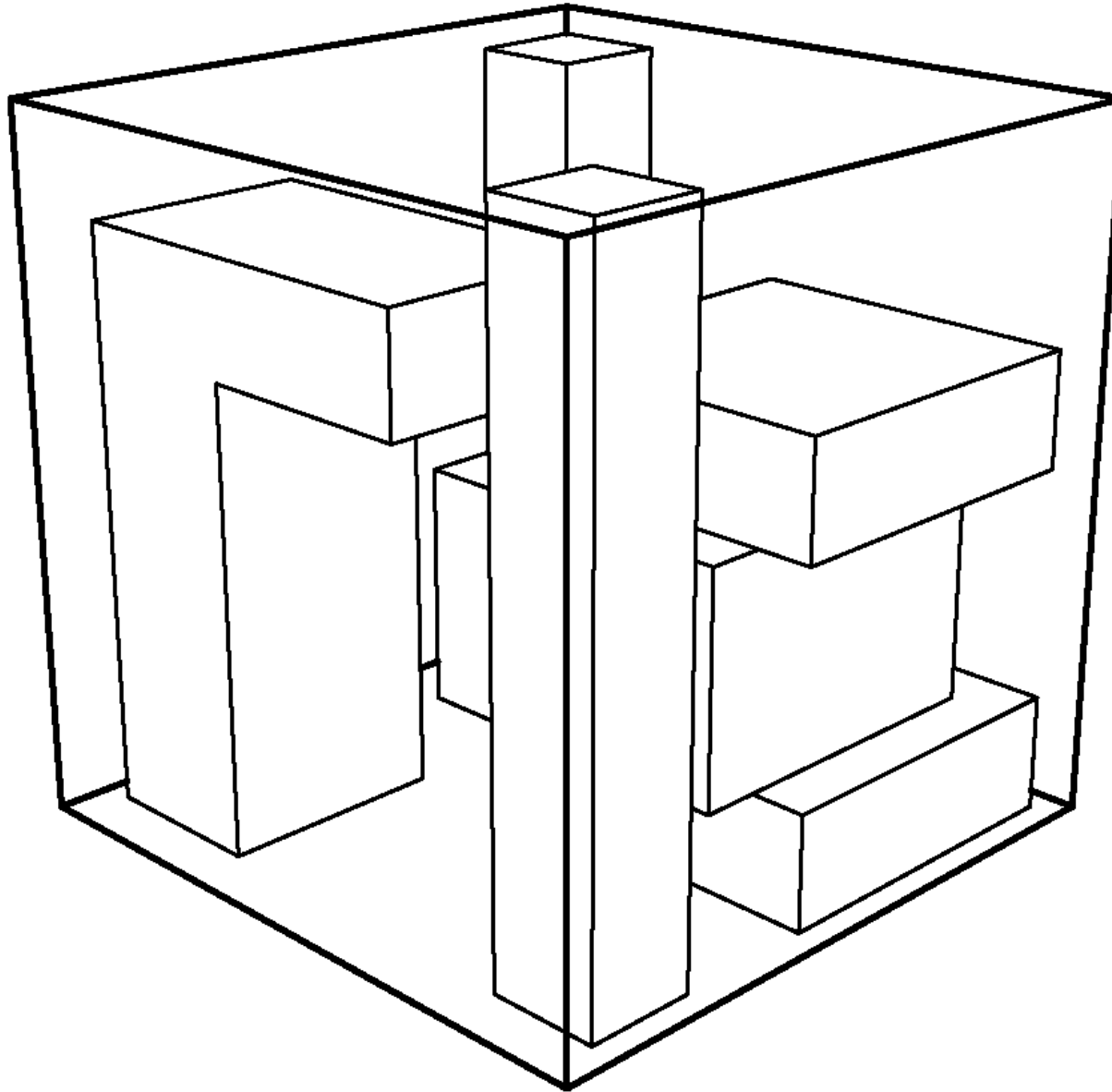


# Within and Without

St. Paul Museum of Architecture

By Mitch Abrahamsen



# Thesis Premise

Through architecture, a museum can frame the exhibits held within as well as the context surrounding the building, both physical and conceptual

## Research

Multiple readings on museum design and architectural theory as well as an extensive series of case studies

## Design

intentionally designing a museum to simultaneously frame internal exhibits as well as external context, both physical and conceptual.

# Museum Design

Through my research, I've identified the concept of framing as the most important element of museum design

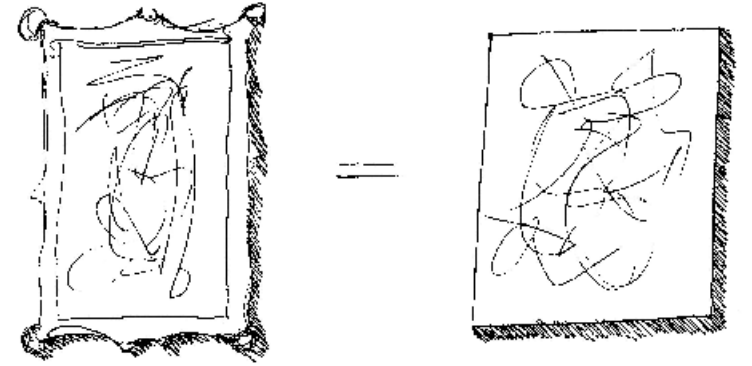
What is “framing”?

- **In photography:** a technique to draw attention to the subject
- **In film:** a technique similar to framing in photography with the added element of movement
- **In architecture:** a construction method typically using wood or steel
- **In social sciences:** a set of concepts and theoretical perspectives that determine how people perceive reality

# Museum Design

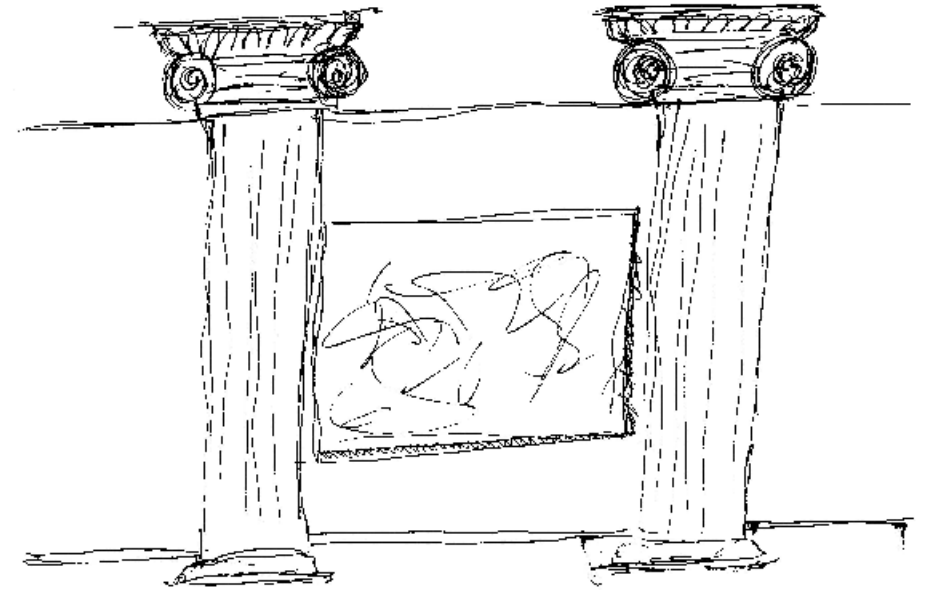
What does framing mean for museum design?

- Two quotes from Janet Marstine
  - “Framing is a metaphorical process that creates a vision of the past and future based on contemporary needs”
  - “Frames don’t isolate a work from the wider world, they link the two.”



Types of framing in a museum

- **Internal framing:** the exhibits within the confines of the building
- **External framing:** the surrounding context of the building and global ideas of the subject
- **Physical framing:** picture frames, glass cases.
- **Non-physical framing:** spatial volumes, lighting techniques, audio tours

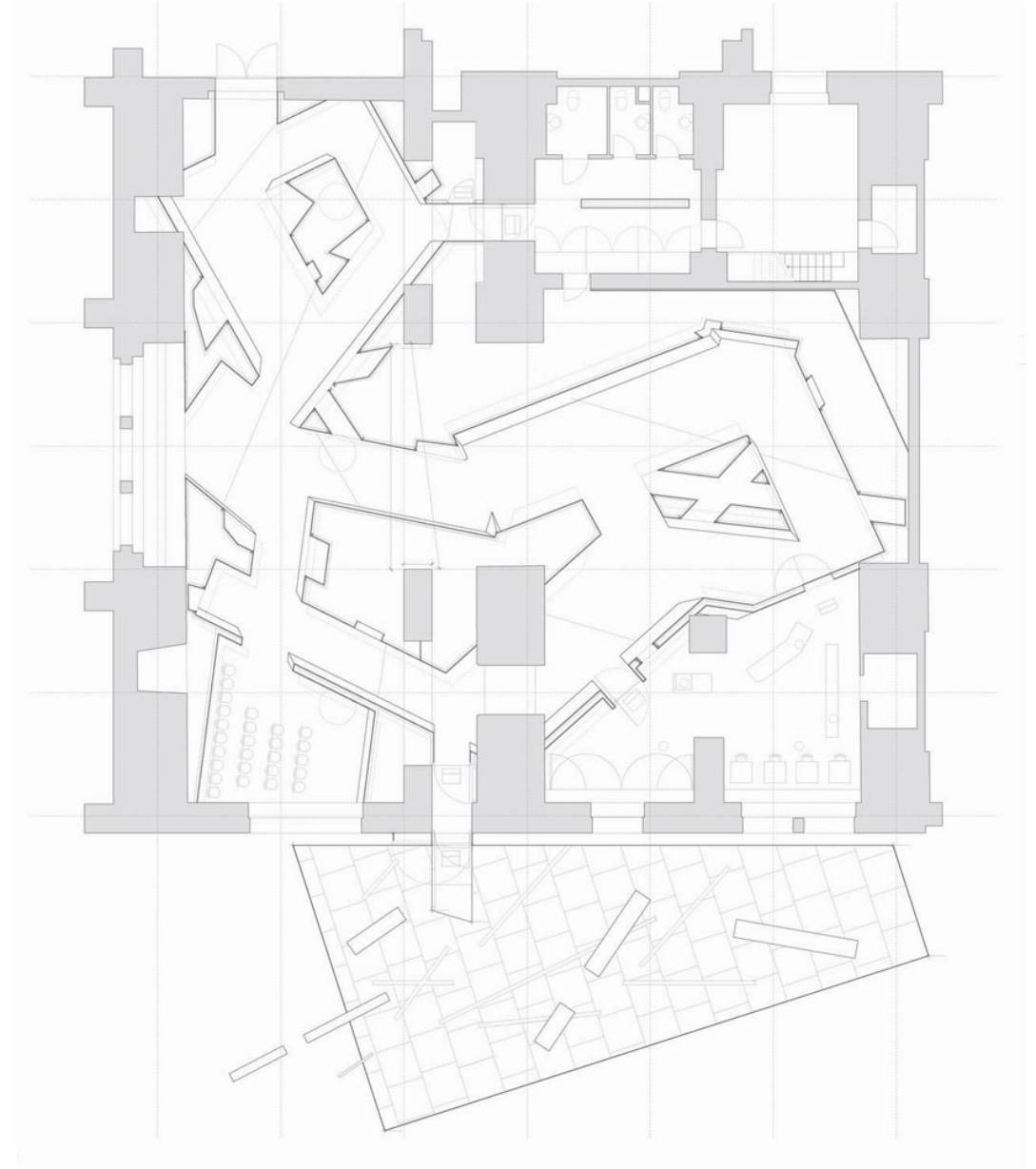




# Case Studies

Danish Jewish Museum- Daniel Libeskind- 2004

- Framing through architectural experience
- The architecture plays a direct role in a visitor's perception of the exhibits
- Very choreographed and controlled experience



