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Hotel and Conference Center for Foreign Dignitaries

Hotel and Conference Center for Foreign Dignitaries

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Abstract

Located along the bank of the Potomac River in Langley, Virginia, this Hotel and Conference Center is a place of gathering and refuge for foreign dignitaries. Each building shares the characteristic of protruding volumes and surfaces reinforced by parallel load-bearing masonry walls. These brick walls buffer the interior from the exterior and demarcate the program. Punched voids provide natural light. Each element including entry, wall, stair, column, and fireplace is designed to comply with the collective composition. The circulation is situated along the building's edge, thus guiding people from center to edge across diagonals and through corridors naturally lit from adjacent windows. Drawing played an essential role throughout the design. In the following drawings the process of design and discovery in architecture is intelligible. The question of "how" is more revealing than the question of "what."

Dedication and Acknowledgements

This book is dedicated to my grandparents, Jack and Susan Poole, and the late John and Doris Hershey, in recognition of their loving support and encouragement throughout my life. It is also dedicated to my family, Paul, Cheryl, Peter, Jeff, and Rachel.

Thanks to my committee members, Scott, Steve, and Bill for sharing their enthusiasm and knowledge about architecture.

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Preface

In his book, *Architectural Principles in the Age of Historicism*, Carroll William Westfall writes, “As it is in politics so is it in city building and in architecture. The purpose a people have in living together defines the civil form they will find useful, and the civil form defines what is required of the architectural and urban form” (Westfall 47).

By designing a Hotel and Conference Center for foreign dignitaries, the civil form requires the architectural form to be a place of gathering and refuge. This goal helped direct the design and organization of the building and all its “elemental” parts. Each element composes a piece of the collective composition of the building and the site. Louis Kahn spoke in 1966 at a lecture to the Boston Society of Architects that “Composition is dealing with elements, and design is a matter of working within them...” (Kahn 205). Each element in this building ,including door, entry, stair, roof, column, wall, window, and fireplace, is designed to properly address the collective composition of the building. Rules dictate the usage of each of these elements and each element fits within the order of the overall composition.

This building is embedded into the earth and stretches across the landscape. Its elements are simultaneously separate yet unified in composition. Each building shares the characteristic of protruding volumes and surfaces reinforced by parallel load-bearing masonry walls. These brick walls buffer the interior from the exterior and demarcate the program. Punched voids provide natural light. The circulation is situated along the building’s edge, thus guiding people from center to edge across diagonals and through corridors naturally lit from adjacent windows.

At the start of my thesis, I did an informal investigation of interesting buildings through sketching. I was inspired by the drawings of Frank Lloyd Wright. Through these drawings in Bruce Pfeiffer’s *Frank Lloyd Wright Drawings*, I studied his formal tendencies and, more importantly, his process. The objective of my investigation was to answer a few fundamental questions to help direct my work. I asked the same questions about his work that I asked myself about my thesis, most importantly, how did he do it? How did the most prolific architect in history design? My answer is that he did it through drawing.

Through drawing architects exercise their imaginations. Drawing is a representation of an idea. It allows the architect to explore an imagined world. However, in order to exercise drawing correctly we need to understand its limitations. Louis Kahn wrote the following in an essay on form and design in 1960: “When I place the first line on paper to capture the dream, the dream becomes less. Everything that is made obeys the laws of nature. The man is always greater than his works because he can never fully express his aspirations. For to express oneself in music or architecture is by the measurable means of composition or design. The first line on paper is already a measure of what cannot be expressed fully. The first line on paper is less” (Kahn 63). This does not make drawing less important, but rather reinforces its importance as a mediator between the ideal world and the real world. In order to draw a representation of a building, an architect is forced to make decisions about building concepts, material representation, textures, structure, light, and shadow. These decisions are not pre-determined but rather discovered through the process of drawing.

Art isn’t dead in architecture. Art reveals more to us about the human mind than most studies in psychology. Art is a direct means of showing the human mind at work as it is working. You can see this for yourself by sketching the room you are sitting in. It doesn’t matter if the drawing you produce looks correct based on general perception. The only thing that matters is that the drawing shows the process of your thoughts and how those thoughts are transferred from your mind to the paper. Mistakes show learning and learning shows progress. Thus, without drawing, architects will stop evolving and progressing. Drawing or even sketching is the most efficient way to test your ideas. Drawing is plural, offering the possibility of understanding different aspects of the design simultaneously including size, proportion, shadow, light, material, etc.

I am writing these things in part to remind myself of a sense of values and inspiration I’ve gained as a student. Over the last six years, I’ve had highs and lows that have led me in different directions but ultimately towards a self-identity and self-confidence in architecture. Ultimately, finding what you like about architecture and pursuing this with integrity and discipline is what matters most. As architects we should search for a sensation that is magical. Architecture is magical for what is created and the stories and people behind these creations. Ultimately, we all must let our creativity flow and experience the magic.

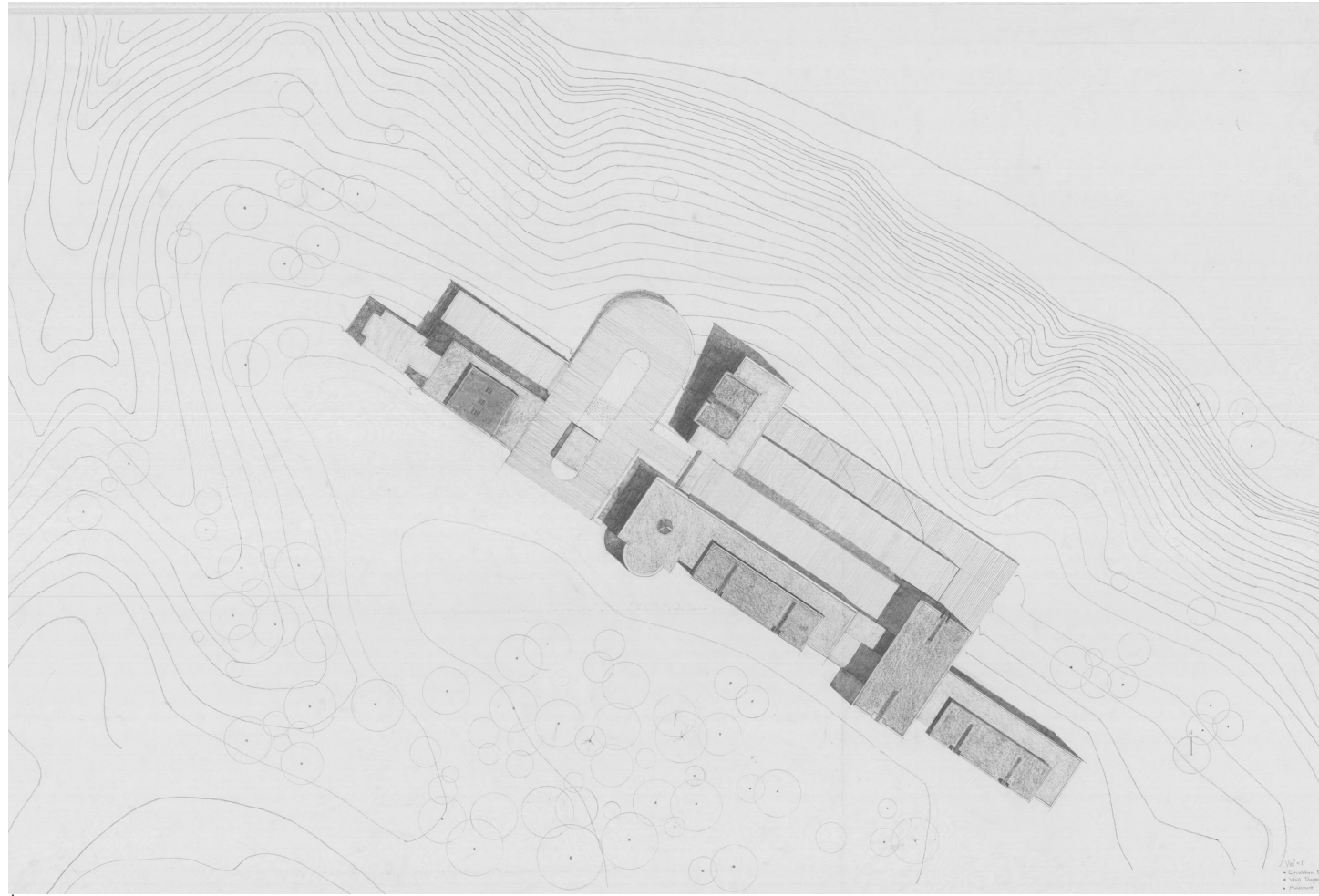
Site Plan, Plan, Perspectives and Composition



2. Turkey Run Park Langley, Virginia and Capital Building Washington, DC, 7 miles



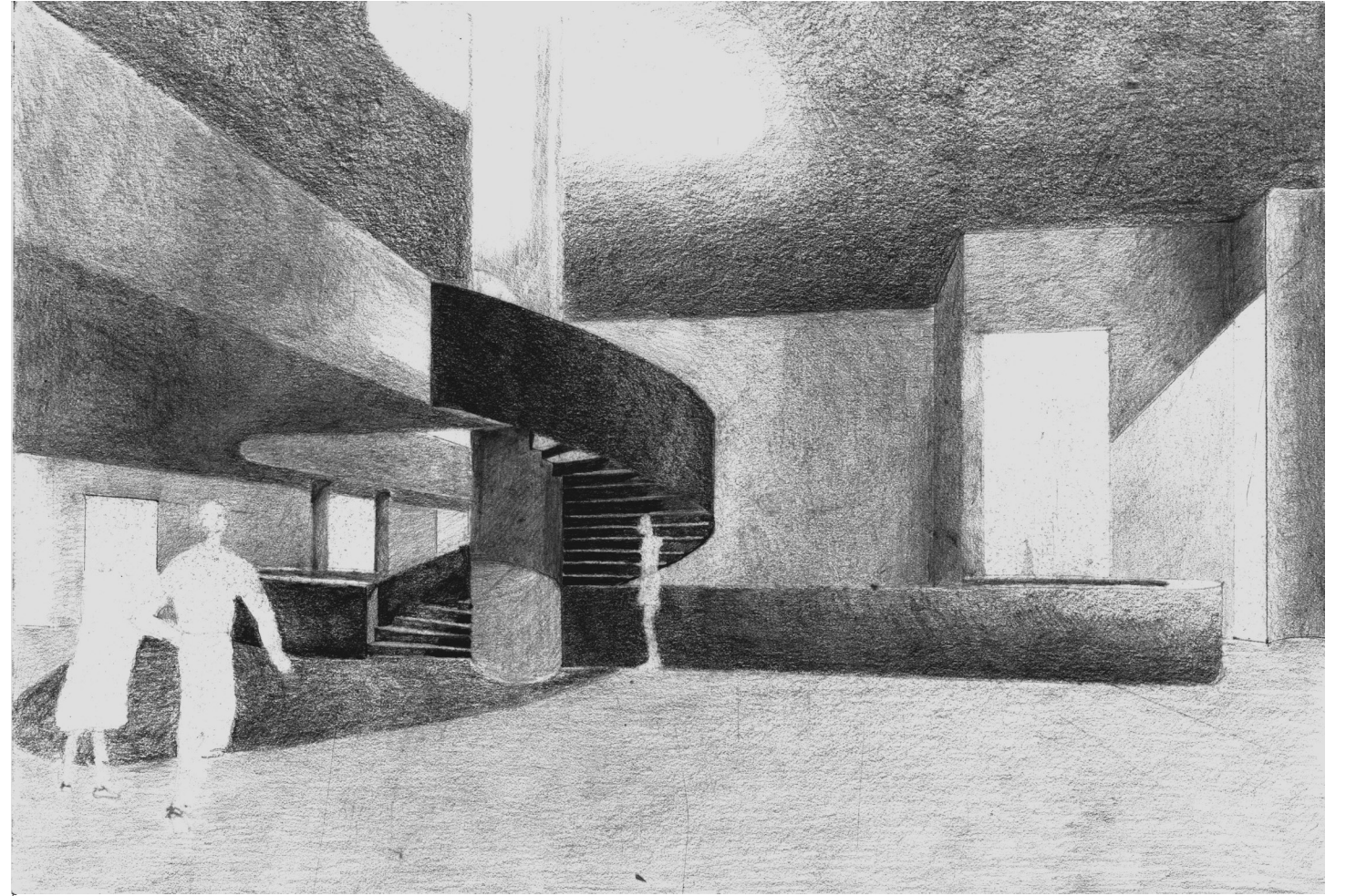
3. Located on the bank along the Potomac River, this elevated site provides protection and peaceful view of the river. Entry into the site snakes through the woods in Turkey Run Park seven miles west of Washington DC. The topographic change in allows the building to be embedded into the ground on two levels.



4.

4. Site Map and Roof Plan, graphite line drawing

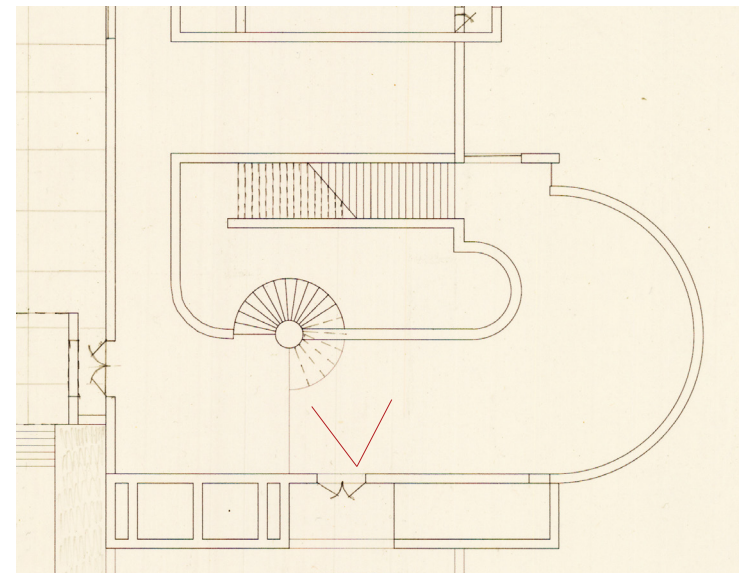
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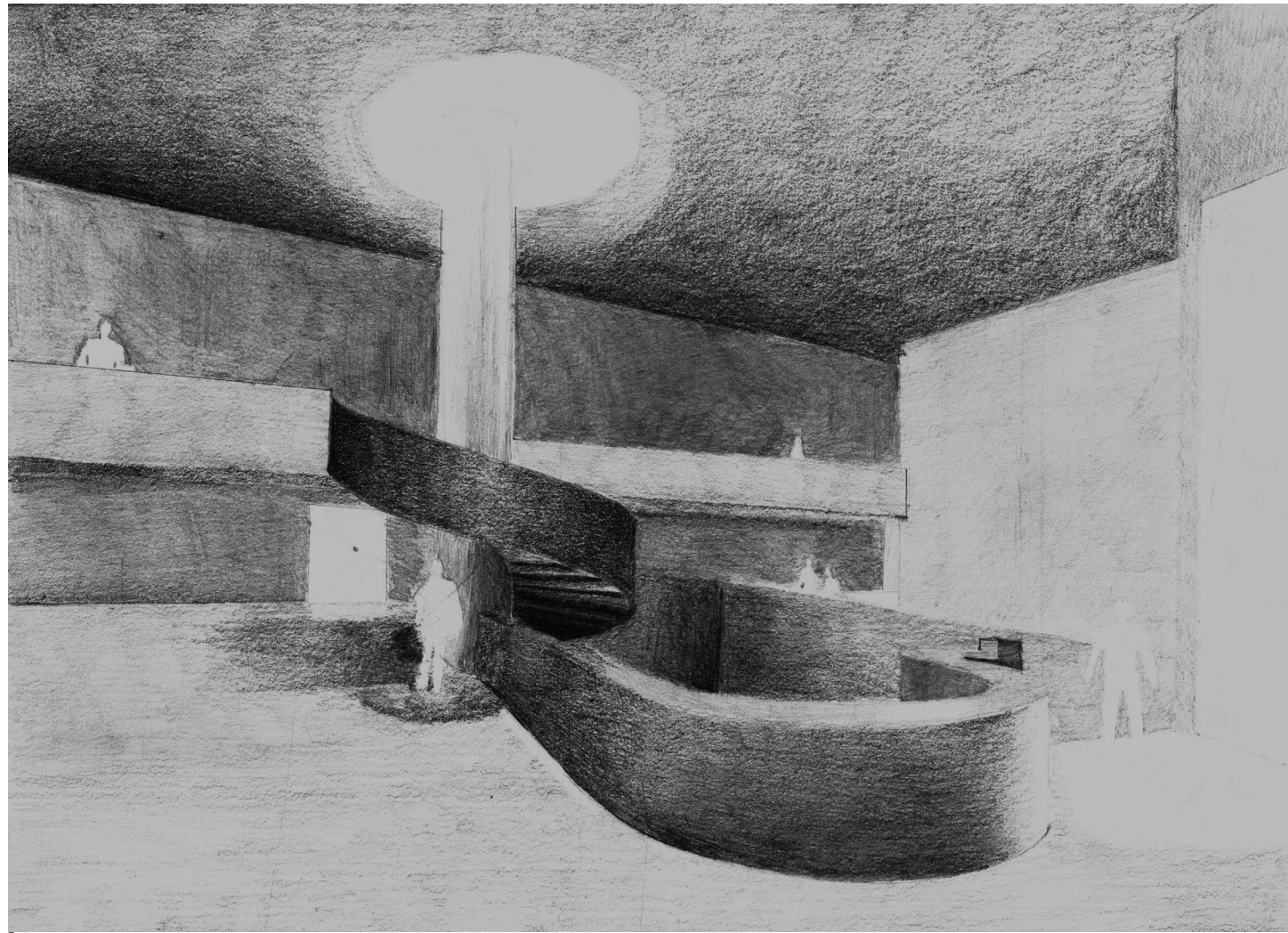
5. Entry Sequence 1, graphite rendering

