

Waiting

for

Joseph Richard Conway

Ruin



"It is no accident that the artist comes to terms with a tension between the expectation harbored by custom and the introduction of new ways of doing things...

...We shall have to ask ourselves what follows from this unity of what is past and what is present."

(Gadamer, 1987, p. 10)

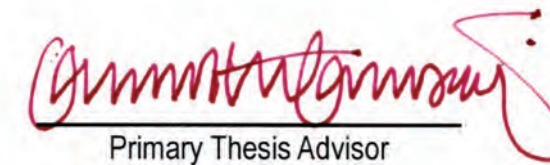
waiting for ruin

A Design Thesis Submitted to the
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By

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Primary Thesis Advisor



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abstract

This Thesis, *Waiting for Ruin*, is an examination of how adaptive reuse projects can become an intermediary for overlapping contemporary and historic architecture. Adaptive reuse can be used to revitalize historic but decrepit structures by giving them new purpose through new construction that draws on the existing character. Using the principles of phenomenology, new architecture is inspired by the old. The existing historic structures becomes informed and inspired by the new architecture. This thesis does not approach adaptive reuse from the stand point of sustainability or historic preservation. While sustainability is a worthwhile and commendable endeavor, and will be utilized in the design process, this project will not focus on the environmental and economic implications of its application. This thesis seeks to create a new harmony between contemporary and historic architecture, while bringing forth a new history for the forgotten architecture. A surrealist art gallery and public exhibition hall will be the typology for exploring this thesis. The site for the project will be the abandoned Island Station Power Plant in St. Paul Minnesota.

Key Words

Adaptive Reuse
Phenomenology
Gallery
Historic
Contemporary
Surrealism
Repurposing

problem statement

In an adaptive reuse project, how can historic architecture and new construction inform and enhance one another?



statement of intent



Typology

Surrealist Art Gallery and Public Exhibition Hall

Claim

By designing with an understanding of how time and memory are affected by materials and the way they age, an adaptive reuse project can entwine historic and contemporary architecture.

Unifying Idea

The creation of a building that entwines historic and contemporary architecture, following the principles of phenomenology, will craft powerful architecture that questions the notion of time.

Project Justification

Not every building can become a museum to its former self. In a culture where antiquated buildings are commonly demolished, an old factory would sooner be torn down than be preserved. The ever increasing demand for function in modern buildings makes historic buildings obsolete. Designing for decay, adaptive reuse combines new construction and old architecture to mutually enhance the qualities of the each. This approach to construction can create a unique precedent that reveals value in abandoned structures; giving them new purpose.

Supporting Premises

Adaptive reuse provides a medium for the cohabitation of old and new history where they can inform and improve one another.

Entwining modern architecture with the existing building draws from history while simultaneously contributing its own inspiration and ultimately developing into a new adaptive architecture. “Beyond the practical argument for sustainability and the socially aware argument for preserving our history is an argument for saving a more ephemeral quality of older buildings - they are experientially different from buildings of today.” (McIntyre, 2008)

Historic structures provide limitations to modern building typologies but if adapted properly can adjust to changing needs over time. The addition of contemporary architecture is necessary for addressing these limitations—eventually leading to timelessness.

In the case of adaptive reuse, phenomenology can address limitations in the difference between old and new. The principles of phenomenology focus on the experience of building materials and their sensory properties. This allows the designer to focus on the cohesive architectural experience and not just preserving the old building as it once was.

proposal

narrative

Historic preservationists will always work to preserve the buildings with true significance, but not all buildings deserve to be “saved”. Turning every old building into a museum of its previous purpose is akin to becoming its own mausoleum. The importance of time and recollection in architecture is not that a building was once noteworthy, but that it continues to be (or can be again). When architecture has lost its purpose it has died. Humankind and all of its creations are eventually returned to nature. Architecture, however, can be reborn. We humans, as makers of architecture, have the power to instill new purpose in these structures by gathering up the disjointed ruins and using change as a vehicle for introducing new ideas and new ways of building. Through the practice of adaptive reuse, old architecture becomes reborn with the introduction of new architecture. Contemporary architecture has much to glean from the character of historic buildings, while historic buildings can benefit greatly from a considerate introduction of modernity. This raises the questions of how to entwine the new with the old. How do you open a dialogue between the dead and the not yet born?

Ruined architecture has a unique aesthetic quality granted by time. The inimitable patina of time cannot be crafted by human hands alone; it is a result of nature’s desire to reclaim matter. The valuable character of aging architecture can overlap with new design, creating a reciprocally inspiring exchange. This thesis seeks to explore the dialogue between historic and contemporary architecture. To do so will require a level of restraint and

poise. Designing with consideration to the principles of phenomenology can reconcile preconceptions regarding history and modernity for the benefit of the lived experience. A cohesive piece of architecture can be formed by examining the old fragments and new construction for their sensory and experiential properties. This adaptive reuse architecture will exist in the present while still speaking to the past, compressing time and creating architecture that is simultaneously new and old.

The philosophy of surrealism draws upon the nature of fragmentation, rearranging pieces and ordering them in a new way to raise questions about the nature of perception and reality. For this reason, I have chosen to create a gallery for surrealist art as my typology. The gallery itself and the art within will allow participants to question notions of history and time. The distant fragments of past and present become a collage of time and a vessel for meaning. The project site is the abandoned Island Station Power Plant in St. Paul Minnesota. The stark contrast between the functionalism of the power station and the poetic nature of the gallery will give birth to a truly unique piece of architecture.

Ultimately this project is about the synthesis of historic and modern architecture and the conversation taking place between the two. Entwining modern architecture with the existing building draws from history while simultaneously contributing its own inspiration and ultimately developing into a new adaptive architecture. This new construction can create a unique vernacular development that renews the history of existing structures; giving them new purpose.

major project elements

Studio spaces will be used and rented out by local artists who participate in the teaching lectures as well as the exhibition of their works. This space will be used to repair or construct items necessary for efficient use of museum.

Work shop/ Studio Spaces

Office spaces will be provided for managing day to day operations. There will be a general office space for most employees, while the Gallery Director and Curator will each have their own offices.

Offices

The building and its site will have a facilities management and maintenance crew for overseeing the proper functioning of the building.

Maintenance Facility

This space will provide visitors an opportunity to gather and socialize while enjoying a cup of coffee.

Café

The facility will house an auditorium with seating for roughly 300 patrons. The auditorium will be used primarily for performances but can also serve as a lecture space. Consideration will need to be given for the acoustic, HVAC, lighting, and A.V. needs of the space.

Black Box Theater

Lobby/ Atrium

A prominent entry condition and atrium will be a central component of the design. The atrium will be a space that encourages interaction between the people and the spaces. The space will have a security desk/coat check and will serve as a focal point for the building and its functions.

Storage

This space will be used to house works of art and artifacts that are not currently on display, as well as other significant non-display pieces. This space needs to maintain a stable temperature and humidity, as well as provide adequate safety features. This is done in order to provide the best conditions possible for material preservation.

Gallery Spaces

Surrealist Collections

The main focus in the program will be the galleries for surrealist art. These spaces will be used to display surrealist works of art and artifacts. Works found to be in the spirit of surrealism may also be displayed.

Local Art/ Travelling Shows

In addition to the primary gallery spaces, exhibition space for local artists' works will be provided. Works from the local area will promote a sense of community as well as foster an appreciation for the arts.

client description

Owner

The property and building will be owned by the city of St. Paul, while a non-profit foundation will manage the facility and own the works of art in the gallery. Part of the funding for the gallery will be provided by the Minnesota State Arts Board while the rest will come from private donations and other sources.

User

While the museum exists for the appreciation of the entire community, there will be two different primary groups. The first is the general public as gallery patrons, and artists using the workshops and studio spaces. Both user groups will be able to visit the galleries, view lectures, and participate in special events. Much of the public patronage will be provided by the local area. The city of St. Paul has many up-and-coming neighborhoods with an appreciation for culture and artistry like the River Front and Lower Town. There are a number of art colleges as well, with students likely to make frequent visits for academic purposes. The site will need to provide ample parking for vehicles as well as bikes for the diverse range of patrons.

The gallery staff and facilities management will play the role of secondary users. The gallery will have a director, curator, and a building/facilities manager. There will be a number of other employees including security, reception, and maintenance staff. The architecture will need to compliment both public and private uses efficiently.

site information

The site is essential for the success of the project and was carefully selected for the unique qualities it possesses. The primary site requirement was an abandoned building of an appropriate scale for the major project elements. The building also needed to have a unique character and history to draw inspiration from. The Island Station Power Plant is the ideal site for this design thesis. The site is located in St. Paul Minnesota on the Mississippi River. This historic coal power plant was decommissioned in the mid 1970's and has sat relatively unused ever since. Even after it was originally built in 1921, it was made obsolete within a few short years. The building has been relegated to a forlorn identity for the near entirety of it's existence. This project is a chance to give this runt of a power plant new purpose.

The building is situated on a sizable peninsula on the river, with a great deal of space to work with. There are a number of small tertiary buildings around the plant that can either be incorporated into the design or demolished. The plant itself is in rough shape. Most of the windows are missing or broken and some of the exterior concrete has begun to weather and crack. The river site may present flooding issues. The neighborhood around the site is quickly developing into a popular and very livable area. There are a number of industrial buildings but they are slowly being phased out by riverfront housing developments. A local art gallery will provide a cultural staple in the downtown St. Paul area and further encourage the urban development in the state's capital.



Figure 1.1 Upper Midwest (Google Maps, 2010)

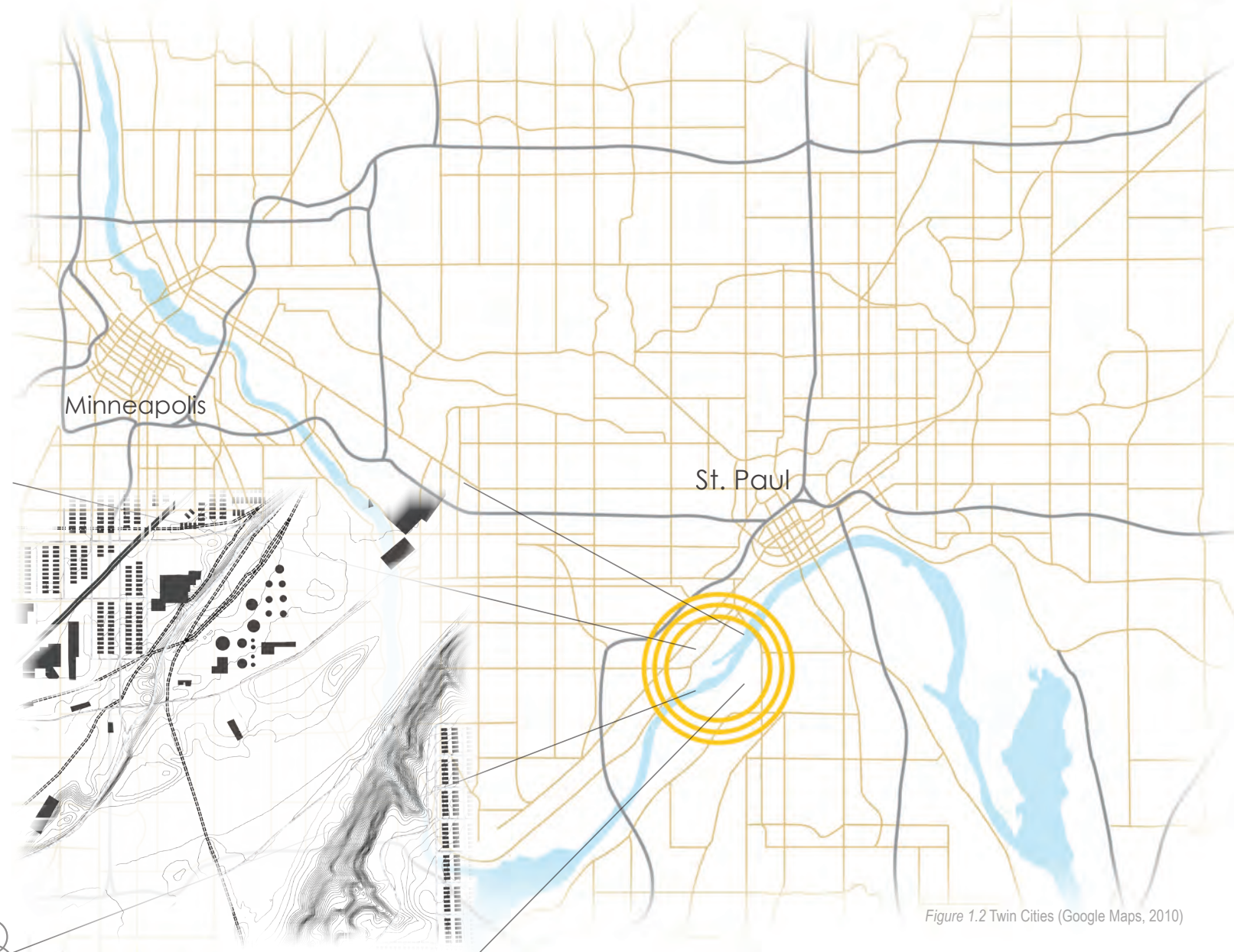


Figure 1.2 Twin Cities (Google Maps, 2010)

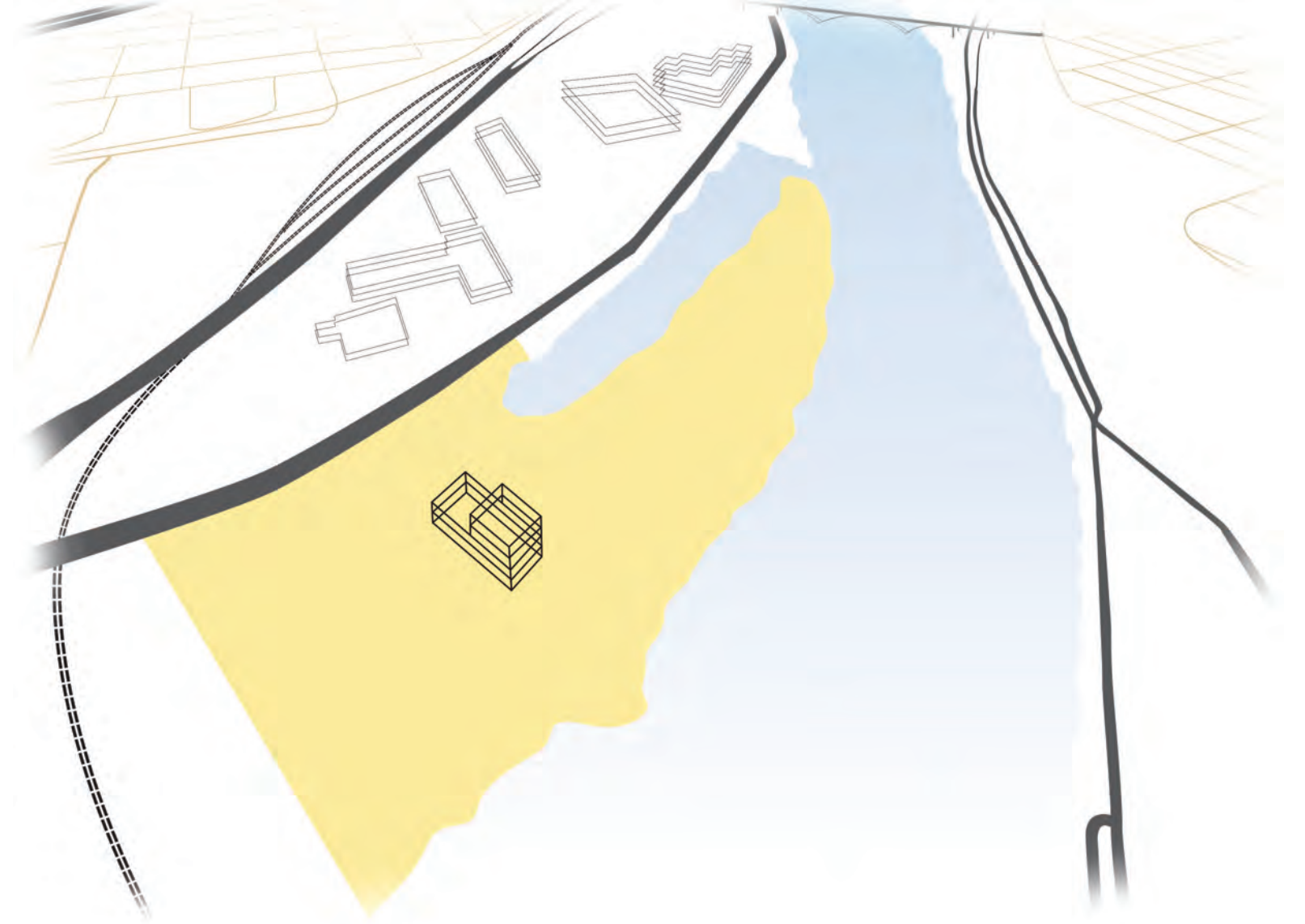


Figure 1.3 Site Map (Google Maps, 2010)

project emphasis

The focus of Waiting for Ruin is to consider the potential of adaptive reuse as a medium for the cohabitation of old and new history; where they can inform and improve one another. This project seeks to create a conversation between modern architecture and the existing building. While this premise could be explored in multiple ways, the project will focus on how the study of how perceptions of time and memory are affected by material decay can question ideas of history in the modern world. This allows the designer to focus on the cohesive architectural experience and not just preserving the old building as it once was. Ultimately this project has to successfully address this problem through the conversion of a dilapidated power plant into a surrealist art gallery.

plan for proceeding

Research Direction

Research will be conducted with regard to the philosophical implications of the theoretical premise/unifying idea. The particular concern will be how to create a conversation between modern architecture and an existing historic ruin. A comprehensive understanding of the many facets of adaptive reuse will be essential for this project. Further research will be conducted on historical precedents in the field of adaptive reuse and gallery adaptation. Research will also include a thorough investigation of the site and existing structure.

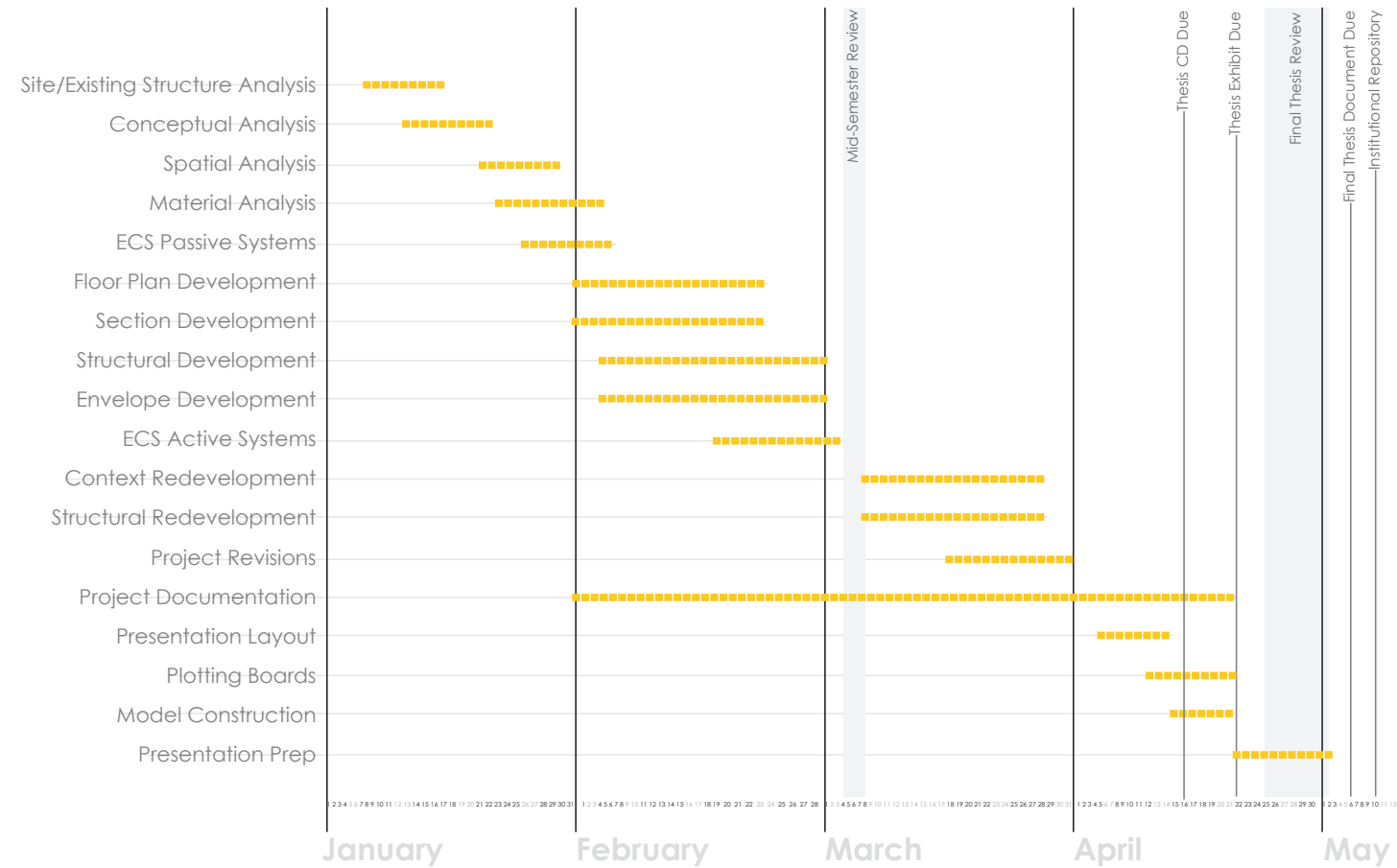
Design Methodology

The design methodology chosen for this thesis will be a mixed method model, while compiling data in a quantitative/qualitative approach. Qualitative data from sources like direct observation and library research will be used, as well as quantitative data such as technical measurements. As this project focuses on adaptive reuse, a great deal of information must be compiled about the existing site and building. Material expressions of construction that help facilitate a poetic understanding of the design will be fundamental.

Documentation of Design

As the final design will be a result of an explored conversation between the historic ruin and modern architecture, the process of the conversation will need to be carefully documented. All components of the conversation, models, sketches, theoretical writings, and photographs will be digitally recorded. The final thesis book will highlight the conversation between new and old as a result of the design process.

schedule



studio experience



Second Year

- Fall 2009 – Heather Fischer
 - Tea House
 - Boat House
- Spring 2010 – Stephen Wischer
 - Twin House
 - Hector International Airport Terminal

Third Year

- Fall 2010 – Paul Gleye
 - Sporting Goods Store
 - Fire Station
- Spring 2011 – Ron Ramsay
 - Shaker Barn
 - Chicago Midrise

Fourth Year

- Fall 2011 – David Crutchfield
 - High Rise
 - KKE Turning Trash to Treasure
- Spring 2012 – Paul Gleye
 - International Study Abroad
 - Square Foch

Fifth Year

- Fall 2012 – Ron Ramsay
 - Stewardship Religious Center

program document

research & goals

theoretical research

There is an opportunity to foster a beautiful revival in the way people interact with the living, and changing fabric of architecture. We are exposed to decaying buildings every day. We see them, we mourn them, and we spray them with graffiti. However, older buildings are finding a more prominent role in our built environment. Historic buildings offer us a unique aesthetic. The construction and style of structures that are only a few decades old, are already antiquated and carry with them the mystique of the past. Architecture of the past, recent or late, is aesthetically and experientially different from the architecture of today. Try as we might, it is impossible to mimic the honesty of any authentic building or style. Although, there is a difference between being old and being historical; not all that is old is historically significant.

While preservation may be desirable for buildings of historical significance, not all buildings should be preserved (or restored) as they once were. It should not be desirable for a building to turn into a museum of its former function. When this happens a building is effectively turned into its own mausoleum and put on display. The spaces have lost all real sense of purpose and the architecture cannot be truly felt. At the same time, not all buildings deserve to be preserved but rather should be changed. The modern preservation movement has developed a desire to preserve that which is old, not that which is significant. The dogmatic approach

of the more extreme preservationists is detrimental to the development of architecture. A preservationist's avoidance of alteration stems from a fear of what is new.

Historic preservation has its place in society. Works of real and influential historical significance should be preserved; works that inspire the collective imagination. However, we as a society should not fear changes in the reason of architecture. As Charles Bloszies stated:

“Anything old was interpreted as old-fashioned and a stumbling block to progress. Who needs old buildings? The backlash that formed to challenge this attitude swung the pendulum in the opposite direction and ushered in a historic preservation movement that has been responsible for saving many irreplaceable buildings architectural treasures. Some architects fear that the pendulum may have swung too far in that direction, facilitating the creation of obstructions to worthwhile development.” (2012, p. 23)

The reason the Roman Pantheon has survived so beautifully intact for so long was its conversion to Christianity from the gods of ancient Greece. While

this change wasn't as striking in structural terms, it had a dramatic impact on the function and meaning of the space. The consecration of the Pantheon into a church saved it from being destroyed by people and time.

Adaptive Reuse is an architectural practice that has become increasingly widespread in recent times. It involves the adaptation of an existing and dilapidated structure towards a new function. The level of architectural modification can be minimal, substantial, or a balance. Adaptive reuse might be considered a compromise between demolition and historic preservation.

Designs entwining new and old are not a simple undertaking. This thesis seeks to explore the union of new and old architecture. The consideration is that adaptation can respect the values imbued within architecture while not fearing the impact of significant change. Ultimately this project is about the synthesis of a dilapidated artifact with contemporary architecture to both create a unique experience and expand the history of the existing building. This project will not explore the relevance of sustainability or the impact of environmentalism as they apply to adaptive reuse. Much of the adaptive reuse movement is rooted in the notion of sustainable design. Using an existing building considers its embodied energy and eliminates the cost of demolition. Changes to the existing building will

make it more energy efficient by controlling factors such as insulation and thermal bridging. There has been a great deal of study and research devoted to sustainability and adaptive reuse, but relatively little consideration has been paid to the poetic and aesthetic potential of reusing old buildings.

Concerning Ruins

Buildings and other meaningful artifacts of human creation always exist in the present but speak to us of the past. What we witness and experience in old fragments of history is the present figure of the past. Even in a condition of great disrepair they capture our imagination and carry us back in time for a short moment. But time makes fools of us all and everything eventually becomes a victim of it. Every creation of humankind has a lifespan, which is slowly worn away by nature and time. The instant a building is deemed complete; it has already begun to decay. We should not fear decay as it is a natural part of life. Even the Pyramids of Giza will eventually become engulfed by the sand of the Sahara. The process of decay can endow our creations with something we cannot create ourselves. The true beauty of decay is that it cannot be substituted or falsified. The wrinkled patina of time has to be earned. Ruins are born in this way.

