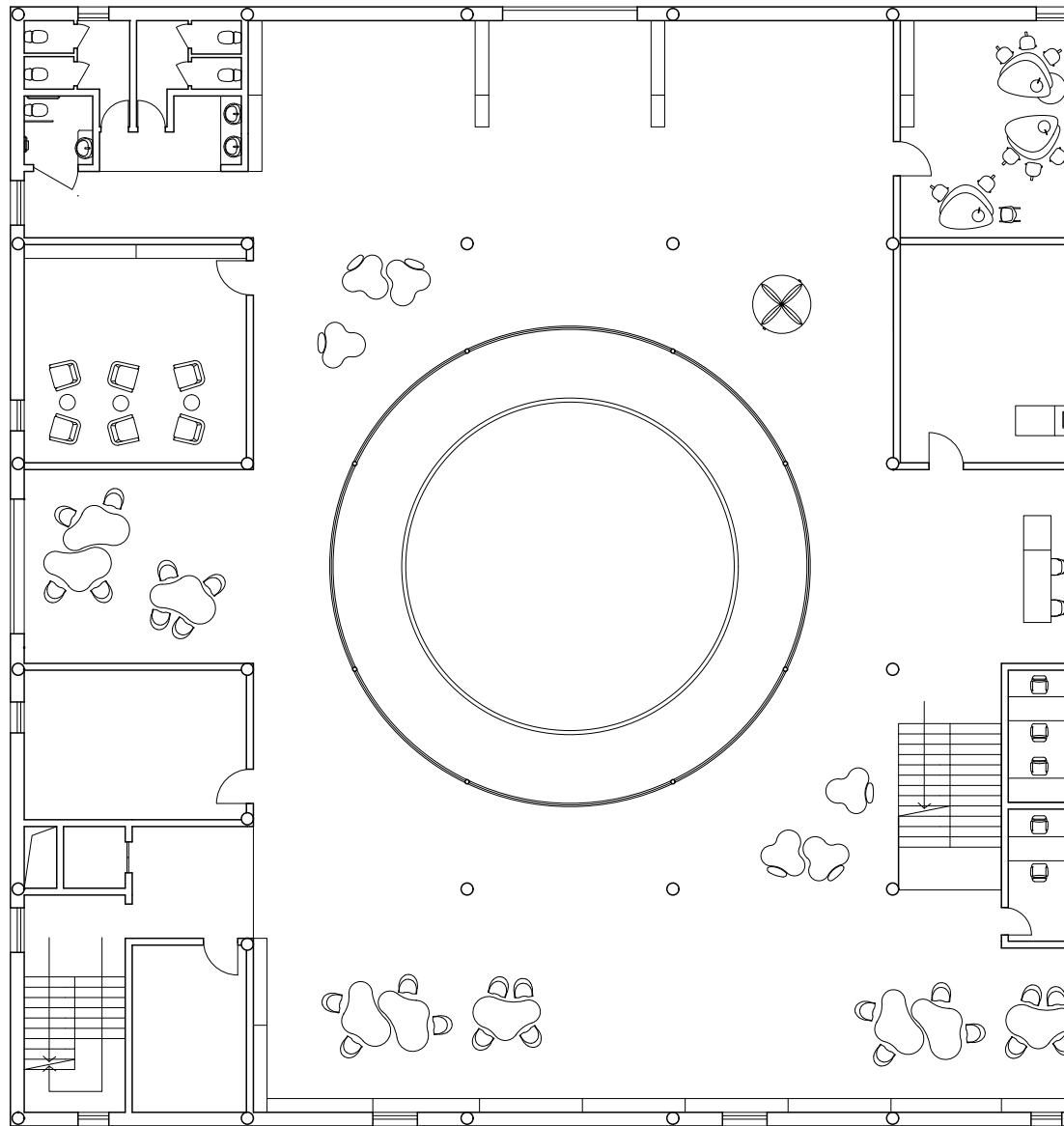


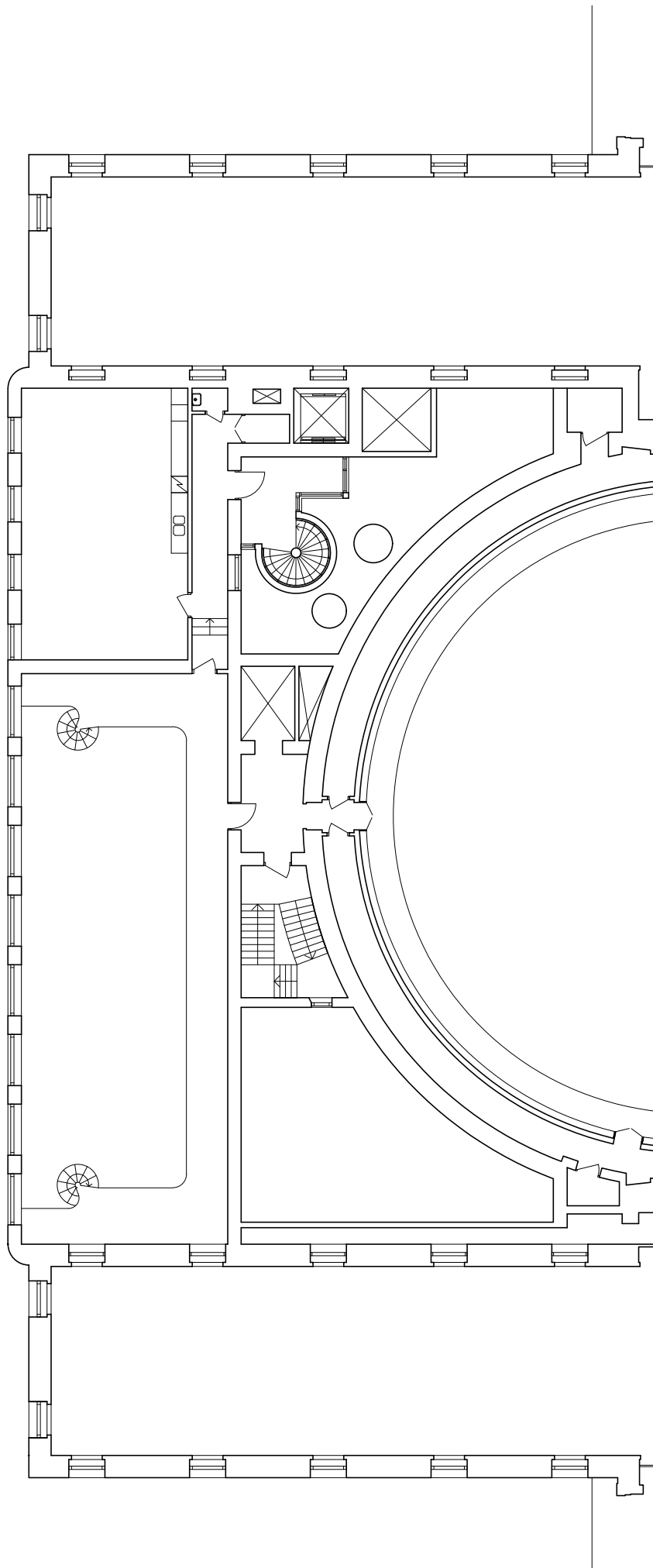


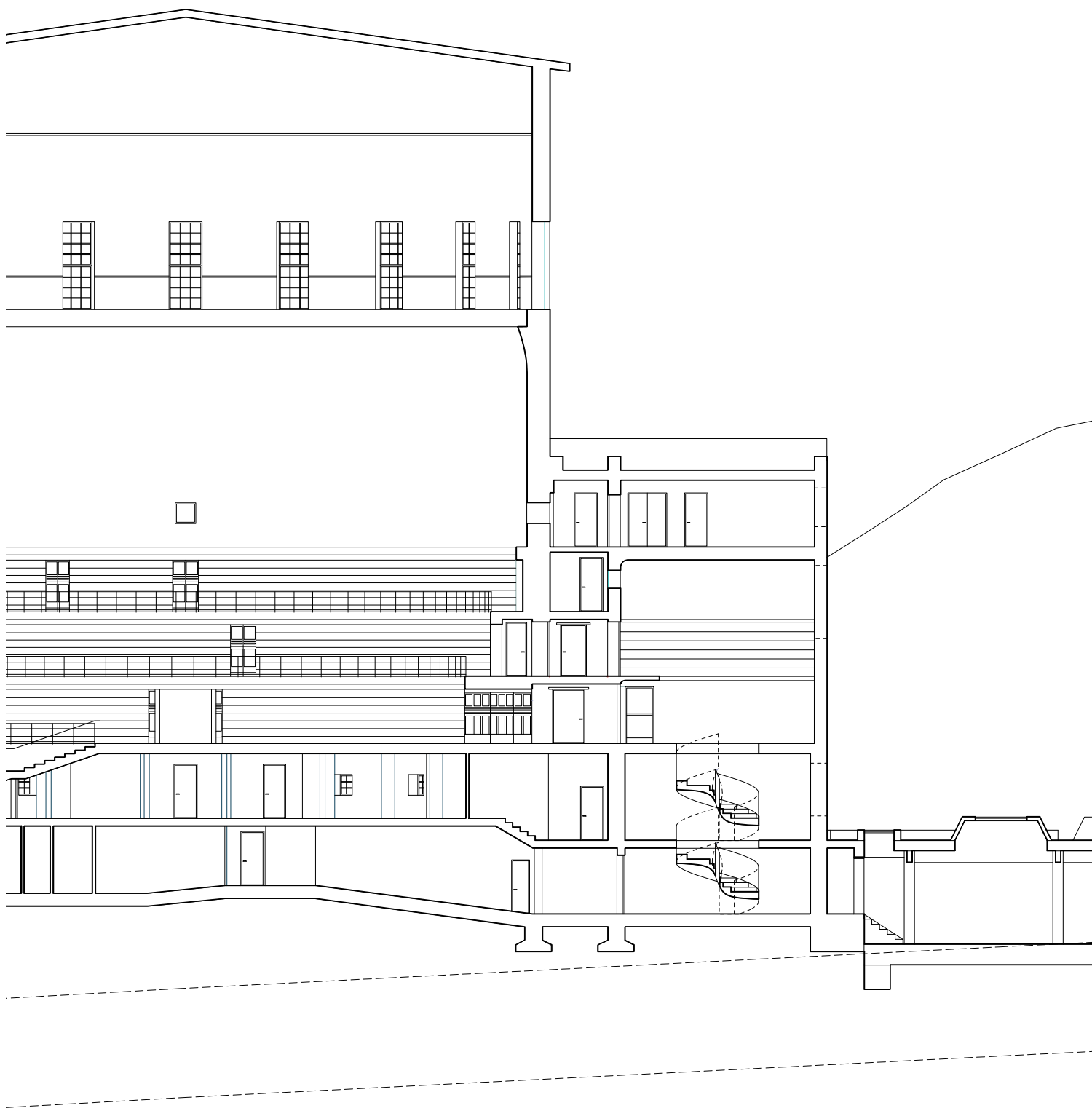




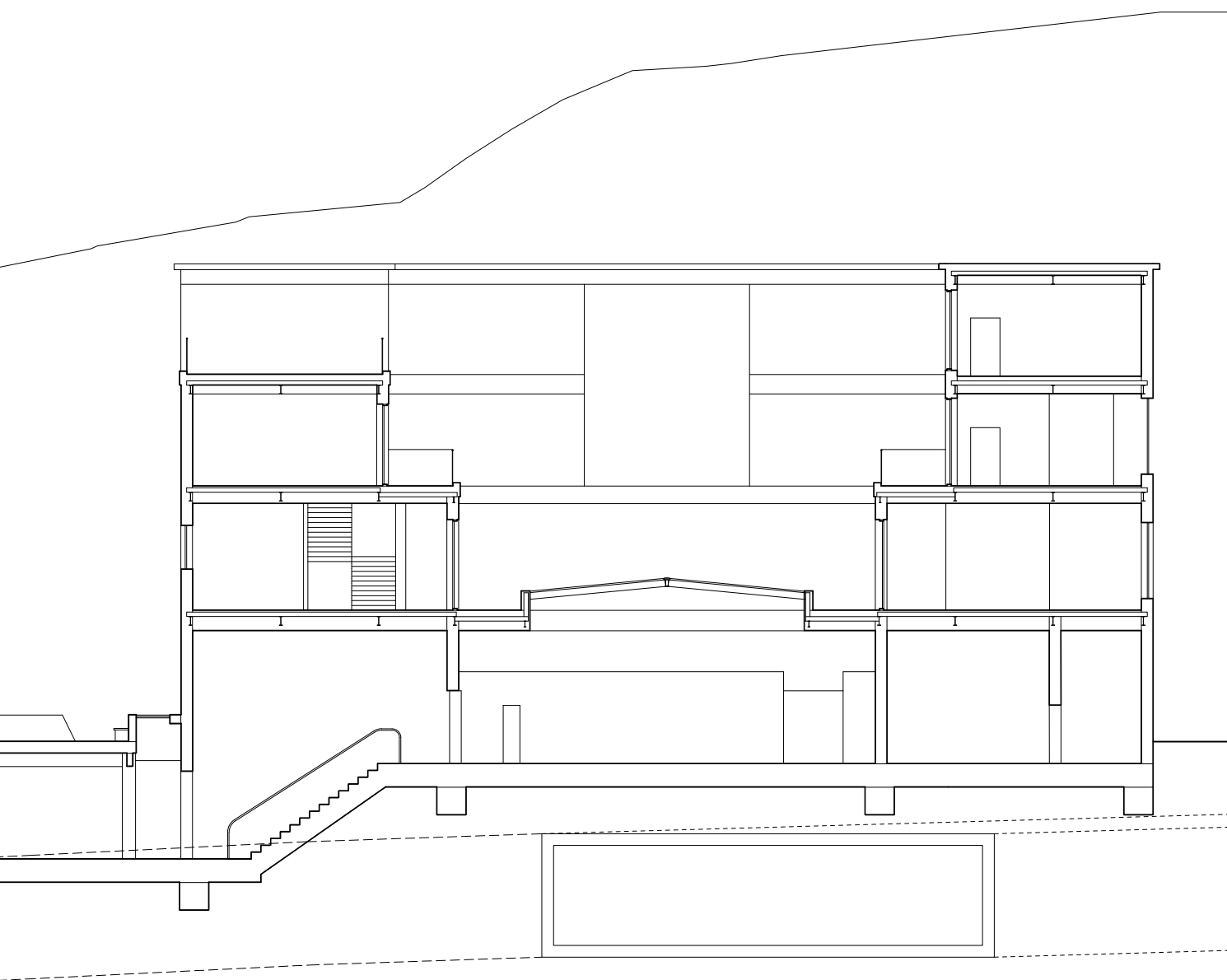


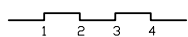


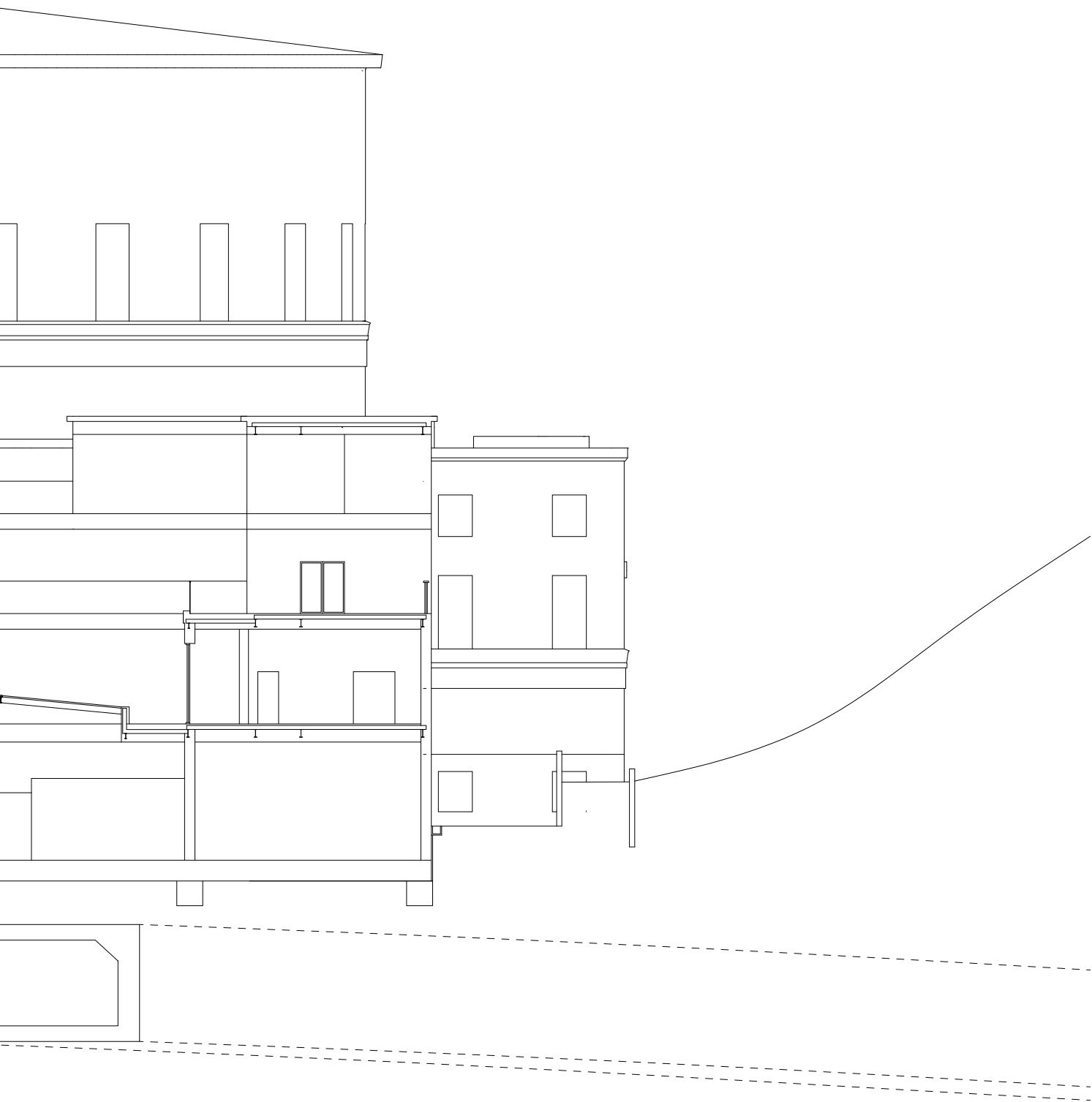










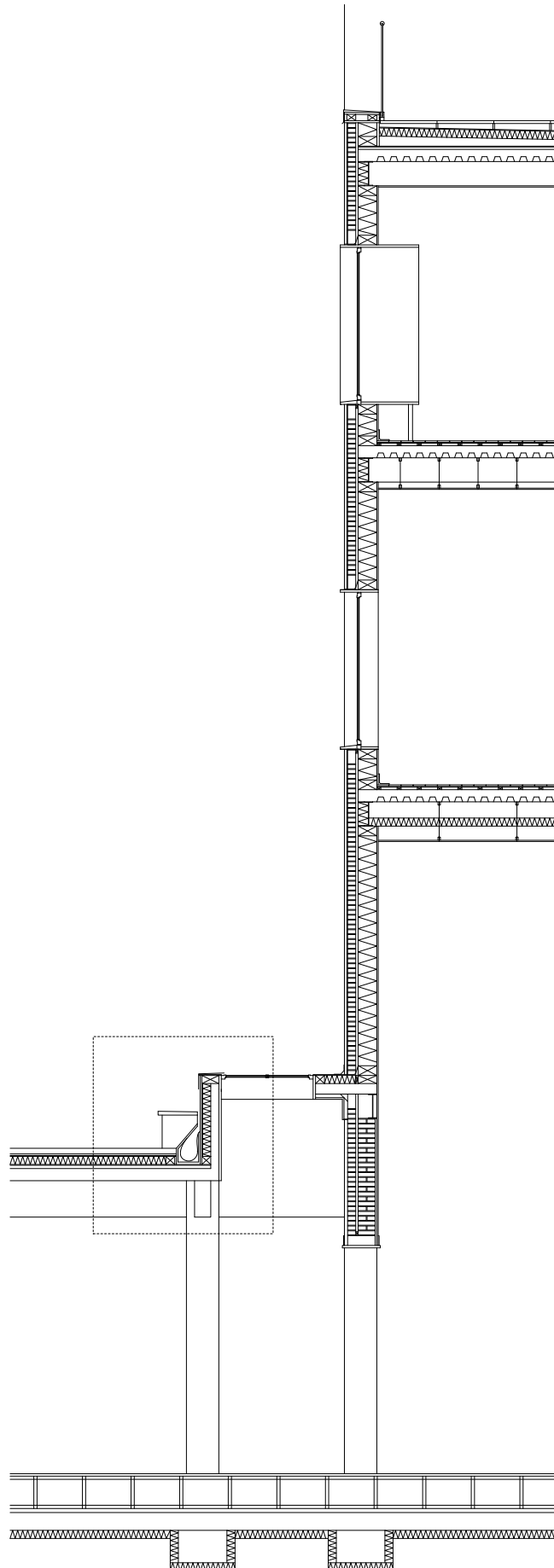






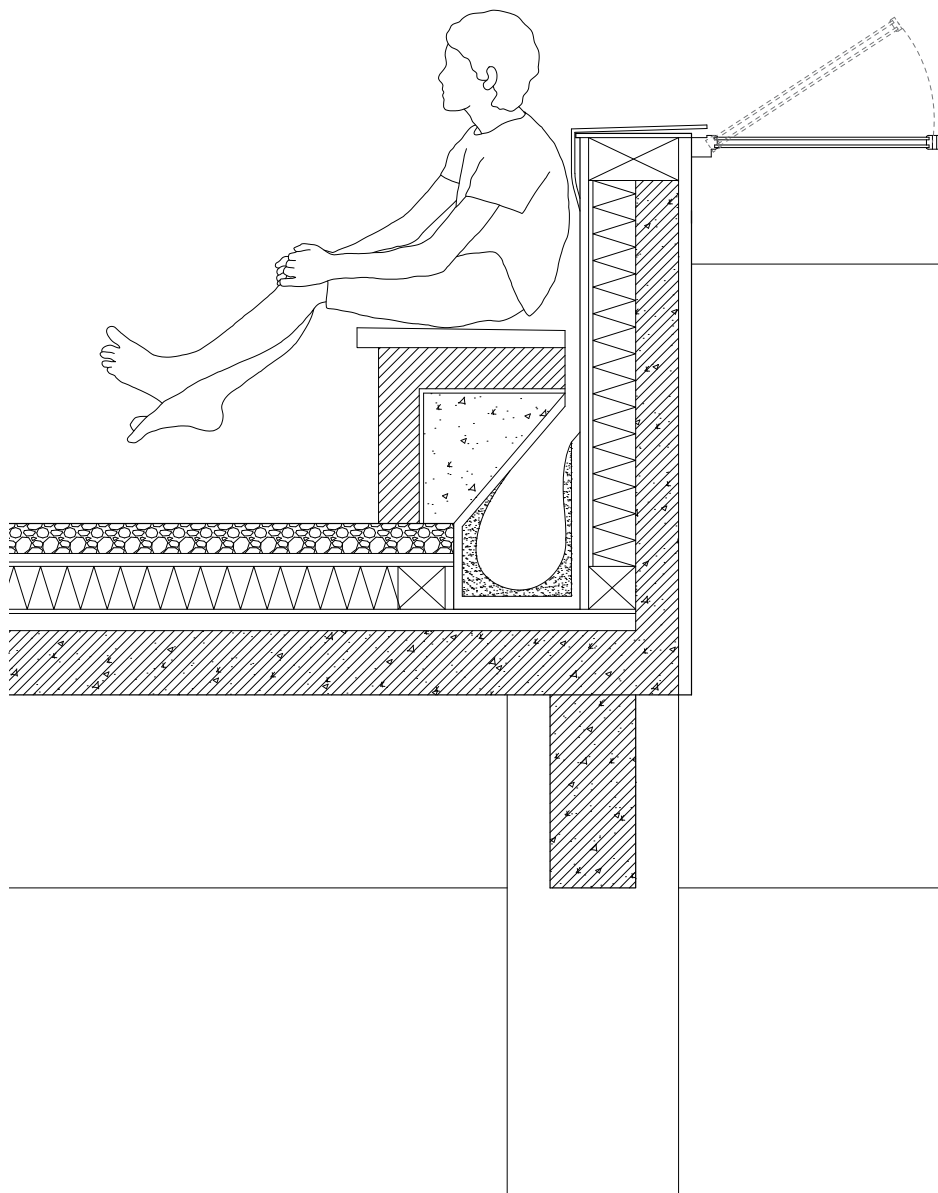
## Detailings

In the detailing, I integrated a combination of skylight and outdoor installation to discreetly conceal the water sink within the stone seat, creating a cozy space to enjoy the garden's beauty.



Facade 1:33





D:

Roof space — a 3<sup>rd</sup> space

entrance from the area in between  
library and the annex

↓  
walling around?  
or ramps lead?

SPACE BELOW & ABOVE

a lot of movements → can it be  
manifest?

buildings looking at each other

↓  
of the strong idea / view / point  
of your project

M: What's the identity of the connection?  
Where's the actual entrance to the library

from the connection?

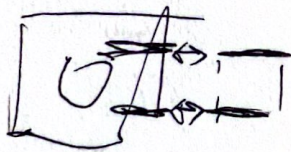
What's your extension's statement of  
its own identity.

Model that's building of the  
nature of building up the 'spaces'.  
(Right now it's hard to read it)

Sri. Section or elevation looking at corner.  
direction from library

Dan: Space above extension

↓  
expression of the top (should be  
a space for the library)

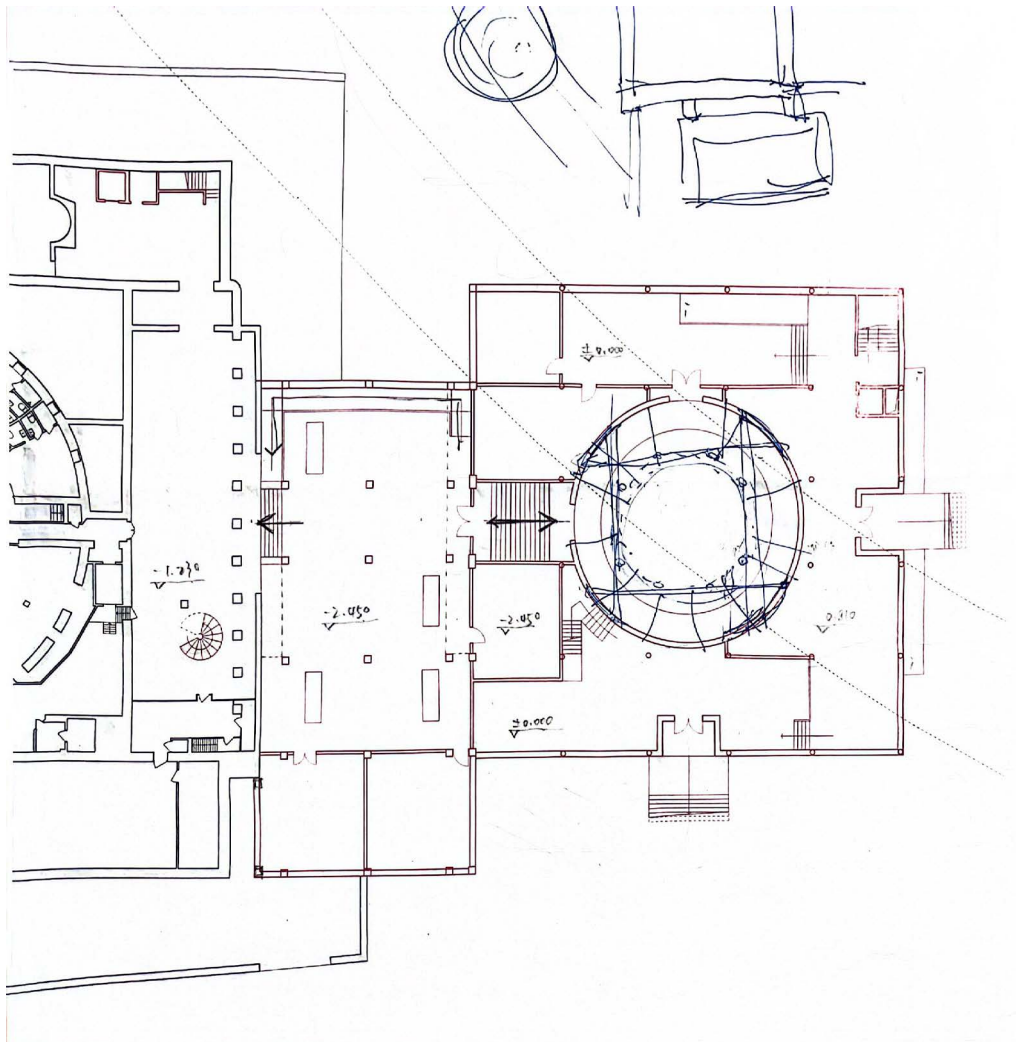


(That line is good!)  
help the interior geometry

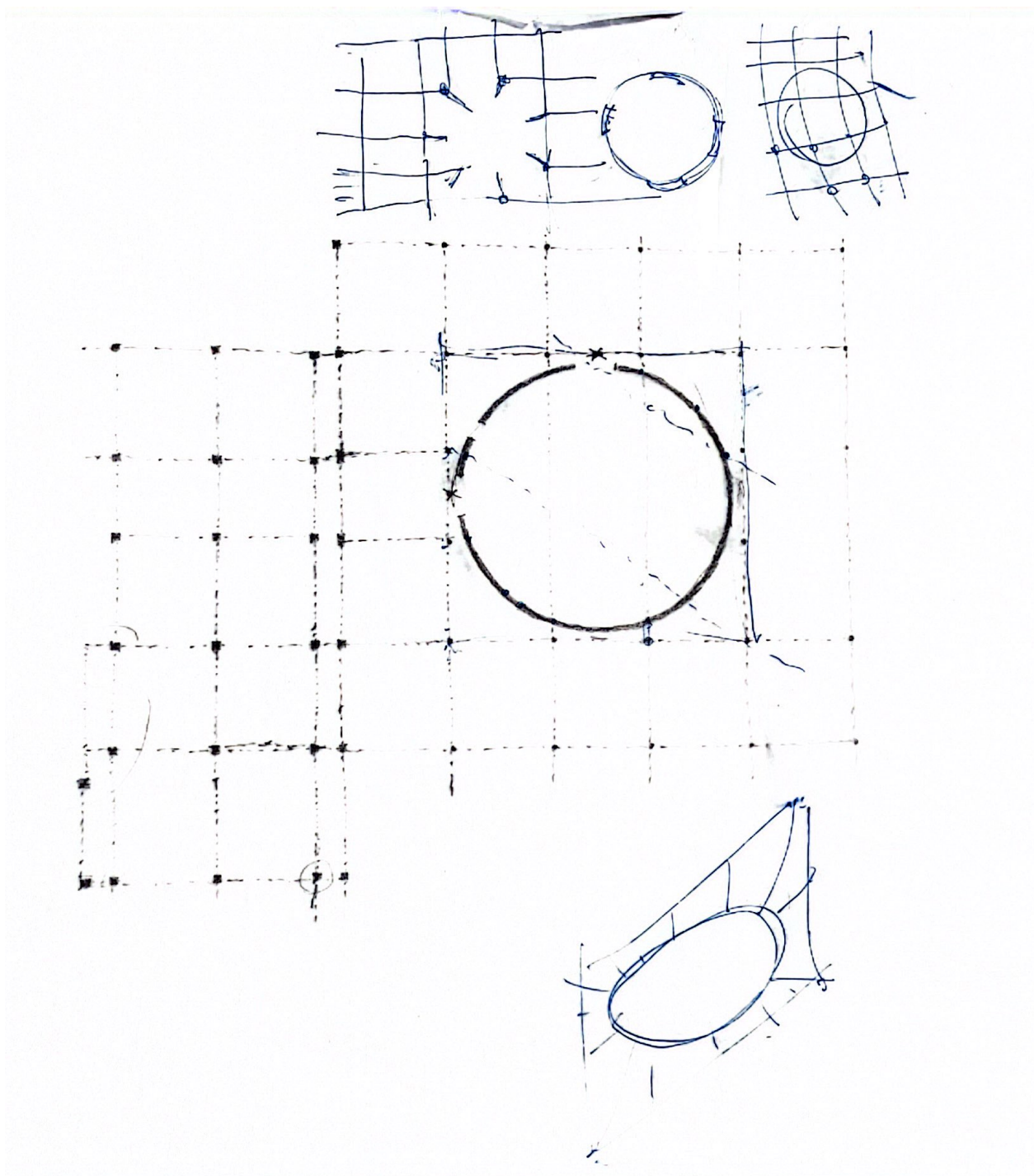
Chris: shape diagram  
have the interior profile?



# BT-Construction



For the central large-diameter rotunda with a partial upper roof, consider placing columns either in the center of the rotunda or constructing them as an integral part of the structure.



# **Information Theater**

Expansion and Renovation of Stockholm Public Library

P4 Project Journal

Liuying Chen

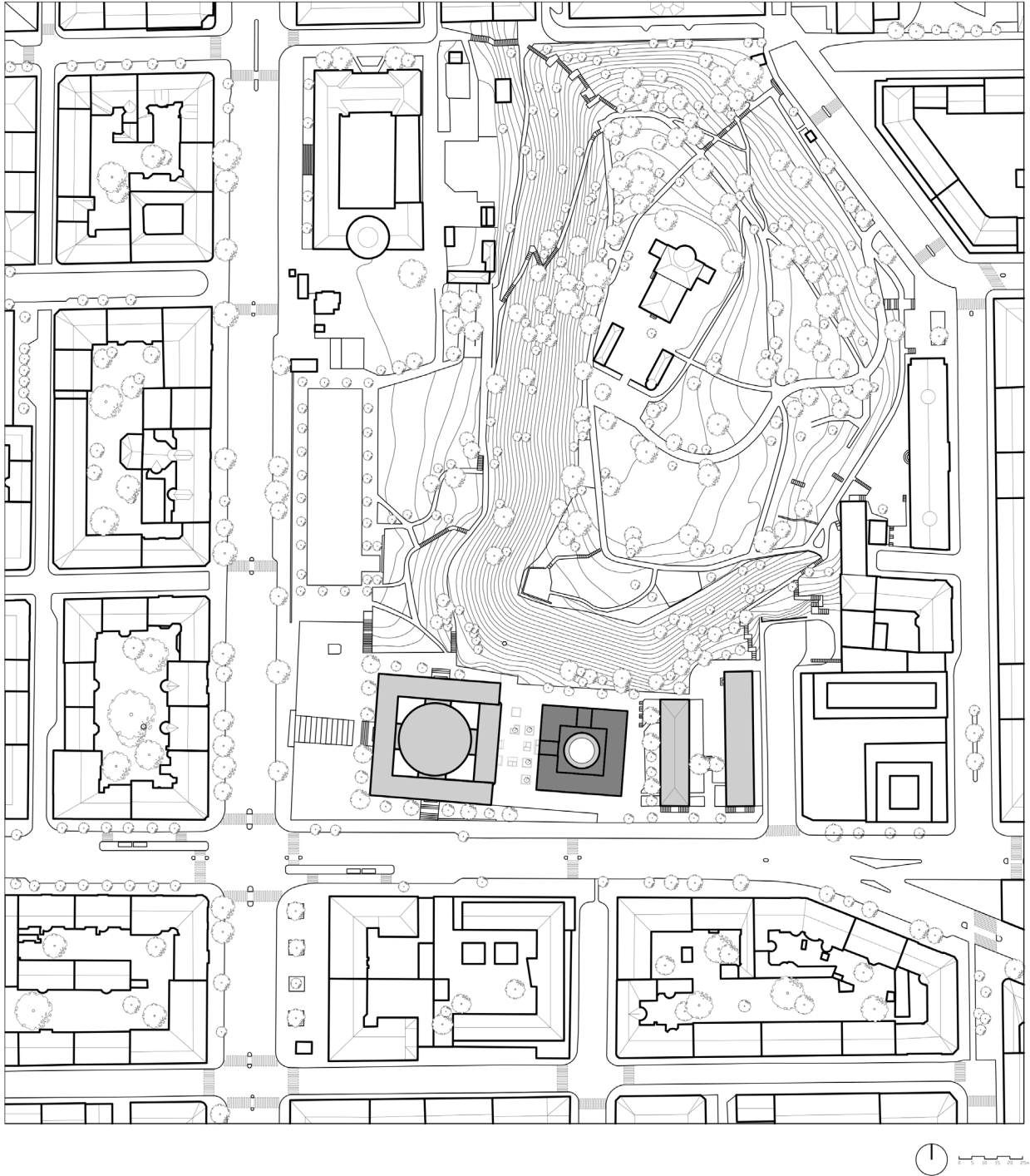
2023-2024 Msc3

Interiors Buildings Cities



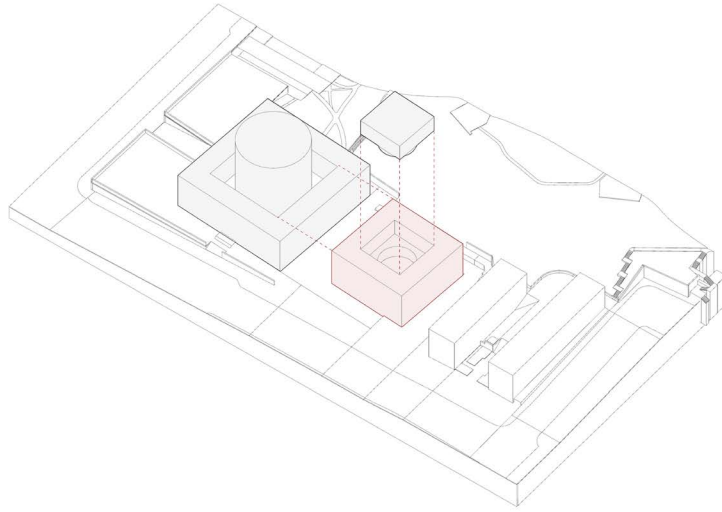


# Design

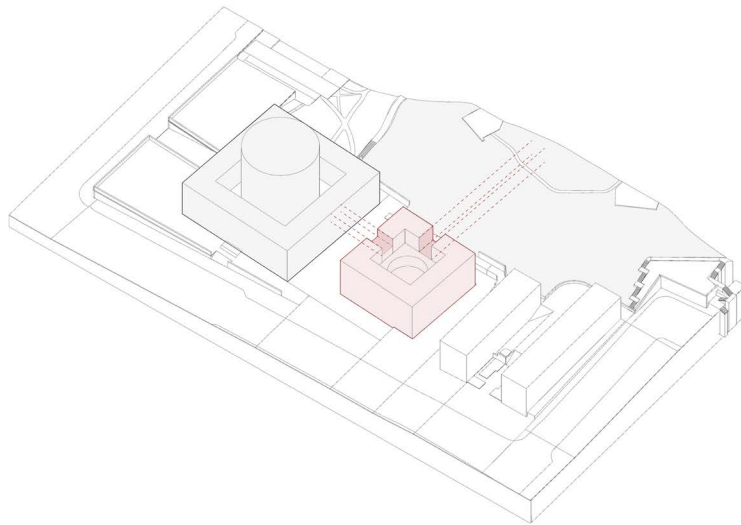


Masterplan

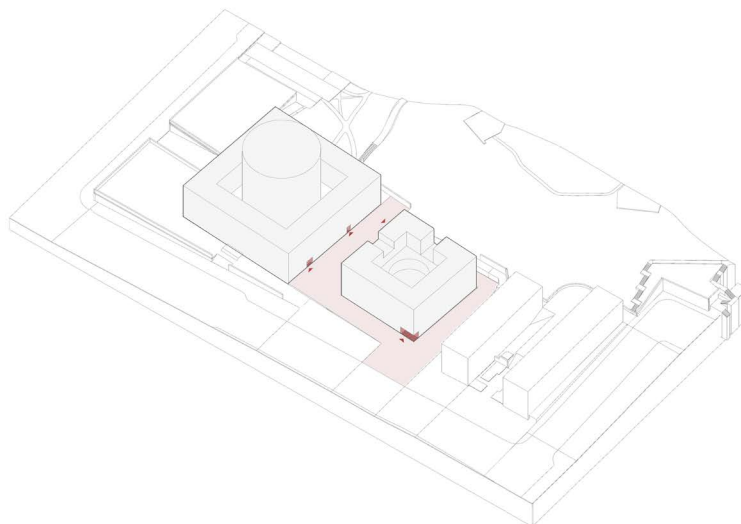
## Column evolution



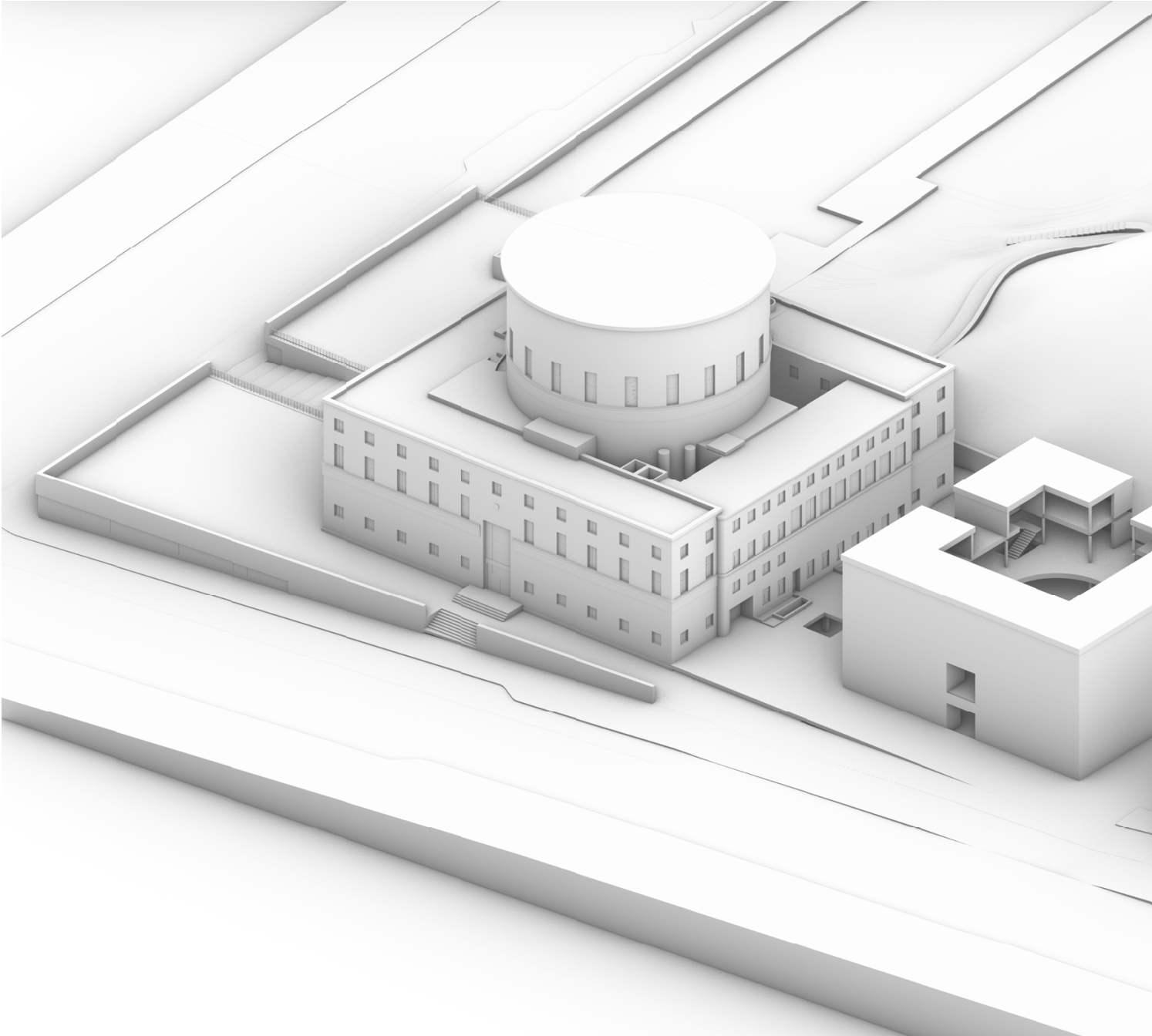
## Overturn



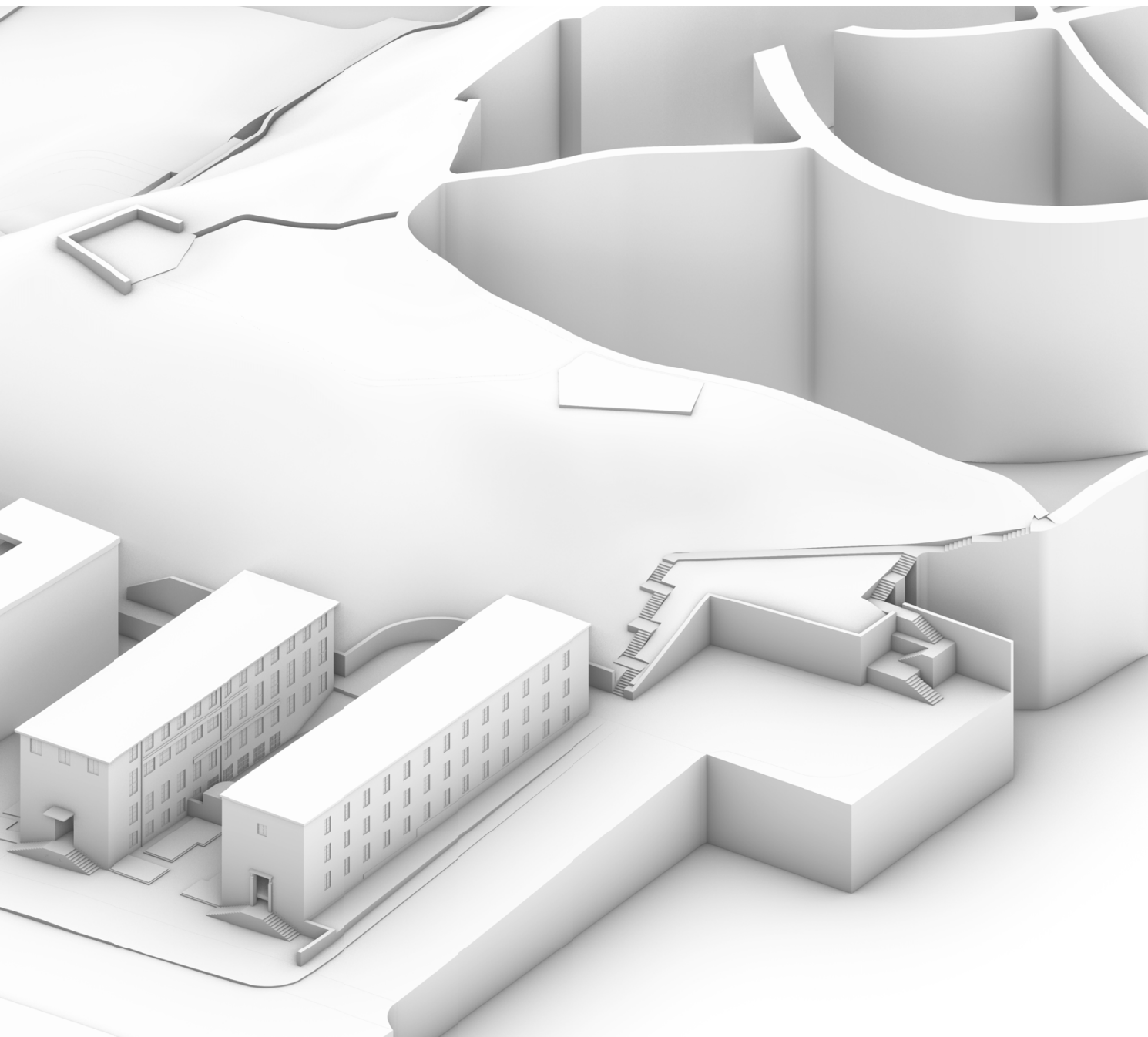
## Void



## Entrance

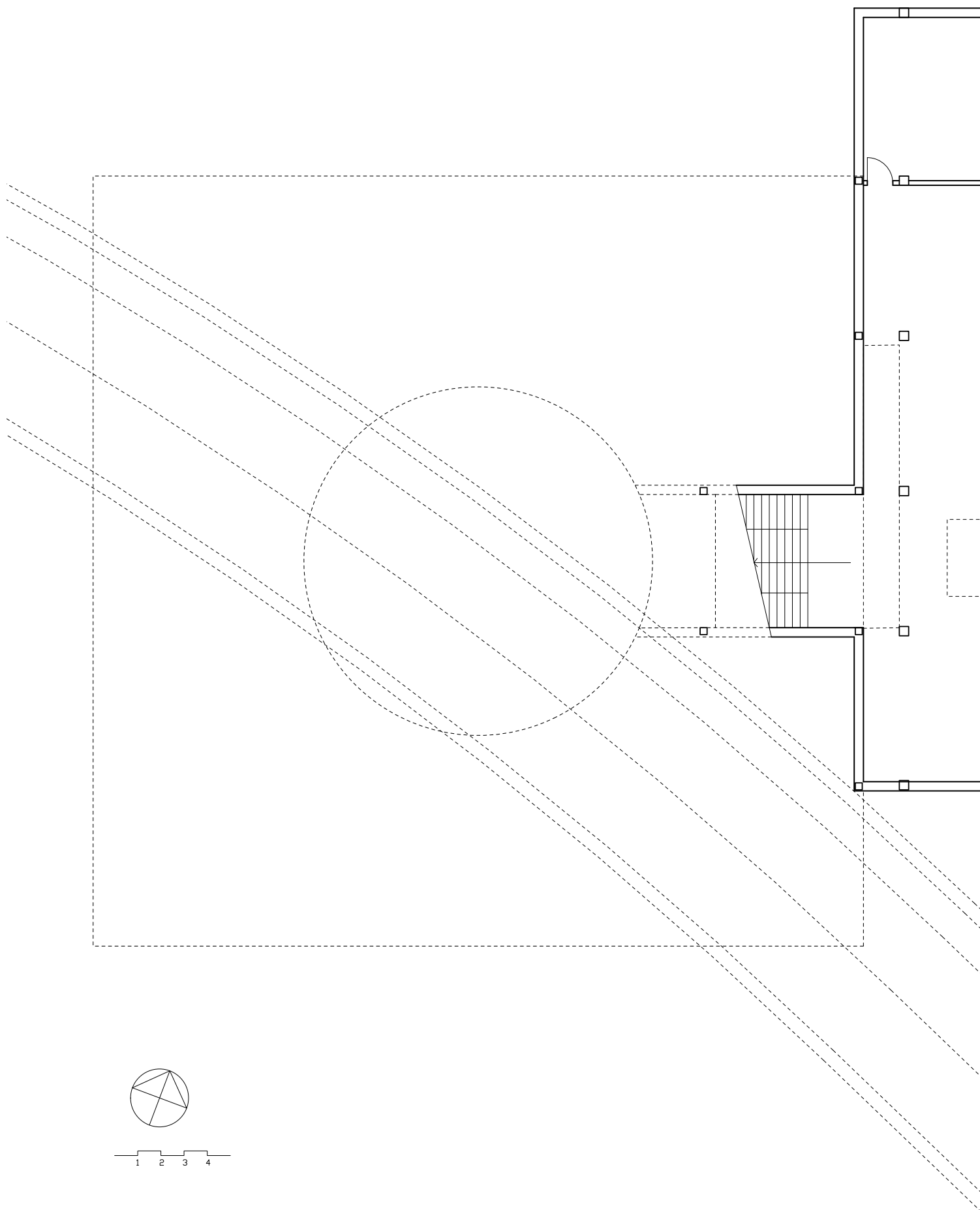


In the new landscape design, I adjusted the building's ground elevation again to reduce the height difference with the surroundings. I also modified the surrounding terrain, removing the ramp that directly connected the street to the garden between the two libraries. This change creates a more private garden space in the middle.