# Case Studies

Glyptothek- Leon Von Klenze- 1830

- Framing through architectural style
- The museum of classical art is designed in the neo-classical style
- This creates a direct relationship between the architecture of the building and the subject of the museum





# Case Studies

Museum of Modern Art- Yoshio Taniguchi, Edward Durrell Stone, Philip Goodwin- 1939

- Framing through modernist design choices
- The architecture is stripped down to allow the art to speak for itself
- The flexible nature of the architecture allows the museum to be in flux, changing along with contemporary art



# Museum of architecture

Breaking architecture down into two basic elements

- Representation: How we draw buildings
- Construction: How we build buildings

Part of this project is an attempt to blur the lines between representation and construction

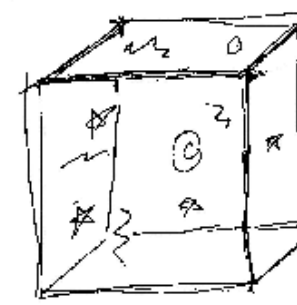
- Revealing the inner workings of the building through the exterior
- Making the design as transparent as possible, both figuratively and literally
- Educating visitors on architecture as they move through the building

# Museum of architecture

The real museum of architecture is all around us in our cities and built environments

How can I draw this global exhibit into one physical location?

- Encouraging anyone from around the world to document their own perspectives on architecture
- Collecting documentation of these perspectives and weaving them into the physical form of the museum in St. Paul
- The museum then becomes framed by the global exhibit of architecture while framing it at the same time



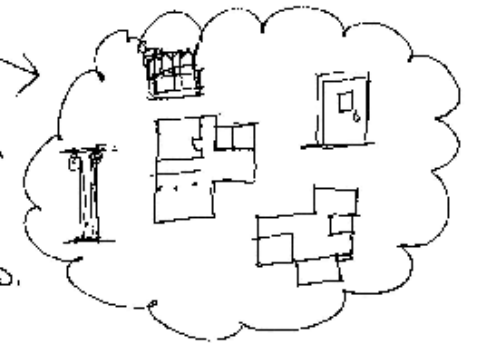
THE MUSEUM AS AN ENCLOSED SPACE HOUSING "THINGS"

THE MUSEUM AS A COLLECTIVE, CONSCIOUS RECORD OF CULTURE



THE CITY AS A TRUE MUSEUM OF ARCHITECTURE.

HUMAN UNDERSTANDING OF SPACE AND ARCHITECTURAL ELEMENTS AS A CULTURAL RECORD.



# Frame Development

## Global Installation

- Frame can be installed in any location around the world
- People passing by can look through the frame from any angle
- These people may notice architectural elements that they were previously blind to
- People would then be encouraged to document what they see through the frame with a picture and post it to the internet
- Those pictures would then be projected on to various surfaces in the museum

# Frame Development

## Iterations

- A transparent plane with a square opening
  - The transparency implies that the frame is both physical and metaphorical at the same time
- A rectangular prism broken down to only six lines
  - The three-dimensionality of the frame allows it to be experienced from any angle
- A rectangular prism made out of transparent acrylic
  - Combining the three-dimensionality and the transparency