“An equalizing justice connects the uninhibited unity of all things that grow apart and against one another with the decay of those men and works of men which now can only yield, but can no longer create and maintain their own forms out of their own strength.” (Simmel 1997, p. 266)

The state of ruin is the purgatory between man-made and natural. Buildings themselves are made of materials harvested from nature and decay is at its essence a return to the most natural state. According to Georg Simmel, we human beings imbue our creations with a part of our will. The true balance of being architecture takes place between the assertions of human will and the reclamations of nature. This balance exists on a pendulum that swings between will and nature. We attempt to build and repair our creations, molding ever more materials to our will as they change with time.

“The ruin of a building means that where the work of art is dying, other forces and forms, those of nature, have grown; and that out of what art still lives in the ruin and what of nature already lives in it, there has emerged a new whole, a characteristic unity.” (Simmel 1997, p. 260)

Ruins do not need to be made of stone, and they do not need to be centuries old. The world is littered with many examples of industrial ruins; the vegetation slowly overtaking the rust covered structures. There are numerous modern ruins waiting to be adapted and reused. Reclaiming an abandoned ruin from nature is a way of appreciating the beautiful contributions nature has made, rather than the damage it has done. It should not be our desire to remove the effects of time and return it to a state of “newness”. We should observe the weathering as yet another material for creation. We must wait for ruin before we can create with it.

When faced with the opportunity to adapt a ruin for a new purpose, there must be a balance between finding historical inspiration and architectural reproduction. In his essay, *The Uses and Disadvantages of History for Life*, Friedrich Nietzsche spoke of three different and fundamental ways of viewing history. The first is the Monumental view: investigating the past with the clear purpose of molding one’s life after some superficial greatness. The past, in the monumental view, is seeking inspiration from the greatest periods of human history and trying to recreate that greatness. The second is the Antiquarian view: revering the past with the sole intention of preserving as much as possible. The antiquarian view is an objectifying historicism which that doesn’t desire to create a connection between the past and the present; it is always looking back. While these two views have

their virtues, they share a common weakness; they do not offer any criticism of the past. This is remedied by the third view of history, the critical view. With an intimate scrutiny of history, humans have the potential to uncover inconsistencies within themselves through the mistakes of the past. By sorting through the successes and failures of history, significant and meaningful development can be made. This capacity to learn from the past rather than be bound by it allows humans to act towards growth and progress. It is important that we are aware of our tendencies when considering history. In order for meaningful progress to be made, sometimes we have to make changes. The ruins of architecture should be permitted to change.

Therefore, when applied to architecture in the extreme, the monumental view would seek to recreate the meaningful architecture of the past. The antiquarian view would restore and preserve every building as it was in its halcyon days. Every building, no matter how decayed, has a history, but it is not always deserving of preservation. These buildings of lesser historical significance are more likely to be torn down than restored. Their chance for salvation is through reincarnation. By becoming part of something new they have purpose once more. Their rustic value should not be lost because of narrow-mindedness. Ruins exist in the balance between will and nature, restoration and destruction. These broken tiles can

become part of a new mosaic. We are waiting for ruins to create with them.

Poetics and Phenomena

Now that the origins and merits of adaptive reuse have been articulated, the next portion concerns the method of adaptation. Projects merging old and new are no effortless undertaking, and adapting to an existing structure presents an infinite number of possibilities. How does one respect the values of the artifact while adding to them? How much can be added before no ruins are left? How can history and modernity be reconciled? As was mentioned, history can provide both inspiration and distraction, so a balance of influence is essential. The ruin is a color among many other colors on the palette from which the architect can paint. In this sense, the ruin again becomes renewed; as a material, unique as any other, to be put towards the creation of a powerful architectural experience. Ultimately, the purpose is to craft powerful architecture that becomes a vessel for meaning and inspires the senses. By embracing the purest and most moving qualities in these ruins, we can put aside our fears of doing them harm. The philosophical design perspective of phenomenology can help uncover these essential qualities.

Phenomenology is both a philosophical design

method in contemporary architecture and a specific field of academic research. Regarding architecture, phenomenology is motivated by the experience of building materials and their sensory qualities. A piece of architecture cannot be reduced to its form, construction, or location. Architecture consists of many tangible elements: material substance, shape, texture, and color to name just a few. These elements combine to form the nature of the architectural experience and the atmosphere of space. It is this quality that allows particular spaces with comparable functions to embody exceptionally varied experiences. Architecture connects with our senses more intimately than most forms of art. This is why phenomenology is often considered a return to the nature of experience; moving away from the abstractions of scientific knowledge and its detached objectivity. This return is rather an attempt to realize our relation with architecture.

Therefore, an emphasis on the building qualities that arouse our senses becomes essential to adapting an architectural ruin. The sensory qualities of the ruin are a unique result of the limbo in which it exists. The balance between will and nature changes the material quality of the building. Stone harvested from nature and crafted by will, is stacked to form walls and columns. Over time this stone becomes weathered and worn as it deteriorates; slowly returning to nature. The cracks and veins that grow become home for a

tender green moss. A gentle peace befalls the stone. This kind of material quality cannot be crafted by human hands alone. A connection to nature resonates with our senses. The stone pleases the eye, intrigues the hand, and echoes to the ear. It smells of life and invokes the memory of every weathered stone we have encountered before. The architectural experience does not take place in the mind; it moves through the body and calls out to our senses. All the architecture we have visited and experienced becomes part of the embodied memory of our senses. Understanding the sensory qualities of the ruins reveals why they are so dear to us, and how to make them into something new.

-Eye

Modern life is visually dominant. Every day we are bombarded by flashy advertisements and spend our day in front of a computer or television screen. This is not an attempt to devalue sight. Sight is an essential ingredient of the human experience, but it is not the only ingredient. These days architecture is commonly judged by how aesthetically pleasing it is. Forms are chosen for visual intrigue, not as a result of some greater whole. Juhani Pallasmaa states:

“An architectural work is not experienced as a collection of isolated visual pictures, but in its fully embodied material and spiritual presence.” (1996, p. 45)

So then, how do we consider the visual experience of architecture? Light. Visual perception is the ability to interpret our surroundings by processing information that is contained in observable light. Visual perception is a response to the existence of light. The modern understanding has reduced light to its measurable qualities. Light guides us and subdues us. It deceives us and inspires us. All architecture contains light, natural and artificial, but great architecture frames light.

“In our time, light has lost its significance as a mediator between two worlds, between enclosed and open, interiority and exteriority, private and public, shadow and light.” (Pallasmaa, 1996, p. 47)

As light casts itself upon an architectural ruin, the state of decay is made obvious. The cast shadows of the chipping paint over the bright orange glow of the rusting steel calls out to our eyes. Every crack and imperfection of the bricks is heightened by the significance of the shadow. We view ruins differently than other architectural objects because light treats them differently. The absence of human interaction welcomes a quiet

chiaroscuro melancholy as the ruin descends into its most natural state. However, if the architecture can be called sleeping, it must be woken up. The addition of new architecture, bold or subtle, will disturb the quality of light that exists. The new architecture can still exist within the ruin. The color and contrast of the new can accentuate the quiet dignity of the old. The ruin may react to new light in unexpected ways as it fills with a renewed spirit. Dramatic lighting can make the space more vivid and exciting. At the same time, yawning shadows dull the visual acuity and give the eye an opportunity to rest. Frigid forgotten corridors can be warmed by the glow of dim spot lights cast upon the brick walls. Deep shadows and darkness are essential, because they make depth and distance ambiguous. The successful adaptation of a ruin begins with how we treat it with our eyes; what we choose to bring out and what we choose to hide. Again in the words of Juhani Pallasmaa:

“Good architecture offers shapes and surfaces molded for the pleasurable touch of the eye.” (1996, p. 44)

-Skin

Pallasmaa describes the eye as an organ of “distance and separation”, whereas touch is the sense of “nearness and

intimacy". If our eyes show us the world, then our hands are what allow us to interact with it. Visual perception exposes to us what our tactile perception already knows. We have an innate knowledge of our surroundings and their material qualities. A desire to connect with the world through touch is almost unconscious within us. The tactile sensations we experience, pleasurable or painful, are recorded deep in the memory of the body. Architecture makes itself present to us most potently through our sense of touch. The tactile connection between human and architecture is sensual and intimate. Touch is considered a personal gesture because we are so detached from interactions with the material world. To illustrate, we only touch our closest friends and loved ones in times of deep intimacy. We live in sterile worlds of privacy and protection; never opening up to greater experiences. The home is often the only piece of architecture with and intimate knowledge of human interaction. Because of this deep intimacy, touching architecture is the most personal interaction one can have with it.

In a raw natural state we might be reluctant to touch a ruin. The chipping paint on the walls might be lead based or we might contract a virus from the scratch of a rusty nail. But beneath the layers of dirt and decay is the purely tactile essence of time. We are drawn to touch aging wood of an antique chair. Not all that is worn is coarse; the opposite is often the case. Imagine

a wooden hand rail that has been given many years of use. While when it was young it had been smooth but it was still rigid and resistant. With years of repeated uses and abuse it has become scuffed and scratched, but those scars have been worn away by the hands that created them. The hand rail grows to be more wobbly and flexible, giving it the illusion of being soft and docile. As hand shapes the wood to its preferred form, the rail becomes increasingly smooth and to the touch. We can't help but run our fingers along the rustic veins of mortar between old bricks. The texture and character of the ruin tells us of its personality. The rough texture of the bricks is like the tough wrinkled hands of an old carpenter; telling stories with the simple shake of the hand. This quality of emotional narrative must not be lost when being translated to new architecture.

The intervention of new architecture can control our introduction to the old. Slowly revealing tactile soul of the ruin will make the participants in the space even more sensitive to every changing sensation. A polished steel hand rail might trace along the brick wall; the cold metal contrasting with rough skin of the brick. The body's sense of gravity is tied to our sense of touch as well. The shifting creeks of an old wood floor make us ever aware of our own weight within the space, connecting us with the architecture even more. A cold sturdy concrete floor implies the opposite. We feel as insignificant and transient as leaves resting on a sidewalk. New

architecture can mimic the textural language of the existing structure or contrast it; the answer depends on what the architecture wants to convey. As long as the inimitable textures of the ruin become a part of the new story, the architecture will be able to create intimate experiences for anyone willing to touch.

-Ear

The sensation of sound, in the experience of architecture, is bound to the sensation of touch. If a surface is soft then the sound that echoes will be soft as well. The hard walls of an empty abandoned warehouse will stretch the crash of every little drop of water. Sound is given form by the material and the shape of the space. Hearing the echoes within a space can even tell us the shape and size of it. As Juhani Pallasmaa describes:

"Buildings do not react to our gaze, but they do return our sounds back to our ears." (1996, p. 44)

We inhabit and explore architecture. It shapes our experiences with it, but it is seldom the case that buildings can respond to our presence. If a space demands silence and tranquility it will amplify our sounds to quiet us. It may also remove the possibility of

sound all together. A cough in a cathedral will resonate throughout the grand space, drawing all eyes to the culprit. While the sound of footsteps in an intimate cloister will scarcely be heard as sound will escape to the sky. Tranquility is one of the most powerful feelings architecture can produce. The orienting quality of sound affects our sense of cosmos. Phenomenology notes that sound is about the immediate (visual is distance). This stretching out of time with echoes gives us a different sense of time. Auditory awareness is truly dimensional sense.

If ruins could speak to us what would they say? Would they tell us tales of their former lives? Perhaps the stories of the men and women that once inhabited them. As Alain de Botton states, works of architecture speak of the manner of life that most fittingly takes place within and around them. The ruin of an abandoned power plant would surely speak of industry and pride. The structure was made to serve the larger public realm; to provide for people. The thick brick walls convey robustness and fortitude. It may mourn the fact that it no longer serves a purpose. The hollow echo of an empty furnace quietly weeps for its lost meaning. We can't help but weep with the architecture; we want to heal the wounds that resonate throughout the space. The objective is to grant the ruin new purpose.

The answer to adapting to the sound of a ruin is to allow for space to be tranquil. Not every space needs to express this quality, but as Pallasmaa again states:

“The most essential auditory experience created by architecture is tranquility. Architecture presents the drama of construction silenced into matter, space and light. Ultimately, architecture is the art of petrified silence.” (1996, p. 44)

Tranquility is present in some of our most precious buildings. Churches, temples, museums, galleries, libraries, homes, and mausoleums all have the capacity for tranquility. A powerful architectural experience quiets the peripheral distractions and forces our thought on the nature of our being. The Kolumba museum by Peter Zumthor is an art museum built over the ruin of a gothic church. The facade of grey brick integrates the fragments of the church’s facade into a new face for the contemporary museum. Zumthor’s design gracefully rises from the ruins of the church, respecting the site’s history and preserving its essence. The space for viewing the remaining foundation of the church is stratified by a wood bridge that is gently positioned so as to disturb as little as possible. The new architecture creates a solemn and tranquil space for the remains of the church to rest. Visitors dare not make a sound for fear of disturbing the space. The experience of any ruin can be shaped by the

sounds it hears and the sounds it wants to hear.

-Nose

Our sense of smell (and taste), is different from our other sensations of experience. We undervalue the impact of scent. If we were to pick a sense to live without, most would undoubtedly choose to relinquish a sense of smell. Whether it’s the pleasurable scent of freshly baked bread or the disturbing smell of expired milk, we only notice smells when they are immediate and obvious. But if we stop to pay attention, our sense of smell has much to offer. Scent is the only sensory method where we welcome particles of substance and matter into our body to be scrutinized. For this fact, scent has a cherished place in the memory of the body. A familiar scent will bring back memories of spaces completely forgotten by ocular memory. We are spellbound by a potent dream as we struggle to draw our way back to the source of the memory. Scent has a mysterious and permeating quality. It is not immediate like light and sound; it is slow. We may not notice a smell until it has consumed us.

“Why do abandoned houses have the same hollow smell: is it because the particular smell is stimulated by emptiness observed by the eye?” (Pallasmaa, 1996, p. 47)

In the case of ruins, scent is not held in the same regard as the other sensory experiences. While sights, sounds, and materials are all things to be inspired by, scent is not. The smell of an abandoned factory can be dank and overpowering. Years of decay and disrepair leave behind a myriad of unsavory odors entrenched within the space. After the space has been broken down and begun the process of rebirth, new scents can be found or created. An old furnace may still have a trace memory of the coal that was once burned in it. When adapting a ruin, for the sense of smell a different approach is necessary. New scents need to be brought into the space, to open the realm of bodily memory to the space of experience. The space may smell of old wood from the floors that can now breathe fresh air or antique books in the library being read. It may also smell of fresh pastries from the café at lunch hour. The building may also invite the scents of the natural environment into the space, creating another connection to the weathered process of the ruins decay. Ultimately the aspiration is to create a space that can place itself deep in the primal memory of the participant; having a scent both unique and familiar.

Surreal Memory

The sensory experience of scent is closely connected with another fundamental sense of the human experience, memory or our sense of time. Memory makes us truly

human as we are beings that exist in time. The animal world exists in the moment, spontaneously forgetting the past and moving forward ever-present. Human beings have the amazing capacity to recall past experiences and refer back to them. All of the senses contribute to the sense of memory because memory is a result of the collective experience. All the senses are interconnected and contribute to our lived experience in the world. The world is physical, we live in the world and the senses help us touch the world.

“As time increases in speed with the advent of modern technology, time loses its echo in the primordial past, man loses his sense of self as a historical being, and is threatened by the terror of time. Architecture emancipates us from the embrace of the present and allows us to experience the slow, healing flow of time. Buildings and cities are instruments and museums of time. They enable us to see and understand the passing of history and to participate in time cycles that surpass individual life.” (Pallasmaa, 1996, p. 47)

Memory is especially present in architecture. Whenever we experience a sensation we believe is new, we call back to past experiences to compare them. When entering a new piece of architecture we immediately

recall any building that is remotely similar; consciously or not. The case of adapting ruins into new architecture deals directly the nature of time and memory. When new forms are physically integrated into old structures, juxtaposition of time becomes immediate. This kind of architectural fusion compresses our understanding of time, as past and present appear to occupy the same space. The experience of the old must call us back to the past and make us inquire about what the space might have been like. Buildings and other meaningful artifacts of human creation always exist in the present but speak to us of the past. As these structures change, by the hand of man or nature, the experiences that take place within them evoke a deep emotional response. We hold a prevailing affection for our oldest creations and the power they have to bring us back in time. The ruin itself is a memory.

“We comfort ourselves by reliving memories of protection. Something closed must retain our memories, while leaving them their original value as images. Memories of the outside world will never have the same tonality as those of home and, by recalling these memories, we add to our store of dreams; we are never real historians, but always near poets, and our emotion is perhaps nothing but an expression of a poetry that was lost.” (Bachelard, 1964, p. 184)

Therefore, an essential understanding of the architectural qualities that arouse our sense of being changes the approach to adapting a ruin. The sensory qualities of the ruin that have been granted by age create a unique opportunity. The balance between will and nature changes the material quality of the building. This is an opportunity to create with something more valuable than gold; material time. This kind of material quality cannot be crafted by human hands alone. A connection to nature resonates with our senses. The architectural experience is ultimately at play with the senses. No single sensory experience should be divorced from the collective memory of the body. All the architecture we have visited and experienced becomes part of the embodied memory of our senses. The alteration of an architectural relic is surrealist in its nature.

The premise that objects become fragments as they decay creates opportunity; pieces that can be put back together in unexpected ways. The reuse or realignment of these fragments allows them be reborn as something new. The philosophy of surrealism draws upon the nature of fragmentation, rearranging pieces and ordering them in a new way to raise questions about the nature of perception and reality. Life is a mosaic where the tiles are frequently falling away, later being replaced by new ones. In the moment when new fragments meet with old ones, time becomes compressed. Through the understanding of these essential fragments of perception that shape

our experience of the world, we can craft powerful works of architecture from the ruins of the past. The surrealist ruin through senses critically crafts poetics into architectural meaning.

Consequently, meaning is derived from our poetic understand of the world. Poetic architecture taps into that moment when architecture transcends the bounds of conventional understanding; when it becomes more than simply a physical space — and conveys to a sense of place and beauty that words struggle to do justice. As Alberto Pérez-Gómez states, “Like the poem itself, architecture is its figure as presence, which constitutes the means and end of the experience.” Adaptive reuse has limitless potential for inspiring poetic interpretation from the pieces of abandoned architecture. There is a chance to encourage a beautiful restoration in the way people perceive with the breathing, and broken fabric of architecture. The old ruin reenters the realm of human interaction, it will move forward with renewed spirit; telling new stories of the past and the present. The power of a space that transcends time will invoke our imagination and suggest the condition of a waking dream. In the words of Alberto Pérez-Gómez:

“If Architecture can be said to have a poetic meaning we must recognize that what it says is not independent of what it is.” (Pérez-Gómez, 1994, p. 8)

research summary

The research into the theory behind this thesis was undertaken in order to establish a legitimate understanding of the theoretical premises laid out in the statement of intent. These premises were established as the driving force behind this project. The associated theoretical research is intended to be a consistent and ongoing investigation that will both influence and be influenced by the development of architectural design. In this way it sets the precedence for the architectural work and its continuation and growth for the duration of the thesis process.

Relating to the character and range of the theoretical research, this was derived from the nature of the founding premises which focus on the relationship between a creation, decay, and sensory experience. The exploration of these premises also focuses on how the adaptation of an architectural ruin is influenced by the nature of creation, decay, and sensory experience. Therefore, the research is primarily philosophical and phenomenological in nature. In other words, the research seeks to understand the way humans can create with the decayed fragments of past creations, thereby approaching a deeper understanding of our being in time. The findings of the research will explore the application of the primarily philosophical and phenomenological ideas as they relate to the creation and experience of architecture.

As we move forward in the modern age of technology, historic older buildings are finding a more prominent role in our built environment. While preservation may be desirable for buildings of historical significance, not all buildings should be preserved (or restored) as they once were. It should not be desirable for a building to turn into a museum of its former function. The act of Adaptive Reuse is an architectural practice that has become increasingly widespread in recent times. Adaptive reuse might be considered a compromise

between demolition and historic preservation. Designs entwining new and old are not a simple undertaking. This thesis seeks to explore the union of new and old architecture. The consideration is that adaptation can respect the values imbued within architecture while not fearing the impact of significant change.

How does one respect the values of the artifact while adding to them? By embracing the purest and most moving qualities in these ruins, we can put aside our fears of doing them harm. The philosophical design perspective of phenomenology can help uncover these essential qualities. Regarding architecture, phenomenology is motivated by the experience of building materials and their sensory qualities. Architecture connects with our senses more intimately than most forms of art. This is why phenomenology is often considered a return to the nature of experience. Therefore, a deeper understanding of the building qualities that arouse our senses becomes essential to adapting to an architectural ruin. Understanding these sensory qualities reveals why the ruins are so dear to us, and how to make them into something new.

The alteration of an architectural relic is surrealist in its nature. The premise that objects become fragments as they decay creates opportunity; pieces that can be put back together in unexpected ways. The reuse or realignment of these fragments allows them to be reborn as something new. In the moment when new fragments meet with old ones, time becomes compressed. Through the understanding of these essential fragments of perception that shape our experience of the world, we can craft powerful works of architecture from the ruins of the past. The old ruin reenters the realm of human interaction, it will move forward with renewed spirit; telling new stories of the past and the present.

CASE STUDIES



tate modern

Project Type: Museum of Modern Art
Location: London, UK
Area: 120,000 ft²
Date: 2000
Architect: Herzog & De Meuron Basel Ltd.

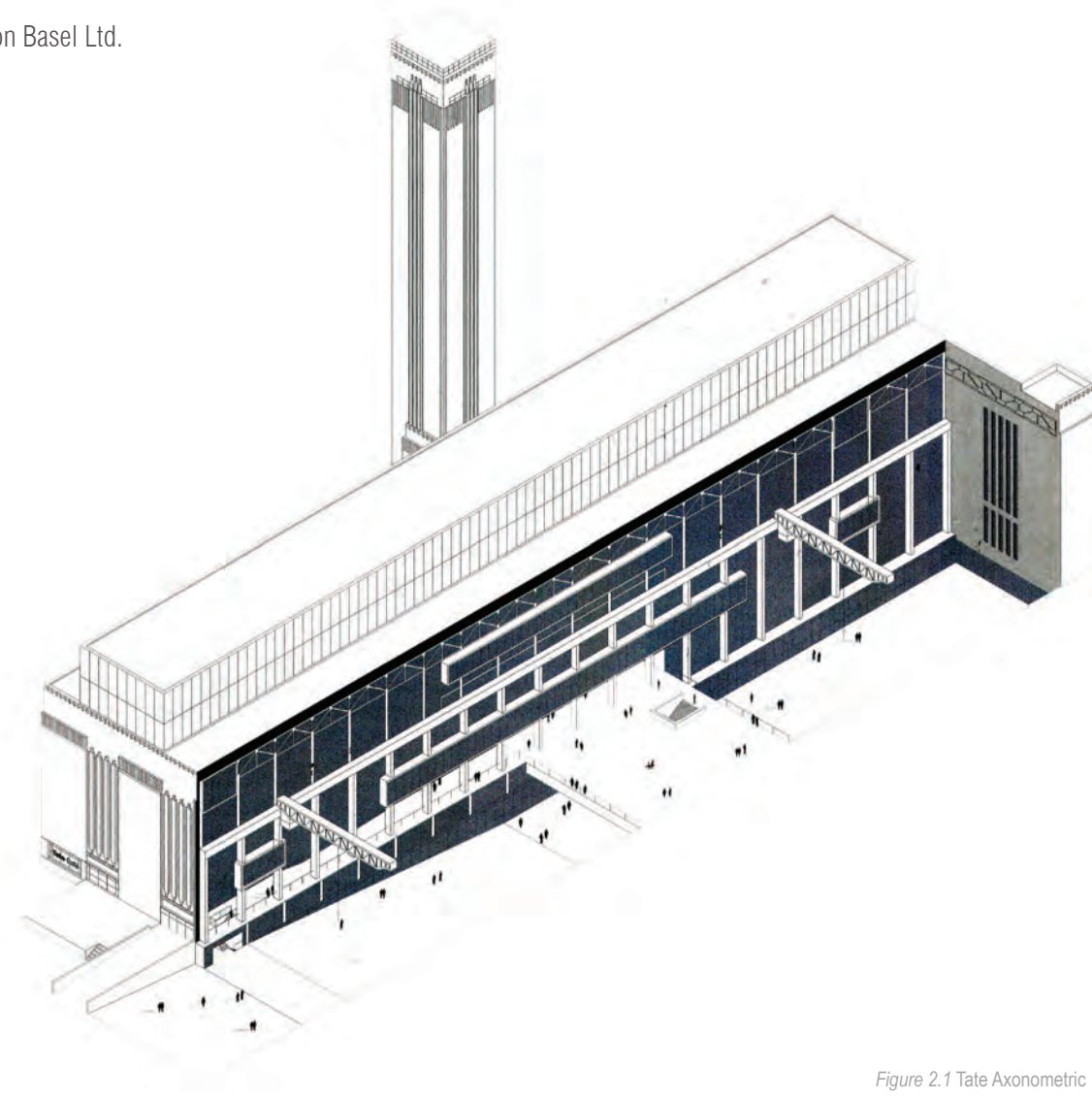


Figure 2.1 Tate Axonometric

The Tate Modern is a modern art gallery located in London, England. It is the United Kingdom's national gallery of international modern art and forms part of the Tate group of museums. It is the most-visited modern art gallery in the world, with around 4.7 million visitors per year (Searing, 2004). It is located in the former Bankside Power Station, in Central London. The collections in the Tate Modern consist of works of international modern and contemporary art dating from 1900 until today (Wagstaff, 2008).

The former Bankside was designed by Sir Giles Gilbert Scott. The Station was active for less than 40 years before it was shut down (Wagstaff, 2008). Tate, a public organization, was outgrowing its original location, the Tate Gallery at Millbank. Discussions led to the conclusion of reusing an existing building, the old power station. Its enormous size and premier location on the River Thames made it the ideal structure. The building was converted by architects Herzog & de Meuron and contractors Carillion.

In little over a decade the Tate Modern has changed London and revitalized the South Bank of the Thames. Tate Modern has transformed a formerly unused district of London and has helped give the city a new image as a leading center of contemporary culture. The museum has become a premier landmark for London, while the design has won international acclaim.