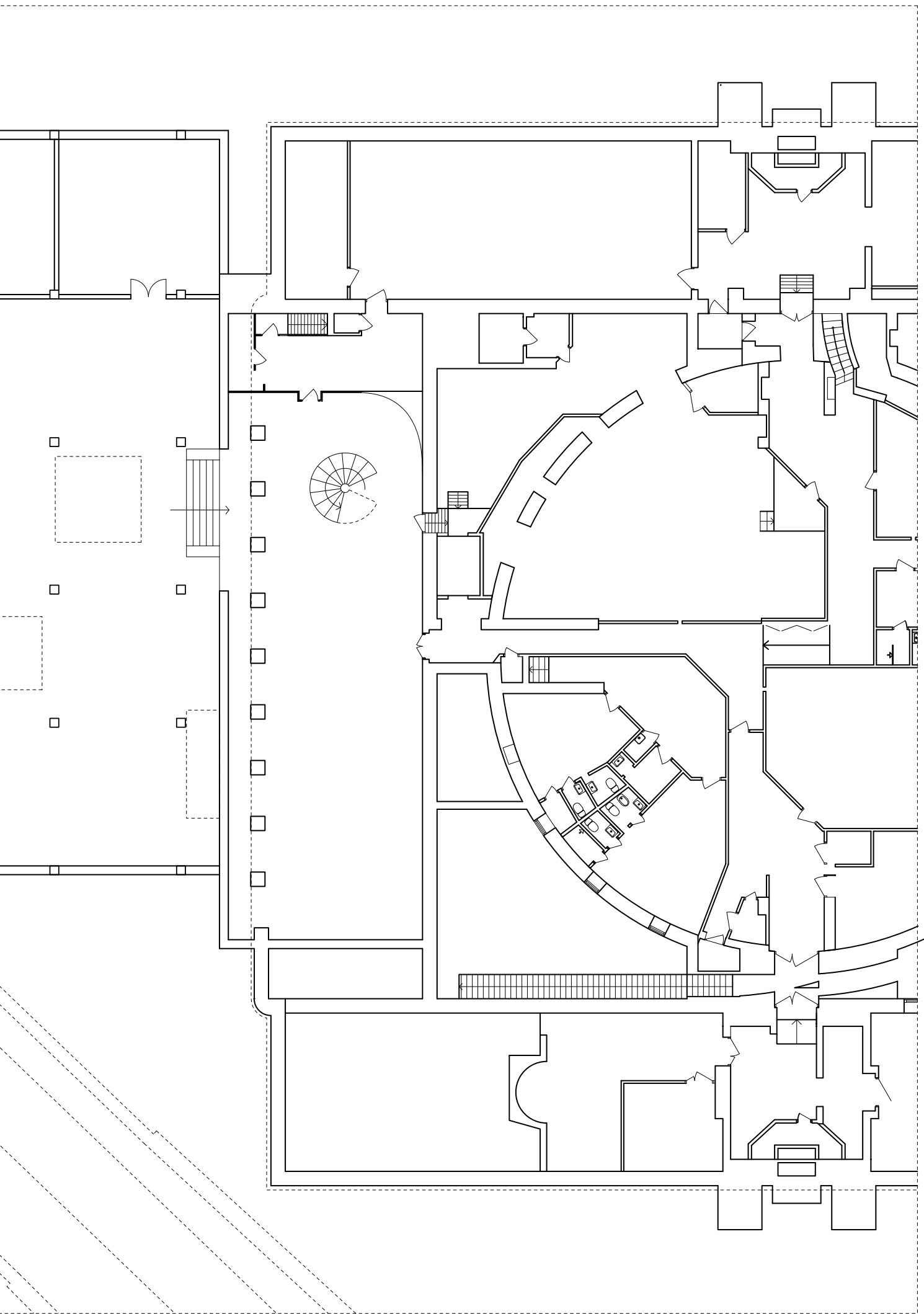


Week 4.1

-1F Plan

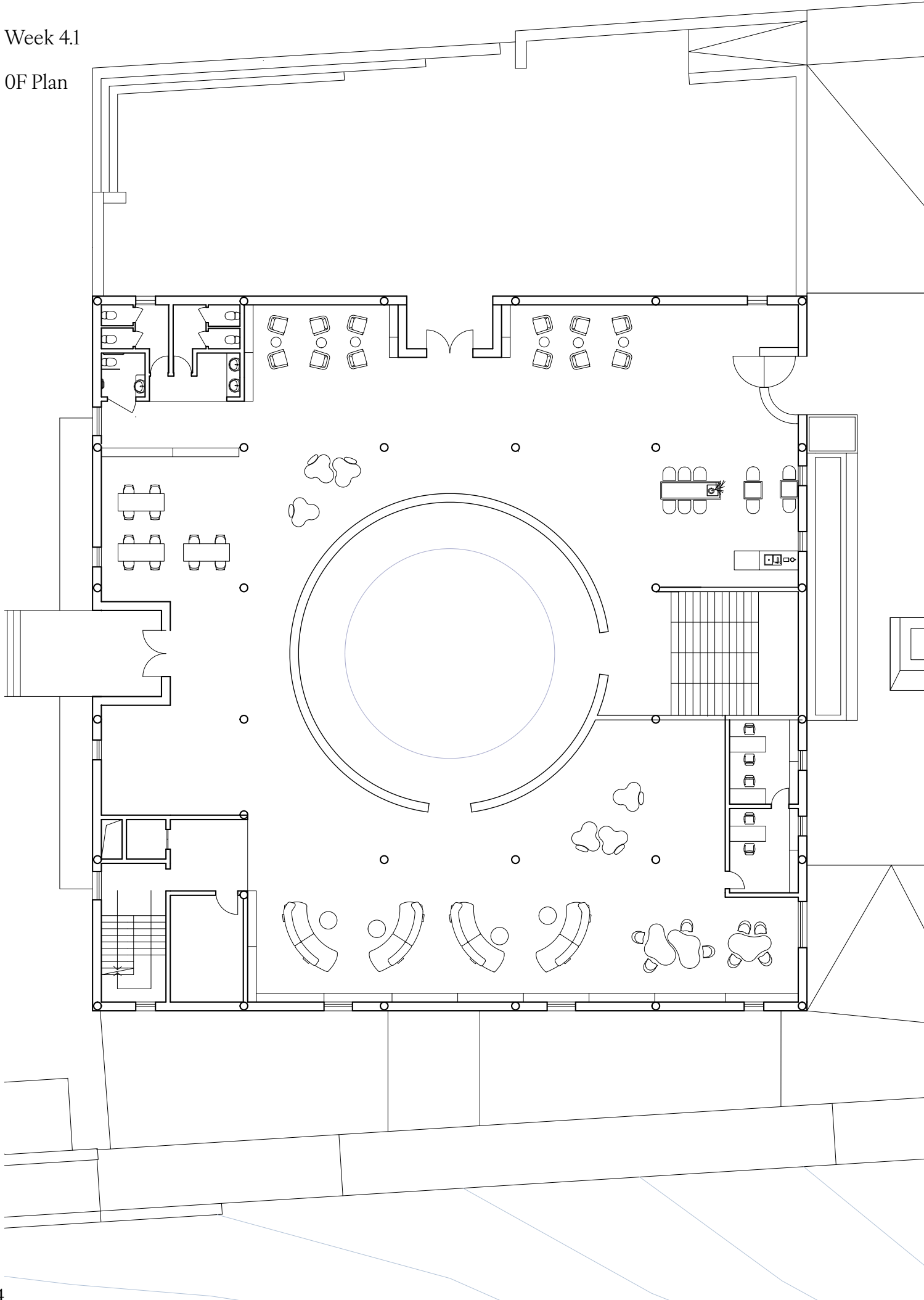


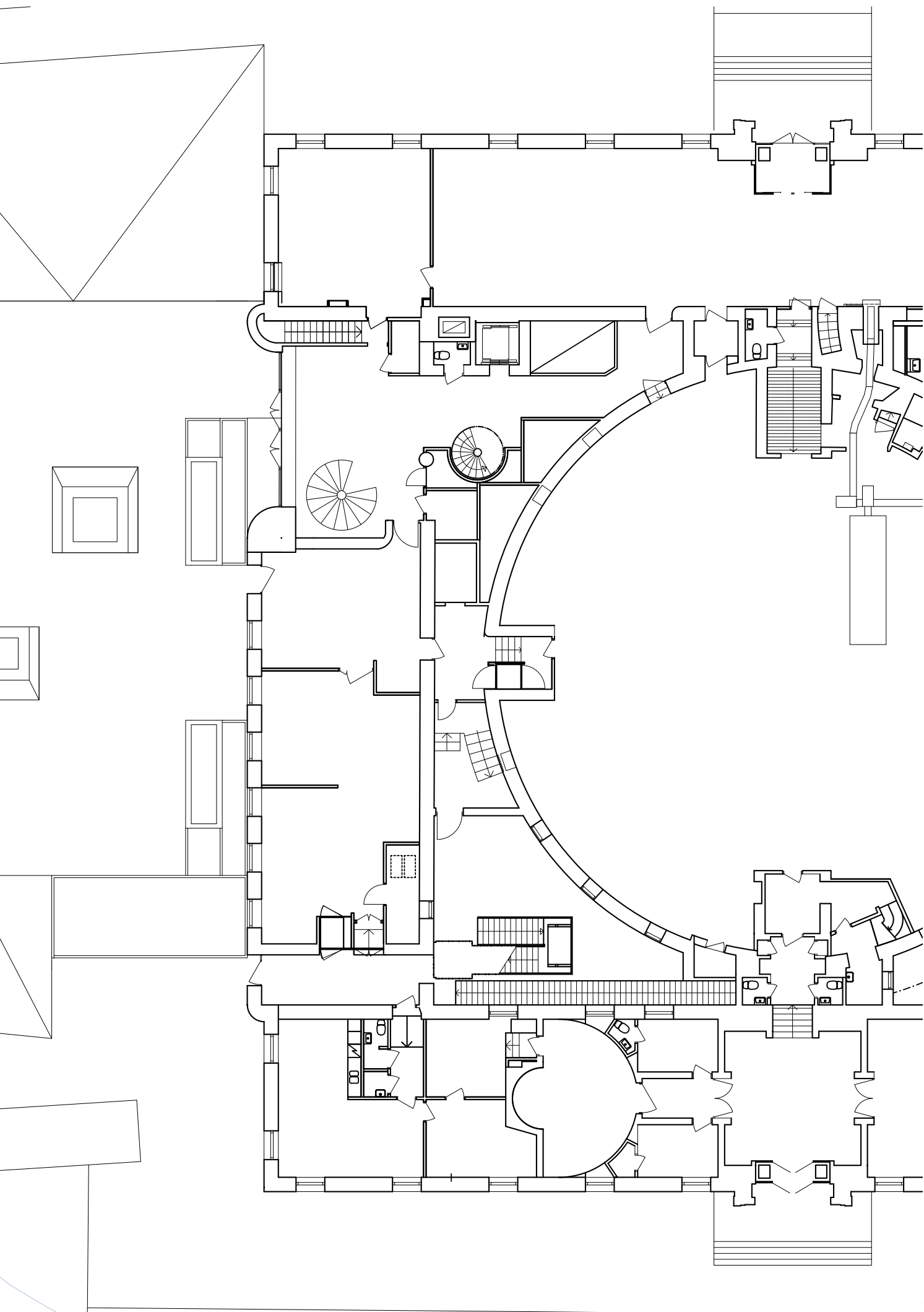




Week 4.1

0F Plan

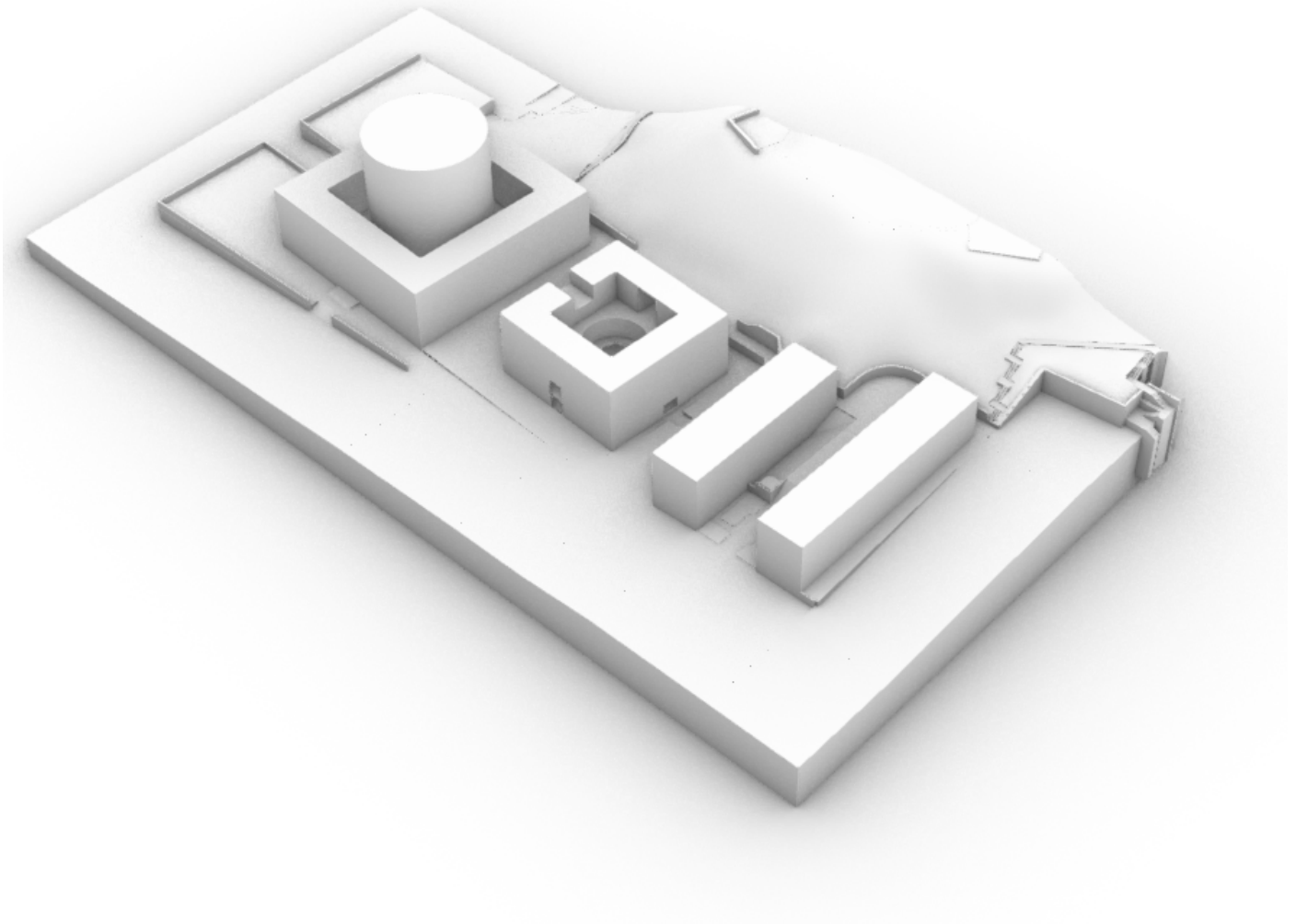




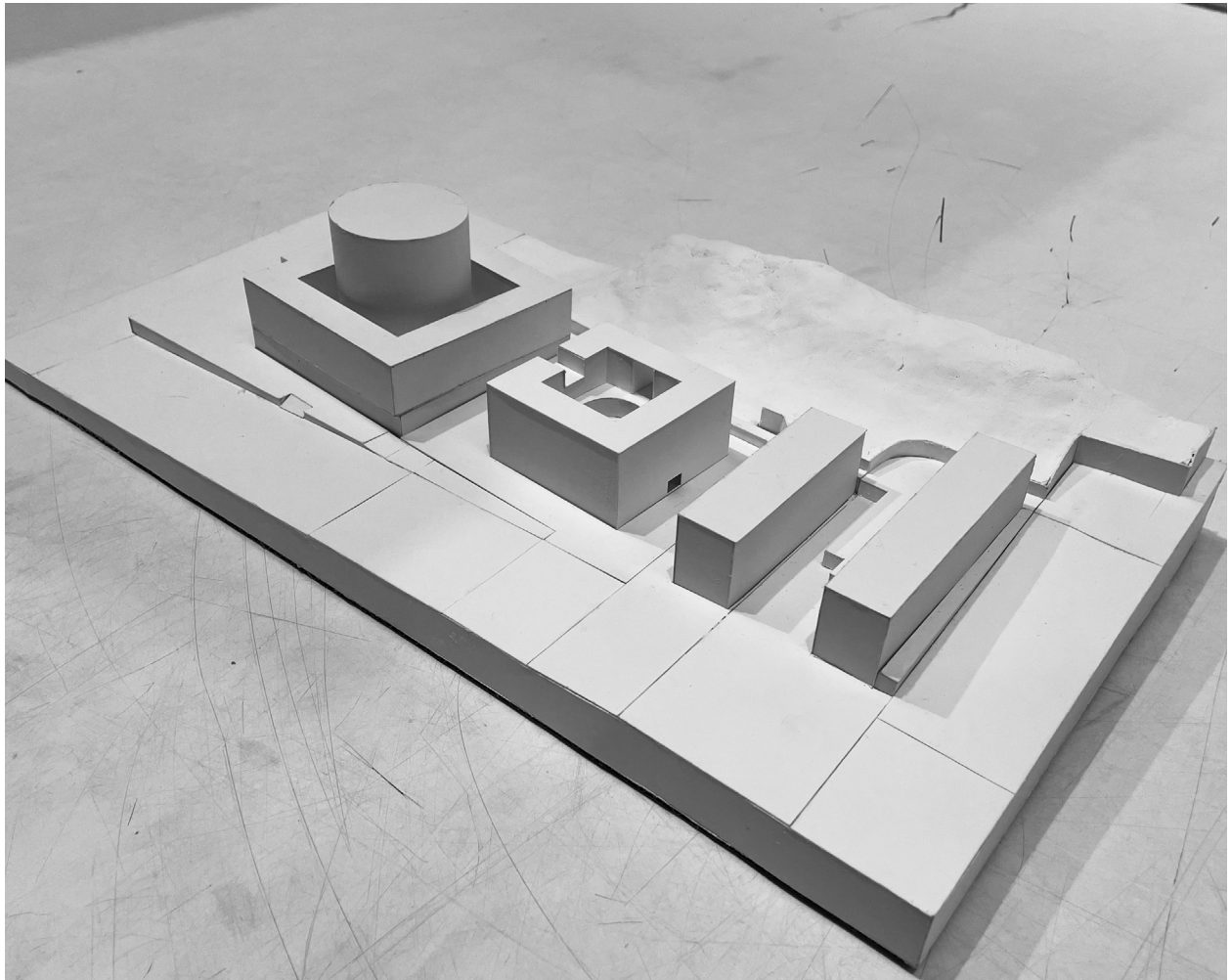
## Week 4.1

### Landscape changing

The original slope for the space in between of the libraries has two ways, which is confusing in direction leading. So I changed the place for the entrance of the building, and make the garden in between a more private space.



Digital model

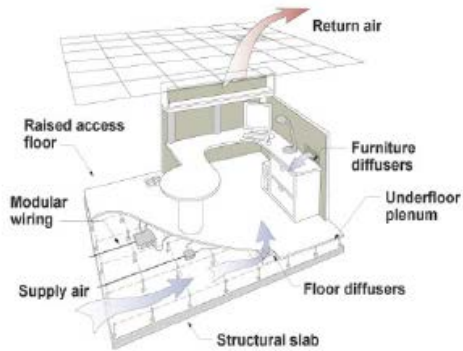


Physical model

# BT Research

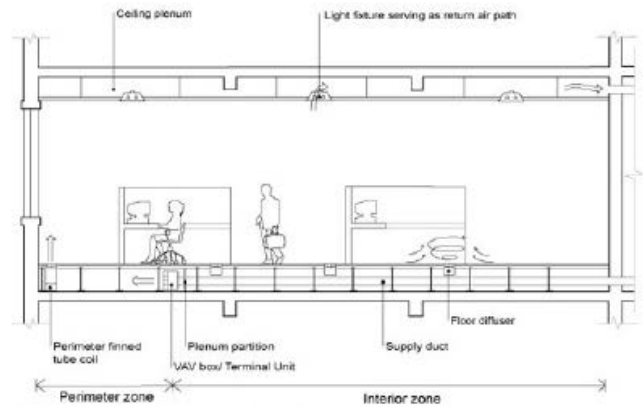
## UFAD System

### Typical Office Work Space Configuration Examples

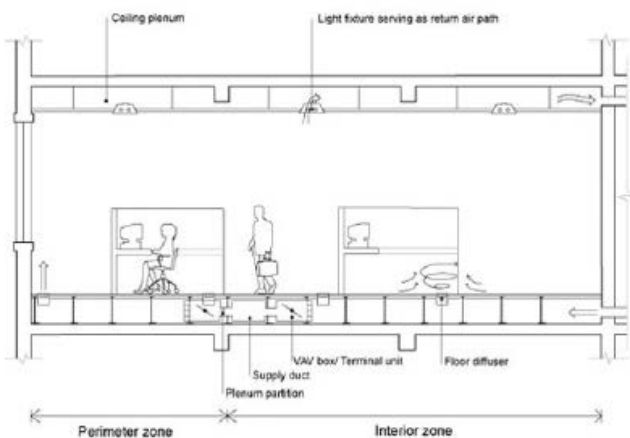


#### Types of plenum configurations

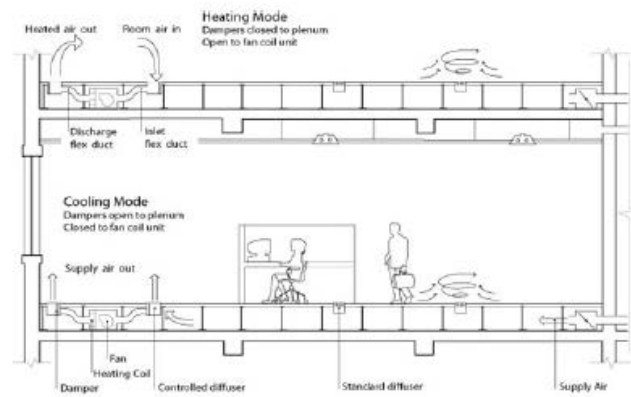
1. Multi-zoned with extensive perimeter ductwork
2. Multi-zoned with limited perimeter ductwork
3. Open-plan plenum



Multi-zoned, limited perimeter ductwork

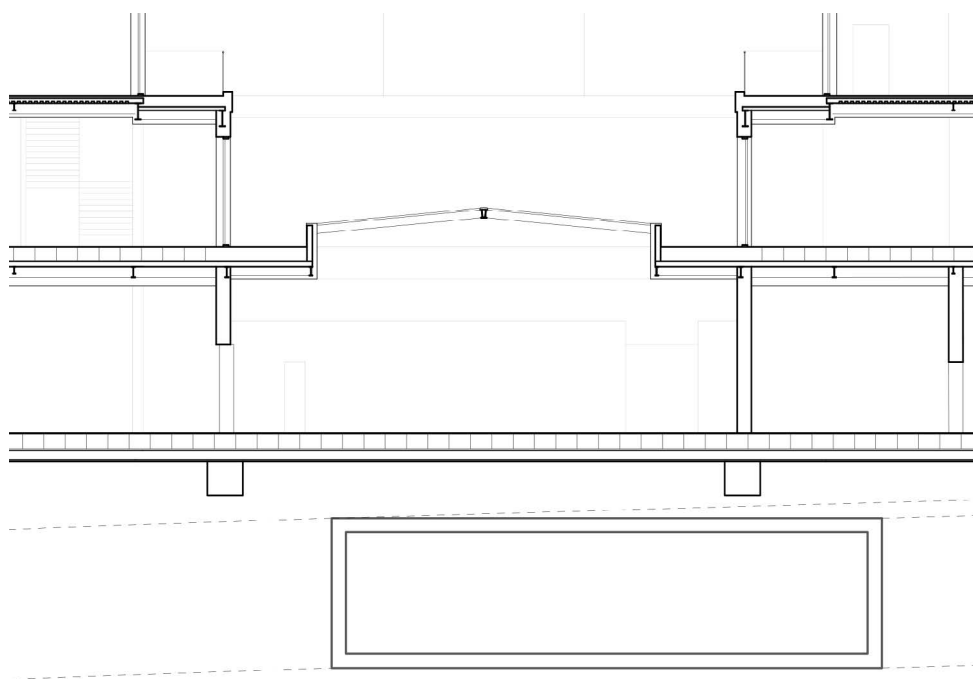


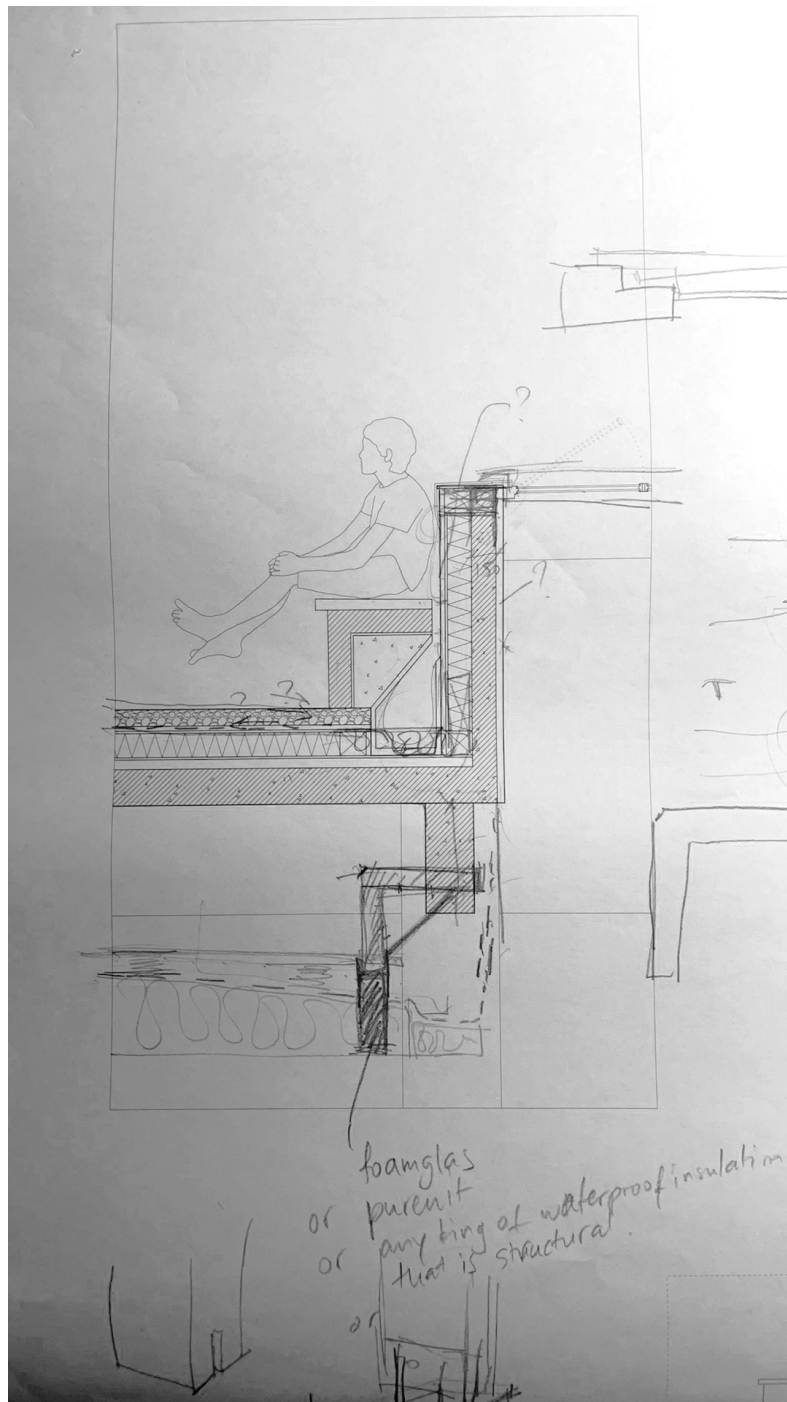
Multi-zoned, extensive perimeter ductwork

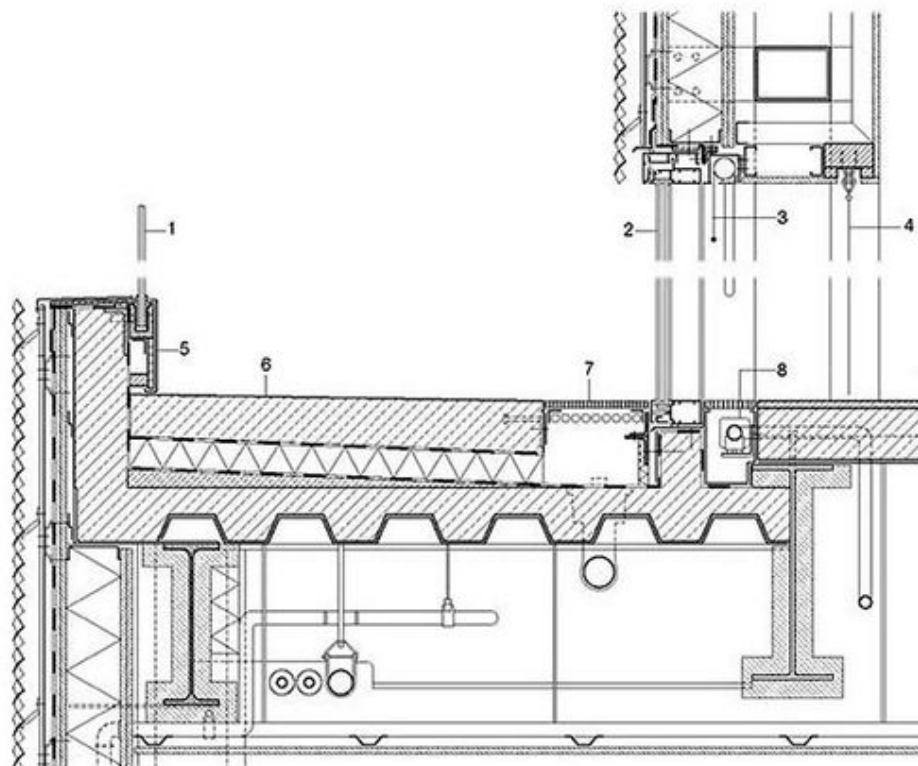
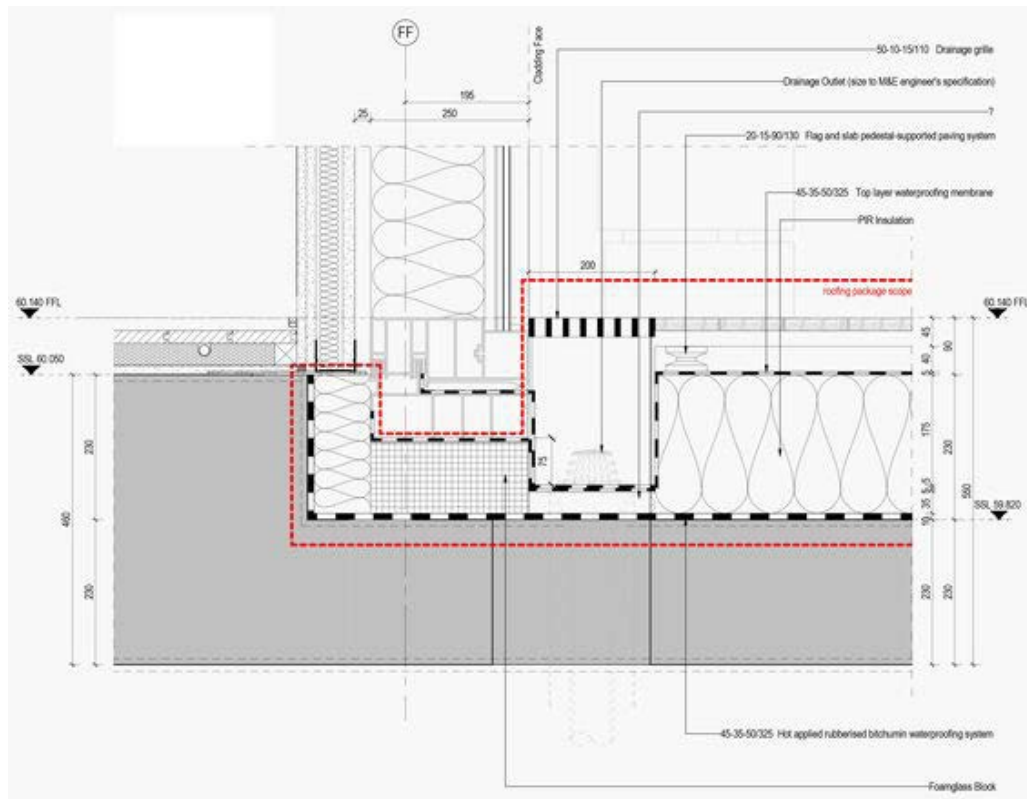


Open Plan Plenum

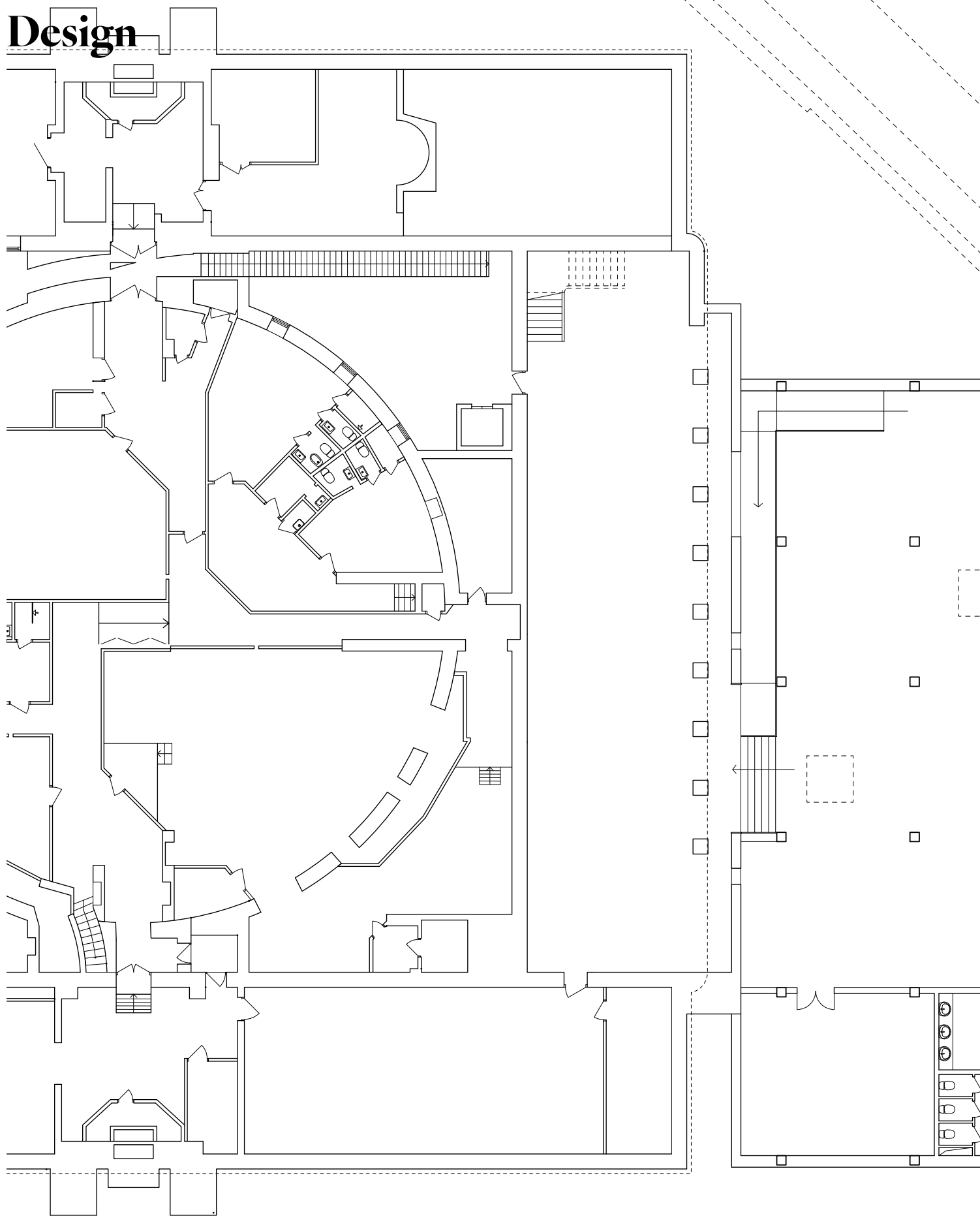


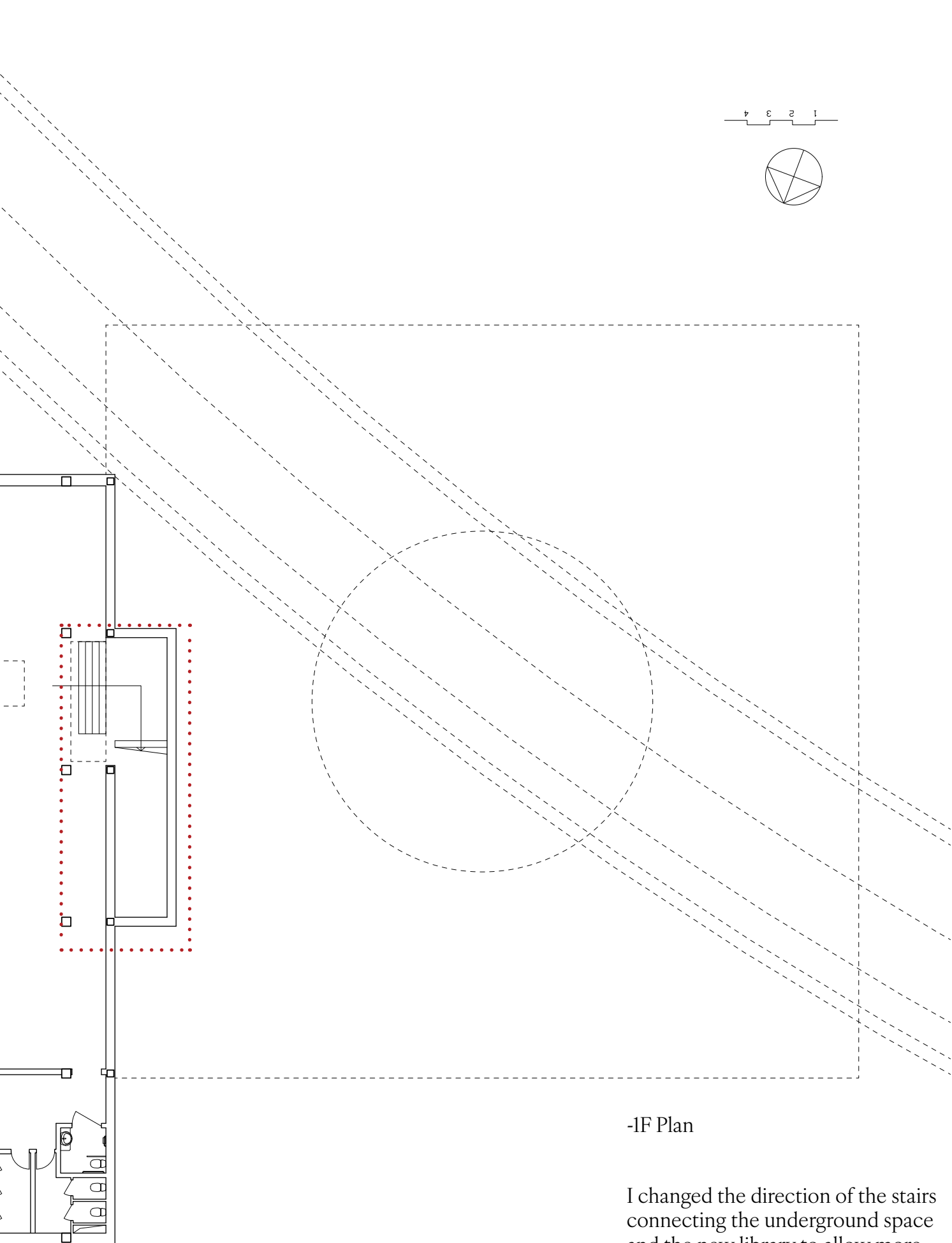






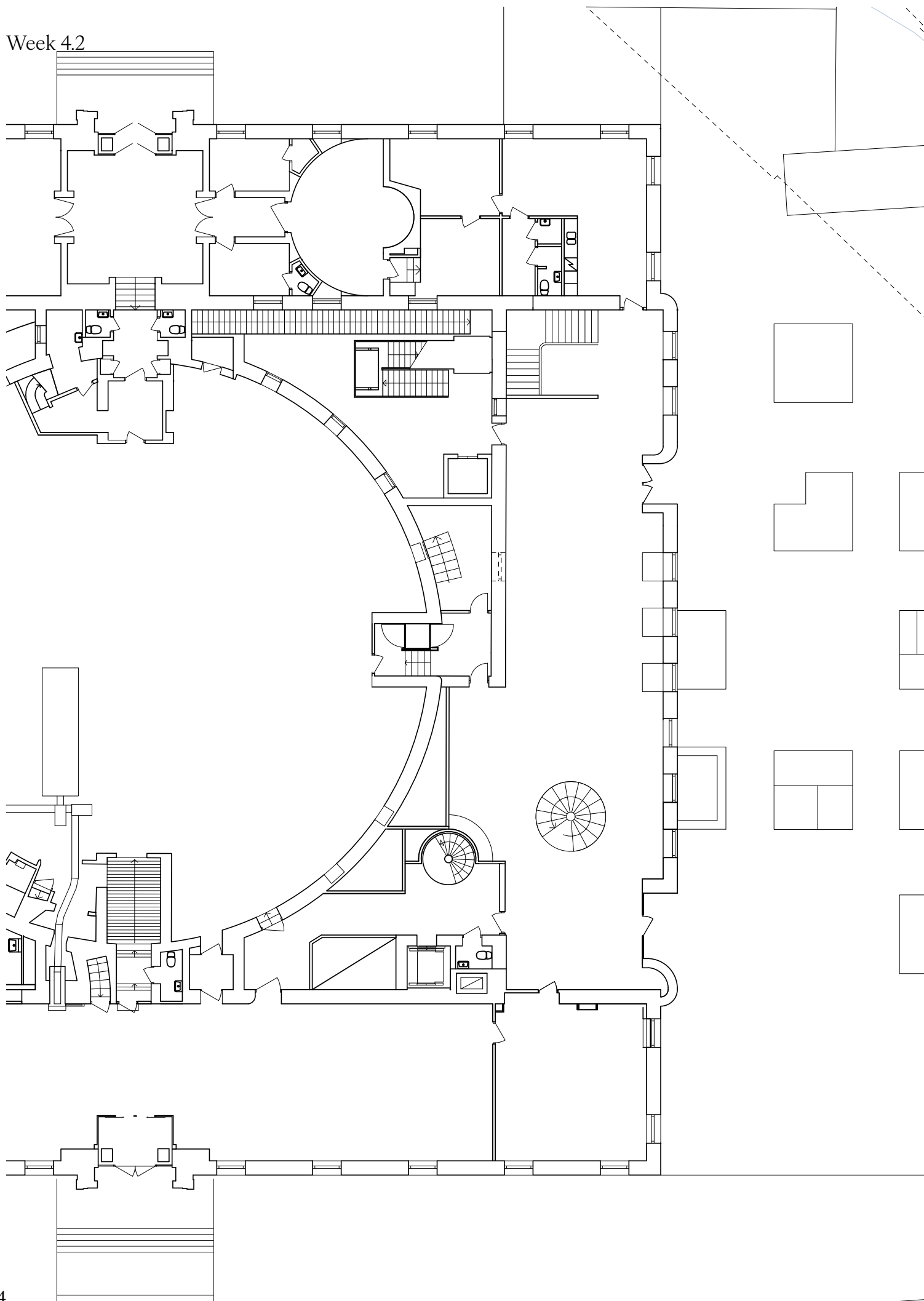
# Design



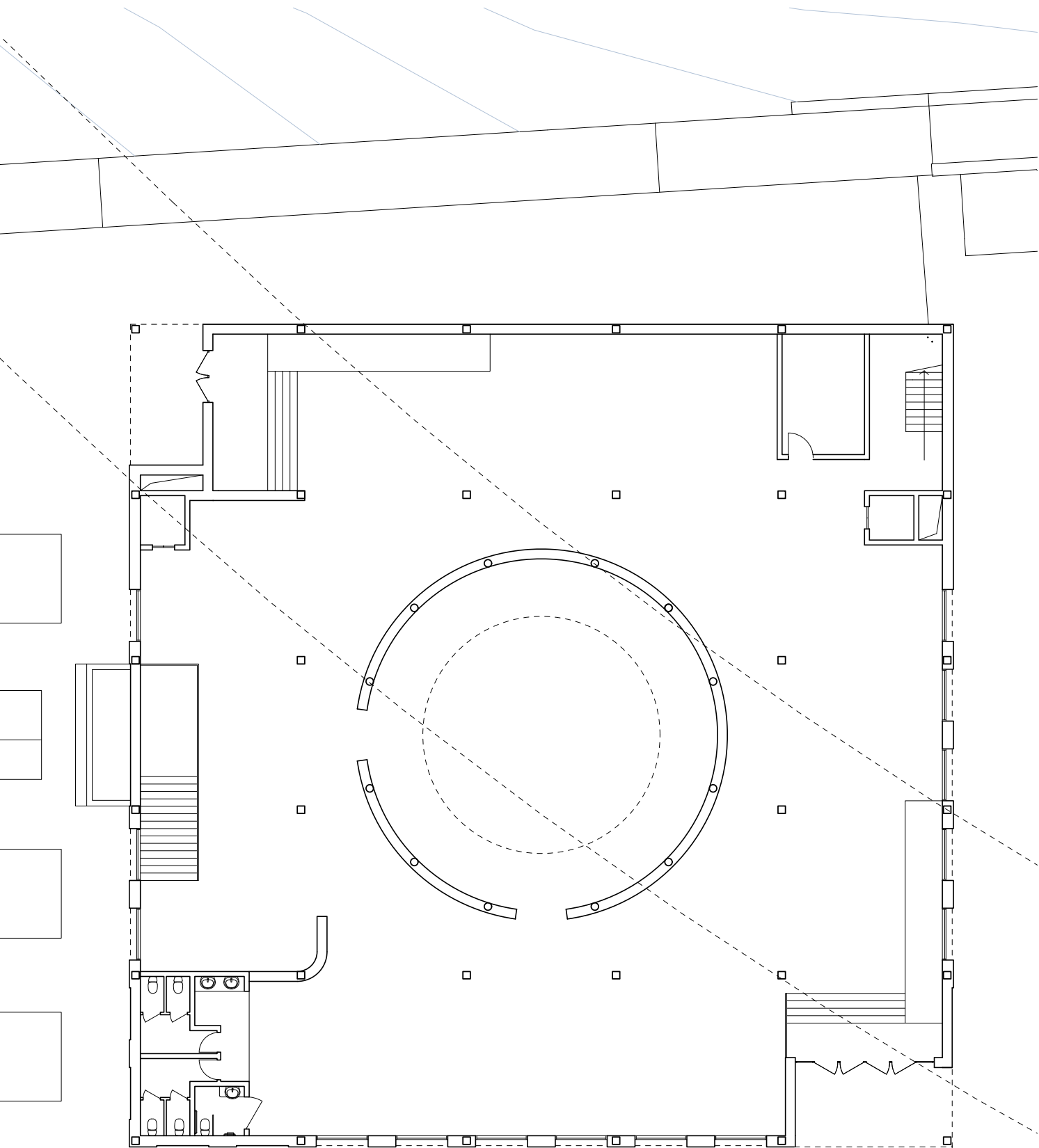


-1F Plan

I changed the direction of the stairs connecting the underground space and the new library to allow more space for the landing.

