

PERFECTLY IMPERFECT

RESURRECTING A LEGACY OF PURPOSE THROUGH MATERIALS, FORMS, AND SPACE



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DREXEL UNIVERSITY
INTERIOR ARCHITECTURE & DESIGN
GRADUATE THESIS

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"Every building is rooted in its own context, has a direct connection with the place that it inhabits, and therefore has a definite narrative to be revealed; every building has its own story to tell." - Sally Stone

SPECIAL NOTES FROM THE AUTHOR

Mom & Dad,

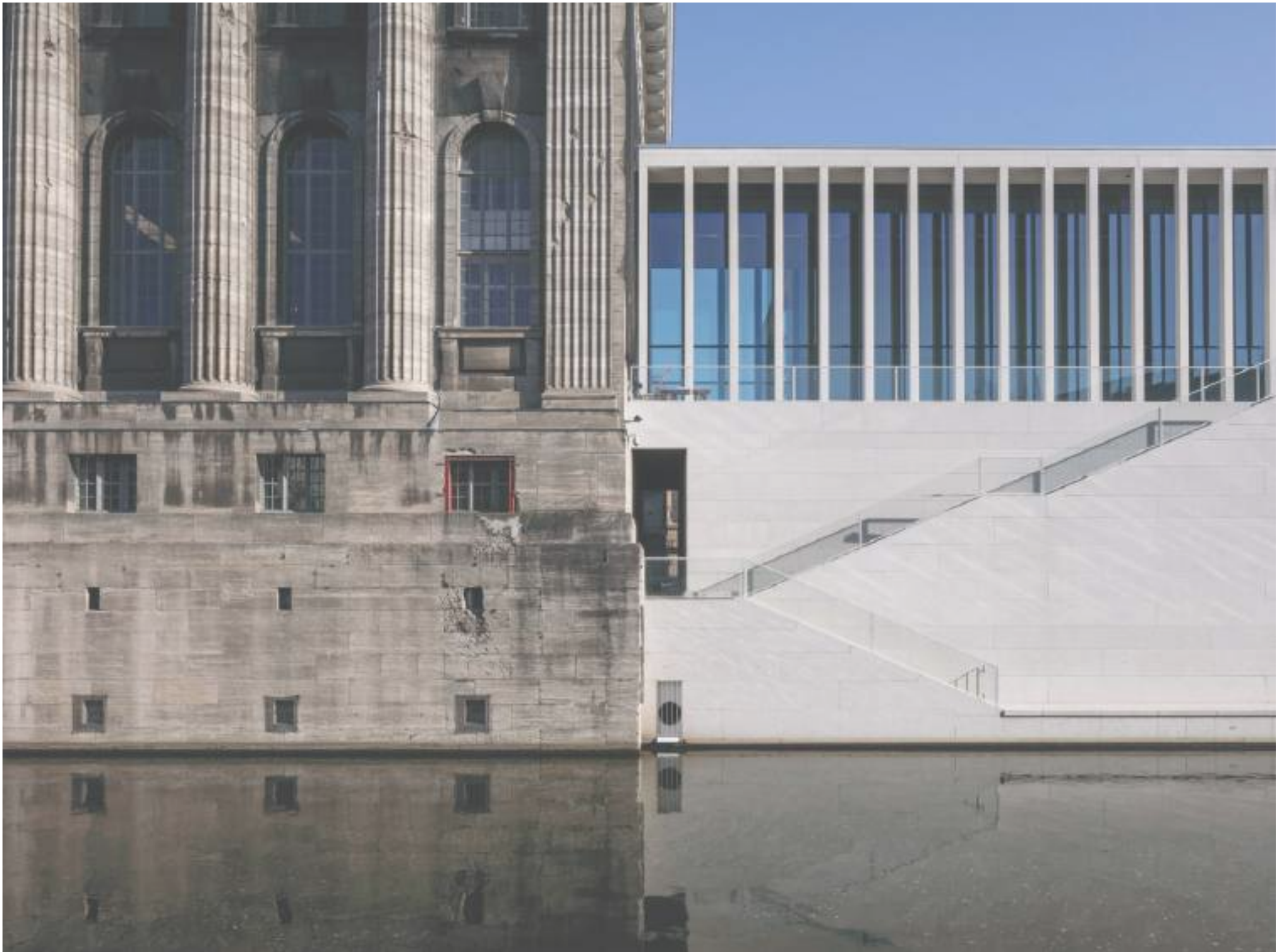
Thank you for your constant support and love through my graduate journey. You have always taught me to pursue my dreams and fight for my passions.

Joey,

Special thank you to the man who has always supported my crazy dreams and wild ambitions. You have always reminded me of my talents and I am forever grateful for you.

Carolyn,

I am beyond thankful for you and everything you've done for me during my thesis work. Your unwavering support and encouragement pushed my thesis to another level and it's all thanks to you. I couldn't have asked for a better advisor.



PERFECTLY IMPERFECT

adjective

per-fect-ly \ im-per-fect

defined as blending materials and forms, old and new, that can be grafted together to visually become a singular object that has distinctive qualities that complement and enhance each material



WAYS TO ACHIEVE PERFECTLY IMPERFECT

LINE

SCALE

COLOR

TEXTURE

PROPORTION

DETAIL

DECONSTRUCTION

CRAFTSMANSHIP

ESSENCE OF MATERIALS

LEGACY

PRESERVATION

HISTORICAL CONTEXT

MEMORY/TIMELAPSE

CONTRAST/SIMILARITY

LIGHT AND SHADOW

ELEMENTS OF NATURE

LANDSCAPES

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01

TOPIC

EXECUTIVE SUMMARY

LITERATURE REVIEW

PRECEDENTS

EXECUTIVE SUMMARY

PERFECTLY IMPERFECT: RESURRECTING A LEGACY OF PURPOSE THROUGH MATERIALS, FORMS, AND SPACE

Century old buildings leave us to retell their stories through their materials, forms, and spaces. I created the phrase "perfectly imperfect" as a way of finding beauty when two materials and/or forms blend with existing materials to form a singular artifact that is perfectly imperfect. Using an estate of grand size and beauty, historic as it is, deserves a mission and purpose grander than its original one-family function. A "legacy of purpose" will be resurrected with this historic estate, honoring Helen Gould's mission and values in how the estate should be repurposed, as a fashion and textile trade school for high school graduates. If she were alive today, she would want the estate to contribute to the greater New York City's underserved youth in this way. Three beautiful buildings on this historic site will be greatly enhanced by these renovations and this relevant, contemporary mission.

PERFECTLY IMPERFECT

RESURRECTING A LEGACY OF PURPOSE THROUGH MATERIALS, FORMS, AND SPACE

"Every building is rooted in its own context, has a direct connection with the place that it inhabits, and therefore has a definite narrative to be revealed; every building has its own story to tell." - Sally Stone

INTRODUCTION

Have you ever thought about the story behind a building's materials? What impression or emotion do the materials portray? Do you feel there is a story still left to tell? This literature review will discuss the intersection of how new materials blend with a building's existing materials to create something that is 'perfectly imperfect'. Perfectly imperfect refers to two materials, one old and one new, grafted together to visually become one single material with distinctive qualities.

Wabi-sabi is another design aesthetic that embraces simplicity and imperfections. It's about appreciating the beauty of everyday wear and honoring the spaces and objects that are lived in and worn with love (Snayd, Joel). Wabi-sabi in its simplest form is perfectly imperfect. The idea of wabi-sabi will also be discussed in the literature review and will uncover how it correlates with my topic of perfectly imperfect.

MEANINGS OF WABI SABI

Wabi-sabi is deeply ingrained in Japanese culture and rejects the philosophy of lushness and magnificence and instead embraces imperfections and authenticity. Its history can be traced back to the 16th century Japanese legend of Sen no Rikyu and his cherry tree's flower petals falling naturally to the ground. Out of the flower petals falling from his cherry tree, he formed the philosophy of wabi-sabi (Snayd, Joel). Wabi-sabi can be more clearly defined as a "combination of two old words with overlapping definitions" and where "both life and art are beautiful not because they are perfect and eternal, but because they are imperfect and fleeting" (Barton, David). The words, wabi-sabi, were born separately and refer to different things. Wabi originally described being lonely and far away from society; whereas sabi was viewed as worn or withered, such as "a flower past its bloom" (Barton, David). During the 14th century, both words took on positive aspects. Wabi took on the positive meaning of living a quiet and rustic simple life. Sabi on the other hand, took on the positive meaning of finding beauty in old characteristics such as the tarnish of the patina. Today, wabi-sabi can be still be broken down into two terms. Wabi is now being defined as "things that are fresh, simple and incorporate rustic beauty" while sabi means "things that are touched by the beauty of a time-worn patina" (Snayd, Joel). Wabi-sabi does not represent things that are glossy or modern. Instead, it is a unique flea market find, a timeworn family heirloom or a seasoned wood floor. These examples of wabi-sabi are all about finding the rustic beauty in the natural timeworn imperfections (Snayd, Joel).

"Wabi sabi is underplayed and modest, the kind of quiet, undeclared beauty that waits patiently to be discovered. It's a fragmentary glimpse: the branch representing the entire tree, shoji screens filtering the sun, the moon 90 percent obscured behind a ribbon of cloud. It's a richly mellow beauty that's striking but not obvious, that you can imagine having around you for a long, long time-Katherine Hepburn versus Marilyn Monroe." - Tadao Ando

VIEWPOINTS ON PRESERVATION

Old buildings are irreplaceable, leaving them to have an endangered status in the eyes of many people. The preservation urge can be provoked by issues that may be unrelated to the architectural qualities of a building. In *Old Buildings, New Designs* by Charles Bloszies, he has taken a strong stance that an old building should never be replaced with a new one. This stance has caused many local jurisdictions to create strict anti-demolition regulations that require extensive study and review to determine if an existing building can be taken down. Many of these jurisdictions have declared any building over fifty years old to be "de facto historic" (Bloszies, Charles). One of the reasons why the architectural preservation movement was formed in the United States was as a reaction to a mind-set that was established in the 1960s. This mind-set was that anything old was interpreted as old-fashioned and posed the question of "who needs old buildings?" (Bloszies, Charles).

The desire to preserve is often sparked by not trusting today's construction methods. The craft of old buildings, display hand-wrought features which evoke feelings of warmth and nostalgia that modern buildings lack. An example is the 13th century Gothic building that was partly demolished in 1936 due to the Spanish Civil War described in the "Ancient Church" article by Editoriale Domus. This church in Vilanova de le Barca in Lleida, Spain, displays the original uneven stone ashlar walls that evoke feelings of warmth and nostalgia, while the new lattice brickwork establishes a sense of wholeness and stability. The desire to retain the existing materials not only preserves the physical building itself, but it also preserves the authenticity and legacy of its past life.



Ancient Church of Vilanova de le Barca | Lleida, Spain

Sally Stone, states in her article "Re-Readings: Interior Architecture and the Design Principles of Remodeling Existing Buildings" that "authenticity within the postmodern age is bestowed upon an object, building, or environment not due to the creative or artistic quality of the thing but due to its age." (Stone, Sally). Authenticity can never be reproduced or copied, and it is one of the many reasons why it's important to preserve old buildings. Authenticity would not be possible without time.

In *Adaptive Reuse of the Built Heritage* by Plevoets and Van Cleempoel, Sally Stone states in her Foreword that, "Age within an object is now considered to contain the greatest value, the patina of wear, the discoloration of time, the tarnish

that repeated contact with human activity can produce are the most pleasing characteristics." The appearance of age in old buildings is created over time by repeated efforts of ordinary people, by the community who lived and worked in the particular section and who infused the sense of life into it (Plevoets, Bie). This speaks to how blending ancient materials with new ones are able to form something that is perfectly imperfect.

"History has never copied earlier history and if it ever had done so, that would not matter in history; in certain sense history would come to a halt with that act. The only act that qualifies as historical is that which in some way introduces something additional, a new element, the world from which a new story can be generated, and the thread taken up anew." - Caruso St. John

DEFINING TERMS FOR REPURPOSING

To begin the discussion of the intersection between old and new, it is important to understand how different building processes are connected to the phrase 'perfectly imperfect'. Repurposing an old building is not a new concept. In the article "Restoration, Renovation, Rehabilitation, Conservation: What Does it All Mean?" by Mark J. Johnston, he identifies three main approaches towards preservation. These approaches are preservation, restoration, and renovation. The first approach is preservation. Preservation is described as the process that focuses on the maintenance, stabilization, and repair of existing materials, and the retention of a building's form as it has evolved over time. The second approach is restoration. Restoration is defined as returning a building to its original appearance and condition at a specific period of time. A true restoration project is quite rare and requires exact replication, which largely limits projects to Museums. The third approach is renovation. Renovation is the process of making something look and function like new. This process can be very sensitive to the historic nature of a building and it is crucial to preserve as much as possible (Johnston, Mark).

Another approach to consider is conservation. Conservation is stated as the safeguarding of particular building features for the future. In other words, it is the process of taking an element that has noticeable decay, and conserving what remains so the original workmanship and materials are able to be preserved for the future (Johnston, Mark). To correlate with the approach of conservation is adaptive reuse. Adaptive Reuse is the process of adapting an existing building for contemporary use (Plevoets, Bie). This involves a careful incorporation of contemporary design approaches, which Sally Stone in her article "Re-Readings: Interior Architecture and the Design Principles of Remodeling Existing Buildings" identifies the strategies of adaptive reuse as intervention, insertion and installation.

DEFINING ADAPTATION STRATEGIES THROUGH MATERIALITY

When a building is reused, the initial design objective to the original building is identifying and establishing the

relationship between the old and new (Brooker, Graeme). The new materials could not exist without the remaining original materials that holds a building's structure together. With Sally Stone's adaptive reuse strategies mentioned above, there are three categories of building reuse that are based upon the context of integrating the old and new. The three categories of adaptive reuse consist of intervention, insertion and installation (Stone, Sally), but this literature review will specifically focus on two adaptation reuse strategies of intervention and insertion.

In *Adaptation Strategies for Interior Architecture and Design*. *Interior Architecture and Design Strategies* by Graeme Brooker, intervention is defined as a strategy that can integrate the existing building with new elements in a clear and distinct manner. When using this strategy, the original surviving building can involve levels of repair and/or selective demolition to create a suitable and appropriate basis for the intervention or new materials (Brooker, Graeme). This strategy encourages the joinery connection between the existing material and the new material to create a defining moment where they are joined together. A successful intervention would be seeing the disruption or break that is clearly defined and articulated once the two materials have been merged.



Astley Castle | Warwickshire, England

An example of a successful intervention is the Astley Castle in Warwickshire, England. Due to its advanced decay, the ruin's crumbling ancient sandstone walls had to be stabilized by new masonry work at a small scale to carefully join the two materials together. The edges of the ancient stone were covered and protected by the new masonry to prevent further deterioration. The choice to use thinner bricks allowed the joinery of the two materials to fit seamless together along the rough and random edges of the ancient sandstone while still leaving a distinction between the materials. The new brick work was laid in a lime mortar in a quarter-lap bond to accommodate the headers (Mann, William). The color of the bricks, charcoal-fired with red and green tones of the sandstone, create a tonal and color harmony, while at the same time as having clear textural differentiations (Mann, William). This is a

representation of how two materials can blend to form something that is perfectly imperfect.

A municipal library in Cervarese Santa Croce, in the province of Padua, Italy, is another example of how an intervention strategy can be used. In 2003, the restoration process began and lasted for 15 years. The library was once Church of San Michele Arcangelo that dates from the period of the earliest Lombard settlements between the sixth and eight centuries (Grillo, Francesca). The first phase of intervention was to remake the original walls and openings. This was

done by preserving the remaining stone walls and adding a new layer of modern-day plaster to fill in the gaps. The new plaster balances out the original stonework by creating a distinct line between the two materials, acting like a scar, bonding the materials together (Grillo, Francesca). A wabi-sabi effect is evident when these two materials join together because there is a purity in each material that is unmistakably visible.

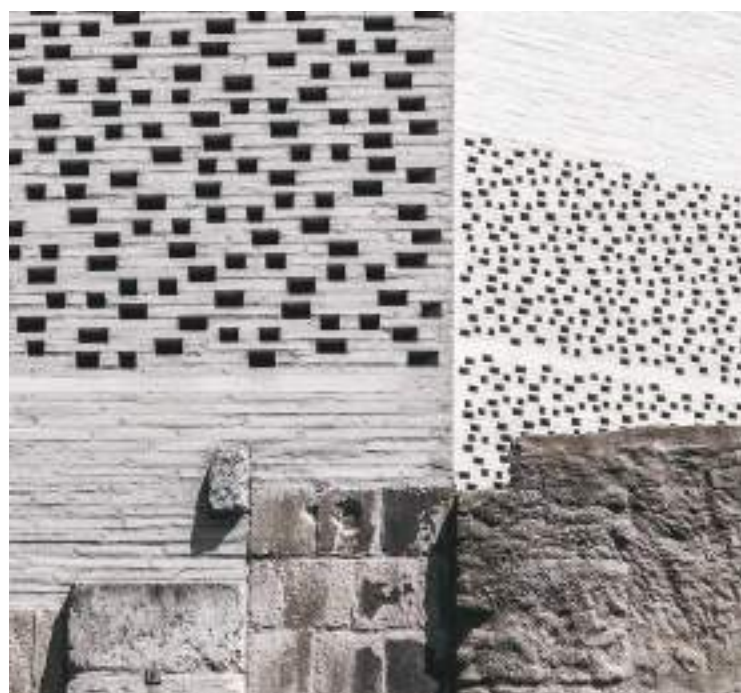
In *Adaptation Strategies for Interior Architecture and Design*. *Interior Architecture and Design Strategies* by Graeme Brooker, insertion is when there is an introduction of a new element, into, between or beside an existing structure. Most times the inserted object can

be seen as independent and “a powerful element that establishes surprising dialogues between itself and the existing structure or volume” (Brooker, Graeme). Even though the inserted element stands alone, there are particular qualities that are derived from the original building. There is a strong relationship between the original building and the new materials that are being introduced (Plevoets, Bie). The best way to present insertion is to have a clear distinction between the new elements and the crumbling antiquity of the existing structure, even though the inserted elements are particular qualities that were derived from the original building (Brooker, Graeme)



Municipal Library in Cervarese Santa Croce | Padua, Italy

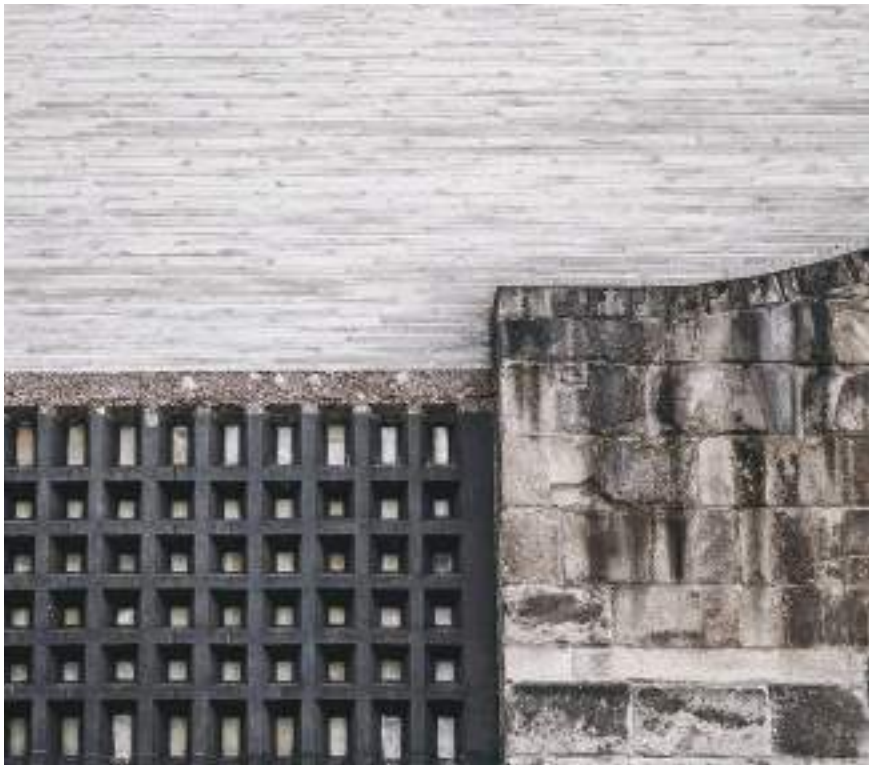
The Kolumba Art Museum in Cologne, Germany was designed by Peter Zumthor who uses the insertion strategy by introducing new building materials to the Gothic church standing



Kolumba Art Museum | Cologne, Germany

structure as a way to build upon the original building’s site history.

