

Furniture Showroom

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University in partial fulfillment of the
Professional degree of

Master of Architecture

In Architecture

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keyword: tranquility, union, tension, compression.

To Steve,

Thank you for discovering my talent on architecture, helping me to explore it utmost and making the education time filled with challenge and joy.

To Hans,

Thank you for enlightening me in many aspects of my life and shaping me into a stronger designer.

To Patrick,

Thank you for offering sorts of diverse opinions and challenging me.

To my parents,

Thank you for being my biggest support and my fabulous idols.

To Jun,

Thank you for all the listening, accompany and jokes.

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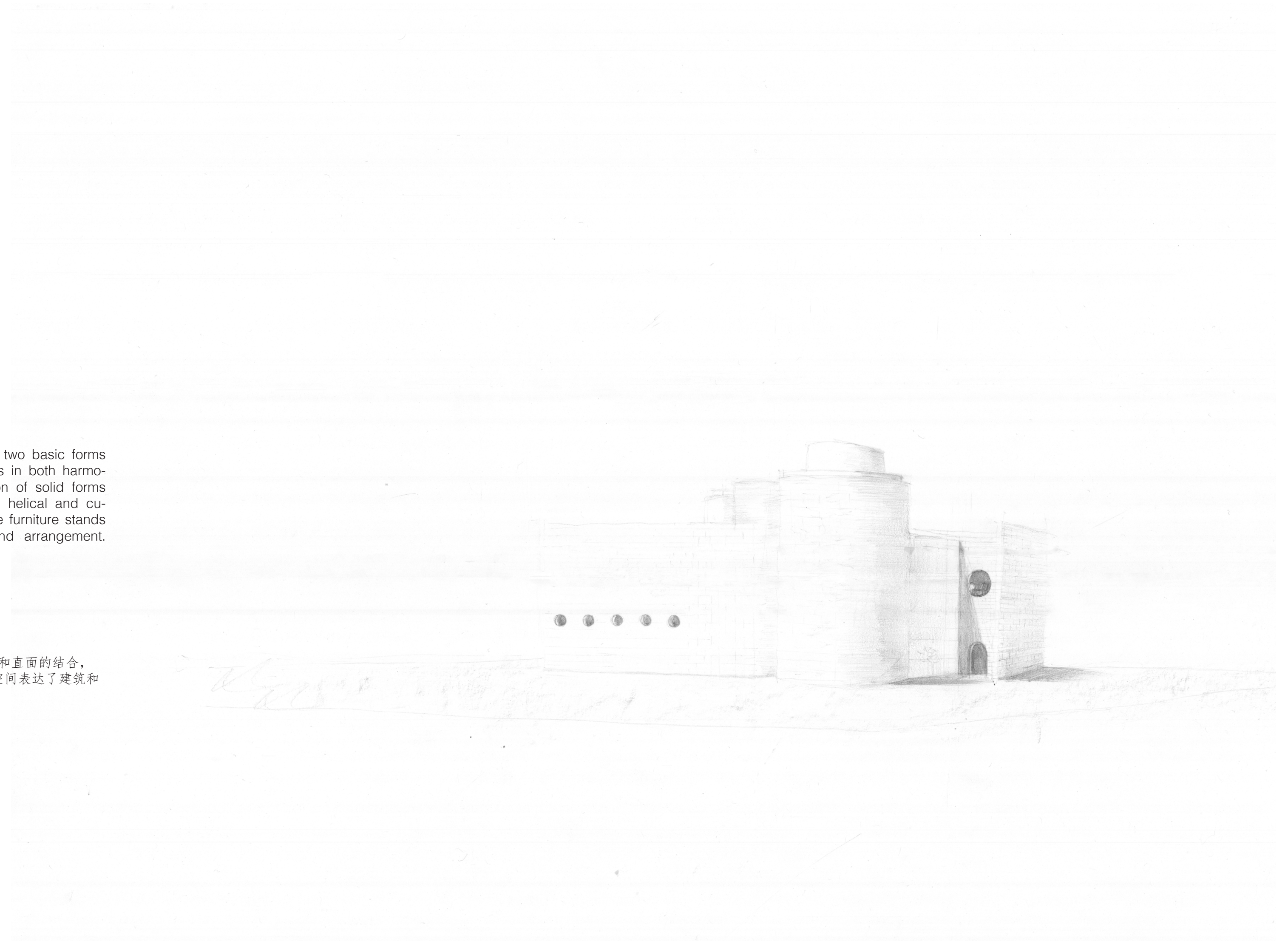
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FURNITURE SHOWROOM

This study of a furniture showroom demonstrates the expression of the relationships of two basic forms of art: furniture and architecture. The geometric form of the work of architecture stands in both harmony and tension with and against its furnishings. Harmony is present through the union of solid forms and the hollows of the rooms and its parts. Through the union of cylindrical, conical, helical and cubic forms, static and dynamic relations activate moments of rest the fluid movement. The furniture stands against this harmonic background and expresses tension through its own form and arrangement.

俱：一起

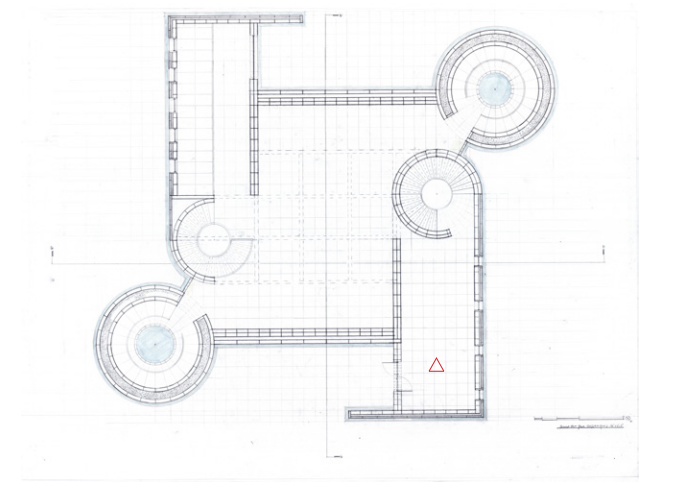
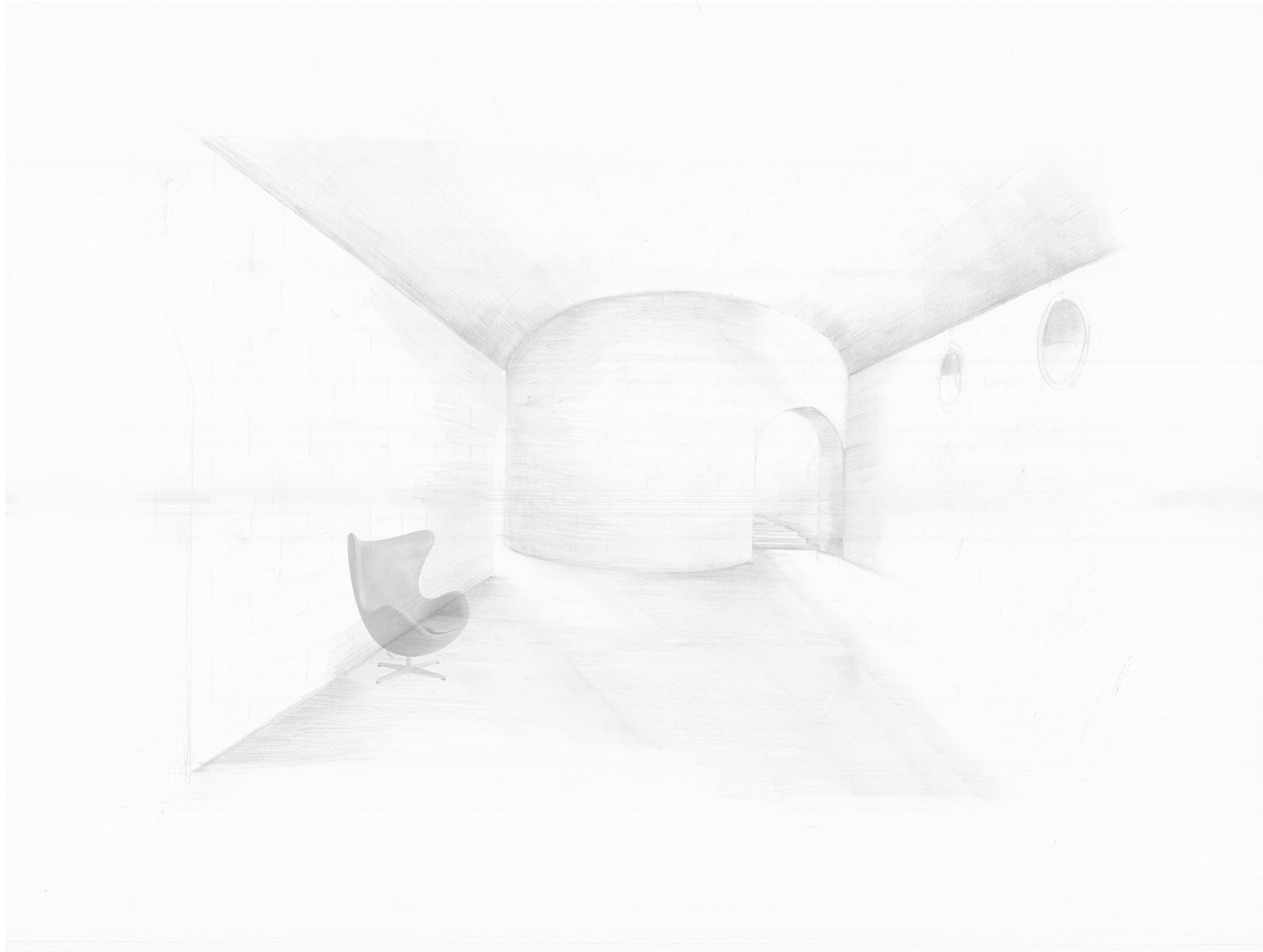
出于自己对于家俱的兴趣爱好，我在毕业设计一年为了家俱设计了一个空间。通过研究曲面和直面的结合，凸面与凹面的面对，以及开阔和闭合的呼应，我在设计中寻找两种艺术形态的整体性。这个空间表达了建筑和家俱之间的和谐与张力。在压力建造的原理下呈现着。



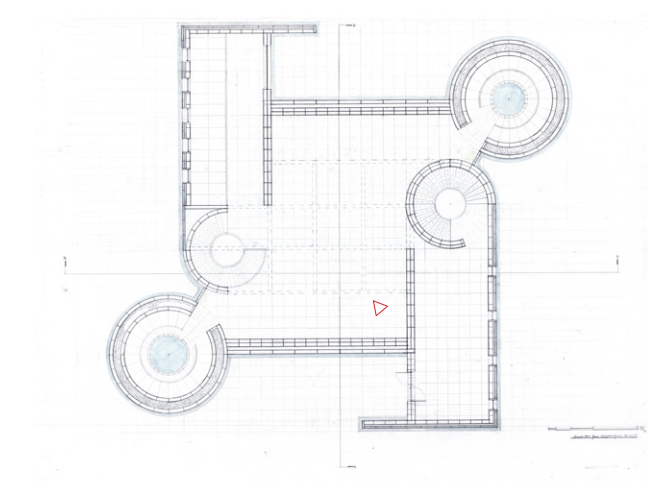
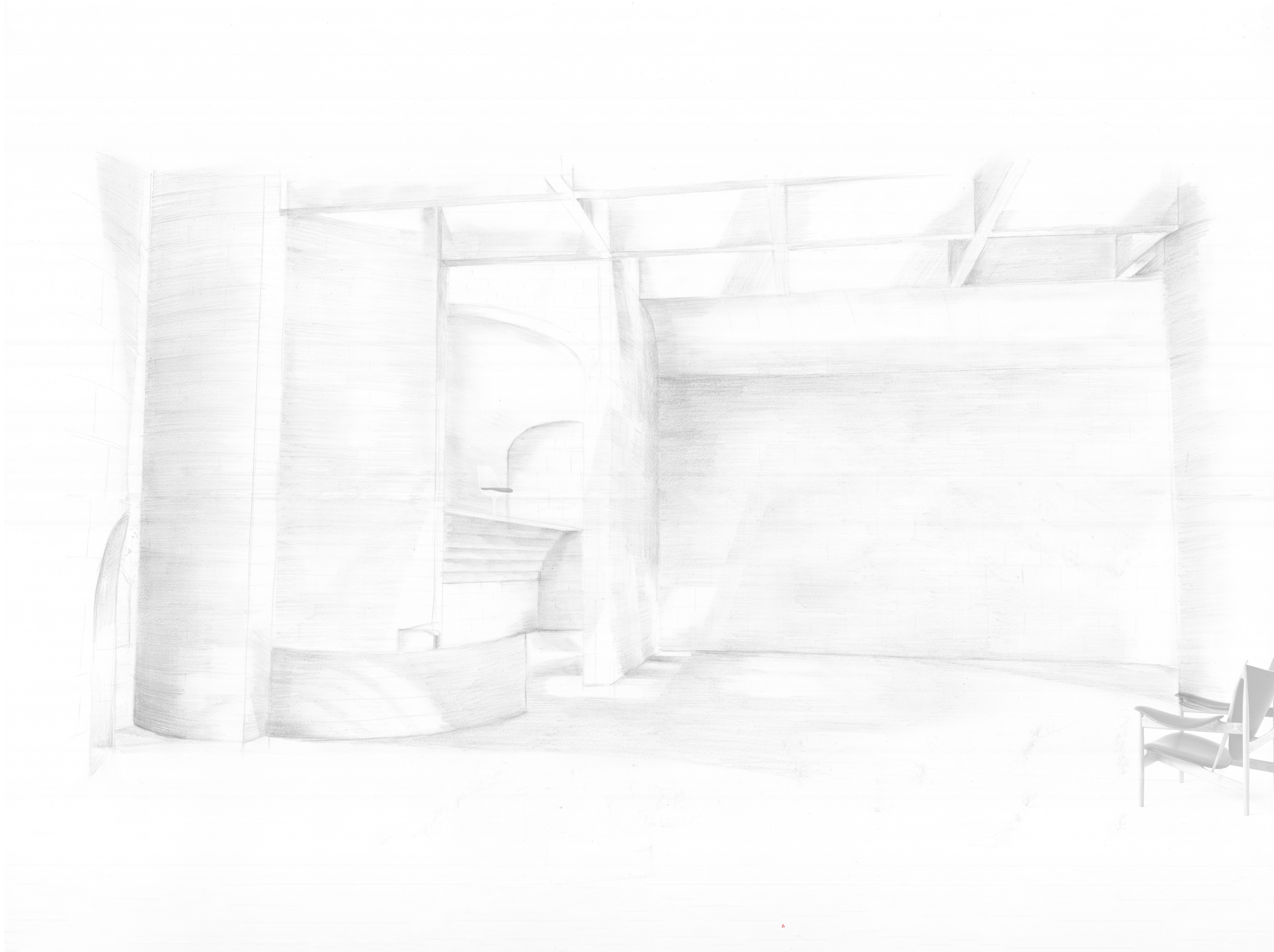
exterior perspective



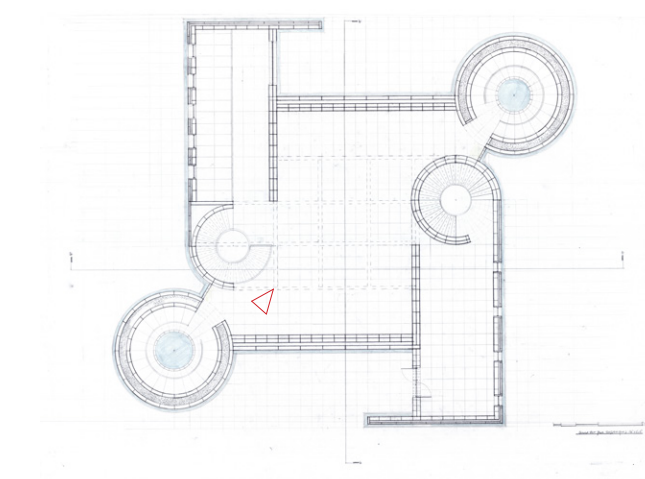
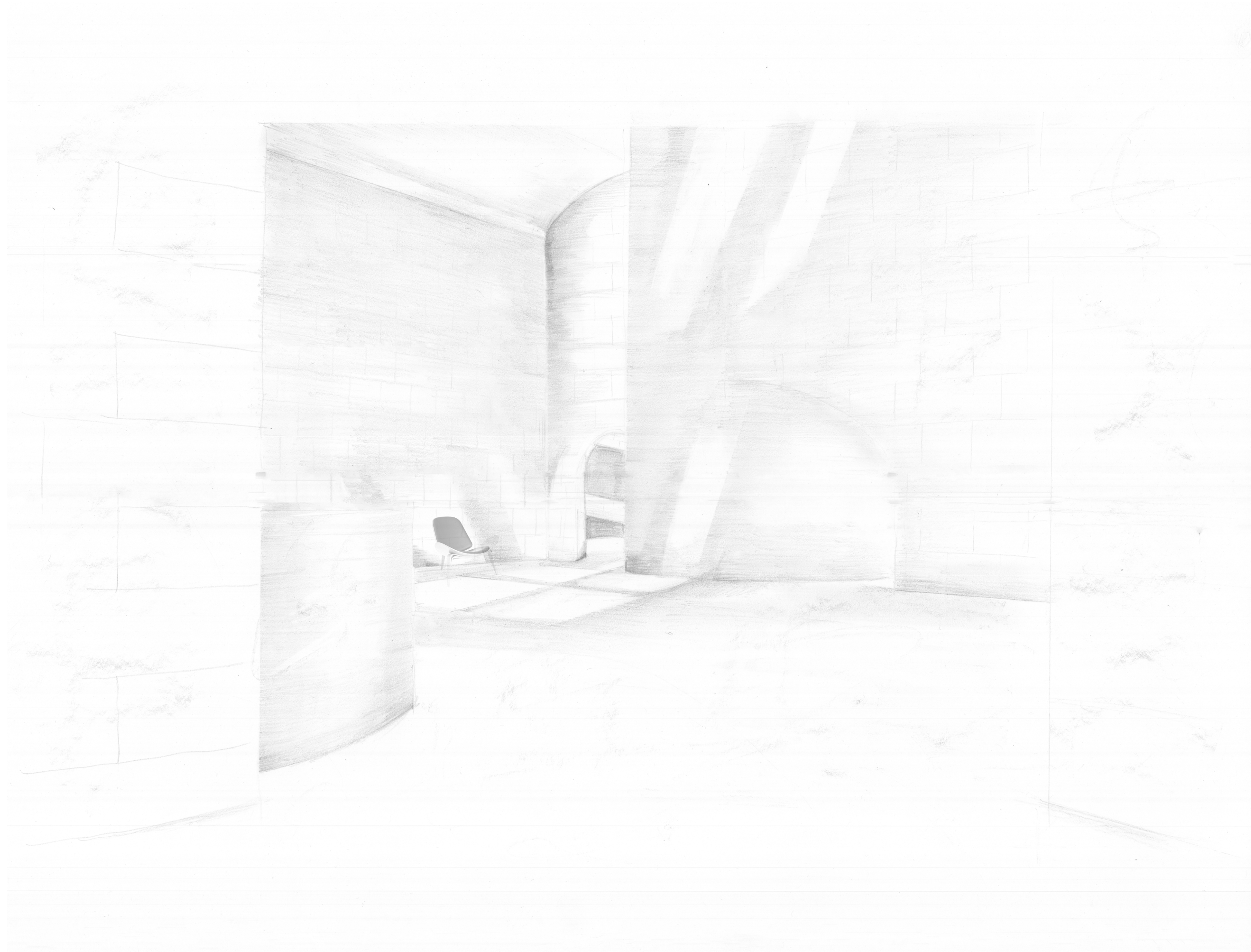
Imaginary view of the showroom



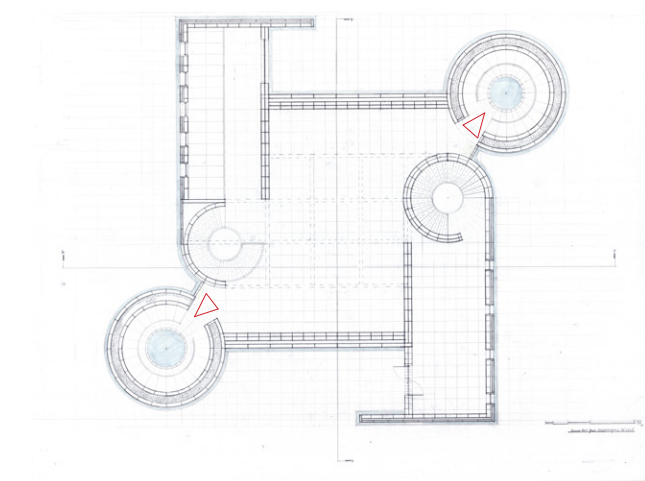
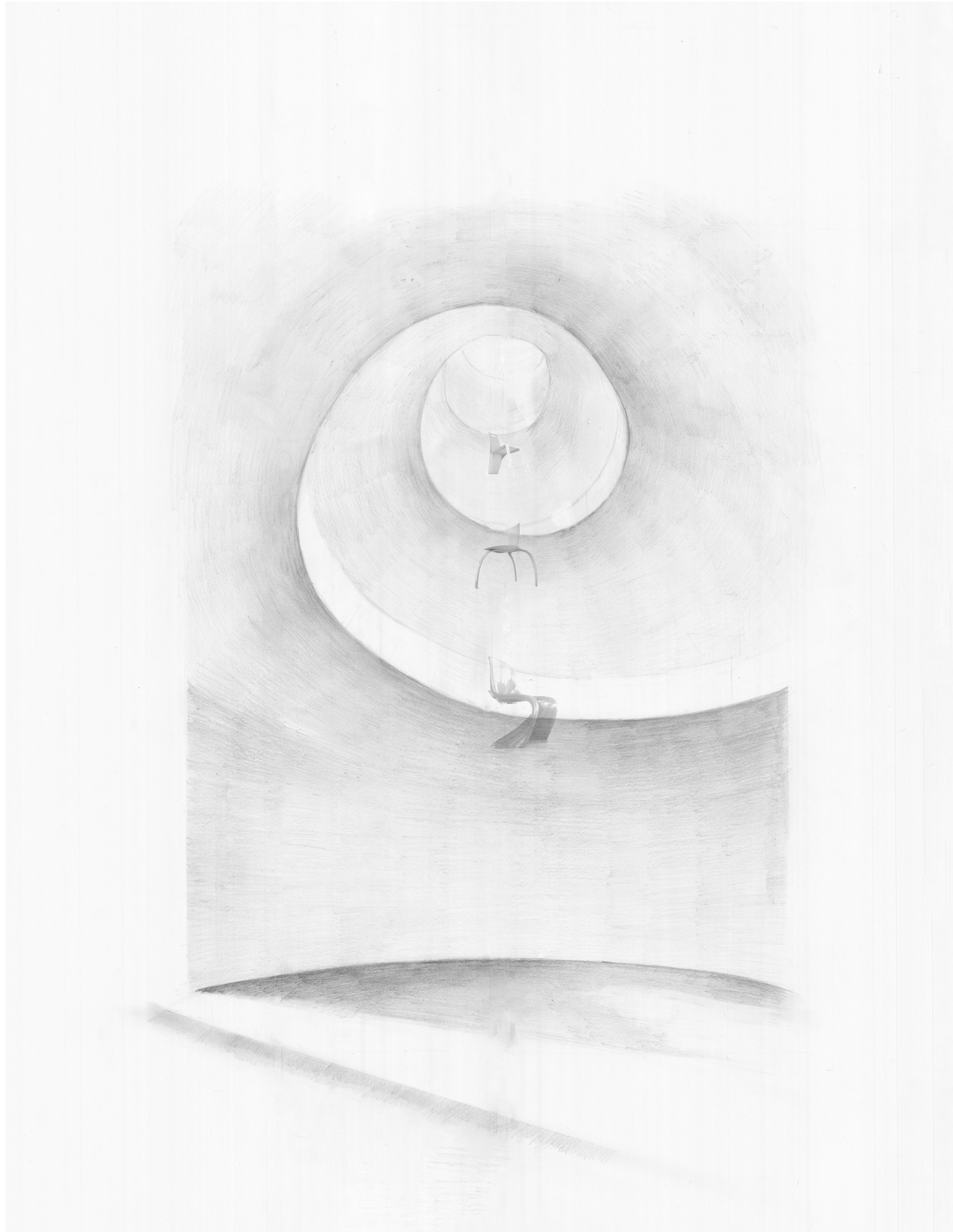
perspective of vault way