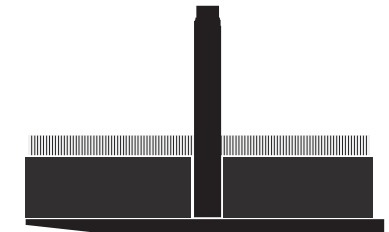


Figure 2.2 Massing

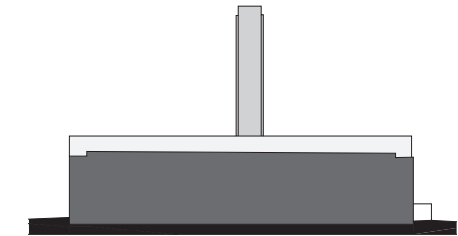


Figure 2.3 Hierarchy

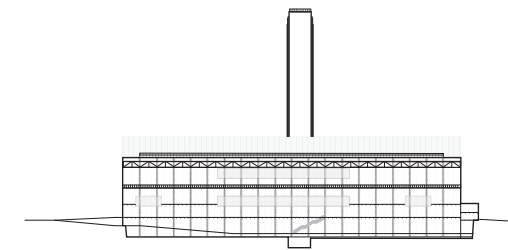


Figure 2.4 Structure

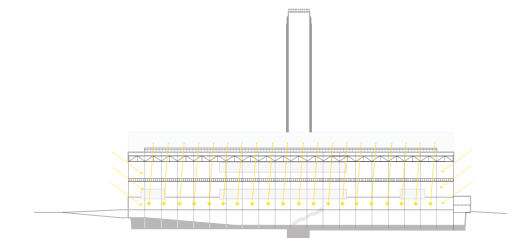


Figure 2.5 Natural Light



Figure 2.6 Tate Modern Images

The Tate Modern is one of the world's most famous examples of adaptive reuse. The 500 foot tall Turbine Hall has become a dramatic entrance for the museum. This hall has housed several massive art installations, regularly changing the entry condition of the building. The building has seven levels with many permanent gallery spaces as well as spaces for traveling exhibitions. The Tate Modern currently has seven different levels, numbered zero through six. Levels zero through four have exhibition spaces (Searing, 2004). The industrial character of the building is reflected in the grey walls and black steel girders. A new glass ceiling floods the sober space with natural light, creating an ideal environment for viewing art (Searing, 2004).

The Tate Modern is a demonstration of the adaptability of a power plant into a place to the appreciation of fine art. The stark industrial character of the power plant translates well to a gallery setting. The large atrium space, formerly housing electrical turbines, creates an intriguing entry condition. The architects focus on the integration of new materials is in keeping with the industrial aesthetic of the museum. While its scale is significantly larger than that of this thesis, it still has a great deal of value as a case study and a historical precedent.

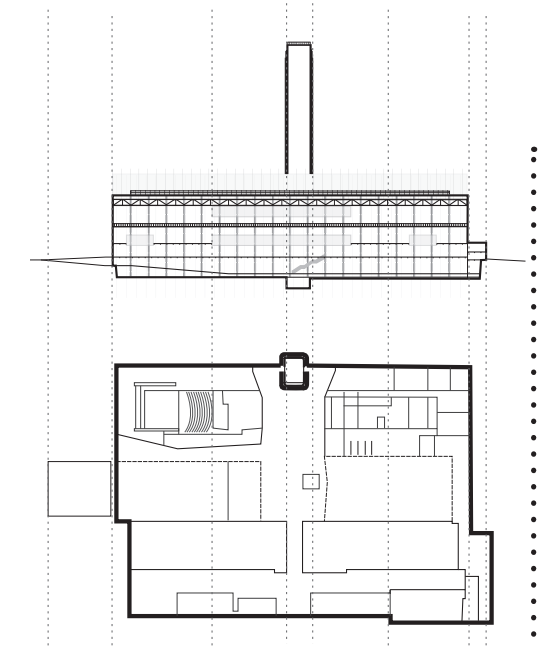


Figure 2.7 Plan to Section

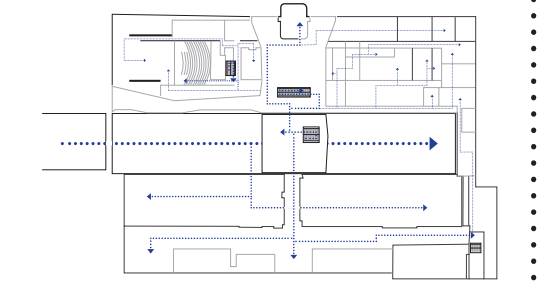


Figure 2.8 Circulation

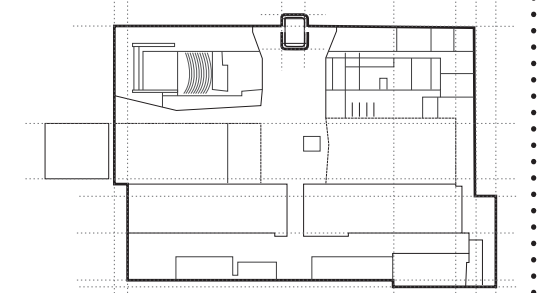


Figure 2.9 Geometry

castelvecchio museum

Project Type: Museum of Romanesque Art
Location: Verona, Italy
Area: 90,000 ft²
Date: 1973
Architect: Carlo Scarpa

Figure 3.1 Castelvecchio Museum Exterior



Castelvecchio Museum is a museum in Verona, Italy. The museum of Castelvecchio occupies an old castle originally built in the 14th century and substantially extended in the 18th century (Di Lieto, 2011). The conversion by Scarpa was designed and implemented between 1958 and 1974 (Di Lieto, 2011). The castle rests on a site by the Adige River at the edge of the historic city of Verona. The museum is split in two separate major wings, connected under a bridge that spans from the castle across the river. The more recent wing was added in the 18th century and delineates one edge of a major courtyard that functions as the focal point of the castle (Di Lieto, 2011). The older portion of the castle was formerly a residential building. Scarpa was responsible for both the restoration of the castle in addition to the design of the exhibition spaces, including the particular spatial arrangement of the art (Di Lieto, 2011).

The restoration by the architect Carlo Scarpa, between 1959 and 1973, has enhanced the appearance of the building and exhibits. Scarpa's additions and modifications are distinct and easily recognizable, but match the aesthetic and material quality at the same time. The new architecture exists in a delicate balance with the old. Scarpa's unique and subtle style is evident in the details of doorways, staircases, and even fixtures designed to hold particular museum pieces. The new architecture is distinguished from the old through the incorporation of exposed joints that show the

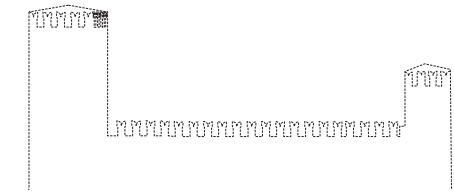


Figure 3.2 Hierarchy

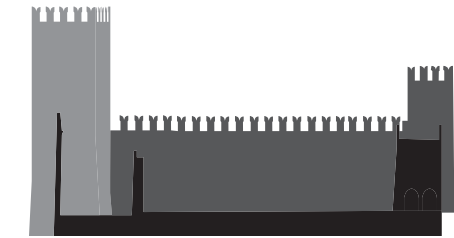


Figure 3.3 Massing

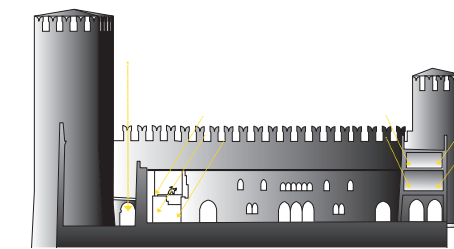


Figure 3.4 Natural Light

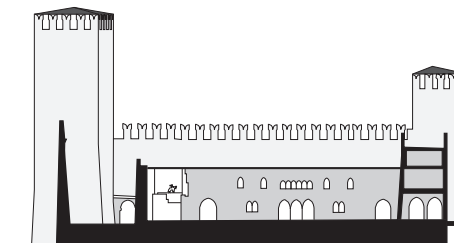


Figure 3.5 Structure

Figure 3.6 Castelvecchio Museum Images



connections of the building (Di Lieto, 2011). The museum displays a collection of ceramics, statues, ancient weapons, sculptures, as well as paintings, many of which date back to the Romanesque period. The most astounding quality of the museum was the integration of the artwork into the space. Knowing the works to be displayed beforehand, Scarpa was able to tailor each space to the particular works being displayed within. The statues were aligned and positioned in space in such a way as to frame their gaze toward the approaching viewer, creating a network of views (Di Lieto, 2011). This museum is perfect example a balanced architecture; between art and architecture in space, and between new and old architecture in time.

Carlo Scarpa believed that new architecture should be integrated with the old architecture, but also believed that the new should be distinctive from the old (Di Lieto, 2011). It is not befitting of either architecture if the new simply mimics the old. The Castelvecchio Museum is a demonstration of adaptive reuse where the old and new architecture have reached true harmony. The building allows the art to stand out while still creating a power experience in the space that holds it.

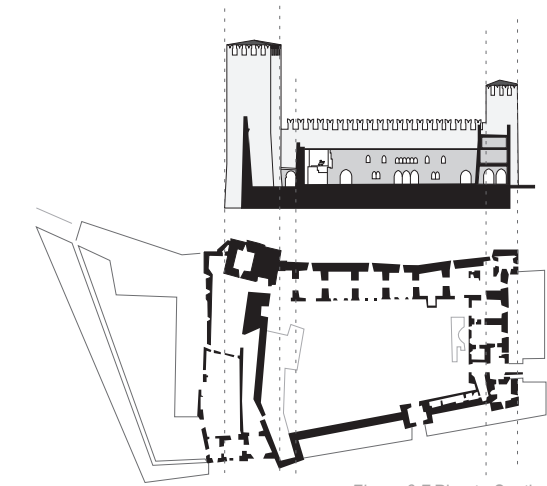


Figure 3.7 Plan to Section

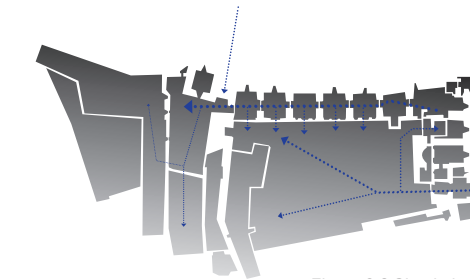


Figure 3.8 Circulation

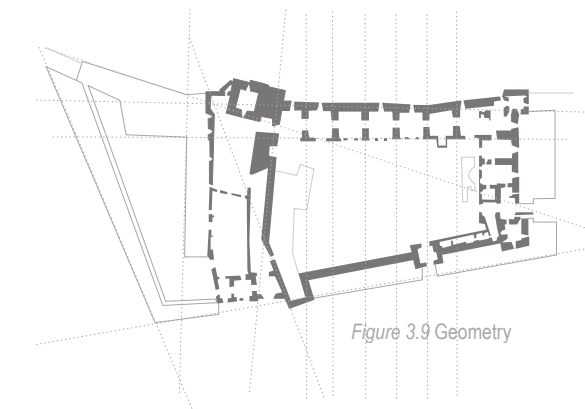


Figure 3.9 Geometry

Kolumba

Project Type: Museum of Art
Location: Köln, Germany
Area: 17,200 ft²
Date: 2007
Architect: Peter Zumthor

Figure 4.1 Kolumba Museum Ruin



The Kolumba is an adaptive reuse art museum in Köln, Germany. It is located on the site of the ruins of the St. Kolumba church. The museum is owned and operated by the Archdiocese of Köln. The museum is curiously different from most other art museums. It juxtaposes old and new religious art and is meant to inspire thought concerning how different times view the realm of the sacred (A&U, 2008). The museum is a place for reflection. It does not have a café, gift shop, or auditorium.

The Kolumba holds a collection of religious art that extends from as far back as the 1st-century up to the present. Zumthor's design uses the old Gothic retaining walls of the church, configured in an uneven multilateral ground plan on the site (A&U, 2008). The design itself drew from the past of the existing ruin. The church of St. Kolumba was destroyed during a bombing raid of Köln during the Second World War. However a figure of the Virgin Mary managed to endure the devastation (A&U, 2008). This event was considered so astounding that a small chapel was built to house the figure. The octagonal form of the chapel sits on the ruins of the old church and remains preserved and integrated into the museum. In 1973, the ruins beneath the chapel were discovered. The site was a significant archeological find and revealed signs of Roman and Gothic architectural remains (A&U, 2008).



Figure 4.2 Hierarchy



Figure 4.3 Massing

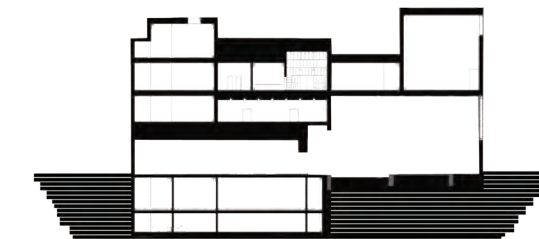
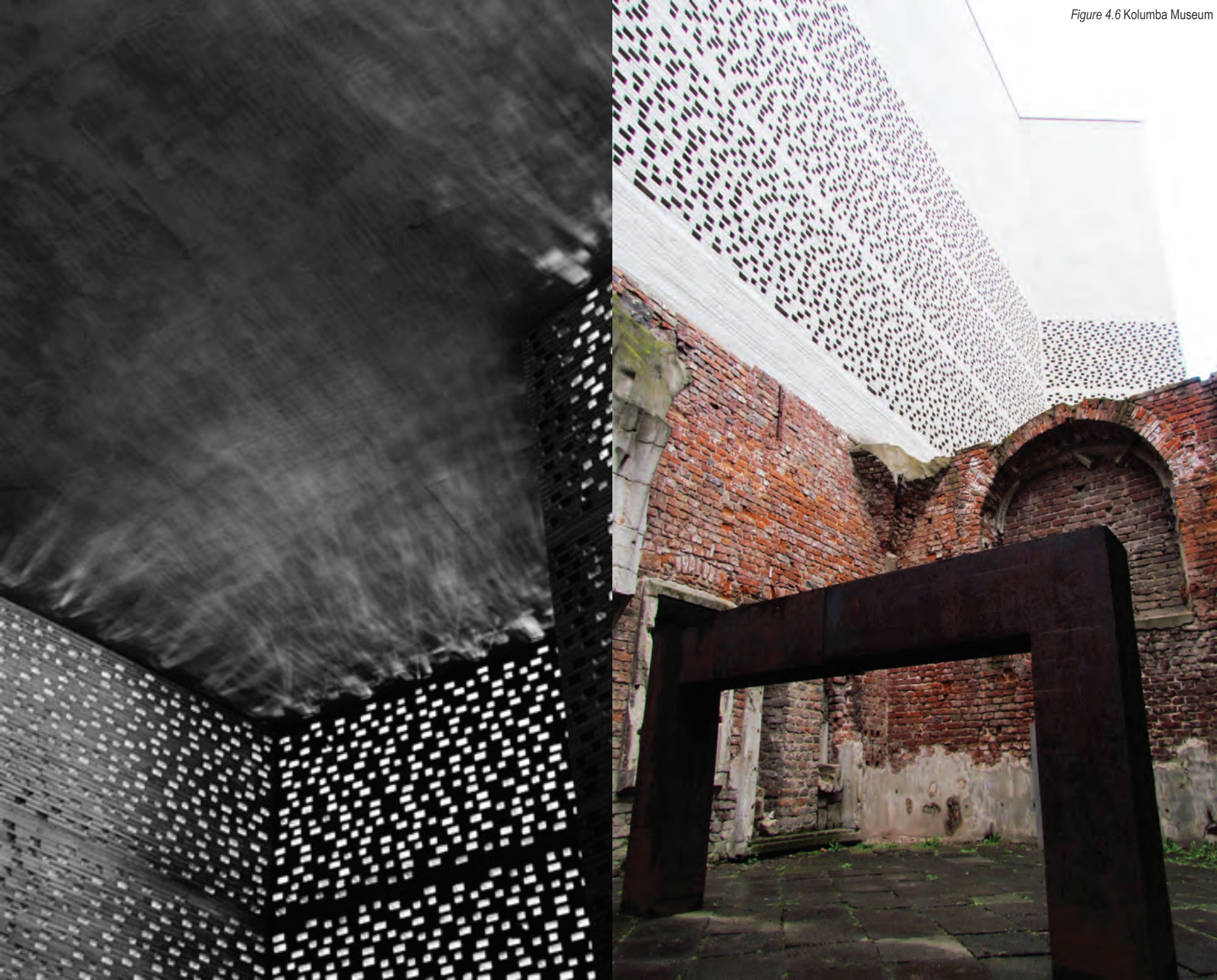


Figure 4.4 Structure



Figure 4.5 Natural Light



To safeguard access to the site of the ruins, while maintaining their historic integrity, Zumthor delicately placed tall, narrow columns of steel encased in concrete (A&U, 2008). These pillars suspend the main museum space above the ruins, creating a solemn atrium for the ruins below. A humble, delicately crafted wooden walkway allows visitors to walk over top of the ruins. Zumthor used custom made grey bricks to create the new masonry walls of the museum, placing them on the remnants of the Gothic church's walls. The grand size and submissive lighting of this space create a solemn, meditative effect that defines the frame of mind for other exhibition spaces.

Peter Zumthor has managed to create a space that suspends time. The delicate fragments of light cascade over the Gothic ruins below; illuminating and reviving the past. The gallery spaces possess a similar solemnity. The combination of religious and modern art creates a mood of quiet curiosity. This museum embodies a careful consideration for history that few other buildings can claim. The purest lesson to be found in this case study is humbling power of tranquility.

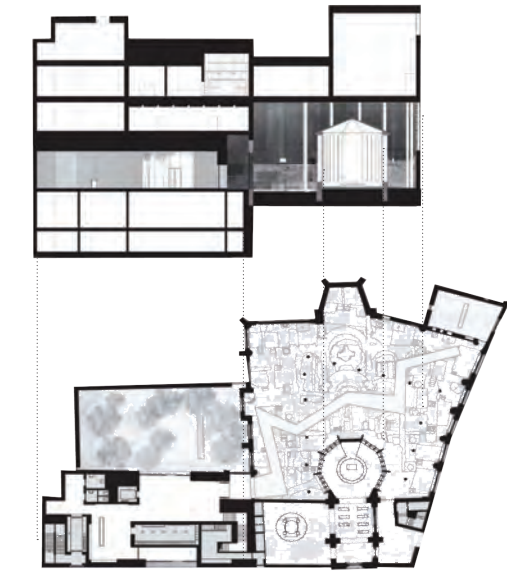


Figure 4.7 Plan to Section

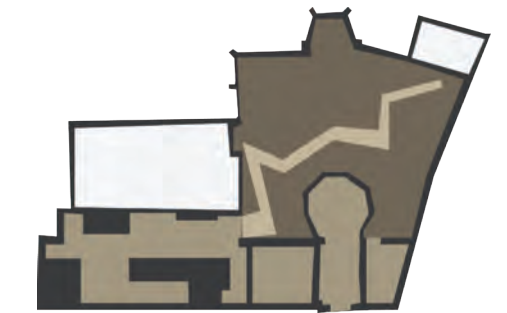


Figure 4.8 Circulation

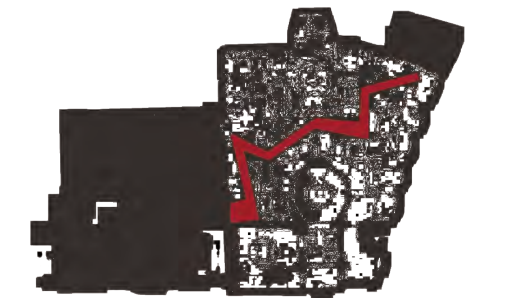


Figure 4.9 Geometry

case study summary

Through the process of researching and documenting the case studies a common theme emerged, the unique methods in which each case adapts to an existing structure. The Tate Modern, Castelvechio, and Kolumba all approach adaptive reuse differently; even when they all have extremely similar typologies. Each one solves unique problems of context in a different way that informs the outcome of the design. These case studies help to develop an understanding of historical precedents in the field of adaptive reuse architecture.

First is the Tate Modern, an art museum built in an abandoned power plant. The Tate Modern offers this thesis a look at a successful adaptation of a power plant. The Island Station Power Plant is significantly smaller than the Tate Modern, but they share a history as pieces of industrial architecture. The Tate Modern worked to preserve its industrial aesthetic and made great use of its largest spaces. The entry atrium allows for a number of unique installations that would not be possible in any other gallery because of its immense scale. There is much to be gained by studying the way the Tate Modern both preserves and utilizes its industrial character.

The Castelvechio Museum is the oldest case study of the group. The building it resides in was built centuries ago and the modern incarnation of the museum was built in an era when adaptive reuse was not nearly as widespread as it is now. Castelvechio is the best example of integrating art and architecture. Each space was designed specifically for each piece of art. The museum allows for each piece of art to draw its own attention or contribute to the experience of the space as a whole. Castelvechio also has an astounding quality of detail. Each door, stair, shutter, and walkway was painstakingly designed until it worked flawlessly with the existing castle. The most important thing to take away from this case study is the careful consideration to creating a cohesive architectural experience. Castelvechio is no longer a castle and it has never been just an art museum in a castle; it is purely a space that has turned a castle into an art museum.

Kolumba is a different case because the focus of the museum is less on the art and more on the beautiful mausoleum space for the ruin of the old church. That singular space is so

experientially powerful it defines the rest building. Because of this, the art loses a bit of the attention it might otherwise deserve. When people leave the museum they will not be discussing the art, they will be discussing the church ruins. The most important thing to glean from the Kolumba Museum is its commitment to the poetic experience. The museum is a resting place for a building that was once a resting place for others. That fact alone is enough to make the building fascinating, but it doesn't stop there. The light, shadow, sound, and smell were all considered during the design process. The experience is precisely what Peter Zumthor had intended.

All three case studies share a number of very important traits in common. First and foremost, they are art museums. This may seem obvious and perhaps even trivial, but it is essential. They are not art museums that happen to be housed in old structures; the architecture was designed with the expressed purpose of housing and displaying great works of art. The existing structures needed to be modified significantly to accommodate the many precise needs of the art. Lighting, temperature, and humidity all need to be controlled to keep the art at its best. Second, these case studies did not sacrifice the true character of the existing architecture when modifying it to be used as an art museum. They each paid careful consideration to the context in which they were working and strived to create new architecture that cooperated with the old. This mindset allowed for the creation of three very power and successful examples of adaptive reuse. The last important trait they share is the power of the poetic experience. This is more obvious in the careful and considerate layout of the Castelvechio Museum and the mournful solemnity of ruins with the Kolumba Museum. That does not mean the Tate Modern is not poetically inclined; the case is the opposite in fact. The use of the modern industrial aesthetic juxtaposed with one of the greatest modern art collections in the world allows for a greater understanding of the living experience in the modern world. All three of these case studies will help the development of my thesis. Careful study of their successes as well as their faults will help to make the project the best it can be. These buildings have proven that not only is adaptive reuse a viable option for the creation of an art gallery, it has the potential for creating great and meaningful works of architecture.

historical context

Introduction

It is through the careful study and understanding of the past that we can truly recognize the potential course for the future. We must use the lessons of history and move forward with them in mind. Humans are historical beings and as such we have a tendency to hold too tightly onto the past. In the words of Friedrich Nietzsche: “Historical education is wholesome and promising for the future only in the service of a powerful new life-giving influence” (1997, p.12). With an intimate scrutiny of history, humans have the potential to uncover inconsistencies within themselves through the mistakes of the past. By sorting through the success and failures of history, significant and meaningful development can be made. This capacity to learn from the past rather than be bound by it allows humans to act towards the growth and progress. It is important that we are aware of our tendencies when considering history. For this section of research, a foundation of historical knowledge is necessary. The history of the site and existing structure will be explored as well as the history of the field of adaptive reuse. The section will end with a brief account of surrealist art and its history.

St. Paul Minnesota

The city in which the site exists is St. Paul Minnesota. St. Paul is the state capitol and is the state’s second largest city. From its establishment as a natural gathering point for rail and river traffic, Saint Paul’s growth has been joined to transportation (City of St Paul, 2006-2011). The City of Saint Paul was originally established as the “The Town of St. Paul” by an act of the Legislative Assembly of the Territory of Minnesota in November of 1849. Saint Paul remained a town until March of 1854 when it became the “City of Saint

Paul, Minnesota Territory”. In May of 1858 when Minnesota became a state the city became known as “The City of Saint Paul, State of Minnesota” (City of St Paul, 2006-2011).

Hillsides and cliff faces of St. Peters Stone surrounding the Mississippi River made the city an ideal location for steamboats to dock (Williams 1906). At the time, river travel was the primary means of transporting people and products to and from the area. By 1860, the population was hovering at around 20,000 people, many of whom had arrived by steamboat. In the mid 1860’s however, the steam engine became the primary mode of transportation to the St. Paul/ Minneapolis area. St. Paul was the beginning of a large network of rail corridors throughout the North Central Midwest (Williams 1906).

The Union Depot train station was completed in 1923 and became the center for rail activity in the area, but was left vacant from lack of use in the early 1970’s. The Depot was remodeled and adapted in 2012 for become a full transit hub, hosting traditional rail, light rail and the Metropolitan Bus system (Duchscher, 2012). The Depot is becoming a premier example of the growing market for adaptive reuse projects. While it originally started as a train station, it has grown into a major transportation hub and is a centerpiece for once again.

Today, the cities of St. Paul and Minneapolis have contrasting personalities. St. Paul has an older style and a slower pace. It has reclaimed and preserved many of its historic buildings and has classical charm (Wingerd, 2001). Minneapolis has a much more modern essence. Many of the buildings are new and clad in steel and glass. Together the cities offer the best of both possibilities. The twin cities are home to a number of theatres, performing arts centers, and museums; including the Guthrie Theatre, and the Walker Art Museum in Minneapolis, and the Ordway Center for Performing Arts, and the Minnesota Museum of American Art in St. Paul. The area is known for its appreciation of the fine arts (Wingerd, 2001). There is also a growing desire

for urban housing in the St. Paul area with an expanding apartment development within walking distance of my building site. All of these factors and historical trends make for a promising long term future for a development of the Island Station Power Plant into a gallery for surrealist art.

Island Station Power Plant

The site for my design thesis Island Station Power Plant is a decommissioned coal power plant on the Mississippi River less than a mile up-river from downtown Saint Paul, Minnesota. This site was carefully chosen from a number of abandoned structures in the Twin Cities Metro area as well as Duluth. The site was chosen for its unique history and character. The St. Paul Gas & Light Company commissioned the construction of the plant in 1921 (Melo, 2012). In 1923, before the construction of the plant had a chance to be completed, a more efficient technology for coal burning had been developed, effectively making the Island Station Power Plant obsolete before it ever opened (Melo, 2012).

The plant became operational in 1926, operating at a reduced capacity until 1943 when it was decided that the plant would only be used for six to ten weeks per year, during the winter when energy demand is highest (Melo, 2012). In 1975, Northern States Power Co. (who acquired the plant shortly after it was finished) decommissioned the plant and began using it for storage.

In 1985, the property was purchased and partially converted to be used as studio apartments for local artists. During this 19 year period the building played host to a number of Twin Cities artists (Melo, 2012). For a brief period of time a colony of nearly a dozen or so houseboat dwellers moored at the shore of the property. Then in 2003 the Island Station Power Plant was purchased for \$1.5 million with the hope of turning it into a 235-unit condo with a 20-slip marina (Melo,

2012). The \$80 million project started work and more than 100 units had even been reserved. As of June 2011 the project has been cancelled and the property is for sale (Melo, 2012).

In October 2012, an offer was made to purchase the property and demolish it. The St. Paul City Council voted to issue a moratorium, preventing the demolition of the plant (Melo, 2012). The Island Station Power Plant has a unique history that has allowed it to develop a distinctive character. The Plant has always wanted to be something more, but never had the opportunity. It had become outdated and unnecessary even before it was finished being built. The building also has a history as a home to the creation of art. Converting the space into a gallery for surrealist art will allow the plant to become something greater.