Zumthor’s design delicately elevates the Gothic church while recognizing the church’s history and preserving its legacy. In the article “Kolumba Museum/Peter Zumthor” by Karen Cilento, Zumthor says that he “believes in the inner values of art, its ability to make us think and feel, its spiritual values. This project emerged from the inside out, and from the place.” Zumthor carefully thought out the use of the materials and specifically how they were going to be constructed such as the use of grey brick to blend the destroyed fragments of the site together (Cilento, Karen). The new brick material is not taking away from the standing structure but are further enhancing the ancient Gothic church characteristics and age-worn materials (Plevoets, Bie). The façade brick work has purposeful



Kolumba Art Museum | Cologne, Germany

enhance and rejuvenate the original building and bring it back to life (Plevoets, Bie). The Neues Museum in Berlin, Germany is an example of how a new, stark white concrete draws even more attention to the other materials such as the rough brick wall and pebble concrete surrounding it. The contrast of the smooth concrete and the rough brick walls “set a tone that is continued throughout the building with new meeting old in unapologetically clean lines” (Ng, Andrew). The remaining original brick and pebble concrete walls are prevalent in a such a grand space to bring life and warmth back into the atmosphere (Plevoets, Bie). Not only are the materials adding something to the interior space, but they are also adding something to the objects being displayed in the interior space. The objects do not necessarily need to have a direct tie to the past history of the building or to the materials themselves. With the integration of materials like concrete, brick and plaster, the objects on display

perforations with the new brick work that is not only visually appealing, but also acts as a light source for the interior of the museum (Cilento, Karen). There is a sense of completeness as if the wound of the past has been fully healed when blending the new brickwork with the existing stone. The new grey brick material is not taking away from the standing structure but are further enhancing the ancient Gothic church characteristics and age-worn materials (Plevoets, Bie). Both materials can speak to their true beauty individually, but when they are joined, they create something that is extraordinary and perfectly imperfect.

A building’s legacy can be interwoven into the design of a new interior by joining new materials with existing materials to continue the story that was once alive. New materials can



Neues Museum | Berlin, Germany

are giving the sense that there is a deeper connection to why these specific objects are being displayed in this particular room with these specific materials (Plevoets, Bie). Not only do the materials tell the story of a building's history, but the things that are inhabiting the interior space are beginning to tell a new story themselves. This is another means of how elements are combined to become perfectly imperfect.

Not all joinery methods have to be directly tied to the past. New materials can be incorporated into a design to elevate the old characteristics that surround it. Using the intervention strategy, the exterior of the James-Simon-Galerie, located in Berlin, Germany, is a representation of how the new meets the old. There is a strong visual contrast between the worn-out existing building and new modern style building, not only in materials, but also in their architectural style. The modern addition to the original buildings displays marble tiles laid in a horizontal pattern that is juxtaposed with the tall vertical columns. The columns create a crisp vertical repetition that echo the original columns in a fresh and urbanized rectilinear form (Kulturbesitz, Stiftung). It gives the new building a sense of sharpness and order, which balances the timeworn stone exterior of the original traditional stone columns that feel soft, hand-crafted, and textured (Kulturbesitz, Stiftung).



James Simon Galerie | Berlin, Germany

CONCLUSION

Old buildings can truly be stated as irreplaceable and their past stories need to have a voice in order for their legacy to carry into the future. By joining old and new materials together, one can create something that is perfectly imperfect while continuing to preserve the legacy of the past. I plan to use the adaptive reuse strategies of intervention and insertion to create interior spaces that communicate the story of the building's past to create a sense of perfectly imperfect. The materials, old and new, will speak for themselves to inform the use of the space. By selecting to use these two adaptive reuse strategies, I plan to creatively blend old and new materials together in a way that showcases their inner wabi-sabi and lets their materiality be presented in its purist form. The timeworn and fresh materials, when merged, tell the story of an existing building's space and begin unfolding a new story for the future. This results in perfectly imperfect design.

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PROJECT

Neues Museum

LOCATION

Berlin, Germany

ARCHITECT

David Chipperfield Architects

MATERIALS

Concrete, brick, plaster, stone, tile





PROJECT

The Old Church of Vilanova de la Barca

LOCATION

Vilanova de la Barca, Lleida, Spain

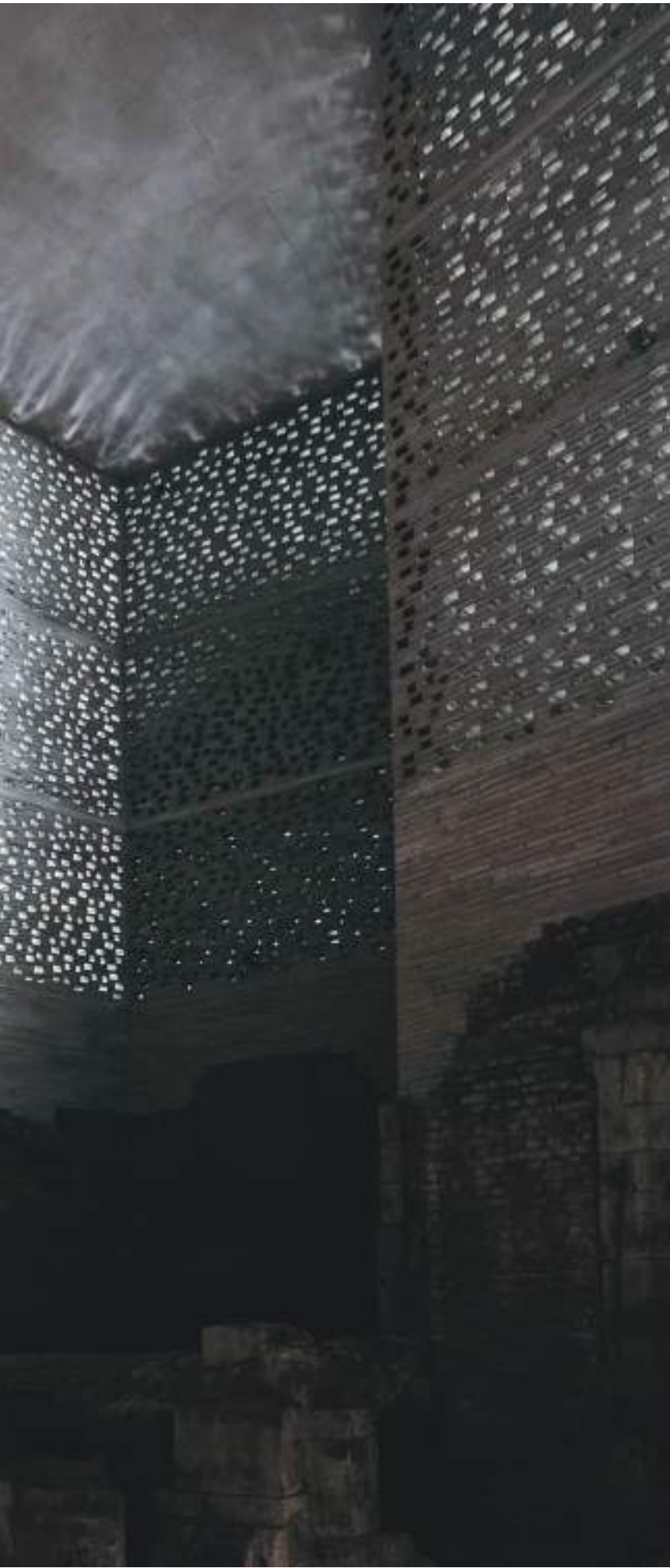
ARCHITECT

AleaOlea Architecture + Landscape

MATERIALS

Concrete, plaster, stone, tile, metal





PROJECT

Kolumba Museum

LOCATION

Cologne, Germany

ARCHITECT

Peter Zumthor

MATERIALS

Concrete, brick, stone, tile, metal, wood





PROJECT

Fuyang Cultural Complex

LOCATION

Hangzhou, China

ARCHITECT

Wang Shu

MATERIALS

Recycled tiles, stone, brick, concrete





PROJECT

Art Museum

LOCATION

Malmö, Sweden

ARCHITECT

Tham + Videgard Arkitekter

MATERIALS

Stone, brick, concrete, metal, iron

02

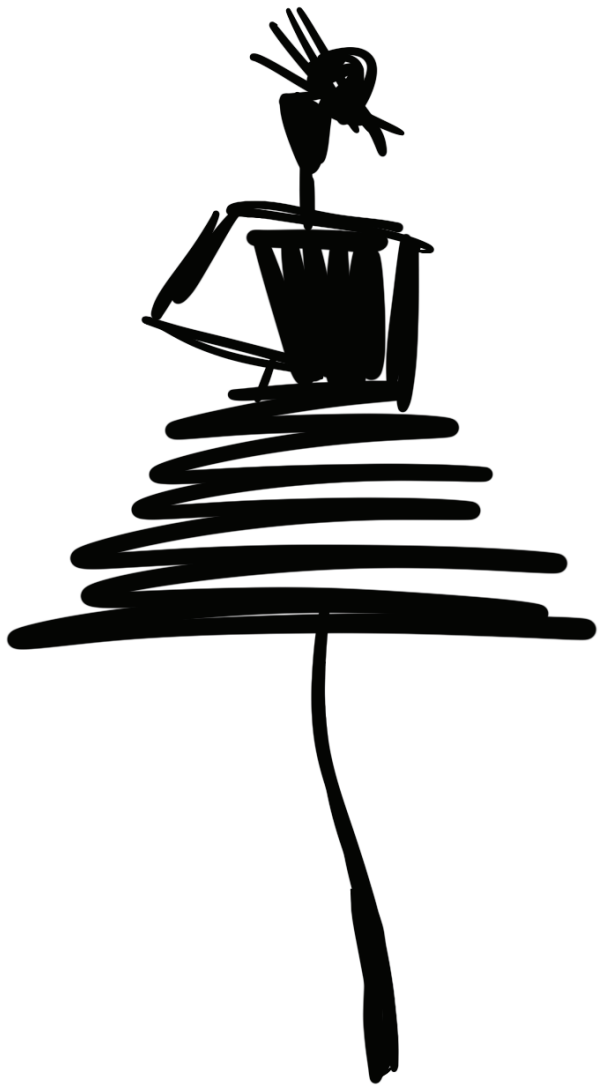
CASE STUDY RESEARCH + INTERVIEWS

FASHION + TEXTILE TRADE SCHOOL OVERVIEW

DREXEL UNIVERSITY

LOCAL COLLEGE

ARTIST INTERVIEWS



FASHION + TEXTILE TRADE SCHOOL

PROGRAM OVERVIEW

Creating a fashion and textile trade school using the Lynhurst Estate resurrected the mission and vision Helen Gould had for her beloved home. Trade schools provide individuals the opportunity to learn a trade to gain self economic independence without attending a four-year university. This school is open to any high school graduate looking for an alternative to a four-year university with a focus on fashion and/or textile design, adults looking for a new career path, anyone looking to launch a fashion brand, and anyone with a strong desire to explore what it takes to become a fashion or textile designer. The potential contemporary trends to implement into this school are textile creation techniques, using and creating sustainable and recyclable materials, adding futuristic fashion design classes using digital techniques, designing fashion garments that alter their shape from sound, and using interactive media to customize garments for potential buyers.



CASE STUDY 1: DREXEL UNIVERSITY

FASHION DEPARTMENT

Drexel University's Westphal College of Media Arts & Design fashion department is housed in the URBN Center since 2013 and located on Market Street in Philadelphia, Pennsylvania. This fashion program is recognized as one of the top fashion programs in the world according to Fashionista and Business of Fashion. The program offers an undergraduate and graduate degree and is ideal for students who have a passion for personal creative expression for fashion. The URBN Center has spacious open concept studios and labs that are flooded with natural light and provide a place for students to work and collaborate with their classmates. There are large work tables in the studio for students to cut and measure fabric, sewing machines along the perimeter of the space by the windows, and various mannequin sizes for building the fashion garments on. Students also learn how to create quality fabrics by experimenting with combinations of yarn type and size within traditional methods and high end technology. In addition to the studios and fabric labs, students learn how to use virtual design and programming softwares that aide in the creation of their designs. A Hybrid Making Lab is also available to students to assist them in making their designs.

SPACE NAME	CURRENT SQ. FT.	IDEAL SQ. FT.	DESCRIPTION
Design Studio	1,250	2,500	Natural light essential, 2 studio spaces
Industrial Machine Lab	342	700	
Computer Lab	468	1,000	Natural light essential
Computer Lab Annex	390	800	16 chairs and computers, add additional table and chair for non-computer work
Smart Classrooms	567	1,100	Must accommodate plotter, color printer and digital fabric printing machine
Textile Studio Classrooms	0	550	Currently 1 classroom, increase to 2
Art/Studio Classroom	0	550	Need washer and dryer, sink and lab space with hooded ventilation
Historic Costume Collection	0	600	Natural light essential and access to water
Historic Costume Collection	465	1,000	Conservation and office/accession with water access
Resource Room	216	500	Must be climate controlled
Display Fixture Storage	160	500	
Supply Closet	144	150	
Offices	810	1,100	7 offices total with 1 near design studio and 1 near Historic Costume Collection
Display Space for Student Work	264	400	Preferrably located at entrance where guests can see work exhibited
TOTAL SPACE	5,076	11,450	

CASE STUDY 2: SMALL UNIVERSITY

ANONYMOUS FASHION + TEXTILE PROGRAM SPACE REQUIREMENTS

This small university asked to remain anonymous, but shared their list of space requirements they are adding to their updated space for fashion and textile students. The design studios and computer labs need plenty of natural light to flood into the spaces as well as additional studio space. The computer annex space needs additional computers and seats to accommodate the increasing number of students attending this university. Art and textile classrooms need access to water for a washer, dryer, and a sink as well as a lab space that has a hood ventilation. The Historic Costume Collection needs two spaces to display the variety of fashion garments as well as an office and water access. There is a need for more faculty offices with one office at the Historic Costume Collection rooms and one near the design studios.

WHY DO YOU DO ART?

It is about the intersection of thinking critically and conceptually. I also think that it is about the world and having hopes to create space for discourse.

WHAT OR WHO IS YOUR BIGGEST INFLUENCES OR INSPIRATIONS?

The built environment, sculptures that you admire, looking at languages, digital fabrication/mold library at Drexel University. This library sparks my interest since so many things can be created.

DO YOU THINK THAT YOU CONNECT TO CERTAIN MATERIALS? DO THEY TIE TO YOUR PAST, PRESENT, OR FUTURE?

Material or objects are accumulated over time such as wood. Wood comes from trees that have to grow for hundreds of years, which is why many people like the grain in the wood because the rings tell a tree's age. Wood from buildings torn down in my local neighborhood say something of how long a material can last. Metal and Plaster you cannot tell the history/age of these materials like you can with wood. I am emotionally drawn to wood since I grew up out west in Minnesota.

DESCRIBE YOUR ROUTINE AS AN ARTIST.

Do not have a set routine. I try not to work with the same material every time. I like to go through a research based process that starts with ideas, objects, a meaning/narrative, the idea of recreating and recombining old forms.

WHAT IS YOUR FAVORITE MATERIAL(S) AND WHY?

Sculptural media - rubber molds, concrete, plaster

Wood is a material I always go back to because it is readily available/salvagable. I am a pack-rat with wood.

WHAT THINGS DO YOU NOTICE IN A SPACE FIRST?

I tend to think in a tactile way and like to decode the spaces and try to understand how a space is put together structurally and with finishes. I have a material sense and enjoy seeing the finer details in the space.

DO YOU AIM TO EXPRESS SOMETHING IN YOUR WORK?

I like to express the fundamentals of understanding history because today in our world we are subjective to everything and everyone - objects will always differ from original versus copied.

ARTIST INTERVIEW 1

LEWIS COLBURN

Drexel University Associate Professor, Sculpture Area Coordinator

WHAT IS YOUR FAVORITE MATERIAL TO WORK WITH AND WHY?

Dust is one of those materials that are interesting in a degree that this material requires a form or becomes formless. Dust activates the imagination and is associated with pollution. Dust also can associate with chaos, violence because when there is chaos there is order. This idea of having dust be formless or have a form is interesting perspective to take because it is can contain all other materials.

WHAT MADE YOU SELECT THE LYNDBURST POOL BUILDING FOR YOU ART INSTALLATION?

I was drawn to the ruin because it evoked a dream of a building's completion and there is an undecided future ahead. The building has been closed since the whole existence of the trust. I wanted to let people to be allowed to enter into the building that had not been restored and was left as a ruin because I was fascinated by the building's figure and its trope in Western thinking. The ruin appears in thought and cultural debates and the way people think about ruins are beginning to change. There are various kinds of ruins from violence, destruction, chaos, and old age. These elements provoked me to create this 'Watershed Moment'. I wanted to connect the site to the entire estate including the Hudson River. This connection to the Hudson River allowed this idea of constant movement. The sound in the Pool Building was another reason why I selected this building out of all of the other ones on the estate. The sound of water gives an expression of movement and marks a point in time, as if the water was put back into the pool. The sound that is playing in the Pool Building is the sound of Niagara Falls on a constant loop. I did not want to recreate the sound of people in the pool. but instead let those who enter be the people themselves and the loop of Niagara Falls is the water being put back into the building.

HOW DID THE SPACE OF THE POOL BUILDING SPEAK TO YOU?

The interior of the Pool Building is magical on various levels. You are able to see some plaster and feel like the skin of the building is being removed and just the bones are beginning to be exposed. This creates something very poetic. There are things that you associate with that are places or things that deal with the unknown. You think that you know someone or something by recalling a memory of your own. Buildings react and act the same way. The character of a building is being stripped away and leaving only the bones, the structure, left for us to discover.

ARTIST INTERVIEW 2

JORGE OTERO-PAILOS

Columbia University Graduate, School of Architecture Director, Professor of Historic Preservation

MIT, Ph.D. in Architecture

Cornell, Masters of Architecture

Cornell, Bachelors of Architecture

New York based artist and preservationist

WHAT DOES YOUR ART WORK AIM TO SAY?

