

SPACE THROUGH ARCHITECTURAL DRAWING

REPRESENTATION AND ANALYSIS OF THE KANDINSKY-KLEE HOUSE (WALTER GROPIUS)

COVADONGA LORENZO-CUEVA

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**Space through Architectural Drawing.
Representation and Analysis of the Kandinsky-Klee House (Walter Gropius)**

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Space through Architectural Drawing. Representation and Analysis of the Kandinsky-Klee House (Walter Gropius)

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Space through Architectural Drawing

Introduction

Space through Architectural Drawing. Representation and Analysis of the Kandinsky-Klee House (Walter Gropius)

Covadonga Lorenzo-Cueva

The value of architectural drawing as an instrument of knowledge

Architectural drawing is one of the most precise and profound instruments for the analysis, understanding, and transmission of architectural thought. Beyond its immediate technical use, drawing enables the decomposition of built reality into its essential components, revealing the relationships between geometry, space and proportion of the architectural form. The production of plans, sections, elevations and axonometric drawings allows architecture to be understood not as an image, but as an ordered system governed by measurable and representable principles.

Architectural Drawings included in this volume involve the precise construction of floor plans, elevations, sections and axonometric drawings, applying the conventions of architectural representation. Particular emphasis is placed on the correct use of section and projection lines to ensure understanding of the architectural space, and the representation of carpentry elements, whose thickness, subdivision, and opening systems play a fundamental role in mediating between interior and exterior space. Likewise, the representation of connection elements, especially staircases, was essential to analyzing the building's spatial dynamics, as these elements articulate movement, connect levels, and structure perception.

However, architectural drawing is not limited to technical accuracy. Equally important is the use of graphic skills that allow the expressive, perceptual, and material qualities of architecture to emerge. In that sense, drawings explore figure-ground relationships in order to clarify spatial hierarchies and distinguish between solid and void.

The use of shadows allowed the volumetric articulation of the building to become visible, reinforcing the perception of depth and spatial layering. The use of color, textures, and material representation introduced another level of interpretation, enabling the differentiation of surfaces and the communication of tactile and visual qualities inherent to the architecture.

Furthermore, the inclusion of the surrounding landscape is understood as an essential component of architectural representation. Architecture does not exist in isolation but is inseparable from its context. Representing landscape, ground planes, access paths, and topographic relationships allowed students to understand how the building engages with its environment, how it is approached, and how it is perceived from different viewpoints.

Through this process, drawing became not only a means of representation, but a tool for research. The act of drawing required careful observation, interpretation, and decision-making. It demanded understanding of the logic of the building, structural order, spatial organization, and material condition. In this sense, drawing operated as a form of analytical thinking, transforming observation into knowledge and representation into understanding.

The Kandinsky-Klee House

The Kandinsky-Klee House is part of the Masters' Houses (Meisterhäuser), a group of residential buildings designed by Walter Gropius between 1925 and 1926 for the teaching staff of the Bauhaus in Dessau. This ensemble was conceived following the location of the Bauhaus from Weimar to Dessau

when the city authorities commissioned Gropius to design both the new school building and the residences for its masters. The intention was not merely to provide housing, but to create a built environment that embodied the pedagogical, social, and architectural principles of the Bauhaus. These houses acted simultaneously as domestic spaces, experimental prototypes, and physical manifestos of modern living.

The ensemble originally consisted of four buildings: a detached house for Gropius himself, and 3 semi-detached houses intended for other masters, including László Moholy-Nagy, Lyonel Feininger, Oskar Schlemmer, Georg Muche, and later Wassily Kandinsky and Paul Klee. The decision to use paired houses reflected both economic efficiency and a conceptual interest in modular repetition and variation. Each pair was composed of two mirrored dwellings connected by a shared vertical circulation core, creating a balance between standardization and individuality.

Within this ensemble, the Kandinsky–Klee House represents one of the most refined examples of the Bauhaus domestic ideal. Its architecture is defined by a composition of interpenetrating cubic volumes, flat roofs, and smooth white surfaces, emphasizing abstraction and the elimination of ornament. However, this apparent formal simplicity conceals a highly sophisticated spatial organization.

The interior is structured as a sequence of interconnected spaces rather than isolated rooms. Living areas are arranged to maximize openness, flexibility, and continuity, allowing space to flow both visually and physically. The staircase plays a central role in organizing movement and perception, acting as a vertical hinge between floors. This spatial continuity reflects the Bauhaus commitment to functional efficiency combined with experiential richness.

The relationship between interior and exterior is carefully articulated through large horizontal and vertical windows, whose proportions and positions respond to orientation, views, and interior use. These openings do not simply admit light; they frame the surrounding pine forest and integrate nature into everyday life. Intermediate threshold spaces, including balconies and terraces, extend the domestic realm outward, creating transitional zones that mediate between architecture and landscape. Color was also used deliberately within the house. Rather than serving as decoration, color functioned as an architectural instrument to differentiate spaces.

As part of the Masters' Houses ensemble, the Kandinsky–Klee House illustrates the Bauhaus ambition to unify architecture, art, and life. It stands as both a domestic environment and an experimental prototype, demonstrating how modern architecture could reshape everyday living through clarity, proportion, light, and spatial continuity.

Drawing as a method of architectural investigation and discovery

The act of drawing the Kandinsky–Klee House enabled to engage with the building as an object of precise architectural knowledge rather than as a distant historical image. Through the careful production of plans, sections, elevations, and axonometric drawings, students were required to reconstruct the building intellectually, understanding how each line corresponds to a physical reality and how each element contributes to the overall spatial system.

In drawing the floor plans, students discovered the subtle proportional relationships governing the arrangement of rooms. What might initially appear as a simple rectangular layout revealed itself to be a carefully calibrated composition, in which dimensions, alignments, and offsets produce balance and continuity. The plans made evident the absence of rigid compartmentalization and instead showed how spaces expand, contract, and relate to one another.

The sections proved particularly revealing. Through sectional drawing, students were able to understand the vertical structure of the house, the role of the staircase as a spatial organizer, and the relationship between different floor levels. They could observe how double-height perceptions emerge not necessarily through large voids, but through visual connections, window placements, and changes in level. The section also exposed the thickness of slabs, the configuration of openings, and the way in which light penetrates deep into the interior.

In drawing the elevations, students encountered the precision with which the façade is composed. The position, size, and proportion of each window became critical decisions that required careful observation. They discovered that carpentry elements are not repetitive by default but specifically designed in response to interior functions. Certain windows expand to frame views and admit light into living spaces, while others are more controlled, responding to privacy or service functions.

This process revealed the façade not as an abstract composition, but as the direct consequence of interior spatial logic.

In addition to the plans, sections, elevations, and site plan, students also developed a large-scale plan oblique of the Kandinsky–Klee House, incorporating selective transparency to reveal the interior spatial structure. This system of representation is particularly valuable as an analytical instrument because it establishes a precise relationship between measurable data and three-dimensional spatial understanding. Unlike perspective, the military axonometric preserves the plan in its true size, enabling direct measurement of dimensions, proportions, and spatial relationships, while at the same time conveying the building's volumetric configuration. Heights are projected vertically from the plan, allowing the spatial logic of sections, floor relationships, and connection elements to be understood without fragmenting the unity of the architectural object.

Moreover, the strategic use of transparency allowed students to visually penetrate the building's envelope and understand the continuity between interior and exterior, revealing how rooms, staircases, terraces, and intermediate thresholds are articulated within the overall volume. This made it possible to grasp, in a single comprehensive drawing, the correspondence between geometry, structure, and spatial organization. Through this process, students discovered that behind the apparent formal clarity of the house lies a subtle and highly intentional spatial composition. The military axonometric thus became not only a means of representation, but a powerful cognitive and investigative tool, capable of synthesizing graphic precision, constructive logic, and spatial perception, and of uncovering the underlying architectural order of the building.

The use of graphic skills such as shadows, texture, and color allowed students to explore how architecture is perceived. By representing shadows, they understood how volumes project, recede, and articulate depth. By applying color, they engaged with the chromatic strategy of the Bauhaus, recognizing how color contributes to spatial identity. The representation of materials allowed them to distinguish between glass, plaster, and vegetation, reinforcing the tactile dimension of architecture.

Equally important was the drawing of the surrounding landscape. Students came to understand how the building is positioned within the pine forest, how access paths guide arrival, and how terraces extend living space. They

recognized that architecture cannot be separated from its site, and that its meaning emerges through its relationship with its environment.

Through this sustained process of observation and representation, drawing became a form of analytical research. Students discovered aspects of the building that are not immediately visible in photographs, including the precise alignment of elements, the hierarchy of spaces, and the role of thresholds such as balconies and terraces. They understood how geometry, proportion, and spatial continuity operate together to produce architectural coherence.

Moreover, drawing allowed them to engage with intangible qualities such as light, perception, and atmosphere. They observed how light enters at specific angles, how windows frame views, and how color modifies spatial experience. This revealed architecture as a dynamic interaction between physical form and human perception.

Ultimately, the process demonstrated that drawing is not merely a representational technique, but a cognitive instrument. It transforms architecture from an external object into an internalized understanding. Through drawing, students were able to reconstruct the architectural intention of Gropius, uncover the richness behind its apparent simplicity, and appreciate the extraordinary precision with which modern architecture was conceived.

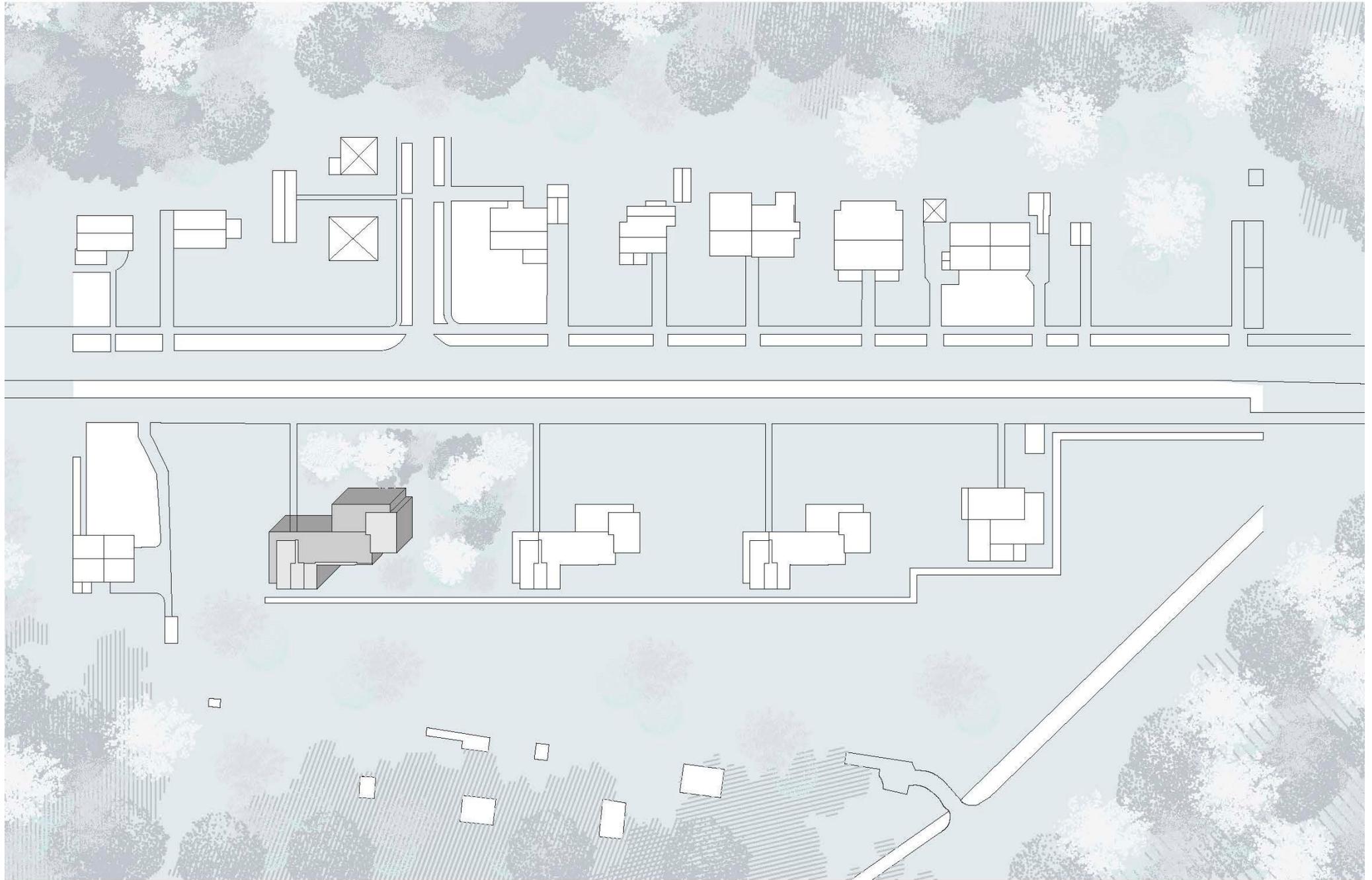
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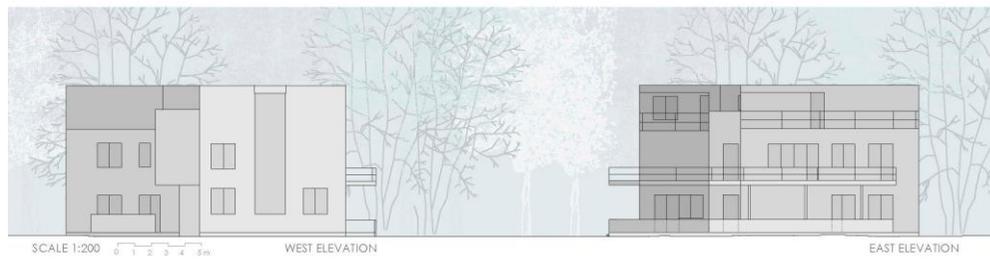
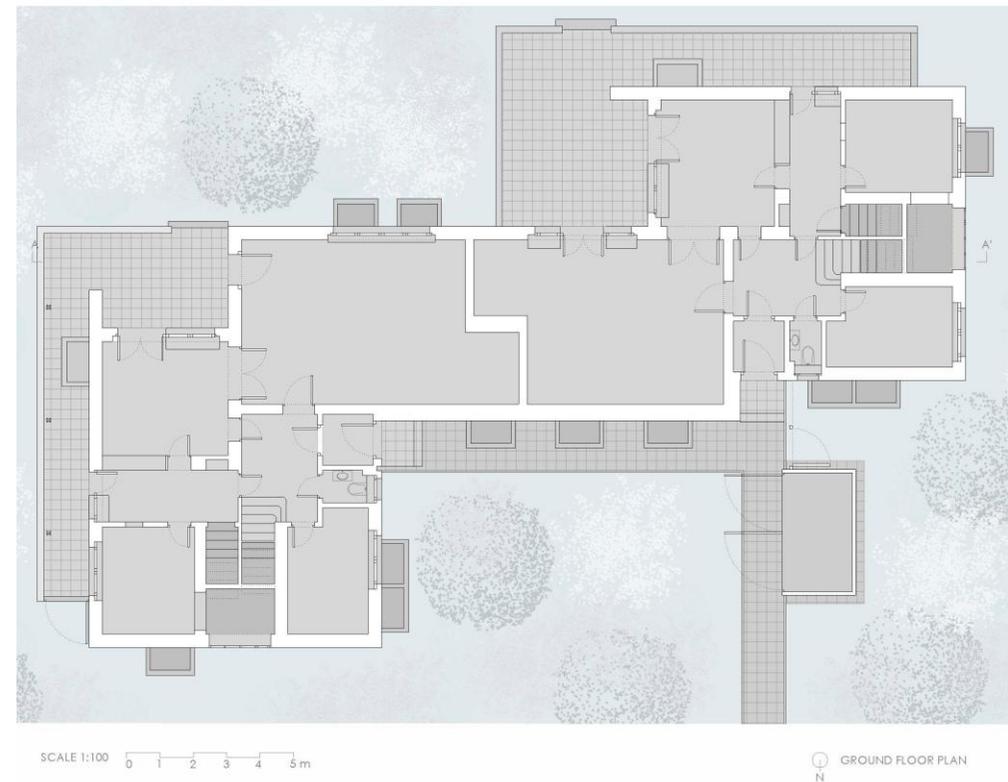
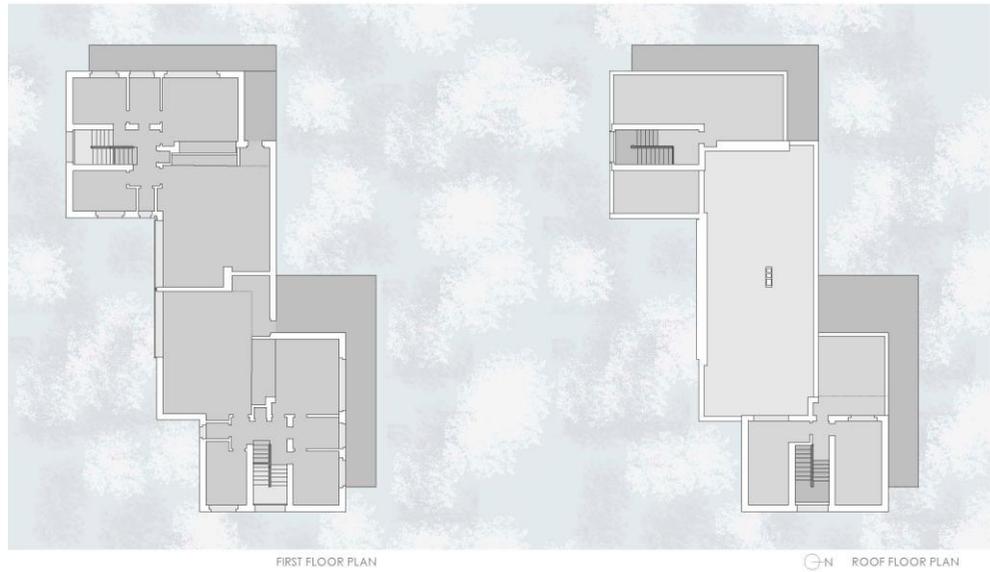
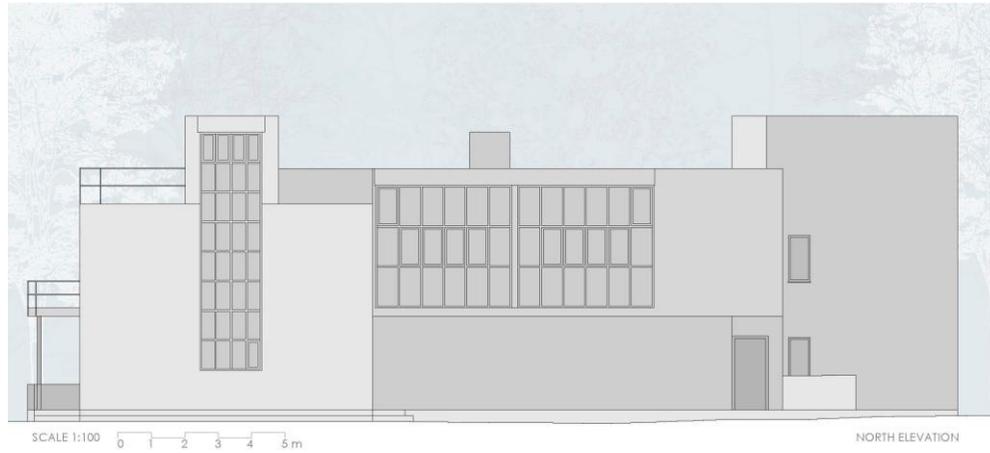
Drawings of the Kandinsky-Klee House (Walter Gropius)