Adaptive Reuse

Adaptive reuse refers to the process of reusing an old site or building for a purpose other than which it was built or designed for. The modern notion of adaptive reuse is relatively new, however the practice is almost as old as architecture itself. Over the course of history old buildings were replaced by new ones, particularly when architectural styles began to change and the public grew tired of an old aesthetic. However, there are examples of adaptive reuse that are many centuries old. One such example is the Great Cathedral of Cordoba, or as it was once called, the Great Mosque of Cordoba. The building was originally a church built around the year 500 CE, but was replaced by a Muslim mosque around 800 CE (Bloszies, 2012). The Mosque of Cordoba changed hands again in the thirteenth century. Around 1525, a Gothic nave was built into the center of the mosque (Encyclopedia Britannica, 2012). The Gothic fan vaulting visually clashes with the Moorish horseshoe arches. As Charles Bloszies states:

“The contrast between the two architectural styles could not be more pronounced, echoing perhaps the difference between religious beliefs that prevailed in the sixteenth century.” (2012, p. 42)

However, the Christians did not tear down the mosque, even when they had the opportunity. They saw architectural significance worthy of at least being adapted rather than destroyed. So often are the places of religious worship the first to be destroyed in times of conflict. Even though the Gothic architecture is crudely integrated, the Moorish architecture was preserved and as such is now considered to one of the best remaining examples of it (Encyclopedia Britannica, 2012). The difference between new and old is expressed through candid contrast.

During the nineteenth century, the issue of historic preservation as we know it now was starting to be born; that is to restore or rehabilitate an existing structure in order to preserve it for reasons of historical significance. With the hurried expansion the Western world was undergoing during the Industrial Revolution, buildings became obsolete more quickly than ever before (Bloszies, 2012). The meaning of the word restoration became a point of debate between two prominent architects at the time, John Ruskin and Eugène-Emmanuel Viollet-le-Duc. Ruskin argued at the time that true restoration was unattainable as the new construction would be too far removed from the vernacular of the original work, while Viollet-le-Duc was deeply fond of mimicking the style of a historic building using newer construction methods (Bloszies, 2012). John Ruskin once stated:

“Neither by the public, nor by those who have the care of public monuments, is the true meaning of the word restoration understood. It means the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed. Do not let us deceive ourselves in this important matter; it is impos-

sible, as impossible as to raise the dead, to restore anything that has ever been great or beautiful in architecture.” (Ruskin, 1989, p. 194)

Ruskin would not have been able to support the contemporary historic preservation movement as many modern techniques do require changes to the building. Viollet-le-Duc however took his restorations a step further, adding features that never existed in the first place, making them appear more picturesque (Bloszies, 2012). Ruskin’s words are undeniably true, when a building is altered it loses an authenticity it once had. However, this thesis sides with neither of the two ideologies. Many buildings need to be adapted in order to avoid destruction, but serious alterations should not be made under the pretense of restoration.

In recent years, adaptive reuse has become an increasingly viable option. The decades of urban renewal and the destruction of many old and often historic buildings, citizens began to take notice. The urban fabric was beginning to appear increasingly sparse. In the late twentieth century and early twenty-first century the support for adaptive reuse of historic districts began to grow. Now the field of adaptive reuse is viewed as an essential component to the preservation of old buildings as well as urban revitalization. The adaptation of an abandoned power plant into an art gallery is building on a trend that has been slowly growing for centuries.

Surrealism

As the typology of this design thesis is a gallery for surrealist art, it would be prudent to briefly explore the history and principle theories of the subject. Surrealism is a cultural movement which started in the early 1920s, and is preeminently recognized for its strikingly abstract visual works of art and writings (Breton, 1978). Surrealist works present the facets



of dream, unexpected juxtapositions and fragments of reality; though, most Surrealist artists and writers consider their labor as an expression of the philosophical realm above the value of its aesthetics alone (Vesely, 2004). The works themselves become the artefact to present a greater idea. André Breton was one of the leading minds behind the surrealist movement. Clear in his belief that Surrealism was first and foremost a ground-breaking movement, he wrote the Surrealist Manifesto (Breton, 1978). Surrealism was heavily influenced by the works of Sigmund Freud, especially those concerning the nature of dreams. The surrealist movement began in Paris and quickly spread around the globe, having a profound impact on literature, film, and music. One of the primary thoughts within surrealism is the nature of fragmentation. The golden age of surrealism was over by the 1950's, but more work continues to be produced. Surrealism never went away; it merely fractured into several directions and influenced different movements, under different names. Many artists still identify themselves as Surrealists and some founding Surrealist artists are still alive (Vesely).

The philosophy of surrealism draws upon the nature of fragmentation, rearranging pieces and ordering them in a new way to raise questions about the nature of perception and reality (Vesely, 2004). Surrealism is about erasing the logic of modernism to reunify the self through dream-states and association. The images of a disembodied torso or a melting clock are not placed simply for their visual intrigue; they have very specific and intentional poetic meanings. The composition of a surrealist piece is meant to inspire confusion, raising questions about the way we perceive and interact with the world. Andre Breton said:

“Poetic analogy transgresses the deductive laws in order to make the mind apprehend the interdependence of two objects of thought situated on different planes, between which the logical functioning of the mind is unlikely to throw a bridge, in fact opposes a priori any bridge that might be thrown.” (Vesely, 2004, p. 341)

This idea of fragmentation relates directly to the essence of adaptive reuse. The abandoned architecture being weathered and broken is fragmented and indistinguishable from its former self. In addition, the new architecture is merely a fragment. If separated from the ruin it ceases to be whole. Through the realignment of fragments old fragments and the addition of new fragments, a powerful piece of architecture can be created. This work would raise questions about perception, time, and being through experience. The display of surrealist works in addition to the architecture will only enhance the experience further.

The collective histories of St. Paul, the Island Station Power Plant, Adaptive Reuse Architecture, and Surrealism are all present in this design thesis. These histories influence the scope and direction of the project. A solid understanding of the historical influence of a project gives it direction and merit. It is through the thorough study and comprehension of the past that we can fully distinguish the latent possibilities of the future.

project goals

Academic

As a student of architecture at NDSU, my graduate thesis must demonstrate the full product of my education. The graduate design thesis is described as a comprehensive design project. My goal is to create a thesis project that thoroughly addresses the questions raised by my theoretical premise in a comprehensive way. My design must be both poetic and practical; addressing issues of program and infrastructure in a poetic and meaningful way. This thesis aims to address the disparity that exists between the preservation or restoration of abandoned architecture and the adaptive reuse of it. As the academic setting exists as a precursor to the professional environment, where projects have budget and code restrictions, this thesis project will focus primarily on the contribution of new ideas and concepts. I want to strengthen the connection between adaptive reuse and the study of phenomenology. I want to explore the sensory experi-

ence of decaying architecture and how it can be transformed into new architecture. However, my goal is not to isolate my work in the philosophical and theoretical realm of research. This project must be founded on physical materializations that present these philosophical ideas and that interact with the world, becoming tactile and experiential. Ultimately, at the end of the thesis process I want to be proud of the work that I create. My aspiration for this thesis is to create a beautiful and elegant solution to a design problem.

Professional

The professional goal of this thesis begins with the method in which it will be designed. Adaptive reuse is becoming an increasingly relevant design approach in the professional realm. This thesis seeks to explore the union of new and old architecture. As we move forward in the modern age of technology, historic older buildings are find-

ing a more prominent role in our built environment. I hope to find a better understanding of what it takes to create an Adaptive Reuse project from start to finish. Another professional issue addressed by the thesis project is the design of a particular building typology; a Gallery for Surrealist Art in this case. A gallery is neither a new nor an outdated typology and continues to be a realistic prospect in the creation of architecture. The typology of a gallery or museum continues to be relevant to the profession. I also hope to create a project that demonstrates a competent understanding of the field and practice of architecture. By engaging this method of design in consideration of the building typology and recognizing real world applications, involving the ideas presented in this thesis will communicate with the profession at large. Outside this thesis project and regarding my future career as an architect, I aspire to create work that spans both the theoretical and the practical construction of real buildings.

Personal

On a personal level this thesis project is the culmination of many objects of interest and avenues of study that I have been exploring throughout my academic life. This thesis will allow me to explore these different interests and develop them into a project that demonstrates my fascination with them. One of my primary focuses in school has been the study of phenomenology and the poetic experience of architecture. Another has been the adaptive reuse of existing architecture. I want to expand my knowledge in both of these areas through the development of my design thesis. At the end of the thesis project and my design education at NDSU, I hope to expand the collective knowledge of the design community.

site analysis



site narrative: **Qualitative Analysis**

Before choosing my particular site, I investigated a number of dilapidated abandoned buildings around the Twin Cities Metro as well as Duluth. The industrial history of these cities has created a large number of prospective sites. After doing a great deal of careful research about the history of each building and the area of the site I began to visit the sites. I visited many of the sites over the summer, but none of them had the characteristics I was looking for. Many of them were unsuitable for the project because they were either too large or too small for the building typology. Another problem was the neighborhoods in which these sites were located. Majority of the sites were located in unsafe neighborhoods; not the ideal place for an art gallery. The site that stood out from the others was the Island Station Power Plant.

The day I first visited the site was a sunny Saturday in early fall. The leaves on the trees were beautiful collage of green, gold, and red. I approached the site by car from downtown St. Paul, taking Sheppard Road past the Minnesota Science Museum. On the way I passed a number of new housing developments along the Mississippi River. The area was once an industrial park but is slowly being converted to high-end apartment complexes. There is a park that stretches along the length of the Mississippi from the downtown area past the

new apartments. A place that was once devoid of any pedestrian activity was bustling with the activity of people jogging and biking. As I drove past the apartments I noticed there are still pockets of light industrial activity. Between the site and the city is a massive bridge spanning the Mississippi River; connecting to the top of the bluffs on both sides of the river. After passing under the bridge, there are small shipping and packaging centers spread out over large concrete lots, with a power substation placed at the center of it all. I couldn't help but feel that in ten years the whole industrial lot would all be apartments as well. The site of the power plant is sandwiched between a grid of light industrial infrastructure and the Mississippi River.

On the way to the Island Station Power Plant, the massive metal clad chimney was visible from miles away. It towered over everything in the area. When I finally arrived at the site however, I was surprised at just how tall the chimney was compared to the rest of the structure. The building itself has four sides and measures approximately 100ft by 250ft. The building looks to be about 120ft tall by guessing and the chimney towers another 150ft above the building. Mind that all of these measurements are just approximations. The chimney is so tall that it casts a shadow over much of the hillside to the north of the site when the sun is low. The only



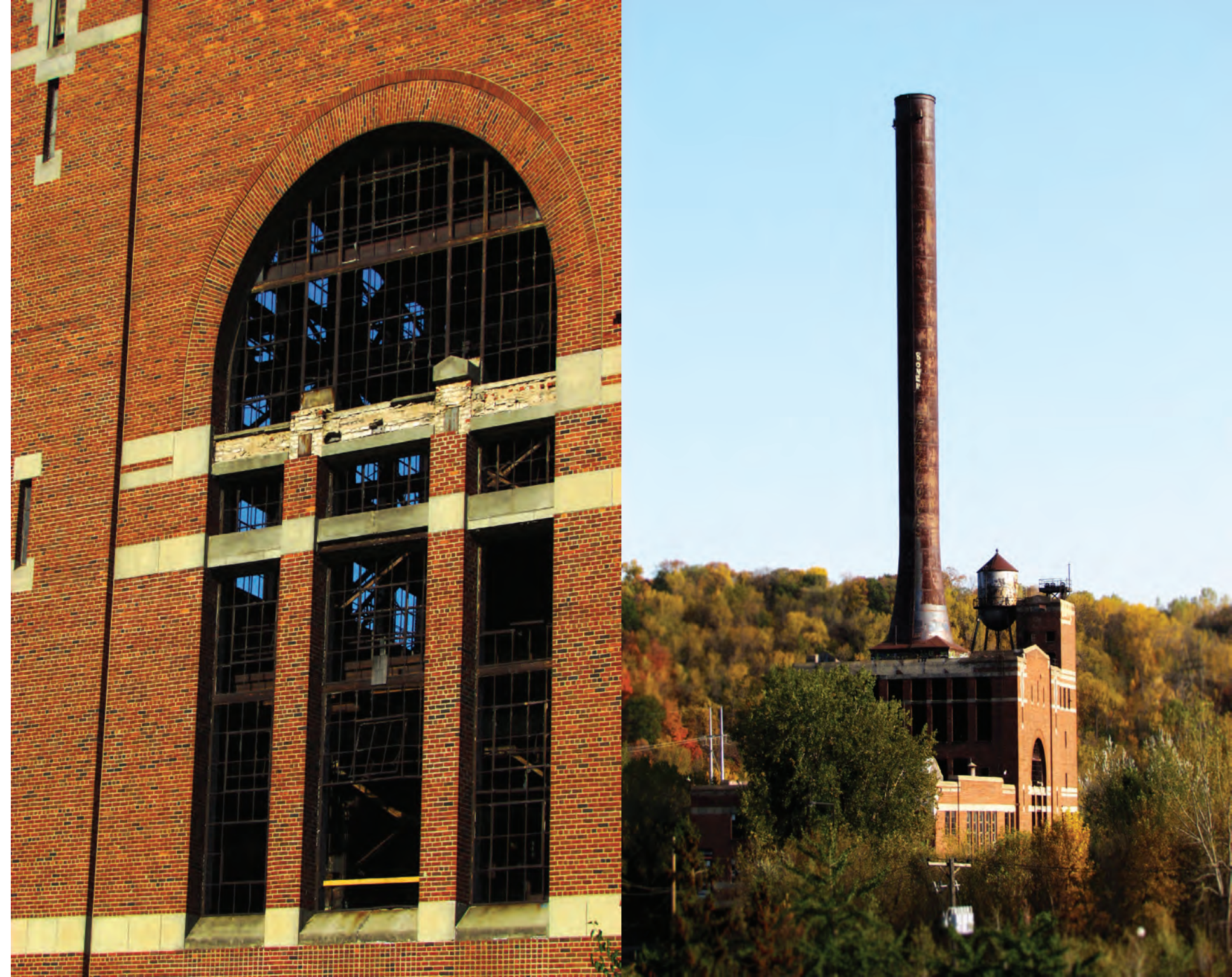
shadows cast on the plant are from the surrounding vegetation.

The building sits on a sizable peninsula on the north bank of the Mississippi River. The fall colors were strewn across the trees on the bluffs on the south side of the river. As I began to explore the site I noticed a number of small tertiary buildings around the site, likely related to utilities. There is a set of train tracks that defines the western boarder of the site and crosses the river on a rotating bridge section. There is a moderate amount of noise from the trains, however the dense vegetation between the tracks and the plant buffer much of the noise. There is not much noise from traffic since the road to the plant is side-street that only leads to more industrial builds and eventually leads to a dead end. There is pedestrian traffic however, since a walking path travels past the site towards the apartments to the East. The area surrounding the power plant is over grown with trees and brush. The vegetation is thick after years of neglect. The site is covered in low brush and tall grass. The trees vary in height. The soil is likely contaminated with industrial waste. I noticed a fair amount of trash strewn across the site, but that was to be expected. The power plant was in severe disrepair and much of the surrounding area is distressed. Graffiti was scrawled across the old bricks and many of the windows were broken

or boarded over. I did not venture into the building itself as the doors and windows were locked or boarded over.

The site is rich with unique textures created by years of human absence. The brick façade of the plant is weathered and cracked, and portions of concrete are beginning to fall away. The exposed metal mullions, railings and rafters are coated in a skin of rust. The graffiti stains many of the areas within arm's reach. The vegetation is rough and resists any human intrusion. The only noticeable changes in topography are manmade around the sides of the power plant. There are minor changes in slope over the peninsula. The slope is steeper close to the river. The area across the river from the site is a sandstone bluff with a severe slope. The river is major part of the site. The bay created by the peninsula has the potential to become a marina. The site is high enough above the river that minor flooding should not be a problem, but major flooding may still affect the plant.

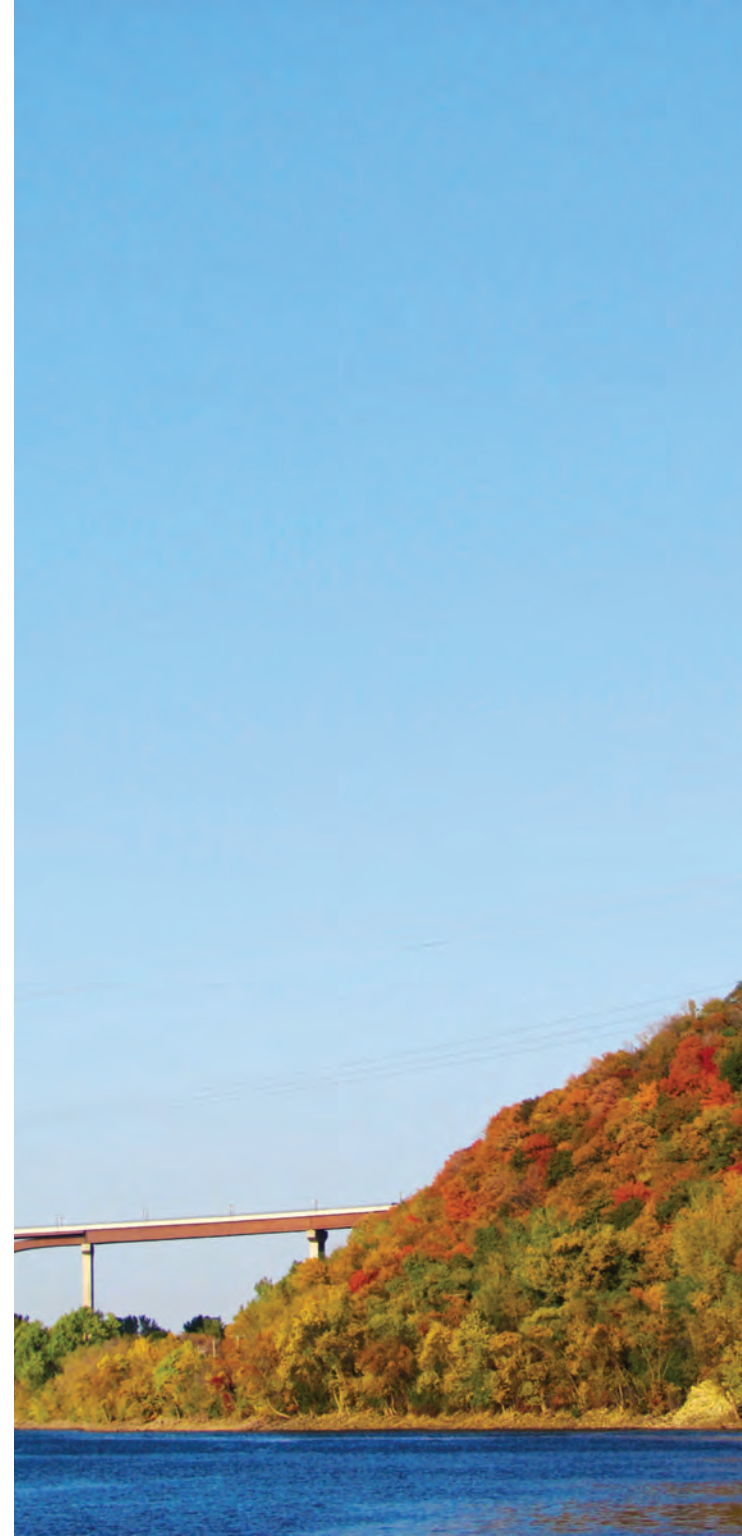
There were two separate sections of power lines that crossed the site at the end of the peninsula and joined at the nearby substation. There was a large sign warning of a gas pipeline that crossed under the river and passed underground through the site. These utilities will impact the boundaries



of the final design. After exploring the perimeter of the power plant, I ventured to the end of the peninsula. There was a narrow dirty path, slowly being reclaimed by the underbrush. At the end of the site there was a strange concrete box, about 20ft by 20ft and 15 ft deep, set into the river along the shore. It was covered in moss and algae. After this I went back to the power plant. The area has great natural lighting and there is nothing that is really large enough to cast a shadow over it nearby. After thoroughly investigating the site, I proceeded to travel to the south side of the river to view the site from a distance. Walking along the river I noticed a great deal of boat traffic on the river. There were large freight barges, small personal boats and even a historic river boat. The Island Station Power Plant has an iconic appearance from every angle.

After a day of investigating the site and the surrounding area I headed back to St. Paul to briefly reacquaint myself with the city. I stopped by the Union Depot, a historic train station that is currently being restored to function as a transit hub for the city. I was inspired by the spirit of the project. St. Paul is growing and my thesis project will follow the momentum of progress. St. Paul has always been a city of history and character and this thesis will be as well.







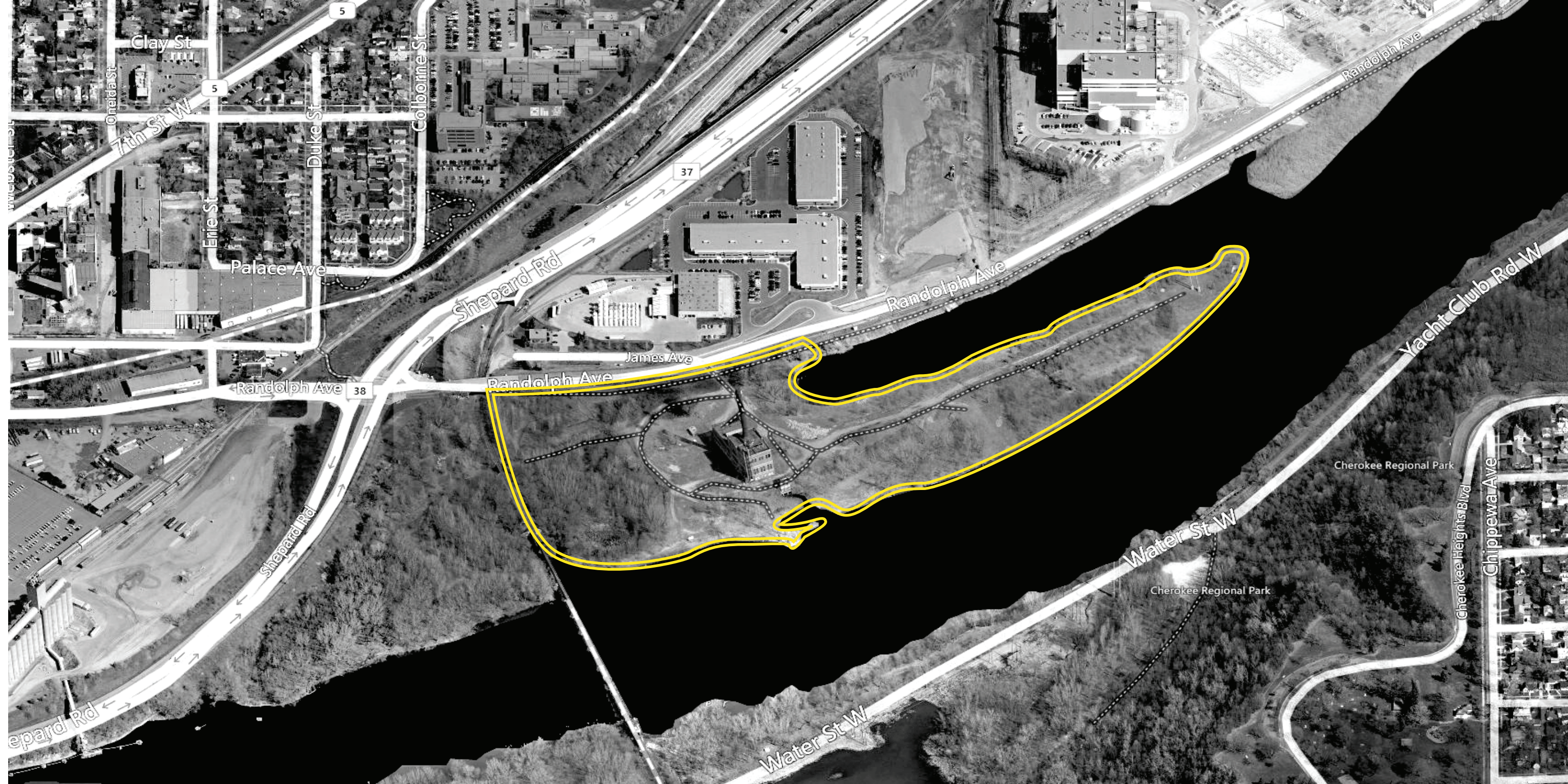


Figure 5.1 Site Bird's Eye View

site: Quantitative Analysis

The following charts and diagrams illustrate the various quantitative aspects of the Island Station Power Plant Site. An accurate understanding of weather patterns, soil types, wind speed, sun path, and ground slope all play an essential part in the proper development of a project.