# Frame Development

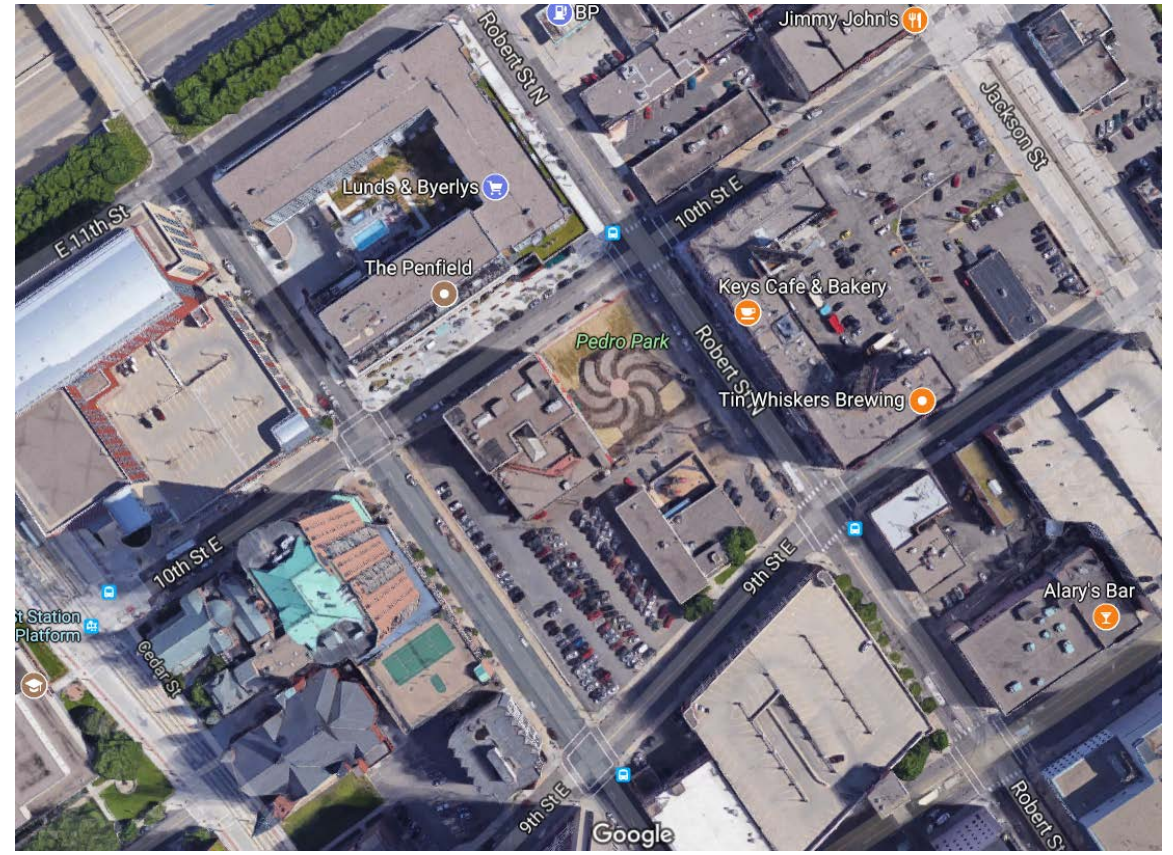
## Final Prototype





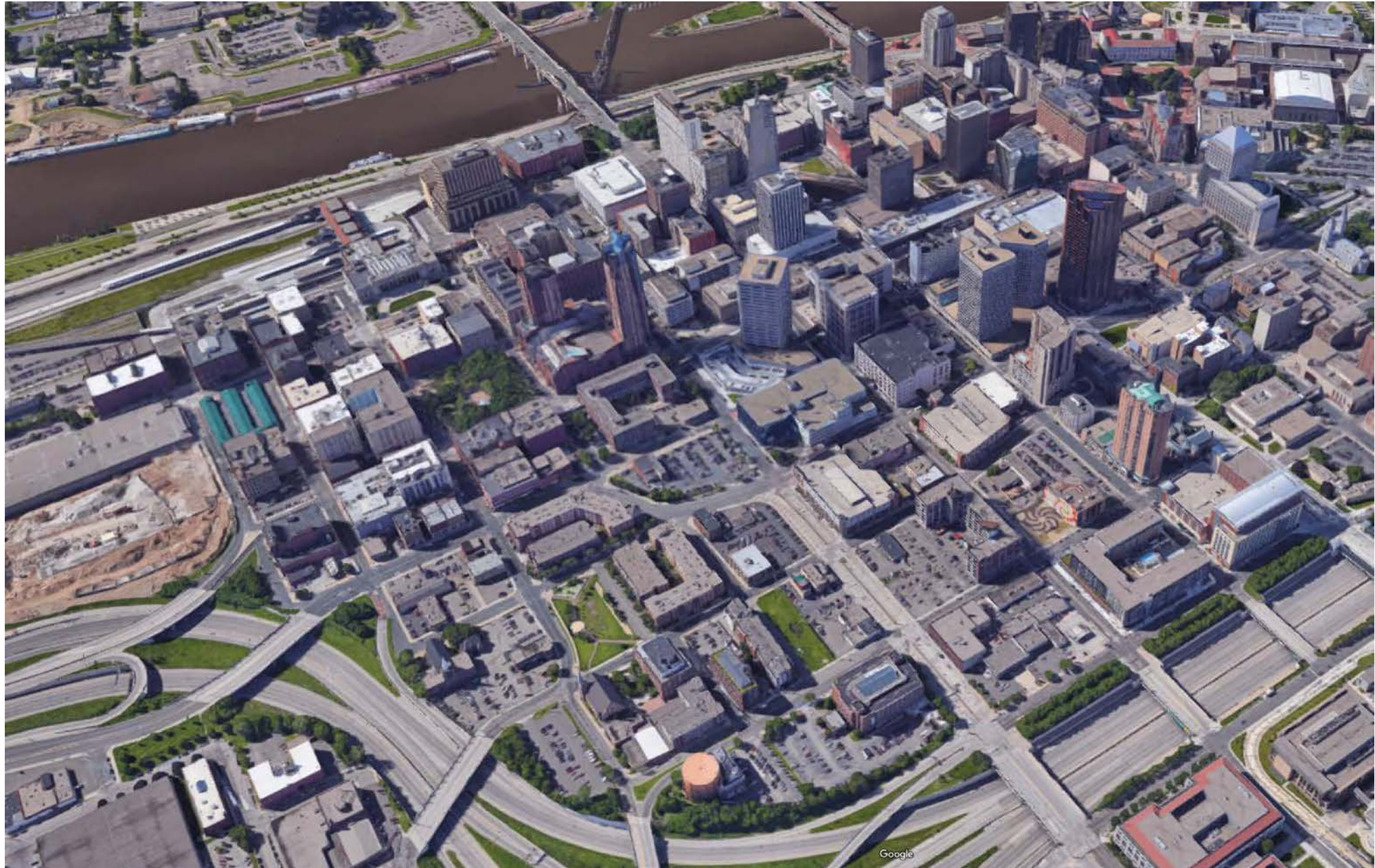
# Site

100 10<sup>th</sup> Street E, St. Paul, Minnesota





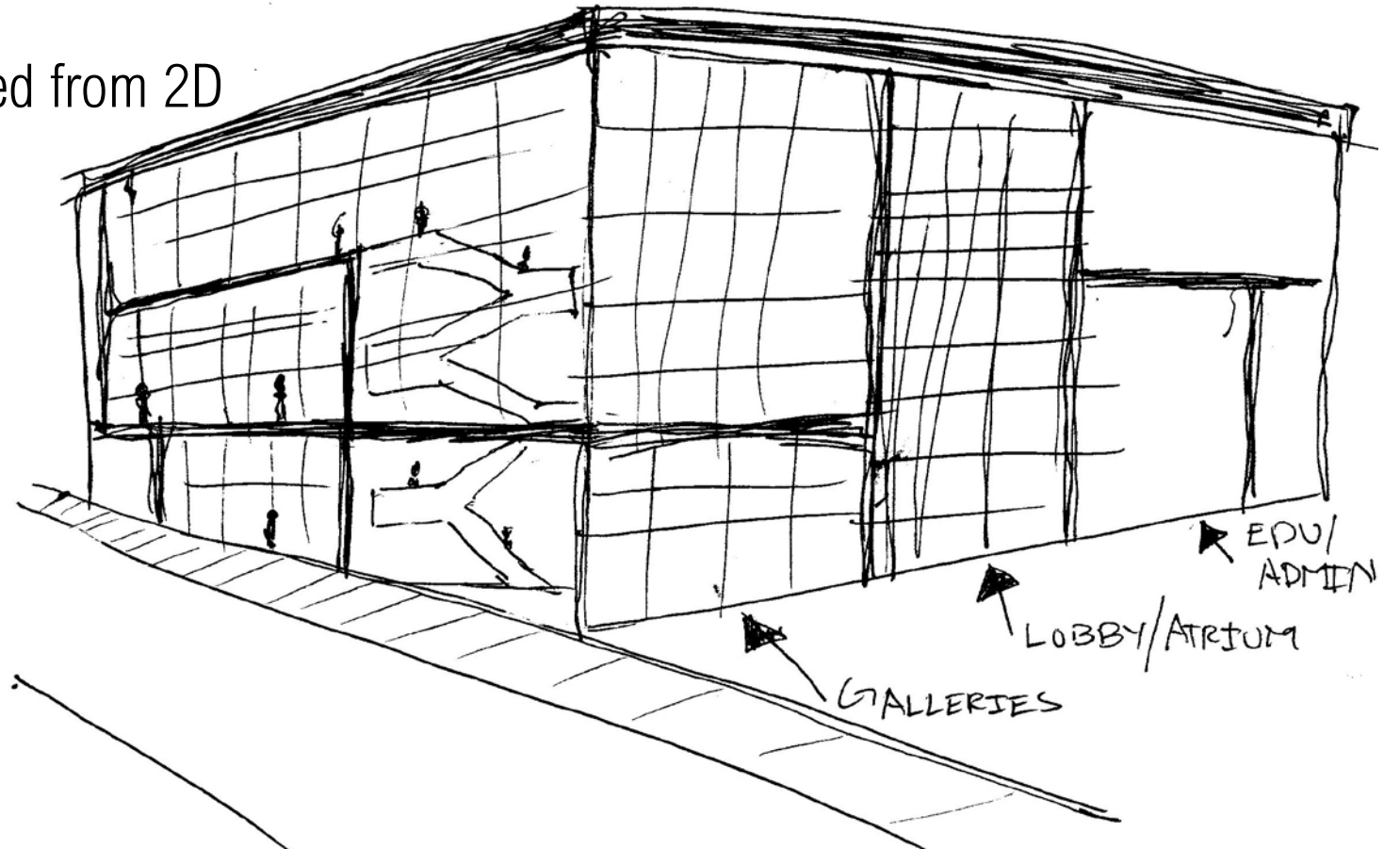
Site



# Design Process

## Façade as section

- Presenting the exterior faces of the building to appear as section drawings
- Blurring the lines between drawings and constructed buildings
- A display of how a 3D building is formed from 2D images