6. Viewers Perspective in Plan, CAD line drawing and graphite

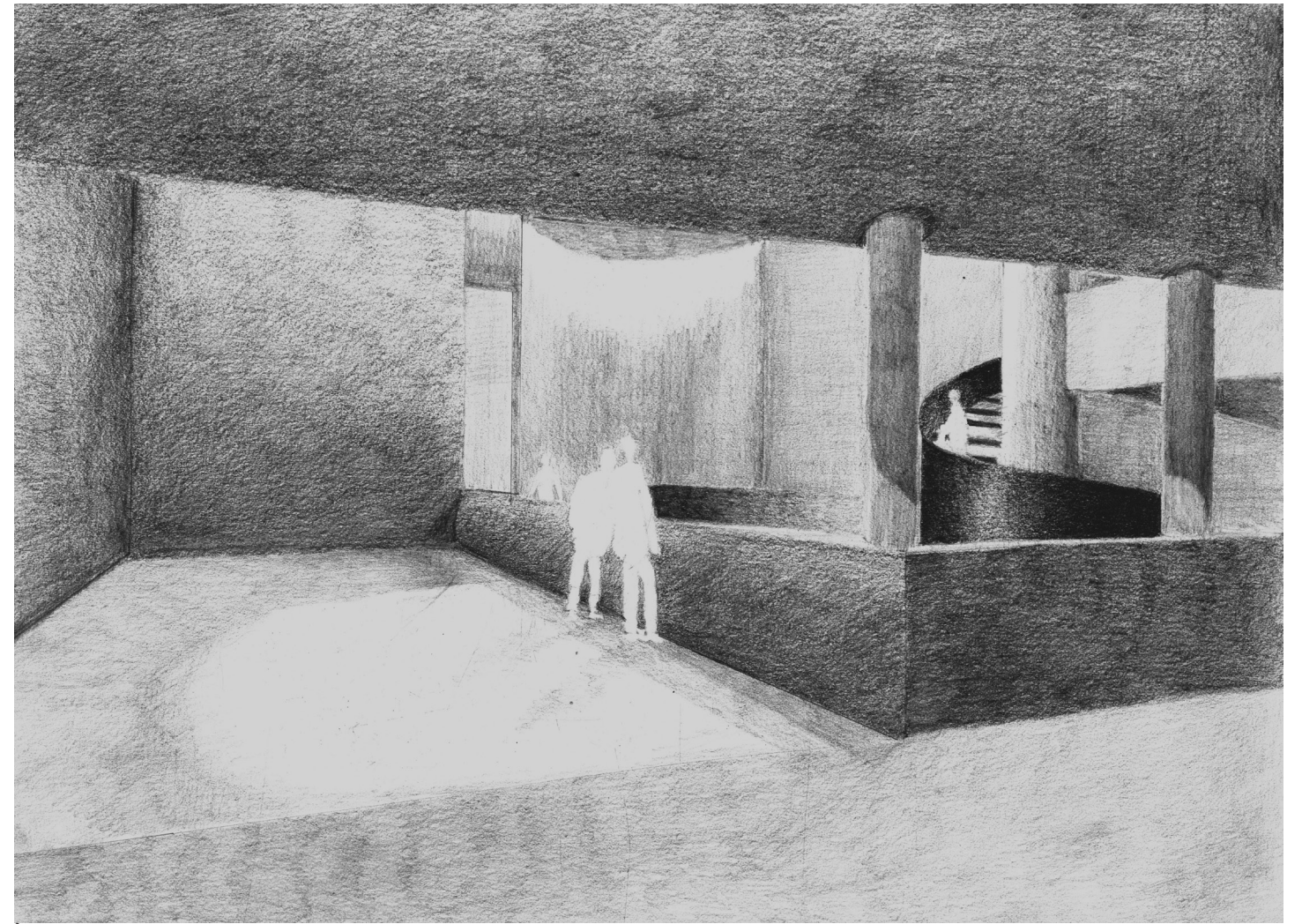


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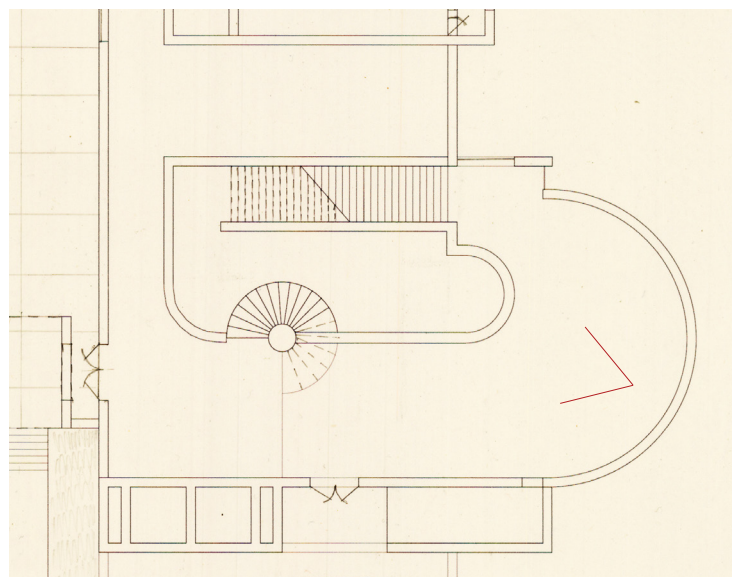
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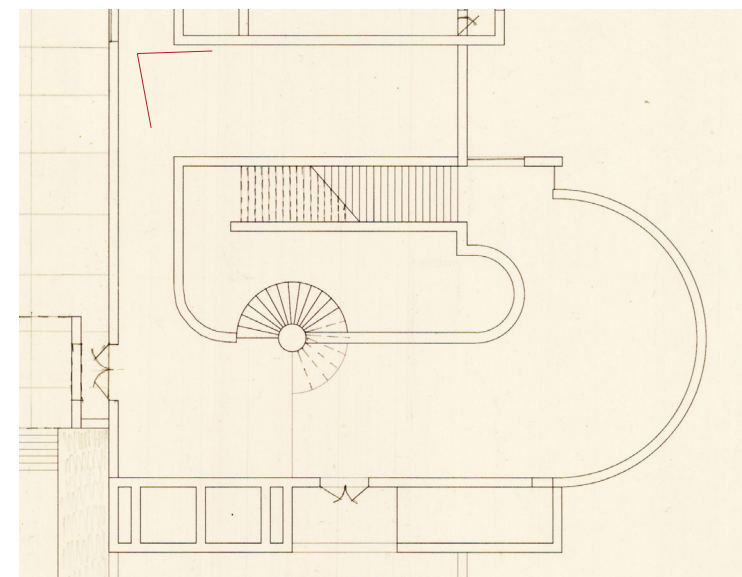
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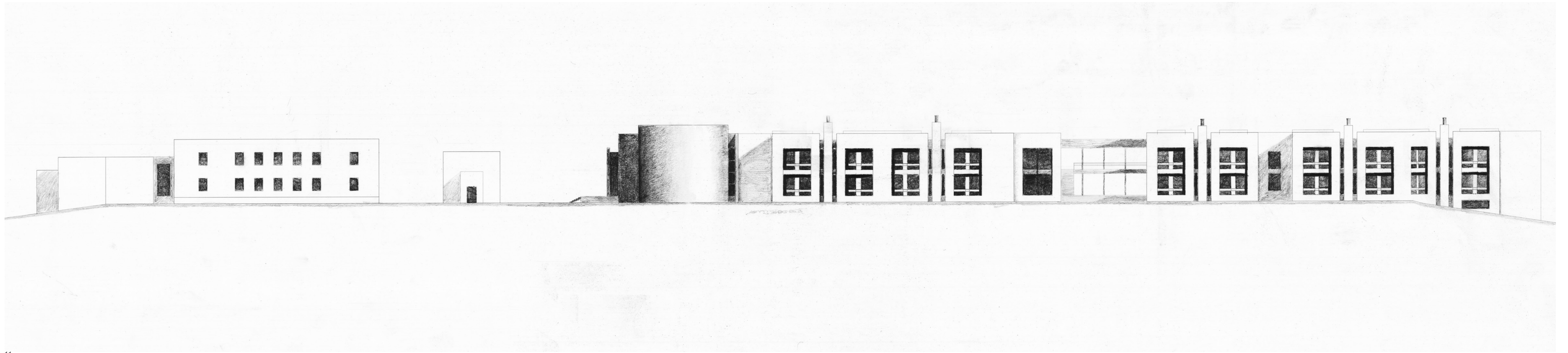
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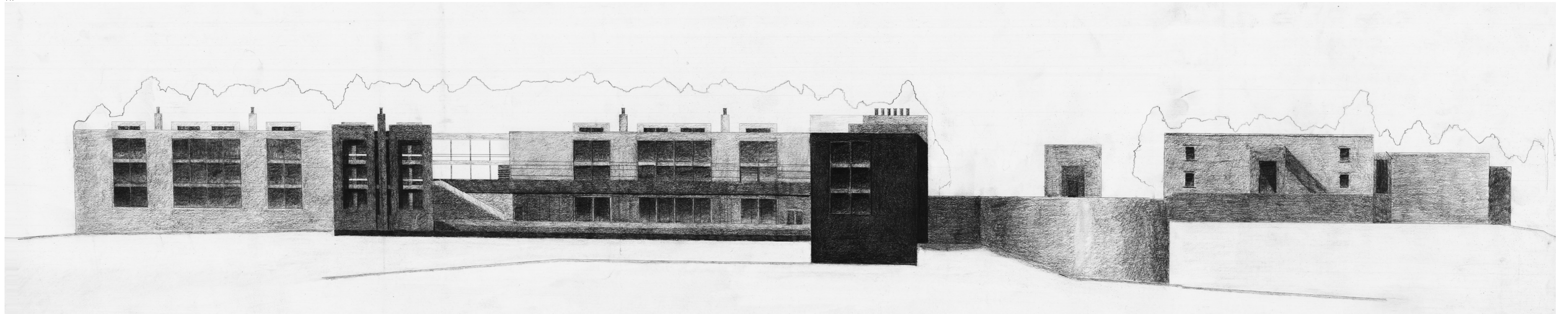
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7. Entry Sequence 2, graphite rendering
8. Viewers Perspective in Plan, CAD line drawing and graphite

9. Entry Sequence 3, graphite rendering
10. Viewers Perspective in Plan, CAD line drawing and

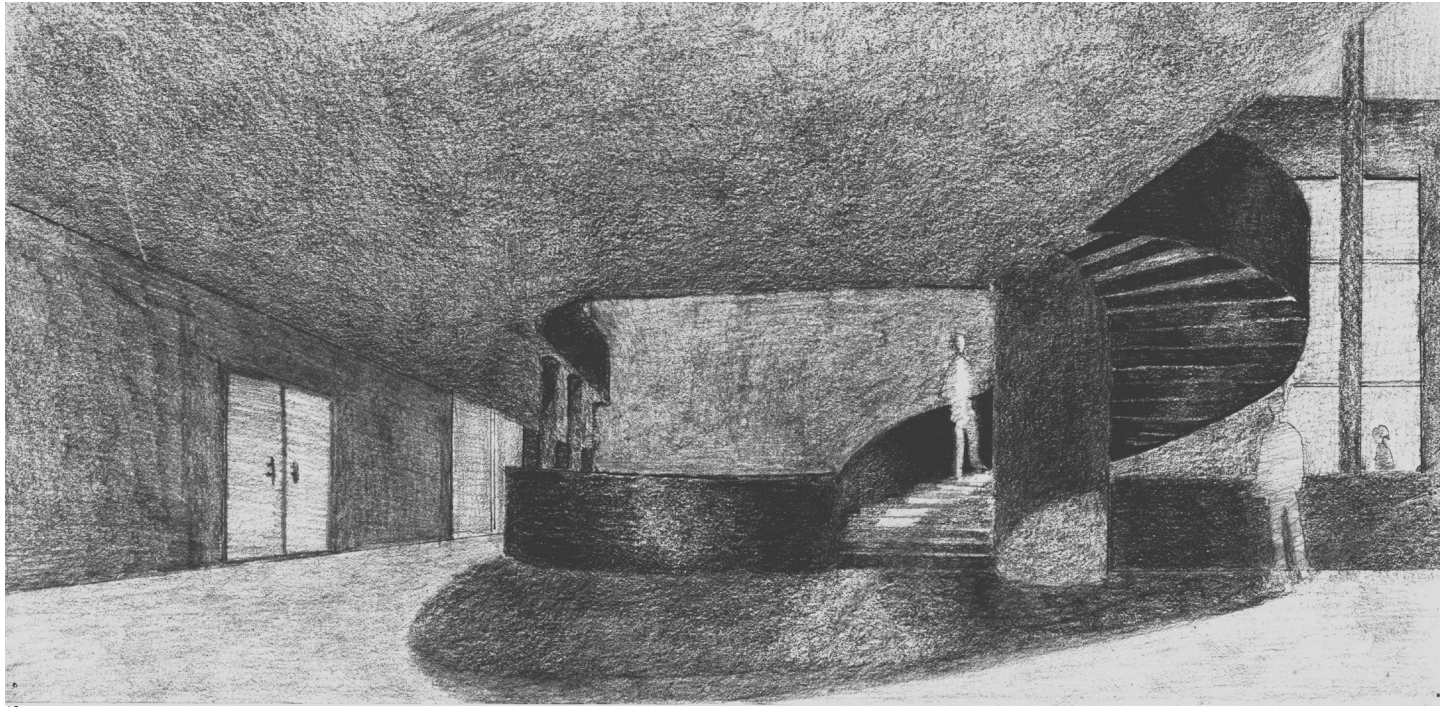


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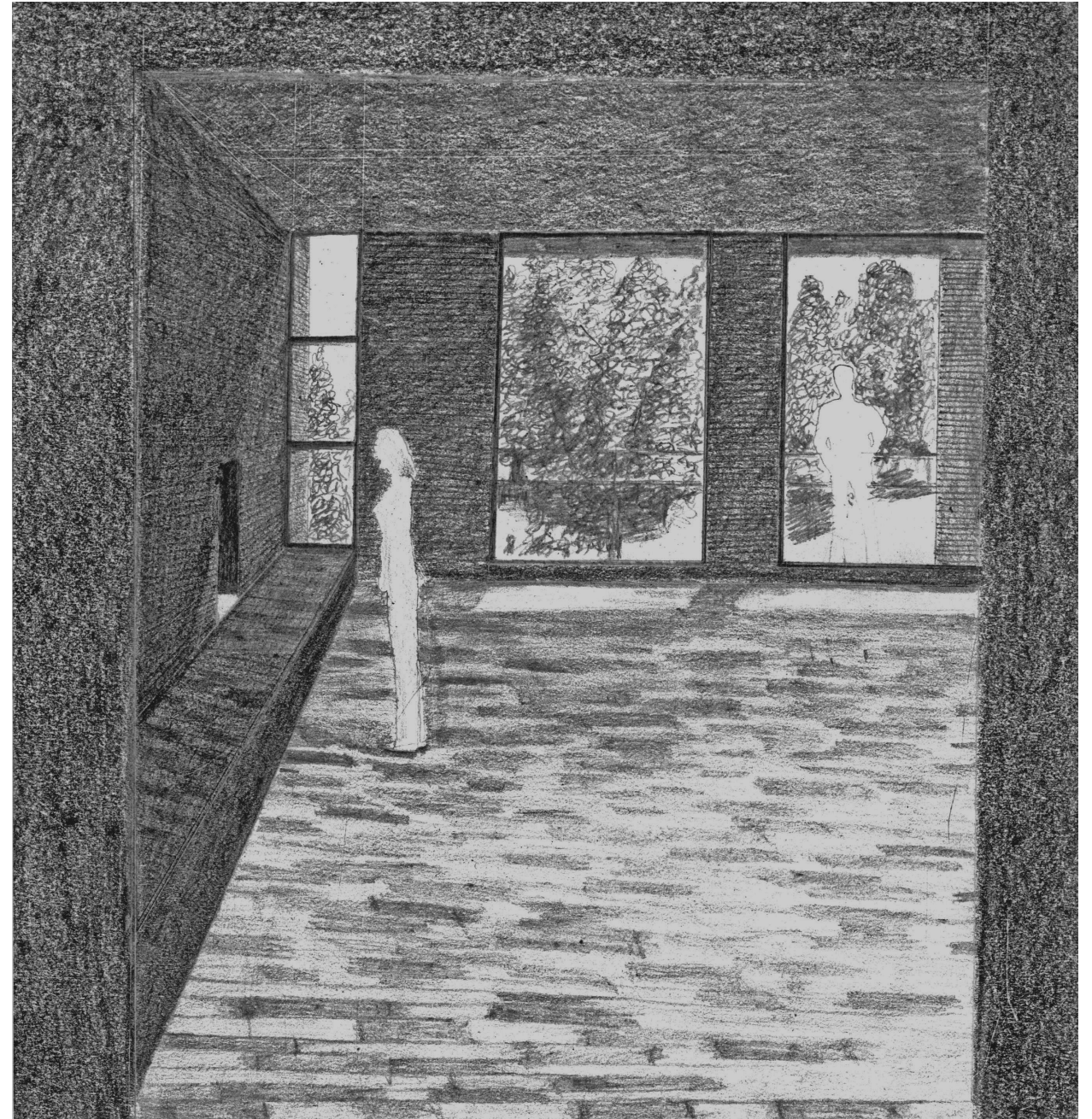
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11. South Elevation, graphite rendering 1/16" = 1'
12. North Elevation, graphite rendering 1/16" = 1'