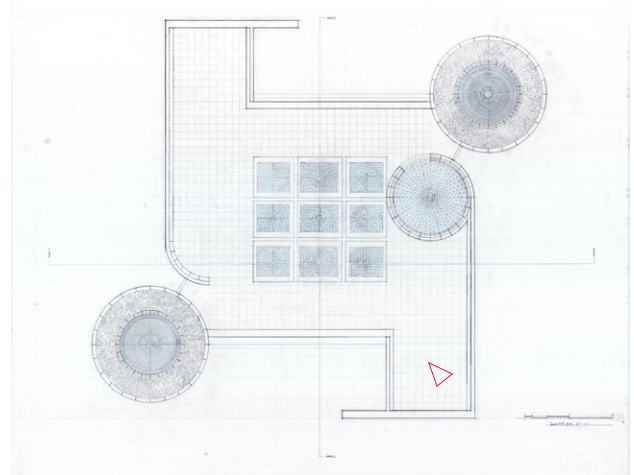
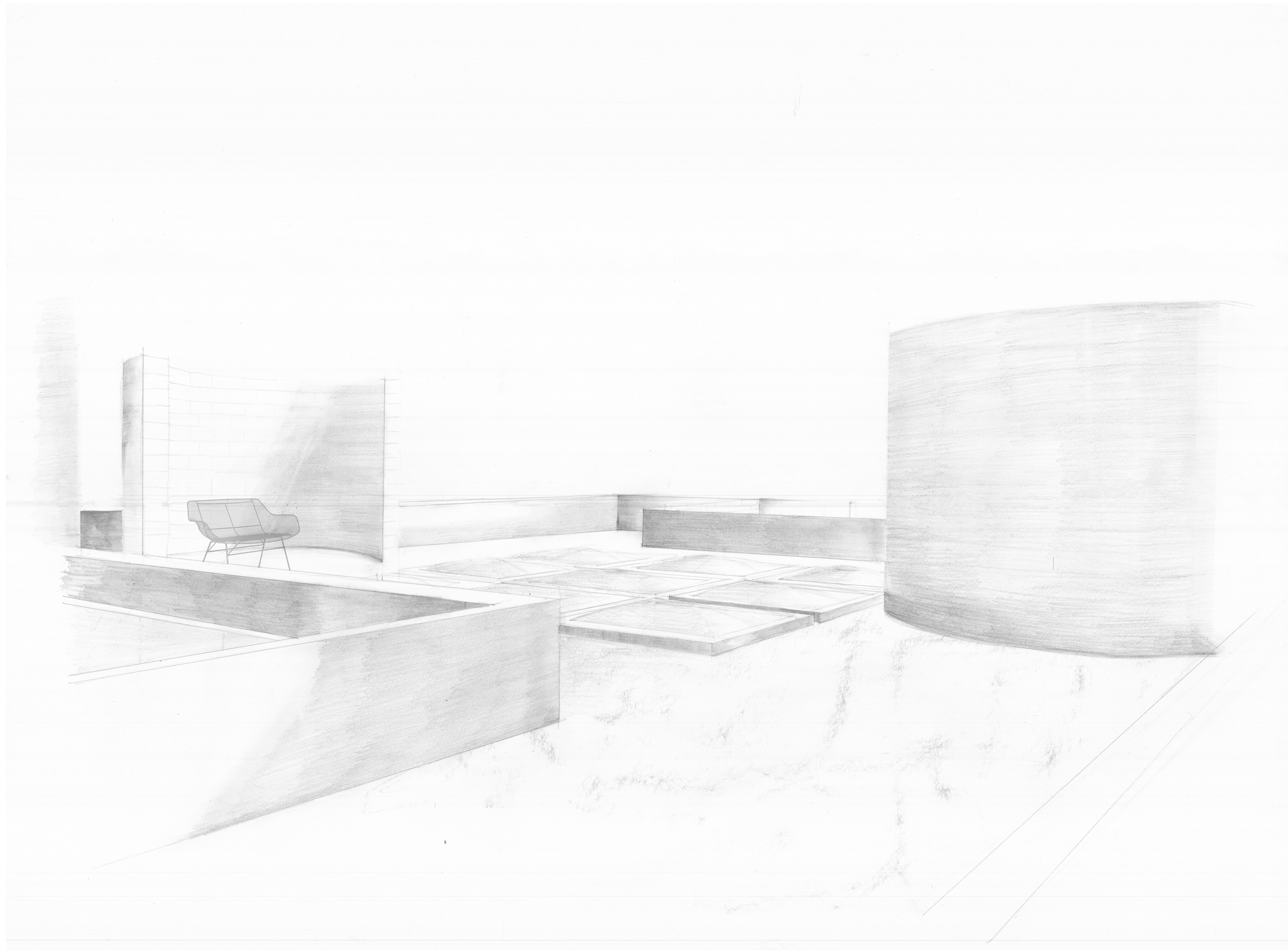
perspective of atrium