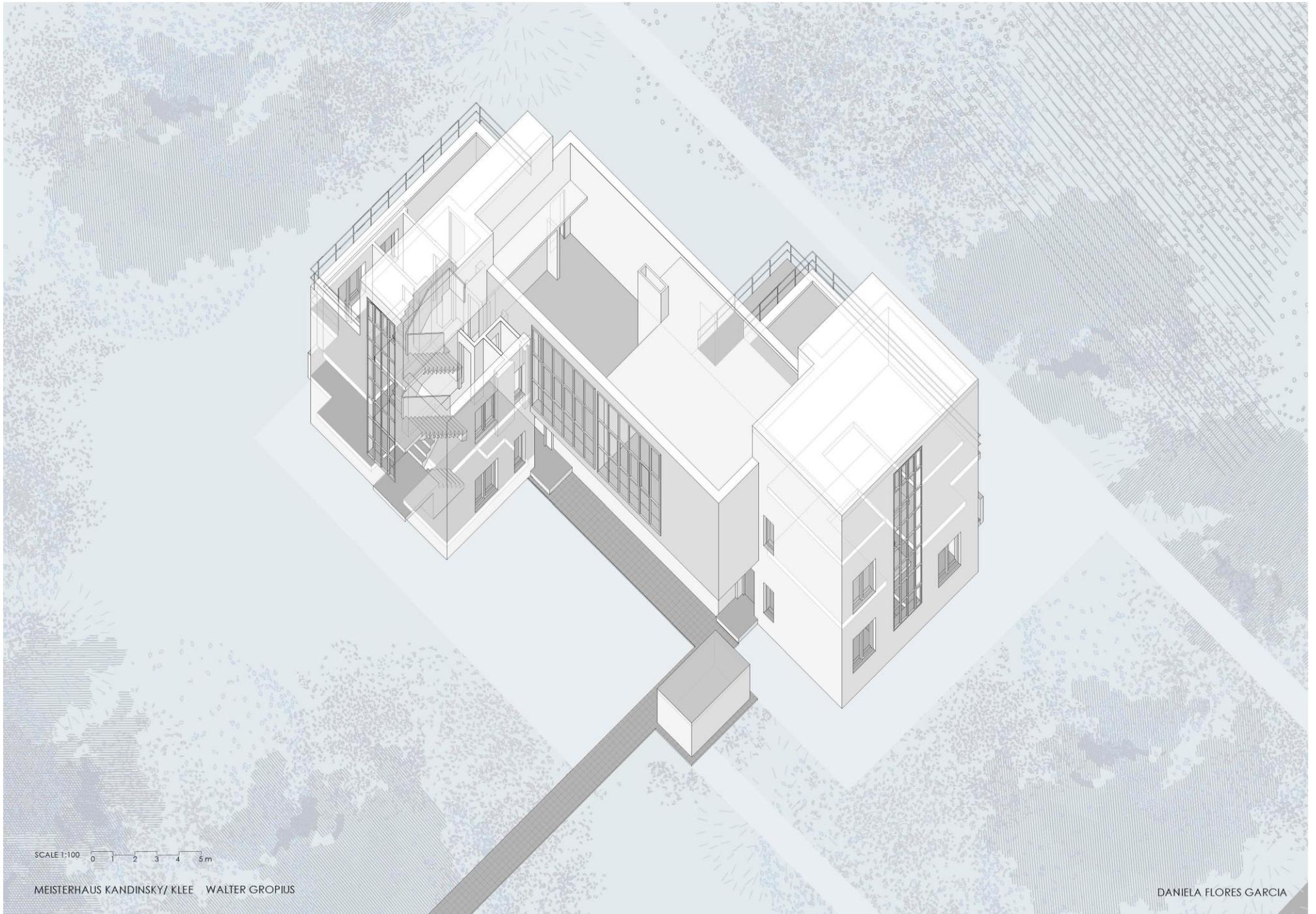


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SITE PLAN





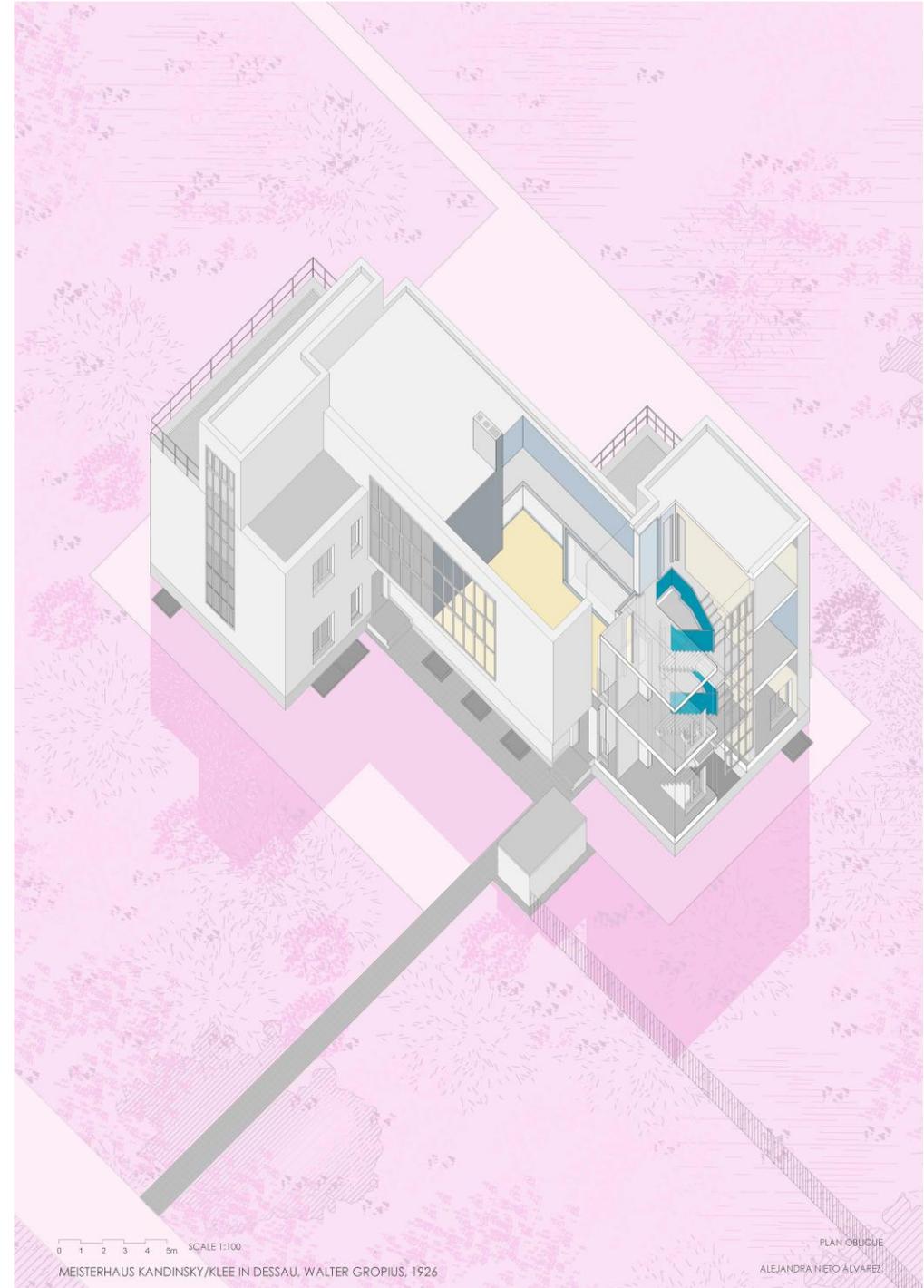
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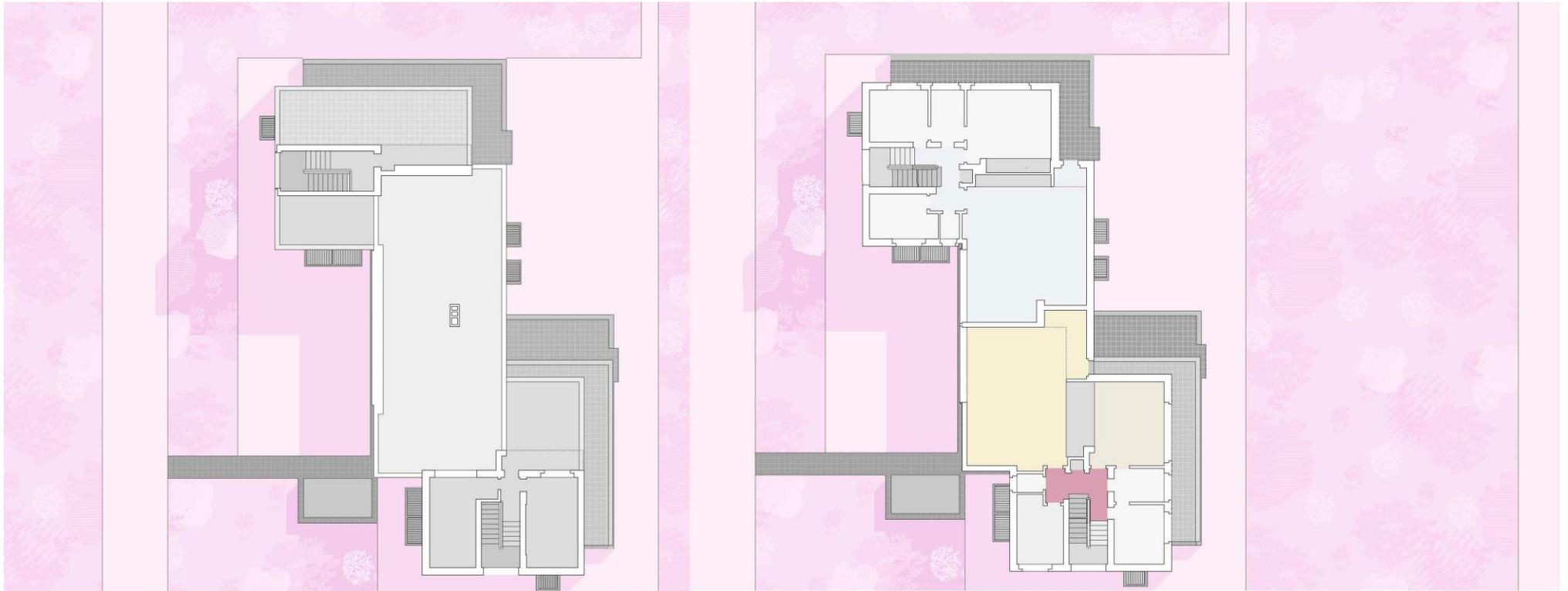
MEISTERHAUS KANDINSKY/ KLEE WALTER GROPIUS