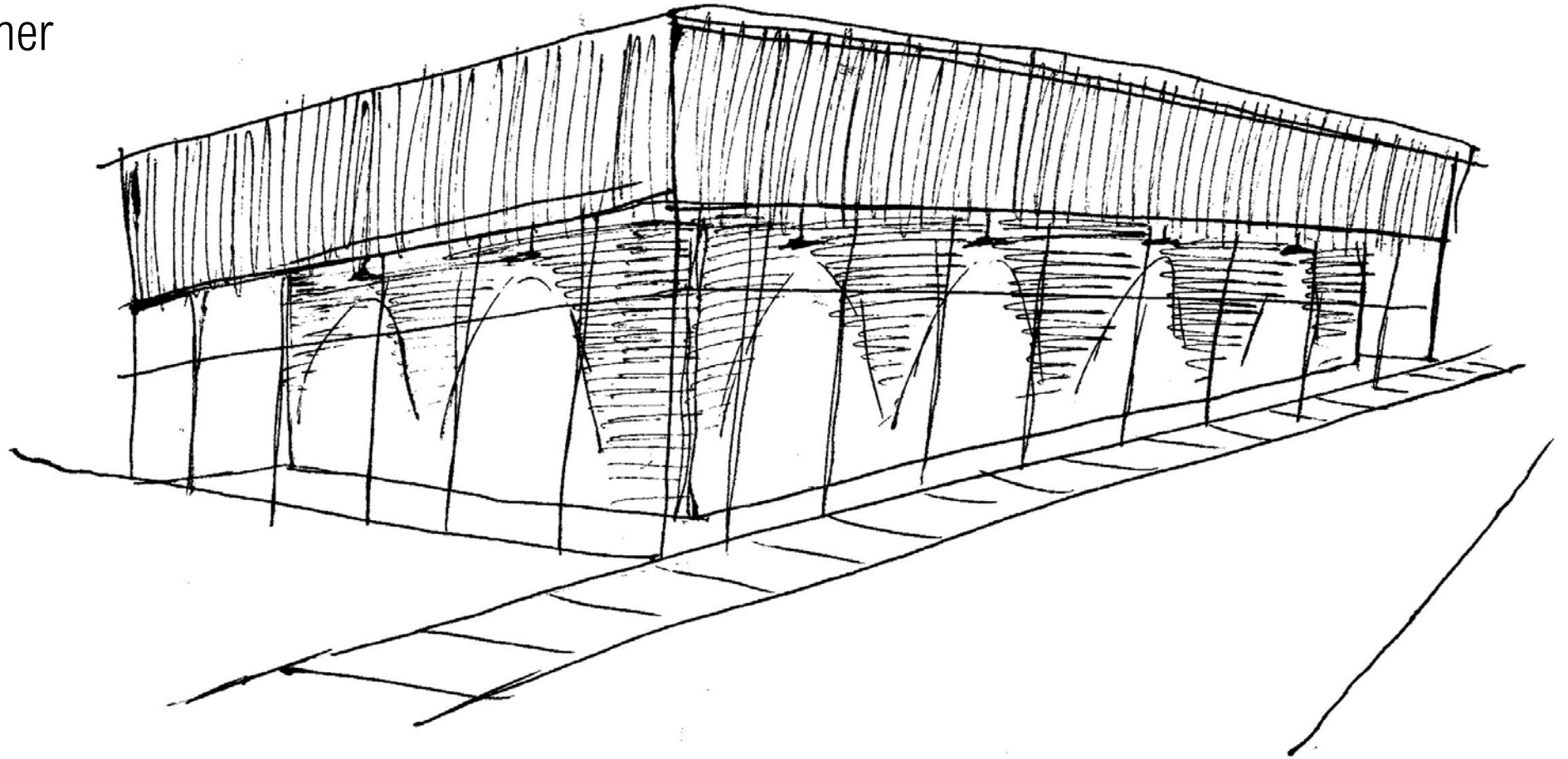




# Design Process

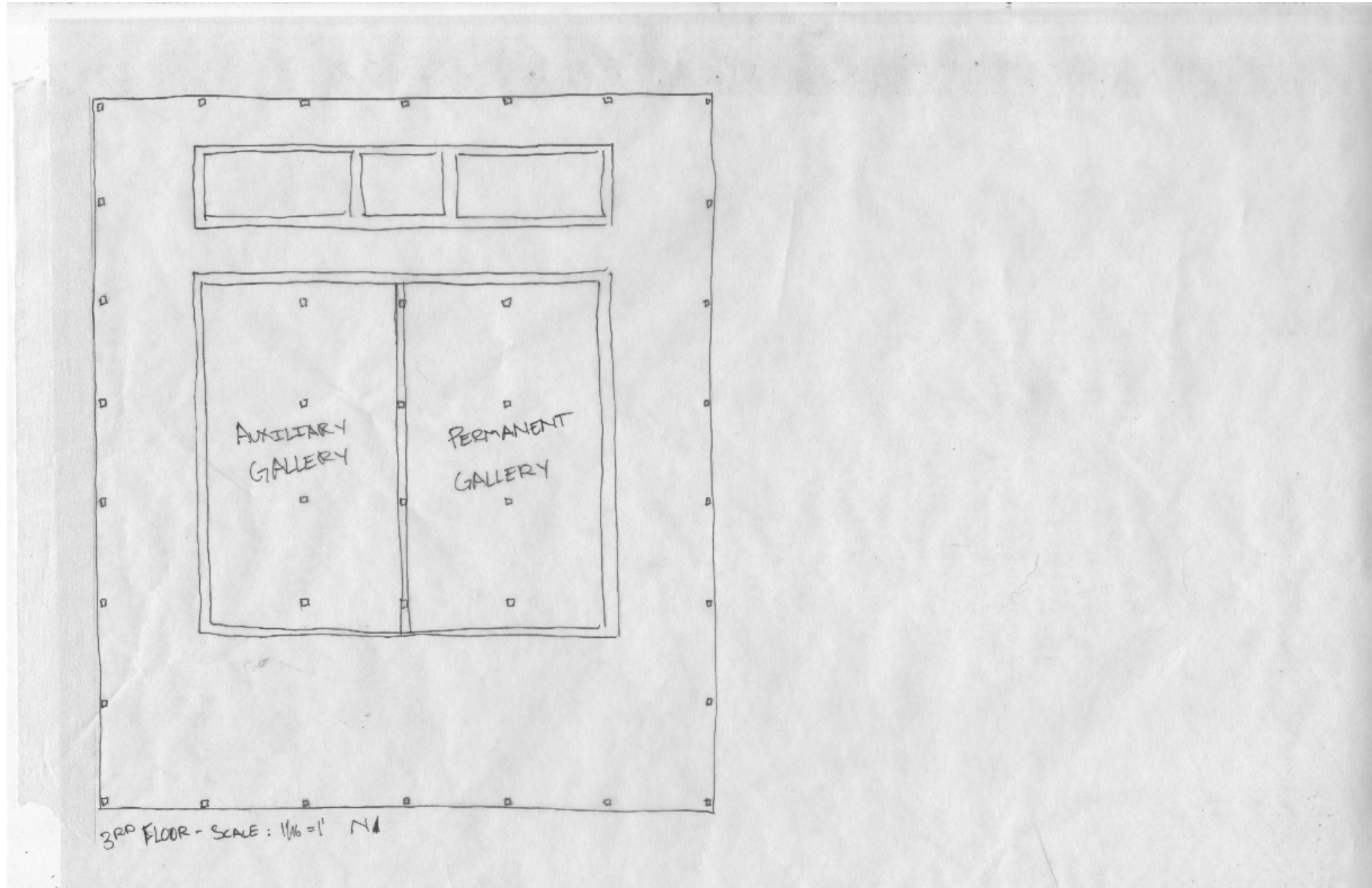
An object within a glass case

- Presenting the interior spaces as a singular mass within an all glass exterior case
- A direct metaphor of an object in a museum being framed by its container