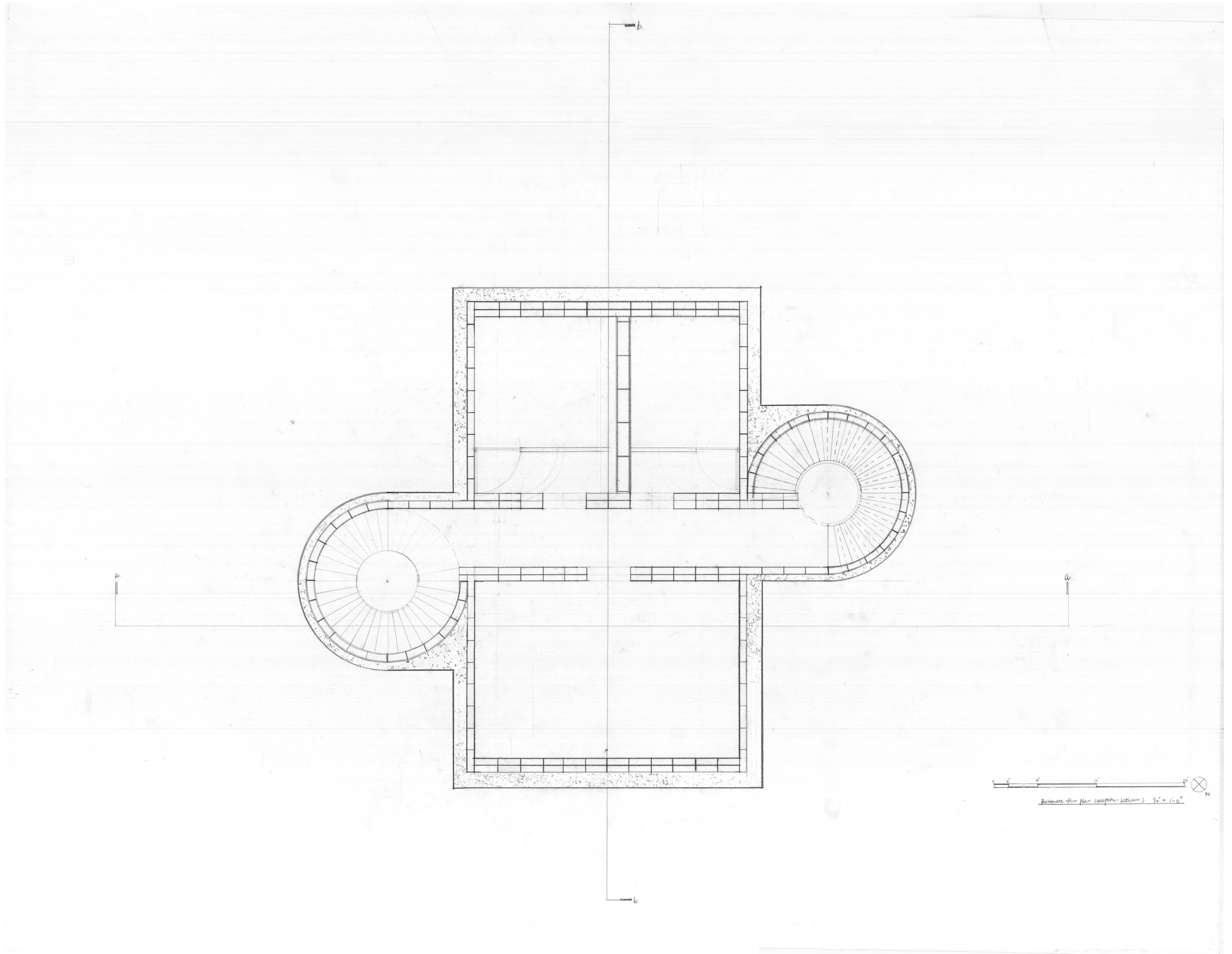
perspective of atrium

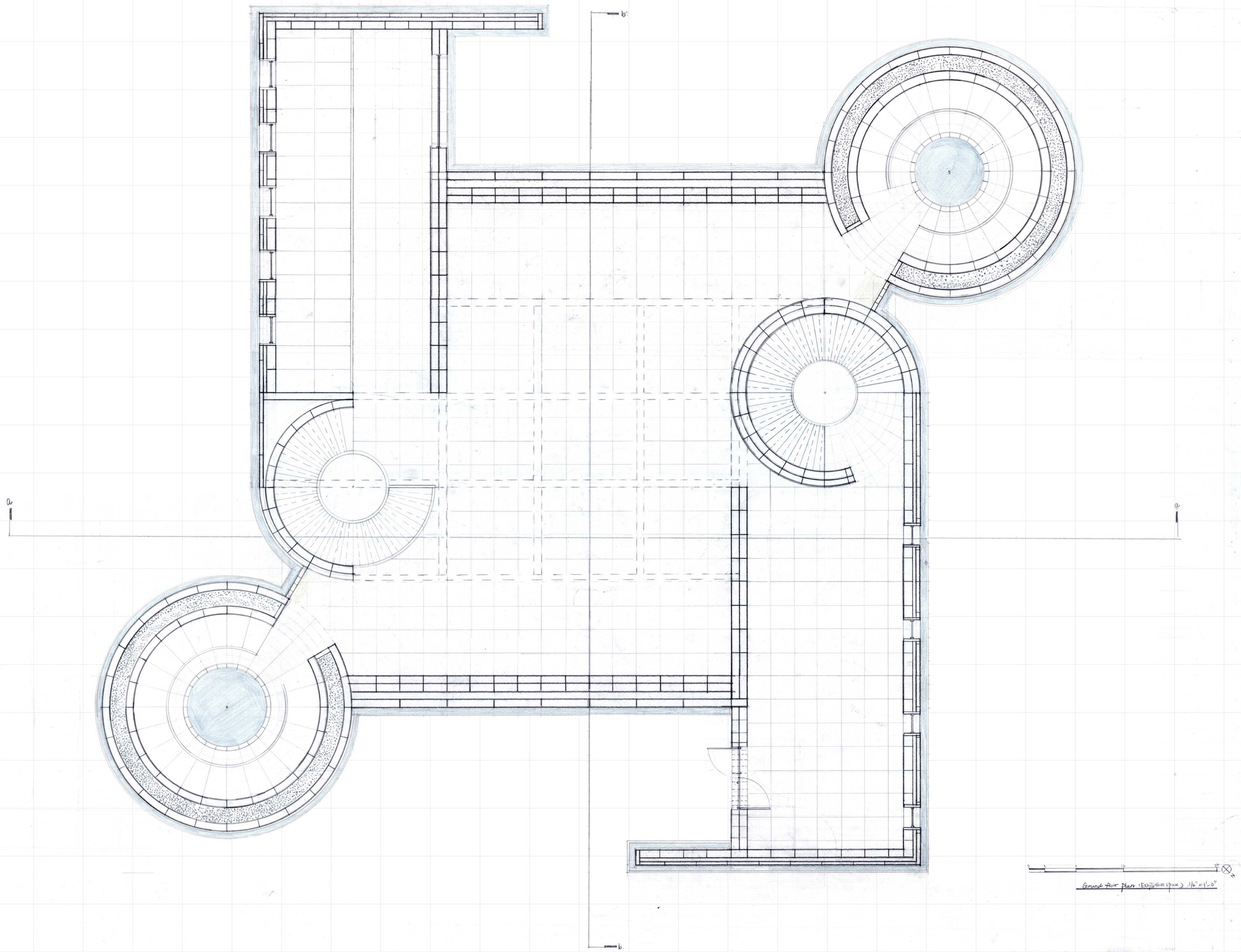


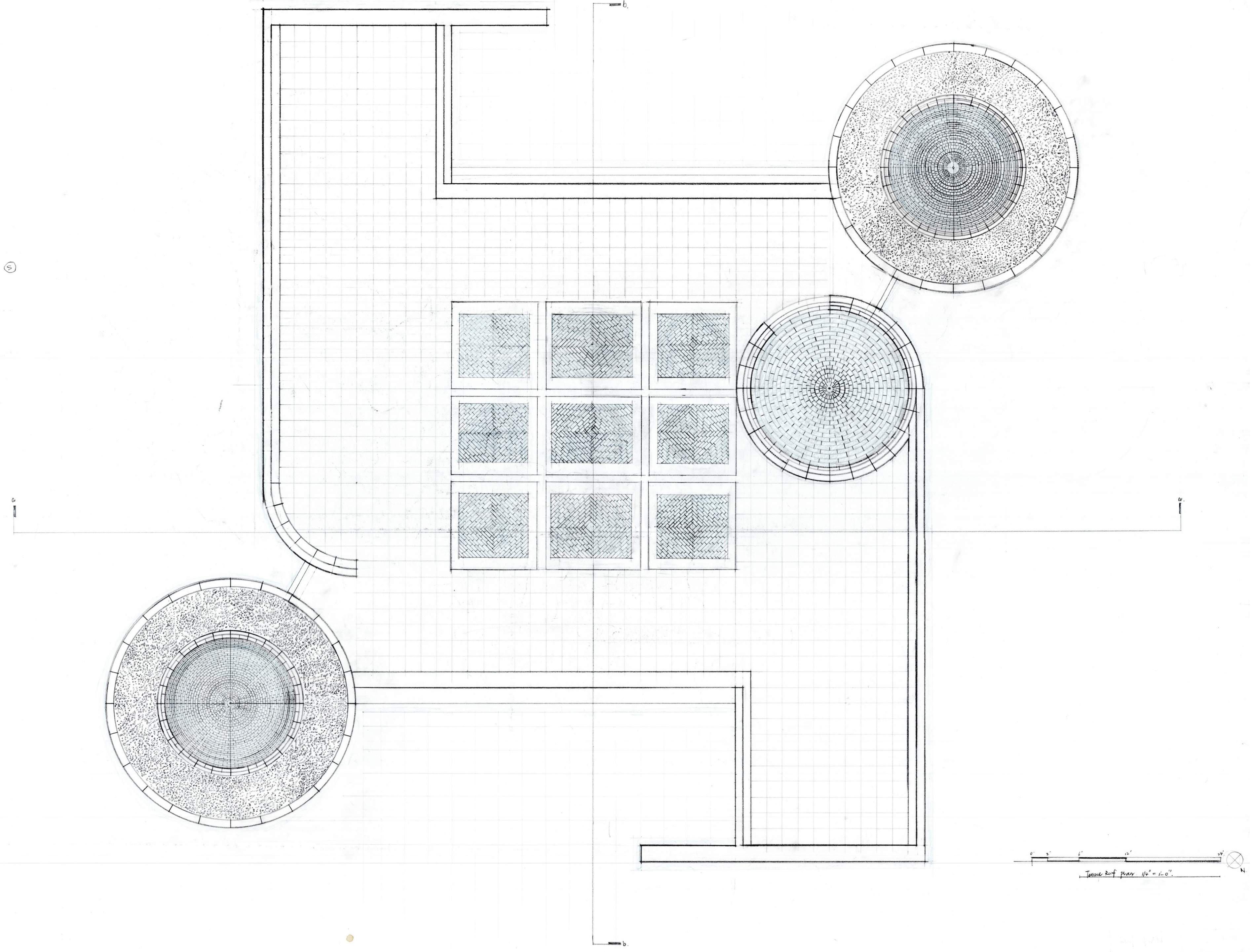
perspective of exhibition tower

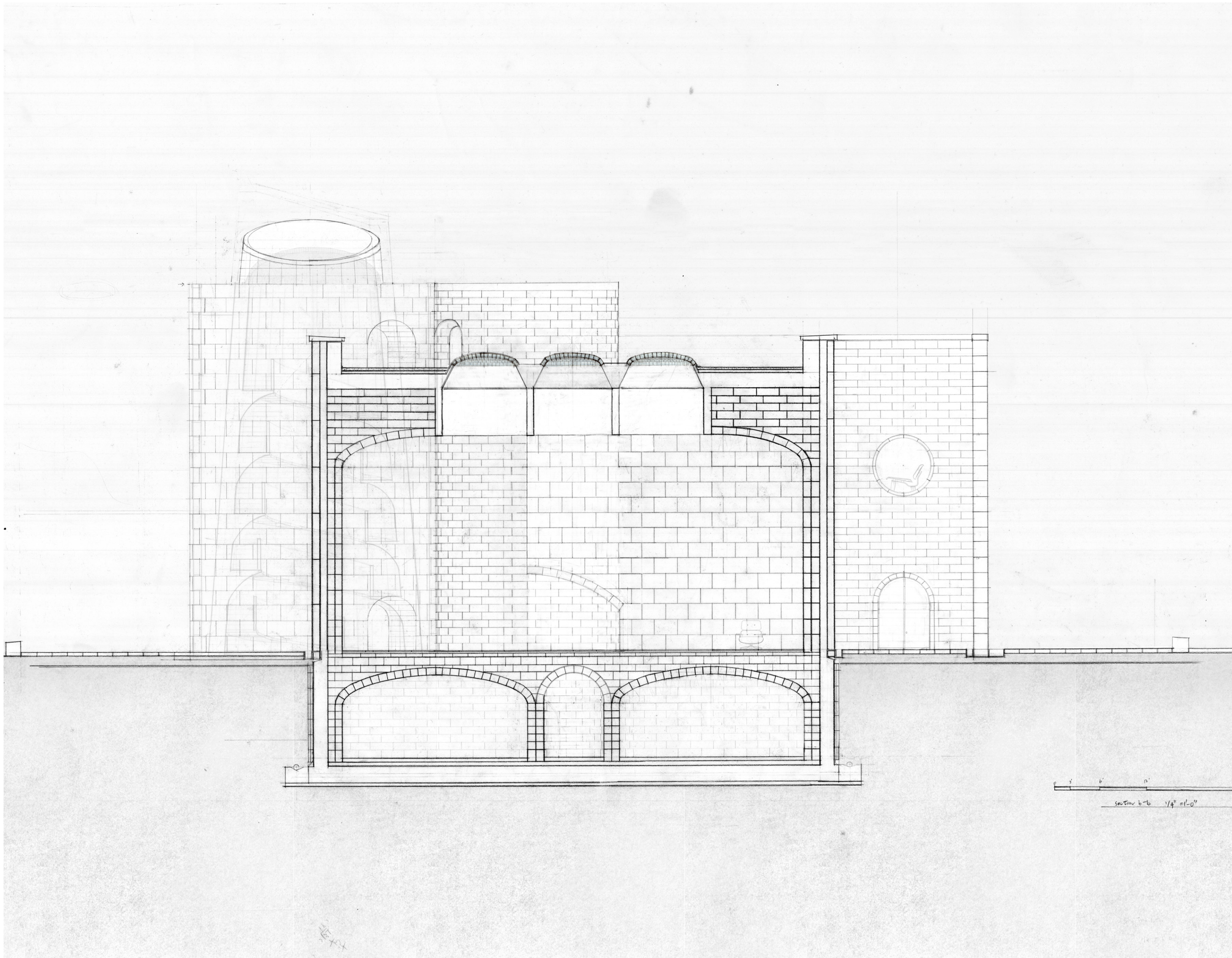


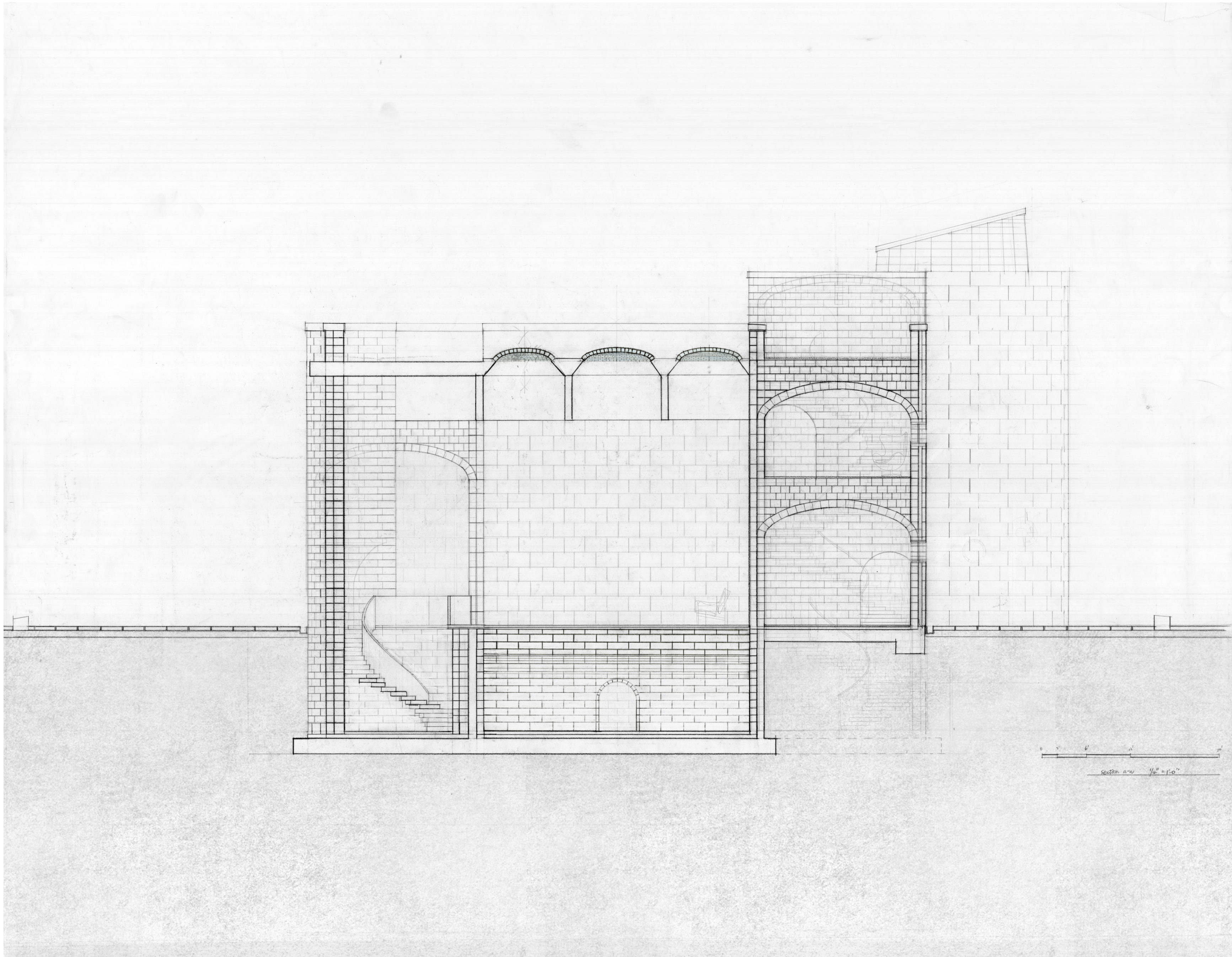
perspective of roof terrace

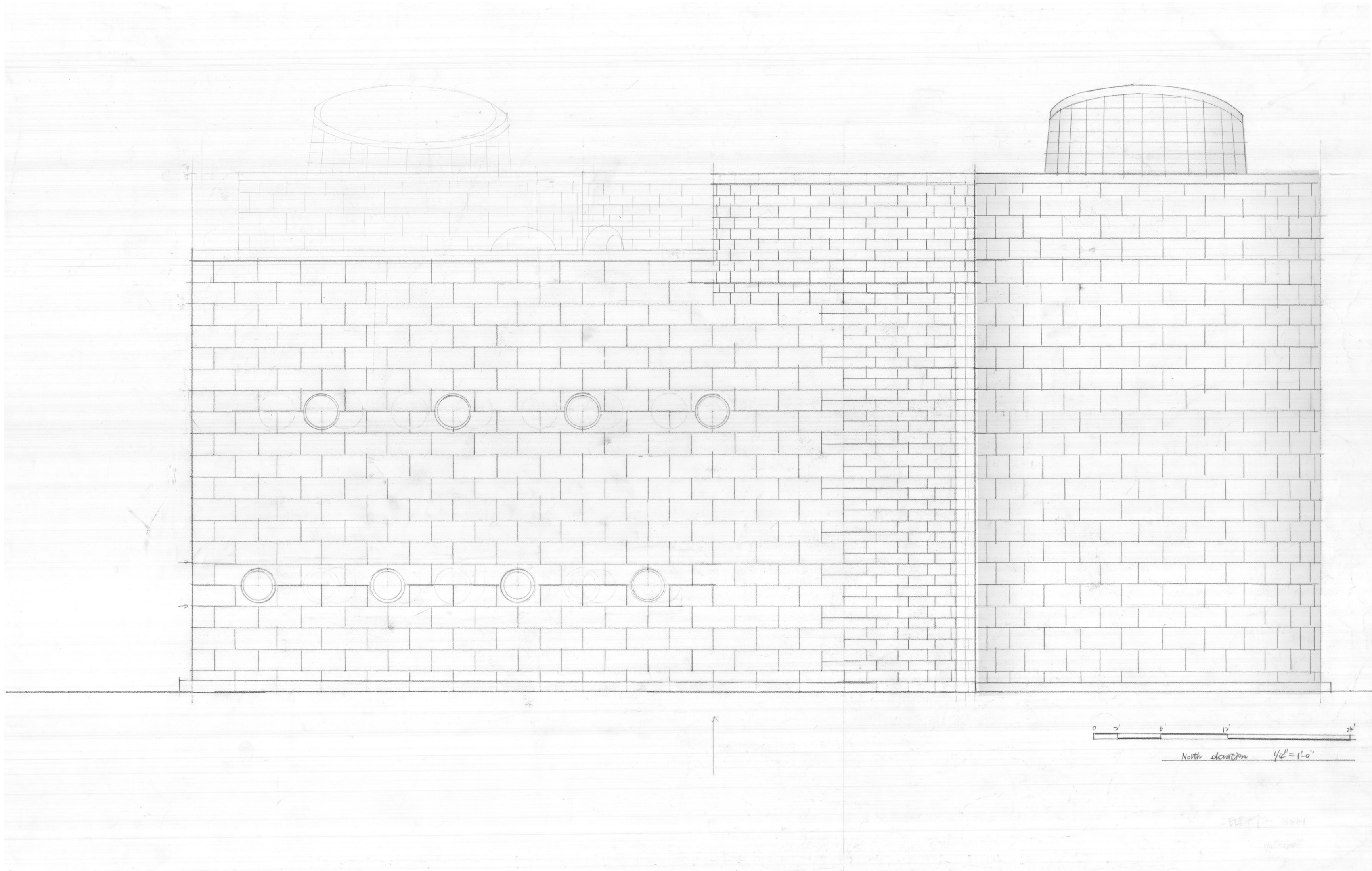


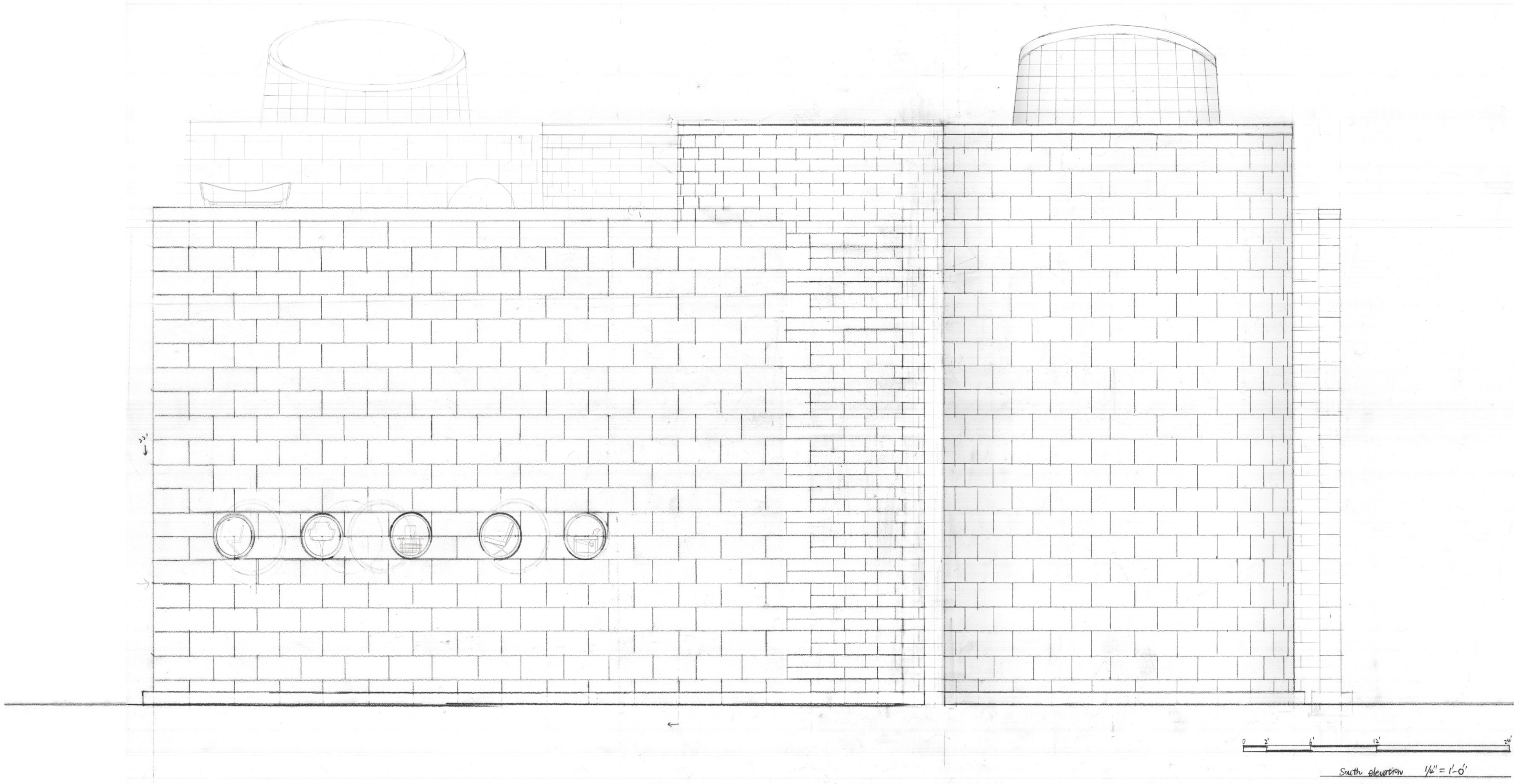


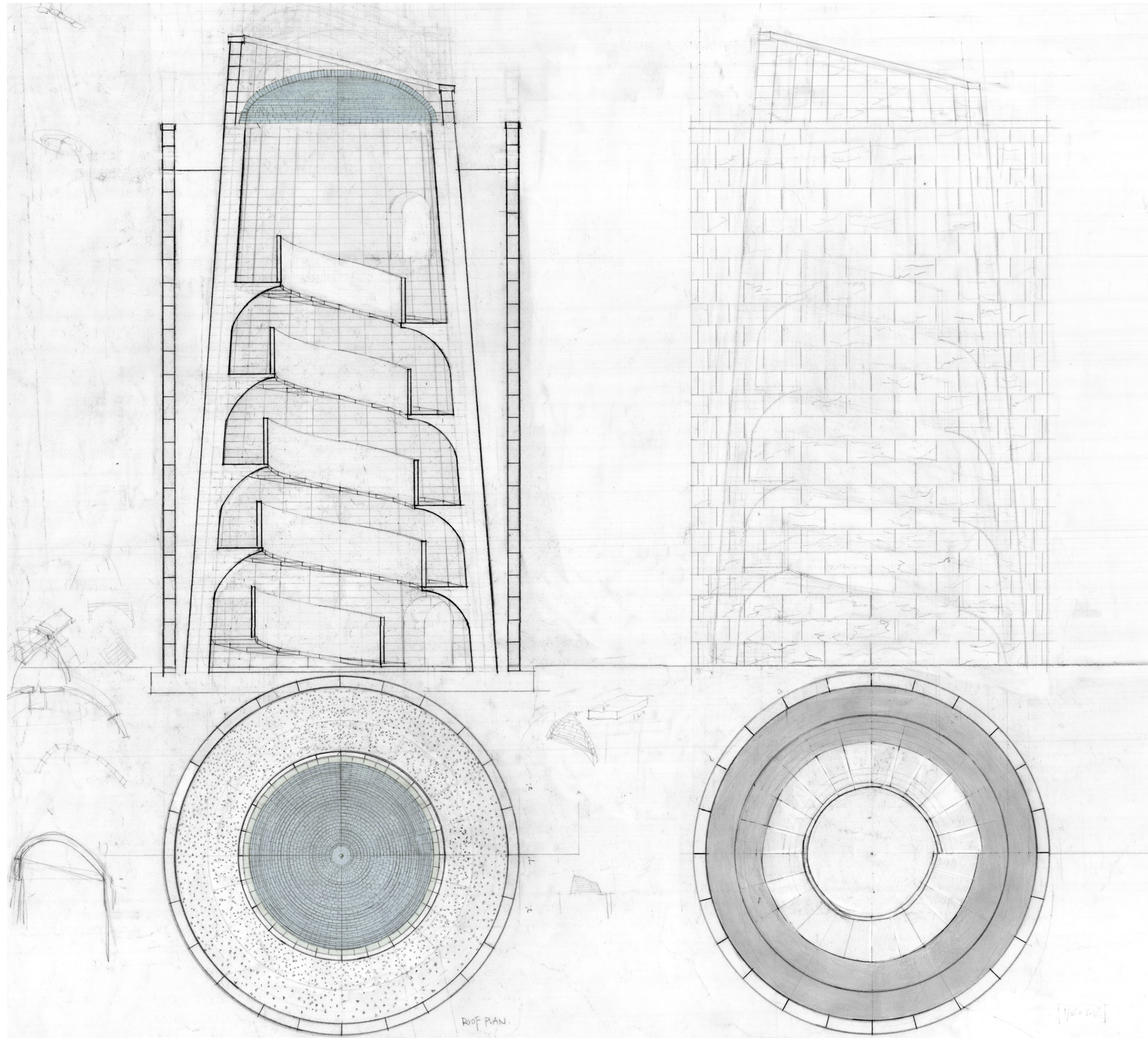








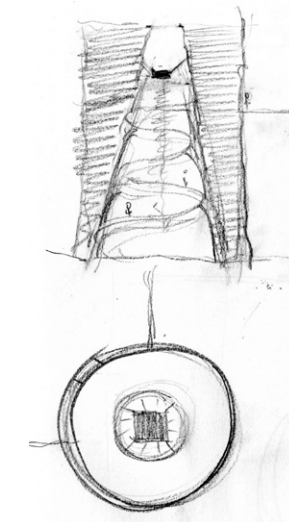




Spiraling exhibition tower

The exhibition tower is the union of two solids: cone and cylinder. A solid spiraling ramp moves from the first floor to the roof terrace. The ramp will be cut from solid marble blocks using the techniques of stereotomy. Advancing digital fabrication techniques will reduce the time required for cutting the stones and for improving the accuracy of complex shapes.

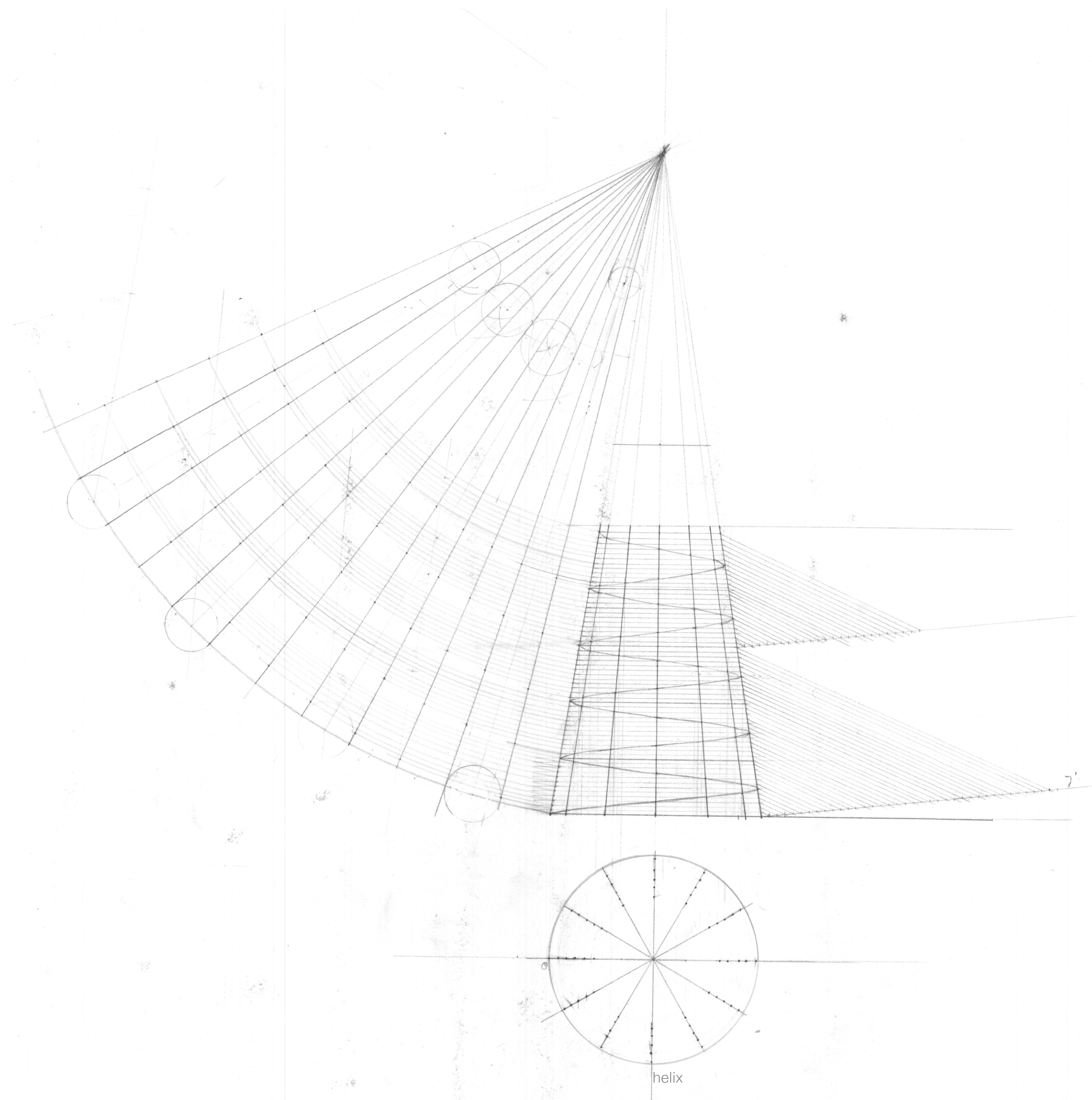
The cone is capped with a dome made from cast glass blocks.

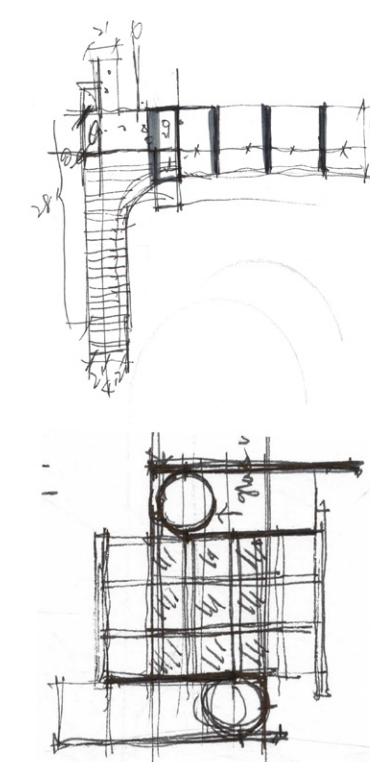
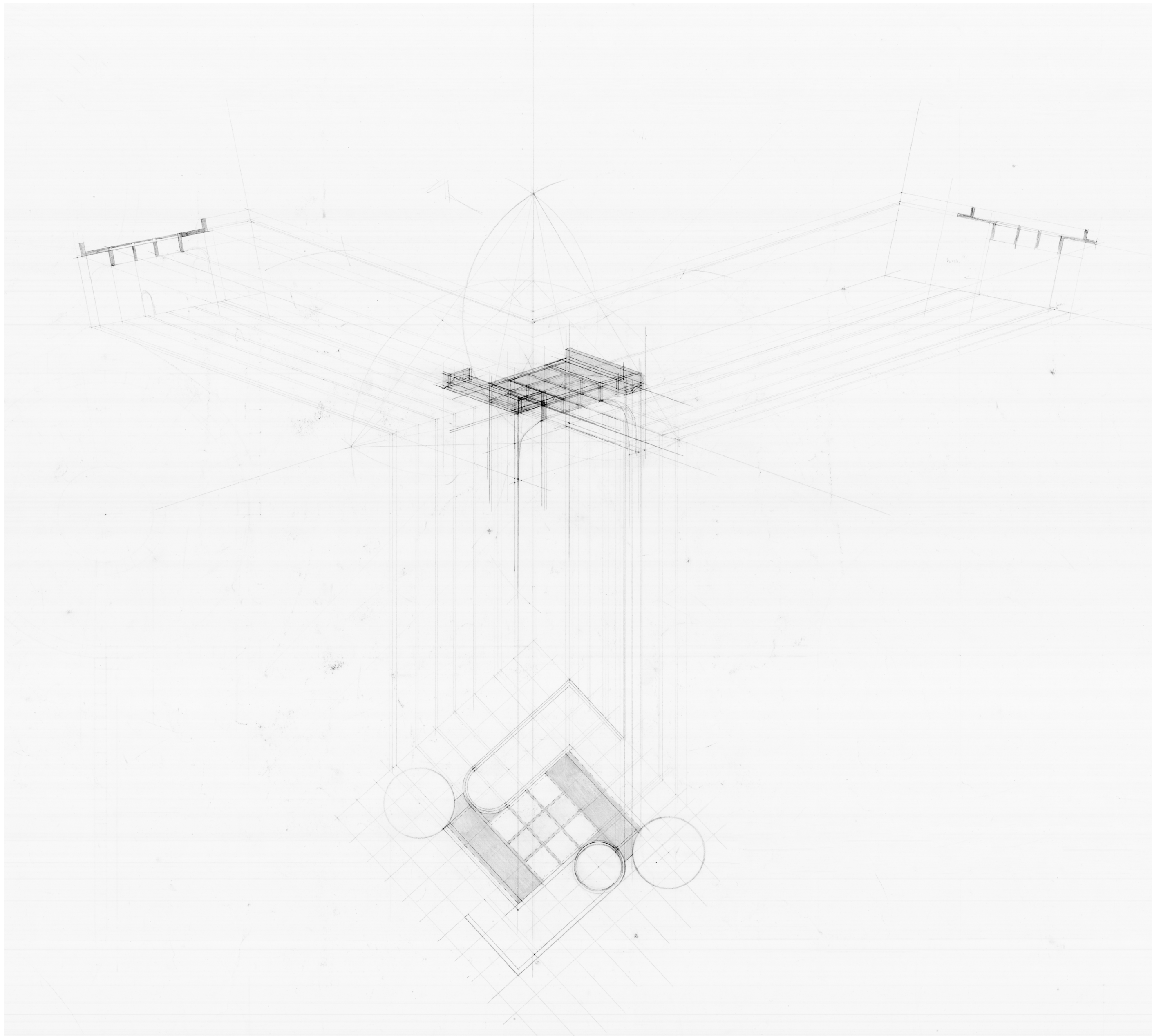