DANIELA FLORES GARCIA



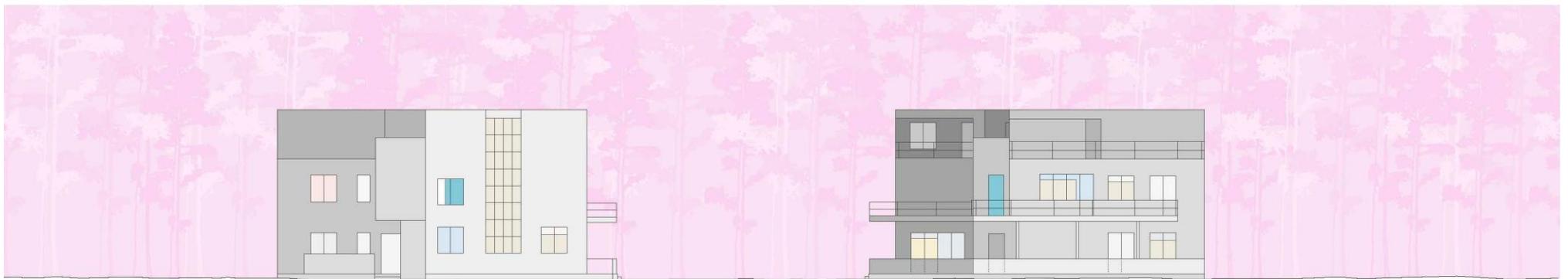
SCALE 1:1000





FIRST FLOOR PLAN ⊕

⊕ ROOF FLOOR PLAN



WEST ELEVATION

EAST ELEVATION

0 1 2 3 4 5m. SCALE 1:200

MEISTERHAUS KANDINSKY/KLEE IN DESSAU, WALTER GROPIUS, 1926

ALEJANDRA NIETO ÁLVAREZ
□ ■ □ □
□



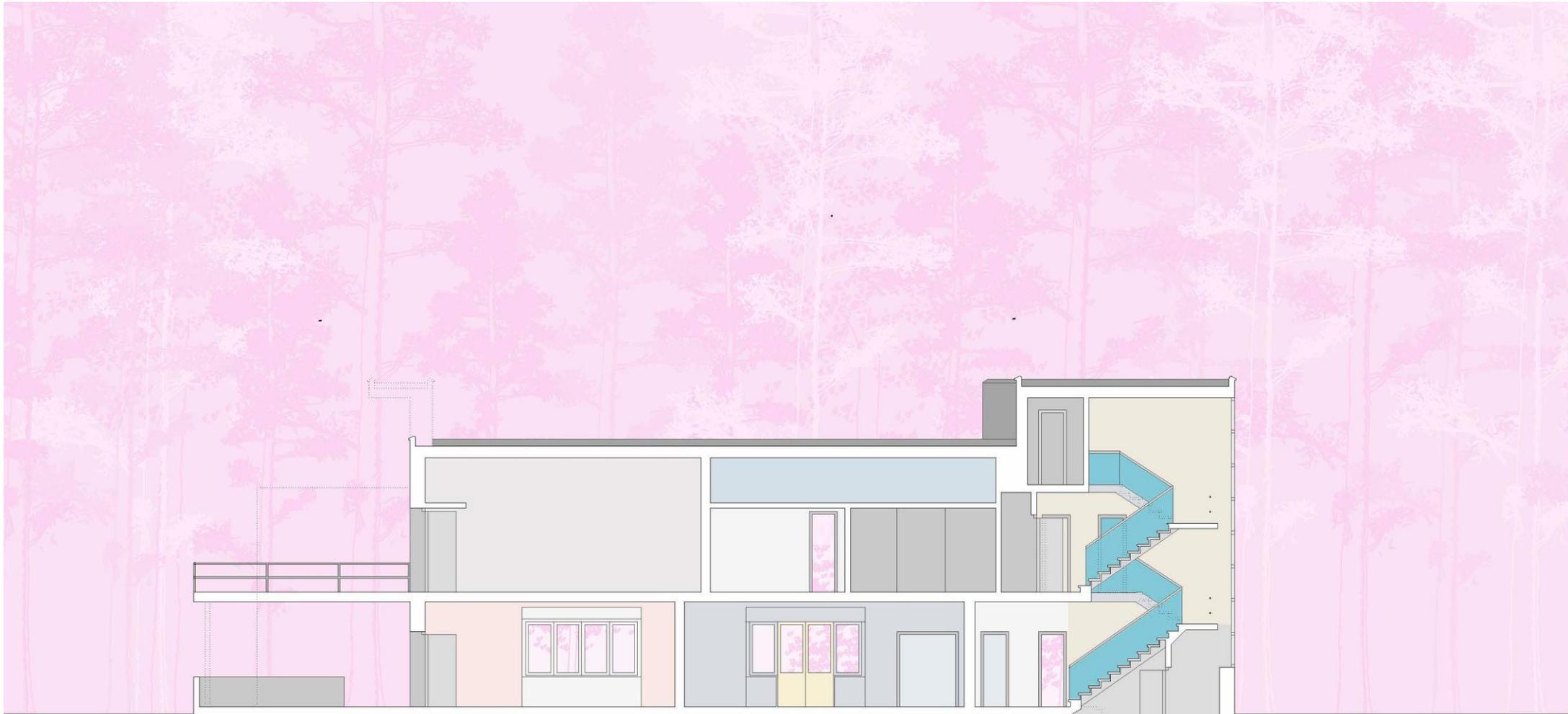
0 1 2 3 4 5m. SCALE 1:100

MEISTERHAUS KANDINSKY/KLEE IN DESSAU, WALTER GROPIUS, 1926

NORTH ELEVATION

ALEJANDRA NIETO ÁLVAREZ



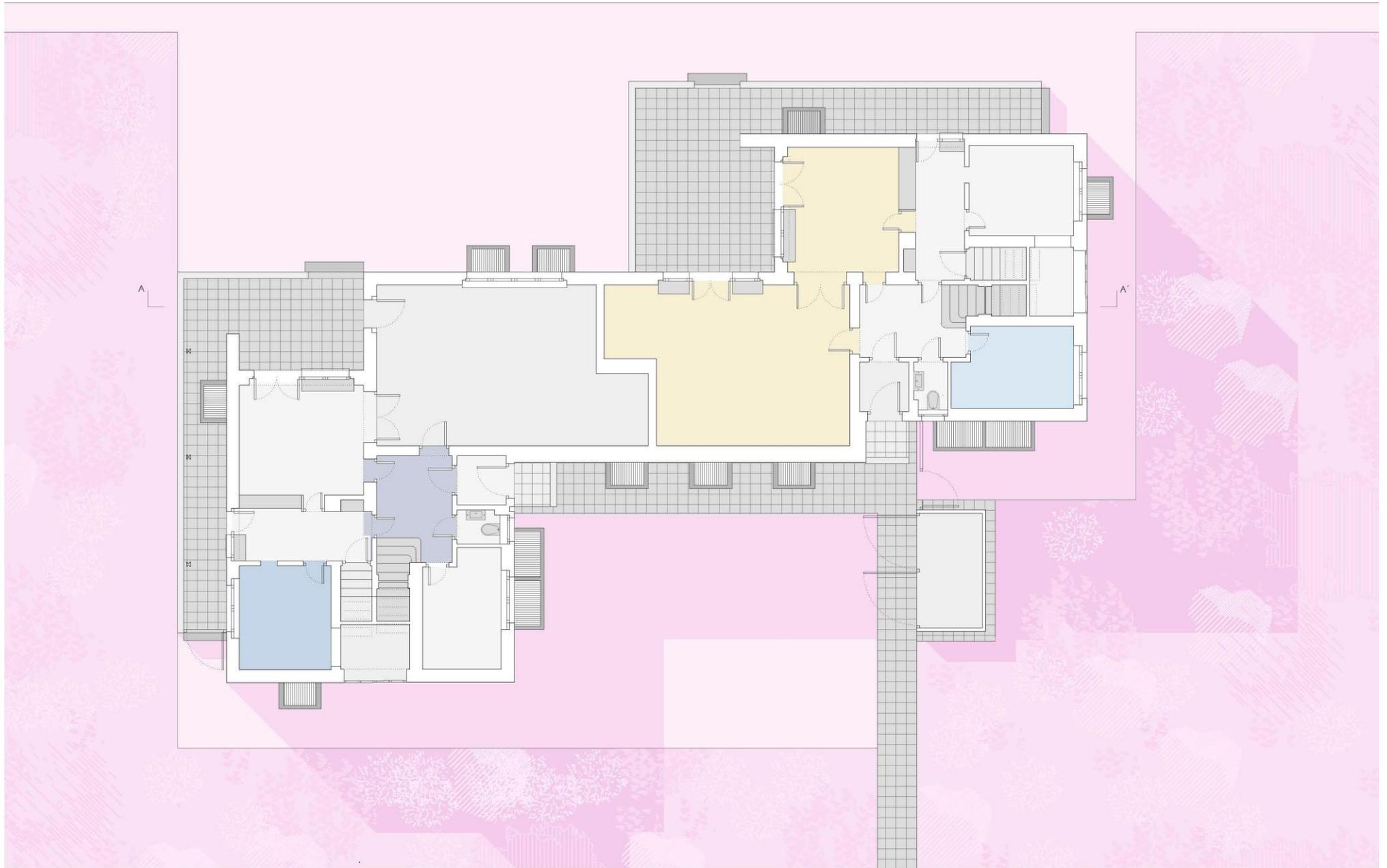


0 1 2 3 4 5m. SCALE 1:100

MEISTERHAUS KANDINSKY/KLEE IN DESSAU, WALTER GROPIUS, 1926

SECTION AA'

ALEJANDRA NIETO ÁLVAREZ
□ □ □
□



N
0 1 2 3 4 5m. SCALE 1:100

GROUND FLOOR PLAN

MEISTERHAUS KANDINSKY/KLEE IN DESSAU, WALTER GROPIUS, 1926

ALEJANDRA NIETO ÁLVAREZ
□ □ □ □
■





SOUTH ELEVATION



⊕ FIRST FLOOR PLAN

⊕ SECOND FLOOR PLAN

SCALE 1/200 0 2 4 6 8 10m



SCALE 1/100 0 1 2 3 4 5m

NORTH ELEVATION

KANDINSKY/KLEE HOUSE WALTER GROPIUS

YAGO VALDÉS MARTÍN G-202

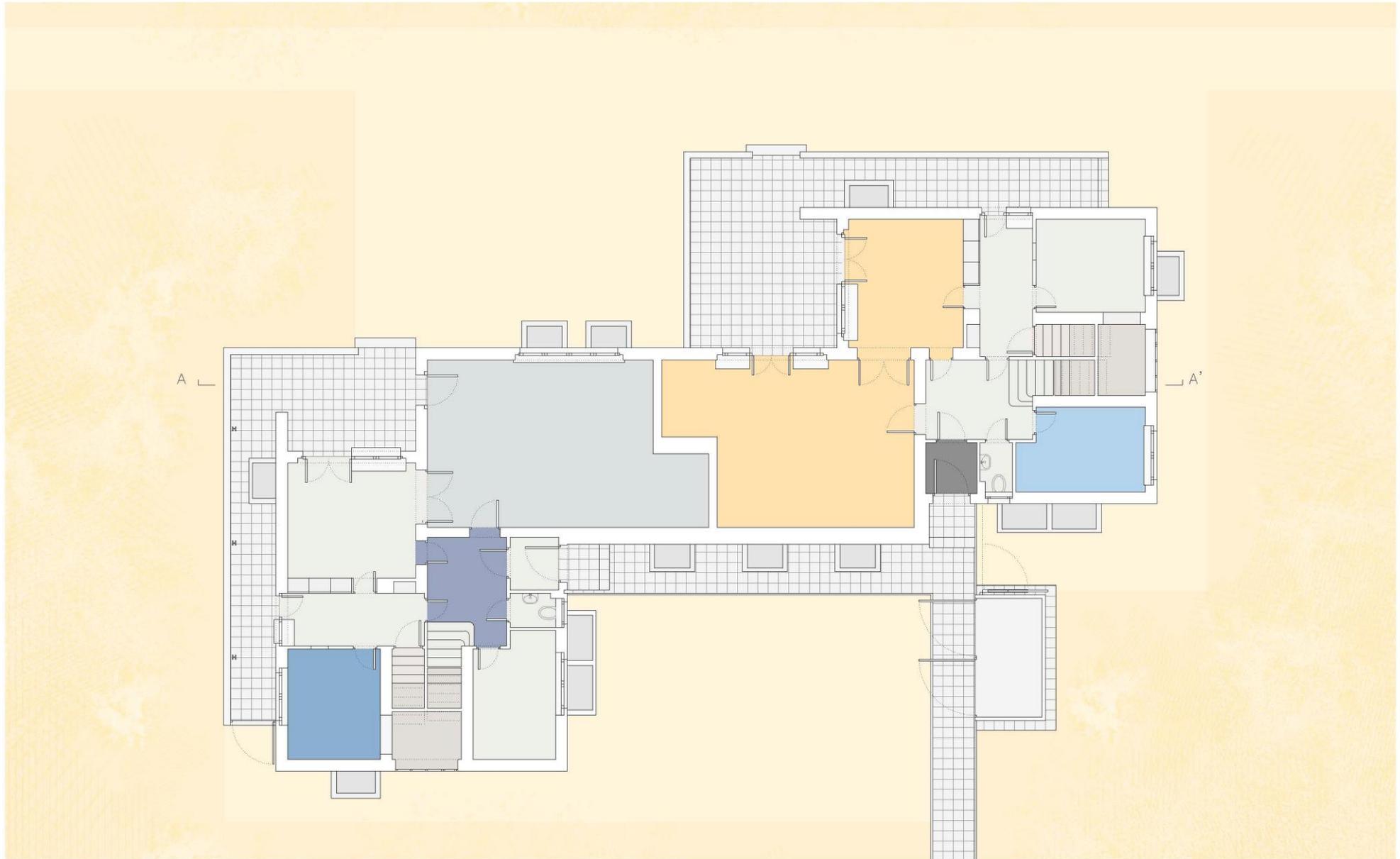


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SECTION AA'

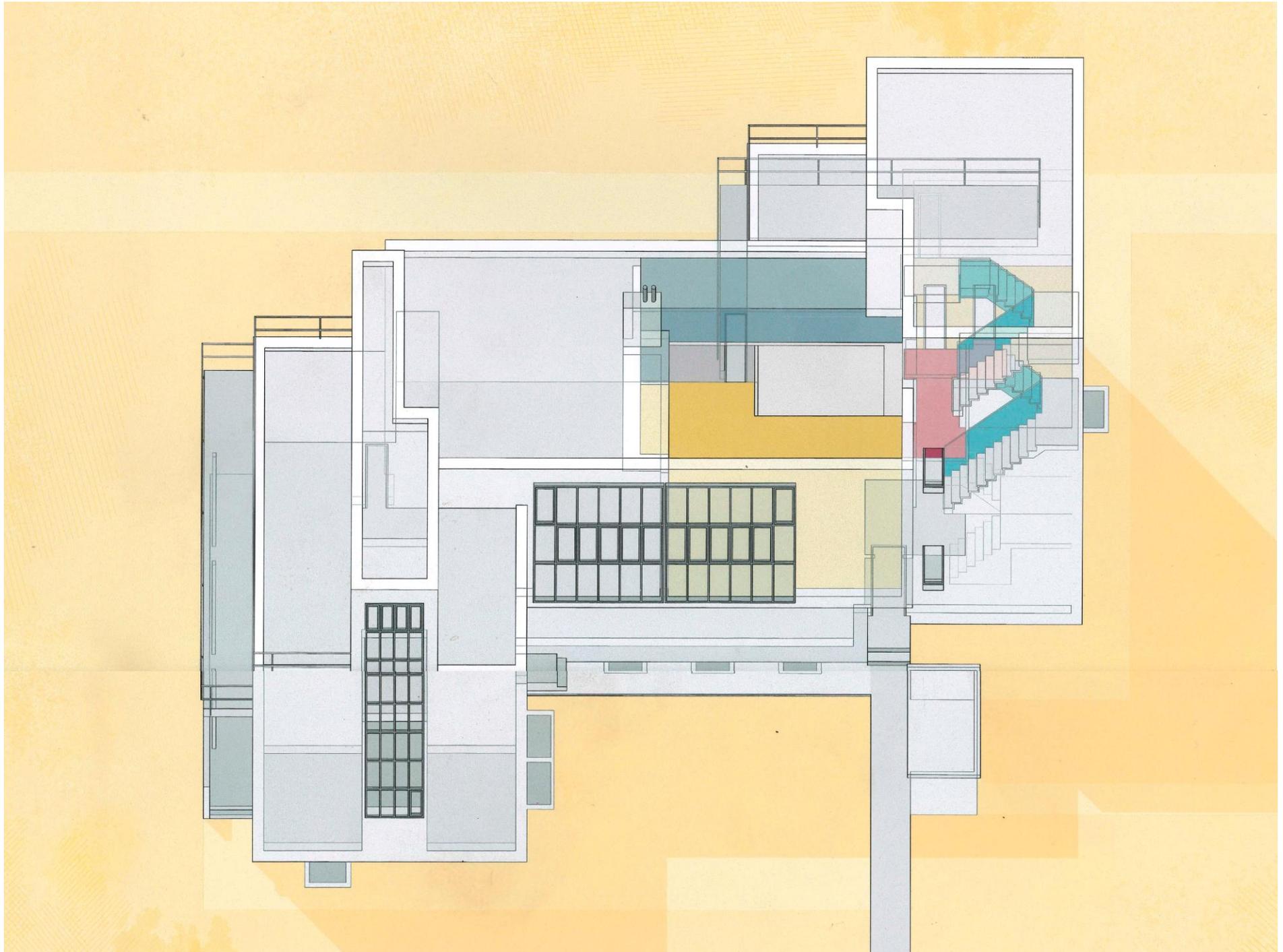
KANDINSKY/KLEE HOUSE WALTER GROPIUS

YAGO VALDÉS MARTÍN G-202



SCALE 1/100 0 1 2 3 4 5m

⊕ N GROUND FLOOR PLAN





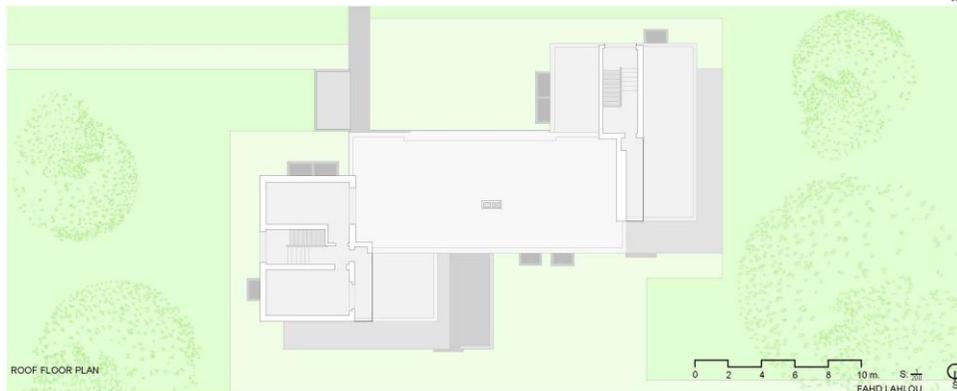
SITE PLAN 0 10 20 30 40 50 m. S: 1/1000 N