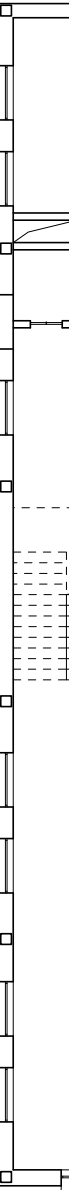
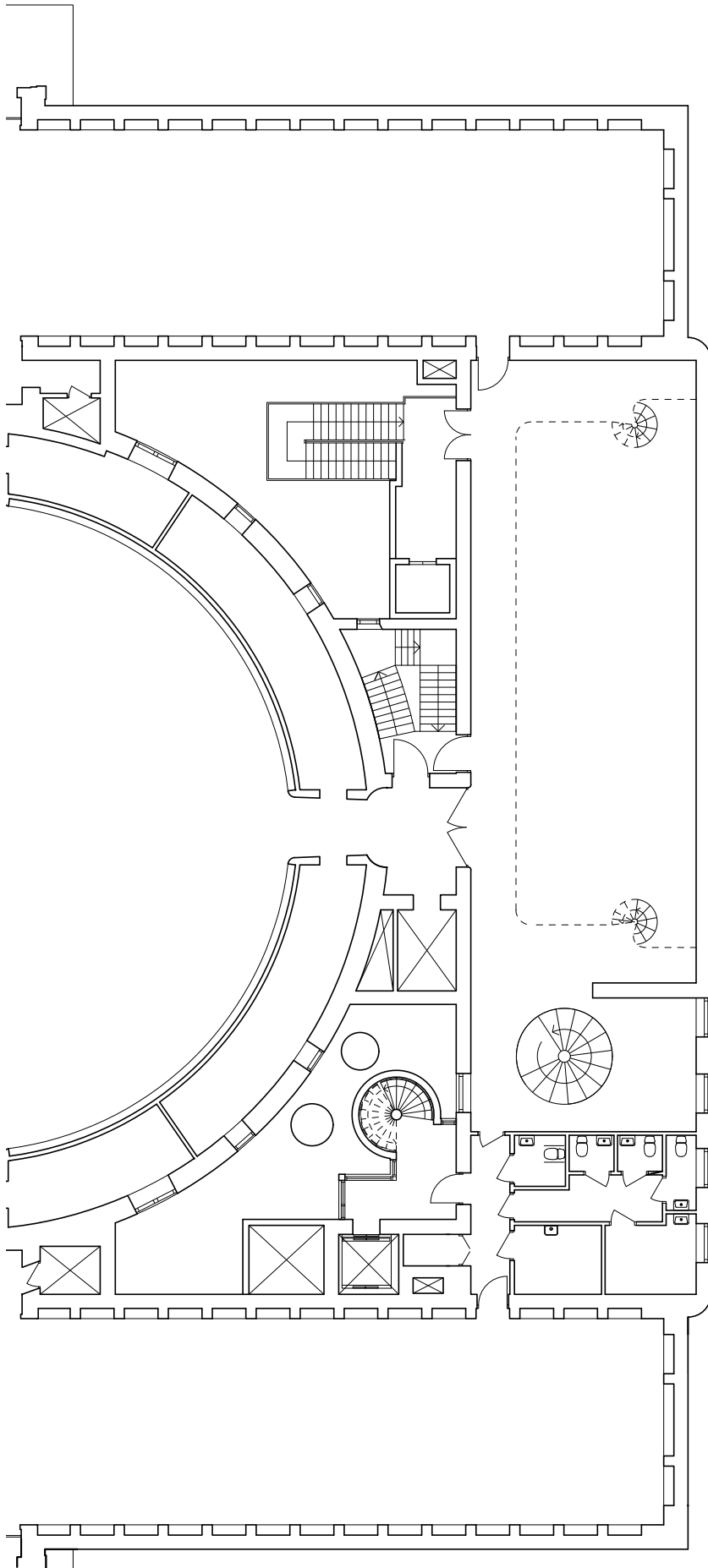


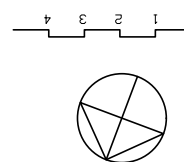
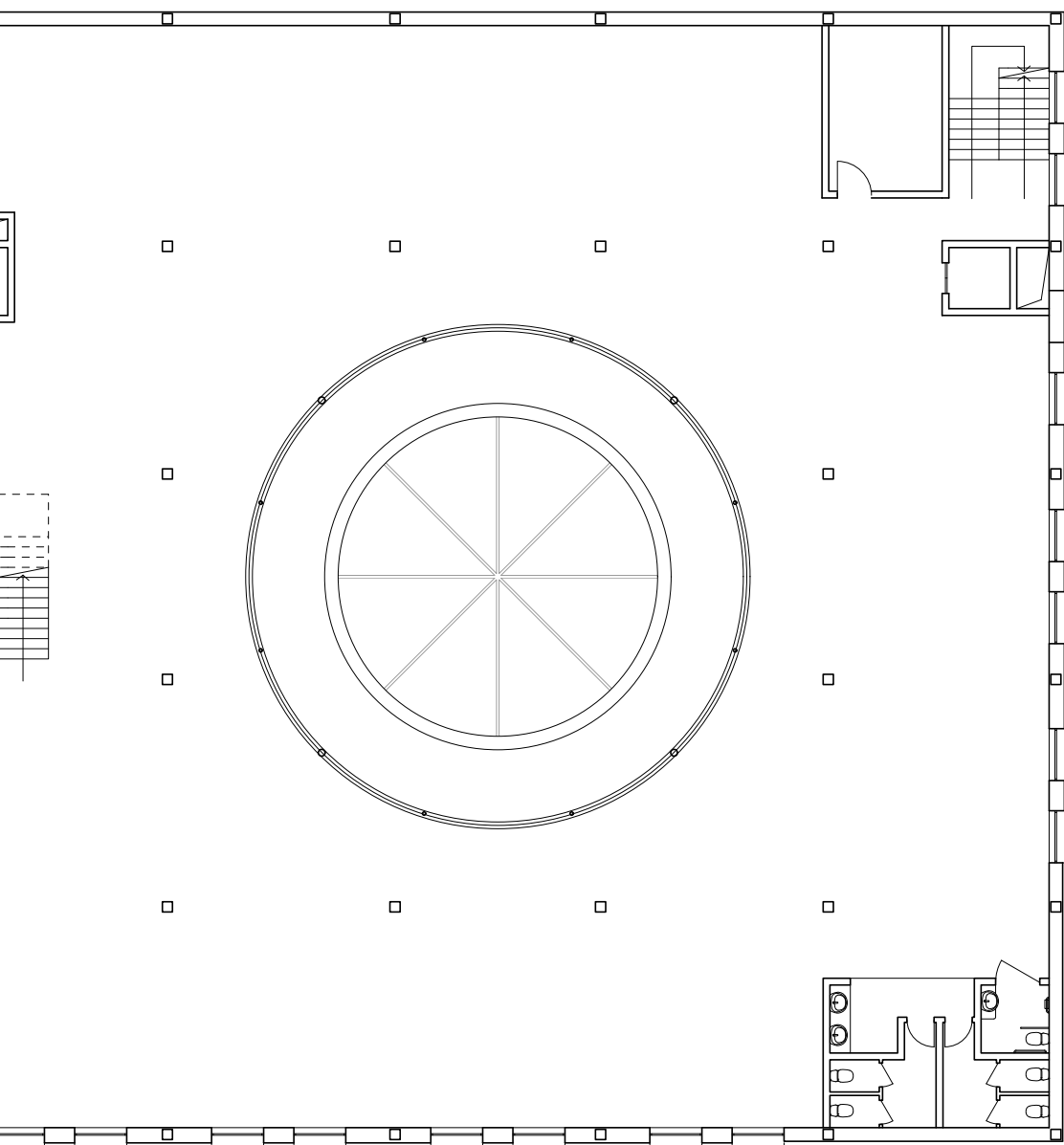




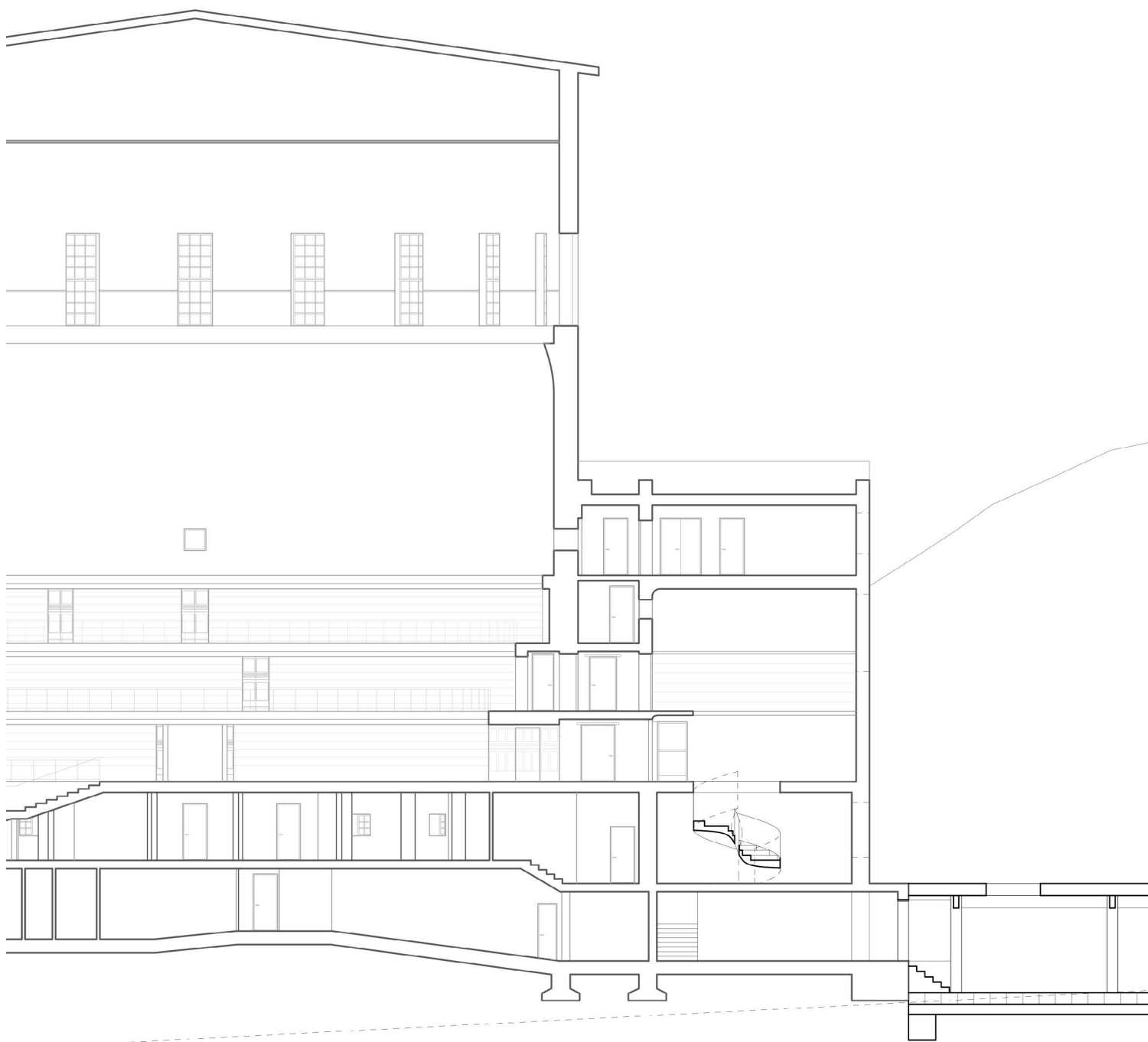
OF Plan

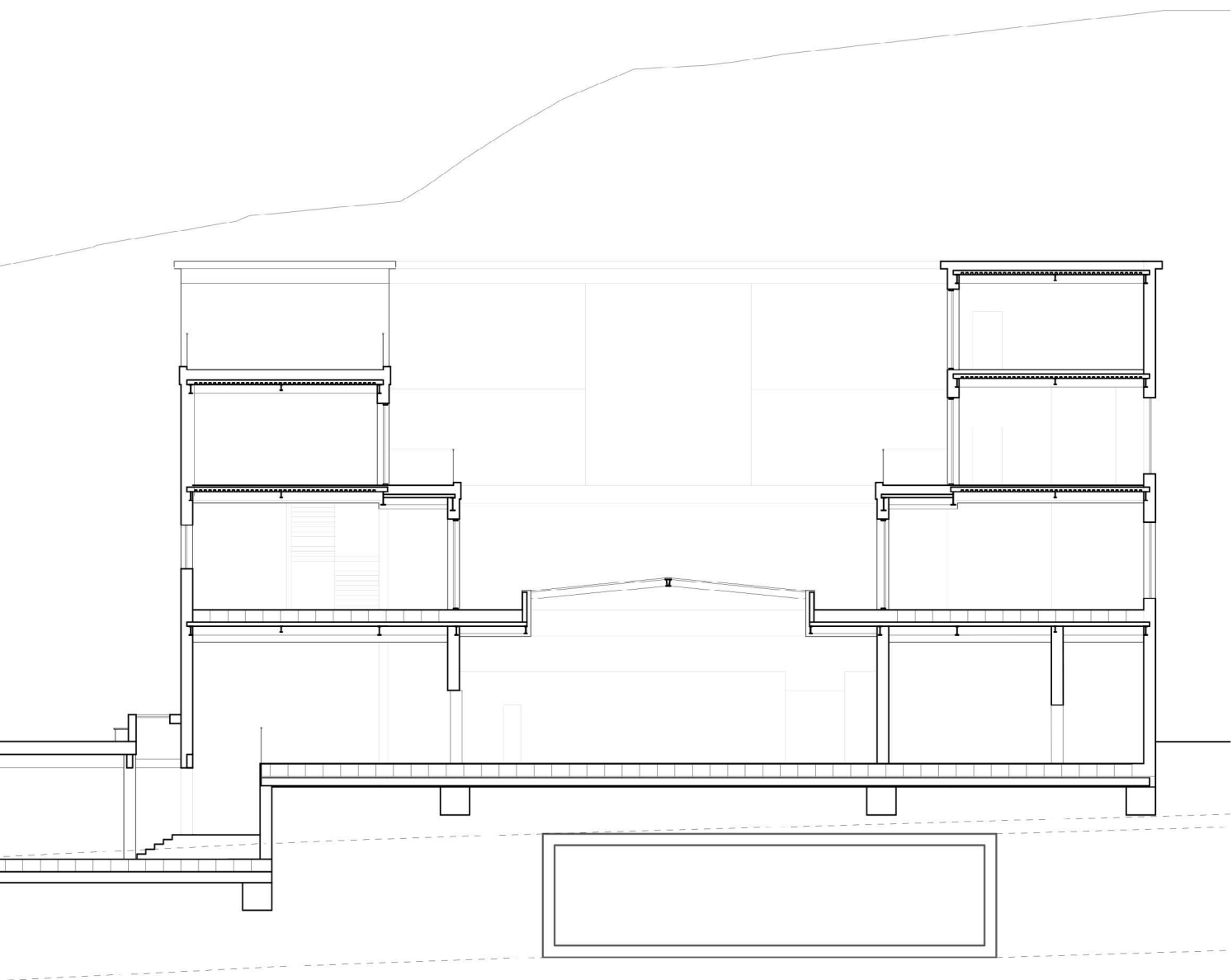
I moved the entrance to the corner to accommodate the changes in the landscape and to give the library a diagonal symmetry.





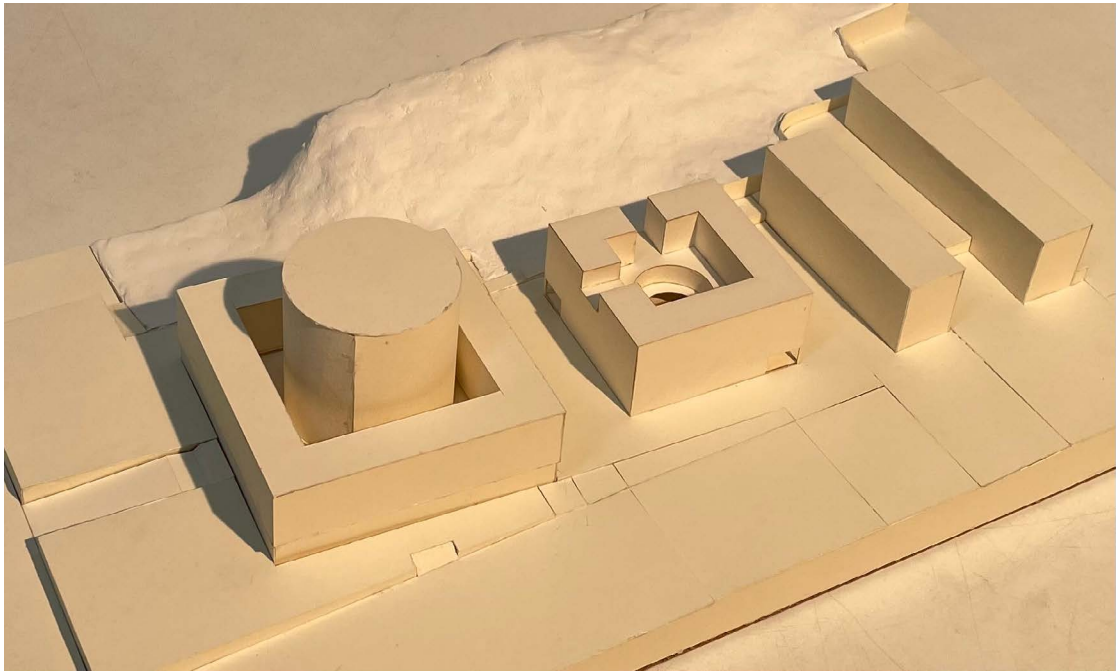
1F Plan



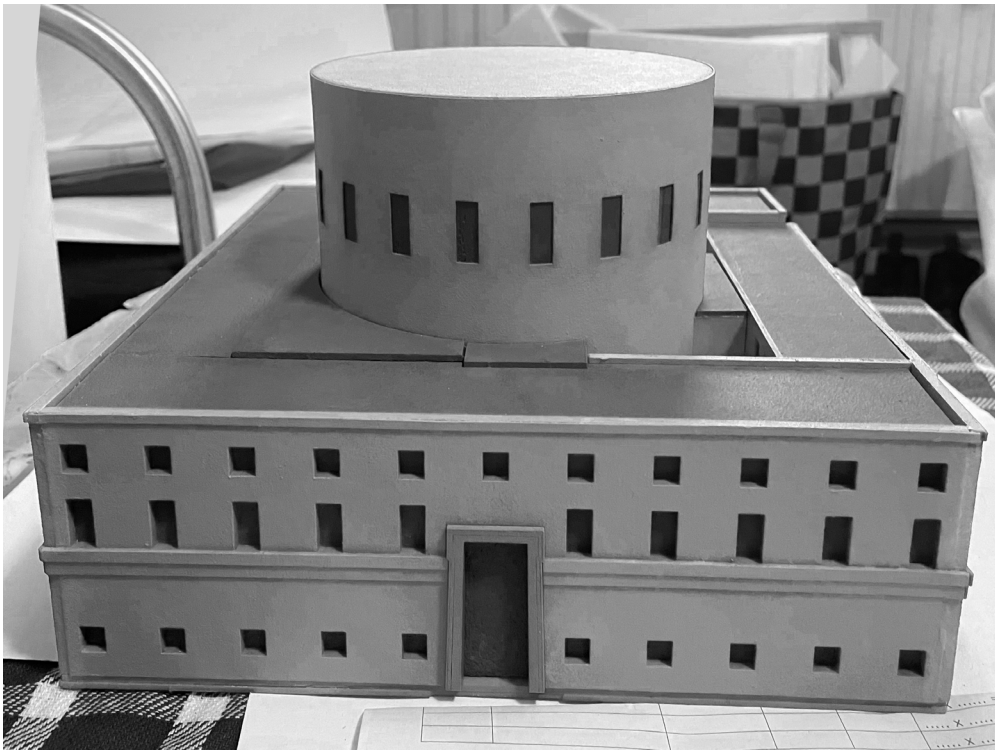


Week 4.3

# Model



1:500 model

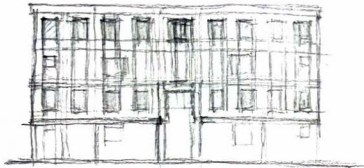


1:200 Process model

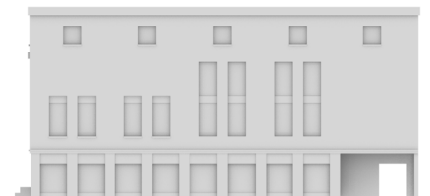
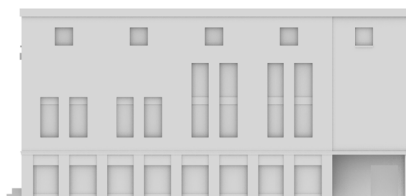
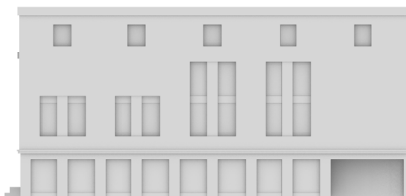
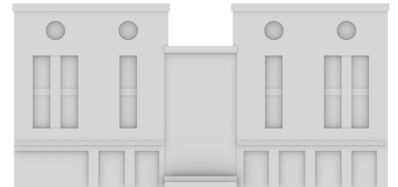
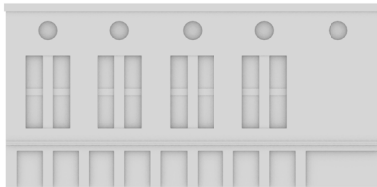
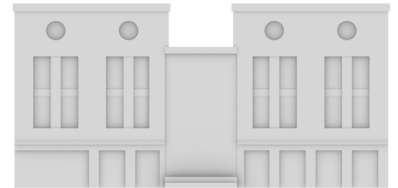
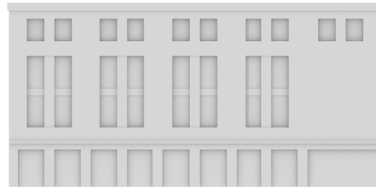


# Design

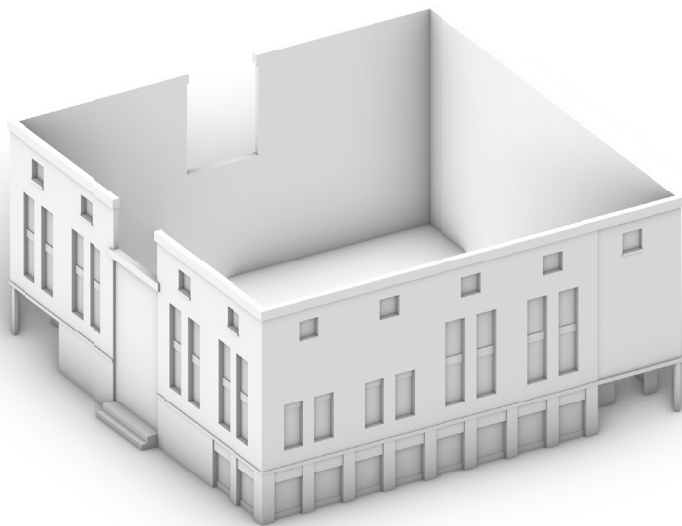
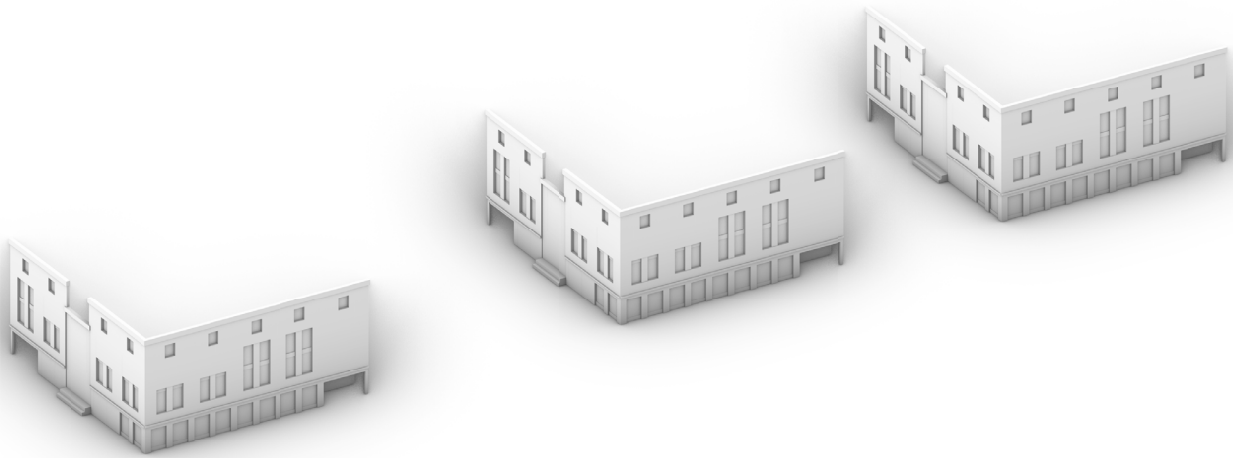
## Facade Refinement



Draft: week 3.6

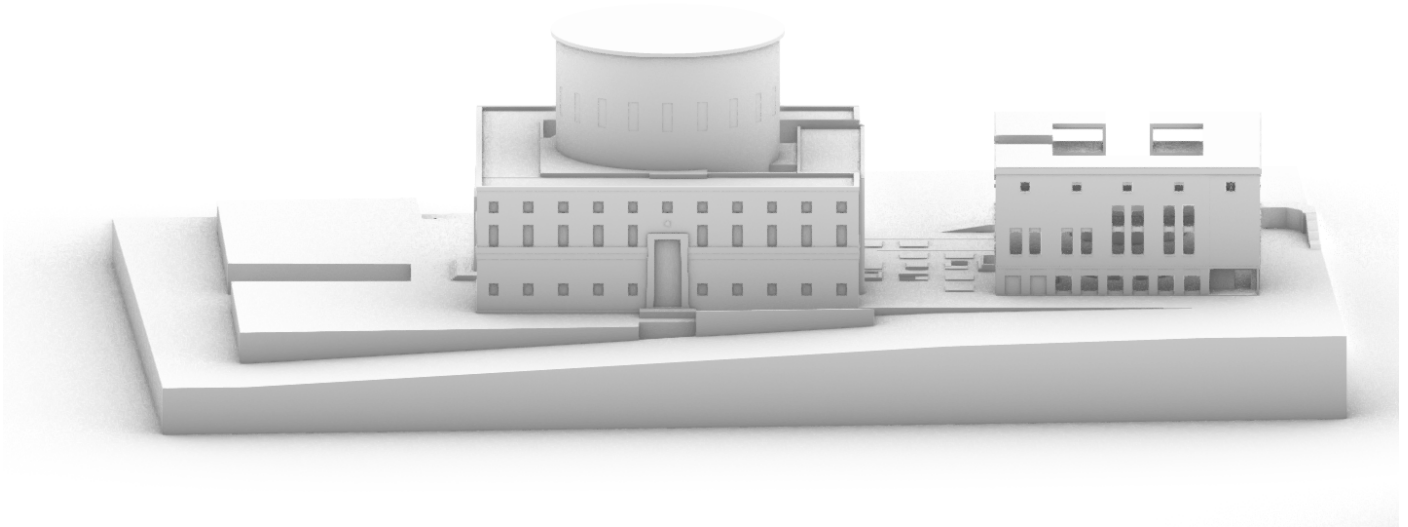


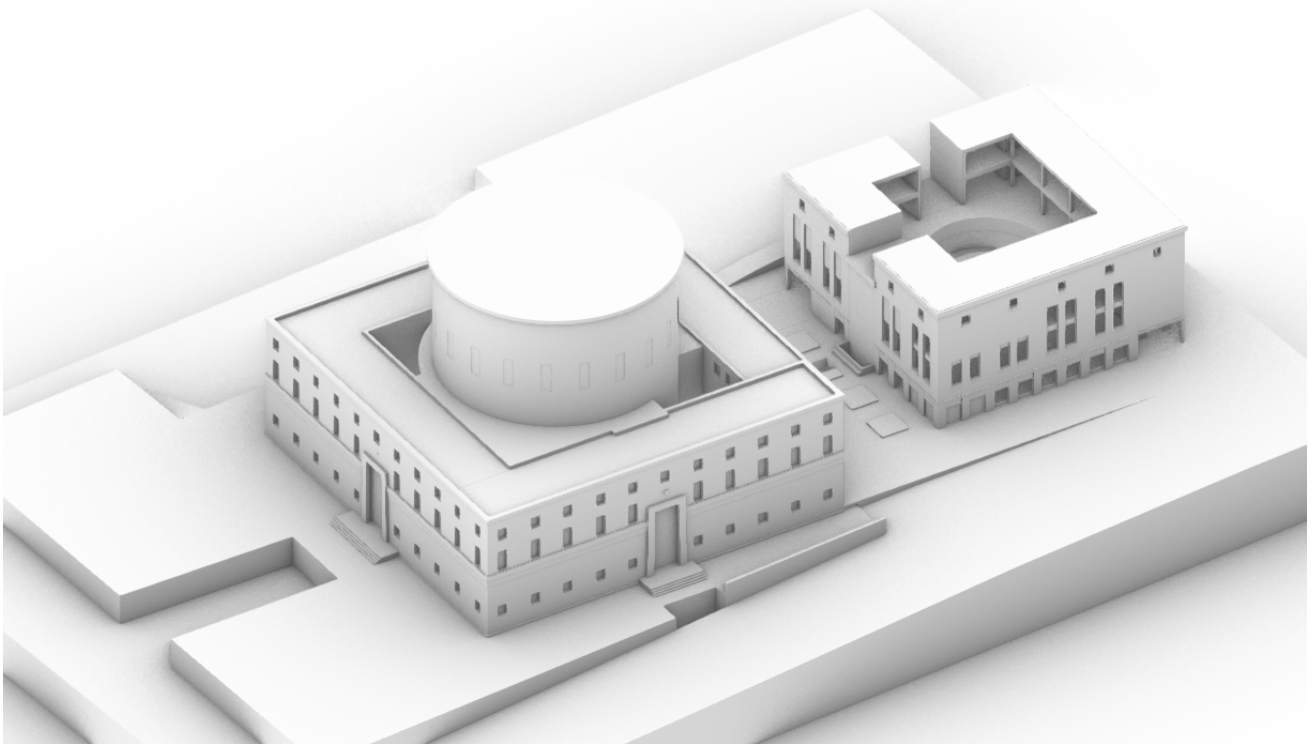
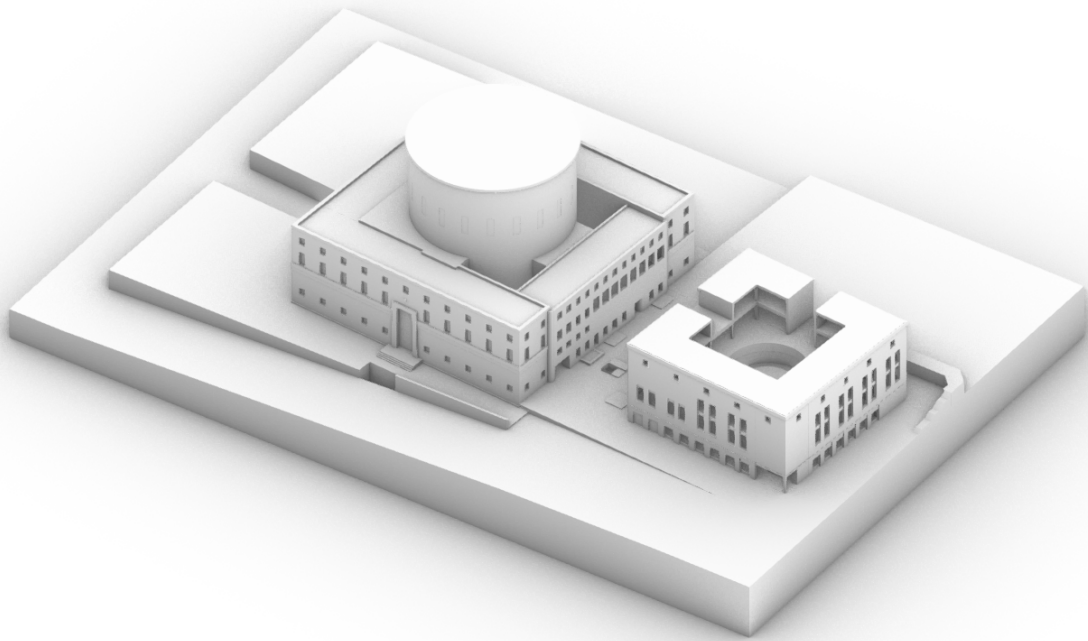
Based on the previous sketches, I have divided the facade primarily into two parts with different materials: plaster on top and brick veneer below. Within the plaster section, I've further divided it into two orders based on varying degrees of privacy and in homage to Asplund's facade style. Within these frameworks of order on different facades, subtle variations have been incorporated.



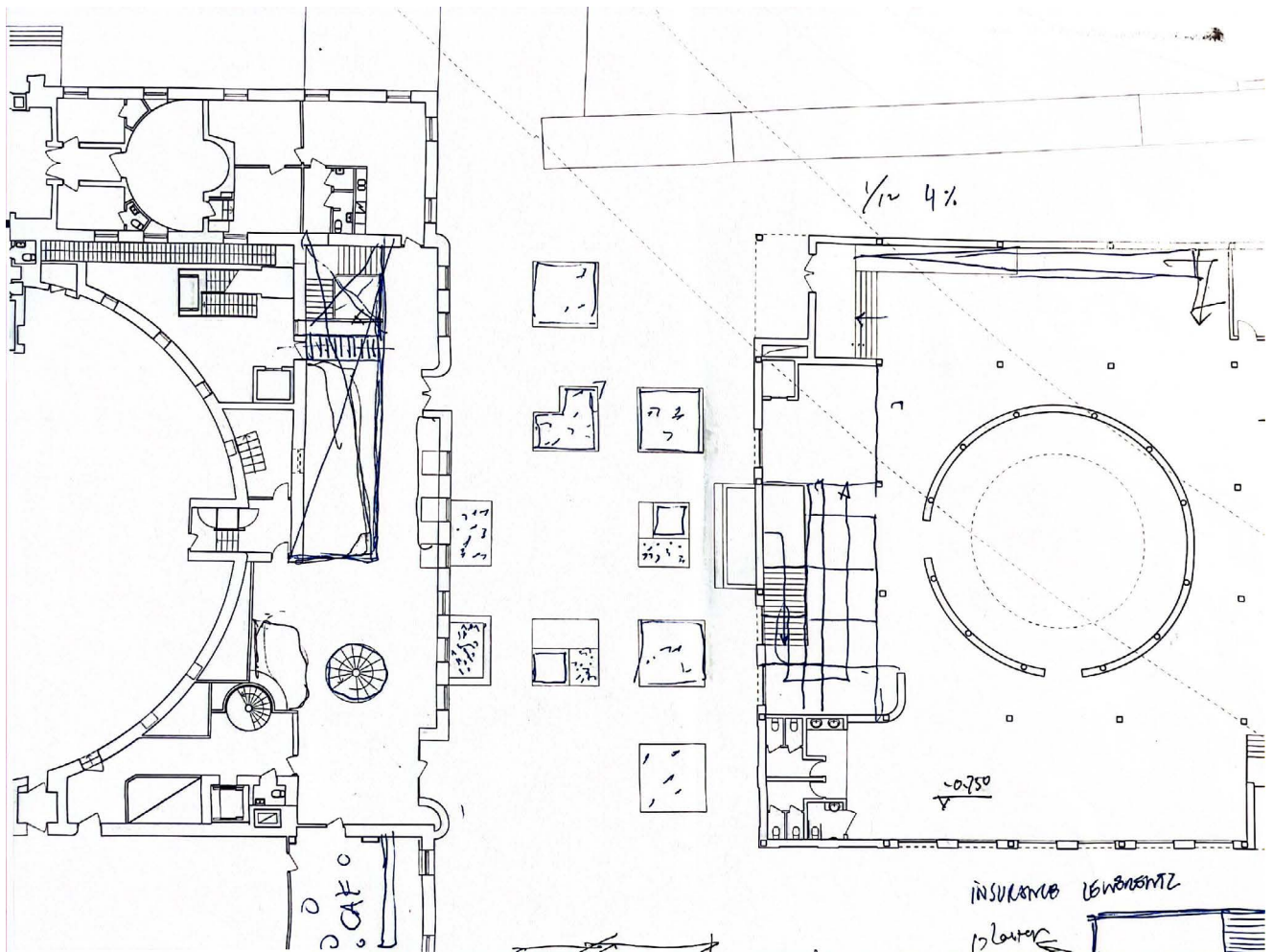
Week 4.3

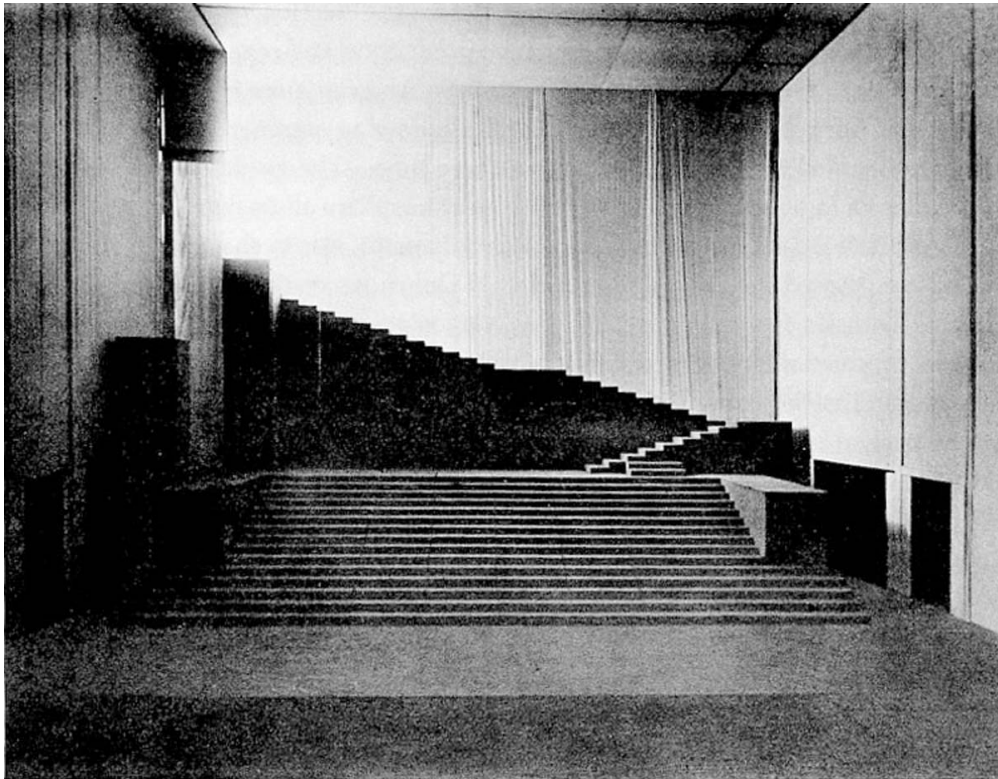
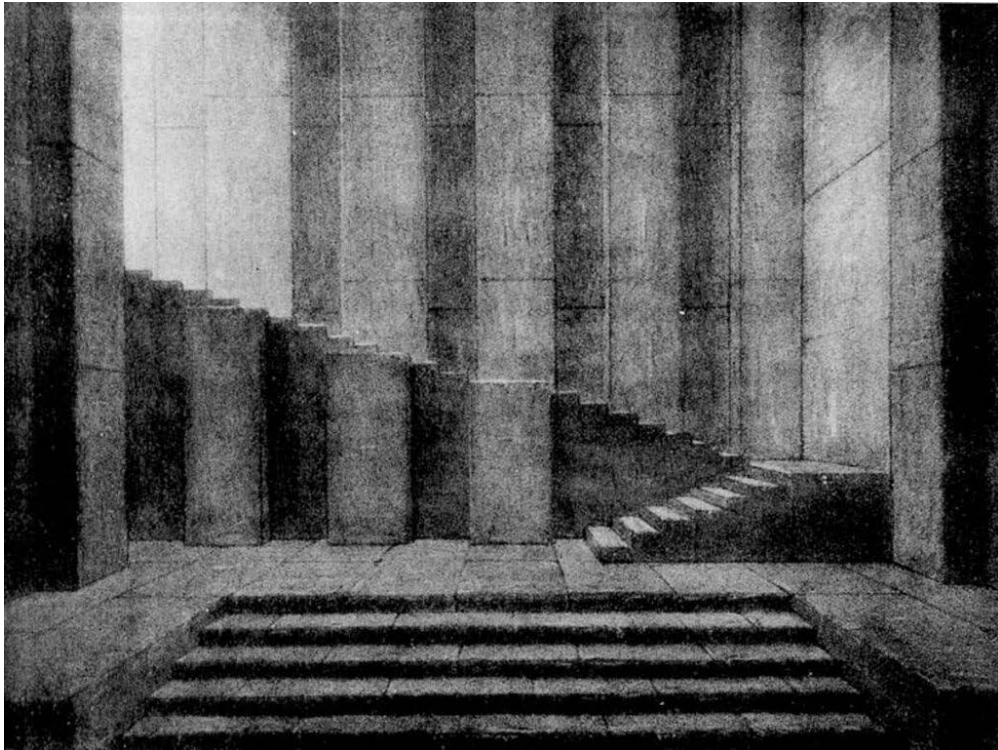
Facade Refinement





It is suggested that the connecting stairs adopt a more scenic approach to enhance the richness of the space and the mutual perception between different areas.