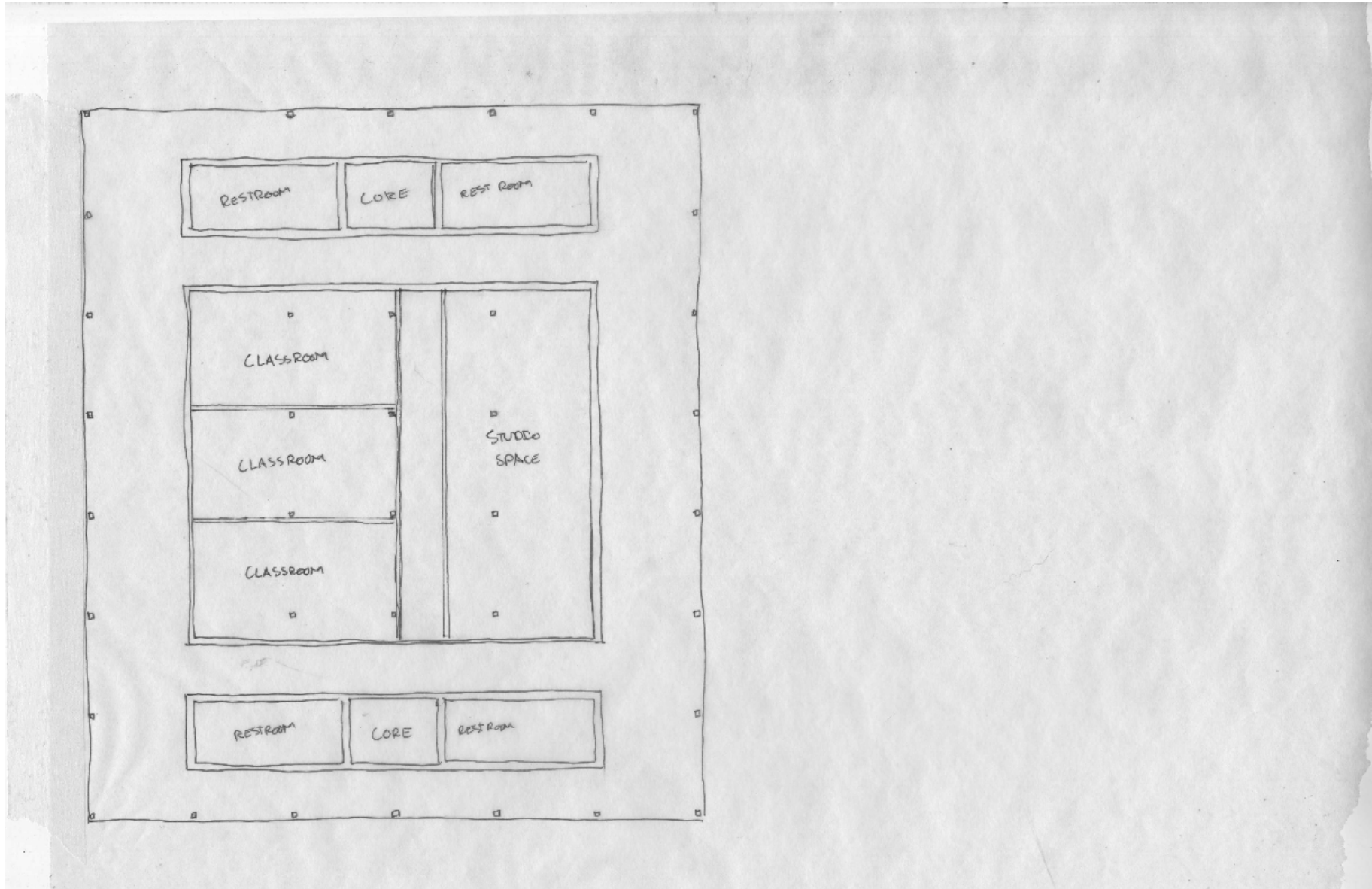
# Design Process

An object within a glass case



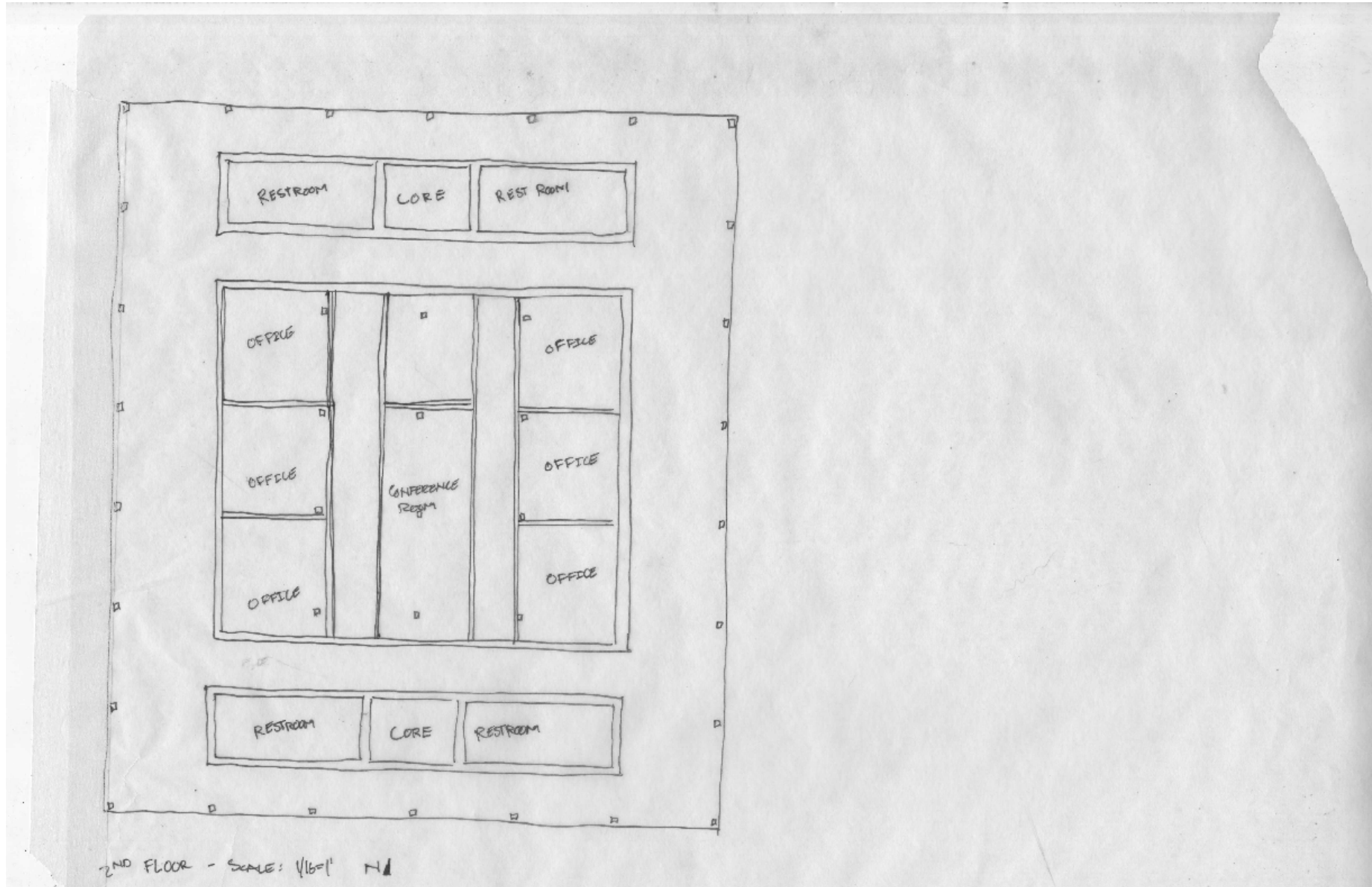
# Design Process

An object within a glass case



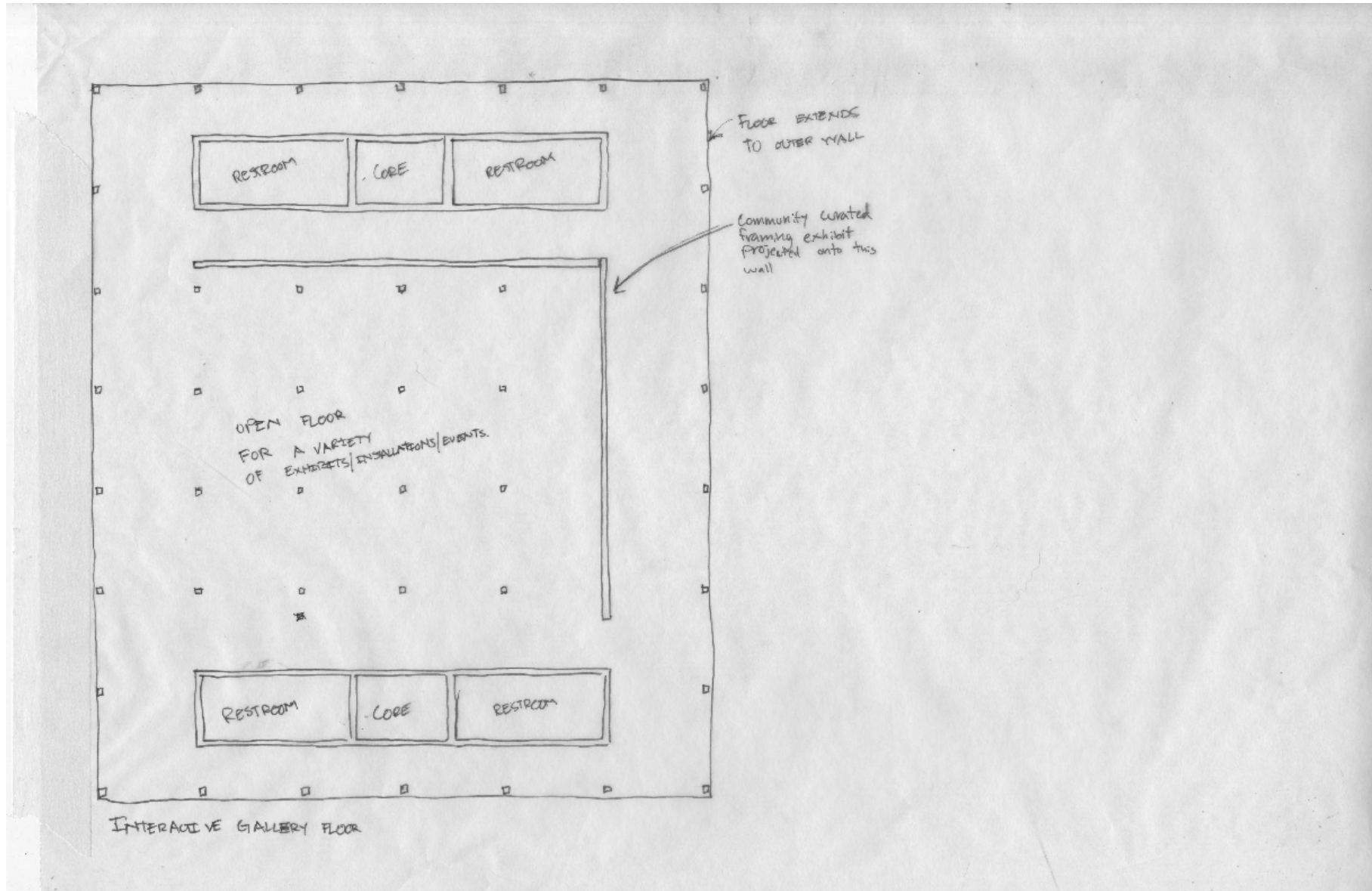
# Design Process

An object within a glass case



# Design Process

An object within a glass case

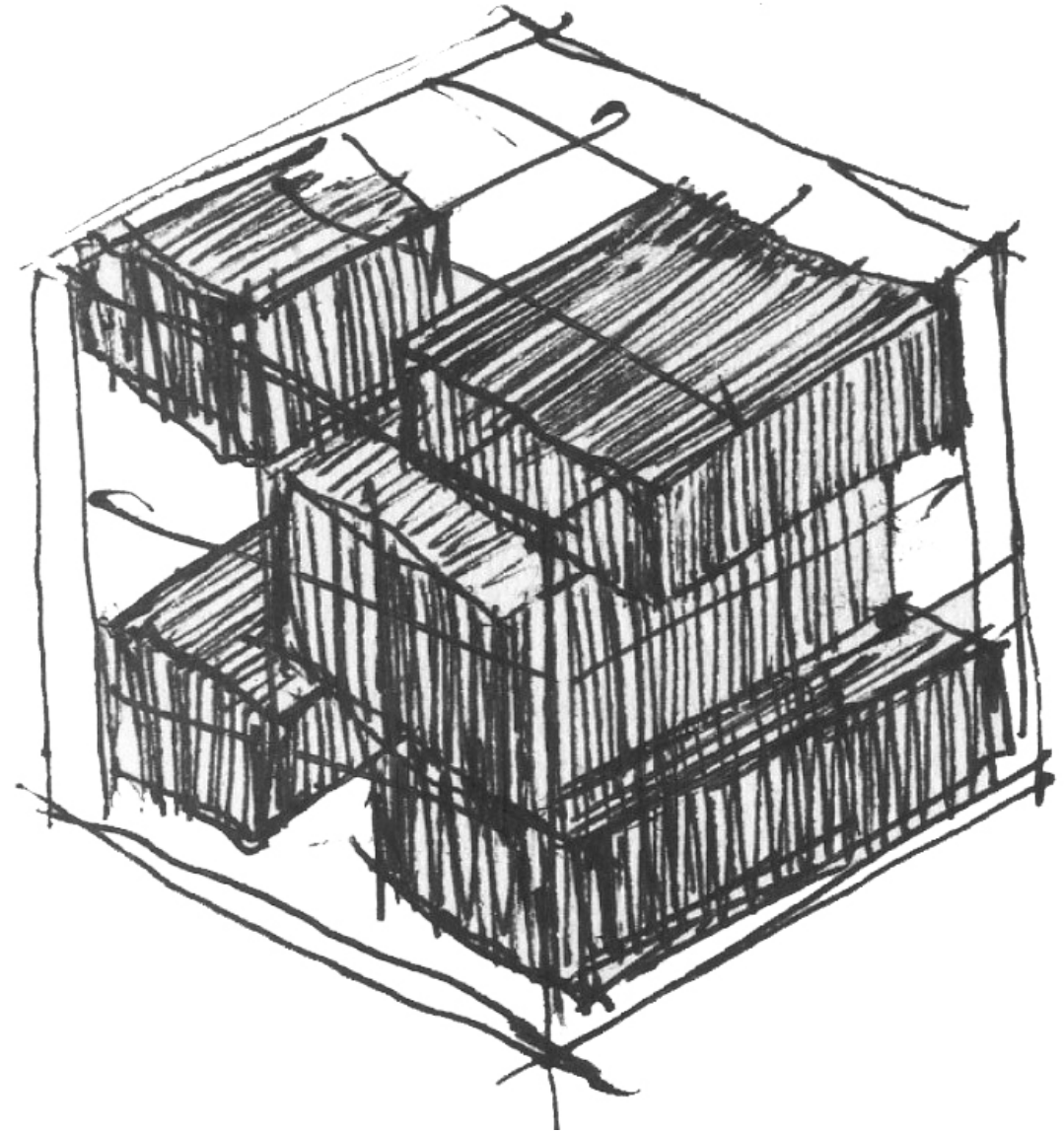




# Design Process

## Combination

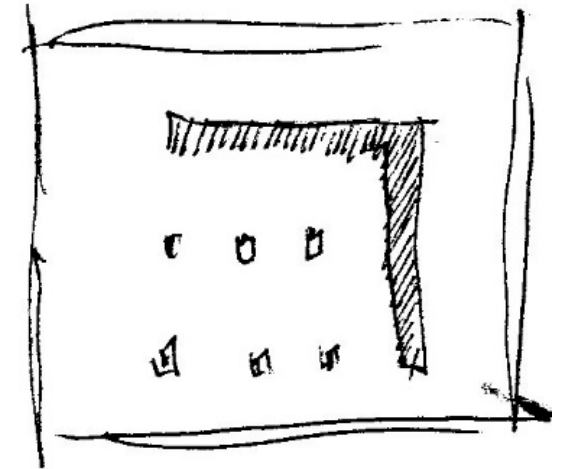
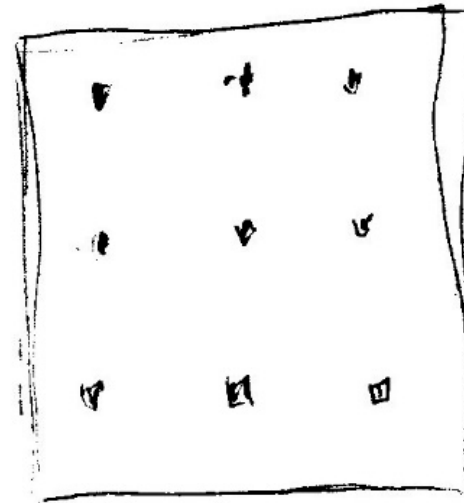
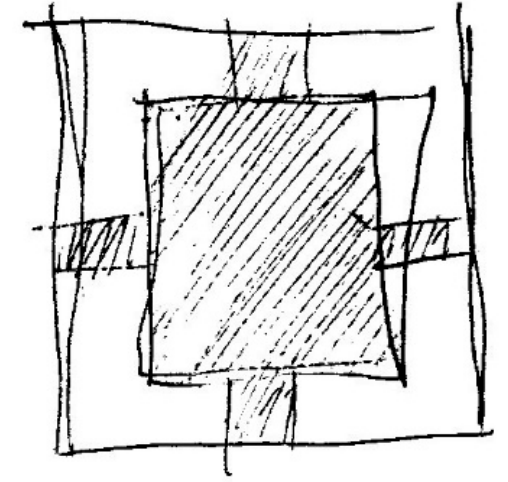
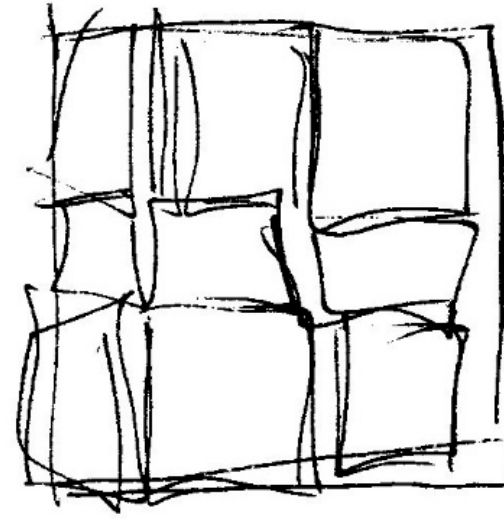
- A collection of masses within a uniform glass shell
- Each façade becomes a diagram of how the interior spaces are organized
- The building as a whole appears as different volumes held within a case