My work is concerned with the experience and perception of space either abstract or concrete, imagined or real, and is explored through material expression (tectonics) and the formation/dissolution of boundaries.

WHO OR WHAT ARE YOUR BIGGEST INFLUENCES OR INSPIRATIONS?

Right now I've been looking a lot at the work of Cristina Celestino an Italian architect and tile designer. Artists Henry Moore, Barbara Hepworth, and Jean/Hans Arp, and architects Peter Zumthor, Carlo Scarpa, and Frank Lloyd Wright are some of my longtime favorites.

WHAT ARE YOUR FAVORITE MATERIALS TO WORK WITH AND WHY?

My favorite materials to work with are clay, paper, and concrete. Clay has the ability to take on almost any appearance--it's incredibly versatile. What I enjoy most about clay though is the process of working with it. It is very physical and can be temperamental--you have to follow it's timing and sometimes things are simply out of your hands. It is both delicate and strong. Concrete is similar - it has a lot of potential and can more quickly reach its final state than clay. I work with concrete when I'm impatient. I like paper for its tactility and qualities of temporality.

WHAT EMOTIONS, ATTITUDES OR THOUGHTS DO YOU HAVE ABOUT OLD BUILDINGS?

Abandoned buildings often make me think of the shifting of attitudes and values and the reasons that led to its abandonment. Why couldn't it be maintained? Did the building no longer support the function or did the people/jobs move elsewhere? Often I'm impressed by substantiality of old buildings. Buildings today are shells - they are paper thin. The massive foundations and masonry walls are no longer needed, but remind me of the solidness of the earth.

DO YOU HAVE ANY PAST EXPERIENCES OR MEMORIES WHEN YOU ARE INSIDE OF AN OLD BUILDING?

Along the lines of memory, old buildings are interesting because of the narrative they tell. Either through lingering smells, layering of renovations, or unfamiliar shaped or organized rooms/doors/etc. the building tells the story of someone else's experience and needs. Memory in this sense is greater than myself and connects me to other people. I'm often curious about how or what it was made of and perhaps what original conditions were changed over time.

WHAT DOES YOUR WORKSPACE LOOK LIKE AS AN ARTIST?

When I had a studio, it had precedent images and drawings on the walls, at least one large table for drawing or working, access to water is always critical, and storage of materials/sketchbooks/etc. My ideal workspace would have large windows with northern light, plenty of work surfaces, display opportunities - tack walls & shelves, storage, and an easily cleaned floor. My ideal materials would be concrete floors, wooden tables, homesot or drywall walls, masonry exterior walls, 10' min. ceilings, and now I'm just dreaming...

ARTIST INTERVIEW 3

LISA PATUSKY

Former graduate from Drexel University, Masters of Science in Interior Architecture and Design

Ceramic artist

03

SITE

SITE ANALYSIS MAPS

BUILDING 1: POOL HOUSE

BUILDING 2: BOWLING ALLEY

BUILDING 3: GREENHOUSE





NAME

Lyndhurst Estate

LOCATION

Tarrytown, New York

PROPERTY DETAILS

Gothic Revival architecture design

Sits on 67-acre property

31.4 miles from New York City, New York

Along the Hudson River

7 buildings on the estate

Beautifully landscaped site



TRANSPORTATION ROUTES

- CAR ROUTE FROM ESTATE TO NYC (45 MINUTES)
- TRAIN ROUTE FROM ESTATE TO NYC (1 HOUR & 15 MINUTES)

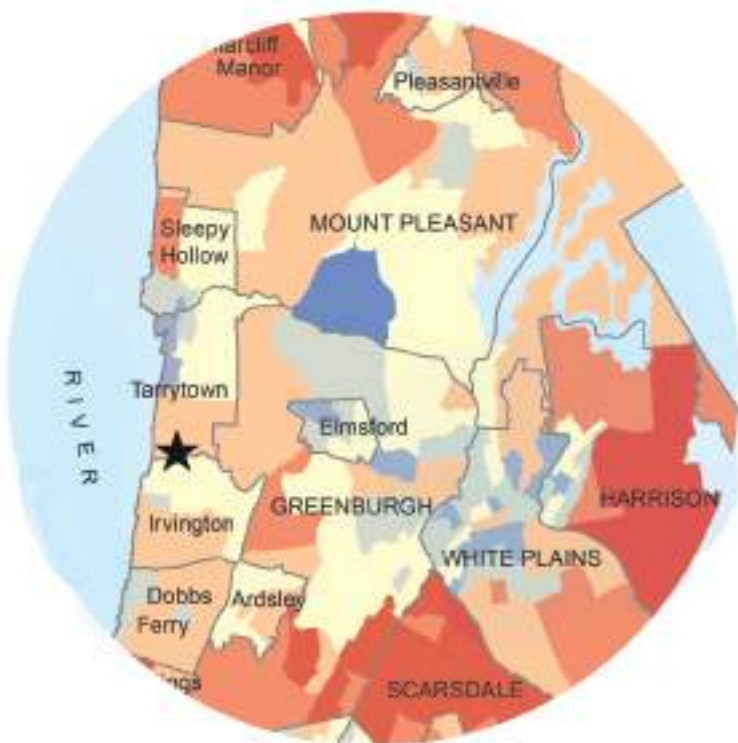
LOCAL EDUCATION

- TRADE SCHOOL
- UNIVERSITY
- COLLEGE



LOCAL INCOME LEVELS

- UNDER \$20,000
- \$20,001 - \$50,000
- \$50,001 - \$85,000
- \$85,001 - \$120,000
- \$120,001 - \$170,000
- \$170,001 - \$240,000
- OVER \$240,000



S I T E A N A L Y S I S M A P S

TARRYTOWN, NEW YORK AND SURROUNDING AREA

Detail maps show transportation routes to New York City, local education from the Lyndhurst Estate to New York City, and local income levels of the areas surrounding Tarrytown, New York.



BUILDING 1: POOL HOUSE

HELEN GOULD'S SWIMMING POOL

1915

Helen Gould constructed one of the finest and most sophisticated swimming pool buildings in the country that was built in the style of a Roman bath. She created this building to not only be used by her family, but opened its doors to the local children of the community. The building consists of an entry lounge with male and female dressing rooms, and a large pool hall. The swimming pool was covered by a glass roof and incorporated tropical palm trees from the Lyndhurst greenhouse. The pool was large enough to have a lifeguard rowboat in the pool. After Helen Gould's death in 1938, the pool building fell into disuse and disrepair.

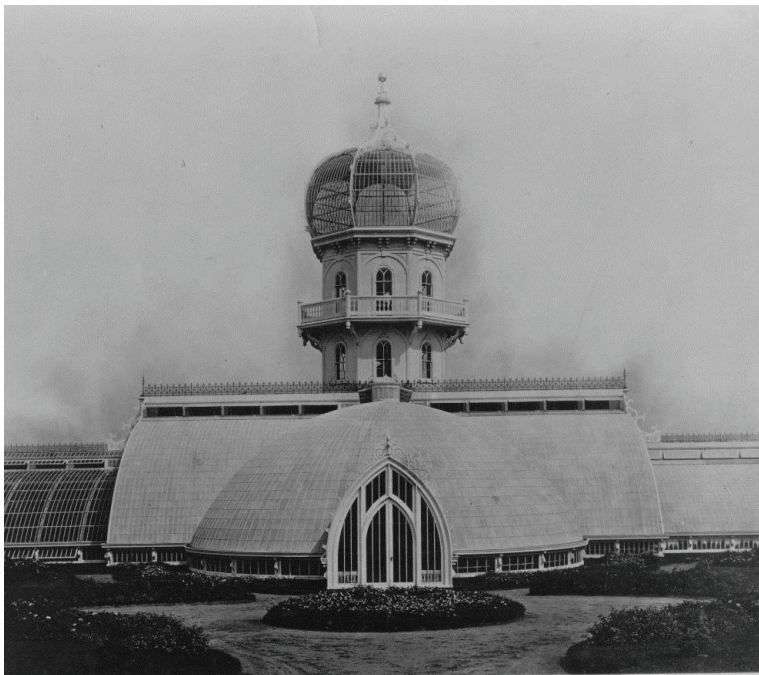
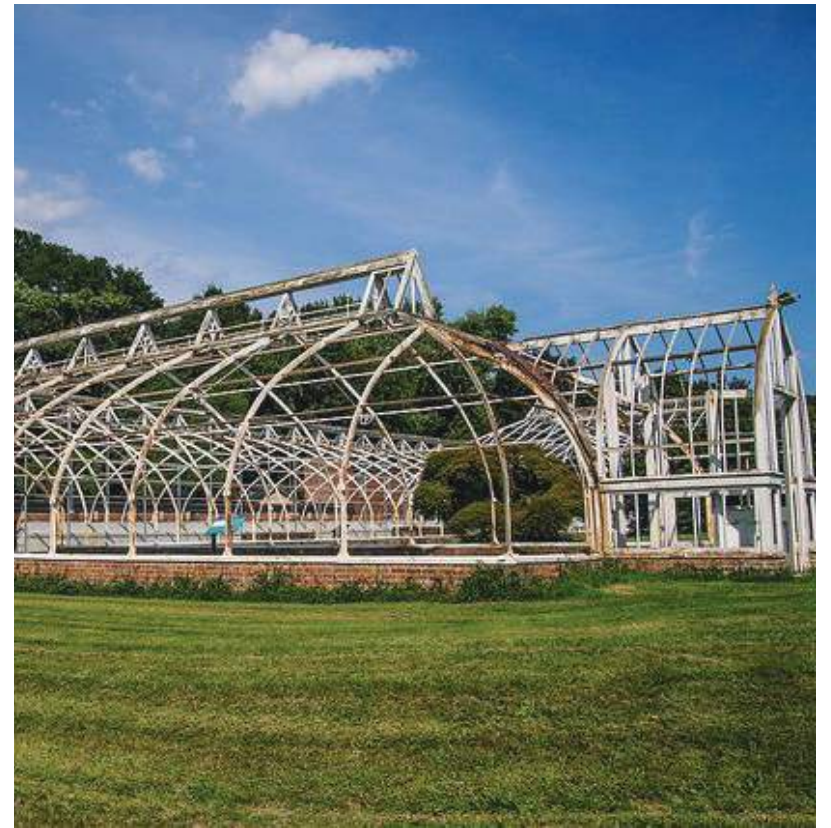


BUILDING 2: BOWLING ALLEY

HELEN GOULD'S BOWLING ALLEY

c. 1900

In 1894, another building was added to the property by Helen Gould. The bowling alley is adjacent to the Hudson River with two regulation-length bowling lanes, two octagonal parlors, and a wide, river-facing veranda. This building is considered to be the oldest regulation bowling alley in the United States. Since Helen Gould was an avid sportswoman, she championed bowling competitions for both men and women. In addition to housing bowling competitions, it was also home to Helen Gould's sewing school that provided local girls the opportunity to learn trade skills and provided economic opportunities



BUILDING 3: GREENHOUSE

GEORGE MERRITT'S GREENHOUSE

c. 1865

In 1865, the second owner of the Lyndhurst Estate and builder of this massive wood-framed greenhouse was George Merritt. This greenhouse was filled with extensive collections of rare plants and topped with an observation tower. In 1880, shortly after Jay Gould purchased the estate, the wood-framed greenhouse burnt to the ground. Jay Gould rebuilt the greenhouse using a Lord & Burnham metal frame structure to keep a greenhouse apart of the estate. In Gould's greenhouse, it contained over 40,000 plants and was known for its collection of tropical palms and more than 60,000 orchid specimens. Due to deteriorating conditions over time, the only thing remaining of the greenhouse is the original Civil War-era foundation, Lord & Burnham metal frame, and a Fiske foundation in the original tropical palm court.

04

DESIGN AGENDA

DESIGN INTENT

DESIGN PROBE 1: SCALE

DESIGN PROBE 2: MATERIALS

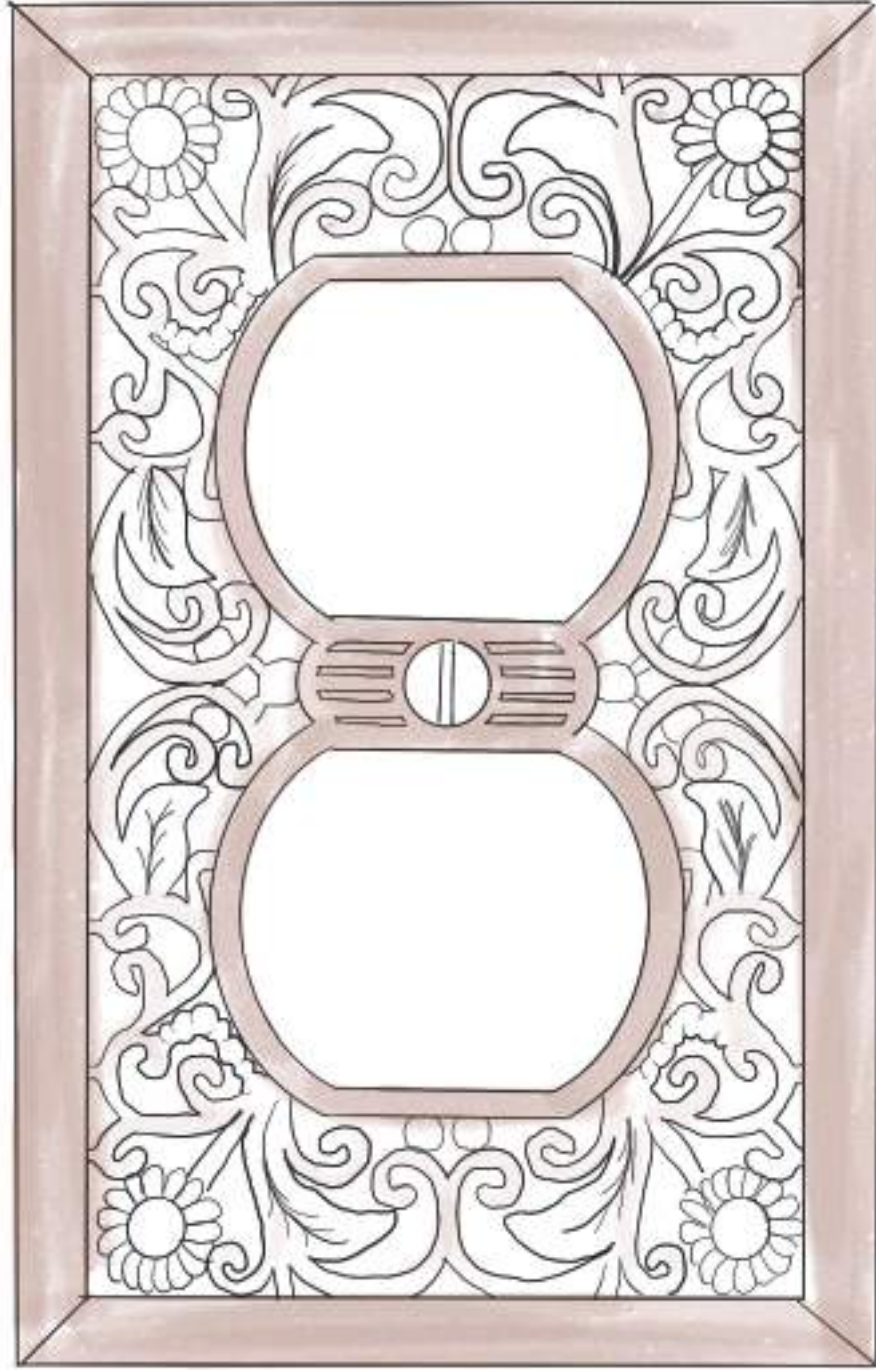
DESIGN PROBE 3: EXPERIENCE



DESIGN AGENDA

THREE BUILDINGS WITH THREE INTENTIONS

The design agenda for the pool house, bowling alley, and greenhouse are to study and understand the existing materials, forms, and spaces in order to introduce new materials, forms, and spaces. The goal of each building is to achieve a level of perfectly imperfect that creates a balance of the old and the new. Each building is in various conditions that all tell the story of the Lyndhurst Estate. I not only want to add new materials, forms, and spaces to these three incredible buildings, but I want to preserve what has been left behind and retell their story by honoring Helen Gould's mission and values she set for the estate many centuries ago.



DESIGN PROBE 1: SCALE

MODERN + ANTIQUE OUTLET PLATE COVER DESIGN

Combining the style of an antique electrical plate cover and today's outlet covers, is a design that physically represents the idea of how old and new can be joined together. This outlet cover is designed to add a piece of the past into spaces while it meshes with the modern colors, furniture, and overall design of the space.

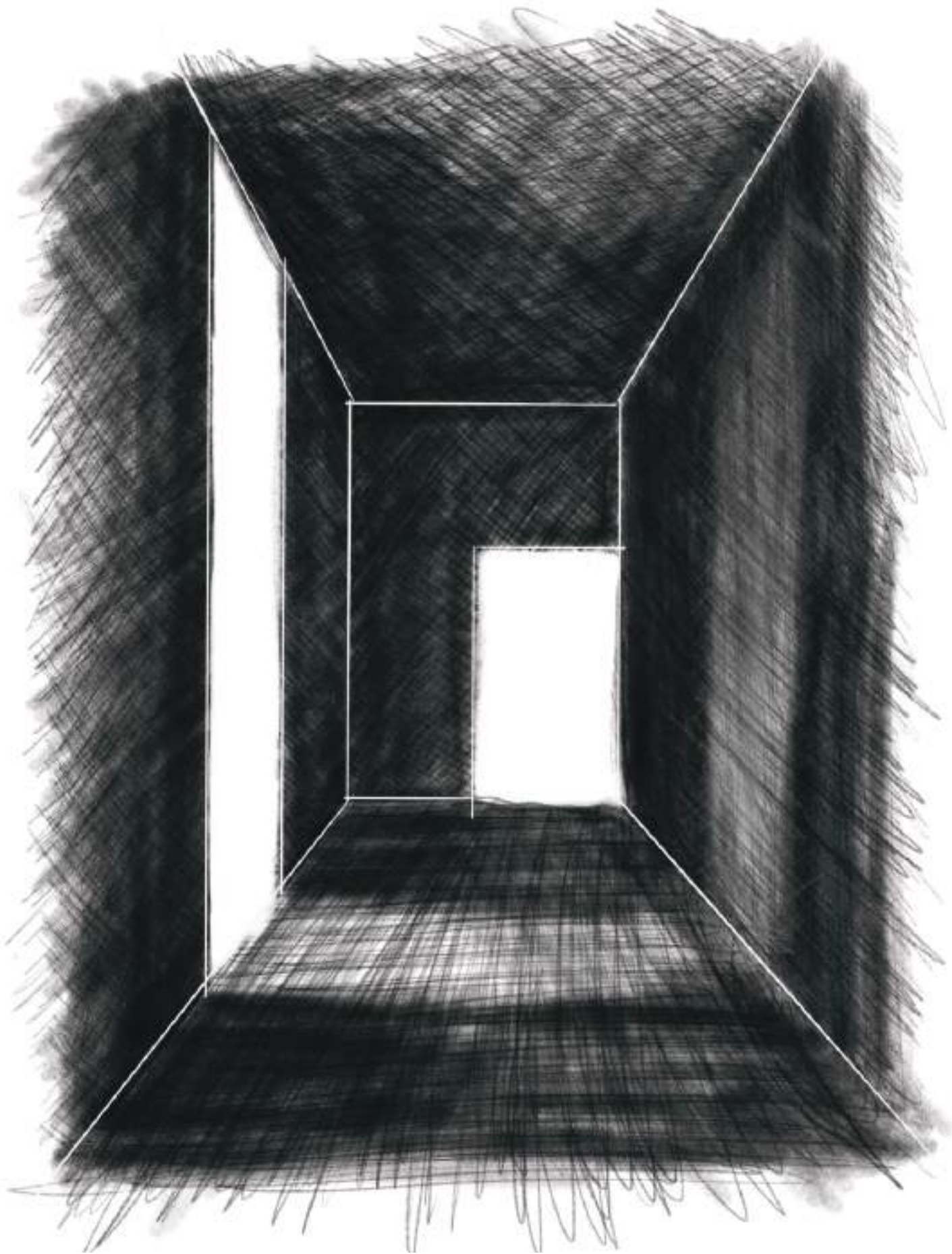
Even at such a small scale, an object like this can add incredible value to any modern space.