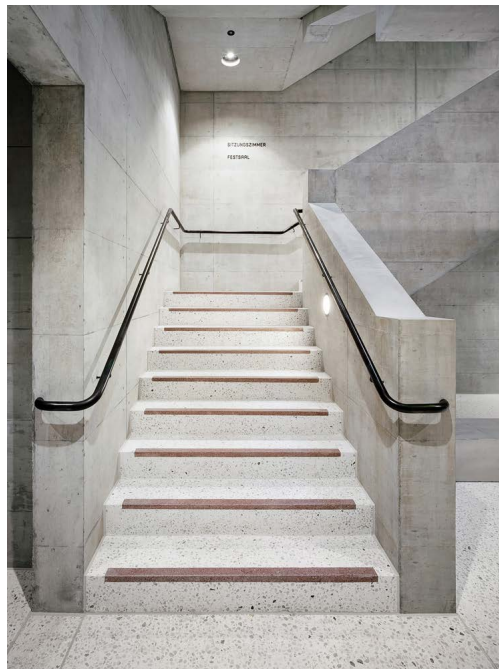
Reference: Adolphe Appia's work





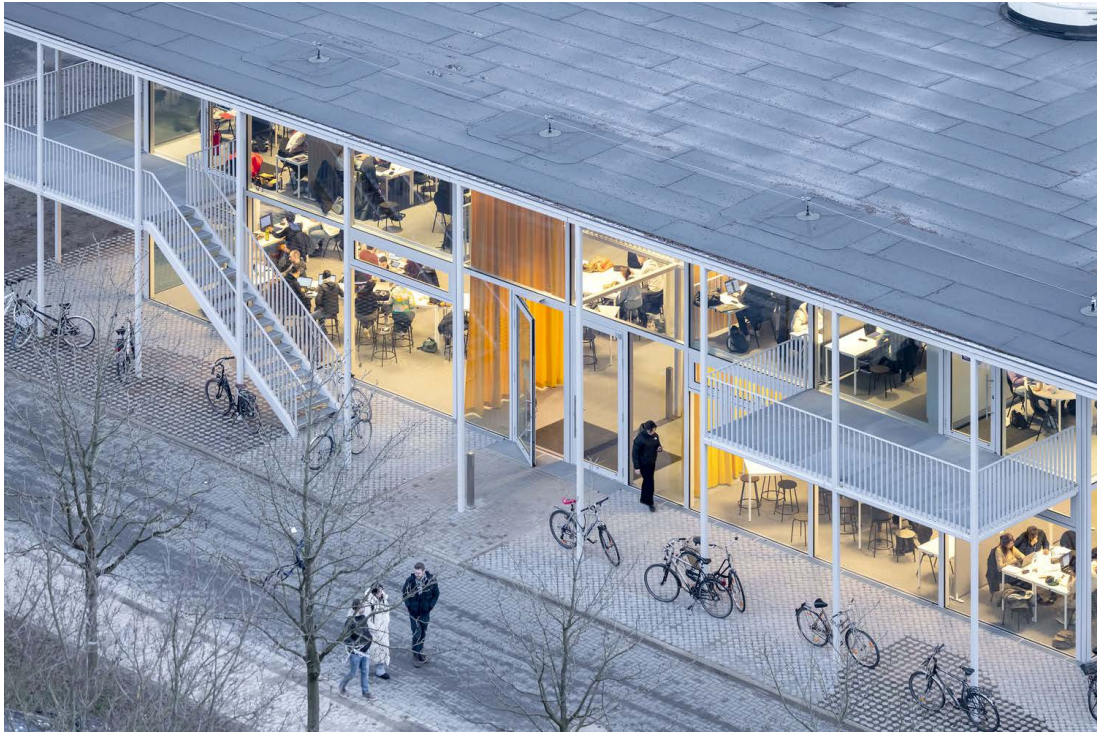
Reference: Dorfzentrum Untersiggenthal /  
NYX ARCHITECTES





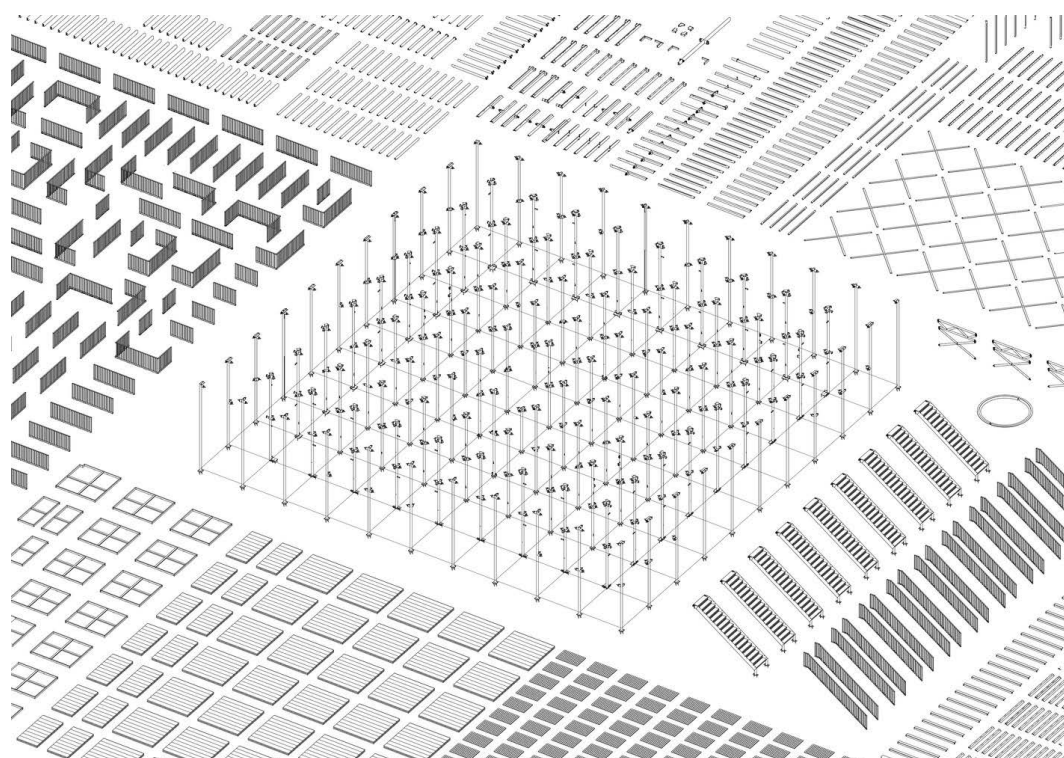
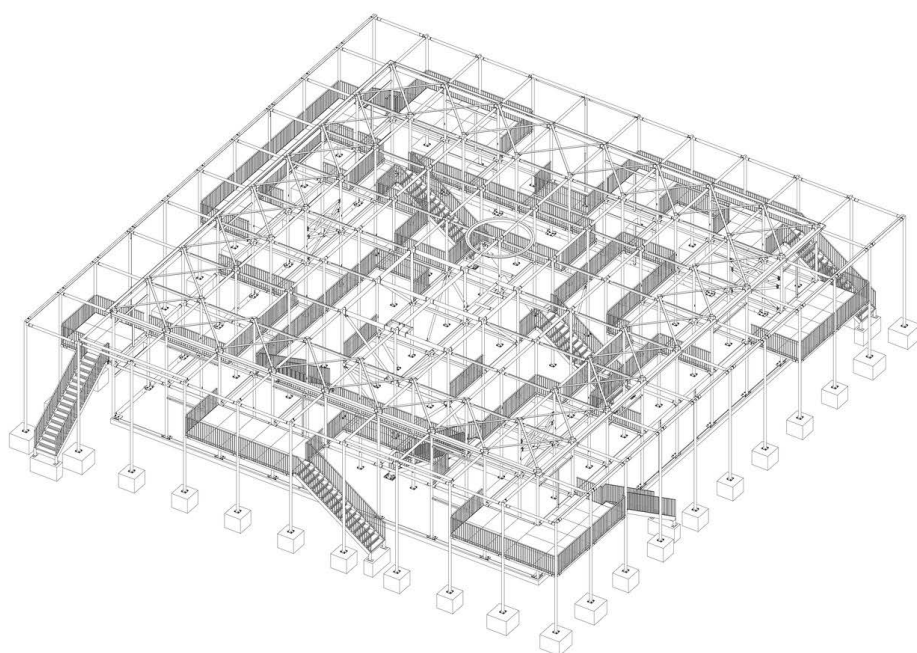
# BT-Construction

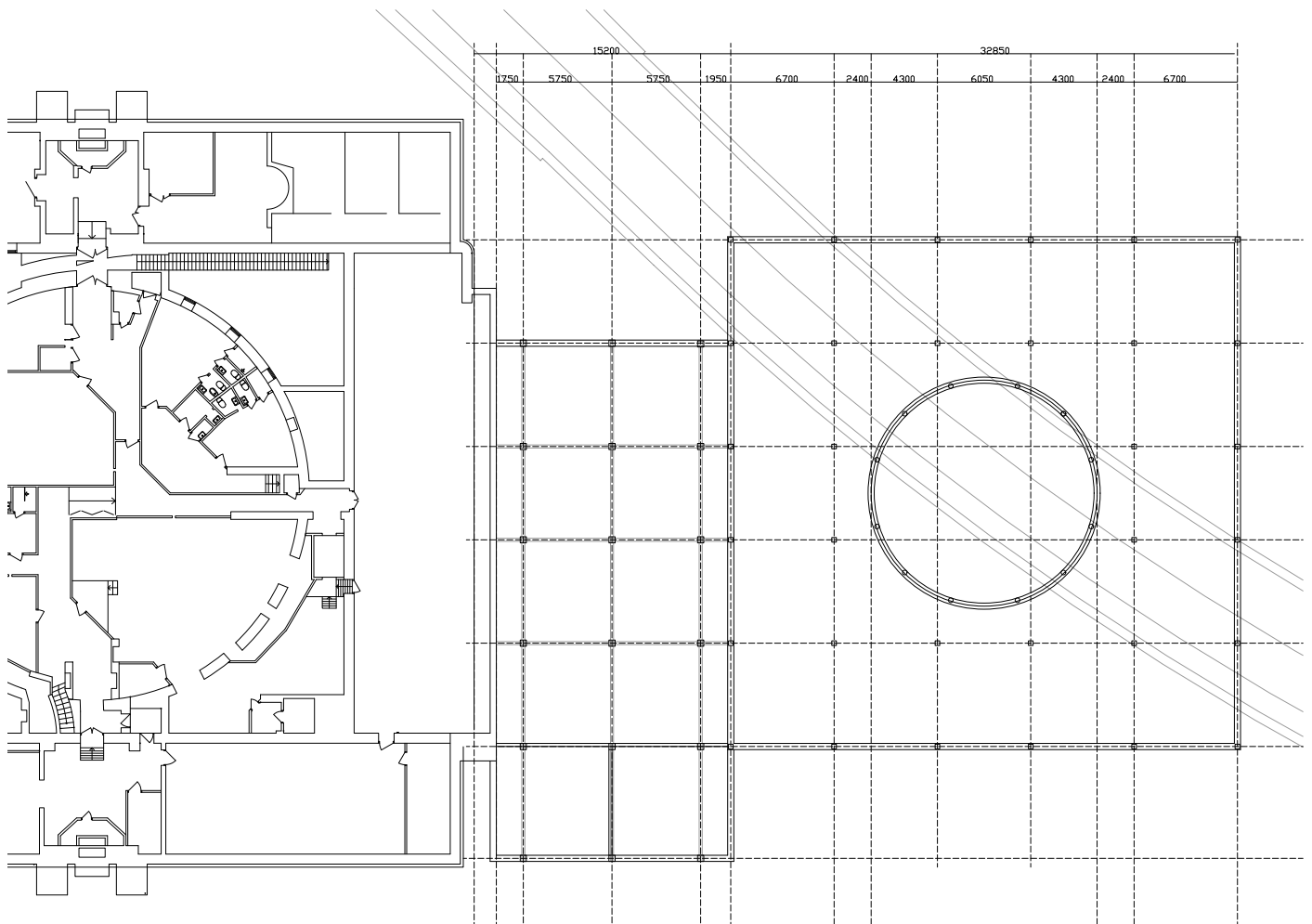
## Structure Reference-Grid

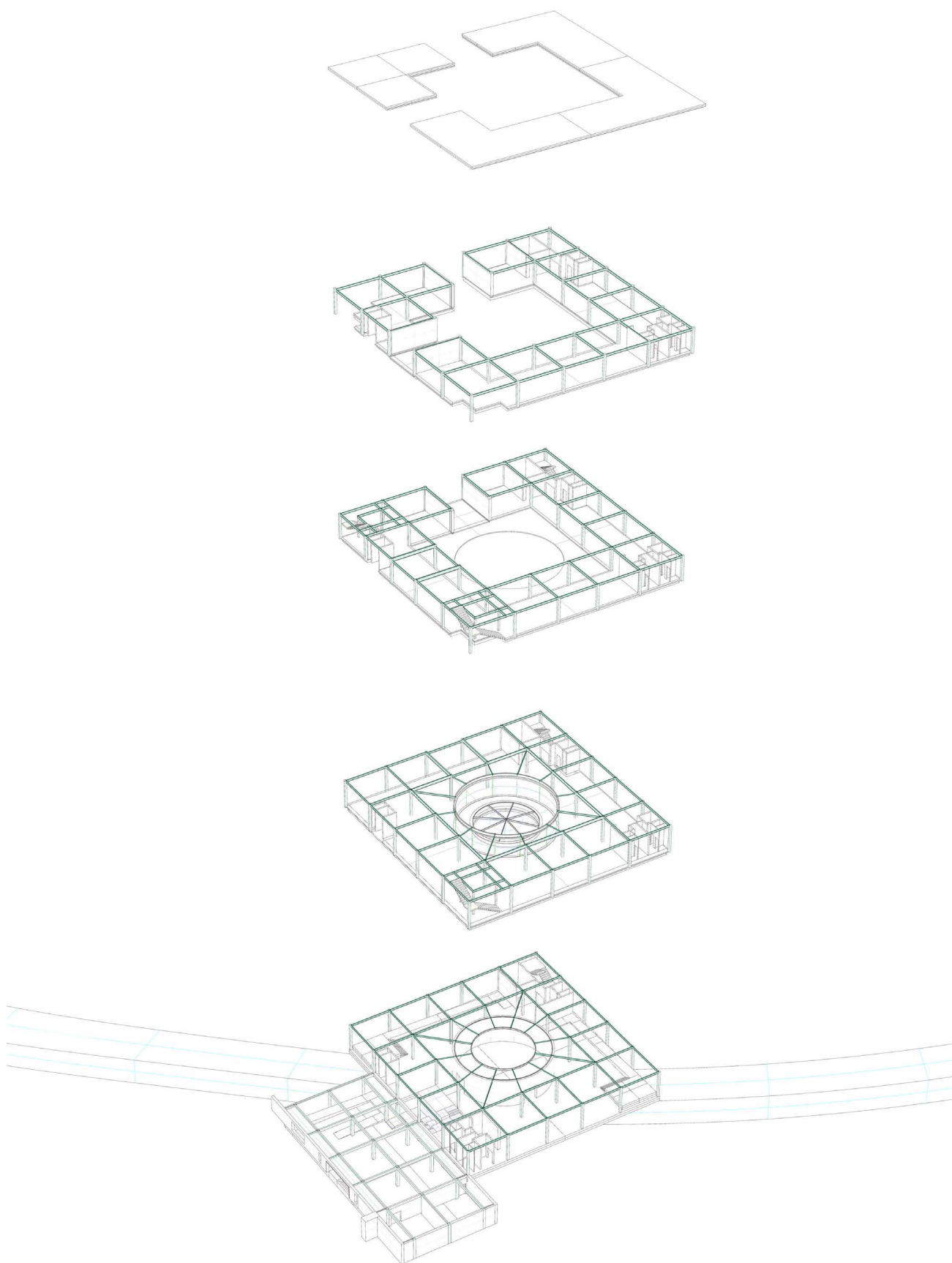


Study Pavilion TU Braunschweig /  
Gustav Düsing + Max Hacke

In the case of this study pavilion, a very homogeneous grid steel structure system is used to construct the entire space, creating a sense of lightness and transparency. The internal walls and spaces are then divided based on this grid, creating a clear and logical construction approach. The homogeneous structure also helps to dissolve the sense of division in space, making exploration more engaging. Therefore, I have referenced this approach in the construction logic around the outer ring of the rotunda.





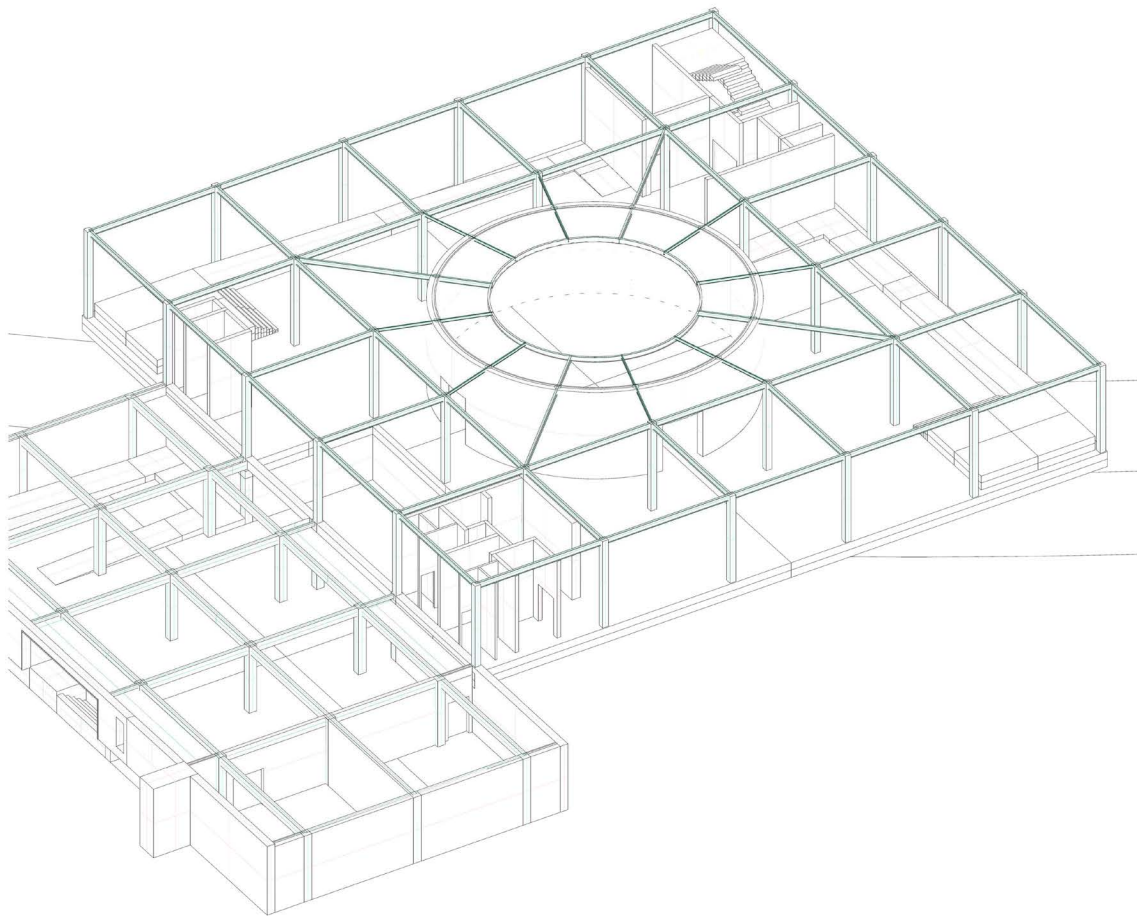


Structure diagram axo

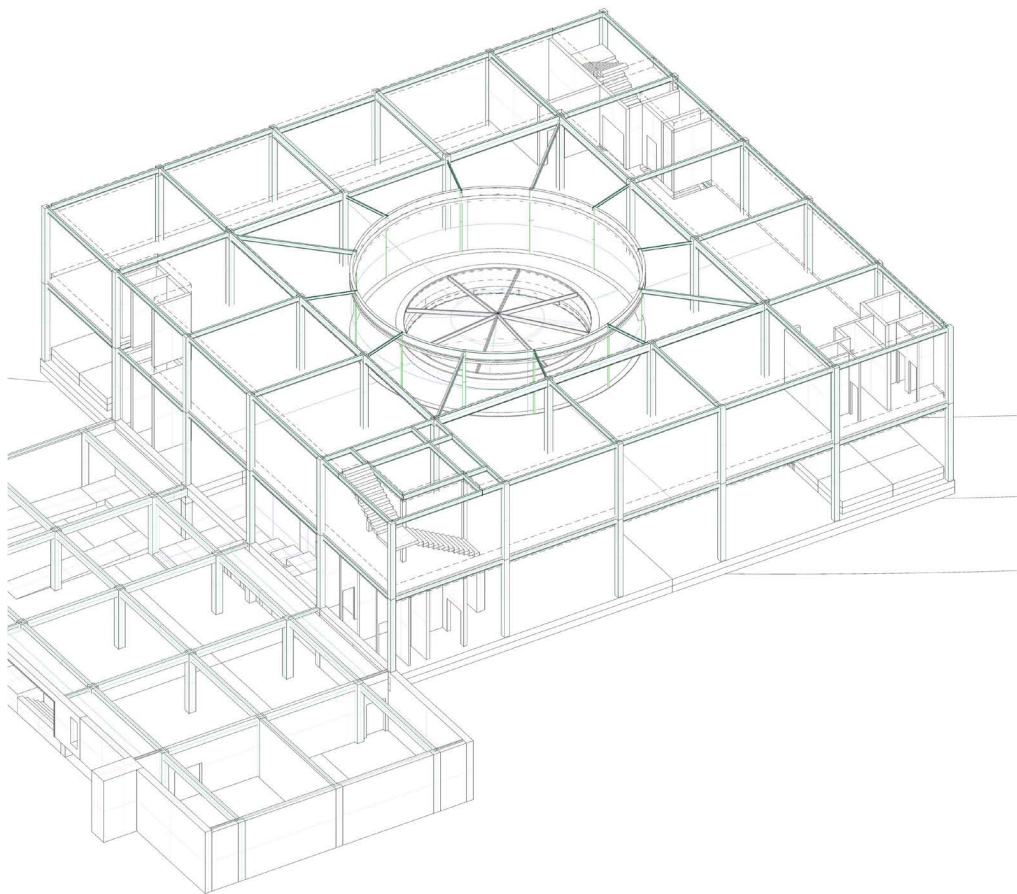


Week 4.3

## Structure Diagram

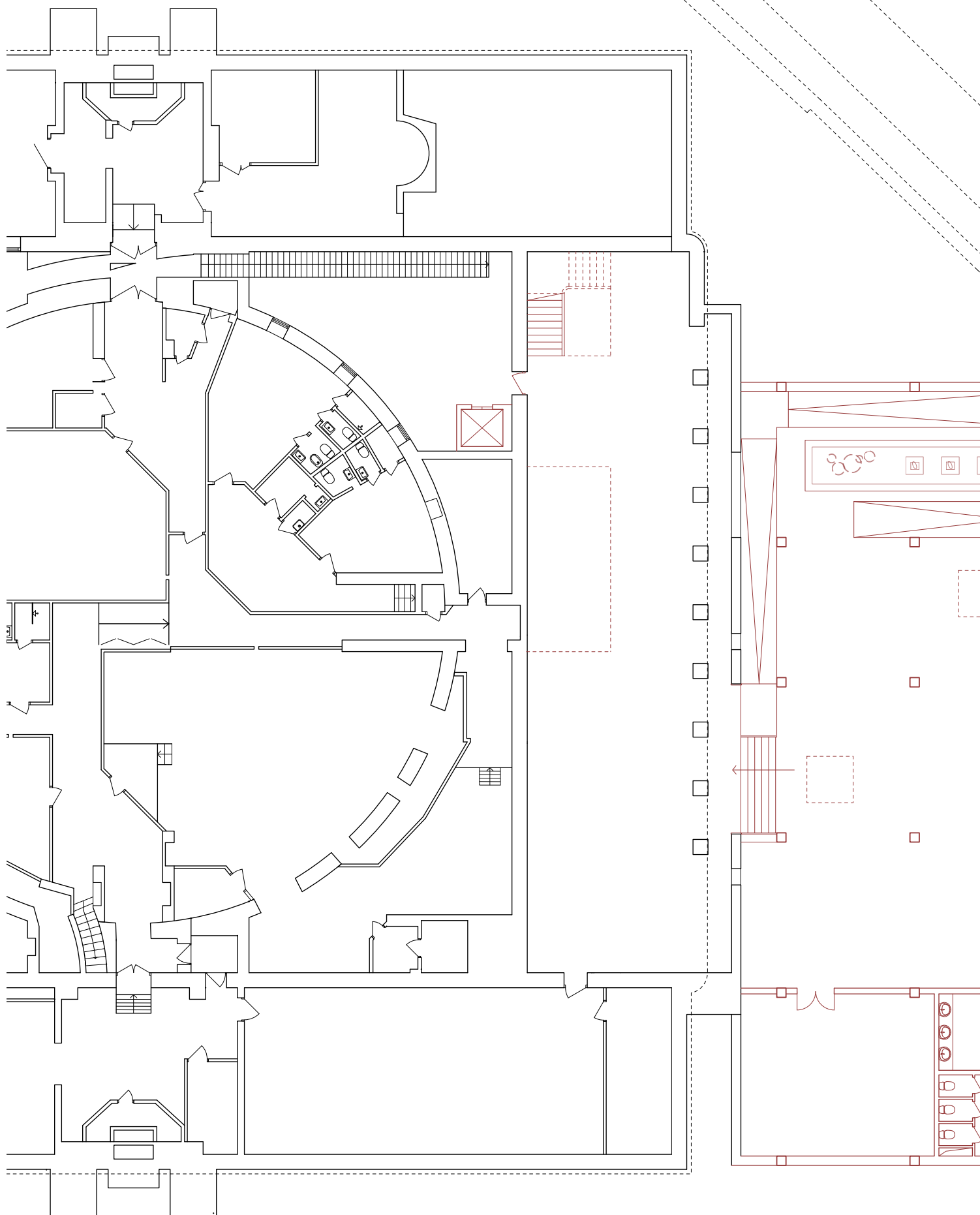


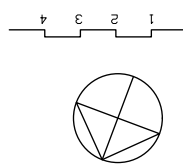
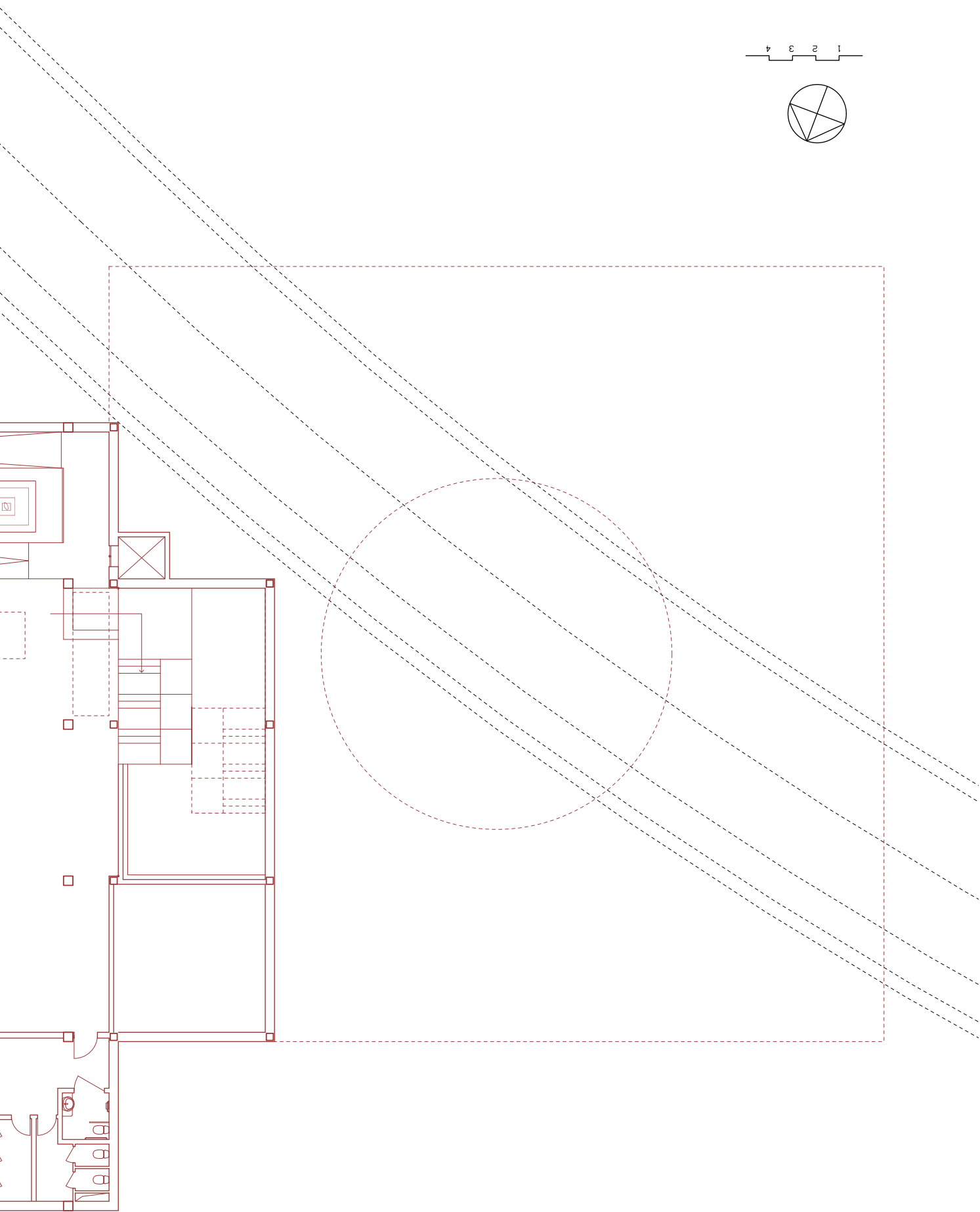
Structure diagram Of



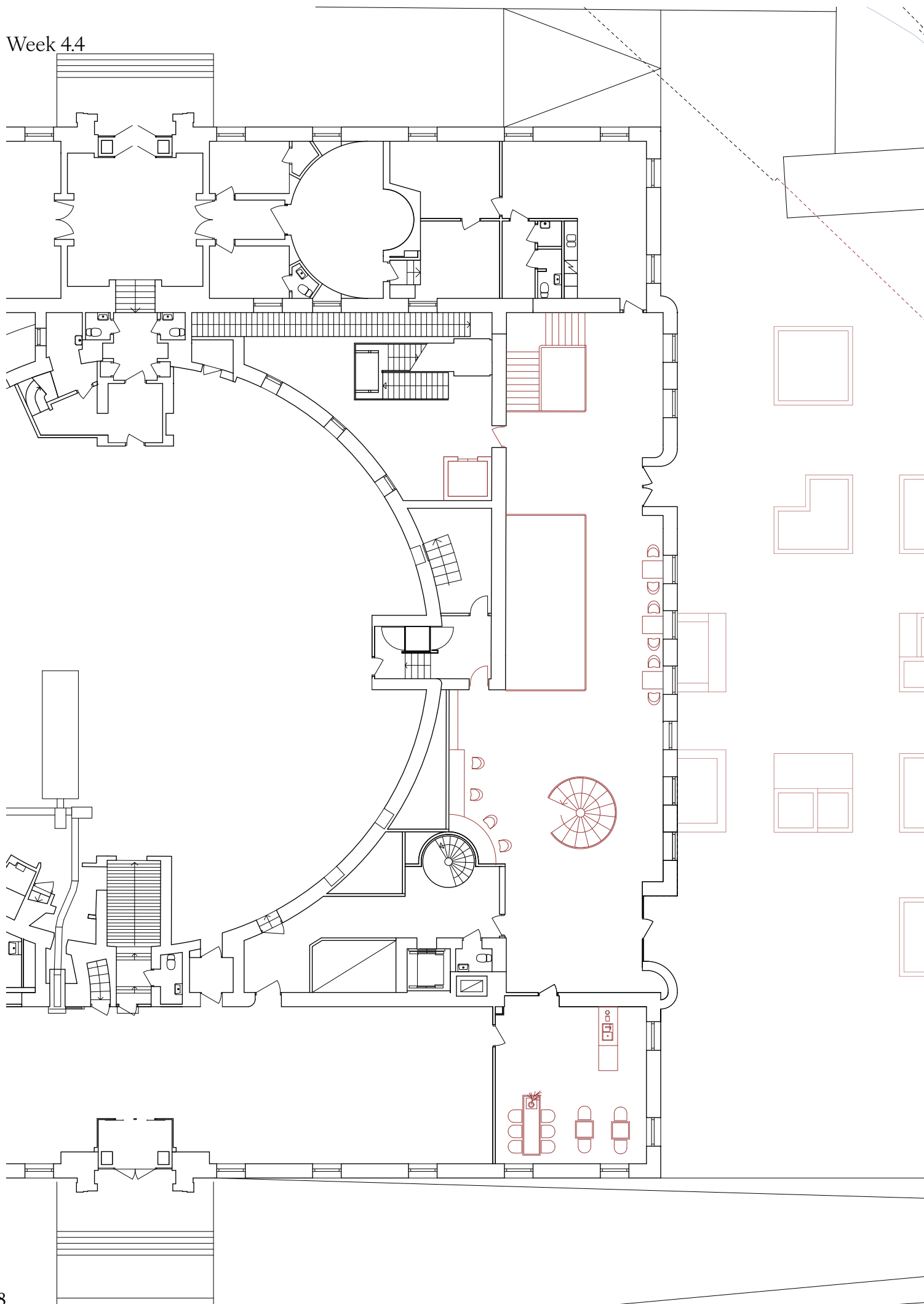
Structure diagram 1f

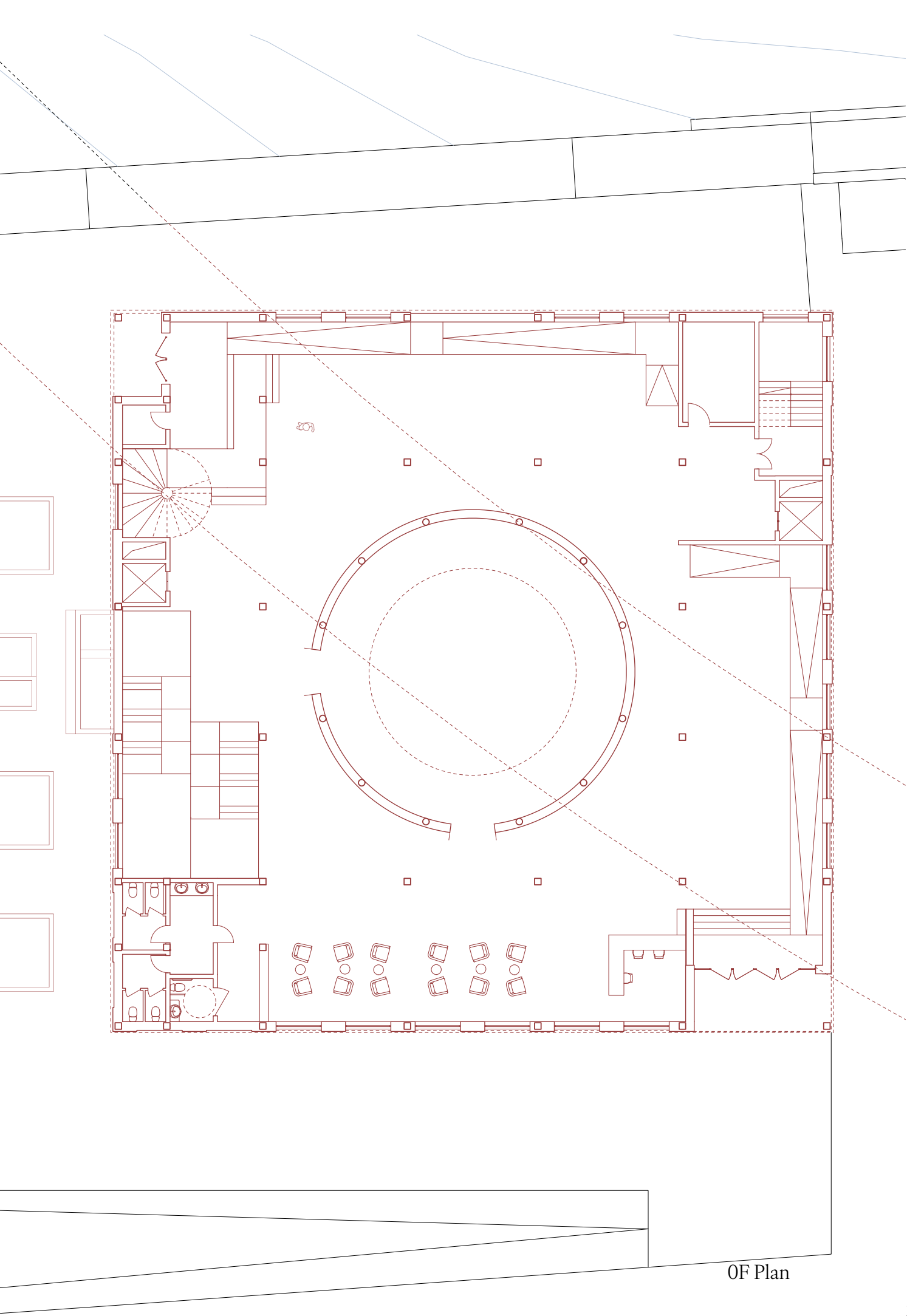




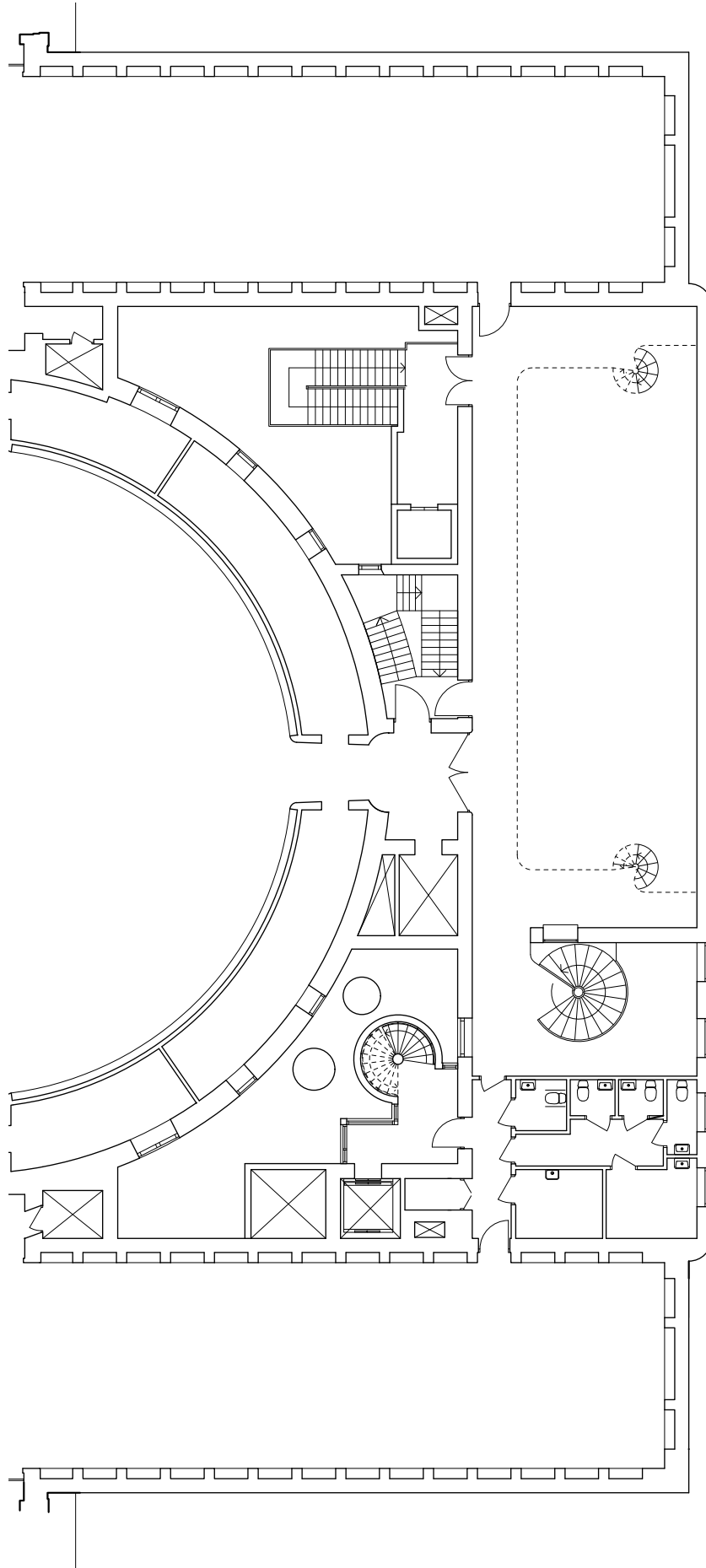


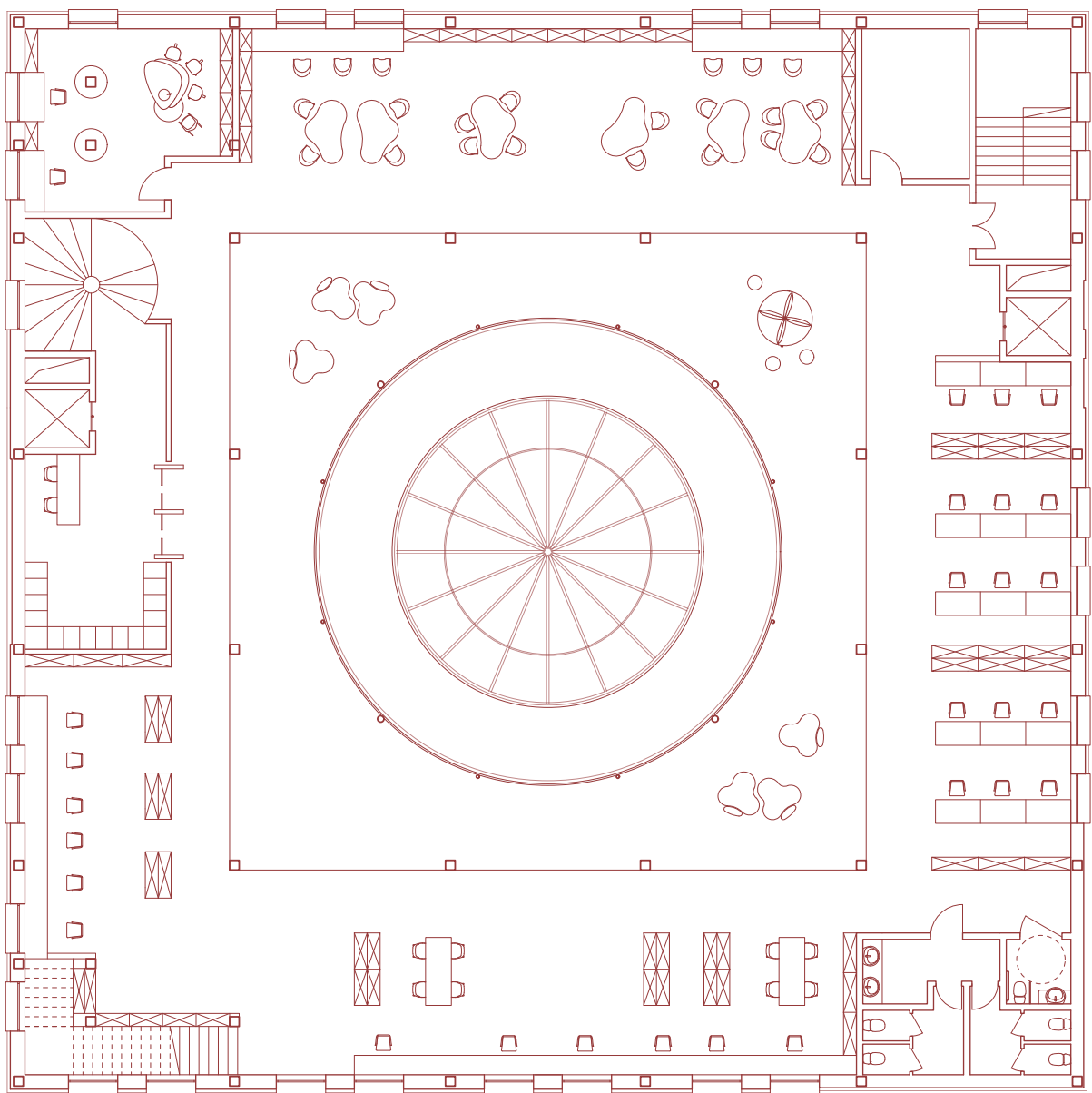
-1F Plan

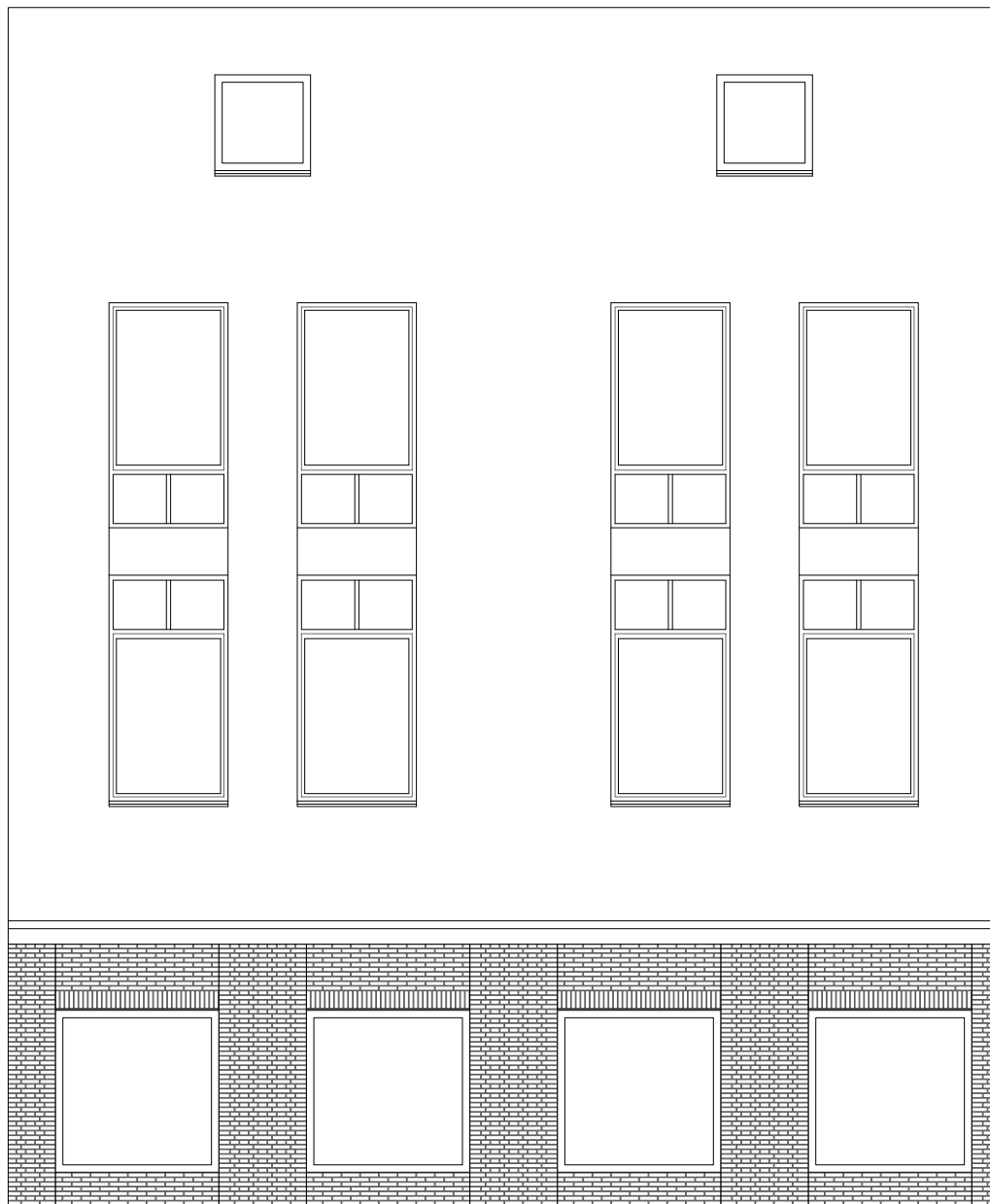




OF Plan

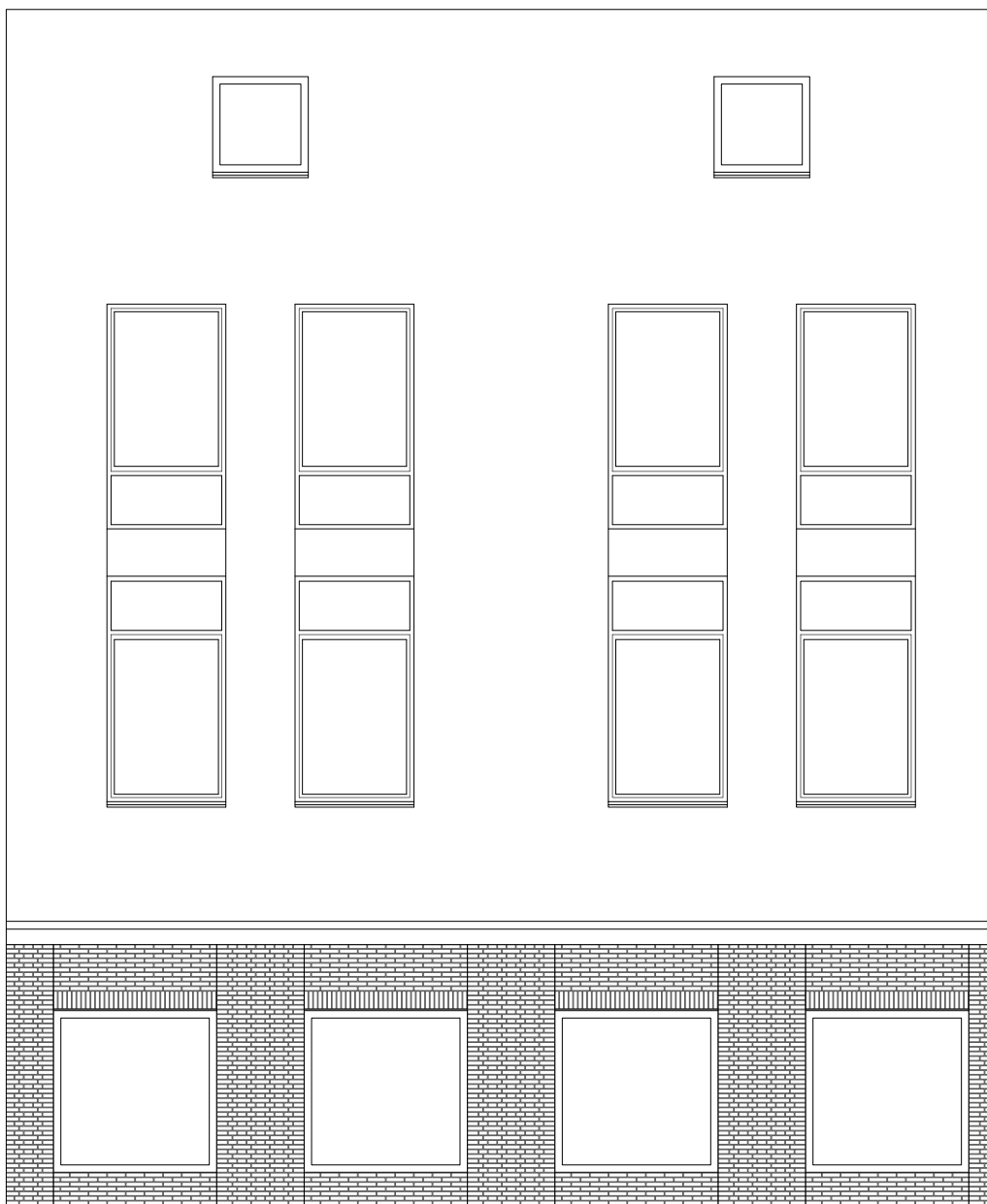






Considering the need for operable windows in the facade openings, it's necessary to divide them in a way that tests which division pattern is more aesthetically pleasing.

