

## ABSTRACT

Title of Thesis: MEMORY OF THE FUTURE – ADAPTIVE  
REUSE OF THE SEAHOLM POWER PLANT,  
AUSTIN, TEXAS

Matthew E. Davis, Masters of Architecture, 2006

Thesis Directed by: Brooke Wortham, Assistant Professor, Chair  
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This thesis will investigate ways in which elements and cues can be introduced to an existing building to serve the memory of the future. The project will serve as a continuation of time and space, linking what the building has been to present and future evolutions. This thesis will investigate several types of built interventions to the historic and currently unused Seaholm Power Plant site in downtown Austin, Texas, creating something greater than but inherently associated with the physical structure itself. Utilizing a concept of structures existing in different states of permanence, with different influences on memory, this project will test the ability to design into a collective memory. The attempt will be made to embellish the life and story of the Seaholm building, linking the ways it has been known before, is remembered and used now, and how it will project our heritage to those that await us.

MEMORY OF THE FUTURE  
ADAPTIVE REUSE OF THE SEAHOLM POWER PLANT, AUSTIN, TEXAS

by Matthew E. Davis

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park in partial fulfillment  
of the requirements for the degree of  
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## DEDICATION

To my parents, Gary and Jo Ann, and my sister, Lea Ann.

To my infinitely supportive and caring wife, Tracy.

If not for your discussions, debates, and patience,  
this project would not have been.

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MED – Matthew Davis

## **CHAPTER 1 – INTRODUCTION TO PRINCIPLES**



SEAHOLM POWER PLANT

With the constant barrage of change altering contemporary ways of life, and often very little control over what changes occur, there is a tendency to preserve buildings that communicate past values and communities (believing the value of architecture will be lost if the story is altered.) However, there is success in architecture that captures the strength of the old, asking it to lead with contributions to the challenges of today. Additions that place present ideas alongside past knowledge find the deeper level of meaning and function in existing buildings, moving beyond the physical make up of historic structures. Value becomes the way architecture serves the people, not simply the 'survival' of objects. Therefore, buildings must serve the needs of now, validating that the existing structure is authentic, capable and worthy of an extended life. The placement of new demands on old solutions reveals the aspects of a culture that have changed and remained. Additions show the variety of challenges we face today and utilize old structures to confront those issues. A layering of old and new promotes a process of discovery, where both the designer and the viewer learn from change. Designers can at once understand where contemporary culture is in the present and how far it has come.

We exist in the context of the physical world, and the built environment acts as a key component that envelopes our experiences and supplies a backdrop for almost every memory we have. The elements of architecture tell a story, one that is both collective to the city and specific to the individual, embodied in the memory and the “persistence of autobiographical data and



general knowledge.” Memories may be episodic and personal, but they can also serve to explain a city's history and character, the identity all citizens share within the context of the past. Architecture may be only part of a memory or a cue to trigger remembrance, but it is nonetheless embedded in our minds and acts as a tool for understanding experiences of a bygone time.

Architecture shows us the differences and similarities we hold with the past in the fact that our culture discards and treasures certain elements. What is preserved and what is progressed gives us indications of individual and collective motives, needs, and biases in the past. Understanding heritage supplies a connection through time to the aspirations and accomplishments of all those who came before.

The Seaholm Power Plant is an example of an iconic element that starts to reveal the ways in which time, experience, and memory are layered. The simple fact that the building exists means that there was a time before and after its conception, where influential events occurred toward its character and function. The history of Austin has shaped its citizens and their beliefs, and the Seaholm Power Plant was influenced by that same history. The power plant is iconic because it tells of the ideas and values of an era we all know and depend on. It is part of our identity we can point to. The Seaholm Power Plant is not static, and the acceptance of before and after reveals that there is something far more meaningful to explore in the structure. It is one of the real and few connections we have to both our past and our future.

## **PRINCIPLES OF MEMORY**

Through memory, we preserve and add to culture. Through culture, we define ourselves as human.

- Christopher K. Egan, *Materiality and Cultural Memory*, Reference1

The concise and accepted definition of memory is the mental faculty of retaining and recalling past experiences, the act or instance of remembering something.

***For use in this thesis, I will define memory as the means of understanding future implications through the present retrieval of past experiences.***

Memory exists as fragments of information relative to an event, encoded and stored into separate categories, and retrieved by reconnecting the relationships in the mind that constitute an experience. The manner in which the connections are reconfigured constitute the perceptions of the past.

Memory works as a present act of consciousness, almost indistinguishable from any other abstract thought. Reconstructive of the past, memory is stimulated by an analogue called a 'retrieval cue'. The retrieval cue sparks a neural network of fragments of past experiences that have been encoded in the brain. In this sense, memories are better thought of as a puzzle than a continuous recording, due to the fact that we do not record all the sensory data we come across. Pieces of memories are stored separately according to the variety and type of information recorded, and because data

is divided, it must be reconstructed in order to remember something. The stronger the connections, the stronger the memory. The way we separate and reconfigure our memories, and the better or worse we are at doing so, constitutes what we find important to an experience, therefore defining our perception of events. *Reference 2*

Memories are often classified by duration:

- *Sensory Memory*: automatic results from perception, and generally disappears in less than a second
- *Short-Term Memory*: memory that retains information and allows access to it for less than a minute.
- *Working Memory*: an extension of short-term memory used to perform cognitive processes on the items that are temporarily stored in it.
- *Long-Term Memory*: includes the fragile memory of recent facts and the consolidated memory of older facts.

Memories are accessed by:

- *Encoding*: assigning meaning to the information to be memorized, which determines how well it is retrieved.
- *Storage*: the active process of consolidation that makes memories less vulnerable to being forgotten.
- *Retrieval*: involves active mechanisms that make use of encoding indexes.

Information is divided into types:

- *Declarative Memory*: requires conscious recall.
  1. *Semantic Memory*: recalling facts independent of context, knowledge of words, ideas and concepts.
  2. *Episodic Memory*: recalling events that you personally experienced at a specific time and place, specific to context.
- *Procedural Memory*
  1. *Implicit Memory*: not based on conscious recall, but learning of skills and emotional conditioning

Forgetting memories is due to:

- Weak encoding due to a lack of concentration during the experience.
- Lack of retrieval cues or something sensory to stimulate memory.
- The layering and replacement of memories.
- Repetitive experiences happening often.
- The sensory overload that would occur if we never forgot anything.

Retrieval of information is a factor of:

- *Recall*: actively reconstructing information from bits of data.
- *Recognition*: determining from cues whether one thing among others has been encountered before.

*Reference 3*

The chance of remembering or recalling something improves with giving memories meaning. The use of mnemonic devices, a shorthand or cue for recall, can help with meaning, giving an association that is much easier to grasp.

Often, as strong as memories may seem, the issue of subjectivity and accuracy comes into play. This act of mistaken remembrance is often a factor of memories being made with the weighing of specific needs, influences, or motivations that are accompanied by emotions and personal values. This may often prove to be the difference between collective and individual memory, where experiences move towards the general or specific depending on the level of personal influence.

The link of architecture to a cultural and individual memory is strongly supported by the principles listed above. As we take in and register information relative to our experiences, part of that data encoded is the environment we were in, the architecture. While a recording's strength is relative to the individual's concentration on the surrounding sensory elements, the built environment is a tool to place oneself back into an experience. Architecture serves as a strong cue for remembrance due to the fact that buildings often work with a series of elements that are both episodic (common and well-understood) and semantic (unique characteristics) of a single building. An experience can often spark memories of a building, such as the act of viewing art bringing forth the image of a gallery seen before, or visa

versa. However it is reconstructed, architecture is a strong example of elements we index during experiences in order to recall and enrich a memory, aiding a full sense of remembering. *Reference 4*

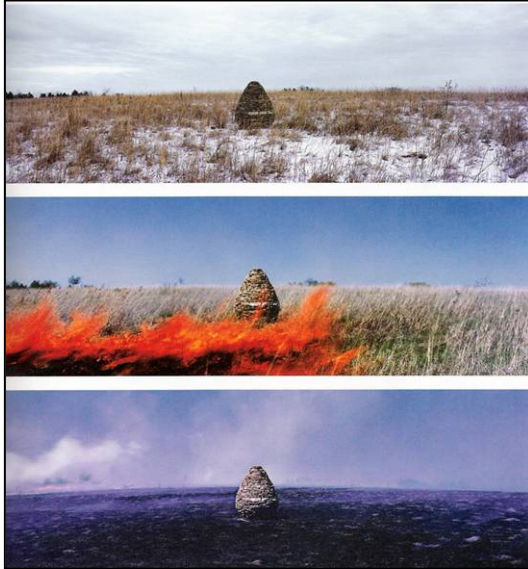


Figure 1. Example of memory as a relationship of static and dynamic events. One object remaining the same amidst several variations. The rock structure is the common element observed in a direct display of change.



Figure 2. Example of memory as an object frozen in time. A preserved object rests still in a changing time. Nestled between the living world of change, the object serves no purpose but historic.

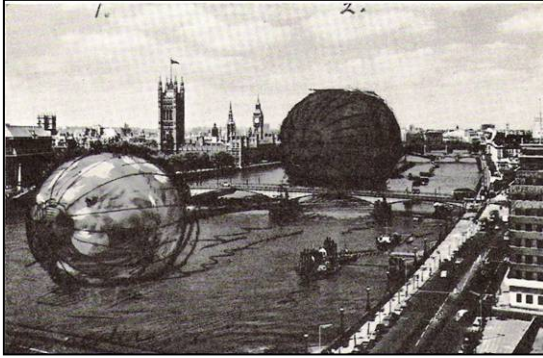


Figure 3. Example of displaying unperceivable change. Representing the changes that occur too fast or slow to comprehend, such as the rise and fall of the tides.



Figure 4. Example of futurism, making all states of time and change perceivable.

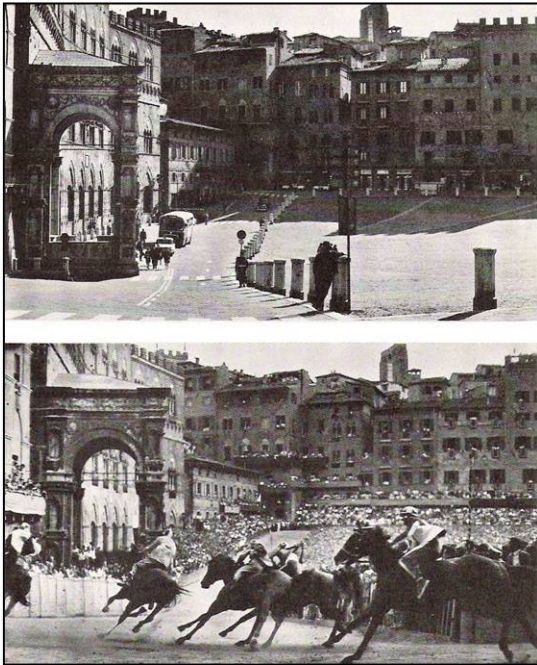


Figure 5. Example of episodic contrast. Series of changing states of being and events take place against a consistent backdrop, providing the viewer discontinuous markers in time and the awareness of recurrent events.

## **PRINCIPLES OF HISTORY**

Two types of history exist, which affect the validity and value of information that is passed on. One type of history is *factual history*, the past as it was according to gathered data. In this type, there is no grey area for question; past events were one way or another, not both or neither. The second type of history is *attitudinal or interpretive history*, where interpretations are made and positions are taken on the gathered data. Historians often see this second type as having an ulterior motive, reshaping heritage to meet current needs or the self-image of a culture, or sometimes glorification.

Factual history of primary events and interpreted history of cultural manipulation are both present in the record of history. They are real, but both are not necessarily relevant. The myth-creating or modifying process of a perceived history is just as valid as the truths of factual history. Cultures may depend on embellished narratives equally or even more than any fact to define their heritage. Everything that happens in history is data for factual history, including myth, fraud, or disillusion. Therefore, when looking at history, both of these types must therefore be taken for 'what it is', fact or interpretation.

Comparative history combines factual and interpreted history in the concept that there is more than one past for different individuals and cultures. While looking for repetitive elements in history, their variations and particular



instances, consideration is made for varying possibilities for the same phenomenon. "This is not only history, but the only valid history."

However, there are some pitfalls to discovering a history tied to interpretation. One of these fallacies is the idea that nothing exists but the present. This mistake often denies the idea that there is any sort of bond between generations and that "no age can truly know another age." Another is the concept that there is no order to history, one where events occur randomly with any sort of influence. A fallacy of fiction is the accepting of myth in the place of a person or event, yielding both positive and negative stereotypes. Finally, there sometimes exists a story or narrative that is completely false, but continues to be supported and added upon due to the fact that it is so ingrained in a cultural heritage that it is completely intractable.

There are some strong examples today of architecture being the harbinger of history and link between time and generations. The proposed project for the above ground train line in New York City, the Highline, is an example of several very distinct time periods being processed by current culture through one element, the physical structure. The Highline has always existed as a steel railway suspended above grade for over one hundred and fifty years, but has done so in a variety of ways. Once a prosperous system for the movement of goods and people, the highline was abandoned in the 1950's, and became an overgrown and forgotten environment. Now, a revitalization project is looking to reuse the Highline system as both park and infrastructure, linking together three extremely disparate circumstances of

time, value, and use in one overlapped piece of the built environment.

### Reference 5

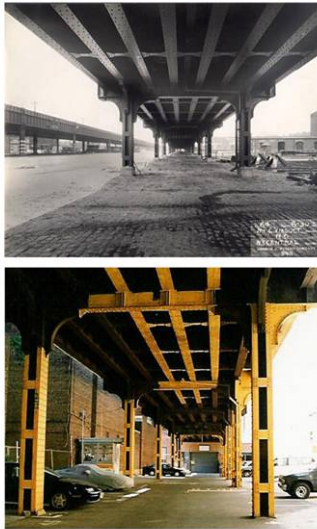


Figure 6. The underside of the Highline. An example of the layering of memories and history on a common element. Humanity fills in the openings over time.

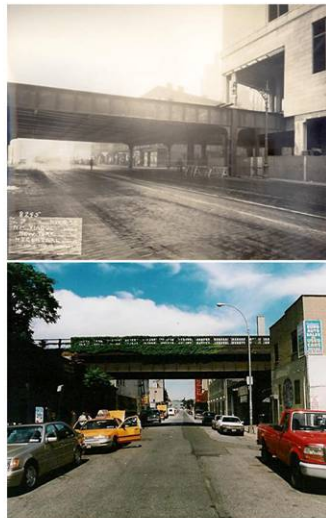


Figure 7. The Highline bridging over the same street. The structure is the same, but the perception from below is different with the alternative functions and levels of activity.



Figure 8. Upper platform of the Highline. The foundation for the world on top of the highline is consistent, but all else changes. The environment above the street and the surrounding city are constantly juxtaposed with the static nature of the platform

## **AUSTIN HISTORY**

For hundreds of years, Austin, *Texas was the land of nomadic tribes of Native Americans* such as the Tonkawas, Comanches, and Lipan Apaches who camped and hunted along what is now known as Barton Springs. The Spanish arrived in the central Texas region during the late 1700's to set up temporary *missions*, and later in 1830, American settlers followed Moses Austin, and his son Stephen, to establish the first Anglo town in Texas, *the village of Waterloo*.

After a hard fought battle for independence from Mexico, in 1839 Waterloo was chosen to be the capital of the new *Republic of Texas*. The centrally located village was quickly built into a new city in the middle of the Texas wilderness, and was named after Moses' son, *Stephen F. Austin, "the father of Texas."* The street plan, which has survived largely intact to this day, was surveyed and laid out by Judge Edwin Waller, who would later become Austin's first mayor. In October of 1839, the entire Republican government was transplanted from Houston, and within three months the city's population had swollen to 856 people.

The new plan for Austin included a prominent hilltop site for the capitol building, with a view directly down towards the Colorado River from the head of Congress Avenue. *"The Avenue" and Pecan Street*, the later now 6<sup>th</sup> street, have served as Austin's primary business streets for the 150 years since. Although much effort was made to establish Austin as the seat of the *Texas government*, after the state was annexed by the United States in 1845, two statewide elections were needed to keep Austin the capital city.

By the late 1880's Austin was fast becoming a city. With creative funding involving the famous XIT Ranch, the original 1839 plan for the *capitol building* was finally completed in 1888, touted as the "7th largest building in the world." The building remains a central landmark on the Austin skyline, and continues to house one of the city's most prominent industries - state government.

September of 1881 saw the first classes of the Austin City Public School System, and in that same year, the first College opened its doors, Huston-Tillotson College. However, the plans to place the new *University of Texas* in Austin faced opposition due to the perceived terrible influence lawmakers would make on a young student's morals.

The damming of the Colorado River with the "*Great Granite Dam*" in 1893 was another milestone achievement of Austin's growth. The dam stabilized the flooding of the Colorado, and provided hydraulic power to generate electricity, attracting manufacturers. By 1938, the Great Granite Dam had been replaced by a series of seven U.S. government-funded dams. One official who helped shape these public works was the congressman *Lyndon Baines Johnson*, who got his start in government work in Austin.

As early as the end of the Depression, the city's future as a center of high technology was being planned. By the 1950's, several research laboratories and think tanks had been founded in Austin, drawing *innovative thinkers* and *high-tech* companies from across the nation. This trend continues today, with some of the most well-known technology corporations

calling Austin home. With the growth in the economy, modern amenities made their way to the Austin area, including theaters, more swimming pools, a branch library system, and a professional baseball team.

Many strong *neighborhood, environmental, and historic preservation communities* that constitute Austin's civic life today sprang up from the rapid growth of local political activity during the 1970's. In particular, the concern with the purity of water flowing from *Barton Springs* led to the landmark becoming an icon for the "*Austin Frame of Mind*", a progressive and ecologically sensitive approach to city life.

Austin has attracted diverse cultural groups throughout its history, as well as a diverse musical pedigree. The rebirth of *Austin music* in the 1970's with artists such as *Willie Nelson* and *Stevie Ray Vaughn* drew national attention and artists to the capital city. Today, "the live music capital of the world" provides countless styles and concerts each and every night.

Austin is known as much for its cultural life and high-tech innovators as it is for its pioneers, revolutionaries, and lawmakers who shaped the beginnings. The same success that has gained the city a national reputation has brought with it many difficult choices, such as the relentless expansion and traffic problems of Austin today.

As a new century begins, and as Austin completes its transformation from town to city to metro area, the city and its people face decisions on how the city will preserve its past, and how they will allow that past to shape their future. *Reference 6*

## **THE VARIOUS WAYS TIME IS STRUCTURED**

Grain - the size and precision of the chunks which it is divided.

Period – the length of time within which events occur.

Amplitude – the degree of change within a cycle.

Rate – the speed with which change occurs.

Synchronization – degree to which the cycles and changes are in phase, or begin and end together.

Regularity – the degree to which the preceding characteristics themselves remain stable and unchanging.

Orientation – the degree to which attention is focused on past, present, or future.

*Reference 7*

## **TIME / MEMORY METHODOLOGIES**

### **Detached Past**

The pathological and ancient past that is difficult to relate with in a drastically changed or changing society.

#### *Possible Retrieval Methods:*

- Elements frozen in time, a preservation of an ideal
- Some elements are seen, but cannot be reached

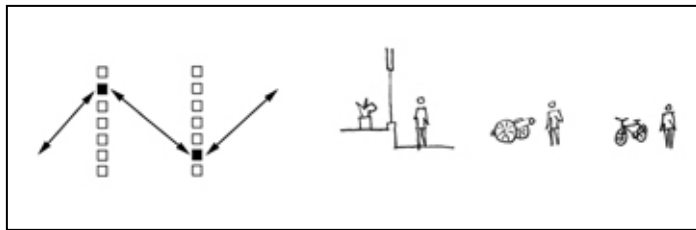


Figure 9.

### **Continued Past**

The elements of the past that are propelled through time and cultures, a continued memory by mixing the past with the contemporary.

#### *Possible Retrieval Methods:*

- Temporal collage of various additions to environment over time
- Layering the elements of various times
- Insertion of new elements into old
- Tension of existing between new and old elements

- Relating past elements and experiences to the present, making circumstances understandable

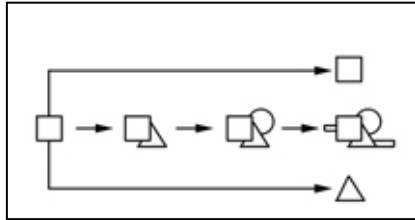


Figure 10.

### Factual Past

The understanding of past events only through the detached and specific facts of events as they actually happened.

*Possible Retrieval Methods:*

- Direct path of experience
- Determined line of where to go and where to come from
- No interpretation of route or choice in present condition

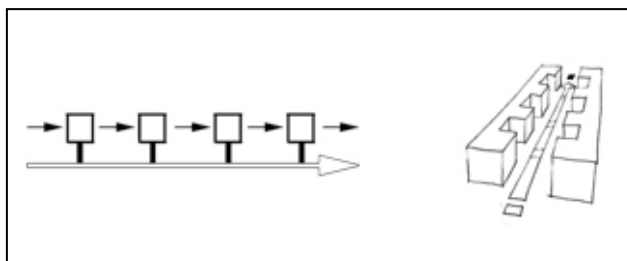


Figure 11.



### Attitudinal Past

The observing and interpreting of past events through the filter of personal, cultural, and need-based influences.

#### *Possible Retrieval Methods:*

- Idea of choice and personal influence
- Interpretation of a shared present condition

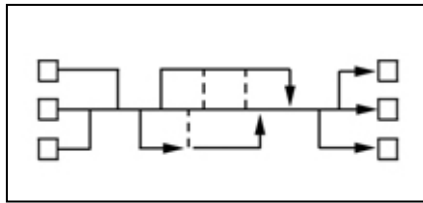


Figure 12.

### Adding to the Collective Memory

Elements of the past working their way into the concept of something larger than the individuals that witnessed them, such as the identity of a city.

#### *Possible Retrieval Methods:*

- Giving an element iconic status
- Presentation, display of values
- Isolation of one piece of the entire fabric
- Discovery of something new among familiar elements

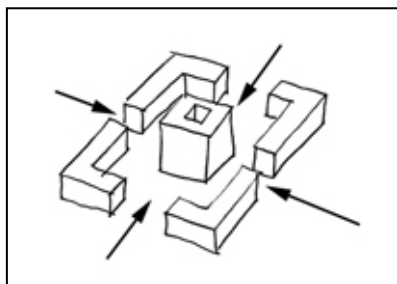


Figure 13.

## Revealing Personal Memory

Individual configurations the different memories, emotions, or feelings about a common event.

### *Possible Retrieval Methods:*

- Discovering something personal and new within the familiar
- Erosion of environment
- Insertion into new elements
- Peripheral events stemming from and tied back to collective whole

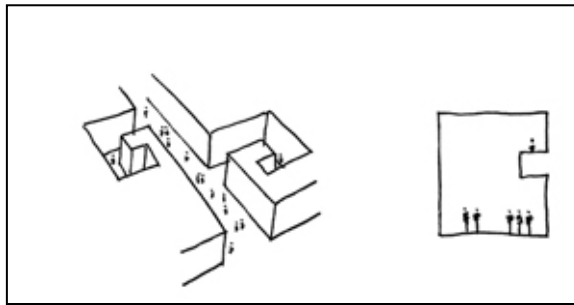


Figure 14

## Forgotten Past

The past that is buried beneath layers of change or altered priorities.

### *Possible Retrieval Methods:*

- 'Excavation' of buried things
- Elements in a found state
- 'Ah-ha!' Experience of discovery

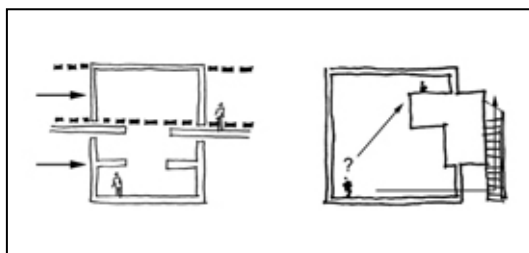


Figure 15.

## Denied Past

The past that is hidden for a specific purpose.

*Possible Retrieval Methods:*

- Erosion
- Tension between what was and what will be with new information
- Past, histories, or stereotypes torn, destroyed, debunked

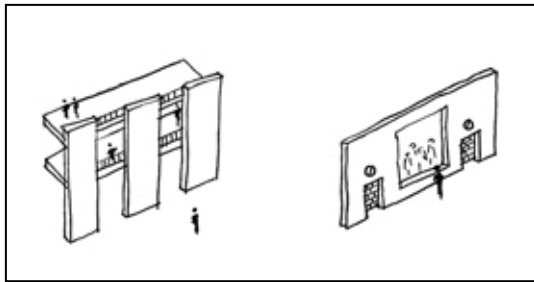


Figure 16.

## Linear Time

Events that occur along one understandable stream of time, cause and effect.

*Possible Retrieval Methods:*

- Elements leading to and end to a process
- A point in experience is more important than the process

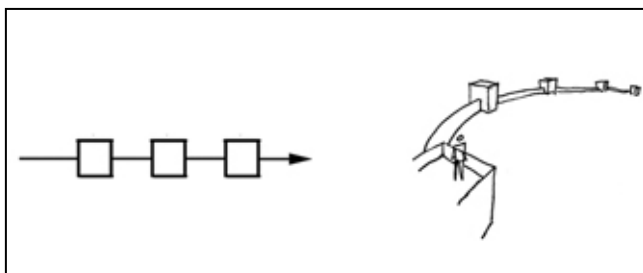


Figure 17.

## Fluid Time

Events where the effects of time move backwards and forwards, split paths of history that reunite from time to time.

### *Possible Retrieval Methods:*

- Elements inform both what has been seen and what will be experienced
- Various states of decay and completion
- Different rates of evolution for interconnected elements

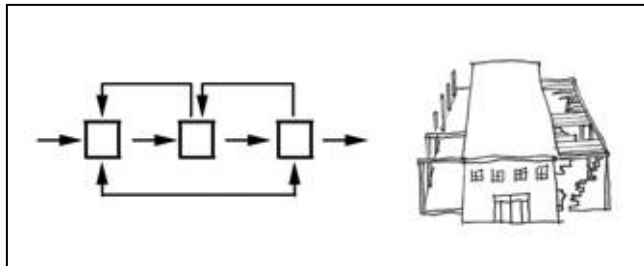


Figure 18.

## Segmented Perception

The lack of memory or dependence on anything past.

### *Possible Retrieval Methods:*

- Place can be of any time or point along process
- Functions and expectations are not expressed
- Most important idea is what comes next

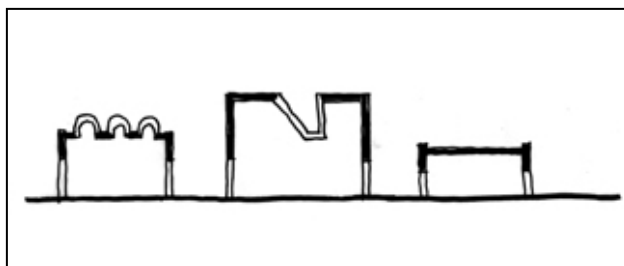


Figure 19.

## Episodic Events

Reoccurring elements in time that express the present in a process leading from the past to the future, time measure through memory and presupposition.

### *Possible Retrieval Methods:*

- Elements that are important with or without event
- General elements alongside special ones
- Build up to events are apparent: empty, construction, event, deconstruction, empty

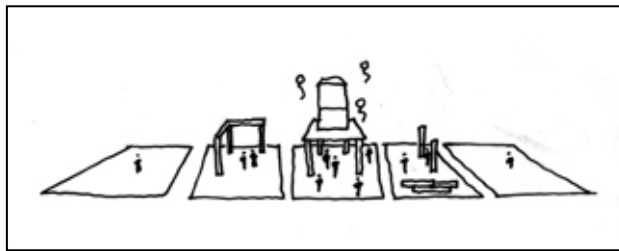


Figure 20.

## Myths

Elements of history that may have never existed or happened, but are vital to a culture.

### *Possible Retrieval Methods:*

- Expression of stereotypes
- Erosion or discovery of how things really are or are not

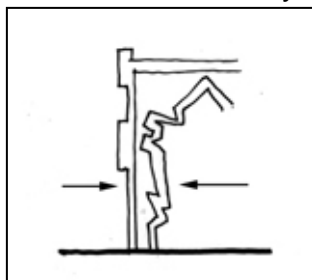


Figure 21.

## Narratives

Elements of history added to and embellished over time, glorified and expanded versions of the same story.

### *Possible Retrieval Methods:*

- Changing experience of elements through motion
- Building up to event or experience over time
- Change forms or make them apparent along a path

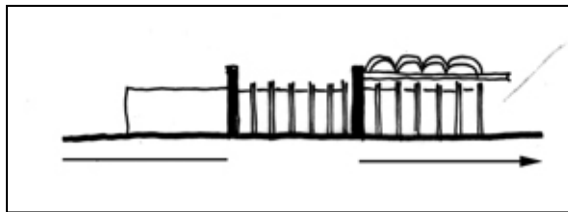


Figure 22.

## Long Term Futures

Perceiving what is in the extended and abstract future, what has the chance of happening.

### *Possible Retrieval Methods:*

- Indications of elements to come
- Various rates and stages of addition, completion, and permanence

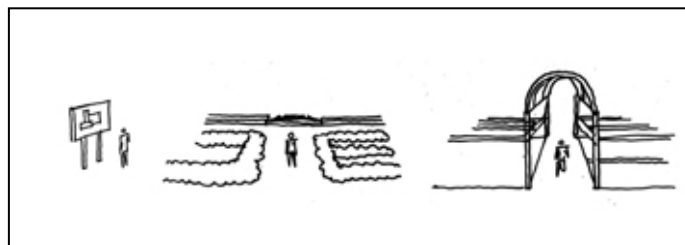


Figure 23.

## Making Memories

The ephemeral elements of time and the rapid passing of the future into the present, the present into the past.

### *Possible Retrieval Methods:*

- Actions of now having effects on the immediate and far reaching state of the environment
- Being forced into the future, constantly progressed

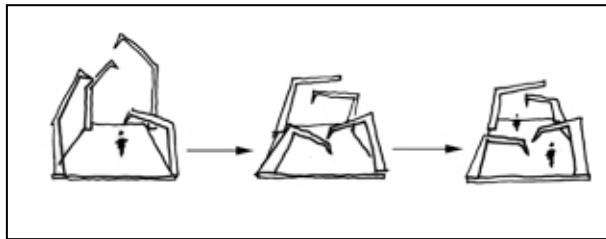


Figure 24.

## Futurism

Comprehending past events, present situation, and future chances in one instant in time.

### *Possible Retrieval Methods:*

- Layered and different elements working for one whole
- Seeing intention, creation, and consequence in one instance

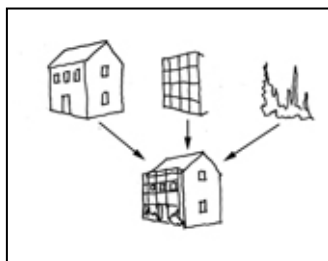


Figure 25.

### Direct Display of Change

Time made apparent through the witnessing of before and after, understanding the changes made through events.

#### *Possible Retrieval Methods:*

- Elements physically change depending on certain factors
- Expression of constantly changing elements, time, water level, etc.
- Destruction of elements

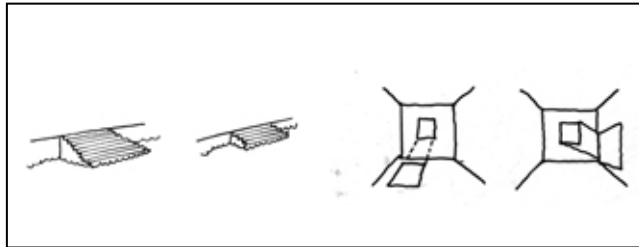


Figure 26.

### Motion causing Change

Comprehending time through the changing points of perception along a journey in the built environment, and the relation of those points.

#### *Possible Retrieval Methods:*

- Elements that yield a different understanding according to place in space and time

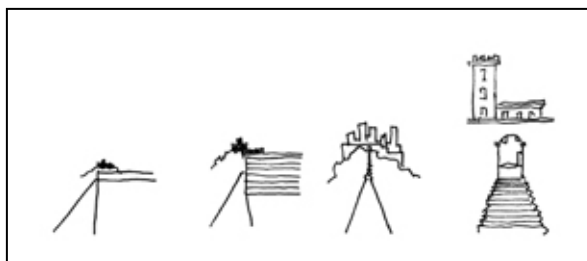


Figure 27.



### Incomprehensible Change

The slowing down or speeding up of time periods that are usually out of human perception, to make them apparent.

#### *Possible Retrieval Methods:*

- Grouping or constantly repeating elements to slow down rapidness of change
- Using elements as a control to measure change against

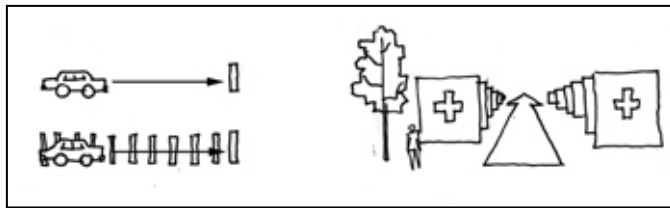


Figure 28.

### Short Term Memory

The present act of remembering past events for future situations.

#### *Possible Retrieval Methods:*

- Tying comprehension and actions of present directly to success and understanding of future experiences

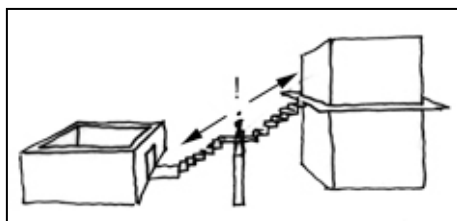


Figure 29.

### Static Place with Dynamic Events

Various events and alterations to elements within a constant environment.

*Possible Retrieval Methods:*

- Focus is on creations or variations, within a more important whole

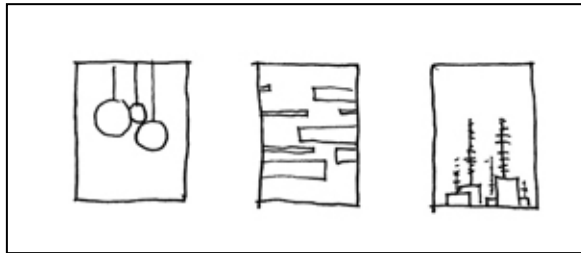


Figure 30.

### Static Events with Dynamic Place,

A recurrent and established event that alters the environment it occupies.

- Focus is on a more important whole, with creations or variations occurring peripherally

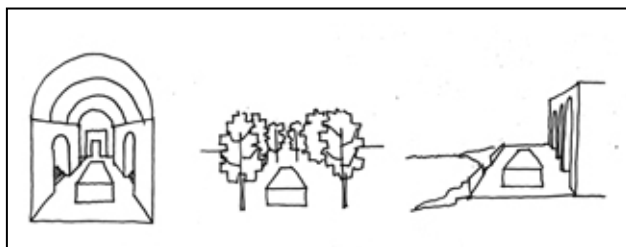


Figure 31.

### Changing Meaning

Through need or through forgetting, the intention of an event or element is changed.

- Elements change use, scale, or form with need or changing function

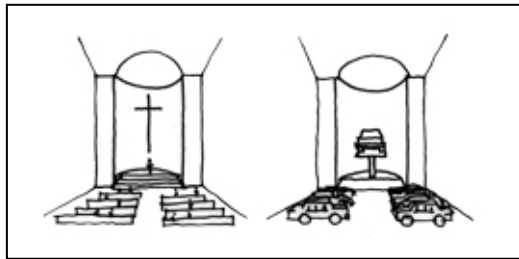


Figure 32.

## **TYPES OF HISTORY TO EXPLORE**

The Colorado River

Town Lake events

Industry

The changing face of energy

Texas pioneers

The Texas Revolution

The Railroad

The Arts

Seaholm Power Plant

The time before the Seaholm Power Plant

## **DESIRED EFFECTS OF MEMORY & TIME**

Determining what memories take precedent.

Determining what memories to promote.

Determining what memories to disprove.

Determining what memories to leave for interpretation.

Determining what memories to create.

## **CHAPTER 2 – CONTEXT OF SITE**

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## **ORIENTATION**

The Seaholm Power Plant site rests in the heart of downtown Austin, a city central to the state's geography and on the edge of the Texas hill country. The site is on the northern shore of Town Lake, an east-west section of the Colorado River in the central downtown district. The Seaholm site is flanked to the east by a sharp drop in topography at Shoal Creek. Across Shoal Creek is the Austin downtown water treatment plant, currently in use. To the west of the site is Lamar Boulevard, a major commercial and local north-south traffic thoroughfare. This adjacent section of Lamar is at various levels, above grade to bridge over Town Lake at the southwest corner of the site, and below grade to pass under the rail bridge on the northwest corner.



Figure 33. Aerial view of Seaholm Power Plant, Town Lake, and Downtown Austin.

Finally, the northern edge of the site is lined with the recently constructed West Avenue Lofts mixed-use development on west 3rd street. The area south across Town Lake from the Seaholm site is Austin's Auditorium Shores, a designated park space that used for city events and performances. The inlet to Barton Springs from Town Lake lies just to the southwest, across the river from the Seaholm site.

### **SITE HISTORY**

From 1823, when the Stephen F. Austin pioneers originally settled the area until 1845, the Seaholm site was primarily open ranch land and private property. As Austin grew, so did its industry along the fast moving waters of the Colorado River, including a flour mill constructed on the Seaholm site. With the introduction of rail shipping and modern industrialization in 1866, the mill was renovated and expanded for a new lumber mill. The lumber business utilized the site's proximity to Austin's new train depot and warehouse district just to the east of the site across Shoal Creek. The meeting of the state government, the University of Texas, and a myriad of other travelers and establishments fed another sort of industry at the site, a section of town full of brothels, casinos, and saloons in what came to be known as 'Guy's Town.' The lumber mill remained on the site until 1893, when it was fully converted into Austin's first electrical plant, thus ending the era of tolerable sins and placing the property in the city's hands.



Figure 34. Walter Seaholm

The municipal ownership of the site was in jeopardy when Texas Power and Light Company made a private bid for the city's energy production. However, the Electric Department's Superintendent, Walter E. Seaholm, demonstrated a more efficient production method, ending TP+L's bid and keeping power in the city's control.

Growing from the success of the University of Texas, the city government anticipated the increasing demand for energy. In 1948, the city made the decision to construct a new gas/oil power plant on the site. The original plant was built in two phases, one in 1950 and the other 1955, with the addition of office space and a loading dock in 1972. The mill building was demolished in the 1960's for an outdoor electric substation. The Seaholm Power Plant was the city's main production point for energy until it ended production in 1989 when its operating costs exceeded market rates. The city has since constructed two new plants on the east side of town to supply the city's power. The Seaholm building, its peripheral structures, and the site have remained unused until this point in time. *Reference 8*





Figure 35. Austin's First Power Plant

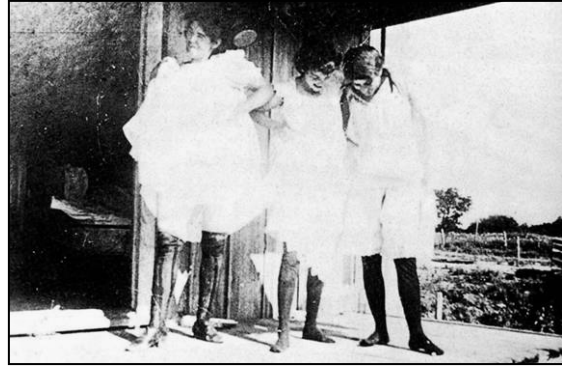


Figure 36. Guy's Town Women

## **NATURAL ELEMENTS AND CLIMATE**

Austin, Texas is a temperate climate with hot summers and reasonably mild winters. Inconsistent freezing temperatures during the winter and the shallow substrate of limestone keep the ground from freezing to any depth below the surface, negating any need for an insulated foundation. However, the need for shade and natural ventilation in warm weather are of a high priority during a majority of the year. Rainfall averages in the Austin area are approximately 33 inches per year.

A majority of the existing trees on Town Lake and the Seaholm site are Live Oak, with interspersed Elm, Dogwood, and Pecan along the edge of the site. All trees on the city owned property have been tagged and indexed, and a few of the larger trees on the Seaholm site are under protection from removal. *Reference 9*

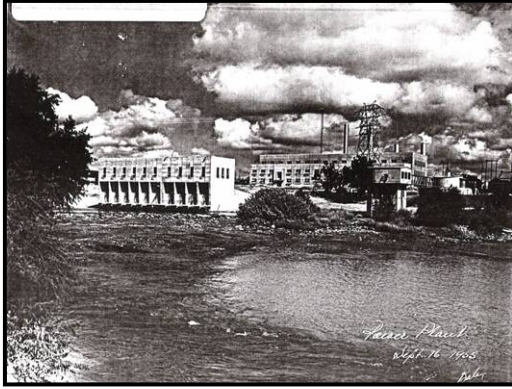


Figure 37. The waterfront and natural edge condition at Town Lake's southern shore, across from the Seaholm Water Intake structure.



Figure 38. The waterfront and natural edge condition at Town Lake's southern shore, across from the Seaholm Water Intake structure.

The water features adjacent to the Seaholm site are prominent in both physical and cultural aspects. Town Lake and Shoal Creek both create unique natural environments in the urban setting of downtown Austin, along with a sense of pride and protection in local citizens.



Figure 39. Breaking of Austin's first dam.



Figure 40. Tom Miller Dam, the controlling agent for the water levels, and the northern edge of Town Lake.

Town Lake is a section of the Colorado that is damned on either end by the Miller Dam and Longhorn Dam, to the west and east, respectively. The

Colorado was first dammed with the construction of 'The Great Dam' in 1893. The regulation of the river's water not only supplied an opportunity for constant energy and industrial development at the dam, but also kept river levels in the downtown area at constant level. The Great Dam also created Lake McDonald (now Lake Austin), a new upstream playground to the west for the citizens of Austin. However, in 1900 the unthinkable occurred when the dam broke, destroying industrial buildings in the vicinity and flooding downtown up to a quarter mile inland. By 1938 the current dams were in place at either end of the river to maintain an average depth of around 14 feet in the downtown section of the Colorado. However, the river still exceeds control capabilities and floods at least once every five years, including a disastrous flood reaching the 100-year flood level in 2001. The river now spans between 400 and 2500 feet across in some sections, and is approximately 6 miles long. The shore is a mixture of edge and elevation conditions, ranging from natural tree species and low-lying river plants, to a direct drop-off of the soil and limestone strata. Contaminations of the water supply led to the establishment of several local and state agencies to oversee the clean up and preservation of the river, as well as the restriction of motorized boat traffic.

Shoal Creek is a smaller tributary of Town Lake, as is Barton Springs on the opposite shore, running through the city to the Colorado River. Shoal Creek and its nature trail wind in from Pease Park in northern Austin, defining the eastern edge of the Seaholm property, and finally spilling out into Town

Lake. Before the Austin pioneers came to Texas, a long established Indian path across Texas took the major turn to the west at Shoal Creek and the Colorado. The western bend in the river is still part of the creek's trail, but is now edged by apartments, municipal energy buildings, and the edge of the warehouse district, and is largely neglected and hidden in this area. The acute angle in which it connects to Town Lake causes part of the waterfront of the Seaholm site to exist as peninsula offset approximately fifty feet from the shoreline. *Reference 10*

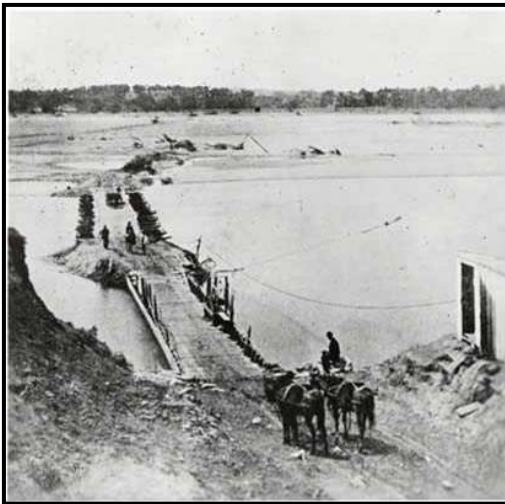


Figure 41. The first bridge across the Colorado River at Congress Avenue



Figure 42. View of downtown from the south shore of the Hike and Bike Trail



Figure 43. The nature trail along the downtown shores of Shoal Creek, immediately to the west of the site.



Figure 44. The Shoal Creek peninsula

## **TOWN LAKE**

Town Lake currently serves as the only true civic space in the city, acting as a strong uniting element between both sides of downtown. The city is well connected across the river by three vehicular bridges, one pedestrian bridge, one rail bridge, and a bridge at each dam. Several areas of civic use exist on Town Lake, which foster a consistent and high volume of activity. These civic places include Auditorium Shores, an open green space for concerts and events, Zilker Park, and the Hike and Bike Trail.



Figure 45. The Ben Hur Riverboat on Town Lake



Figure 46. Runners on the Hike and Bike trail

Many activities on the river have continued over the years. With the damming of the Colorado, competitive rowing started on Town Lake as internationally renowned regattas were held annually. The University of Texas crew as well as two private clubs still use the river for rowing, but there is no longer any competitive racing. Grand tours aboard the Ben Hur Riverboat were also established around the construction of the Great Dam, a practice that continues today but on a much smaller scale. As of late, since the mid



1960's, the Hike and Bike Trail has become a regular jogging route for Austinites. The only event that occurs on Town Lake itself is the nightly tourist attraction and iconic city symbol of the flight of over one and a half million bats from under the Congress Bridge.

Town Lake does have a tradition of holding one-time spectacles on the river such as high diving shows, tight rope walking across the river, and as recently as 2004, the Red Bull Flugtag competition. However, besides foot races and several unsuccessful annual concerts on Auditorium Shores, the only event that occurred with any consistency was the annual Aqua Fest celebration, a parade and performance of water and music activities which lasted for 36 years but officially, and quietly, ended in 1998. *Reference 10*



Figure 47. The Flugtag



Figure 48. Austin Aquafest

## **TRANSPORTATION**

The existing transportation relative to the Seaholm site is primarily vehicular. Two major streets, Lamar Boulevard and Cesar Chavez, border the west and south edges, respectively. Both personal transportation and the public bus system have access to the areas adjacent to Seaholm. However,

the stops that buses service are limited to the major roads. Cesar Chavez is primarily an access road into downtown between Interstate 35 and MoPac expressway, as well as connecting to Lamar Boulevard, which passes overhead. Cesar Chavez is not edged with any buildings until it passes by the Seaholm site into the central business district. Lamar Boulevard is a thriving retail street, but does not support any building types along the edge of the site. Because the rail line was established long before the road, Lamar Boulevard comes across Town Lake as a bridge above grade, cuts under the rail, and back up to grade at 5th street.

The Missouri-Pacific, or MoPac, railroad line currently bifurcates the Seaholm site and its topography change. The tracks continue at grade at the edge of the site, elevating to a bridge as the grade slopes down towards the water. The rail line is used for both the movement of goods and people from the west of the site across the river to the south. The existing Amtrak station sits across Lamar to the west, but conducts only minimal business in the regional area and schedules are irregular.



Figure 49. Cesar Chavez Avenue.

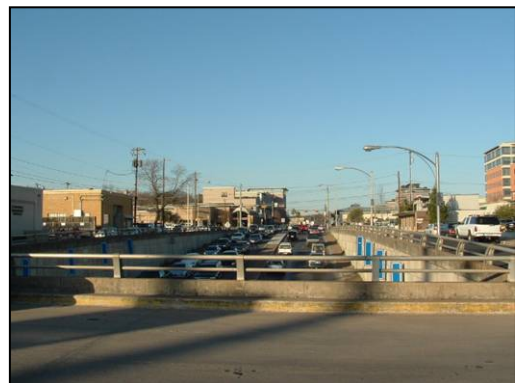


Figure 50. The train bridge at Lamar Boulevard



Figure 51. MoPac train line on the northwest section of the site



Figure 52. The train bridge over the site to the east of Seaholm

The train line through the site is only a remnant of public transportation and a connection from downtown across the site. Although rail use along the line has dwindled to only 4-5 trains a day, there is a rich heritage of the train in both Austin's and the site's history. The first train arrived to downtown Austin in 1871 crossing Shoal Creek on the trestle bridge that still remains today. The construction of Union Depot directly east of the site in 1890 ushered in new prosperity for both the site and the lumber mill, for both the influx of industrial goods as well as tourists and politicians. Once the train no longer served as the main means for the city to receive goods and people, its western entry point from the Seaholm site was abandoned, and the site was no longer one of the first impressions visitors held of the city.





