

CHRISTOPHER BRICH

Architectural Portfolio

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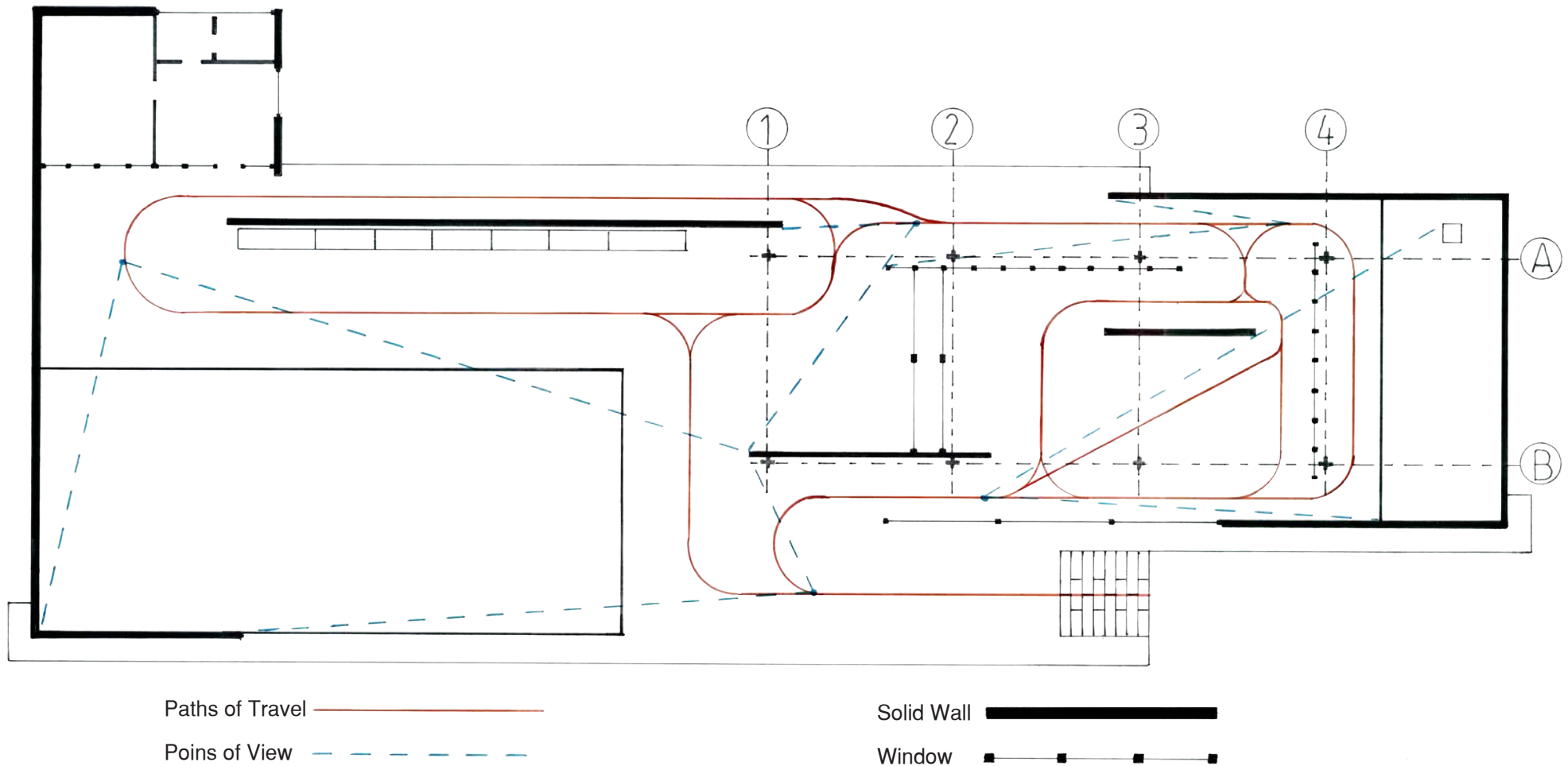
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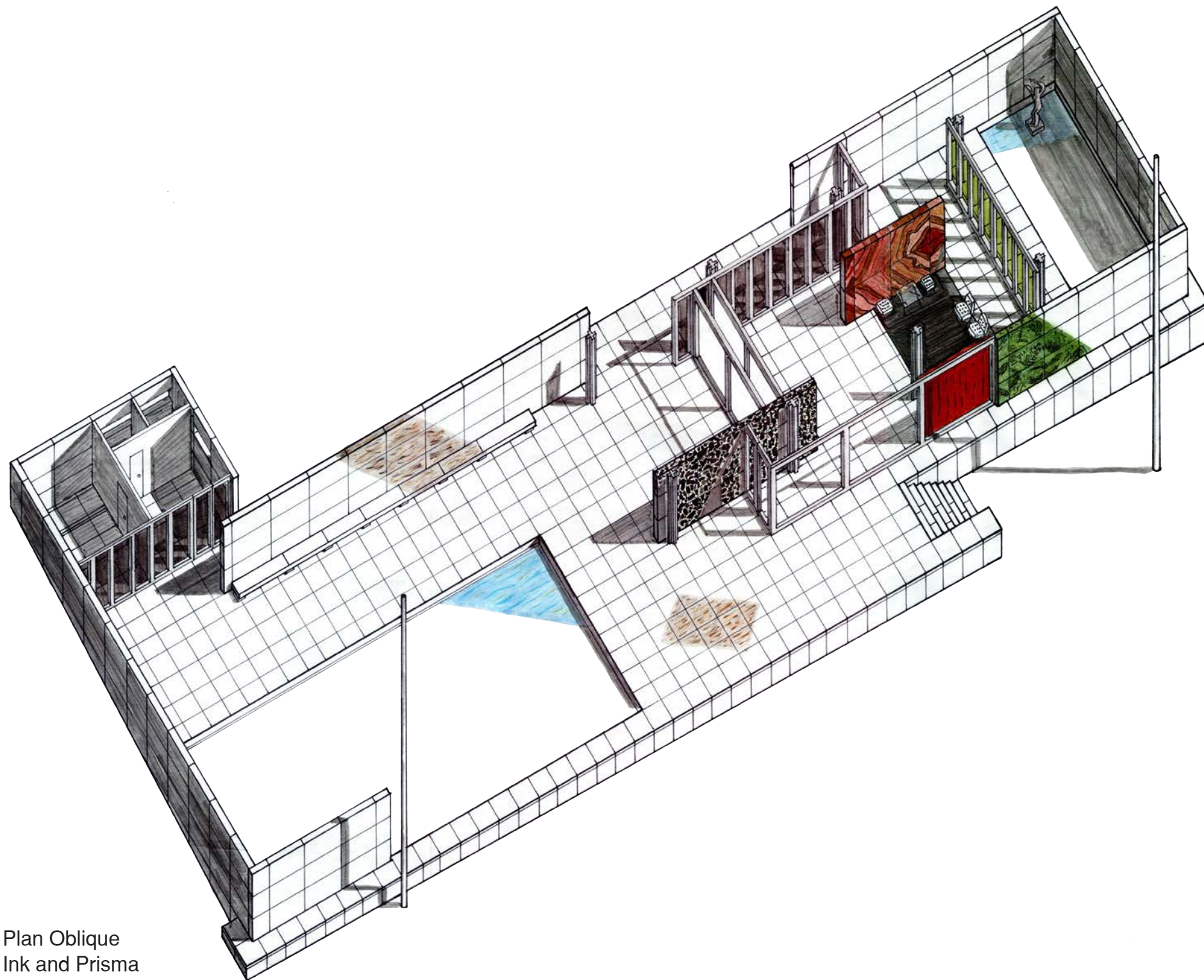
BARCELONA PAVILION

Arch 1121

Objective: To understand an architectural work by analyzing the interaction between the occupants and the space. A plan analysis and plan oblique are to be drafted in ink as a way to develop hand drafting skills.



Site Analysis

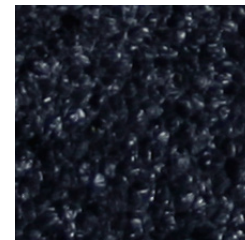


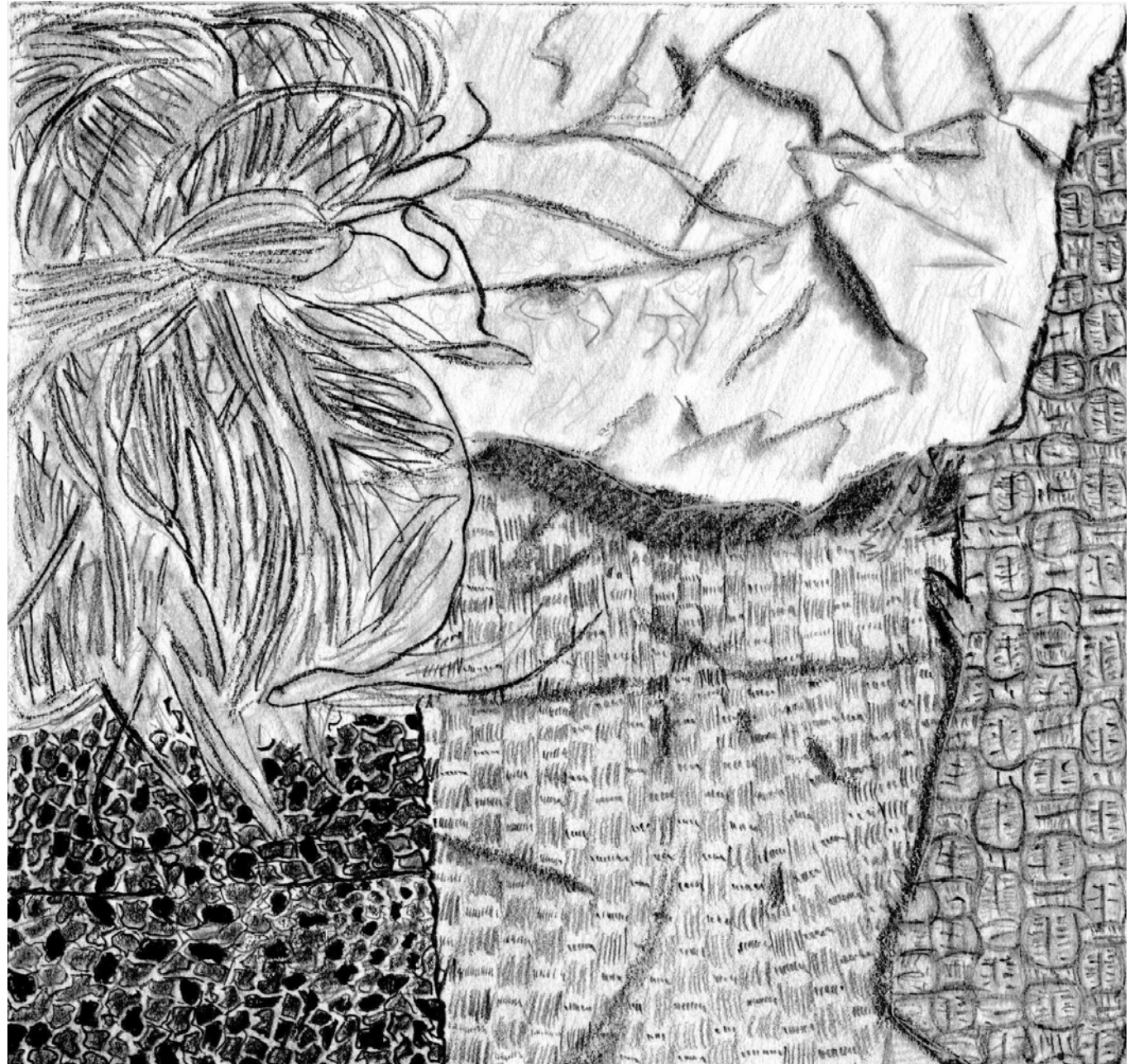
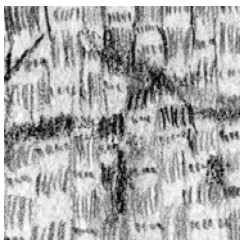
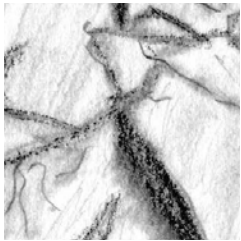
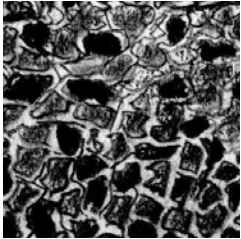
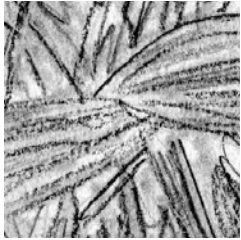
Plan Oblique
Ink and Prisma

TEXTURE DRAWING

Arch 1121

Objective: To create a collage of found objects with varying textures. Recreate collage as a full size illustration in pencil.