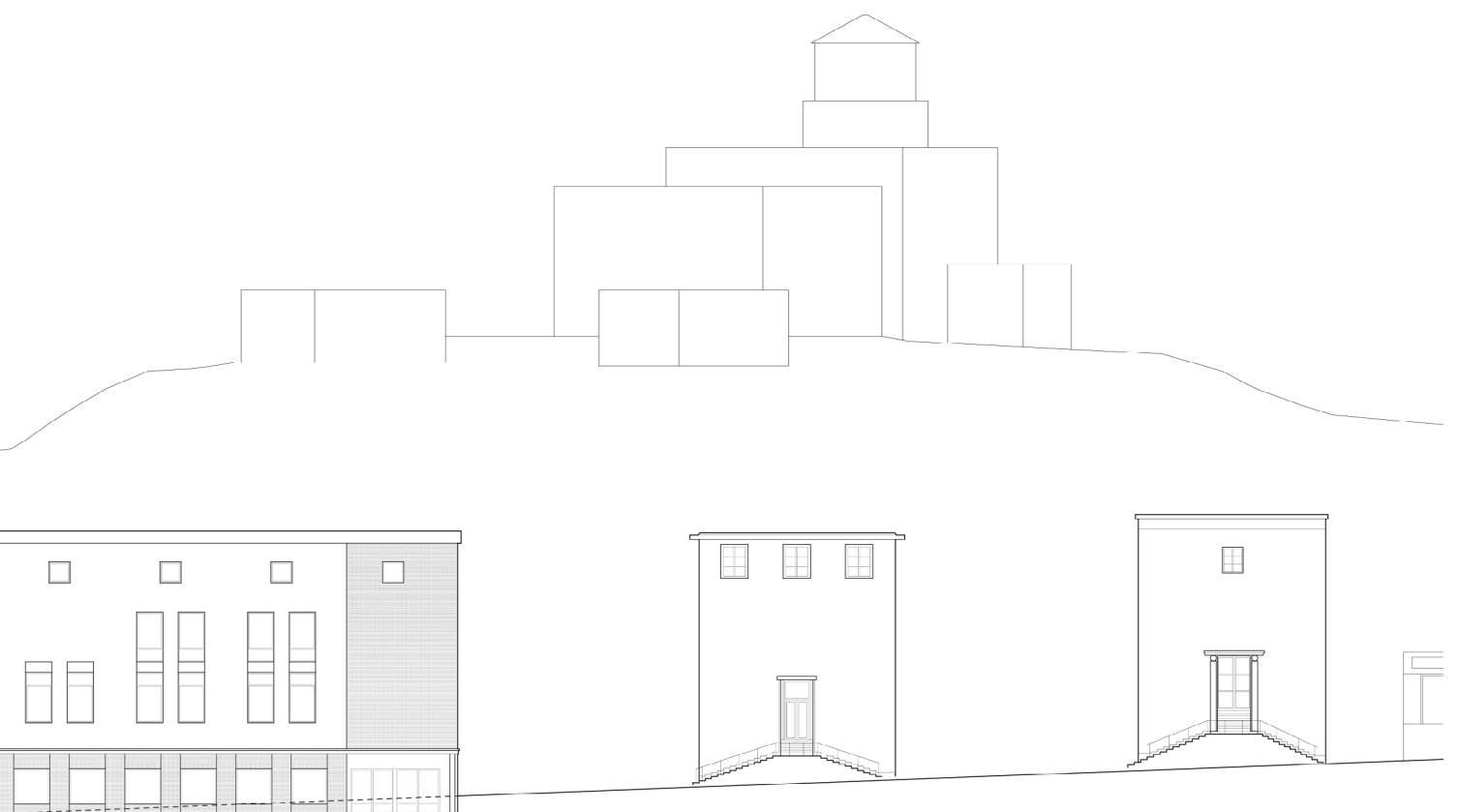


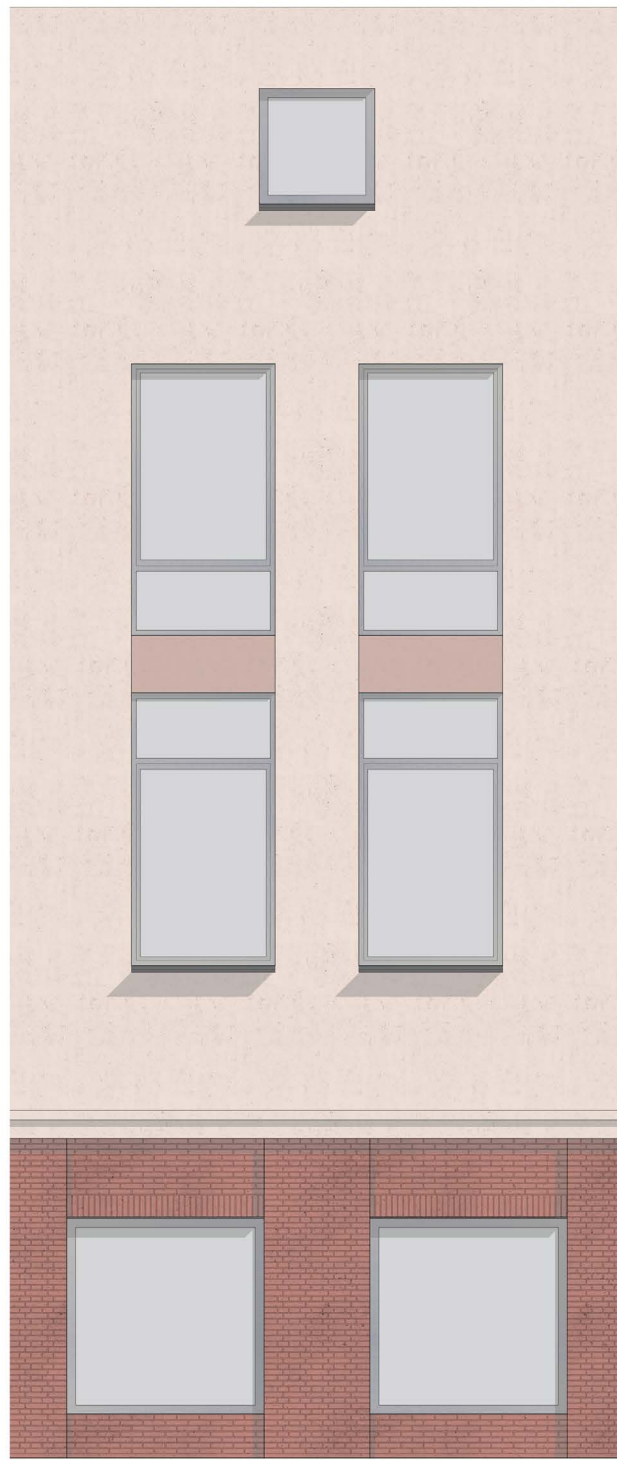
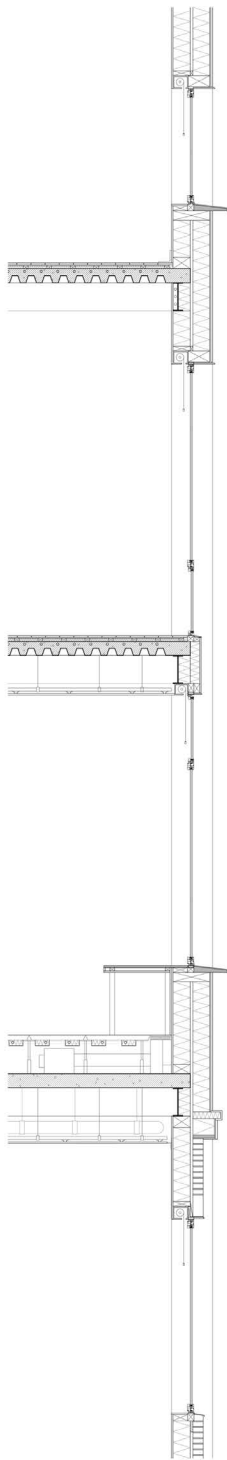


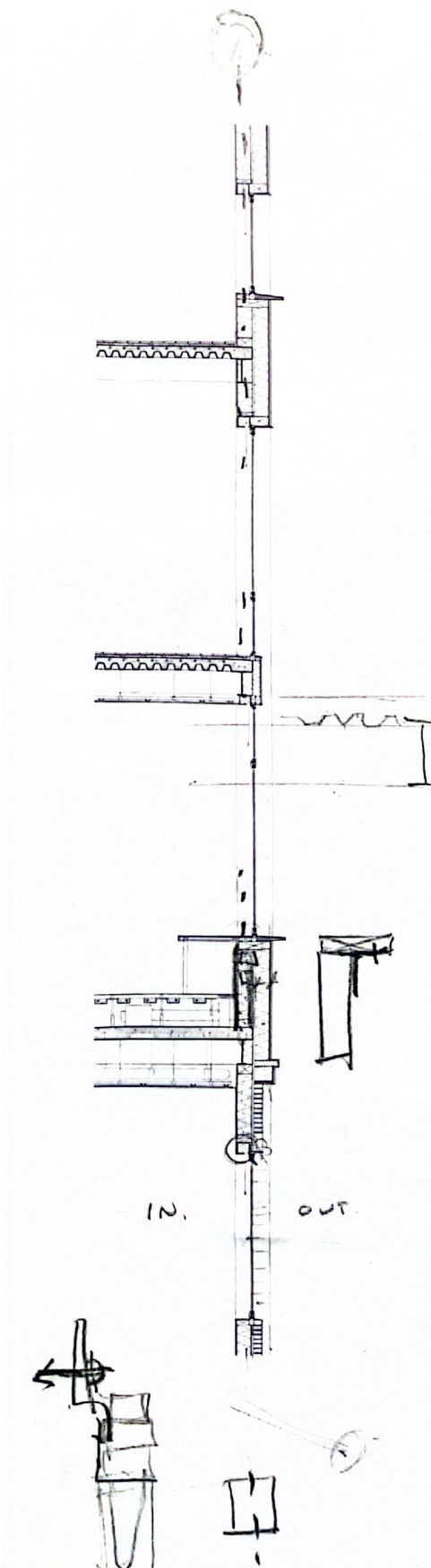
Week 4.4

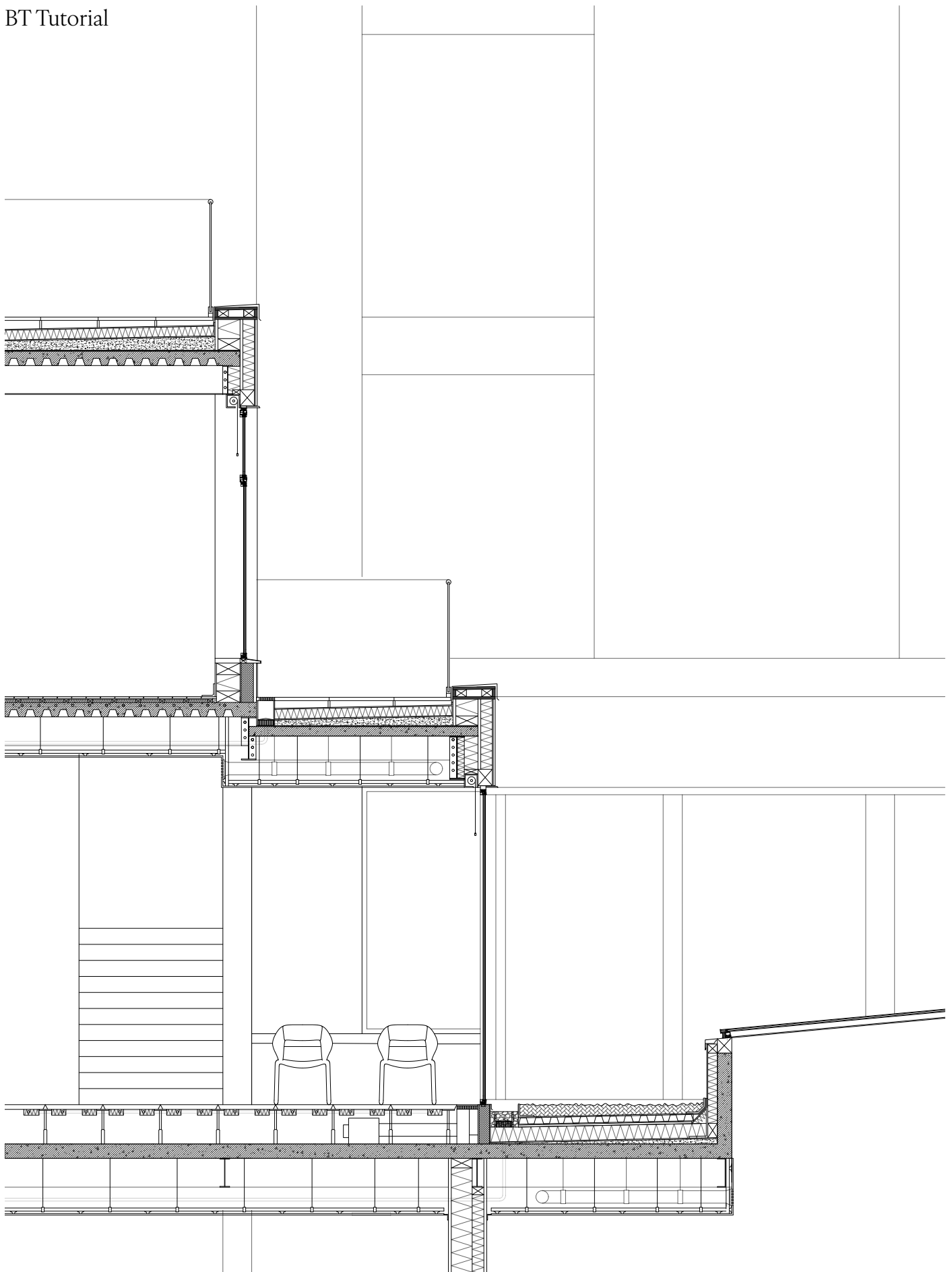
Elevation

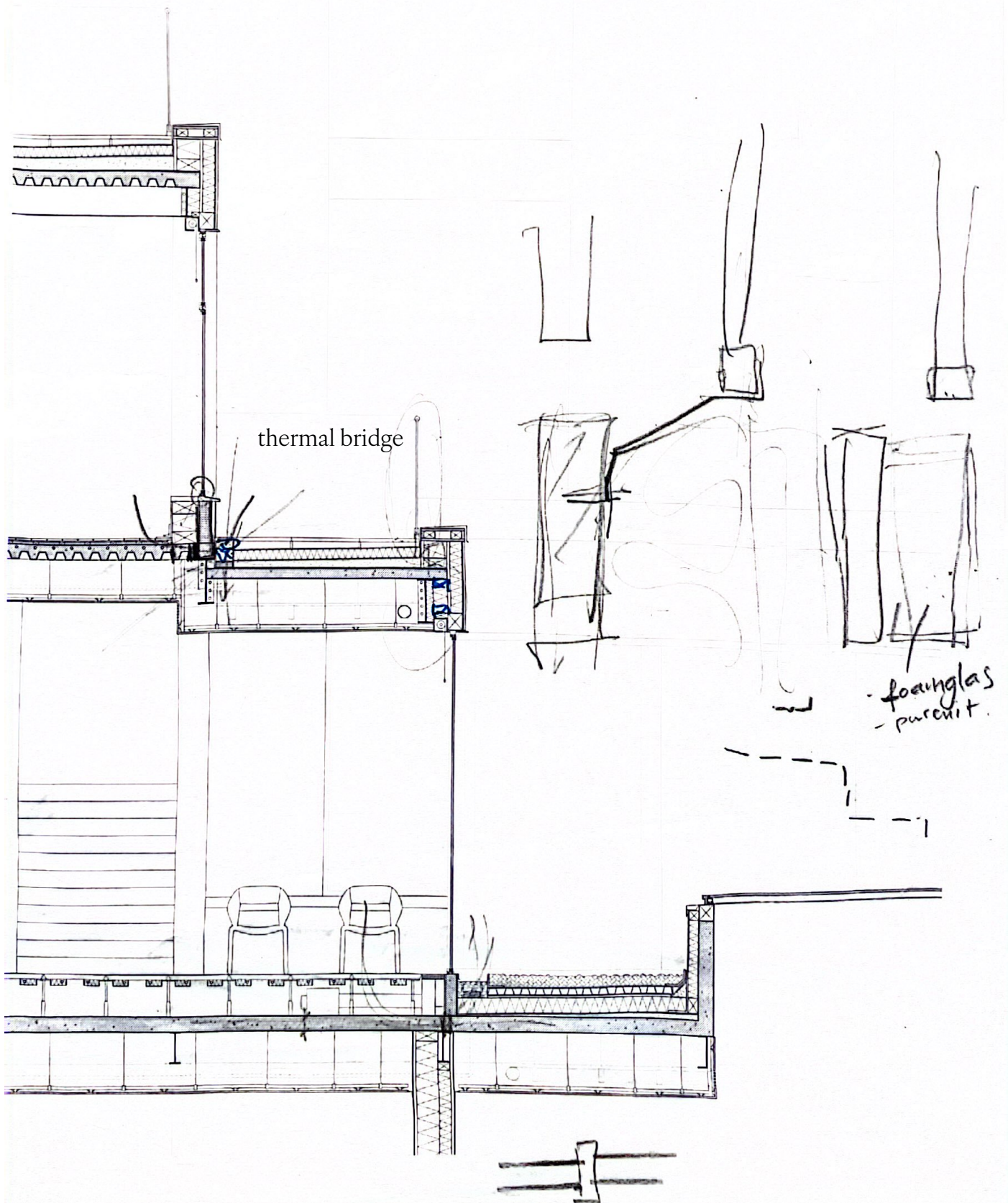




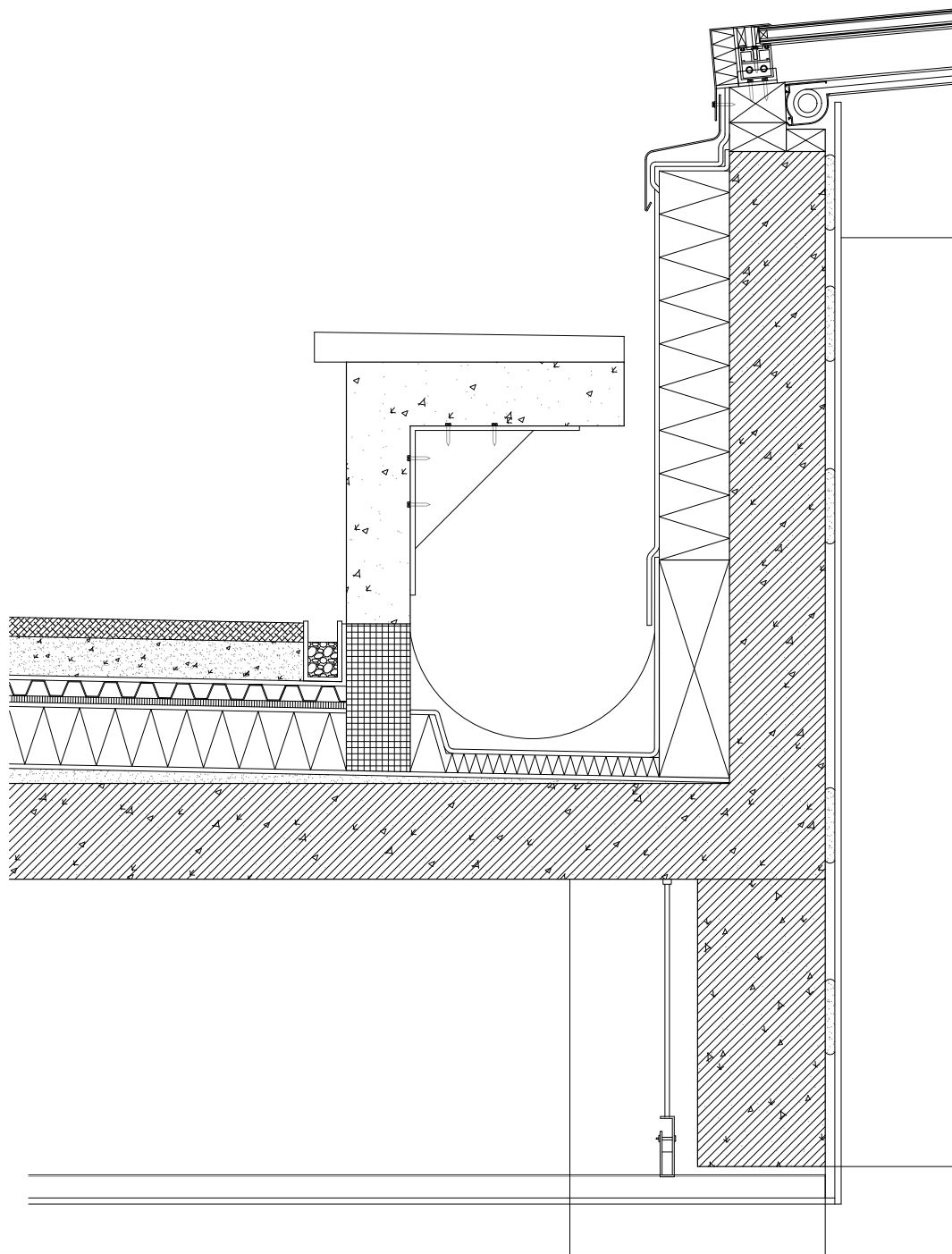


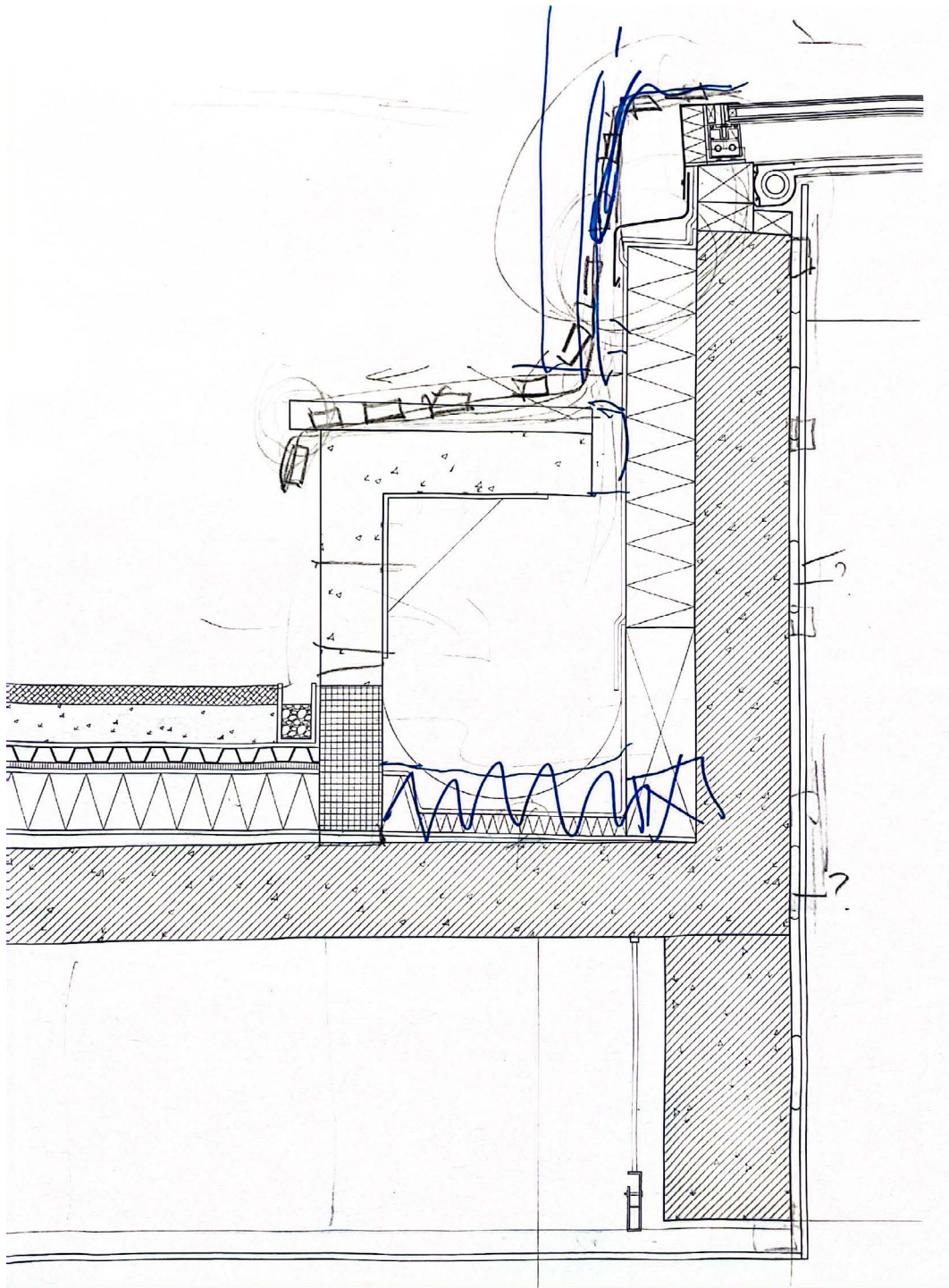


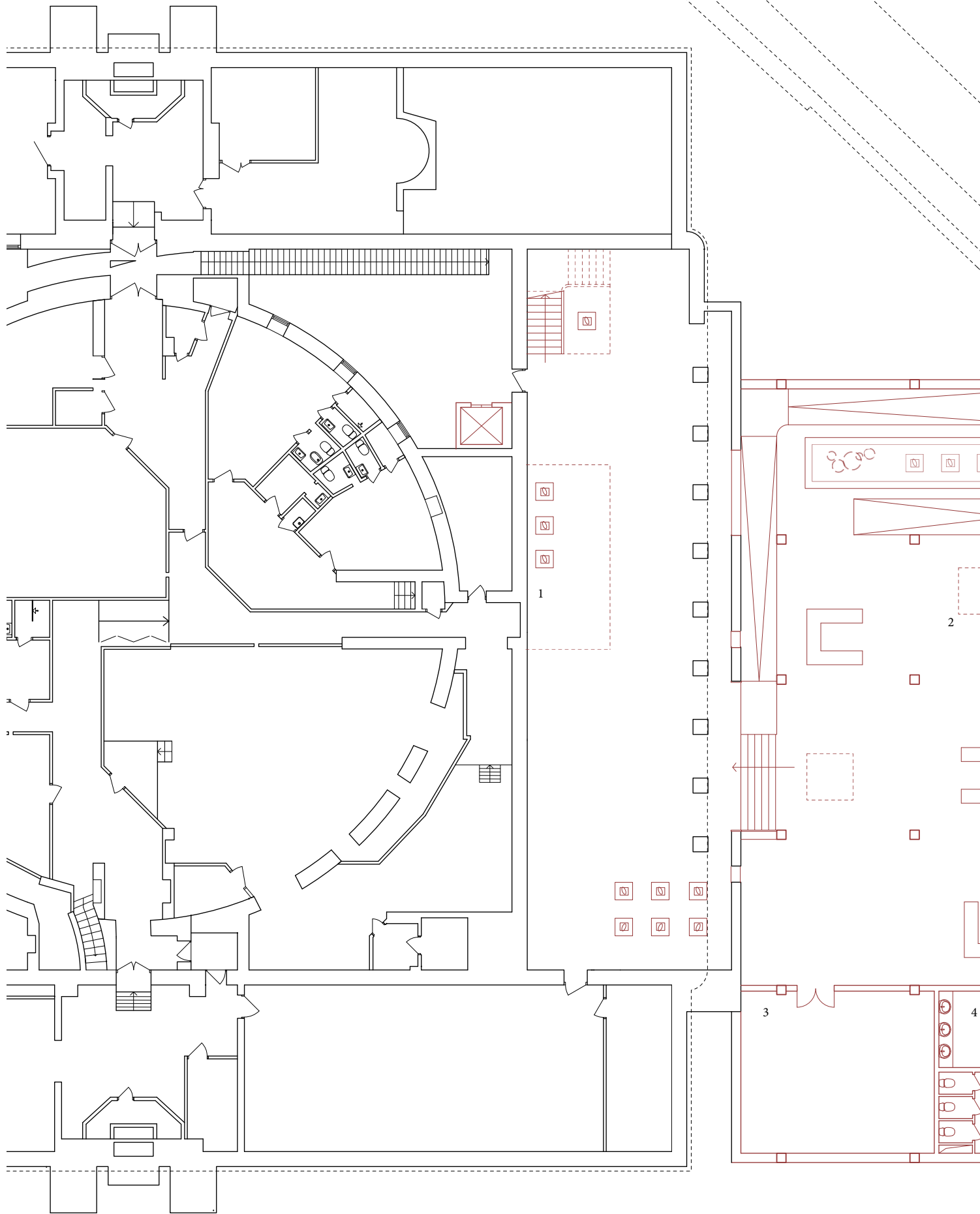




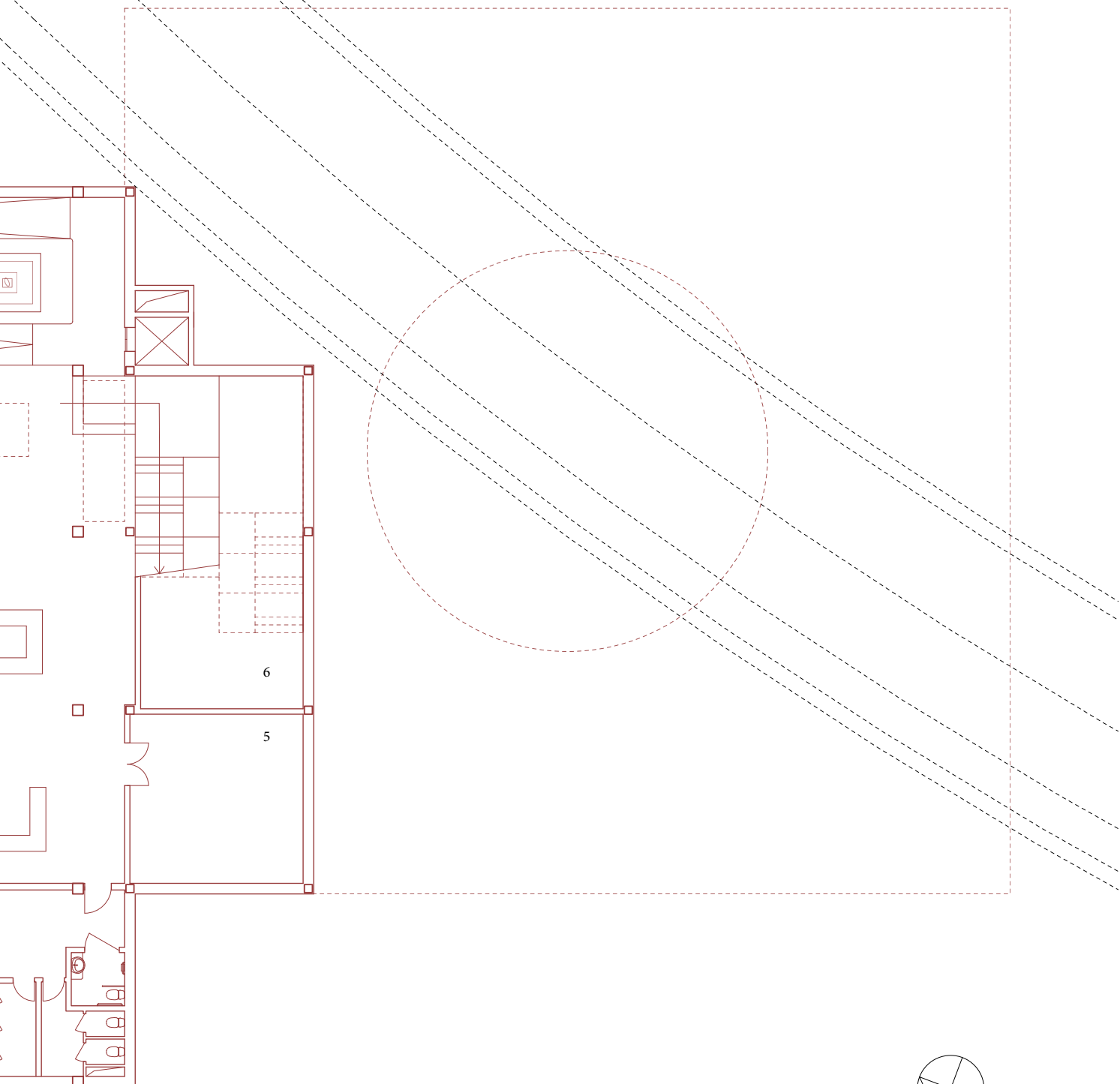




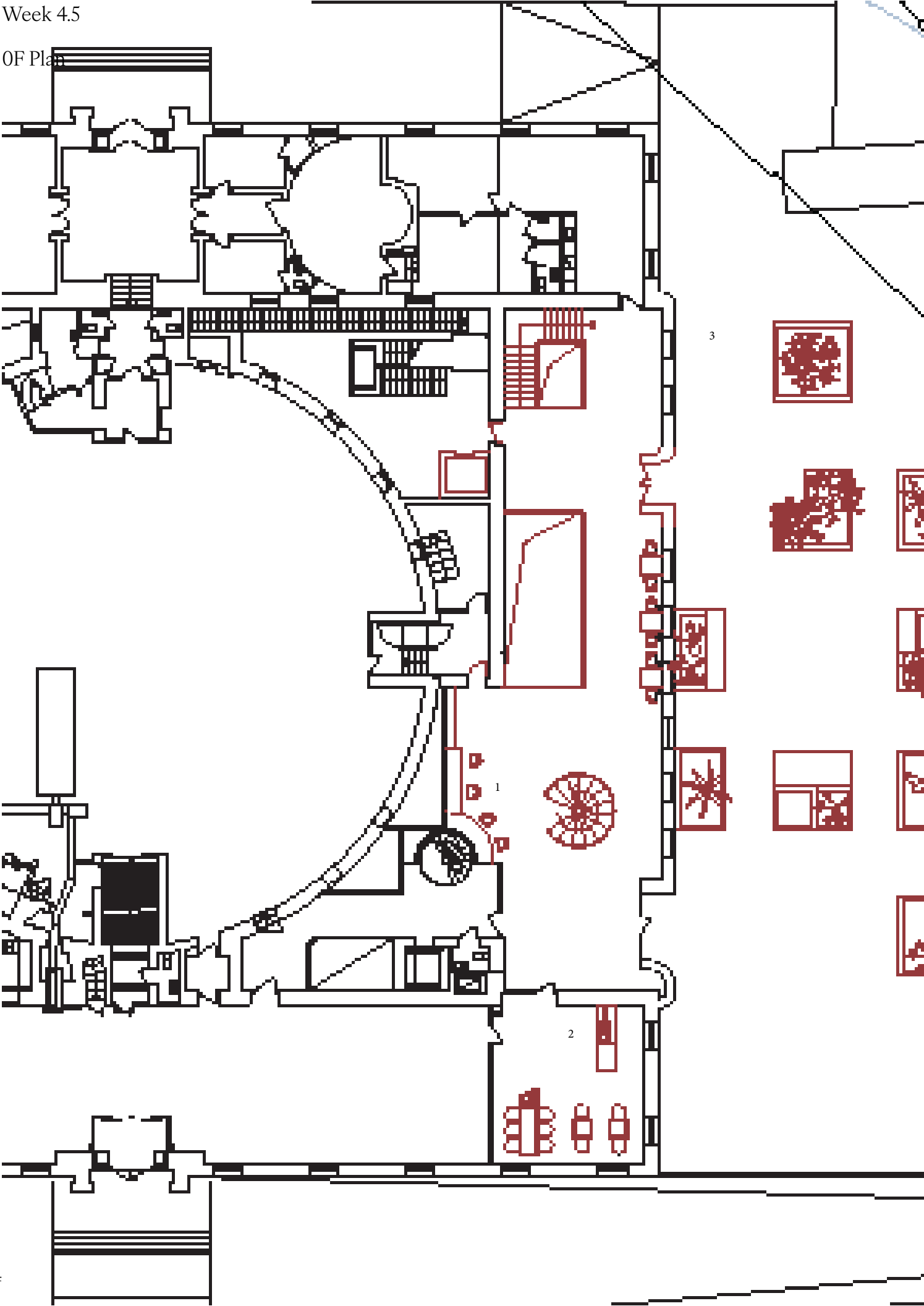




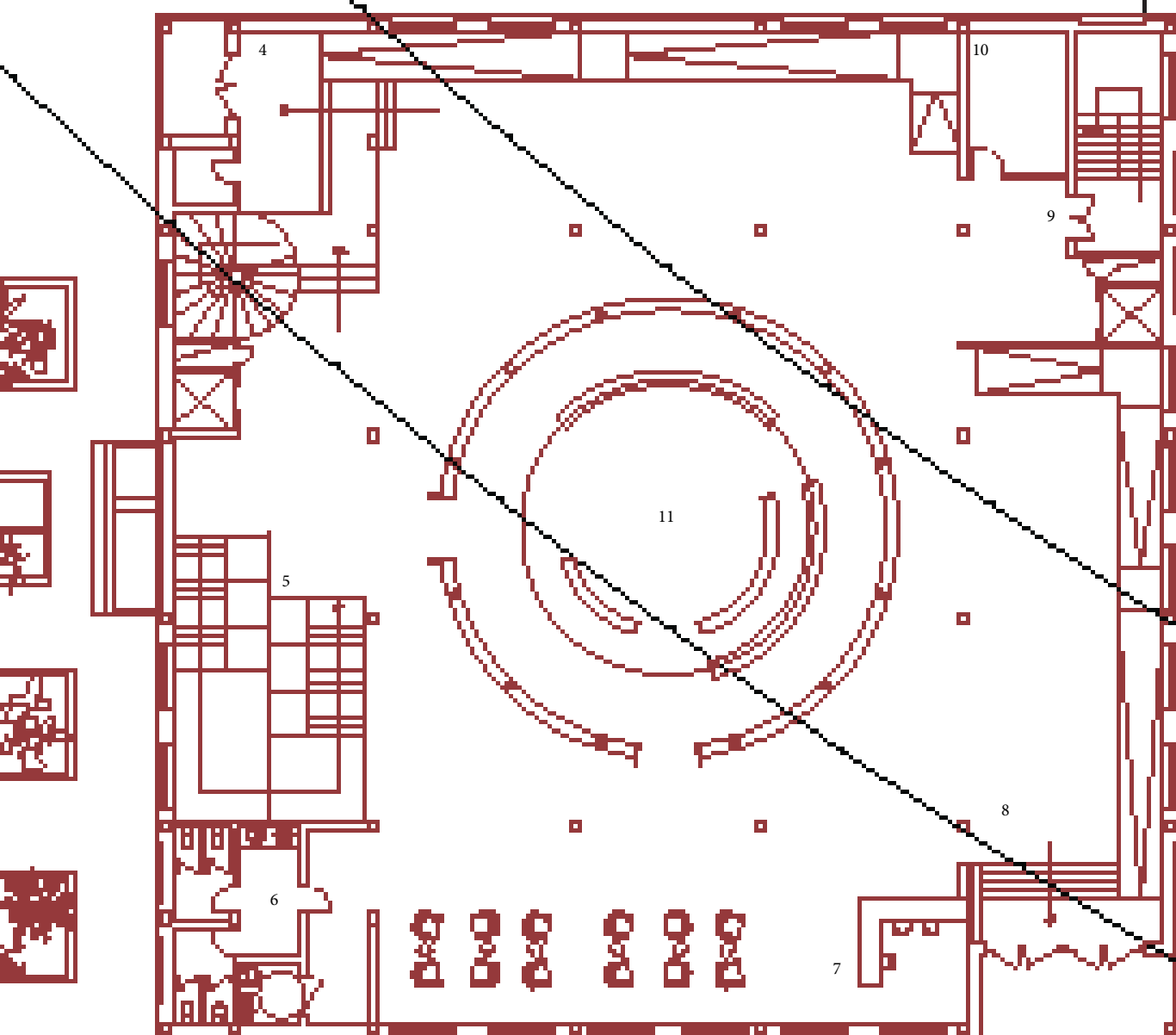
- 1. Display
- 2. Art gallery
- 3. Archives
- 4. Restroom
- 5. Cloakroom
- 6. Equipment space

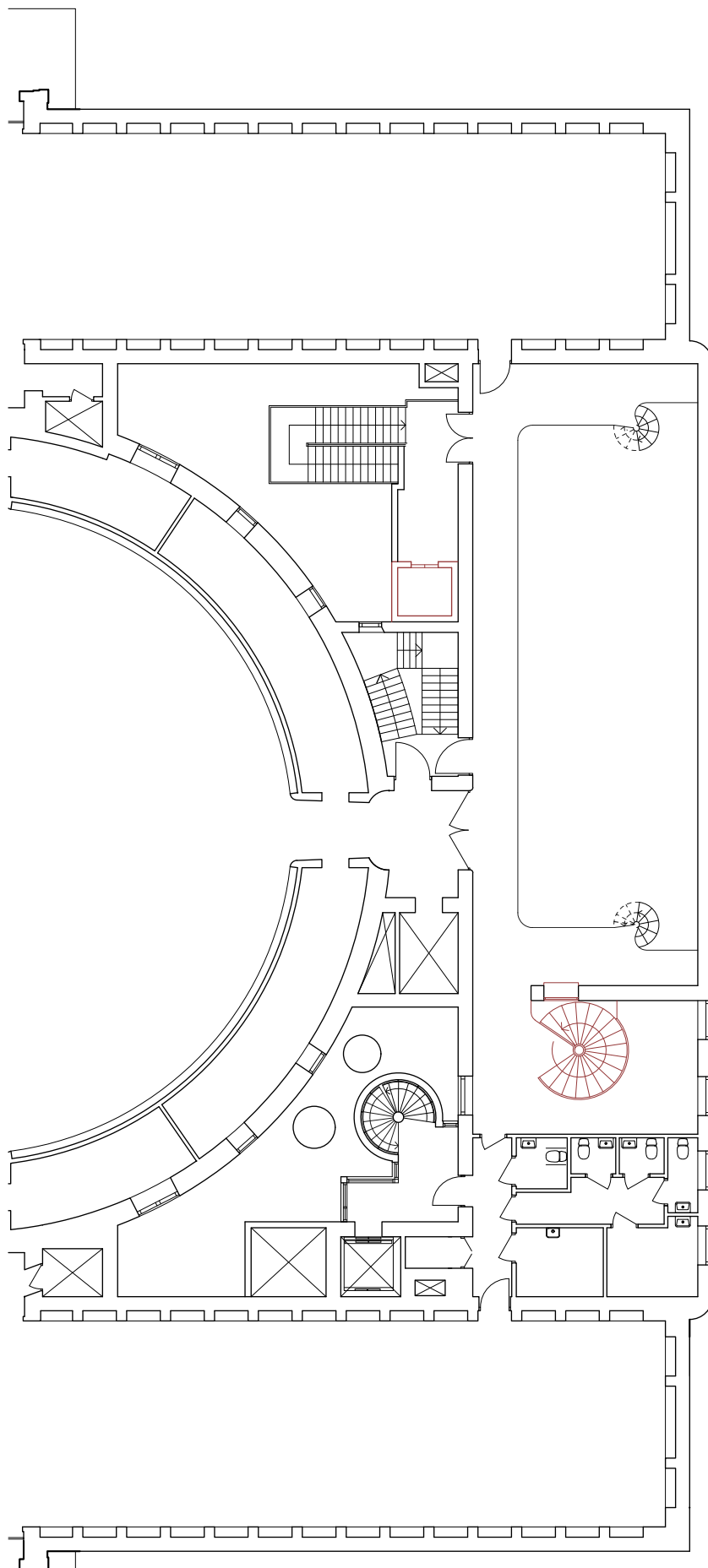


1 2 3 4



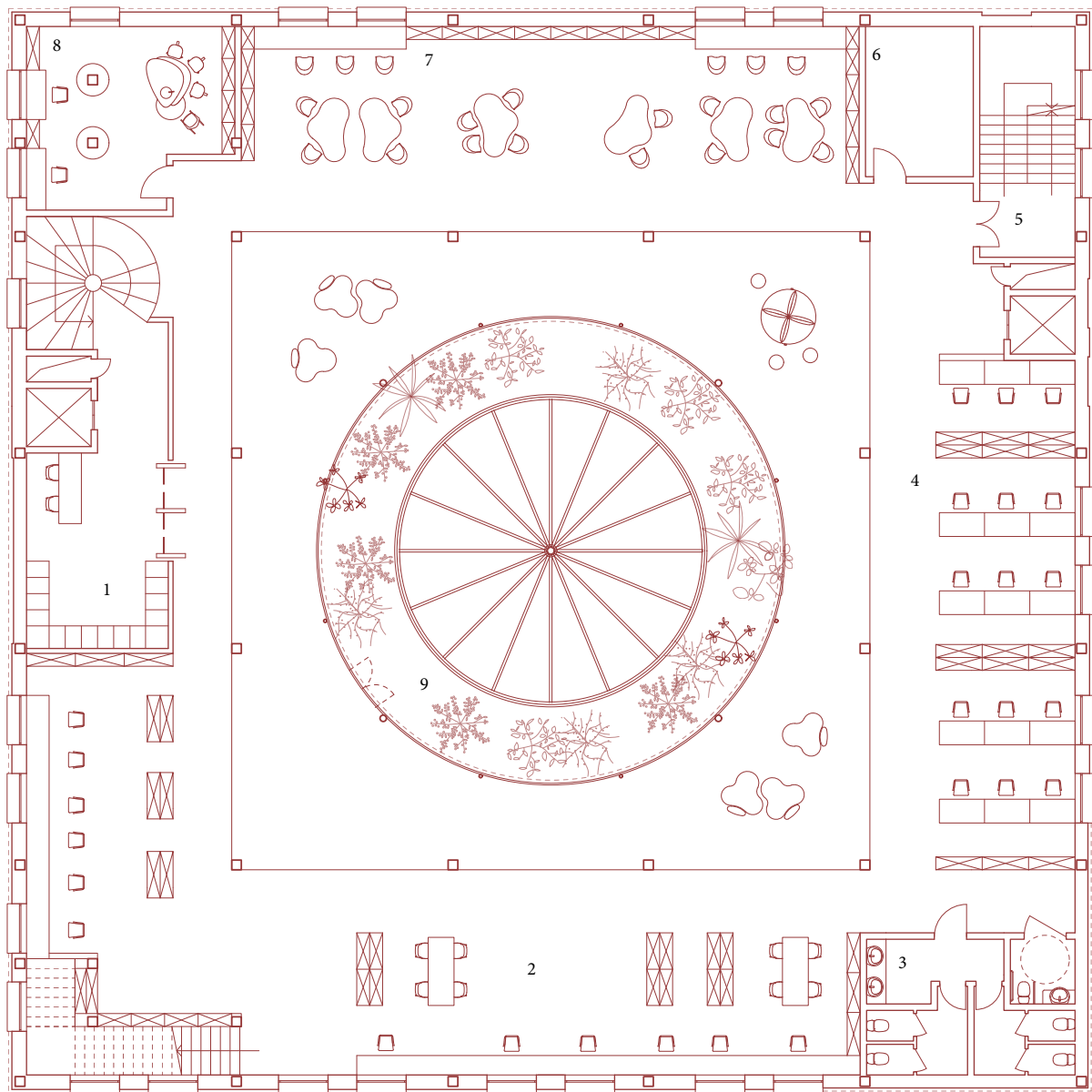
1. Newspaper reading bar
2. Cafe
3. Garden
4. Entrance to the garden
5. Landscape stairs
6. Restroom
7. Reception
8. Entrance to the street
9. Fire stairs
10. Equipment room
11. Immersive theater