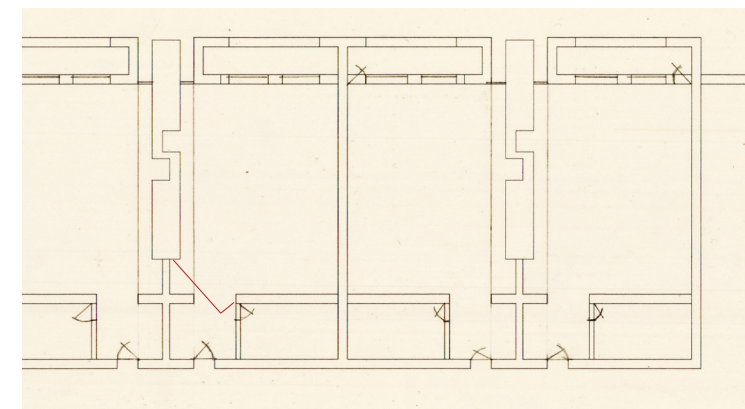


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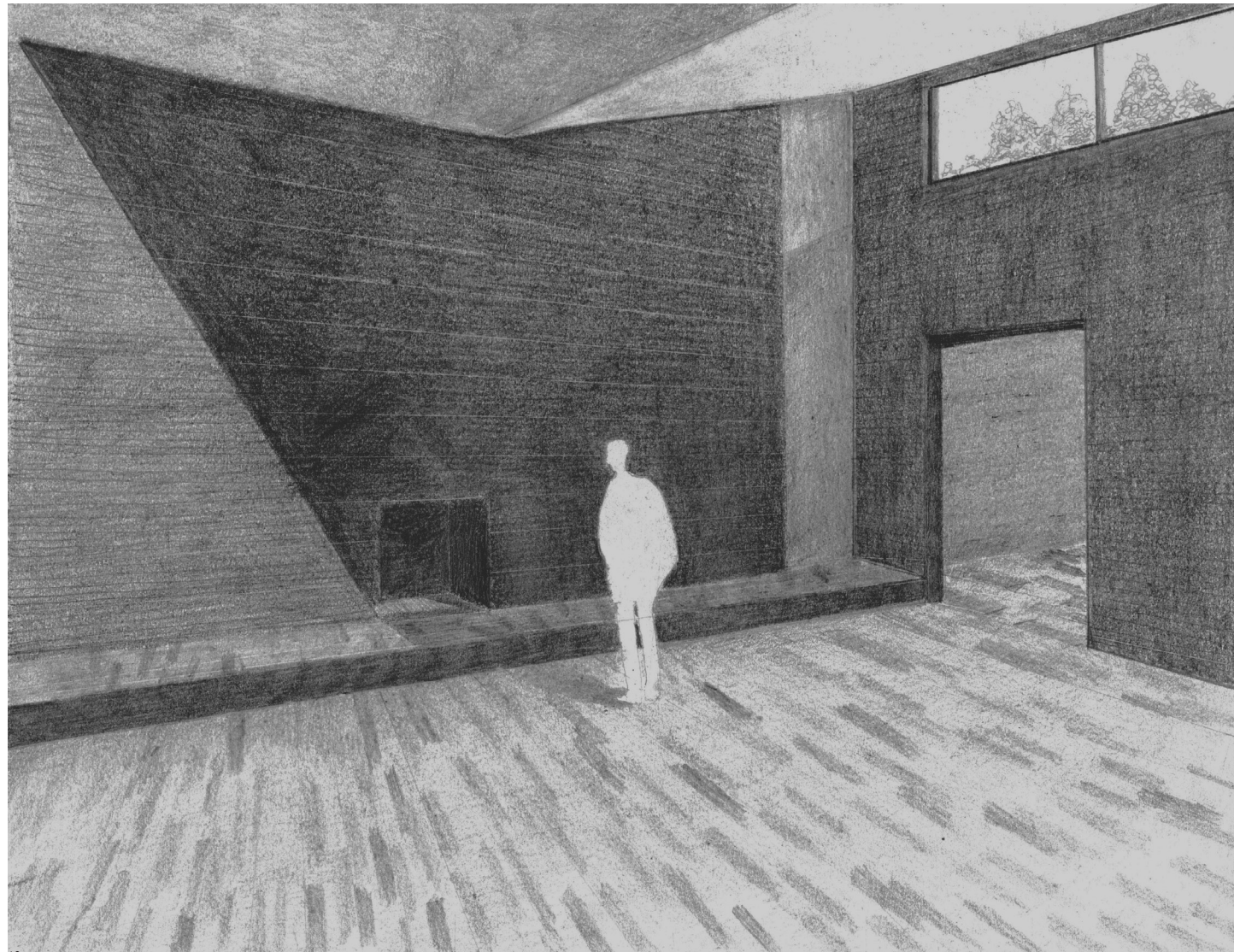
"Elements include such simple things as doors, roofs, chimneys, and fireplaces, which, if misplaced or ill-considered, could compromise the integrity of entry, shelter, ventilation, and warmth both functionally and psychologically" (Kahn 197).



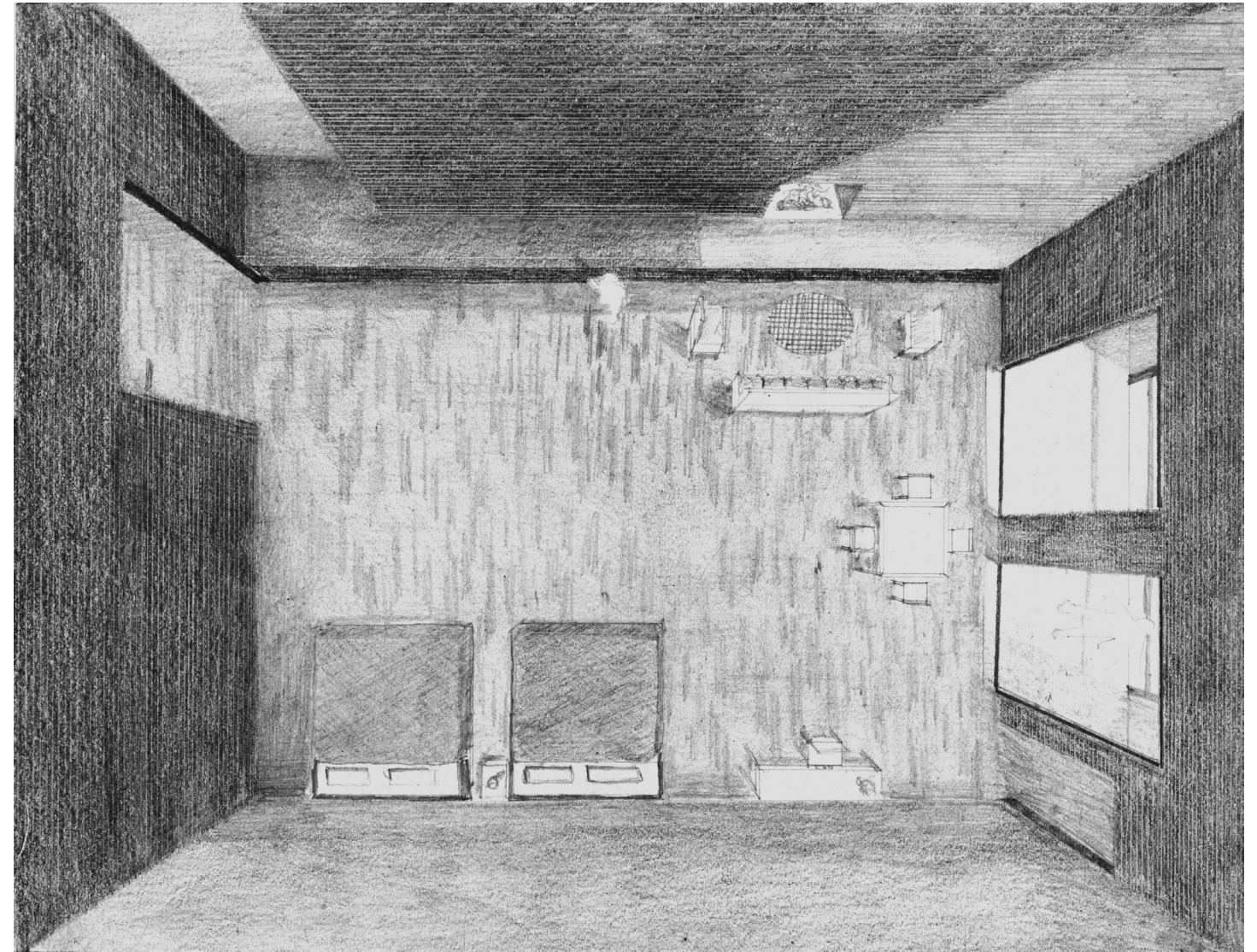
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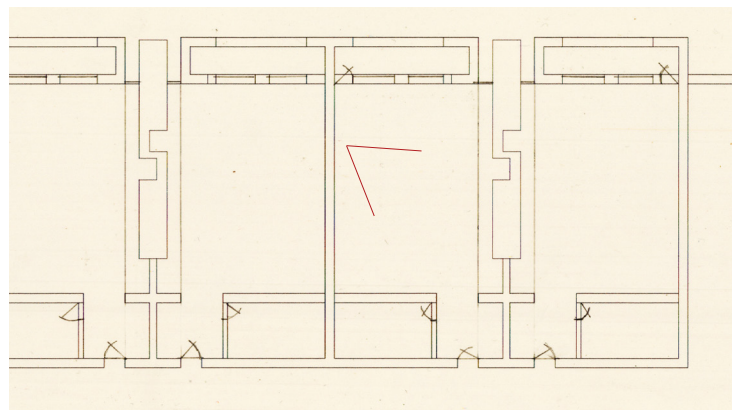
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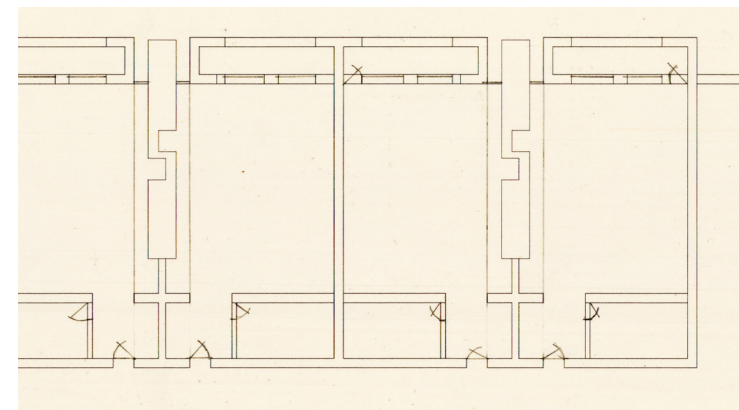
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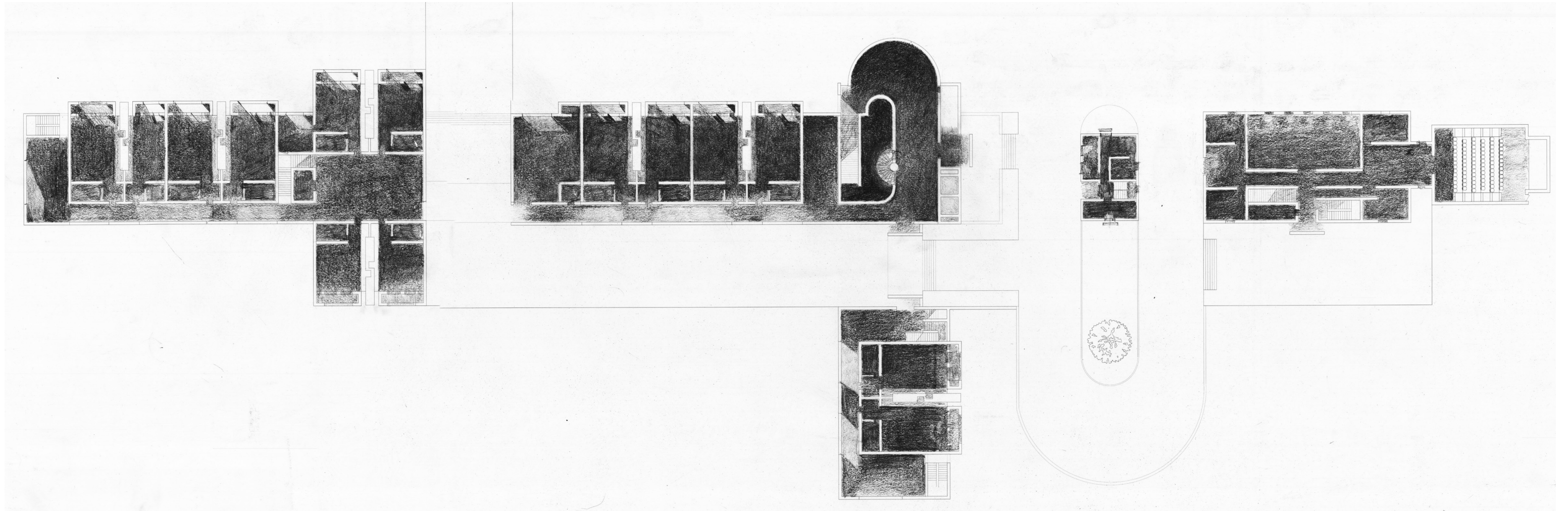
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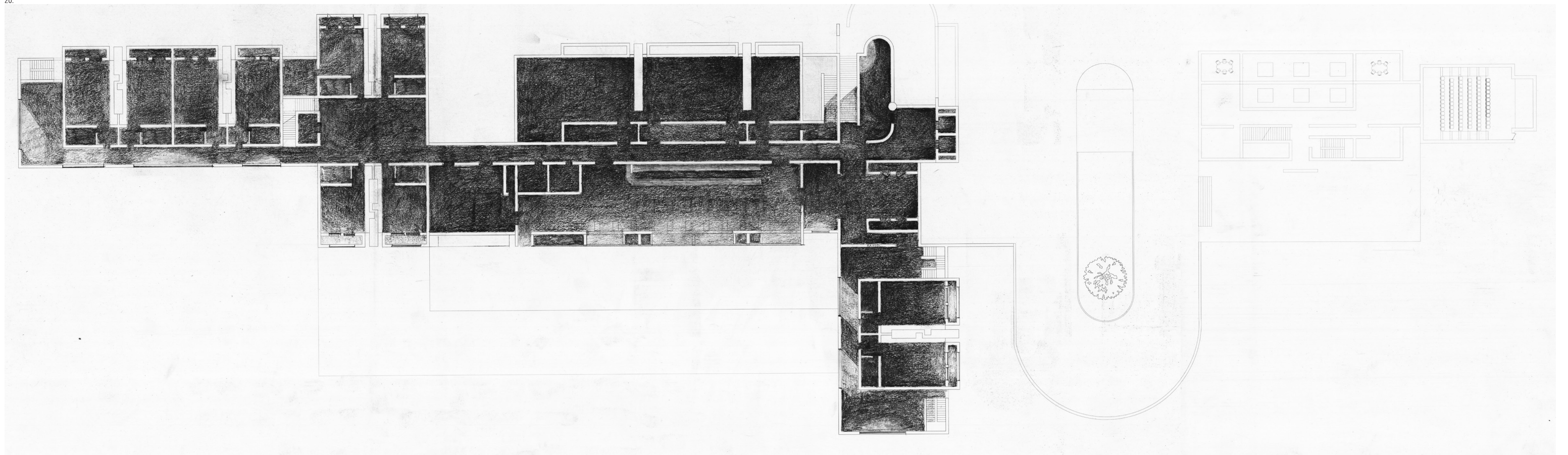
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16. Guest Suite Perspective 2, graphite rendering
17. Viewer's Perspective in Plan, CAD line drawing and graphite