Figure 53. Historic image of original train bridge from the Seaholm site east across Shoal Creek.



Figure 54. Austin's downtown train depot directly to the east of the site, across Shoal Creek



Figure 55. Train Relic



Figure 56. Train Relic



Figure 57. Train Relic

The newly passed referendum for Light Rail in Austin is an opportunity to resurrect this heritage and entry experience with plans for a line to be brought through the existing Amtrak station, directly adjacent to the Seaholm site, on toward the downtown business district in the exact manner as before. Even the light rail in Austin has a history over the years, going back to mule pulled carts at the turn of the century and electric street cars up until the 1930's. *Reference 10*



Figure 58. Austin's first trolley system

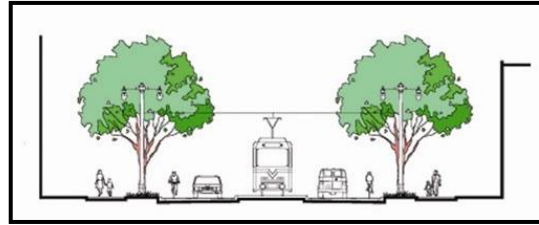


Figure 59. The proposal for the light rail north of the Seaholm Site.

The Hike and Bike trail on Town Lake and Shoal Creek are major arteries for pedestrian and bike traffic in the downtown area. These natural pathways along the water's edge are clearly distinguished from vehicular roadways, but do intersect at some traffic signals. The volume of both bike and foot traffic are quite significant for recreation and commuting. The Lance Armstrong Bikeway is also being proposed to run adjacent to the Seaholm site as a street grade bike route leading from far east to far north Austin.



Figure 60. Level change at the Hike and Bike

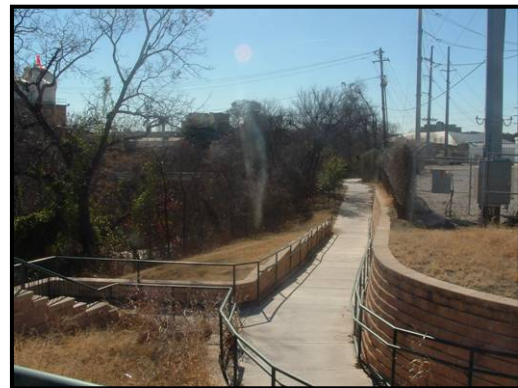


Figure 61. The Shoal Creek trail at the eastern edge of the site

## **INSTITUTIONS**

Several established institutions lie within the downtown vicinity of the Seaholm site. Many state and local government buildings are in adjacent to the Seaholm district, including the State Capitol to the northeast and the recently completed city hall just an eighth of a mile to the east of the site along Cesar Chavez. The University of Texas, Austin Community College, and the Texas School for the Deaf are all within a one to two mile radius. Of these institutions, only the Austin Community College and the new city hall have any contextual district ties to the site.

The only area city school of any contextual significance is Austin High School, directly westward down the water's edge from the Seaholm site. The high school is the city's oldest, but moved to its current location in the late 1970's. It's proximity to Town Lake and downtown make it an ideal place for tennis and other ball sports, as well as a makeshift parking and meeting point for runners and bicyclists on the Hike and Bike trail.



Figure 62. Austin High School



Figure 63. Austin City Hall at Cesar Chavez Avenue

One addition the City of Austin is proposing to the downtown is a new central library at the site of the existing water treatment plant, directly east across Shoal Creek from the Seaholm Site.

### **OVERSIGHT GROUPS**

Several organizations oversee actions and uses relative to the Seaholm site. The City of Austin currently owns the site, and regulates the zoning and code requirements and enforcement. The City of Austin Watershed Protection Department oversees the enforcement of performance standards for all aspects of construction within Austin watersheds. The Lower Colorado River Association is a state program monitoring the conditions and quality of the river in Texas. This committee provides many of the same safeguards and regulations as the Watershed Protection Department, but at a much larger scale. *Reference 11*

### **BUSINESS TYPOLOGY**

Employment and services in the Seaholm district are of a typology consistent with the rest of the city of Austin. Most businesses tied to the Seaholm site lie are directly north of the site, to the northwest on Lamar Boulevard, and directly to the east in the central downtown business district. Small shops and specialized business line the northwest edge of the site, as well as a large multi-use building with an architecture firm and an office supplies store. Lamar Boulevard serves as the major retail area for this



district with the Whole Foods headquarters and several clothing boutiques, book and record stores. The adjacent neighborhoods to both the northeast and northwest support many small professional services within modified homes and small commercial buildings, including many artist's galleries.



Figure 64. Retail along Lamar Boulevard, just northwest of the site.



Figure 65. Whole Foods flagship store, two blocks north of the site.

Several prominent high-tech companies have offices in the downtown district, including two Computer Science Corporation buildings on either side of the new city hall down from the Seaholm site. Although the Seaholm building is less than an eighth of a mile from Congress Avenue, no real relationship is now established between the site and the downtown business district due to the barrier Shoal Creek creates.



Figure 66. Café and shop across West 3<sup>rd</sup> street from the site.



Figure 67. Small office building directly to the north of the site.

## **LIVING TYPOLOGY**

Downtown Austin is an odd mixture of scales moving east to west from downtown. The scale of commercial buildings sharply decreases from the central business district across the Seaholm site to the MoPac expressway. The residential areas to the east and north of the Seaholm site push right against the central business district. This creates an odd zone where it is hard to distinguish between homes serving as residences and homes serving as businesses.

While there are no single family residences directly adjacent to the Seaholm site, several multi-story developments with a higher density have been and are currently being constructed, including the West Avenue lofts directly across 3rd street. The local areas function very well for residences here, providing the services, amenities, recreation, and parks necessary for a safe and unique environment.



Figure 68. Various multi-family residences to the north of the site.

## **RECREATION**

Recreation around the Seaholm site is almost completely directed towards Town Lake, and the activities are numerous. Many sports and clubs line the shores of the water and the Hike and Bike trail. These include biking, football, baseball, canoeing, and rowing, and several running clubs, training groups, and information booths. Auditorium Shores, a green space across the river and to the east of the Seaholm site, is a city venue for various concerts and events. There are several sightseeing boat tours that launch from the downtown shores of the river to view the bat colony and take evening cruises. The activity along Town Lake is also a venue for public promotions, vendors, and demonstrations.



Figure 69. The evening flight of the Congress Bridge bat colony.



Figure 70. Concert on Auditorium Shores

## **THE ARTS**

The city of Austin has begun to slowly establish the area around Town Lake as a district for the arts with the construction and renovation of buildings for civic art organizations. Across the river from the Seaholm site to the southeast, Palmer Auditorium is currently being renovated to serve as a major performing arts center. The Austin Lyric Opera is housed directly to the west of Palmer. Further west, directly across from the Seaholm site, is Zachary Scott Theater, the city's largest and oldest dramatic theater company. A majority of the music scene in Austin takes place along 6th street, east of Congress Avenue. However, the publicly owned Austin City Music Hall and La Zona Rosa music club are directly east of the Seaholm site across Shoal Creek and just north of the water treatment plant.



Figure 71. A local music club to the east of the site.



Figure 72. The Austin City Music Hall



The only function of the arts that does not currently have a presence on Town Lake is the visual arts. These institutions are currently spread around the downtown area. The Austin Museum of Art is located on Congress Avenue in the central business district, occupying one-half of the street level space in a thirty story office building. AMoA is a gallery of 20<sup>th</sup>-century and contemporary art dedicated to developing and educating a broad audience. The gallery presents a broad range of permanent exhibitions as well as occasional shows of more challenging work. AMoA was established in 1961 as Laguna Gloria Art Museum when Clara Driscoll donated her lakeside estate. In 1996, the institution changed its name and moved to its current and primary location. The Gallery has continually served as Austin's primary community art museum and plays a vital role in local art education.

*Reference 12*



Figure 73. Austin Museum of Art



Figure 74. Arthouse – Jones Center

Also on Congress Avenue is the smaller Arthouse – Jones Center for Contemporary Art. Arthouse is both the oldest statewide visual arts organization in Texas, and the only one devoted solely to contemporary art. The institution was founded as the Texas Fine Arts Association in 1911 to maintain the studio and collection of Elisabeth Ney, but later was charged with promoting the identity of Texas visual arts. Besides contributing to the cultural landscape of Austin, Arthouse is also acts as a resource for Texas-based artists. Arthouse offers educational programs aimed at all ranges of adults, including high school and college students. The mission of Arthouse is to promote the growth and appreciation of contemporary art and artists in Texas. *Reference 13*

The Dougherty Arts Center is located on the south side of Town Lake just off Lamar Boulevard. The center sits on the former site of the Naval and Marine Reserve Center, dedicated in 1947 for the school. The DAC houses an 1800 square foot gallery, 150 seat theater, a specialized art school, studio/lab space, classrooms, offices, and the Austin Art in Public Places program. *Reference 14*



Figure 75. Pecan Street Festival



Figure 76. Dougherty Arts Center

A variety of local galleries and studios are located to the west of the site on 5th and 6th streets. These are primarily personal studios and exhibit space. There are also many art festivals that occur annually in downtown, the largest currently held on east 6th street and Republic Square, in the central Business district. The Pecan Street Festival is held annually in the spring for artisans from all over the United States to display and sell their homemade art and craftwork.

## CHAPTER 3 - THE POWER PLANT

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SEAHOLM POWER PLANT

## **SITE SELECTION**

There were several reasons for selecting the Seaholm Power Plant site as the context for the thesis investigation. One factor was the proper context and necessity for the chosen program: The established performing arts presence on Town Lake, but no visual arts center; the recreational activity on the lake, but no focused center; the civic function of the water for the entire city, but no physical acknowledgement of it. The adjacency to the central downtown district, and the existing and proposed development in the area were also supportive of a reuse for Seaholm. New downtown residential



Figure 77. Seaholm Power Plant (black) and the locations of the current Austin arts facilities (red).

buildings, retail, and office space, are capable supporting almost any type of program considered for the Seaholm site.

However, the primary reason for the selection of the site was the symbolic and historic relevance of the physical structure of the power plant and its auxiliary buildings. The Seaholm Power Plant has been at the heart of the city's changes, from the pioneers and Indians at Treaty Oak to the boom of the rail and modern industry, the seedy underbelly of wild times and backroom deals to the migration of citizens back to the Austin's core. The Seaholm Power Plant is known as an icon, noticeable to outside visitors, but certainly a well known element of the urban landscape for the citizens of Austin. The building is a topic that seems to often come up in talk of development, sparking curiosity about what has been, and representing a shared notion of the past and of a cultural identity. The buildings on the Seaholm Site and their unique historic presence supply a base of knowledge to test and attach memory. These built objects are at once well known in their existence, but in large part foreign in their story. The unique opportunity now arises to reconnect the misplaced and separate bits of history surrounding the Seaholm Power Plant and Austin.





Figure 78. One of the two south entry portals.

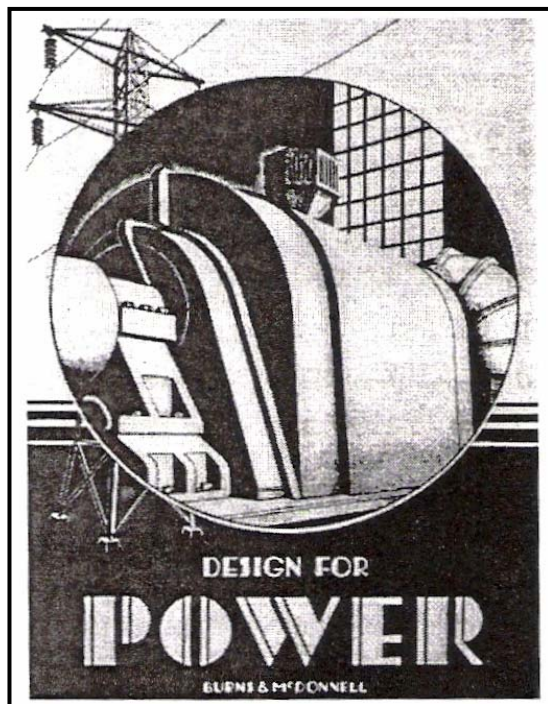


Figure 79. Advertisement for Burns & McDonnell Architecture.

## **SITE DESCRIPTION**

The Turbine Generator Building is set atop a sloping hill overlooking Town Lake. To the east, between it and Shoal Creek lays an outdoor electric substation currently in use by the city. To the west of the Turbine Generator Building is a masonry and steel railroad bridge carrying tracks from the middle of the site to the north edge of the site at west 3rd street. To the south is Cesar Chavez, which separates the Turbine Generator Building from the Water Intake Structure and a grove of Live Oaks at the lake's edge. To the north of The Turbine Generator Building on recently poured asphalt is the Oil Heating Plant.

The lack of surrounding buildings allows each of the three primary buildings on the site to stand as prominent figures in the landscape, however, this also creates a lack of scale for the large structures.

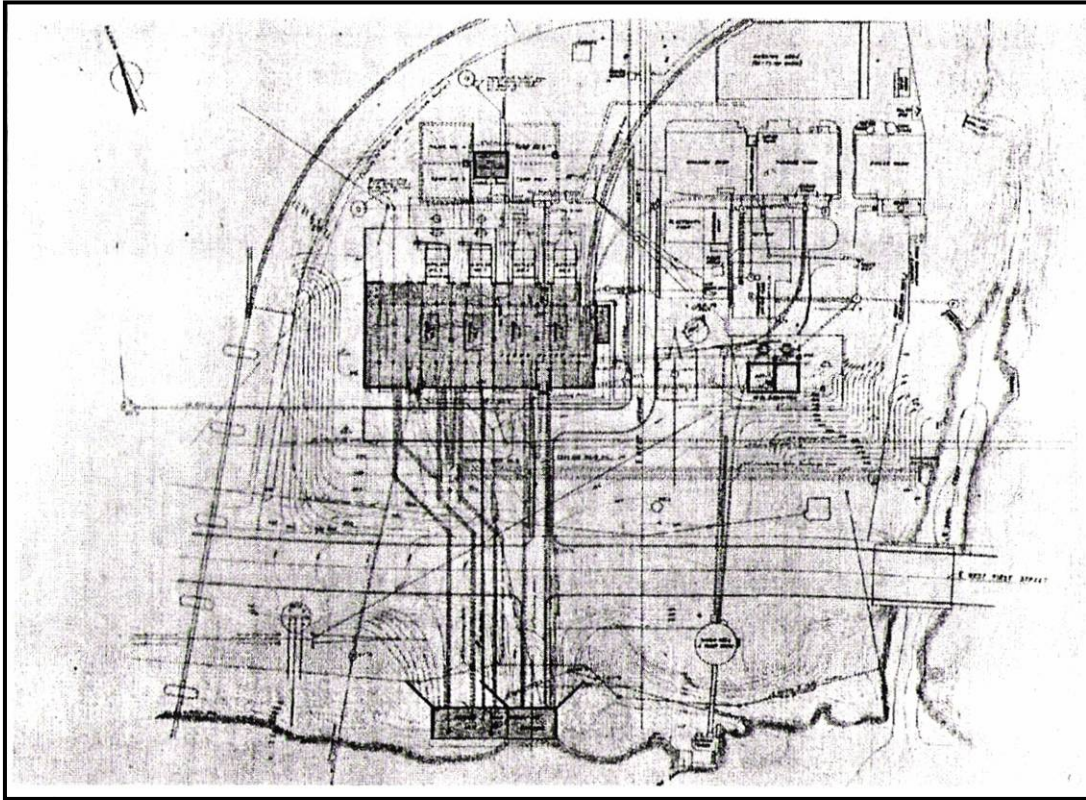


Figure 80. The original site plan drawing

## **BUILDING HISTORY**

Austin first produced electric power in 1893 with the adaptation of an existing mill building into the city's first generation plant. The production of power has been owned and distributed by the city continuously since that time thanks to the actions of Walter E. Seaholm. Seaholm protected municipal sovereignty during the 1927 TP&L bid for privatized production, as



well as the flood of 1935 which knocked out all city power and drinking water. The power plant was later dedicated to Seaholm posthumously in 1960.

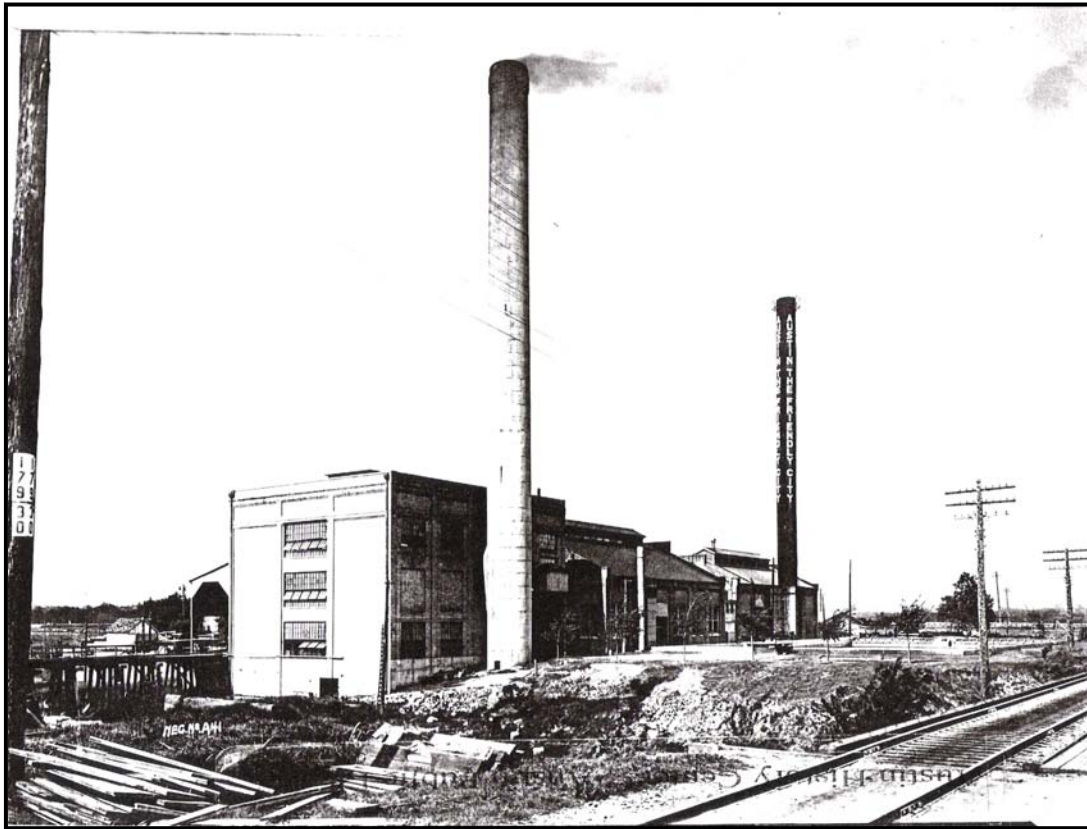


Figure 81. The first Austin Power Plant

An eight-year population increase of over 35,000 citizens, post-war shortages, and lifestyle changes due to modern electronics placed an enormous strain on the city's aged power infrastructure. Power Plant #2 (later Seaholm) was commissioned in 1948, and was designed in two phases between 1950 and 1955 by the engineering firm of Burns & McDonnell, the nation's experts in municipal power plant design. The Seaholm Power Plant was a deviation from typical power plants of the time (usually masonry) as it was constructed site-cast concrete, probably due to post-war steel shortages



Figure 82. Seaholm Construction

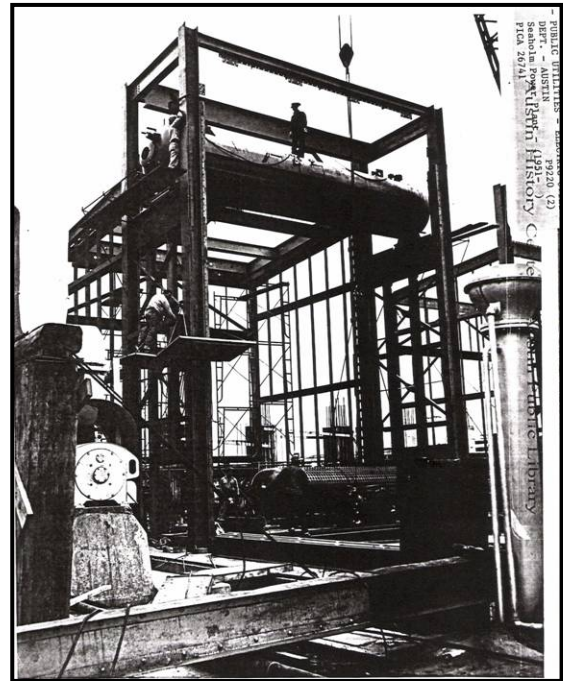


Figure 83. Seaholm Construction

or the speculation of an aesthetic lean toward the materials of other municipal projects such as dams.

The Seaholm Power Plant is a semi-outdoor type, one suited primarily for temperate climates of the south, with its boilers outside and its generators inside. This was done to reduce the cost of covering the boilers, but compromised the ease of maintenance. Seaholm was designed to hold five hydrogen-cooled turbine generators. As per the standard, all turbines were capable of being run by coal, crude oil, or natural gas (the later being the primary energy source.) The coal option was the reason ash pits and a lower level were designed for in the plant, and oil burning made the Oil Pump House necessary. In short, the manner of Seaholm's generation was not at all unique, but the scale was as grand as was seen at the time.

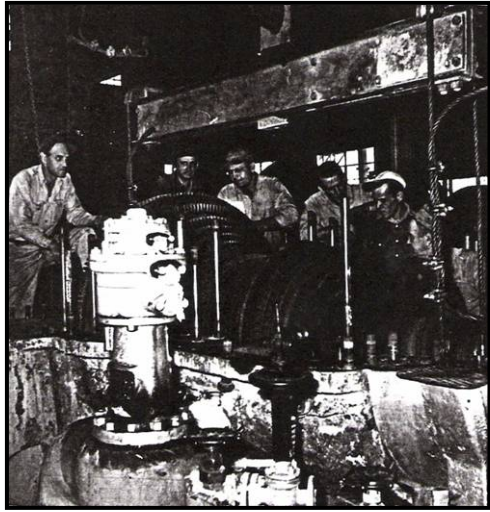


Figure 84. Workers repair equipment

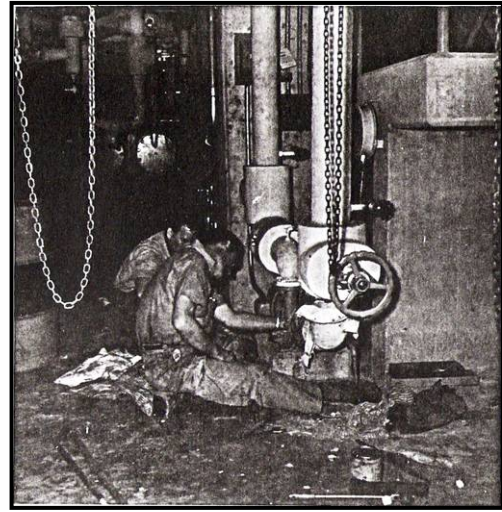


Figure 85. Workers repair equipment

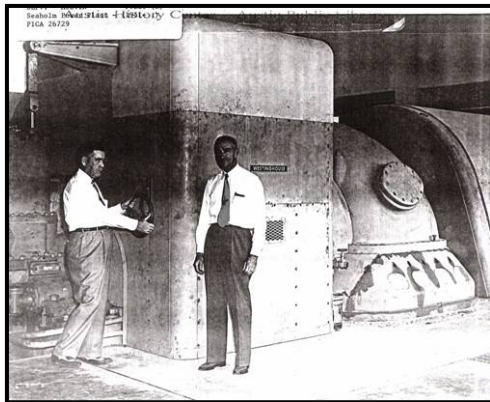


Figure 86. Seaholm - Austin Energy officials

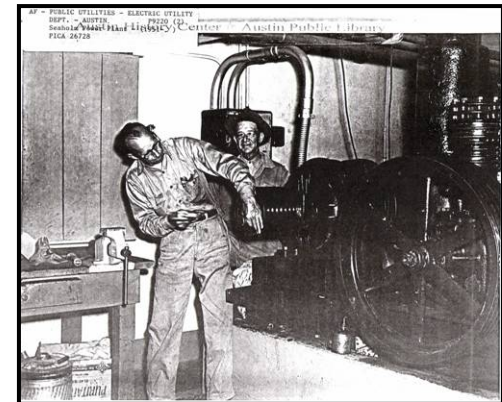


Figure 87. Workers repair equipment



The Seaholm Plant was indicative of Burns & McDonnell's Art Deco work. Contrary to the stereotypical stark and functional design of most municipal buildings of the time, Burns & McDonnell's design was thoughtful scaled and detailed to give Austin a civic testament to the strength and reliability of electrical power. The Plant was designed with 4-foot by 4-foot panels scored into its concrete exterior to brake down the large scale of the buildings. Other patterns were utilized to break up the large facades as well, including corrugated and flat rubbed surfaces. The plant has retained high level of integrity in its location, setting, design, materials, signage, workmanship and feeling. Besides the old power plant's replacement by the electric substation in the 1960's, and a 1972 addition on the west façade of the Turbine Generator Building, the site has been for the most part undisturbed.



Figure 88. Turbine Generator Building Phase 1

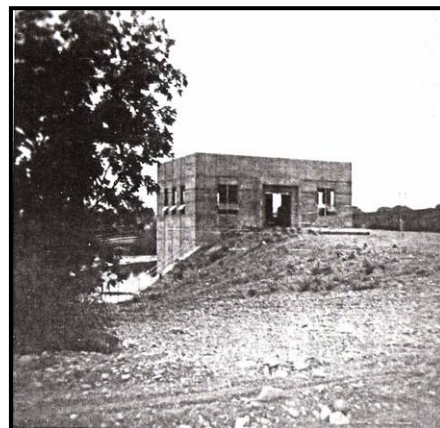


Figure 89. Water Intake Structure Building Phase 1

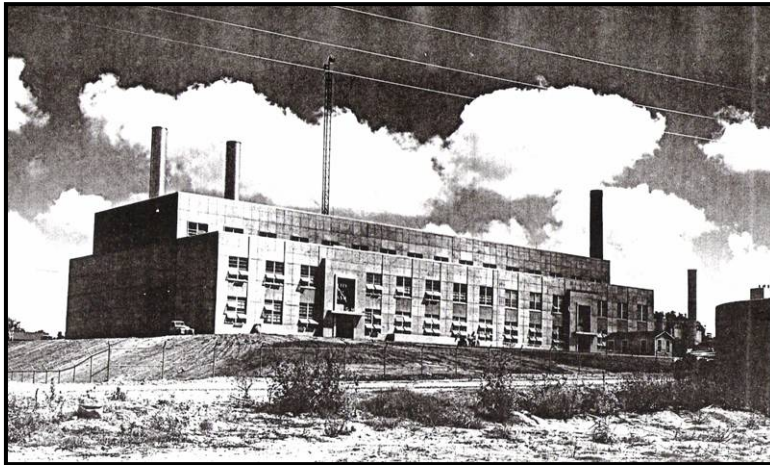


Figure 90. Turbine Generator Building Phase 2

The plant last supplied power to Austin in 1989, when the cost of production rose above what the city could charge in the market, but still housed Austin Energy offices until the late 1990's. In 1984, the City of Austin's Historic Resources survey targeted the Seaholm building as the highest priority level of a building to be preserved, and plans are in effect to have the Turbine Building, the Water Intake Structure, and the Fuel Oil Building placed on the National Historic Register. In 1996, the City Council resolved to preserve the Seaholm Power Plant for public use following decommissioning and remediation of high levels of PCB, mercury, lead, asbestos, and cadmium.

In November of 1999, the City Council passed a resolution for the City Manager to make recommendations outlining the next steps of decommissioning and proposals for reuse. In June of 2000, ROMA Design Group was hired to prepare a master plan making recommendations for

urban design and economic redevelopment of the surrounding area. In September 2002, funds were approved for the new James D. Pfluger Bike and Pedestrian Bridge across Town Lake, which was completed in late 2003. In December of 2002, the City Council approved the extension of 3<sup>rd</sup> street across Shoal Creek, and the extension of West Avenue to Caesar Chavez Street. In late 2003, the City of Austin and Austin Energy acquired an additional 3.6 acres of property adjacent to the west of the site.

Decommissioning of Seaholm started in early 2000. In 2003, decommissioning activities were suspended to allow for regulatory approval and disposal actions of the Environmental Protection Agency, and later to budget limitations. The final phase of cleanup has since been completed in January 2006. The final approval and summary document from the EPA is expected in later that same year. Currently all equipment has been removed from the Turbine Building, Water Intake Structure, and the Pump Room. The stacks have been repainted and remediation of outdoor area is complete.

*Reference 8*

## TURBINE GENERATOR BUILDING

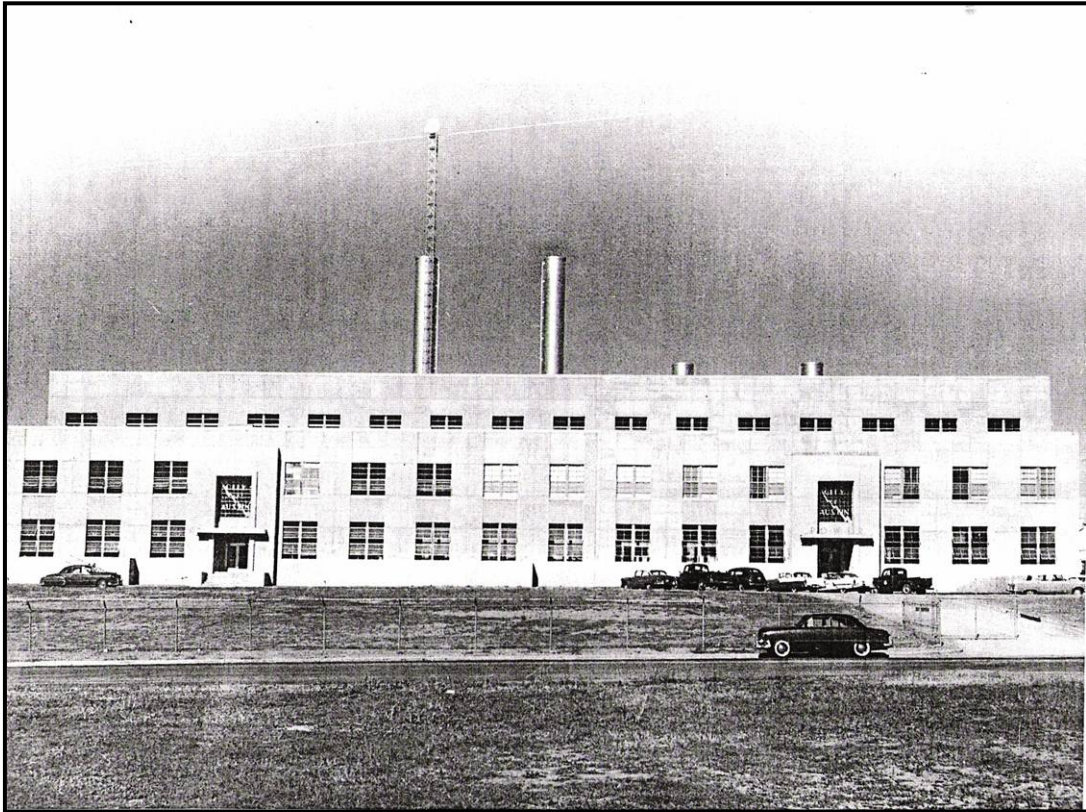


Figure 91. Completed Seaholm Building

The Turbine Generator Building is large structure comprised of four rectangular concrete masses totalling approximately 110,000 square feet of space. The central Turbine Room is a undivided open room 270 feet long, 100 feet wide, and 50 feet high. To the north is a rectangular appendage housing equipment and connections for the boilers and turbines. To the south is a similar mass housing the office space. Both are slightly smaller in length and height than the Turbine Room. A one story space is located on the east end of the building, and the 1972 receiving addition is located on the west end.



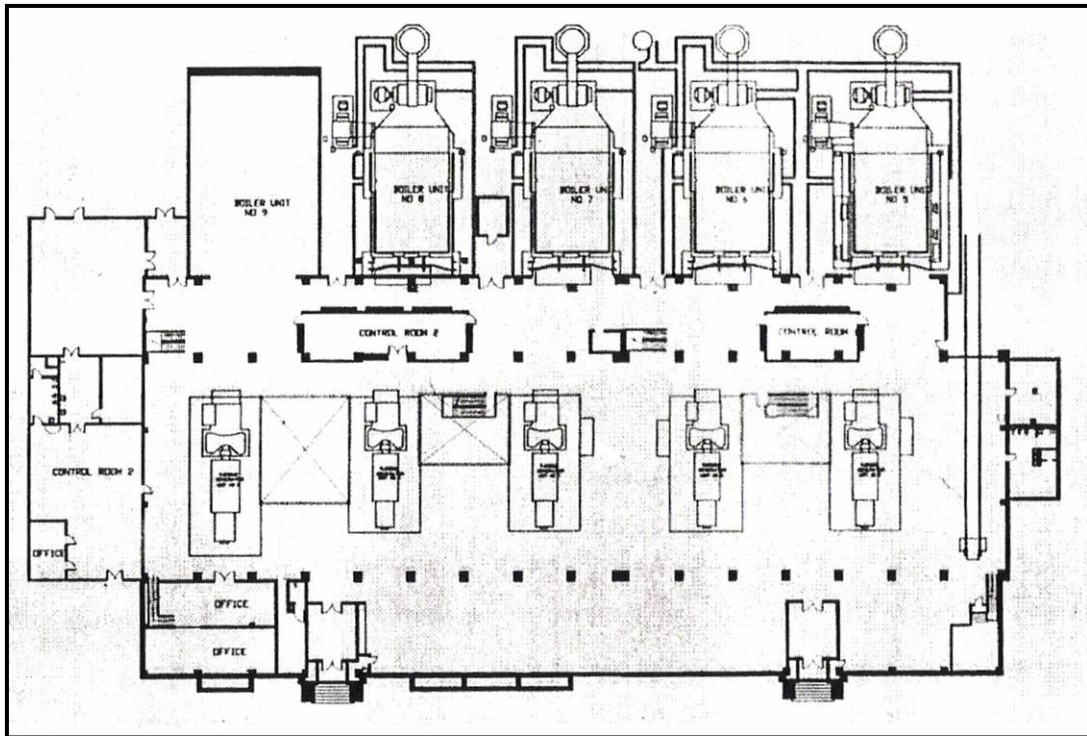


Figure 92. Turbine Generator Building Plans – Equipment Level

The south façade is the closest to the entry drive off Cesar Chavez, and sits behind a sliding chain-link fence and a secure entry with a small guard booth. Two entry portals to the generator building are symmetrically balanced on the east and west ends of the façade, and each entry leads into the office block of the building. These entries are detailed with some of the more unique and Art Deco details of the building, including large planters upon concrete pedestals, aluminum awnings and glass block lights, aluminum lettering on either awning spelling out "light" and "power", and "City of Austin" spelled out on the glass block with a large stylized lighting bolt behind. The facad is unified by concrete construction and a scoring pattern of 4-foot by 4-foot panels tht is used consistenly throughout the entire complex of buildings.



The system of this pattern is adhered to almost completely except at corners and where the two phase of construction meet. All windows in the building are aluminum with operable awnings in a two over six or two or seven division of lights. The space between the first and second story windows are embellished with fluted concrete form work. The south façade terminates with a cast stone parapet at two stories and then rises another story further back at the Turbine Room, and is lined with clerestory windows for daylighting the large open space. The façade of the Turbine Room also ends in a cast stone parapet with a obscured gabled roof roof with an east-west ridge. On top of the Turbine Room roof is an 80-foot aluminum microwave tower used to control eelctronic switching.



Figure 93. The south elevation of the Seaholm Power Plant, looking north across Cesar Chavez – 1<sup>st</sup> Street.



Figure 94. South Entry Portal

The east elevation introduces several window types, varying in the number of lights and the relief of the concrete surround, and a large . The smaller one story mass attached to the east end of the Turbine Room houses the men's locker room and a laboratory.

The north façade of the Turbine Generator Building is almost completely obscured by the five boilers and exhaust stacks. Abandoned train tracks used to deliver the turbines to the plant enter the Turbine Room through a rolling steel door to the east of the boilers. The four eastern boilers (# 5 through # 8) are all identical, although the stacks for # 7 and # 8 added in the second phase are taller and thinner. Each stack rests on an octogonal pad north of its associated boiler. Each boiler has been encased in corrugated aluminum due to decontamination requirements, which represents the greatest change in the plant's original design. Each boiler is attached back to the Turbine Room through piping linked to the turbines, and through a pair of metal doors between each boiler. Above the boilers is a steel superstructure containing a maze of valves, stairs, ladders, catwalks, and piping. Boiler # 9 to the far west is different in both operation and appearance. # 9 is a 'hanging boiler', designed to expand downwards during operation, so it is raised off the ground and much taller than the others, braced by a much larger steel superstructure. To the west of boiler # 9 is the north face of the 1972 addition. This addition is scored in a much larger pattern than the rest of the Turbine Generator Building and contains a concrete block infill with a double-leaf man door and the only visible roof on the building.



Figure 95. North Elevation



Figure 96. Boiler

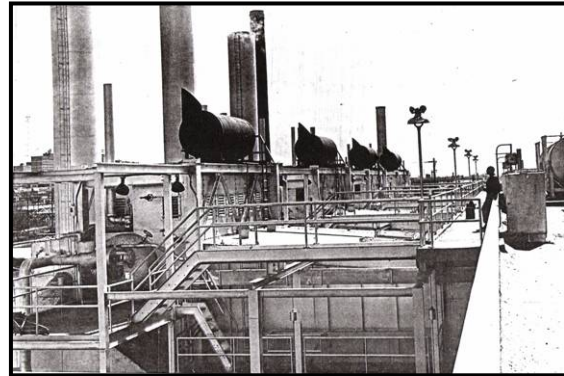


Figure 97. Roofscape

The western elevation is probably the complex's most recognizable façade to Austinites. The boilers, stacks, and west end are all visible on this face, and are easily viewed over the railroad tracks. The west end of the Turbine Room is without fenestration and holds the iconic, red-illuminated letters spelling "City of Austin Power Plant."

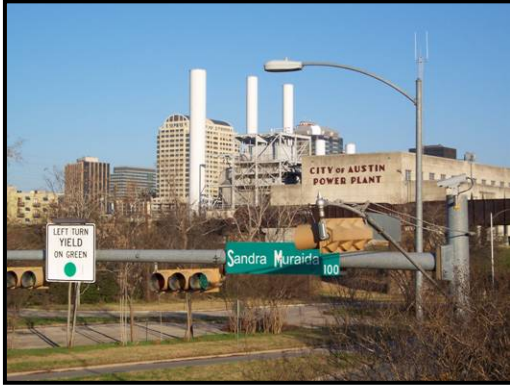


Figure 98. Seaholm from Pfluger Bridge



Figure 99. Western signage

Inside both south entry portals is a double-height stair lobby, detailed elaborately with aluminum stair components, the large glass block window, and the City of Austin seal on the lobby floor. A landing on the lobby stairs sits directly behind the glass block window, above the entry doors. The lobby is illuminated at night to back light the entry's exterior lettering. The stair lobbies lead directly to the Turbine room floor through a pair of steel doors where the five steam turbines rest on the bare concrete floor. The Turbine Room is receives a high level of natural light from the clerestory above and the windows on the east façade. Three rectangular openings provide views to the mezzanine and basement levels below where gauging equipment and piping is located.

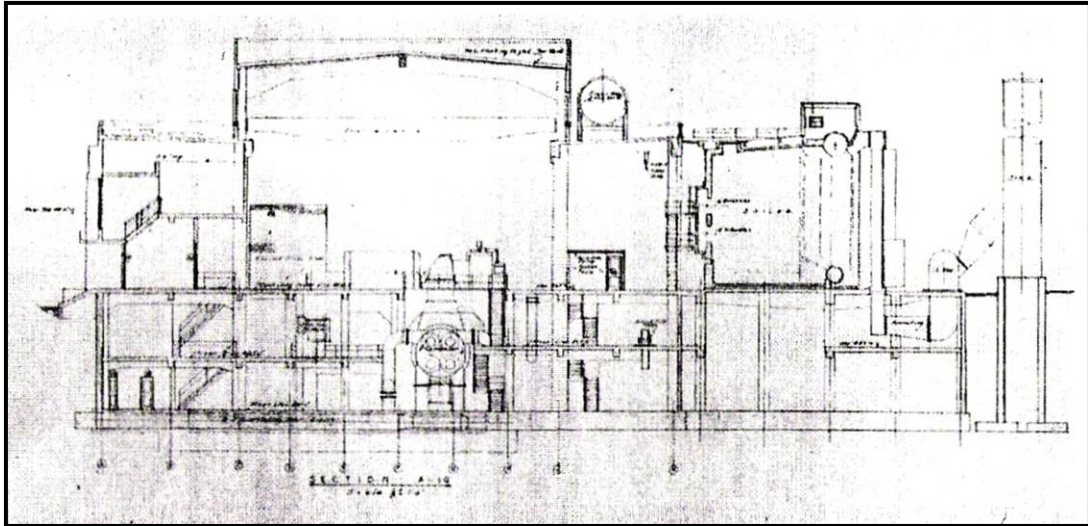


Figure 100. Turbine Generator Building North-South Section

Rectangular piers extend two stories up from the Turbine Room floor to support the runway for the currently operational 75-ton beam crane. The built up roof is supported by a concrete beam topping each of the piers, and a central east-west concrete spine. The south face of the Turbine room is faced with glass windows that permit the office space and the control room to view the floor below.



Figure 101. Turbine Generator Building interior

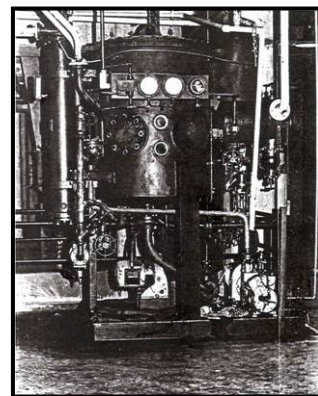


Figure 102. Boiler equipment



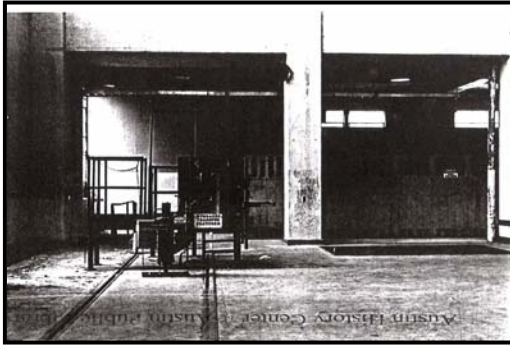


Figure 103. Office space

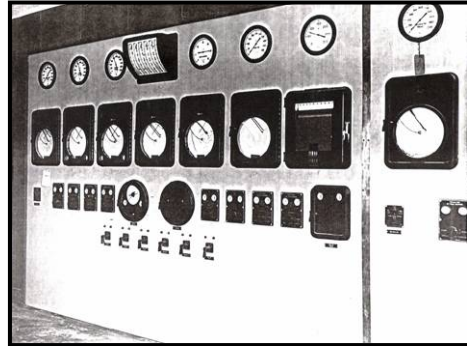


Figure 104. Gauge room

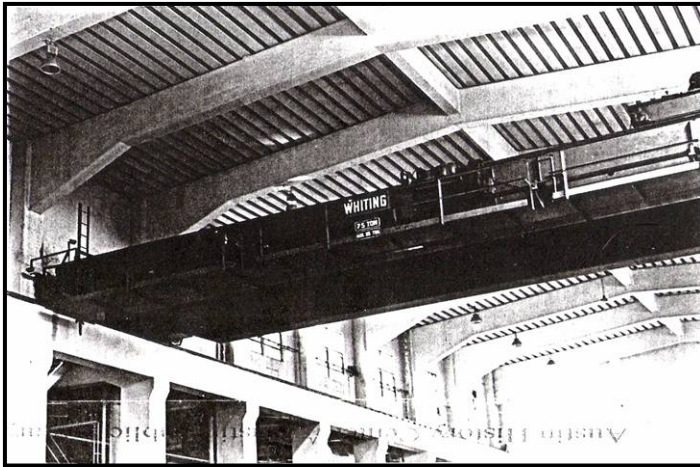


Figure 105. Beam crane

Although the 1972 addition has covered over some of the original wester façade, it has not damaged the building fabric. All parts of the building remain with some have simply been encapsulated, and a majority of the windows are intact, giving the Turbine Generator Building a high degree of historical integrity. *Reference 8*

## WATER INTAKE STRUCTURE



Figure 106. The south elevation of the Water Intake Structure's from across Town Lake.

The Water Intake Structure lies to the south of the Turbine Generator Building across Cesar Chavez Street and extends out into Town Lake. The Hike and Bike trail currently runs adjacent to the Water Intake structure and Cesar Chavez. The construction and design are very similar to the Turbine Generator Building, and the Water Intake Structure was also built in two phases in 1950 and 1955. Each boiler required two water intakes, so originally only four sluice gates were constructed, six more with the

completion of the building. The Water Intake Structure is entered on its north elevation which is obscured by large Live Oak trees that have matured since construction, and a recently placed outbuilding for the municipal water treatment plant.

The east and west elevations are similar, continuing the scored concrete and window patterns and built off of a large concrete retaining wall on either side. A steel staircase is attached to the west façade, which leads to a concrete walk on the south side of the building.



Figure 107. West elevation of Water Intake

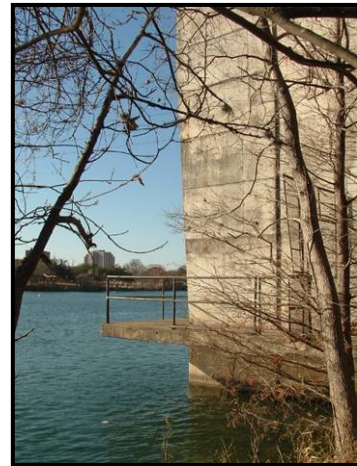


Figure 108. Water Intake at water



Figure 109. North elevation of Water Intake



Figure 110. Water intake sluices



The south elevation raises two stories above the water, and operable sluice gates are tucked below the concrete walk at the water level. Each of the gates has a one-story high rectangular indentation above them, and a metal rod which controls the gates runs down the middle of these indentations. To the east of the Water Intake Structure is a similar four-bay building used by the Green Water Treatment Plant.



Figure 111. Water Intake interior

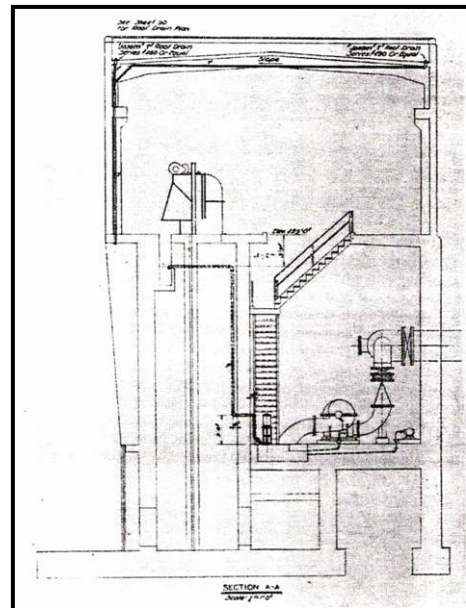


Figure 112. Water Intake North-South section

The 30,000 square feet of undivided rectangular space of the interior of the Water Intake Structure is similar to the Turbine Room of the Turbine Generator Building. The floor also contains two rectangular openings which lead to two sump pits hold the water pumps. As water for the Turbine Generator Building's steam condenser is pulled into the Water Intake Structure, is passes through traveling screens which remove debris from the

lake water. The drive mechanisms for these screens are located on the south side of the main floor. The historical integrity of Water Intake Structure is also very high, with the traveling screens being the only elements to have been replaced or altered. *Reference 8*

## FUEL OIL BUILDING



Figure 113. Fuel Oil Building entry.