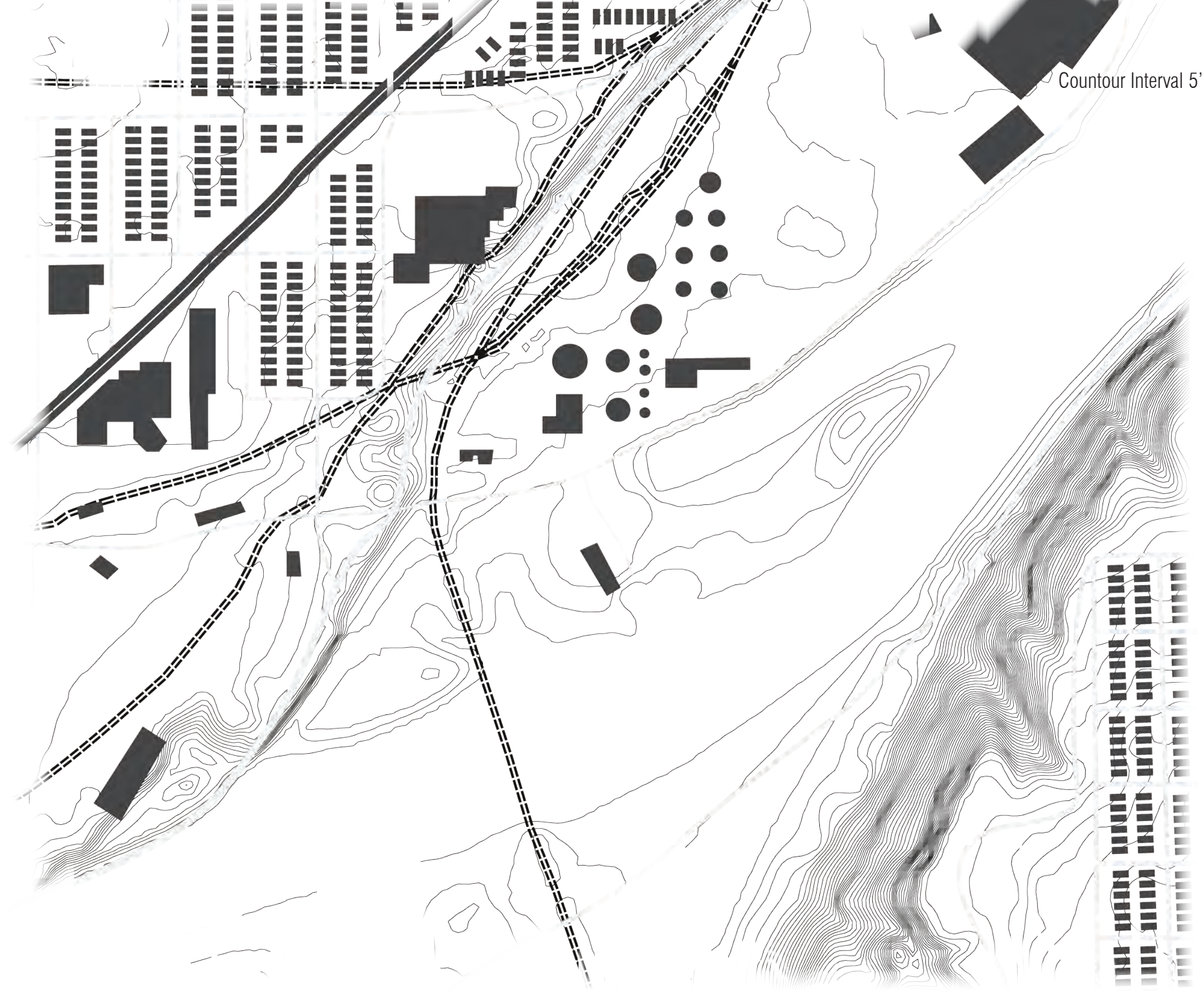


Figure 5.2 Topography

Soil & Slope Analysis

SOIL:

- Type 1.) Low Terrace Sand & Silty Sand
- Type 2.) Ice contact deposits, cobbly sand and silty sand
- Type 3.) Preglacial Outwash Sand: basal part is cobbly
- Type 4.) Grey till complexity intermixed w/ red-brown till
- Type 5.) Platteville Formation & Glenwood Shale, undivided
- Type 6.) St. Peter Sandstone
- Type 7.) Prairie Du Chien Group

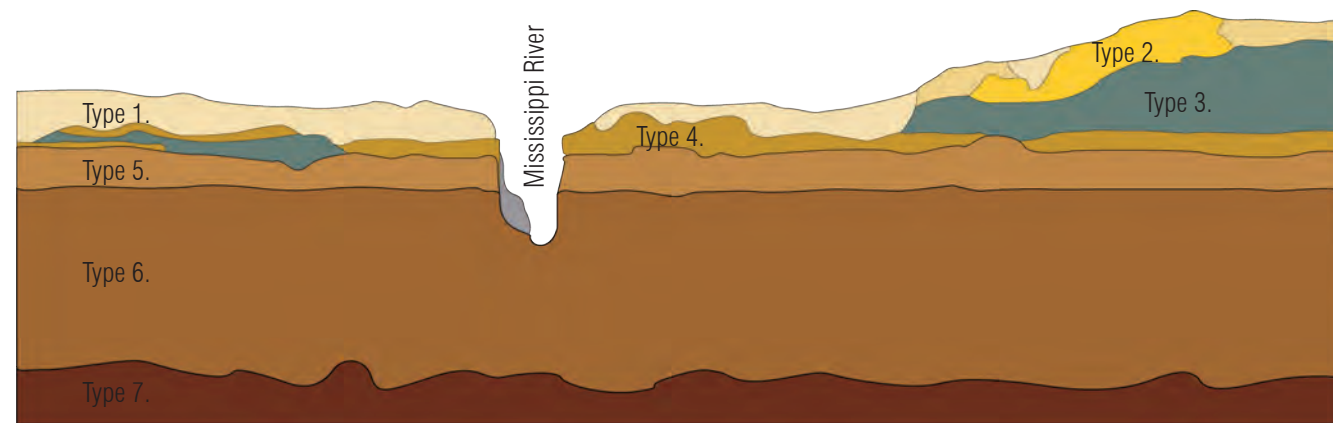


Figure 5.3 Soil Diagram

Slope Analysis

- 0 - 10% Slope
- 10 - 25% Slope
- > 25% Slope

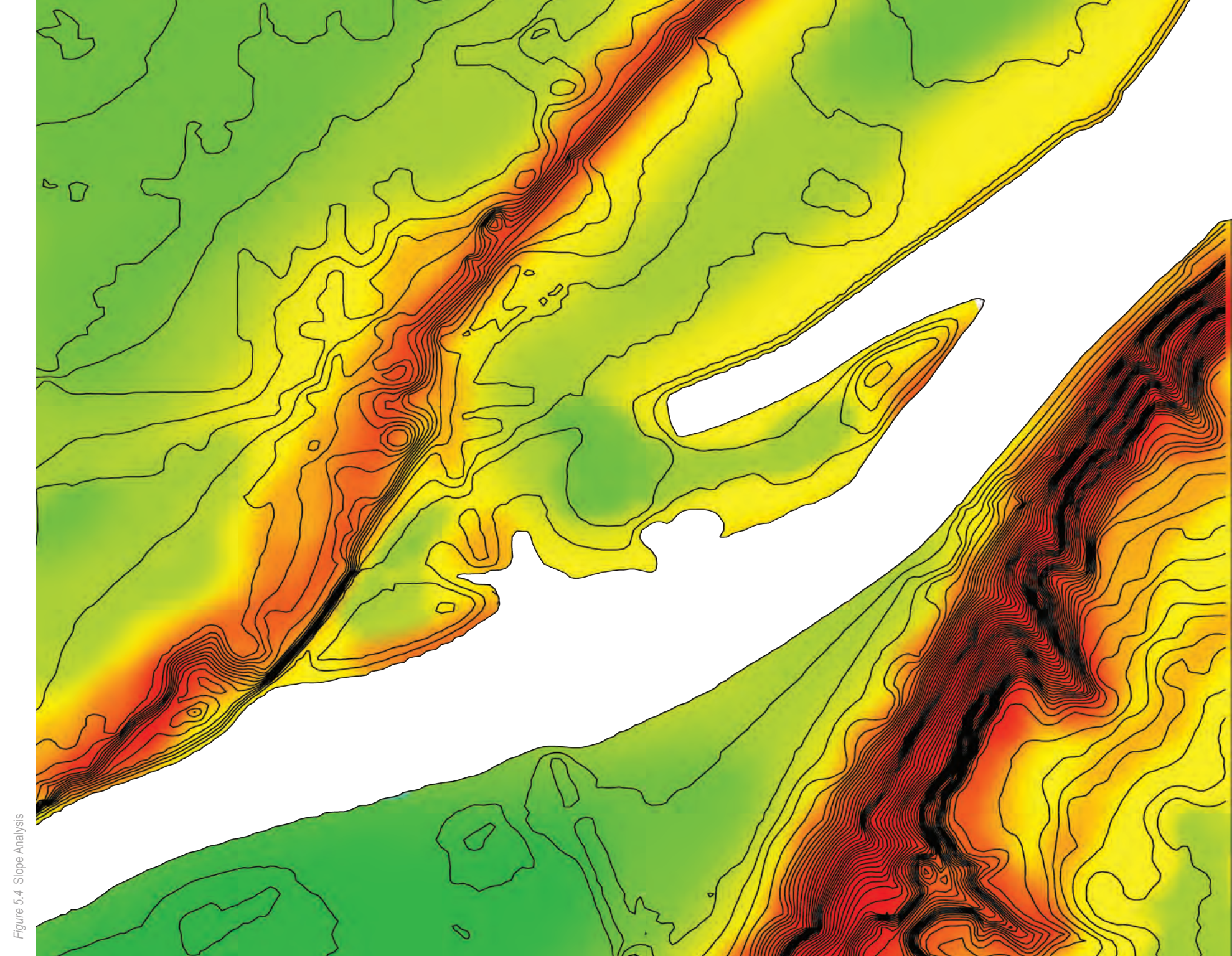


Figure 5.4 Slope Analysis

Sun Path, Solar Climate, Shading

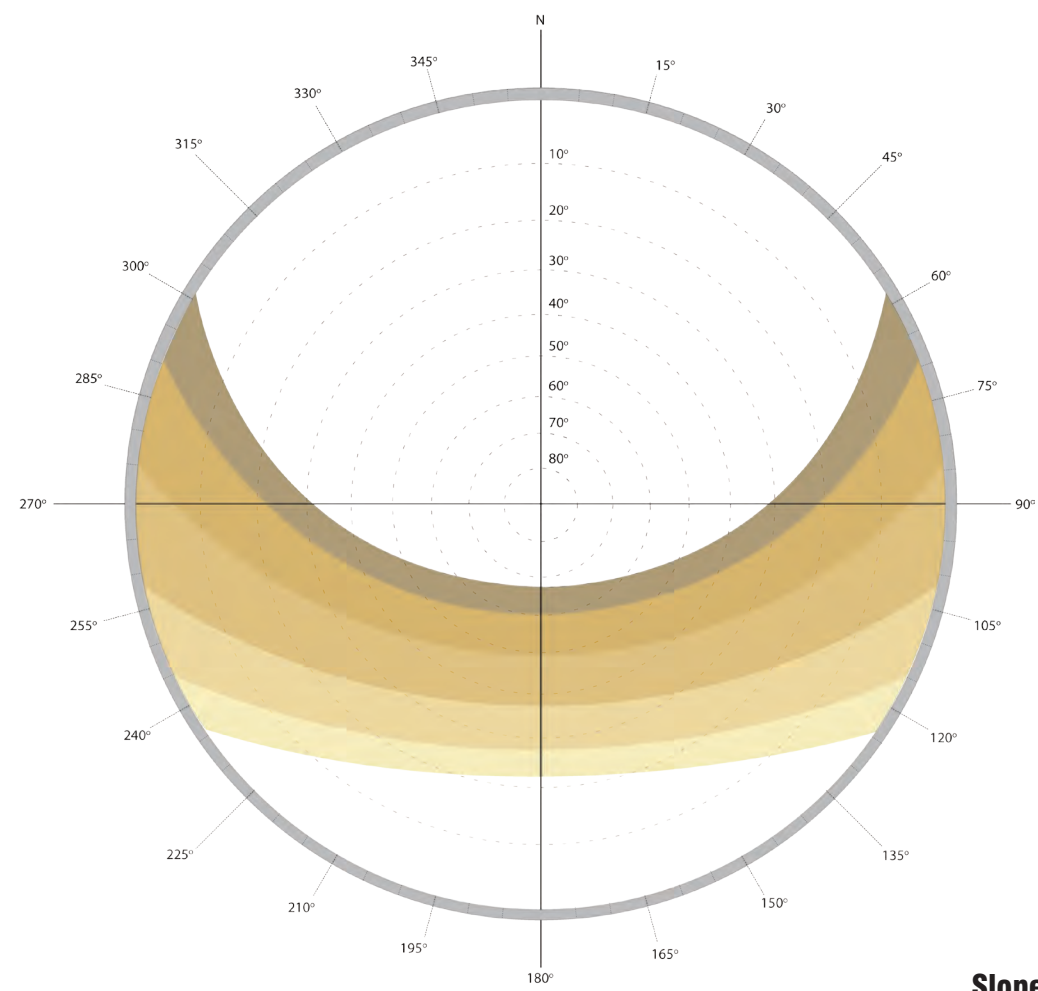


Figure 5.5 Sun Path Diagram

Slope Climate Analysis

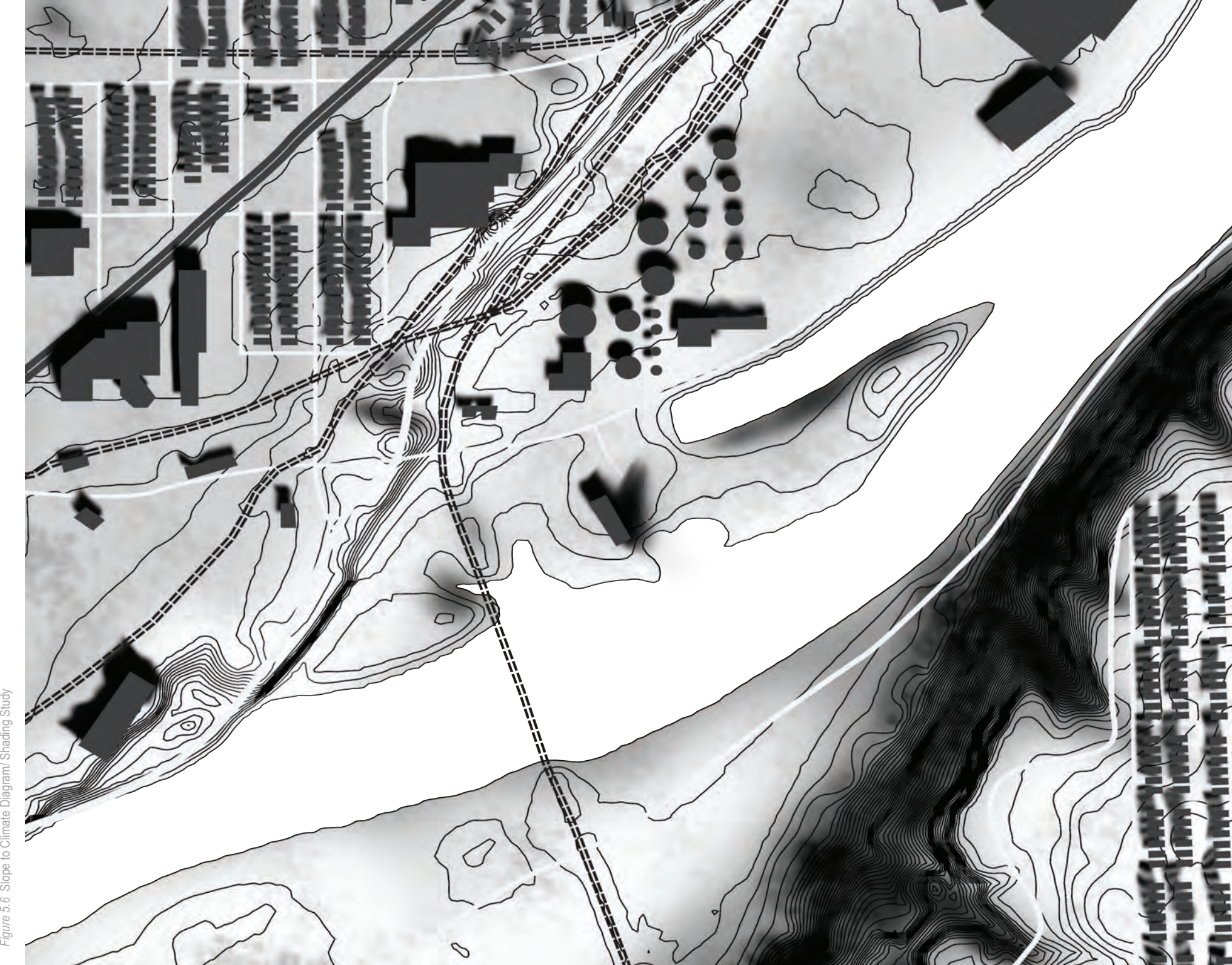
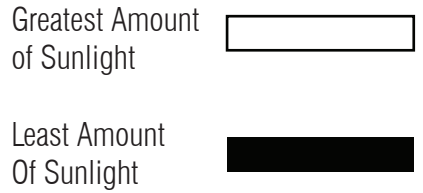


Figure 5.6 Slope to Climate Diagram/ Shading Study

Wind Rose & Site Activity Map

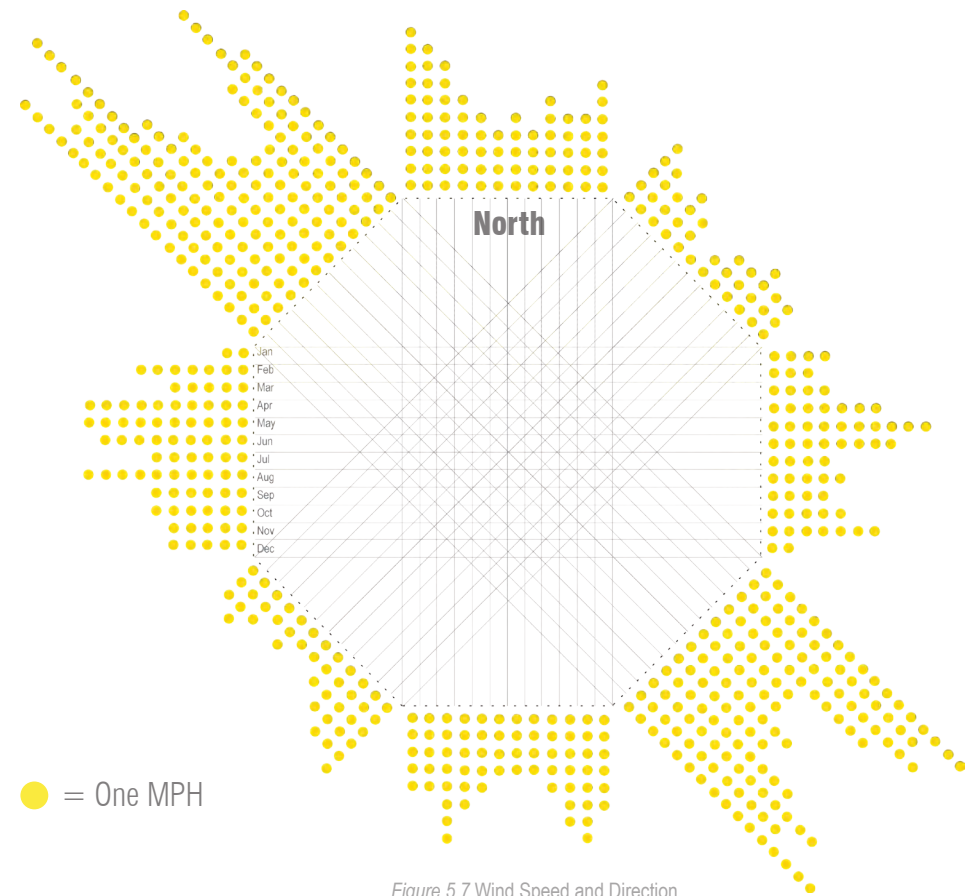


Figure 5.7 Wind Speed and Direction

Site Activity Map

Frequent Vehicular Traffic >>>>>>>

Noise

Wind Currents

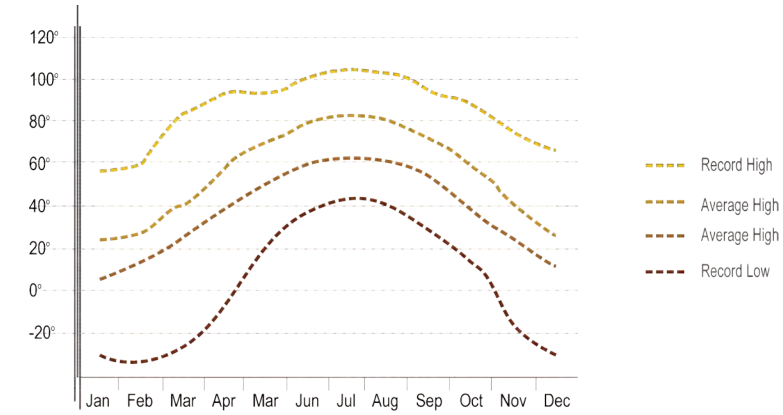
Figure 5.8 Site Activity Map



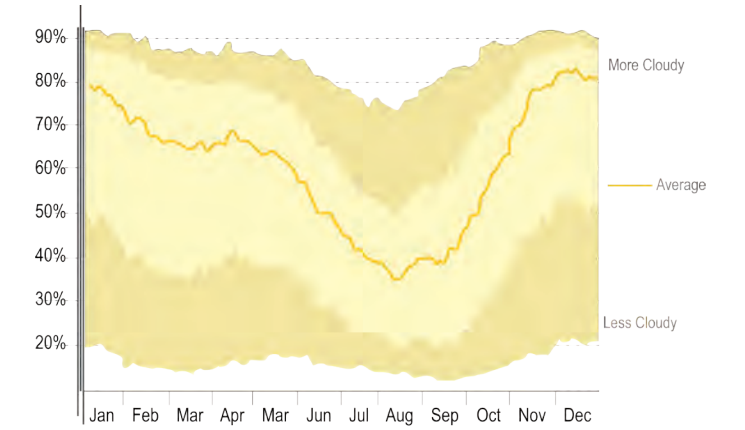
Shadow Study & Annual Climate Data



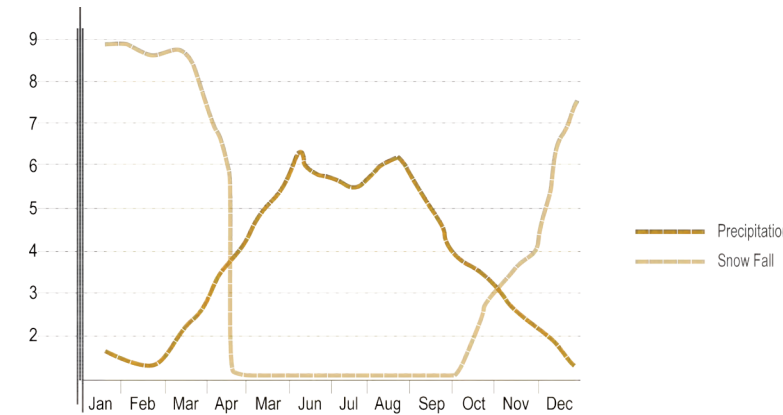
Monthly Temperature (°F)



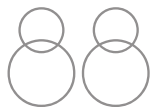
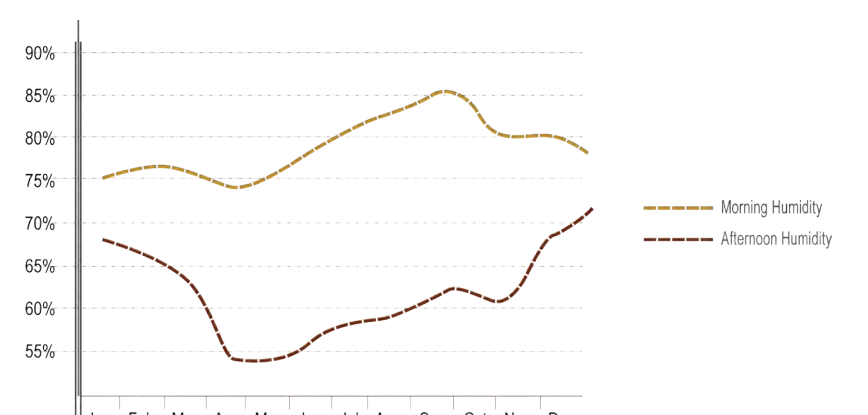
Cloud Cover (%)



Precipitation & Snowfall (in)