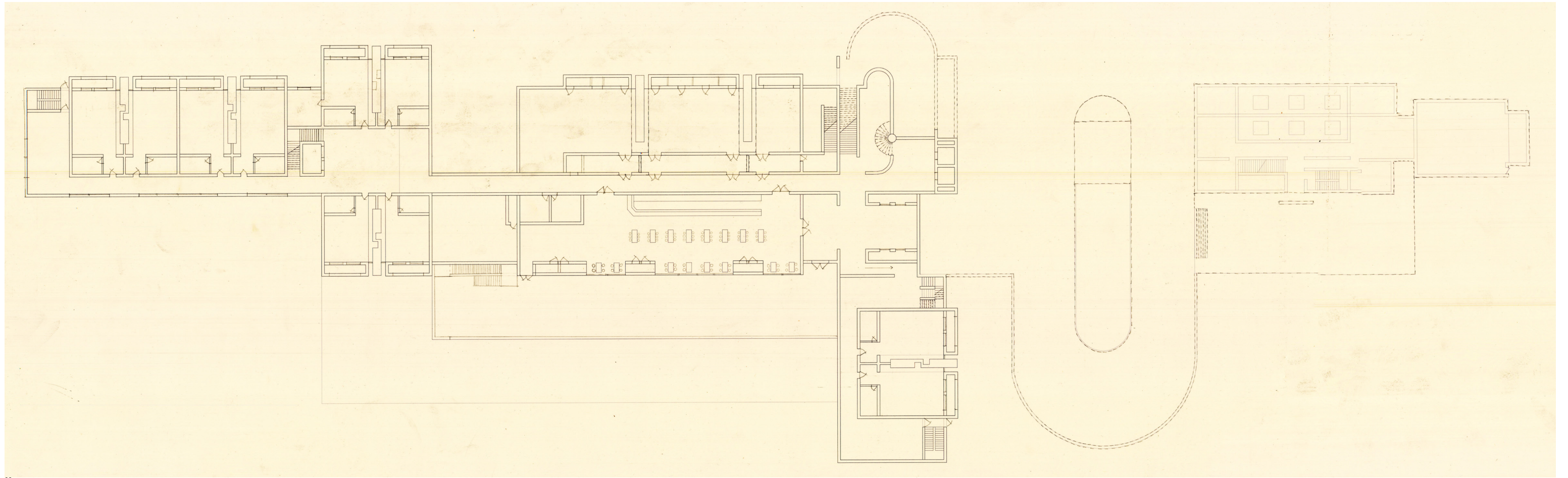
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19. Partial Plan, CAD line drawing and graphite



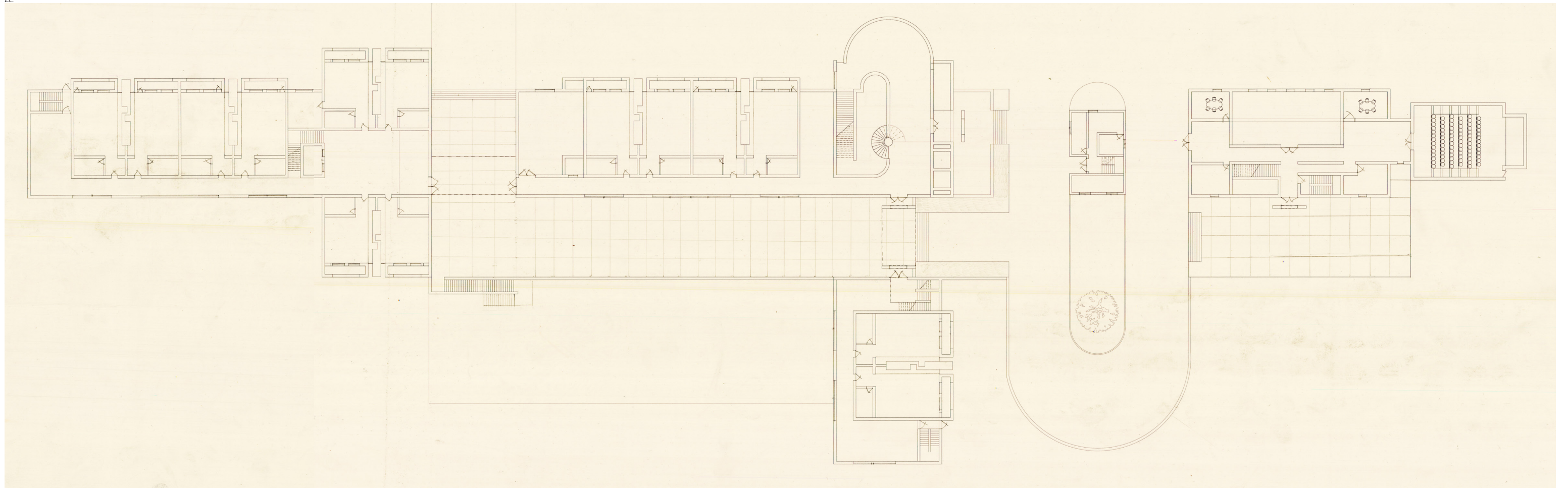
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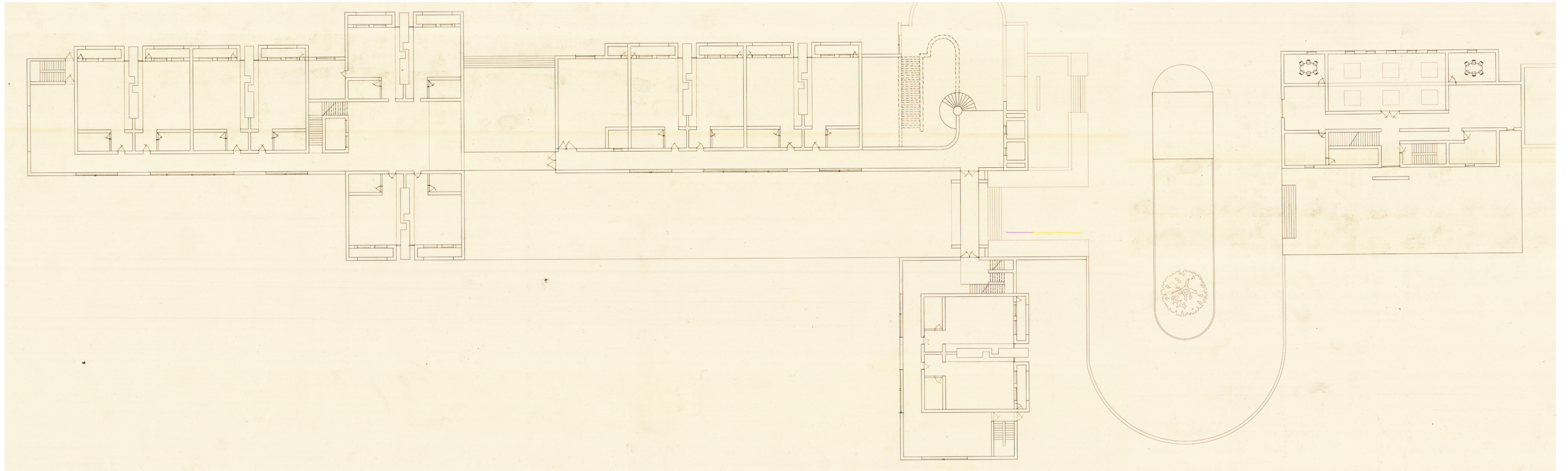
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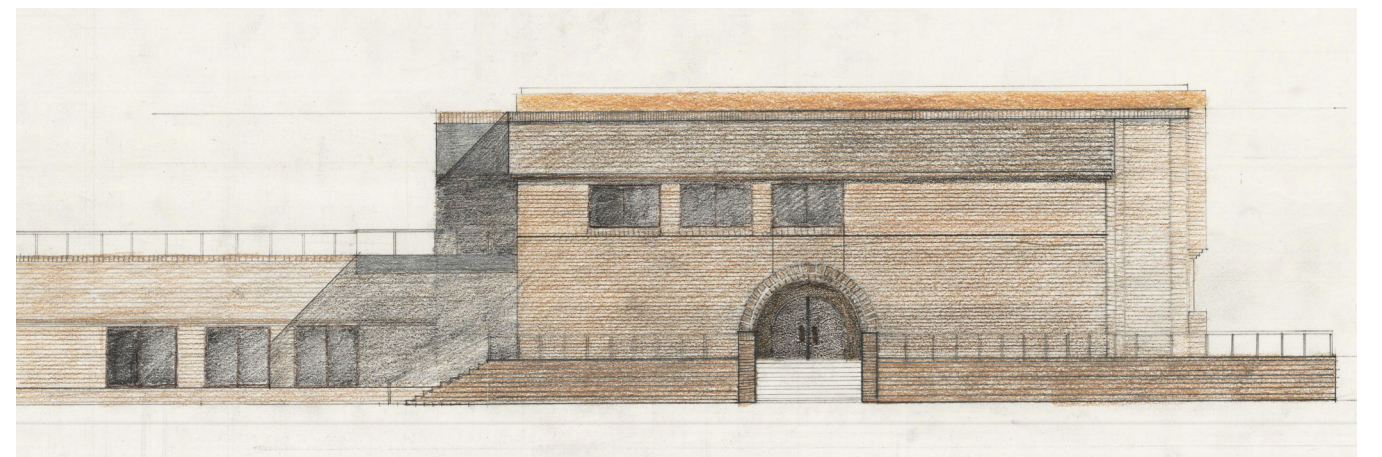
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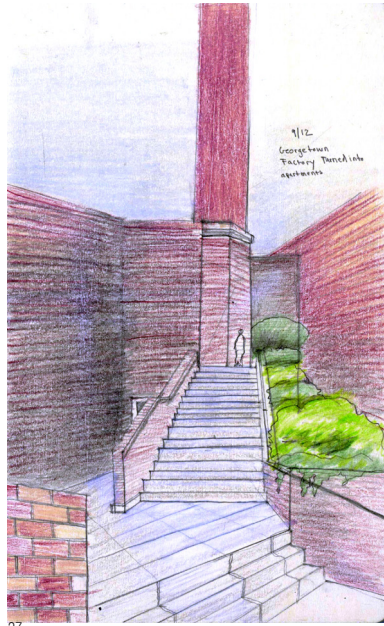


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24. Second Level Plan, CAD and graphite 1/16" = 1'
 25. East Elevation Iteration 3, color pencil and graphite, 1/8" = 1'
 26. East Elevation Iteration 4, color pencil and graphite, 1/8" = 1'