DESIGN PROBE 2: MATERIALS

TIMEWORN, LAYERD, AND TEXTURED

Buildings of the past tell their story through the presence of their materials. The materials on the left can be described as timeworn, layered, textured, authentic, raw, rustic, elegant, classic, iconic, and rich. Materials become poetic, historic, and build character after centuries of natural weathering, repeated human contact, and the built environment.



DESIGN PROBE 3: EXPERIENCE

THE IMPACT OF LIGHT IN A SPACE

The interior lighting of the space can impact one's spacial experiences. The dark room is created with sketchy lines that resemble one's memories and stories that are unfolding within the space. The lighting within the space determines what type of memories or feeling one may recall from their past. The walls represent the solidness of the Earth that are containing an atmosphere that creates an awareness of time.

The two openings represent how light is entering into the space.

05

THE DESIGN

BACKGROUND INFORMATION

SITE MAP

GIFT EXHIBITION HALL

HASTINGS-SILVER ACADEMY OF FASHION

C.J. WALKER RESEARCH + DEVELOPMENT CENTER

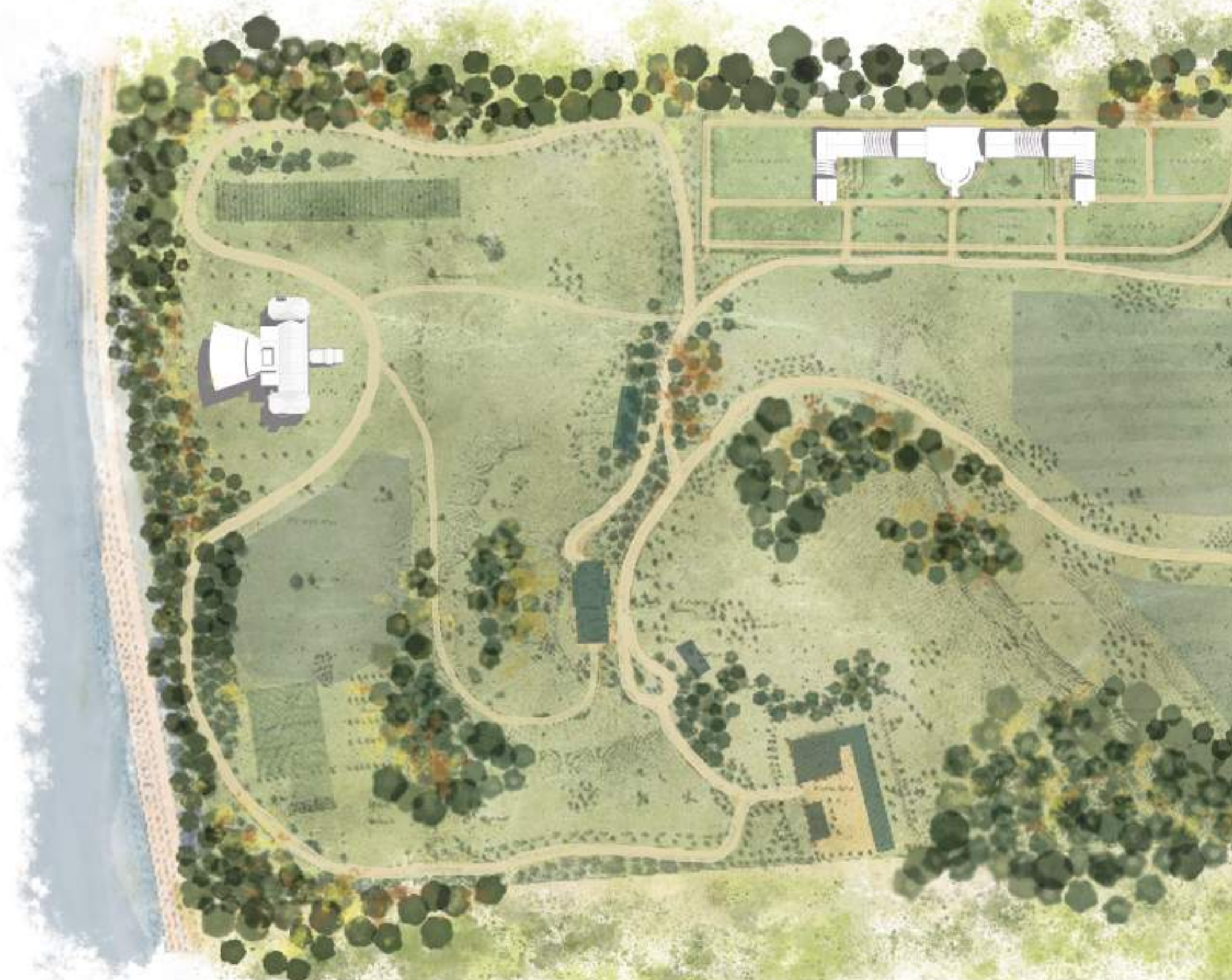


HELEN MILLER GOULD

1868 - 1938

Throughout my thesis journey, Helen Miller Gould has been a constant influence and inspiration to the design and function of where this estate is headed. When she inherited the estate after her father's passing, she set out to make it more accessible to the public and especially to those in need. Gould made the transition from dutiful and religious daughter to one of the foremost American philanthropists of her time, she founded a home for disabled boys, and began a series of projects designed to enable women to gain useful skills and have more economic opportunity. Gould also studied law at New York University, was an advocate for women's equality, helped finance the Spanish-American war, and married for love at age 45.

Helen Gould was described as "plain, plump, and not interested in society" according to the New York Times, but she was quite the opposite. She had a keen eye for fashion and taste for tailored clothing that were shades of whites, blacks, and neutrals. Her fashion style was described as contemporary with textures and layers of materials that created very flattering and feminine silhouettes.





LYNDHURST ESTATE

SITE MAP

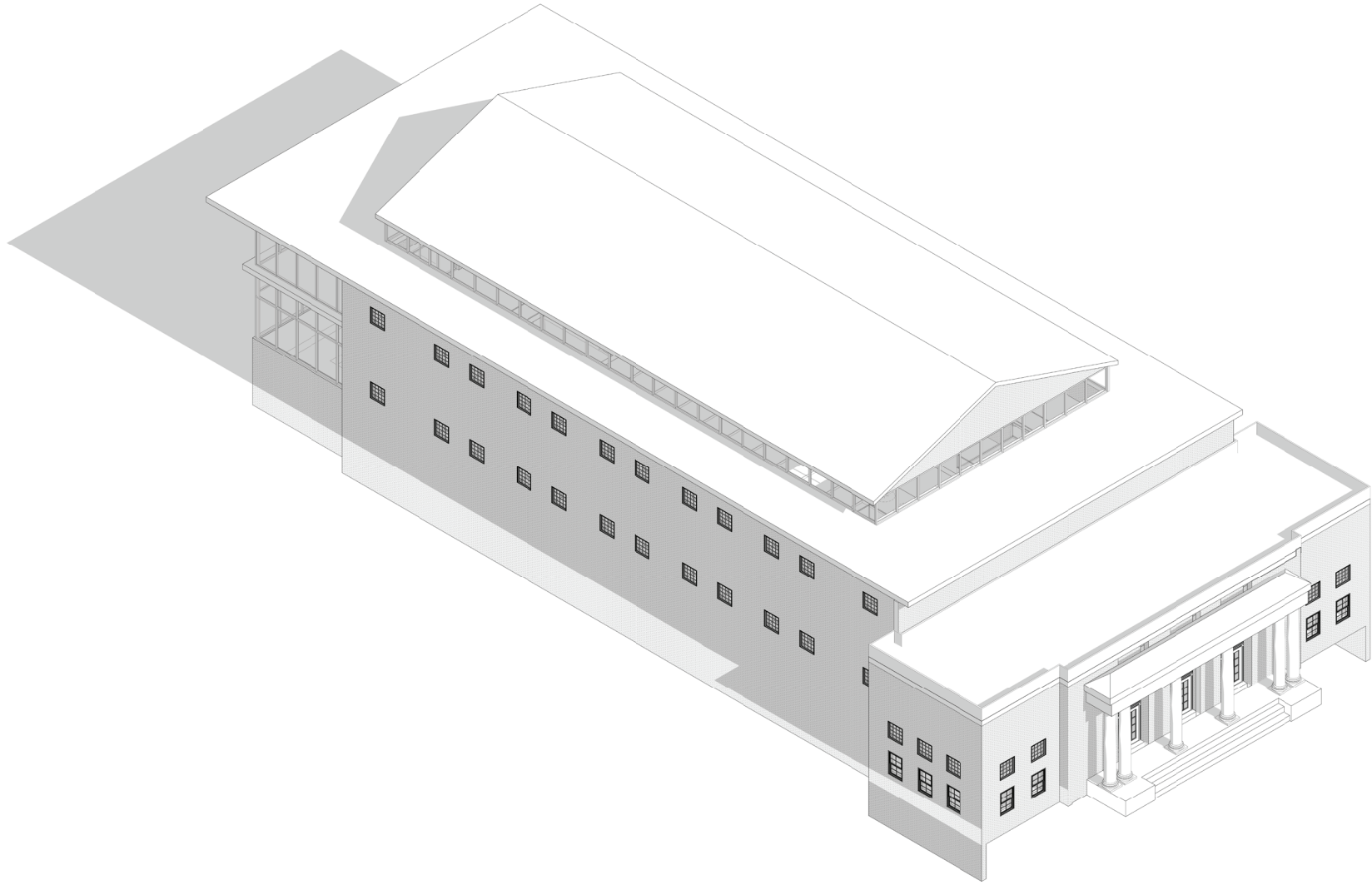
The Lynhurst Estate sits on a 67-acre property along the Hudson River. I choose an historic estate of grand size and beauty because this estate deserves a mission and purpose grander than its original one-family function. A "legacy of purpose" will be resurrected with this historic estate, honoring Helen Gould's mission and values in how the estate should be repurposed. I plan to repurpose the estate as a fashion and textiles trade school that allows people to gain usefull skills and achieve more economic independence. The three incredible buildings I will be repurposing are in white and the remaining outbuildings on the estate are in teal. The large pale blue blocks are designated parking areas on the estate.



GOULD'S INSTITUTE OF FASHION AND TEXTILES

ESTABLISHED 2021

Gould's Institute of Fashion and Textiles was named after Helen Gould honoring the legacy she left behind. The school continues to use her mission and values she set for the estate and carries them on through their fashion and textile programs.



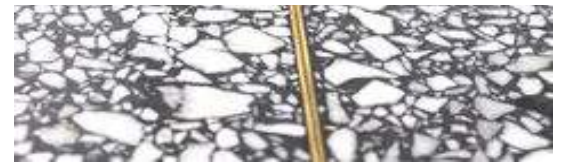
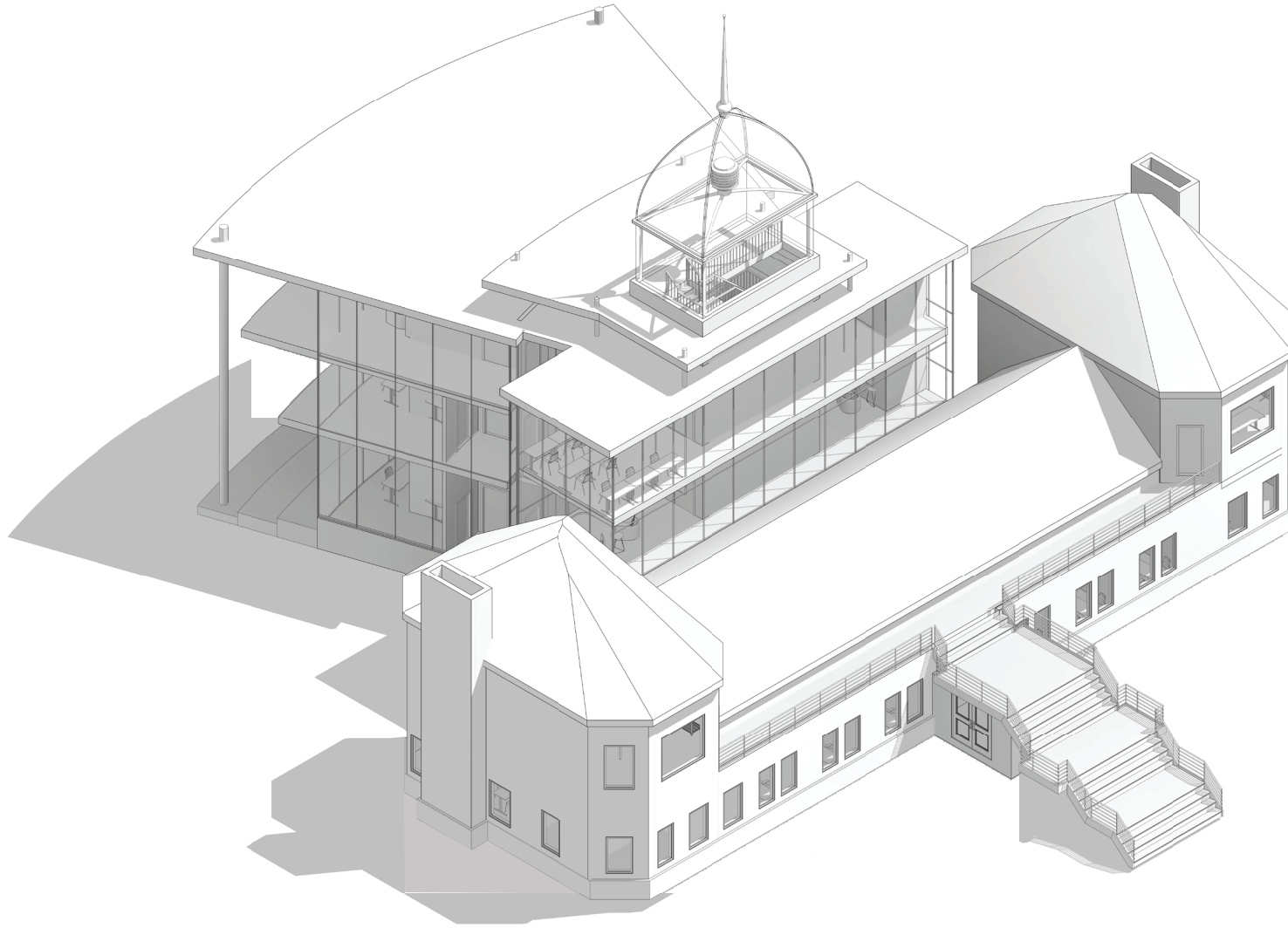
SQUARE FOOTAGE

11,523

GIFT EXHIBITION HALL

FORMER POOL HOUSE

The GIFT Exhibition Hall was formerly the pool house where Helen Gould opened its doors to the local children to use. This building was transformed from its ruin-like appearance to an exhibition hall for fashion students to have their designs displayed throughout the building. The materials to accompany the garments are rustic, raw, elegant, classic, and iconic.



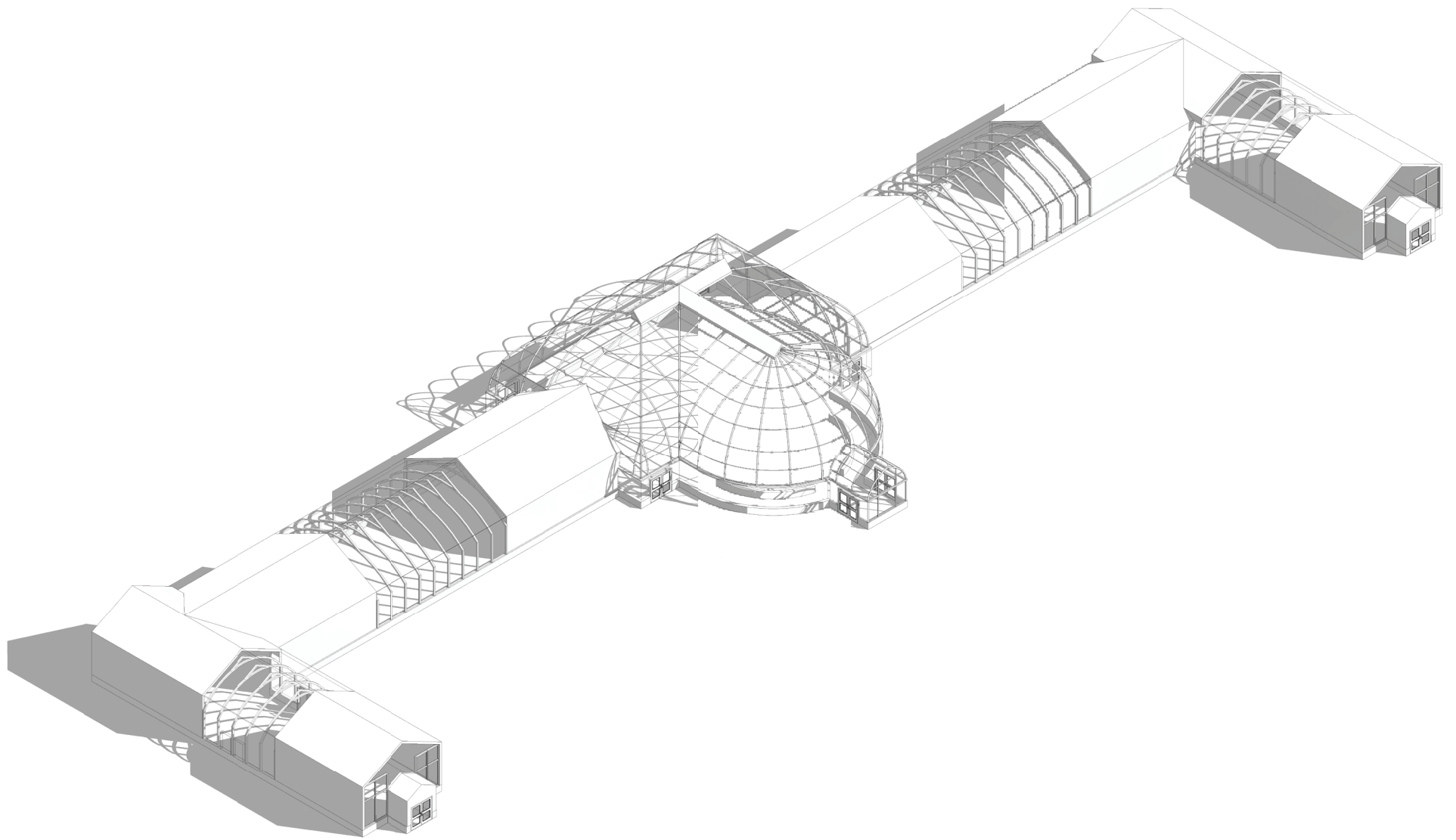
SQUARE FOOTAGE

14,963

HASTINGS-SILVER ACADEMY OF FASHION

FORMER BOWLING ALLEY

The Hastings-Silver Academy of Fashion started out as a sewing school and bowling alley and is now the main building for fashion students. The name of the building comes from a modern-day historic preservationist and Assistant Curator for Lyndhurst, Krystyn Hastings-Silver, who has worked tirelessly in restoring the bowling alley building to its original grandeur. The materials of this building are woody, clubhouse-like, and classical.