The Fuel Oil Building rests just north of the Turbine Generator Building, isolated in a recently poured asphalt lot. The building is consistent with the scored concrete construction of the rest of the complex. The east and west façades have no doors or fenestration. The south façade has one steel man door on-center and two windows on either side. The door is actually reached by a concrete bridge over a pair of stairs on either side, descending below the door adjacent to the building. The north face of the building has a symmetrical layout of double doors on either side of square chimney rising above the parapet. The building is approximately 10,000 square feet. *Reference 8*

## **PROPOSED MASTER PLAN**

In June of 2000, ROMA Design was commissioned by the City of Austin to prepare a master plan for the Seaholm Power Plant and surrounding city owned site. The recommendations of the master plan were as follows:

- Preserve the Seaholm Power Plant as a prominent civic historic landmark with viable and complementary public-oriented uses. Reinforce the natural, visual and open space character of Town Lake and Shoal Creek.
- Ensure that adequate parking is provided for Seaholm.
- Extend roadways to improve local access to Seaholm and to create better linkages to the downtown and adjacent activity centers, and provide for improved bicycle and pedestrian circulation through the Seaholm district.
- Provide the development of an intermodal transit facility at the heart of the Seaholm district, accommodating city and inter-city buses, Amtrak and future light rail and commuter rail service.
- Promote the development and redevelopment of surrounding properties and the preservation of key resources to create a unique and vibrant mixed-use district that complements Seaholm as a public attraction.

*Reference 15*



Figure 114. Seaholm Master Plan



Figure 115. Aerial image of master plan proposal.

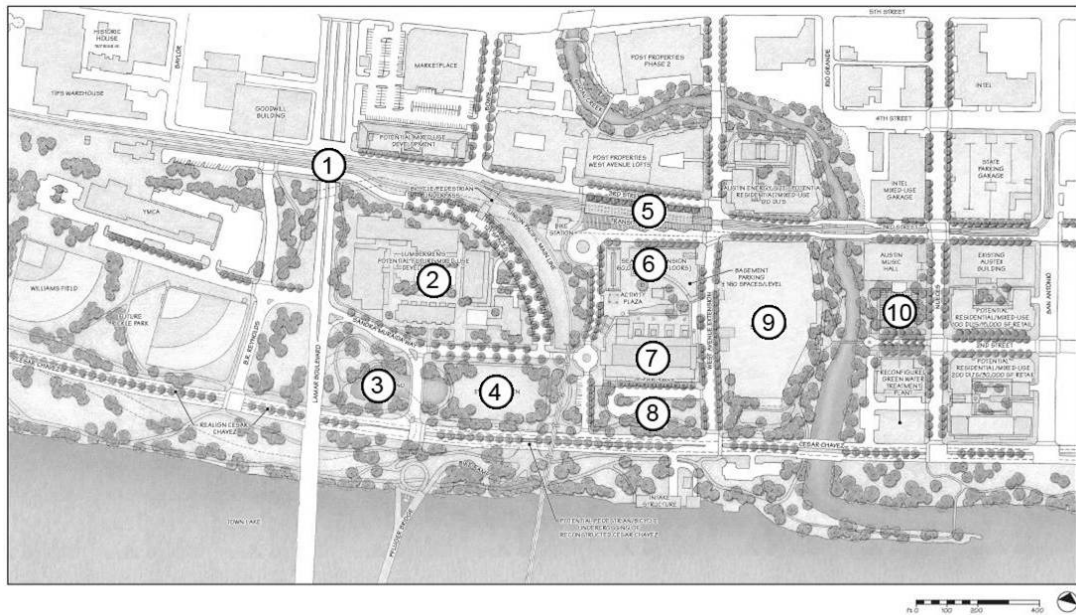


Figure 116. Features of the proposed master plan.

1. Widening of Lamar overpass for new vehicular and pedestrian use.
2. A proposed residential / mixed use development.
3. Pond feature.
4. Events green and amphitheater.
5. New Transit Center.
6. New mixed used buildings (2-3 floors).
7. Seaholm Power Plant.
8. Vehicular access and drop-off drive.
9. Green space.
10. Austin City Music Hall plaza.

Reference 15

## **MASTER PLAN CRITIQUE**

The master plan addresses many crucial issues and looks at some innovative ways of handling a building and site with enormous potential. The plan does call and layout better connections of vehicular, realigning and meeting up key roads both to the site and through it. There is also an indication of linking pedestrian traffic across Cesar Chavez with an underground passage, and widening the bridge over Lamar. In addition, the plan calls for more entry points and lays out roads and parking internal to the site to support proposed civic functions. There is well defined green space, and the existing plant is well presented on an open axis of lawns. The plan also does well at recognizing and isolating the train, and relocates the transit center to the Seaholm site. The planners were also forshadowing certain mixed developments to help fill in the currently large, open green spaces.

The plan, however, does not supply strong gestures to three sides of the site at Lamar, Town Lake, or Shoal Creek. This disallows any real connection, both physical and mentally, to the lake and the downtown business district. The master plan also fails to fully engage the Seaholm Power Plant, leaving it isolated from new development. There are a few landscaped elements on the site, but exist as repetitious water and green spaces that are either challenge or lack a real connection to Town Lake and the Hike and Bike Trail. Finally, the Water Intake Structure and Fuel Oil Building were either disregarded or poorly planned for in new development.



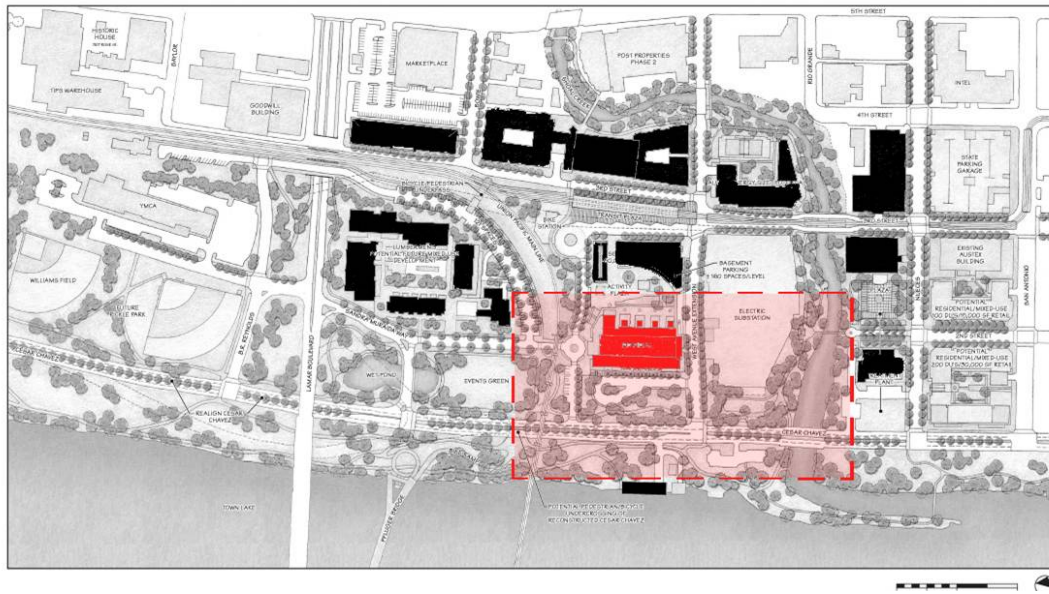


Figure 117. There are new roads and rail passages, but the site is still unattached to any sort of established civic activity at Town Lake. Where connections do exist, they are minimal and hidden, especially at Shoal Creek.



Figure 118. New buildings are added to the site, but the Seaholm building is still isolated in the landscape and from a formal connection to any sort of urban fabric. The fabric of the development fails to create anything informed by or inspiring an overall city organization.





## CHAPTER 4 - SITE INVESTIGATION

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SEAHOLM POWER PLANT

## SITE PERSPECTIVES



Figure 120. Aerial view north across Town Lake towards the Seaholm Power Plant site. This image shows the complex prior to the removal of several auxiliary buildings.



Figure 121. North Elevation of the Power Plant across the rail line from West 3<sup>rd</sup> Street.



Figure 122. West Elevation of the Power Plant from Lamar Boulevard.



Figure 123. South Elevation of the Power Plant across Caesar Chavez Street from the Hike and Bike Trail.

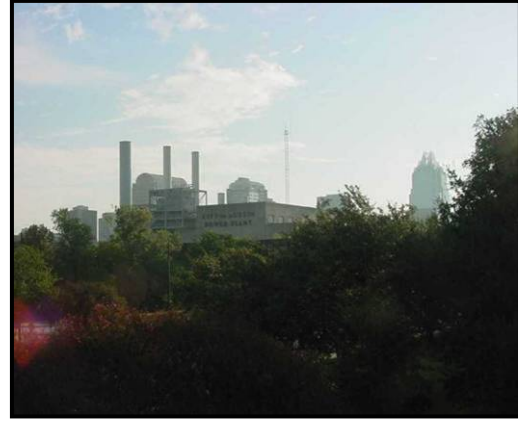


Figure 124. View of the Power Plant from the Pfluger Pedestrian Bridge.



Figure 125. View east down the northern easement towards shoal creek and the central business district



Figure 126. View north down West Ave and West Avenue Lofts



Figure 127. View west across water treatment plant towards Seaholm Power Plant.



Figure 128. View north across Town Lake to Seaholm Power Plant.





Figure 129. View east across below grade section of Lamar Boulevard.



Figure 130. View east to Power Plant down West 3rd Street.



Figure 131. View down Cesar Chavez towards the Lamar Bridge.



Figure 132. View down Cesar Chavez at the Seaholm Site to the downtown business district.

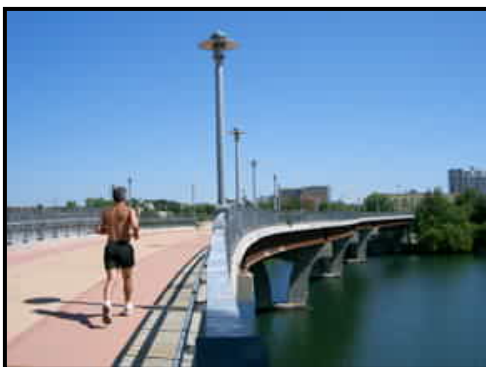


Figure 133. View of Pfluger pedestrian bridge at the southwest corner of the site.



Figure 134. View from the south shore of Town Lake to the Rail Bridge coming out from site.

## SITE SURVEY

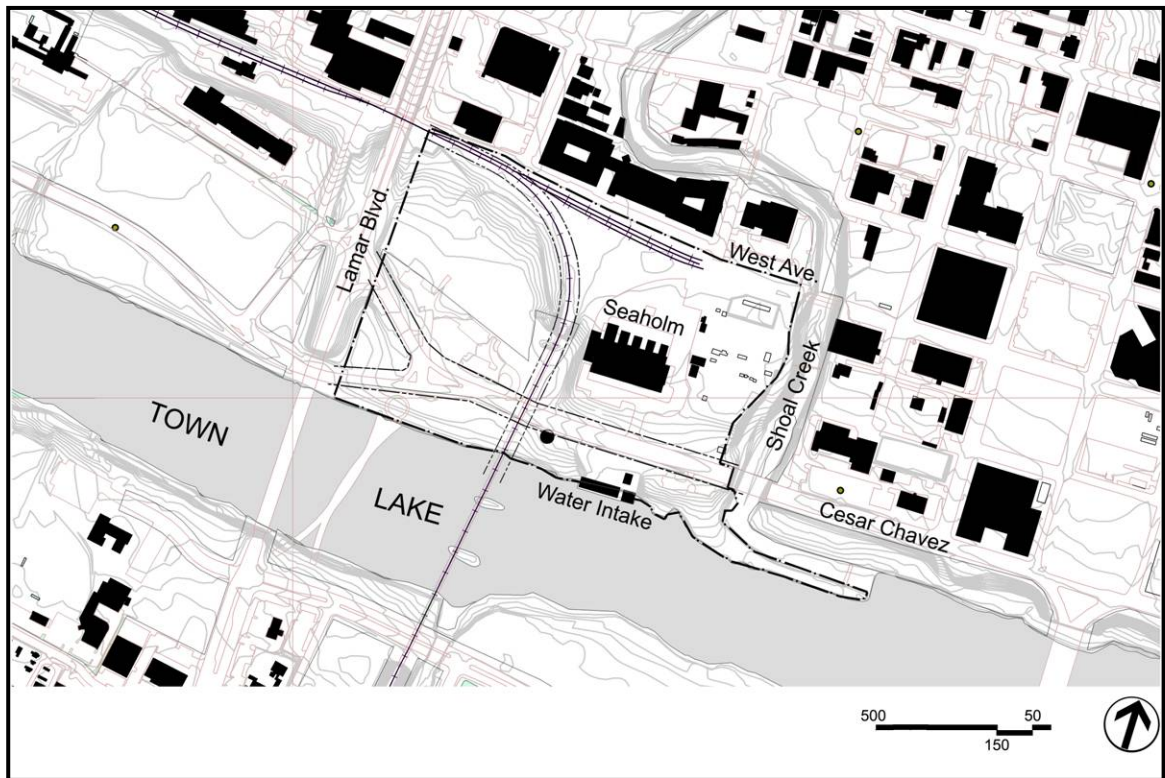


Figure 135.

The boundaries of the Seaholm site lie along two roads, Lamar Boulevard and West Avenue, and two natural elements, Shoal Creek and Town Lake. The change of topography on the site is taken up in short, steep sections. There is a sharp drop in elevation at the Shoal Creek edges and portions of the just to the south of Cesar Chavez at Town Lake. There is also a ten foot section of land that was built up for the plant, creating a small drop that travels around the south side of the plant and follows the train rails. There is a twenty foot easement on the northern edge of the site for the train line and existing power and communication utilities. The existing structures on the site are the Power

Plant, centered in the site, and the Water Intake Structure and Fuel Oil building resting side by side at the shoreline of Town Lake.

## CITY - DISTRICTS



Figure 136.

- |  |                               |
|--|-------------------------------|
| 1. Seaholm Power Plant                   | 13. Riverside Neighborhood    |
| 2. Williams Ball Fields                  | 14. Travis Heights            |
| 3. Austin High School                    | 15. Bouldin Creek             |
| 4. Deep Eddy Neighborhood                | 16. Texas School for the Deaf |
| 5. Enfield Neighborhood                  | 17. Town Lake Commercial      |
| 6. Lamar / 6 <sup>th</sup> Street Retail | 18. Auditorium Shores         |
| 7. Downtown Business District            | 19. Barton Springs Retail     |
| 8. State Capitol                         | 20. Inwood Hills              |
| 9. University of Texas                   | 21. Zilker Park               |
| 10. Chicon Neighborhood                  |                               |
| 11. Rosewood Village Neighborhood        |                               |
| 12. Craig Fields                         |                               |

*Reference 9*



## CITY - LANDMARKS



Figure 137.

- |                              |                            |
|------------------------------|----------------------------|
| 1. Deep Eddy Pool            | 13. Paramount Theater      |
| 2. Austin High School        | 14. Woodridge Park         |
| 3. Barton Springs            | 15. State Capitol          |
| 4. Treaty Oak                | 16. Old Austin High School |
| 5. Pfluger Pedestrian Bridge | 17. House Park Stadium     |
| 6. Seaholm Power Plant       | 18. Frank Erwin Arena      |
| 7. Palmer Auditorium         | 19. Dishfalk Field         |
| 8. City Hall                 | 20. Longhorn Dam           |
| 9. Congress Bridge           |                            |
| 10. Republic Square          |                            |
| 11. Historic Driskell Hotel  |                            |
| 12. 6 <sup>th</sup> Street   |                            |

*Reference 9*

## CITY - EDGES

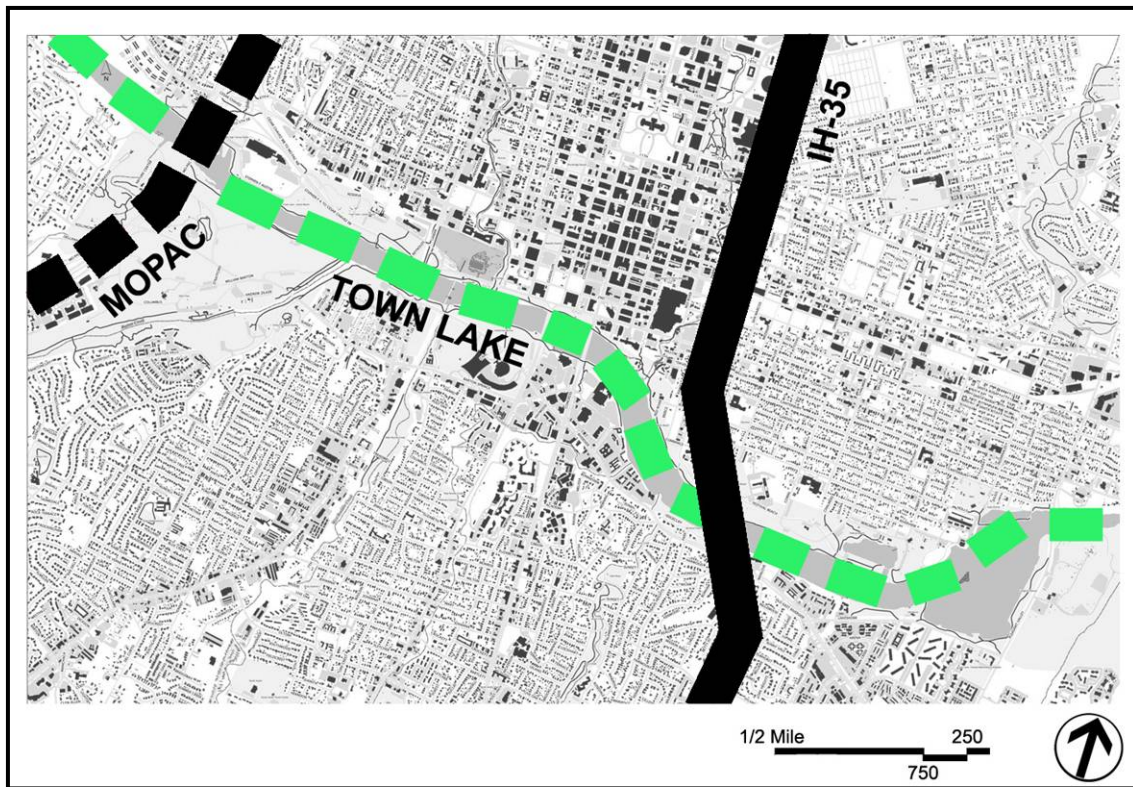


Figure 138.

There are three very strong edges to downtown Austin, two negative in MoPac expressway and Interstate 35, and one positive in Town Lake. Interstate 35 is the major regional highway and has established itself as a major negative divider between impoverished east Austin and the downtown district, discouraging any connections of the urban fabric as well as development, race, and financial equality of the city. MoPac expressway is a physical edge in the same sense as IH-35 but is an outlet for much more local traffic and is porous enough to allow reasonably unnoticed disjunctions in the adjacent neighborhoods. Town Lake, however, is a dividing element that also acts as a usable civic space, where the activities at the edge pull the city

across the water. Although it divides the business district and the southern park shore, it actually serves as node for the city and as the most public, recognizable, and orienting spaces in downtown Austin.



## CITY - MOVEMENT

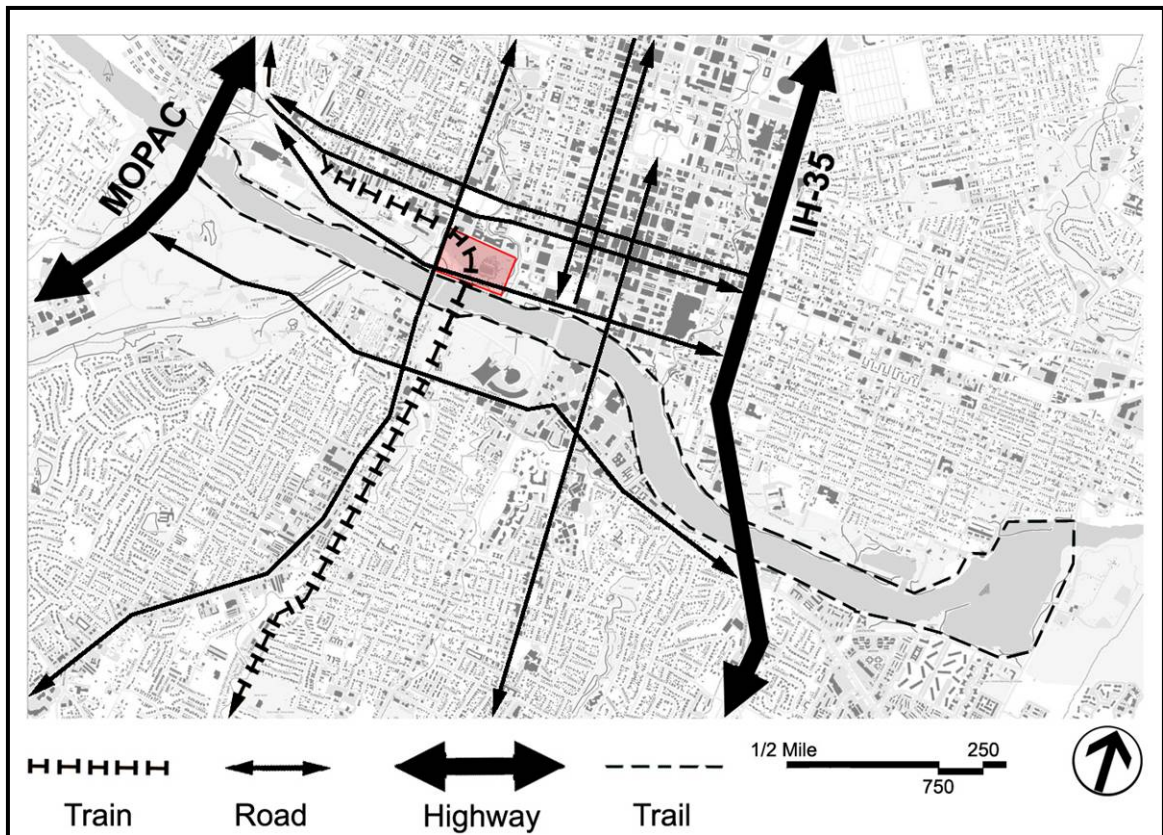


Figure 139.

A majority of vehicular traffic in the downtown district runs in the north-south direction, including major highways. Although the larger vehicular roads handle a majority of the traffic in downtown, they exist in fewer numbers and are not always continuous. Of the east-west connections downtown, the faster and freer flowing lie along Town Lake. This includes the primary direction of the Hike and Bike trail. Reaching the downtown area along MoPac, the train line makes a shift east towards central downtown, and then shifts again south at the Seaholm site.

## CITY - PUBLIC SPACES & TEN MINUTE WALK

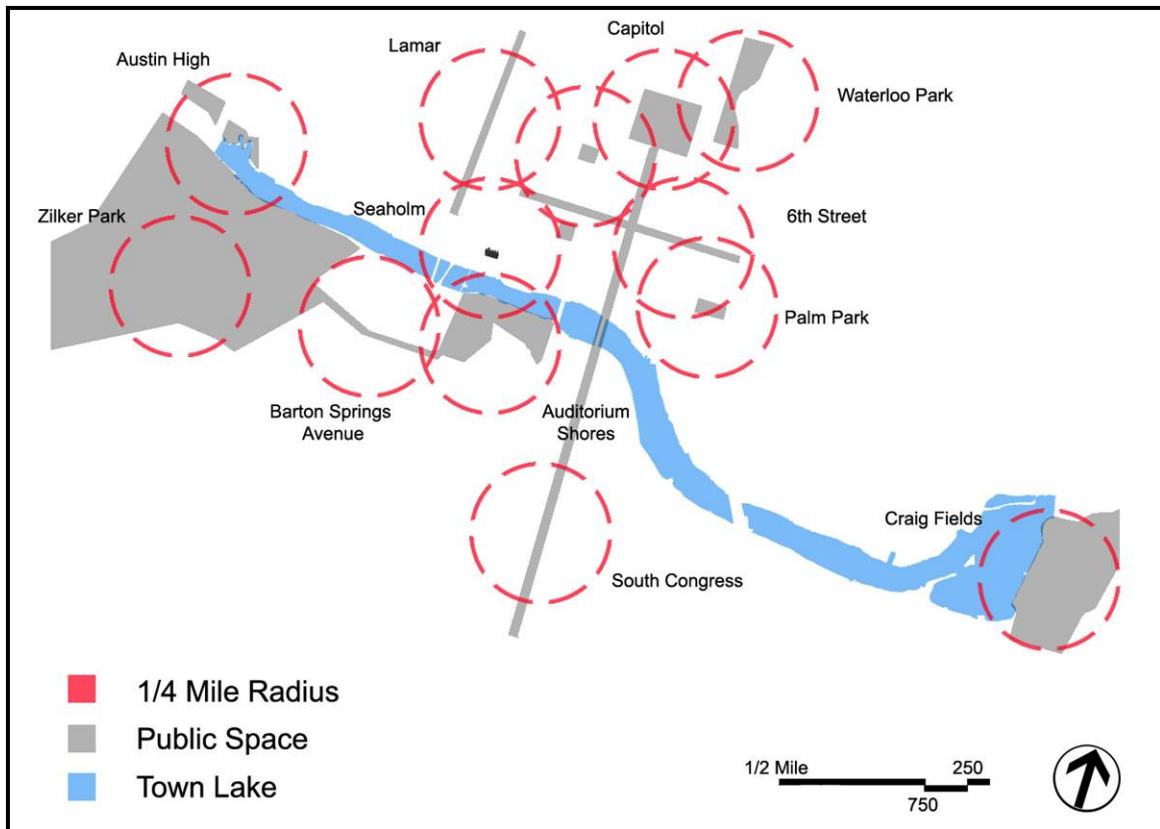


Figure 140.

The public areas in downtown Austin are well-spaced and numerous, however unsuccessfully they serve the city's civic life. This diagram shows that the Seaholm site is well linked with the various nodes throughout Austin as far as tolerable walking distance and functions. There are fewer nodes acknowledged by the consensus to the east of Congress Avenue, historically a less developed area due to income levels and ability to build at steeper edge of Town Lake. Although the western nodes are separated by more space, they are primarily nodes for outdoor and exercise activities that lie along the Hike and Bike trail. At the Seaholm site, there is an opportunity

between well established nodes for a major development for the civic and retail environment.

## SEAHOLM DISTRICT - FIGURE GROUND



Figure 141.

The figure ground shows a distinct difference in the scale and urban organization of the opposite sides of Town Lake. The northern side is the business district with full and well defined city blocks. There is a regular shape and pattern to the lot size and building fabric, with a higher density and fewer, more rigid open spaces.

The southern side is primarily residences with a much more irregular and natural pattern to the streets. This area is much more about open space and more gracious floor to area ratios. There are also major jumps in the

different scales on the south side, with large, isolated buildings mixed in with single-family residences. Another obvious difference is the amount of park space, with all major event and public green spaces for Austin on the south side of Town Lake.



## SEAHOLM DISTRICT - GRID PATTERN



Figure 142.

The grid pattern for downtown Austin is split in much of the same way as the figure ground. The north side of Town Lake has very regular grid for the organization of commercial buildings. This grid responds to the two slightly different angles of MoPac and IH-35, mediating the difference directly to the north of the Seaholm site at Pease Park. There is not a great deal of hierarchy of road or block size.

The south side hardly shows any sign of discernable grid. While the major and minor roads are much more distinguishable, they follow a much

more irregular path. There are only a few continuous routes, which hold very subtle relationship to any sort of building edge or blocks.

## SEAHOLM DISTRICT - VEHICULAR MOVEMENT

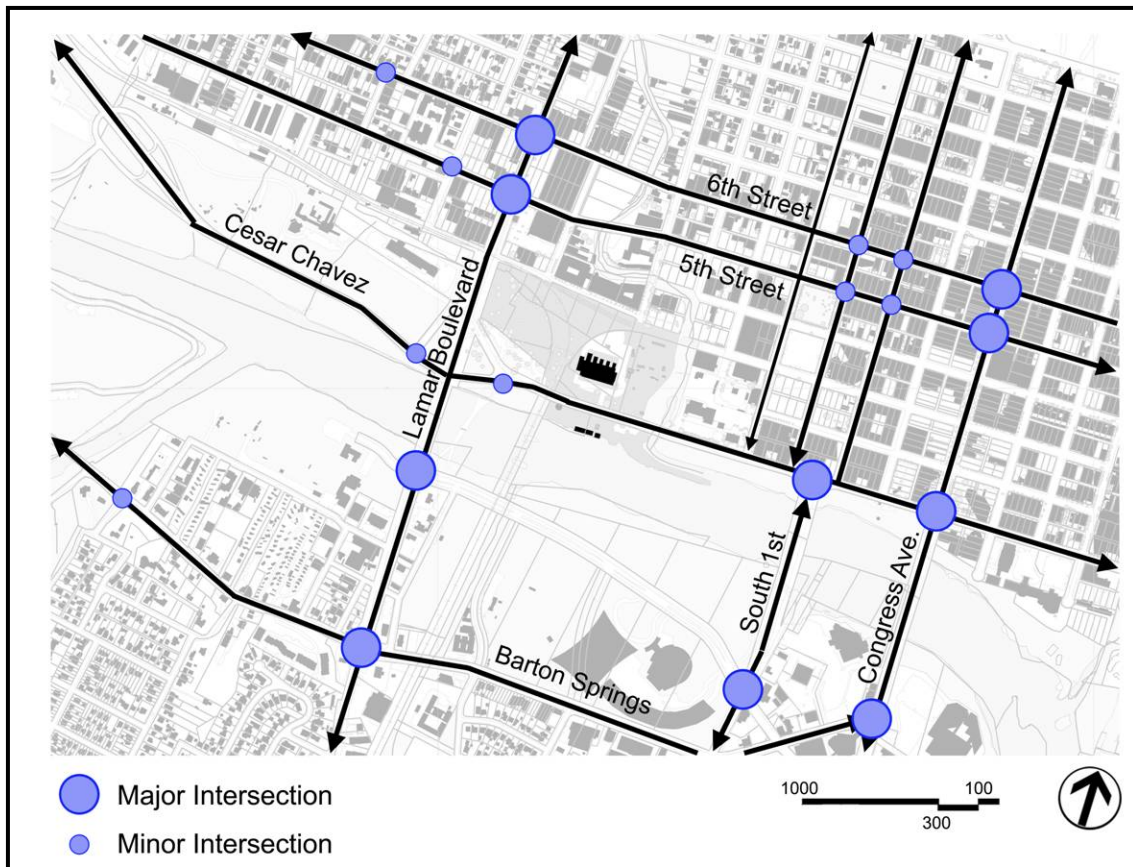


Figure 143.

The Seaholm site is bordered by one major north-south road (Lamar) and one major east-west road (Cesar Chavez). Currently, there are no major traffic intersections directly at the site, which is positive for the amount of pedestrian movement in the area. However, with future development, the Cesar Chavez/Lamar intersection may help capture relatively high amounts of cross-town and cross-river traffic and help organize the exit and entry of various routes within the site. A majority of the traffic routes are two way for better access. Although there is a separation of the site and other

developments by various grade changes and open space, it is well linked to the major highways and south Austin.

## SEAHOLM DISTRICT - PUBLIC TRANSPORTATION MOVEMENT

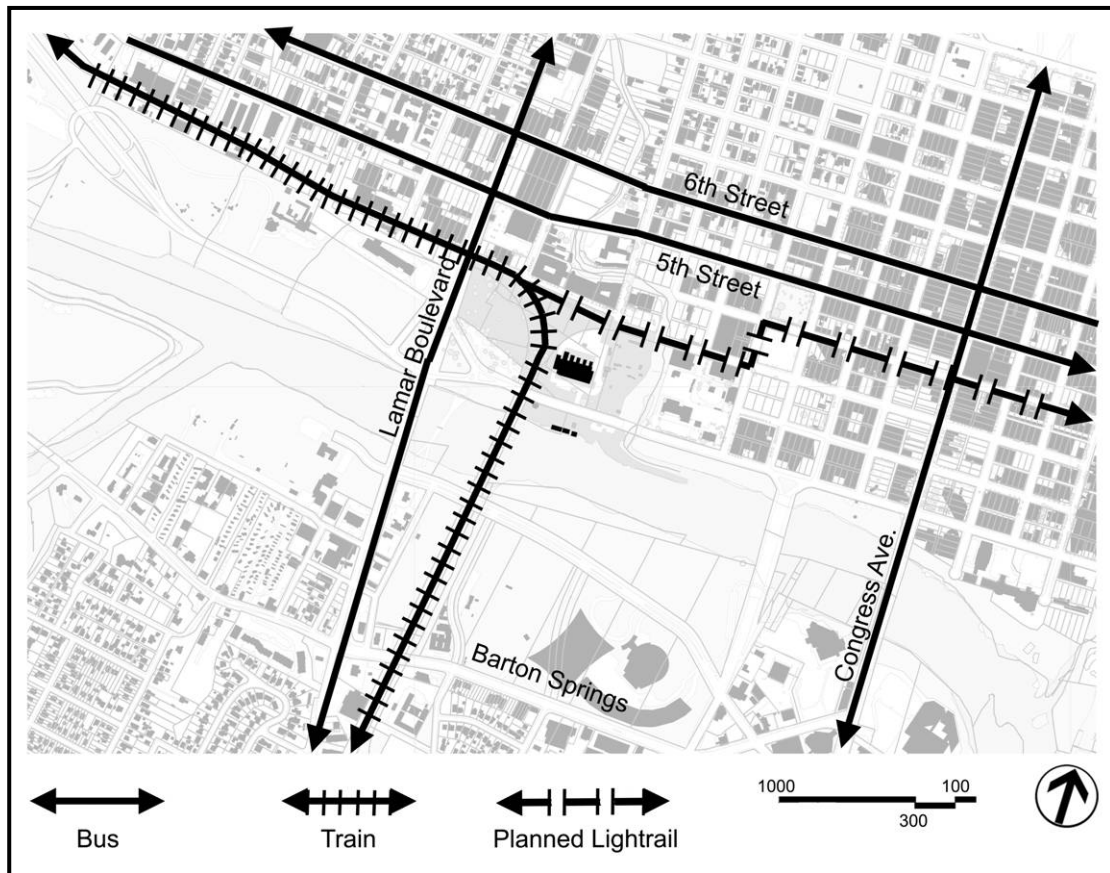


Figure 144.

The site is well linked to public transportation. The proposed light rail and existing Amtrak line will make the Seaholm site one of the strongest arguments for a downtown transit center. The current station to the west is now within walking distance, but there is absolutely no vehicular or walkable path. The station could move to the site at the intersection of the two rail lines and two directions of travel. This would not only support regular commuter traffic, but would link all areas of Austin and types of intermittent visitors.

## SEAHOLM DISTRICT - PEDESTRIAN & BIKE MOVEMENT

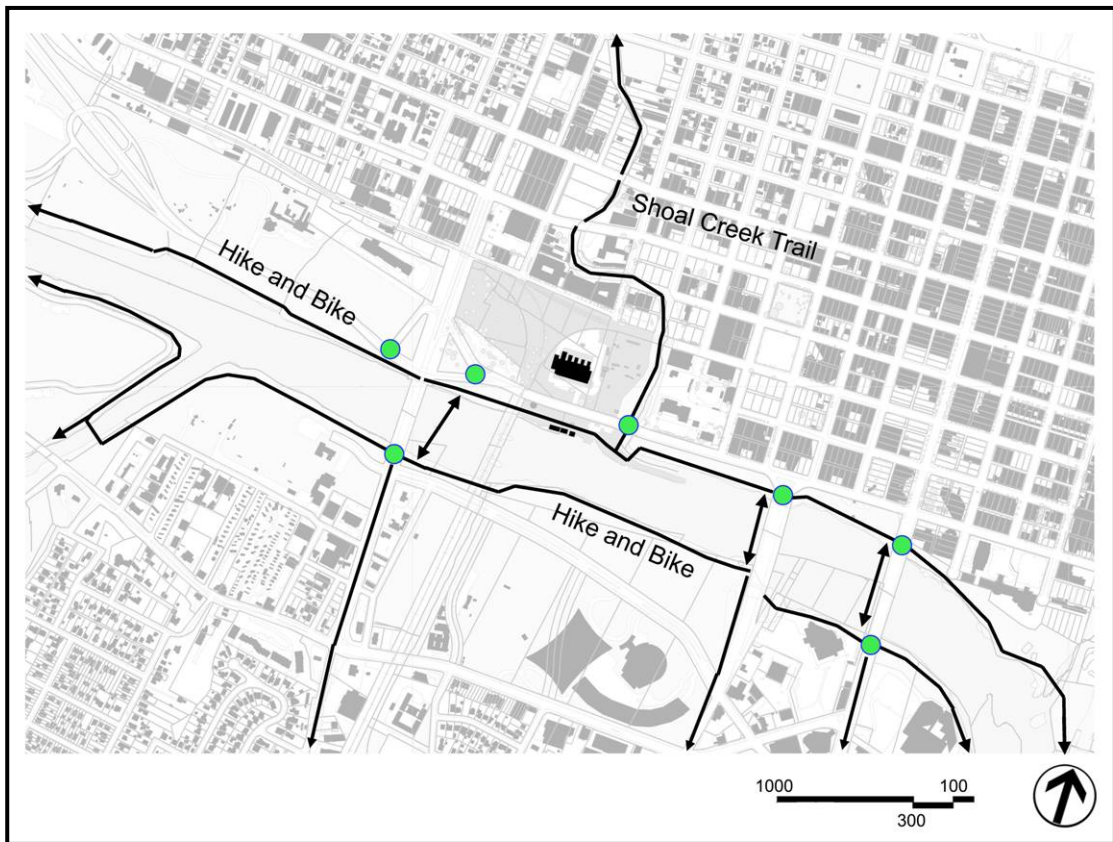


Figure 145.

Just as the site has a high level of access to the train lines and the network of major and minor streets, there is a wonderful level of pedestrian movement on both the adjacent street and nature paths. This is a good example of how Town Lake acts as an urban center for Austin. The lake collects pedestrian movement from the southern Zilker and Lamar routes, as well as northern routes such as Shoal Creek, and redistributes them through the Hike and Bike trail. The Seaholm site has direct access to major portions of the Hike and Bike trail, the Shoal Creek trail, and the major street level connection at the Pfluger Bridge.



## SEAHOLM DISTRICT - GEOGRAPHIC INFLUENCE

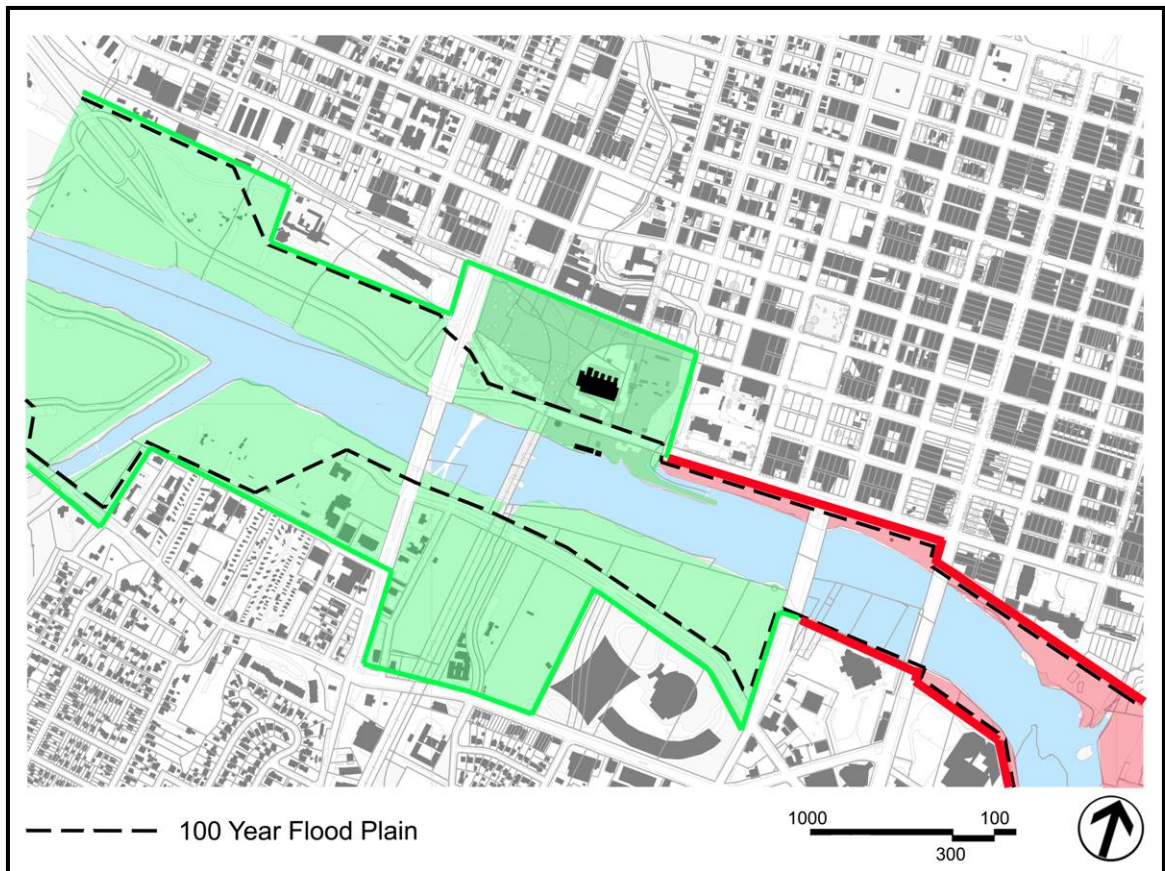


Figure 146.

The topography at the water's edge of Town Lake changes quite a bit along the downtown section, which affects the pattern of buildings along its edge. As the topography goes from a steep to a shallower grade, the buildings start to pull back from the water to maintain their distance from the flood plain. To the east at the central business district, buildings are set up higher above the water at the steeper grade. This allows them to building almost directly at the water in an almost cantilevered manner, with the nature trail much further down at the water. To the west, the grade is much slighter,



and park space is developed as a buffer between the water and much larger scale buildings.

## SEAHOLM DISTRICT - WATER RECHARGE ZONES

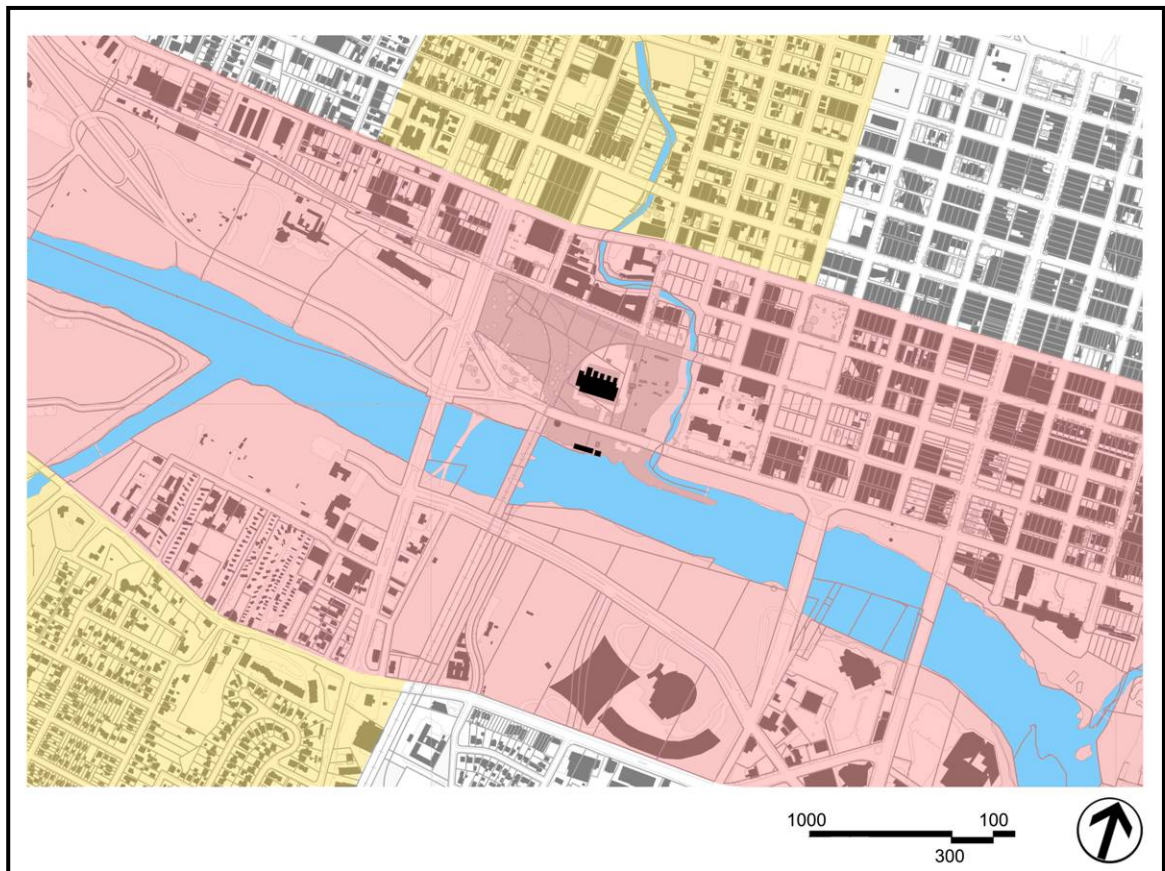


Figure 147.

The Seaholm site is subject to the regulations of two separate waterways, the Shoal Creek (orange) and Colorado River (red) recharge zones. This places certain restrictions on setbacks, removal of vegetation, and ratio of impervious cover on the site. Another environmental factor related to the site is the Edwards Aquifer recharge zone. This establishes parameters on building construction independent of both waterways.