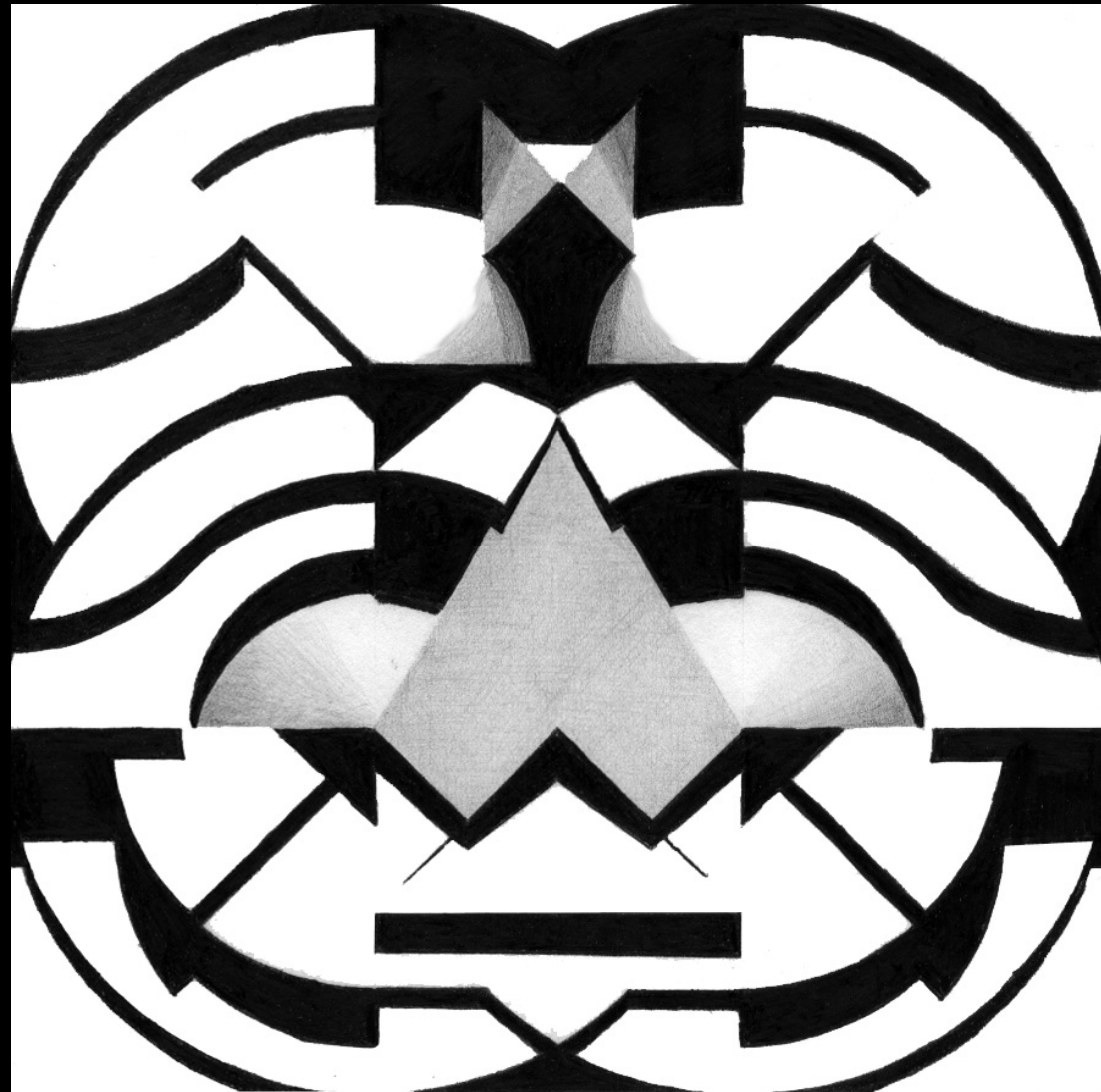




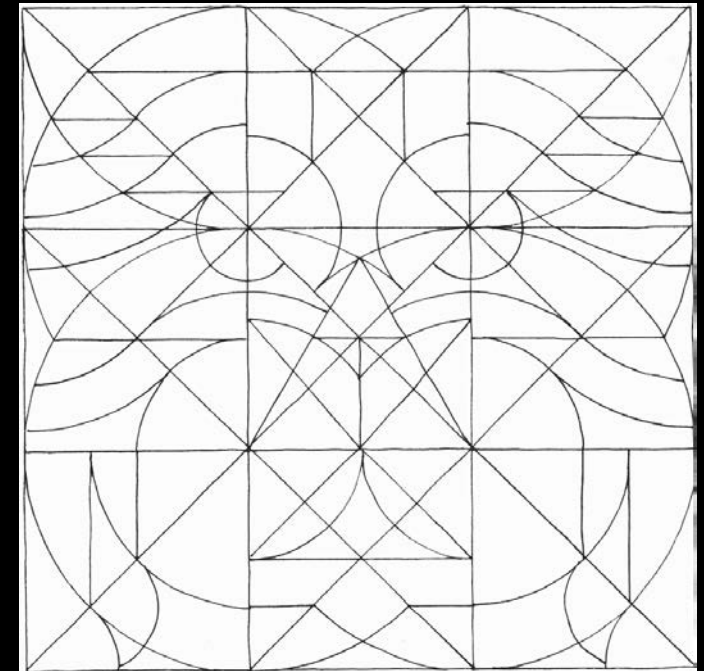
FORM

Arch 1131

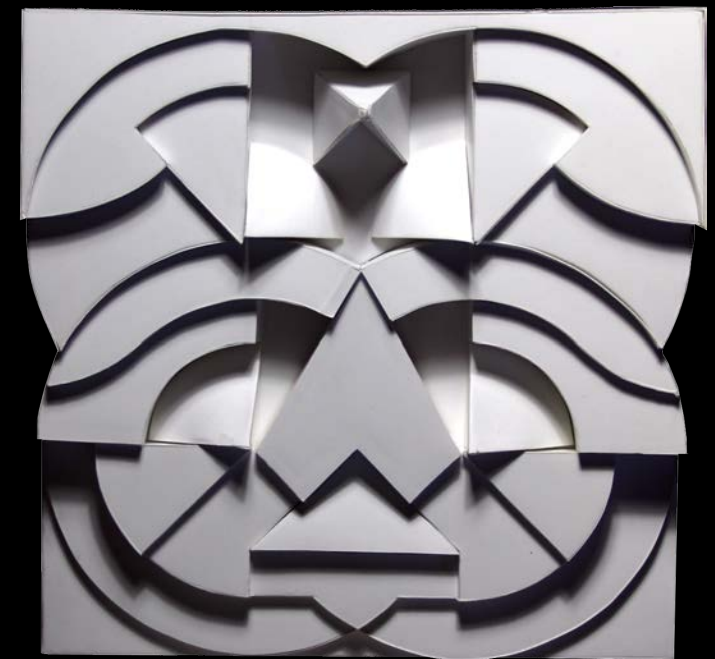
Objective: Using a set of rules, develop individual symmetrical and asymmetrical drawings. Assemble the individual drawing into a collage, one symmetrical, one asymmetrical. Construct a relief model of each collage. Illustrate tone drawings showing shade and shadow.



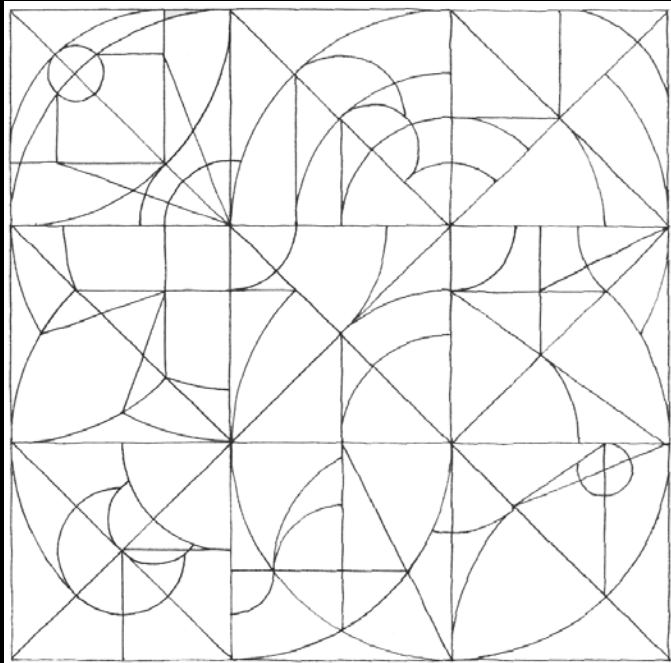
Symmetrical Tone Illustration



Symmetrical Collage



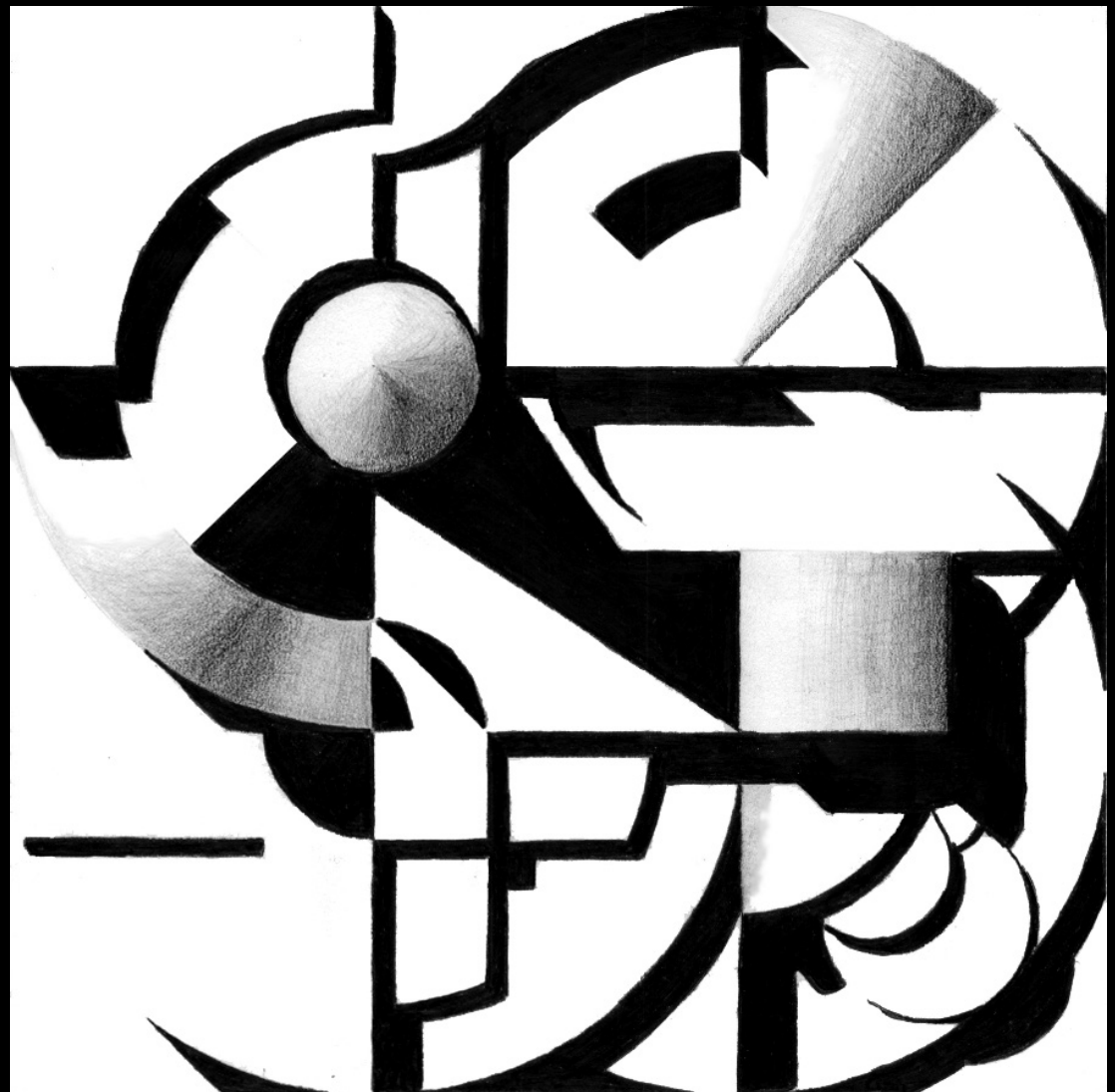
Symmetrical Relief



Asymmetrical Collage



Asymmetrical Relief



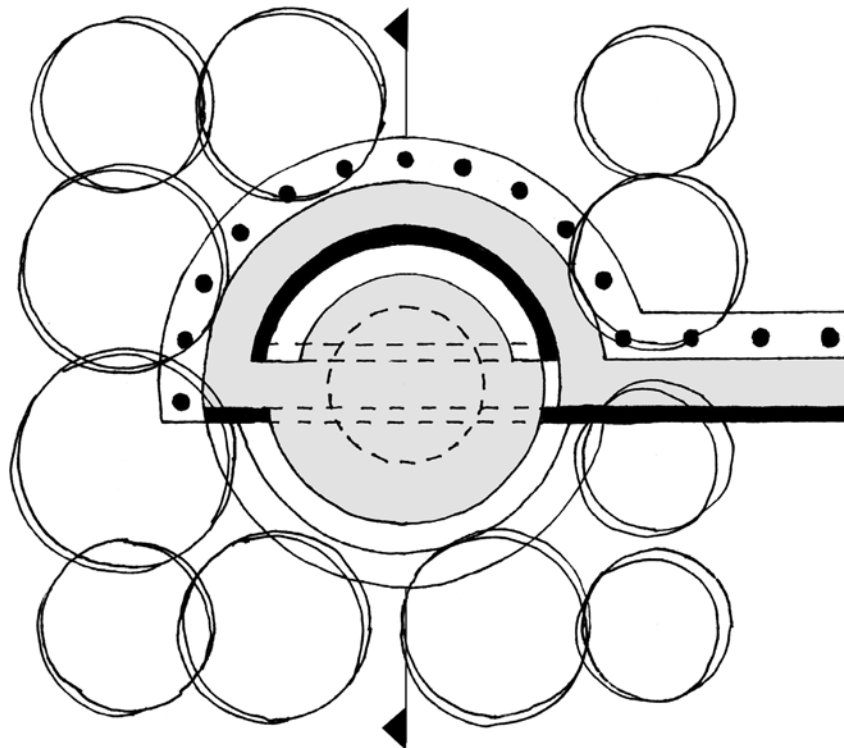
Asymmetrical Tone Illustration

COMMUNITY GATHERING SPACE

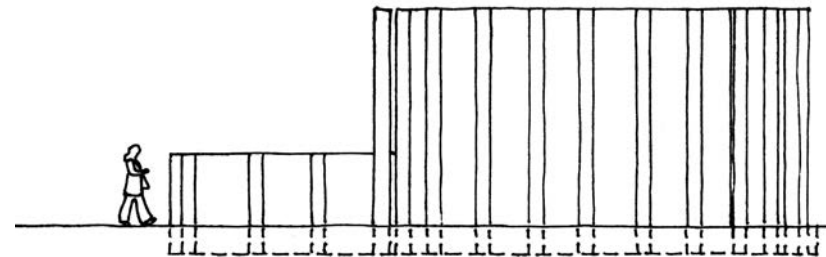
Arch 1131

Objective: Design a community gathering space on an existing site using a strict set of architectural elements. Analysis of the site and existing elements must be incorporated into the design. The design should create a unique and memorable experience as you move through the site.