exhibition tower

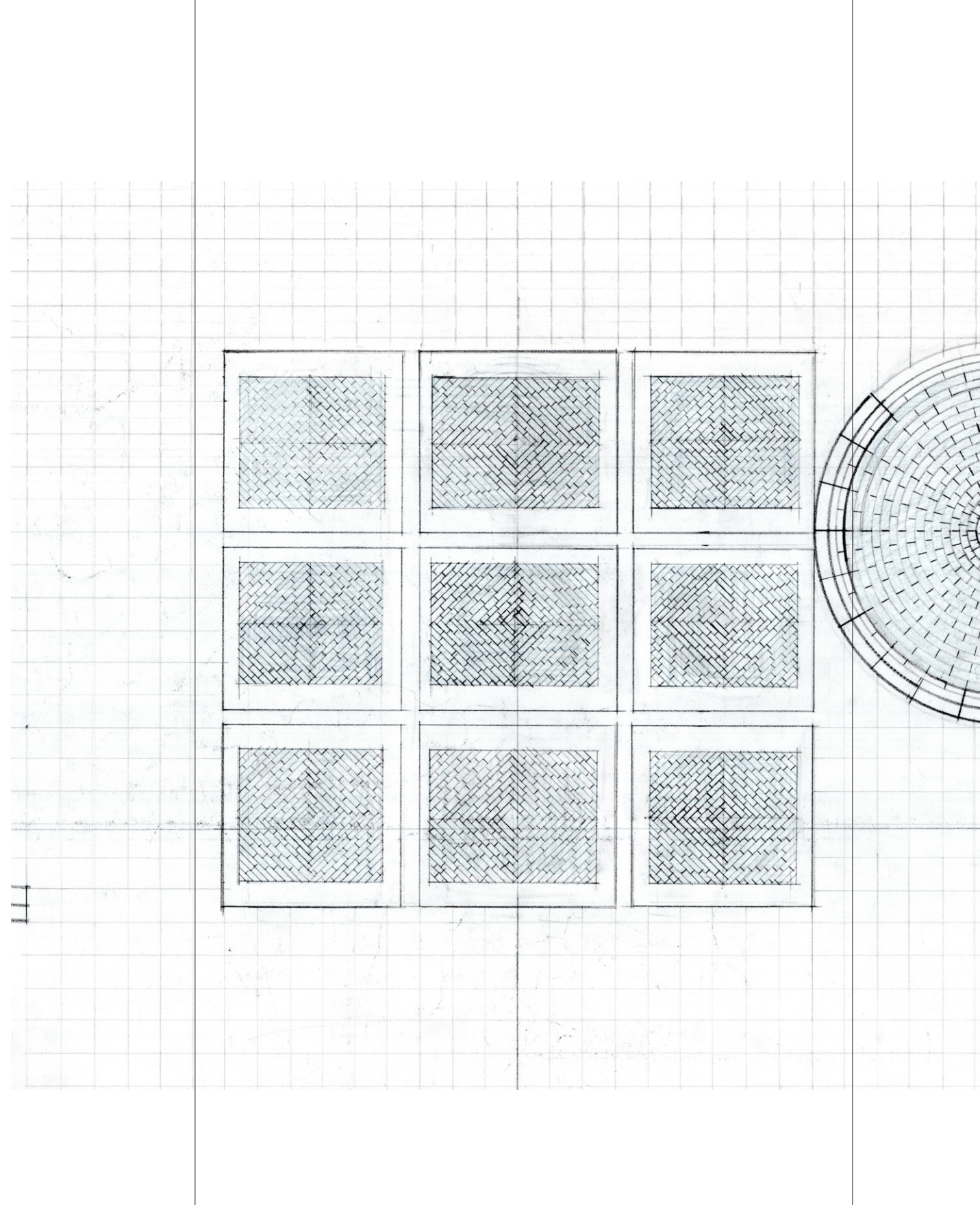
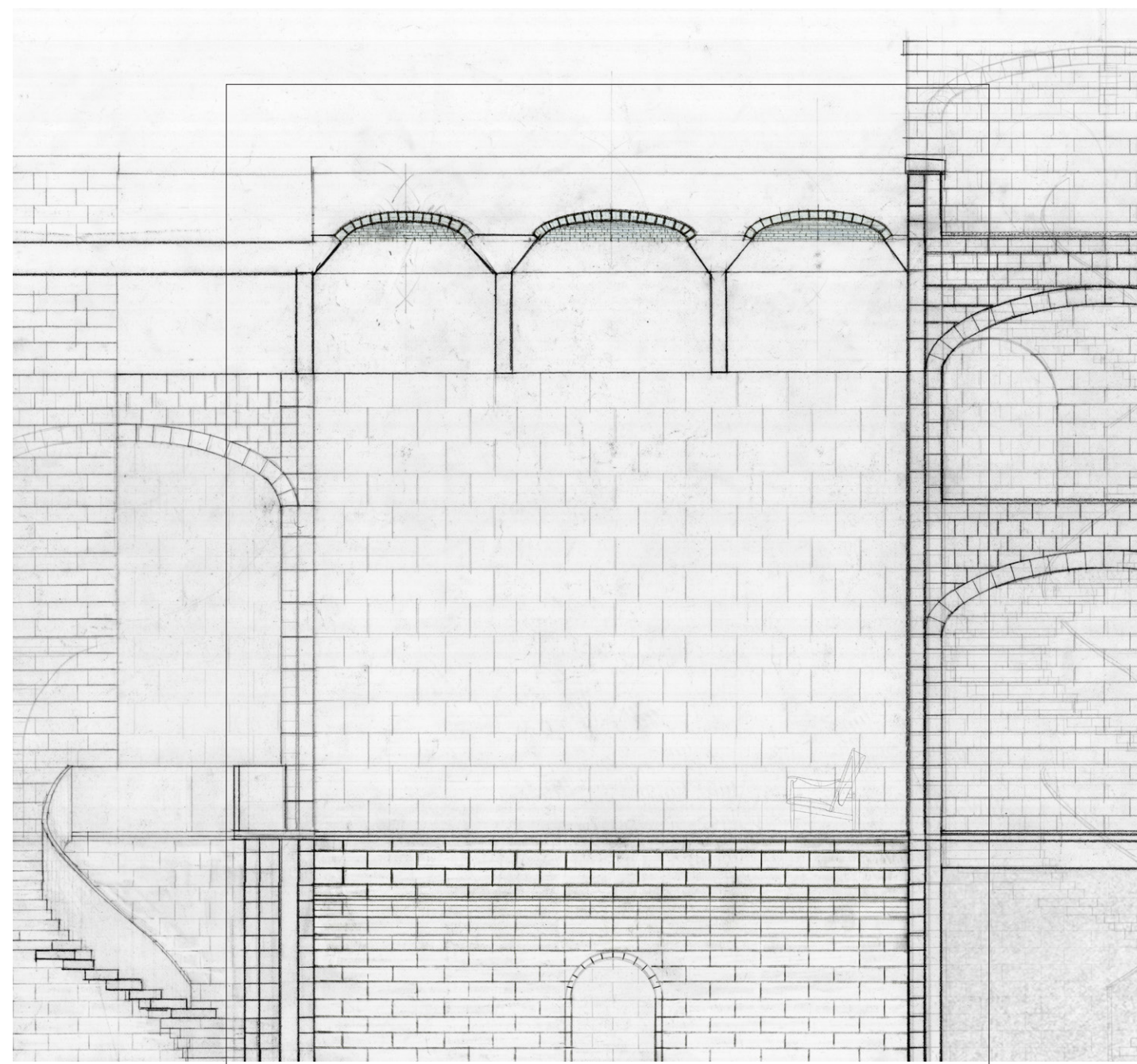
section
roof plan

elevation
plan





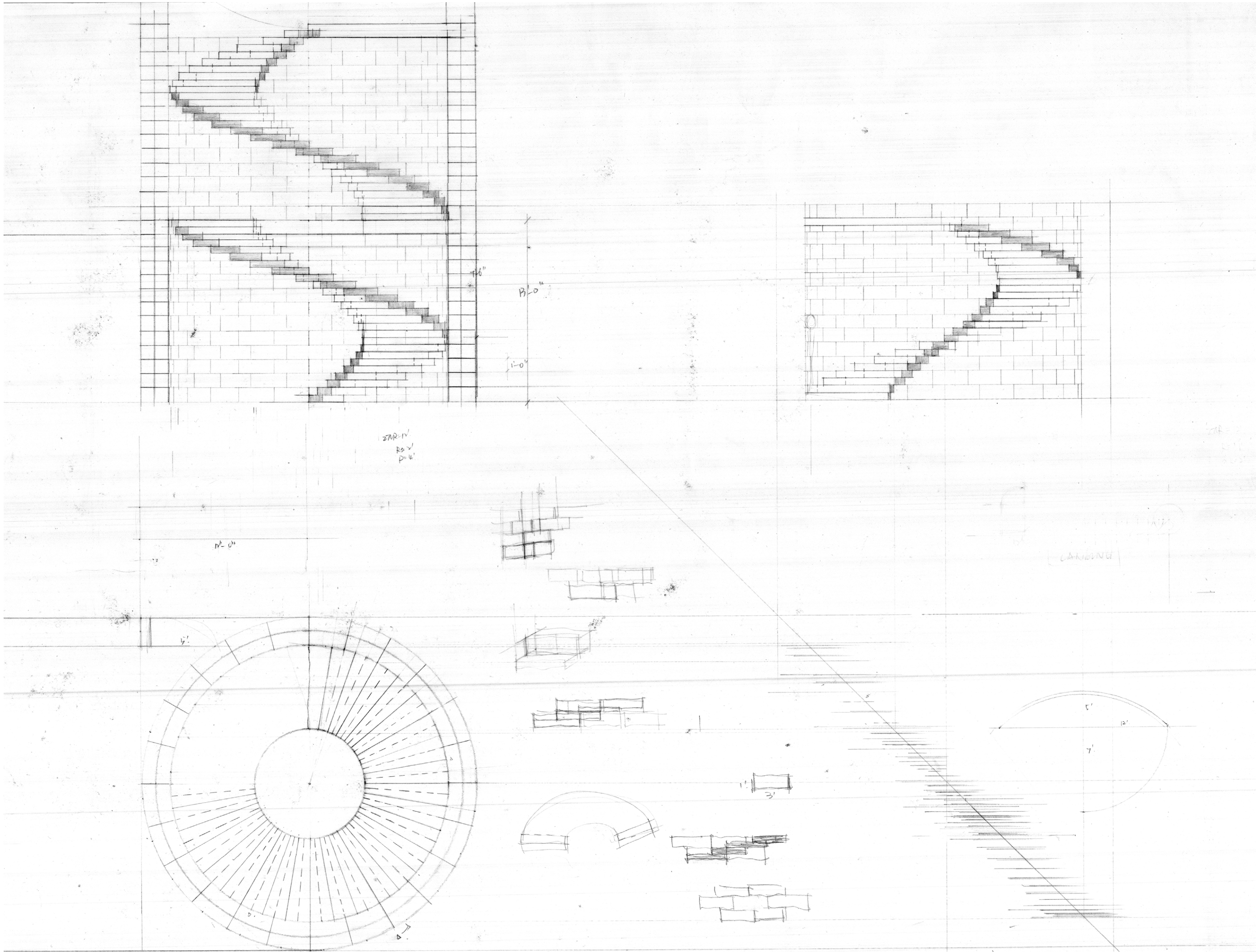
roof structure - lattice beam structure

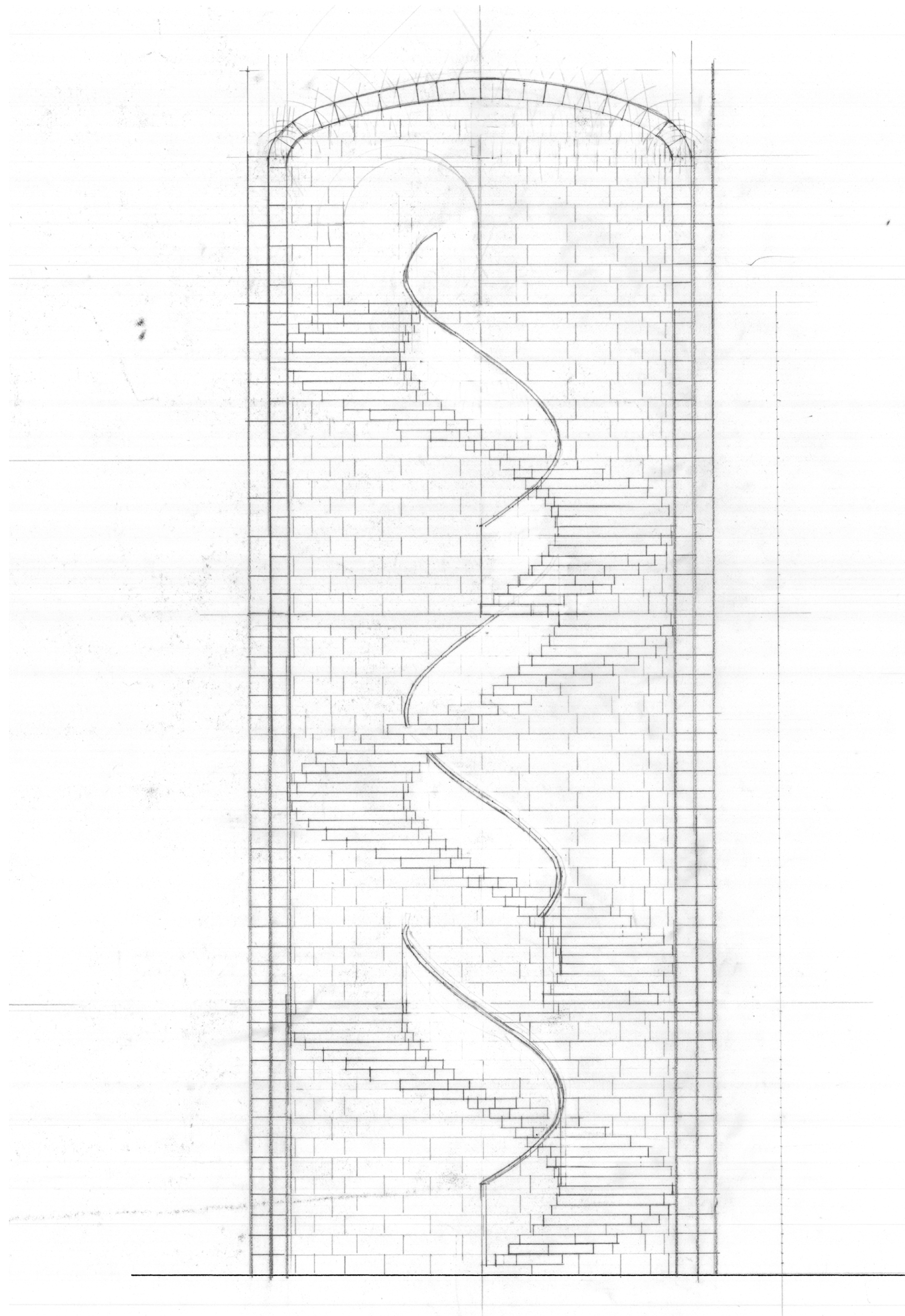


from top: section of skylight in atrium
plan of skylight

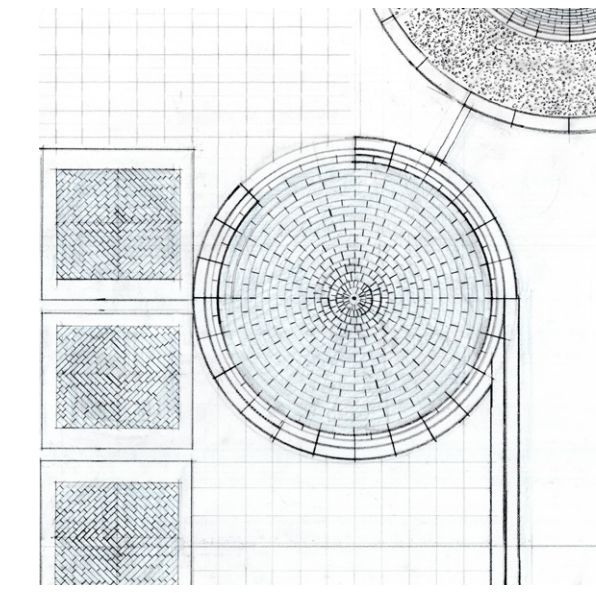
Catalan vault of glass blocks skylight

The skylight on the top of the lattice beam structure is made with Catalan vault structure on the rectangular footprints. The Catalan vault is made of cast glass blocks consistet with to the compressive construction as a whole. Nine Catalan glass vaults also bring a the unique and beautiful moment on the roof through its character of transparency, complementing the reflective marble tower on the corners.



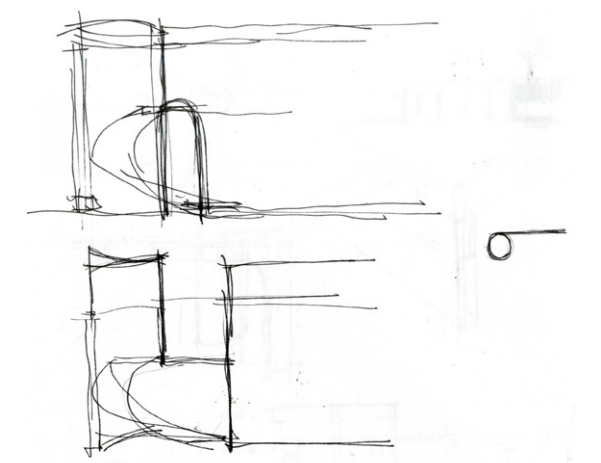
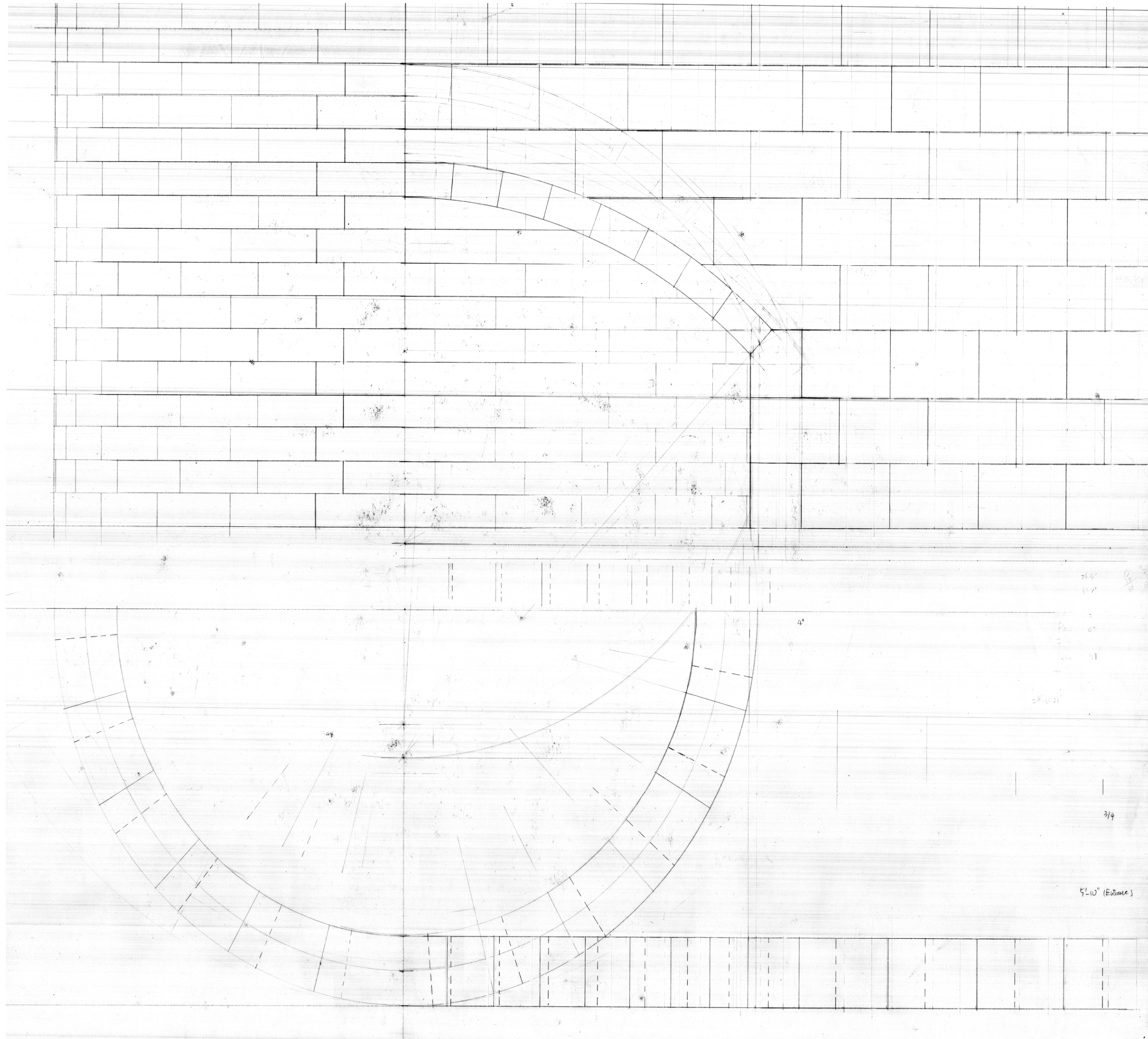