# Design Process

## Combination

- Each floor is organized to fit the specific needs of the spaces it hosts
- The result is a collection of volumes as opposed to one monolithic volume



# Final Design

## External Framing

- The internal volumes are framed by an external glass cube
- The building is framed by the physical context of St. Paul
- Reflections of the surrounding buildings can be seen on the glass façades
- The building is framed by the global exhibit of architecture through the crowdsourced images

# Final Design

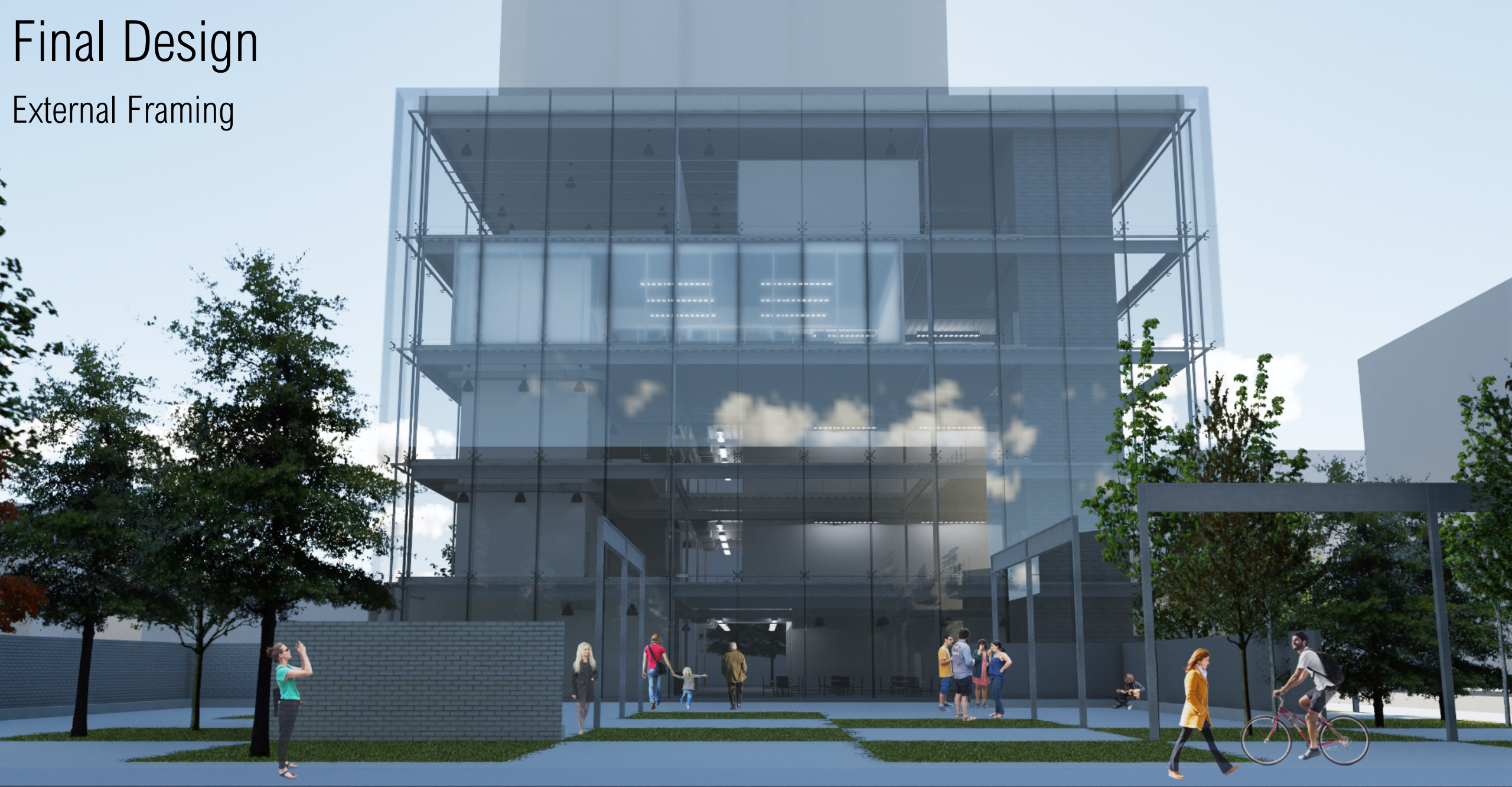
## External Framing





# Final Design

## External Framing



# Final Design

## Internal Framing

- Views of the surrounding buildings are framed by the internal structure of the museum
- The exhibits are framed by the structure and spatial volumes of the museum
- The global exhibit of architecture is framed by the physical form of the museum
- The structure, HVAC, plumbing, and electrical systems are exposed to frame the internal volumes
- A “structural garden” adjacent to the museum provides a display of different types of construction



# Final Design

## Internal Framing





# Final Design

## Internal Framing





# Final Design

## Internal Framing



# Final Design

## Main Gallery

- Occupies the entirety of the 5<sup>th</sup> floor for panoramic views of the surrounding city
- Completely open floor plan allows for maximum flexibility
- Moveable wall panels on a track system to allow for an infinite arrangement of exhibits



# Final Design

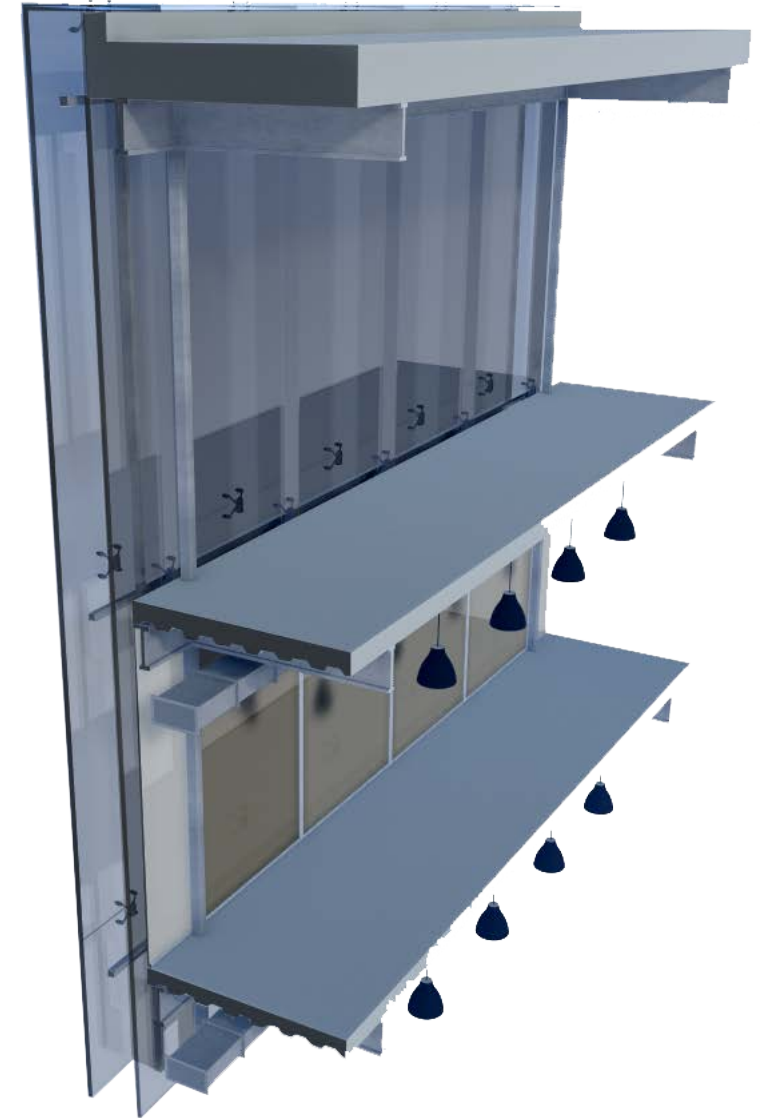
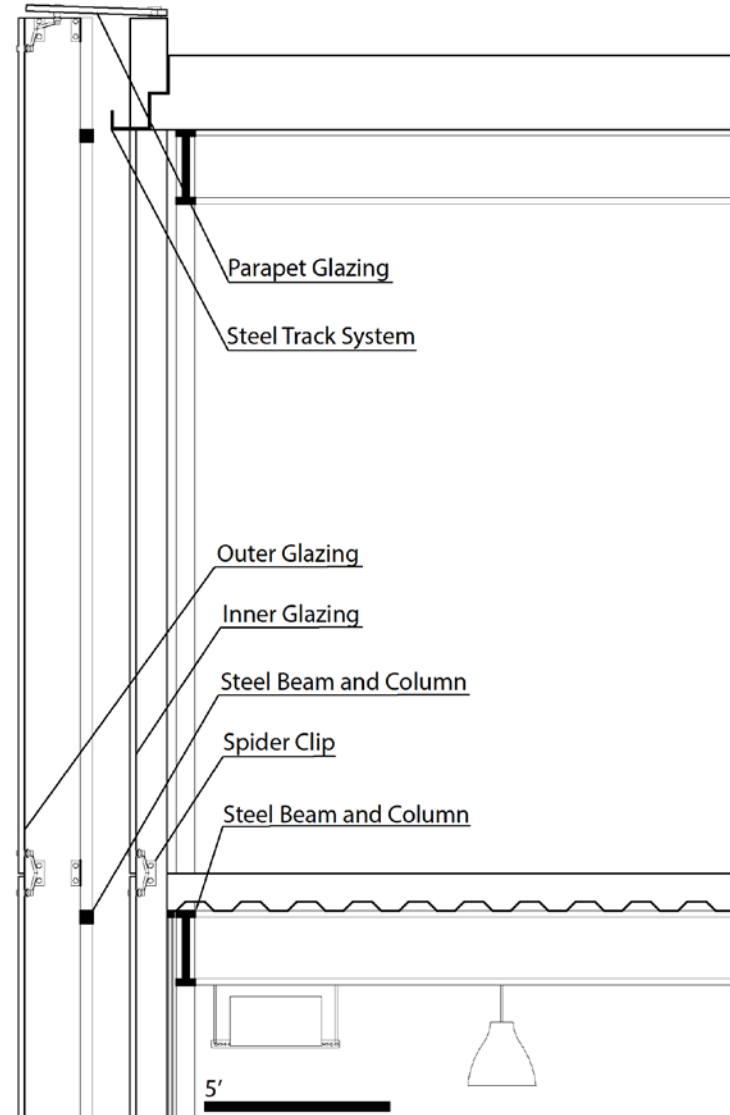
## Main Gallery