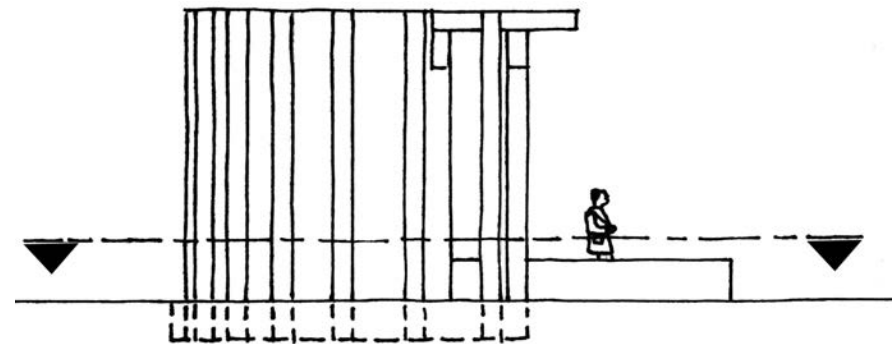
Solution: The design and orientation of the structure was done with solar angles in mind. As you enter the site you are given views of the gathering space. The path keeps you in the shadows until you reach the main space that is full of light. The disk shaped roof is specifically placed so that it provides shade for the main seating in the hottest months of the year.



Plan



North Elevation



West Elevation



Section



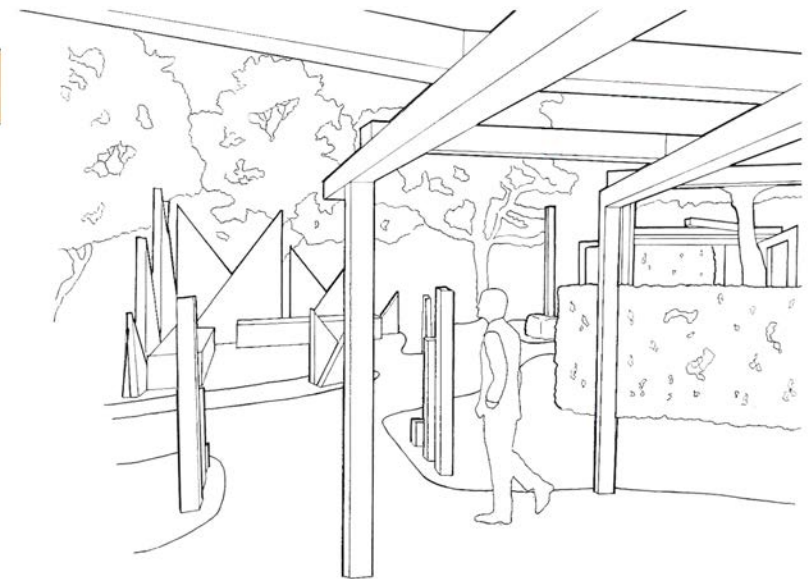
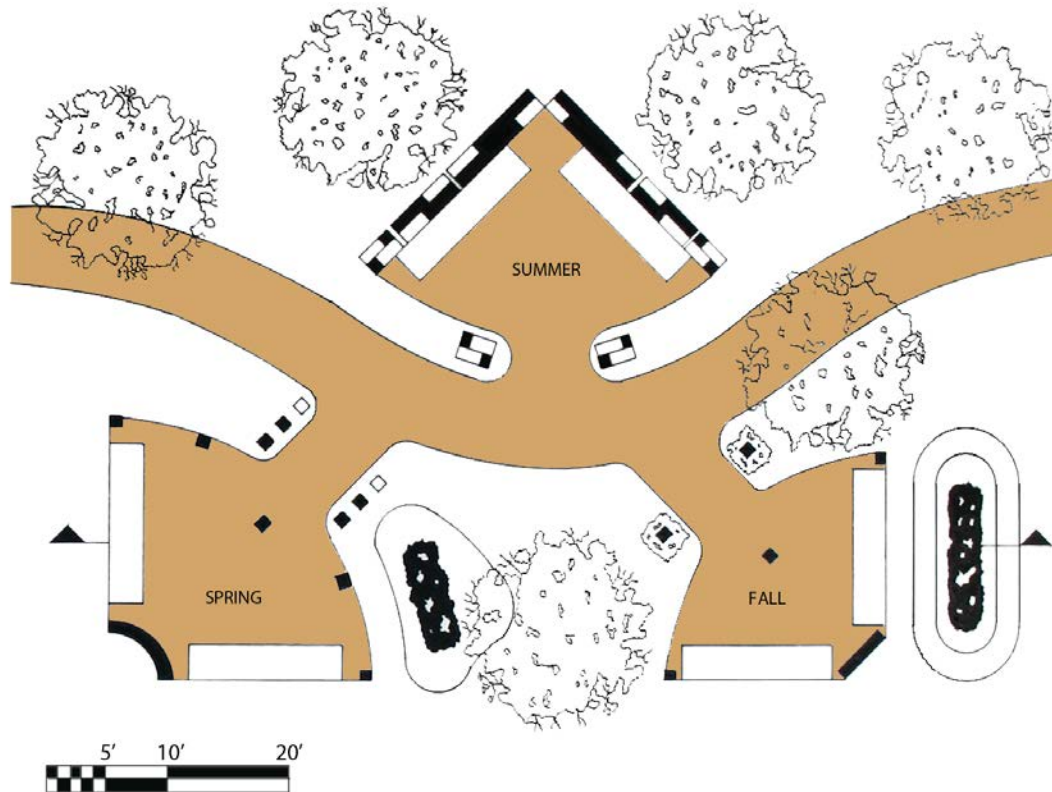
Perspective Illustration (Ink and color pencil)

SPATIAL SEQUENCE

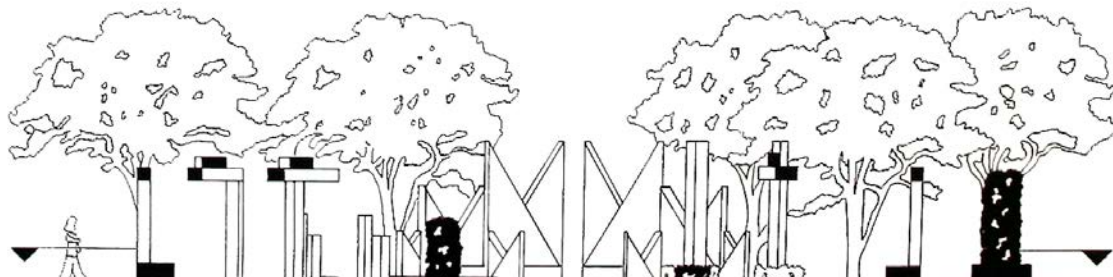
Arch 1131

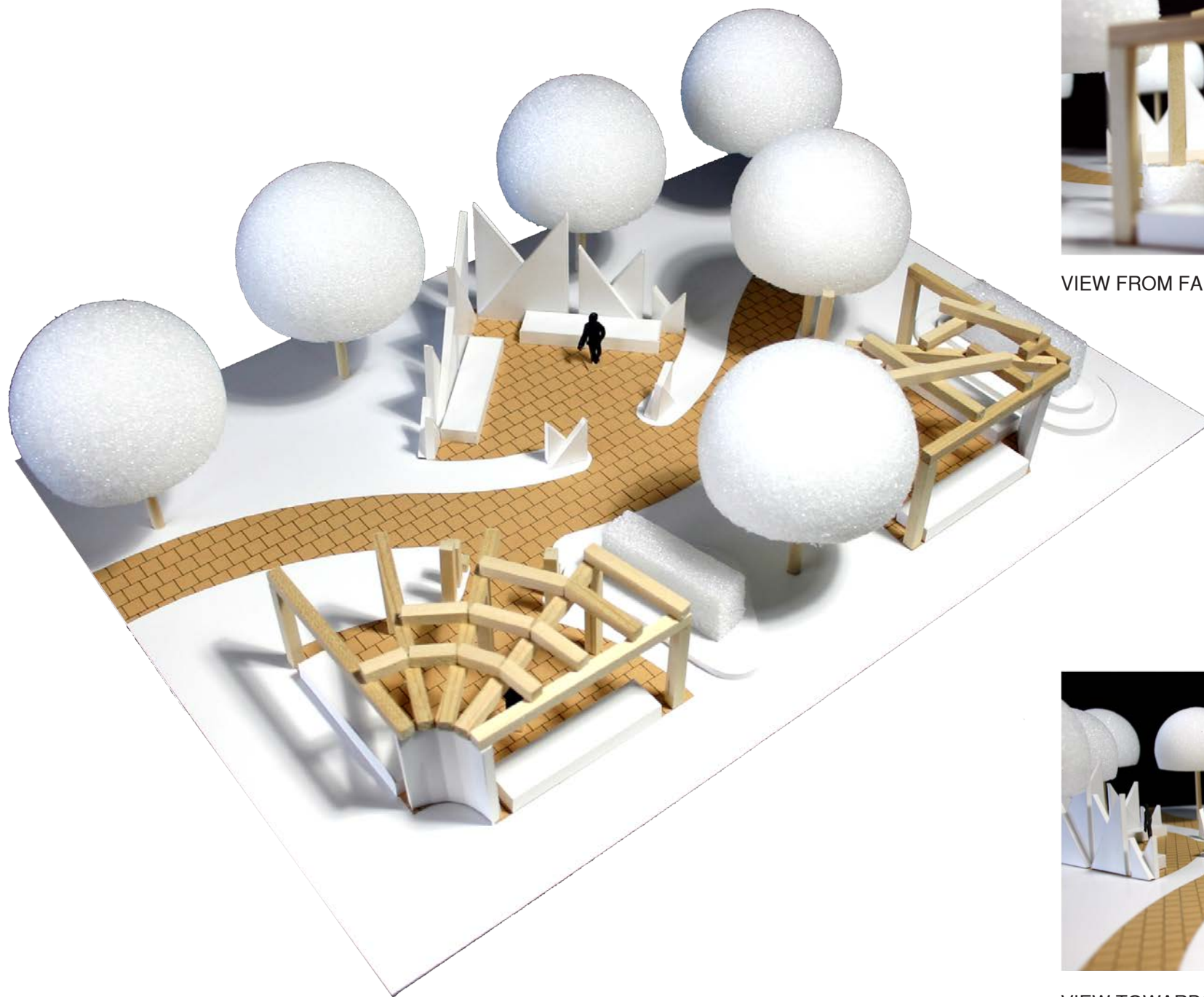
Objective: Using a kit of parts, create three separate spaces representing Spring, Summer and Fall. The spaces will be linked by a single path with each space transitioning from one to the next. The major spaces will respond to the solar angles and climatic considerations.

Solution: Each space is designed to represent its season. The trellis of spring represents the trees becoming fuller. The angular walls of summer represent the rays of the sun. The trellis of fall represents the trees losing their leaves. The trees and shrubs are placed so that they provide shade and reduce wind.

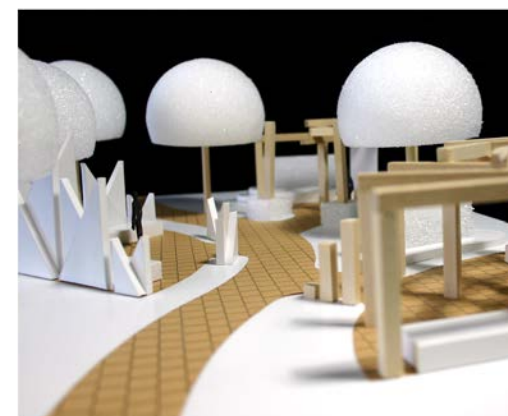


VIEW FROM SPRING





VIEW FROM FALL



VIEW TOWARDS FALL

NATURE OF MATERIALS

Arch -1131

Objective: To develop an abstract expression of Neue Staatsgalerie by James Stirling. The construction of the model must use metal, wood, glass and concrete. It must use all of the materials in a way that has a meaningful association to the nature of the material.

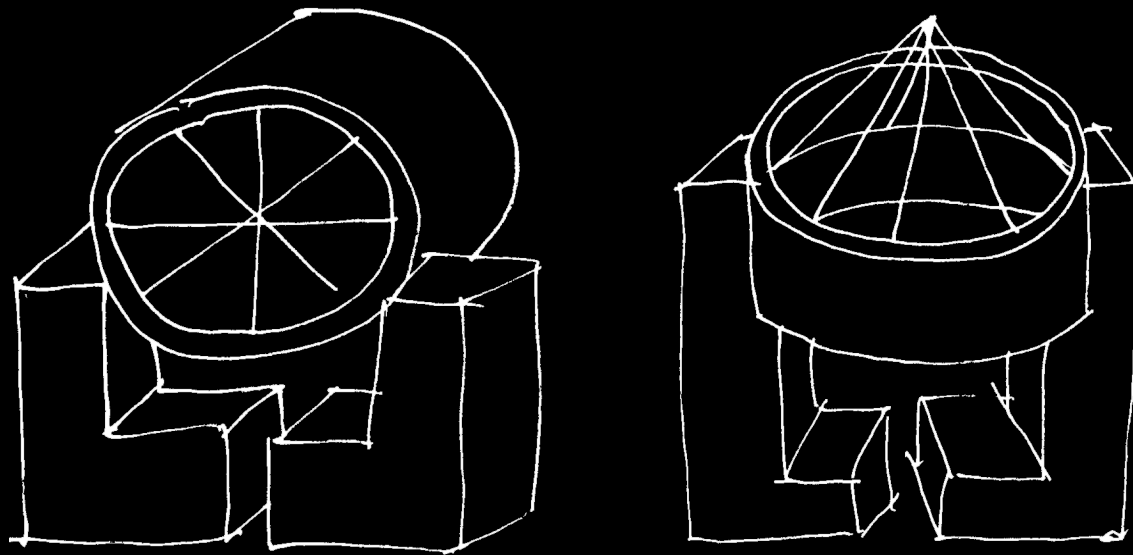
Solution: The rotunda of Neue Staatsgalerie is the main focal point of the building and the model.