Helical stair tower

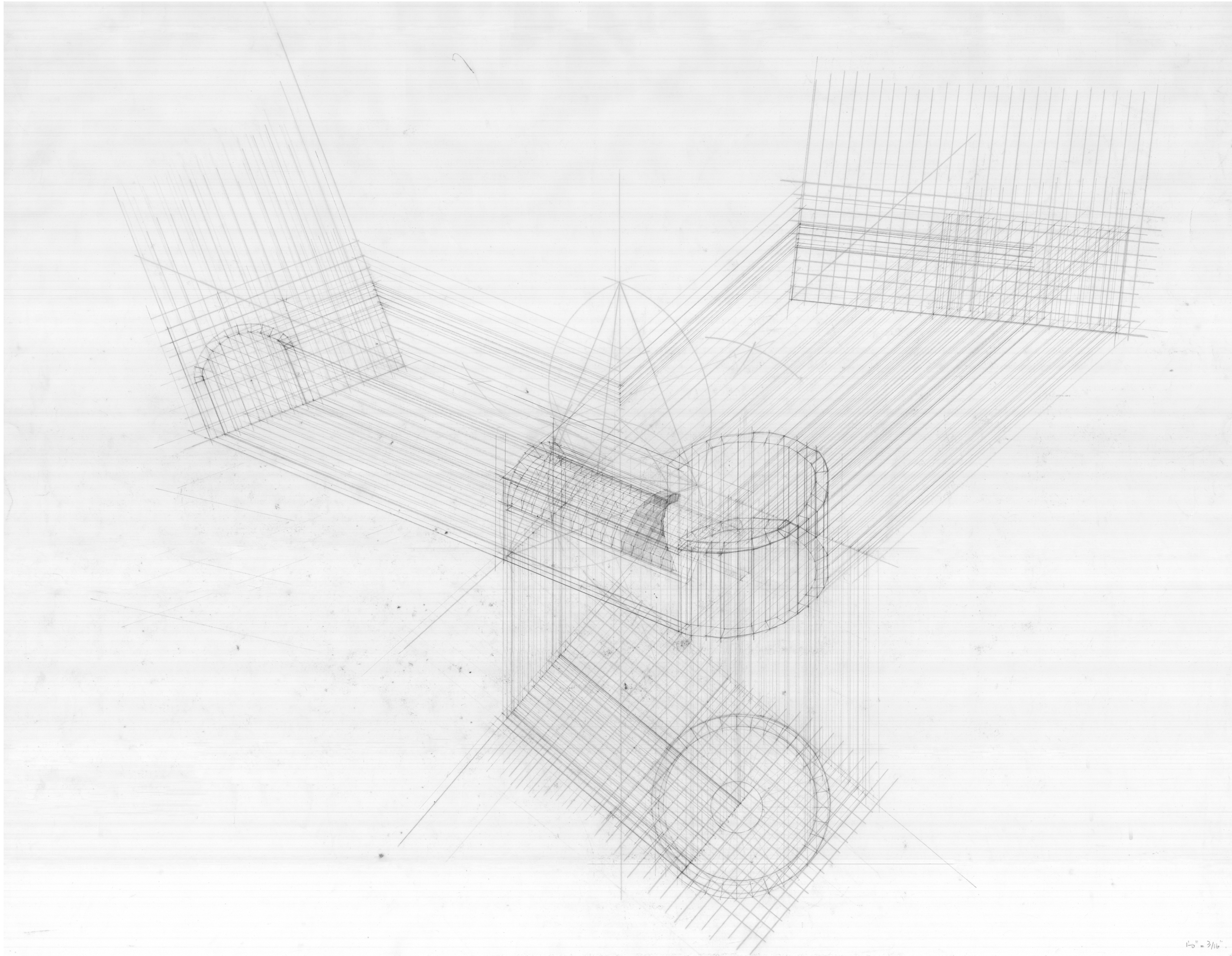


Helical stair tower

The cylindrical stairwell encompasses the helical stairs leading from the basement all the way to the terrace roof. Each tread is solid marble, overlapping and engaging into solid marble walls to demonstrate its fluidity.



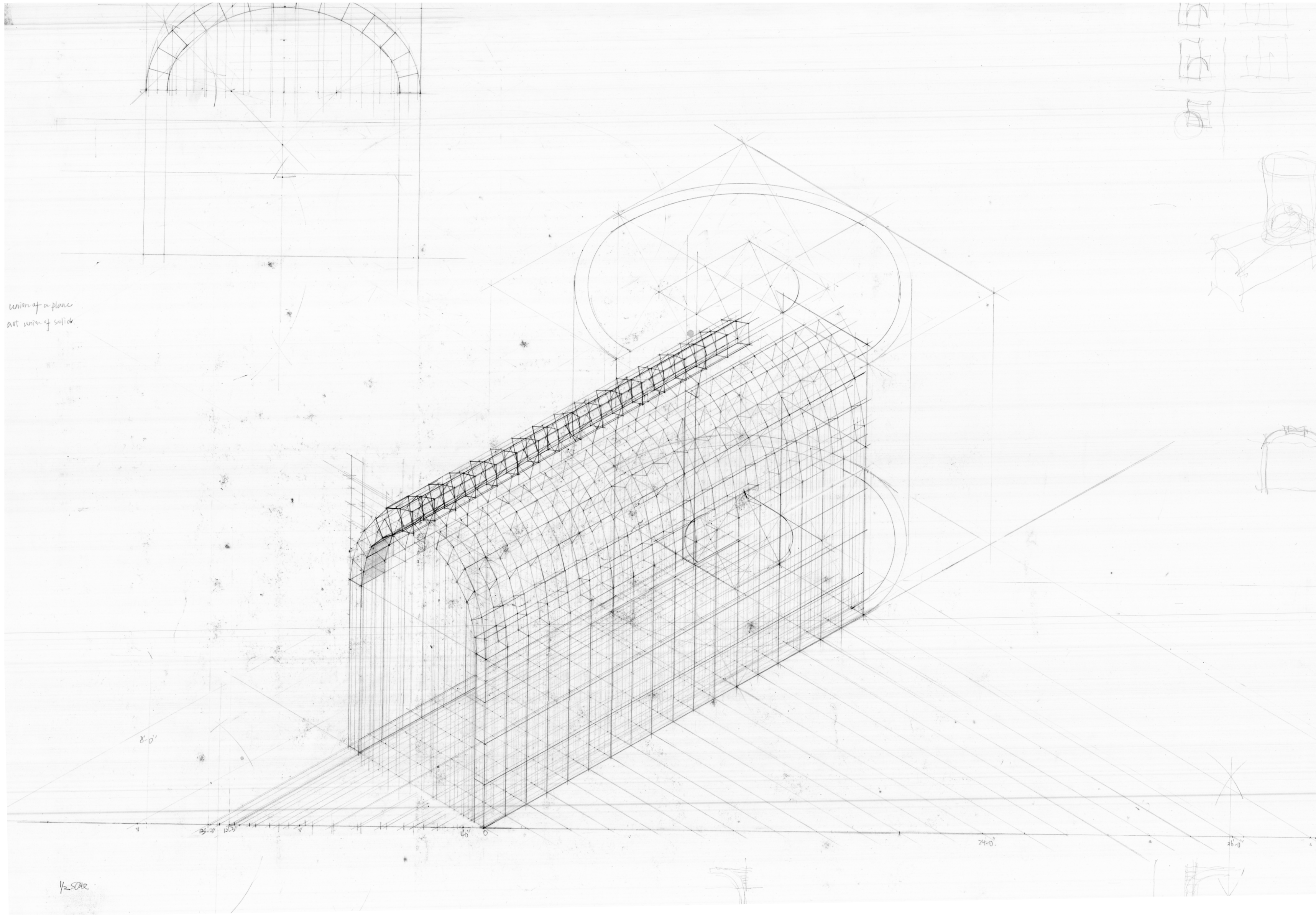
opening - shallow vault



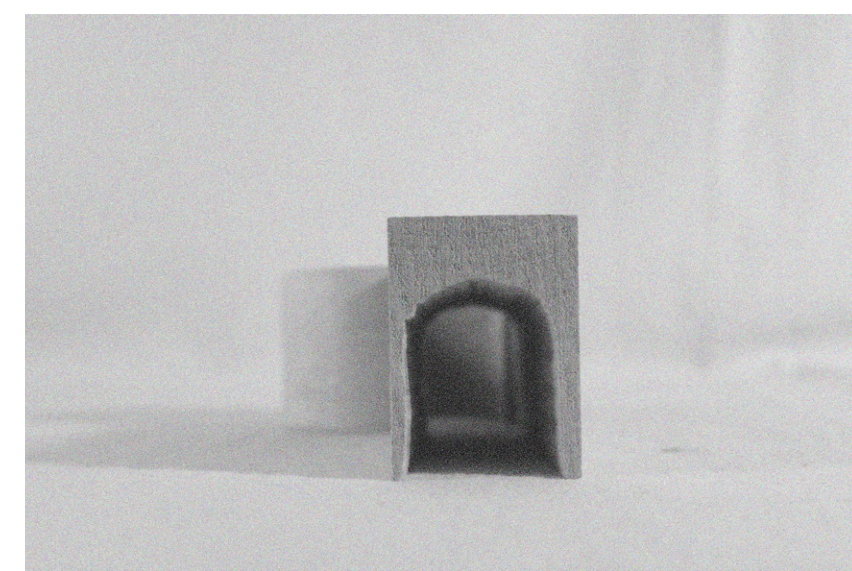
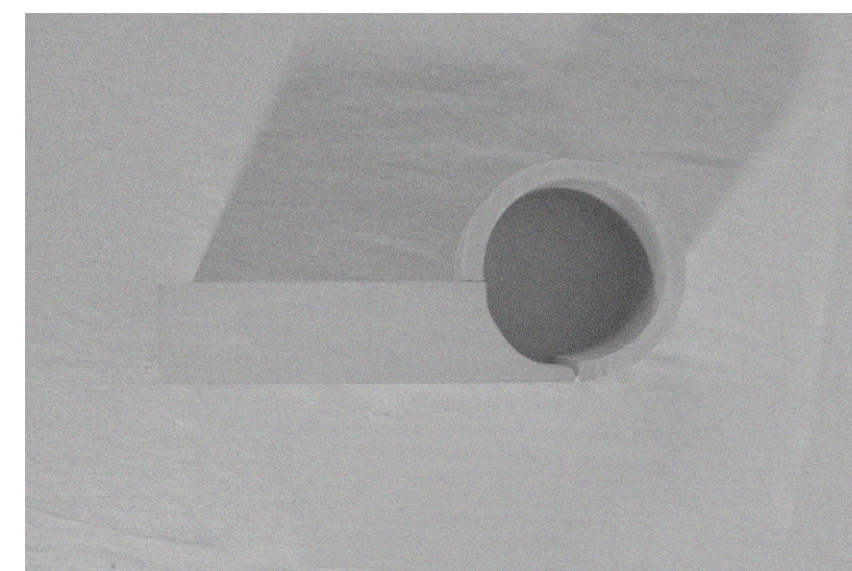
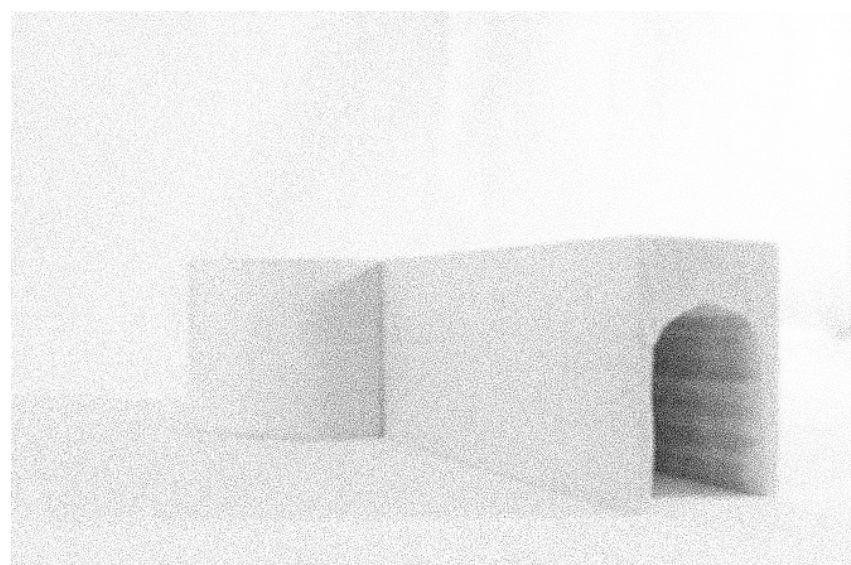
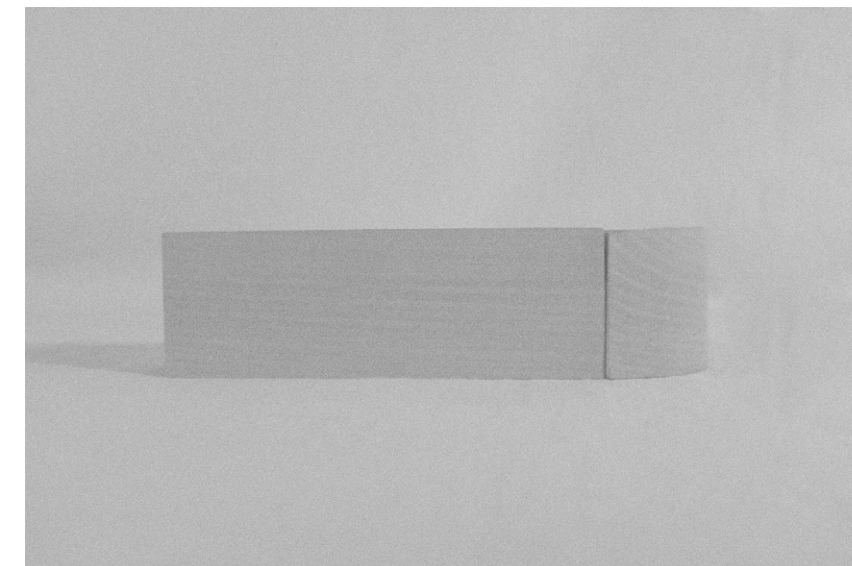
Axonometric projection

UNION OF SOLIDS

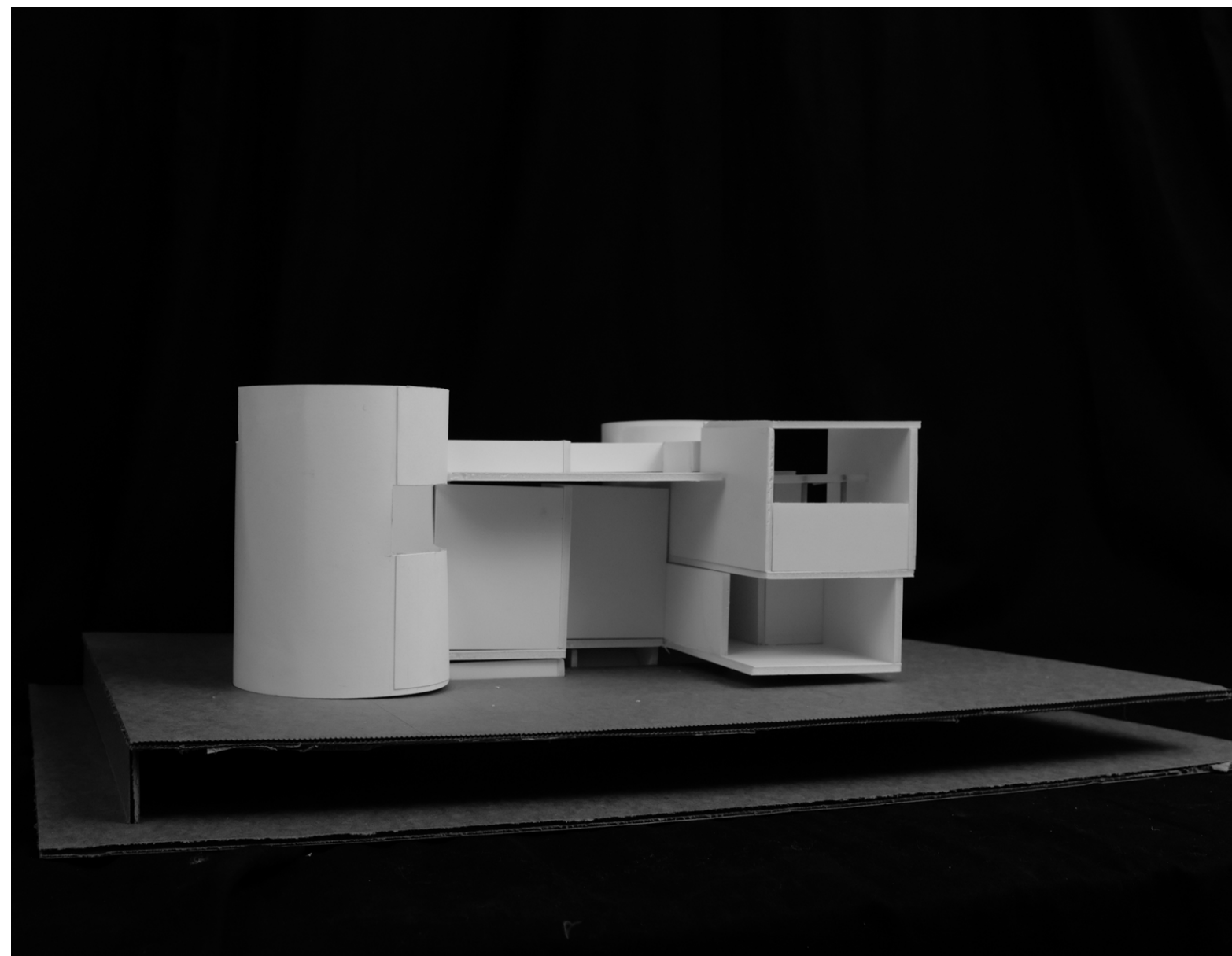
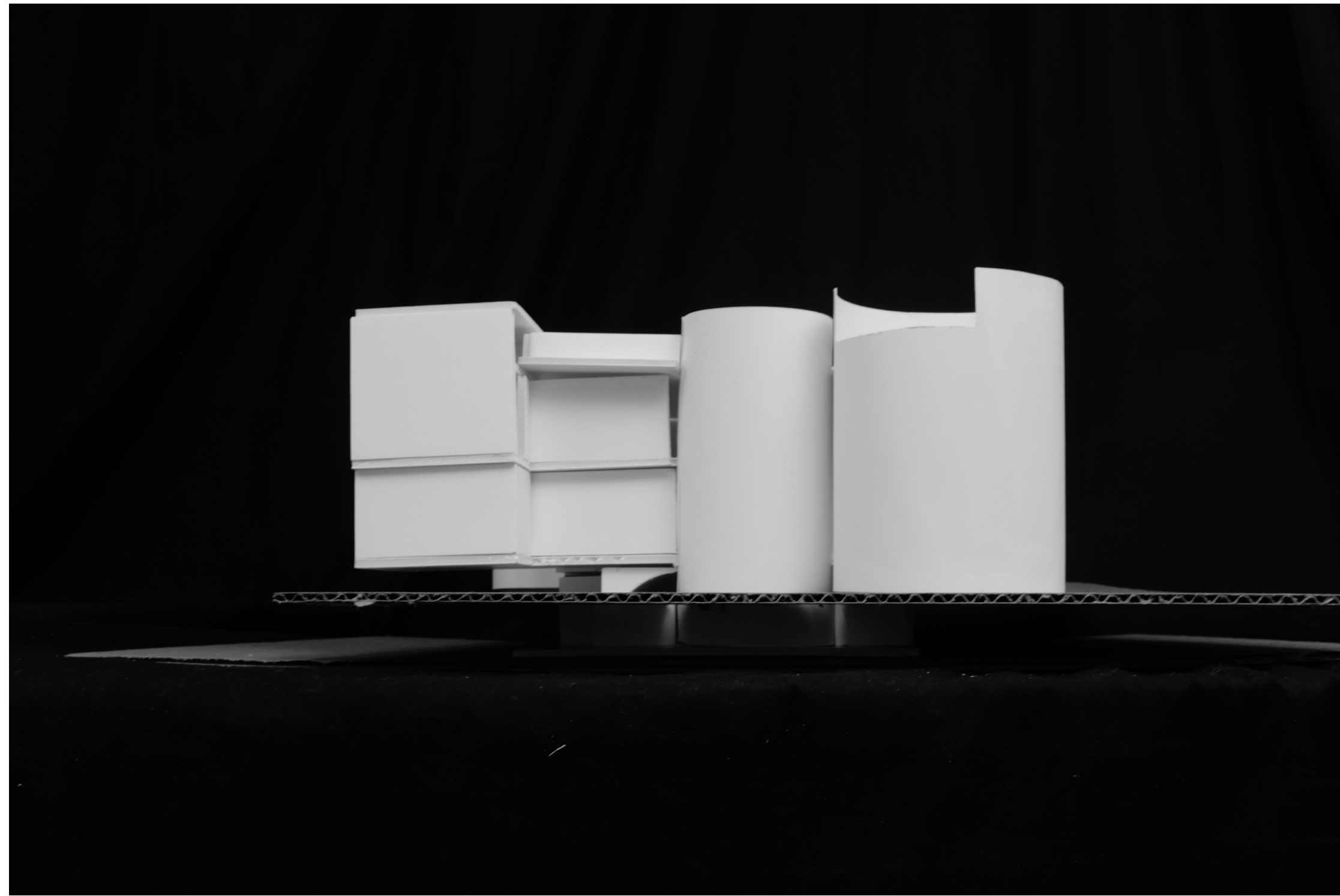
The three-dimensional space created by the union of a vertical cylinder stairwell and a horizontal vault hallway was studied by the axonometric drawing above. The unique cutting curve line is made by uniting two forms together. This union becomes the main building form, giving direction to the space both horizontally and vertically.