## SEAHOLM DISTRICT - HYDROLOGY & VEGETATION

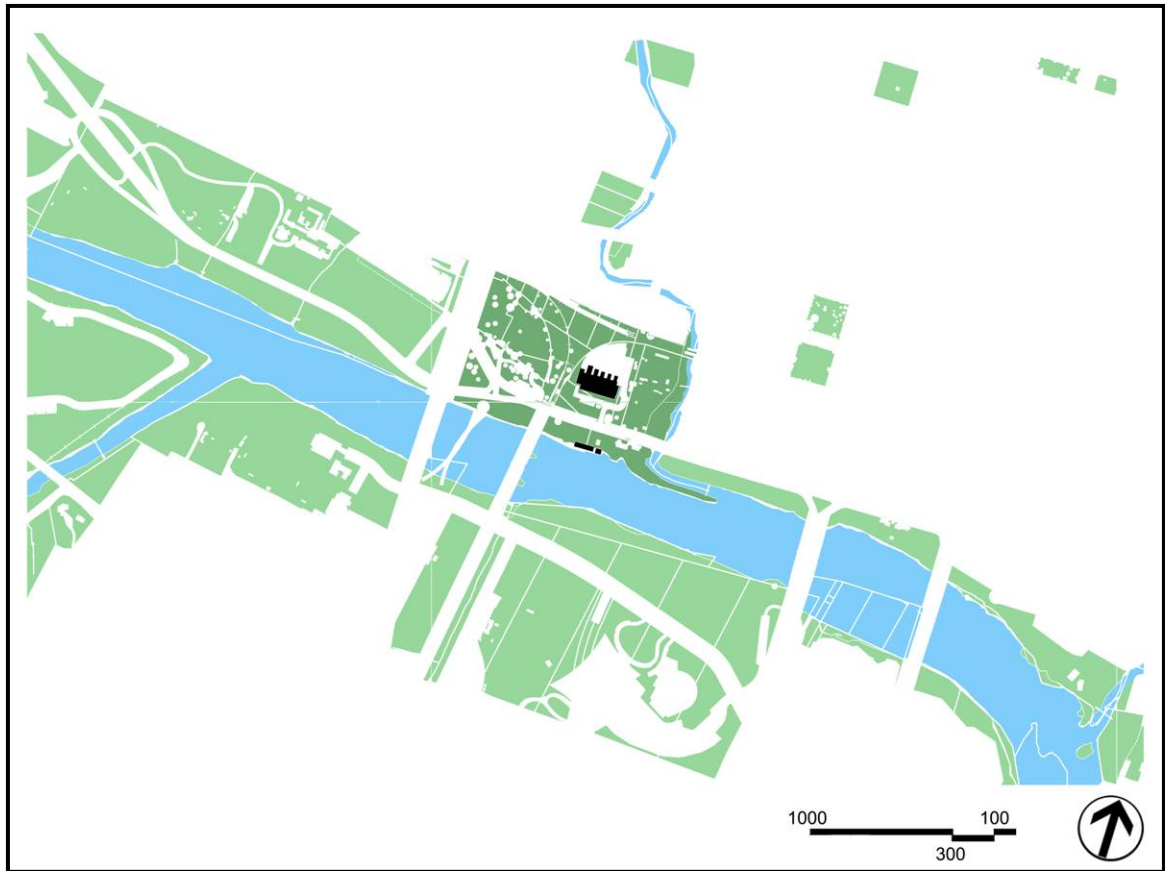


Figure 148.

Along with acting as a major spatial element and civic gathering space for Austin, it is also apparent that the area along Town Lake is connected with much of the interior park space of the rest of downtown. The open green space along the lake the Hike and Bike trail expands and contracts to create a variation in the density of foliage and space. Narrow and intimate trails, edged by bluffs and larger trees, have regular distances until they hit parks such as Zilker and Auditorium shores, which are about a more open and civic

space. This green path to episodic parks also occurs along the Shoal Creek nature trail north to Pease Park.



## **SEAHOLM DISTRICT - COMMERCIAL TYPE**

Figure 149.



## **SEAHOLM DISTRICT - RESIDENTIAL TYPE**

Figure 150.



## **SEAHOLM DISTRICT – CIVIC TYPE**

Figure 151.

## SEAHOLM SITE - AXIS

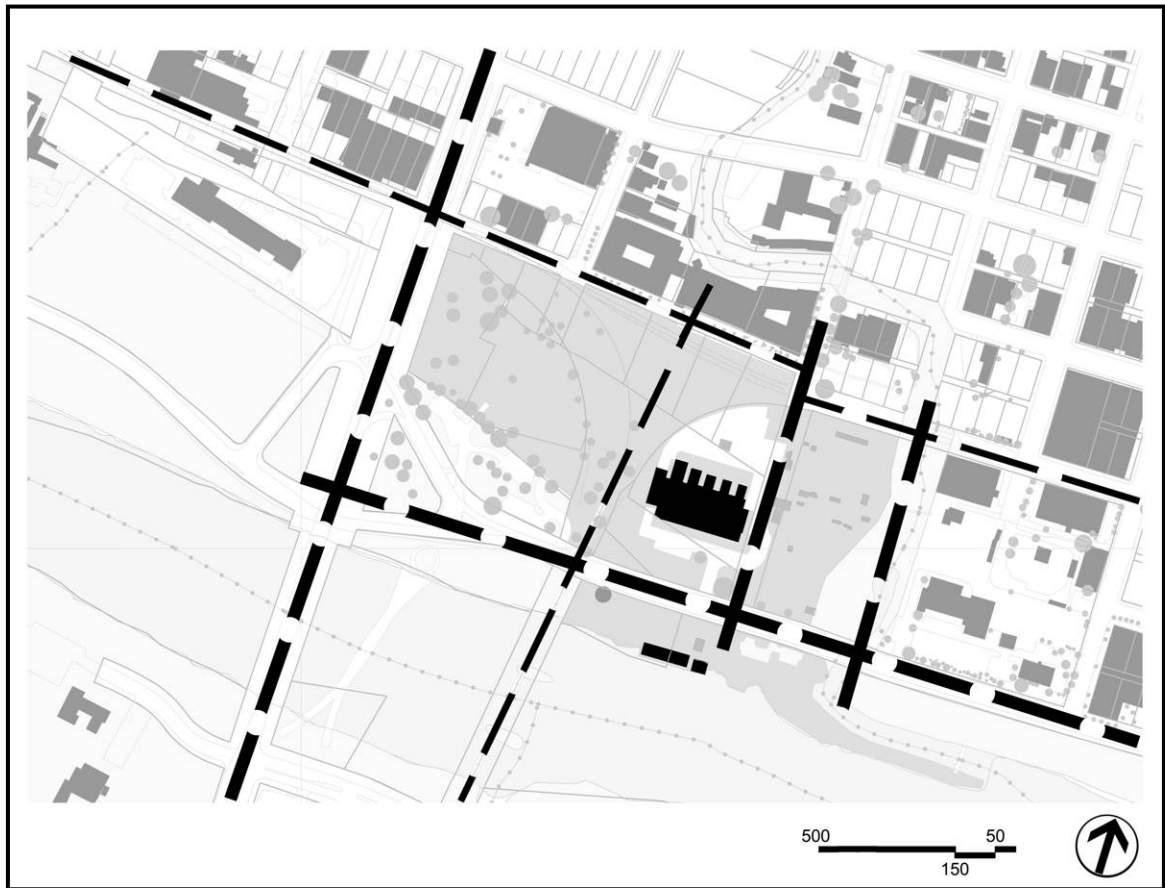


Figure 152.

Several elements act axis lines for the Seaholm site, those that balance the site and adjacent territory, and those that balance the logic within the site. The northern edge of the site at West Avenue, with several new developments, has become lopsided in a formal sense. The well-defined edge is a sharp contrast to the very open and natural terrain of the Seaholm site. Shoal Creek is an axis in the same sense of open and built space. Cesar Chavez however, creates a mismatch of amenity, with Town Lake separated

from a larger portion of the site. This axis may want to be removed, or at least overcome points.

Of the later type, internal, the rail line through the site creates a very hard line not easily overcome, creating two nearly equal halves of the entire site.

## SEAHOLM SITE - EDGES

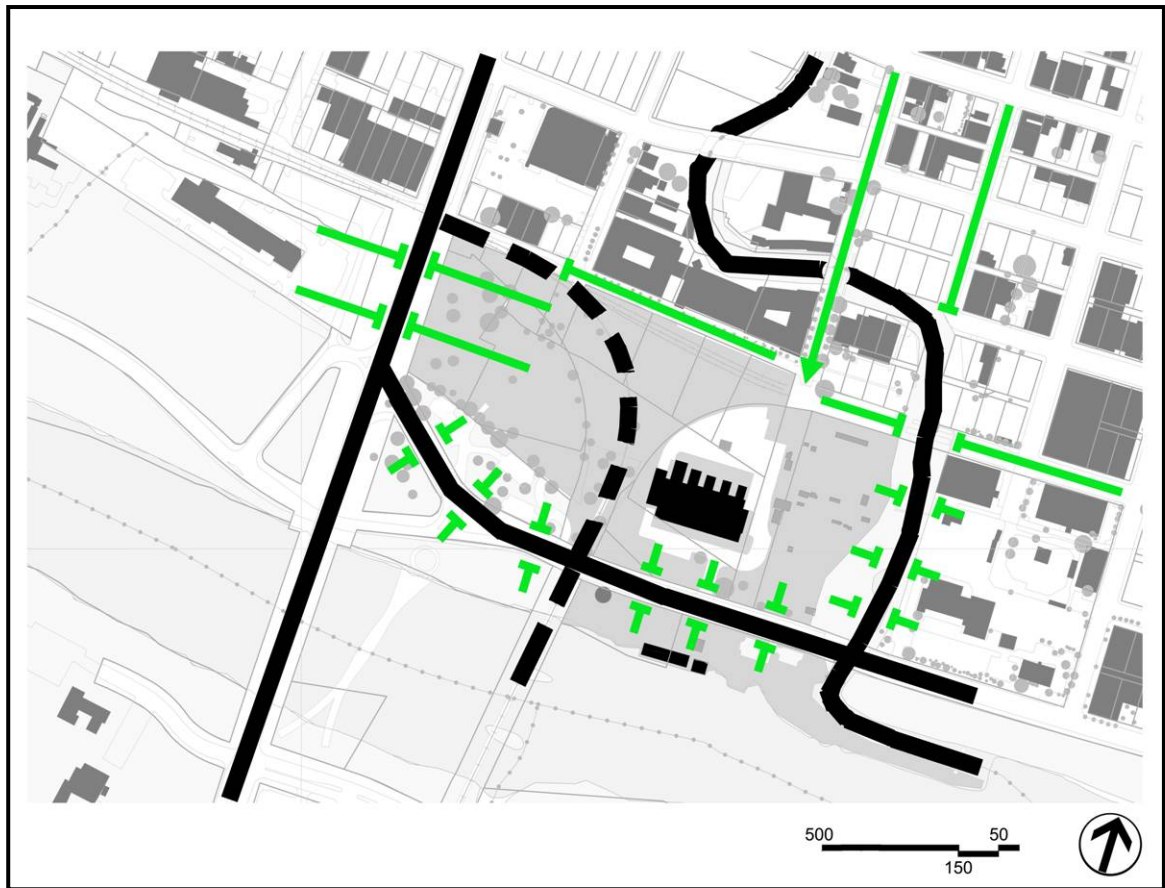


Figure 153.

As alluded to before, the site is quite different than its relatively dense northern and eastern edges. However, the strongest sense of distinction is caused by several very troublesome edges. The rail line, also previously explained, can be a unattractive, noisy, and even dangerous element running through the site. The decision must be made early whether or not to build to the west of the rail. Cesar Chavez is a difficult street to cross, blocking access to the lake, but is not quite as imposing as Lamar or Shoal Creek. Both of these elements have drastic grade changes and are environments



unwelcoming to easy pedestrian traffic. Although Shoal Creek is a successful trail, there is no connection up the bluffs to the site except at Town Lake. Lamar comes across the lake north at about 30 above Cesar Chavez, the dips down at the site to around 30 feet below grade.

## SEAHOLM SITE - ACCESS



Figure 154.

Access to the Seaholm site is currently limited, with one southern entrance drive and parking lot off Cesar Chavez, and a service entrance off West Avenue to the north. At this point in time, the most traffic that actually comes onto the site is the train running through. However, the number of highly active local routes that are directed to the site set up strong pressure for not just more access, but roads that connect through the site and weave Seaholm with the surrounding fabric. Most of this can be remedied with the connection of already aligning roads and paths.

## SEAHOLM SITE - SUN PATH

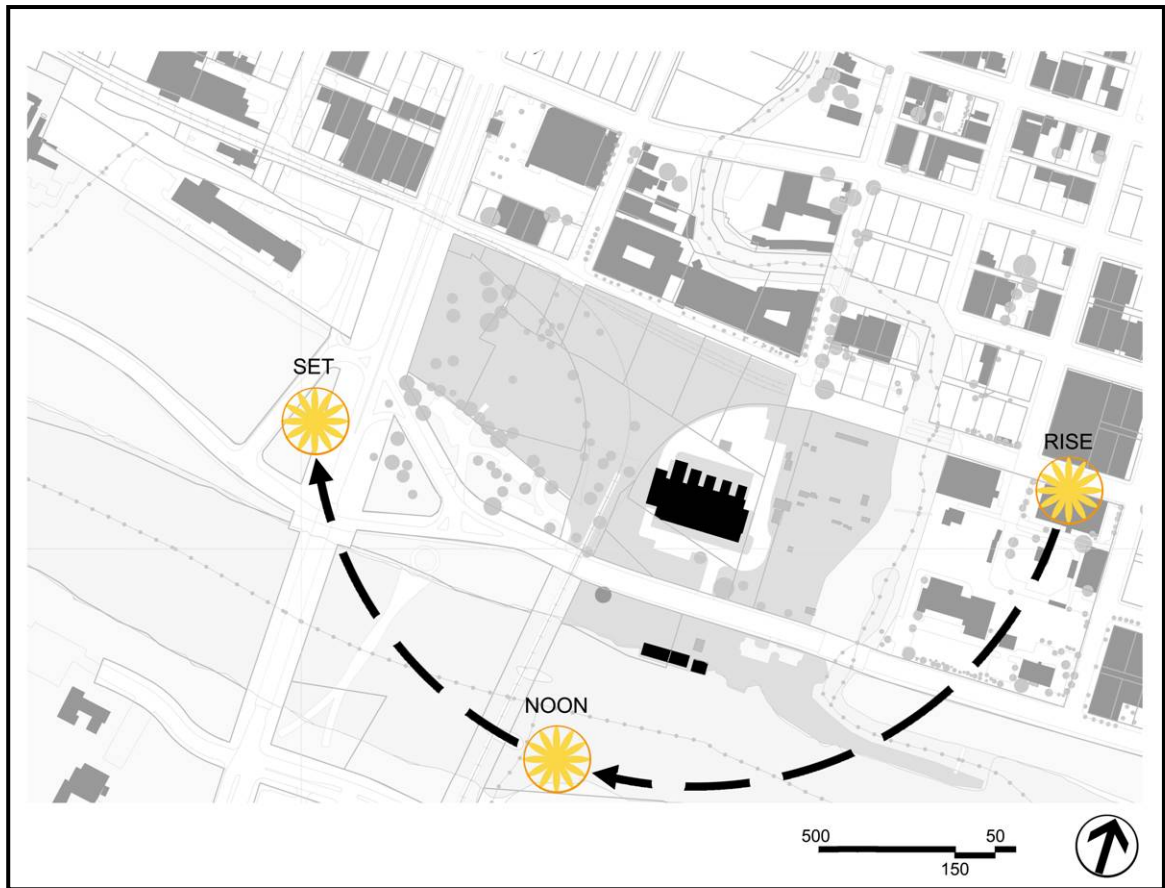


Figure 155.

The lack of large scale buildings near the site and the open shore of Town Lake to the south place a large amount of direct sunlight on the Seaholm site. While the existing power plant has a majority of its windows to this side, most are small and are constructed with glass block. However, with any new construction, the amount of sunlight and the subsequent heat gain will be a major design factor.

## SEAHOLM SITE – VIEWS

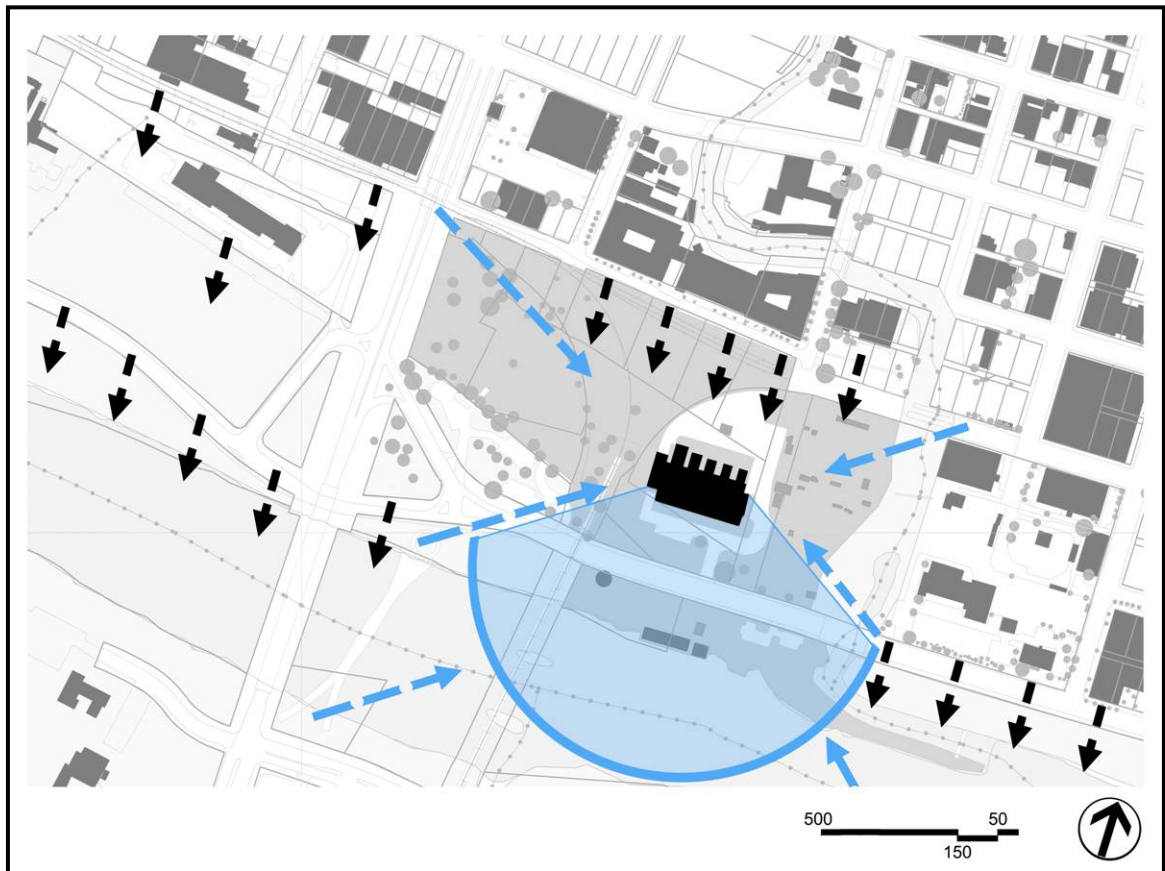


Figure 156.

Besides the strong connections revealed already, one of the strongest ties the Seaholm site has to the rest of Austin are the lines of sight. The power plant is quite visible from almost anywhere in the vicinity. There are strong views from Auditorium Shores southeast, Pfluger Bridge southwest, and overtop the buildings from the north. The Water Intake Structure is also a prominent icon from anywhere along the water's edge of Town Lake. In return, the power plant has a strong view out towards the Water Intake Structure and Town Lake beyond. Views in all directions are often just as good in the sense of

viewing the plant they are using it to frame or add foreground for other attractive views of Austin beyond.

## SEAHOLM SITE – CONNECTIONS

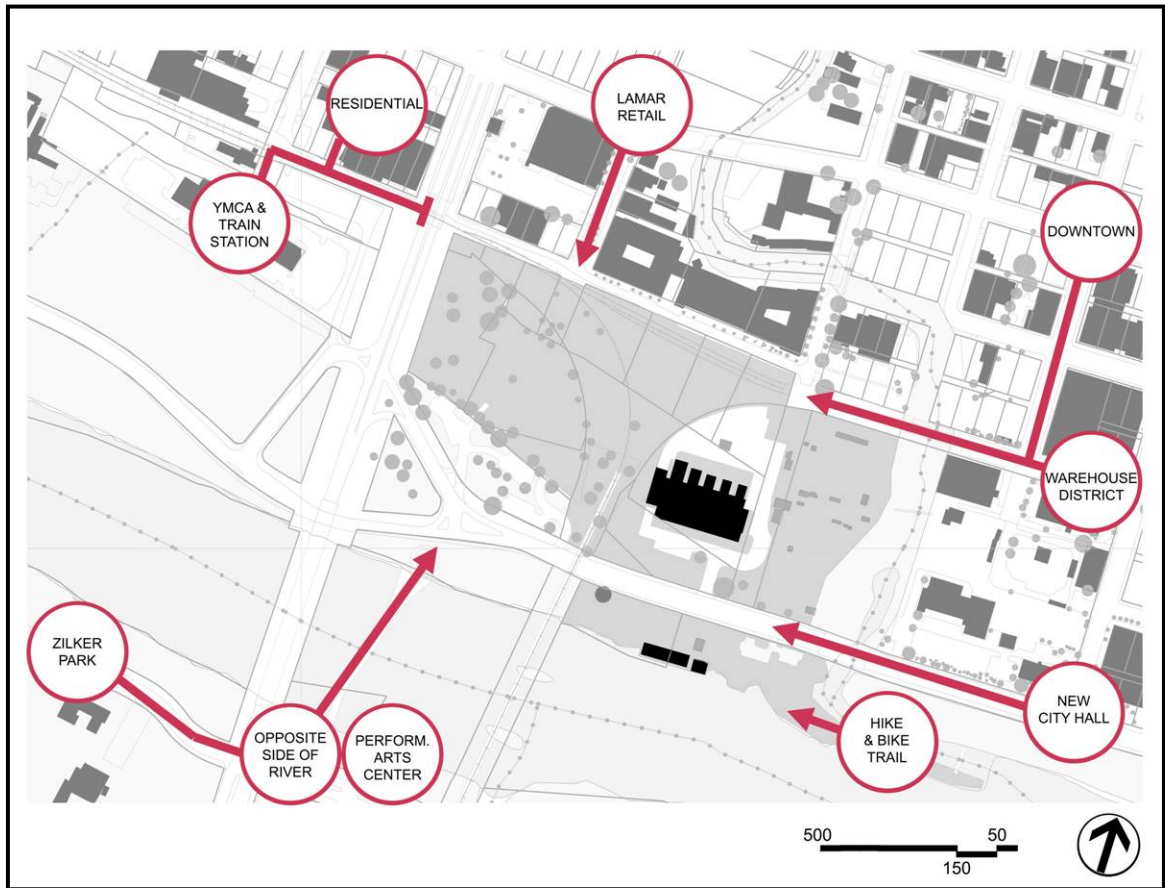


Figure 157.

Finally, as discussed with the public spaces diagram, one of the most promising aspects of the Seaholm site is its connection to other major areas and functions of downtown Austin. The power plant is within reach of almost all civic, retail and recreational points in the district. The connections and ease of travel simply need to be opened up with logical, safe, and attractive routes of access.

## EXISTING SITE SECTIONS



Figure 158. Existing Site Section  
East - West direction

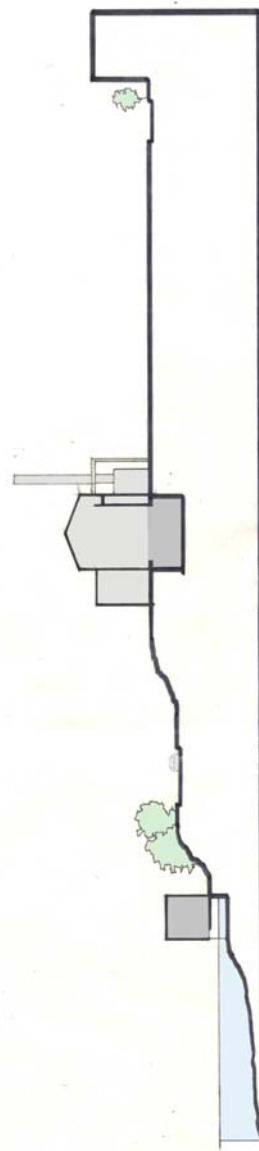


Figure 159. Existing Site Section  
North - South direction



## TOWN LAKE EDGE CONDITIONS AT SITE

Section of Water Edge at  
Central Business District



Figure 160.

Section of Water Edge at  
Shoal Creek outlet

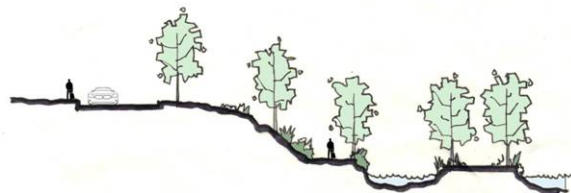


Figure 161.

Section of Water Edge at  
Water Intake Structure



Figure 162.

Section of Water Edge at  
Seaholm Site



Figure 163.

Section of Water Edge at  
Hike and Bike Crossing

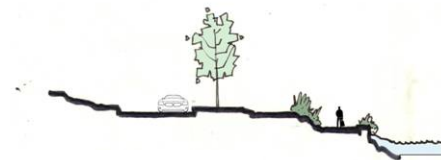


Figure 164.



## SITE BARRIERS

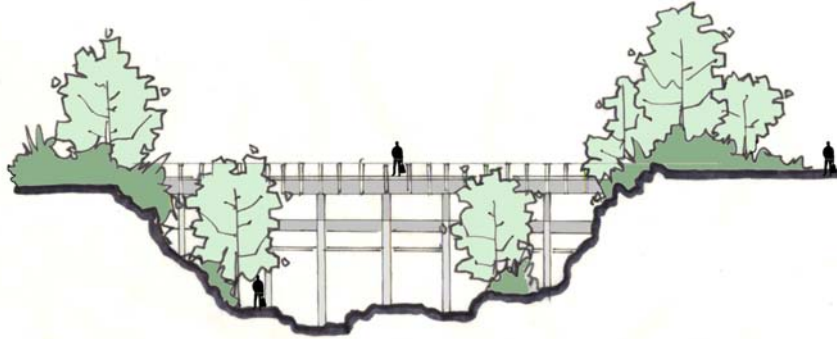


Figure 165. East-West Section at Shoal Creek. Nature trail at the creek level, and the existing trestle bridge at site level.

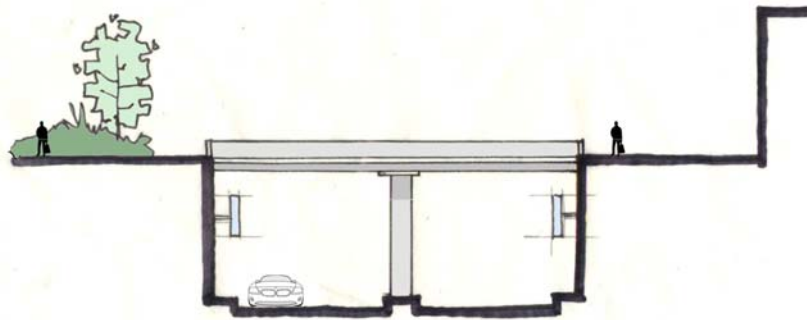


Figure 166. East-West Section Lamar Boulevard. 2-way traffic at the below grade street level, and the existing rail bridge at site level.



## TABLE 1 - ZONING ANALYSIS

### CITY OF AUSTIN – SITE DEVELOPMENT STANDARDS

#### **L District - Lake Commercial**

Minimum Lot Size (square feet)	5,750
Minimum Lot Width	50 ft
Maximum Height	200 ft
Minimum Setbacks	
Front Yard	10 ft
Street Side Yard	10 ft
Interior Side Yard	--
Rear Yard	--
Maximum Building Coverage	50%
Maximum Impervious Cover	50%
Maximum Floor Area Ratio	8:01

#### **CR District – Commercial Recreation**

Minimum Lot Size (square feet)	20,000
Minimum Lot Width	100 ft
Maximum Height	40 ft
Minimum Setbacks	
Front Yard	50 ft
Street Side Yard	50 ft
Interior Side Yard	20 ft
Rear Yard	20 ft

Maximum Building Coverage	25%
Maximum Impervious Cover	60%
Maximum Floor Area Ratio	0.25:01

#### **Parking Requirements**

Personal Services	1 space/275 sqft
Indoor Sports & Recreation	1 space/500 sqft

## CHAPTER 5 - DESIGN OBJECTIVES

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SEAHOLM POWER PLANT

## OVERALL DESIGN GOALS

### MEMORY CONDUCTOR



Figure 167. View across the historic railroad trestle bridge towards downtown

As stated before, memory is the means of understanding future implications through the present retrieval of past experiences. The manner in which an individual or a collective group assigns meaning to, stores, and retrieves information of an event is relative to the manner in which they perceive that experience and their world. The first design goal of the thesis will be to create architectural interventions to the Seaholm Power Plant that place the memory of the past against the recollection in the present in order to create various effects on the cultural perception of Austin.

The first step towards this goal is to define the facts, myths, narratives, disputes, and denials of history or memory relative to both the cultural and built environment of Austin. This includes analysis of the history and perception surrounding the Seaholm Power Plant, the site, the context, and the city in general. This step should reveal what is significant about the memory of Seaholm and the reason for that perception, then determine which memories or history to promote, which to dispute, and which to leave open for interpretation. The artifacts of the past must be processed by the design.

After determining the ways to treat the memories or perceptions of the Seaholm Power Plant, the second step is to define the ways in which architecture can play to the cognitive aspects of developing memory. The previously stated aspects of duration of memory, type of memory, recall, and personal perception all depend on the built environment surrounding an experience. Architecture is best understood by looking at the detailed elements of the design and finding the manner in which they fit together to make the whole. This exercise can be beneficial to memory when the details begin to relate to elements outside of the building itself, events and history. This second step will develop architectural strategies that act as cues and/or generators of memory, collecting stories and configuring them in alternative ways to create different experiences. The artifacts of the past must be progressed in the design.

Finally, the design will look to consolidate these methods of recollection into techniques for building at the existing Seaholm Power Plant



site and building. This step will test where and when to employ each technique in order to extend, truncate, layer, erode, or dispute memory and its construction. The methods will be applied to find the best means to serve legacy. The thesis experiment will find the best circumstances for creating space for the interpretation of the old and the making of the new. The elements of the present must have the ability to become artifacts. By telling of something precise in today's unique place in time, built elements can transcend their ordinary status to become extraordinary for information in the future.

#### NEW VISUAL ARTS DISTRICT



Created by Frank Kozik 1989

Figure 168.

The programmatic aspect of the thesis will be a contribution to the ever-growing and long-standing tradition of the arts in Austin. While known for its abundance and quality of live music and a developmental effort with several new performing arts improvements, Austin is yet to have a strong image and cohesive center for the visual arts community. Although there exists a variety of international collections of fine arts, production and presentation of local artists,

and educational centers, Austin's visual arts scene remains mostly beneath the surface of the city's identity. The visual arts not only speak of the character of the city and its people, but create a unique timeline of creative and progressive acts. This timeline speaks about the cultural past, a tracer of events and perceptions that have shaped Austin. However, they also speak of the future, of the direction a culture is taking in its beliefs and what values should be fostered for a better world. As art critic Robert Hughes put precisely, "The essence of the avant-garde myth is that the artist is a precursor; the truly significant work of art is the one that prepares for the future...the transitional focus of culture, on the other hand, tends to treat the present as the culmination of the past." *Reference 28* Therefore, the second design goal of the thesis is to bring a new life, face, and community to the visual arts in Austin through the development of galleries, offices, workshops, educational centers, and festival space for both local and outside artists. This will be new space for existing organizations, as well as the development of new phases of visual art. The programs inserted and added to the Seaholm site will create space for all types of interaction with the art: presentation, production, and sales.

## RECREATION



Figure 169. Hike and Bike trail outside of downtown

Another major aspect of Austin culture that is related to the Seaholm site and buildings is the recreation activity on Town Lake. The lake promotes concerts, festivals, running, biking, walking, swimming, and rowing, and serves as the only true civic center for Austin and the interaction of its citizens. Town Lake and its shores combine to make the one large-scale urban space in

the downtown. . However, the lake has no strong, definable gathering or event space besides Auditorium Shores, which is simply a large field of grass when no event is in progress. The third design goal of the thesis is to merge the activity on Town Lake together with the new Arts District to develop a new civic center, focusing the energy and image of this unique Austin environment toward a flexible and supportive gathering space. The design will look to connect planned and existing areas, transportation, and the water image and activity of the lake into one understandable and inviting gesture. A definable place on one of the city's most cherished elements gives context and focus for the events and experiences that occur consistently on the lake, and those of a bygone time.

## SUSTAINABILITY



Figure 170. The substation which replaced Austin's old power plant in the 1960's.

Austin's Green Building Program is a major source of innovation and pride. The idea of building with concern for the environment is representative of the values and progressive nature of Austinites, as well as human advancement in general. This is something that will need to be addressed to

at least some degree as a design goal. The Seaholm Building, being a former coal-burning power plant, offers the opportunity to create another important image for Austin. The reintroduction of the iconic building as a symbol for new and alternative sources of energy expresses the advancement of both the city and culture. The thesis supplies an opportunity to express how electrical technology is advanced from the efforts and knowledge of our predecessors and how contemporary society is using those learned skills to create a form of energy that will better the world for generations to come.

## SPECIAL DESIGN ISSUES & CHALLENGES

### PERCEPTION



Figure 171. The paving of Congress Avenue

The image above of Austin's Congress Avenue can mean a myriad of things to any number of people. The picture can mean Austin has come so far from humble beginnings as a frontier town, or not far enough as a city with such promise since the time this picture was taken. It can show some things unique in Austin's past, or indicate that the city was the same as any other growing town in the nation at the time. Whatever the interpretation, a strong

image of the past is one that pulls a viewer in and, even if for only a moment, allows us to share something with Austinites we can never know. This image gives us clues about the aspirations of early Austin, the things people thought were important, worth working and fighting for. The elements in the picture that we recognize allow us a connection those which we don't understand in a time that is far from our reach. Familiar views, streets, and buildings that still exist today give a connection to the past. Faces that seem oddly familiar, advertising, the importance of architectural stature, the act of an eventful gathering; these all help us understanding some of the consistencies of a world that has drastically changed. This is what the design must skillfully handle, the balance between presenting an interpretation or presenting only the opportunity for an interpretation.

An abstract attempt to decipher and progress memory will make it extremely hard to find a starting approach for the design, as well as the success any such approach truly has on memory. However, the toughest aspect of the analysis and design process will be making decisions between contradicting factors or definitions. Two examples of this difficulty are the instances of individual memory vs. collective memory, and attitudinal history vs. factual history. The difficulty lies in the fact that each is linked, but has completely different aspects and influences. The decision will have to be made as to when the design should play to one aspect or the other, and when the design should find the middle ground where both can contribute and be affected by the architecture.

## PROGRAM FLEXIBILITY

A less daunting but still challenging aspect of the thesis is its program geared toward a fairly specific type of environment and use. Although both the visual arts program and thesis concept are somewhat dependent on a general idea of interpretation, for the existence of an active district and civic center, the design must work toward creating a variety of use. There needs to be a sense of attraction for citizens by giving predetermined uses and auxiliary uses, an appeal to the simple sense of enjoyment of one of the city's most prominent features in Town Lake.

## INTERACTION OF EXISTING AND NEW

In dealing with the historic preservation and additions to the Seaholm Power Plant structures, it will be vital to determine the best methods to intervene with respect to the integrity of both the building's history and its structure. Despite the manner in which the history and memory of the Seaholm building will be presented, it is vital that its story be preserved and expressed. The thesis design must mediate between the functional necessity for future use and the legacy of what has been handed down. Structural and mechanical issues will also be a concern with the renovation of a currently abandoned building. While structurally sound and currently maintained, the manner in which new structures adhere or tie into existing ones is an issue of both safety and preservation, meshing different types of technology and aesthetics.



## WATER ENVIRONMENT

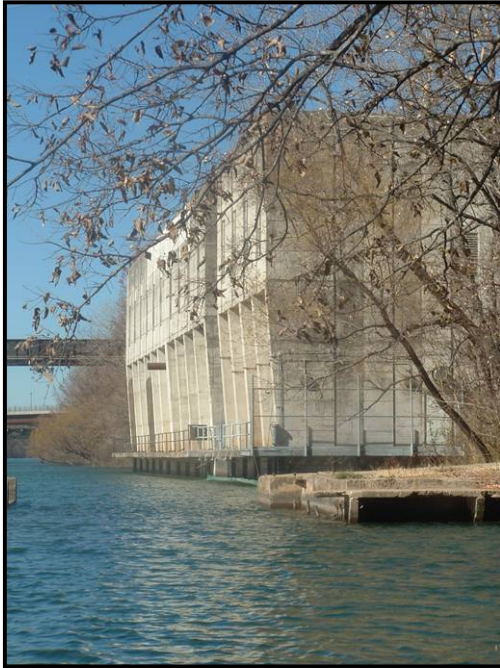


Figure 172. Water Intake Structure

Austin is a city quite conscious of the environmental and habitual concerns of its citizens. Entire neighborhoods, parks, and watershed systems have been revamped and sometimes shut down at a cost of millions, all in the name of the local environment or the survival of the smallest of species. In the late 1980's, Town Lake, upon which the

Seaholm site sits directly, has had moderately controlled recharge zones

and infestations of foreign plants that caused polluted and stagnant conditions. Since then, strict enforcement of runoff in water recharge zones has been mandated. Additions to the Seaholm site, a watershed of Shoal Creek, and to the water intake structure that sits directly on Town Lake will force the design to be ecologically sensitive.

## BARRIERS



Figure 173. Below grade section of Lamar Boulevard and the train line above.



Figure 174. Shoal Creek waterway and nature trail.

While the Seaholm building is a prominent and iconic structure in the downtown district, its idle status has affected its accessibility over the years while the rest of the city has been developed. In its current state, roads, the lack of roads, elevation changes, water, and the tracks of the active train line have all developed barriers to its integration with new downtown development and within the site itself. The thesis design must weigh options and implement strategies for dealing with these elements in order to create the active and safe city center that is proposed.

## CHAPTER 6 - DESIGN ANALYSIS

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SEAHOLM POWER PLANT

## **DESIGN PRECEDENTS**

To help develop an overall thesis strategy, precedents must be carefully examined. But first, consider again the goals of the thesis.

Architectural interventions to the Seaholm Power Plant will effectively use past memory and current perceptions to help with the interpretation of events in modern times, and ultimately affect the cultural view of Austin. This will be reached by:

- Defining what is significant about the memory of the building, city, and events.
- Defining the role architecture can play in the cognitive aspects of developing memory.
- Developing and testing techniques which promote, debate, or allow interpretation of memory.

Some of the issues are:

- The competing and contradicting factors of memory and history (attitudes vs. facts, individual vs. collective.)
- The manner of connecting to existing buildings to preserve structural and historical integrity.
- The understanding of and adherence to local values.

The following precedents are examined for their ability to tie into the relevant historic and memorable elements of each building, the decisions of what to promote and what to discount, the mnemonic devices used, and the strategies employed for the relationship of new and existing architecture.

## TATE MODERN

London Bankside, UK - 2000

Jacques Herzog and Pierre de Meuron Architects

The Tate Modern is one of the world's most celebrated examples of adaptive reuse. The enormous art gallery was created from the shell of the old, unsightly Bankside Power Station on the Thames River in London. The Herzog and de Meuron competition entry was the only design that kept the industrial-gray turbine hall, which runs nearly the entire length of the building and is lit from the ends and ceiling. Left untouched on the interior, the turbine hall is a simple celebration of a space that would not be economically feasible today. *Reference 16*



Figure 175.  
The Turbine Hall prior to renovations, with the original structure and day lighting exposed.



Figure 176.  
The Turbine Hall finished as an exhibition space. The hall was the most sacred artifact of the plant, and the historical integrity of the hall is left intact.



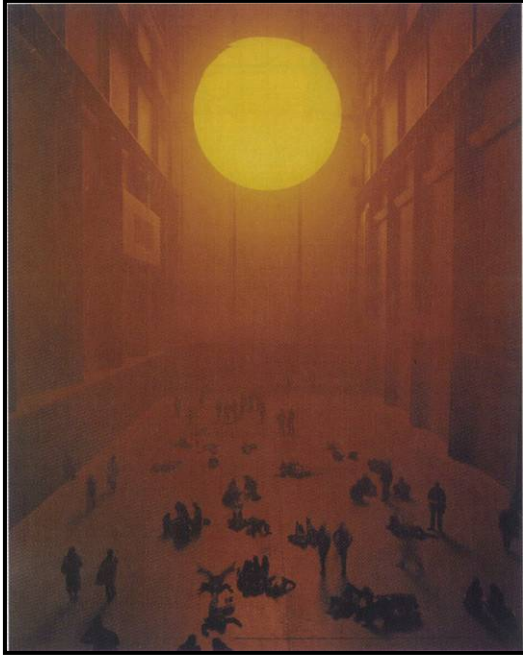


Figure 177.  
One artist's variation of the Exhibit Space, transforming the space's color and focal point.

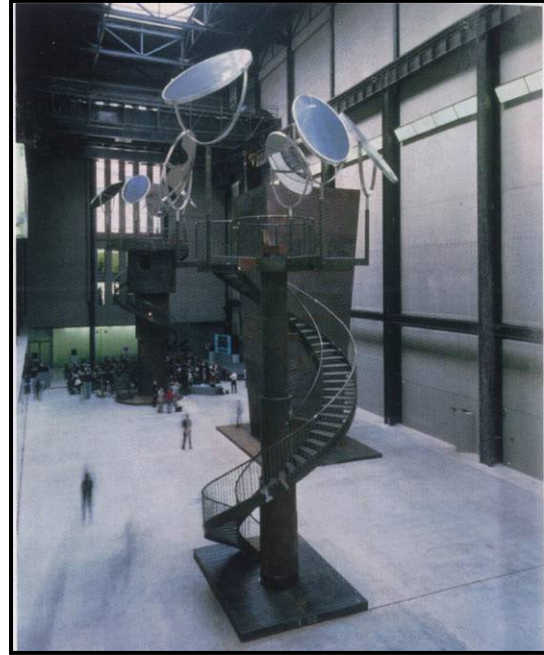


Figure 178.  
Another variation of the Exhibit Space, allowing views of the hall at various levels and uncommon angles.

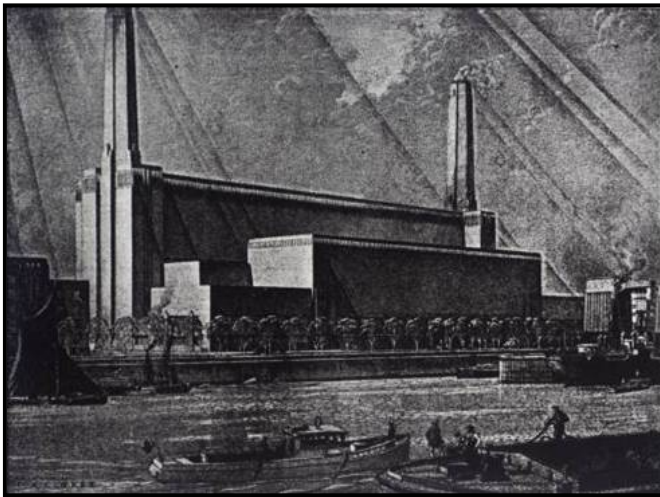


Figure 179.  
The original Bankside Power Station.



Figure 180.  
The Tate Modern exterior additions and renovation at grade level and at the café and office spaces above the original building.

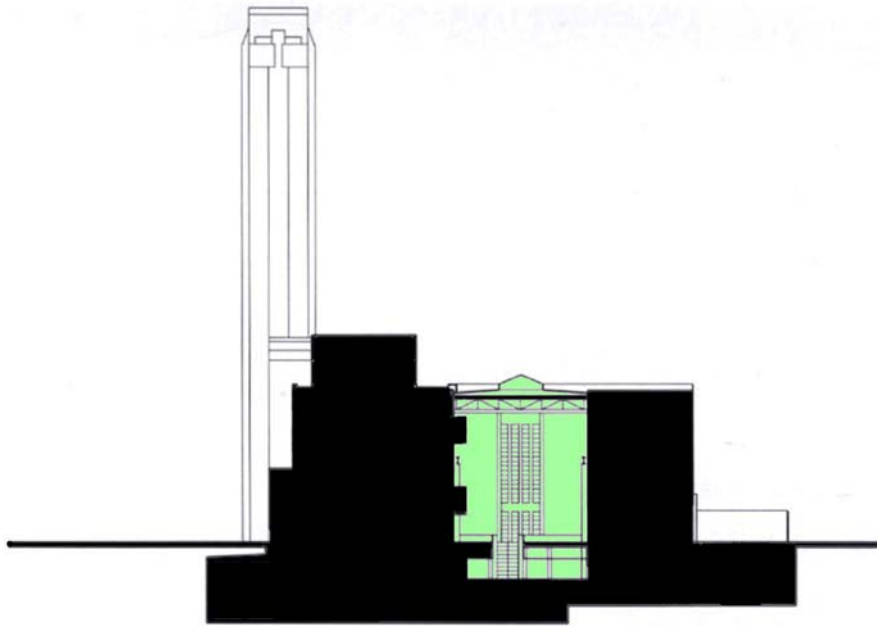


Figure 181. - TURBINE HALL SECTION

The turbine hall is left untouched, celebrating the space existing in both past and present. The space is a recognized volume before and after the renovation, but also a permanent backdrop for installations and memory.

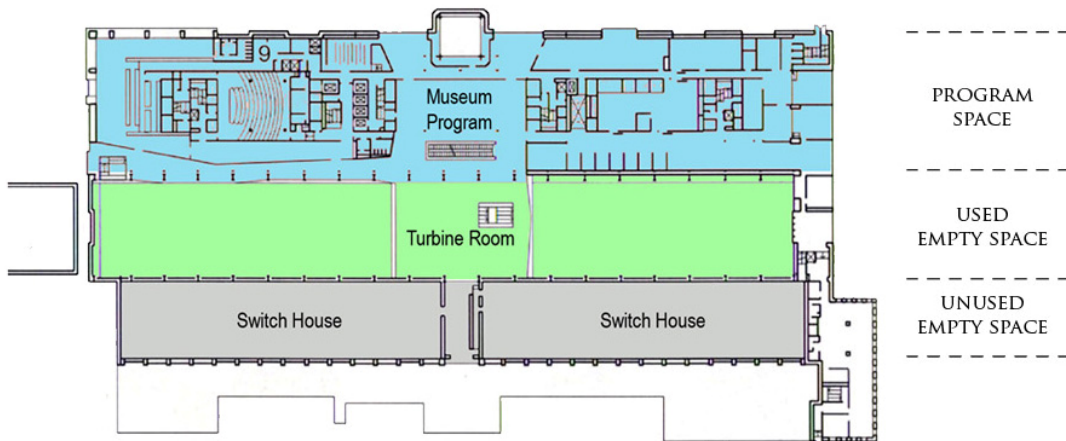


Figure 182. - PLAN ORGANIZATION

The plan leaves the existing structure and form untouched, only expressing new program space with the subtle projections of gallery space.