Base - The "L" shape to symbolize hands, made with concrete to represent strength.

Ring - Representing humanity, made from wood for it's organic nature.

Glass - Representing people because of it's fragile nature. The colors represent diversity and community.

Metal - Represent the strong bond the binds humanity together.



Concept Sketches



Concept Model

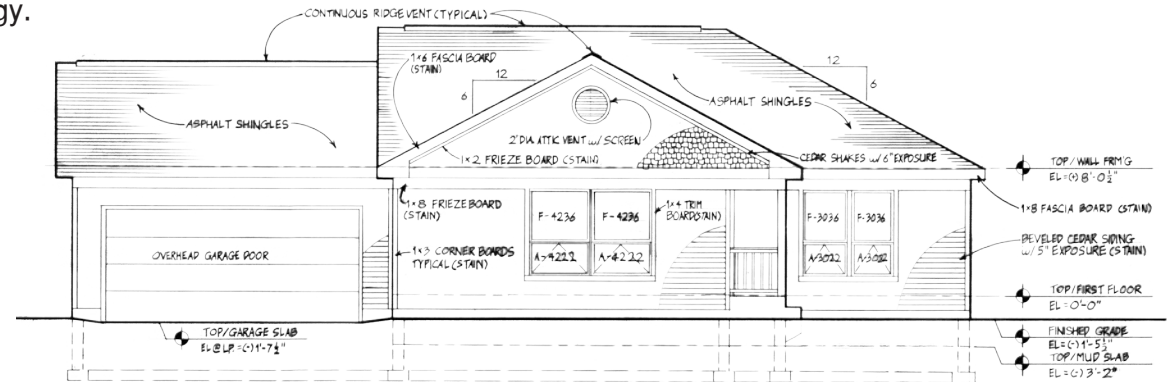


Final Model
48" High, 36" Wide, 30" Deep
250 Lbs.

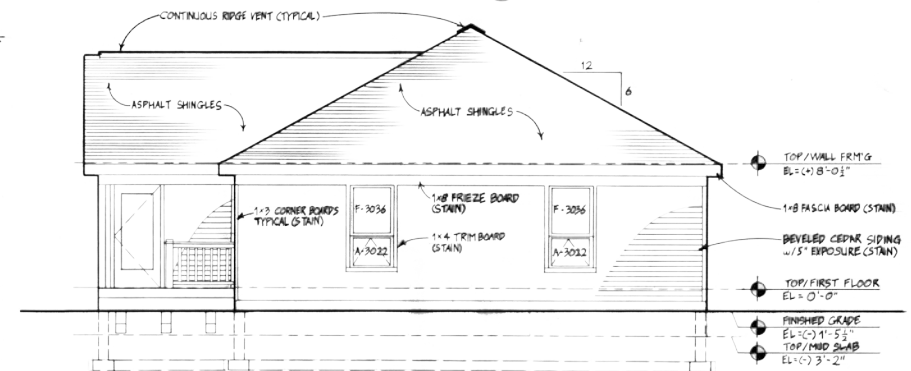
ARCHITECTURAL DRAFTING

Arch 1101

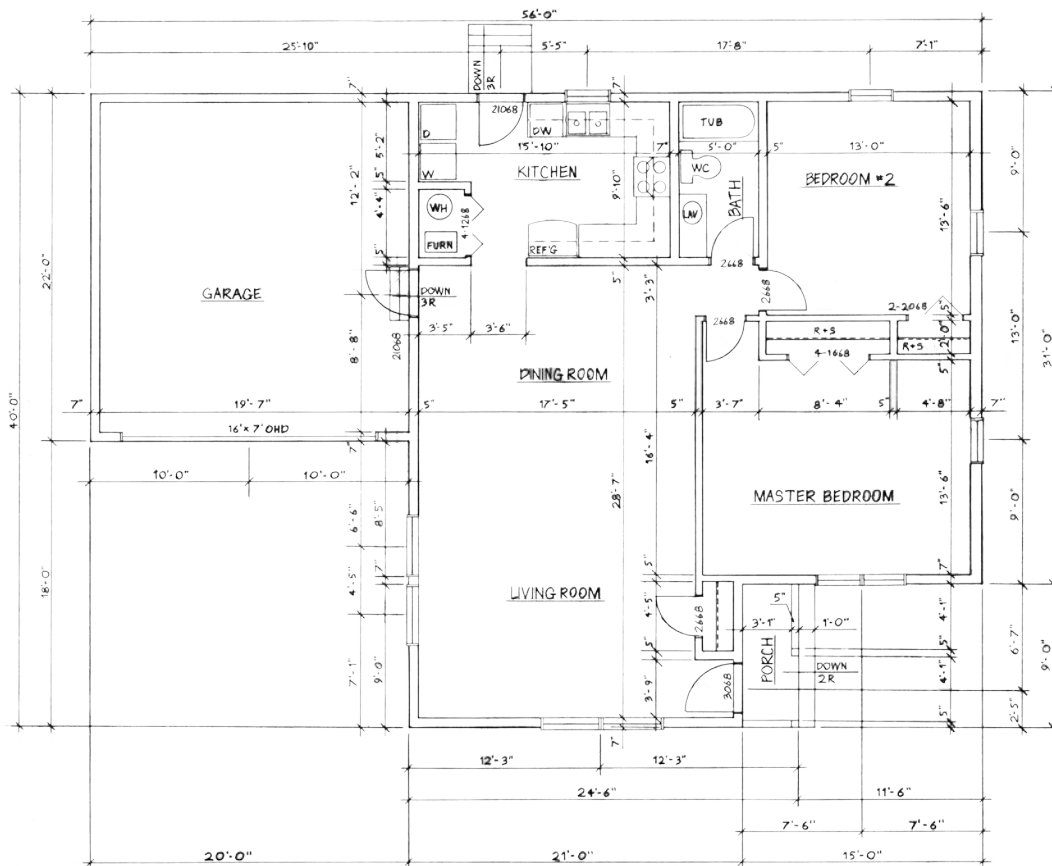
Objective: To learn the fundamentals of hand drafting and architectural conventions. Includes use of tools, lettering, dimensioning, drafting techniques, and frame construction vocabulary and technology.



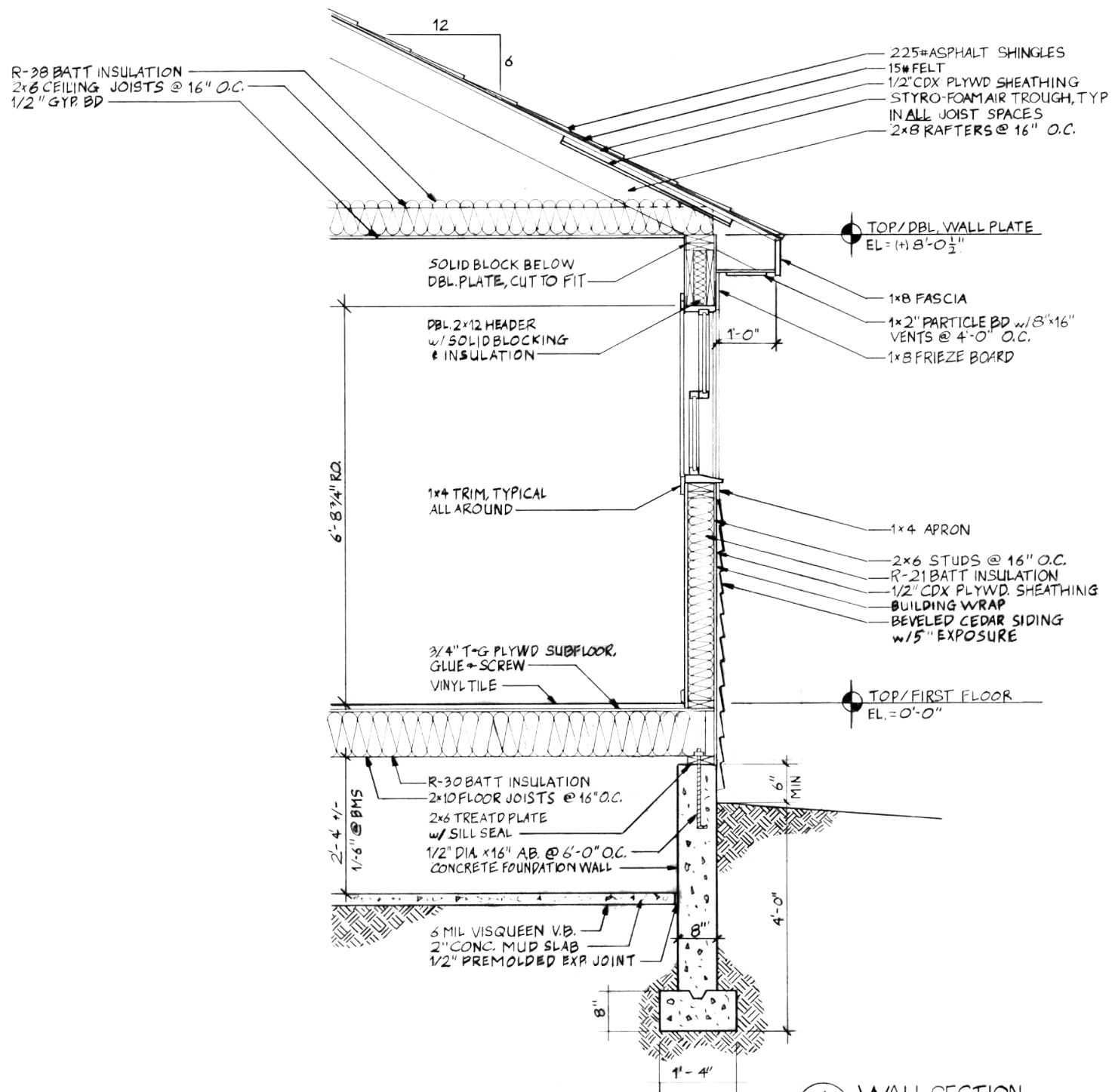
NORTH ELEVATION



WEST ELEVATION



FLOOR PLAN



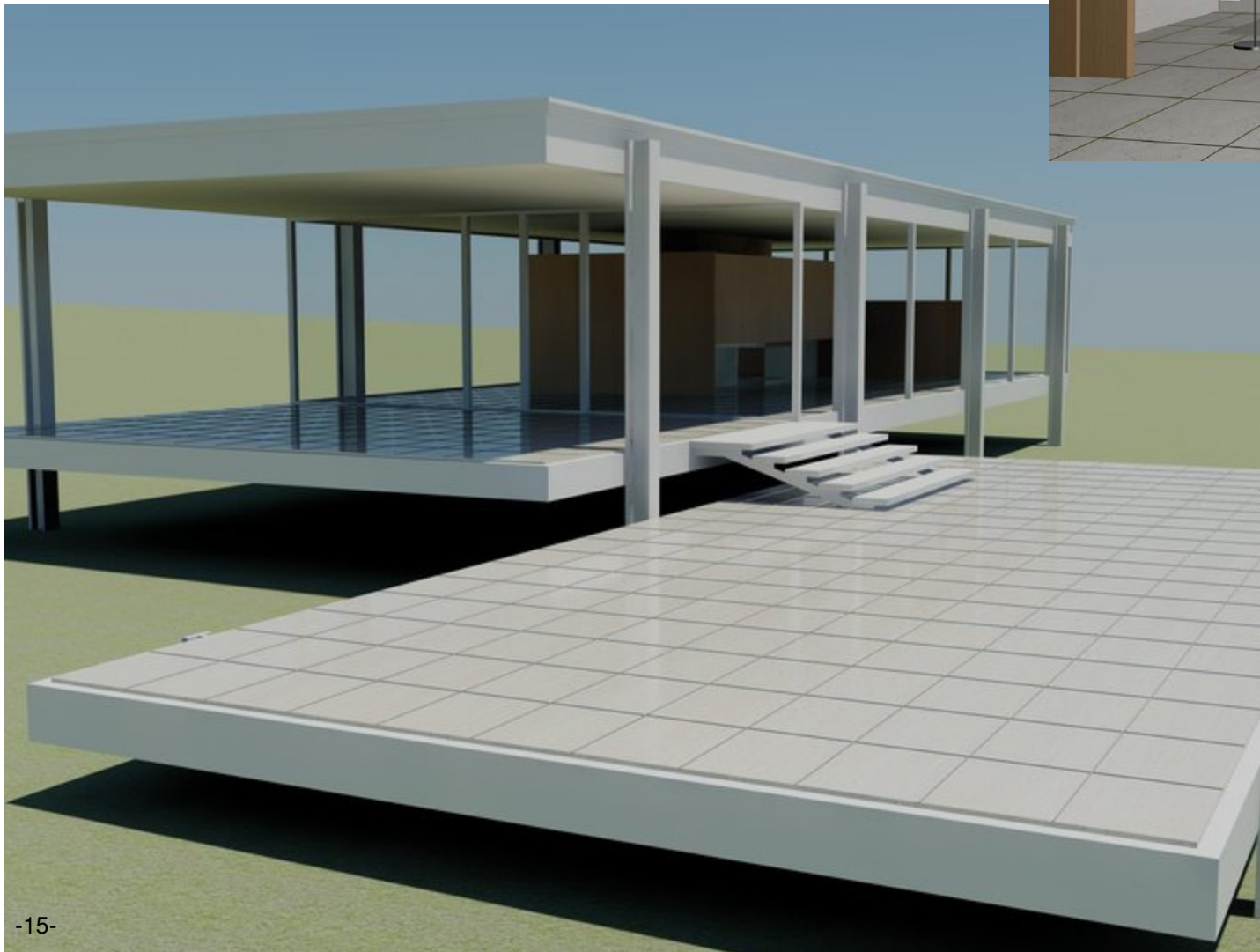
① WALL SECTION

ARCHITECTURAL MODELING

Arch 2220

Objective: Over an eight week period, learn 3DS Maxx and apply those skills to create realistic computer renderings. Points of study; realistic materials, lighting, cameras & lighting, and environments.