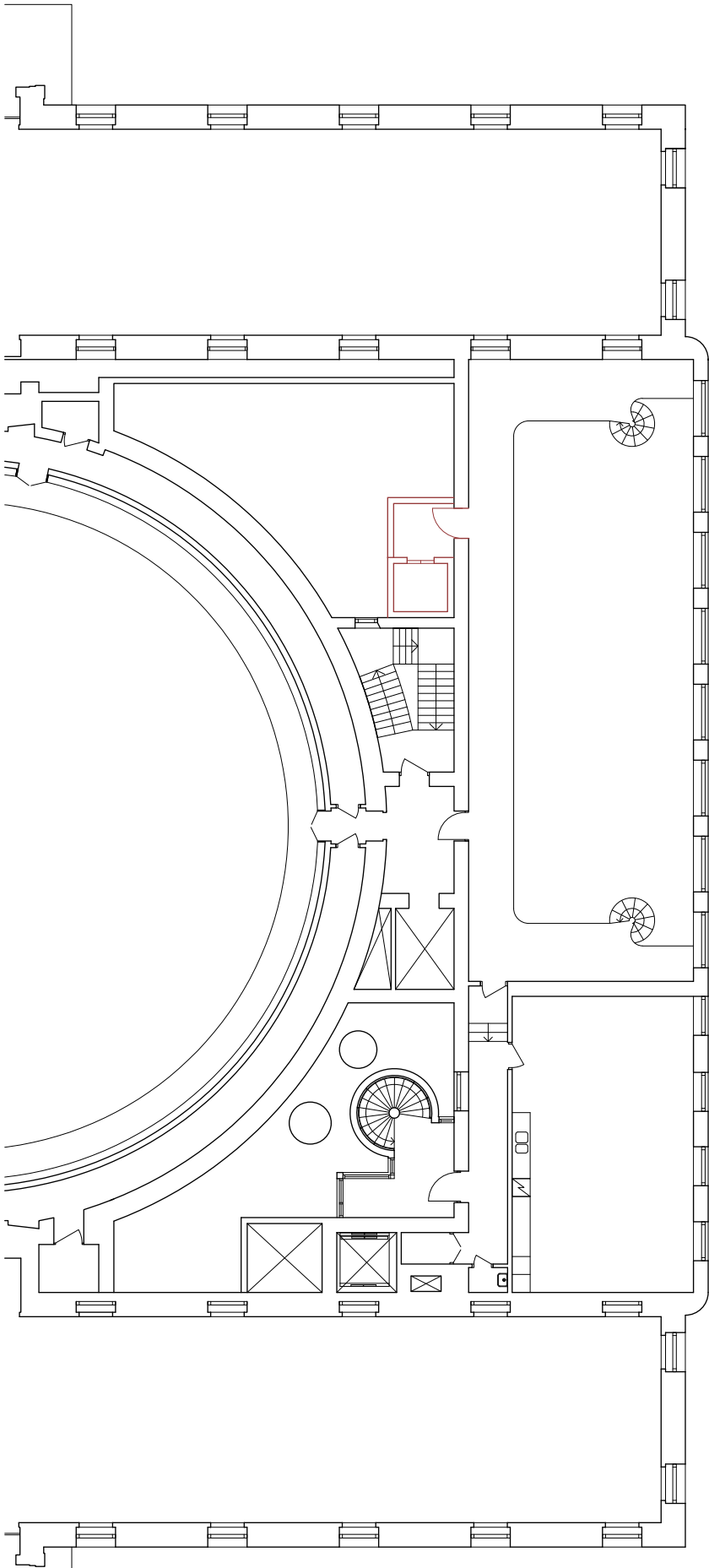




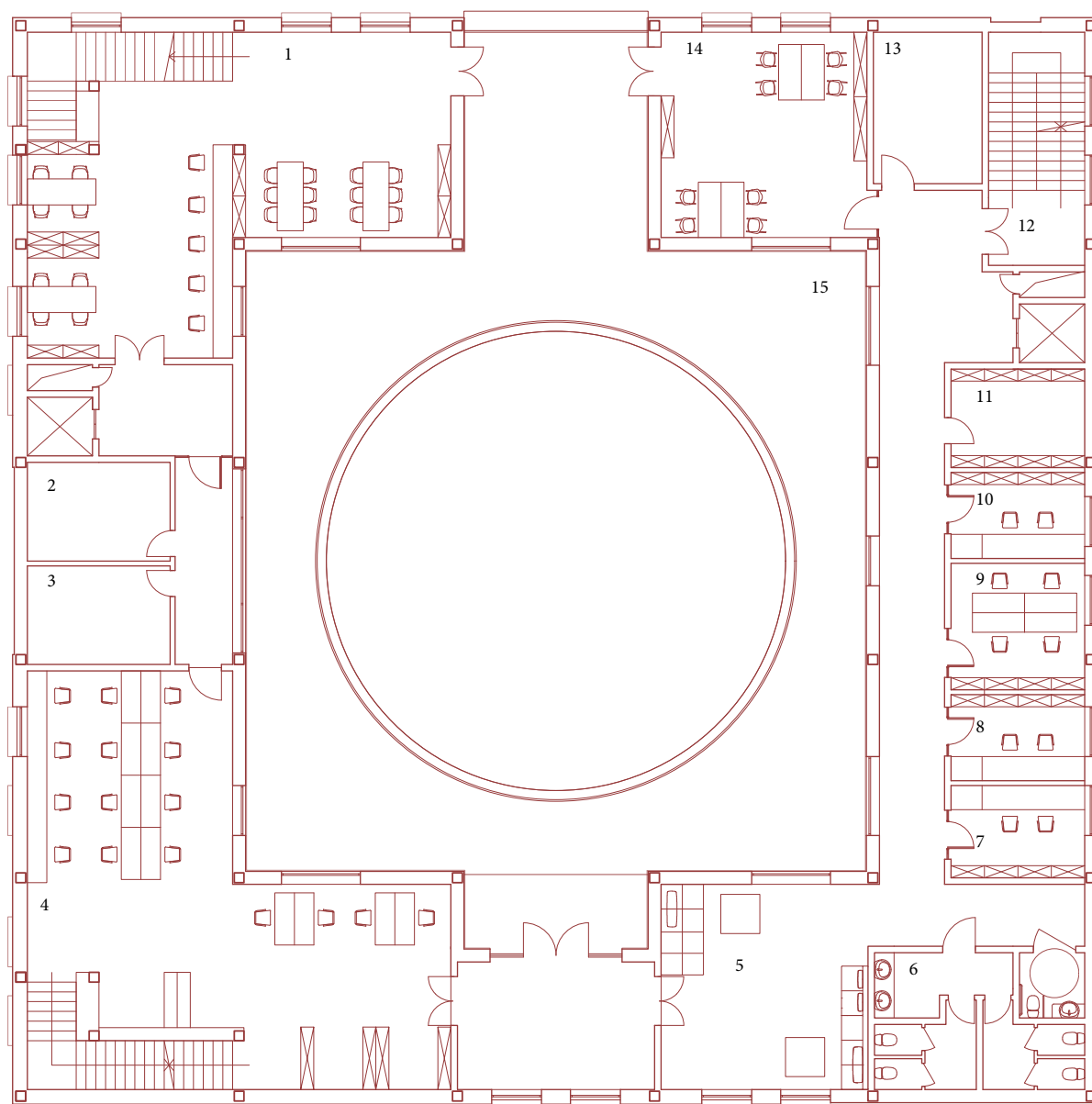


1. Cloakroom
2. Study hall
3. Restroom
4. Talking-allowed reading hall
5. Fire stairs
6. Equipment space
7. Children's library
8. Story-telling room
9. Green atrium



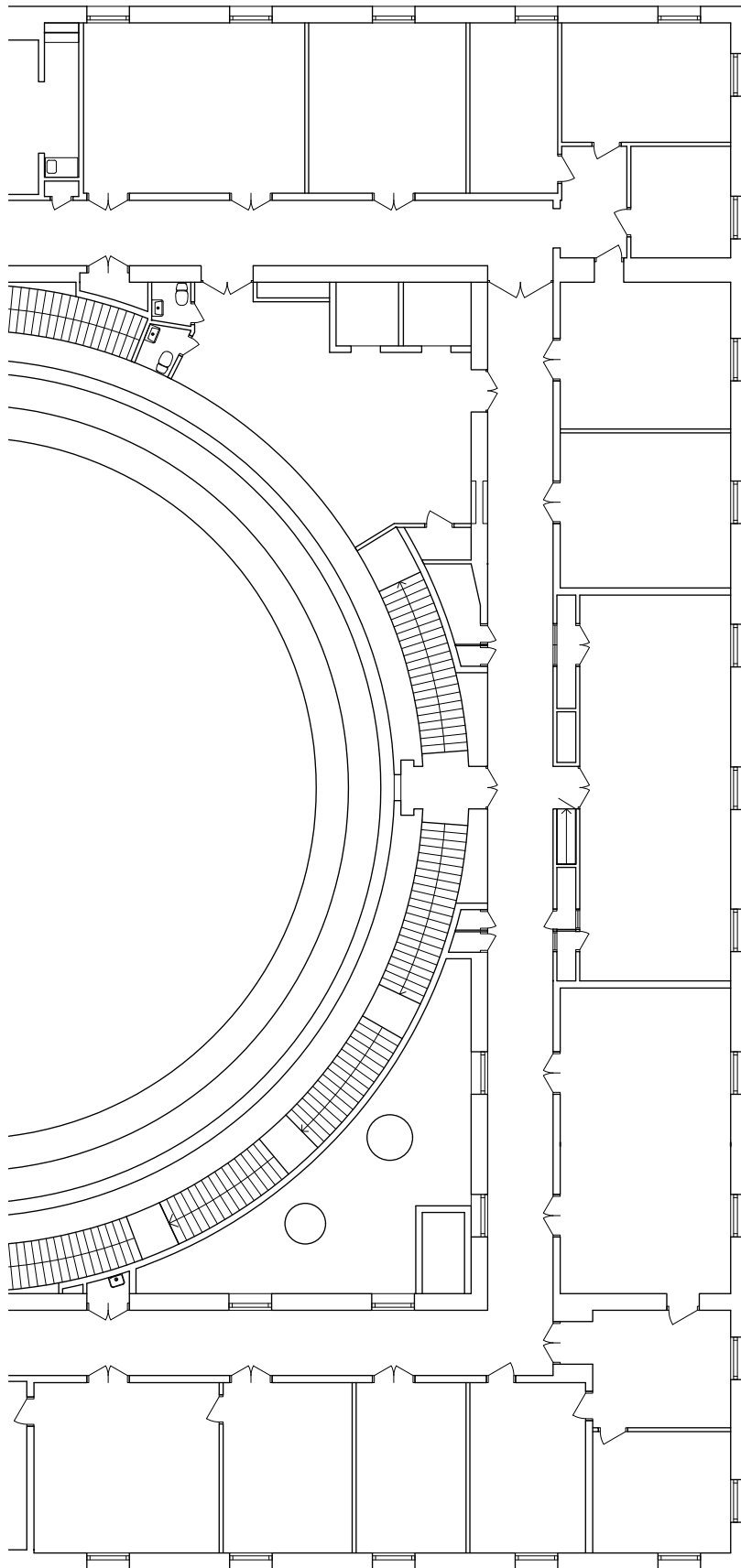


1. Reading hall
2. Printing room
3. Archives
4. Computer room
5. Leisure space
6. Equipment space
7. Study room
8. Study room
9. Study room
10. Study room
11. Study room
12. Fire stairs
13. Equipment room
14. Reading room
15. Terrace

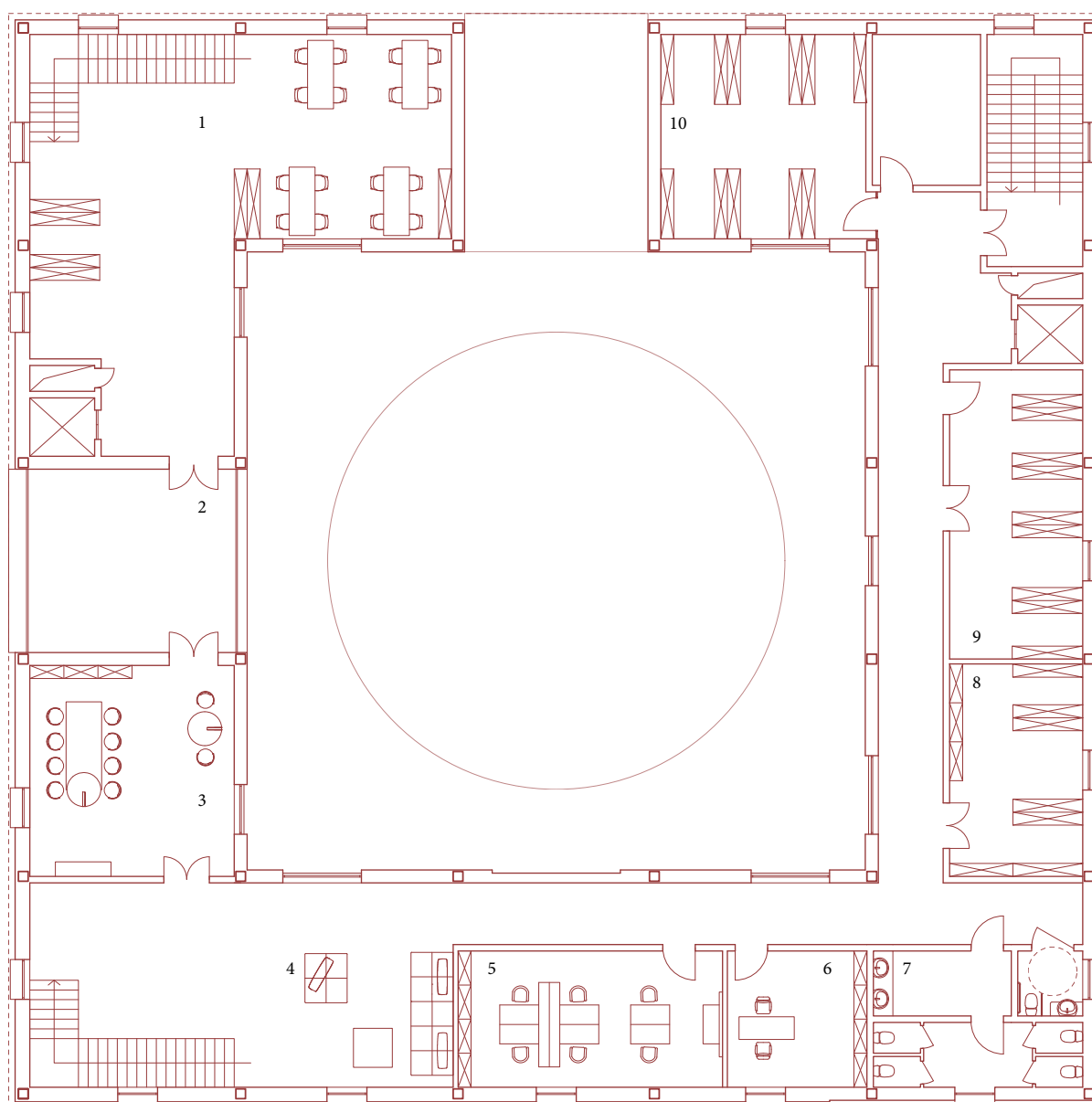


Week 4.5

3f Plan

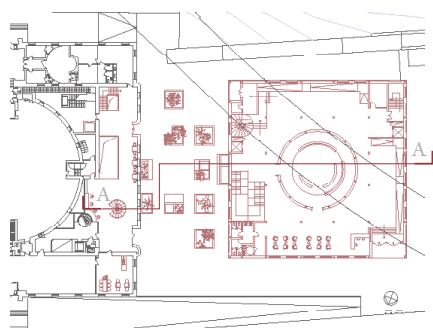
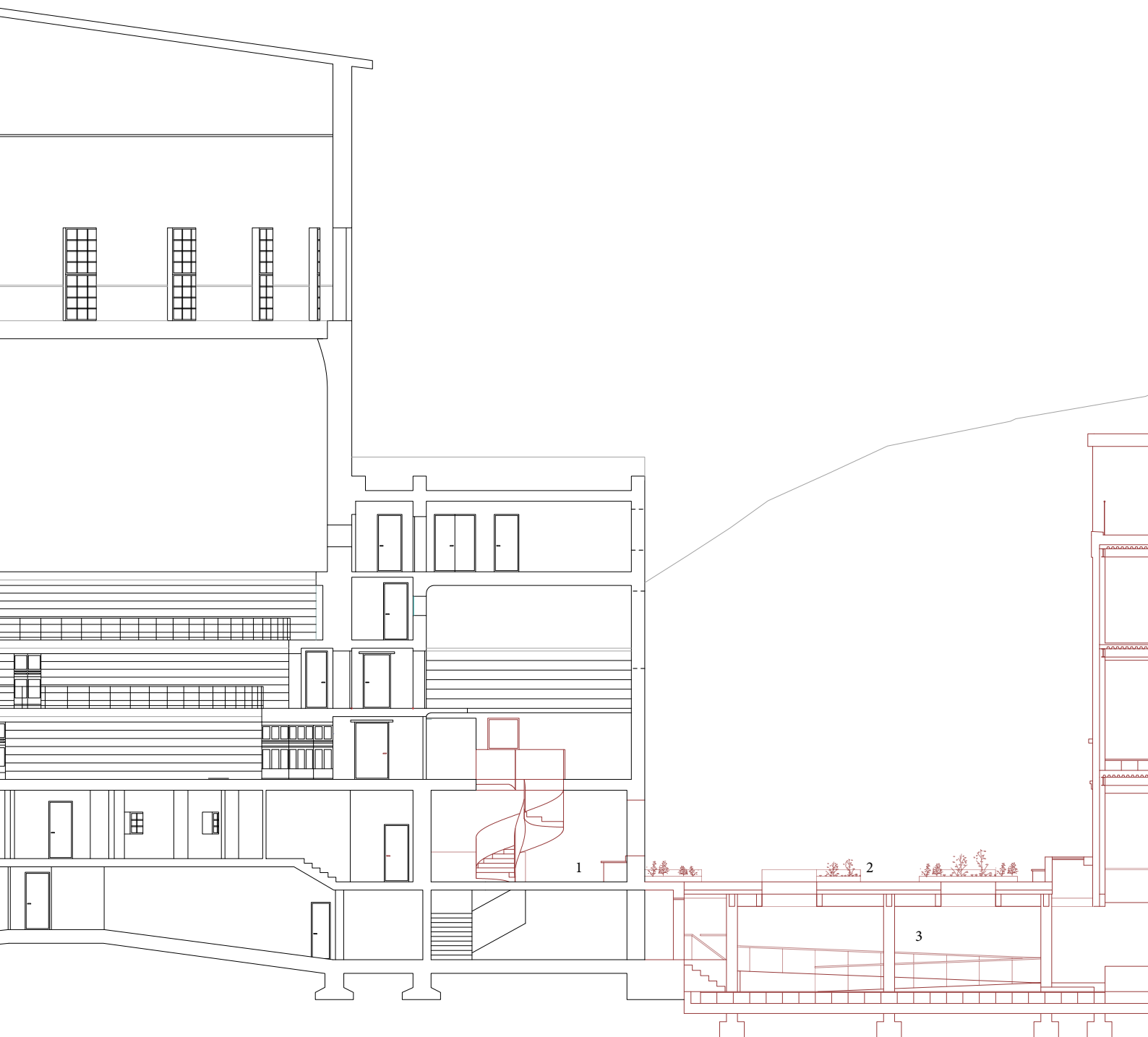


1. Office
2. Terrace
3. Meeting room
4. Leisure space
5. Office
6. Office
7. Restroom
8. Archives
9. Archives

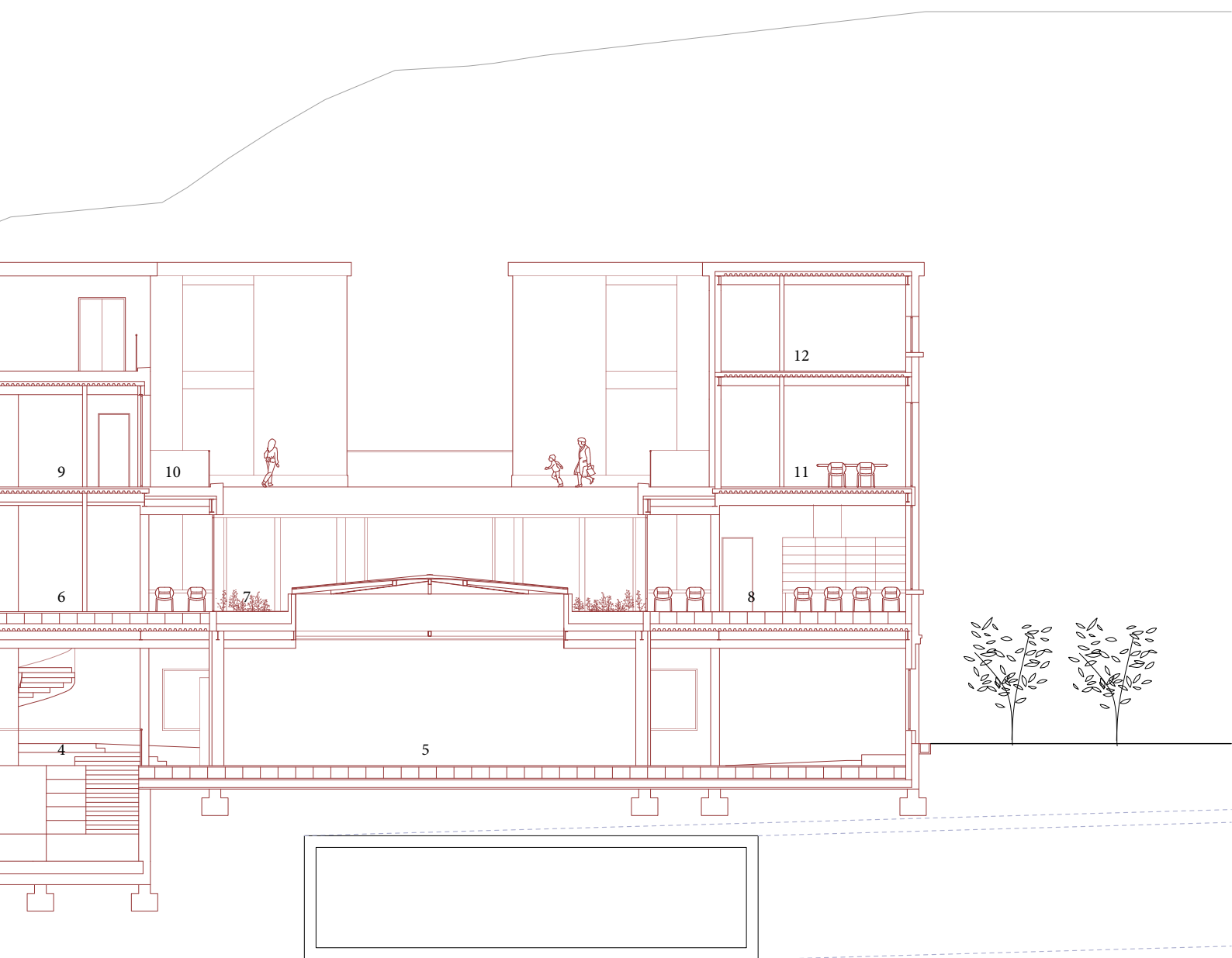


Week 4.5

A-A Section



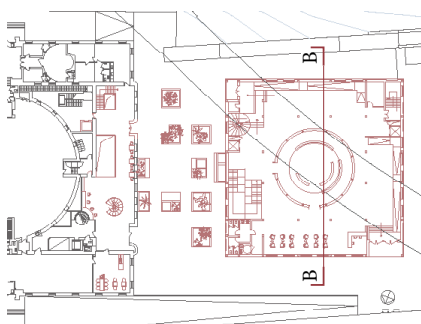
1. Office
2. Garden
3. Art Gallery
4. Landscape stairs
5. Immersive theater
6. Cloak room
7. Green Atrium
8. Reading hall
9. Printing room
10. Terrace
11. Study room
12. Archives





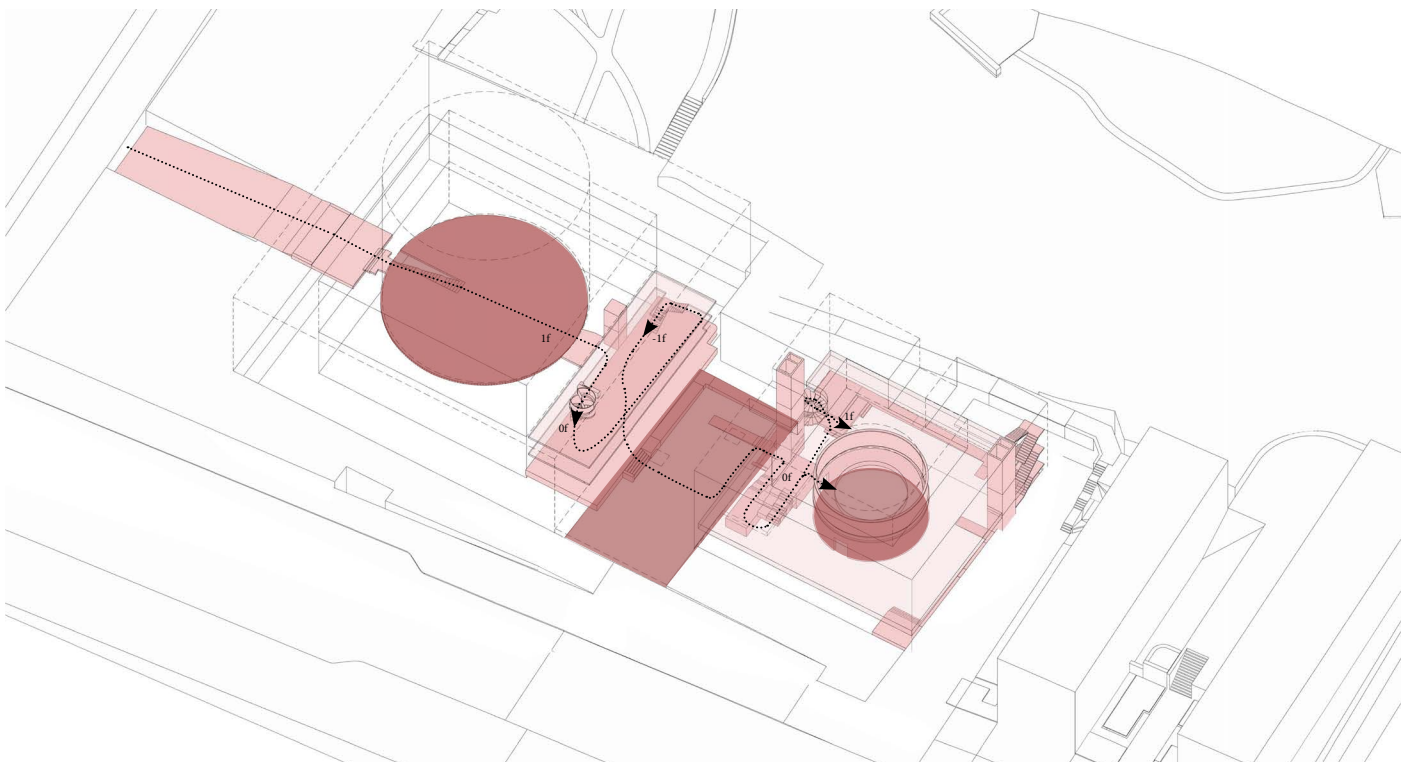
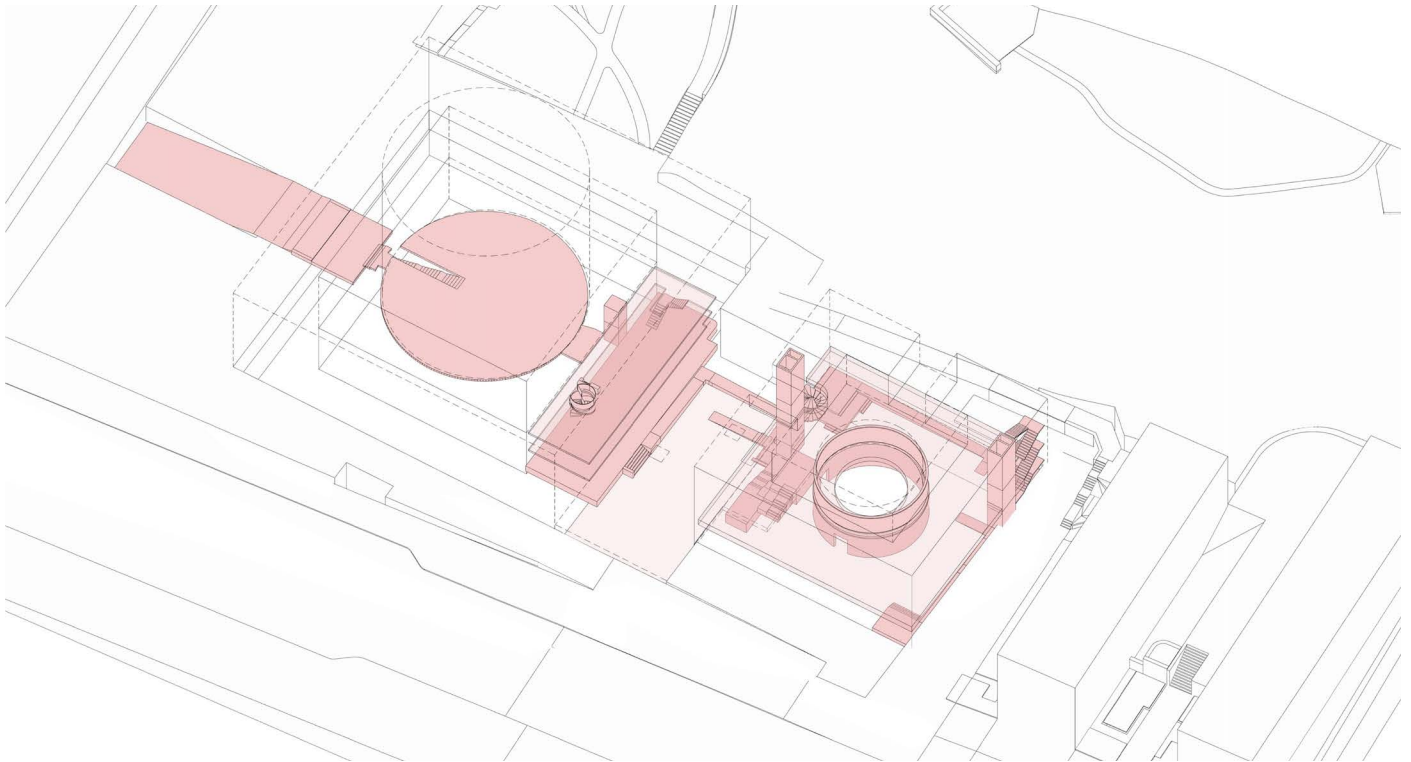
Week 4.5

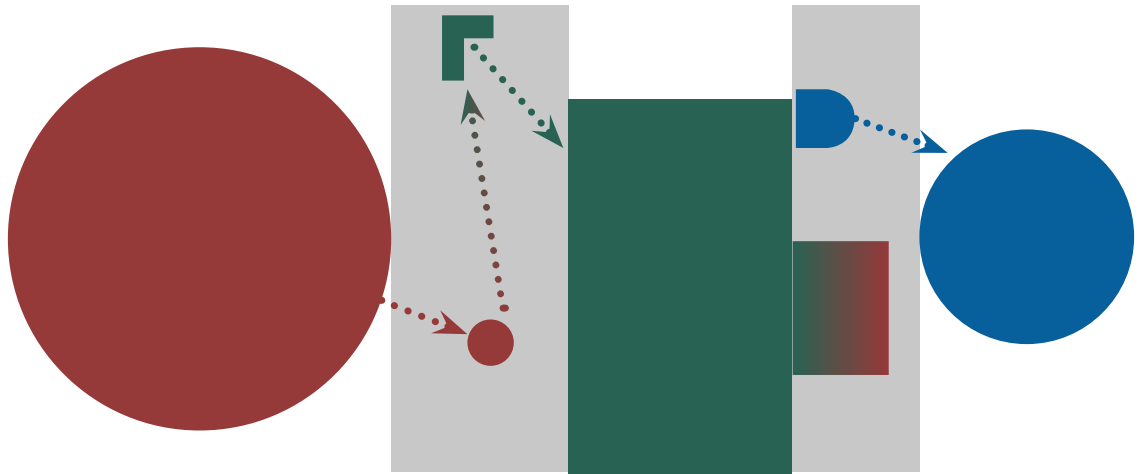
B-B Section

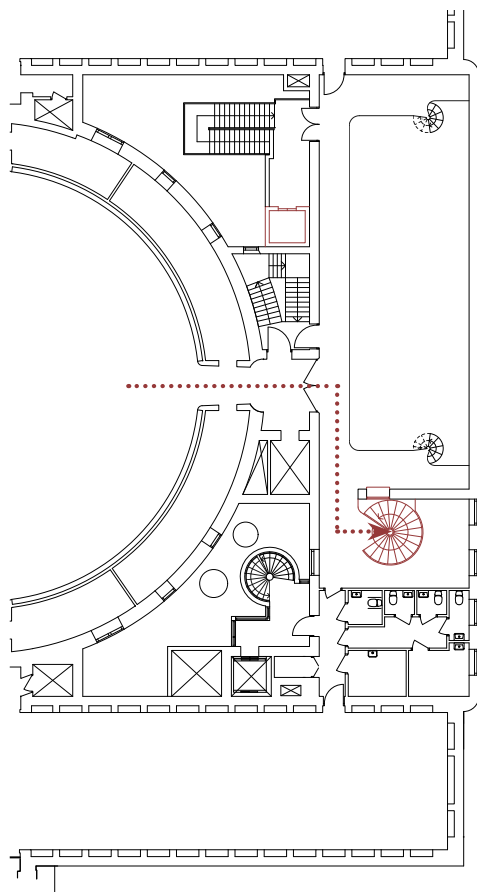


1. Leisure space
2. Immersive theater
3. Composite stairs
4. Reading hall
5. Green atrium
6. Children's library
7. Terrace
8. Office

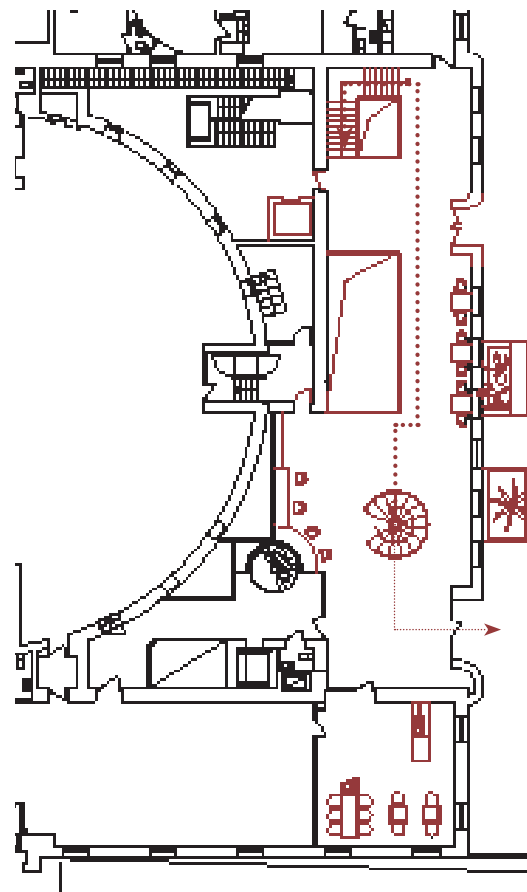






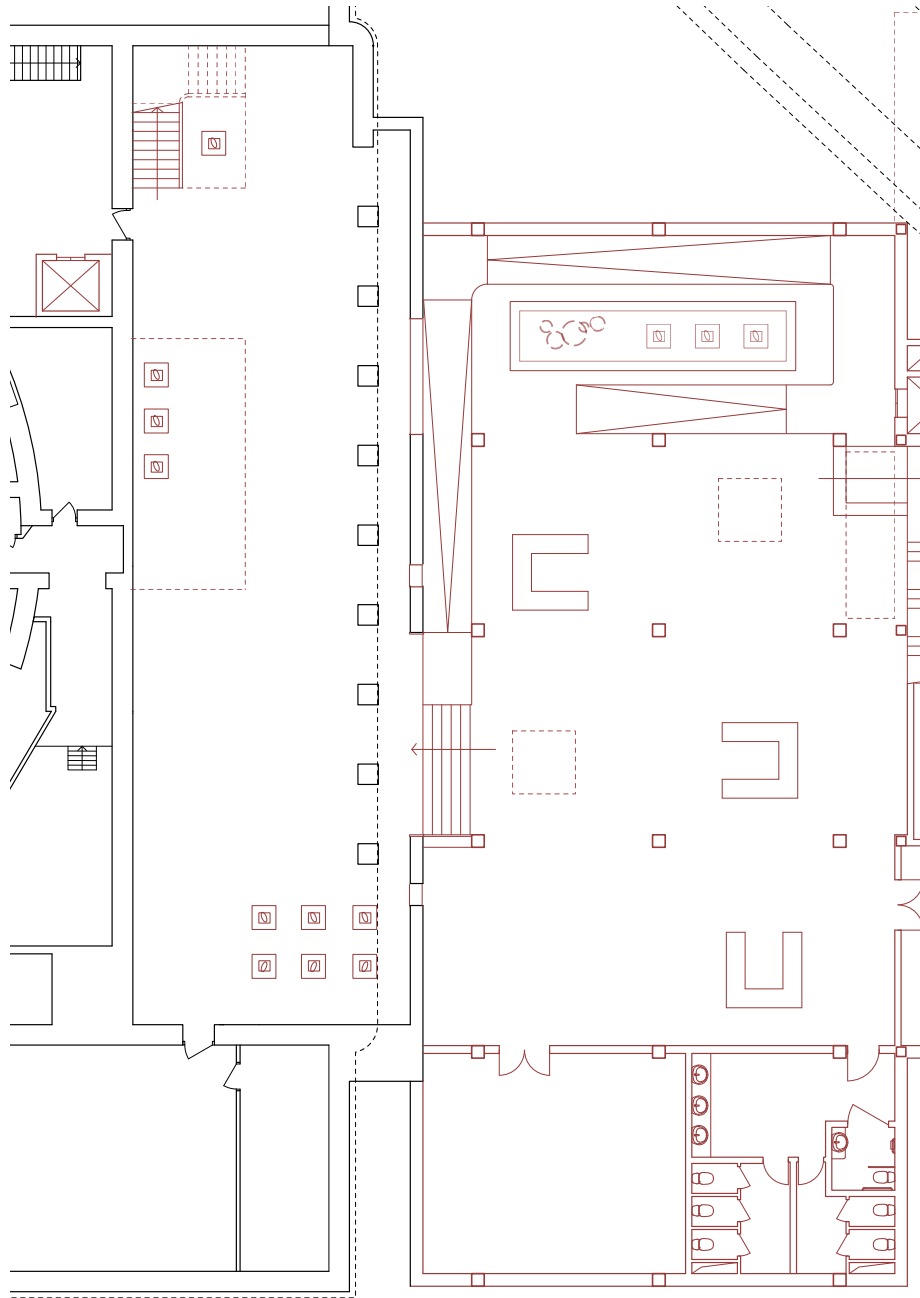


Asplund's library 1f



Asplund's library 0f

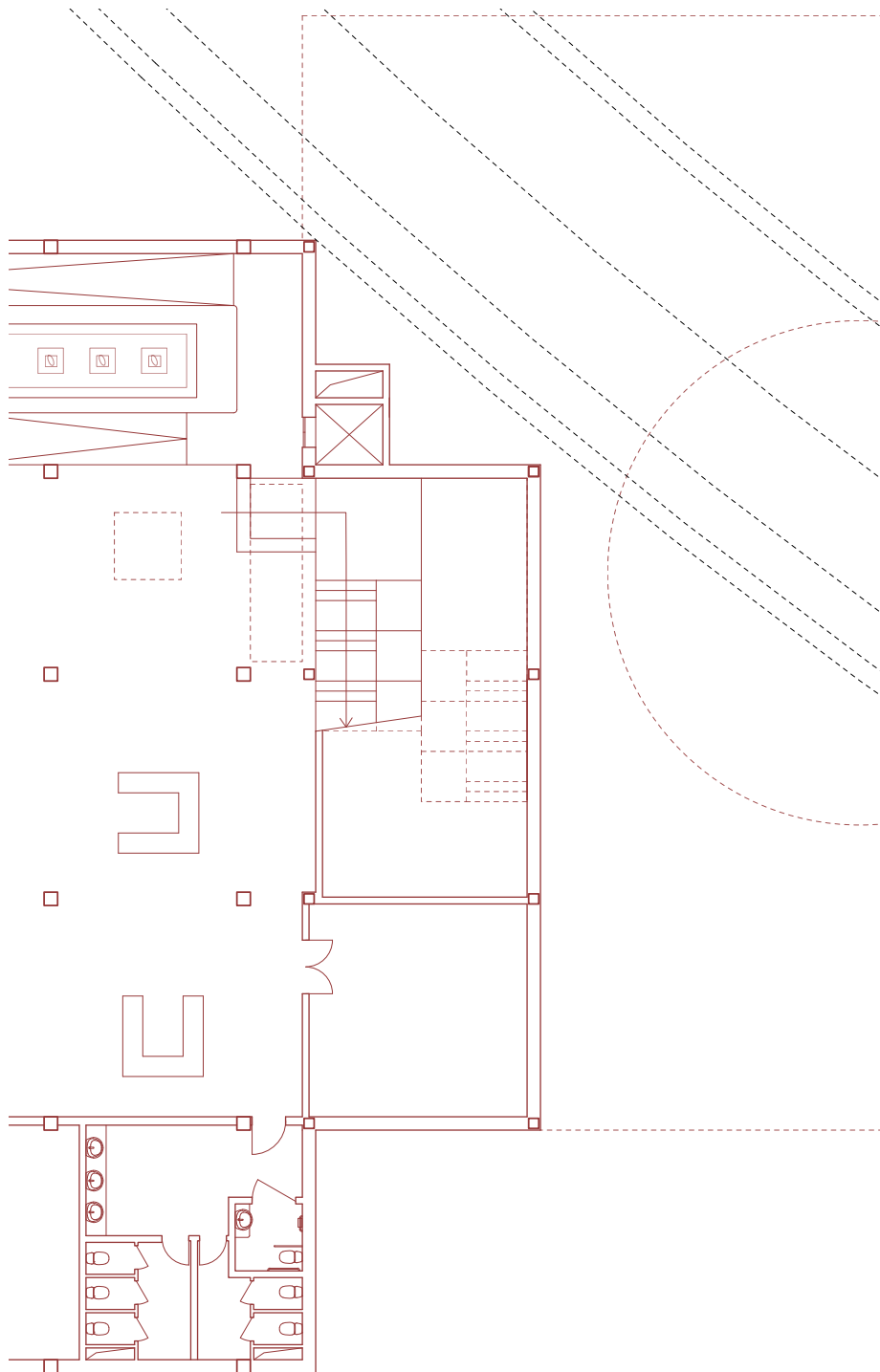




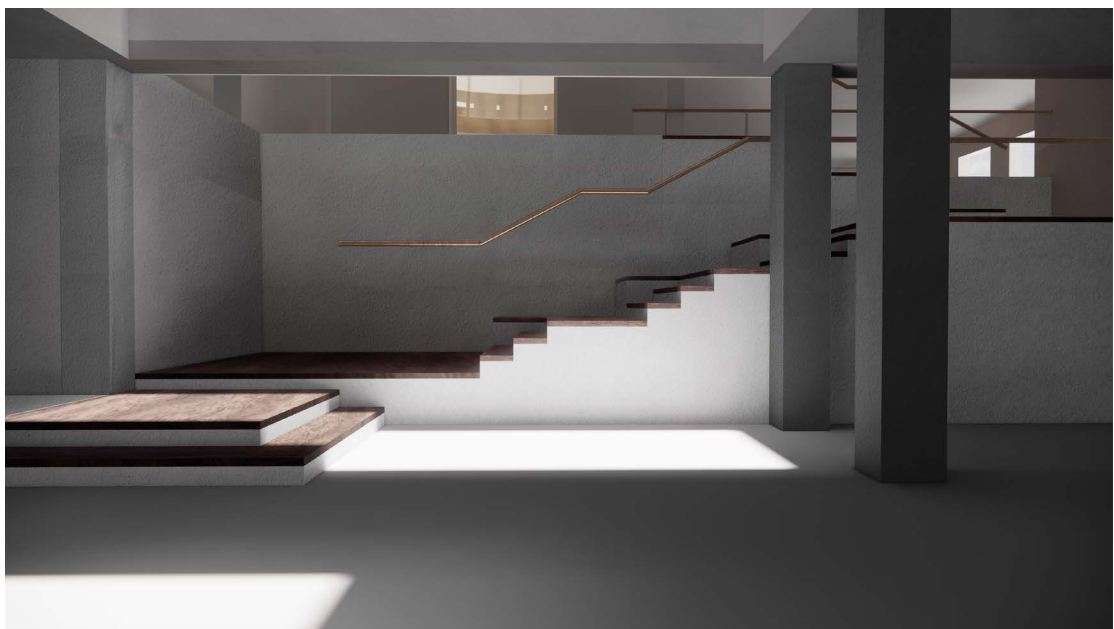
Art gallery

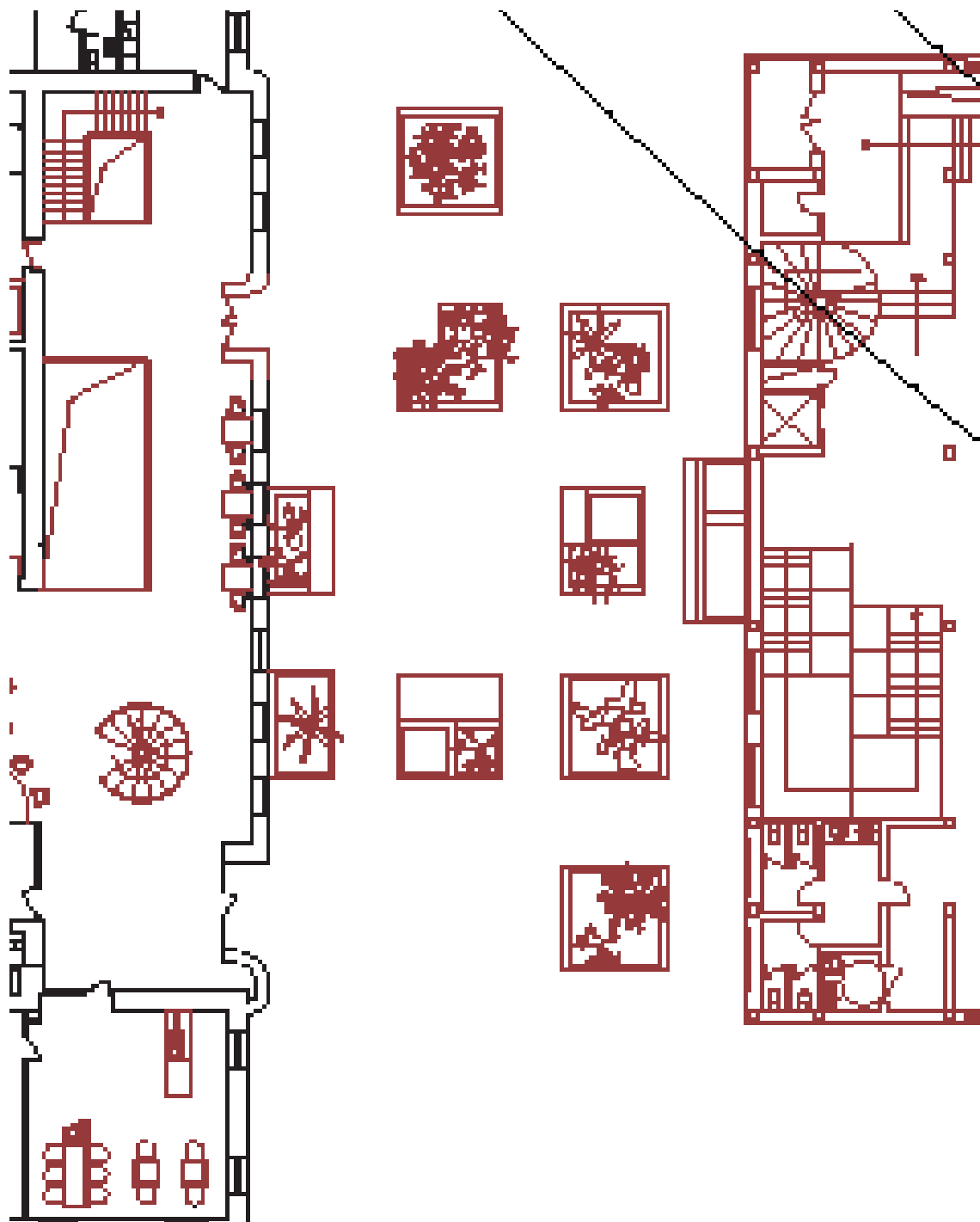






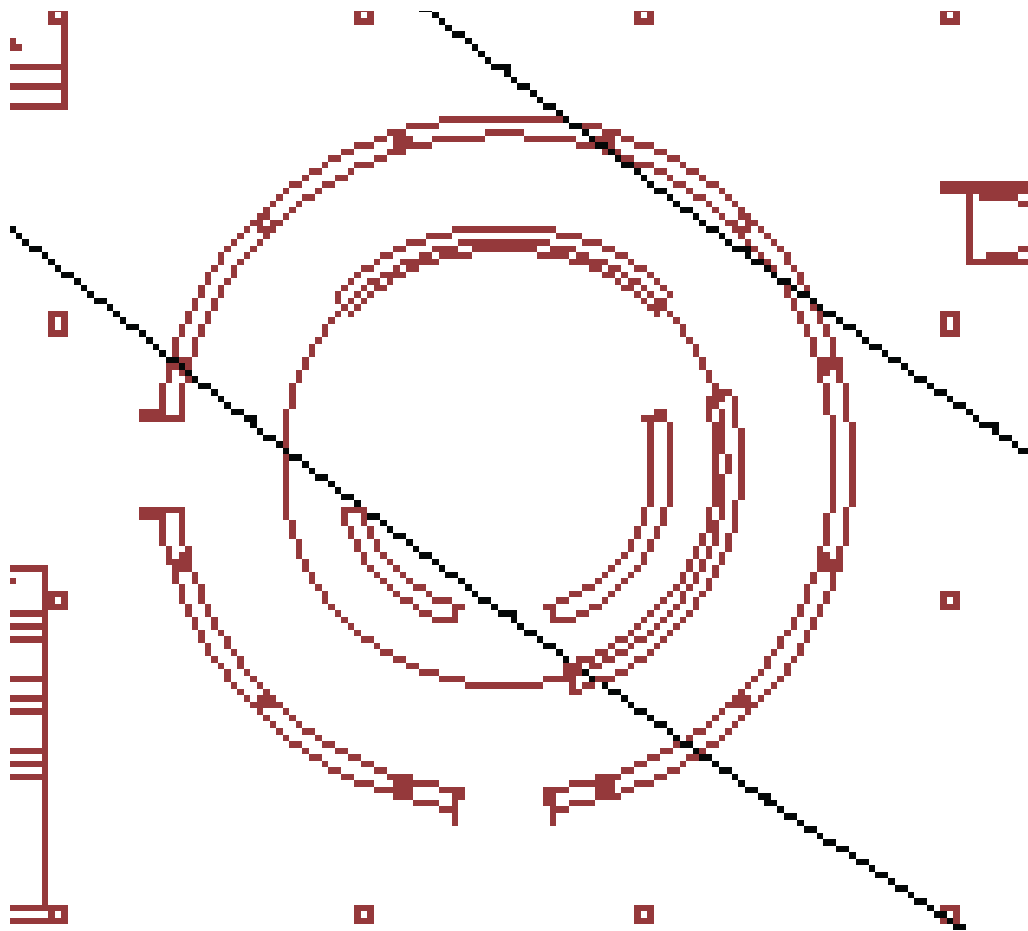
Landscape stairs  
(View from Aspund's Library)