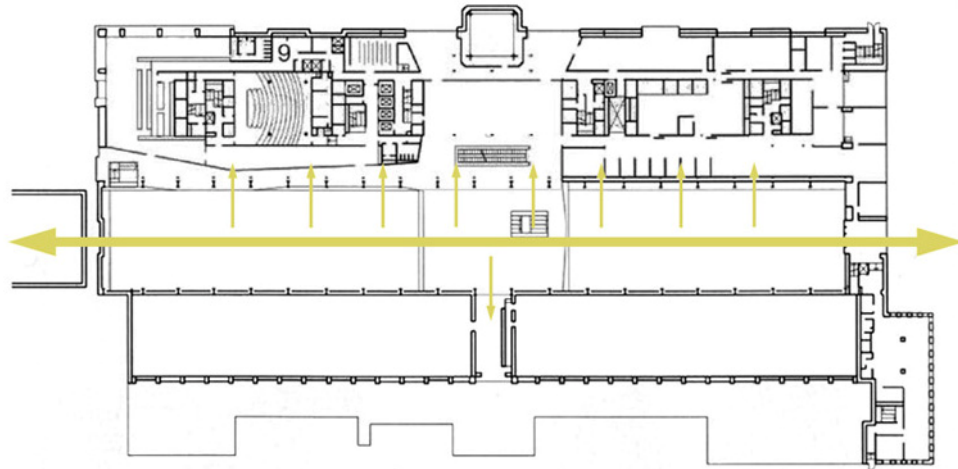


Figure 183. - CIRCULATION

Entry circulation is along the central spine of the turbine hall, leading to the main bridge. The museum space off the spine can be entered from several points, and contains all vertical circulation to gallery spaces

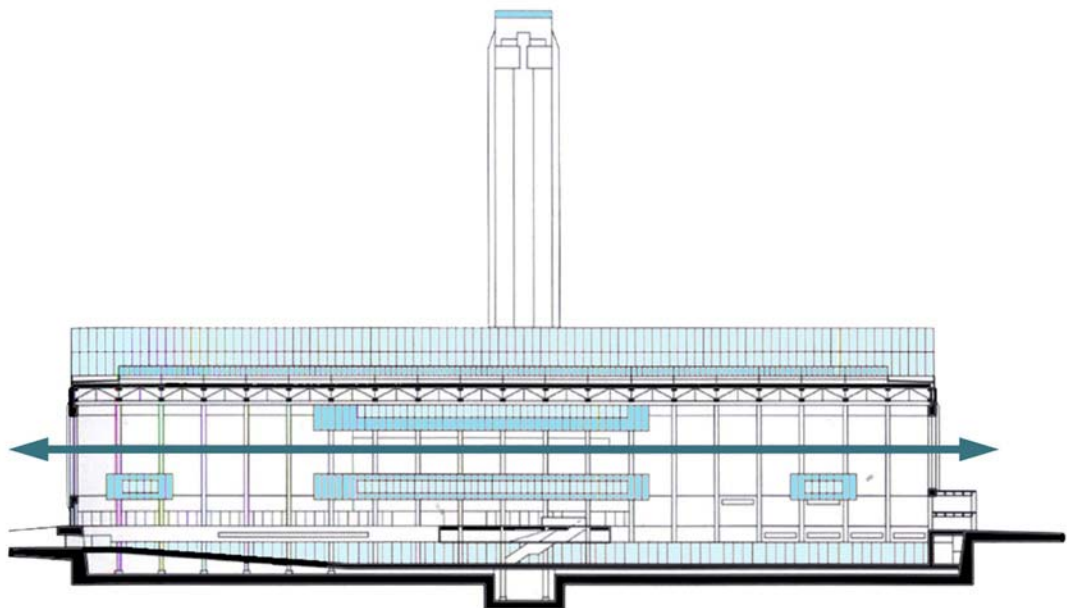


Figure 184. - HORIZONTAL ELEMENTS

Horizontal additions and movement in the turbine hall heighten the perception of scale and length, creating an increased sense of grandeur.

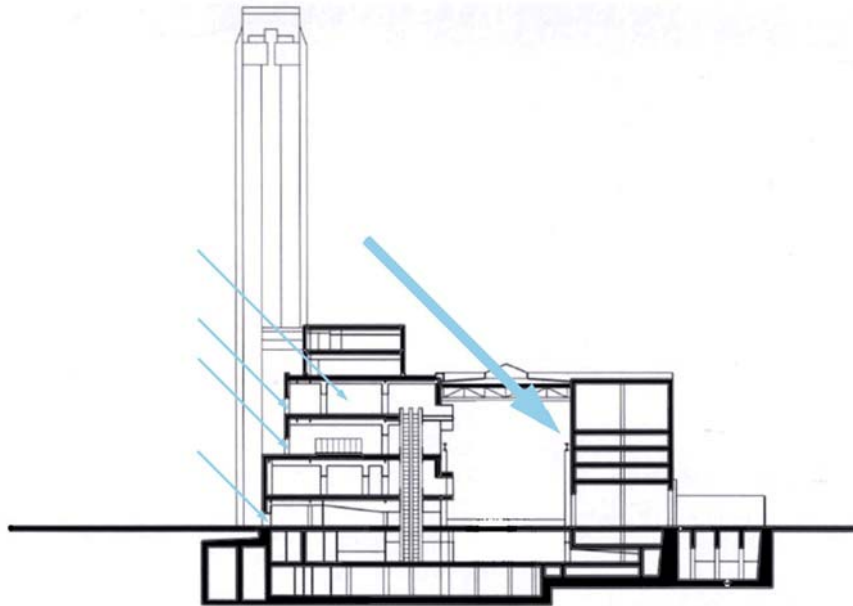


Figure 185. - LIGHTING / VENTILATION

The majority of natural light is directed to the turbine hall through a large opening in the roof structure and strips of windows on either end. Installed lighting is kept to a minimum to embellish the sense of the turbine hall as being separate from the gallery spaces.

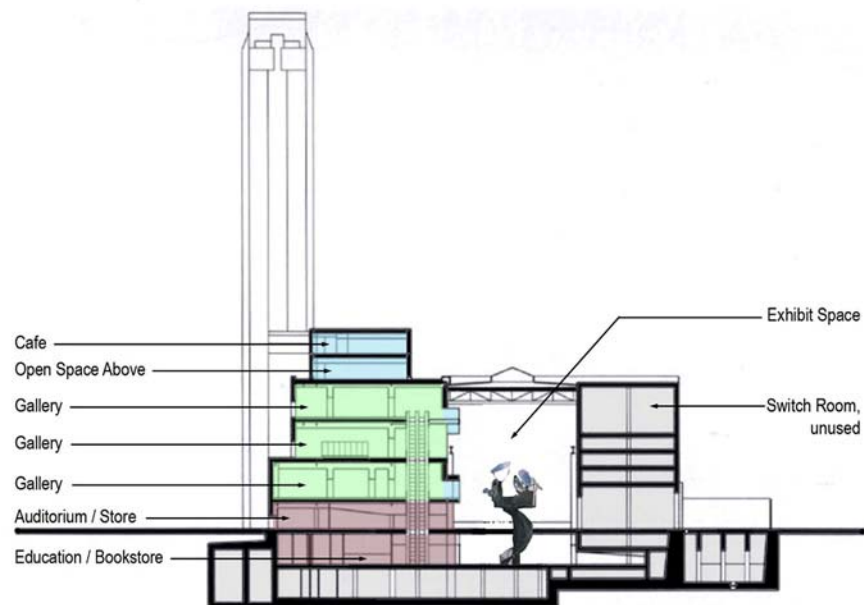


Figure 186. - SECTIONAL ORGINIZATION

The placement of almost the entire program to the side of the turbine hall leaves a rare volume for large-scale installations unique to the Tate Modern.

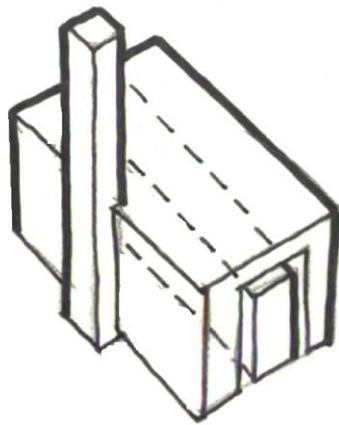


Figure 187. - ISOLATION OF HISTORY  
With a sense of history as the prevailing element, new additions are tie to the elements of the past and absorbed.

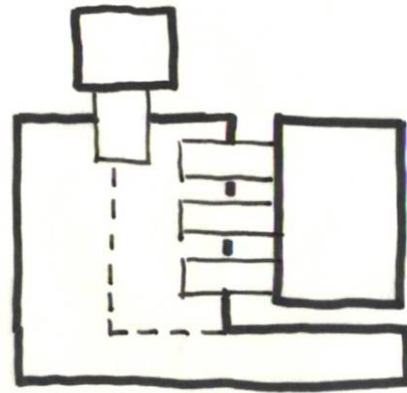


Figure 188. - JUXTAPOSITION  
New program is inserted into a common and recognizable element, giving a new face to the past.



Figure 189. - STATIC AND DYNAMIC EVENTS  
The permanent hall gives a backdrop to compare the changing elements it houses.

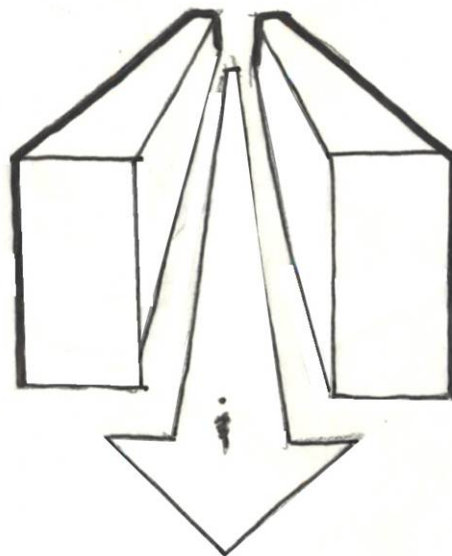


Figure 190. LINEAR PROCESSION  
The elements of the past (the building) and the present (the museum patron) are seen as existing alongside one another, with interpretations and experiences influencing the future memories.

## CENTRE D' ARCHIVES DE MONTREAL

Montreal, Canada – 2001

Dan Hanganu & Provencher Roy

The Centre d' Archives de Montreal is a building comprised of various historical elements, ranging in age from the original 1870 Maison Joidon, to a 1966 archives addition. The latest addition by Dan Hanganu and Provencher Roy is a semi-detached rectangular block that is nestled between the existing buildings, slicing, adjoining, and stripping away at the historic fabric. While the building makes a statement about its own time, it is also tying together and respecting the unique pieces of history evident in the building complex.

### *Reference 17*



Figure 191.  
The circulation space is situated between the existing structure (right) and the addition (left).



Figure 192.  
The exterior of the latest addition, attached to the existing structure on the far right.



Figure 193.  
The original library building.



Figure 194.  
The new interior courtyard





Figure 196.  
PLAN ORGINIZATION



Figure 197.  
SPATIAL ORGANIZATION  
Main arteries of movement remain the same through time, but the latest addition reorganizes the spaces experienced while moving through the building.



Figure 198.  
PLAN POROSITY  
Although the attitudes and subtlety of transitions change, the movement between old and new remains unbroken.



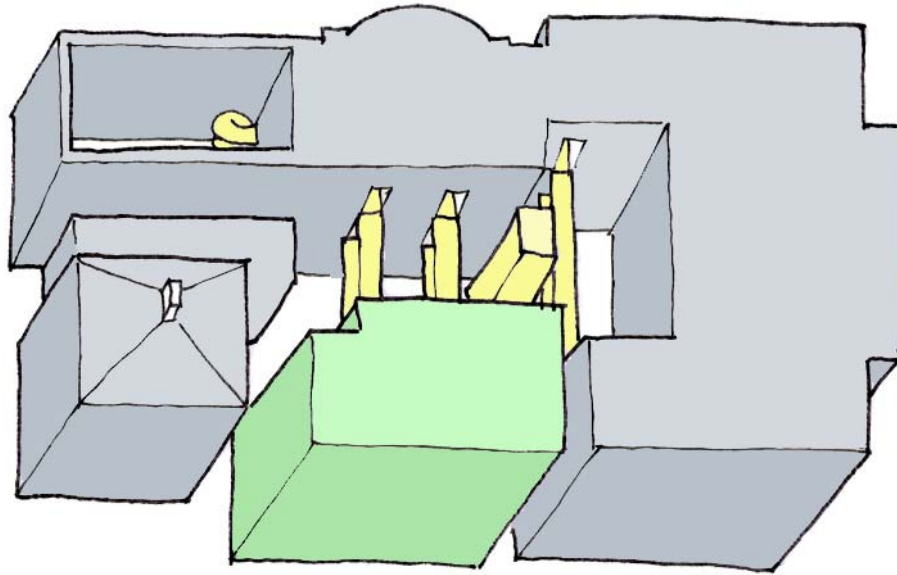


Figure 199. - INTERACTION WITHIN SPACE  
The new addition mediates the varying scales and spaces of past forms. Vertical and horizontal circulation elements are placed within an open space to heighten the dialogue between past and present.

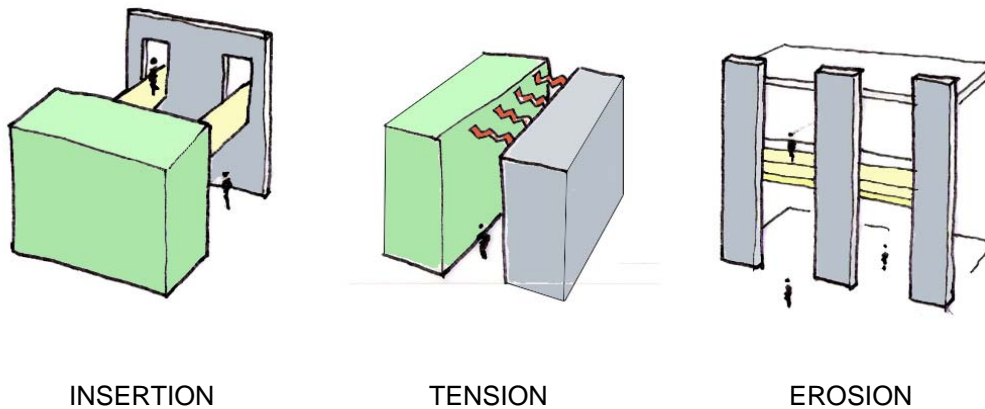


Figure 200. - TYPES OF OLD/NEW INTERACTIONS  
Various manners of interaction with the building and its historic and contemporary pieces are experimented with. These methods allow the building to be seen as a varied but continuous fabric.



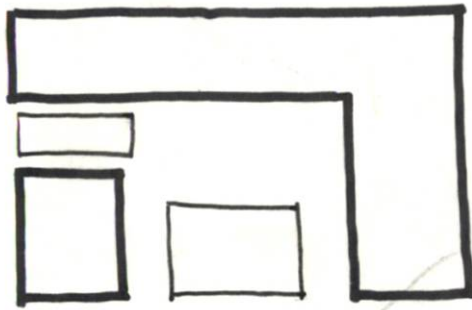


Figure 201. - TEMPORAL COLLAGE  
The elements of various times are laid upon one another as a cohesive and continued story.

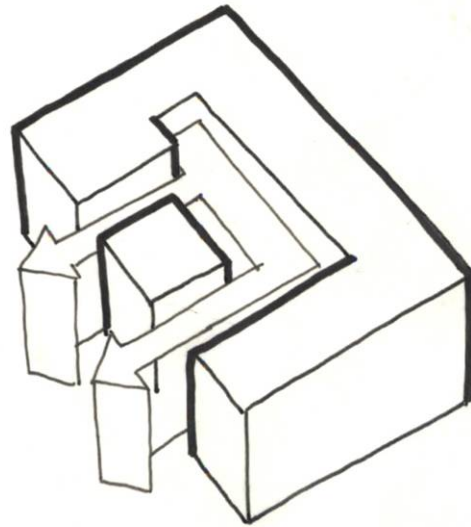


Figure 202. - DISCOVERY  
Static points in time are read from a dynamic space between that allows for a discovery of when and what was done.

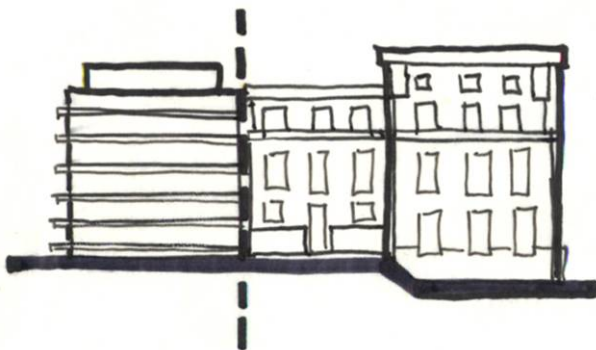


Figure 203. - JUXTAPOSITION  
New and elements are forcefully pressed against one another to present the leap of then to now.

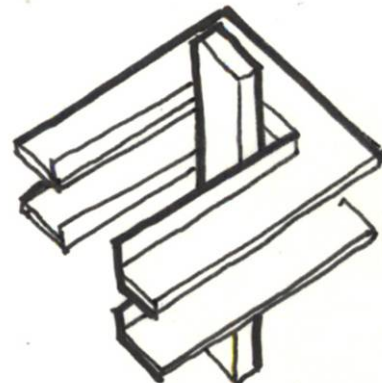


Figure 204.  
The path and elements of the contemporary addition are designed to circulate around the elements of the past, presenting them as artifacts being engaged.

## MILL CITY MUSEUM

Minneapolis, Minnesota – 2003

Meyer, Scherer, & Rockcastle

The Washburn Mill is a lesson in the persistence of time and culture. Despite two explosions the mill was rebuilt due to its powerful economic production. However, after a 1991 fire, and a loss of the industry, the building was in jeopardy. The latest design was an attempt to fortify and preserve the mill as a memory and museum of Minneapolis' waterfront culture. The mill was braced structurally, and the areas far beyond restoration were designated as historic ruins. The remaining structure was then redesigned to incorporate new office and exhibition space. *Reference 18*



Figure 205.  
View from new building gallery to Mill Ruins  
and plaza below.



Figure 206.  
View from the Mill Ruins up  
towards the new addition.

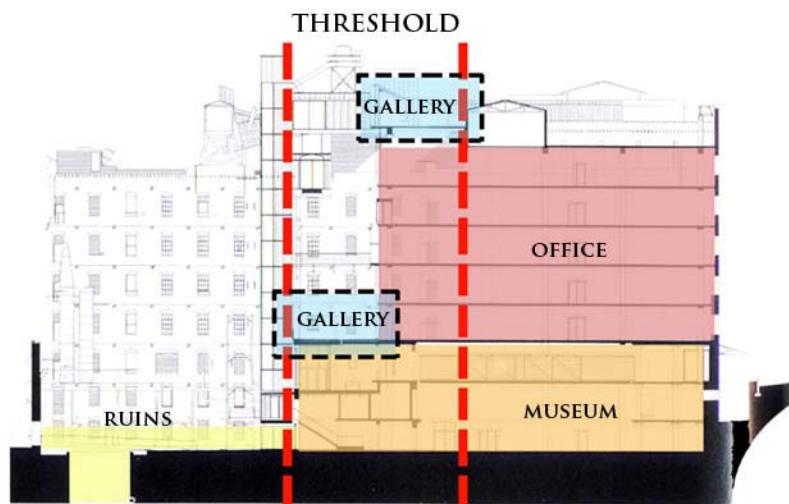


Figure 207. - SECTION ORGANIZATION

The section of the building creates a threshold between what has been preserved, the Mill Ruins, and what is thought anew, the office space. Galleries at the intersection give a clear view of the relationship of old and new.



Figure 208. - VERTICAL CLIMB

Just as the burned out shell of the Mill Building climbs gradually back to the intact portion, so to does the form of the inserted building. This is done as to not fight against the memory of what is left.

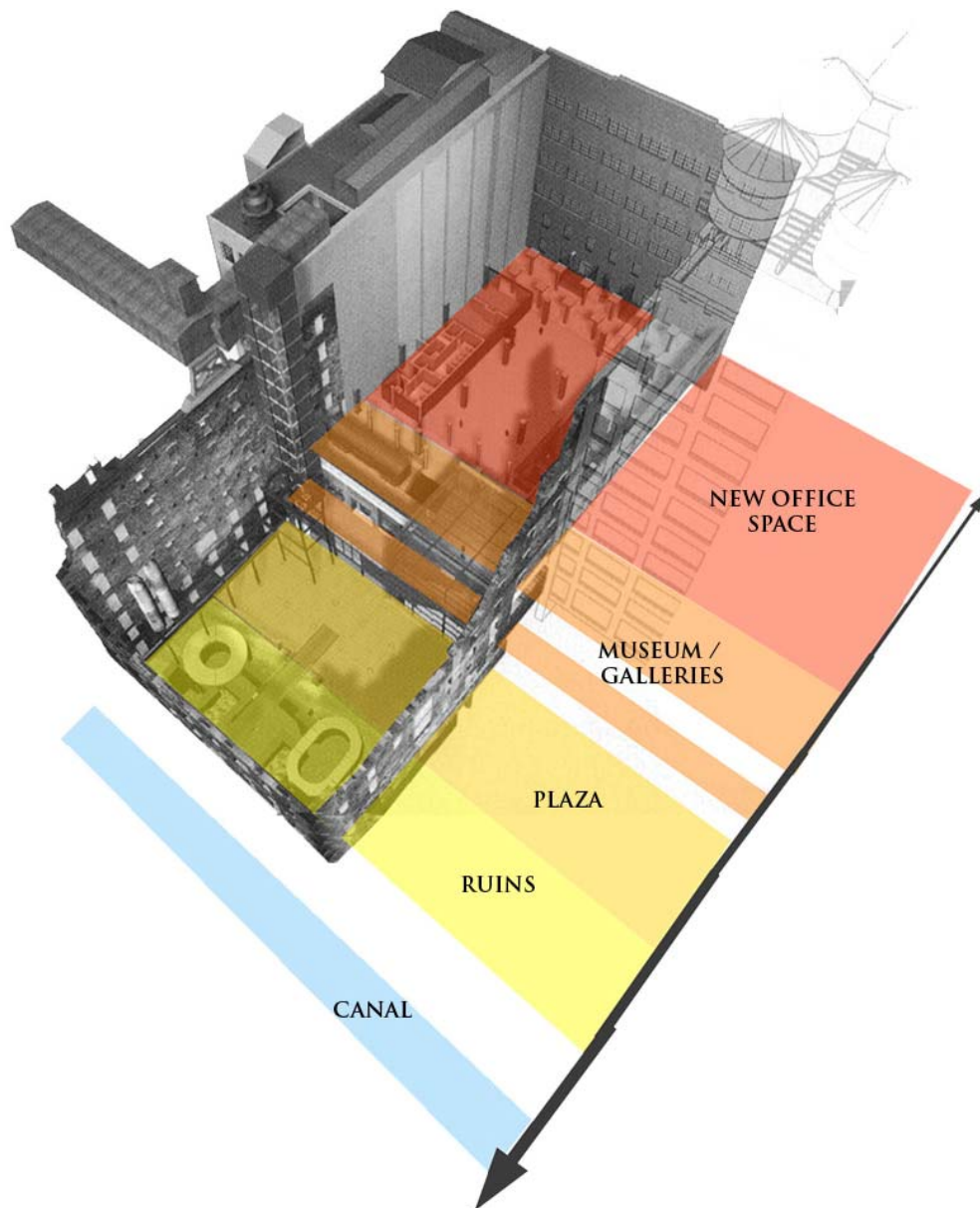


Figure 209. - TIME TRANSITION

The transition from ruins to new space is a gradual one, always respectful of what came before, and allowing a meditative and slow progression through the interior and exterior spaces: infill offices, to the integration at the museum, to relics of the ruins, to the ever-present canal.

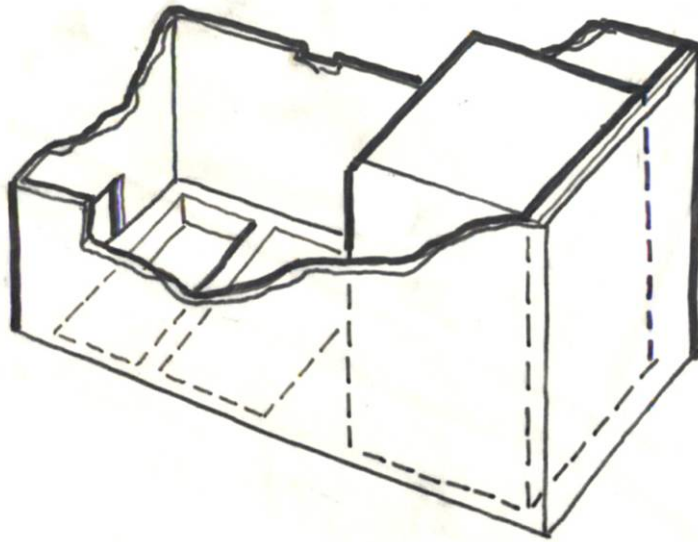


Figure 210. - LAYERED TIME

Several methods of interaction with history and memory are promoted, from the frozen isolation of the ruins and shell, to the interaction with history at the plaza, and finally the insertion of the present over the past with the new offices.

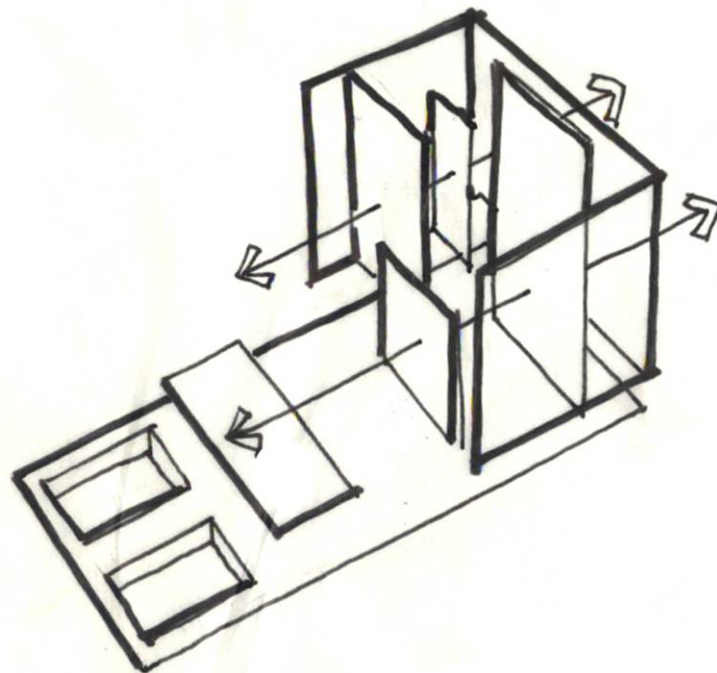


Figure 211. - OPEN FOR VIEW

The architects addressed the problem of a new façade on a historic artifact with a clear gateway giving uninterrupted views and connections from the volume that remains to the volume that is now inhabited. There is no clear distinction between the past and present.



## SCUDERIE ALDOBRANDINI

Rome, Italy – 2003

Massimiliano Fuksas

The Scuderie Aldobrandini is an example of a building serving many purposes unrelated to exact building form or space: a horse stable, a German World War II headquarters, a wine fermenting house, a parking garage, and now a museum, gallery and conference center. The architects took design cues from the extensive excavation for the structural reinforcement work that was necessary. The design pulls back from the exposed 17<sup>th</sup> century walls of the building, allowing a play of new and old to exist, with the movement, light, and occupancy occurring in the space between. *Reference 19*



Figure 212.  
View of the staircase that rises in the space between the existing and new structures.

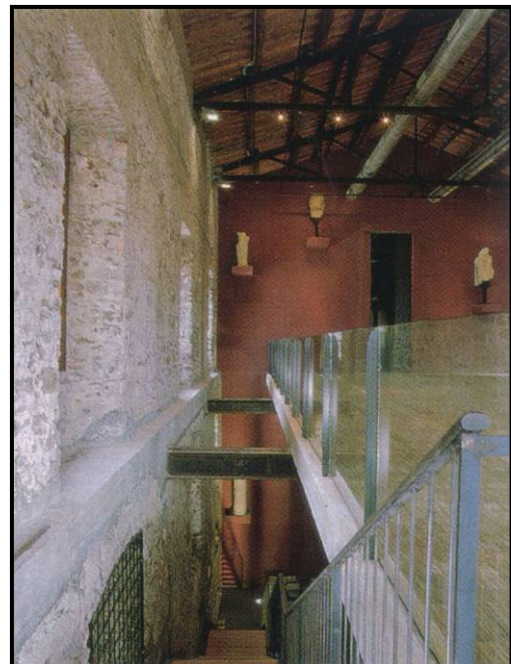


Figure 213.  
View of the new floor plate tying into the existing wall at the staircase.

Figure 214. - PLAN ORGANIZATION  
New gallery spaces are placed on either end of a new central circulation core.

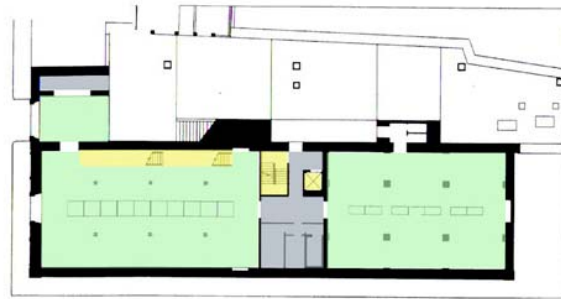


Figure 215. - NEW & EXISTING  
The new addition is held off from the existing walls, tied into the masonry structure but given a generous gap for preservation, visual, mechanical, and circulation purposes.



Figure 216. - FORMAL ORGANIZATION  
The inserted platform and circulation core rest within the existing form. The space remaining creates an uninterrupted and familiar element of the past.

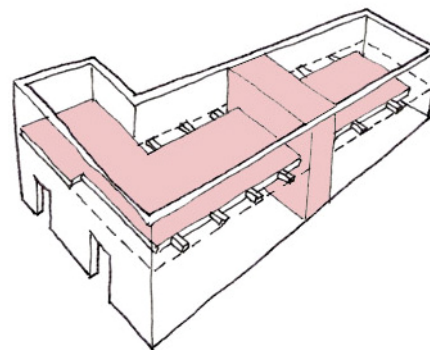






Figure 217. - UNIFIED SPACE IN PLAN

The plans work to carry one through the building as they would have before renovation. The main entry, archeological viewing pits, and openings in the core allow a directed linear path.

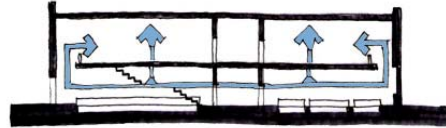


Figure 218. - UNIFIED SPACE IN SECTION

The section works in the same linear and continuous manner, allowing the former building to be seen and understood from floor to floor, as a complete object, without disruption by the new elements.

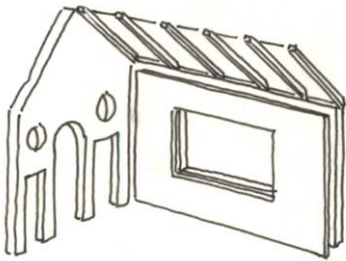


Figure 219. - LAYERED

In some places, new walls and floors are inserted over existing and historic layers.

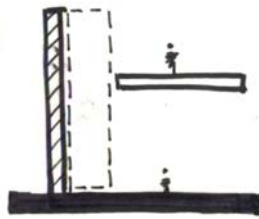


Figure 220. - ISOLATION

There is a separation between old structure and new floors, and the space between is where one witnesses the change in time.



Figure 221. - EXPOSING

Different from the direct contact with past history at the structures walls, the deeper exposure of ruins under the floor is a presentation of the past, detached and finished.

## MADRID REGIONAL ARCHIVE AND LIBRARY

Madrid, Spain – 2003

Mansilla + Tunon Arquitectos

The design for the addition to the Regional Archive is one much like the Centre d' Archives de Montreal in that it is a logical finalization to a complex that has been pieced together over time. The architects picked up on the formal and spatial arrangements of the existing center, and emulated these to turn an uncontained complex into a logical conglomeration. The design is one that not only makes sense of what came before in a plan and programmatic sense, but also organizes the complex in the sense of overall massing and elevation, creating a complex that seems to have been built with one vision. *Reference 20*



Figure 222 .  
View towards the recent  
archive addition.



Figure 223.  
View towards the  
contemporary additions  
(on left) and the existing  
library and silos (on right.)

EXISTING 1914-1960



ATTACHMENT 2003

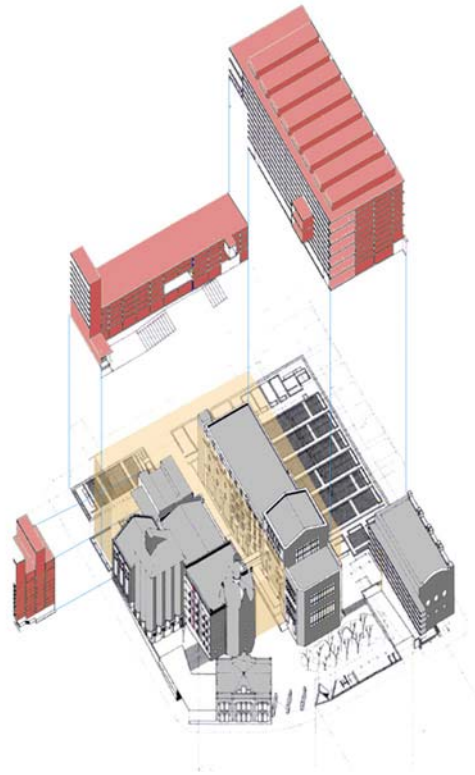


Figure 224. - EVENTUAL COMPLETION  
New and old structures are woven together, seemingly completing what should have always been in form, space, and order.

Figure 225. - FORMAL ORGANIZATION  
The insertions into the existing complex repeat the spaces that existed, creating a series of connected and similar plazas.

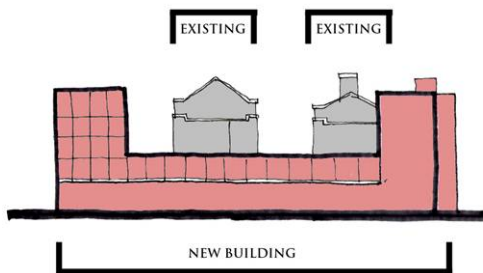


Figure 226. - ORGANIZATION OF EAST ELEVATION  
The new and old elements are distinct in their forms and materials, but work together to complete a balanced façade and a new order.

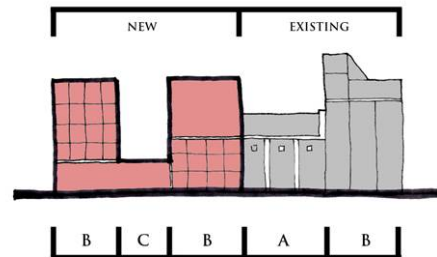


Figure 227. - ORGANIZATION OF SOUTH ELEVATION  
Old forms are now controlled and ordered by the new, framed in views and always seen in the context of the present.

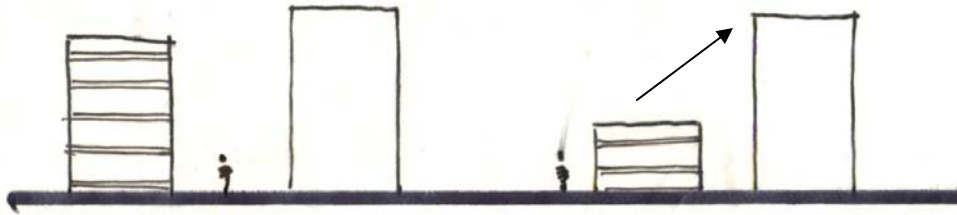


Figure 228. - BALANCE  
Additions are sometimes formed and placed in the existing arrangement to create a balance with the old in the resultant space between.

Figure 229. - ISOLATION  
Existing elements can sometimes be viewed only over a rationalized contemporary element.



Figure 230. - CONNECTION  
Additions sometimes serve to connect the space between two existing forms.

Figure 231. - FRAMED  
Existing elements are combined with additions for a new overall interpretation.

## DUISBURG LANDSCHAFT PARK

Duisberg, Germany - 2000

Latz + Partners

Latz + Partners has set a precedent for generating obsolete industrial lands into active, beautiful parks in urban areas, and the influence of Duisberg Landscape Park is for good reason. Instead of creating a tabula rasa surface for development, the design attempts to celebrate the area's industrial past by integrating vegetation and industry. The intervention preserves the remains of the old installations as valuable (industrial) heritage, and makes them available for public enjoyment. The evident contradictions add to the park's overall effect. *Reference 21& 22*



Figure 232.  
The civic plaza, nestled between the buildings of the original complex and created by the arrangement of iron plates from the original factory equipment.



Figure 233.  
The open landscaped garden space outside the factory, serving as a foil to the compact and harsh steel construction of the plant.





Figure 234.  
The original factory building, in the process of being reclaimed by vegetation.



Figure 235.  
Former water bunkers rethought in use for recreational climbing

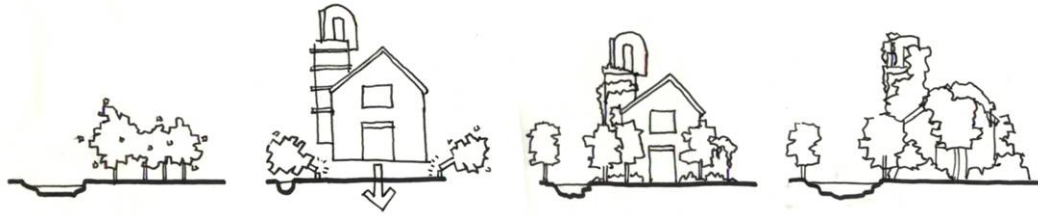


Figure 236. - TIME REVERSAL

The park is designed to act as a regression of time, natural elements and the environment going back the way they were before the plant was built. However, the events that happen in the process change the outcome of 'what was'. The factory was frozen in time and stopped in one aspect, but the reclaiming of the site by the vegetation continues to change the manmade elements to create something completely new. This is almost a denial or cover up of past wrongs.



Figure 237. - PROCESS AND PATH OF DISCOVERY

The park uses neutral and natural breaks along a given path to give the viewer time to reset their senses, and creates passages from one unanticipated space to the next, fostering a sense of discovery.

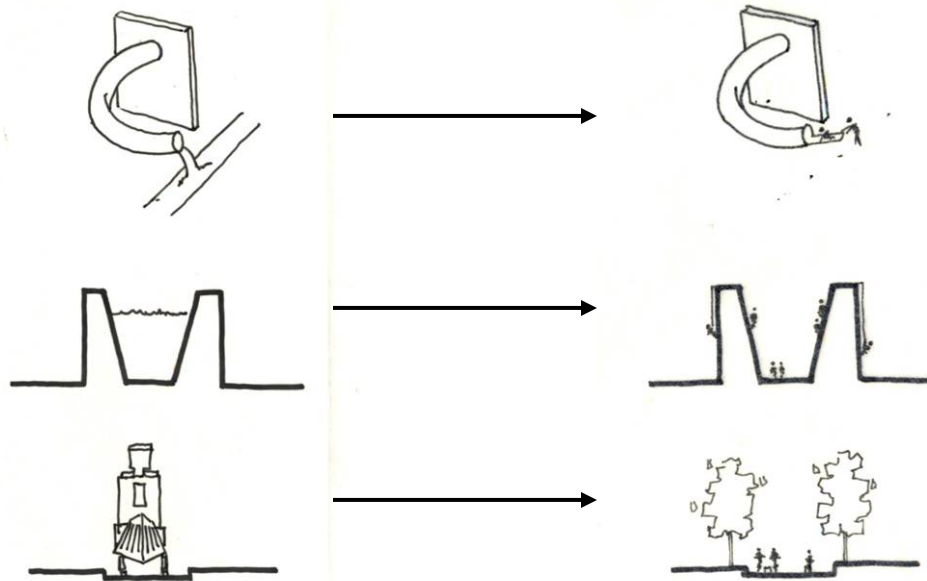


Figure 238. - REANIMATION

Each place is treated as being something dynamic with no written rules for its use outside of what people feel it should be. This allows for changes in the value and meanings of objects. There are different functions throughout the park, with different rates of growth (built forms) and decay (the landscape growth)



## **PROGRAM**

The thesis program hopes to establish a revitalized element of the valued Austin arts culture with the development of a new visual arts district for the downtown area. The program should consider new and existing organizations both local and outside of Austin. It should also include all types of art, including installations, performance art, digital art, and impromptu types such as graffiti. The main programmatic elements to be expanded upon are:

- Galleries space for large both large exhibits and local artists.
- Office and display space for Austin's existing museums and galleries.
- Workshops and studios for the production of local art and restoration.
- Educational space.
- Festival and installation space.

Additionally, the thesis design hopes to draw from Town Lake to create a new center for Austin's recreational activity, meshing the arts district with the city's primary civic space. Utilizing the Water Intake structure, the proposed recreation elements to be expanded upon are:

- A rowing center for the storage of boats, training, and classrooms.
- A Hike & Bike plaza for local organizations, classes, and vendors.
- A green space for a variety of activities and events.

Some of the issues facing the thesis program are:

- Developing a program that is true civic center, as functional for gathering and movement of people as the uses it contains.
- Creating a place used by all types of citizens throughout the day and year.
- Connecting the new Arts District and new recreation center.

## PROGRAM PRECEDENT - PORTER BOATHOUSE

Porter Boathouse, University of Wisconsin - Madison - 2005 - VJAA

Reference 23

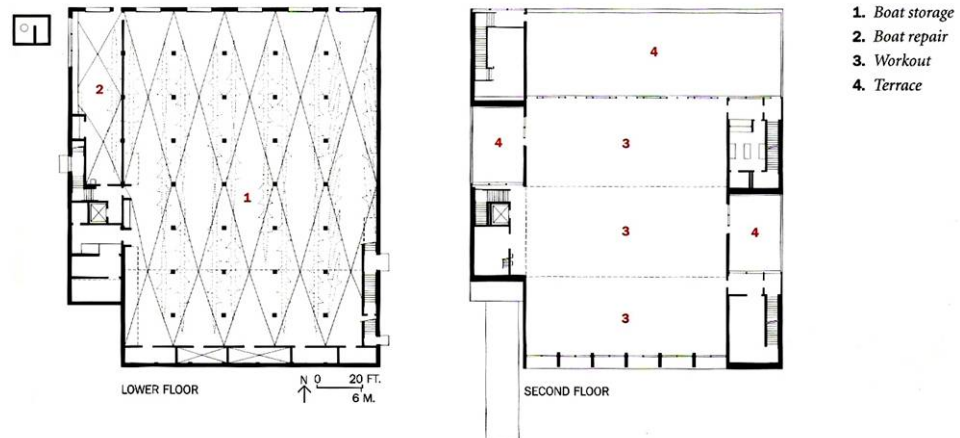


Figure 239. - BUILDING PLANS

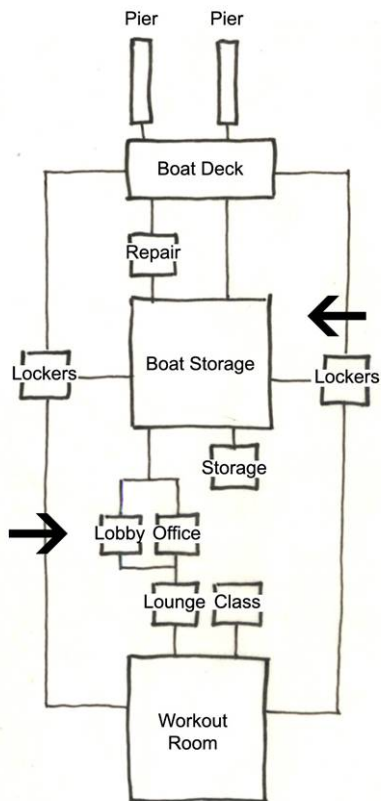


Figure 240. - PROGRAM ADJACENCY



Figure 241. - EXTERIOR OF THE BOATHOUSE

## PROGRAM PRECEDENT - TATE MODERN

London Bankside, UK - 2000 –

Jacques Herzog and Pierre de Meuron Architects

Reference 16

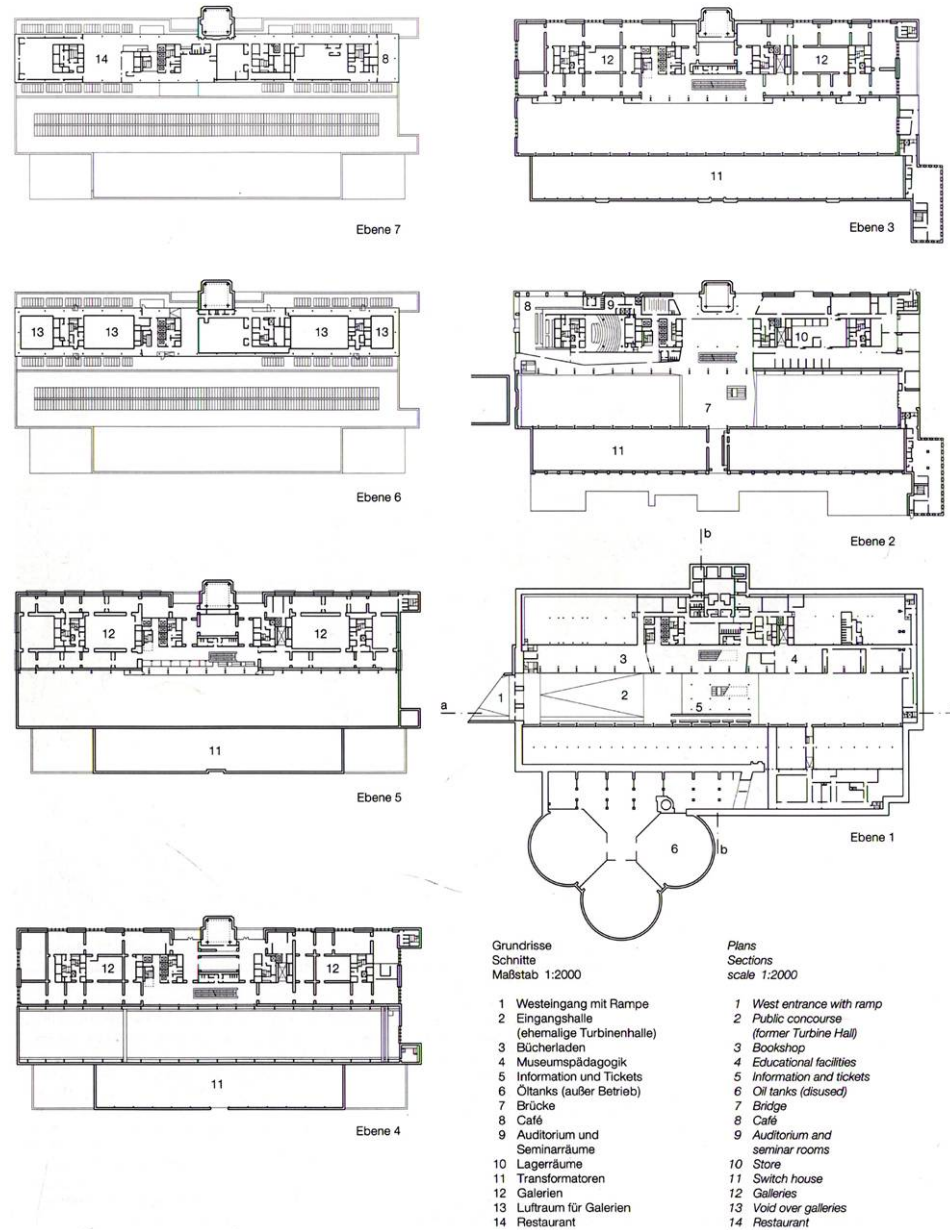


Figure 242. - PLANS

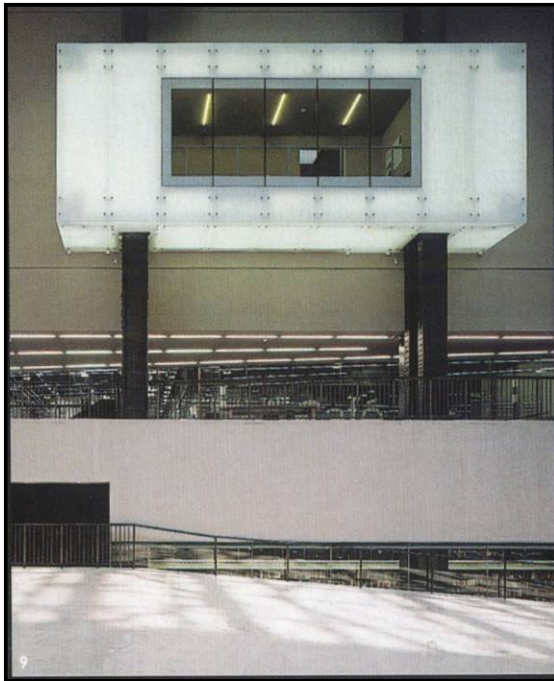


Figure 243.  
View of gallery space projecting out  
over turbine hall.