# Details

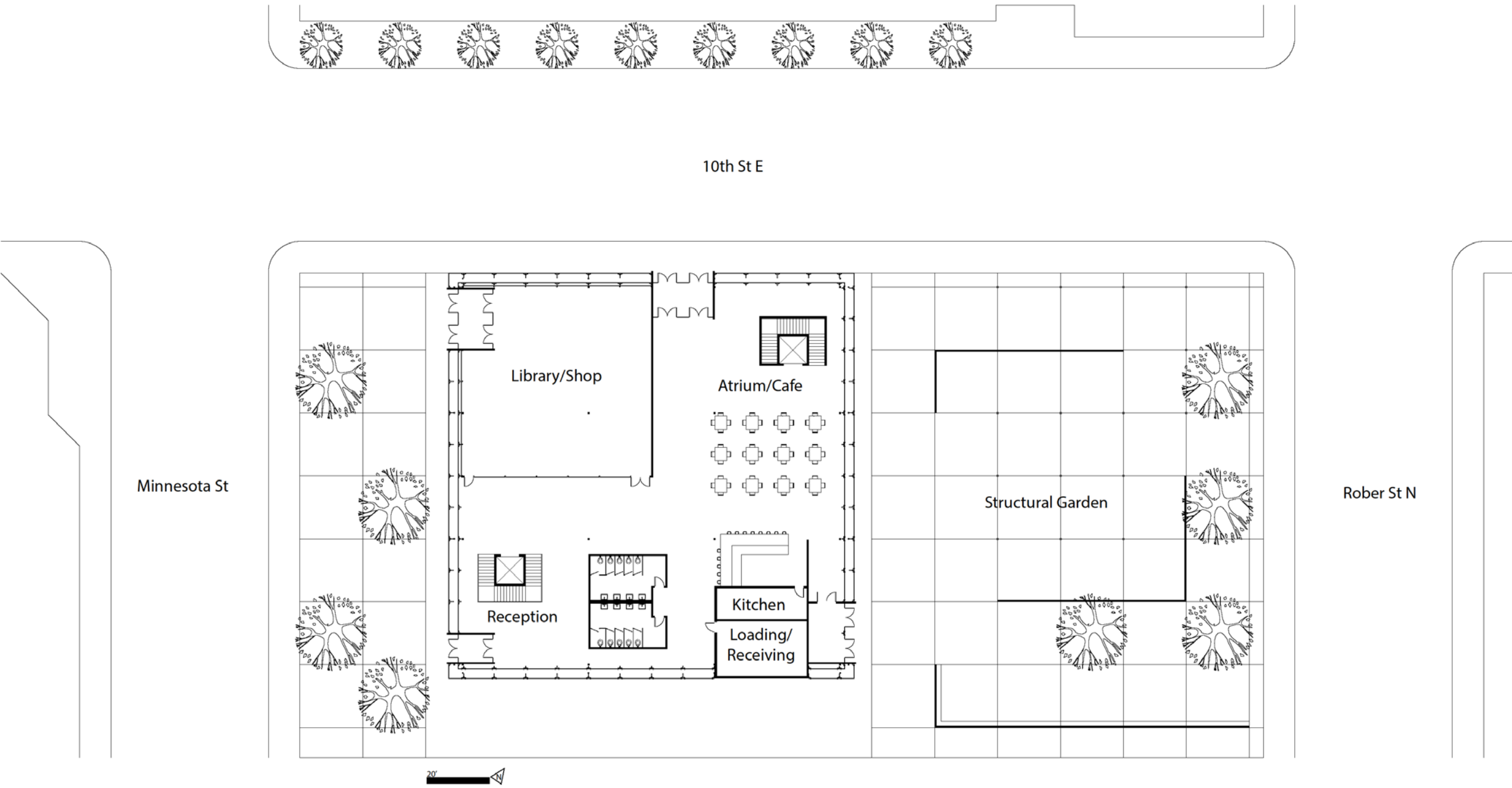
- Double skin
- Outer skin is completely thermally broken from inner skin
- Outer skin wraps over parapet
- Outer skin is held up by it's own structural system
- Inner skin is double glazed
- Inner skin connects to main structure
- Based off of the skin of RHW.2 in Vienna, a Passive Haus certified office tower



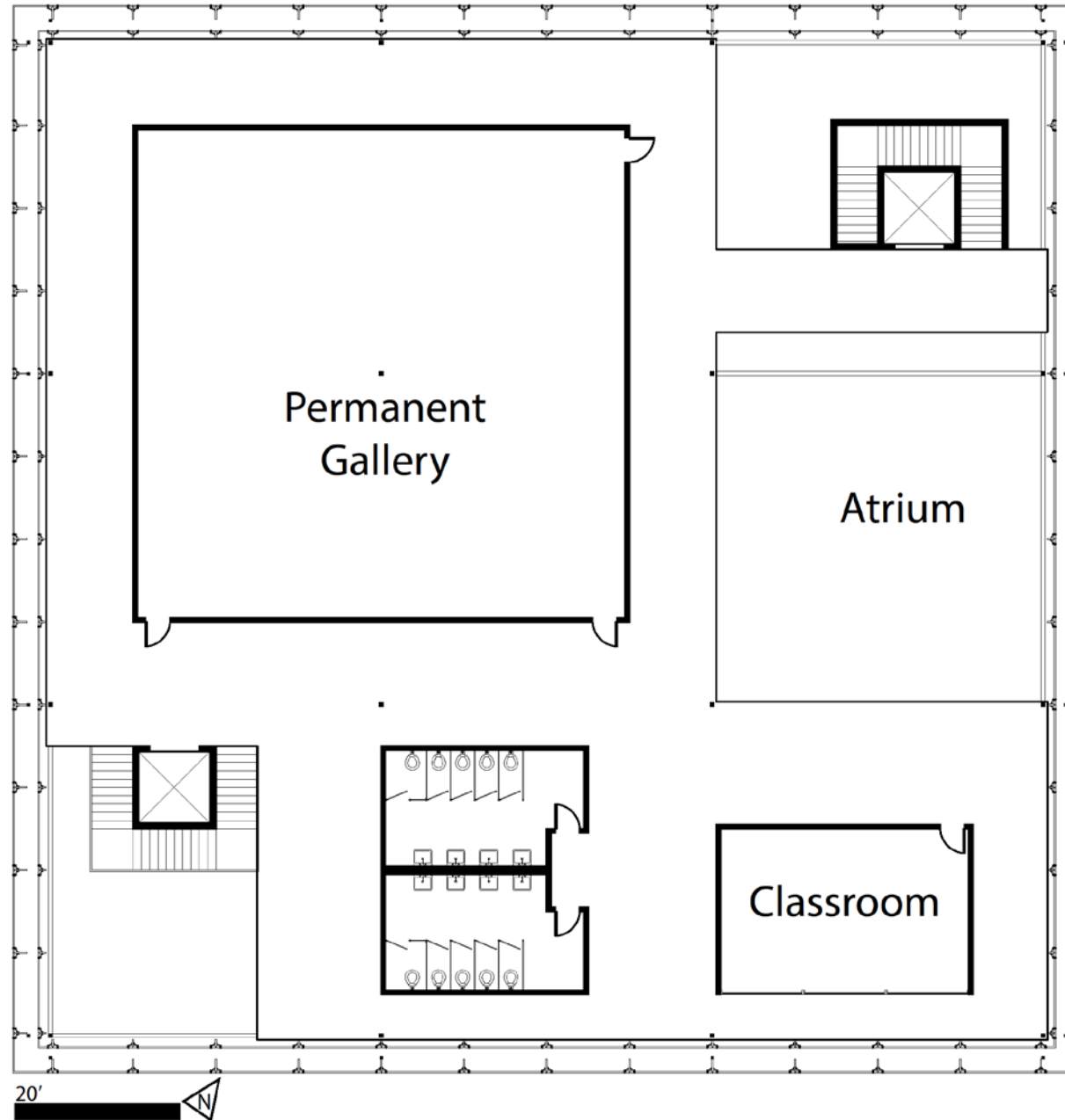
# Program

- Café/Atrium
- Library/Shop
- Permanent Gallery
- Auxiliary Gallery (2)
- Main Gallery
- Classroom (2)
- Open Studio Space
- Open Office Space