SQUARE FOOTAGE

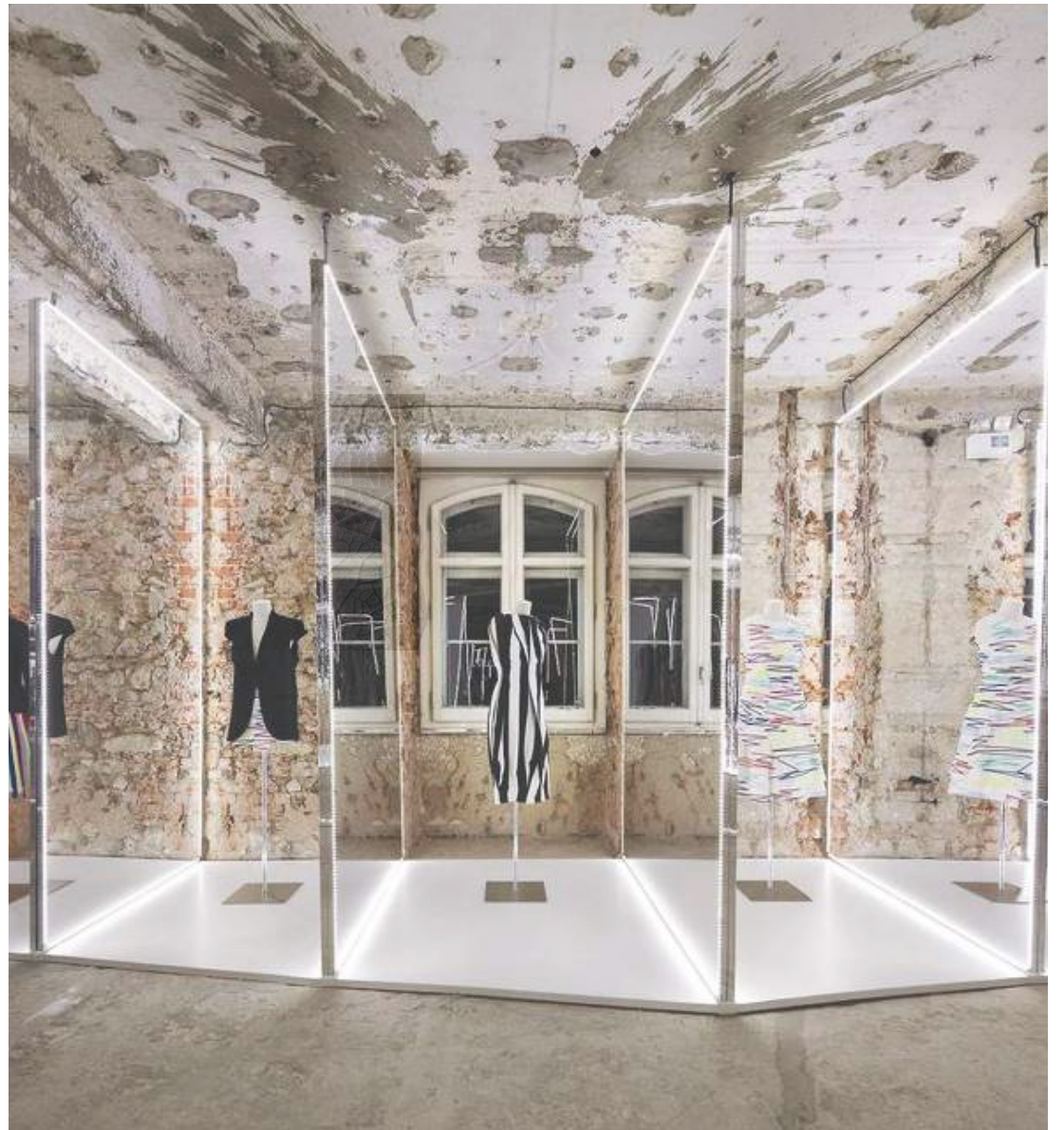
18,757

C . J . W A L K E R R E S E A R C H & D E V E L O P M E N T C E N T E R

FORMER GREENHOUSE

Once serving as the estate's greenhouse is now a research and development center for textiles that is named after the first self-made African American millionaire C.J. Walker. As a daughter of former slaves, C.J. made a fortune on hair care products for African American factories. She was a philanthropist like Helen Gould and donated to many charities that helped promote African American women and women in general.

The materials of this building are timeworn, textured, colorful, and natural.



GIFT EXHIBITION HALL

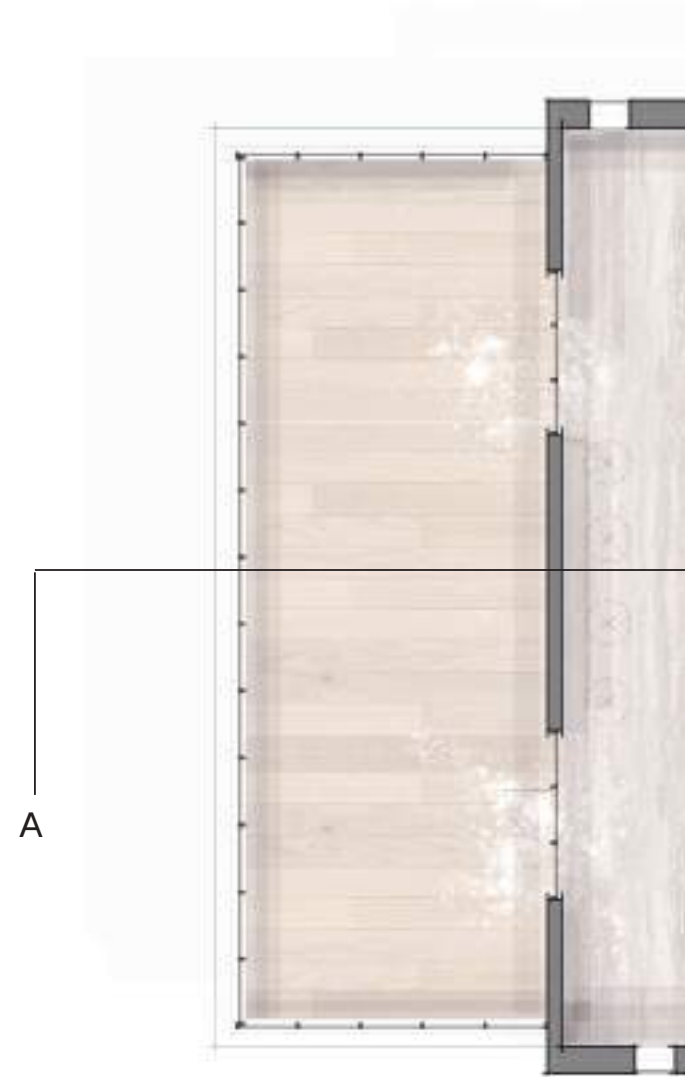
FORMER POOL HOUSE

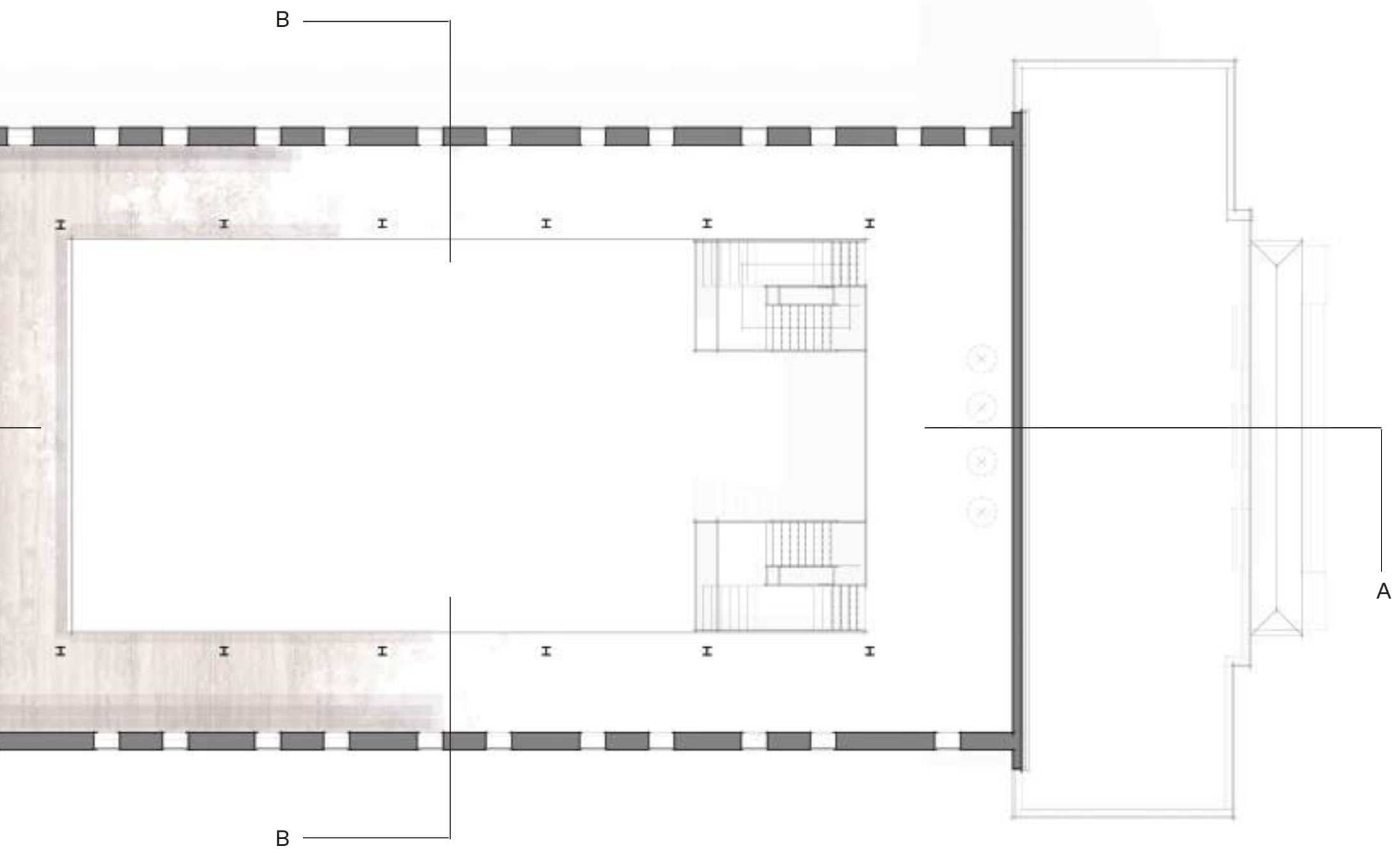
Once used as a swimming pool, the building is now an exhibition space for students' work to be displayed quarterly and annually. Historical context is evident in the structure and materials of the existing building, and the garments occupying the space add a level of richness and elegance to these materials. A Historic Costume Collection is located on the lower level showcasing grand, vintage fashion garments and includes a few pieces from Helen Gould's collection.

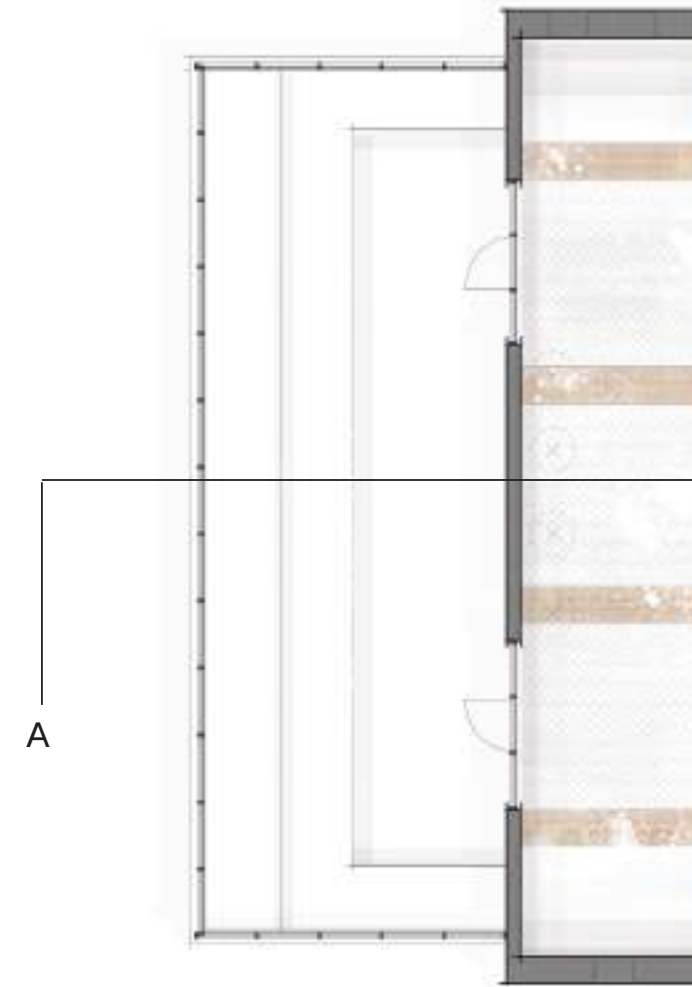


CATWALK FLOOR PLAN

When on this floor, the catwalk provides a view of the space, and the stadium stair garments from up above. I imagine it as a quiet place above the fray and one would get a different perspective on a particular garment when seen from above.