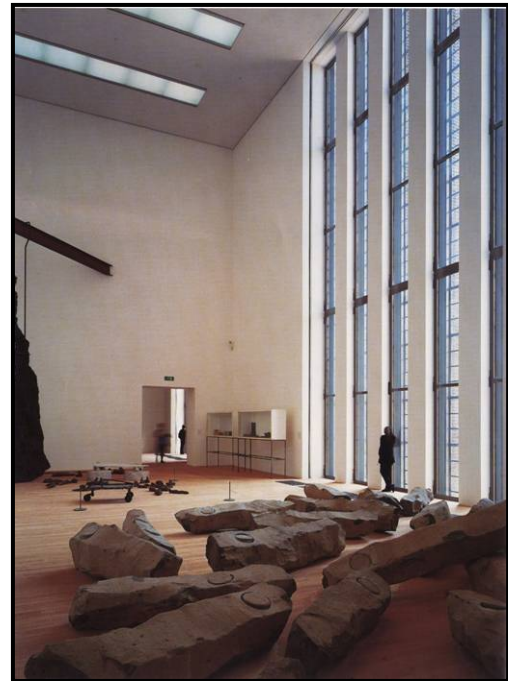


Figure 244.  
View of an Interior Gallery

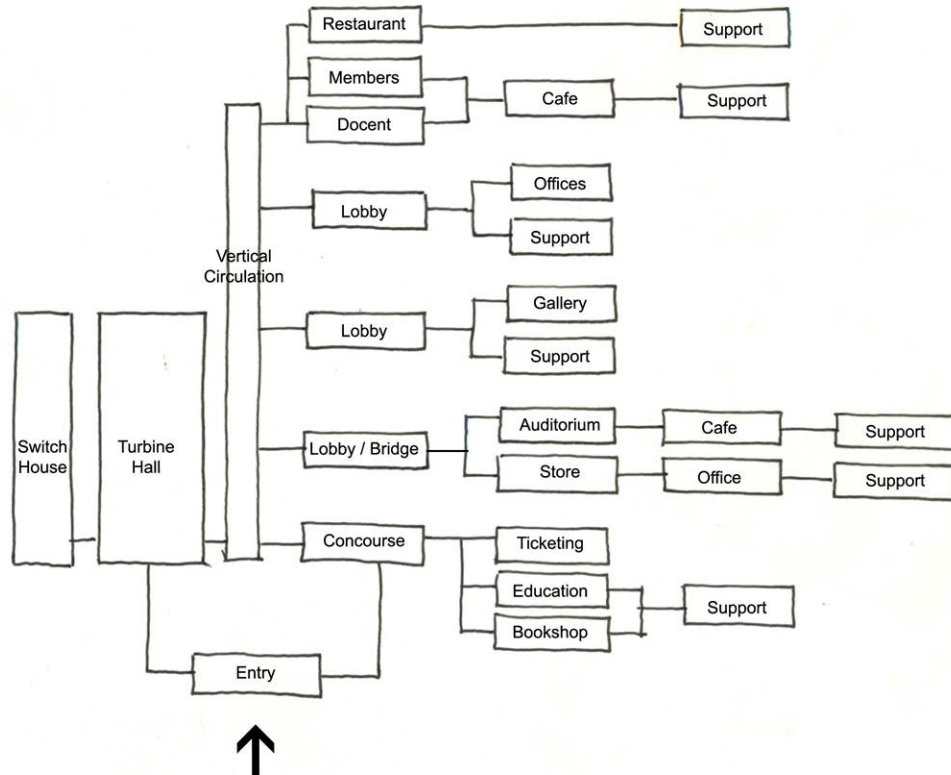


Figure 245. - VERTICAL PROGRAM ADJACENCY

**TABLE 2 - PROGRAM TABULATION**

<b>AUSTIN MUSEUM OF ART</b>	<b>SQ FT</b>
1. Lobby	
- Entry	300
- Main Lobby	2500
- Ticketing & Information	150
- Coat Room	200
- Restroom	600 (2)
2. Galleries	
- Permanent Exhibit Space (determine types)	40000
- Flexible Exhibit Space (determine types)	20000
3. Visitor Services	
- Auditorium persons)	7500 (300
- Museum Shop	2500
- Restaurant	1500
- Observation Deck	1000
- Activity / Education Center	1000 (2)
- Volunteer / Docent Center	300
- Member Room	500
- Seminar Room	200 (2)
4. Administration	7000
- Vestibule	100
- Reception	200
- Director	200
- Assistant Director	150
- Curator	200
- Assistant Curator	150
- Conference Room	500
- Staff Offices	250 (5)

- Clerical Area	200
- Lounge	150
- Storage	100
- Restroom	200
5. Support Spaces	
- General Storage	15000
- Large Object Storage	5000
- Display Preparation	3000
- Janitorial	700
- Loading Dock and Garage	2500
6. Mechanical (15%)	13455
7. Circulation (30%)	26910
<b>TOTAL</b>	<b>130 065</b>

<b>ARTHOUSE - JONES CENTER</b>	<b>SQ FT</b>
1. Lobby	
- Entry	200
- Main Lobby	1000
- Ticketing & Information	100
- Restroom	1000
2. Galleries	
- Permanent Gallery Space	5000
- Flexible Gallery Space	10000
3. Multimedia Presentation	
- Auditorium / Video Presentation Space	4000 (150 persons)
- Projection Room	200
- Media Closet	50
4. Visitor Services	
- Event Room	750
- Museum Shop	500



- Café	500
5. Administration	
- Reception	200
- Director	200
- Assistant Director	150
6. Support Spaces	
- Display Preparation	1500
- Graphic Workspace	1000
- General Storage	5000
- Janitorial	200
- Loading Dock	1500
7. Mechanical (15%)	4958
8. Circulation (30%)	9915
<b>TOTAL</b>	<b>47 923</b>

<b>DOUGHERTY SCHOOL FOR THE ARTS</b>	<b>SQ FT</b>
1. Lobby	
- Entry	150
- Main Lobby	300
- Receptionist	150
- Restroom	600 (4)
2. Administration	5000
3. Exhibit	
- Auditorium	4000 (150 persons)
- Gallery Space	10000
4. Classrooms	
- Studios	2500
- Activity Center	1200
- Library	3000
- Ceramics / Sculpture	2500

- Printmaking	1800
- Painting	1800
- Fiber Arts	1500
- Photography	600
- Digital	600
5. Support Spaces	
- Workshops	5000
- Restoration Center	10000
- Storage	10000
- Loading Dock	1500
6. Mechanical (15%)	8100
7. Circulation (30%)	16200
<b>TOTAL</b>	<b>78 300</b>

<b>AUSTIN ART ALLIANCE</b>	<b>SQ FT</b>
1. Lobby	
- Entry	100
- Main Lobby	300
2. Work Space	
- Studios only	500-1000 each
- Workshop	7500
- Digital Editing Room	500
3. Support Spaces	
- Public Restroom	600 (3)
- Storage	5000
- Loading Dock and Garage	1500
4. Mechanical (15%)	6255
5. Circulation (30%)	12510
<b>TOTAL</b>	<b>60 465</b>

<b>TOWN LAKE CENTER</b>	<b>SQ FT</b>
1. Hike and Bike Plaza	
2. Event / Vendor / Race Pavilion	
3. Training Track	
4. Rowing Center	
- Entry & Lobby	500
- Reception Desk	150
- Training Room	5000
- Classrooms	500 (3)
- Display / Seminar Space	1000
- Scull Storage	10000
- Repair Shop	7500
- Docks	
- Restroom	600 (2)
- Mechanical (15%)	4028
- Circulation (30%)	8055
<b>TOTAL</b>	<b>38 933</b>

<b>SITE</b>	<b>SQ FT</b>
1. Festival / Market Plaza	
2. Sculpture Garden / Installation Space	
3. Performance Park	

## **PROGRAM SUMMARY**

### **AUSTIN MUSEUM OF ART**

---

#### **Lobby**

The lobby is a large space for the entry and orientation of visitors, as well as access to the various programs of the museum. This space will also have space for installations and small performances.

#### **Galleries**

The galleries will be of three types. Permanent collections obtained and owned by the museum, temporary space for traveling or thematic shows, and an orientation gallery of local work shared by the two.

#### **Visitor Services**

These programmatic elements are to serve the peripheral functions of the museum and its interaction with its visitors. A large auditorium will be used for lectures, photographic or video art, education and seminars. The museum shop of local art and souvenirs will be paired with the restaurant, offering full dining facilities requiring a full kitchen. The museum will house an educational center for tours, classes, and hands on activities, as well as several seminar rooms for adult work shops. Special rooms will be designated in the museum for the preparation of tours and museum activities in the docent center, and a of special events and parties in the member's lounge.

### Administration

The administration program will serve an increased operation, with major offices for the directors of the museum, curators, and support staff. This program will also include a general work space and conference rooms.

### Support Spaces

This program is vital for the operation of the museum. The museum needs a large space to prepare shows for exhibit, with the loading dock and museum space immediately adjacent. There is also a need for a large amount of storage for presentation equipment and general art security.

## ARTHOUSE - JONES CENTER

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### Lobby

The lobby will be of a smaller scale, serving primarily as a space for entry and ticketing with access to support spaces and the galleries. It will also hold some space for exhibits that interact with the exterior of the building.

### Galleries

The museum will house both permanent and flexible gallery space. However, the flexible space is larger the museum's higher rate of changing its exhibits of contemporary art.

### Multimedia Presentation

With the increased level of contemporary art in the digital medium, the museum will house a small gallery set up with video and projection capabilities, as well as a small adjacent theater room.

### Visitor Services

The museum will house a small shop primarily focused on the sale of contemporary work by Texas artists. Adjacent to the store will be a café for coffee and snacks, and a event room adjacent to the administration.

### Administration

The offices will consist primarily of the director and assistant director's office, a reception area, and general work space.

### Support Spaces

The museum will need general storage and security, as well as a preparation area for new exhibits. Also important is a digital and graphic workspace to prepare multimedia presentations and museum graphics and installations.

## DOUGHERTY SCHOOL FOR THE ARTS

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### Lobby

The lobby will serve primarily as a orienting element to the various functions of the school with a receptionist for both the educational center and the gallery space.

### Galleries

The school will house a larger gallery for work produced at the school, as well as a smaller gallery for exhibits and events.

### Classrooms

Classrooms will need to serve several functions: space for specific equipment, open studio space, and space for storage. Alongside the classrooms will be a general activity space serving as a lounge and exhibit room. A small library and study room will also be central to the education spaces. There will also be space for the Art in Public Places program specifically.

### Support Spaces

Besides general storage, there will need to be a workshop for the fabrication of works. Sharing this workshop will be the Restoration Center for the entire



arts complex and all museums. This program will also need a few offices, a conference room, and general storage.

## AUSTIN ART ALLIANCE

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### Lobby

The lobby will consist of the entry point for those using the workshops and retaining personal studio space.

### Work Space

Personal studio spaces can be rented out for the use of local or visiting artists. Adjacent general workshops will be needed for fabrication, as will a dark room and digital studio.

### Support Space

The program calls for both individual storage for each studio, as well as general storage for the facility. Also needed are loading docks accessing each workshop and studio, lounge and exhibit space.

## TOWN LAKE CENTER

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### Lobby

The entry will serve as both a security point for training facility and as a direct entry point to the boat storage and docks with a receptionist space.

### Boat Storage

The facility will need to have space to house up to 50 full size sculls and 20 women's sculls. A repair shop and storage facility are also needed, all three with direct access to the boat docks.

### Training

Besides weight and training equipment, the training facilities will contain classrooms, a lounge, a display room, and coach's offices.

## PROGRAM GRAPHIC ANALYSIS

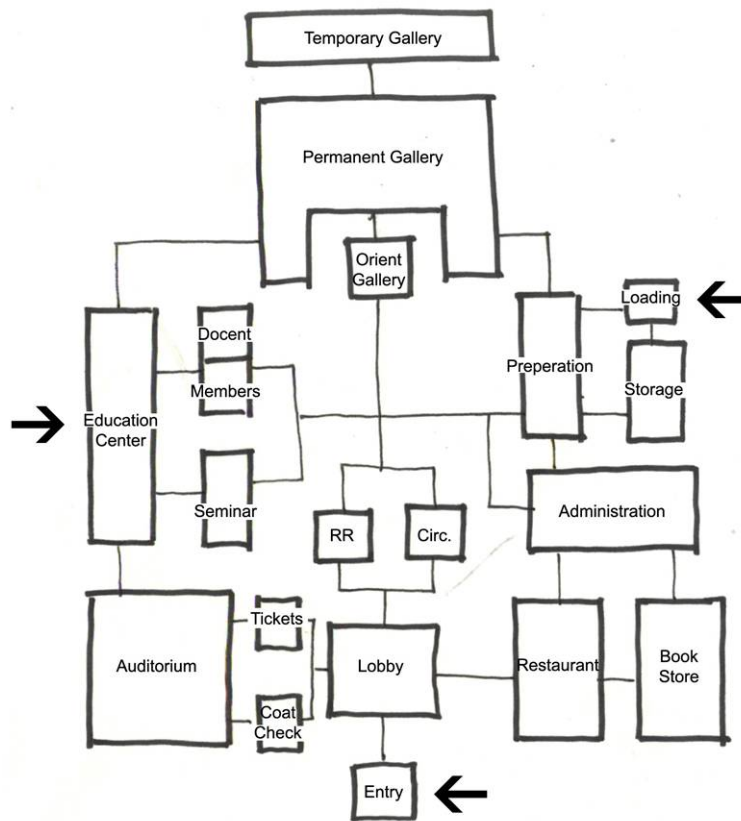


Figure 246.  
AUSTIN MUSEUM OF ART Adjacency Diagram

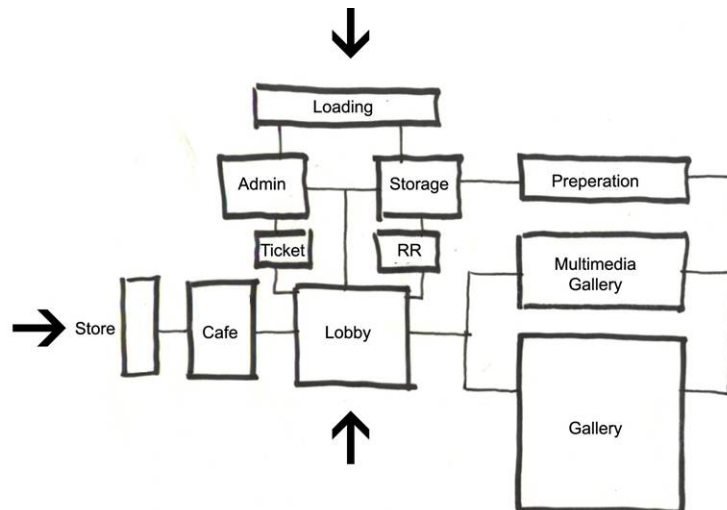


Figure 247.  
ARTHOUSE - JONES CENTER Adjacency Diagram

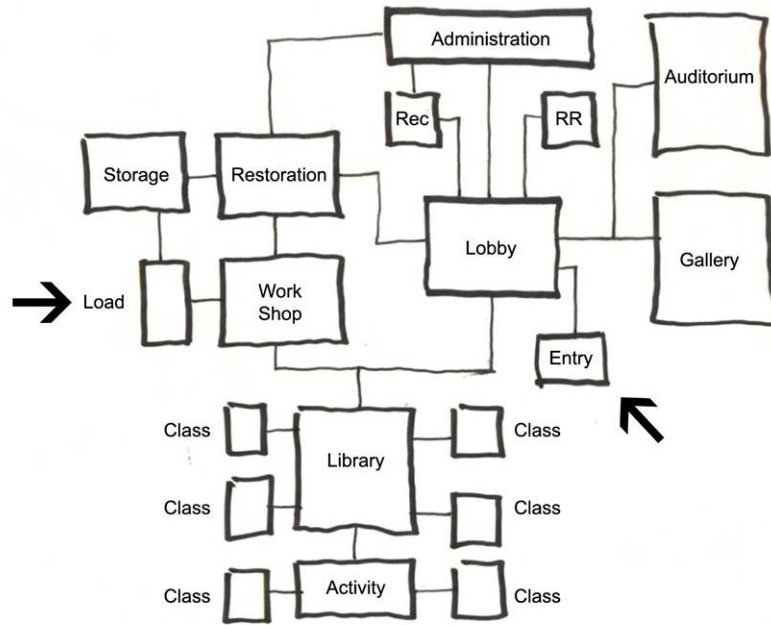


Figure 248.  
DOUGHERTY ARTS SCHOOL Adjacency Diagram

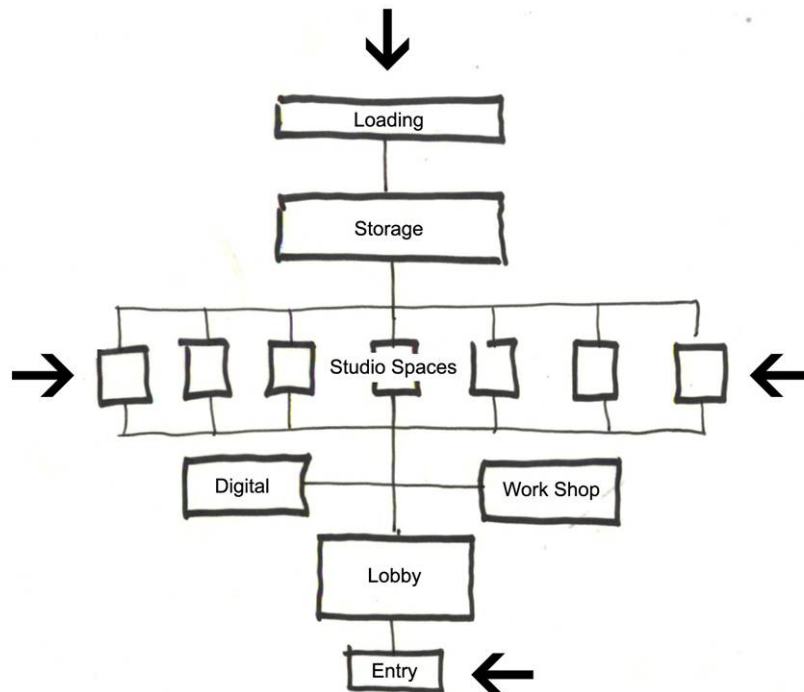


Figure 249.  
AUSTIN ART ALLIANCE Adjacency Diagram

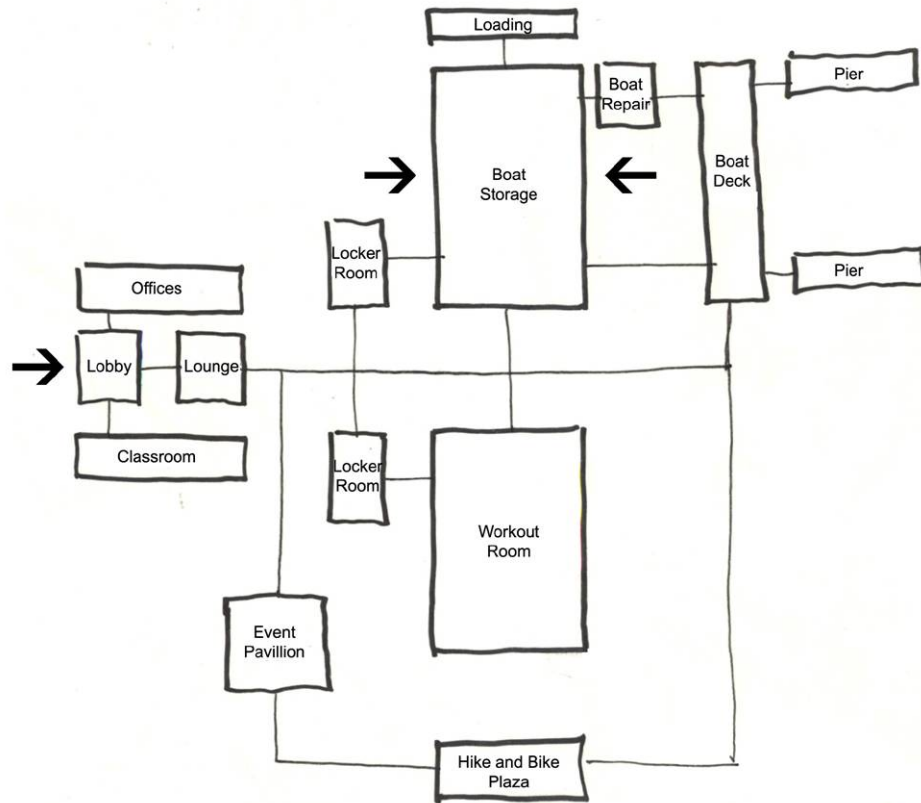


Figure 250.  
TOWN LAKE CENTER Adjacency Diagram

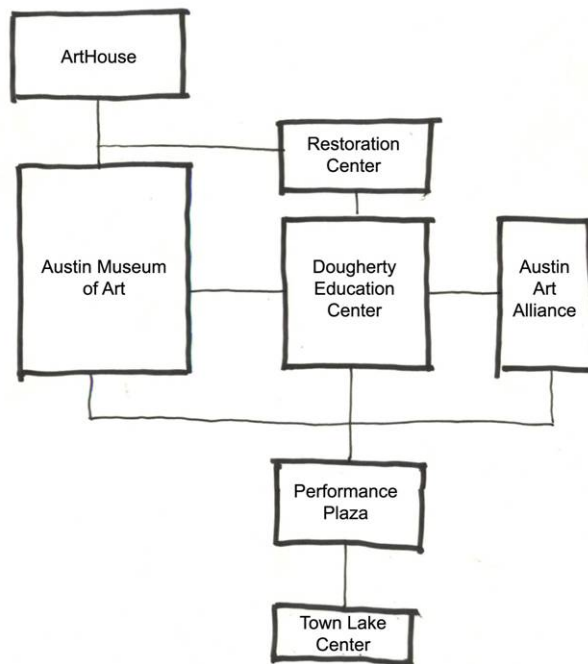


Figure 251  
OVERALL COMPLEX Adjacency Diagram

## **CHAPTER 7 - SITE DESIGN STRATEGIES**

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SEAHOLM POWER PLANT

## **SITE DESIGN - STRATEGY 1**

### **RECONNECTING TO THE WATER**

The first scheme is focused on connecting the fabric of the surround environment as well as the Seaholm Site itself to Town Lake. This involves the extension of streets and pedestrian pathways through the site. An internal logic on the site is then created off of these extensions for public space and parking, and a transit center to the north at West Avenue. This scheme investigates the creation four separate buildings including the power plant for the various functions, placed separately on the site with public space linking them to one another and across traffic routes. This scheme also studies the laying of green space over the two barriers of Lamar Boulevard and Cesar Chavez for an unimpeded flow of the site to the water, adjoining parks and new ball fields. An amphitheater is placed on the east portion of the site supply a physical connection to Shoal Creek and an outdoor performance area to compliment the adjacent indoor facilities of the Austin City Music Hall. The Town Lake Center is attached to the Water Intake structure with its own plaza.



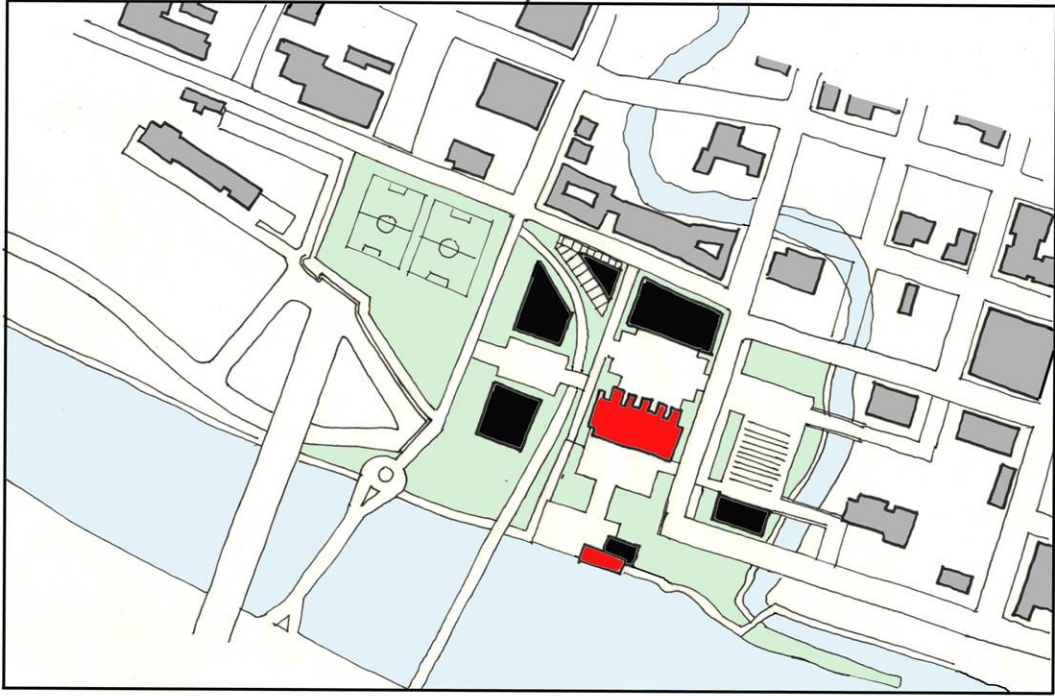


Figure 252. SCHEME 1 – Site Plan

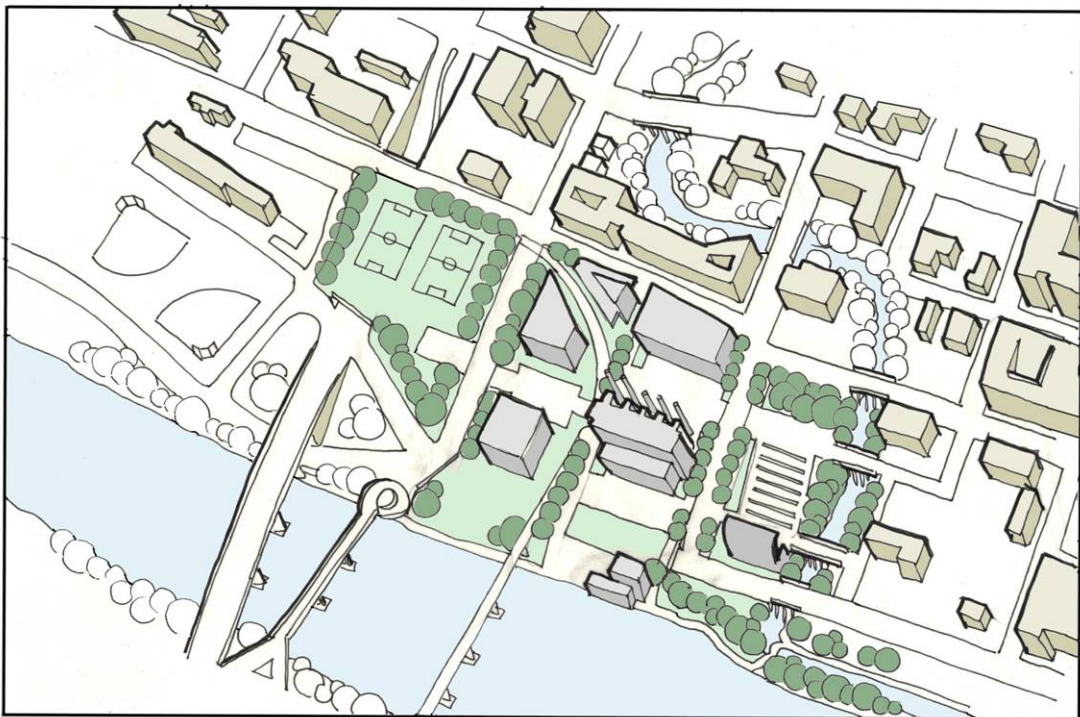


Figure 253. SCHEME 1 – Aerial View

## **SITE DESIGN - STRATEGY 2**

### **FOCUSED CENTER ON THE WATER**

The second scheme looks at presenting a formal and open center for the city at the water's edge of Town Lake. The new intersections created by road extensions are brought to an arts plaza central to the site, surrounded by three separate buildings including the power plant. The scheme once again bridges the land over Cesar Chavez to link the central arts plaza to the Hike and Bike Plaza of the new Town Lake center at the Water Intake structure. Three separate support elements are placed outside of the arts plaza, including an amphitheater to the west, a transit center to the north at West Avenue, and a green space and courtyard to the east at Shoal Creek. The more open and refined gesture to Town Lake is an attempt to capture the activity and civic function of the water, as well as creating a definable city space, which Austin now lacks.

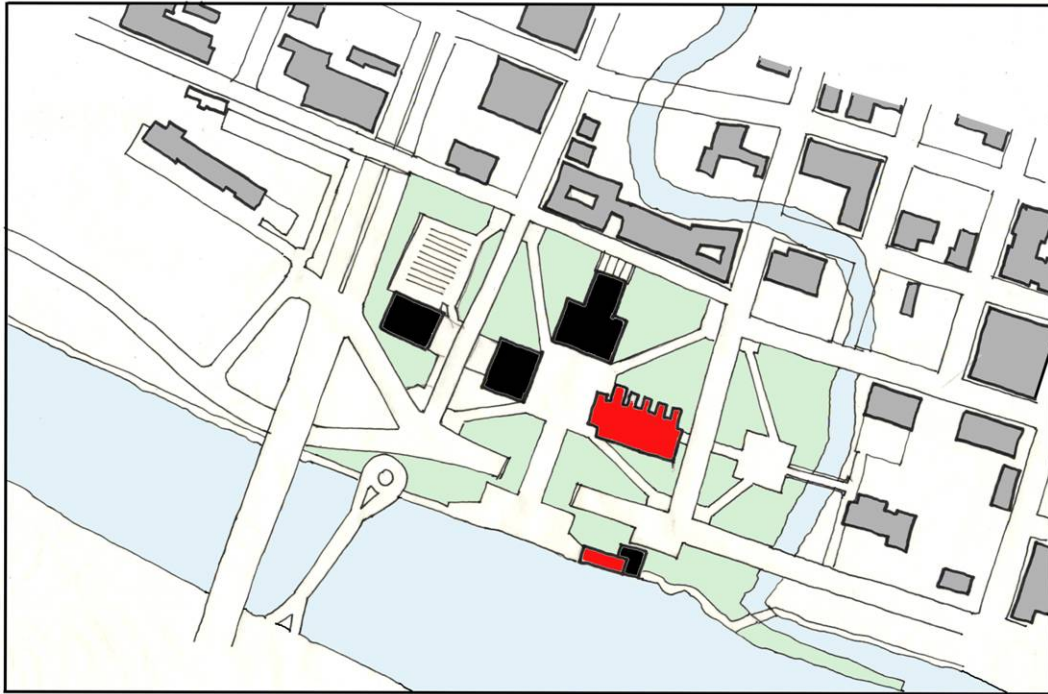


Figure 254. SCHEME 2 – Site Plan

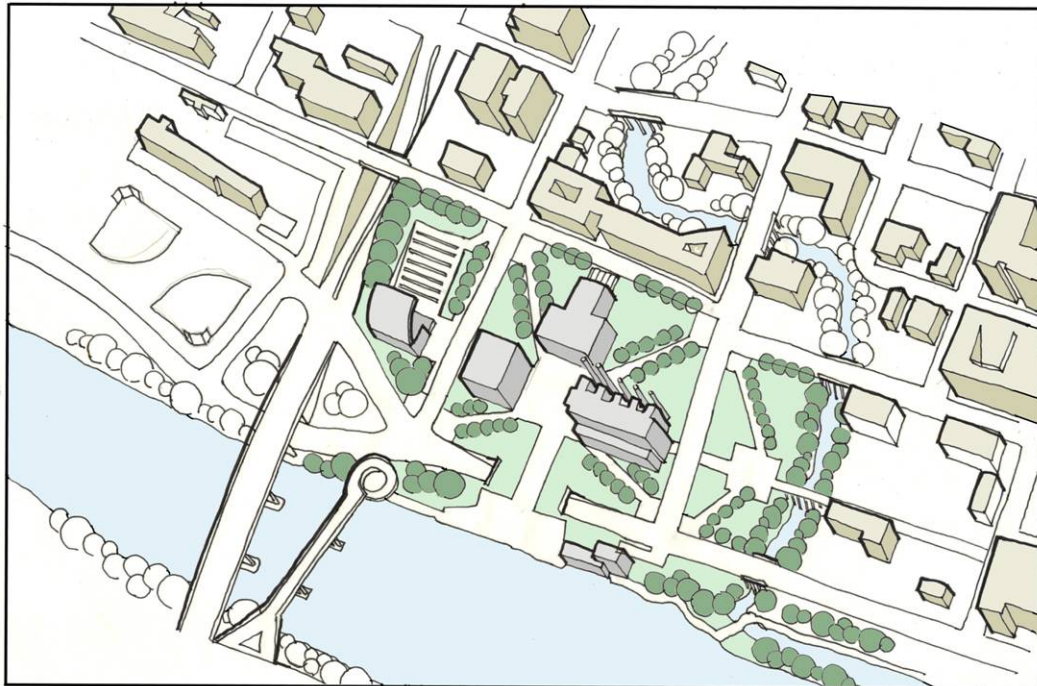


Figure 255. SCHEME 2 – Aerial View

### **SITE DESIGN - STRATEGY 3**

#### **DISCOVERY OF FOLLIES**

Scheme three attempts to capture the more natural state of the site's environment with a somewhat organic and independent arrangement of the building elements on the site. This is investigated by placing independent individual pavilion buildings among a heavily wooded and dense site layout. Pathways from building to building, as well as the journey into the site, are experiences of compression and expansion through portals of natural and manmade elements. Several open resting spots are created along the pathways, as well as a major plaza at the power plant. The pathways are created in a logical manner to link various functions, as well as the city and water. However, the tightening of passages, the limiting of views, and the scale of buildings presents oblique and veiled views from space to space that not understood until the entire site is traversed.



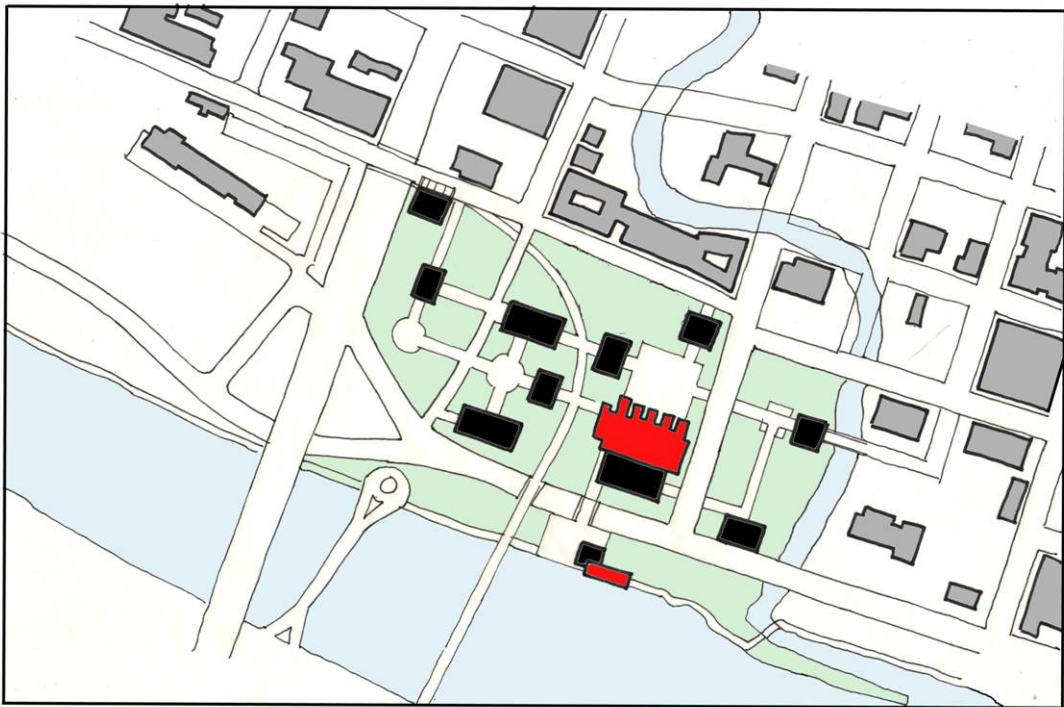


Figure 256. SCHEME 3 – Site Plan

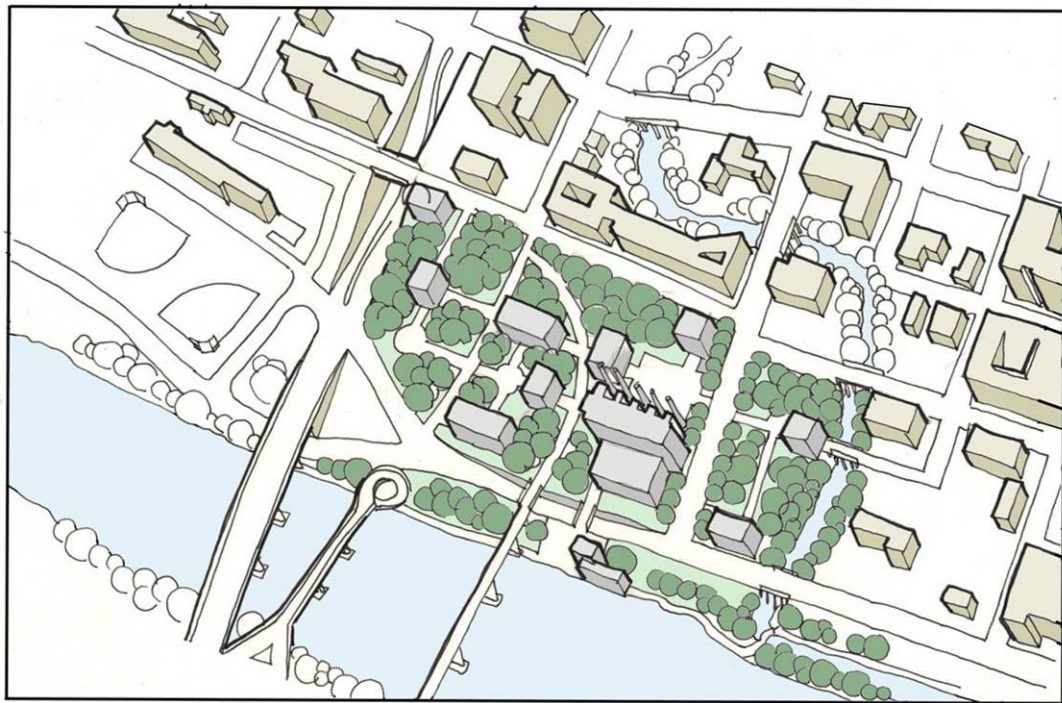


Figure 257. SCHEME 3 – Aerial View

## **CHAPTER 8 - ARCHITECTURAL DESIGN STRATEGIES**



SEAHOLM POWER PLANT

## **FORMAL DESIGN - STRATEGY 1**

### TEMPORAL COLLAGE

The first design parti looks at creating a building form that is a collage of interventions laid upon one another and the historic elements of the site and the power plant. This temporal collage of new buildings interacting with the existing Seaholm structure is a means to express the continuation of the past, with the strength and form of the plant informing contemporary design solutions. Several methods can be utilized to create this interdependence and story of a form propelled through time. The tension of buildings separated by plazas and open volumes of space is utilized to create a viewer's stance

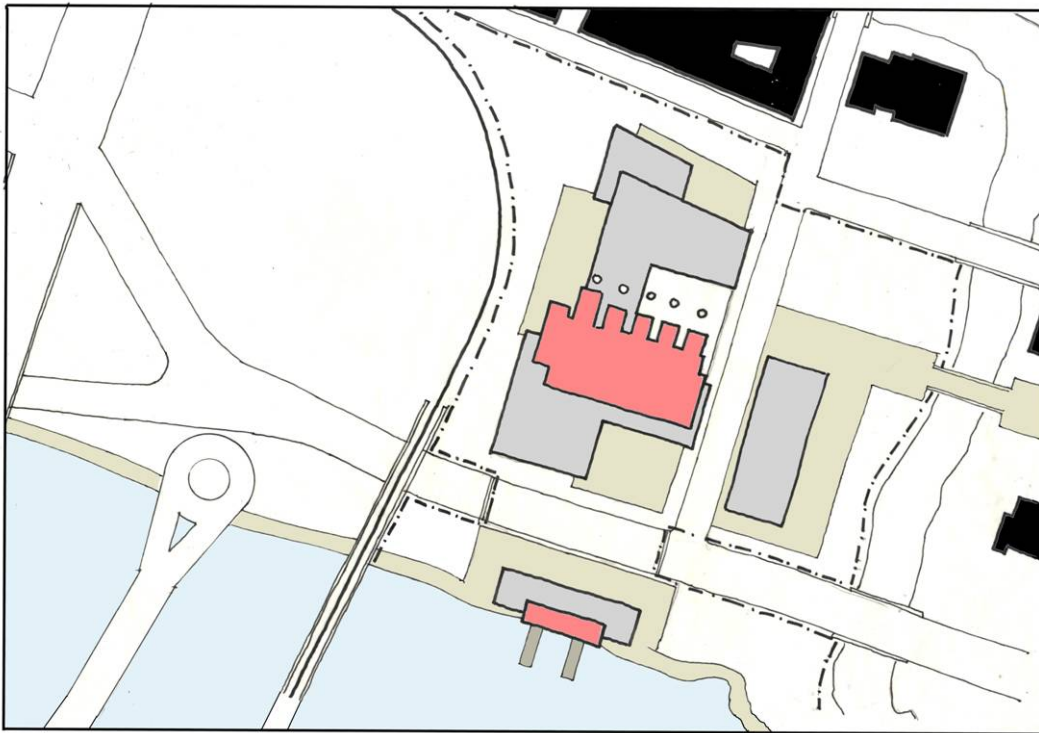


Figure 258. SCHEME 1 - PLAN



between the past and present, which hopes to heighten the sense of time moving forward. The insertions into the form are an expression of the dependence on history for certain elements of present culture. Finally, the erosion of sections of the plant reveals the meaning of parts and the past structure for the lessons of today's methods.

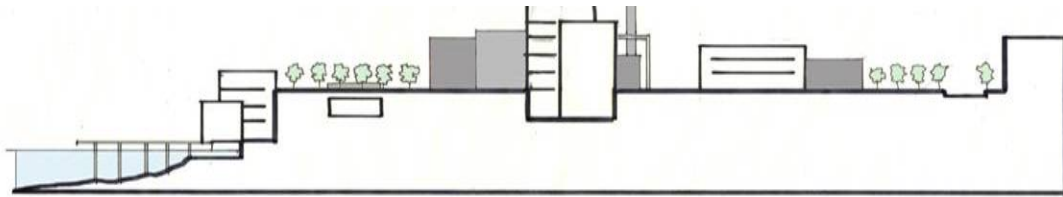


Figure 259. SCHEME 1 - NORTH - SOUTH SECTION

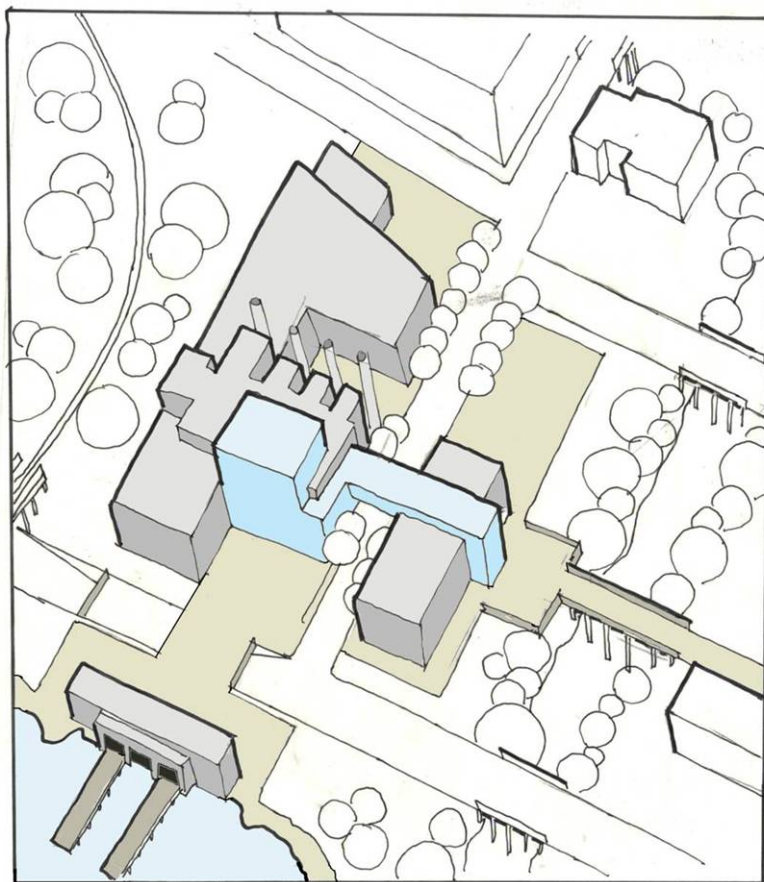


Figure 260. SCHEME 1 - AXONOMETRIC

## **FORMAL DESIGN - STRATEGY 2**

### CONSTRUCTION OF MEMORY

The second scheme investigates an arrangement of building form and spaces predicated on the concept of memory as reconstructed elements defining perception. In an attempt to achieve this in the parti, building elements are separate and isolated on the site, each with their own character and distinct formal attributes. The irregular paths that connect these important elements are ones which only present certain aspects of the surrounding buildings from any vantage within the complex. With partial views from acute angles or over walls of partitioned plazas, building forms are never understood in their entirety or in relation to one another. The complex must be

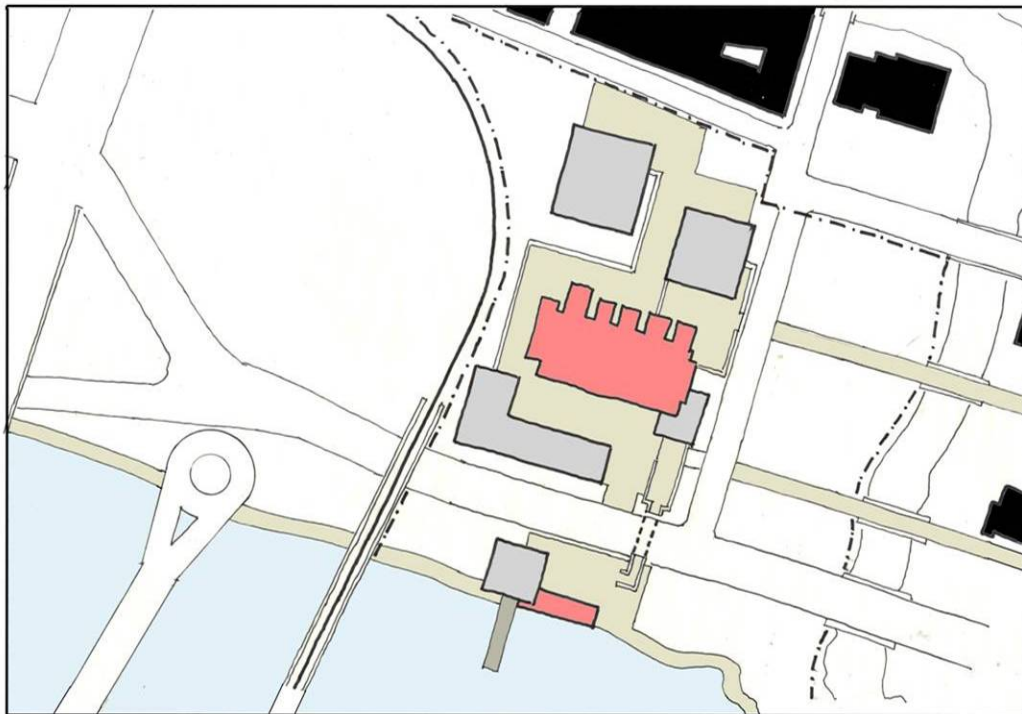


Figure 261. SCHEME 2 - PLAN

traversed and witnessed through a journey, and then reconfigured abstractly in order to understand the complex. The elements that one or another individual finds vital to their overall understanding is what creates their perception of the Seaholm complex.