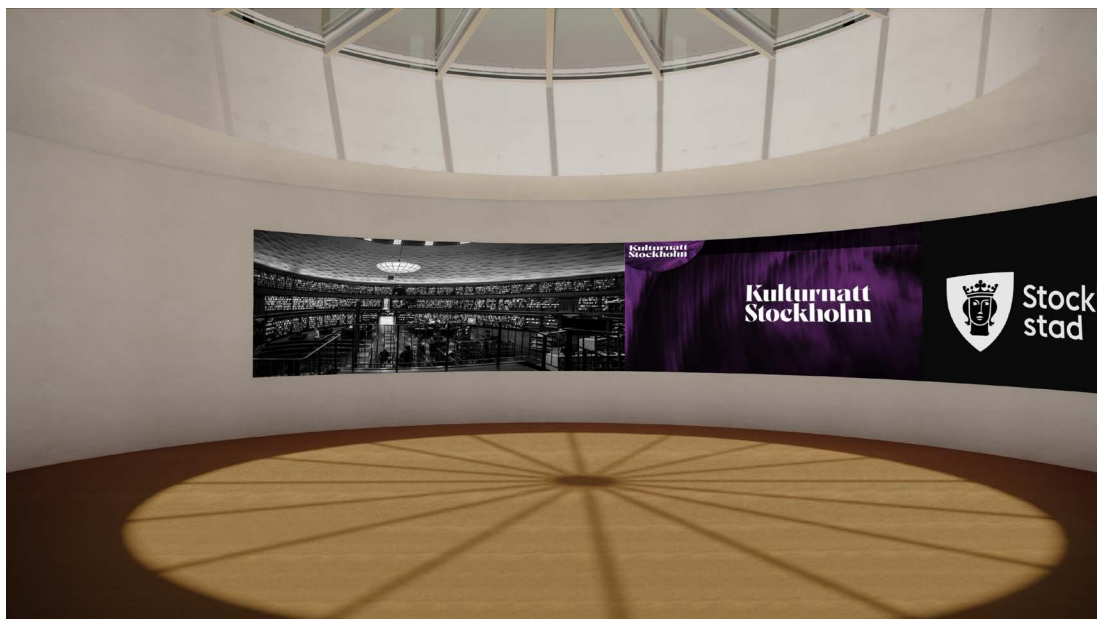


Landscape stairs  
(View from the new Library)

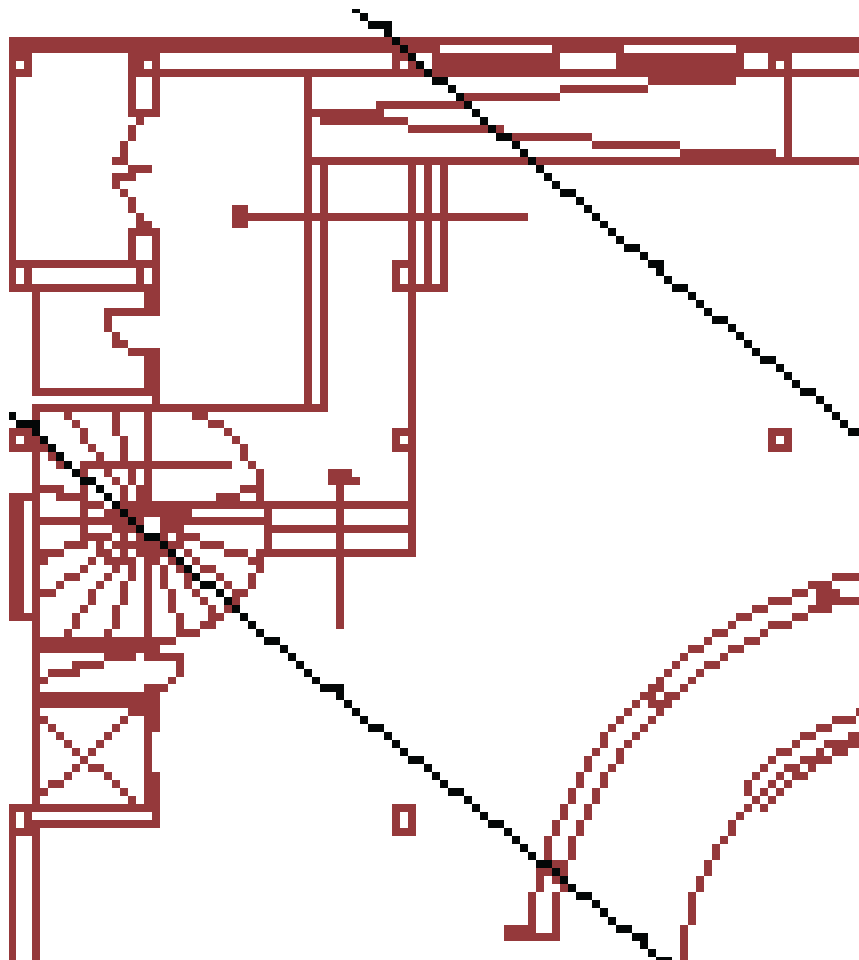




Immersive theater

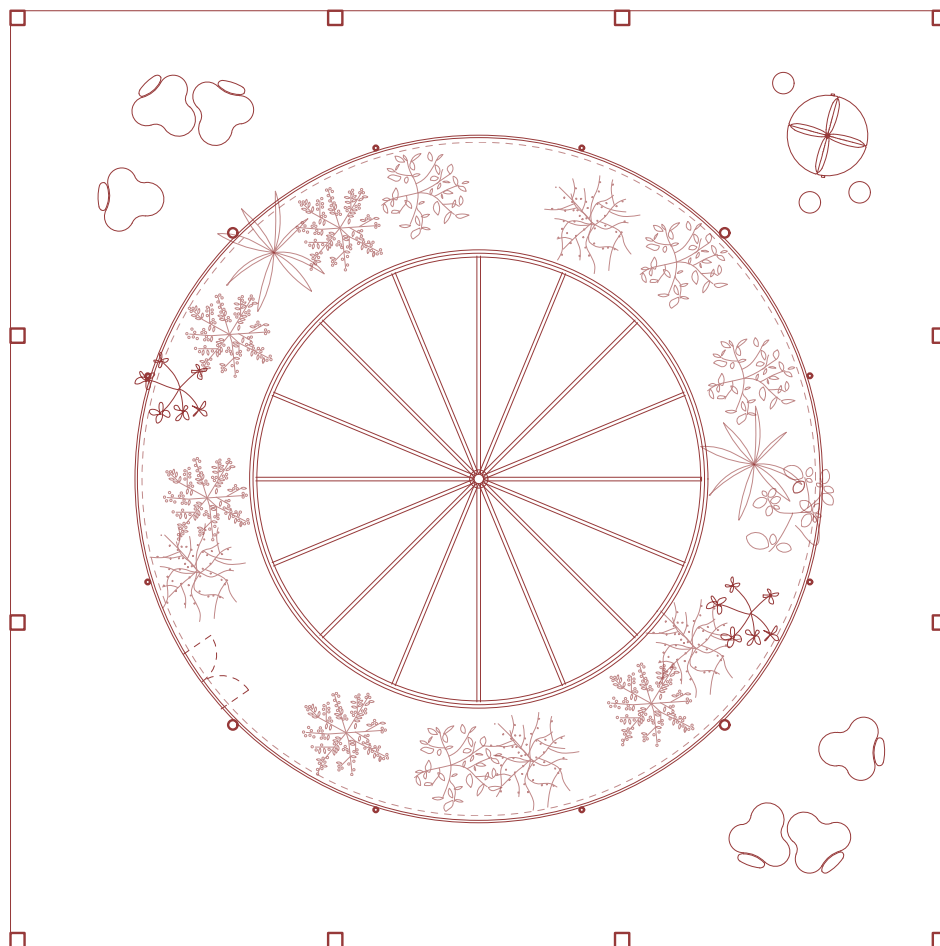






Composite stairs to the entrance and the 1st floor



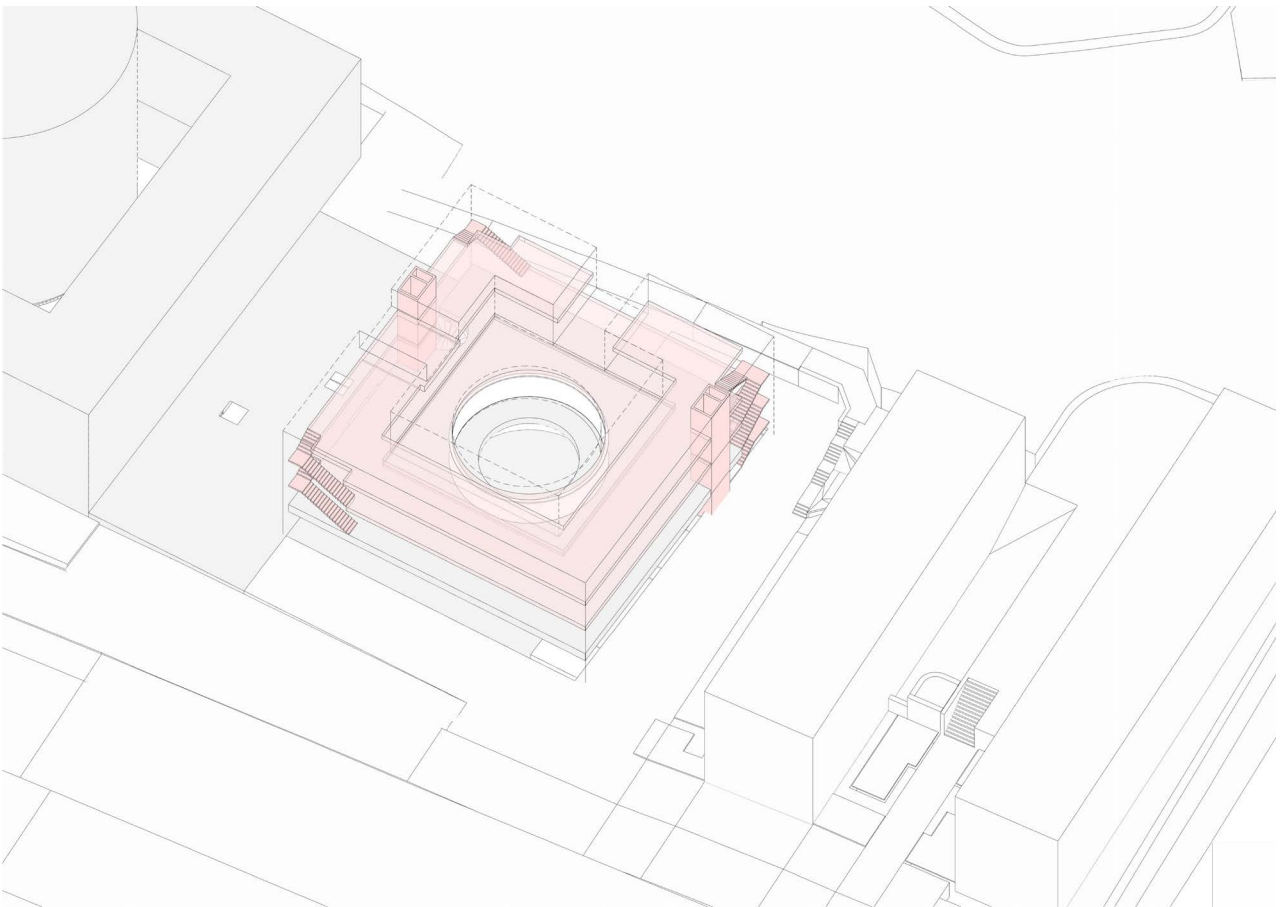


Green atrium



Week 4.5

2f and 3f circulation

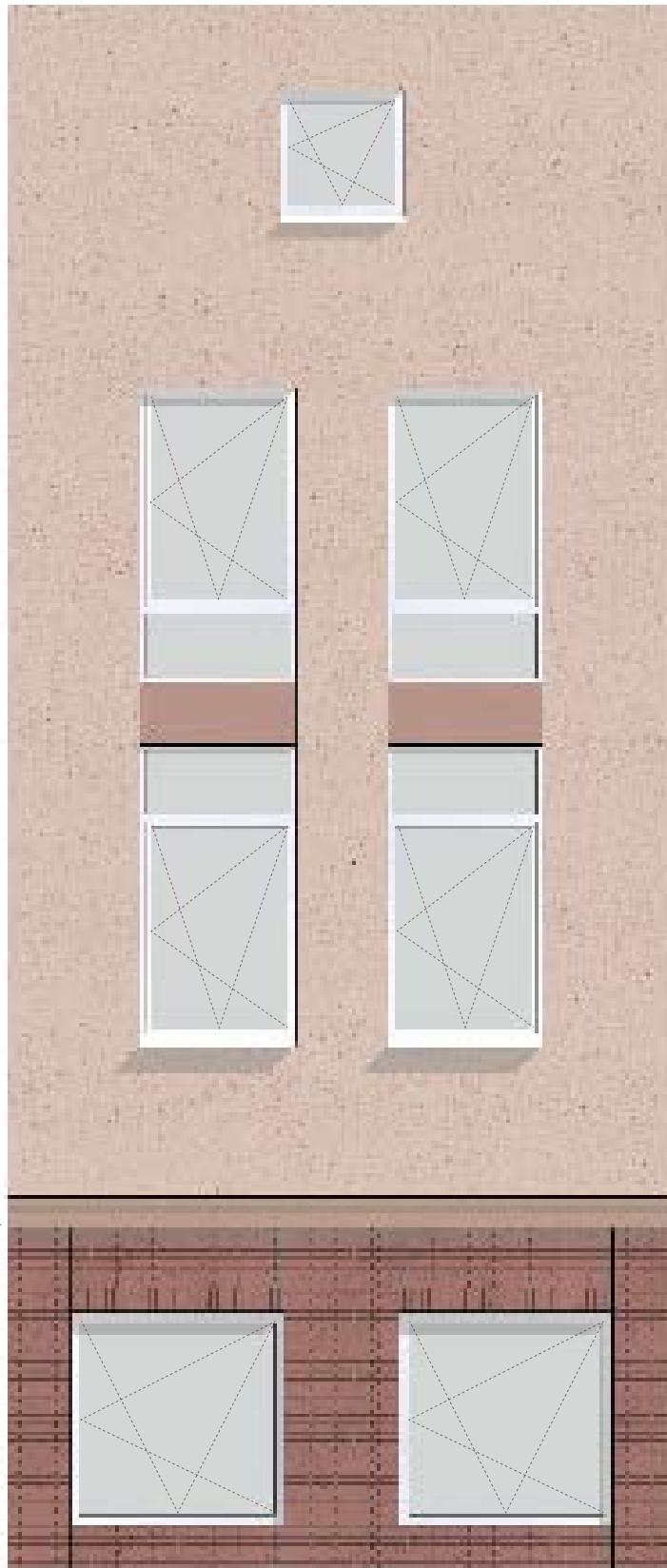




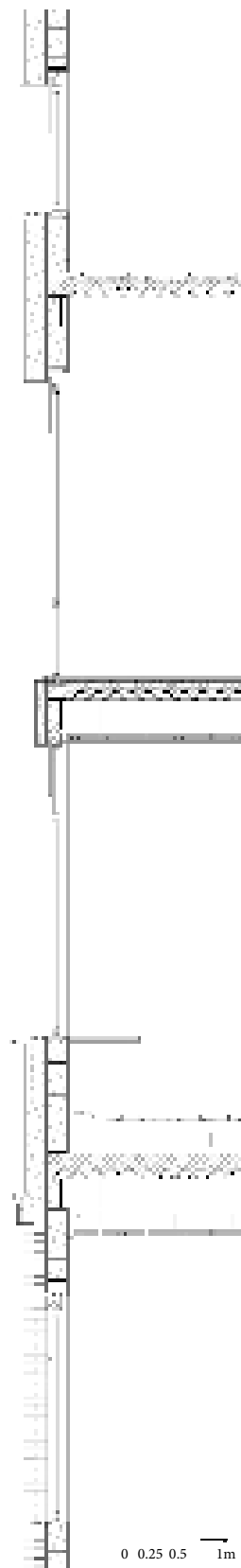
Reference: BBU Library And Student Center /  
Gereben Marián Architects

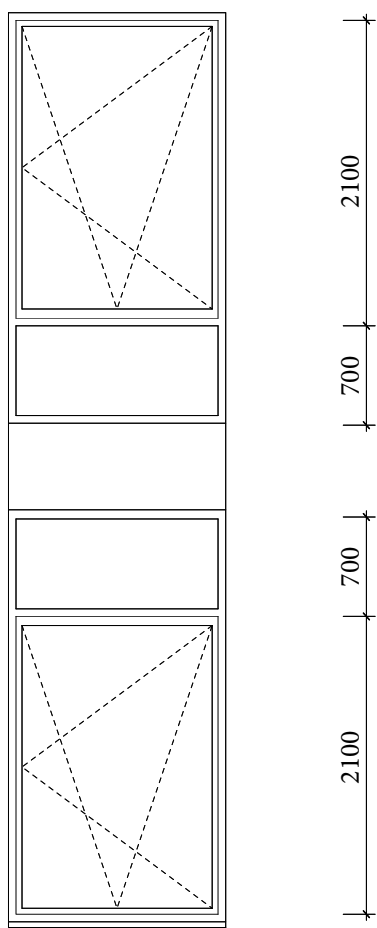
plaster

brick

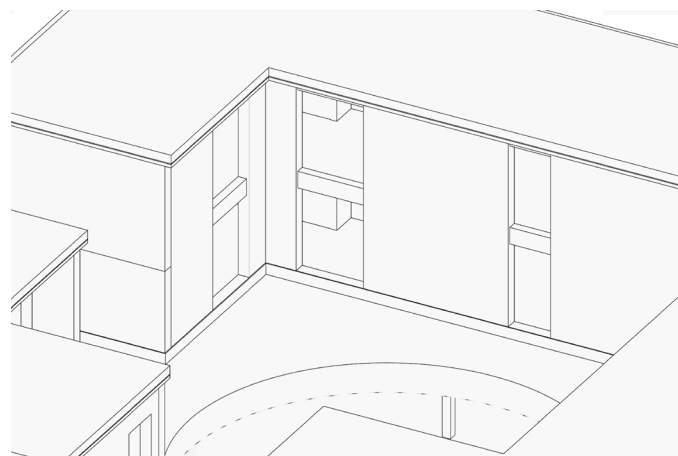




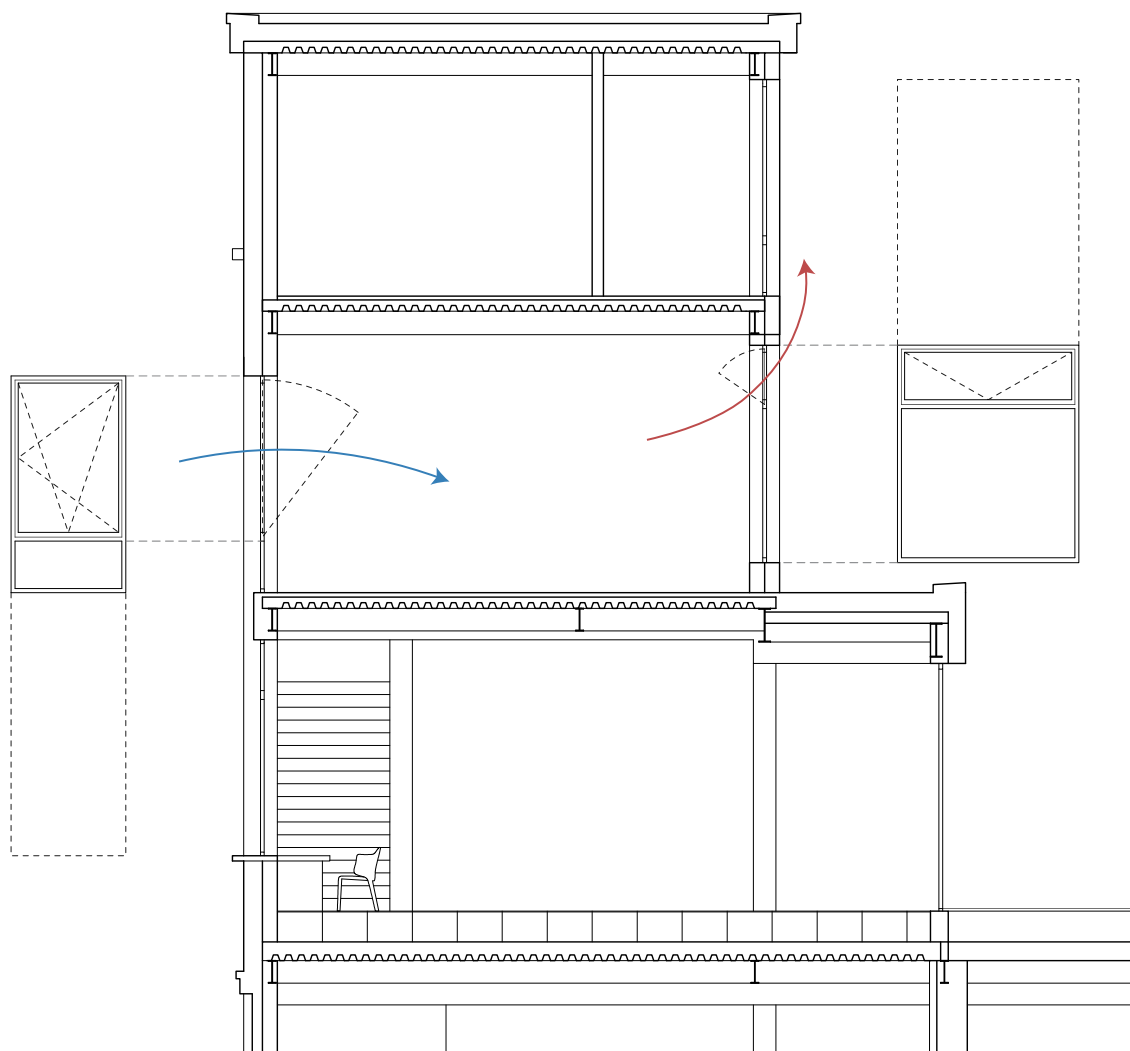


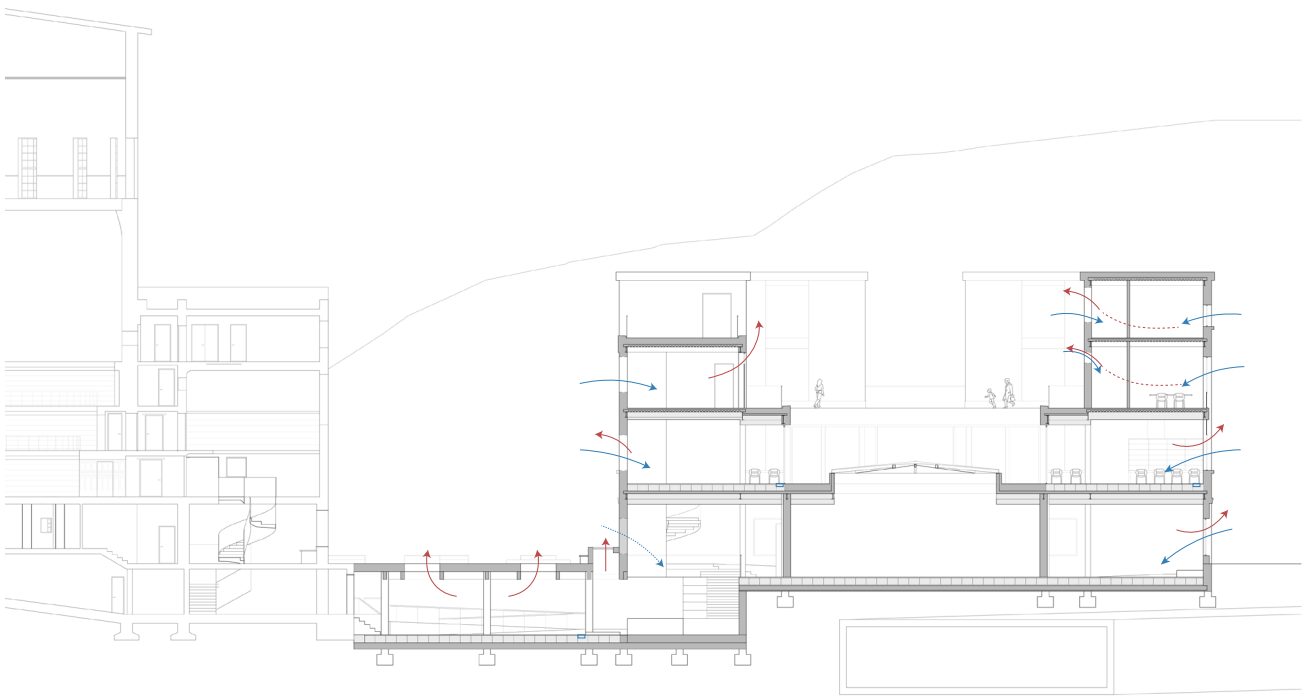


Facade face to the street

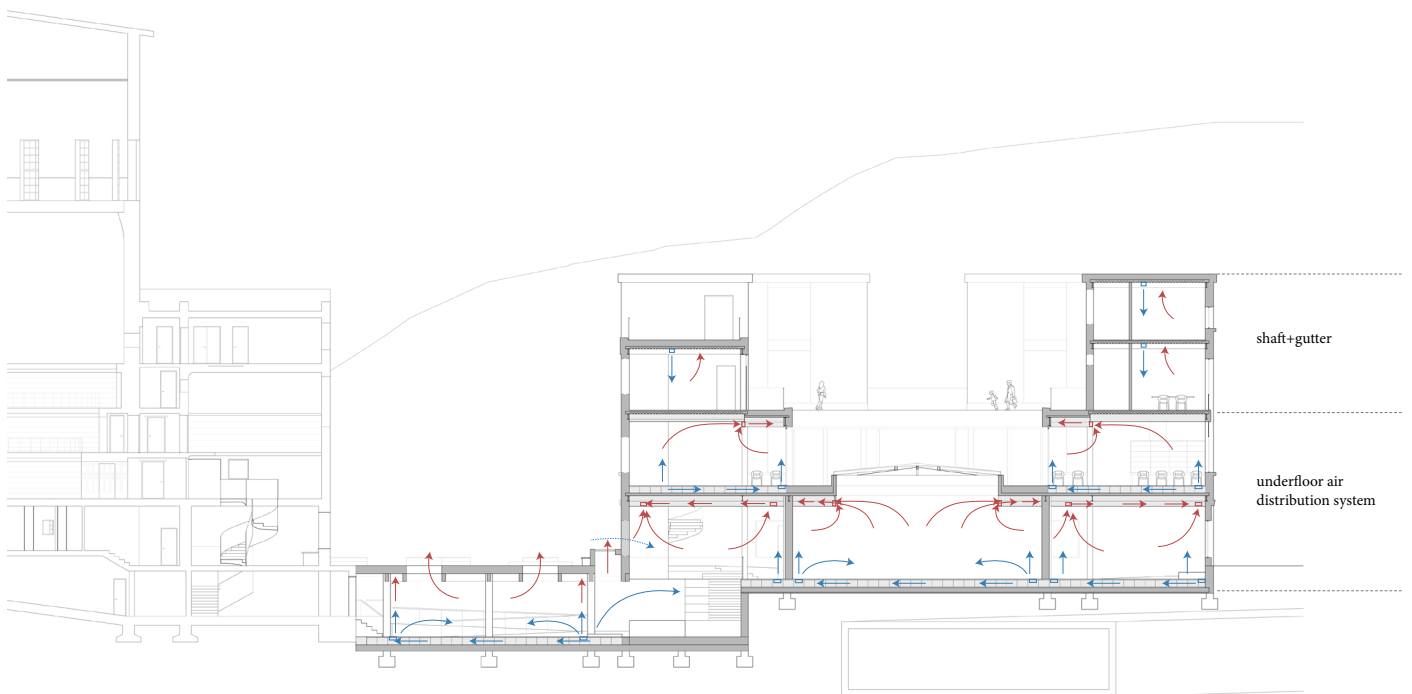


Facade face to the atrium

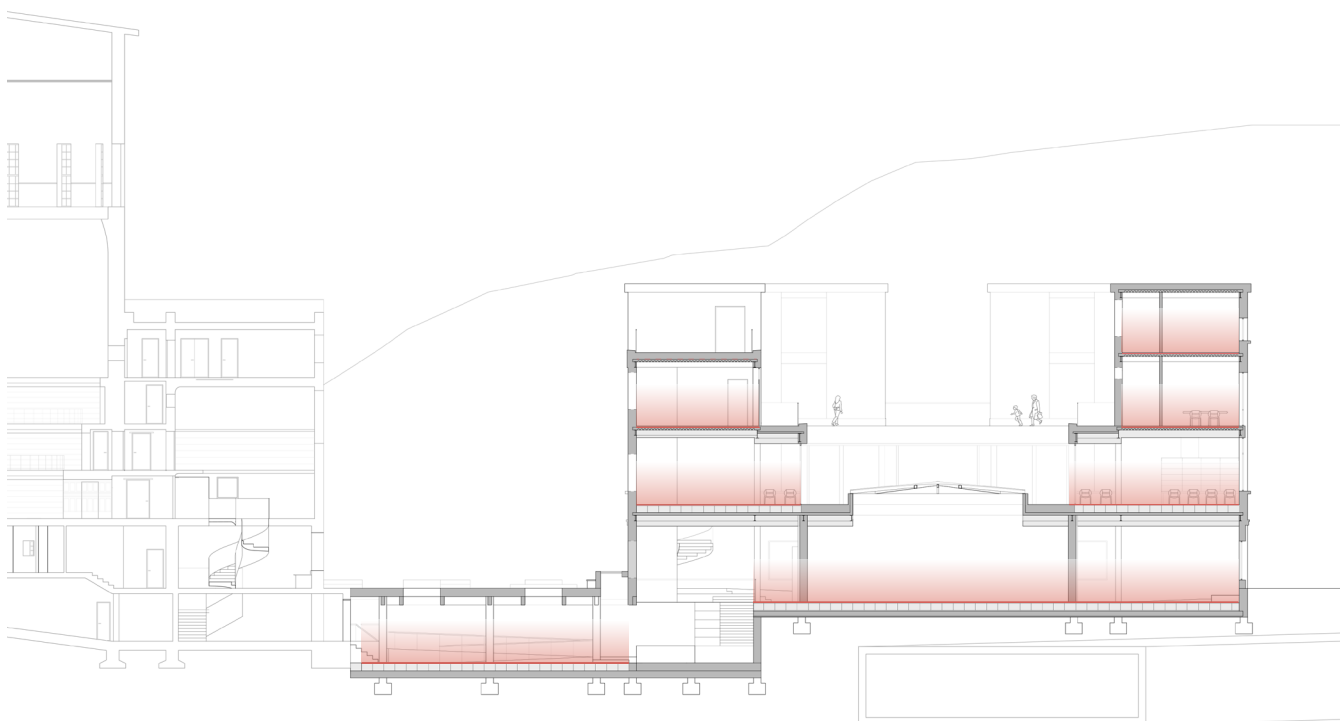




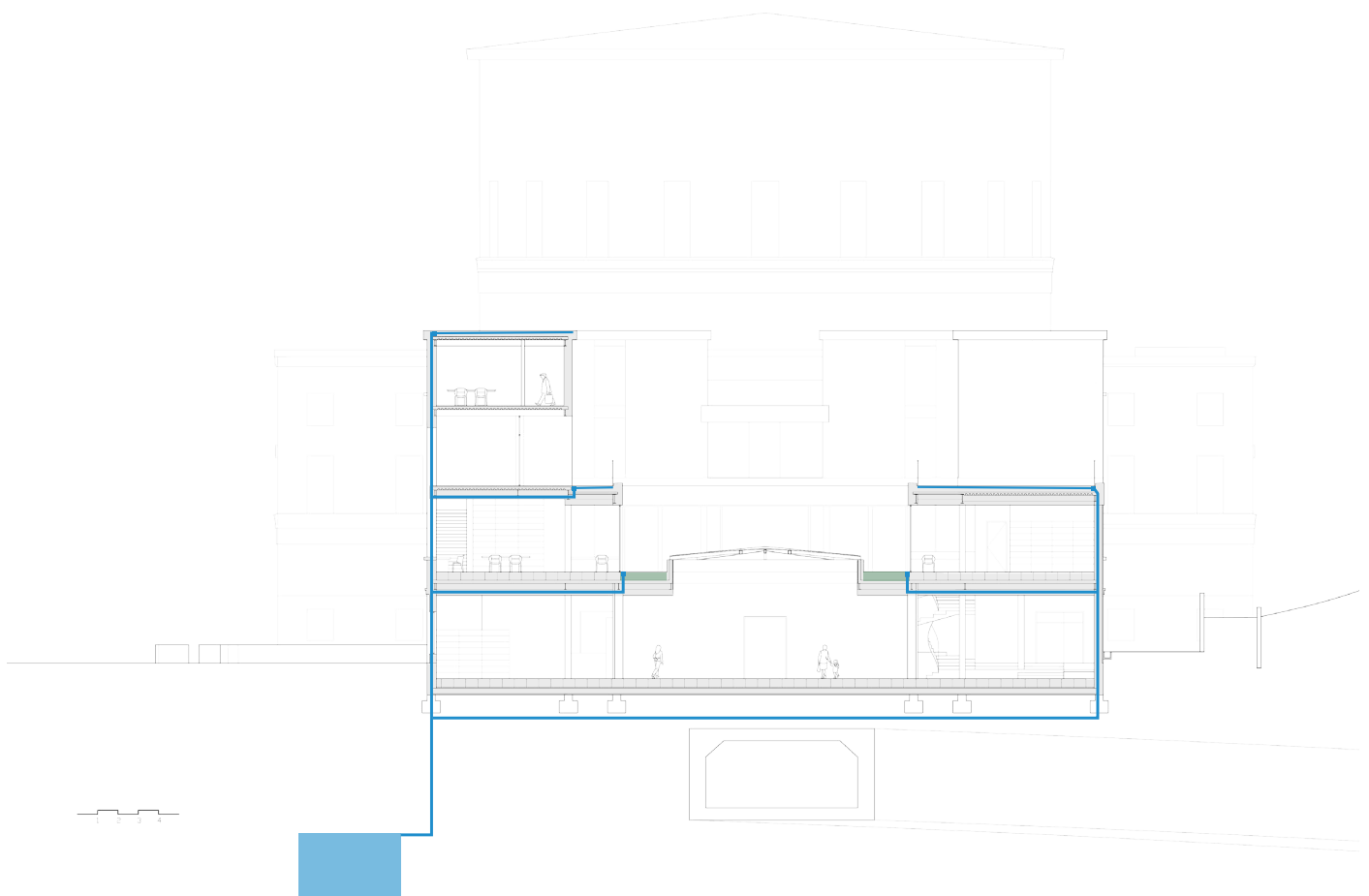
Natural ventilation



Mechanical ventilation

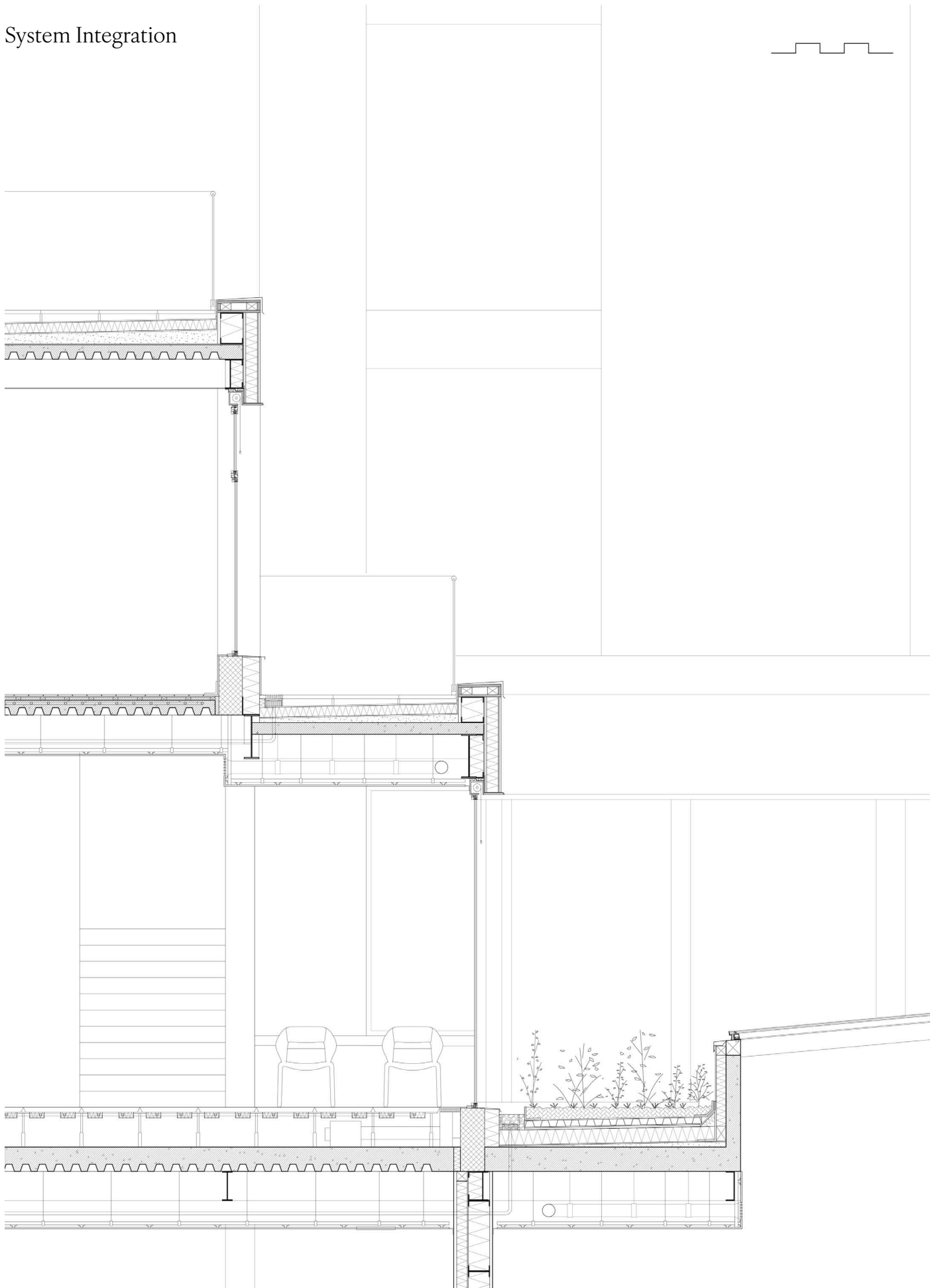


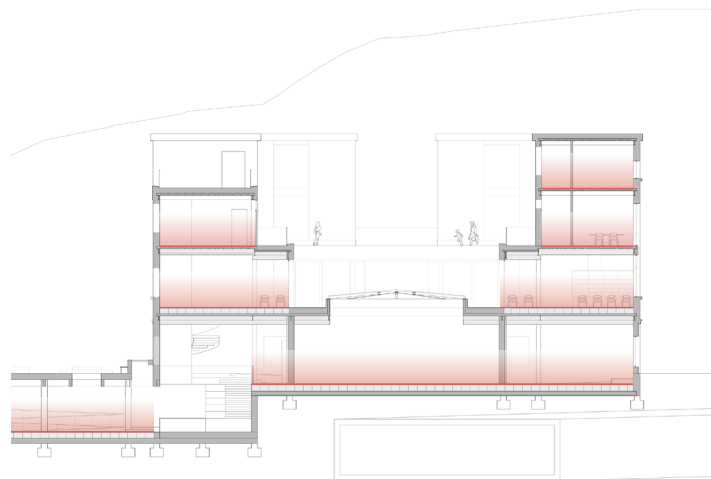
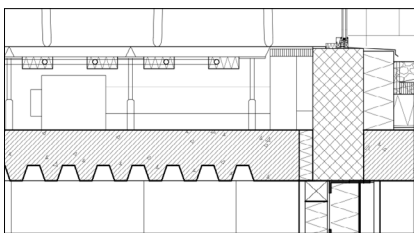
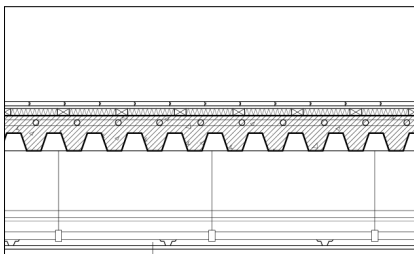
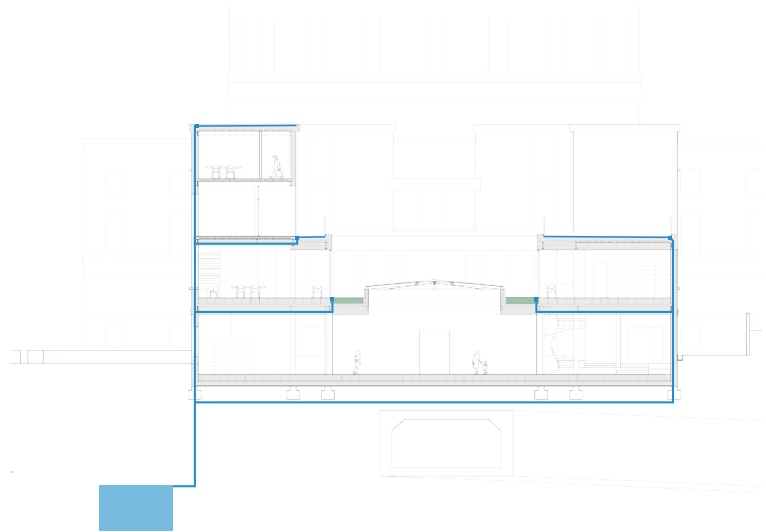
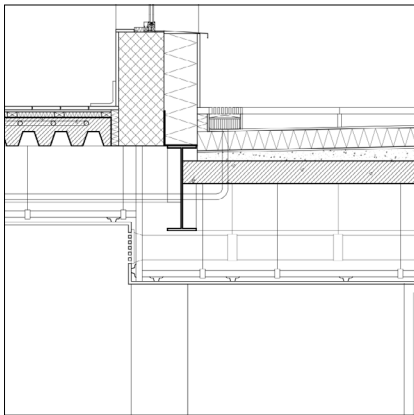
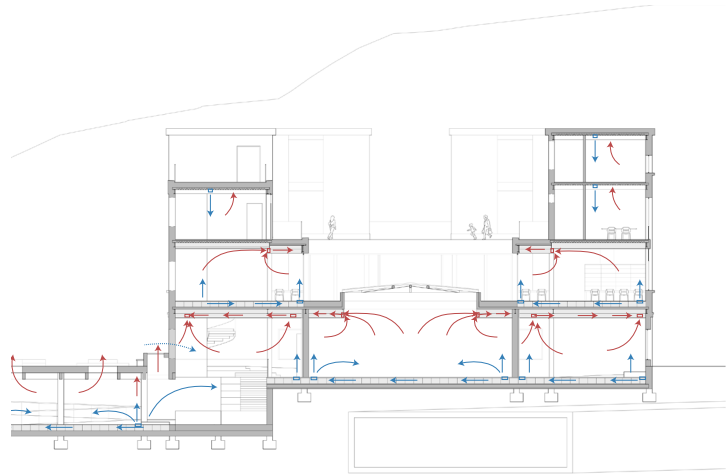
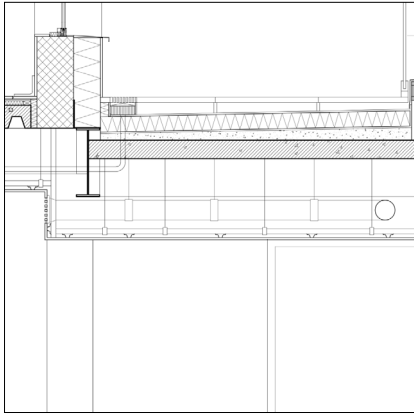
Floor heating