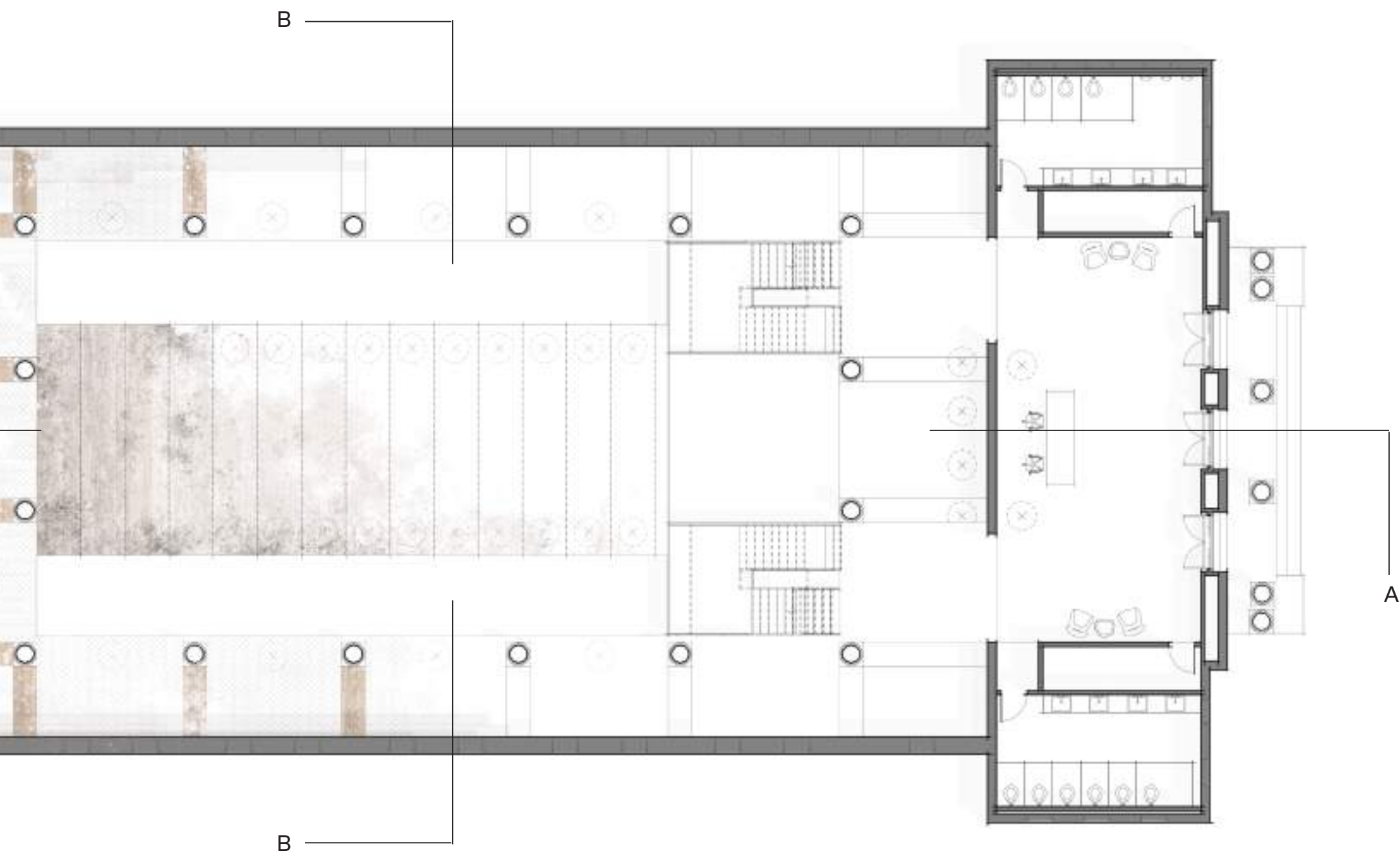


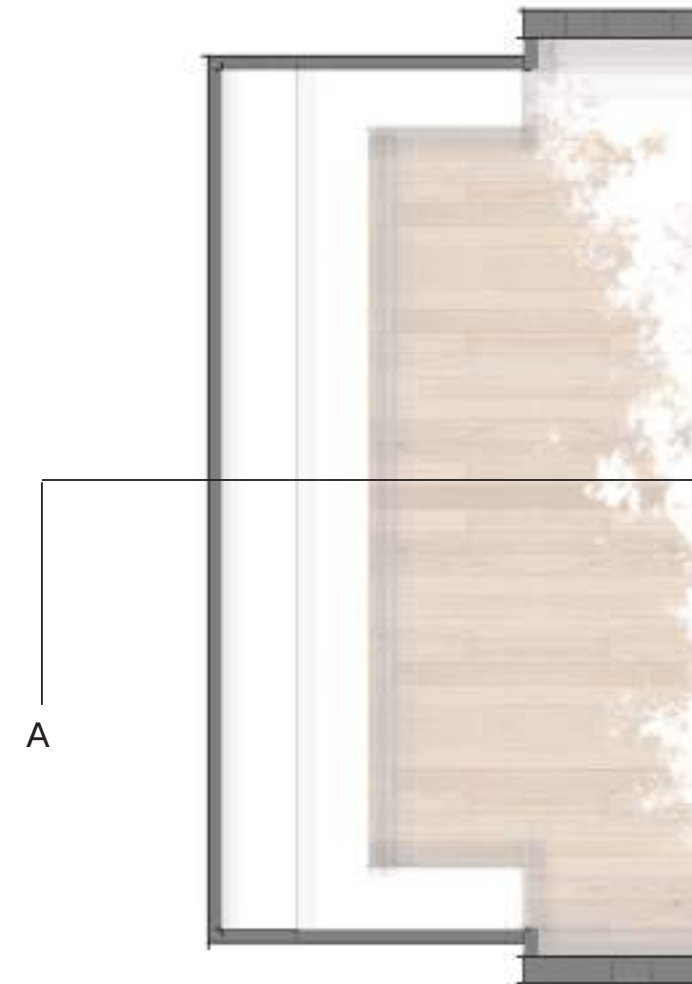
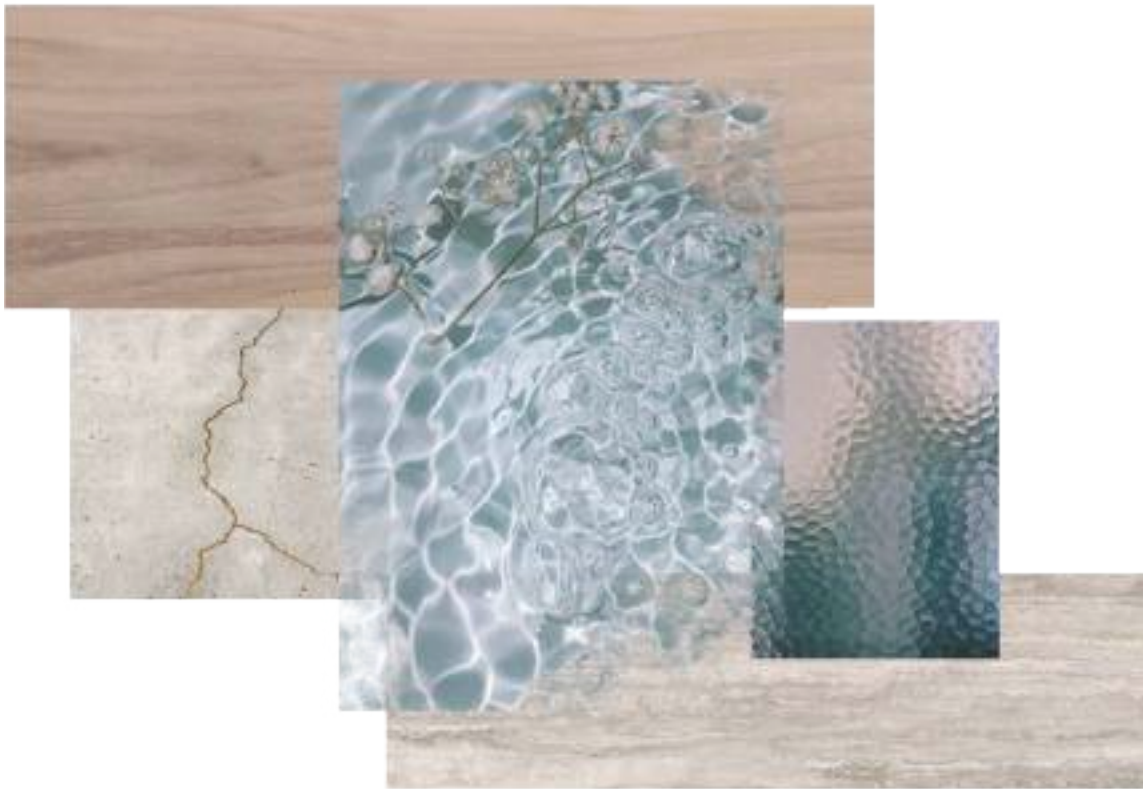




MAIN FLOOR PLAN

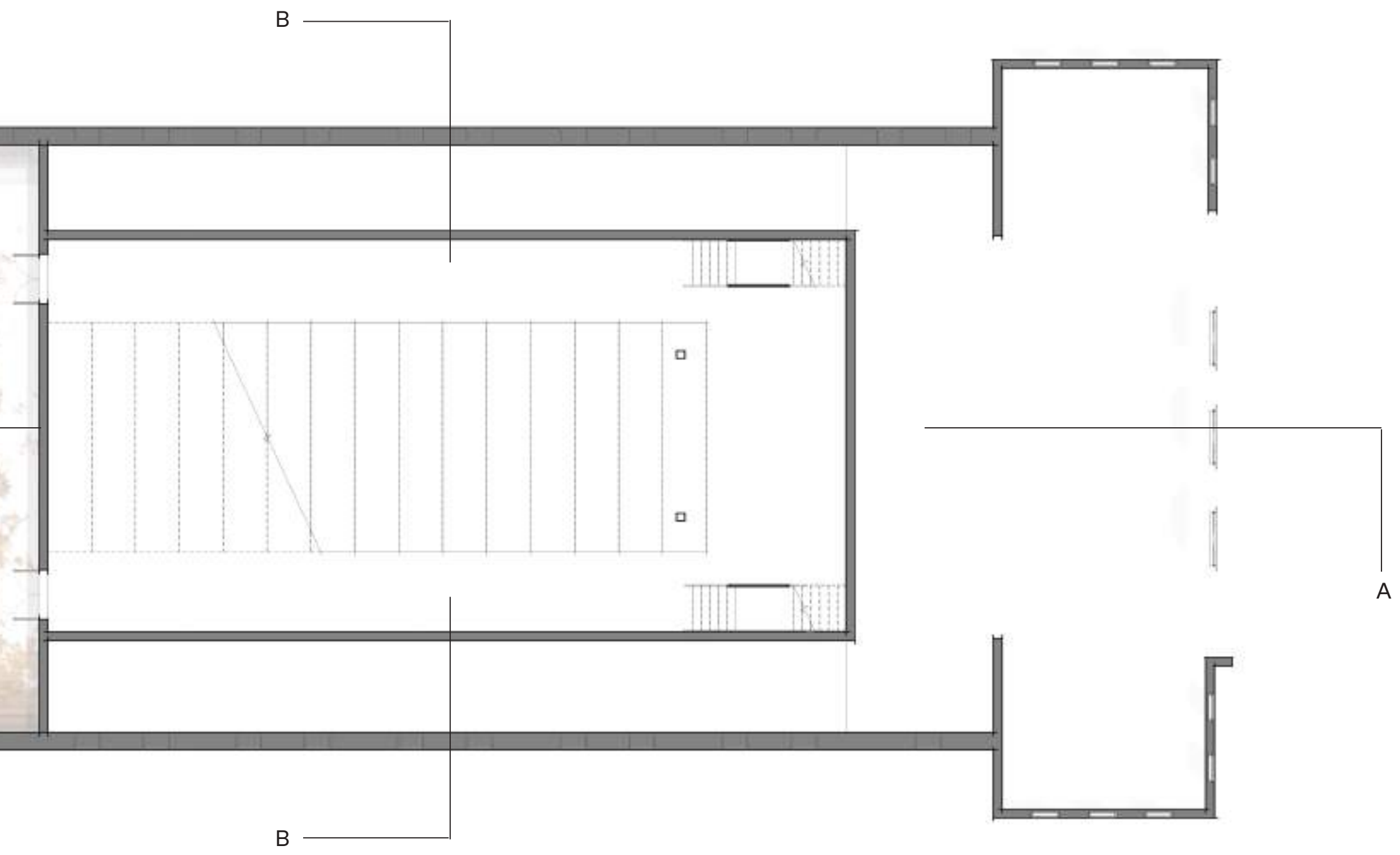
The main level sets the stage with an entry hall that initially hides the grand pool hall from view. When you turn the corner, you see these grand Doric columns creating a beautiful arcade along the four sides and classical framing for the pool. The stadium stairs are used for displaying garments and use travertine treads with glimpses of water slowly moving below the glass risers. The materials on the left are described as raw, rustic, elegant, classic, and iconic. These materials provide a backdrop to any garment on display and further accentuate the design.





LOWER FLOOR PLAN

Walking down the 15 stadium steps, there is a moment of surprise. You get glimpses of the decorative water tank close up, and that makes the stadium stair risers so alive upstairs. The water tank is reminiscent of the old pool and is composed of thick plexiglass like the type used at aquariums. Passing the pool, the hardwood floor and old mosaic tiles from the previous pool lead you back to the historic costume room, which is carefully preserved and below ground as if the view is digging for the history of the place.



B

A

B





SECTION A-A



SECTION B-B



MAIN FLOOR PERSPECTIVE

All three levels of the building can be seen within this perspective and highlight the various materials, old and new. The twin staircases anchor the descending stadium stairs into the existing pool, while the Doric columns frame the perimeter to provide additional symmetry and balance to the overall composition.



STADIUM STAIR PERSPECTIVE

The stadium stairs use terrazzo treads and aquarium tank plexiglass risers allow light to peak through the risers to illuminate the path down the stairs that have a water like glow. There is a water tank under the stairs that reactivates the water that was in the existing pool. The mannequins can be viewed from the catwalk, perimeter of the pool, and as one would walk down the stadium stairs.







STADIUM STAIR PERSPECTIVE

To get a better view of the mannequins, the catwalk offers a space to observe the garments from a different vantage point. This allows for new thoughts and perspective of particular garments.





HASTINGS-SILVER ACADEMY OF FASHION

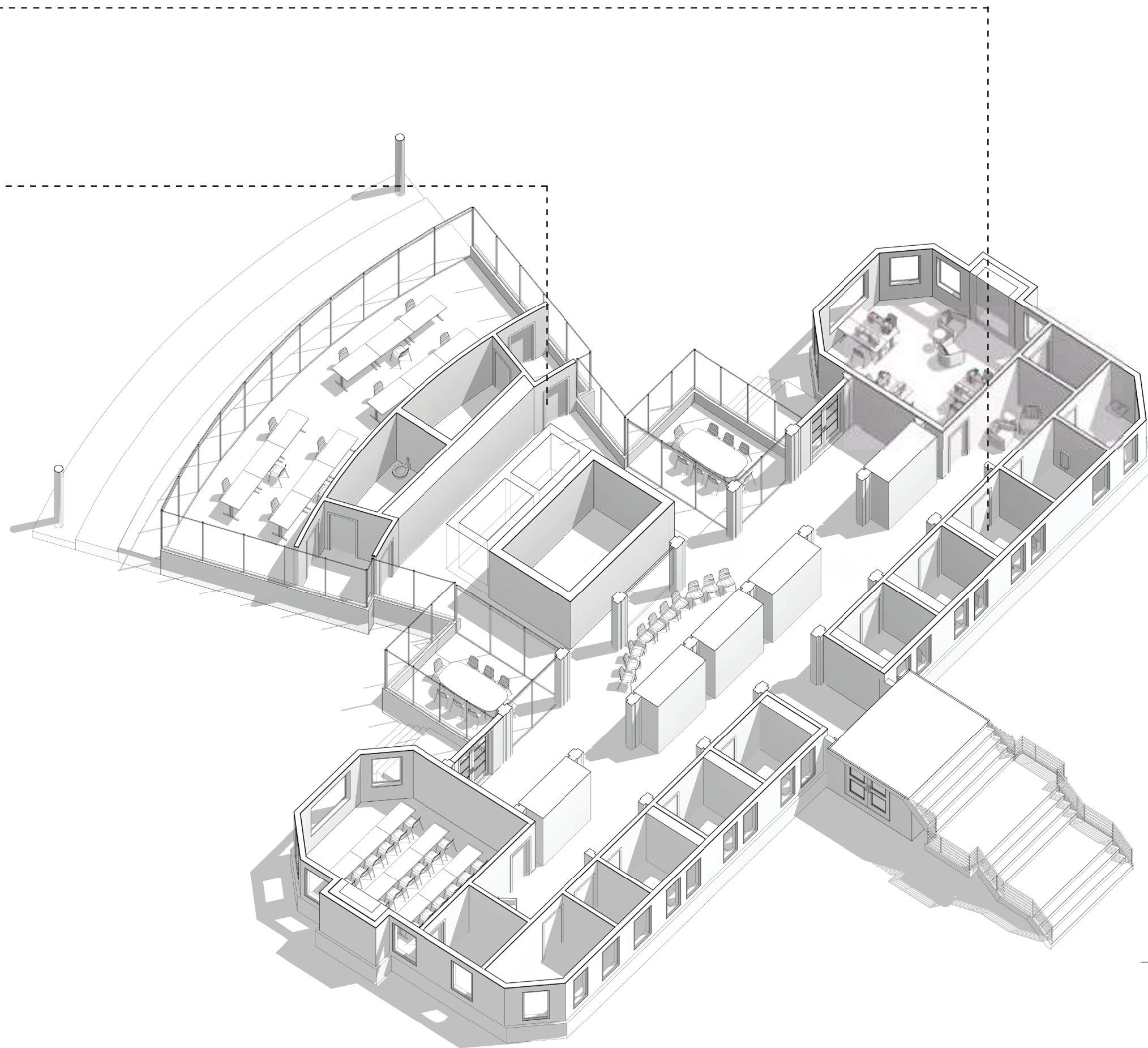
FORMER BOWLING ALLEY

Formally used as a sewing school and champion bowling league competitions, this building now houses the college for fashion design. This building includes not only the existing two octagonal parlors and central arched alleyway, but also welcomes a new, grand, and modern expansion. The new expansion will have the design and photography studios that have incredible views of the Hudson River. The building overlooks the Hudson River on a gradually sloped landscape. The expansion incorporates a modern lighthouse design that will serve as a landmark for the school and can be easily identified across campus and from the Hudson River.



FIRST FLOOR AXONOMETRIC

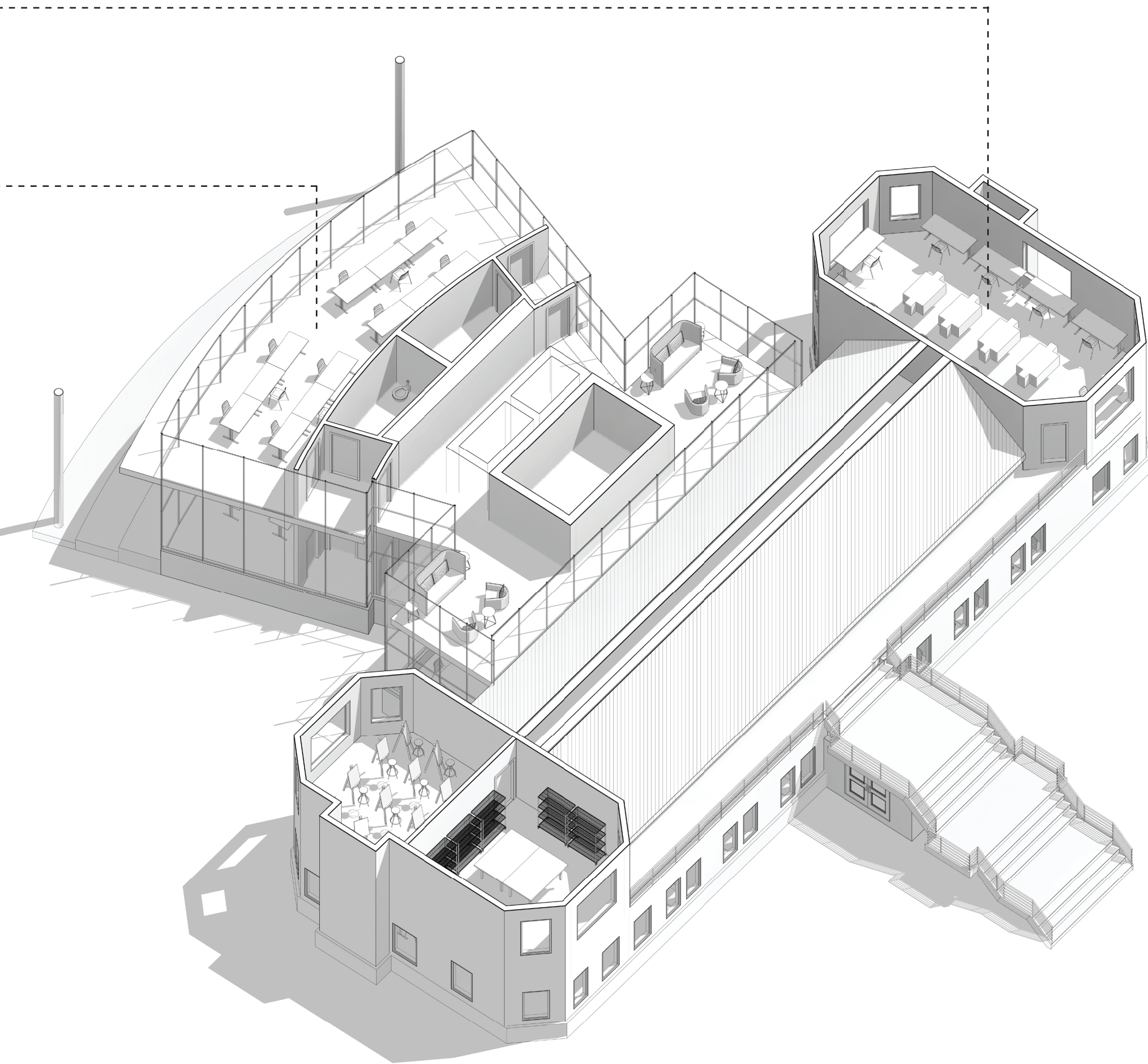
The grand staircase at the front of the building was redesigned to create a more welcoming and gathering feeling when people are walking towards the building. There is an entrance under the staircase that takes you into the main floor where the professors and administration offices are located. Past the offices are glass display cabinets showcasing students' work in progress, a fashion crit area over the bowling lanes, two large classrooms with original fireplaces that I converted to gas, and then the grand expansion.