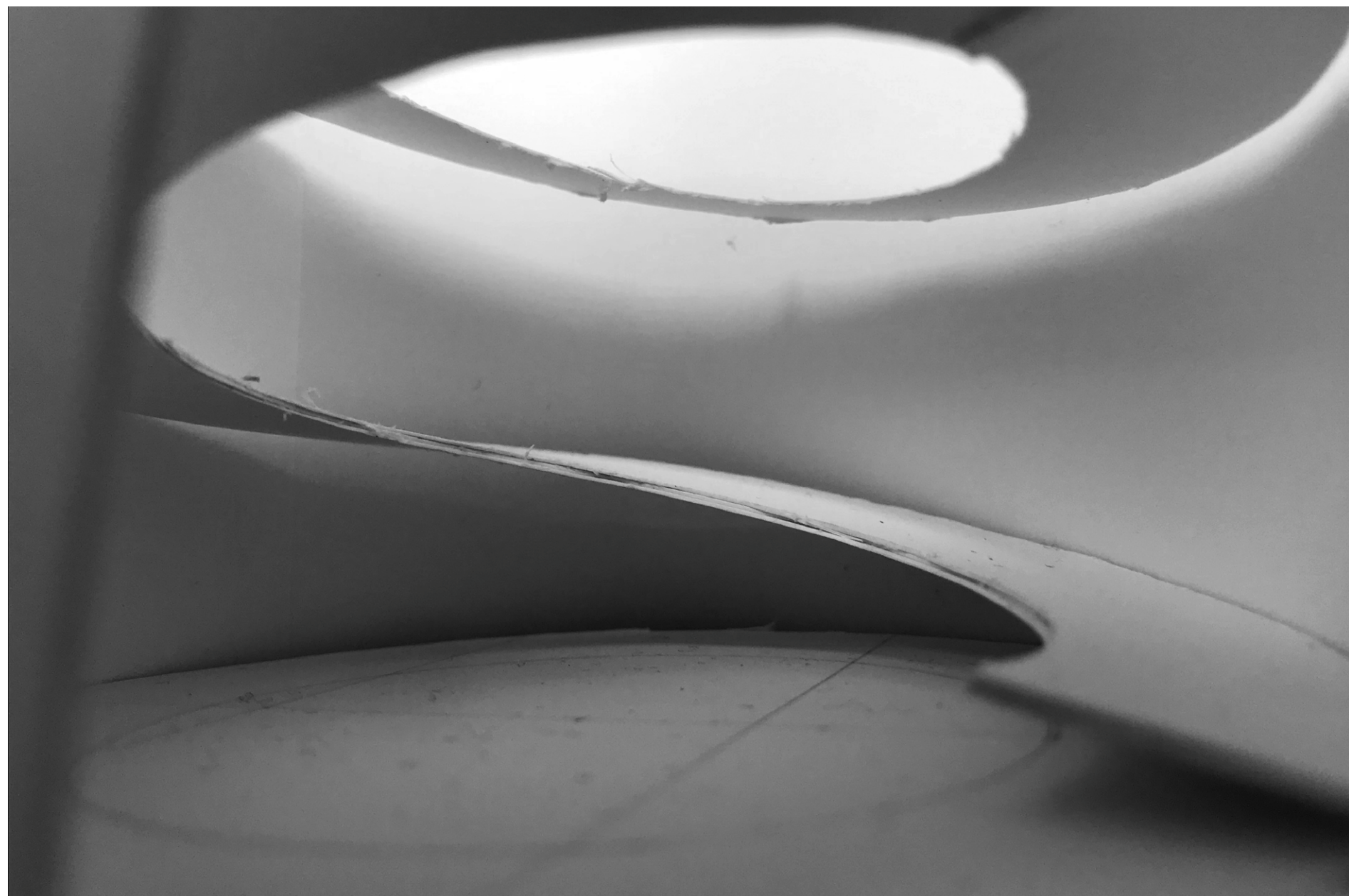
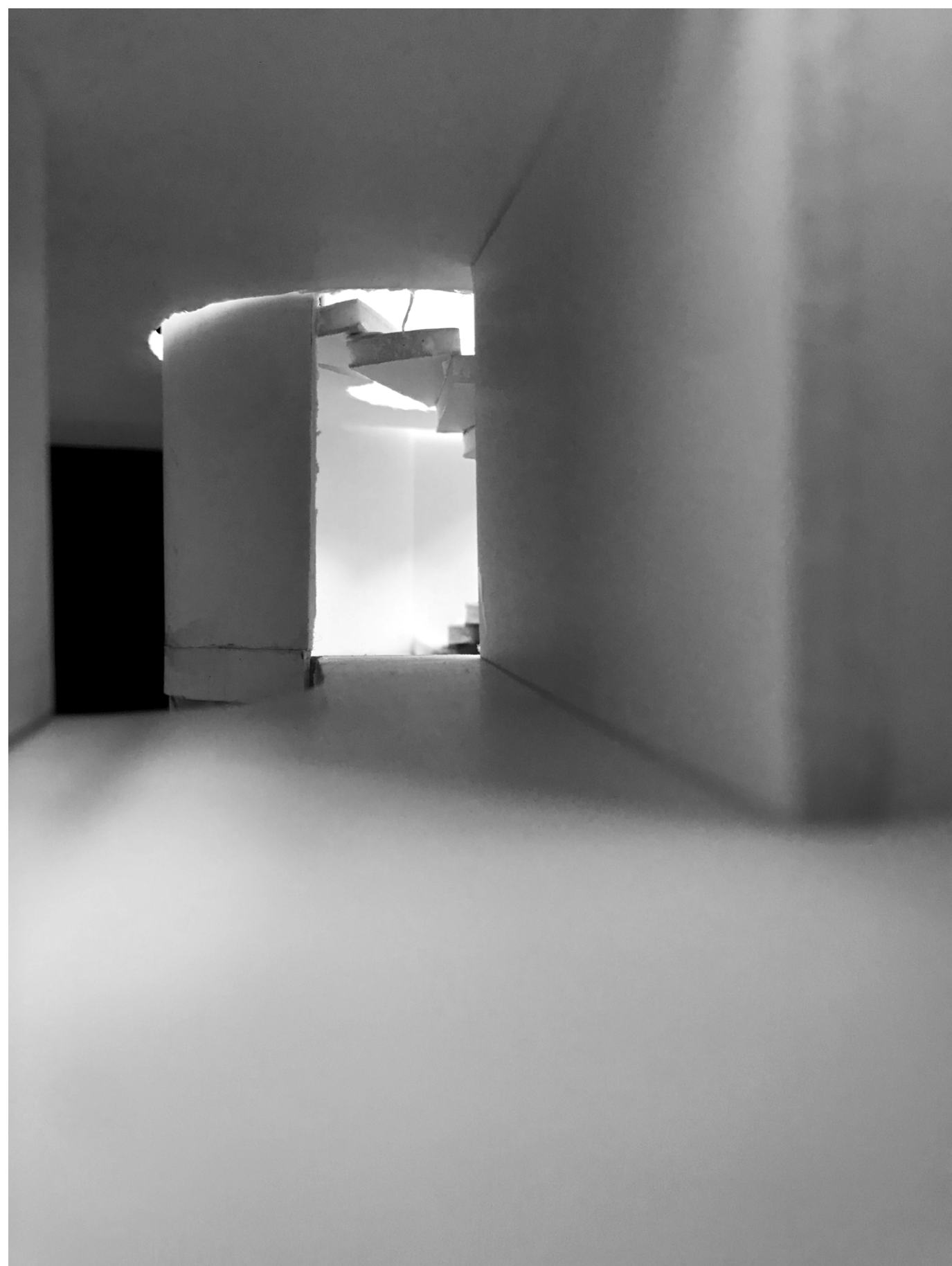
Axonometric drawing of union of solids