EAST ELEVATION 0 2 4 6 8 10 m. S: 1/200 E



WEST ELEVATION 0 2 4 6 8 10 m. S: 1/200 W



ROOF FLOOR PLAN 0 2 4 6 8 10 m. S: 1/200 FAHD LAHLOU S



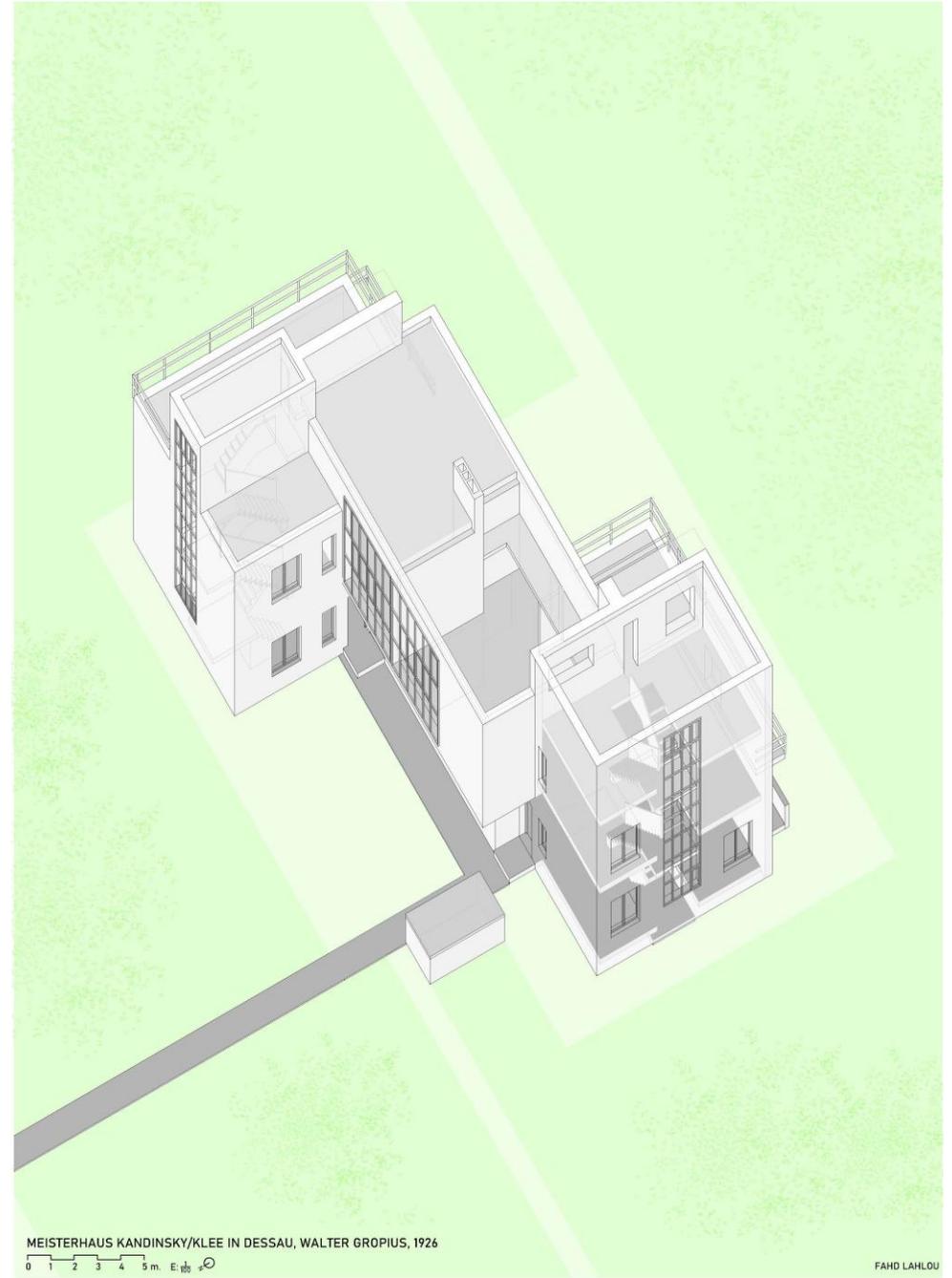
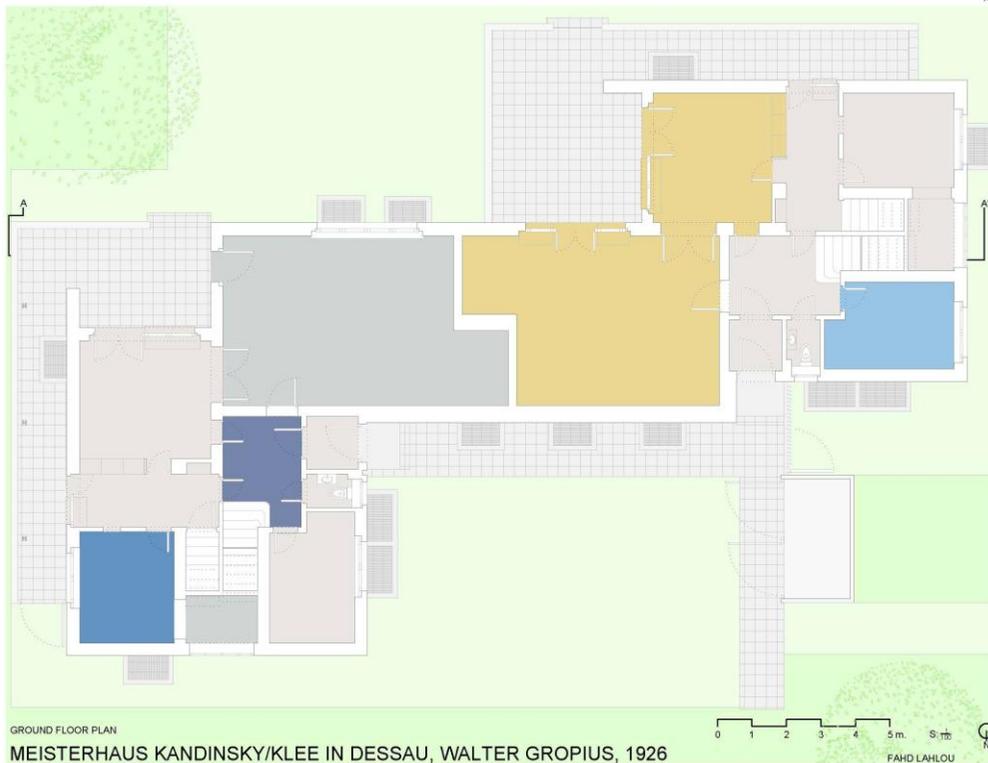
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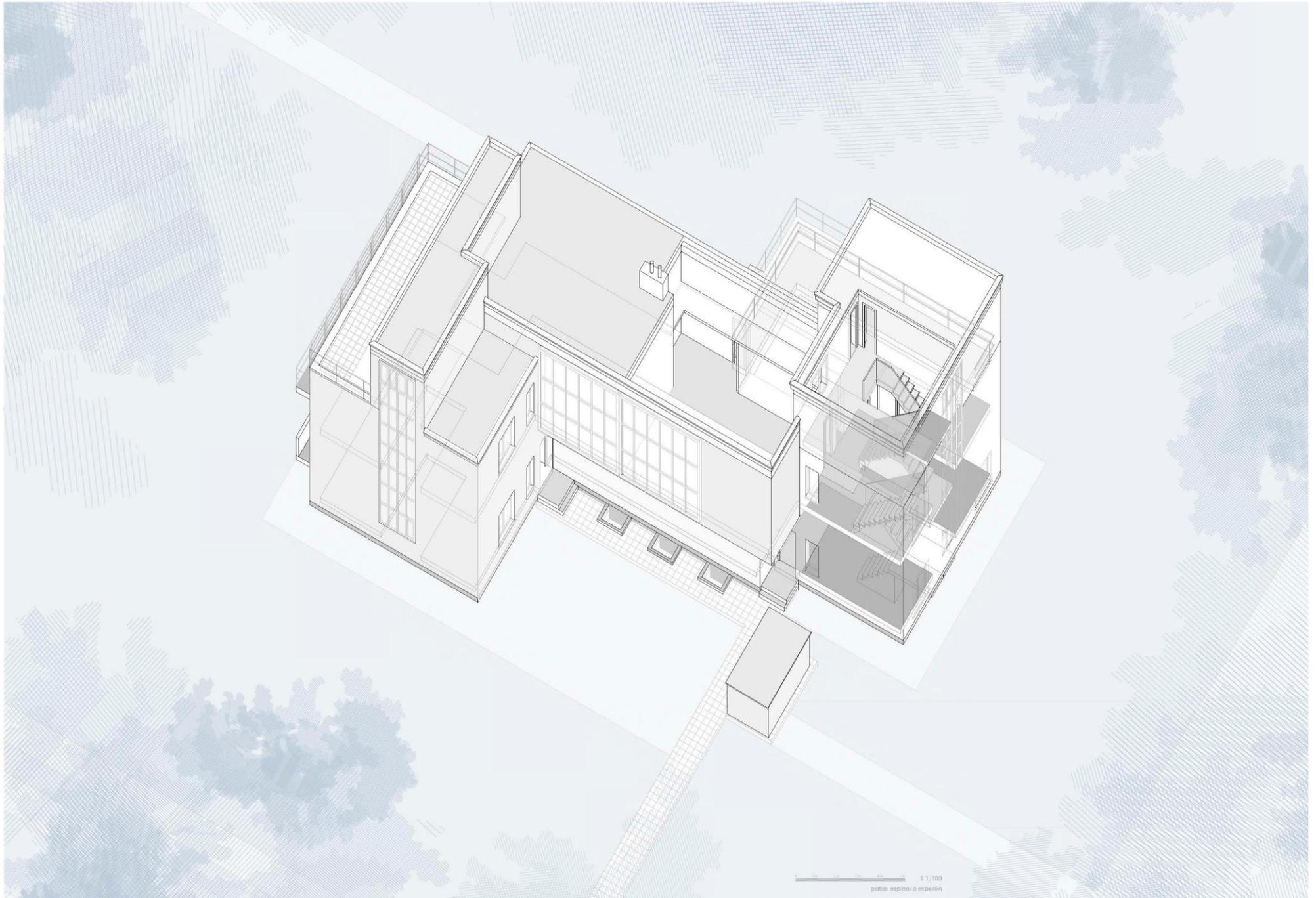