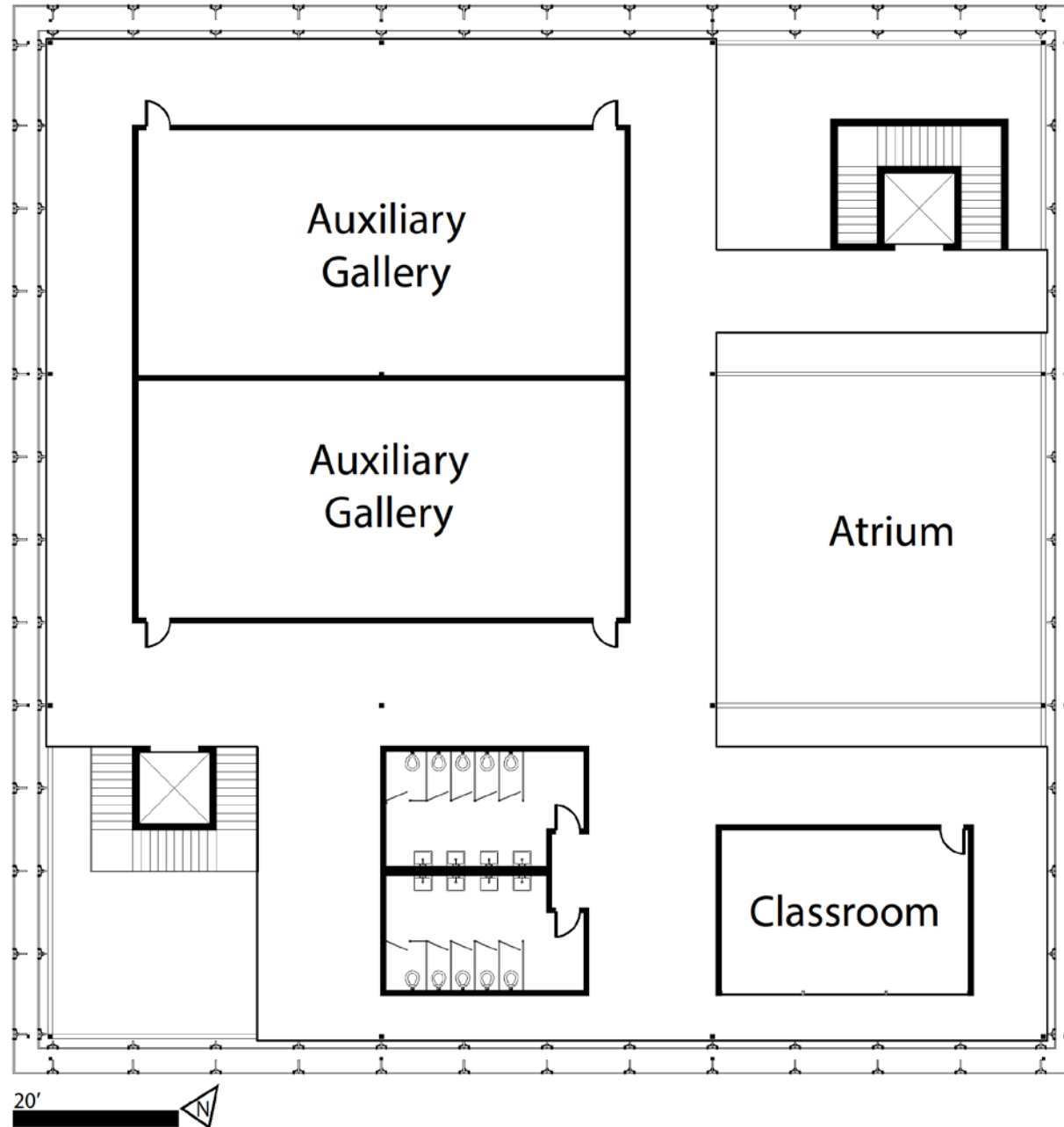
# Site and First Floor Plan



# Second Floor Plan

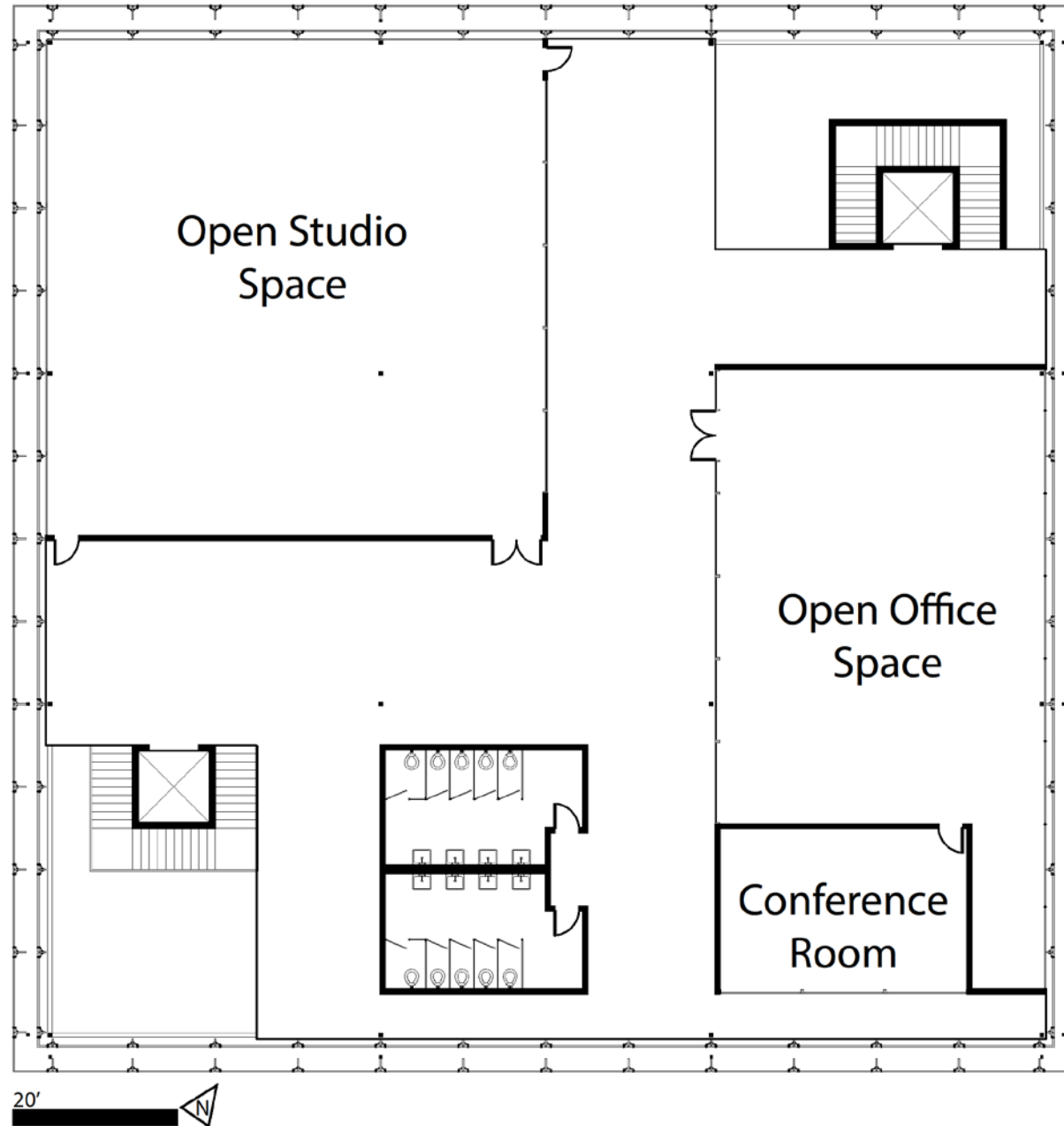


# Third Floor Plan

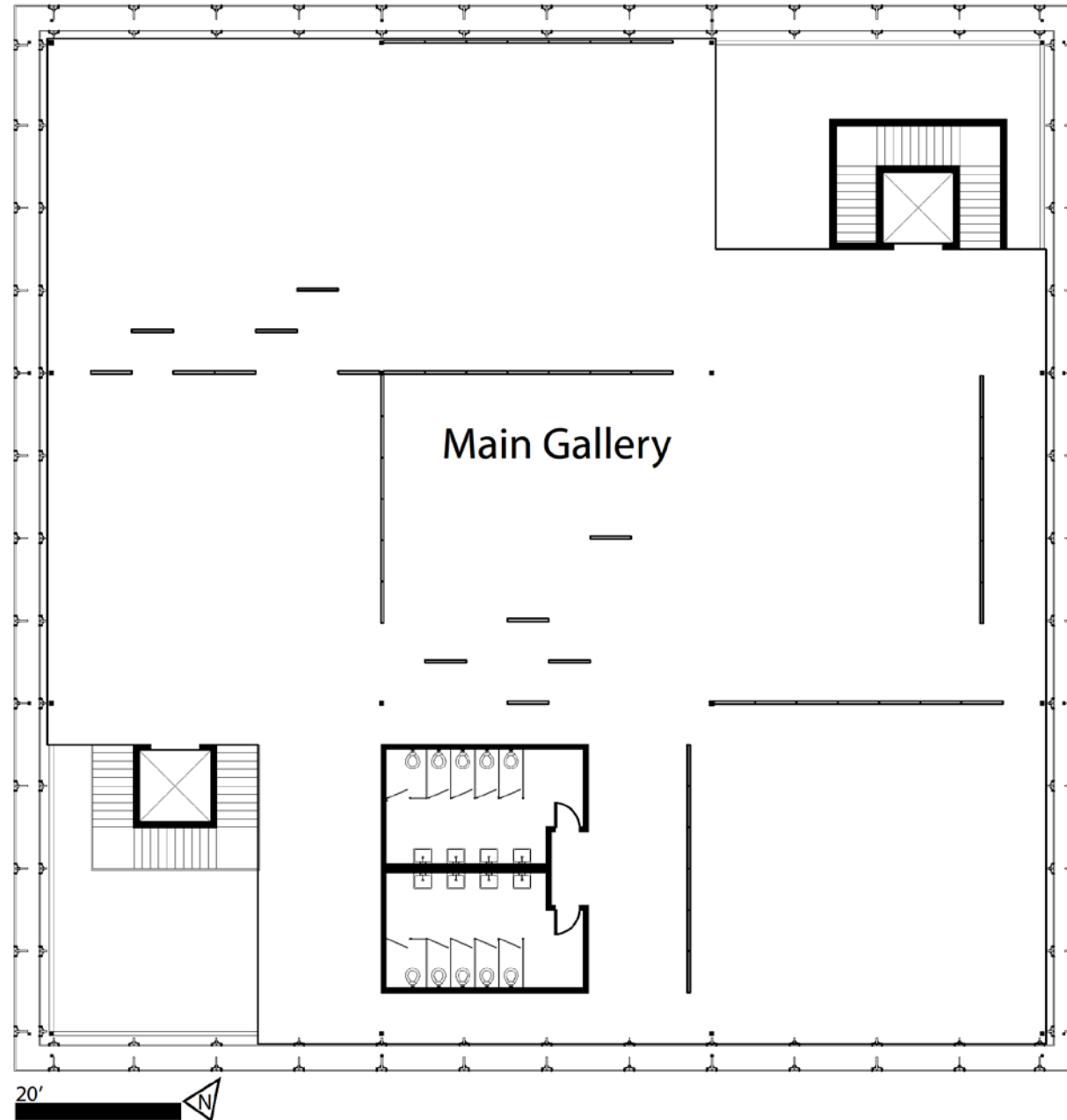




# Fourth Floor Plan



# Fifth Floor Plan



Thank You