SECOND FLOOR AXONOMETRIC

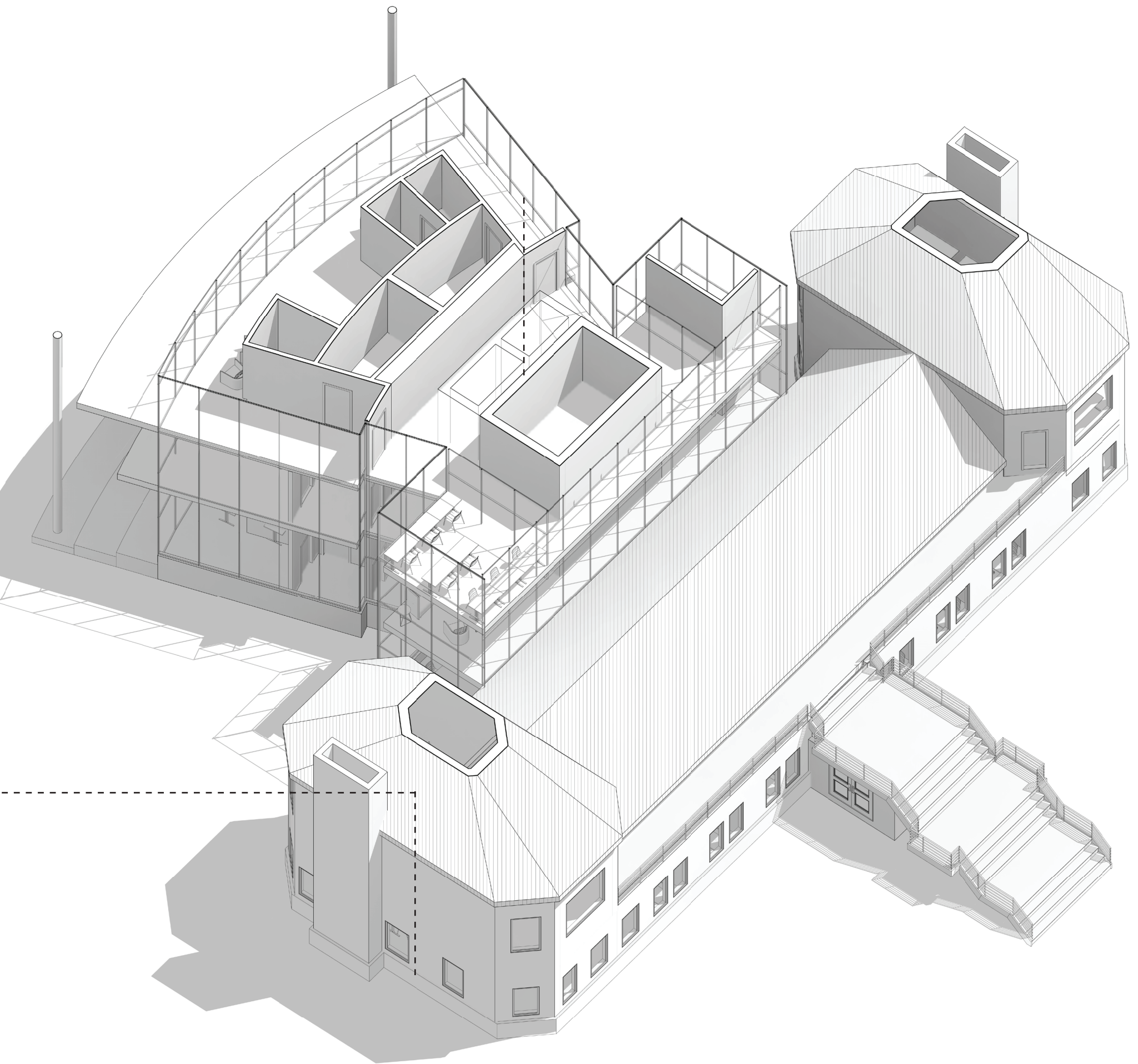
This floor uses the two octagonal parlors as a drawing room, resource library, and fabric and textile machinery labs. The expansion has additional studio space that offers a quiet place to work with fantastic views of the Hudson River.

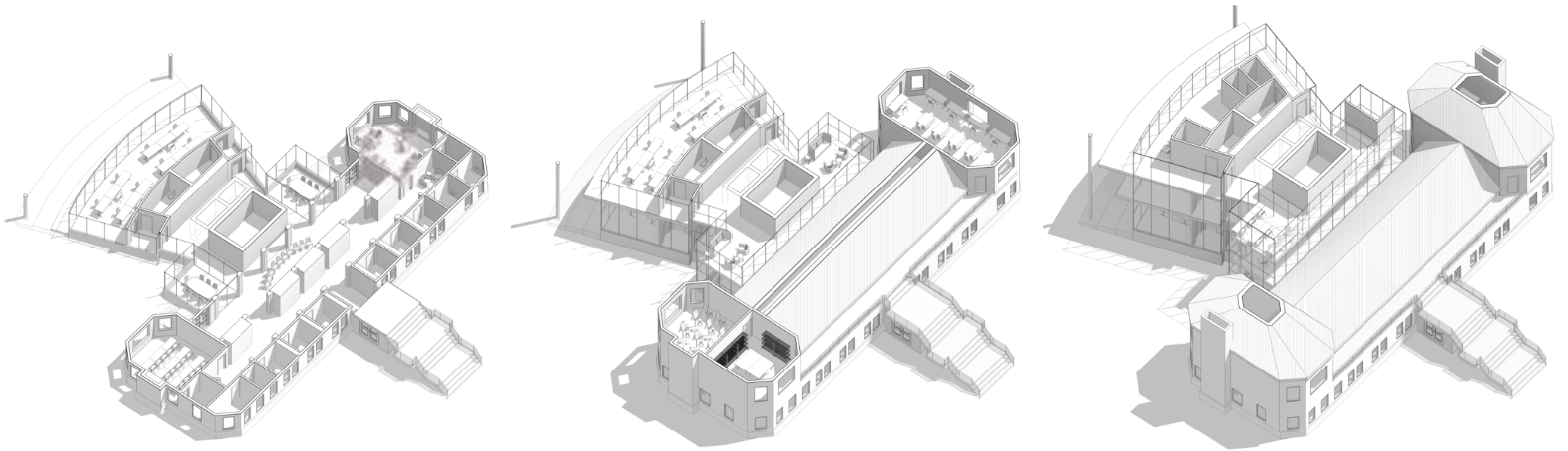




THIRD FLOOR AXONOMETRIC

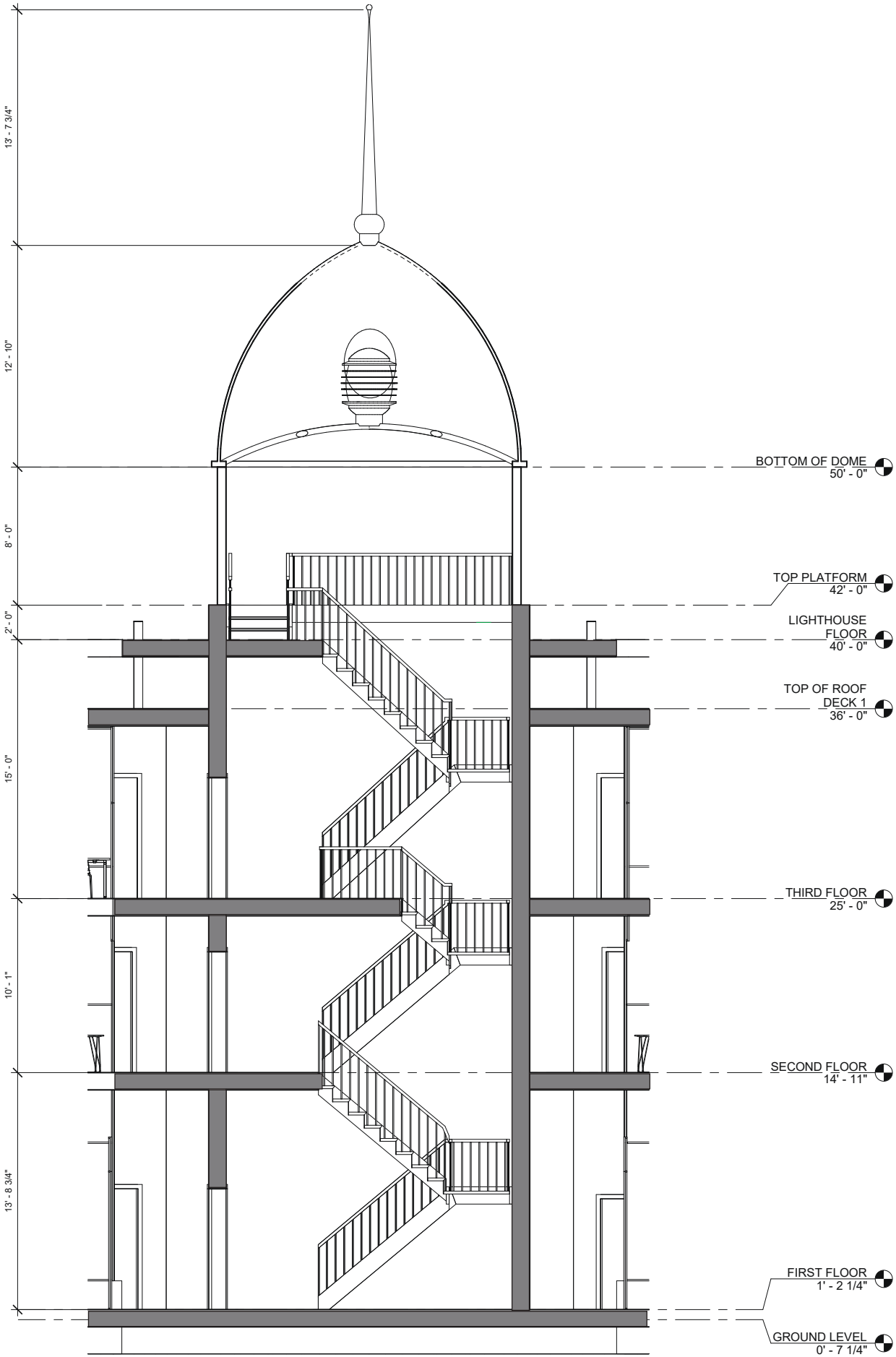
This floor has the photography studio as well as dressing rooms, dark rooms to develop fashion photos, and a computer lab. The photography studio was designed to be on the top floor to have the most amount of natural light fill the space to further enhance the photoshoots.





LIGHTHOUSE SECTION

The surprise moment of this building is the 4-story climb to the lighthouse at sunset! The old, repurposed wood floors creak and still smell of wood polish as you make your way to the top. There is a lovely velvet covered bench below a fantastical reproduction of a Fresnel lighthouse lamp. The light revolves slowly, and time slows down as you watch the colorful sun set on the river.

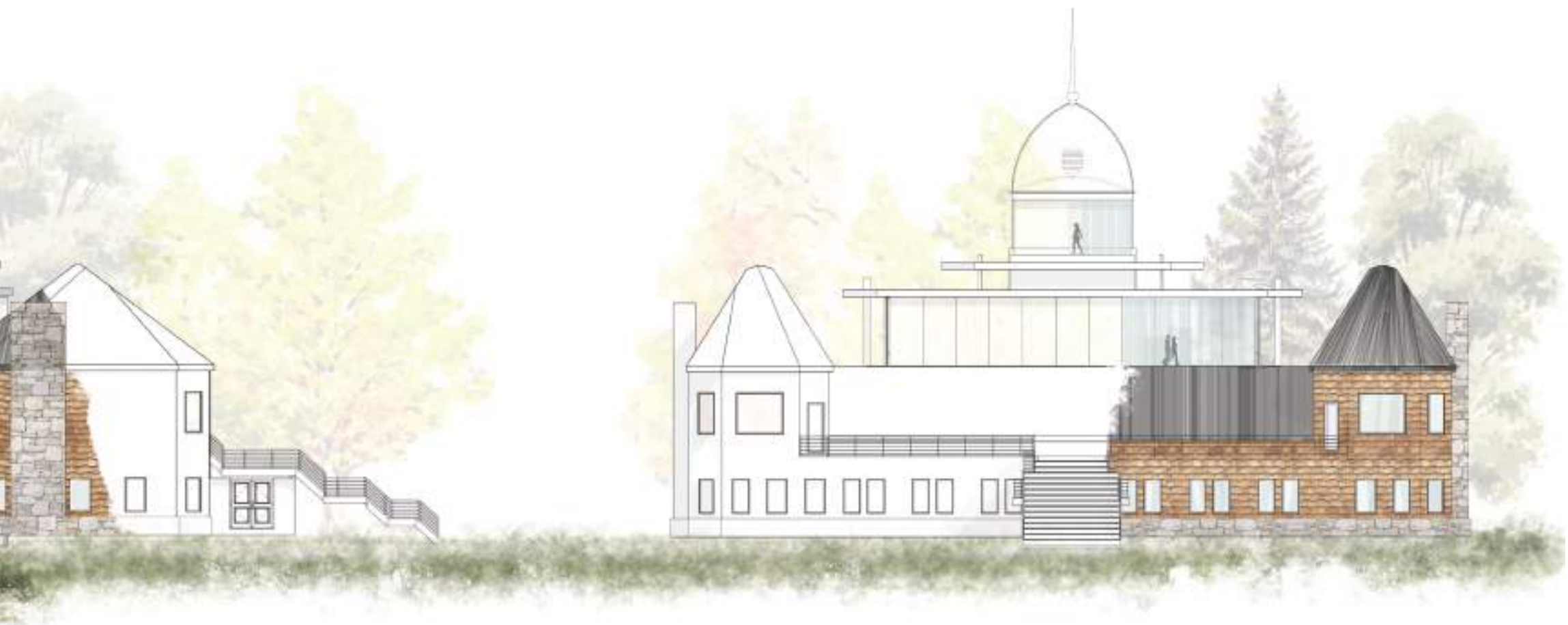




NORTH EXTERIOR ELEVATION



WEST EXTERIOR ELEVATION



SOUTH EXTERIOR ELEVATION



C . J . W A L K E R R E S E A R C H & D E V E L O P M E N T C E N T E R

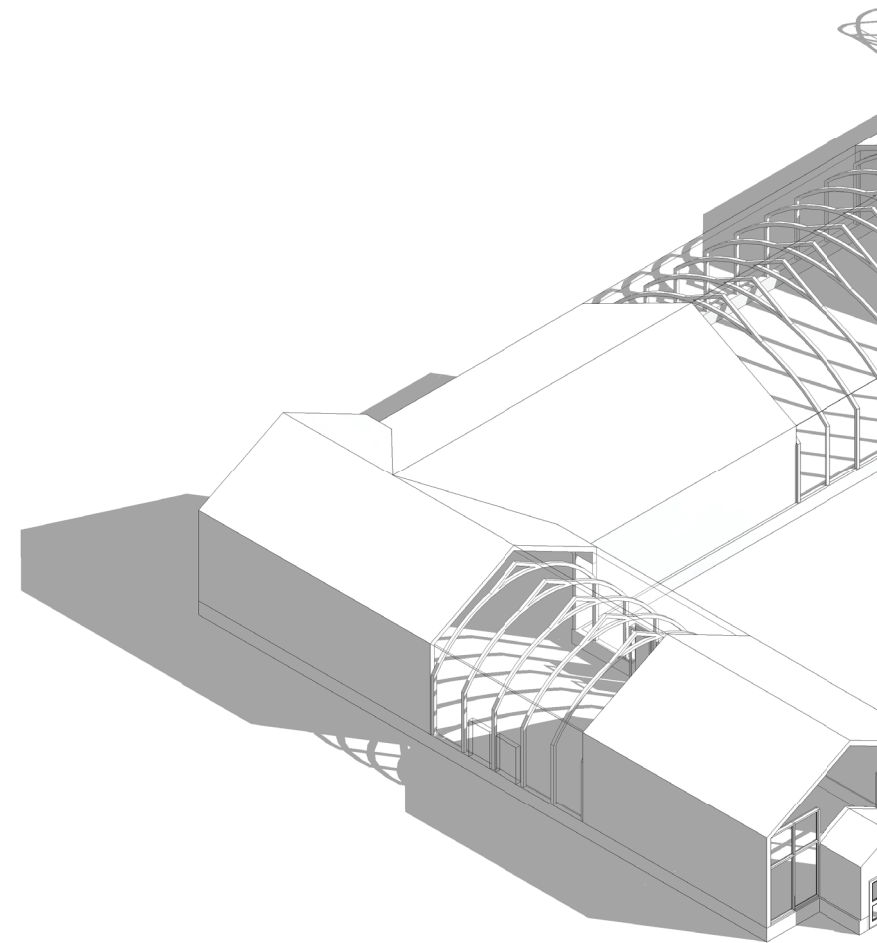
FORMER GREENHOUSE

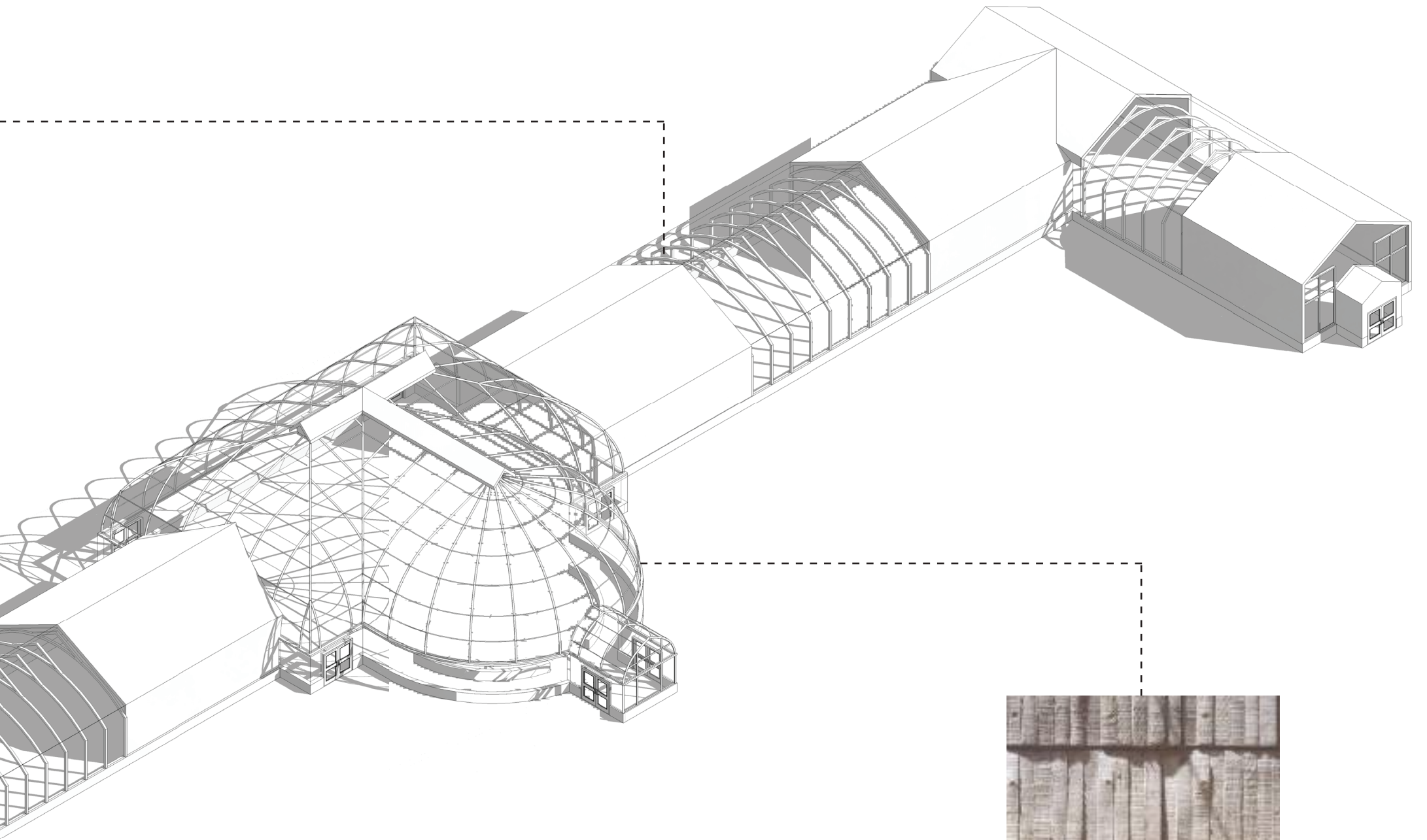
Once serving as a greenhouse on the estate, the largest of its kind when built, is this beautifully aged steel structure. All that remains of the greenhouse now is its metal framing structure. The new design of this building is to incorporate the existing metal frame with alternating solid forms to allow the metal framing to stand out in specific areas. The areas with the exposed frame are lounges that welcome the natural environment and allow people to enjoy the colorful gardens outside. This building will house the textile college labs and classrooms, as well as providing a soaring fashion show venue under the grand dome.