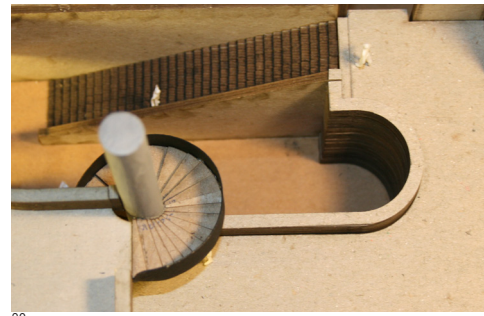
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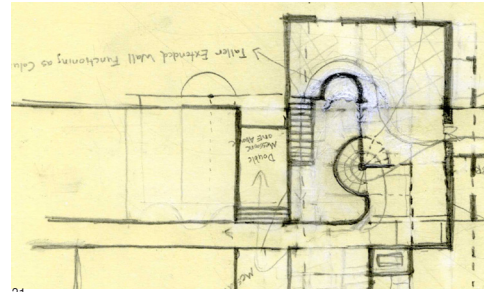
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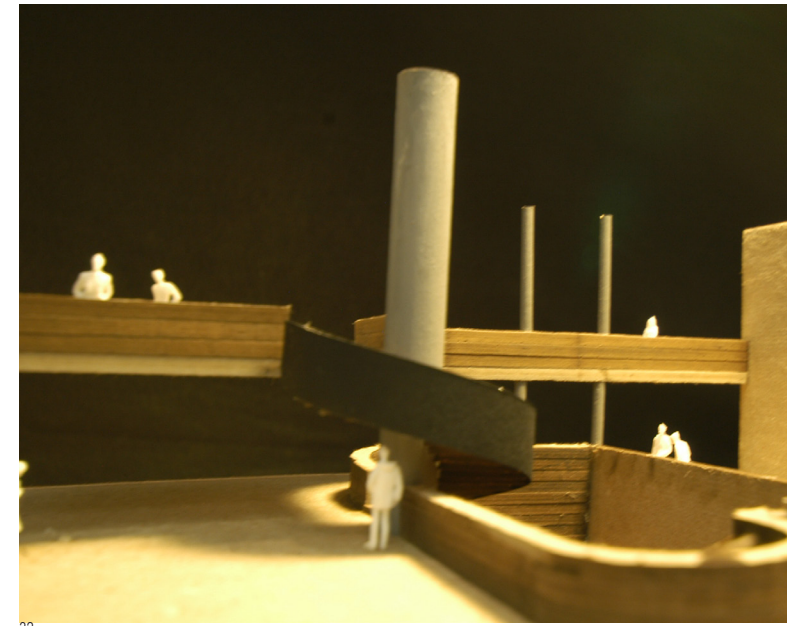
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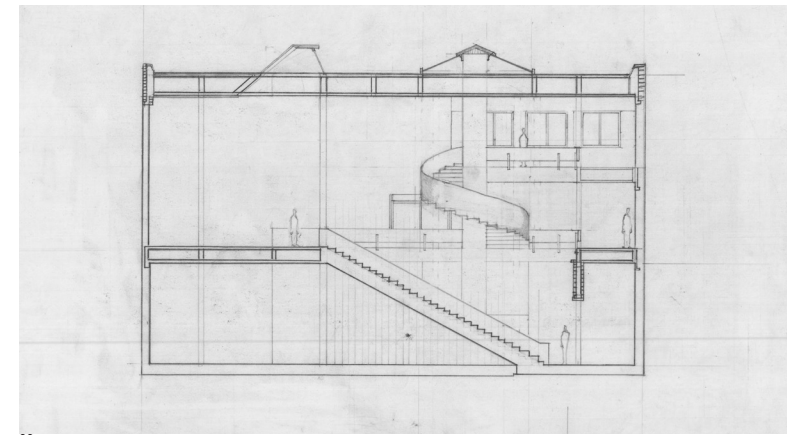
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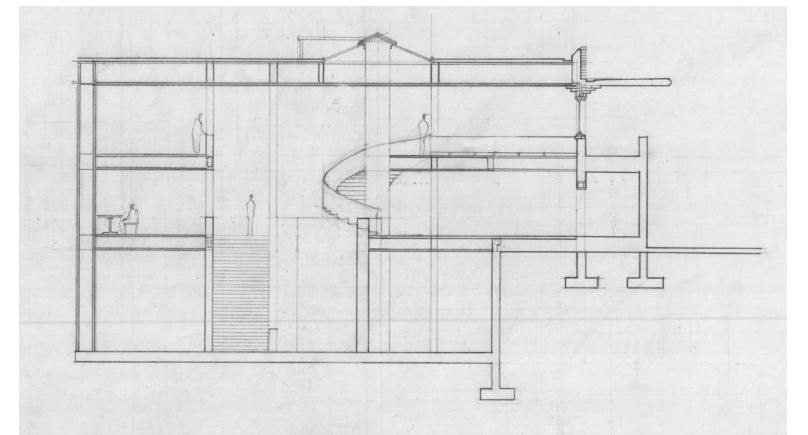
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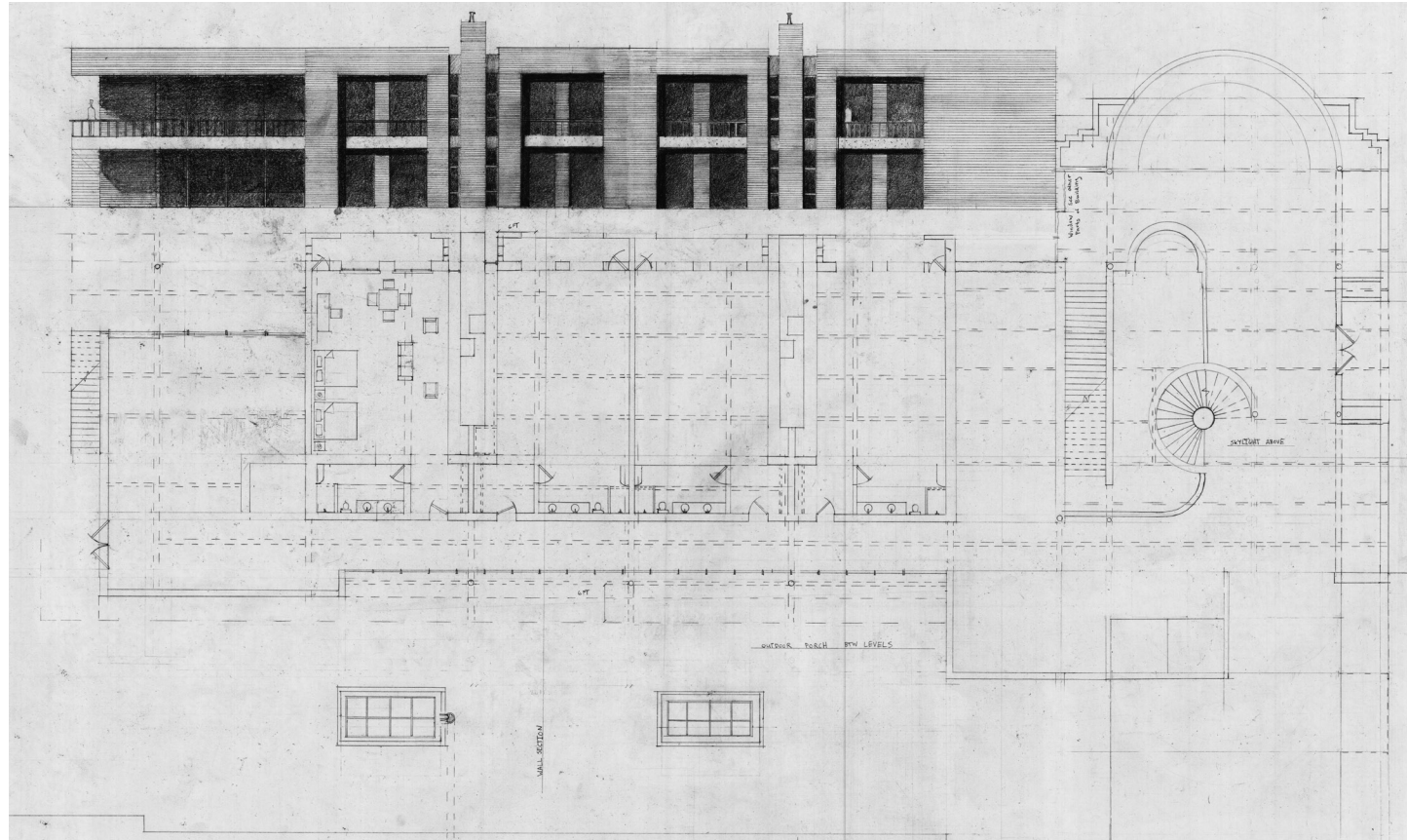
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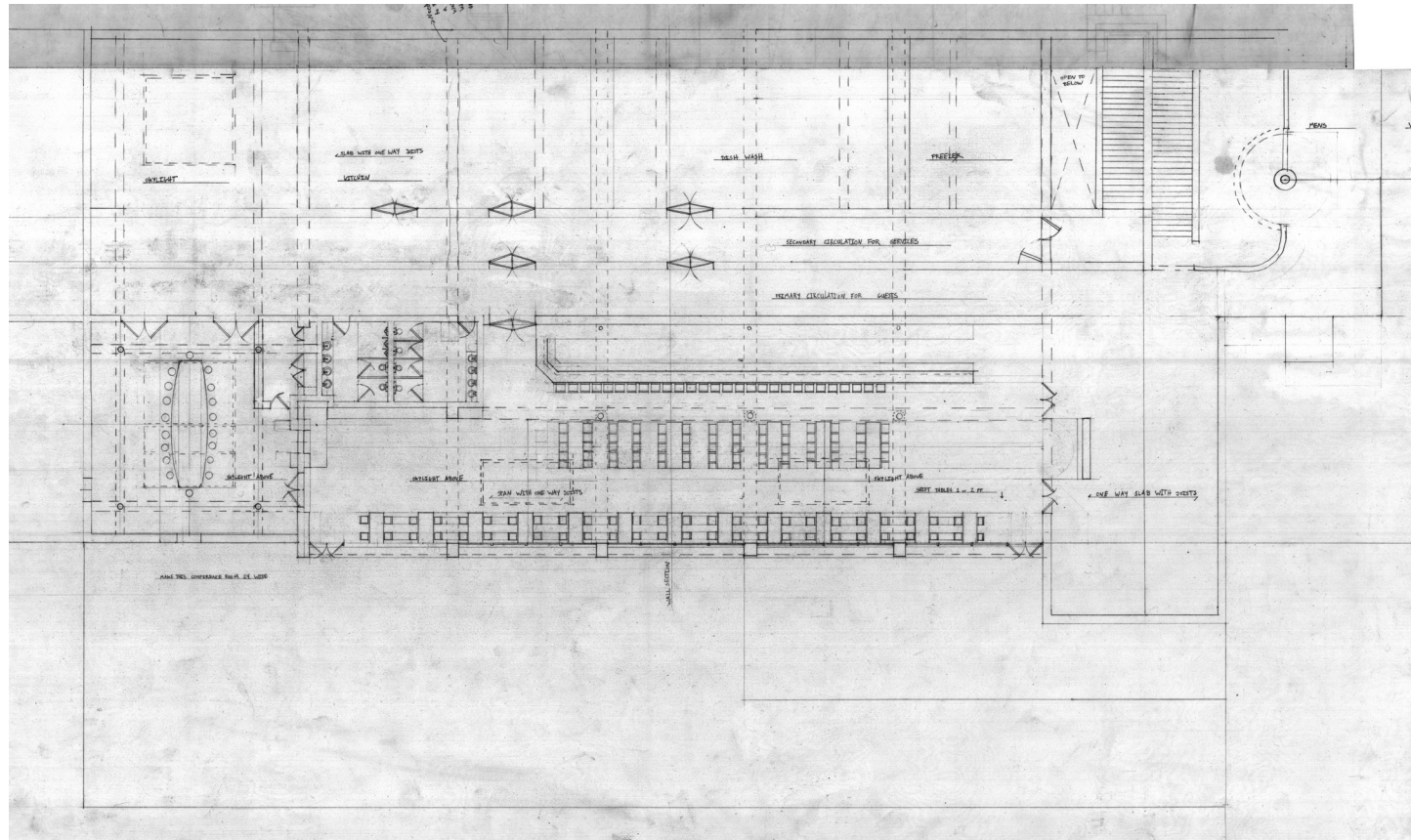
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“All Previous experience in architecture is the inherited property of America, and should be taken every advantage of. Each beautiful thought, form, and mode that is not unsuited to the climate and the people, ought to be studied, sifted, and tested, its principles elucidated, and itself improved on; but the past should always be looked on as a servant, not as a master” (Calvert Vaux 217).

- 27. Sketch of smoke stack in Georgetown, color pencil and graphite
- 28. Photograph of smoke stack in Georgetown
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- 30. Photograph of Model of Spiral Stair and Atrium
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- 33. Section 1 Through Entry Lobby and Atrium, graphite
- 34. Section 2 Through entry Lobby and Atrium, graphite



35.

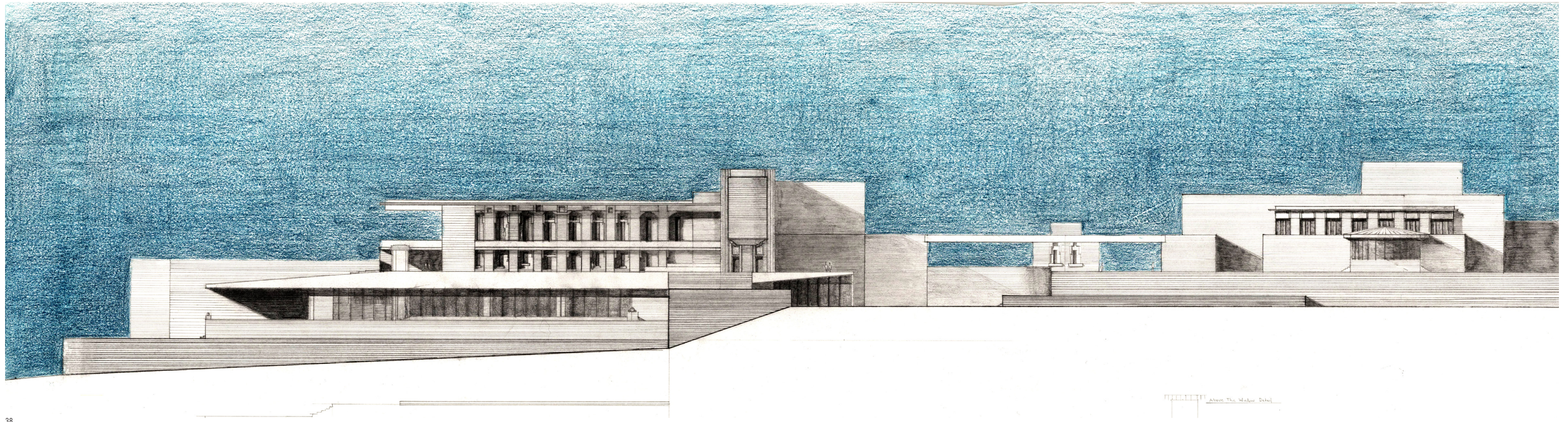


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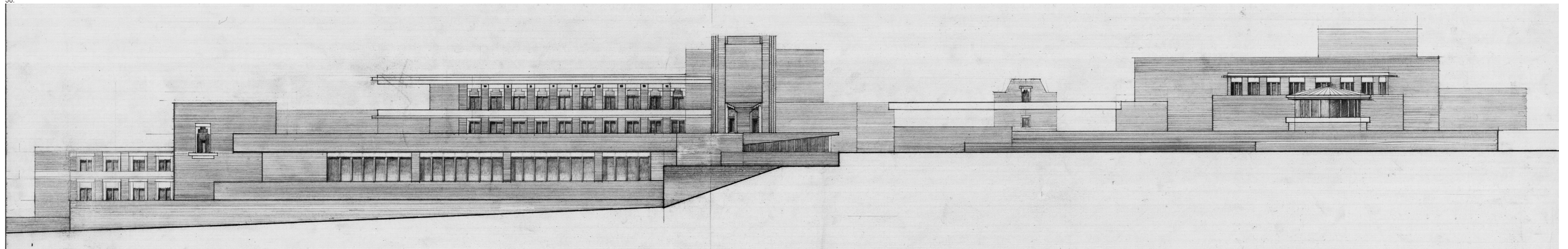


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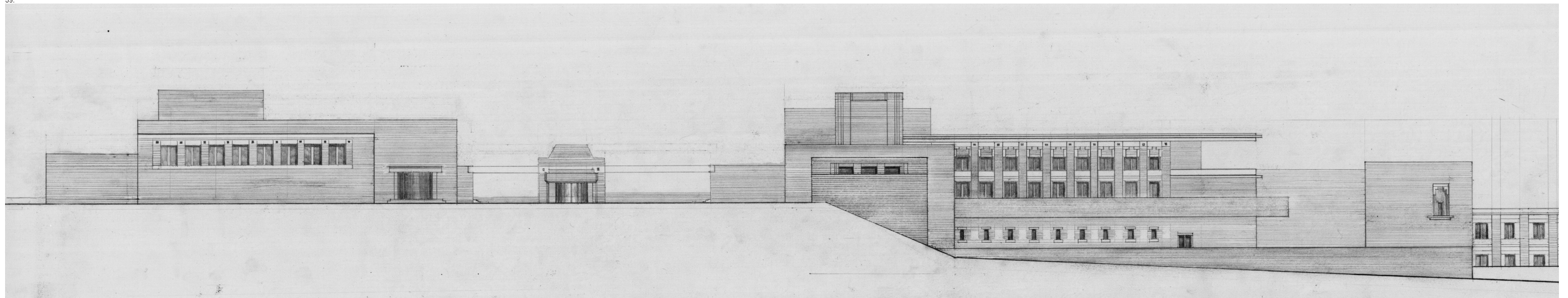
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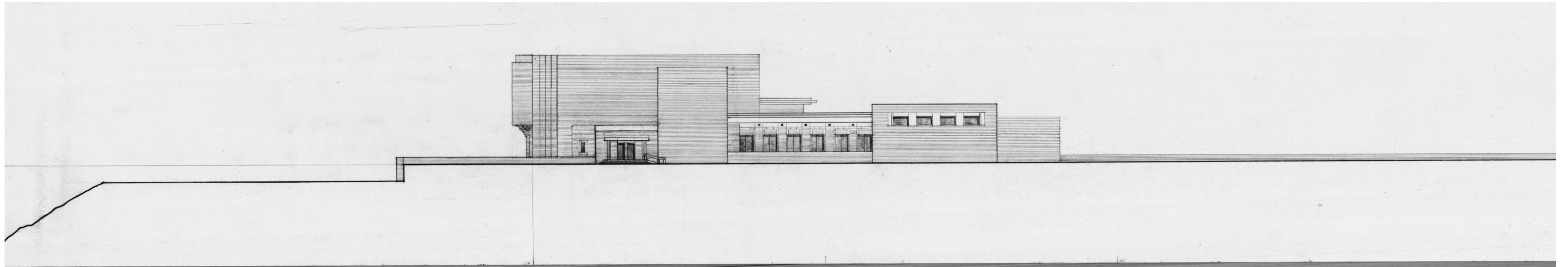
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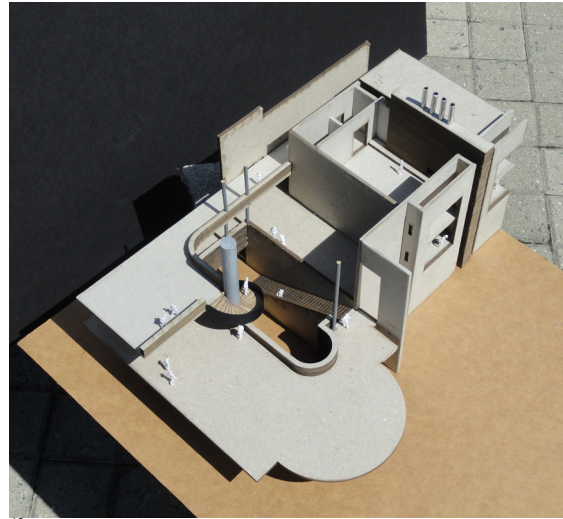
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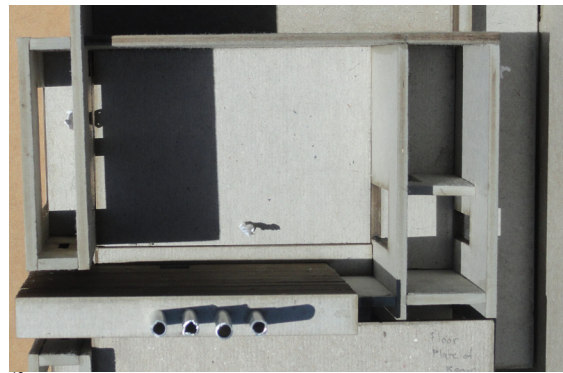
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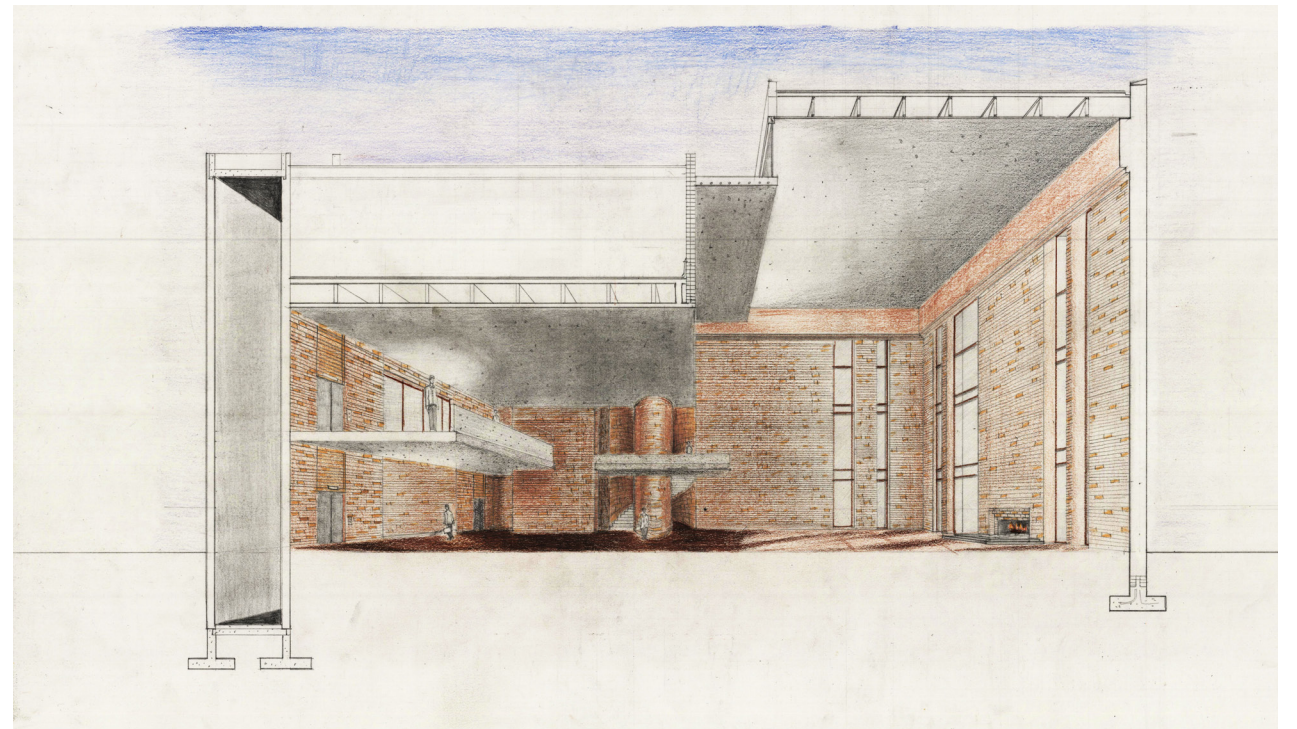
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42.