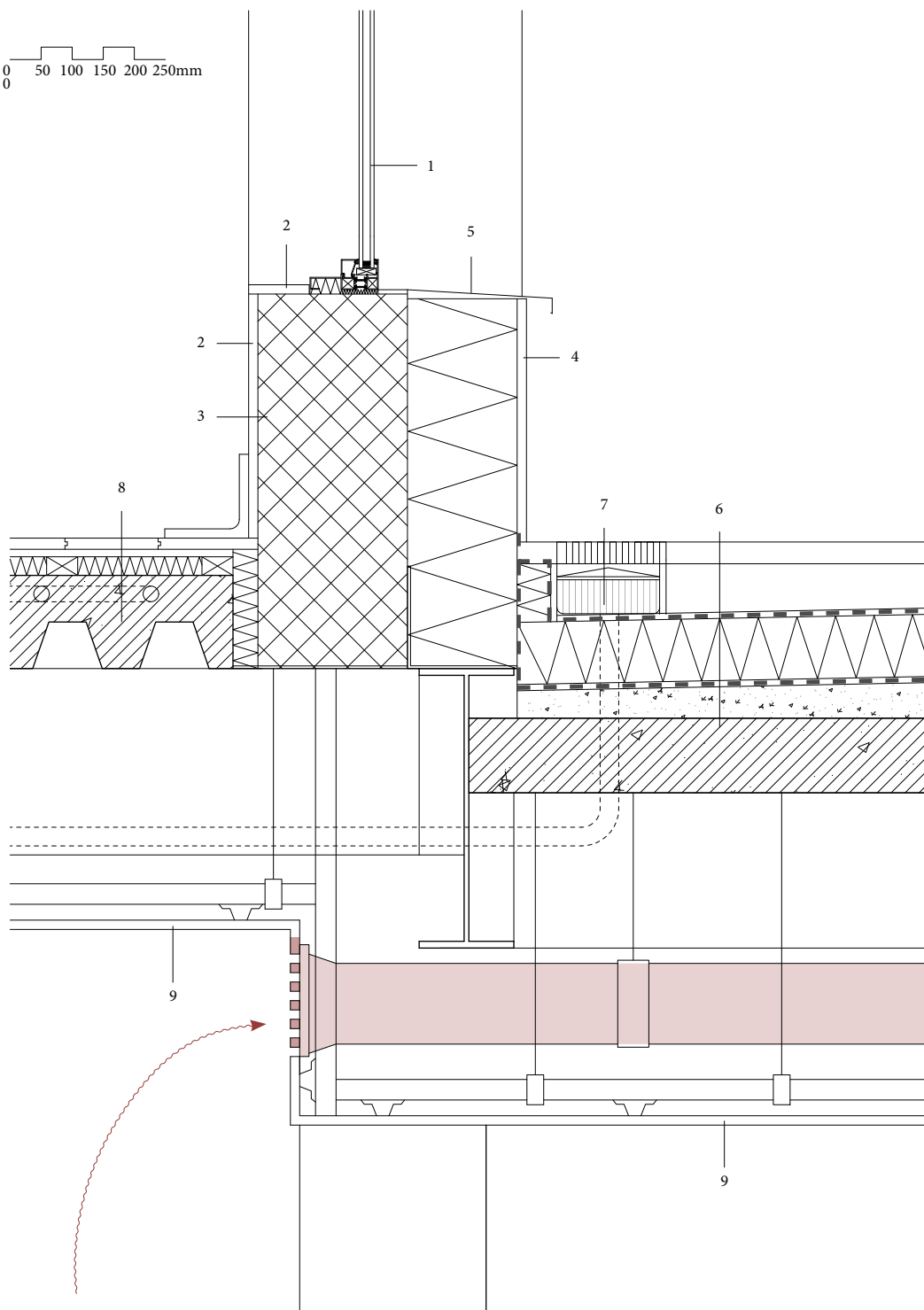


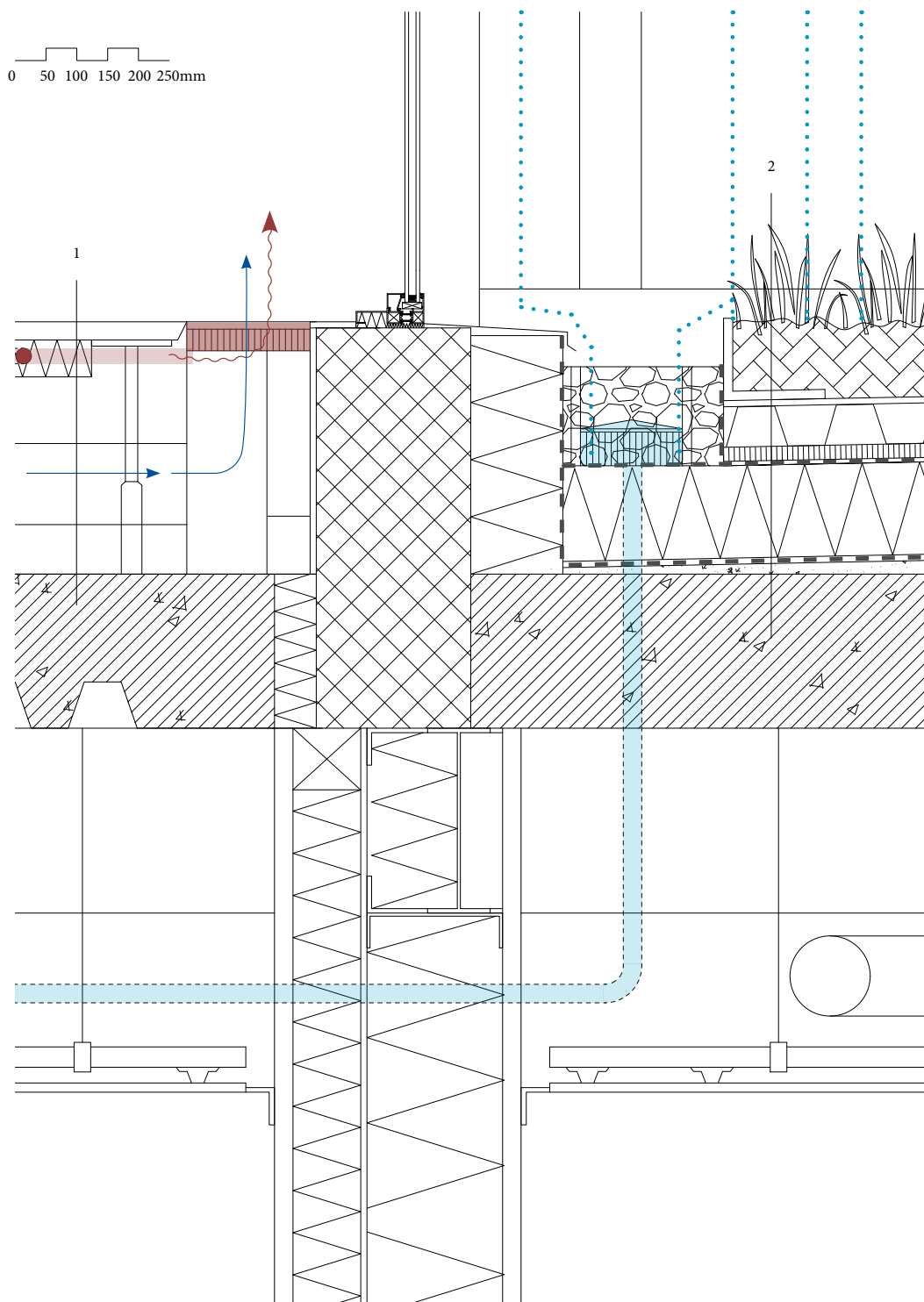
Drainage System-Pluvia





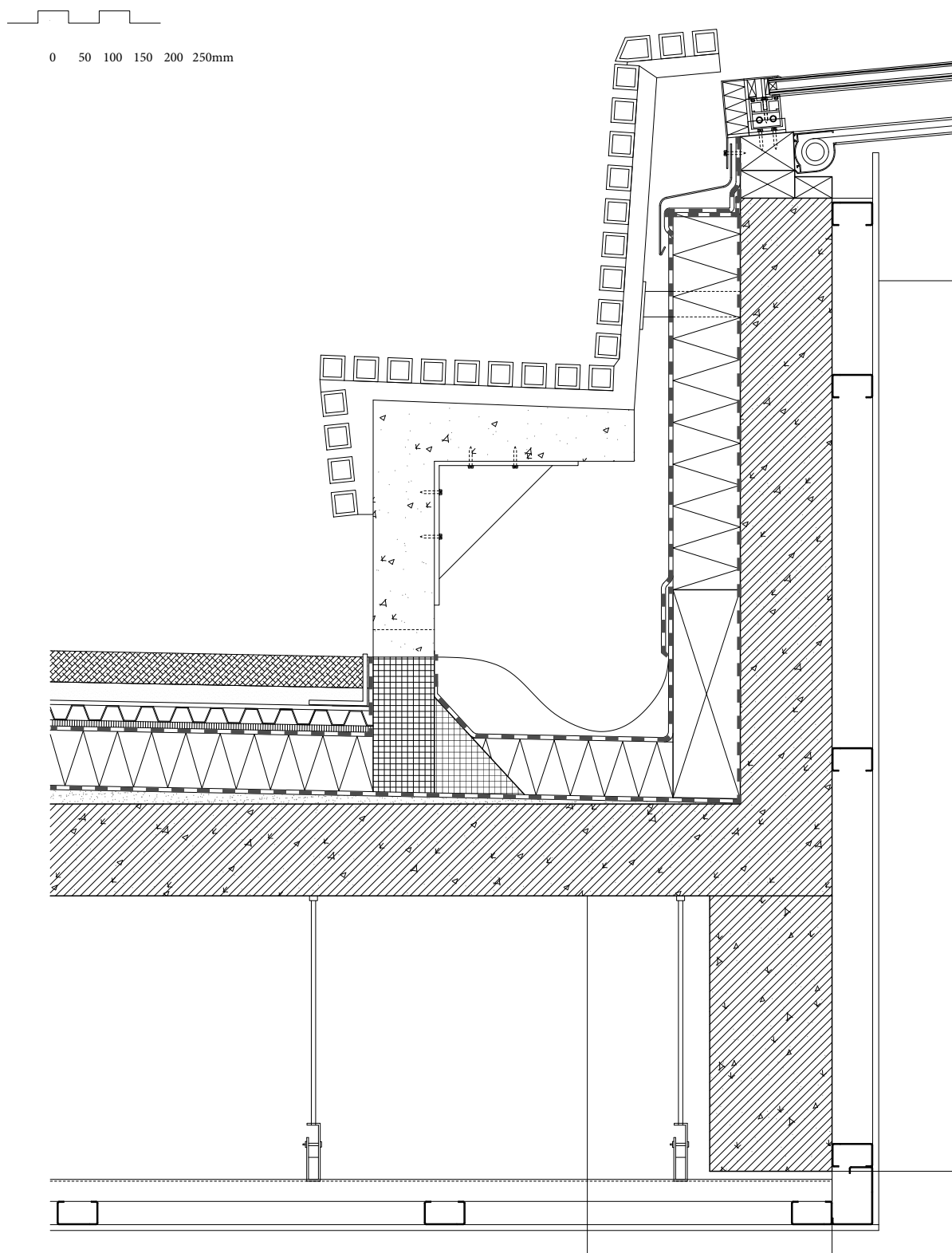


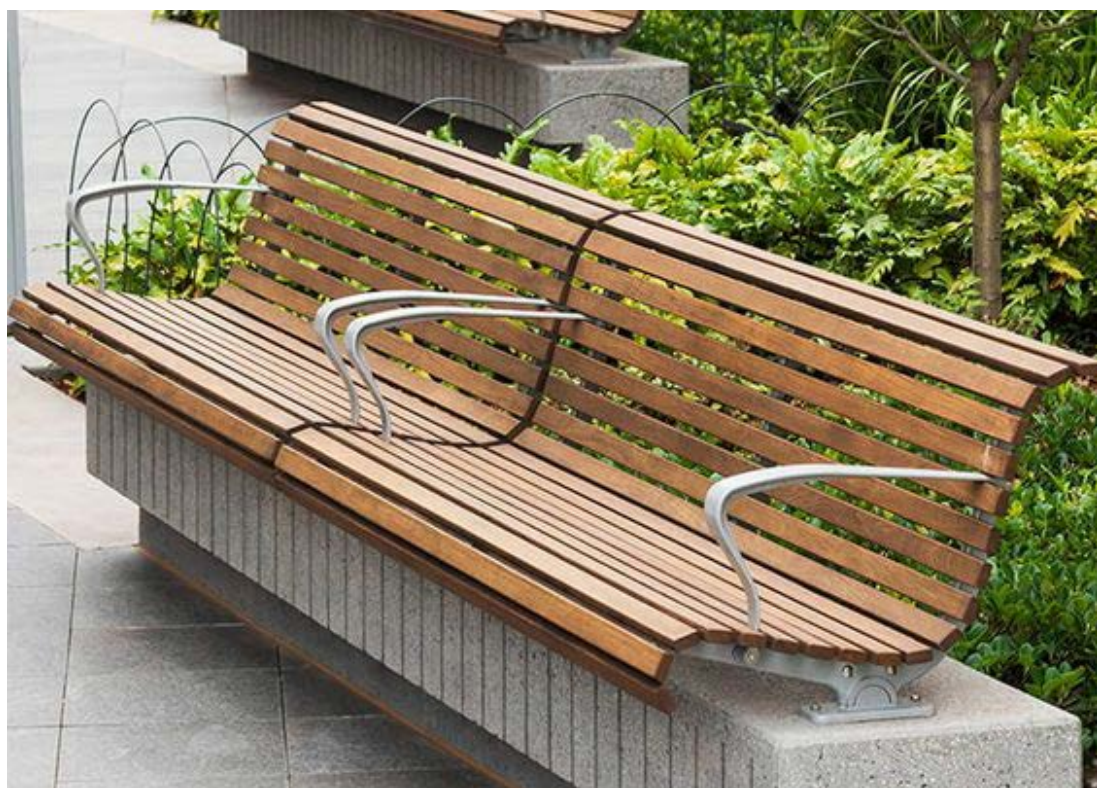




1. raised floor with 30 mm oak floorboard construction: 30 mm three-layer oak floorboard; 60mm thermal insulation adhered below with floor heating pipe embedded; 250mm concrete slab

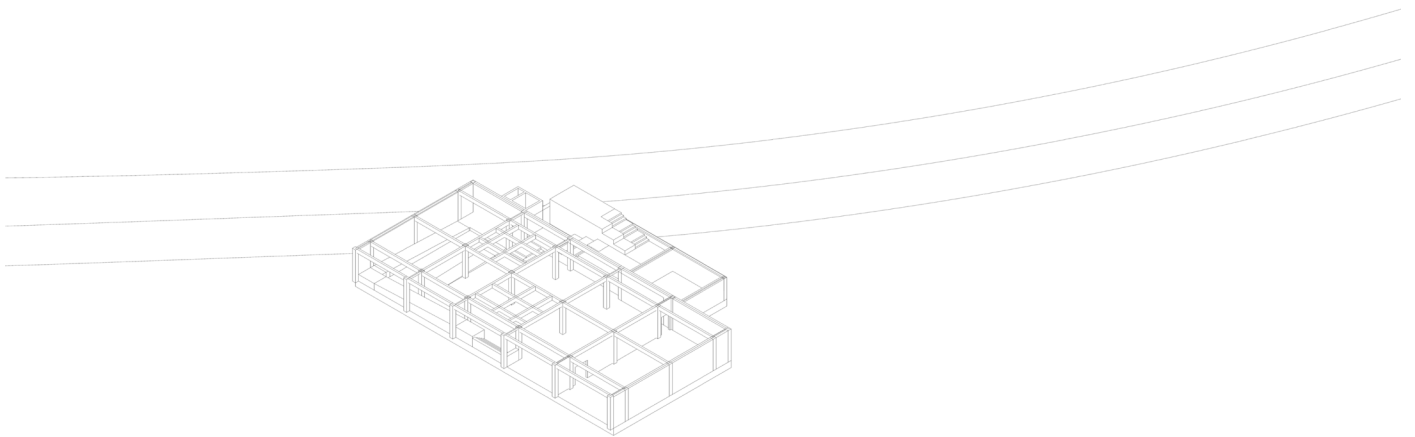
2. 130mm greenroof substrate; geotextile 1m wide at all perimeters, reservoir layer; green roof waterproofing membrane; 65mm drainage layer; aeration layer; 150mm thermal insulation; vapour barrier; cement mortar screeding to falls 2%; 250mm concrete slab



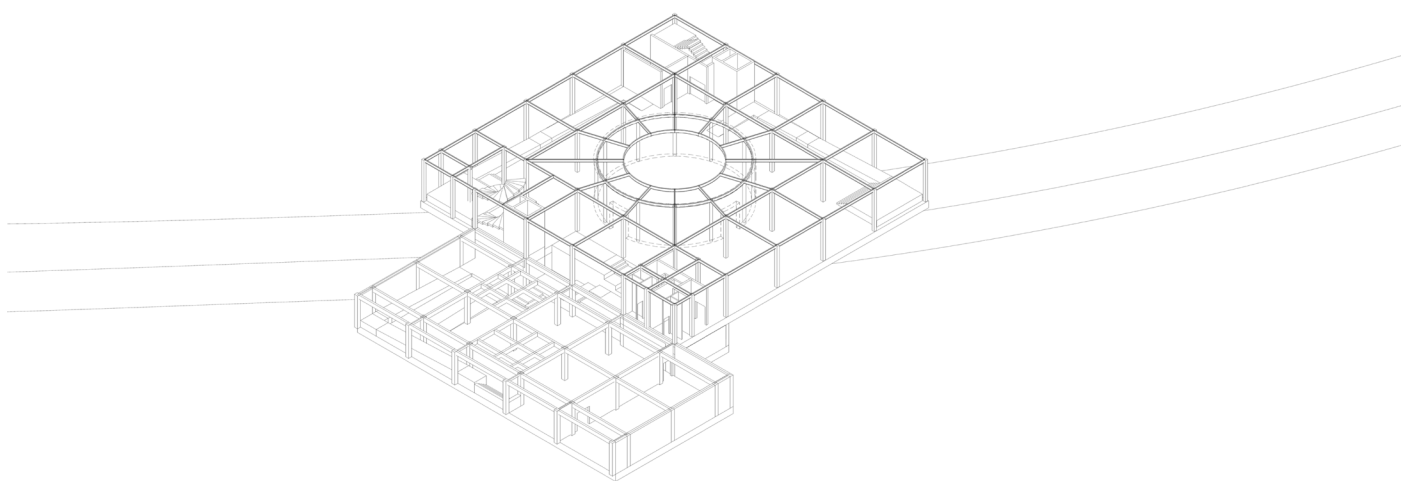


Week 4.5

Structural Diagram

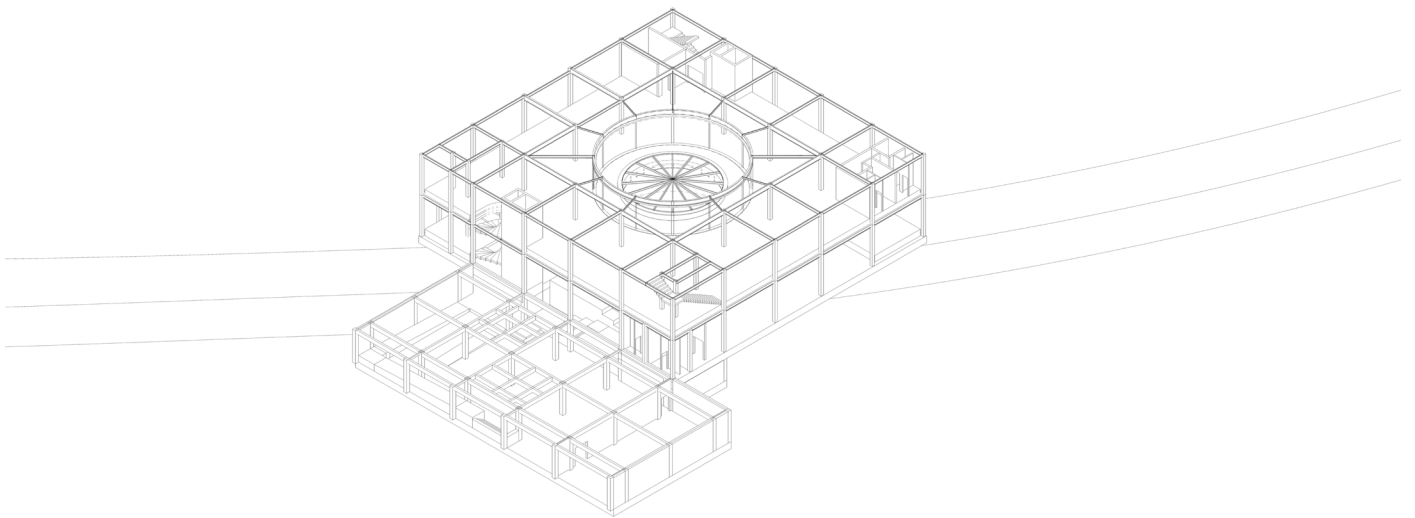


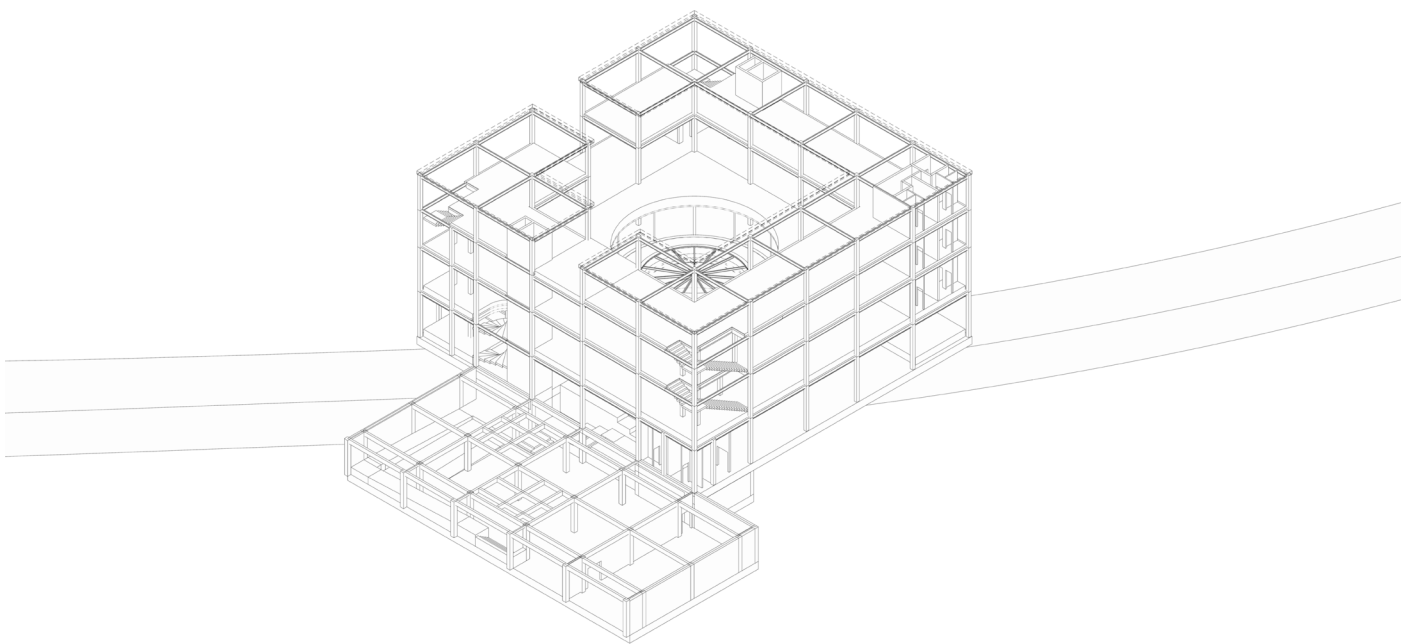




Week 4.5

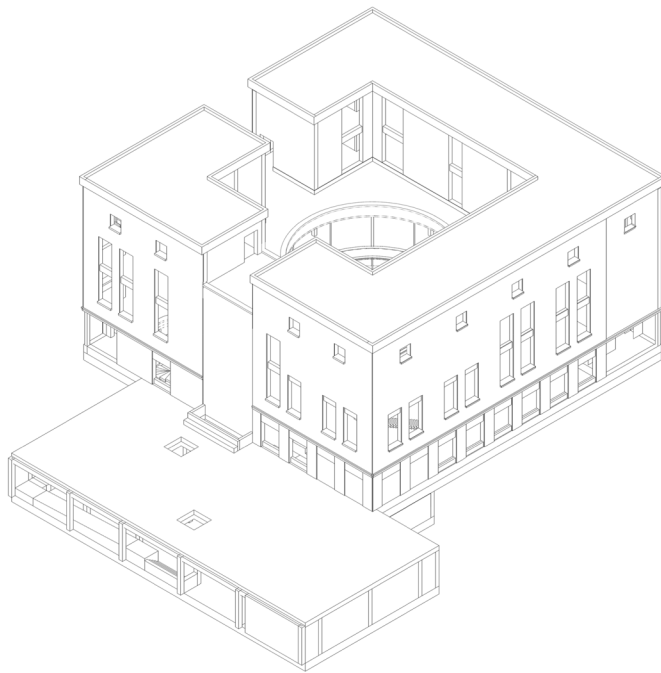
Structural Diagram

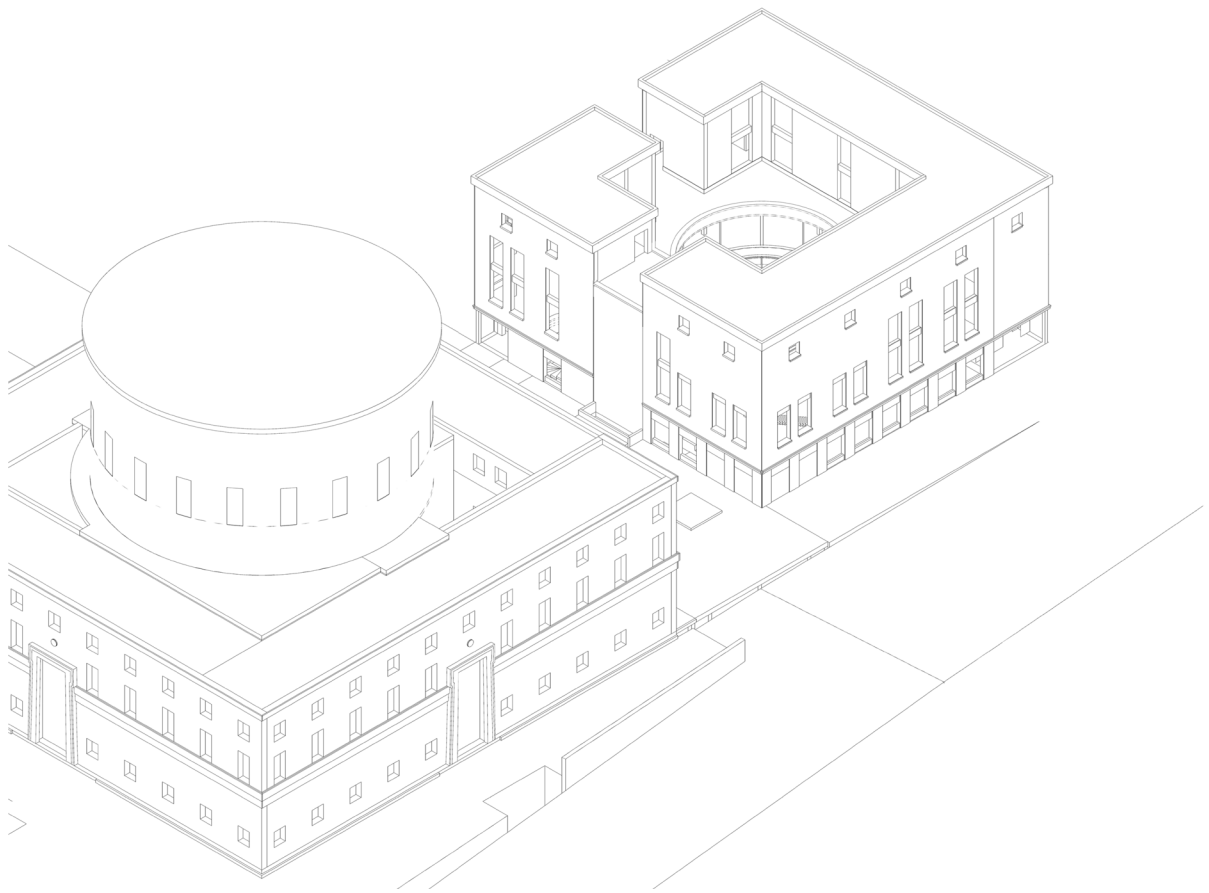




Week 4.5

Structural Diagram





Week 4.5

Rendering of the Street View







## Week 4.5

### P4 Reflection

#### Questions and observations Sam

I miss an introduction to Stockholm, with your impressions when visiting, what does it look like, what is the building culture, except from the Stockholm Library?

Ending with reflection, really good.

Priority to look at your Building Technology, we're taking a risk here. You should look into this with Elina in the coming weeks.

Demolishing the international library: what happens with the debris?

P16 existing passages: (non)qualities of the existing building

P24 could you talk about the masterplan a bit more?

P25: interesting axonometry showing the connection between the two buildings

Natural daylight in the existing rotunda shows the passing of the day. What about your rotunda?

Could you talk about daylight in your addition and connection, for example on slide 26?

P42: landscape stairs:

Could you talk us through how people with reduced mobility can move through the building?

Green roof on top of the immersive theatre. What does this mean when people look at your building when on the hill?

p61 how did you decide on the height of your parapet in relation to the library?

The brick plinth, could you say something about plinths in general in your project?

p 75: what is the bench made of?

#### The Garden

The garden is important in your project, you talk a lot about the references that serve you.

P18 immersive theatre: garden of Monet

Read the text by Mark Pimlott on The Garden as a public interior

Looking towards the sky: another 'garden'

#### Questions Elina

Pluvia system doesn't work like this

Natural and mechanical ventilation in one slide?

#### Questions Sereh

Relation between your building and Asplund's library: old and new rotunda: material, spatial quality and character.

Series of windows on the top, and the lower 'imagined' ceiling. The light that is coming from the sky and the lamp in the old rotunda.

Make sure to reveal the qualities of the spaces by making a model like you made for P1

# **Information Theater**

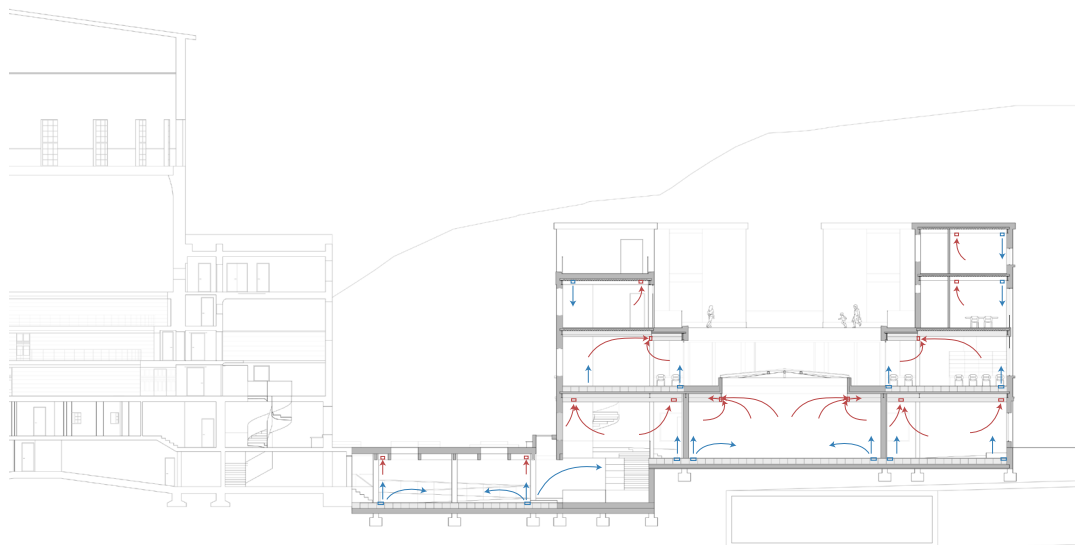
Expansion and Renovation of Stockholm Public Library

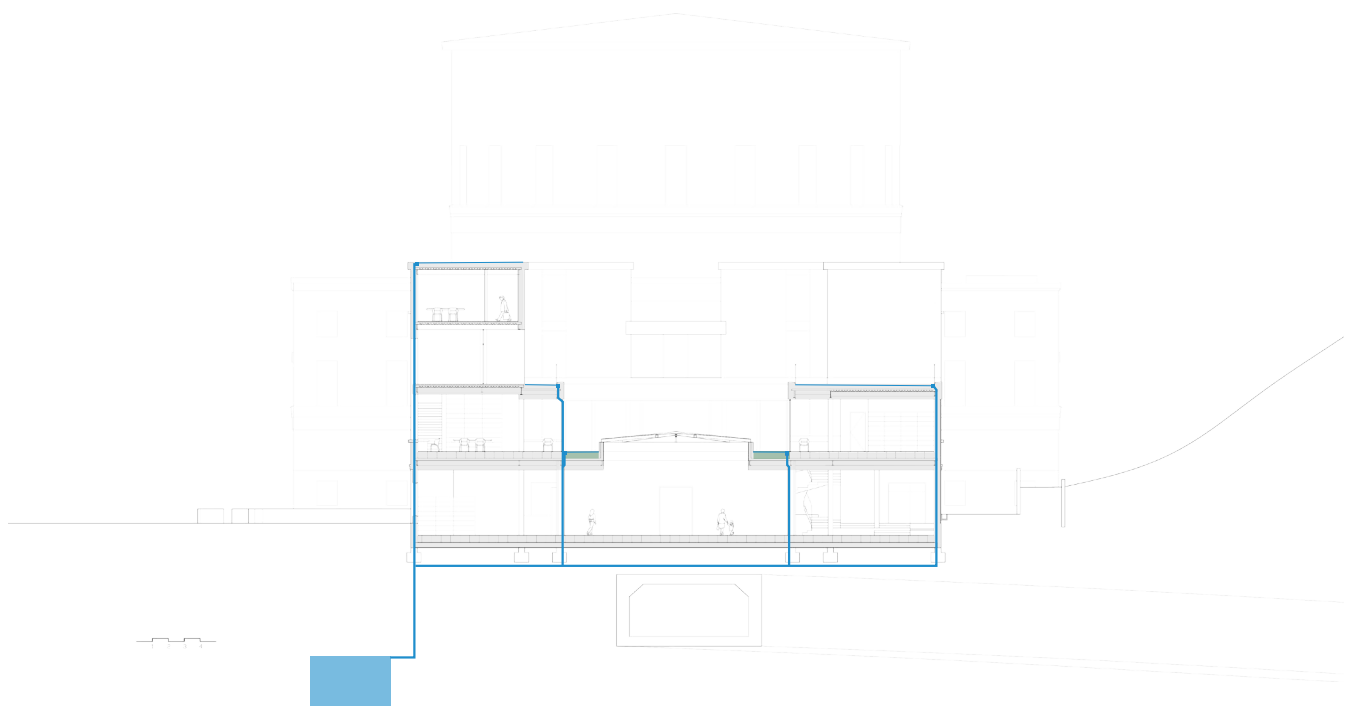
P5 Project Journal

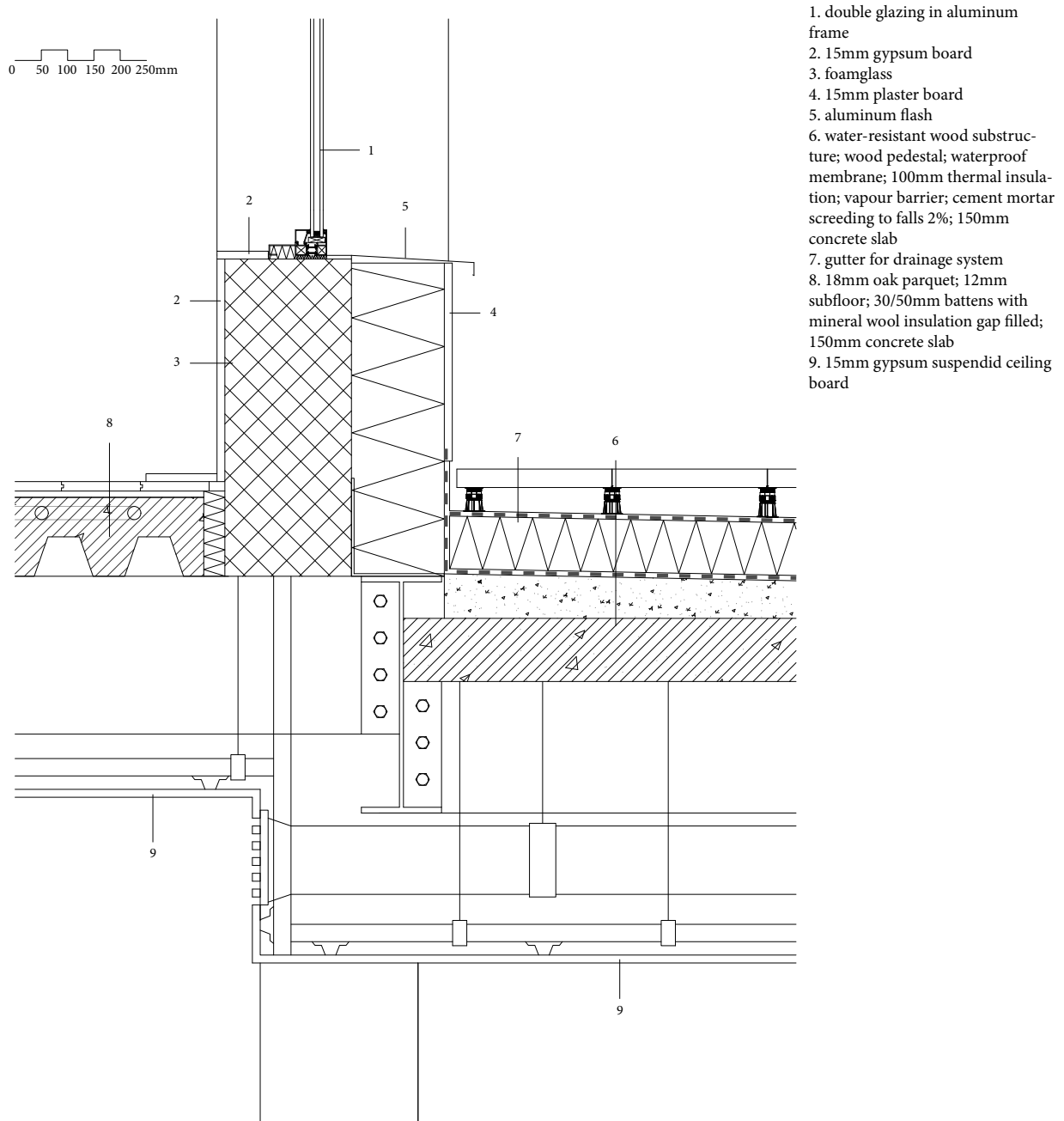
Liuying Chen

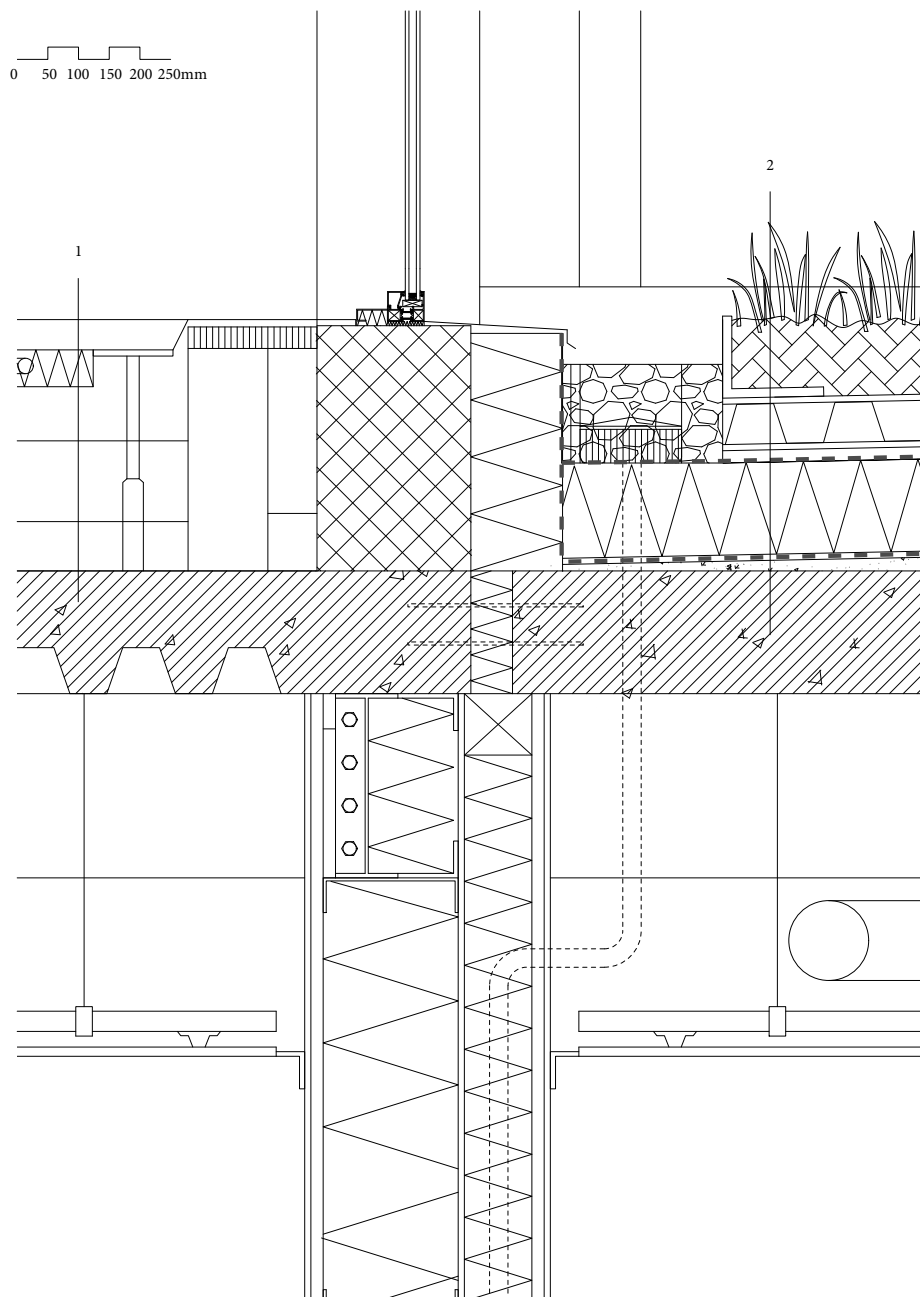
2023-2024 Msc3

Interiors Buildings Cities









1. raised floor with 30 mm oak floorboard construction: 30 mm three-layer oak floorboard; 60mm thermal insulation adhered below with floor heating pipe embedded; 250mm concrete slab

2. 130mm greenroof substrate; geotextile 1m wide at all perimeters, reservoir layer; green roof waterproofing membrane; 65mm drainage layer; aeration layer; 150mm thermal insulation; vapour barrier; cement mortar screeding to falls 2%; 250mm concrete slab

## Week 5.2

### Modeling

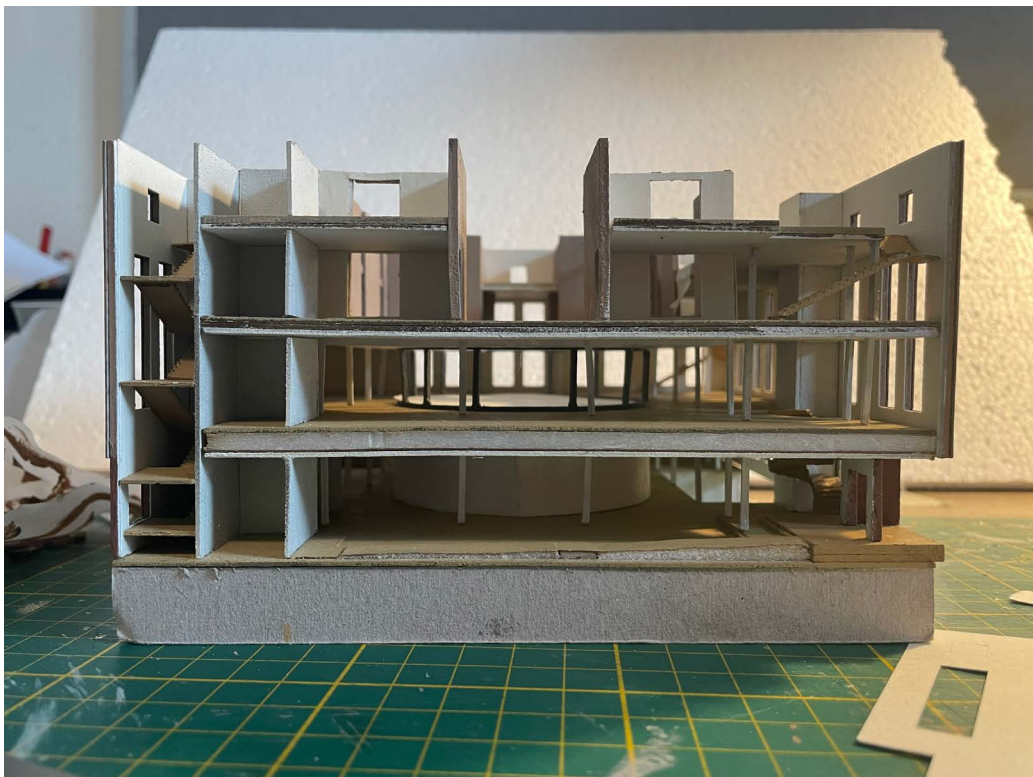
To better showcase the flow and approximate atmosphere of the interior spaces, I have decided to make the 1:200 scale model detachable.

















## Reflection

*What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?*

The topic of my project is the design of library-type spaces, based on the renovation of the existing Stockholm City Library. My track of study is Architecture, and my programme is Architecture and Urbanism. The thesis studio I have chosen is Interiors Buildings Cities. The methodology of this studio involves iterative examination and research across different scales, from the urban level to the architectural level, and down to the interior details level.

Therefore, although my design is an architectural one, it begins with research and problem-solving from an urban perspective, addressing issues not only at the scale of the original small site but also at the larger urban scale. As the design progresses, it also reflects on whether the urban issues identified in the initial research phase are effectively addressed.

The integration of building technology and details with the urban environment influences all aspects of architecture, especially interior design. Hence, while the final outcome of my design is architectural, the thinking and research process encompasses multiple scales, extending to urbanism.

*How did your research influence your design/recommendations and how did the design/recommendations influence your research?*

Regarding the research question, based on the theory of William H. Walters, I propose a strategy to integrate e-media with traditional library spaces. To achieve and highlight this theme, my research is mainly divided into two parts: one is the study of the space and construction history of existing libraries, and the other is the typological study of contemporary libraries.

The construction history of the Stockholm City Library helps me better understand the typical construction methods and spatial organization patterns of Stockholm's architecture. The typological study of other contemporary libraries helps me better allocate different types of spaces and inspires me to construct my spatial sequences and structures in a more contemporary manner.

Inspired by these studies, I gradually build my space, and my design profoundly influences my research on building technology. To better ensure the constructability of my design and to better integrate it with natural conditions such as wind, light, and heat, I have conducted extensive research and comparisons in the area of building technology.

*How do you assess the value of your way of working (your approach, your used methods, used methodology)?*

In the first phase of the project, we worked in groups to create a large-scale site model and conduct research on architects and related architectural types. Through the detailed site model-making process, we studied the structure, construction methods, materials, textures, and spatial atmosphere of the original building by recreating it. During this process, we consulted a large number of archival materials, achieving research across scales from architecture to furniture.

We conducted studies on Asplund's buildings from different periods and representative libraries designed by different architects at different times in smaller sub-groups. Through horizontal and vertical comparisons, we deepened our understanding of the library designed by Asplund.

In the later stages, we mainly carried out in-depth design and research individually, but there was some cooperation and exchange among classmates in certain historical research areas. In my personal design, I primarily refined my design through online literature searches and model-making. By reading and searching online literature, I was inspired to formulate my research question. Based on this, I iterated and deepened my design using a combination of hand-drawing and digital drawing, as well as handmade and digital models.

However, during this process, I felt that I gradually became more focused on the space itself and occasionally neglected whether my research question remained the main thread. Although the final results still showed considerable relevance, I sometimes felt a slight deviation in the design process.