AXONOMETRIC VIEW OF EXTERIOR

It is currently a massive skeleton lying horizontally on the grounds of the estate. The evenly steel rusted frames hold up the ornate complex shapes of the original building with a concrete foundation base. I saw this as more of an agricultural building, almost barn-like, and wanted to tone down the spooky skeletal presence, while making it more practical for a classroom and laboratory building. To do this, I needed to break up the repeated long, cavernous interior and provide enclosures for practical reasons, keeping out the elements in harsh New York winters. Key features are textured concrete and a customized standing seam roofing material with a slight rusted appearance providing coverage for the solid forms and then the interior steel frame is left exposed but still filled in with insulated glass for the transparent study lounges.

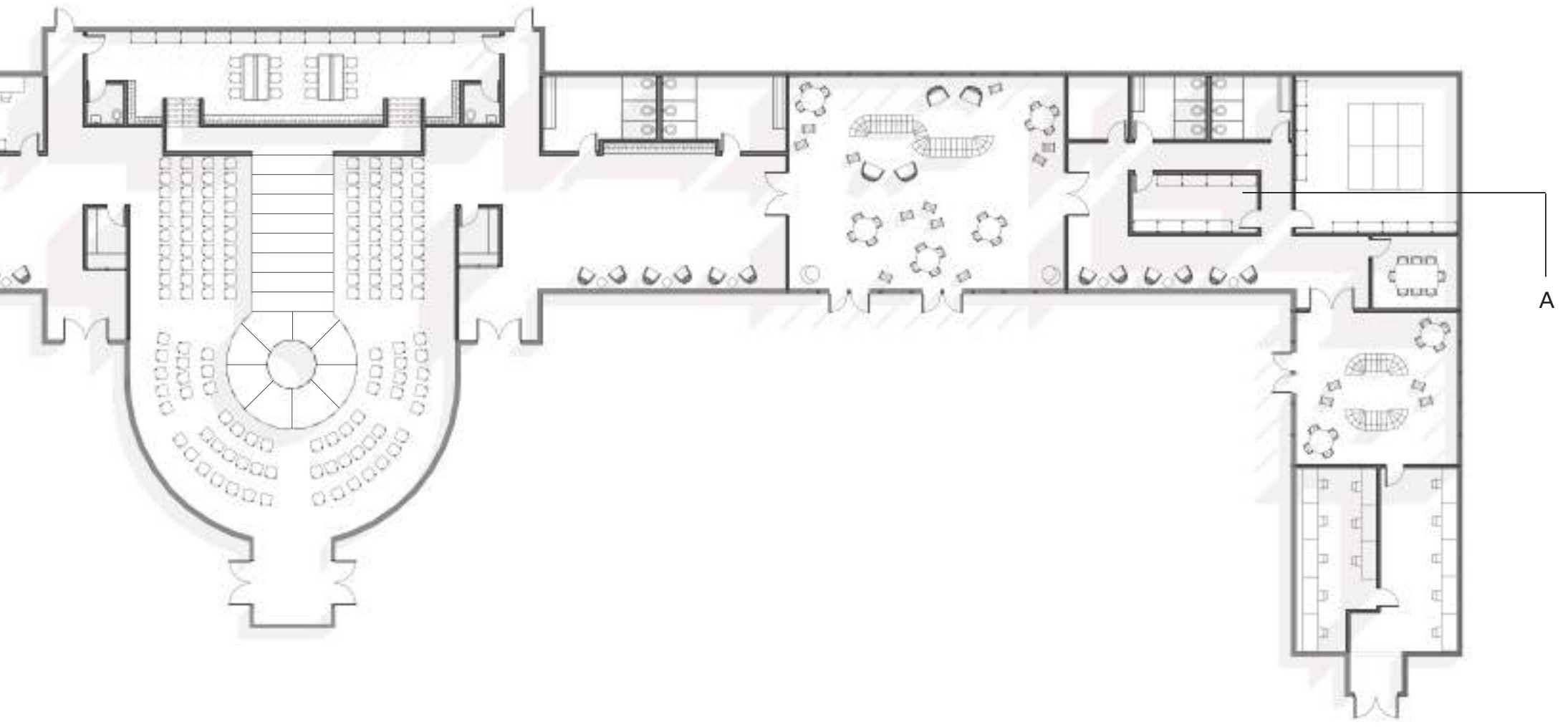


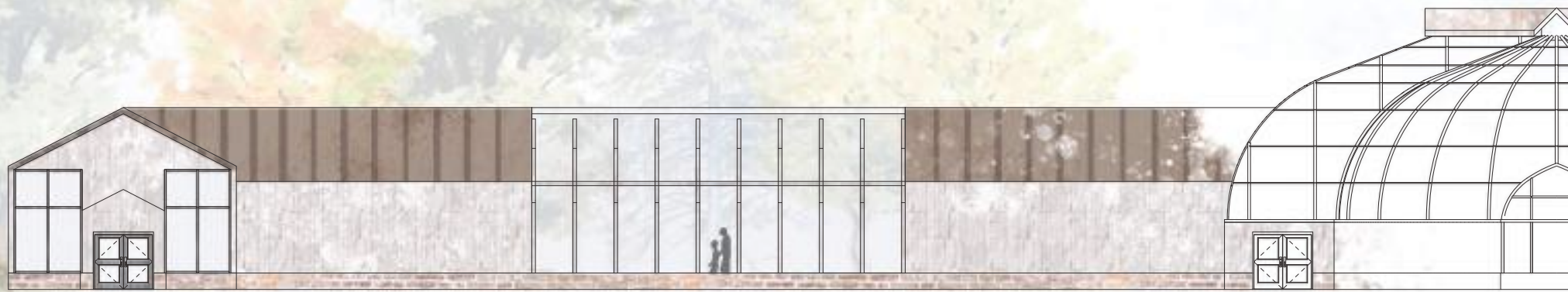




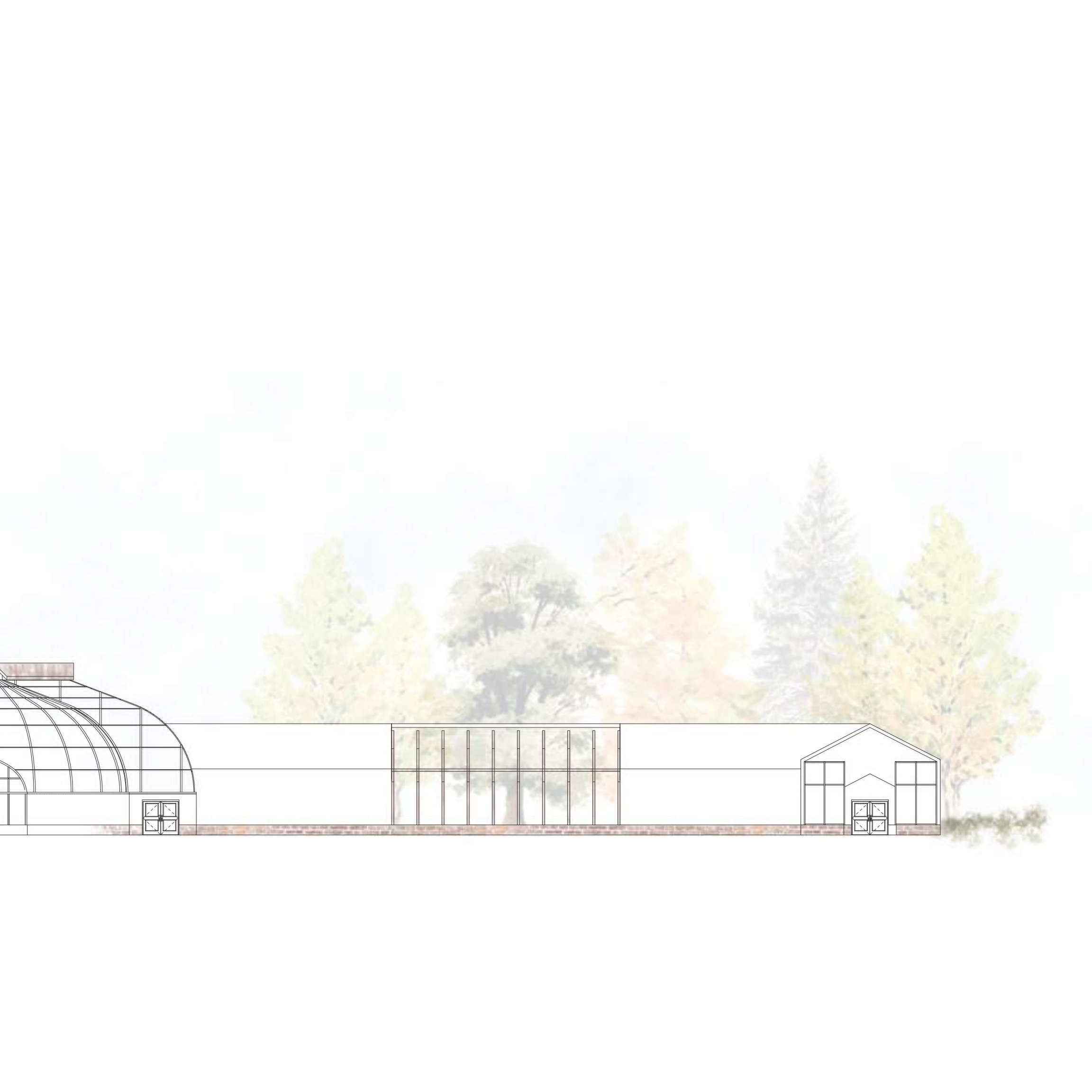
FLOOR PLAN

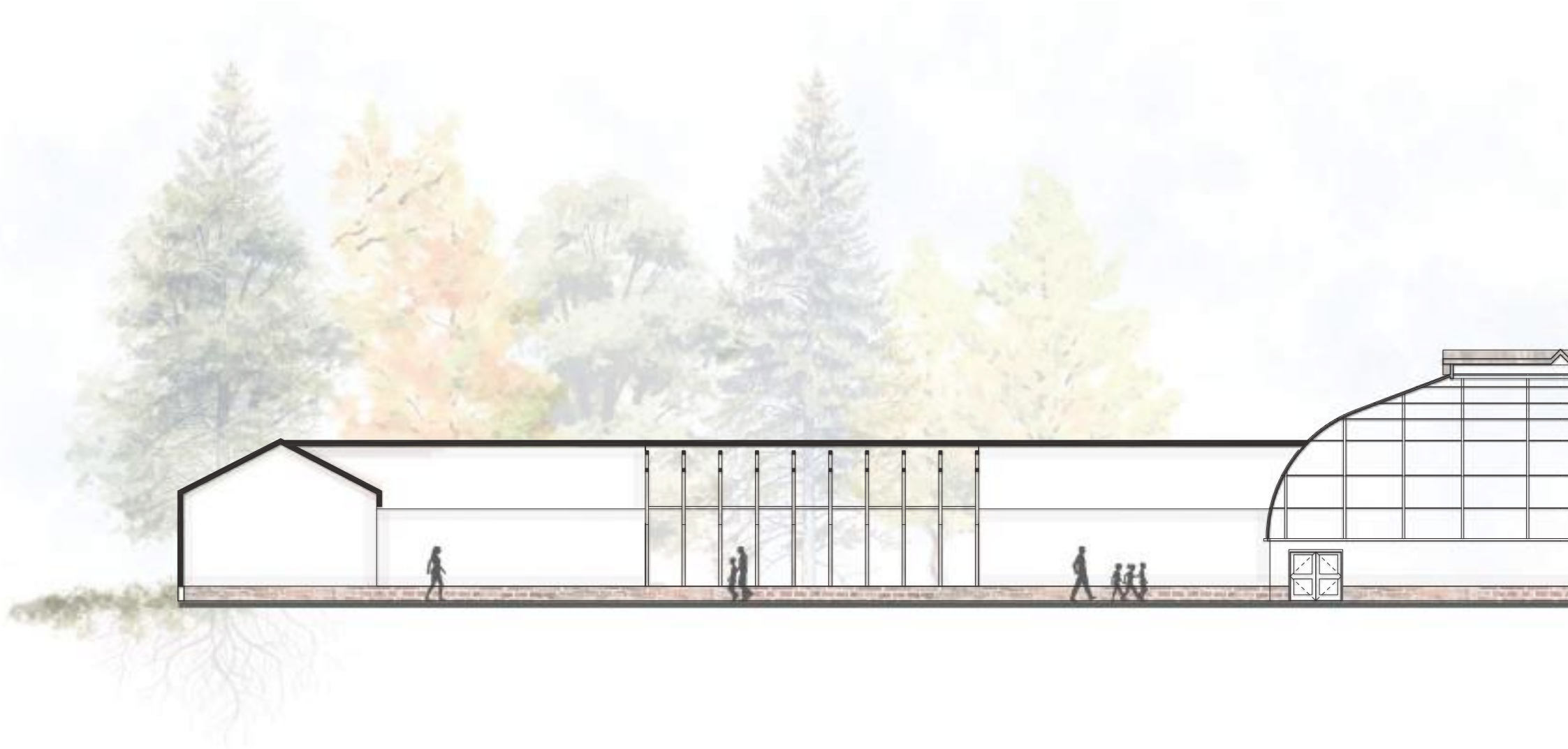
Entering on the left, there are a series of classrooms and labs in the solid spaces that are broken up by beautiful, light-filled lounges. The same idea is reflected on the right side of the building and features industrial machines for recycling fabrics and is a key trend of fashion future and our planet! The surprise moment is the central point of the building. The space opens up even more to a huge 80 foot wide glass dome where there will be the fashion show venue, with ticketing booths, seating for 200, breakout areas, a demountable fashion show runway that is 3 feet high, and a large backstage prep area. The end of the runway is circular to reflect the dome above.



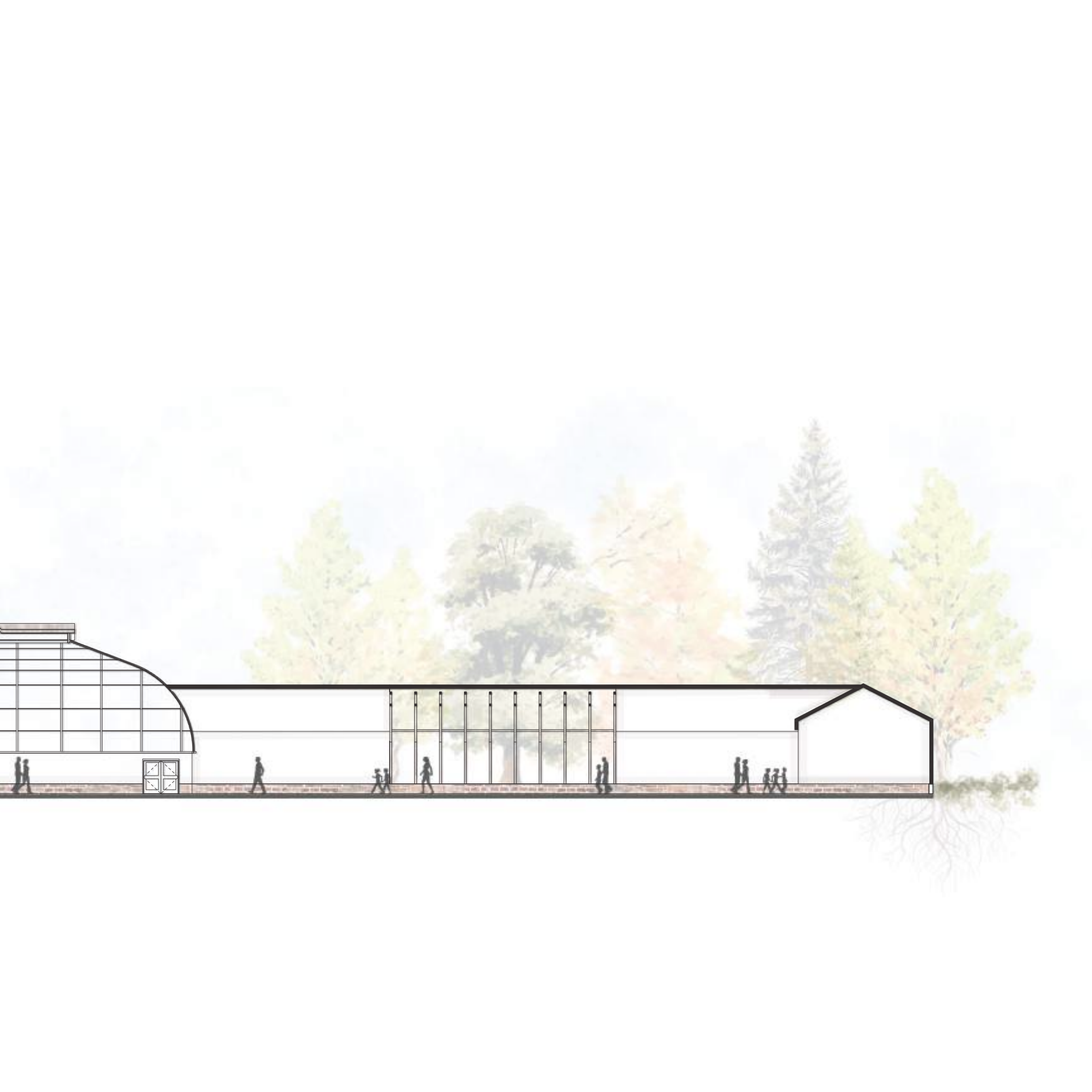


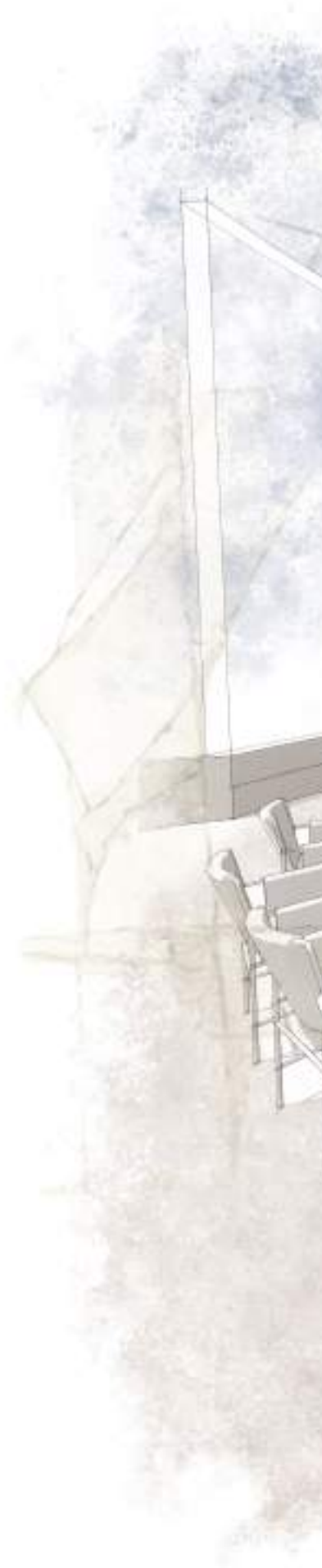
NORTH EXTERIOR ELEVATION





SECTION A-A





RUNWAY PERSPECTIVE

The runway perspective shows how the central dome's space is arranged for fashion shows with the 200 seats, the 3-foot-high circular ending runway stage, and a spacious light element with thousands of glass leaves filtering the light coming in through the glass dome.