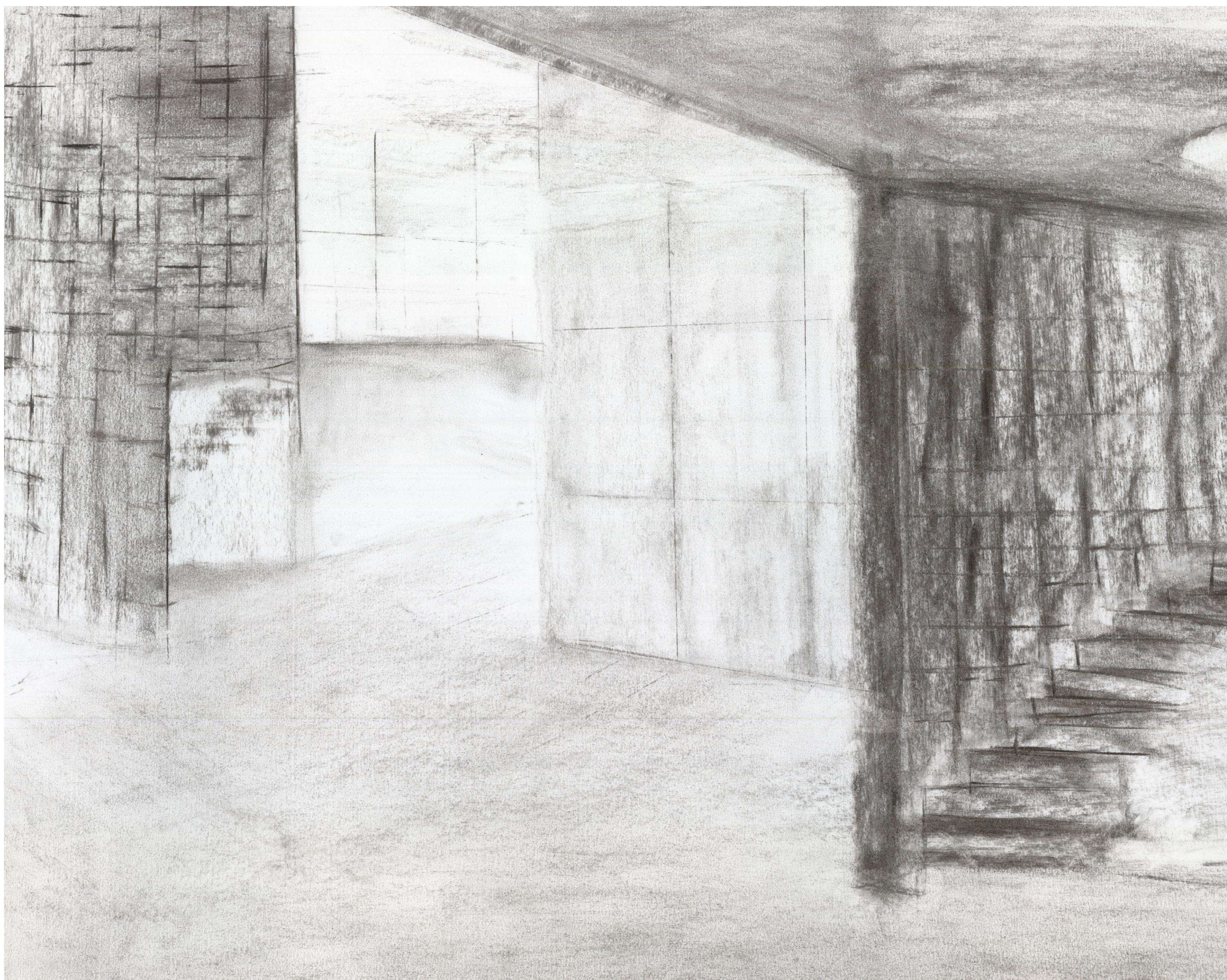
photopgrahy of model



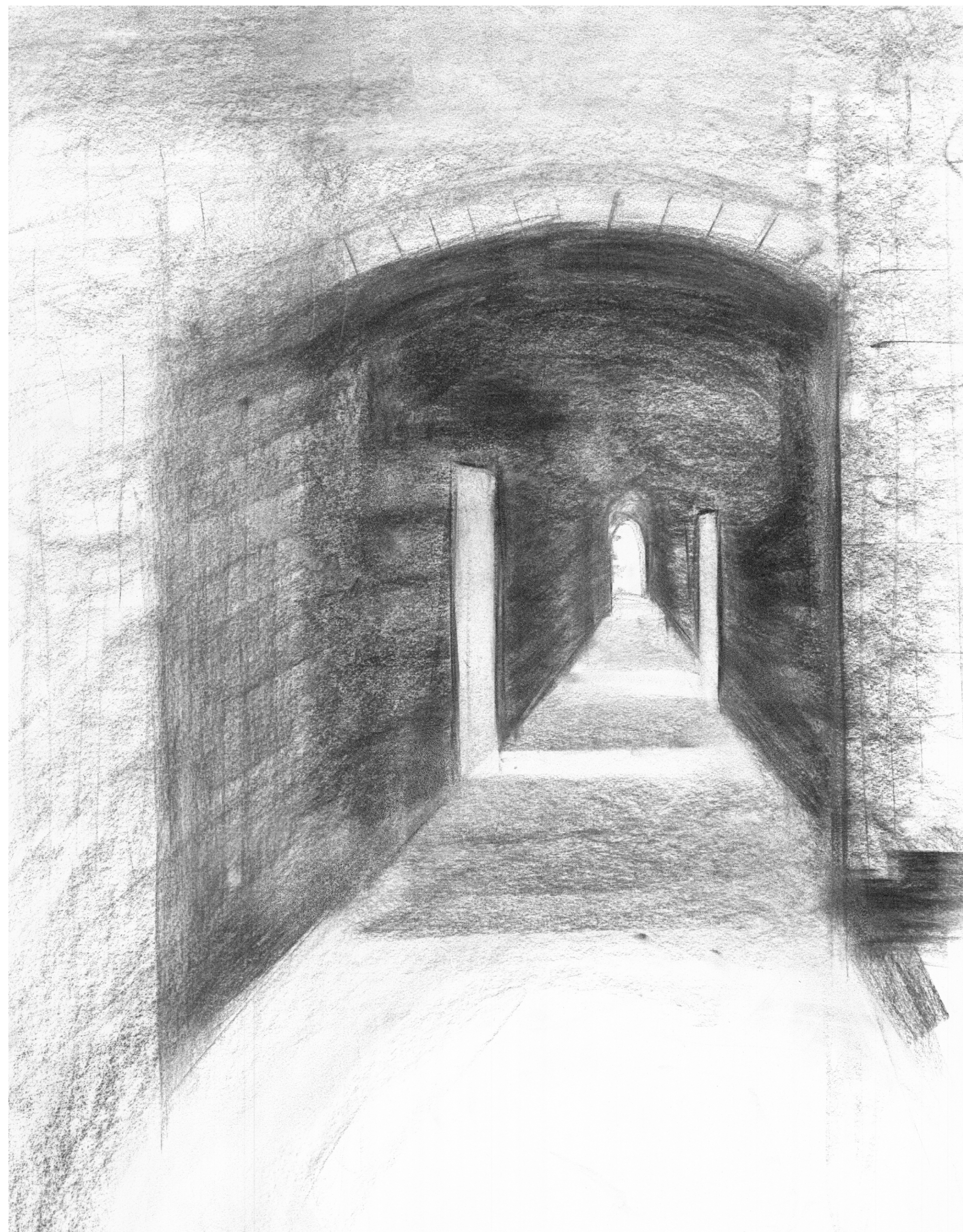
photograph of conceptual form



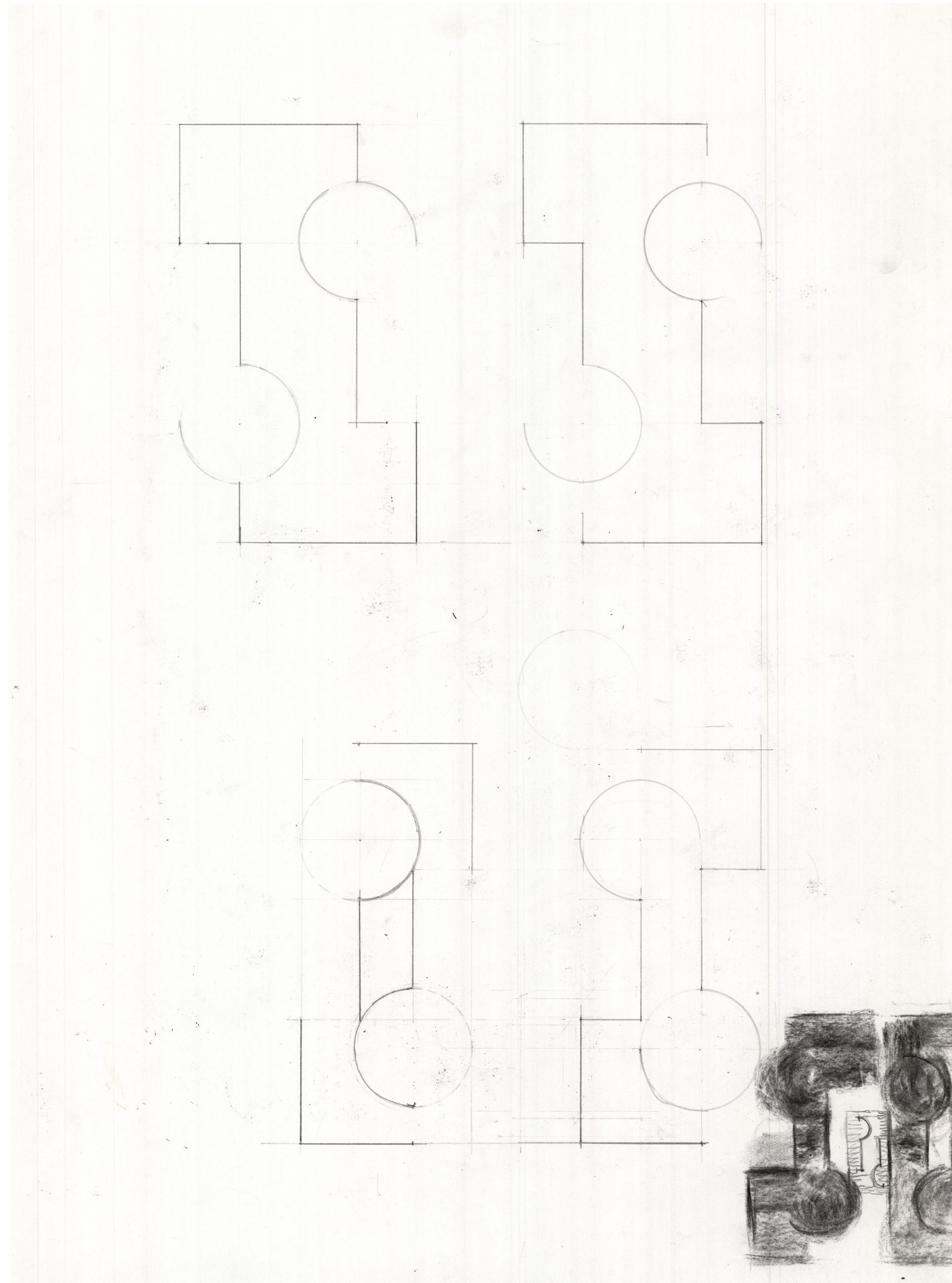
photograph of conceptual space



Imagination of space

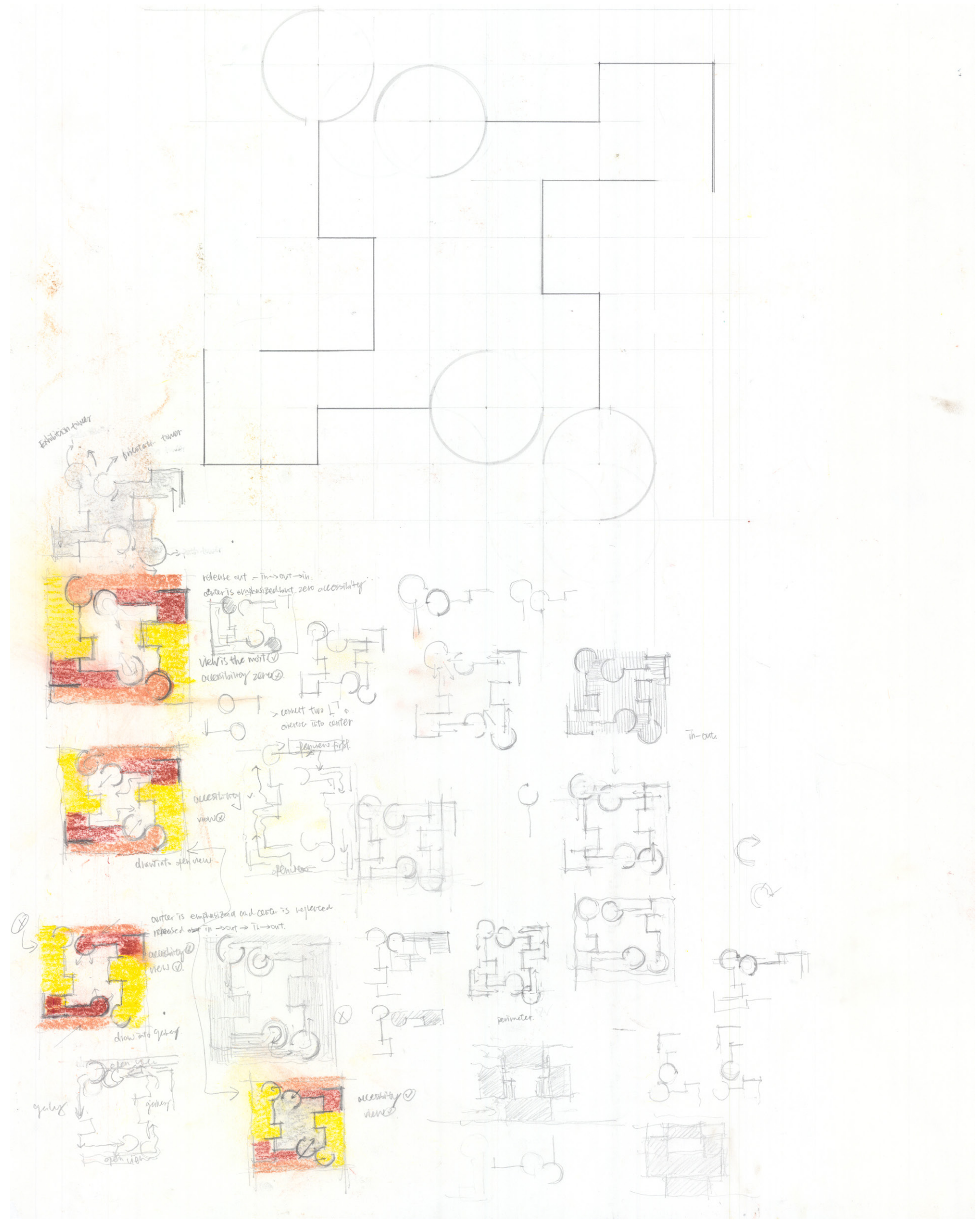


Imagination of space

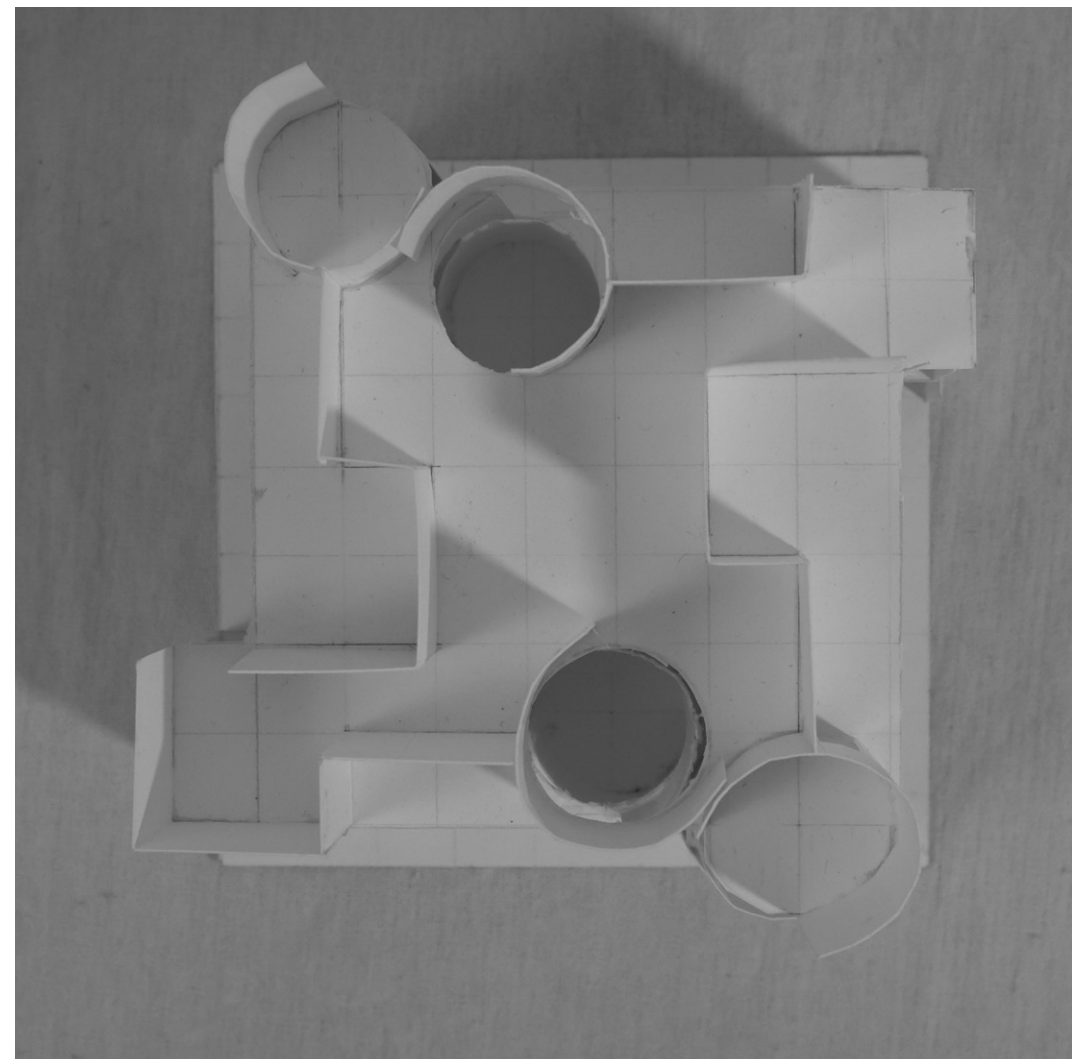


Schematic Diagram

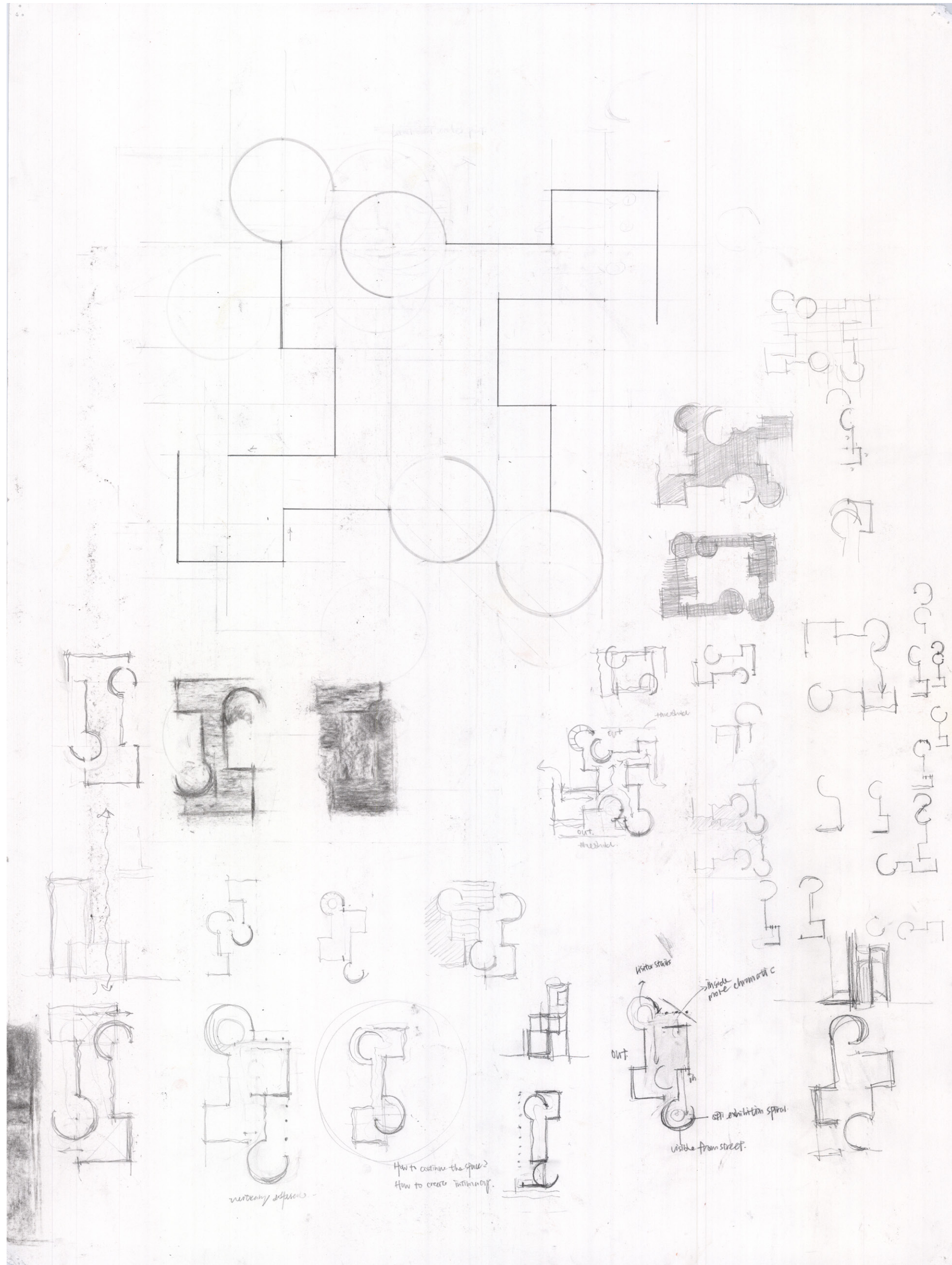
The figure is a union of curvilinear and rectilinear form with the focus on tension and release between two circles.



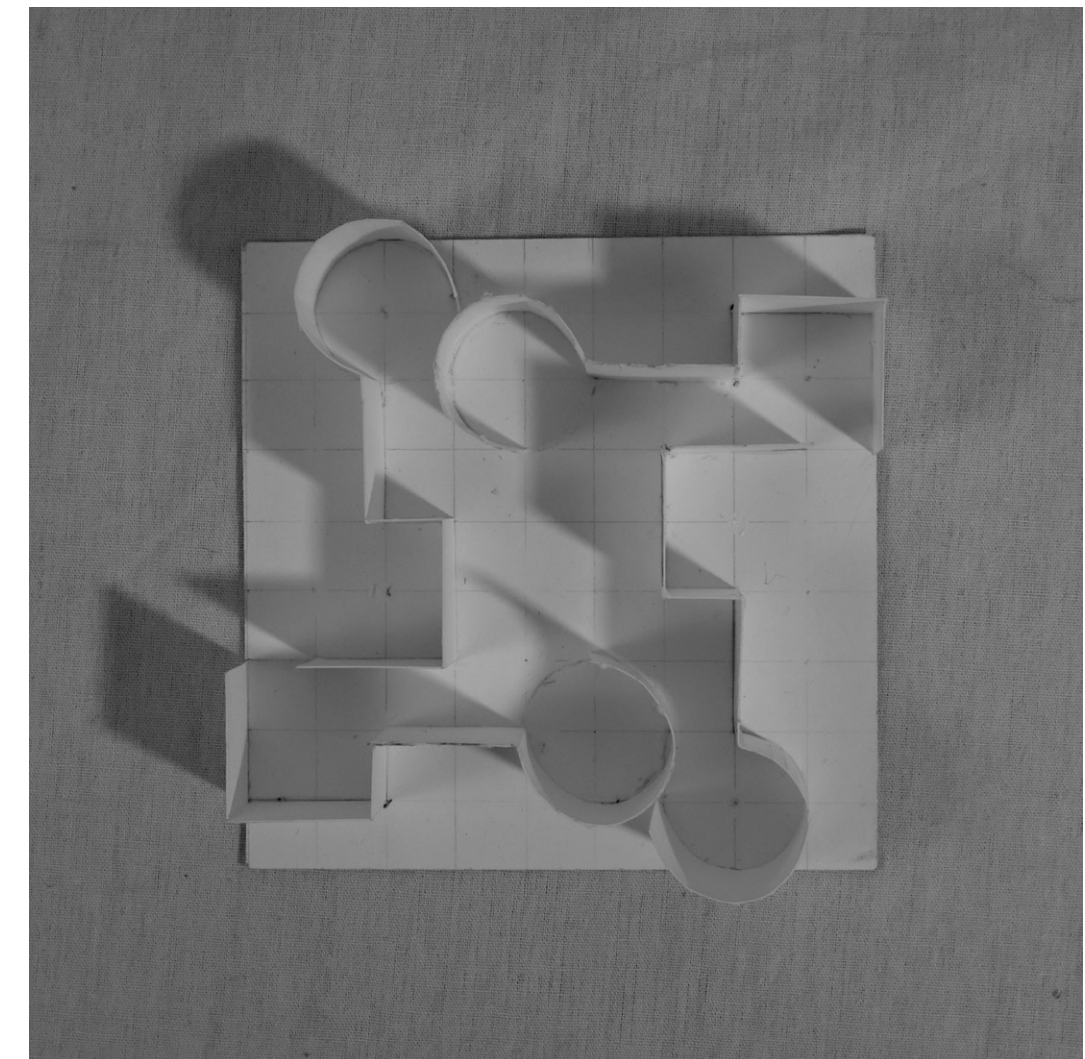
scheme two: focus on both central space and perimeter space
two circles open oppositely.



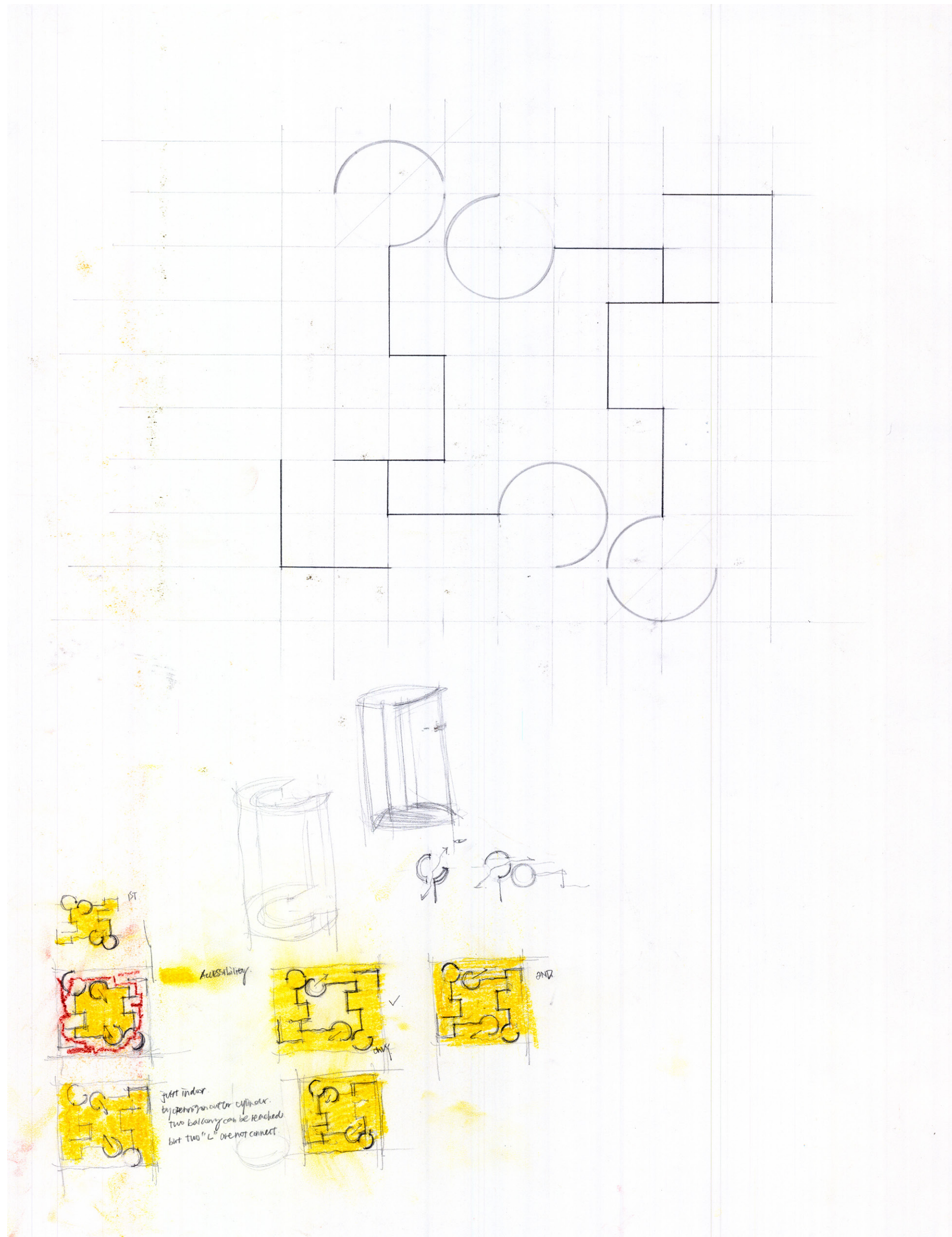
model of scheme one



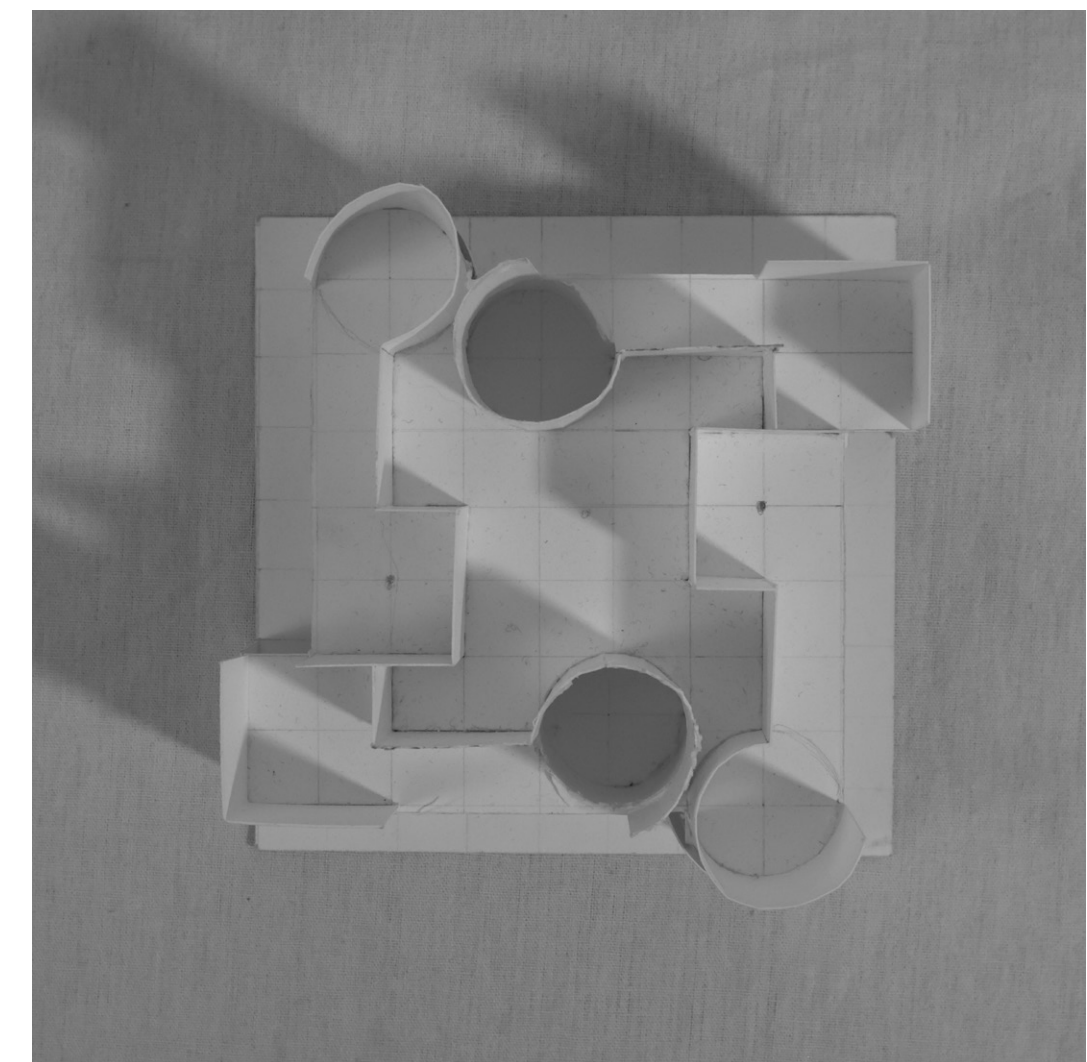
scheme one: focus on central space
two circles open towards
same direction



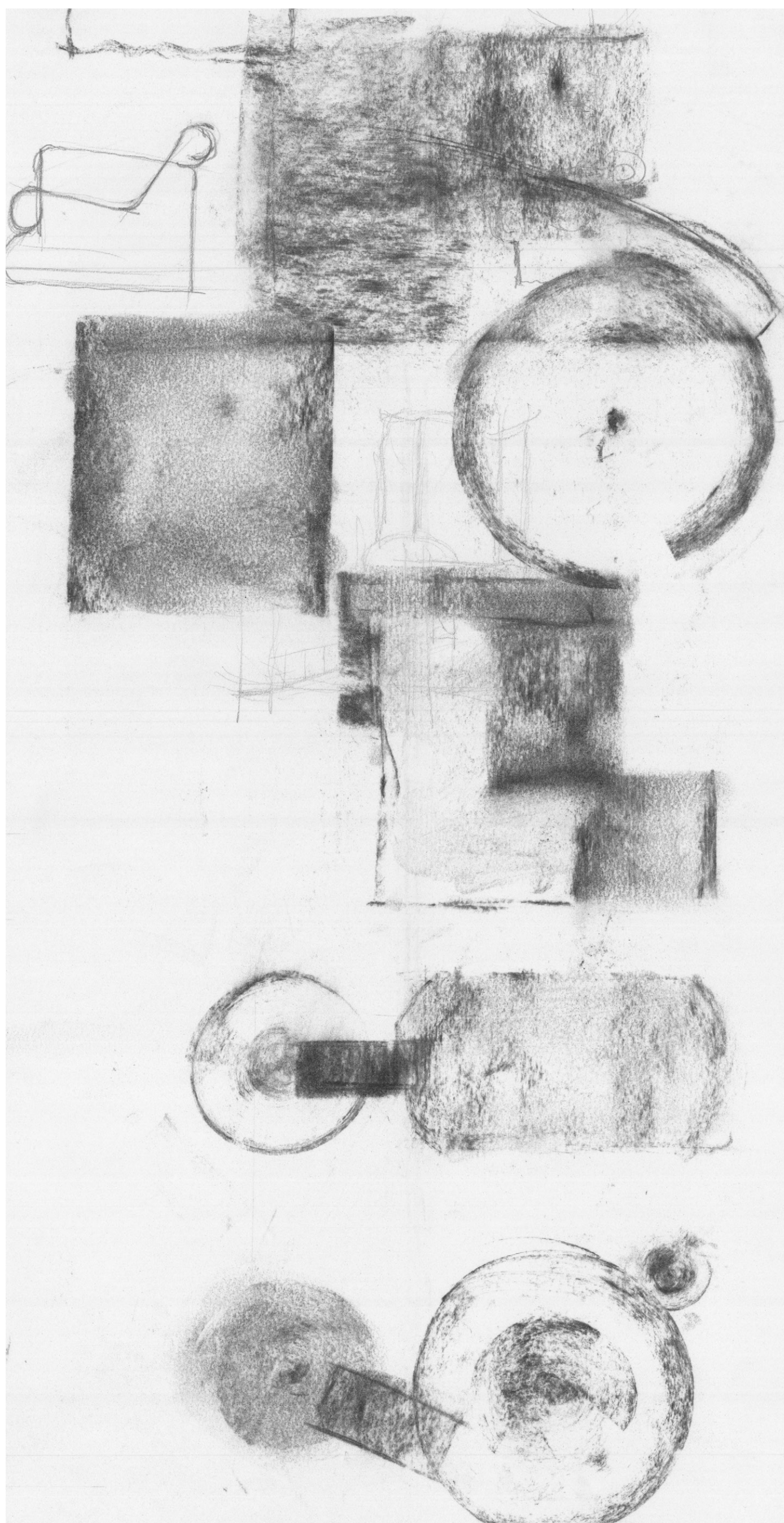
model of scheme one



scheme three: focus on perimeter space
two circles open oppositely.