Farnsworth House Interior:
3DS MAX - Mental Ray Render



Farnsworth House Exterior:
3DS MAX - Mental Ray Render

Milam Residence Exterior:
3DS MAX - Mental Ray Render



Milam Residence Interior:
3DS MAX - Mental Ray Render

STRUCTURAL STABILITY

Arch 2230

Objective: Construct a rectangular structural frame of 4 sides and a floor. The structure must have enough space for one person to rotate with arms outstretched in any direction when standing on the floor. It must be able to hold the weight of three people. The structure must be able to withstand lateral loads and racking. The construction may not use any type of fasteners.

Solution: The structure was developed using the idea of a geometric cube. The cube was constructed using plywood with tongue and groove and slotted connections.

Group Members: Chris Brich, Paul Davidson, Gary Krantz, Doug Lueken



Study Model



Connection Details





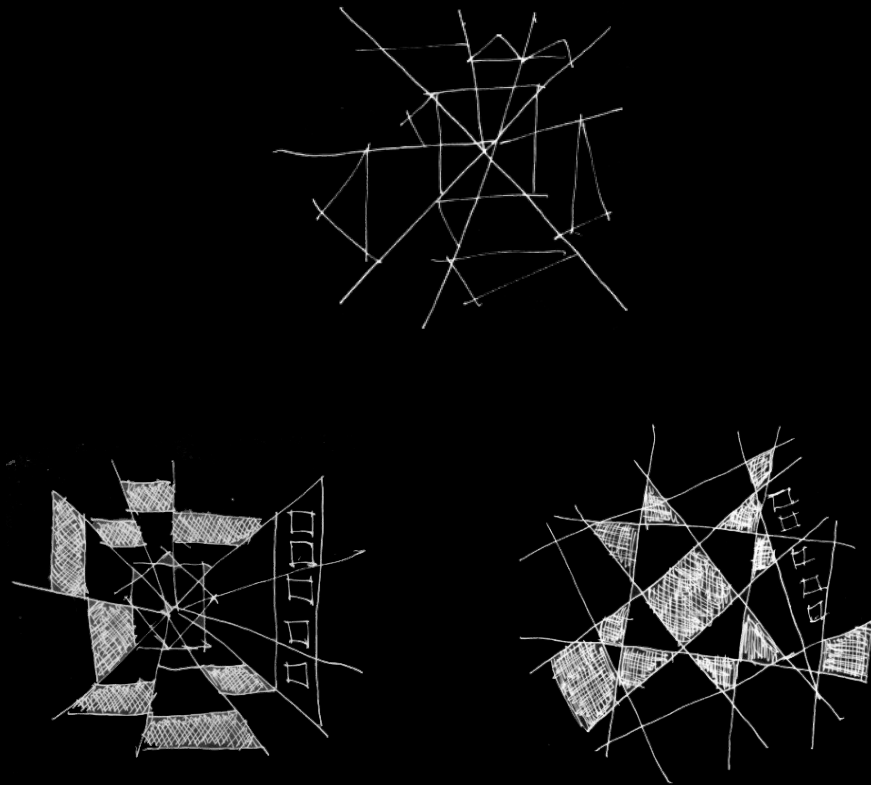
Final Structure
4' Wide, 4' Deep, 7' Tall

PRECEDENT STUDY COLLAGE

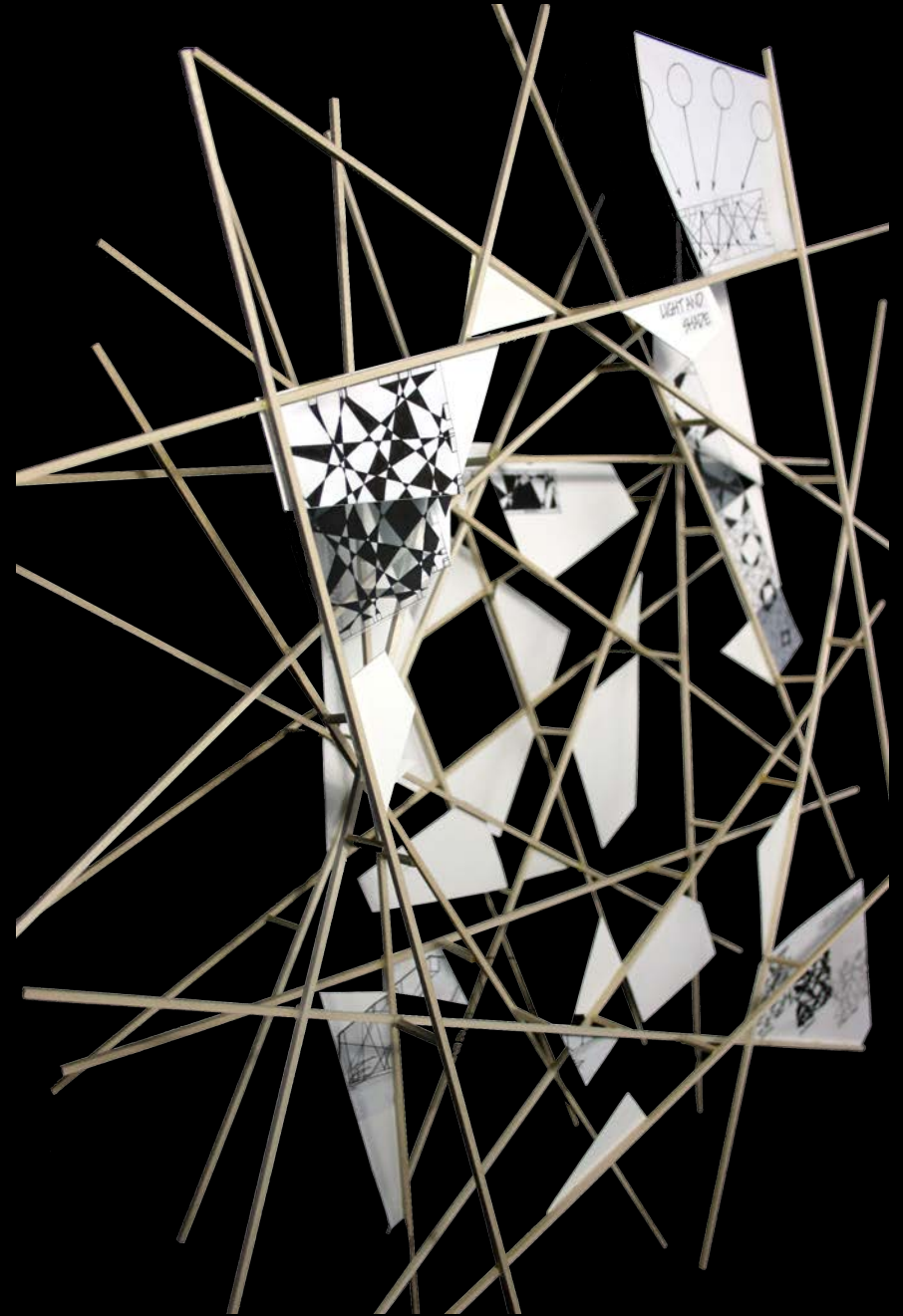
Arch 2201

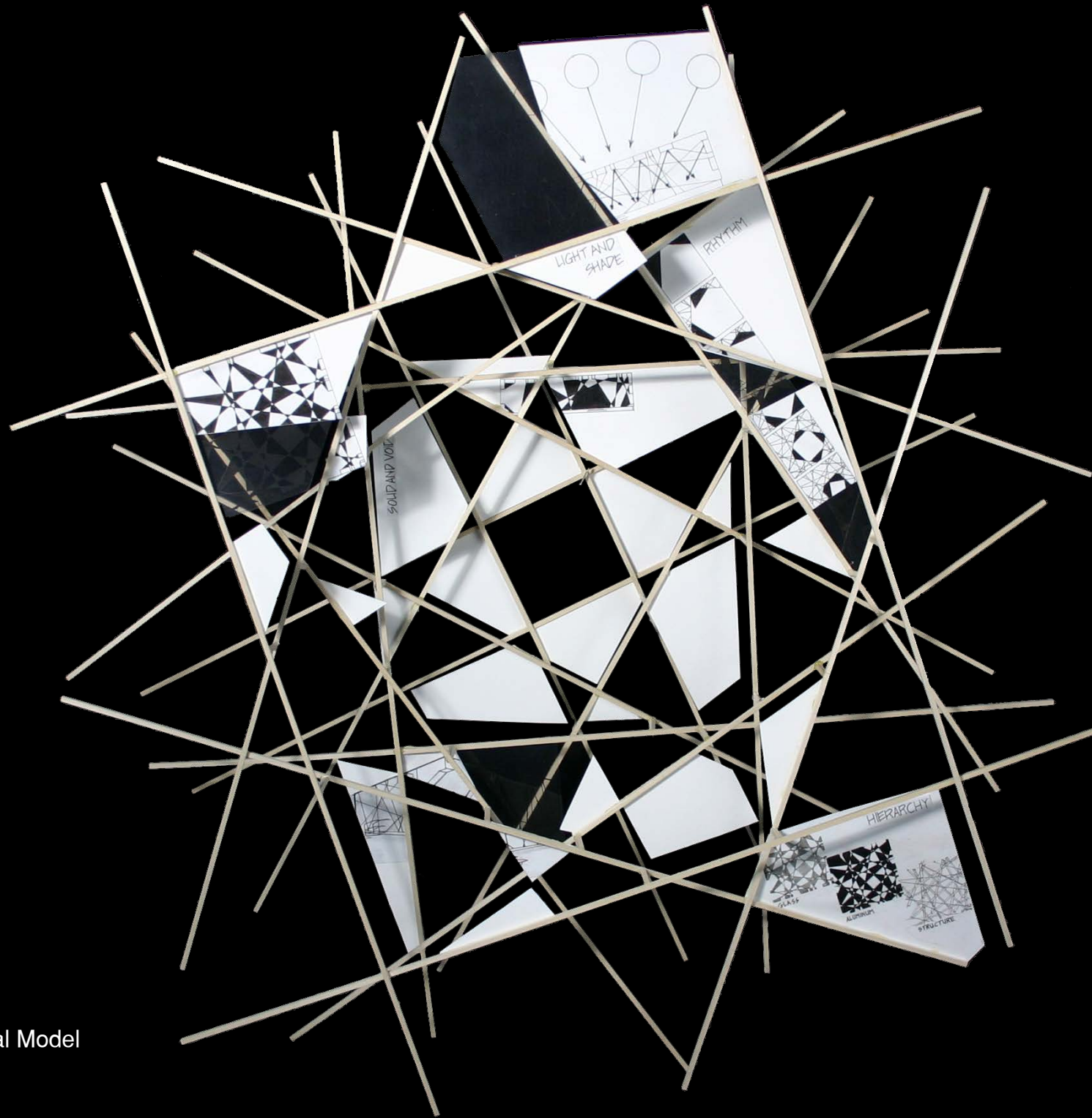
Objective: To research and understand the Serpentine Pavilion in London by Toyo Ito. Understand the ideas and concepts behind the work. Construct 3-dimensional concept model illustrating the ideas of the pavilion.

Solution: The main design concept behind the Serpentine Pavilion is an algorithm of a rotating and expanding square. Using this concept multiple levels of expanding and rotating squares were constructed. Panels are placed in different levels but appear to be on the same plane when the model is viewed directly.



Concept Sketches





Final Model

VISITORS CENTER PAVILION

Arch 2201

Objective: Design a visitors center pavilion located in the Daley Bicentennial Plaza. This pavilion required a visitors center, cafe, gallery, and performance space.

Solution: Through analysis of the site, a strong circulation pattern was observed. Using this information several study models were developed. A centralized design was inspired from the rail yards that were once located near this site and Burnhams 1909 Plan of Chicago. The main focus of the design is to give visitors an unobstructed view of the surrounding area. At the same time, the design gives visitors a sense of privacy by shielding them from the surrounding elements. The final structure uses exposed tapered wood beams, copper screening for light filtering. The roof panels are pitched and have translucent glass to allow natural lighting.