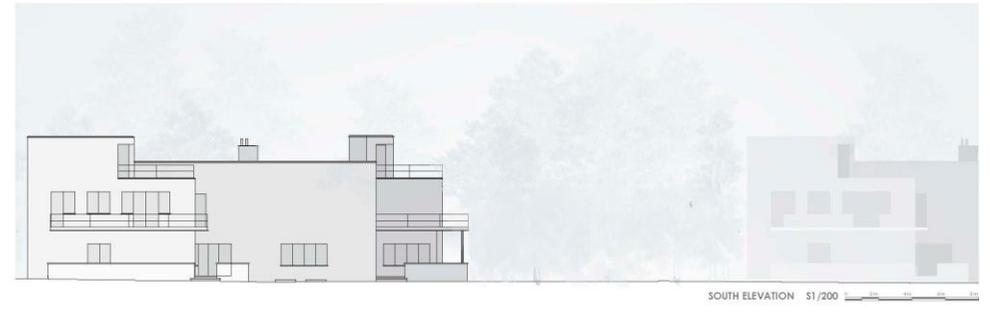
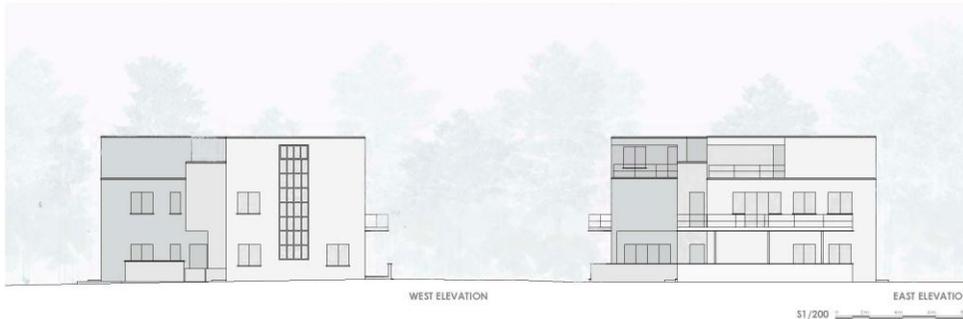
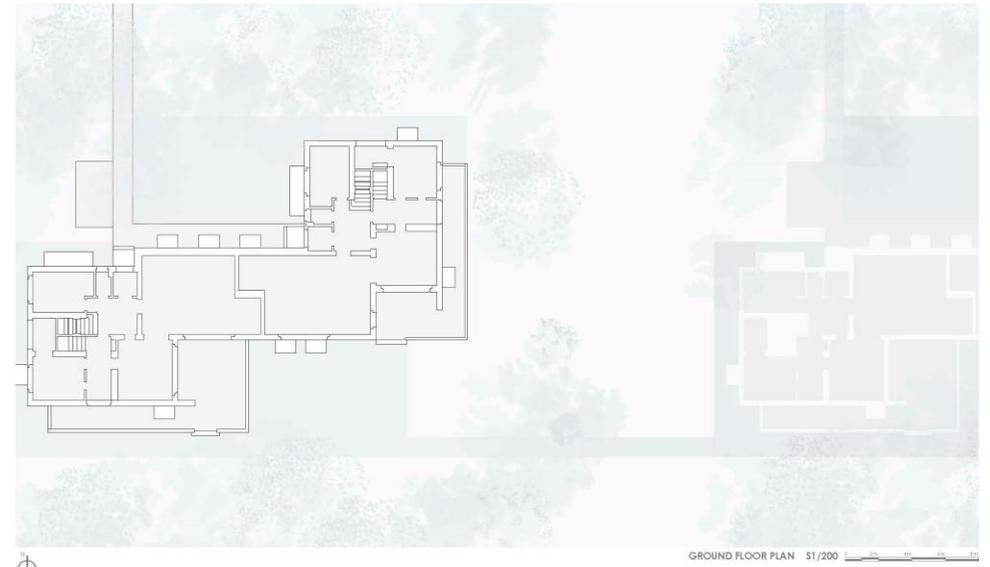
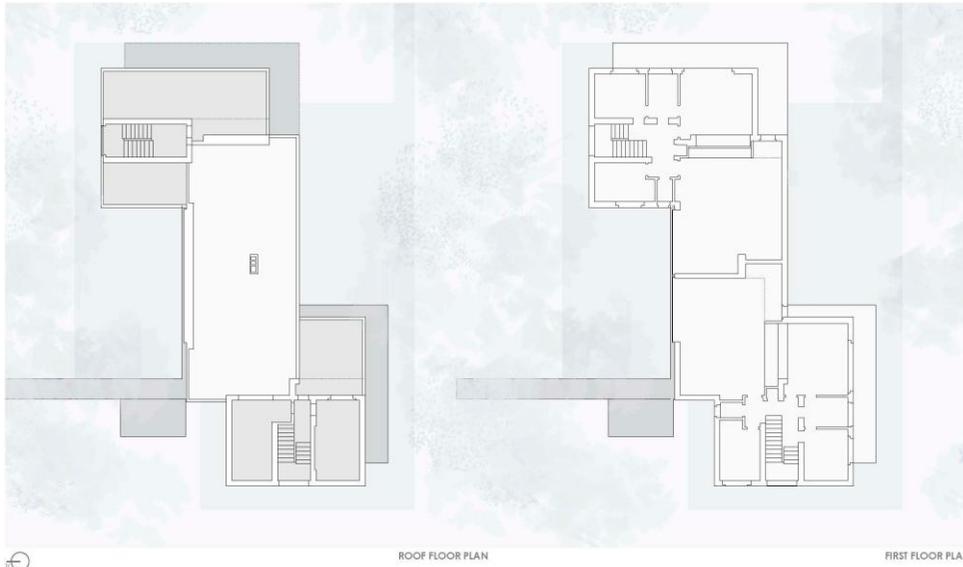
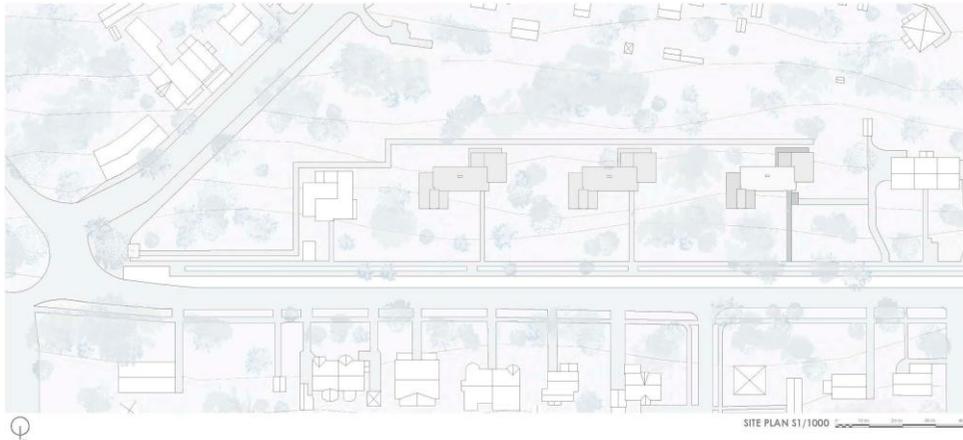
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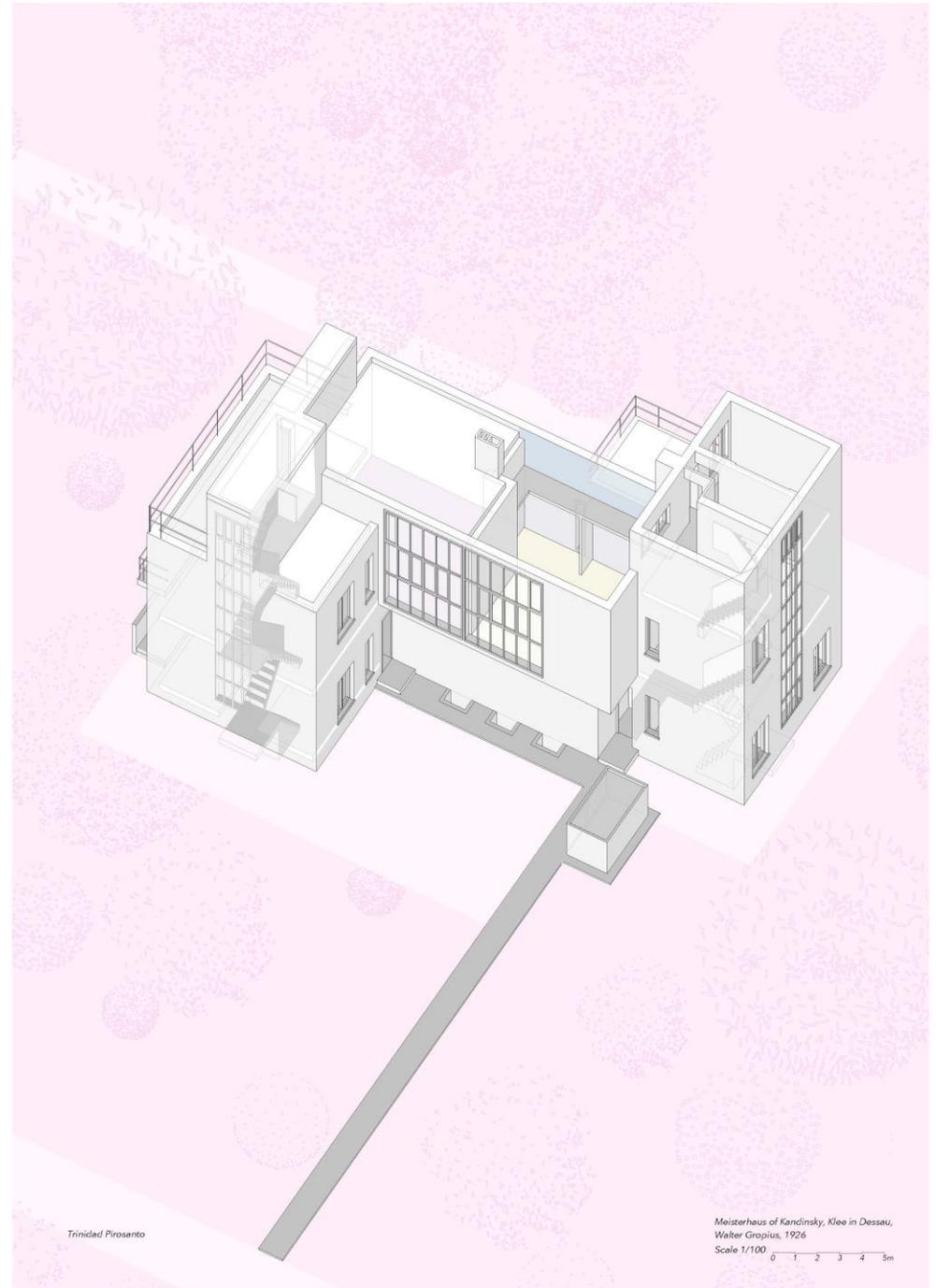
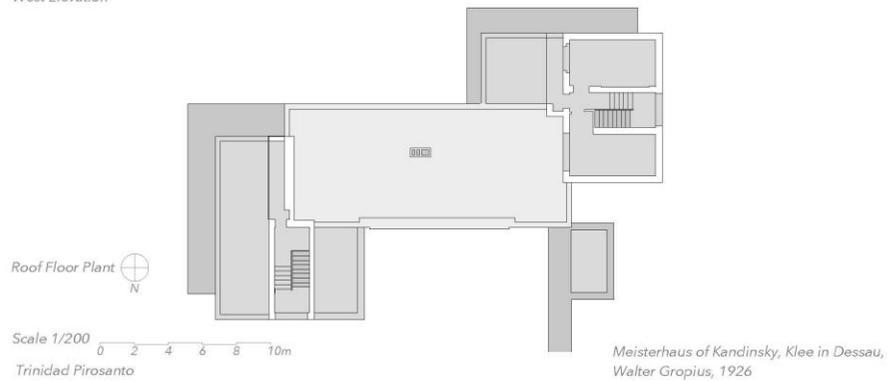
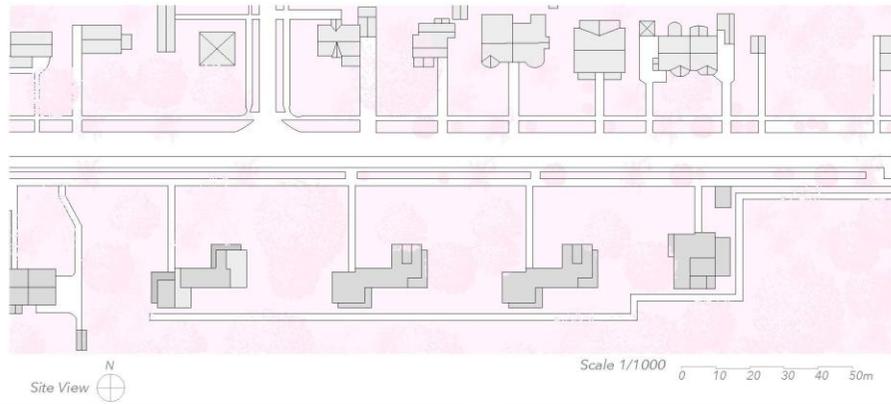


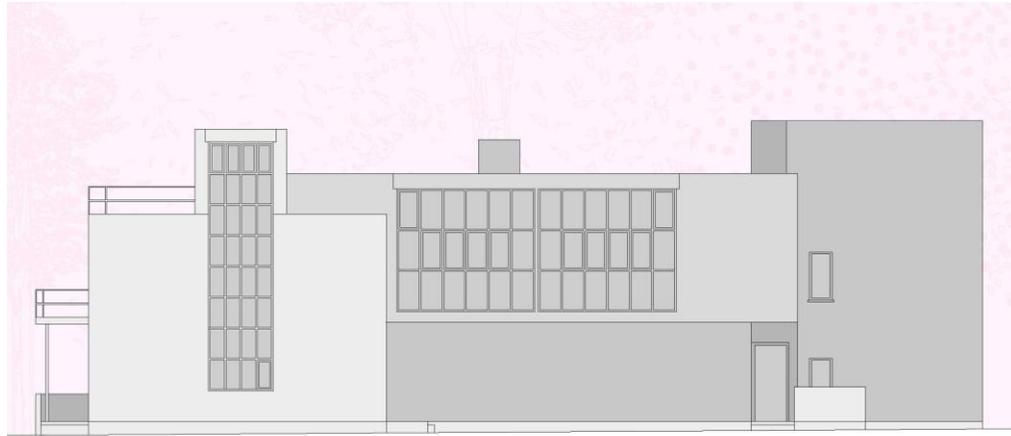
FIRST FLOOR PLAN 0 2 4 6 8 10 m. S: 1/200 FAHD LAHLOU S











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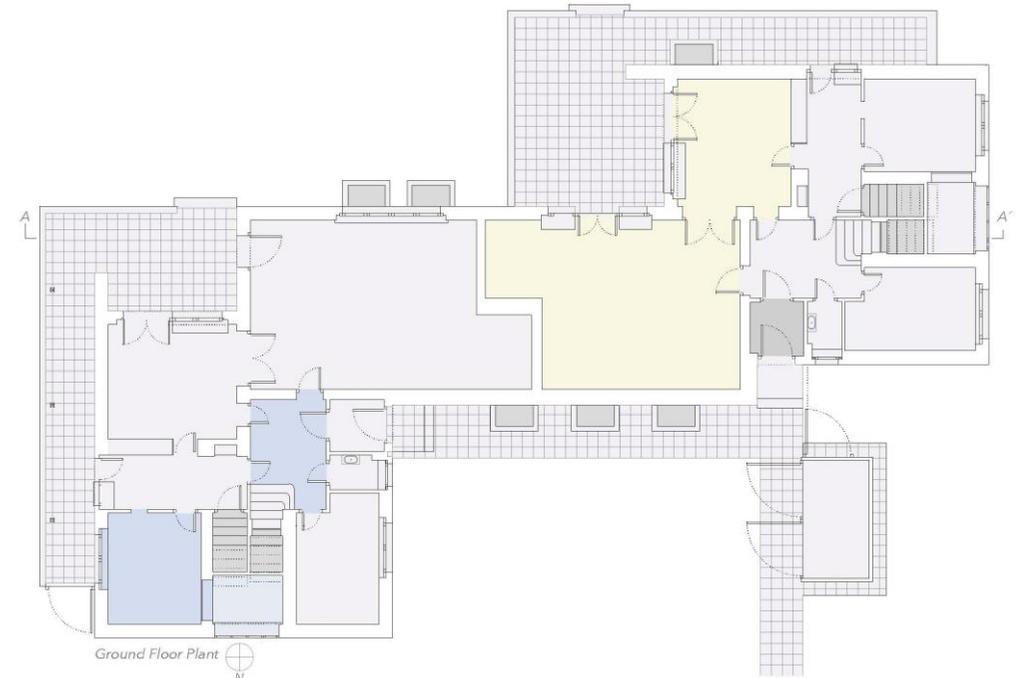
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Section AA'

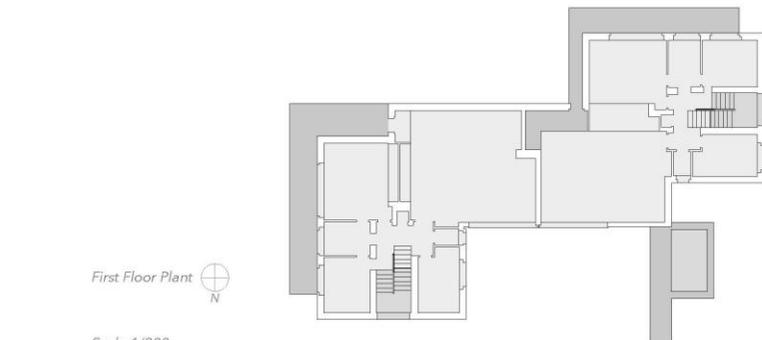


South Elevation



Ground Floor Plant

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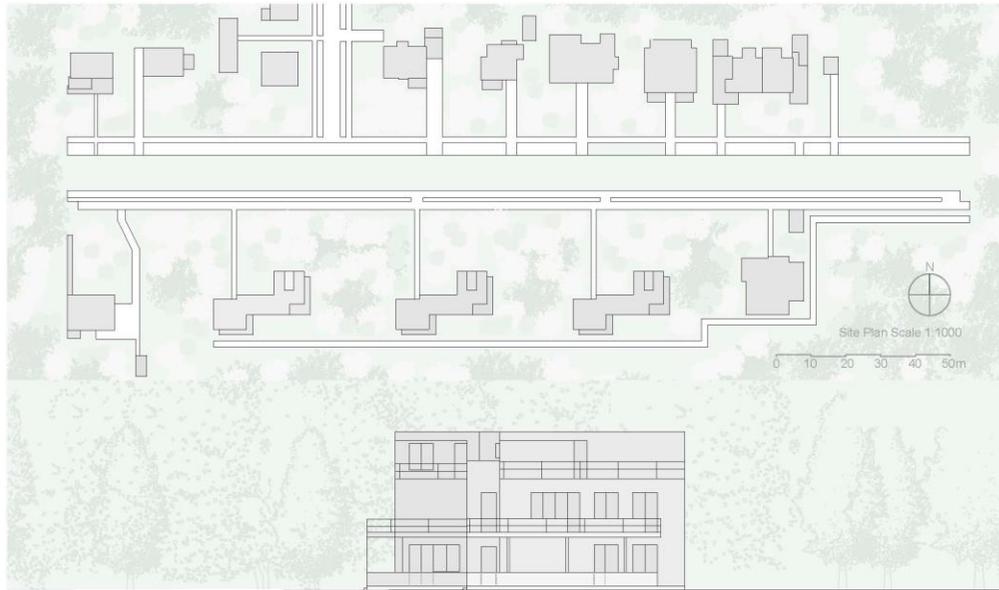


First Floor Plant

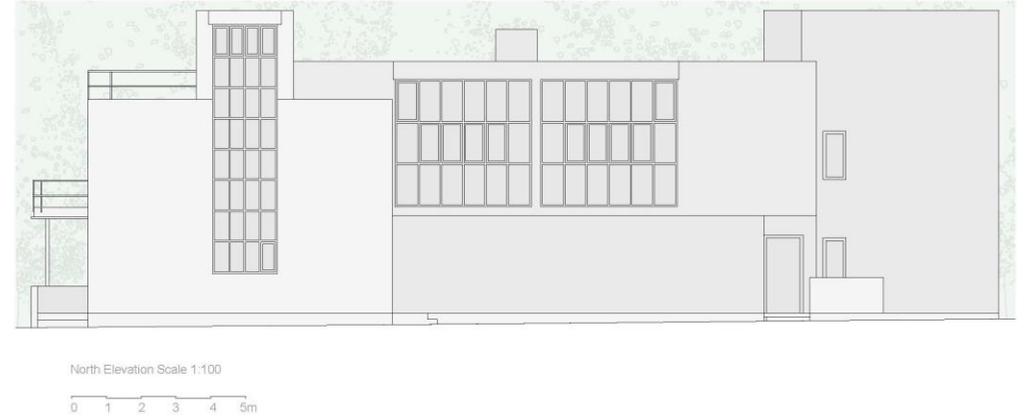
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Meisterhaus of Kandinsky, Klee in Dessau,
Walter Gropius, 1926