43.



44.

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 44. Perspective of Entry Lobby Iteration 1, color pencil and graphite



Structural Purity vs. Formal Purity

Good architects command the tension between structure and form in two ways:

- 1) Relieve the tension between structure and form.
- 2) Make tension between structure and form.

- Materials: Materials have inherent qualities that inform their structural capabilities.
- Structural Purists - The structure is sovereign. The form is derived from structural characteristics. The building is organic. It propagates from a single structural form. This is often the result of material characteristics, for example, a pure masonry building that only has compressive forces.
- Formal Purists - Form is sovereign. Structure is secondary. Structural characteristics are only considered in order to make the form.

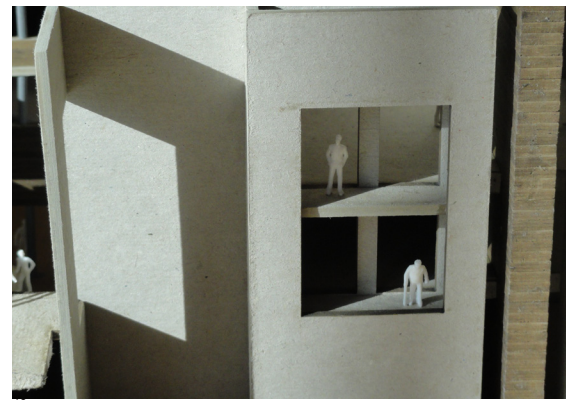
Problem:

The same form can be constructed with different materials.

Solution:

A different structural approach is appropriate in different circumstances. In this project a balance is achieved by taking from both strategies to achieve the goals of the project both aesthetically and architecturally. The walls are pure masonry and thus work compressively while the floors are cast concrete thus spanning in compression on top and tension on bottom.

45.



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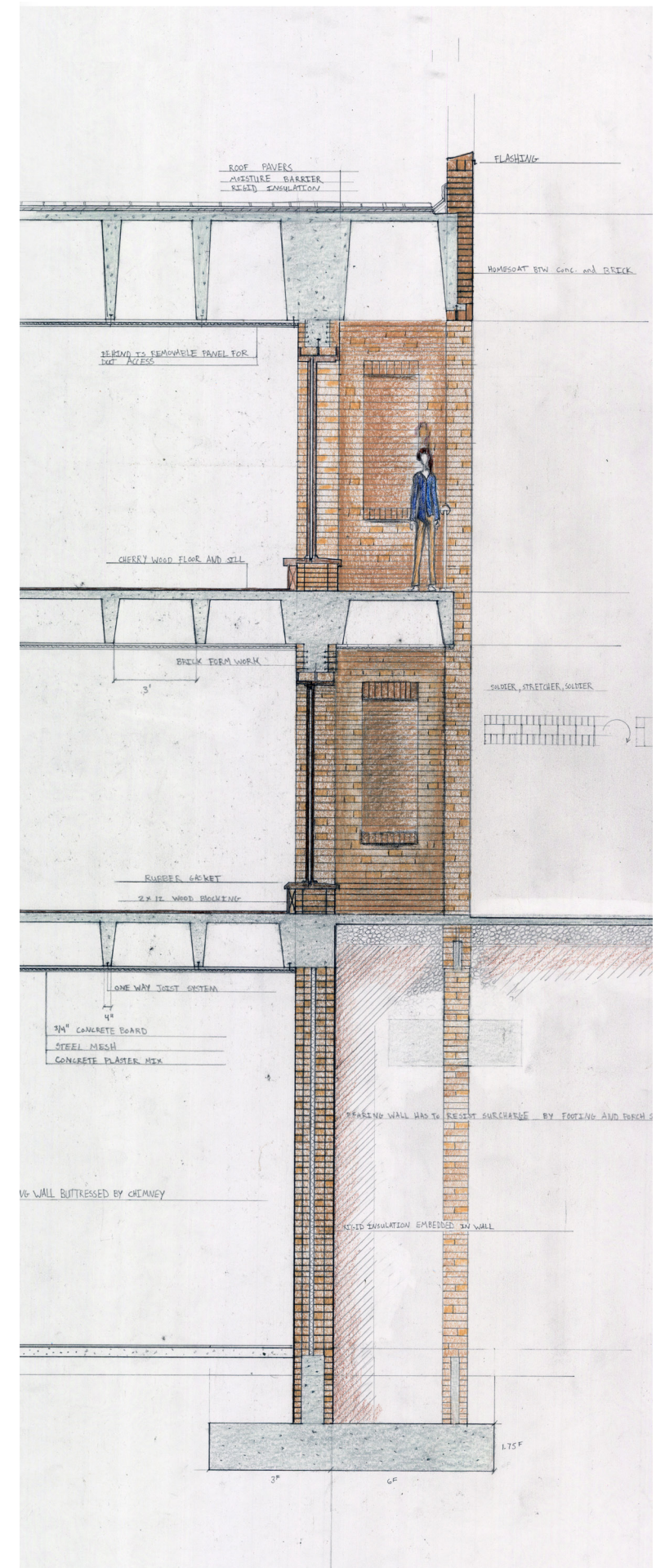


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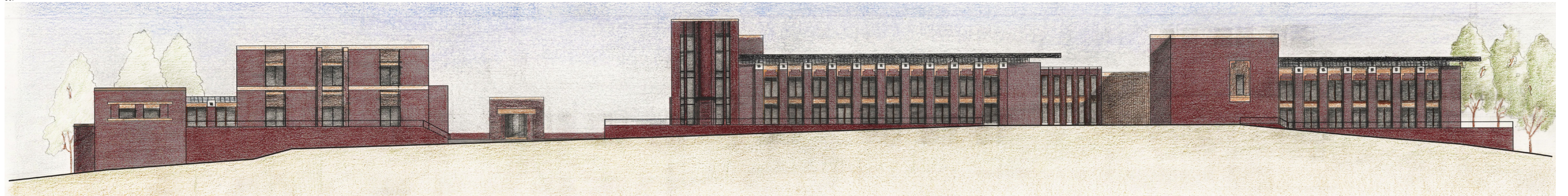


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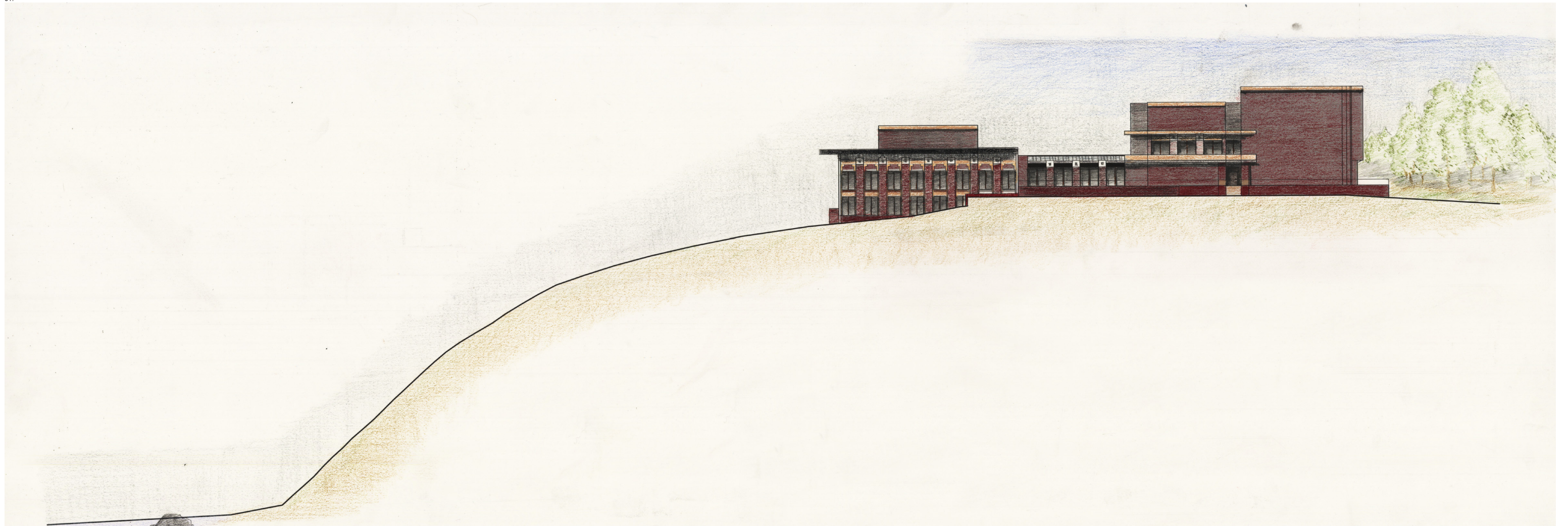
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50.

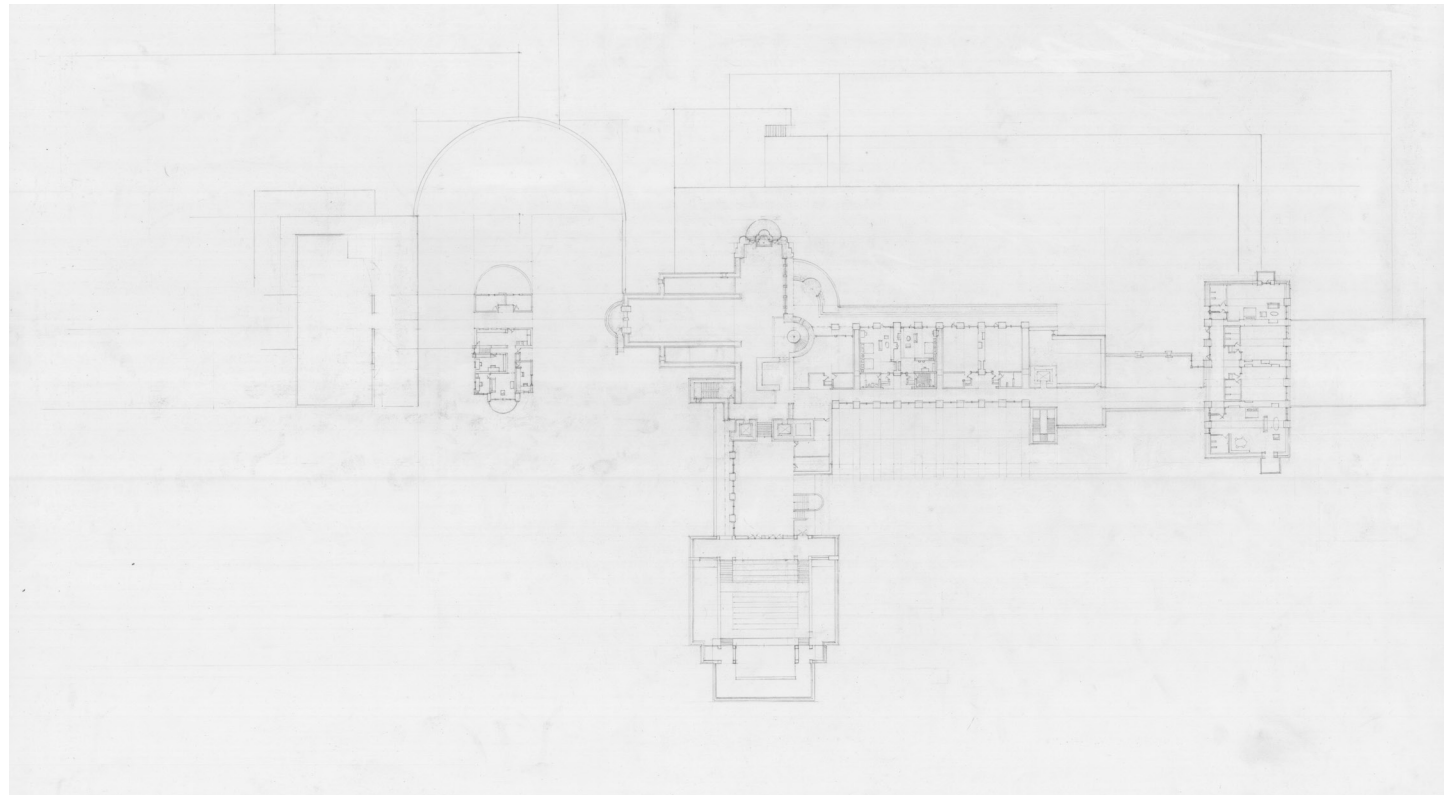


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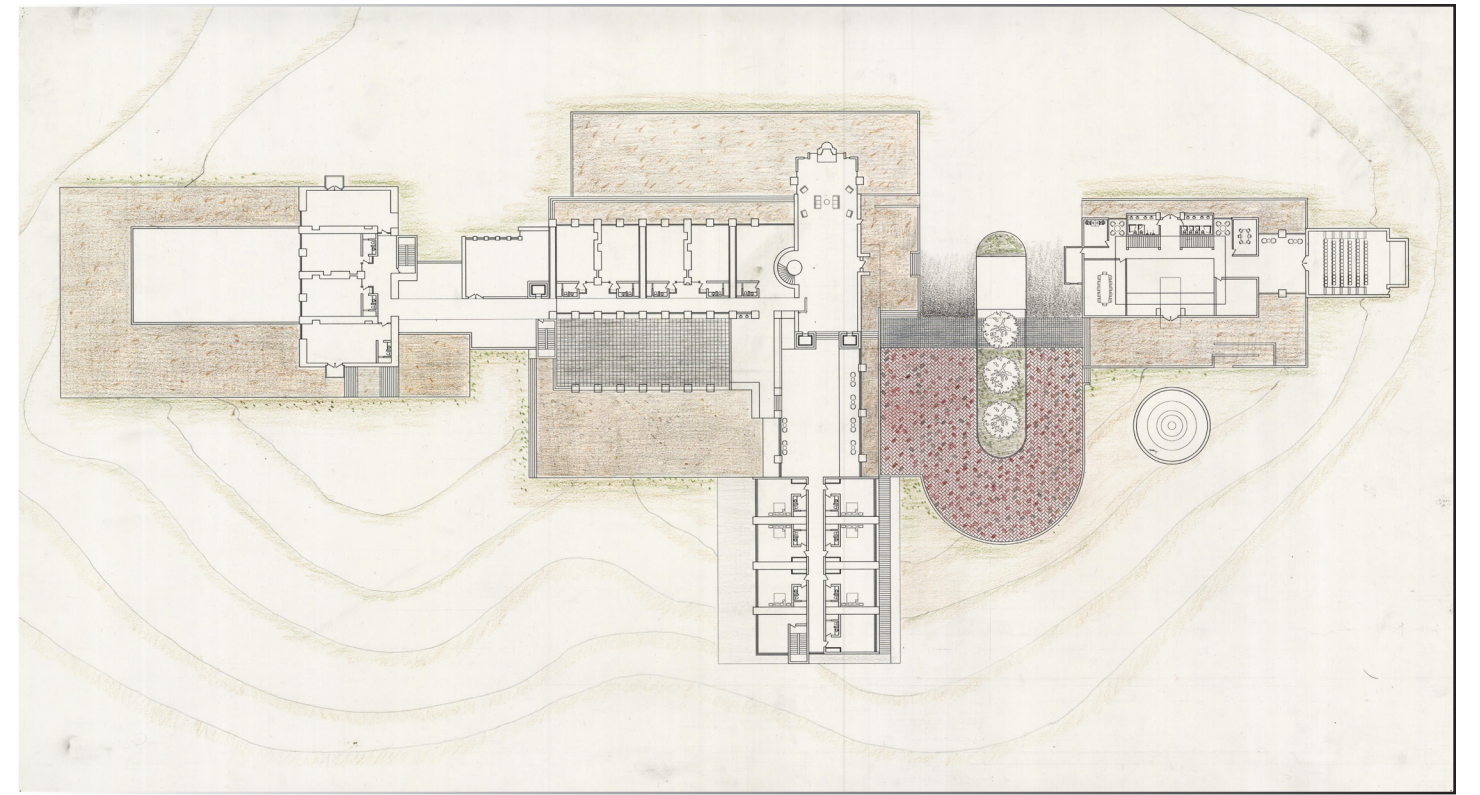


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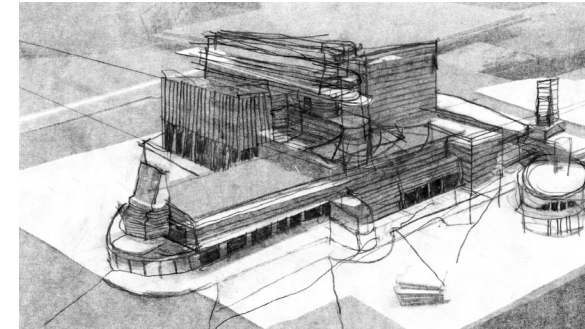
54.