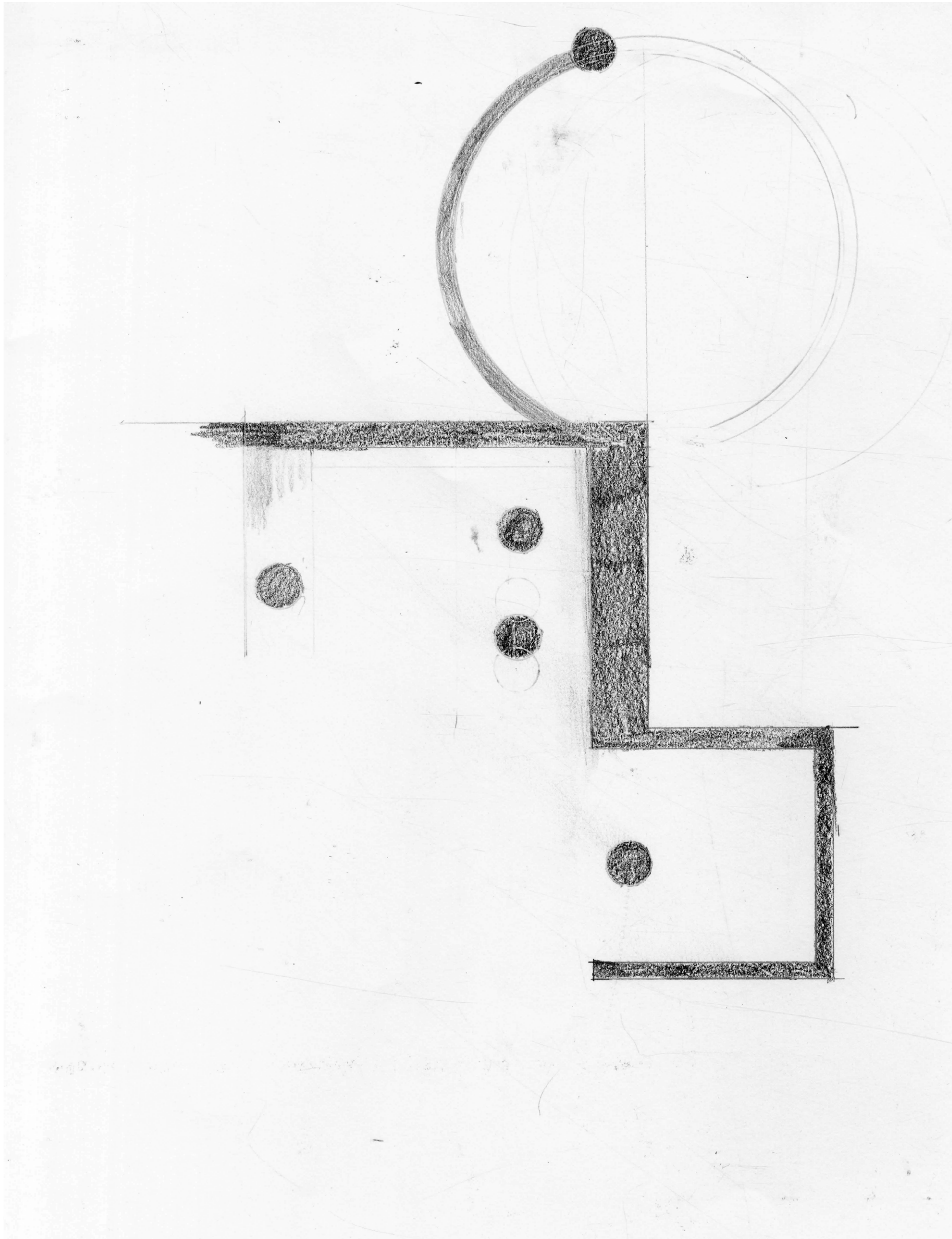


model of scheme one

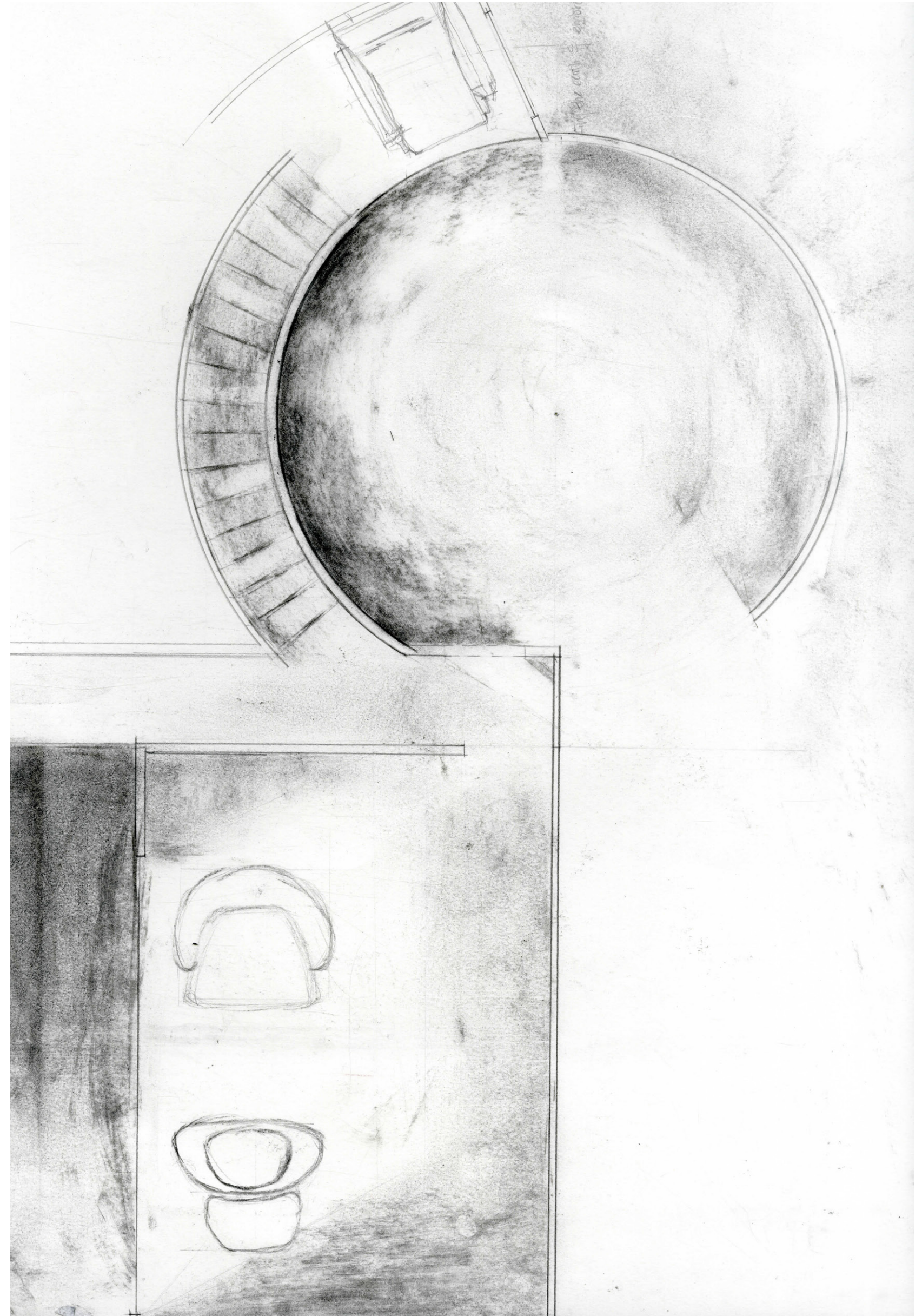


Beginning Thoughts

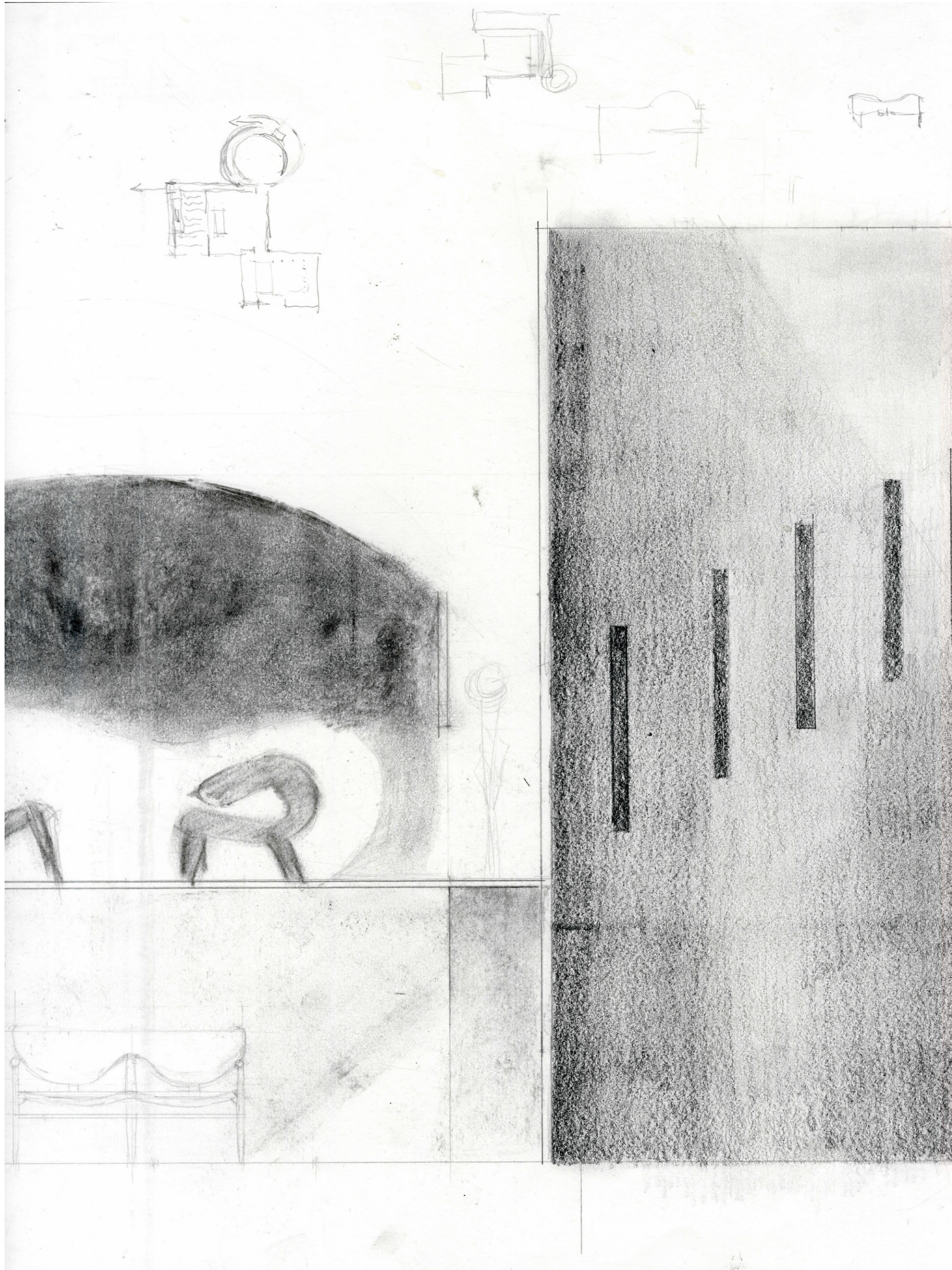
Schematic design is an attempt to choose certain chairs and to design the specific room for individual chair.



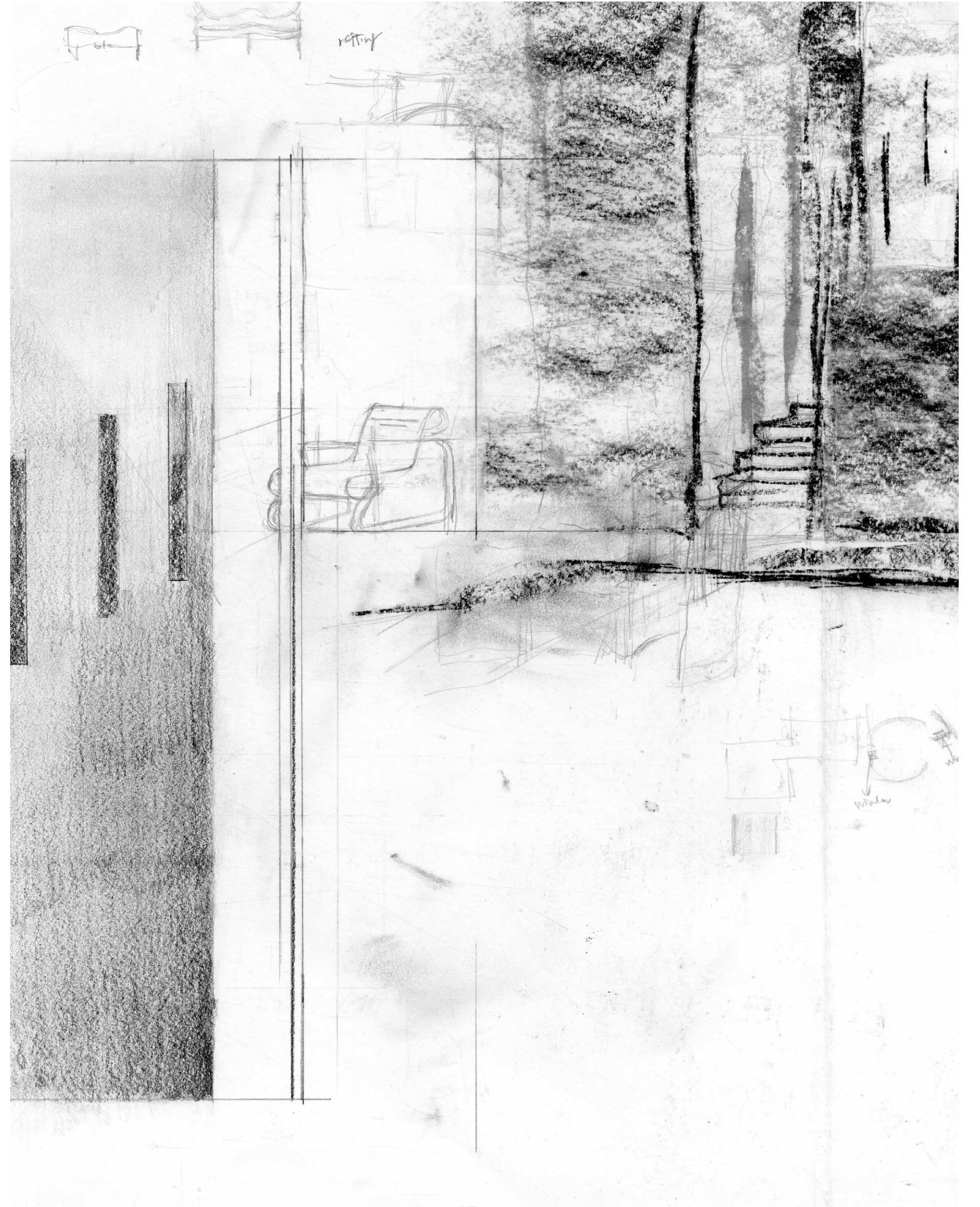
plan of the complex.



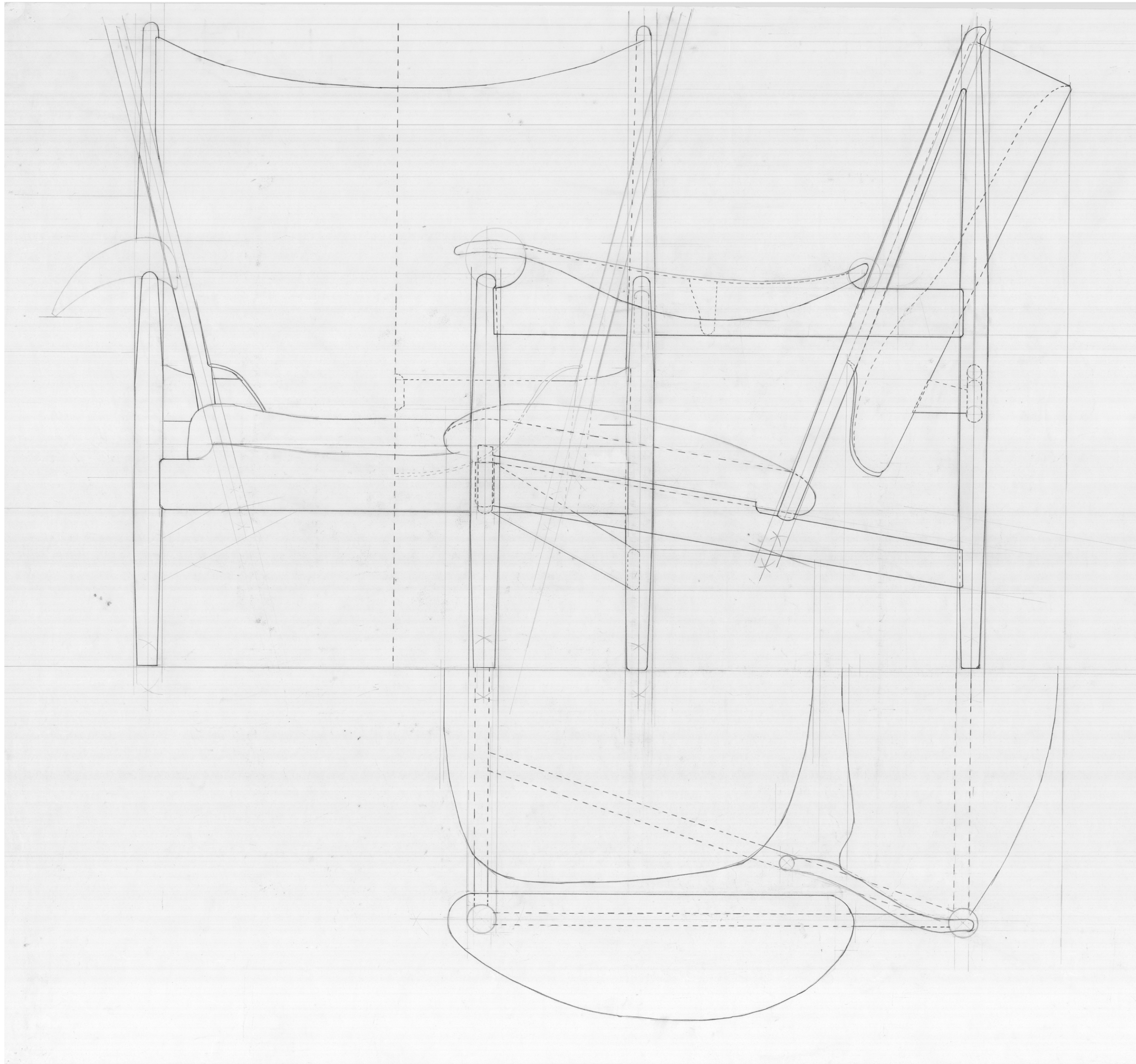
plan of two rooms



elevation



elevation



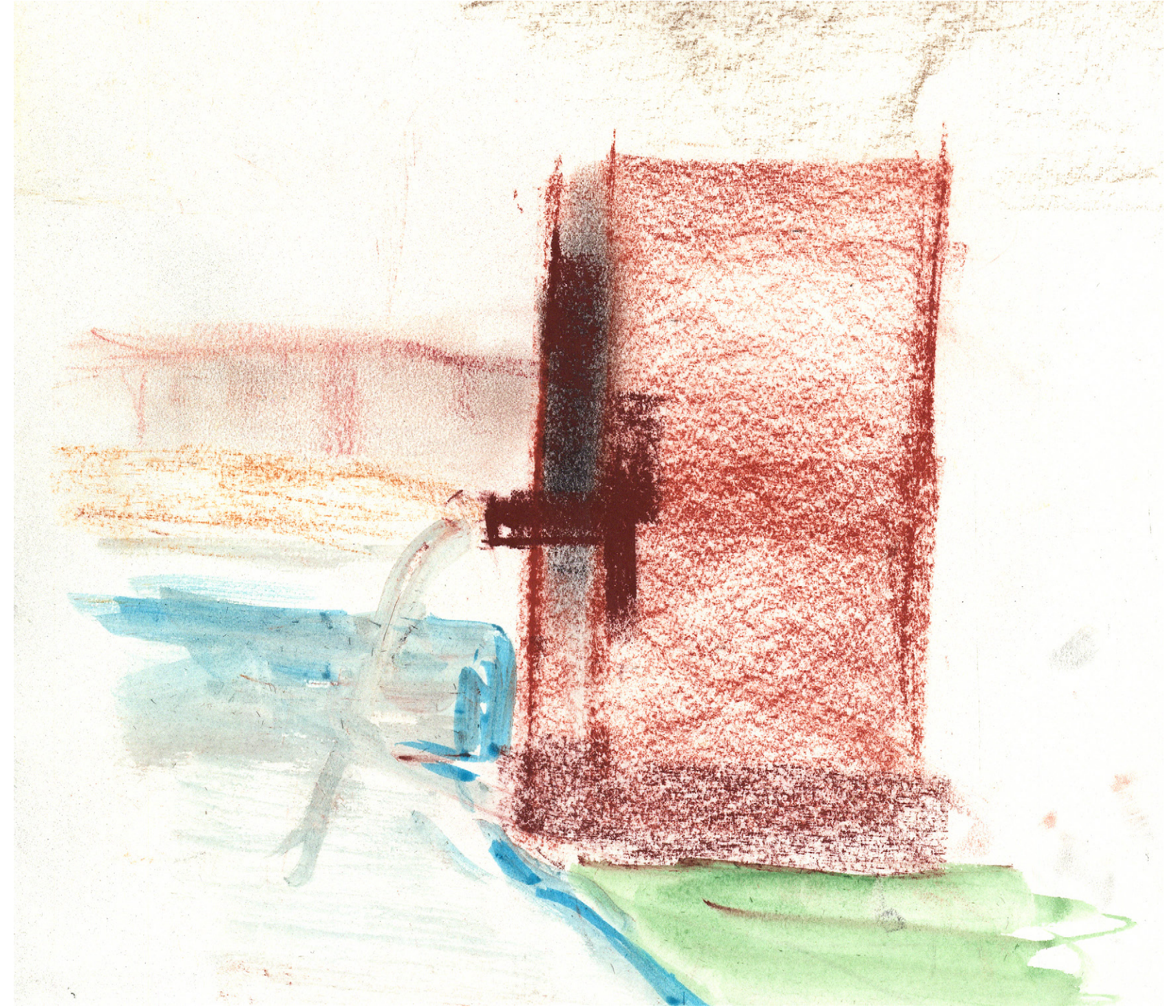
Beginning Thoughts

The beginning of the project were in wonder of the relationships between architecture and furniture. The drawing above is a study of the Chieftain Chair designed by the Danish architect Finn Juhl



Beginning Thoughts

Luis Barragan's house inspires me in the way that the existence of the furniture enlighten the space.



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