Meisterhaus of Kandinsky, Klee in Dessau,
Walter Gropius, 1926



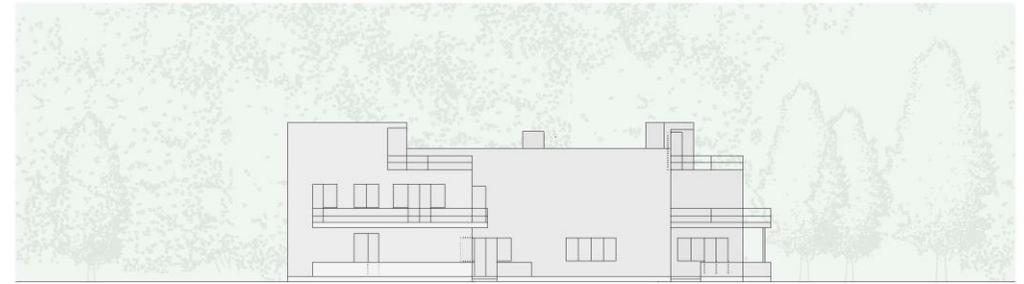
West Elevation Scale 1:200



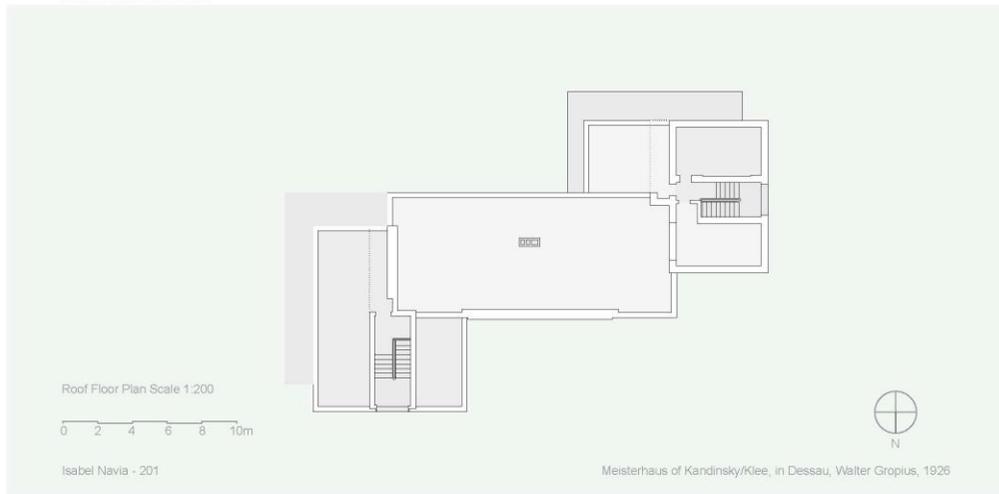
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East Elevation Scale 1:200



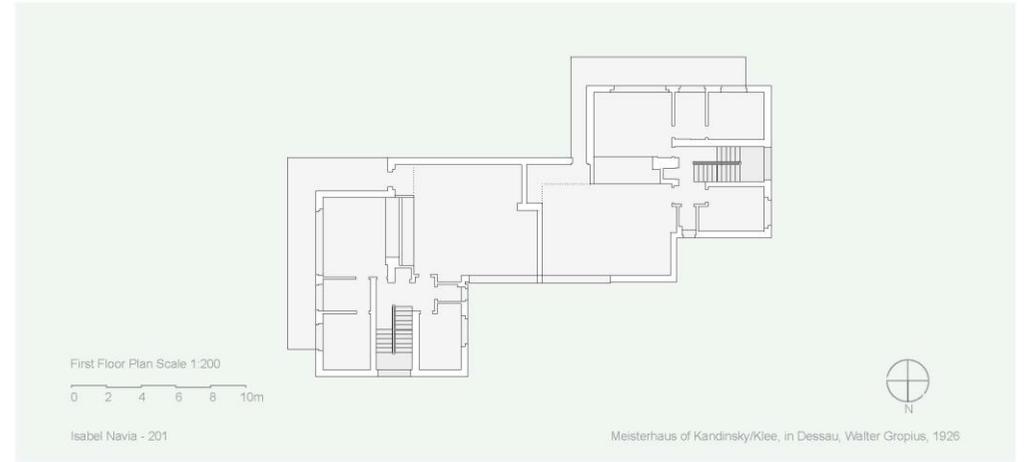
South Elevation Scale 1:200



Roof Floor Plan Scale 1:200
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Isabel Navia - 201

Meisterhaus of Kandinsky/Klee, in Dessau, Walter Gropius, 1926



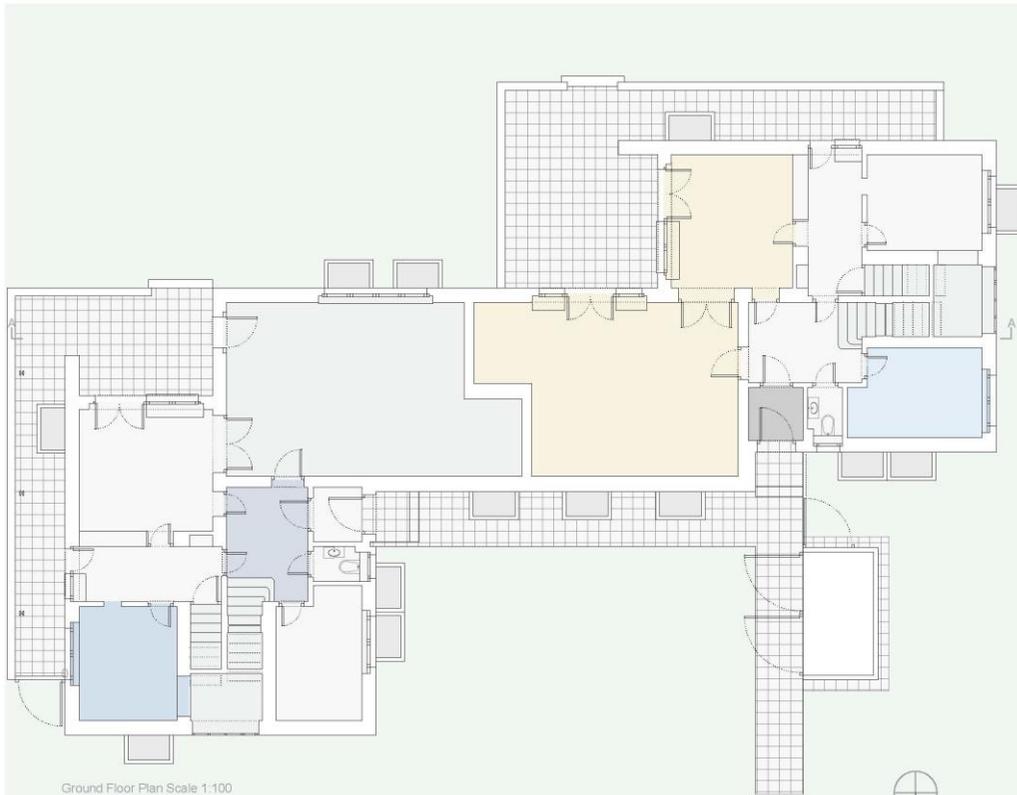
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Isabel Navia - 201

Meisterhaus of Kandinsky/Klee, in Dessau, Walter Gropius, 1926



AA' Section Scale 1:100

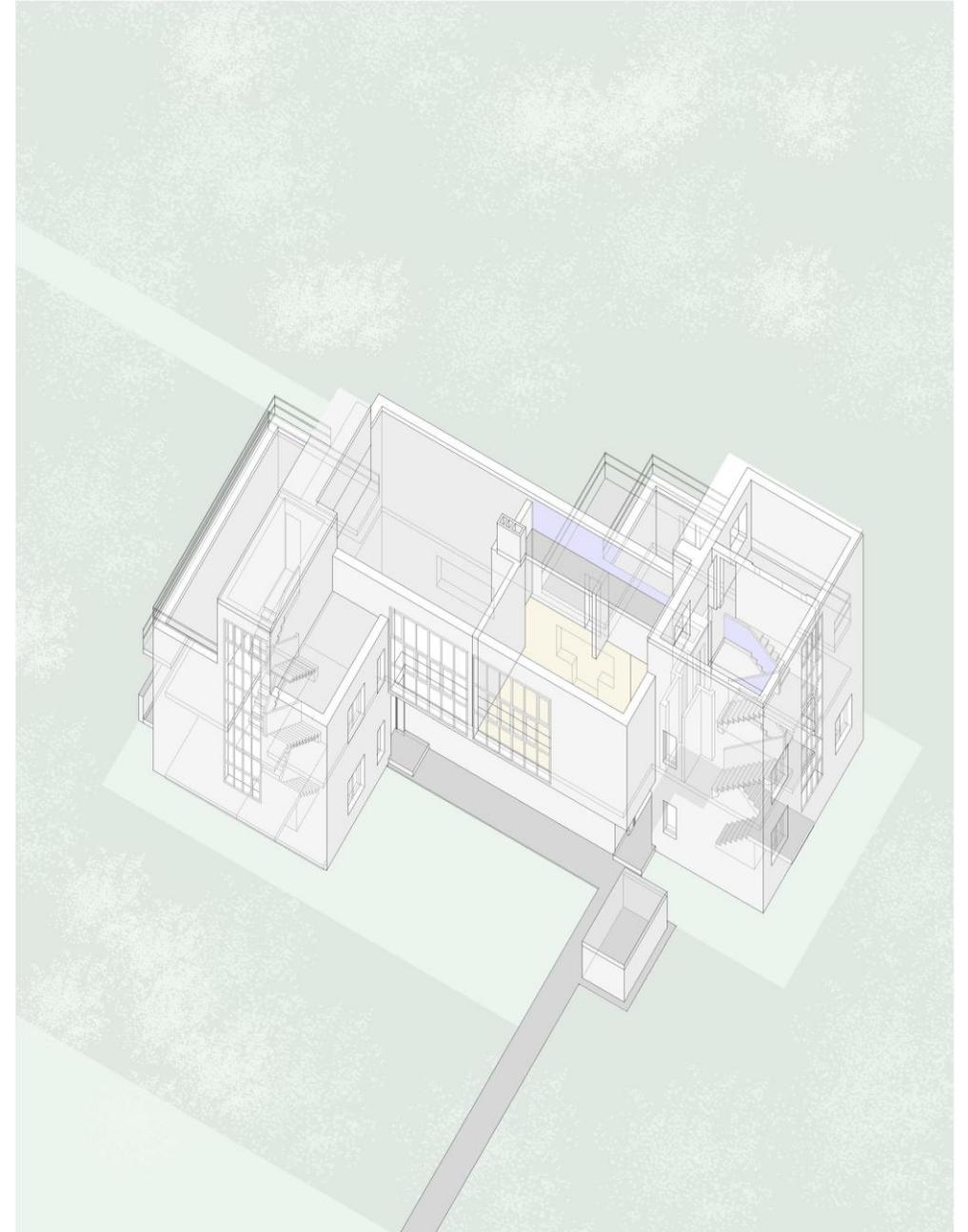


Ground Floor Plan Scale 1:100

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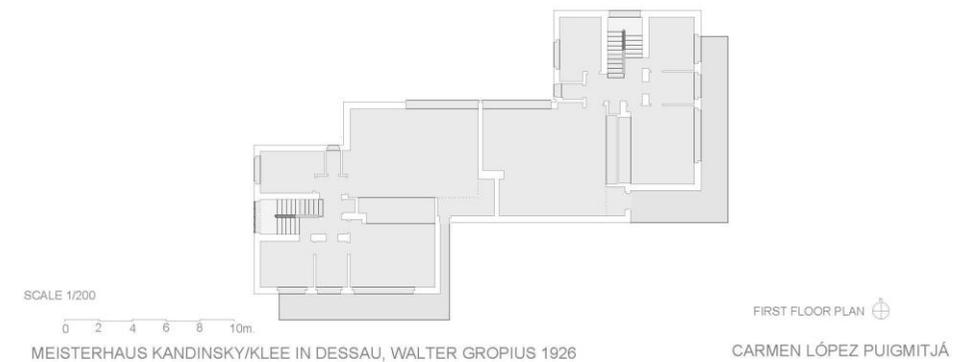
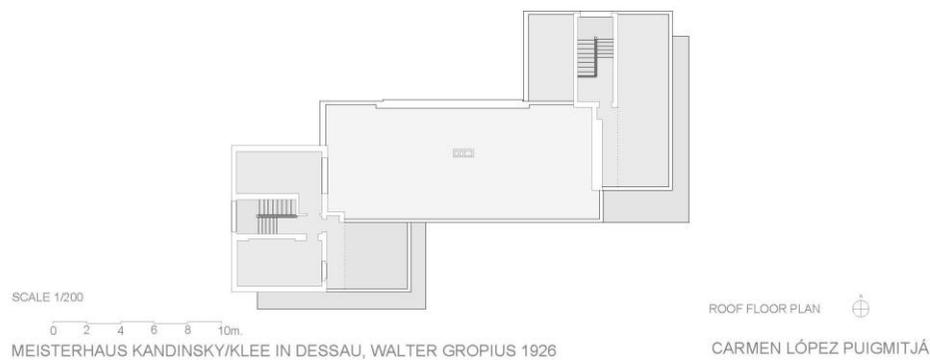
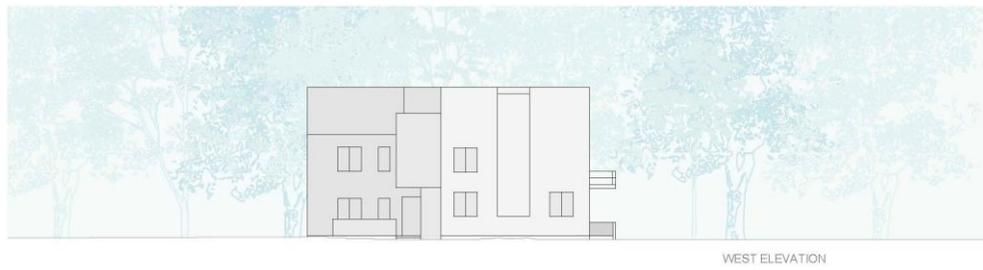
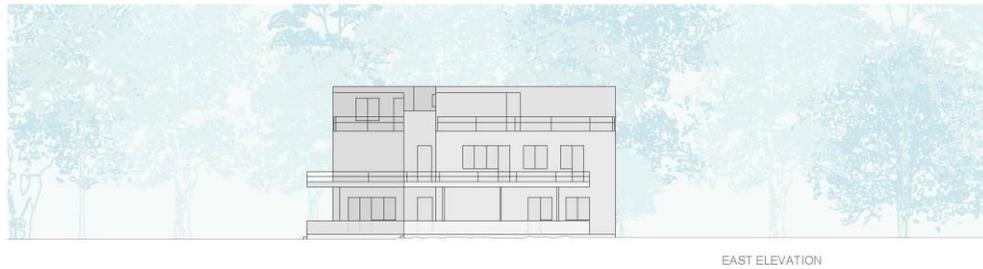
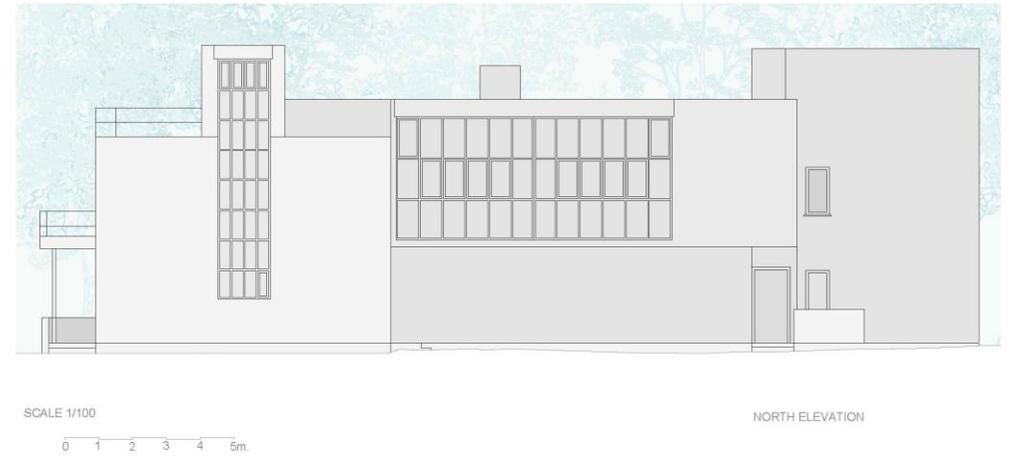
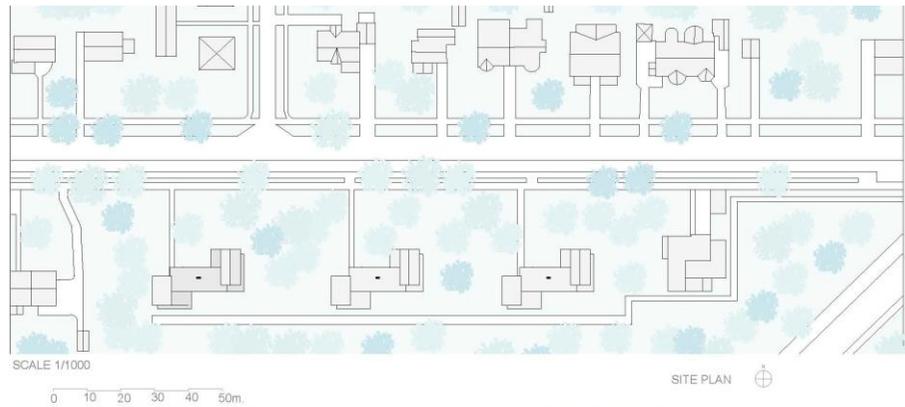
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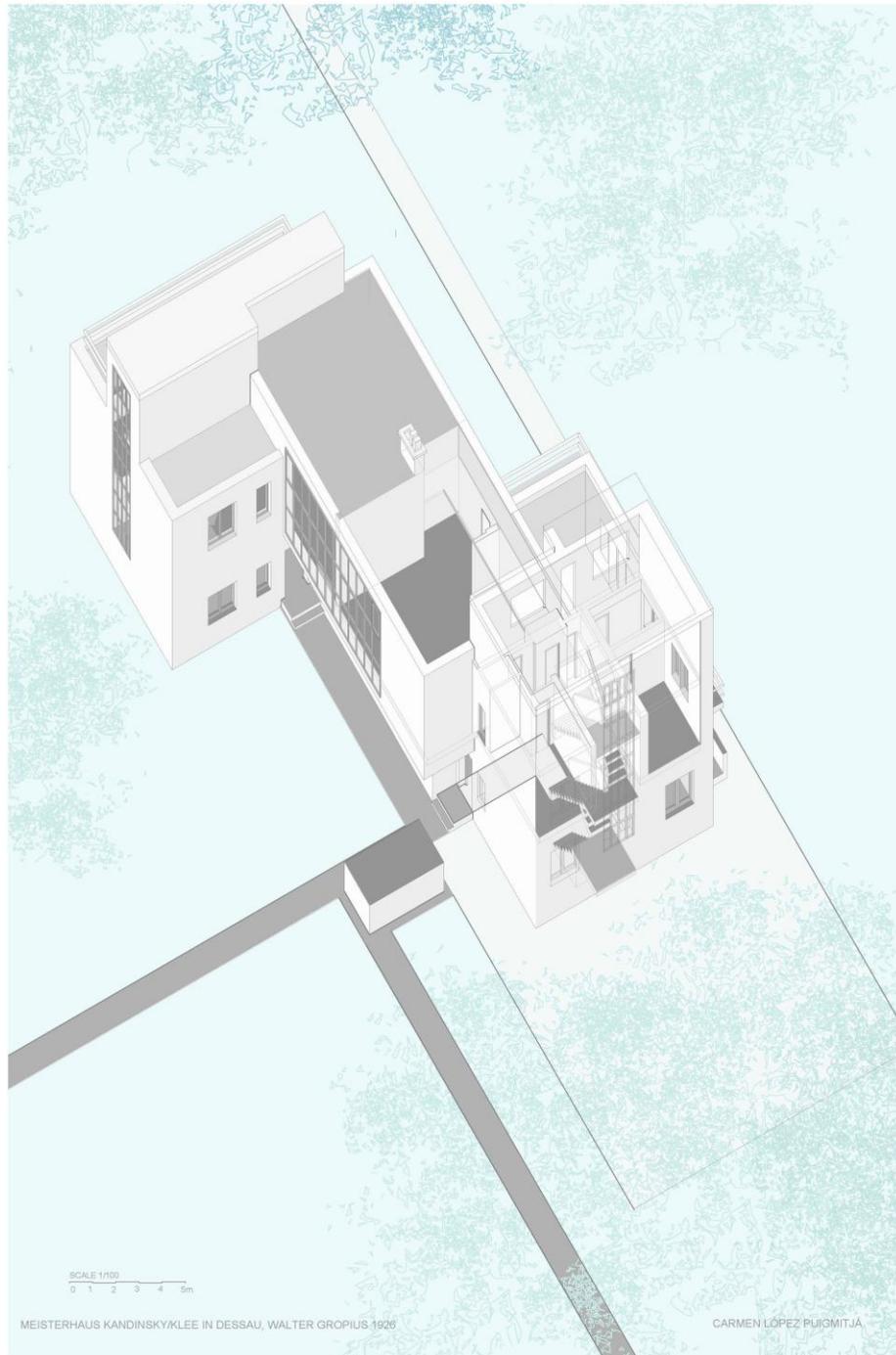