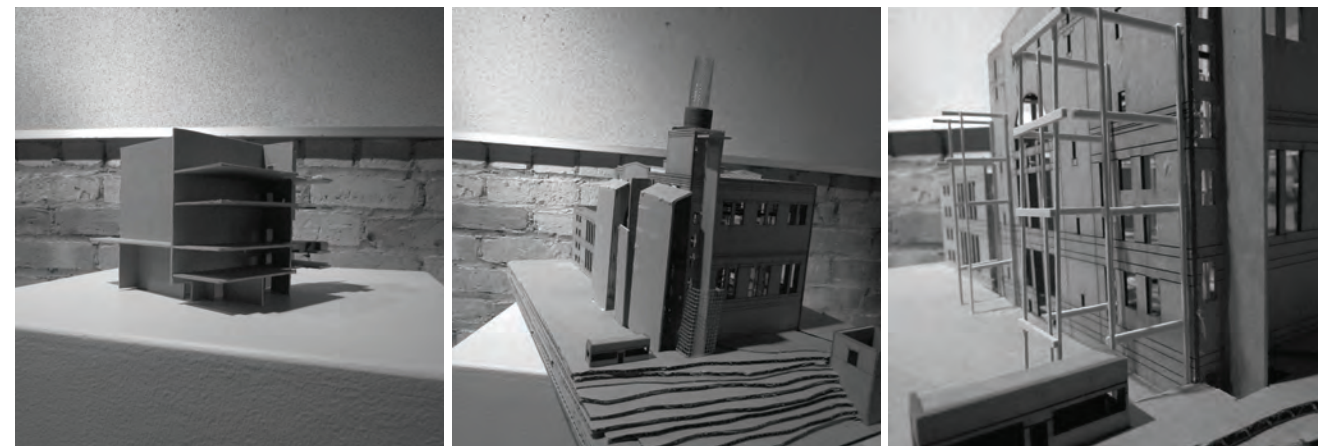
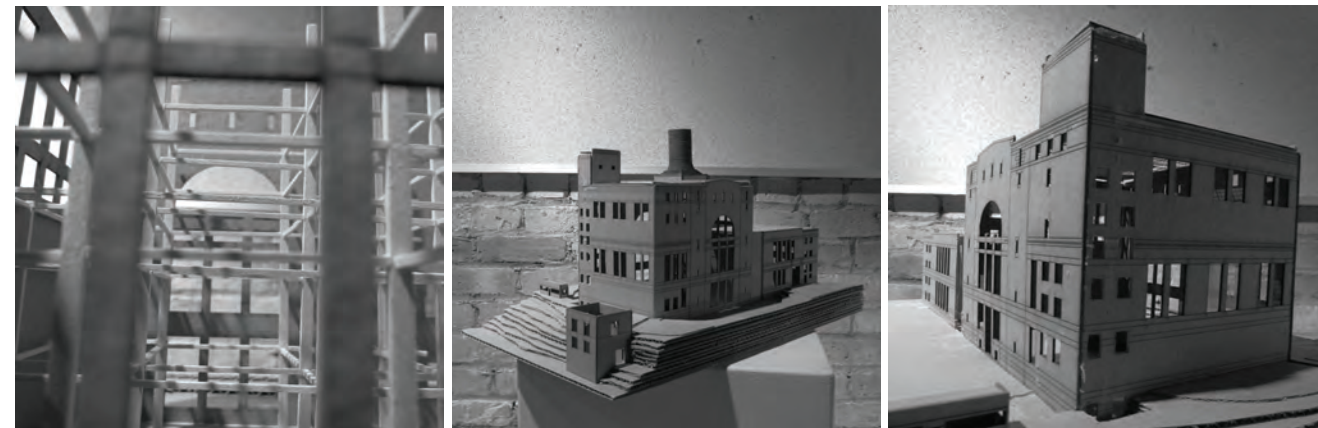
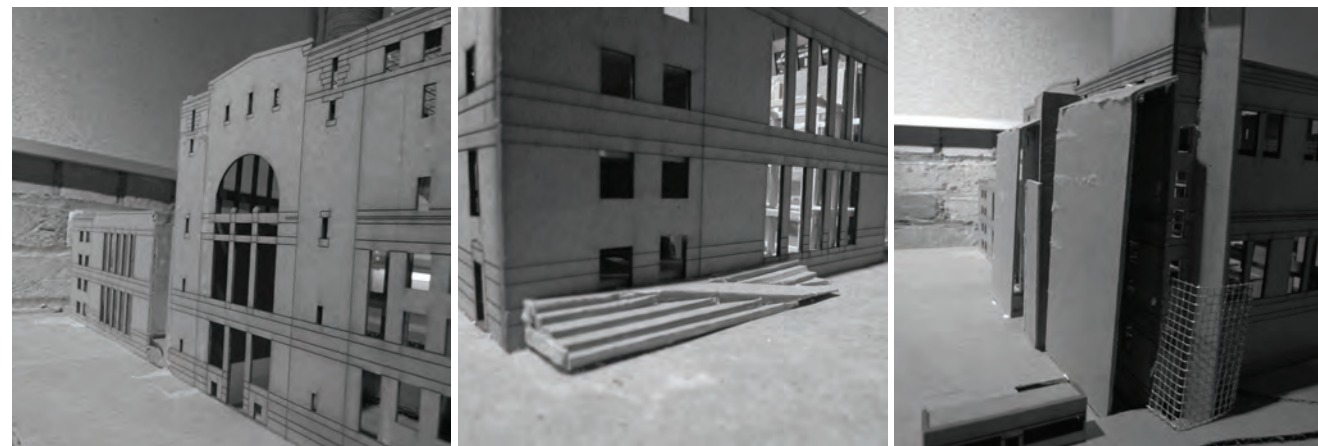
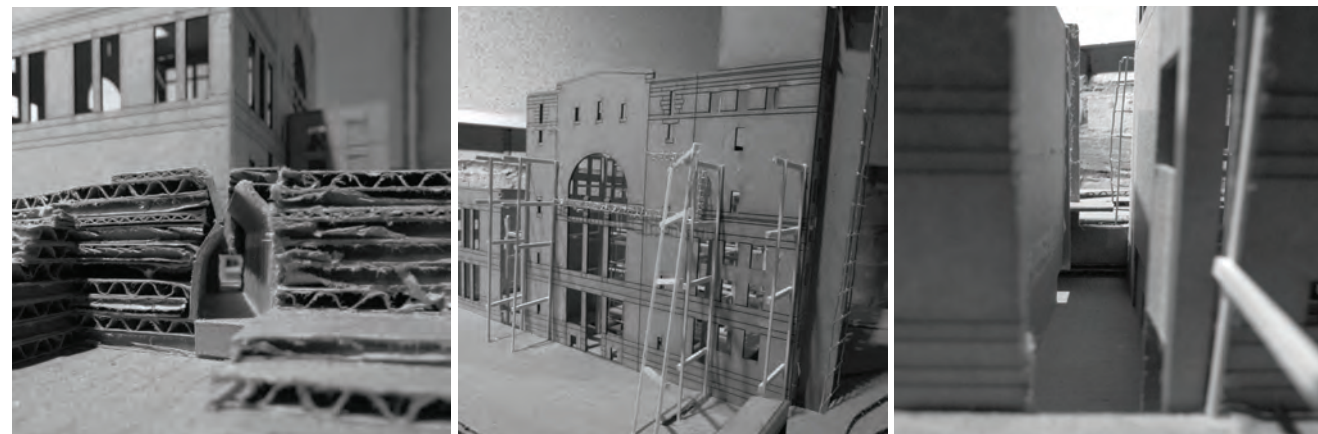
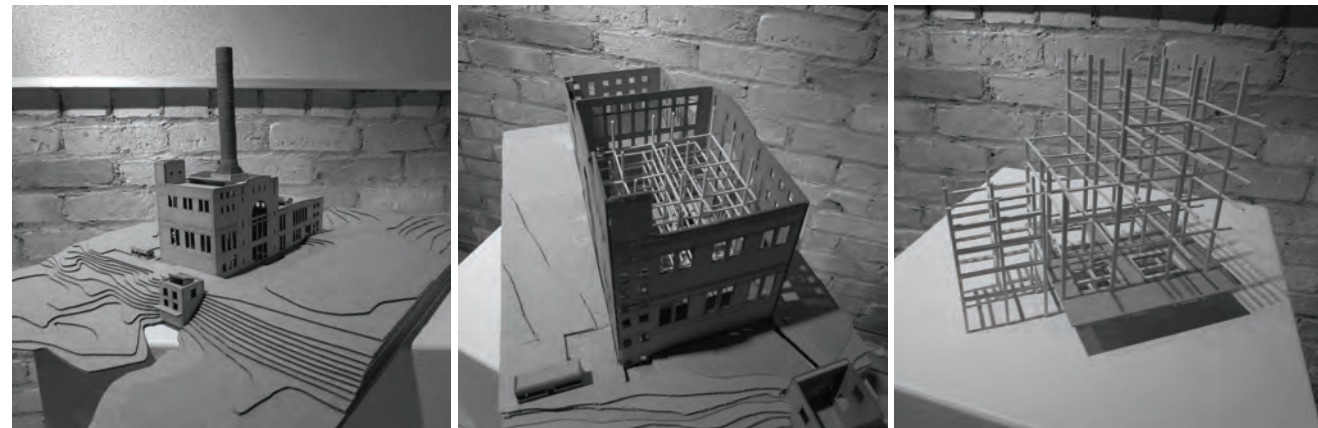


Monthly Humidity (%)

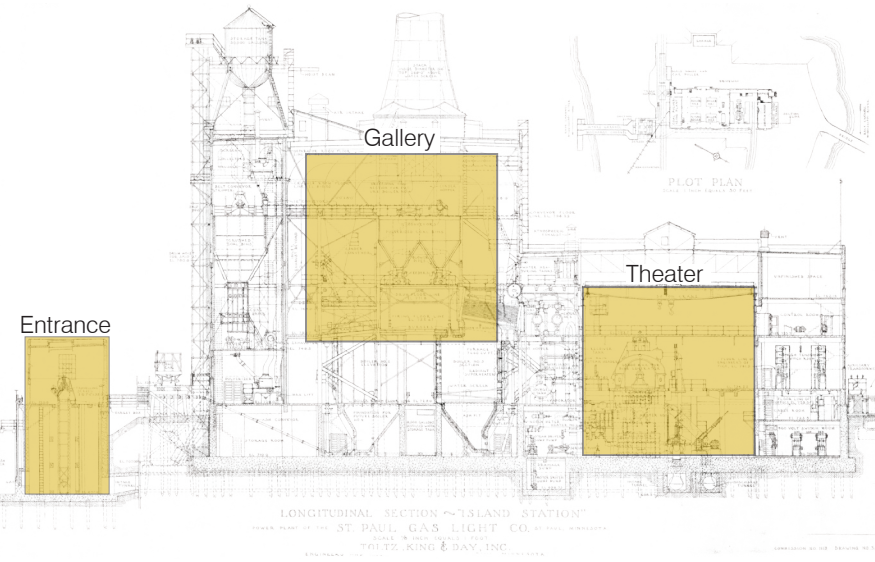


project

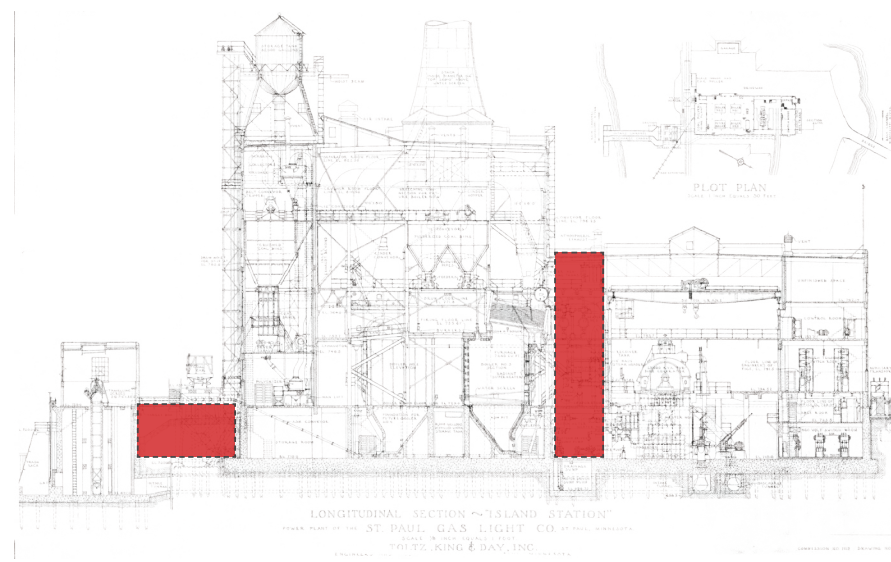
process



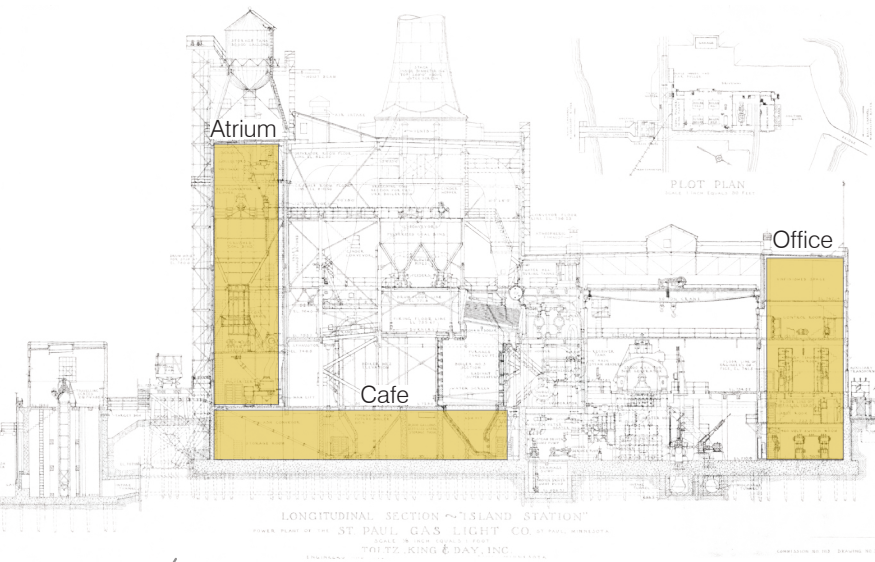
Primary Space



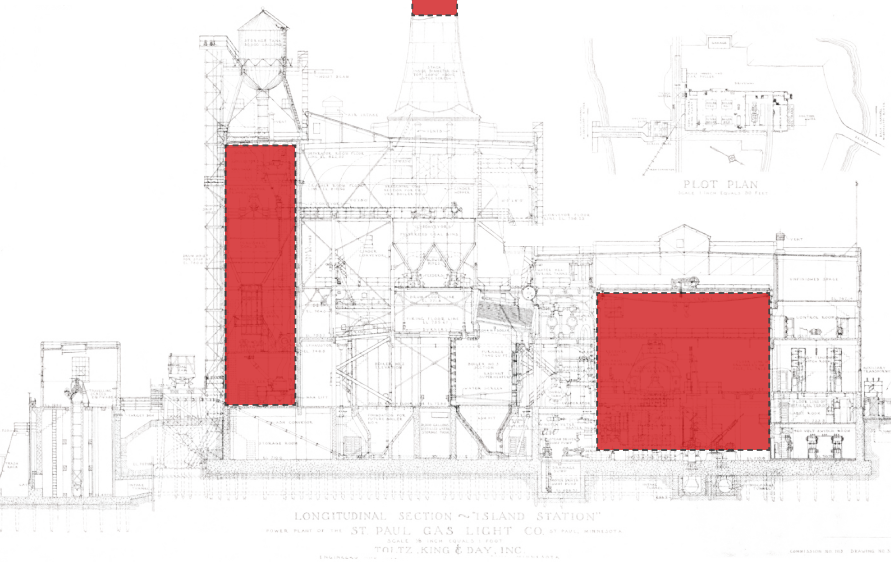
Primary Modification



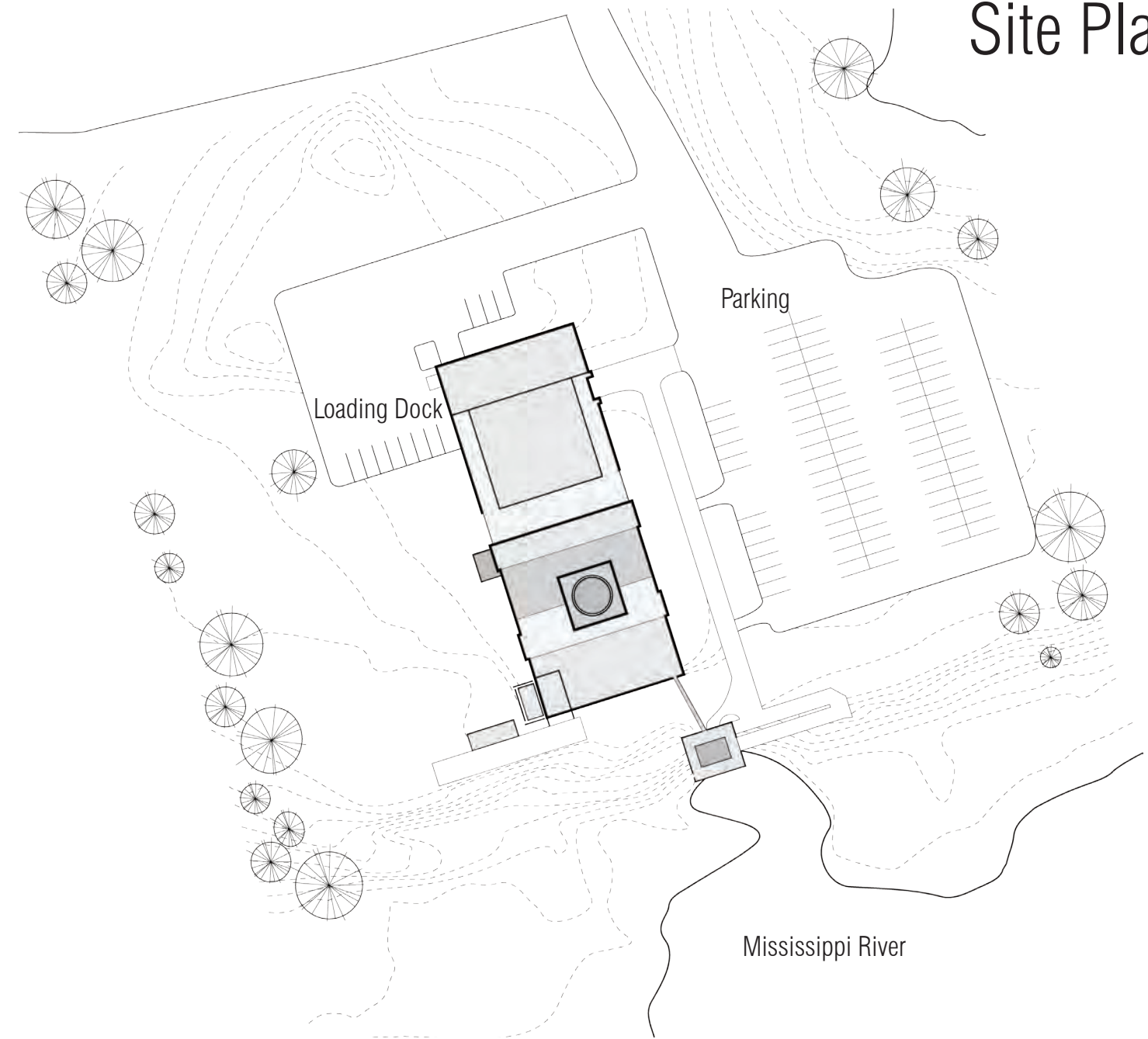
Secondary Space



Secondary Modification



Site Plan



design

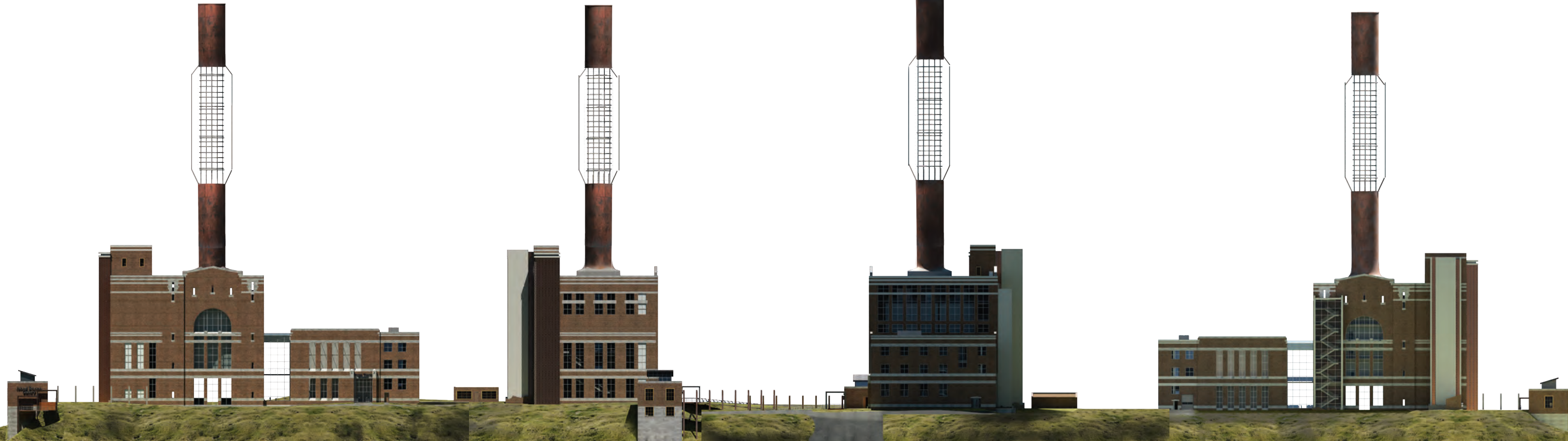
The Island Station Gallery utilizes the key features of the power plant to create a variety of spaces and experiences. Unique features of the design include the entry sequence, basement cafe, galleries, and black box theater. The entrance to the begins with the satellite building south of the main structure. A path over the river bank leads into an underground tunnel that empties into a grand atrium. The sequence subtly compresses and disorients patrons in a way that prepares them for the unique spaces of the gallery. From the atrium, patrons can go down to the cafe; a vast space lit by the holes left behind by the old furnaces. Most of the industrial character of the basement is preserved even without the old machinery. The basement lets out to another atrium then into the theater which was once occupied by the turbines of the plant. The black box theater has adjustable wall panels and seats to allow for a variety of avant garde performance types. The industrial crane from the turbine hall has been preserved to be used during performances for staging or lighting. Back at the other end of the building, the grand atrium leads up to the various gallery floors. The variety of spaces can support traveling shows, local exhibitions, or the permanent surrealist collection. The galleries are held aloft in a glass box pierced and supported by the aged metal of the existing building. The blending of old and new is especially present in the galleries with the metal contrasting with the modern purity of the channel glass, white walls, and polished concrete floors. The final focal point is the old smoke stack. The middle section is dissected and rebuilt as a ghost structure. At night the structure is lit and becomes a beacon, drawing interest to this strange place lost in time.

East

South

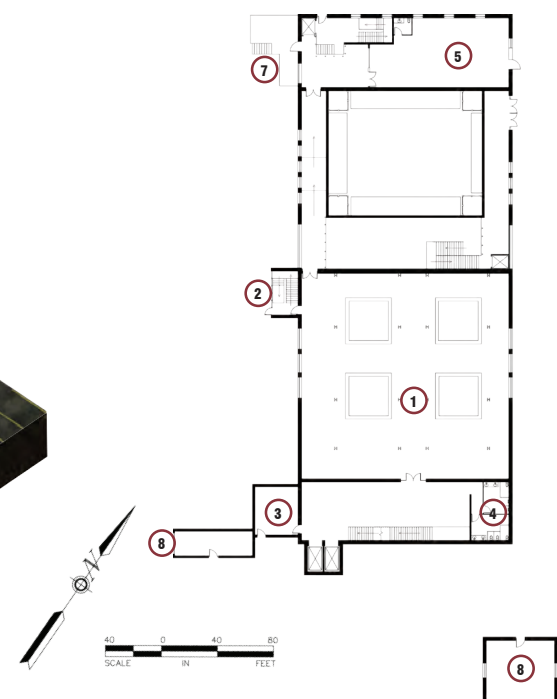
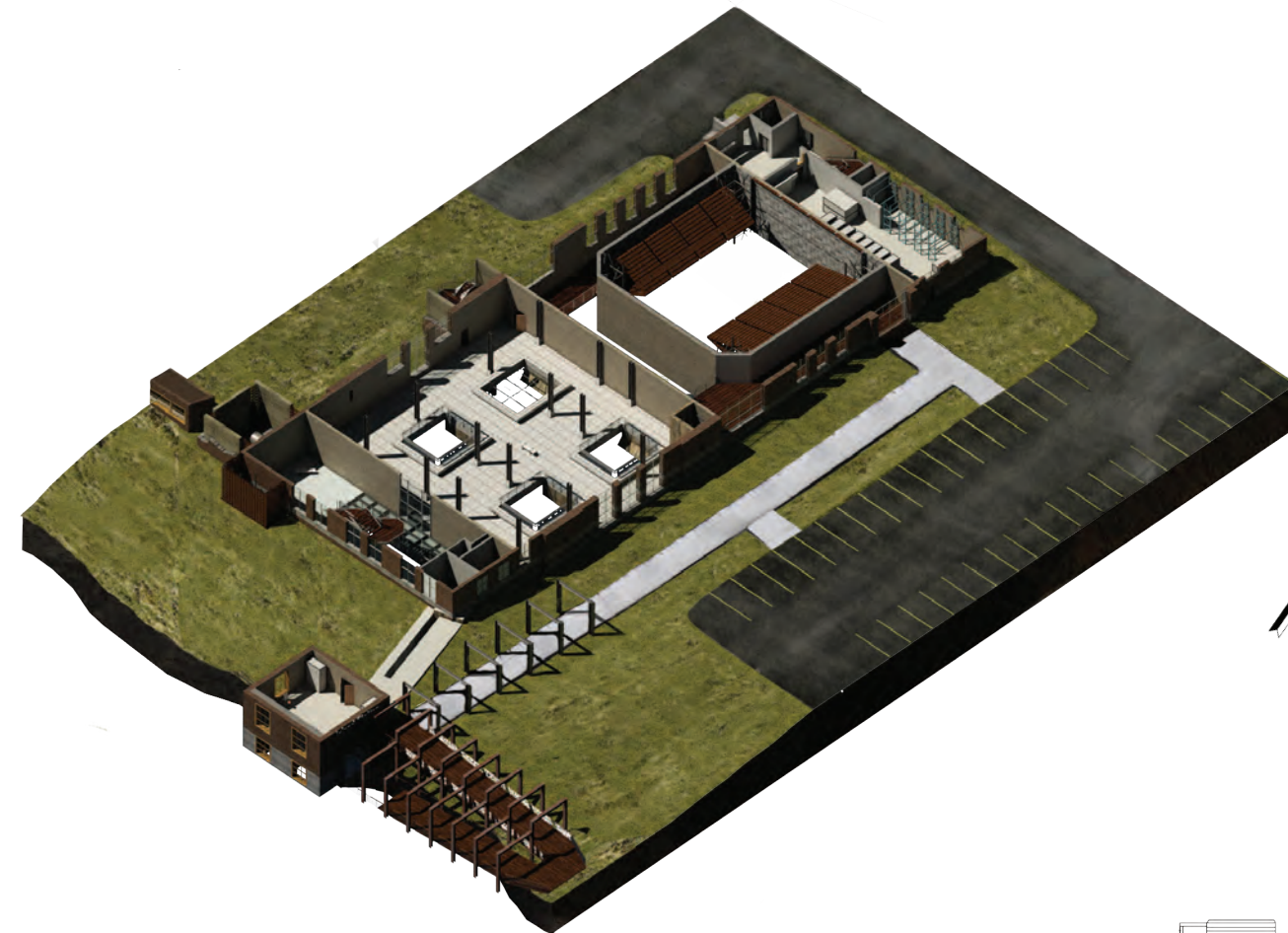
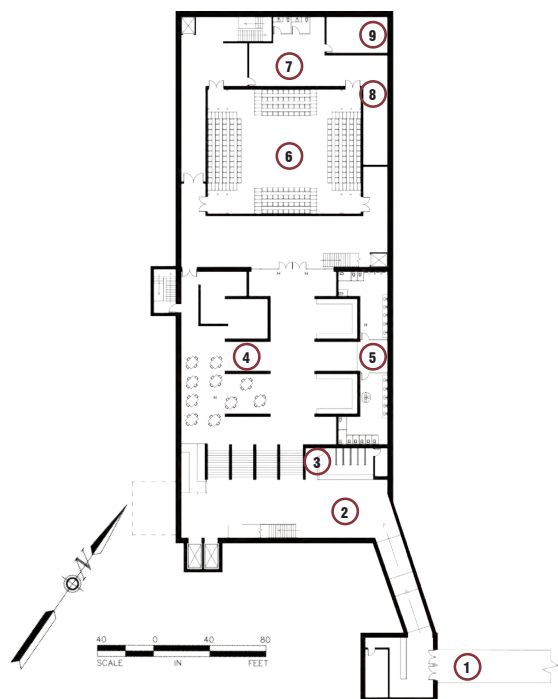
North

West

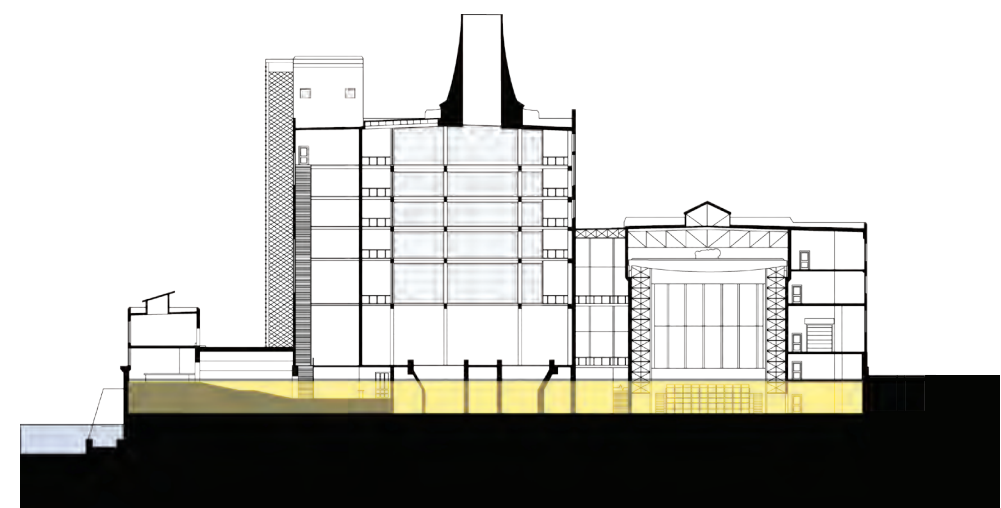


Basement

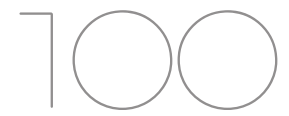
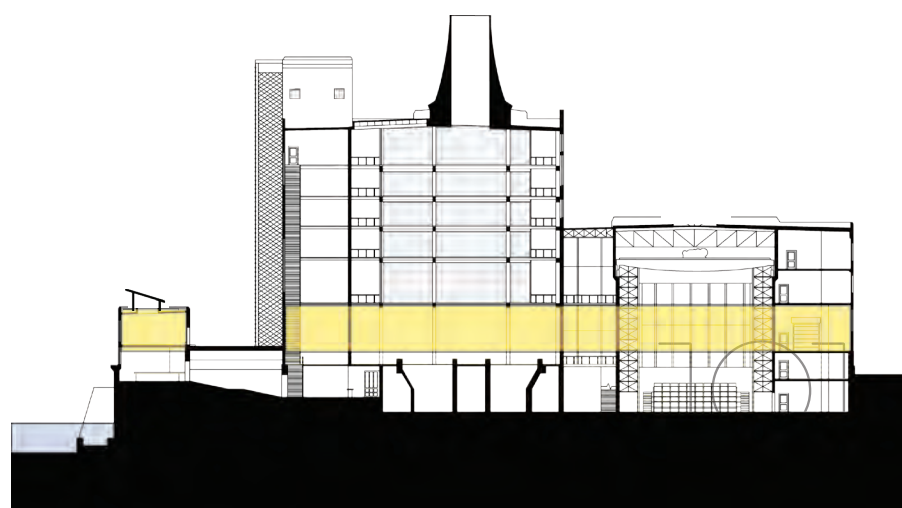
Level 1