Cafe Exterior Looking West



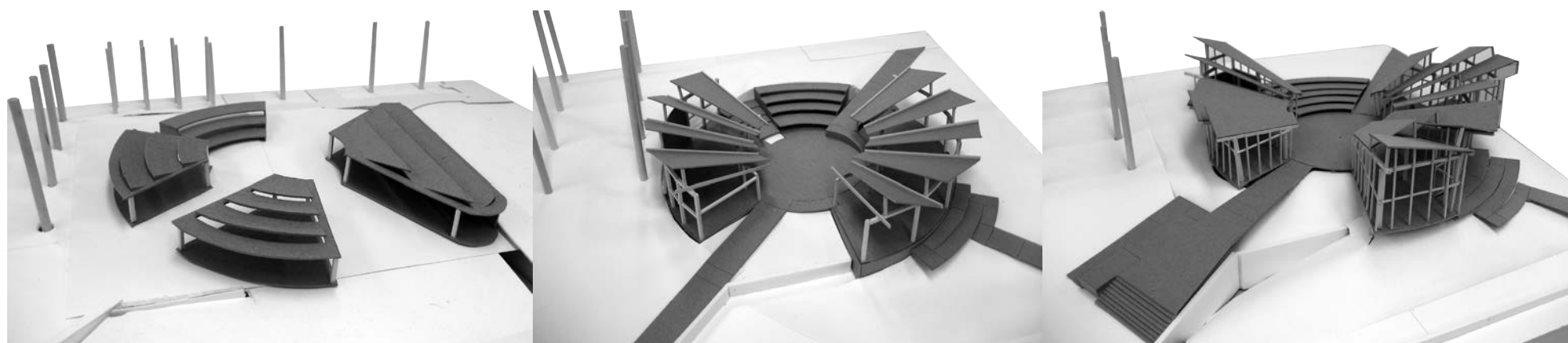
Site Location



Cafe Interior Looking North



Final Model

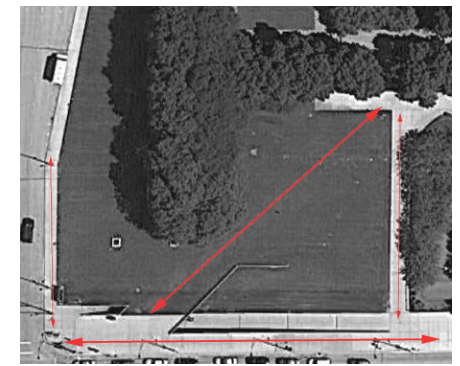
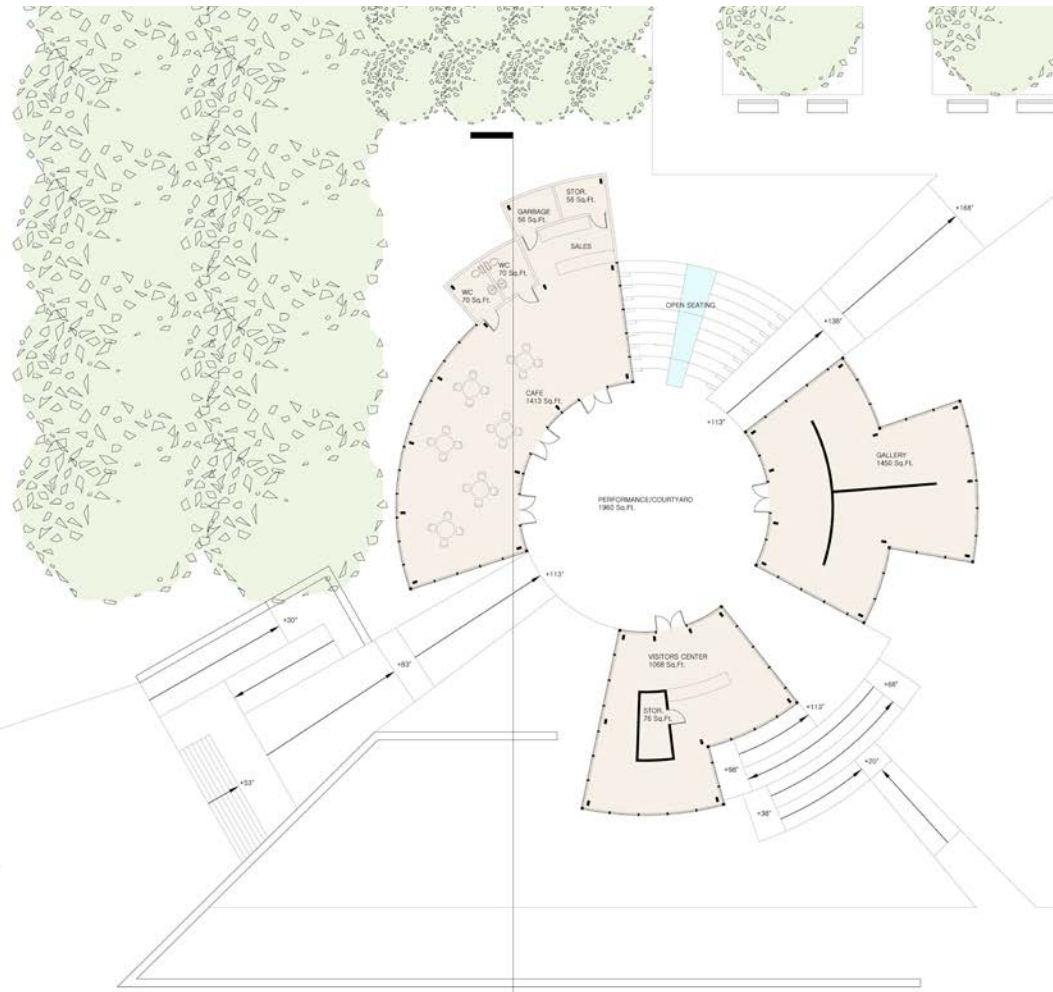


Process Models

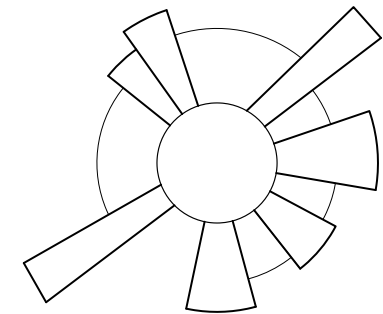
COLUMBUS DRIVE

Plan

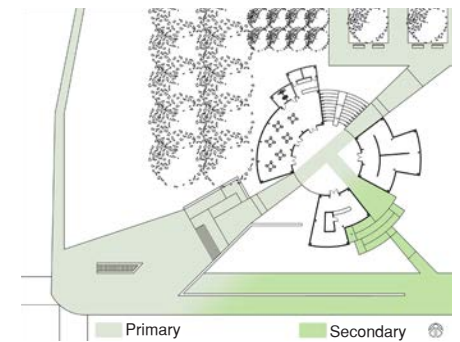
MONROE STREET



Observed Pedestrian Traffic



Parti

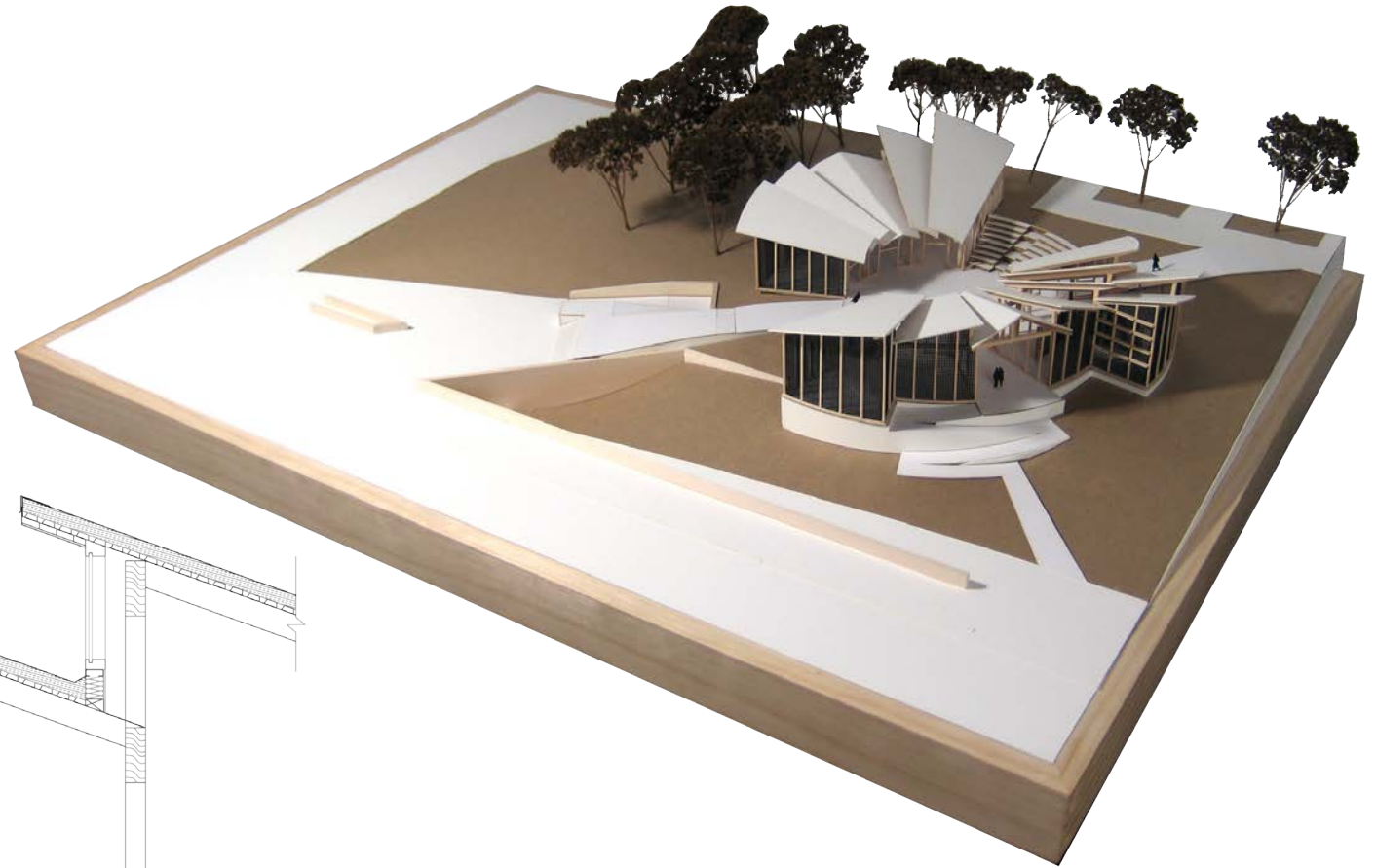
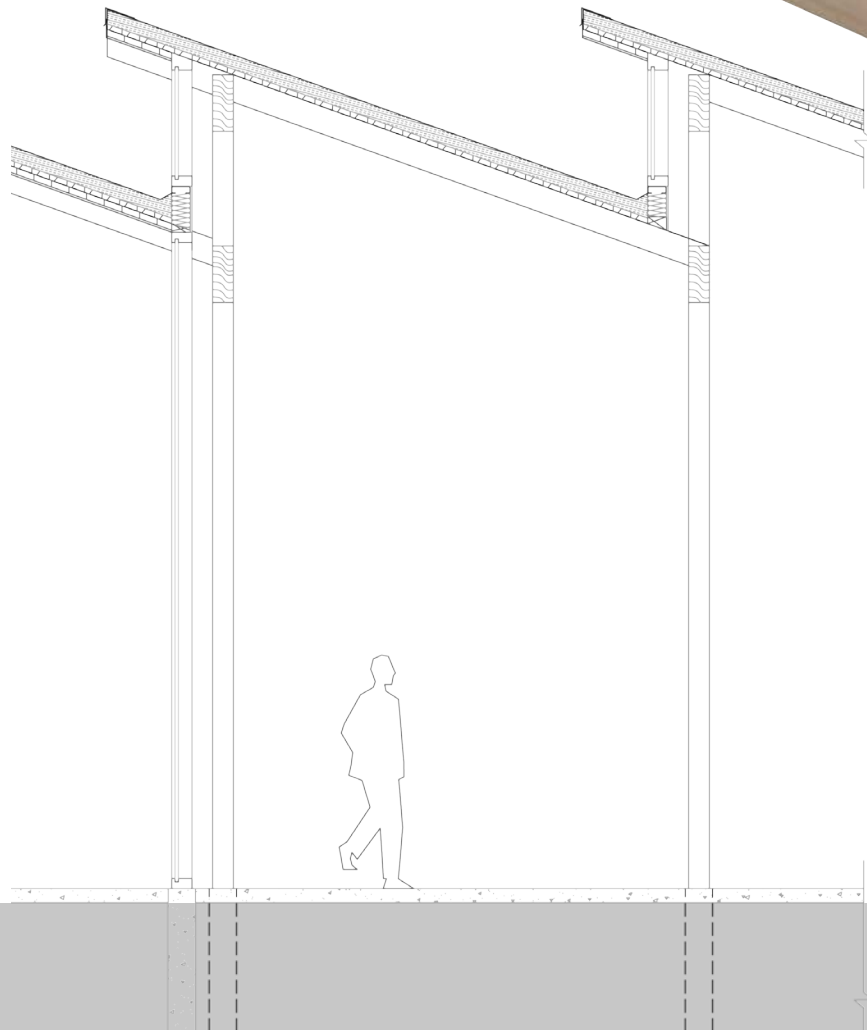


Circulation

Section



Gallery Detail Section



LIGHT MODULATING WALL

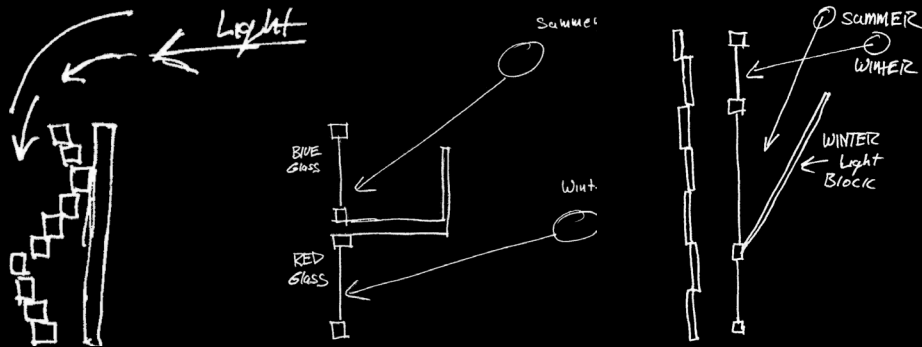
Arch 2202

Objective: To utilize sectional design in developing a highly detailed South facing wall that modulates natural daylight.