Meisterhaus of Kandinsky/Klee, in Dessau, Walter Gropius, 1926

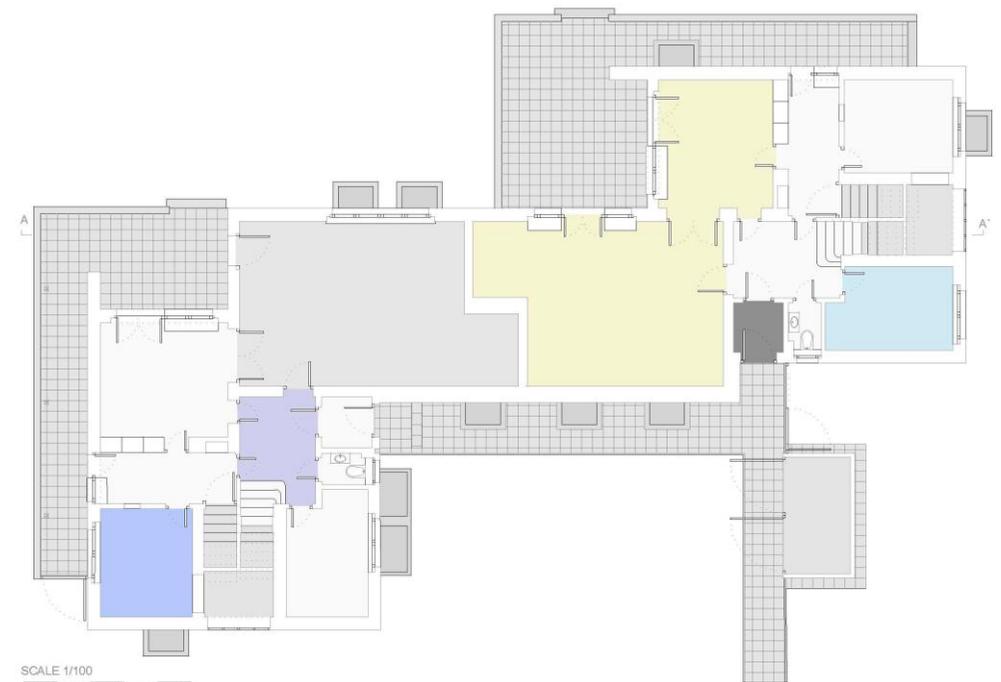
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Isabel Navia - 201





AA' SECTION



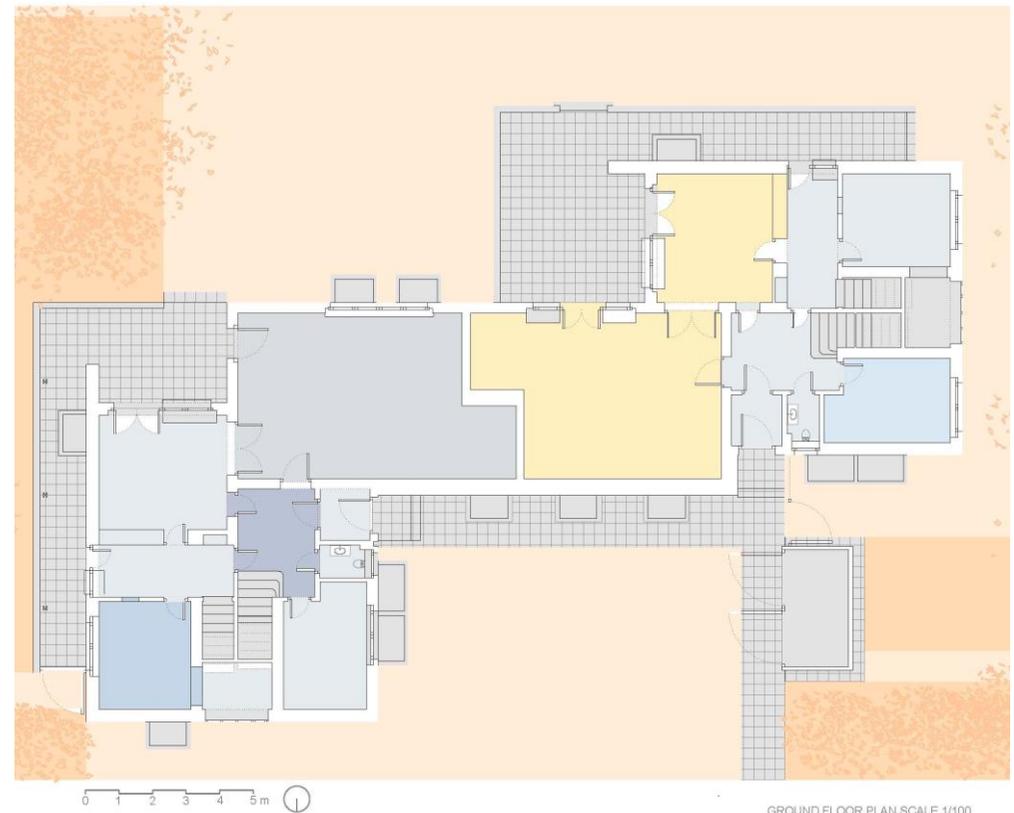
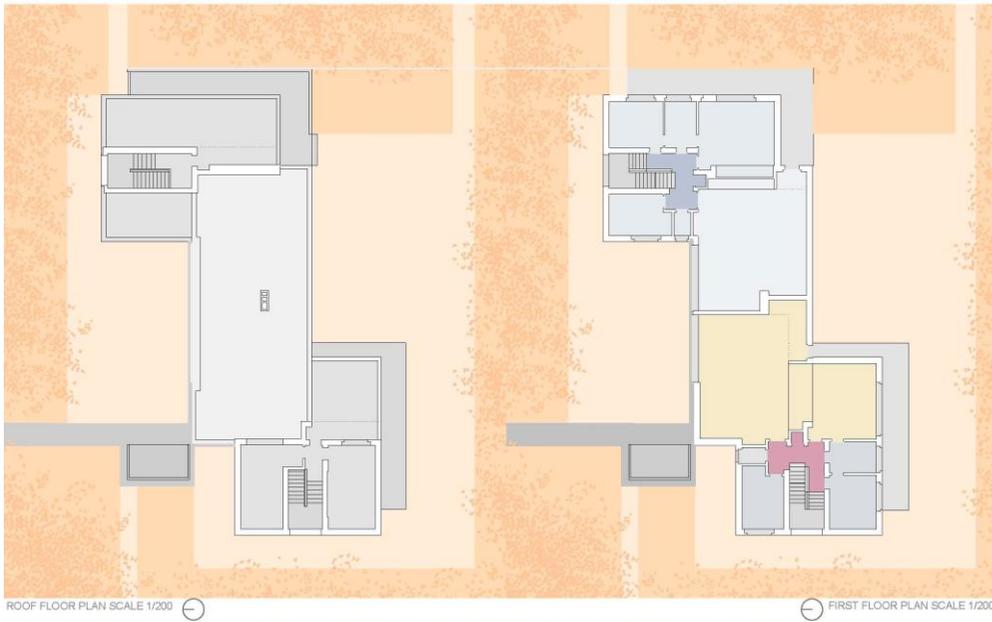
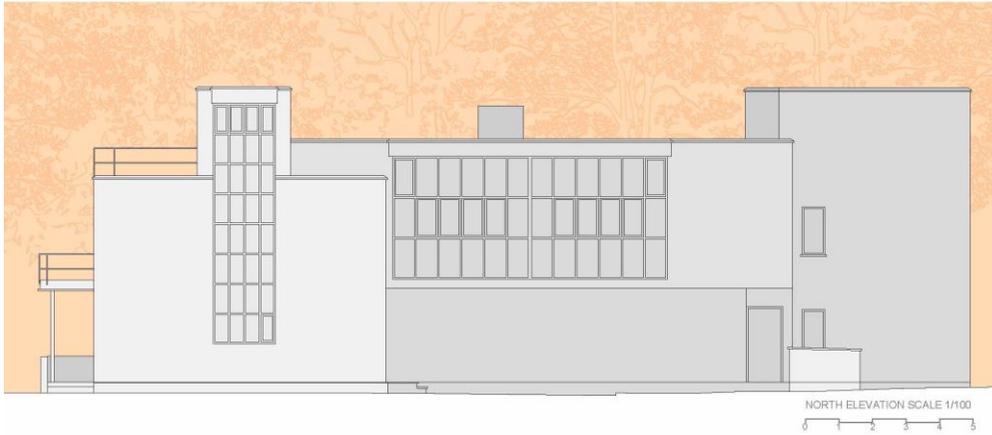
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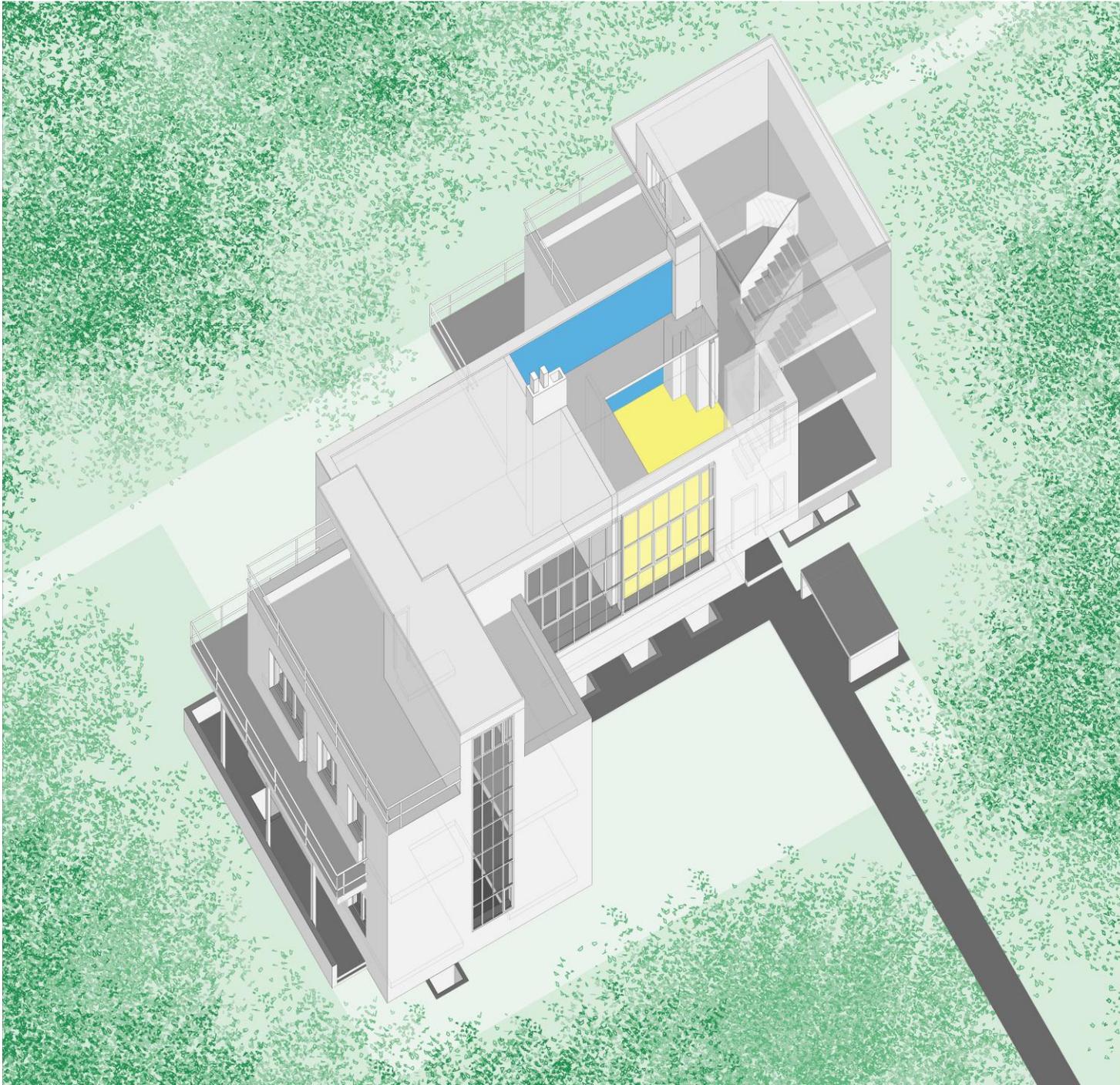
MEISTERHAUS KANDINSKY/KLEE IN DESSAU, WALTER GROPIUS 1926