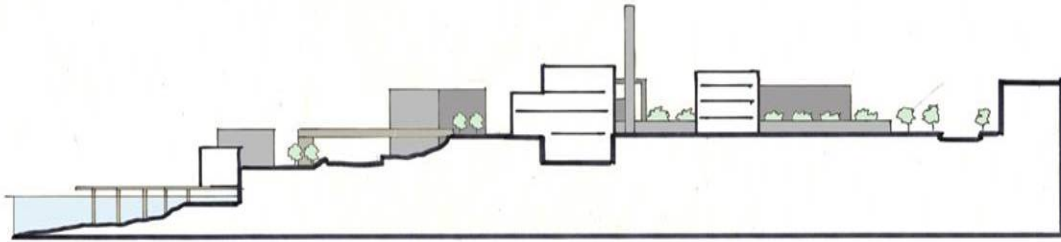


Figure 262. SCHEME 2 - NORTH - SOUTH SECTION

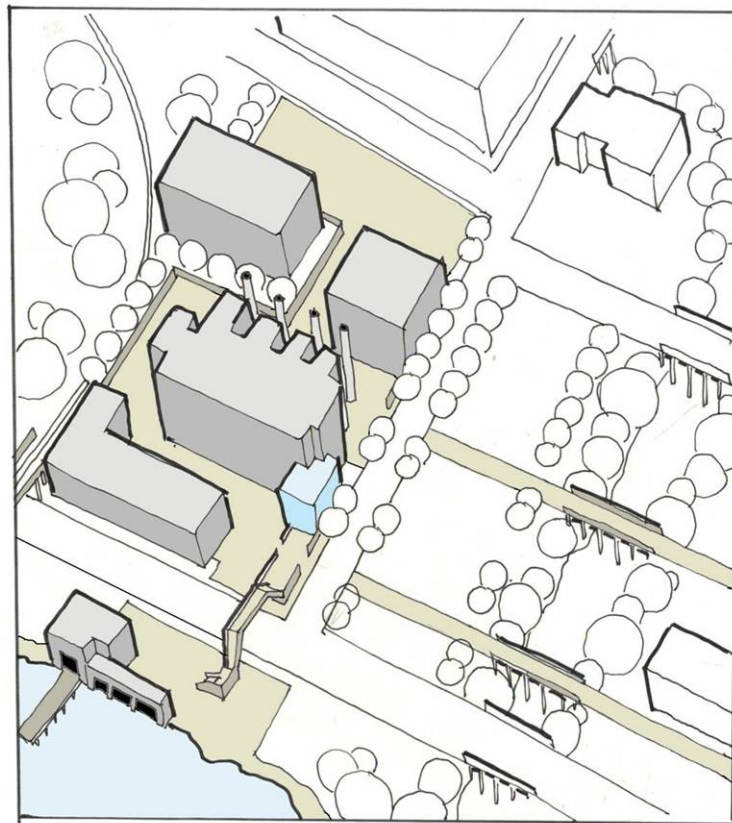


Figure 263. SCHEME 2 - AXONOMETRIC

## **FORMAL DESIGN - STRATEGY 3**

### PROCESSIONAL TIME

The final scheme is an investigation of various experiences along a common element, tying the past, present and future together. A spinal circulation space is extended across the site and to the water's edge. This feature slices through the various building forms and functions. When this singular element is juxtaposed against the various experiences in each building, the viewer is given a relative standard with which to decipher the unique conditions of each building. The spine serves as the factual element of time that organizes the attitudinal perceptions of various events during the

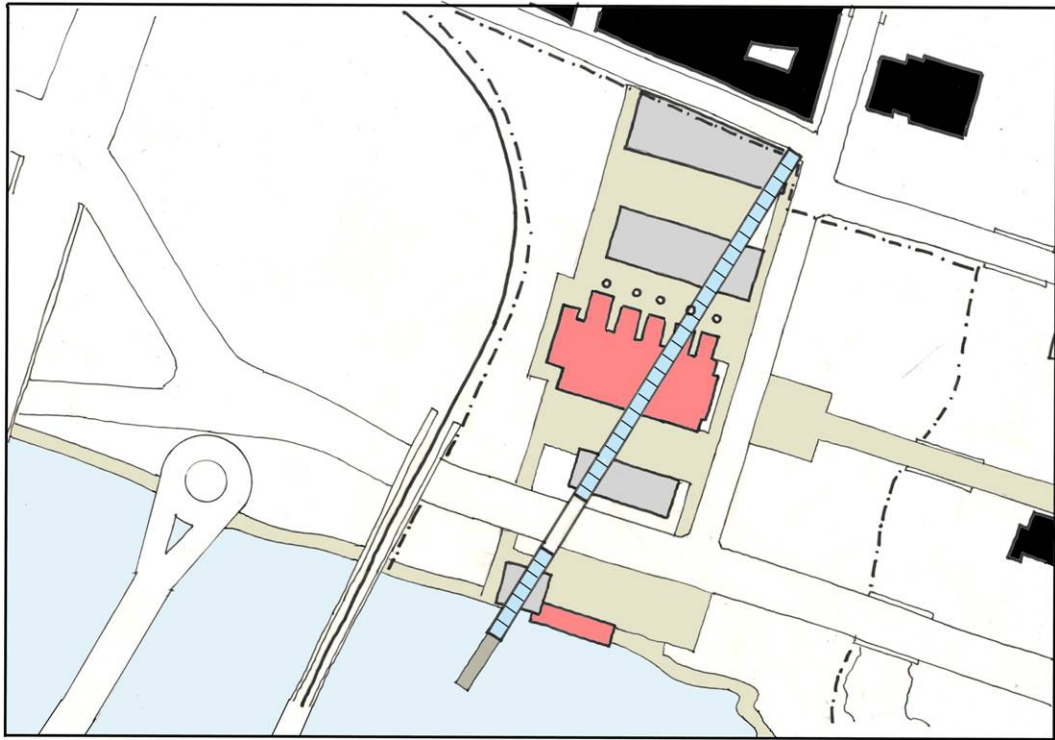


Figure 264. SCHEME 3 - PLAN

process of experience. This also supplies a defined sense of a beginning and end to their experience, as well as measurable distances and order to the way that the functions are arranged along a singular path.

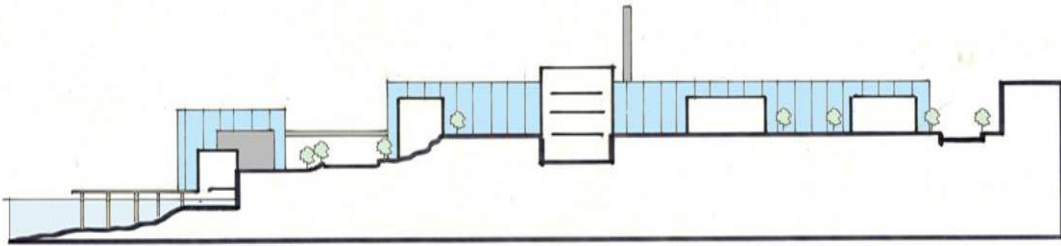


Figure 265. SCHEME 3 - NORTH - SOUTH SECTION

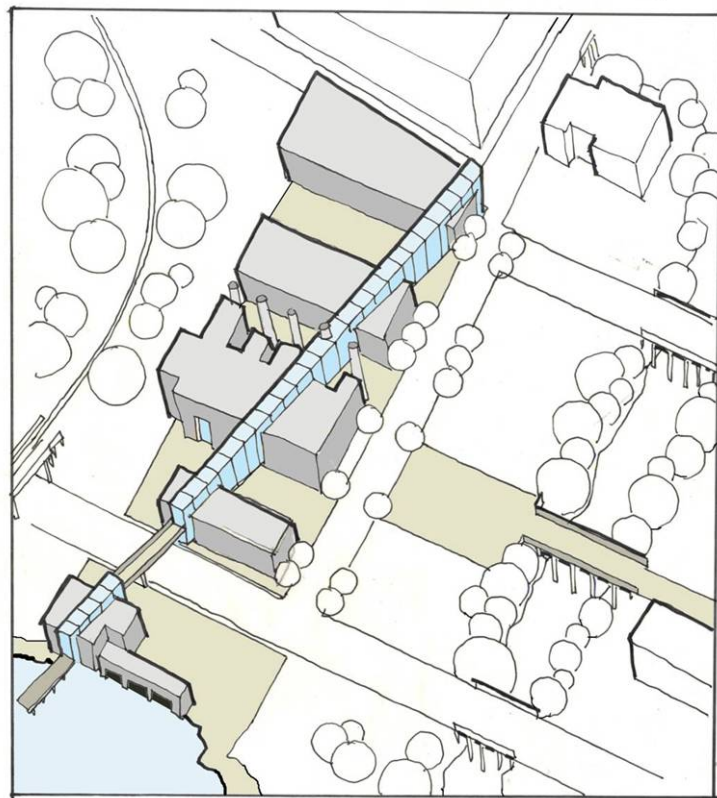


Figure 266. SCHEME 3 - AXONOMETRIC

## CHAPTER 9 – DESIGN

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SEAHOLM POWER PLANT

## **DESIGN CONCLUSION**

The design process for the adaptive reuse of the Seaholm Power Plant and the exploration of time and memory was carried through as a dichotomy of thought; both pragmatic and tectonic architectural design and theoretical and temporal testing. The project was also subdivided into the realm of site and building, each having certain programmatic and time aspects that were associated and independent. The process of carrying along all these components proved difficult to maintain at times due to the demands of the scale and scope of the project, but the result is a balance of both the abstract and concrete spheres of thought. Using the twenty-six developed time / memory methodologies as a starting point, the design began by exploring the ways in which historic past, current perception, and future development of memory could best be abstracted on the site and the building.

## **INITIAL SCHEME**

The original parti schemes were modified into a bar scheme running east-west across the site. The scheme involved placing two new buildings on either end of the Seaholm Power Plant; the Art house-Jones Center Contemporary Museum and the Dougherty Arts School, east and west sides respectively. This bar scheme proved capable of subdividing the massive Seaholm site into rational zones running east-west, parallel with the river, and north-south, leading between the river and the city. The bar scheme is conceived to be both an object building, a southern front for the arts district to



the river, and an edge for the spatial arts district zone between Seaholm and the city. The subdivision east to west was based upon historic treatment of the site. The eastern third, where the historic power buildings had once stood, was to be treated with excavation, discovery, and rejuvenation of past ghosts. The middle third, where Seaholm stood, was to continue the tradition of being a clearly planned and iconic zone of contemporary structures. The western third was conceived to respect the natural landscape that has continuously existed with a light architectural touch on the terrain.

## SITE PROCESS

From this start, a series of principles was conceived and progressed throughout the project to guide the design. Three major site principles were developed relating to movement, division, and social activity. First, the design looked to capture the existing and proposed movement through the site from city to water. The building scheme was to be porous enough to allow specific movement corridors to pass unimpeded, the existing train line, and the newly proposed pedestrian Park Promenade and Arts Promenade, from Bowie St. and West Ave. respectively. The building would open to these paths at courts, creating a simultaneous focus on both route and building object. Second, the design refined the zones of the site. At the northern edge was a filtering zone of a market street before entering the site. Just to the south was the museum zone relating to specific functions of the arts complex. Next was the filtering zone of the bar building, and to the south, the water capture courts open for

community interaction. Finally, south past Cesar Chavez Ave. was the water zone, with new hard edges at specific points and a projecting terminus to the Arts Promenade at the Water Intake structure. Third, the site looked to take the object / edge concept of the building further by making the two zones north and south of the complex distinct in character. The northern spatial zone would be primarily for arts district functions, for patrons and museum and school events. The southern edge zone would be a more communal and transitory space, for events and congregations not directly tied to the arts complex. While separate in attitude, both would remain clearly organized, porous, and promote free movement.

To take the organization of the site one step further in clarity, it was laid upon a Cartesian grid to order site elements, scales and edges of specific courts and green spaces. This is also used to help guide the layout of a pole network on the site. These poles are used for a variety of functions including lighting, seating, water misters, way-finding, memorials, and interactive kiosks. The water capture system on the site was also laid out upon the grid. This system retains and redistributes rainwater to the western half of the site, and filters runoff to the eastern edge and Shoal Creek. The program for the site was not only conceived in function, but also in an experiential aspect dealing with time and memory. The manner in which one travels through the site, the changing events held within each area, and the way the architectural elements adaptively frame the procession of time and episodic event all contribute to the expression of the way in which space is used to conceive

memory and recall. A few of these memory elements are public art kiosks (steel pavilions that serve as seating and framework for public exhibitions, demonstrations, and education), the market edge (sheltered frames harking back to the existence of Guy's Town structures as adaptable frames for street festivals and vendors), the industrial green (where Seaholm mechanical relics are rethought as sculpture and playscape), and an artist's lawn at Town Lake's edge (where the progressive work of artists can be witnessed day to day.)

## BUILDING PROCESS

Five major building principles were developed along with the project, which include memory approaches in massing and section, the concept of narrative, interior/exterior relationships, and the concept of a clear and consistent datum in all three buildings. The afore mentioned concepts of excavation, grounded icon, and retention of nature were carried form the site approach to the building. The Seaholm building was kept at grade level, while the Dougherty School to the west was raised up off the landscape, and the Arthouse Museum was dug into the ground to the east. The building was also conceived with the idea of narrative, as each building expressed consistent and unique elements as the bar moved across the site, slowly changing materials and character, but reading as one complex. Another key principle was the relationship of exterior and interior. It was vital for movement in and out buildings, as well as the circulation within, to be connected between

spaces, a constant communication and counterpoint of very different experiences. This connection also reinforced the regional idea of porch, and presented the city and the river in views from the building. Finally, to reinforce the bar and complex, a sleeve was designed to run along all three buildings. This sleeve, while consistent in its relation to building circulation and scale, evolved in its materiality, veiling or exposing qualities, and structural system. This sleeve serves as a datum through the entire complex, a constant to the unique interior environments and undulating ground planes of each individual building.

## THE BUILDINGS

The Seaholm Power Plant was designed to juxtapose and highlight the existence of new and old with the adaptation of the Turbine Generator Building into the new home for the Austin Museum of Art. Four key elements were applied in order to place the viewer in position between the past and present, allowing them to decipher layers of change and decide for themselves what was, is, and what could be. The first was the placement of a sleeve inside the original turbine hall where all circulation was organized. Gaps between the floors and vertical circulation being placed outside the sleeve created a circulation experience where viewers move in and out of new and old, gaining an awareness of the space between and patching small and large snapshots of the building together to understand its entirety. The next method was to juxtapose the former turbine hall space with a new conception of the turbine hall floor. The equipment level and mezzanine level

were removed to expose the below ground area and the full height of the turbine hall space. A new floor was then layered on top, which rises and falls to create intimate and separate spaces within the greater hall. This new floor, which worked in conjunction with crossing bridges, creates even more opportunities to find personal space within a grand scale. Finally, the flooring of the new circulation was brought in to the existing office and mechanical wings, adjacent to the turbine hall, and layered over old materials. This creates a new surface that a viewer can look through to see the historic conditions, layering new and old, prior industrial function and new museum use.

The Arthouse Museum to the east is designed in order to force a viewer down into the earth and building to recall and face the past of the site. The building form undulates above and below grade, much like the Seaholm floor, and creates a series of courts that have views up and out and can be seen from above. The building form rises up to meet the datum of the sleeve at the eastern portion, reinstating in a ghost-like fashion Austin's first power plant. This section of the Arthouse building then crescendos into an observation tower, playing to the memory of the old power plant's stacks, and connecting to the Seaholm building's vertical elements. The massing of the bar scheme is actually fragmented in form at the Arthouse into smaller buildings and courts, but this phenomenon is veiled by the sleeve, creating a preconception of form on the outside and a discovery of truth once within. Bronze panels are attached to the sleeve at the Arthouse, and are designed

to weather and evolve over time, allowing viewers to mark their place along a timeline of the building's development.

The Dougherty Arts School, situated to the west of Seaholm, is designed to reinforce interior/exterior connection and exposure. The spatial elements, both inside gathering atriums and the large ground floor porch, are intended to heighten an awareness of a person's point in time and space. The building mass hovers above the terrain, allowing the landscaping, people, and views to move freely below. The building is organized as four programmatic cubes that are lifted on concrete footings. Between each set of cubes are large open atriums, connecting floor to floor and to exterior porches. Circulation space continues this notion of witnessing time. Hallways between cubes function as gallery space, offering outside views while being protected by perforated metal louvers held by the sleeve. The glass stairwells within the two end cubes reiterate this notion of voyeurism, allowing a viewer to witness the progression of studios and restoration as they travel up and onward to their destination.

Finally, the Water Intake structure was rethought with minimal interference. The western, eight-bay portion was programmed as housing for visiting Arts Fellows, researchers, architects, or any other professional associated with the arts complex. The eastern, four-bay portion was designed as a recreation center with a café, locker rooms, and equipment rental on the upper level, canoe and kayak rental on the lower level. The only major

physical change to the building was the integration of new hard-edged walks and the projecting terminus to the Arts Promenade.

In conclusion, while the idea of memory may have been explored further in some aspects, such as preconceived evolution into future developments, the overall design is a well-balanced encapsulation of program, tectonics, form, and theory. The project was a successful attempt to understand how architecture serves the way in which we view our world, and strengthens the experiences we make and lives we lead inside it.



## INITIAL SCHEMES



Figure 267. Initial Parti Scheme looking north.

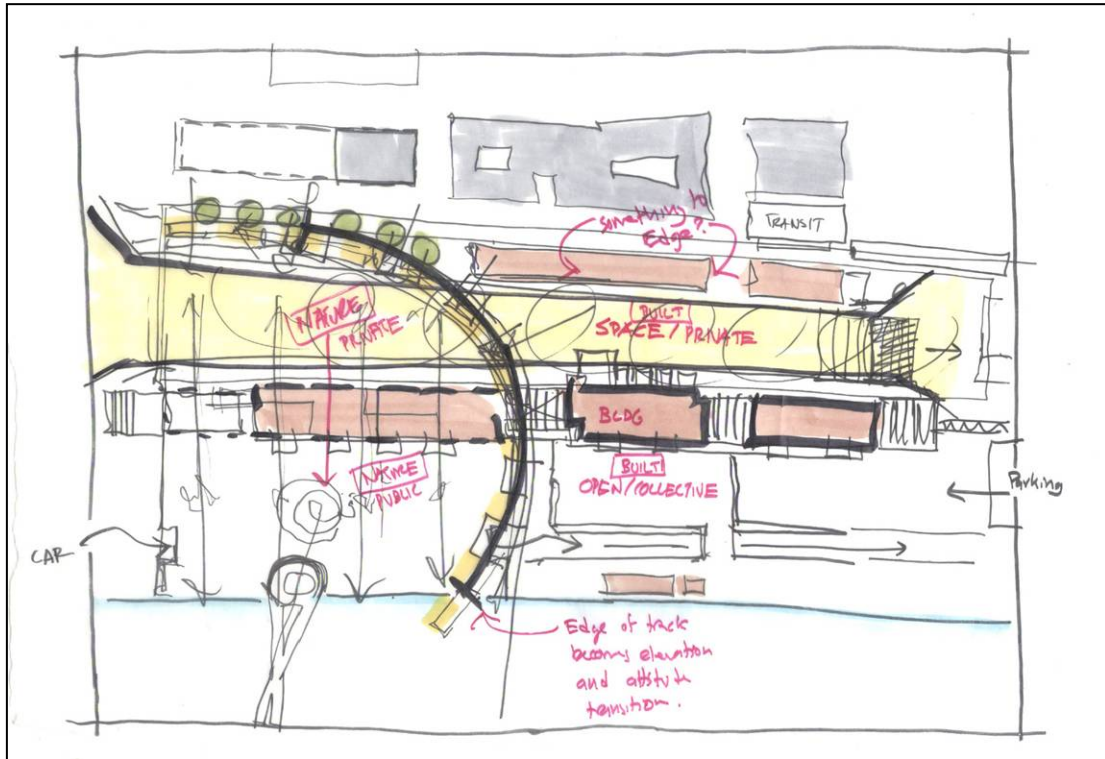


Figure 268. Initial Site Organization

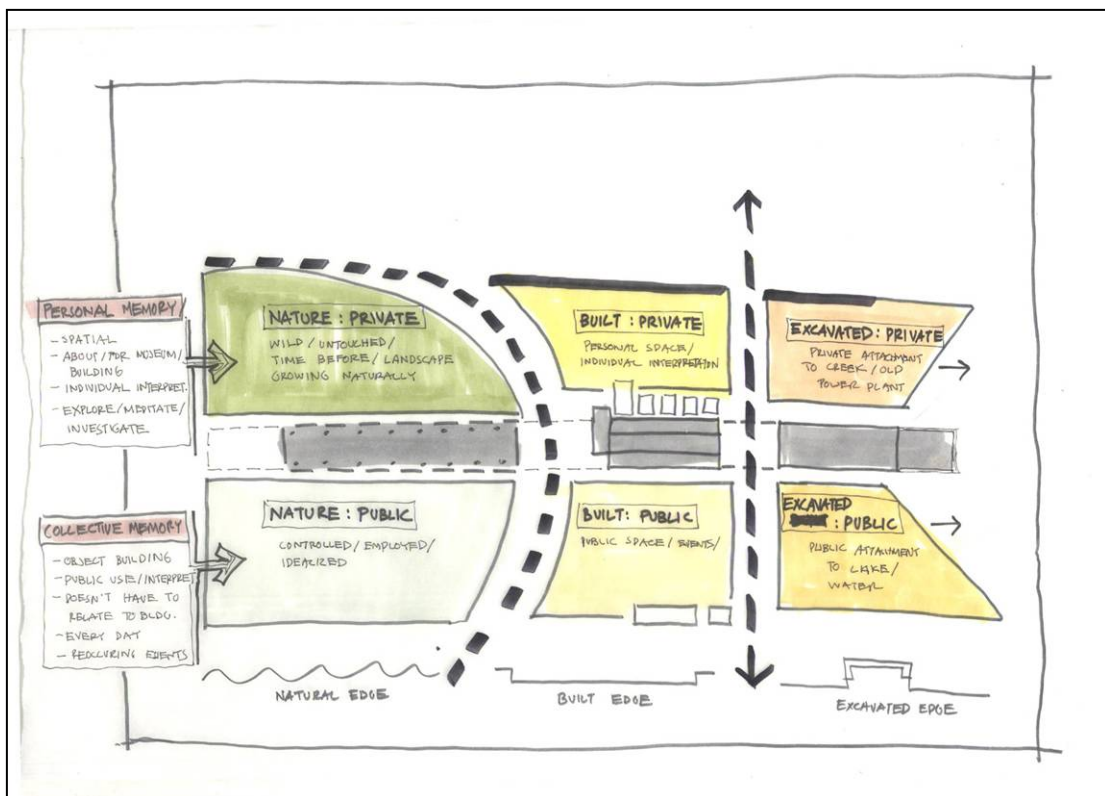


Figure 269. Initial Site Zones

## SITE PRINCIPLES

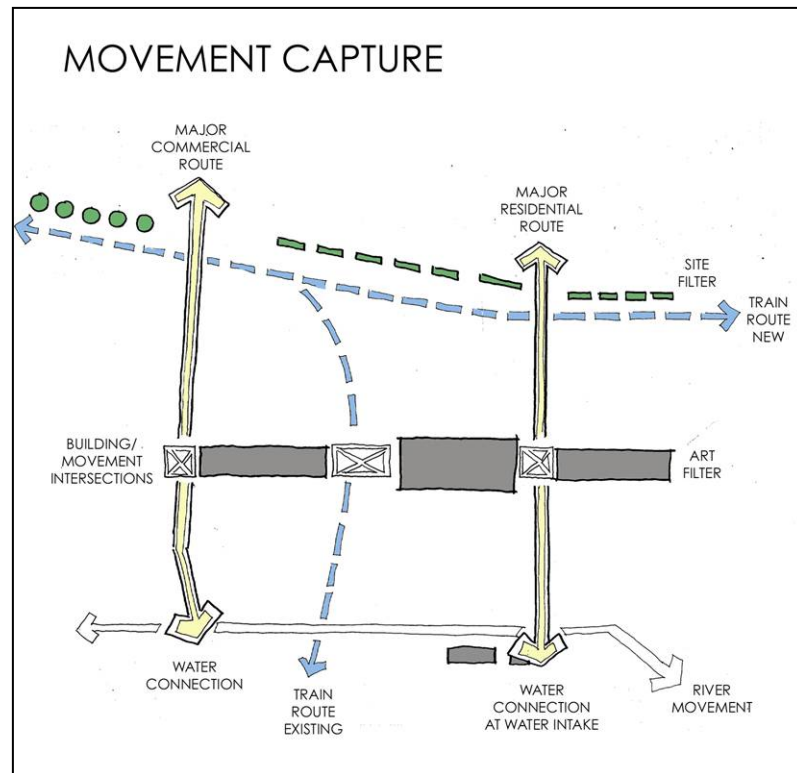


Figure 270.

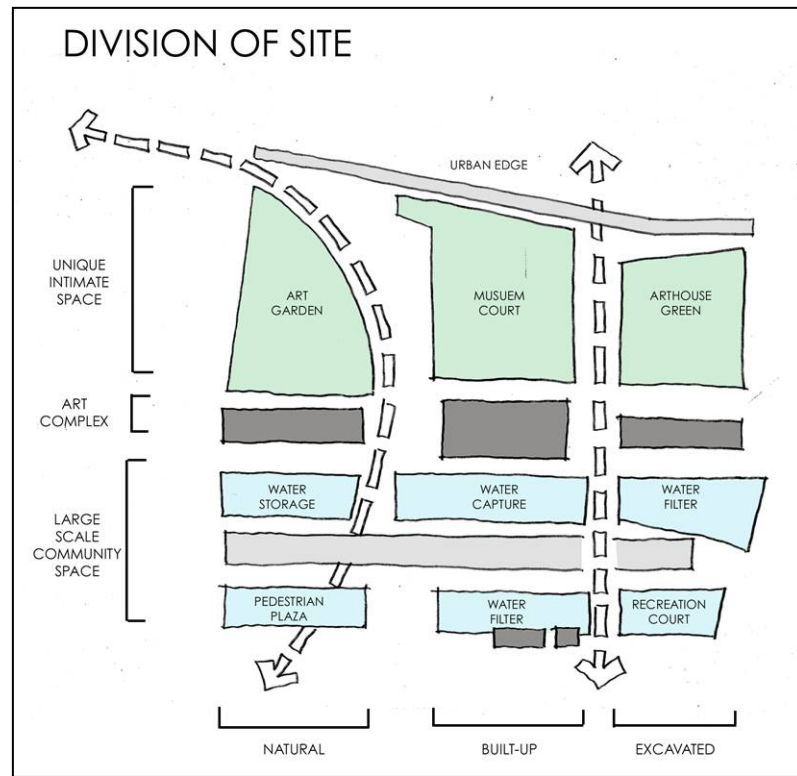


Figure 271.

## COMMUNAL/CULTURAL

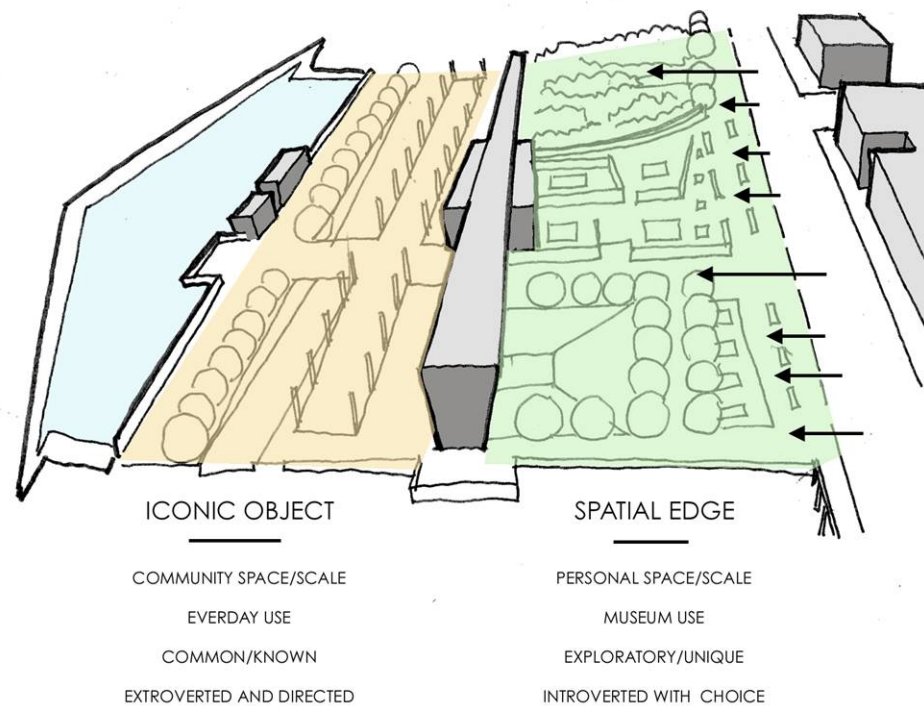


Figure 272.



## **BUILDING PRINCIPLES**

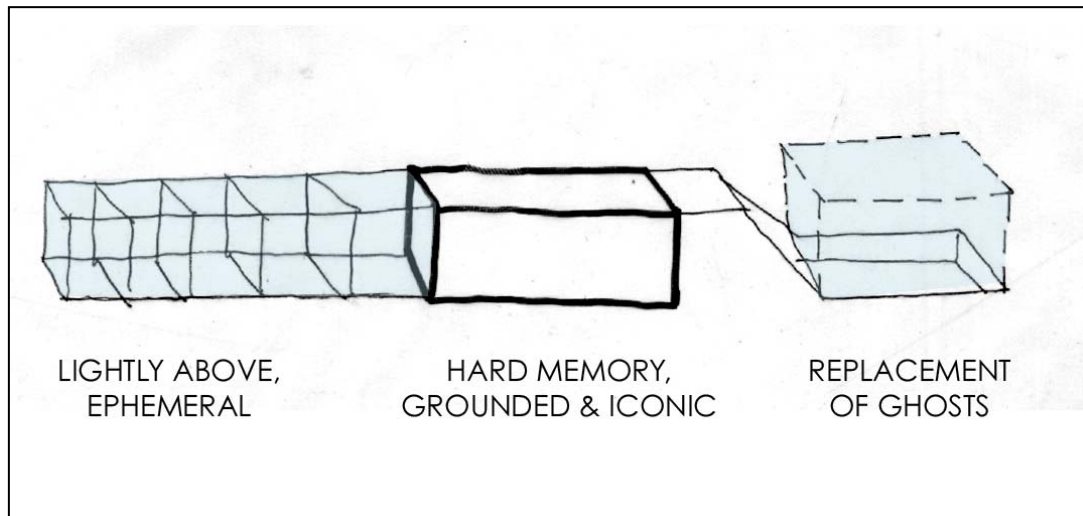


Figure 273. Memory Massing Strategy

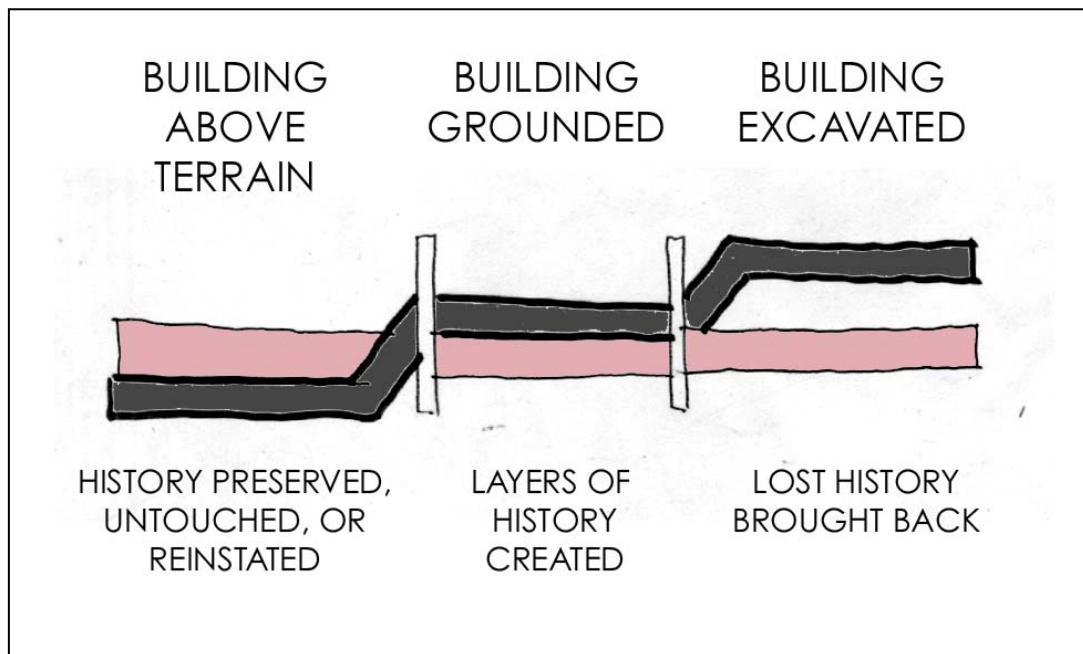


Figure 274. Memory Section Strategy

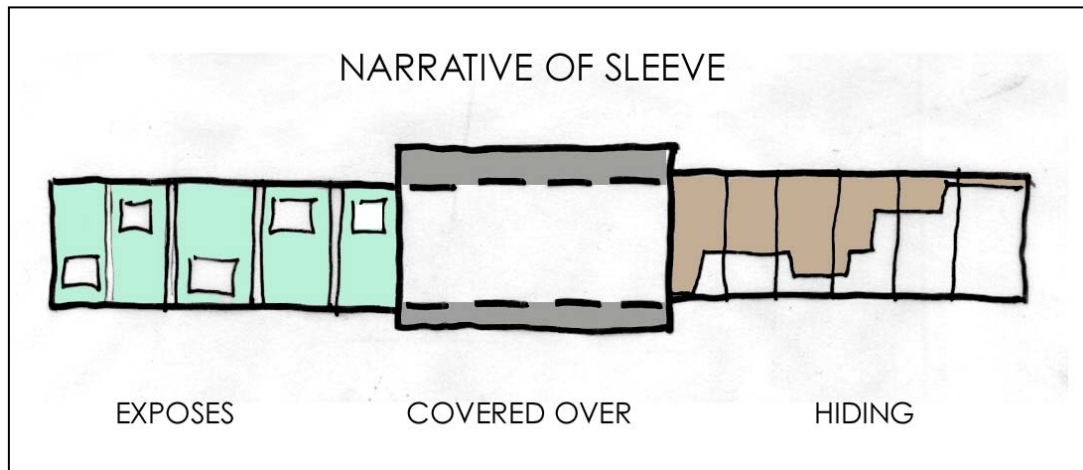


Figure 275. Sleeve Narrative

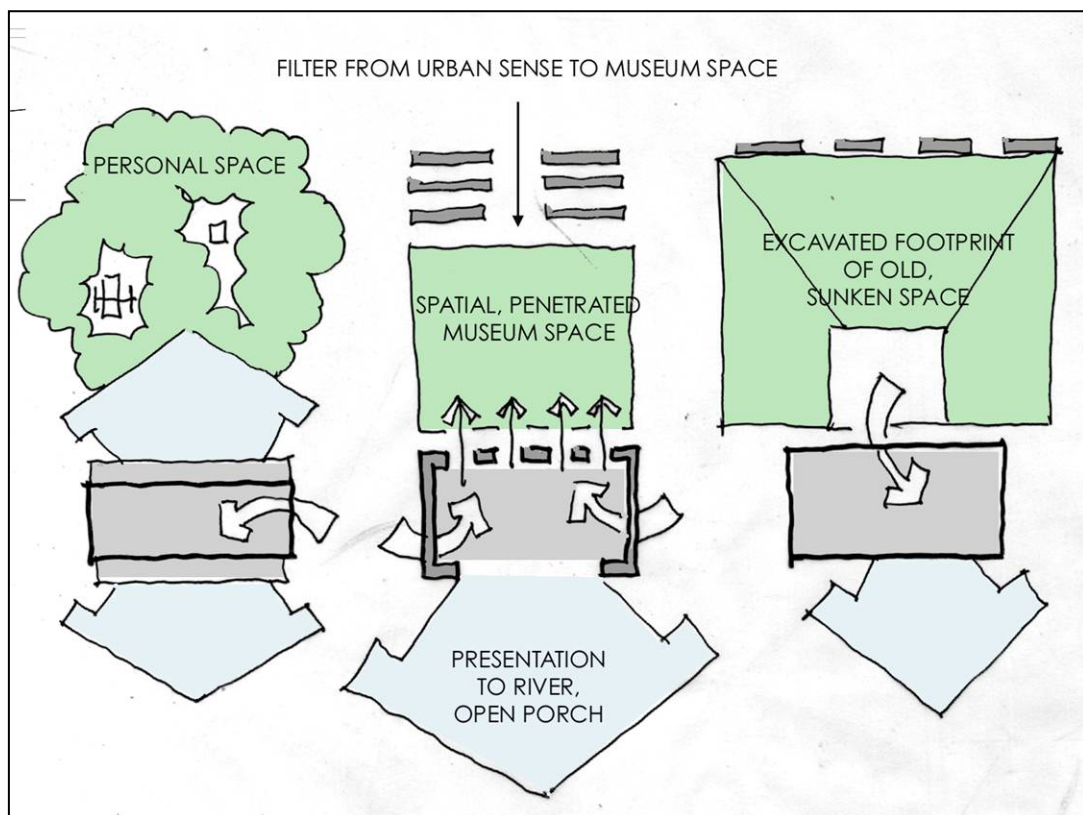


Figure 276. Relation of Interior / Exterior Space

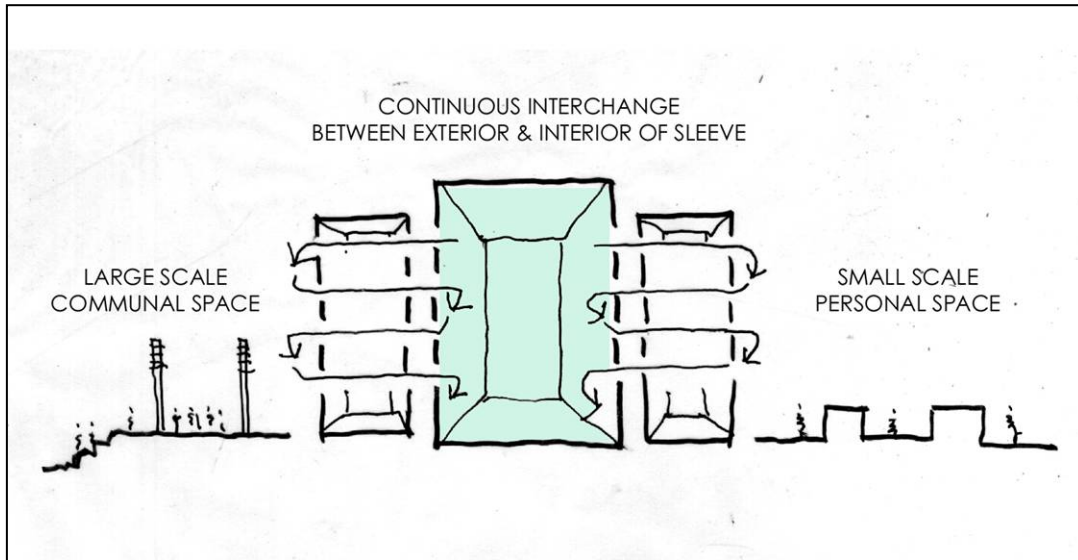


Figure 277. Interior / Exterior relation of circulation.