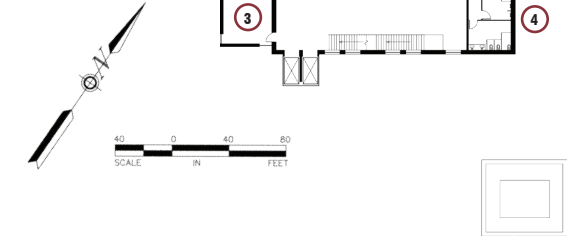
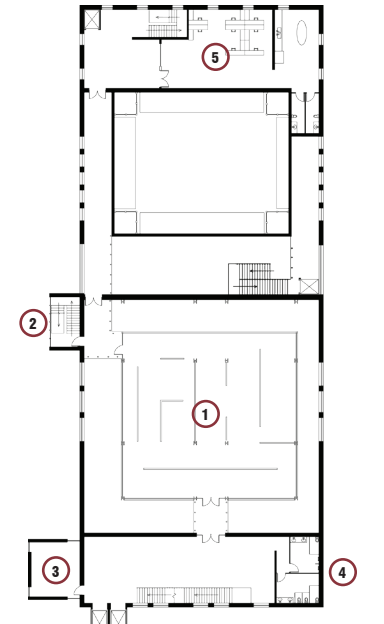
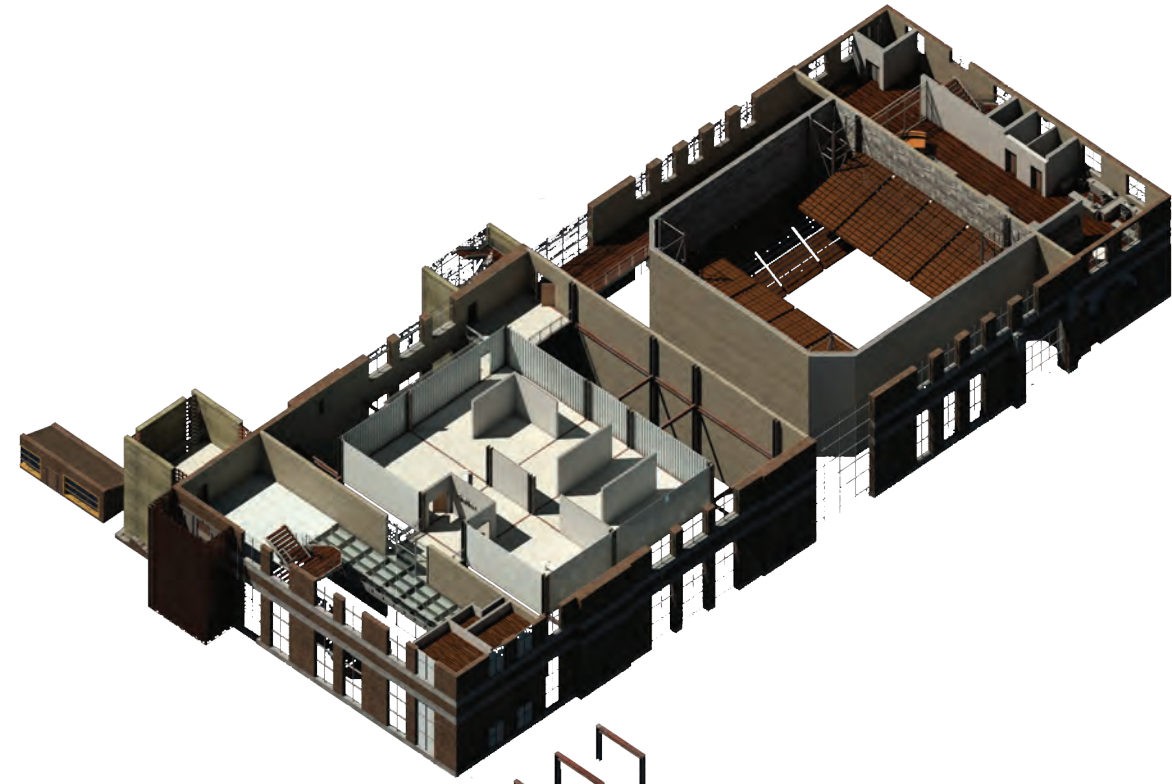
- ① Entrance - 506 s.f.
- ② Foyer - 1,836 s.f.
- ③ Coat Check - 336 s.f.
- ④ Cafe - 1,656 s.f.
- ⑤ Restrooms- 1,404 s.f.
- ⑥ Theater - 5,200 s.f.
- ⑦ Security - 2,520 s.f.
- ⑧ Storage - 1,820 s.f.
- ⑨ Mechanical - 1,300 s.f.



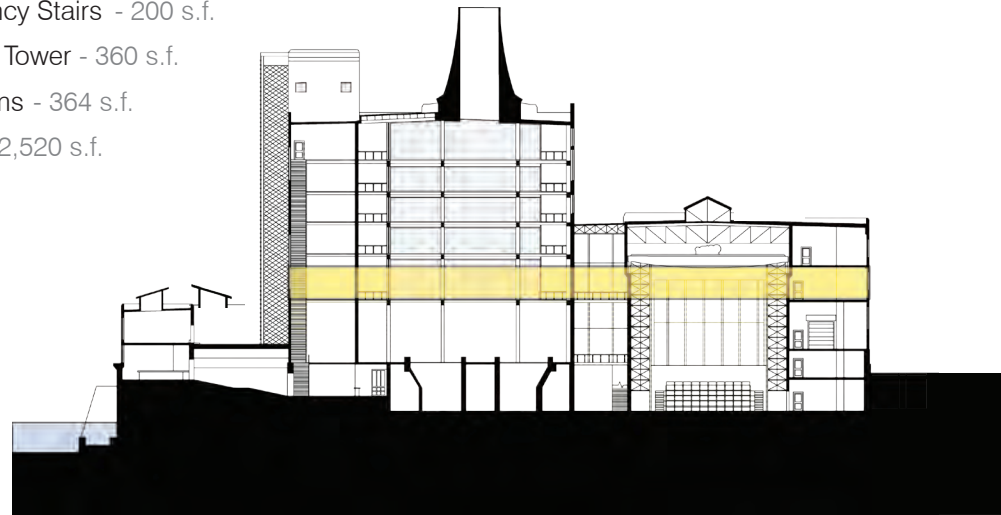
- ① Exhibition Hall - 5,480 s.f.
- ② Emergency Stairs - 200 s.f.
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.
- ⑤ Storage - 2,520 s.f.
- ⑥ Theater Entrance
- ⑦ Loading Dock
- ⑧ Rentable Studio - 436 s.f./ 500 s.f.



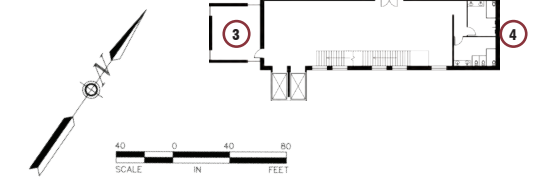
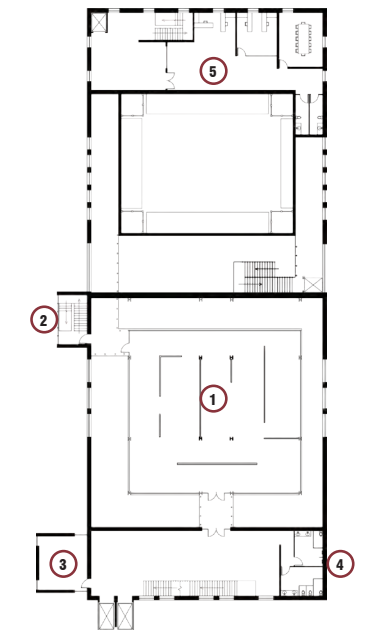
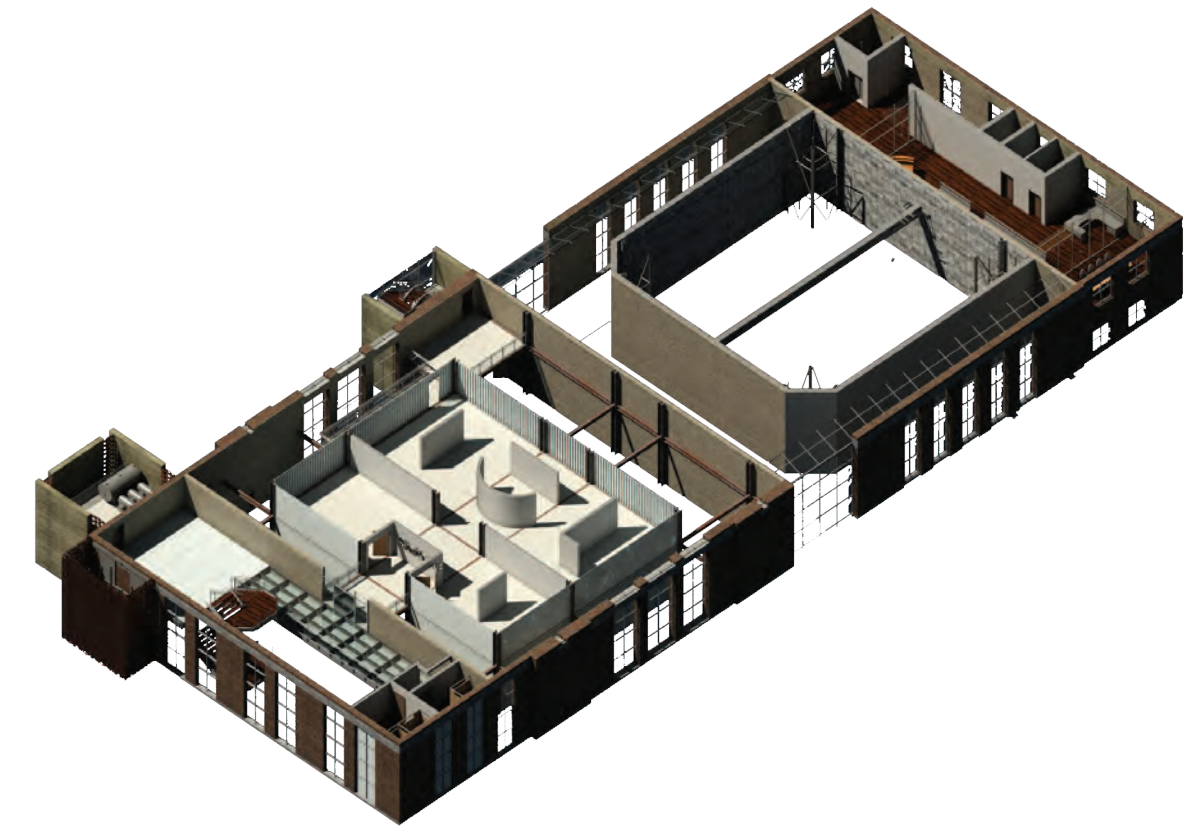
Level 2



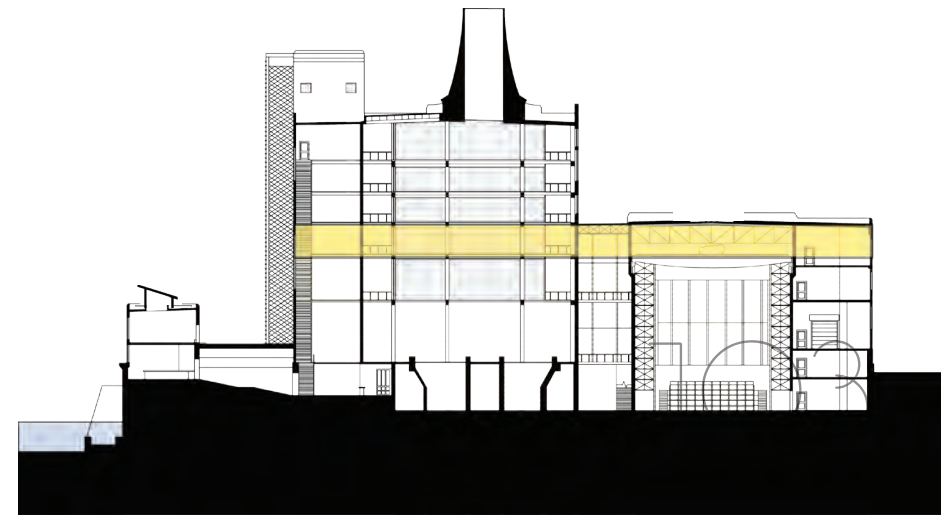
- ① Gallery - 3,380 s.f.
- ② Emergency Stairs - 200 s.f.
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.
- ⑤ Office - 2,520 s.f.



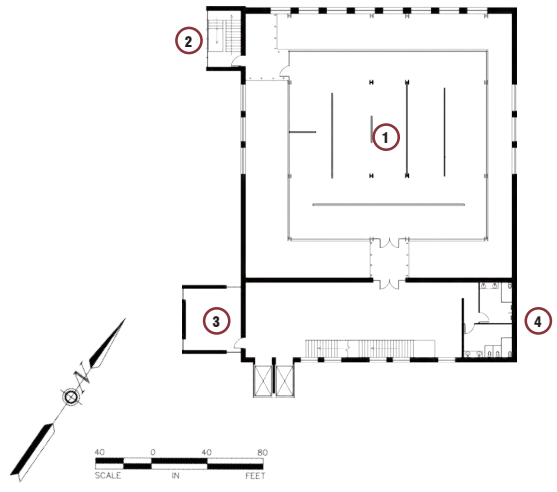
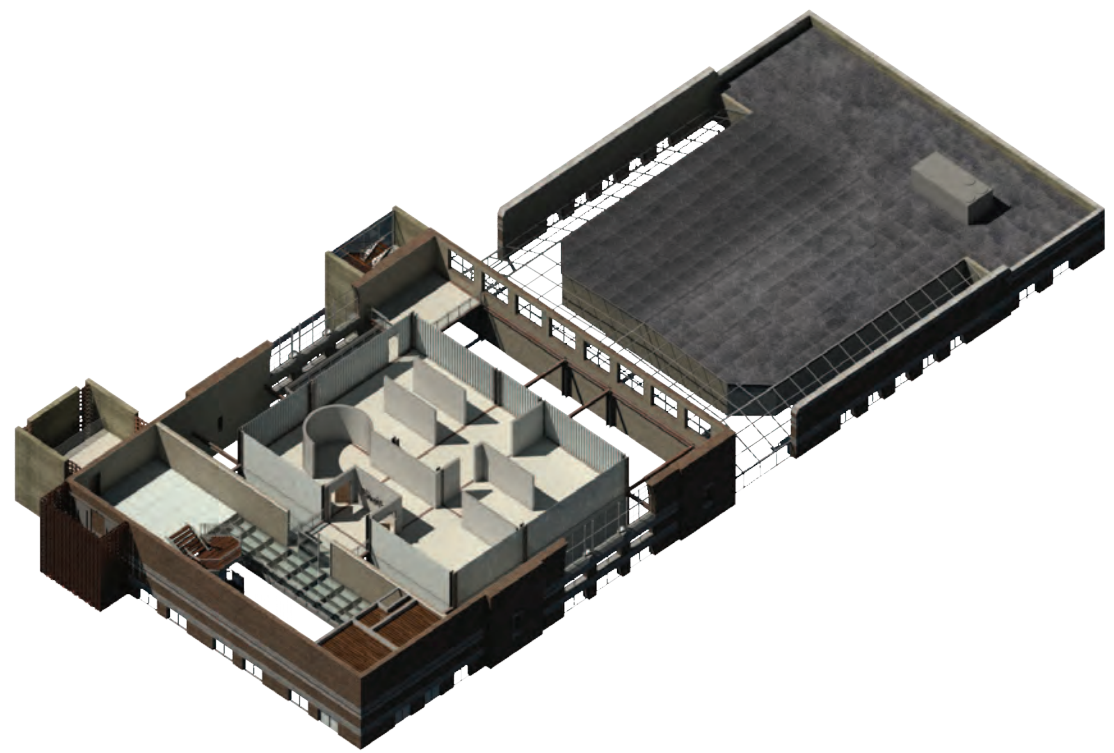
Level 3



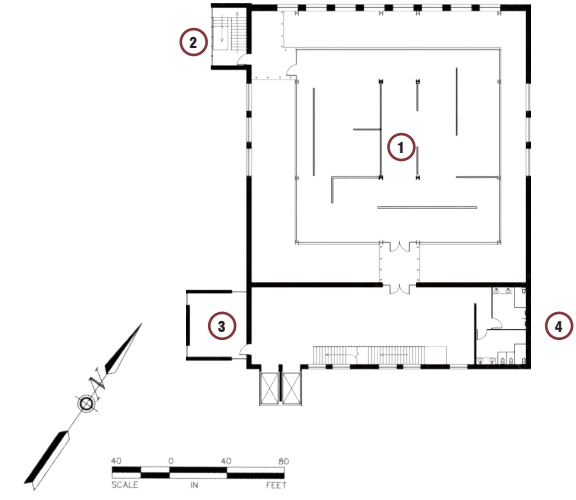
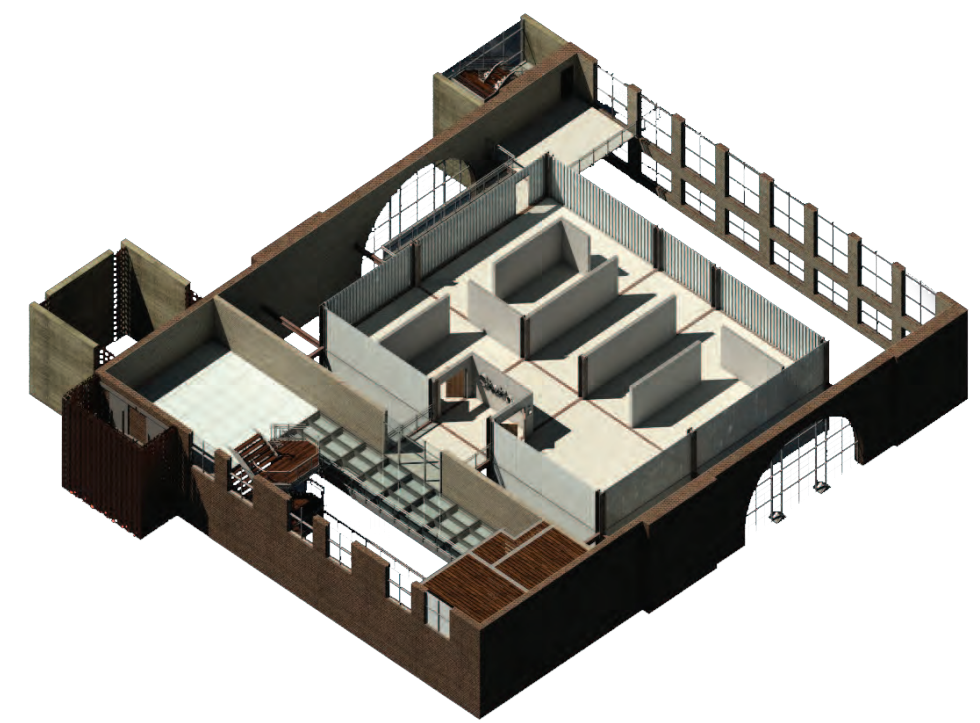
- ① Gallery - 3,380 s.f.
- ② Emergency Stairs - 200 s.f.
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.
- ⑤ Office - 2,520 s.f.



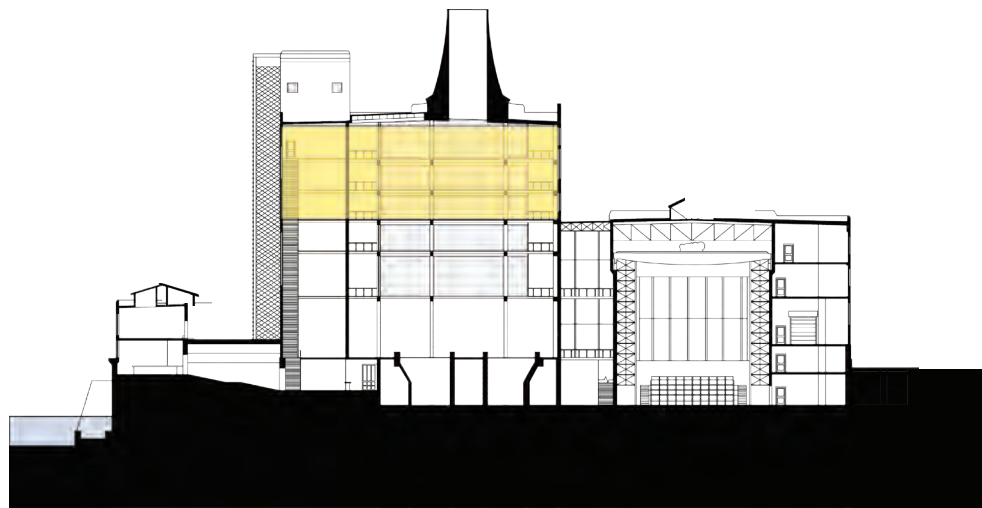
Level 4



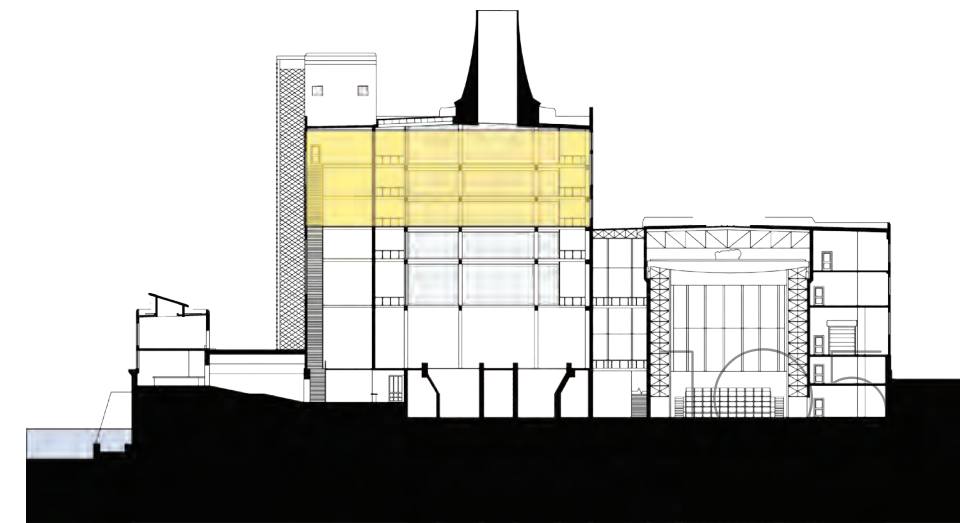
Level 5



- ① Gallery - 3,380 s.f.
- ② Emergency Stairs - 200 s.f.
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.

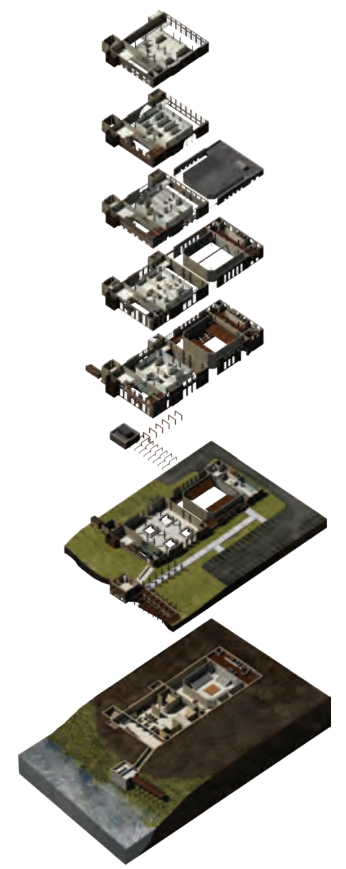
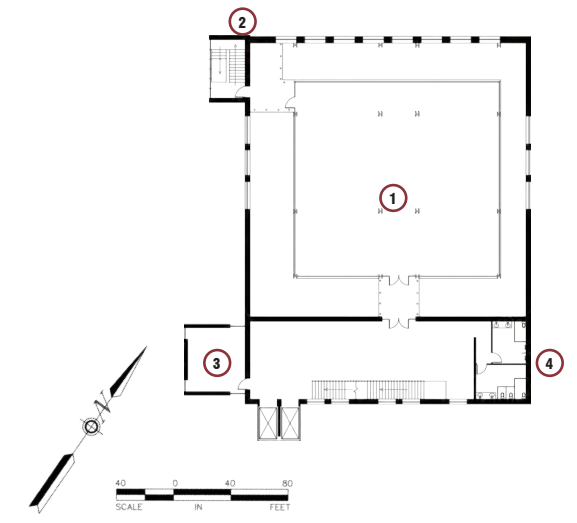
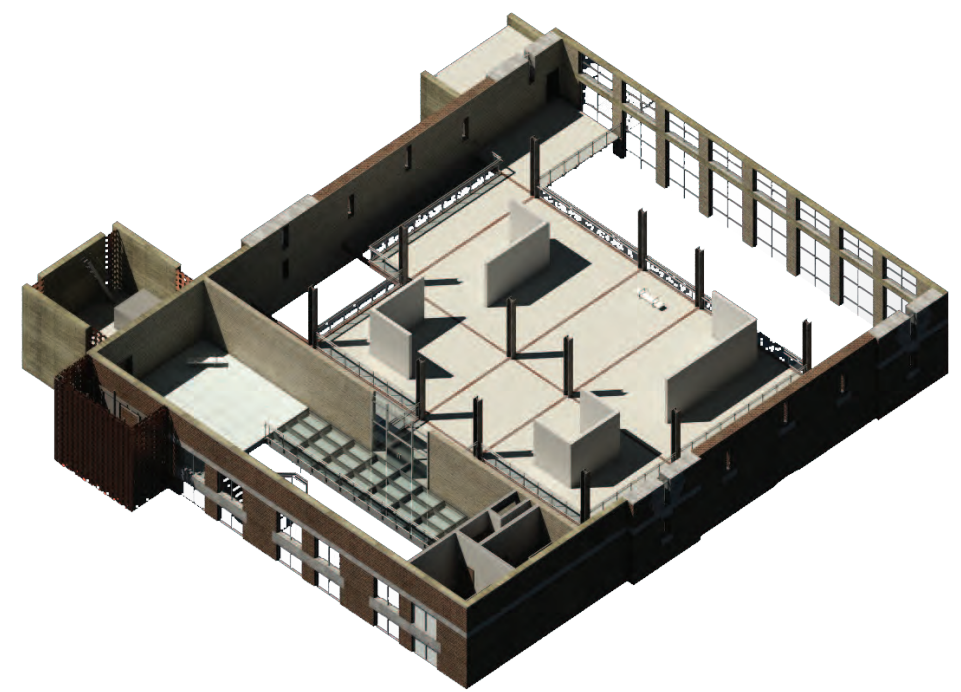


- ① Gallery - 3,380 s.f.
- ② Emergency Stairs - 200 s.f.
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.