56.

53. Building and Site Plan, graphite
54. Photograph of View from Site, Potomac River, from Turkey Run Park
55. Building and Site Plan, color pencil and graphite
56. Photograph of Site, Turkey Run Park

Perspective Drawing and Massing Studies

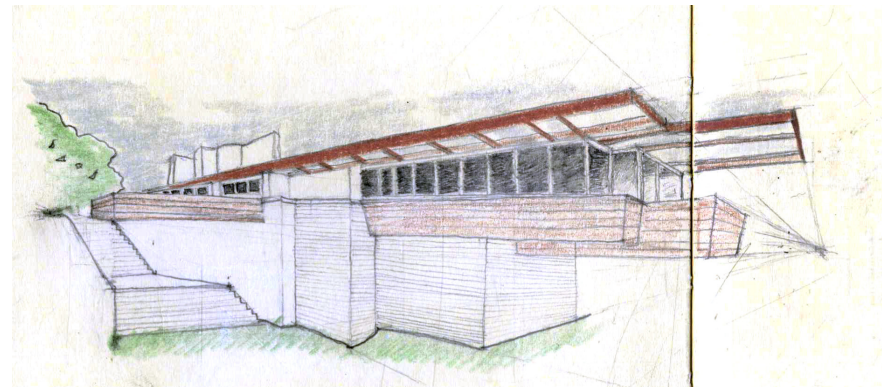


57.



58.

57. Sketch of Massing Model, graphite on trace
58. Photograph of Massing Model

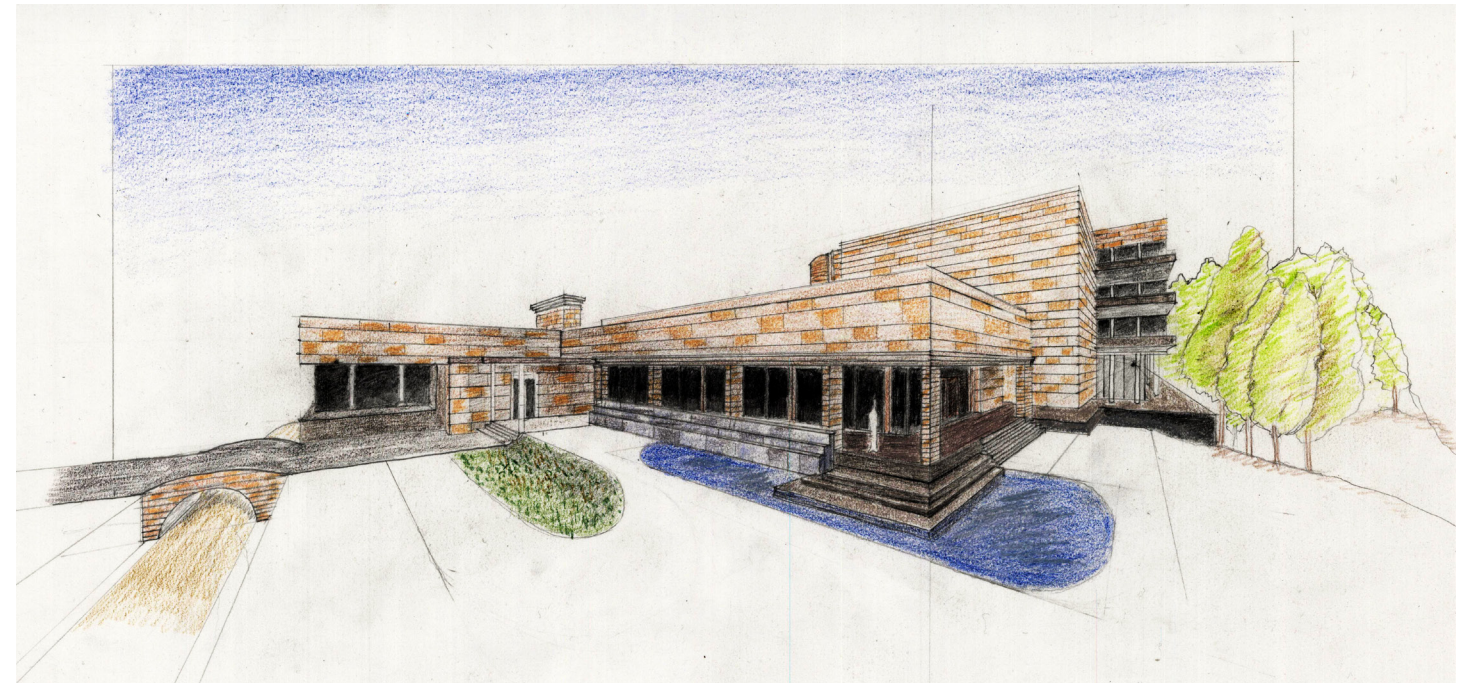


59.

59. Sketch of Frank Lloyd Wright's Wingspread, color pencil
60. Exterior Perspective, color pencil and graphite on paper
61. Exterior Perspective, color pencil and graphite on paper



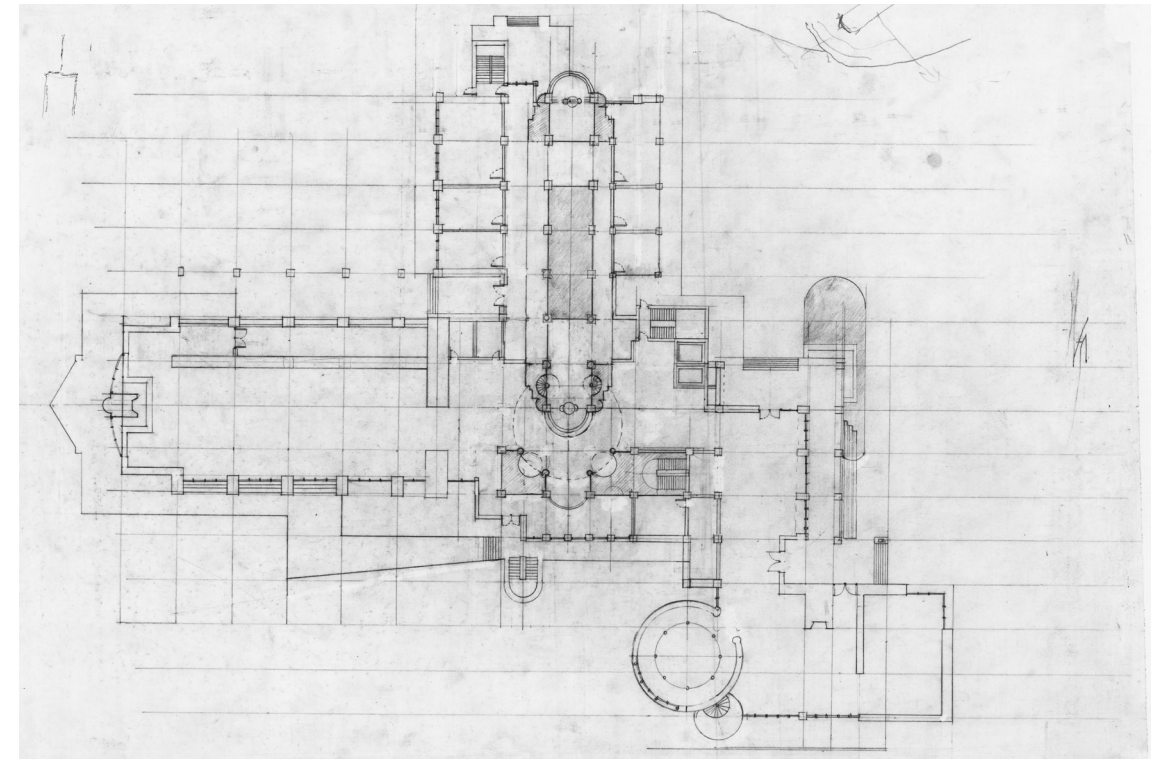
60.



61.

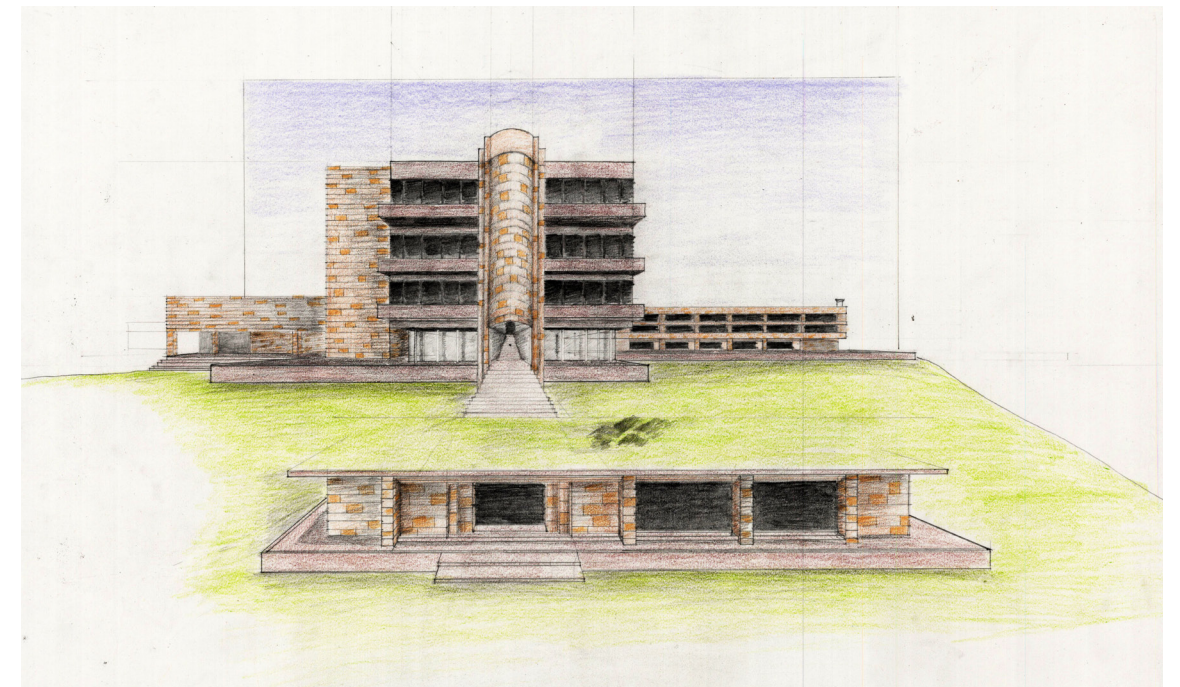


62.



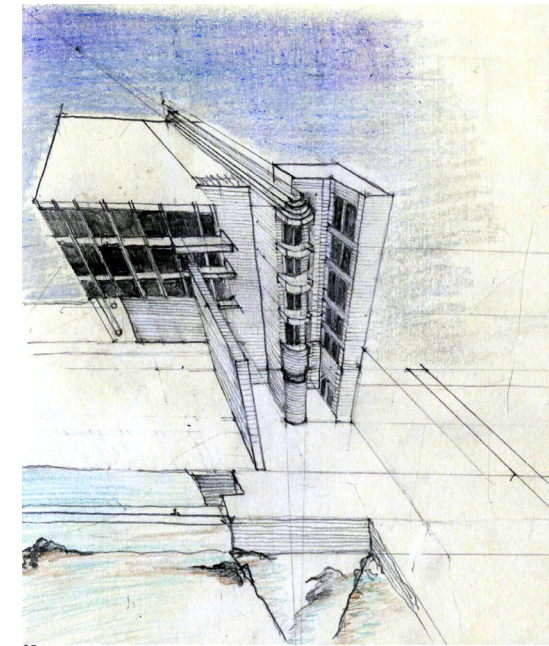
63.

“Everything that is made however obeys the laws of nature. The man is always greater than his works because he can never fully express his aspirations. For to express oneself in music or architecture is by the measurable means of composition or design. The first line on paper is already a measure of what cannot be expressed fully. The first line on paper is less” (Kahn 63)

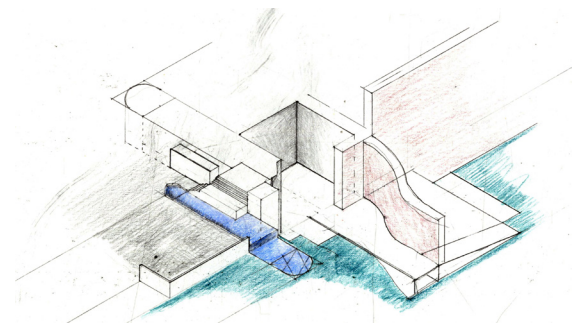


64.

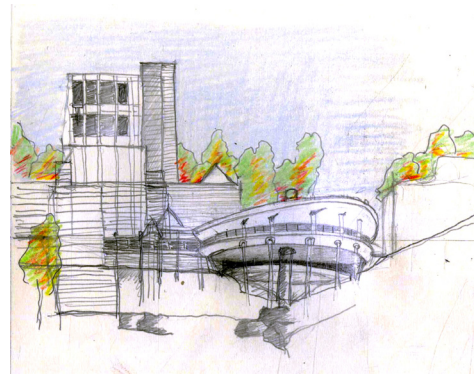
Design Through Sketching



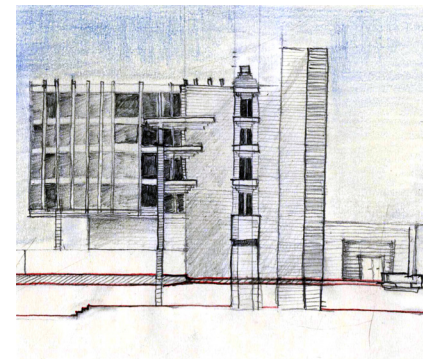
65.



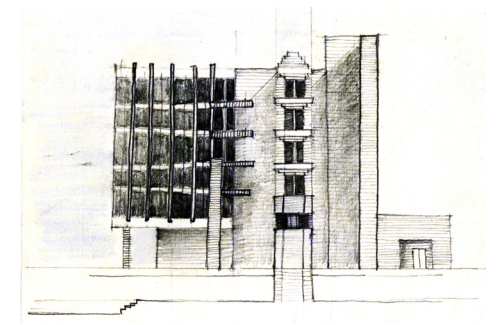
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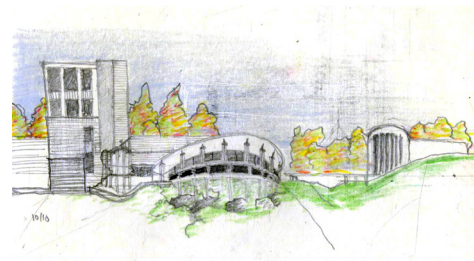
68.



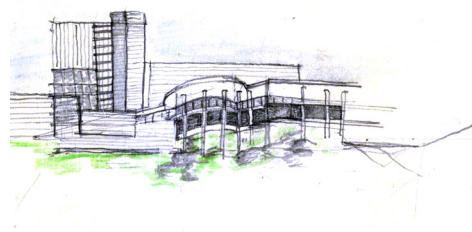
70.



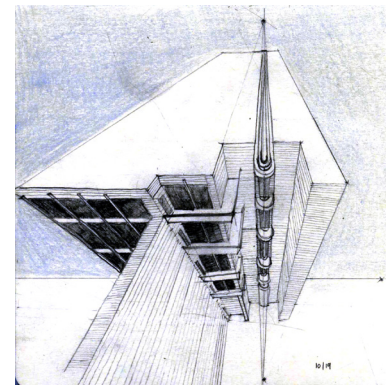
72.