GROUND FLOOR PLAN

GROUND FLOOR PLAN ⊕

CARMEN LÓPEZ PUIGMITJÀ





ARCHITECTURAL DRAWING I

MEISTERHAUS KANDINSKY/KLEE, WALTER GROPIUS, 1926

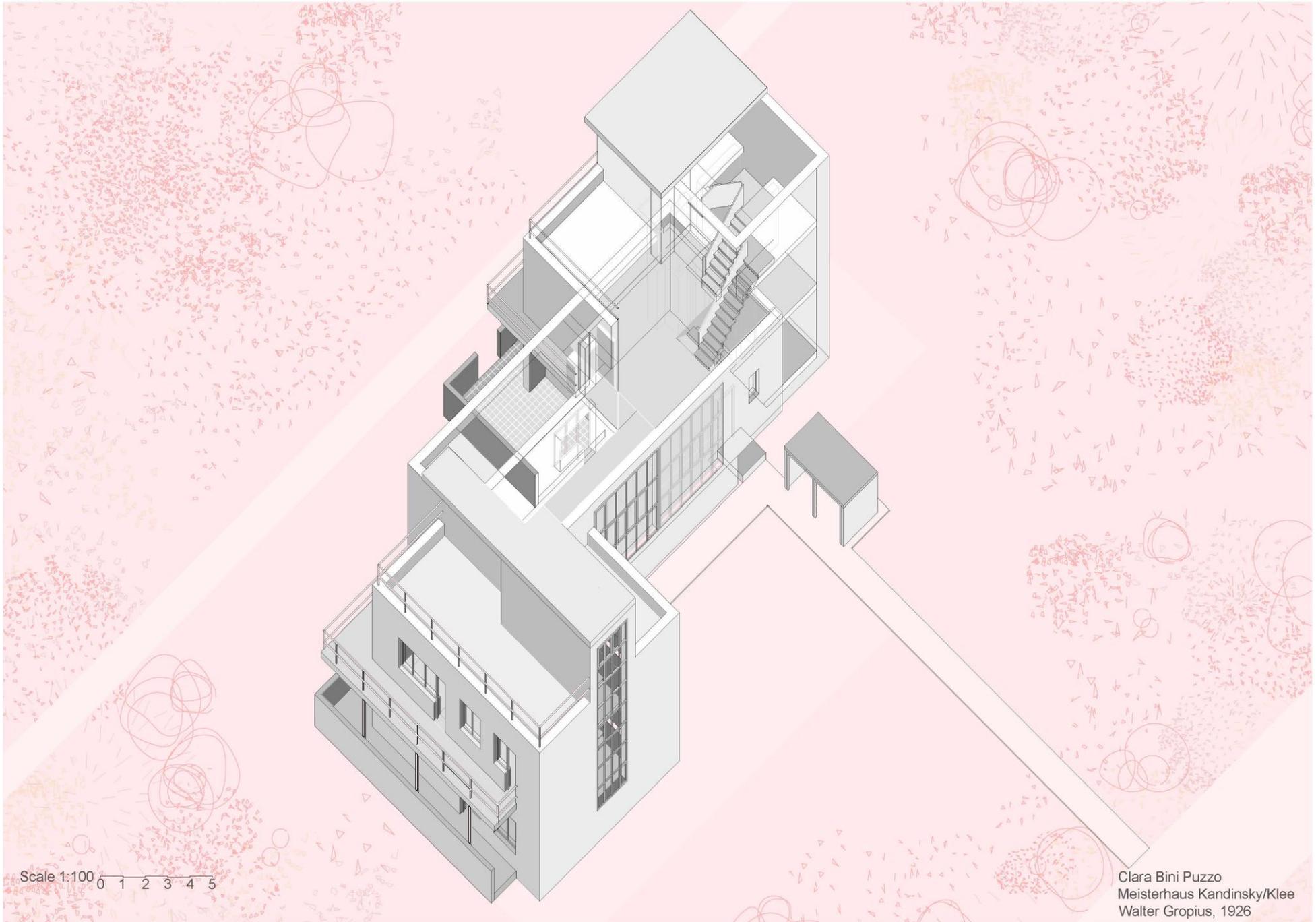
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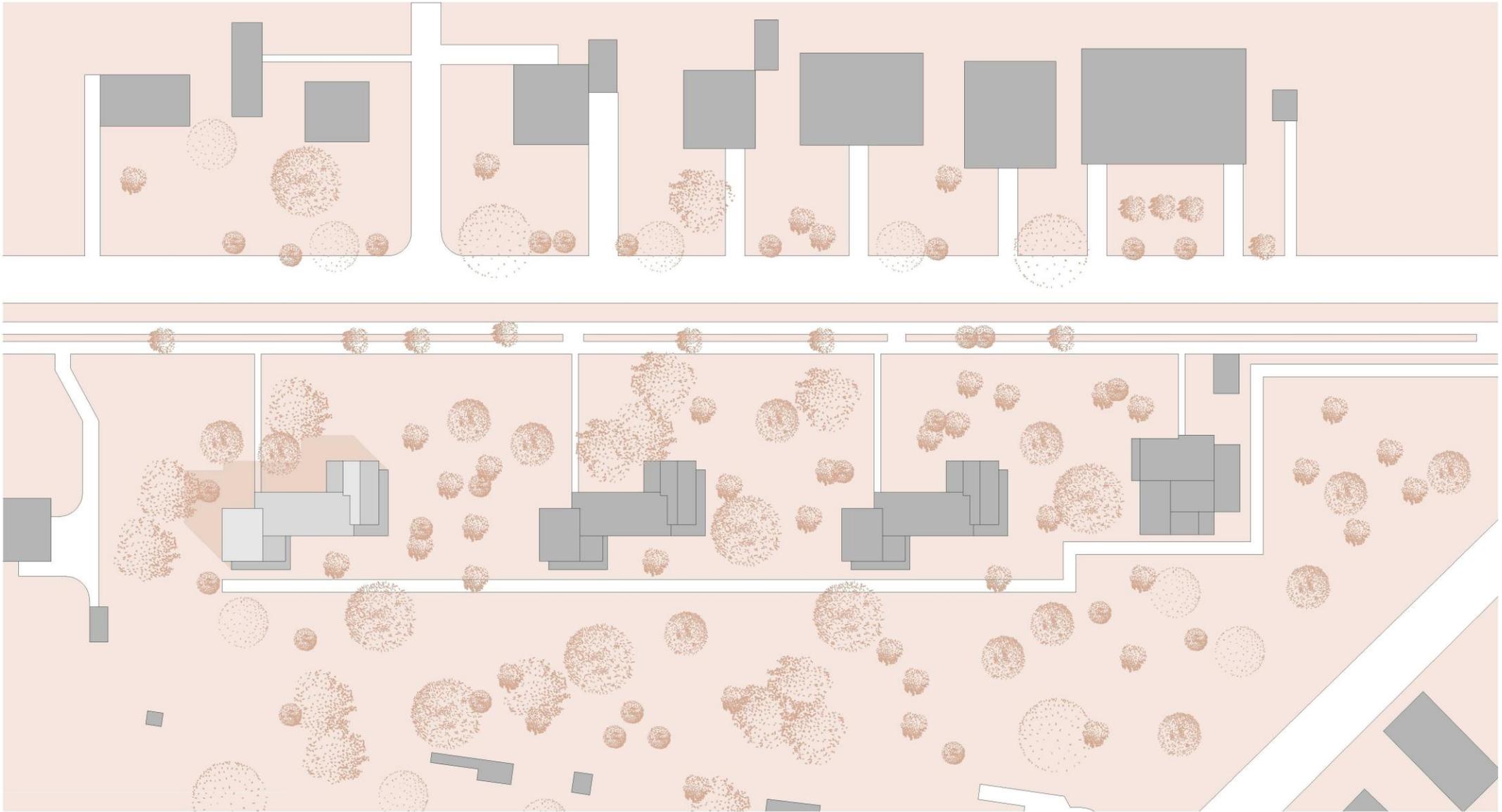


ARCHITECTURAL DRAWING I

MEISTERHAUS KANDINSKY/KLEE, WALTER GROPIUS, 1926

CARRAH PAISLEY COOK

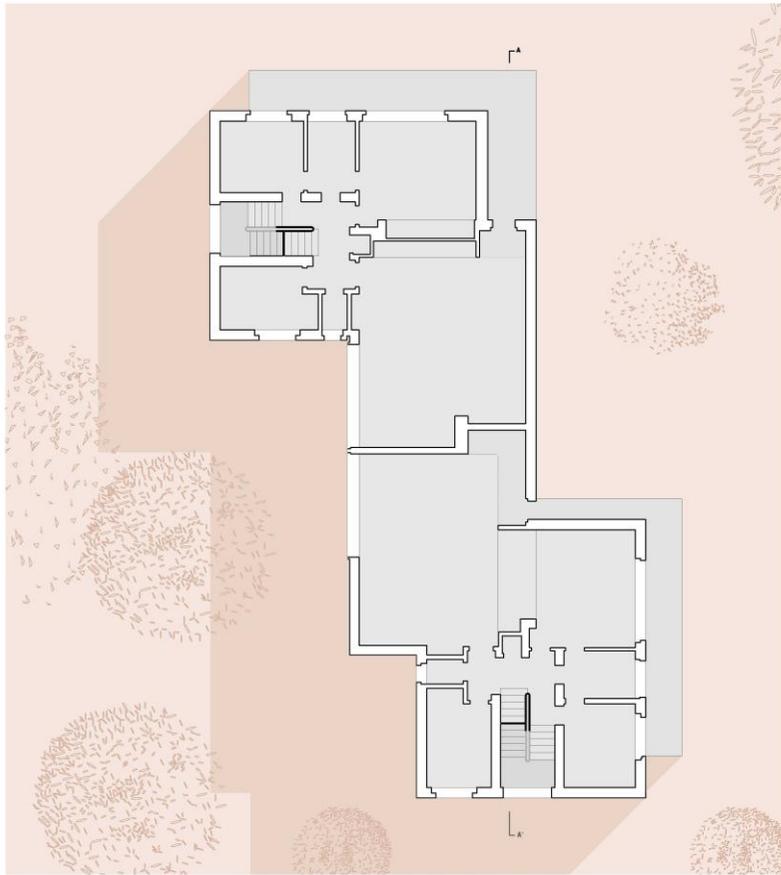




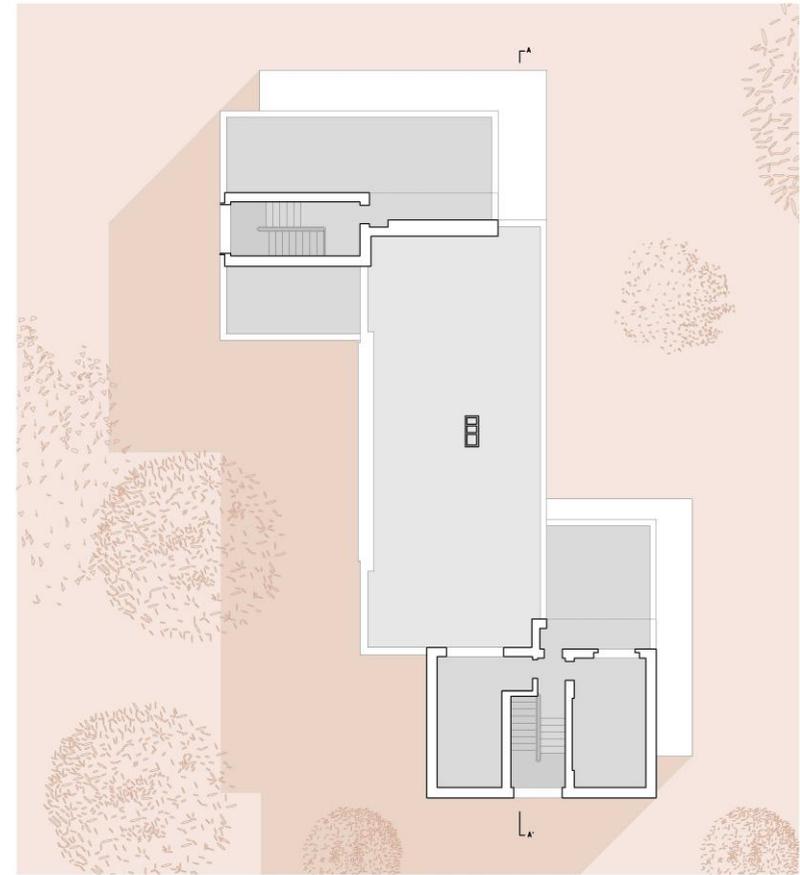
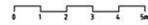
SITE PLAN  SCALE 1:1000



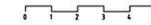
 MEISTERHAUS KANDINSKY/KLEE DESSAU, GERMANY WALTER GROPIUS 1926



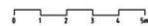
FIRST FLOOR PLAN Ⓢ SCALE 1:200



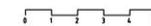
SECOND FLOOR PLAN Ⓢ SCALE 1:200



WEST ELEVATION SCALE 1:200



EAST ELEVATION SCALE 1:200

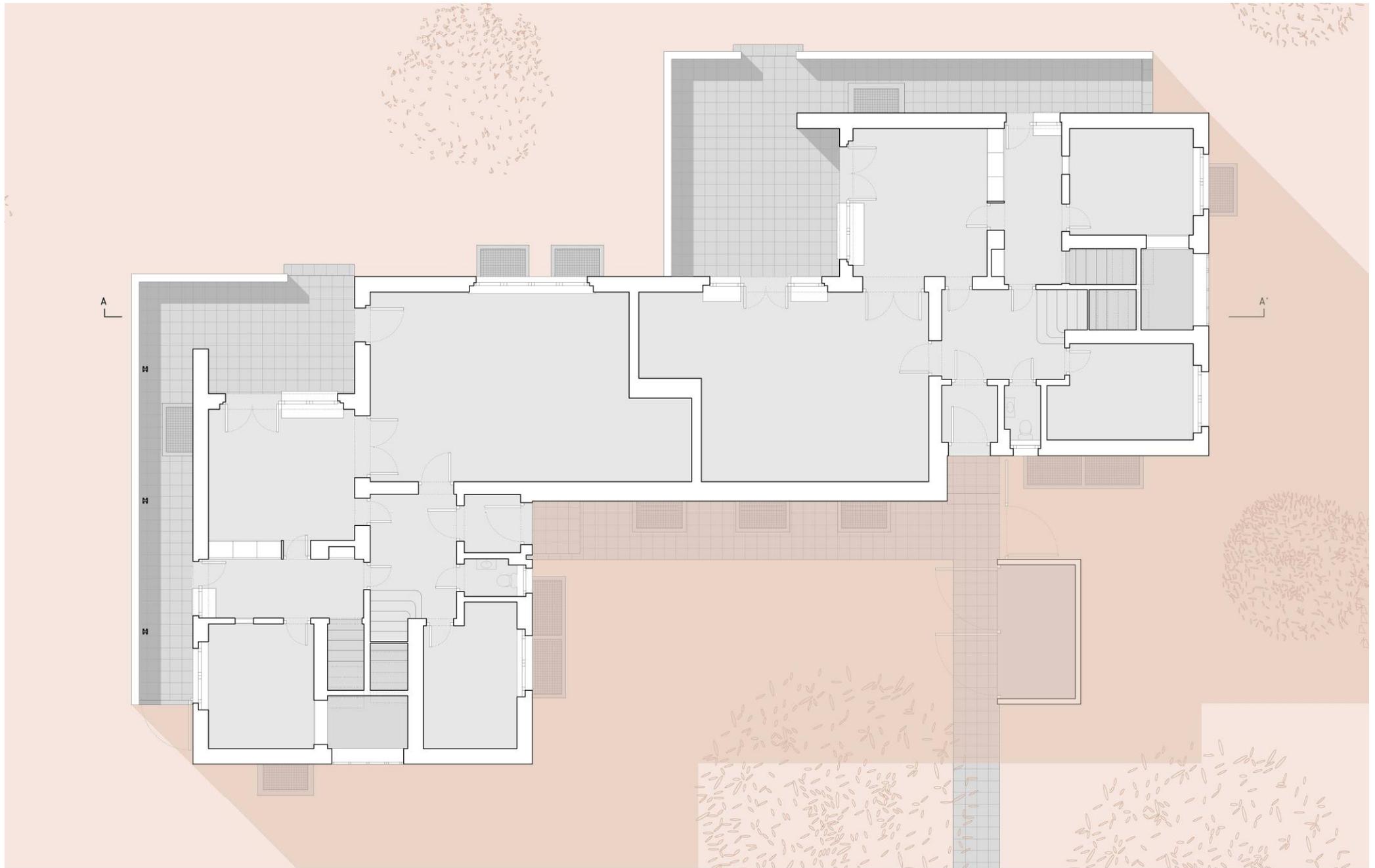




NORTH ELEVATION

SCALE 1:100





GROUND FLOOR PLAN

SCALE 1:100





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