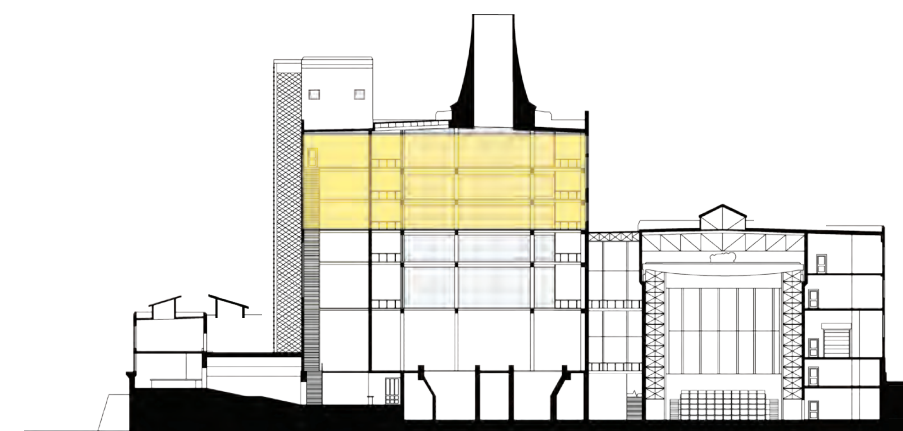


Level 6

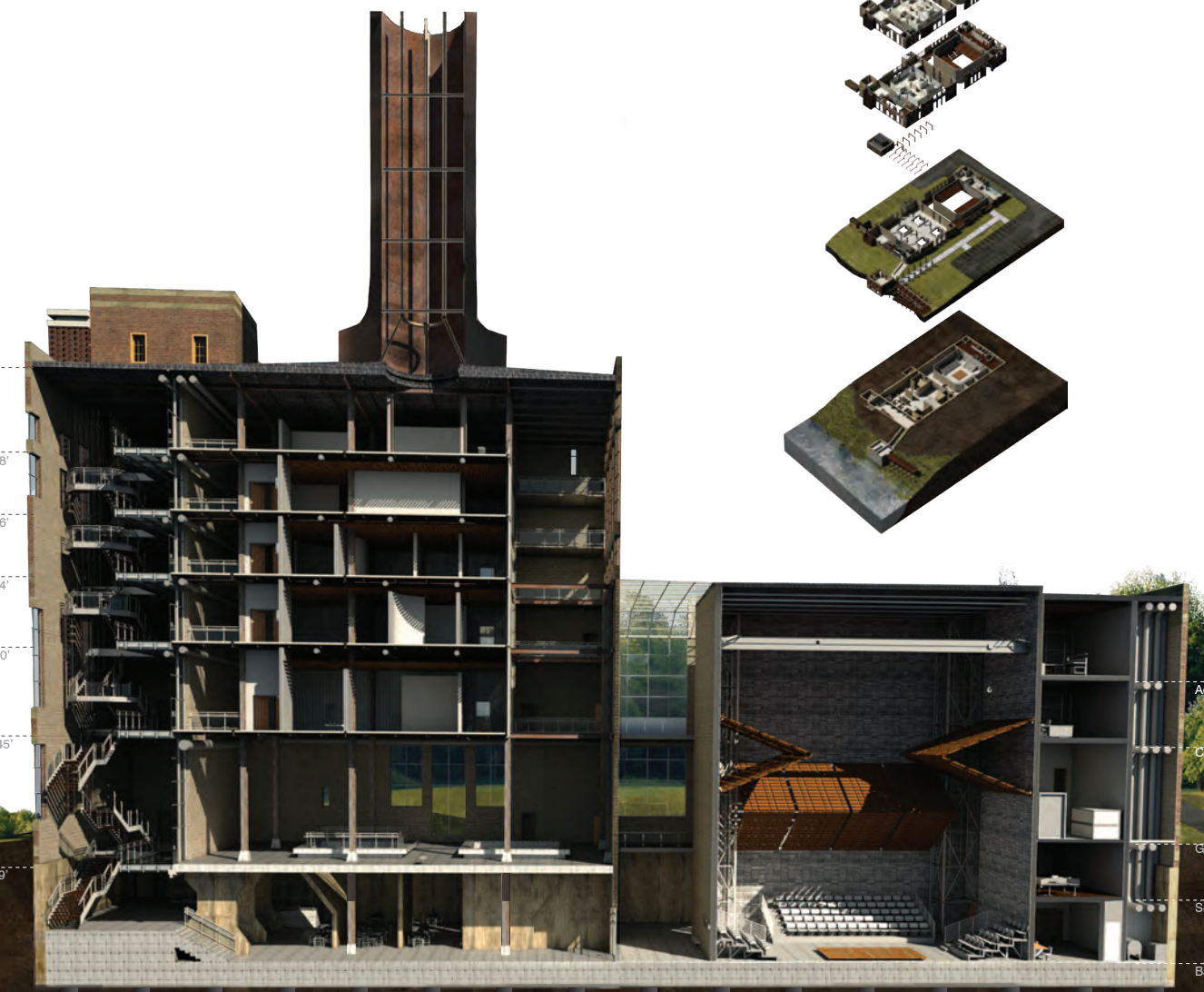
Section



- ① Gallery - 3,380 s.f.
- ② Emergency Stairs
- ③ Systems Tower - 360 s.f.
- ④ Restrooms - 364 s.f.

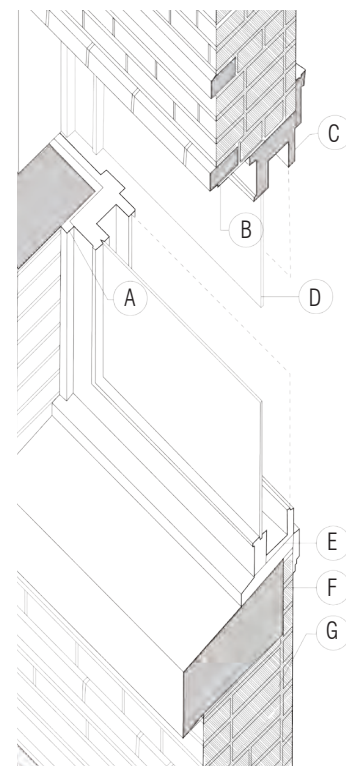


- Roof - 116'
- 6th Floor - 98'
- 5th Floor - 86'
- 4th Floor - 74'
- 3rd Floor - 60'
- 2nd Floor - 45'
- 1st Floor - 19'



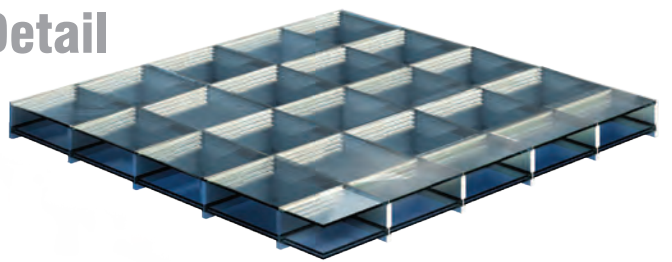
- Administration - 58'
- Curator Offices - 45'
- Gallery Storage - 24'
- Security Office - 13'
- Basement Floor - 0'

Exterior Wall Detail



- (A) Aluminum Window Trim
- (B) Existing Steel Lintel
- (C) Interior Window Trim
- (D) High-Efficiency Glass
- (E) Aluminum Sill
- (F) Existing Concrete Sill
- (G) Existing Masonry Wall (Exterior)

Glass Floor Detail



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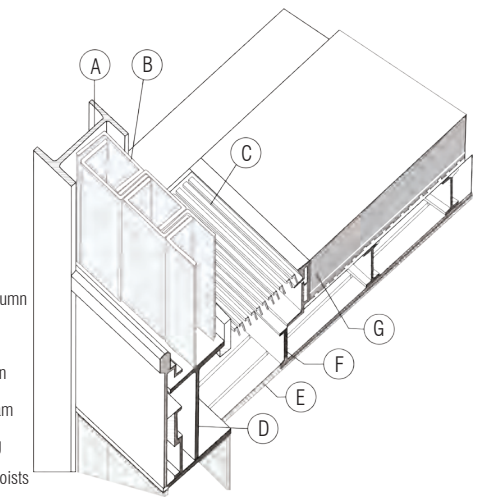


Atrium



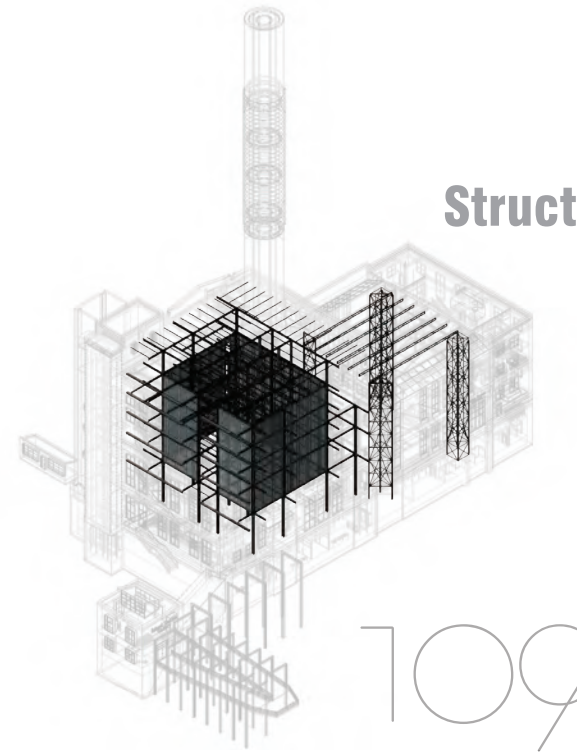
Gallery

Gallery Wall Detail



- (A) Existing Steel Column
- (B) Channel Glass
- (C) HVAC Floor Return
- (D) Existing Steel Beam
- (E) Wood Slat Ceiling
- (F) New Steel Floor Joists
- (G) Concrete Floor Deck

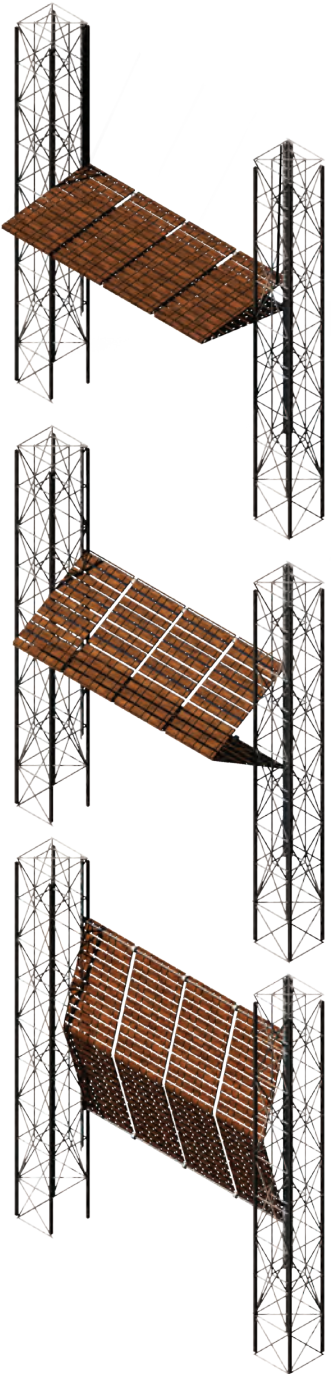
Structure



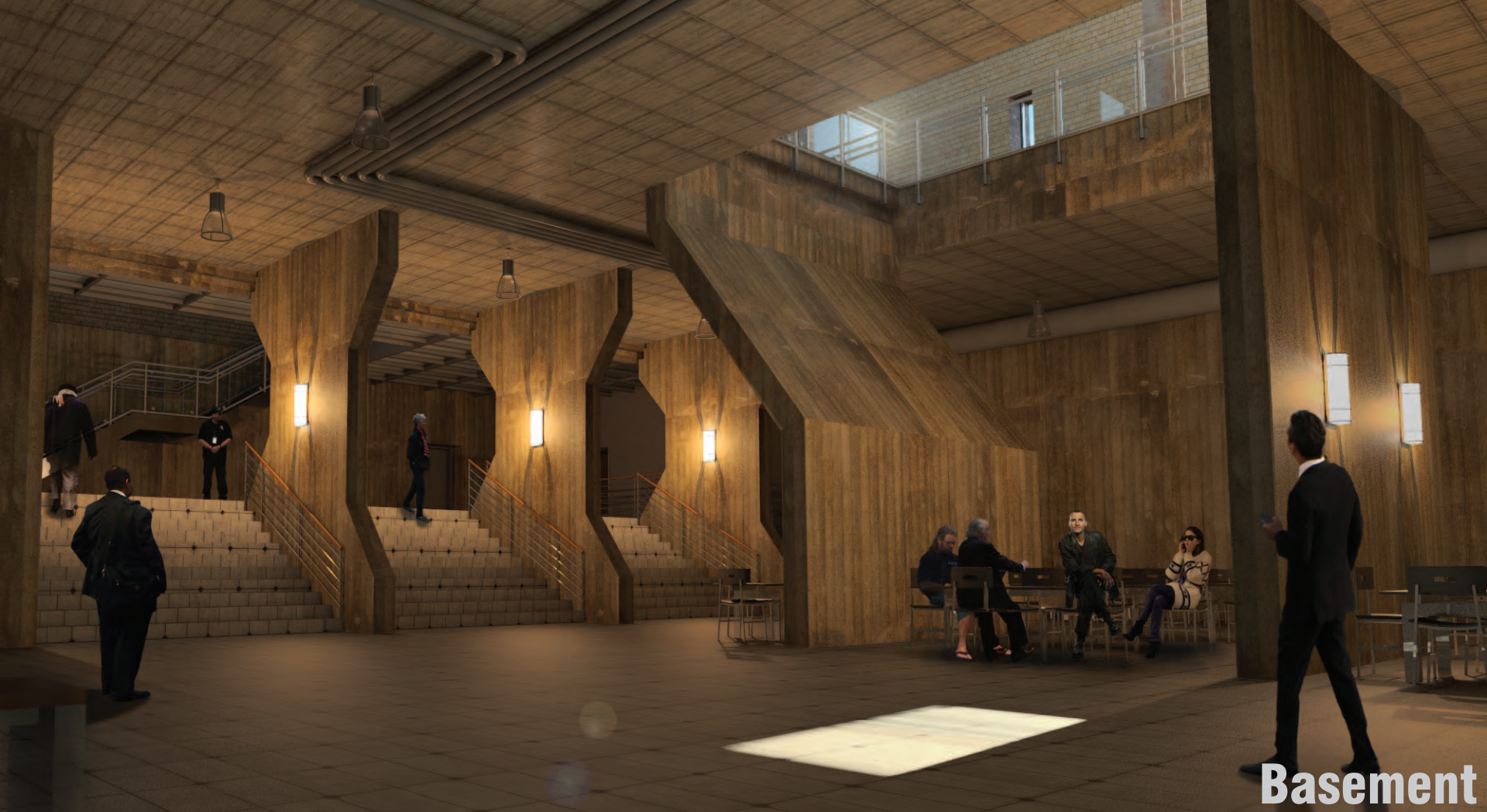
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Theater Panel Detail

Custom theater wall panels are adjustable to create an ideal acoustic environment for a wide variety of situations. The panels can extrude out into the space or can retract back to the wall of the theater. The panels can also be used to create a false ceiling while leaving room for the preserved industrial crane to be used for theater performances. In addition to their ability to extrude and retract, the panels can move vertically along the wall to raise and lower the ceiling.

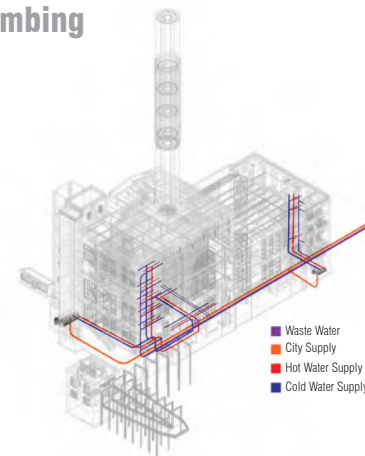


Theater

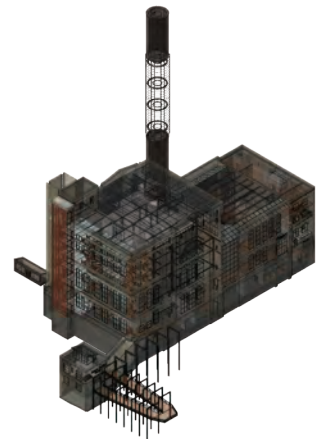
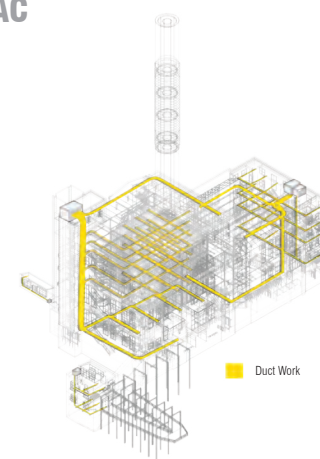


Basement

Plumbing

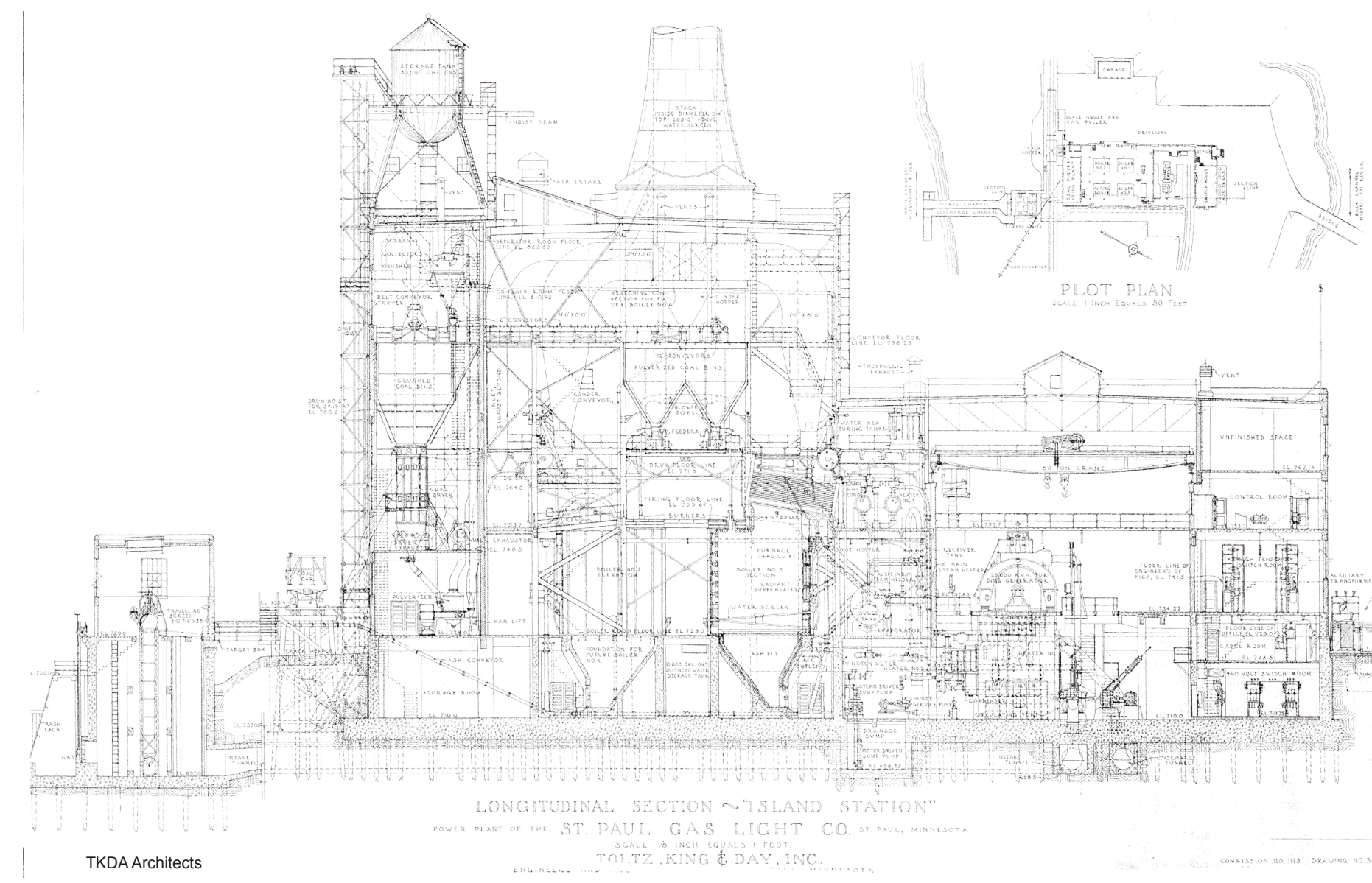


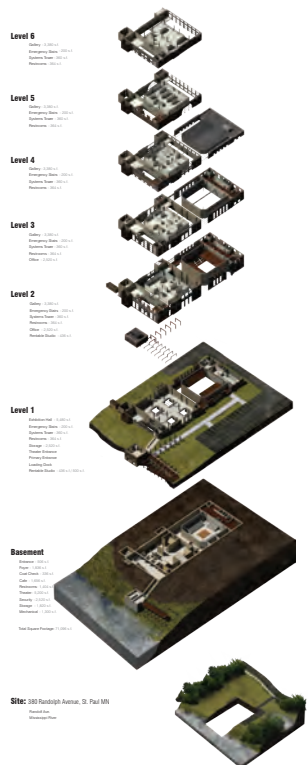
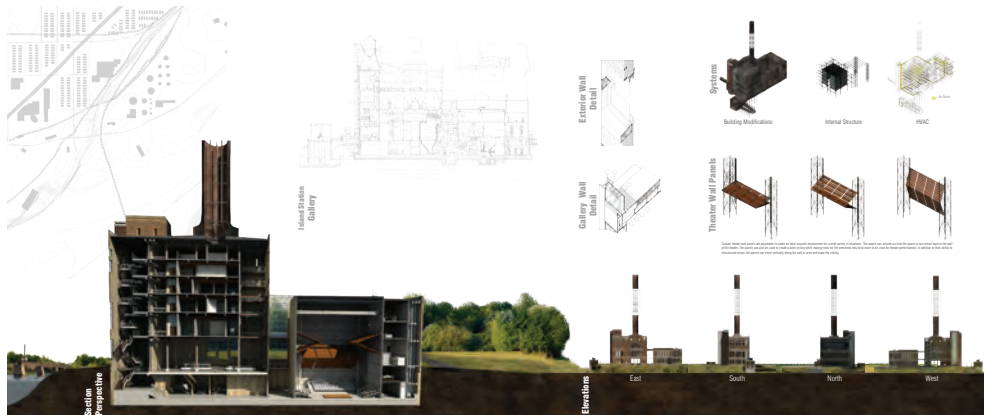
HVAC





Section of Existing Building





gallery for surrealist art

Waiting for Ruin

"In an elegant main project, two contrasting architectural and interior design ideas are brought to life."

This design studio, Waiting for Ruin, is an exploration of how adaptive reuse projects can become an opportunity for the reimagining of contemporary and historic architecture. The project seeks to create a conversation between modern architecture and an existing one. This takes the form of a new gallery for surrealist art, and a building that is a dialogue between the old and the new.

Reused architecture has a unique aesthetic quality gained by time. The available palette cannot be reduced to simple levels alone. It is a result of nature's desire to reclaim matter. The selective character of large structures and their ability to stand for so long is a testament to their strength. A design opportunity is a chance to create a dialogue between the old and the new. The old building's architecture will stand in the present while still speaking to the past, comparing time and creating architecture that is a conversation between the old and the new.

The possibility of renovation opens up the notion of regeneration, reimagining spaces and creating new ones. This is a conversation about the past of architecture and what the future will be. This is a conversation about the past of architecture and what the future will be. This is a conversation about the past of architecture and what the future will be.



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Tables & Figures

Figure 1.1 | Google Maps (2012)

Figure 1.2 | Google Maps (2012)

Figure 1.3 | Google Maps (2012)

Figure 2.1 - 2.9 | Tate Modern in London = Tate Modern, Londra = Tate Modern, Londres. (2000). Detail, 40(7), 1251-1261.

Figure 3.1 - 3.9 | Di Lieto, A. (2011). Castelvecchio Museum: Carlo Scarpa, Verona, Italy 1958-1975. A & U: Architecture & Urbanism, (9), 50-81.

Figure 4.1 - 4.9 | Hasler, T. (2008). Atmosphäre und lesbare Geschichte: Kolumba, Erzbischöfliches Museum in Köln von Peter Zumthor. Werk, Bauen & Wohnen, (4), 4-13.

Figure 5.1 | Bing Maps: Bird's Eye View (2012)

Figure 5.2, 5.4, 5.6, 5.8 | USGS. (2012) <http://www.usgs.gov/>

Figure 5.3 | Web Soil Survey (2012) <http://websoilsurvey.nrcs.usda.gov/app/>

Figure 5.5, 5.7, 5.10, 5.11, 5.12, 5.13 | Weather Data (<http://www.city-data.com/city/St.-Paul-Minnesota.html>, 2010)

Figure 5.9, 6.1, 6.2 | Personal Source

All Images Without Titles or Reference Were Produced by the Author

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“The better the job we do for them,
the better off we’ll be.”

- Joseph Conway