Solution: With great emphasis on creating a memorable space, our group first explored options involving a wall of cascading, serene, or dynamic light. Condensing these options into one idea of a dynamic wall, we began to add some character via transformation of light through color. This ultimately lead us to developing a space that changes the mood of the seasons; providing cool light in the Summer and warm light in the Winter.

Group Members: Chris Brich, Mike O'Rourke, Luke Romanini

Concept Sketches



Scale Model Exterior

Individual Study Models

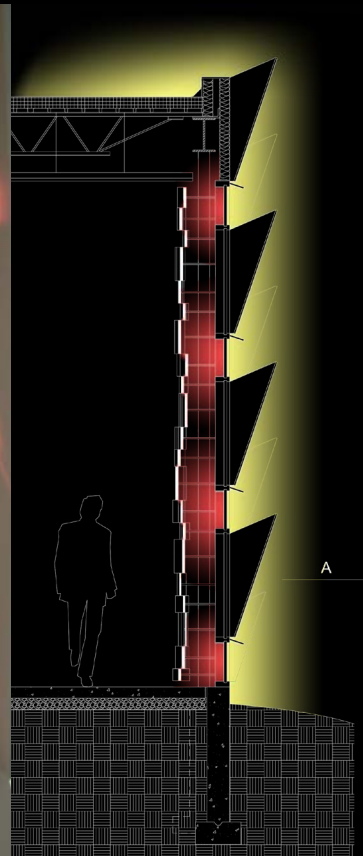


Group Study Models

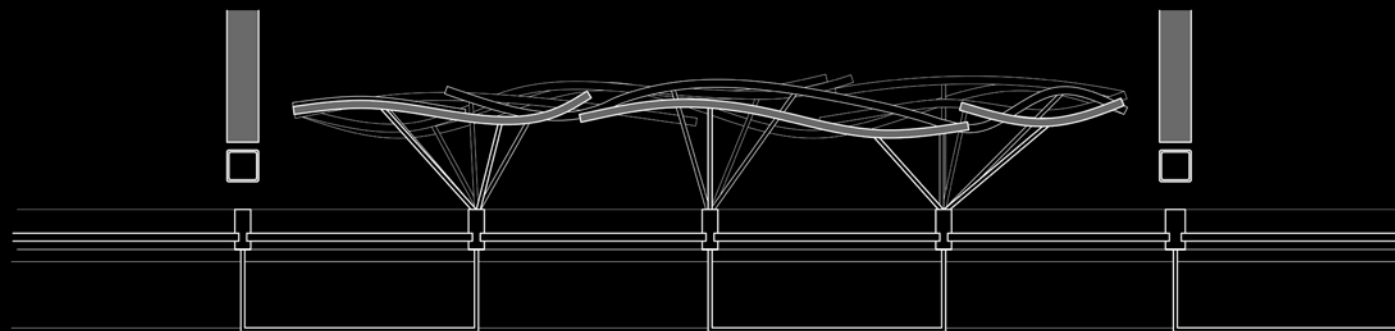
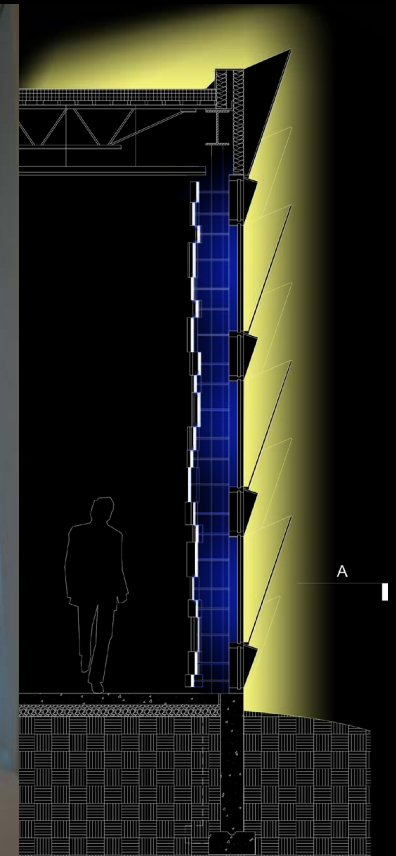




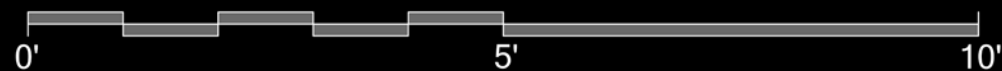
Winter Solstice



Summer Solstice



Detail Plan



URBAN INFILL

Arch 2202

Objective: Design a gallery, studio and residence to be located in downtown Chicago. The site challenges are its triangular shape and proximity to the elevated train. The design of the building is to be derived from a selected art piece as inspiration.

Solution: Using Shay Alkalay's idea that a chest of drawers could move in two directions, the concept that the volumes of a building could also be pushed and pulled. This concept is also carried out vertically causing shifts in planes and the volumes to intersect.



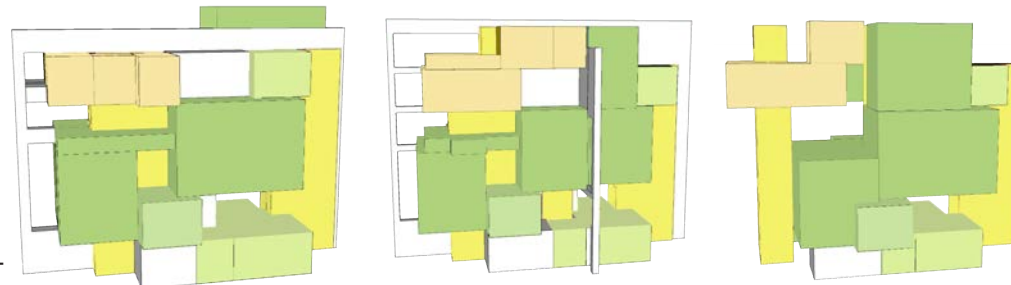
Site Location

"STACK" BY SHAY ALKALAY



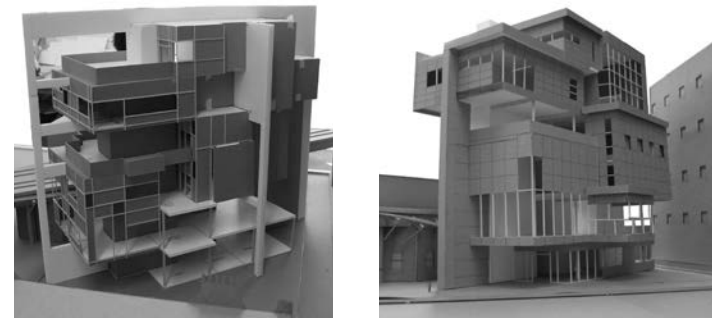
"Usually a chest of drawers consists of an exterior frame, back panel and runners on each drawer. The height is limited to the size of the frame and the drawer can only be opened in one direction. With 'Stack' Shay Alkalay has questioned these elements and challenged our perception of what a drawer unit can be."

Massing Studies

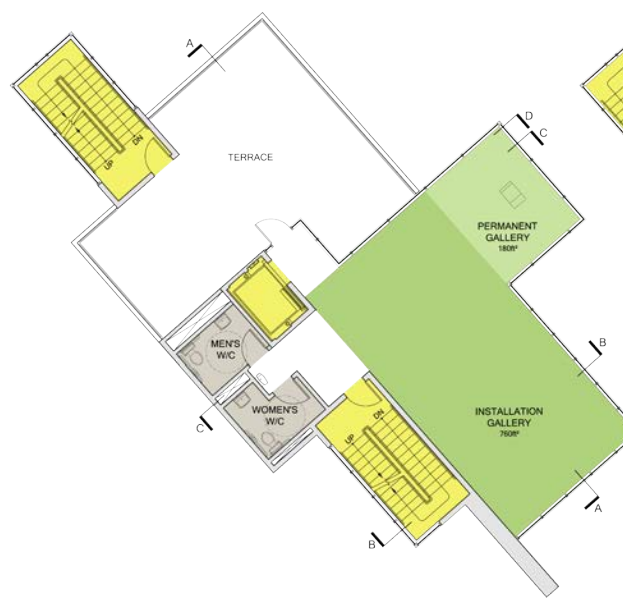
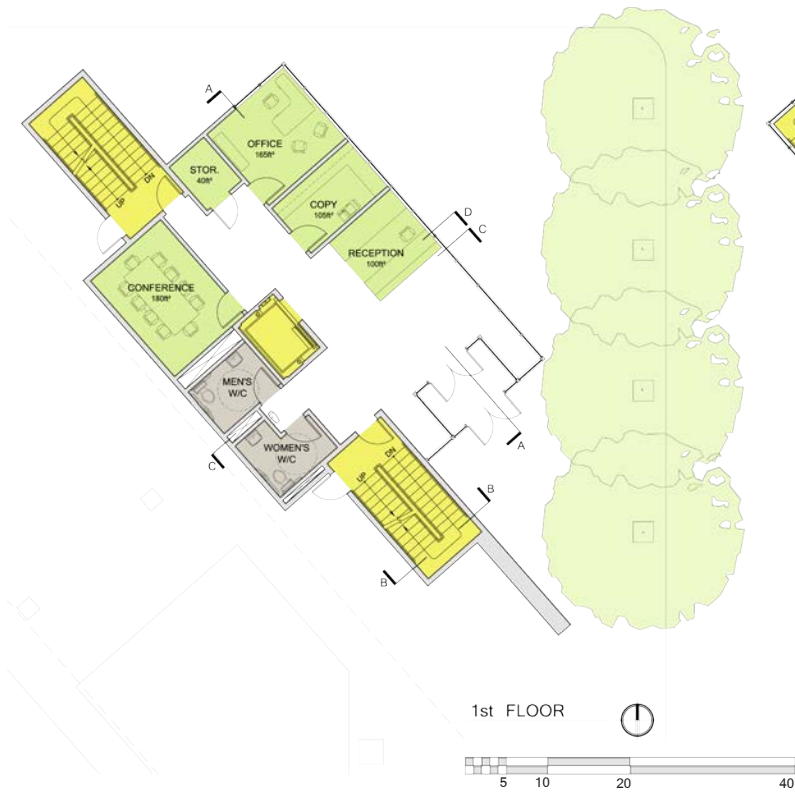