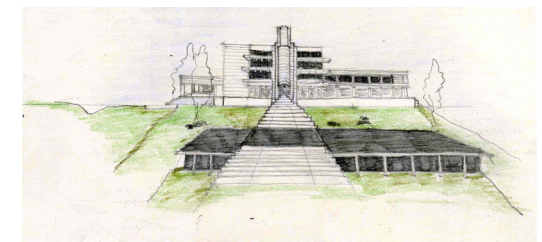
67.



69.



71.

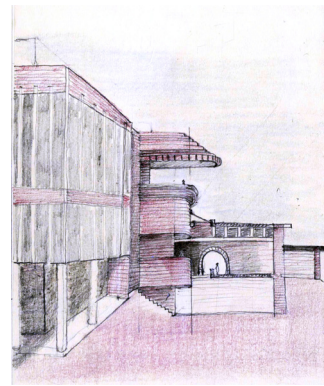


73.

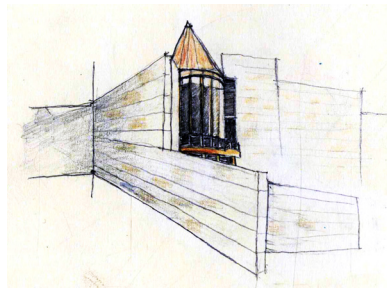
66. Sketch, color pencil
67. Sketch, color pencil
68. Sketch, color pencil
69. Sketch, color pencil
70. Sketch, color pencil
71. Sketch, color pencil
72. Sketch, color pencil
73. Sketch, color pencil



74.



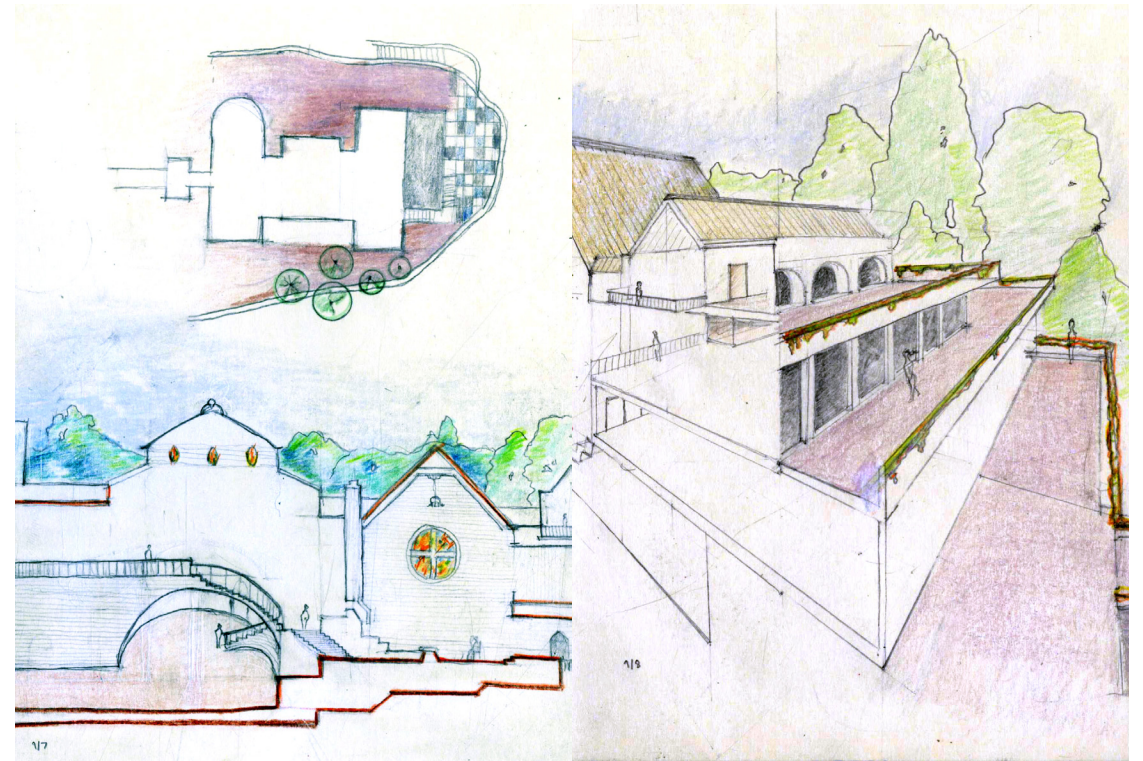
76.



75.

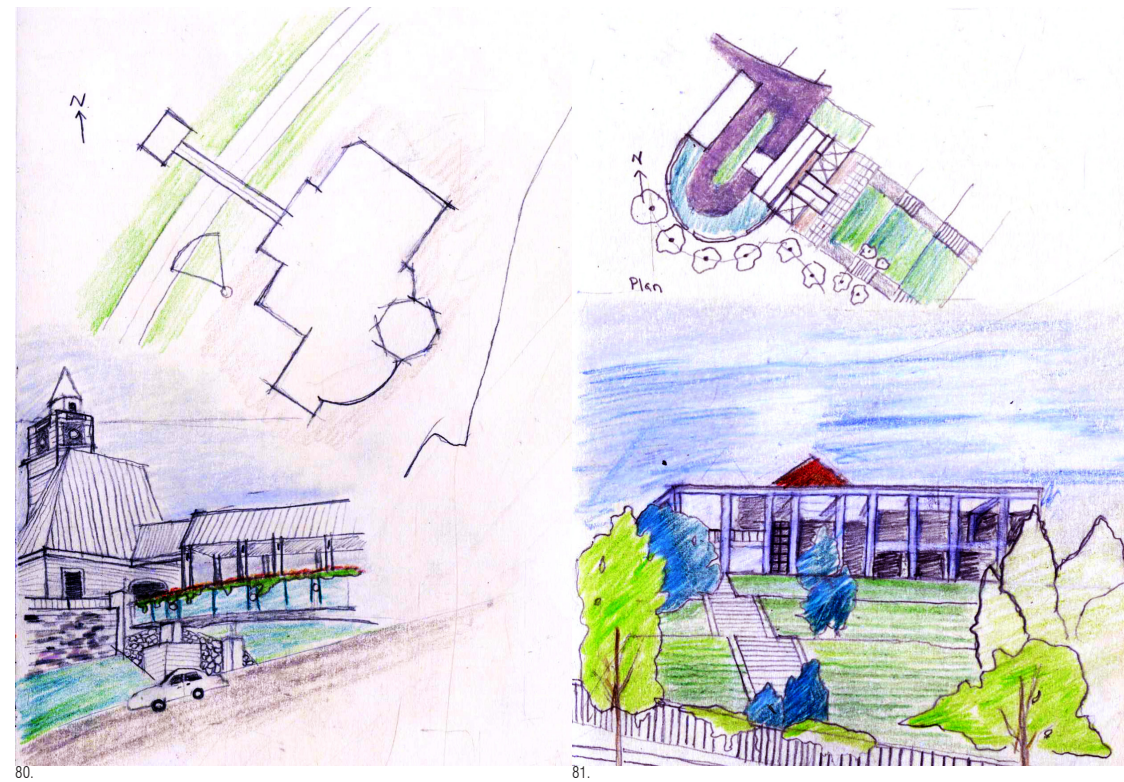


77.



78.

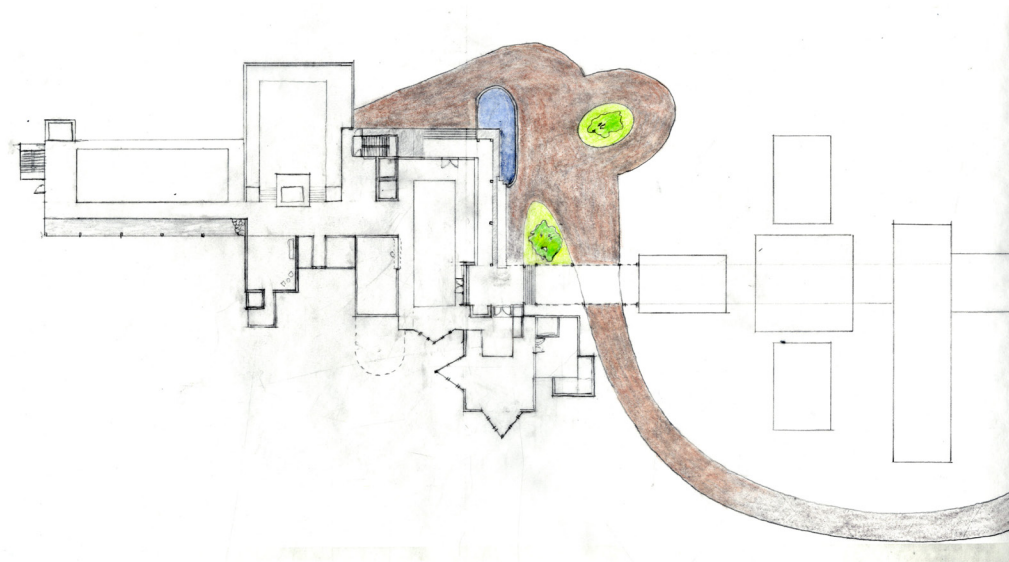
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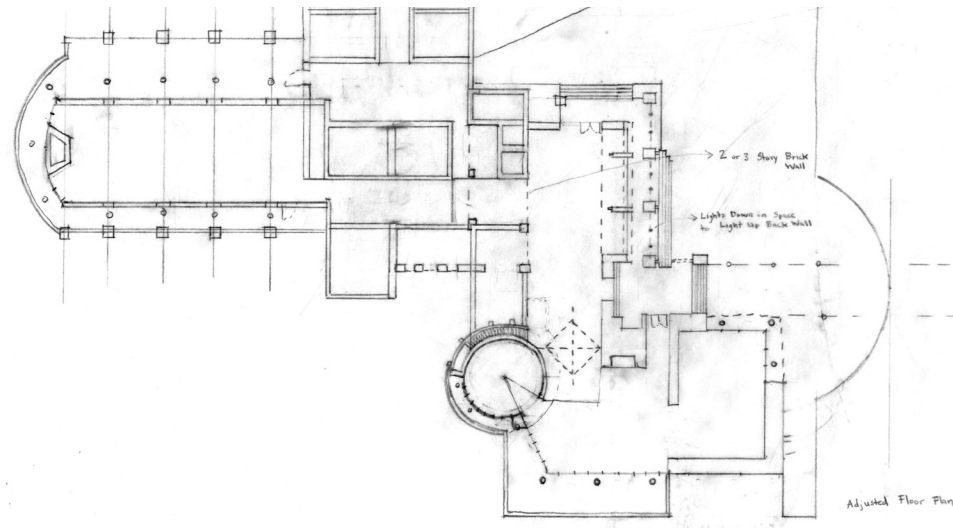
80.

81.

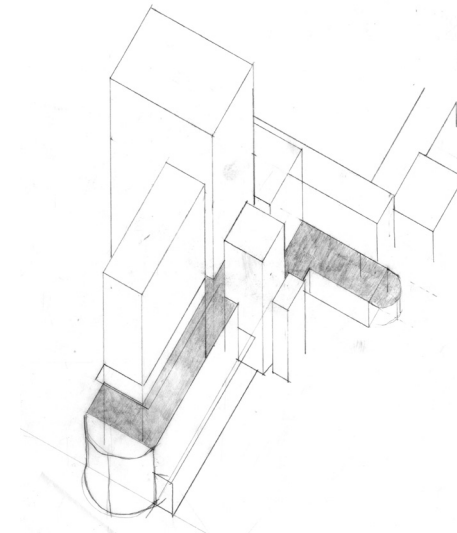
Schematic Design: Site and Massing Development



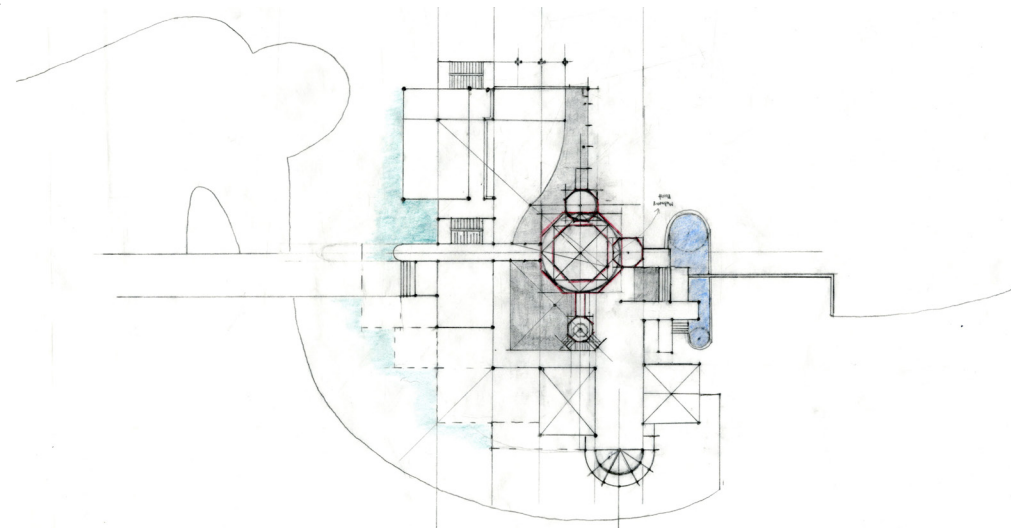
82.



83.

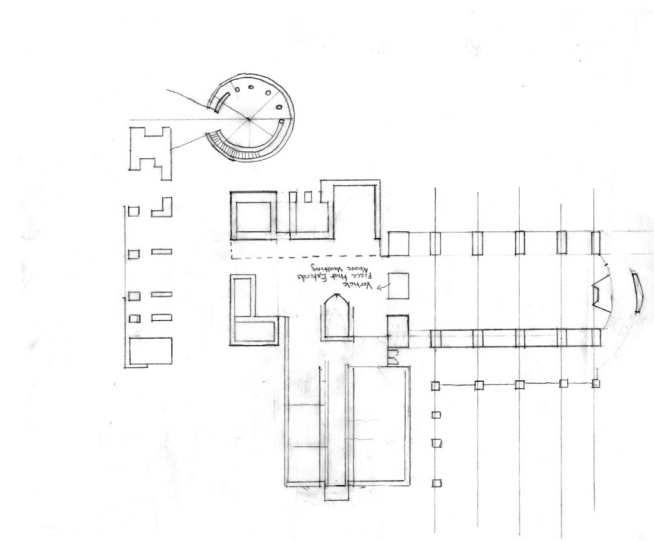


84.

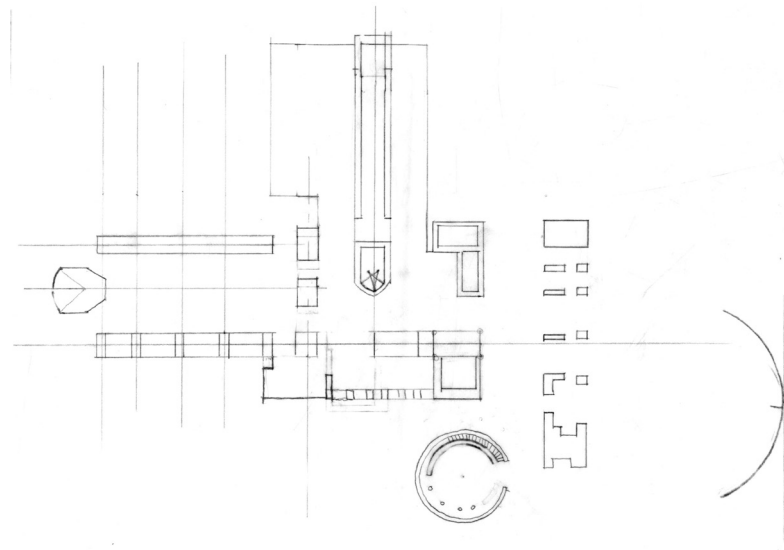


85.

Furniture Design and Construction



86.



87.



88.



89.



91.



93.



90.



92.



94.

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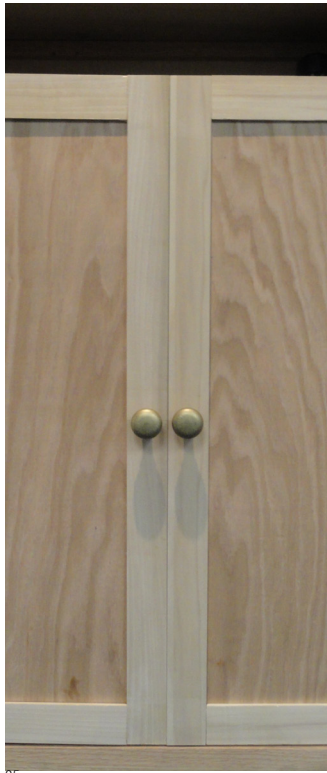
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95.