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Study Models



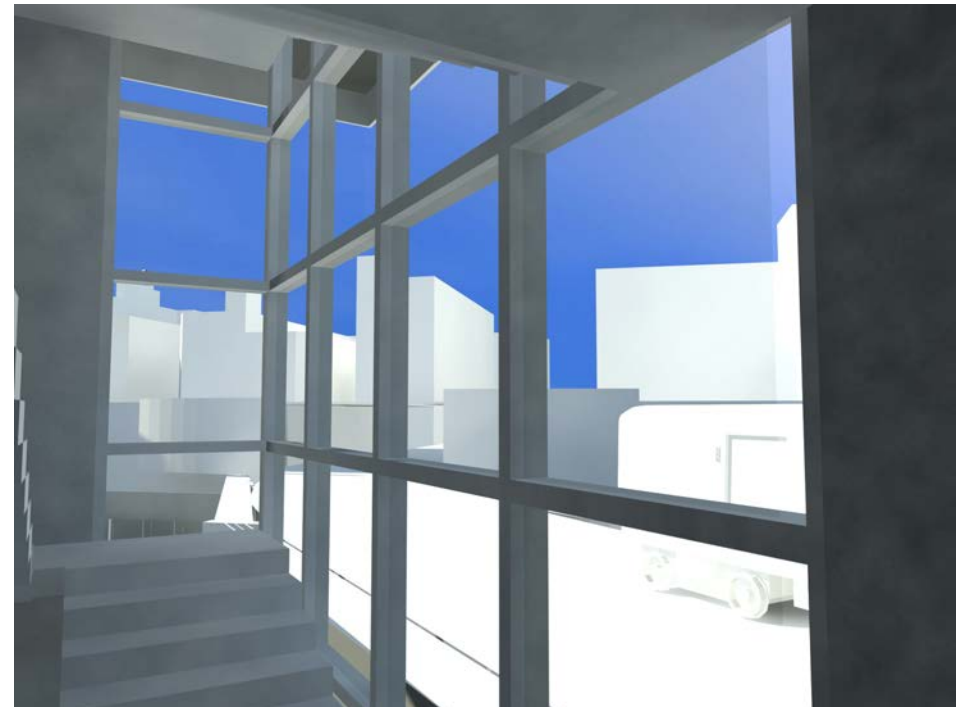


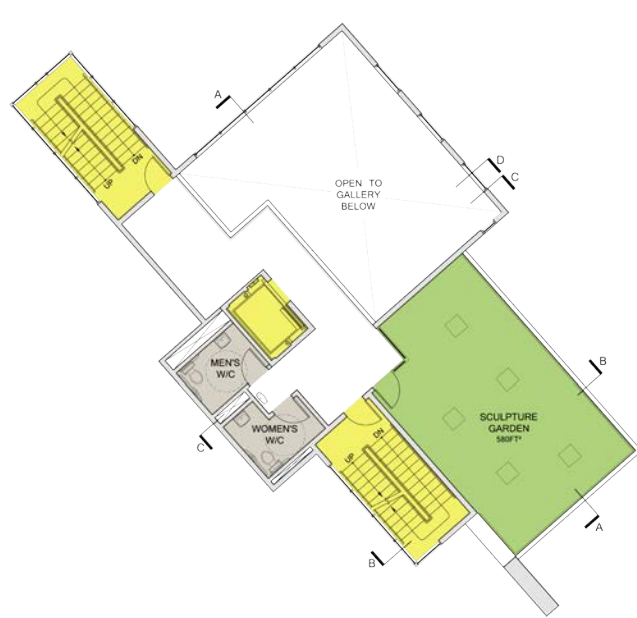


View From Installation Gallery



View From South Stair





View From Southeast



View From EL Platform



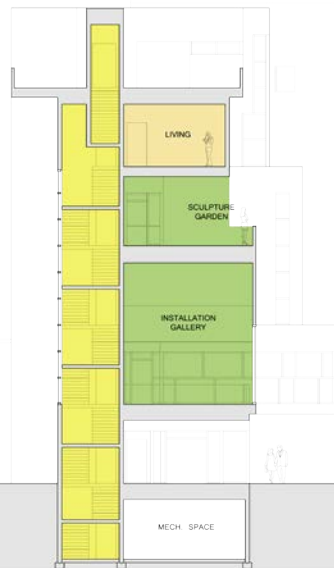


Section A

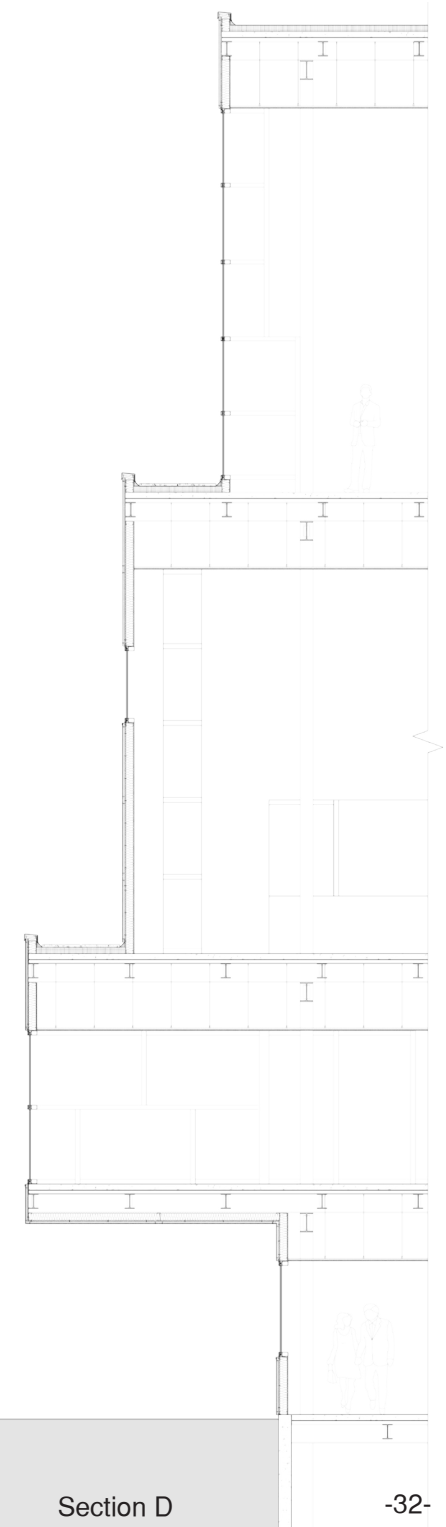
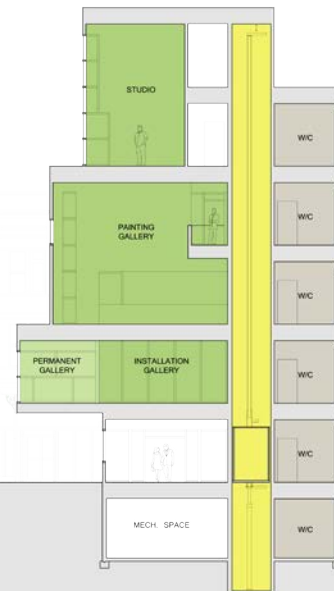




Section B

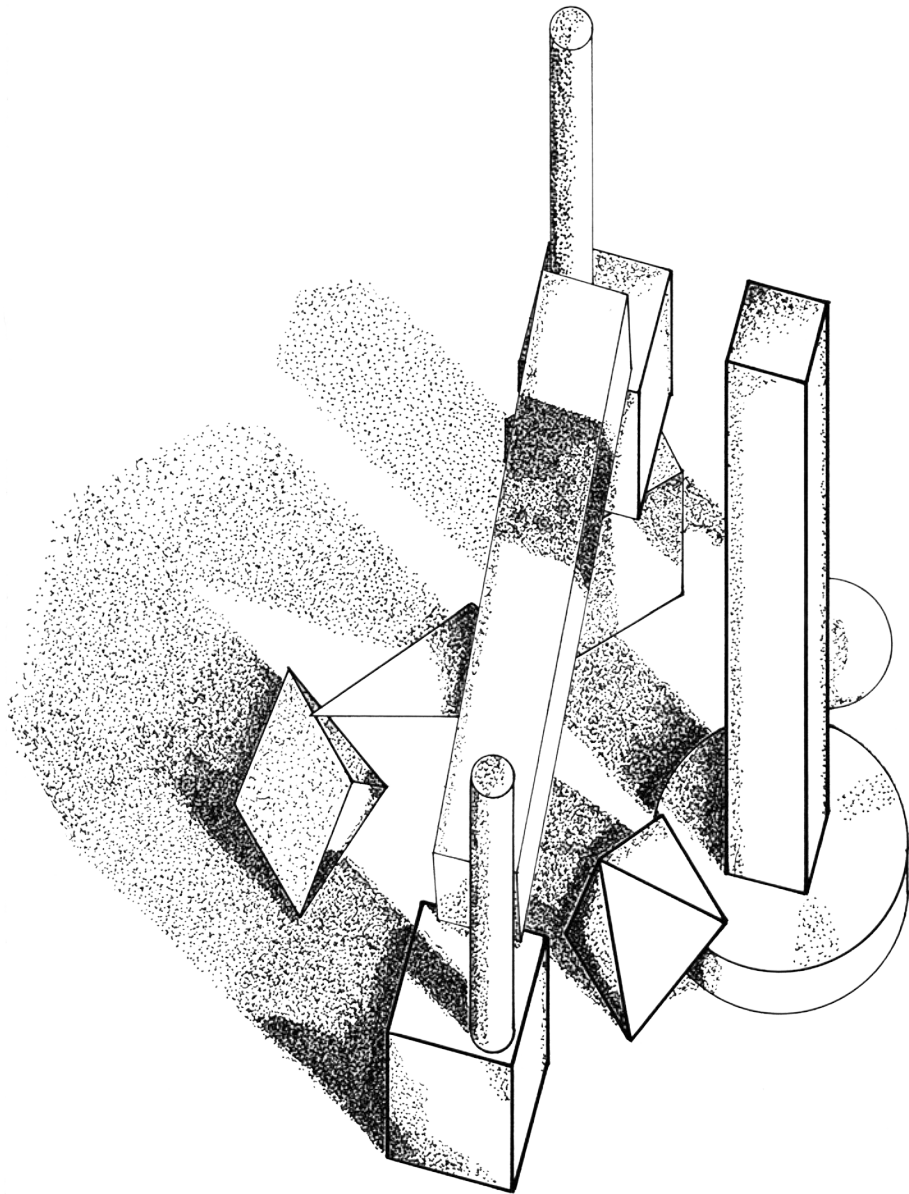


Section C

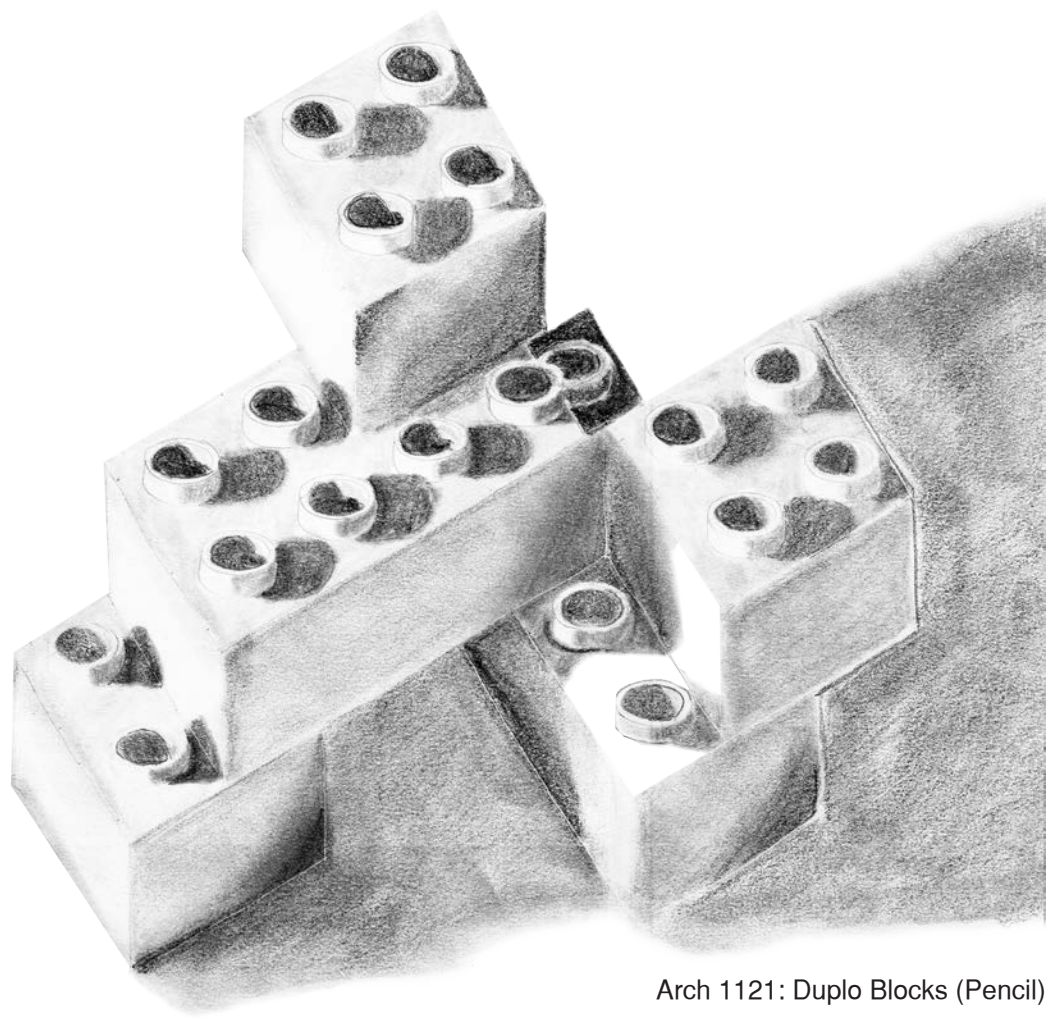


Section D

STILL LIFE ILLUSTRATION



Arch 1121: Still Life Study (Ink)

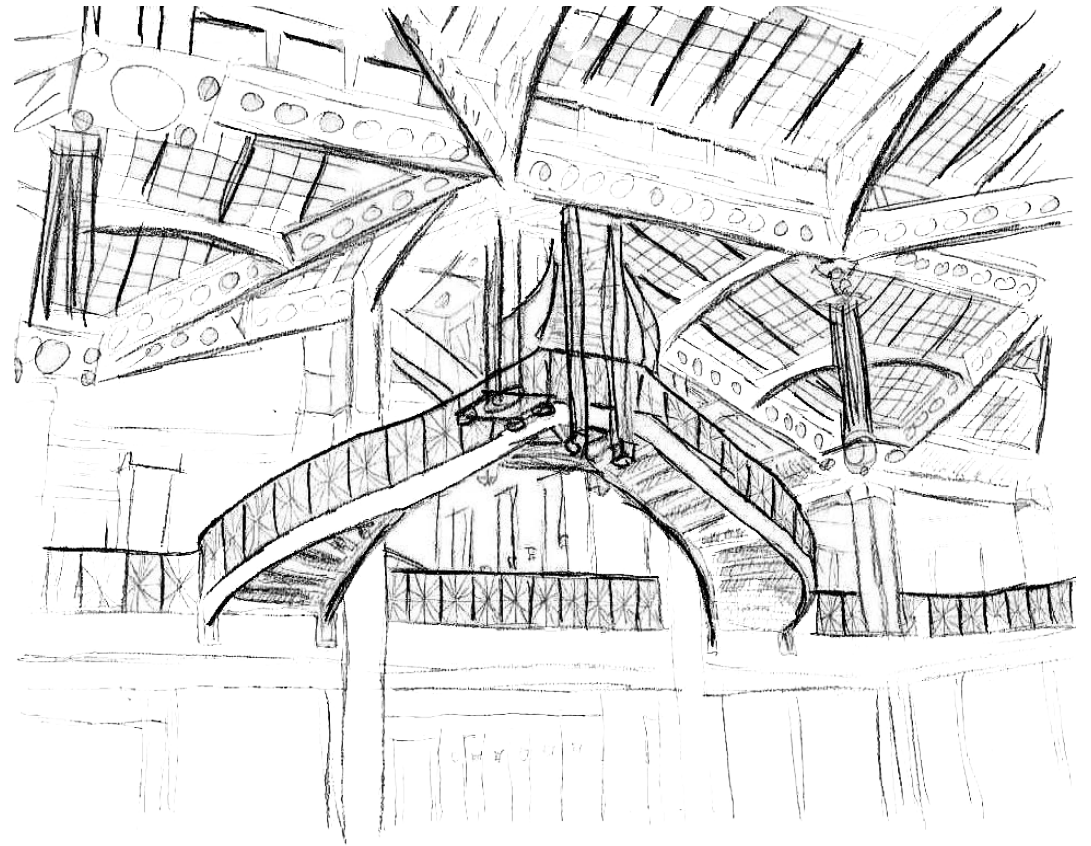


Arch 1121: Duplo Blocks (Pencil)

FIELD SKETCHES



333 N. Michigan Ave. (Pencil)



Lobby of the Rookery (Pencil)



1930 Rt.7 Lockport IL (Pencil)