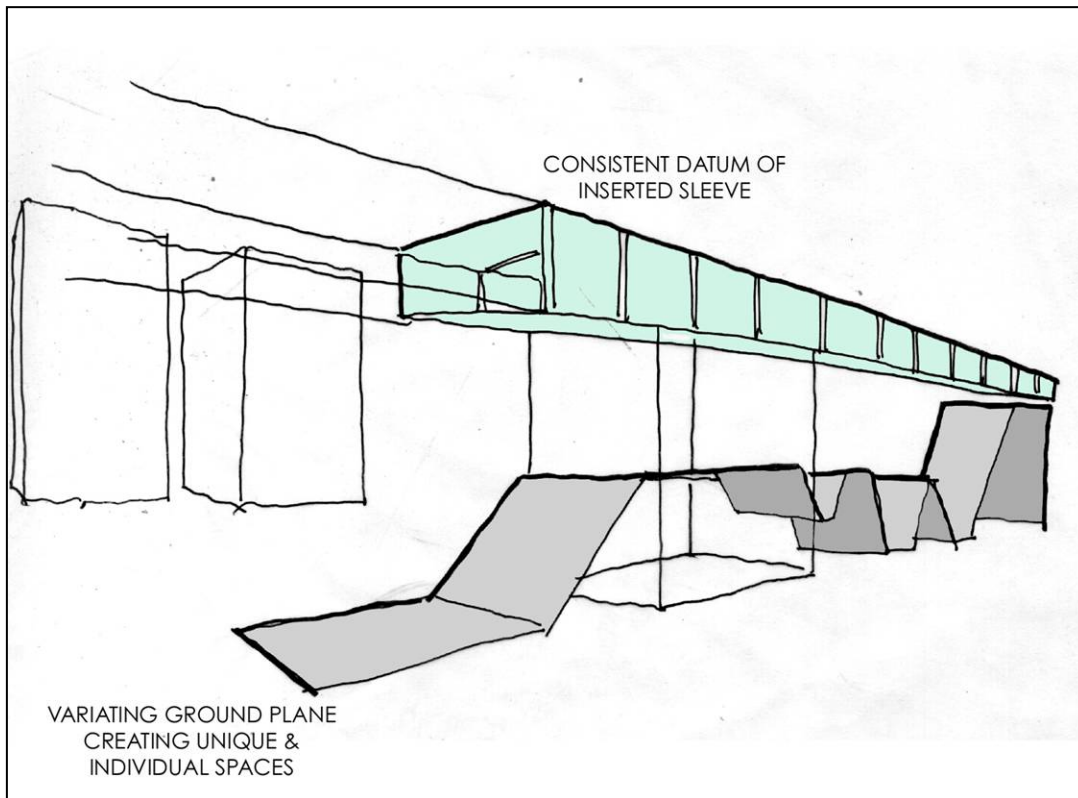


Figure 278. Sleeve Datum



## PROCESS

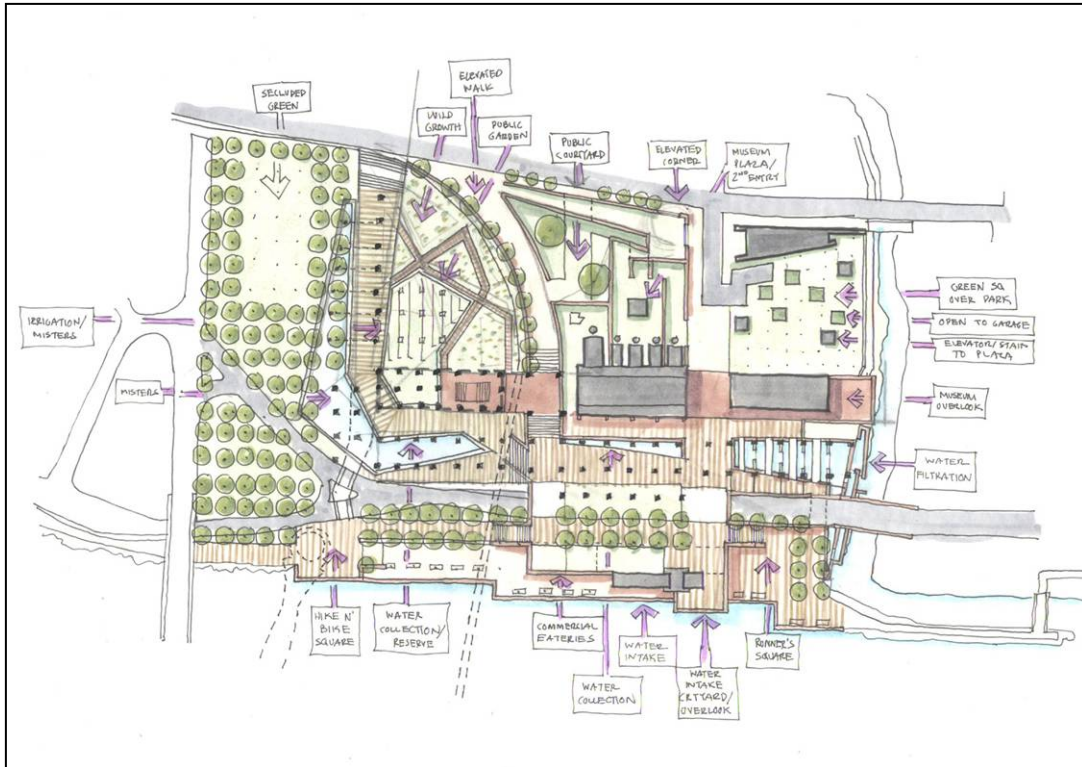


Figure 279. Initial Site Plan

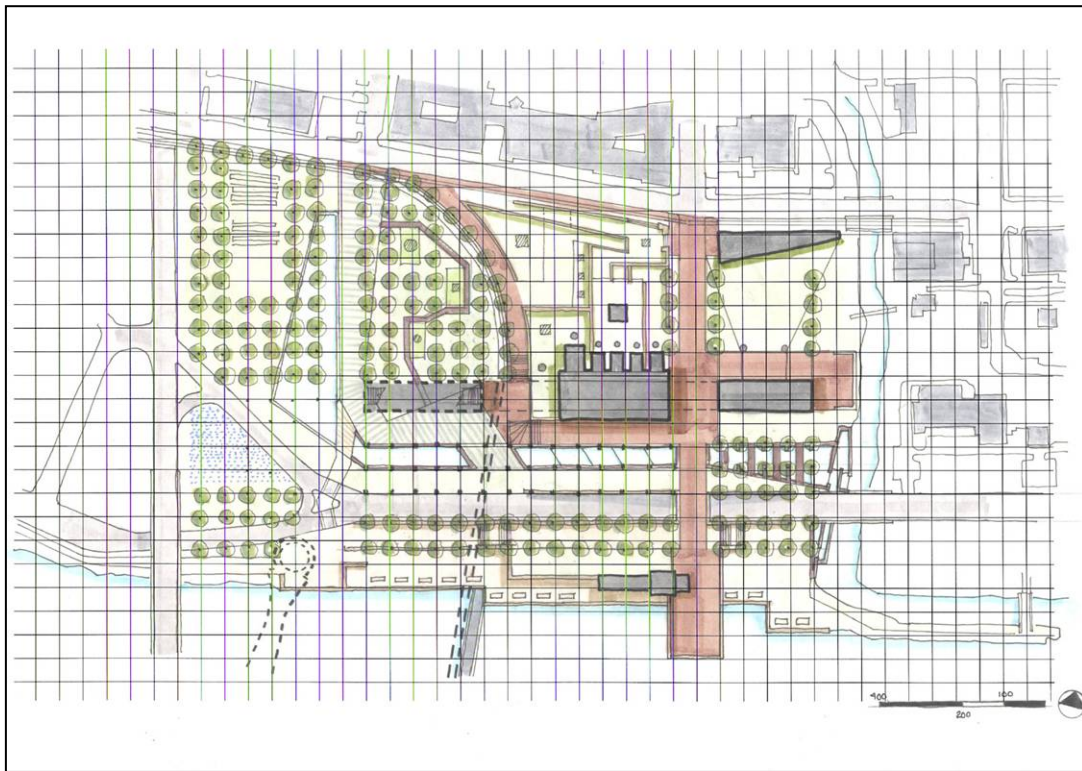


Figure 280. Modified Site Plan with grid

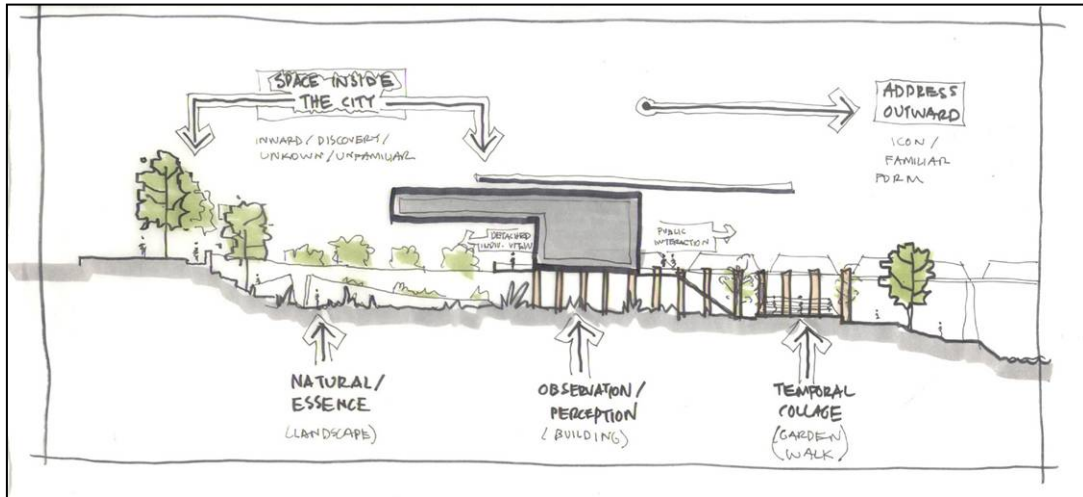


Figure 281. Natural / Built relationship

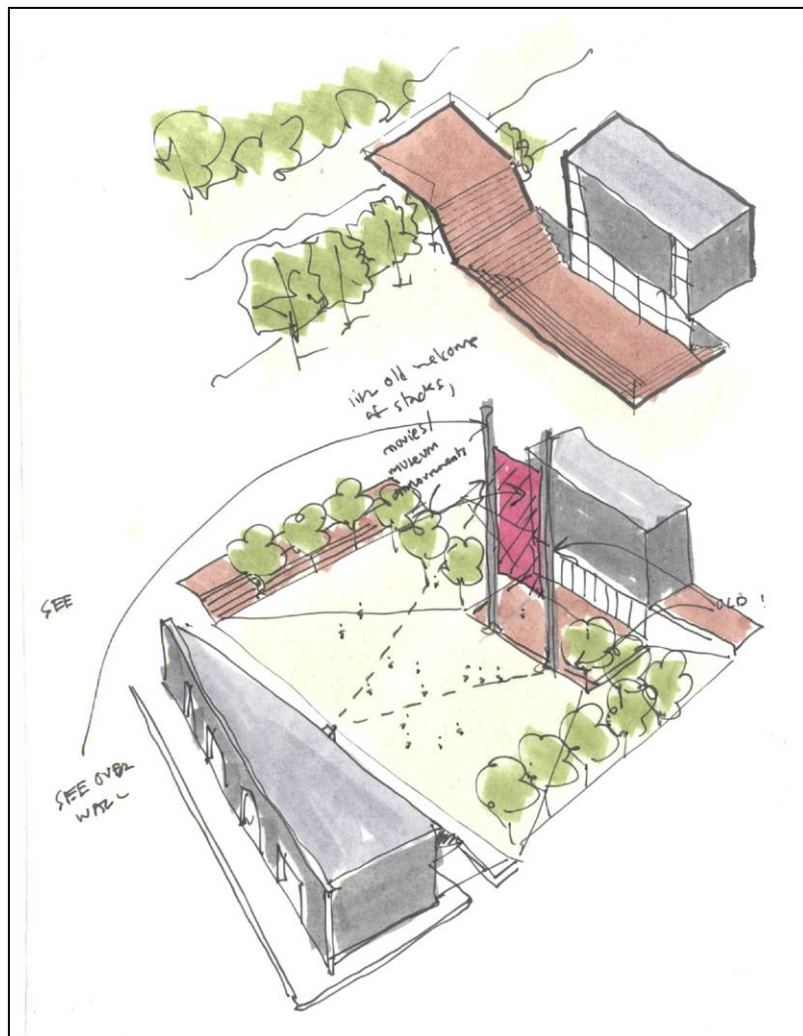


Figure 282. Excavation relationship

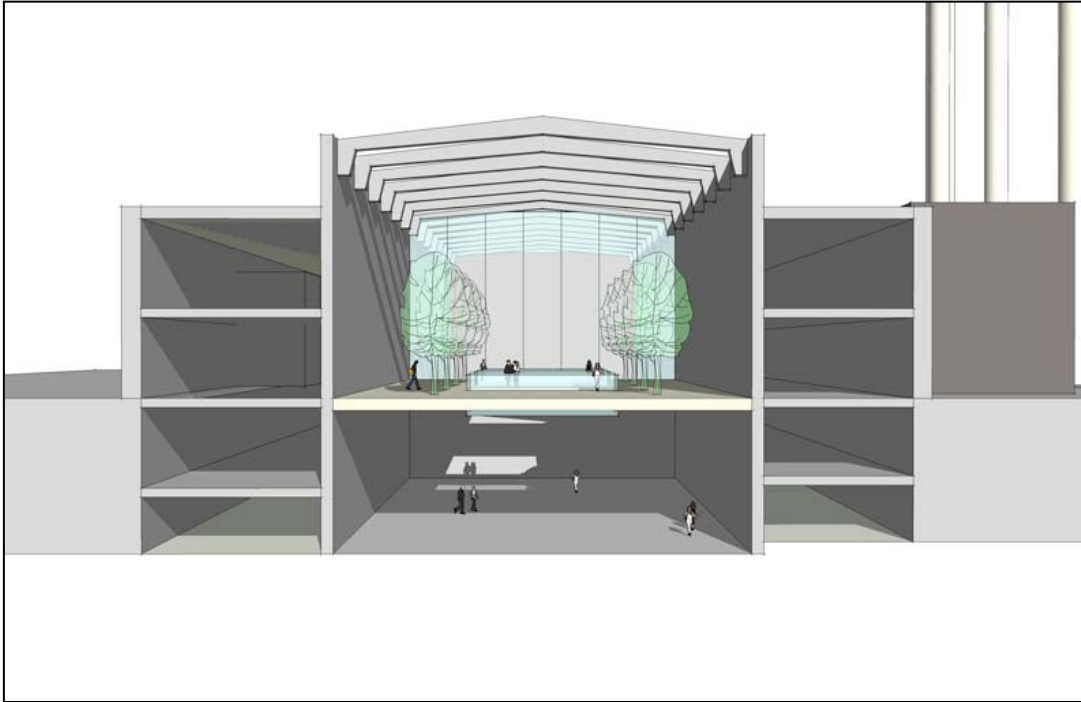


Figure 283. Turbine Hall Scheme 1 - Section

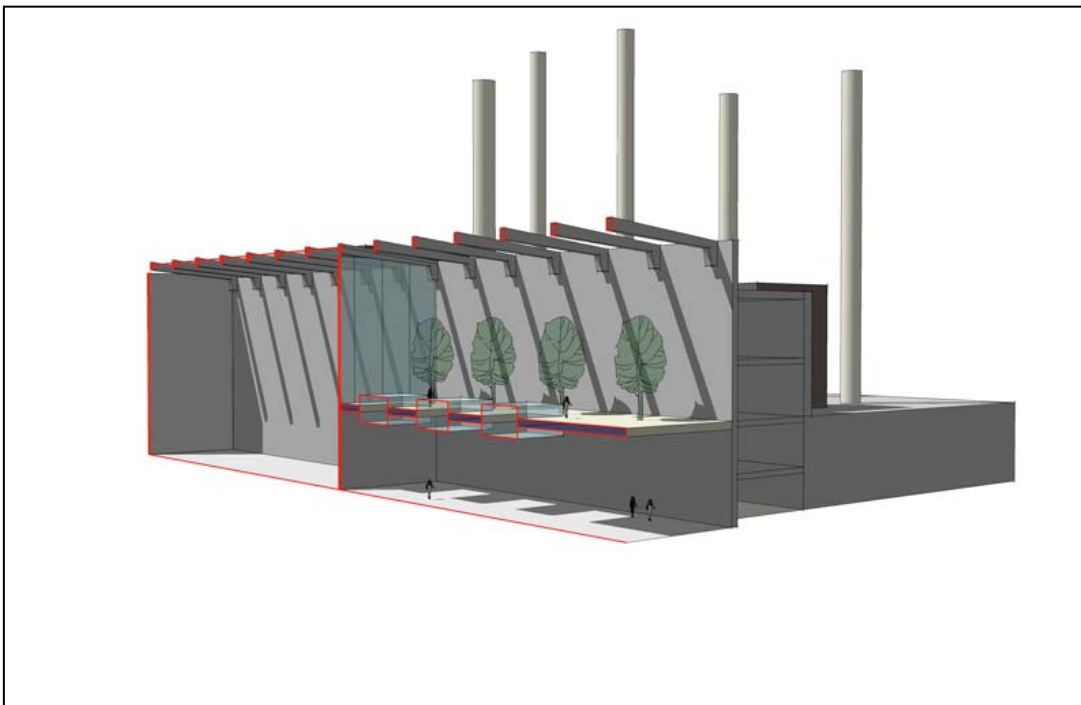


Figure 284. Turbine Hall Scheme 1 – Section Perspective



Figure 285. Turbine Hall Scheme 2 - Section

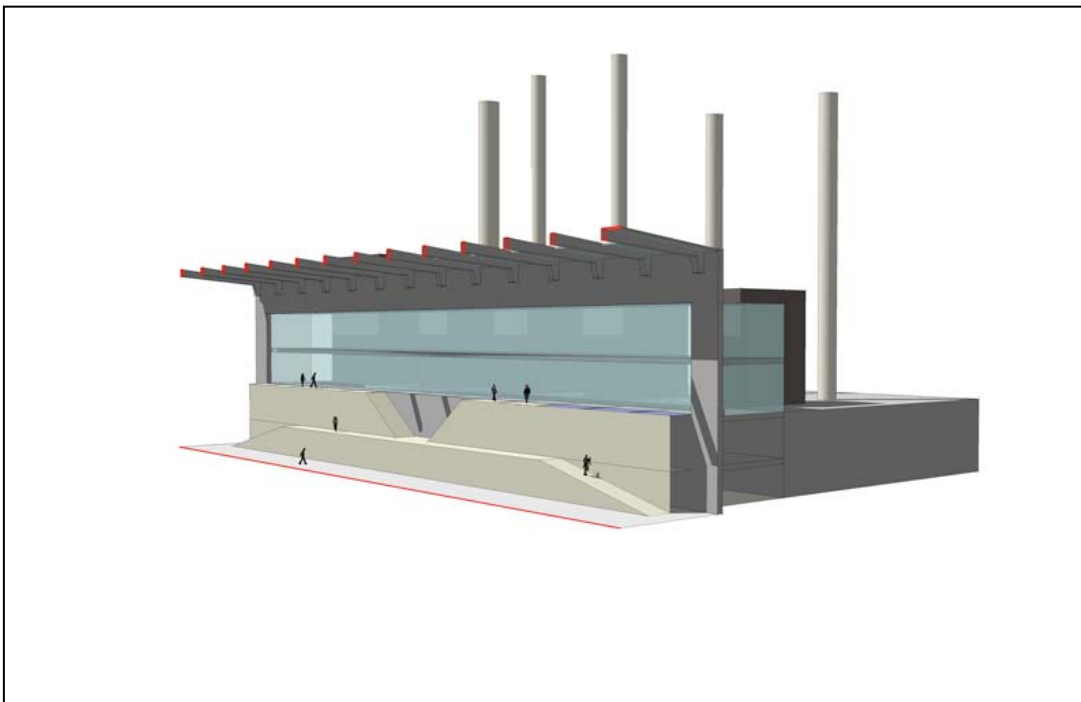


Figure 286. Turbine Hall Scheme 2 – Section Perspective

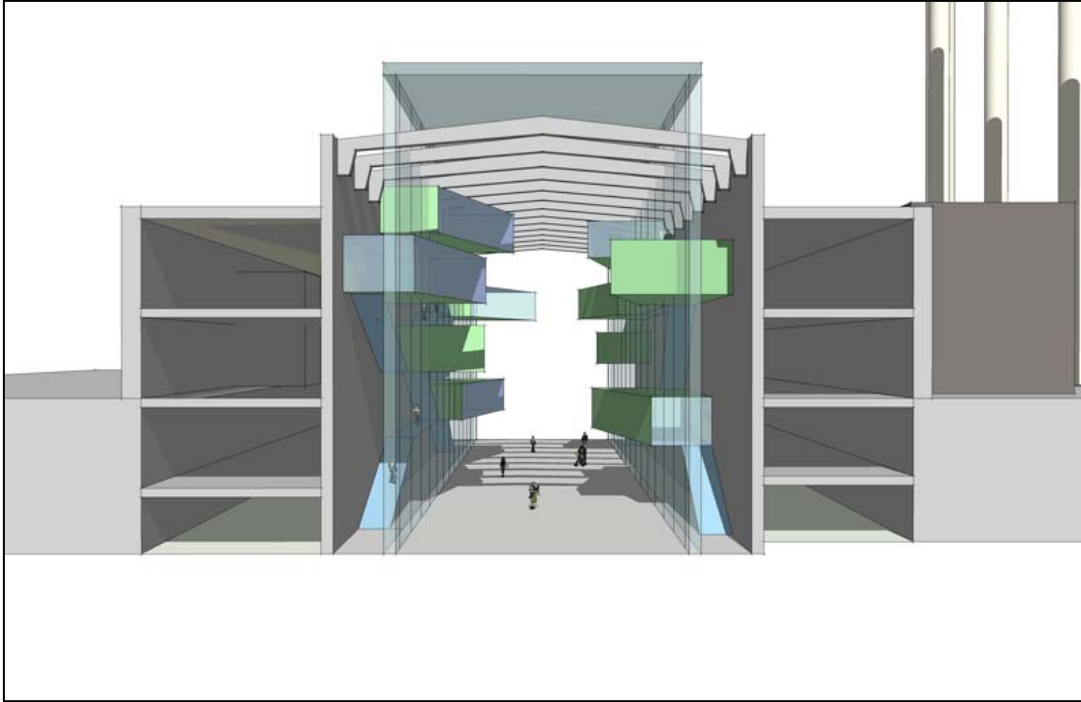


Figure 287. Turbine Hall Scheme 3 - Section

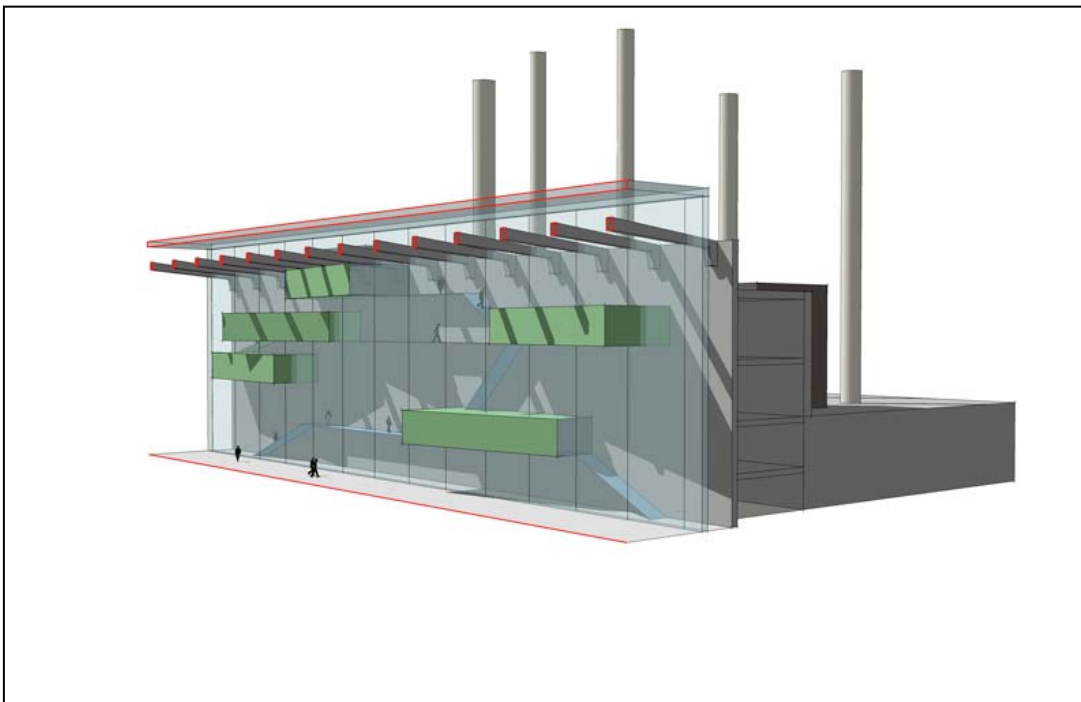


Figure 288. Turbine Hall Scheme 3 – Section Perspective



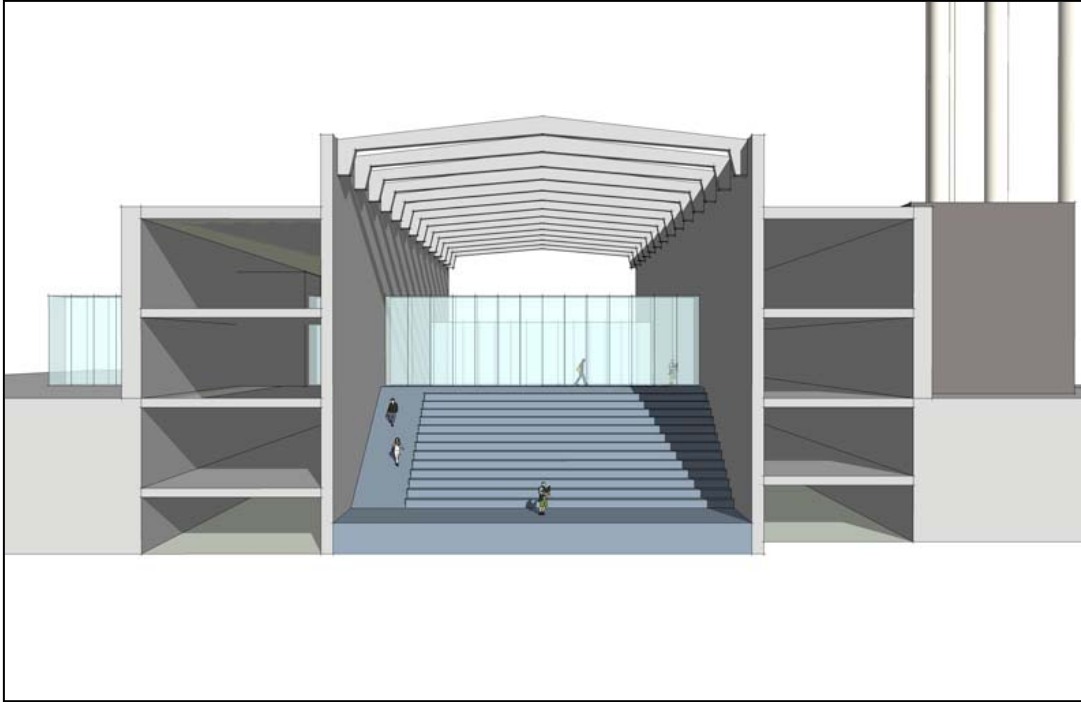


Figure 289. Turbine Hall Scheme 4 - Section

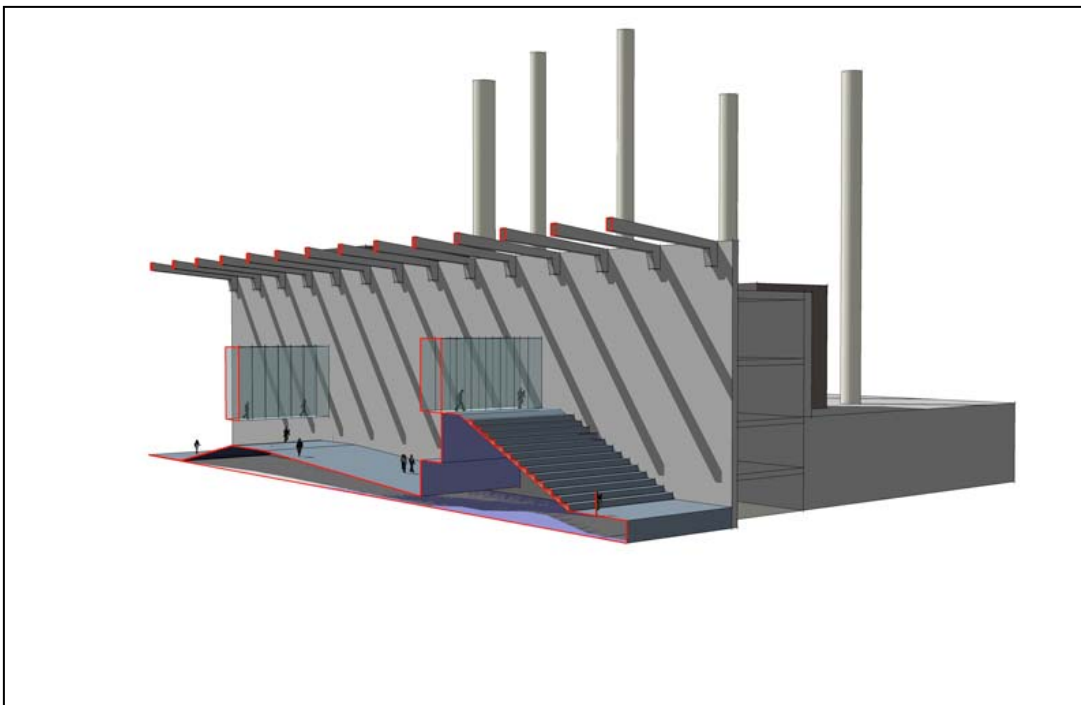


Figure 290. Turbine Hall Scheme 4 – Section Perspective

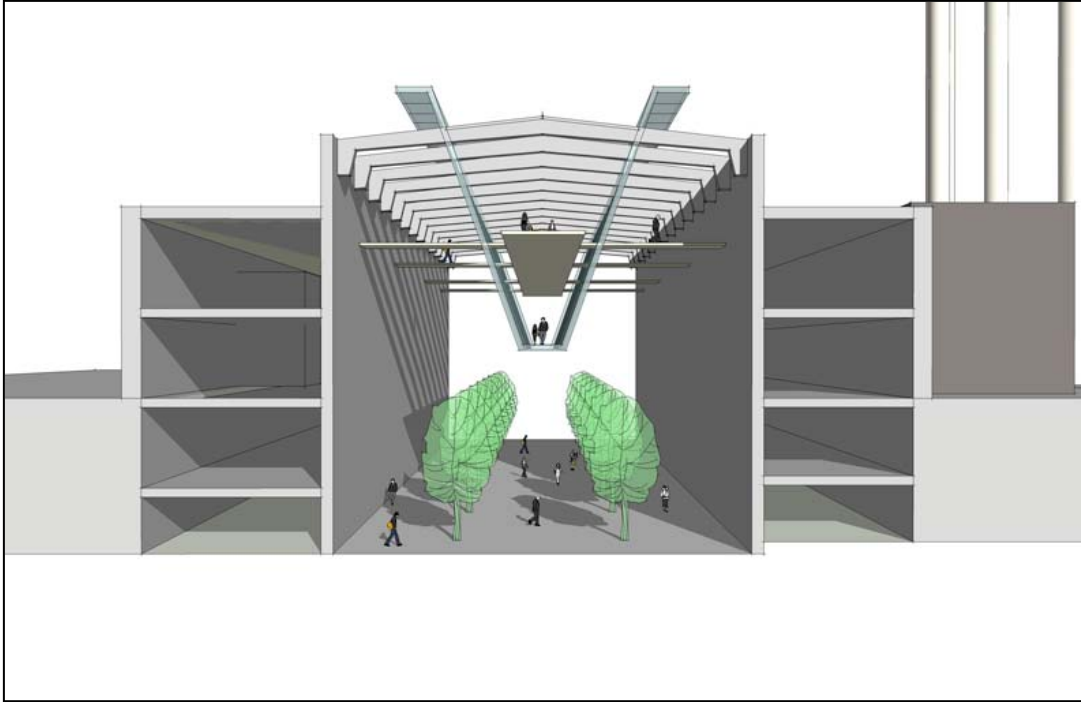


Figure 291. Turbine Hall Scheme 5 - Section

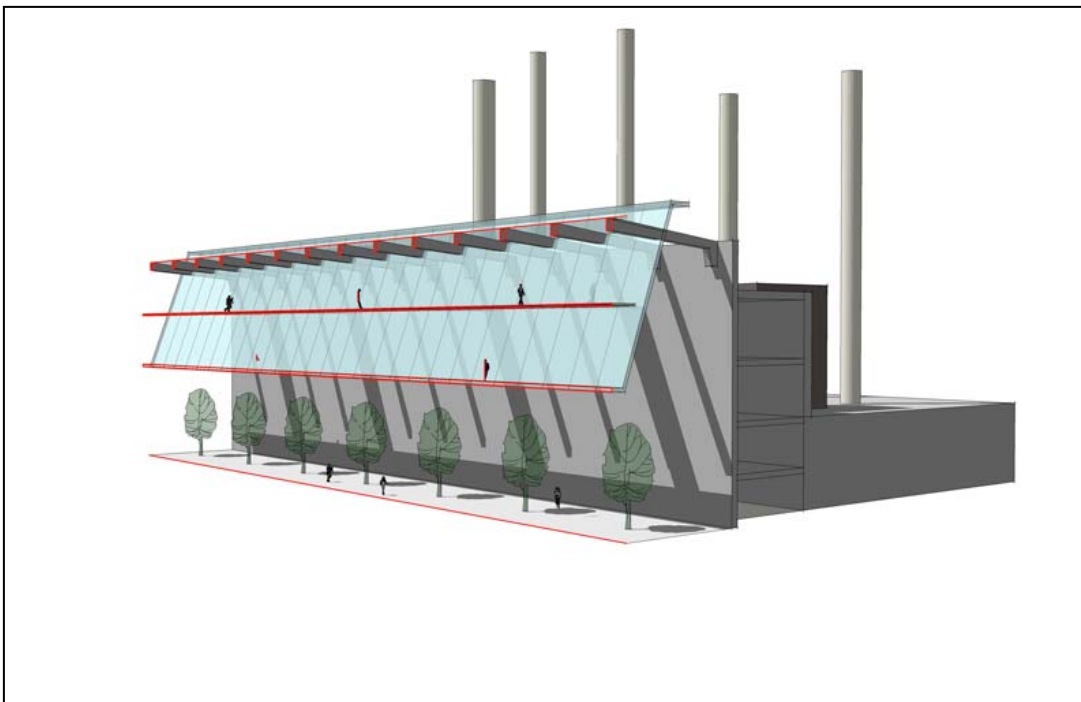
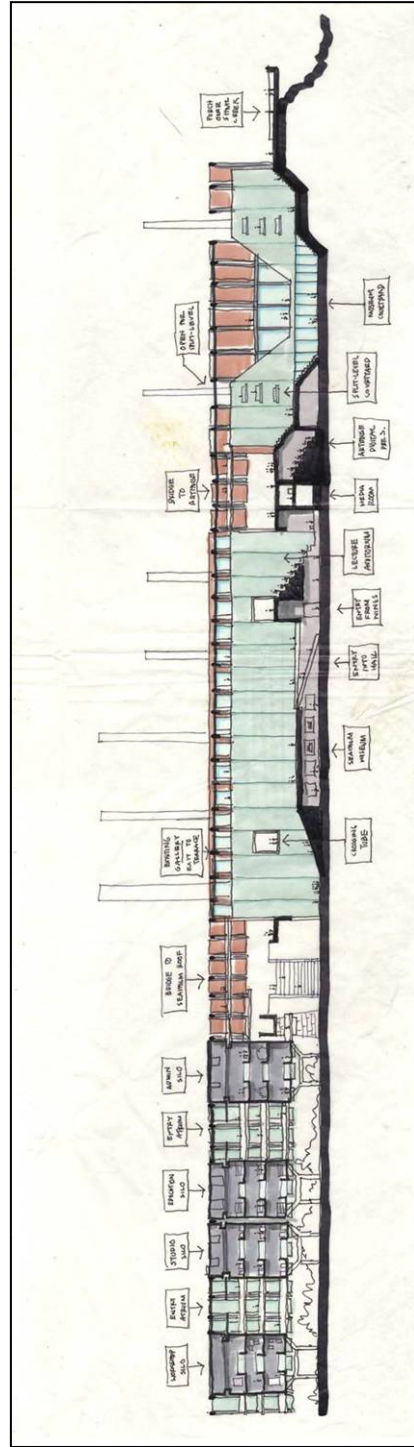
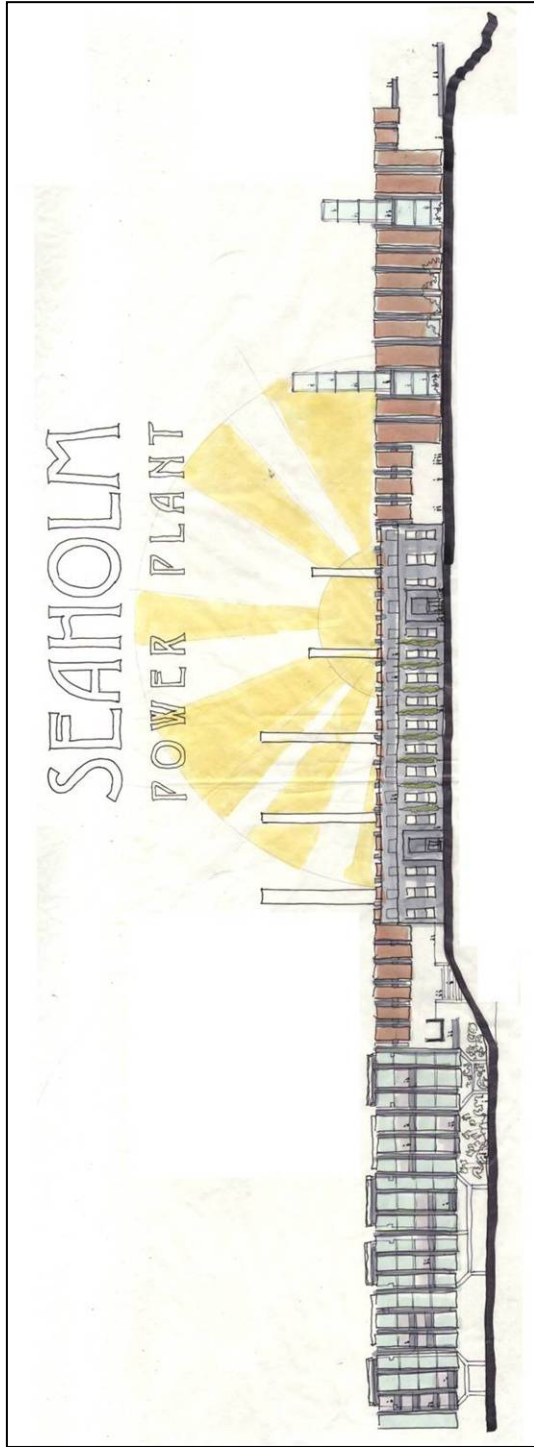


Figure 292. Turbine Hall Scheme 5 – Section Perspective





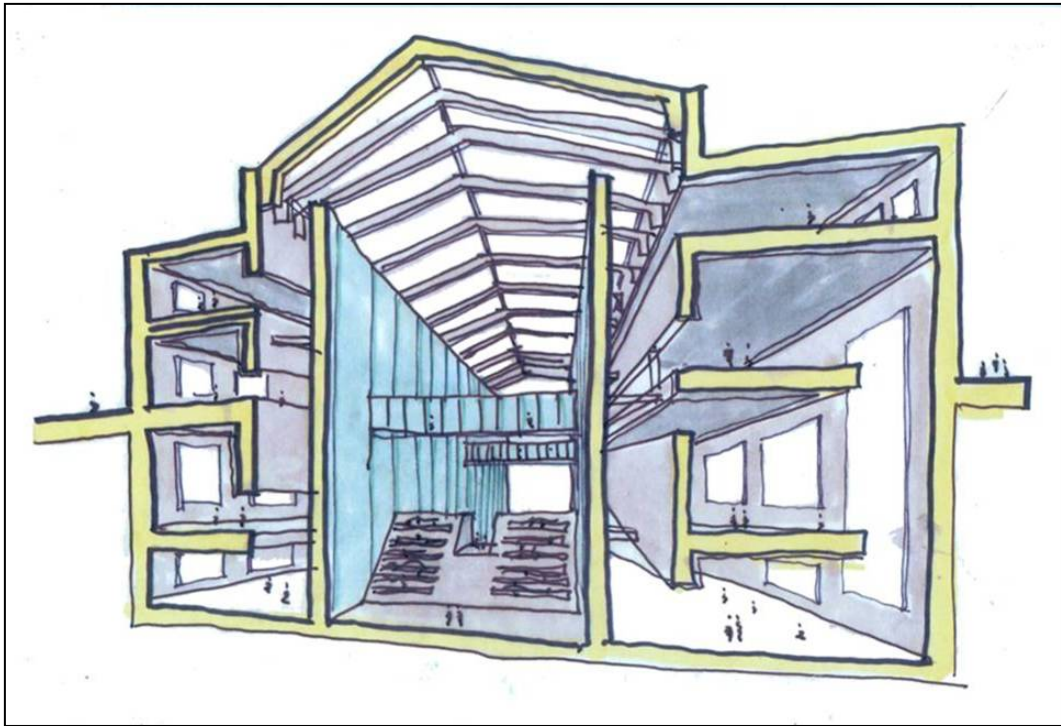


Figure 295. Turbine Hall Section Perspective

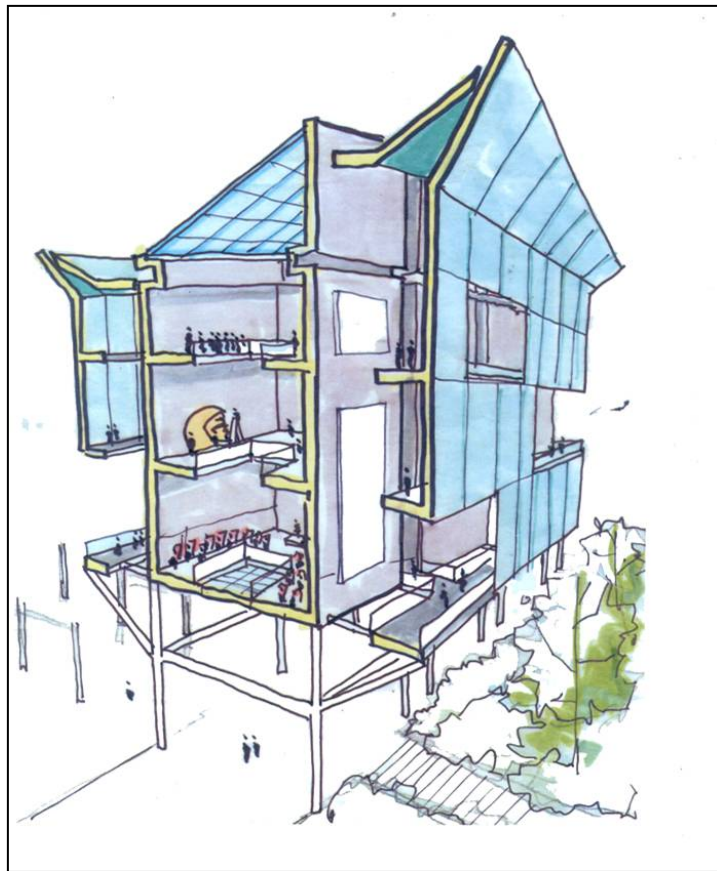


Figure 296. Dougherty Section Perspective

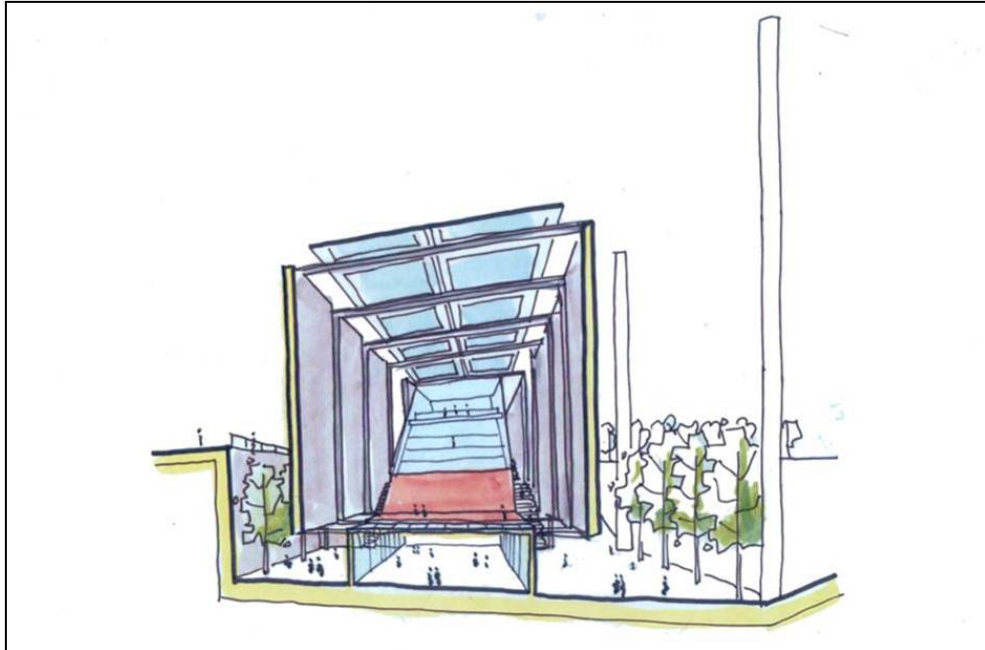


Figure 297. Arthouse Section Perspective

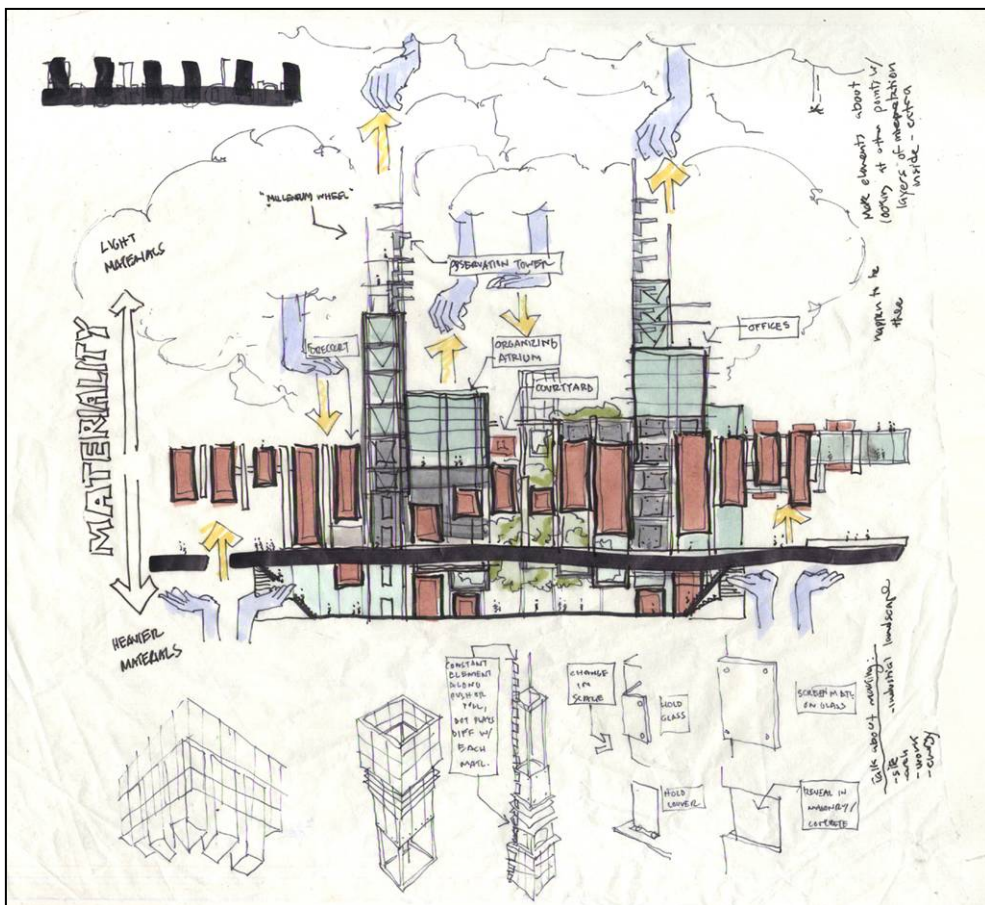


Figure 298. Process Arthouse Elevation



## DESIGN SOLUTION

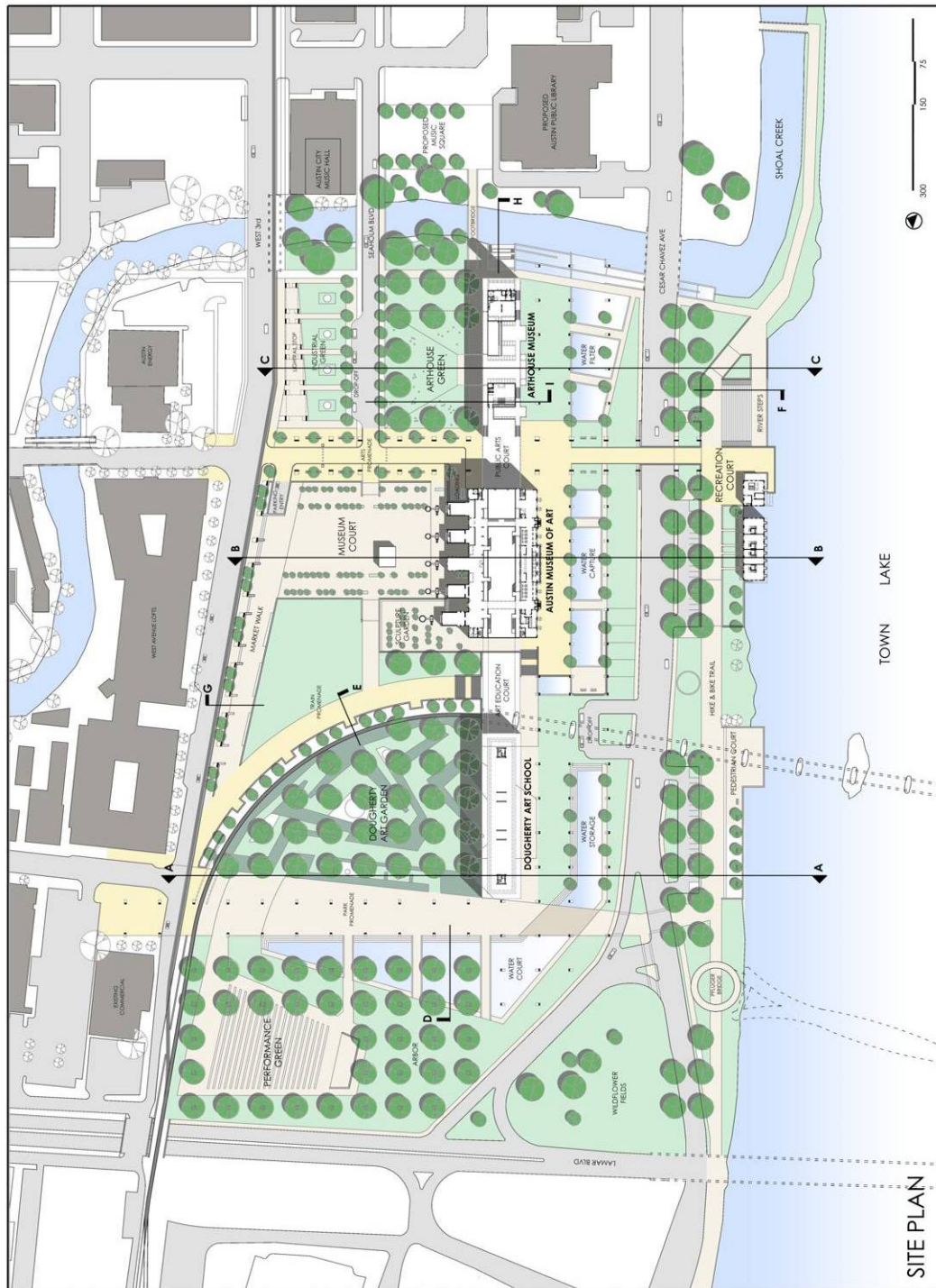


Figure 299. Site Plan

# SITE PROGRAM

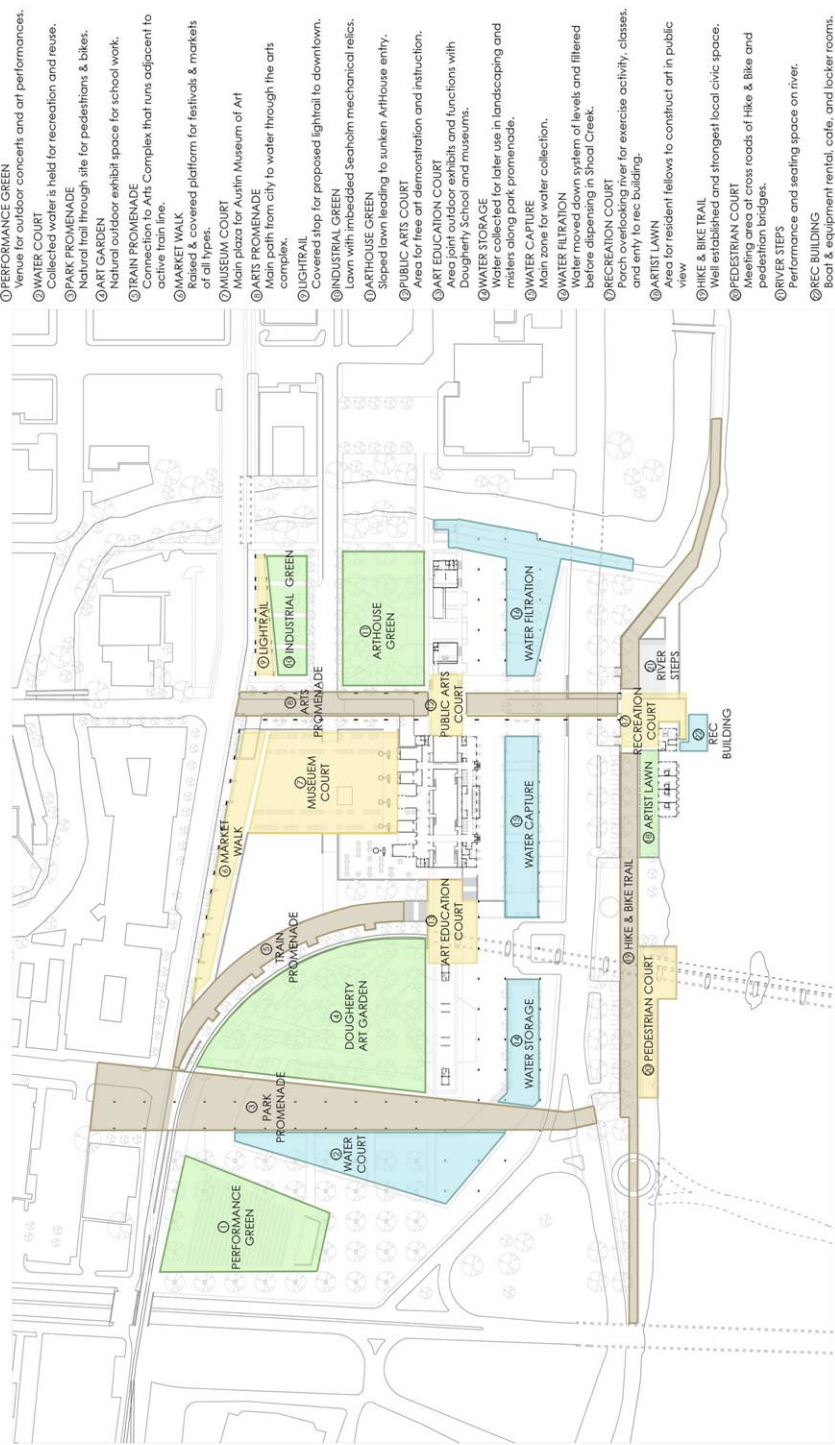


Figure 300. Site Plan - Program

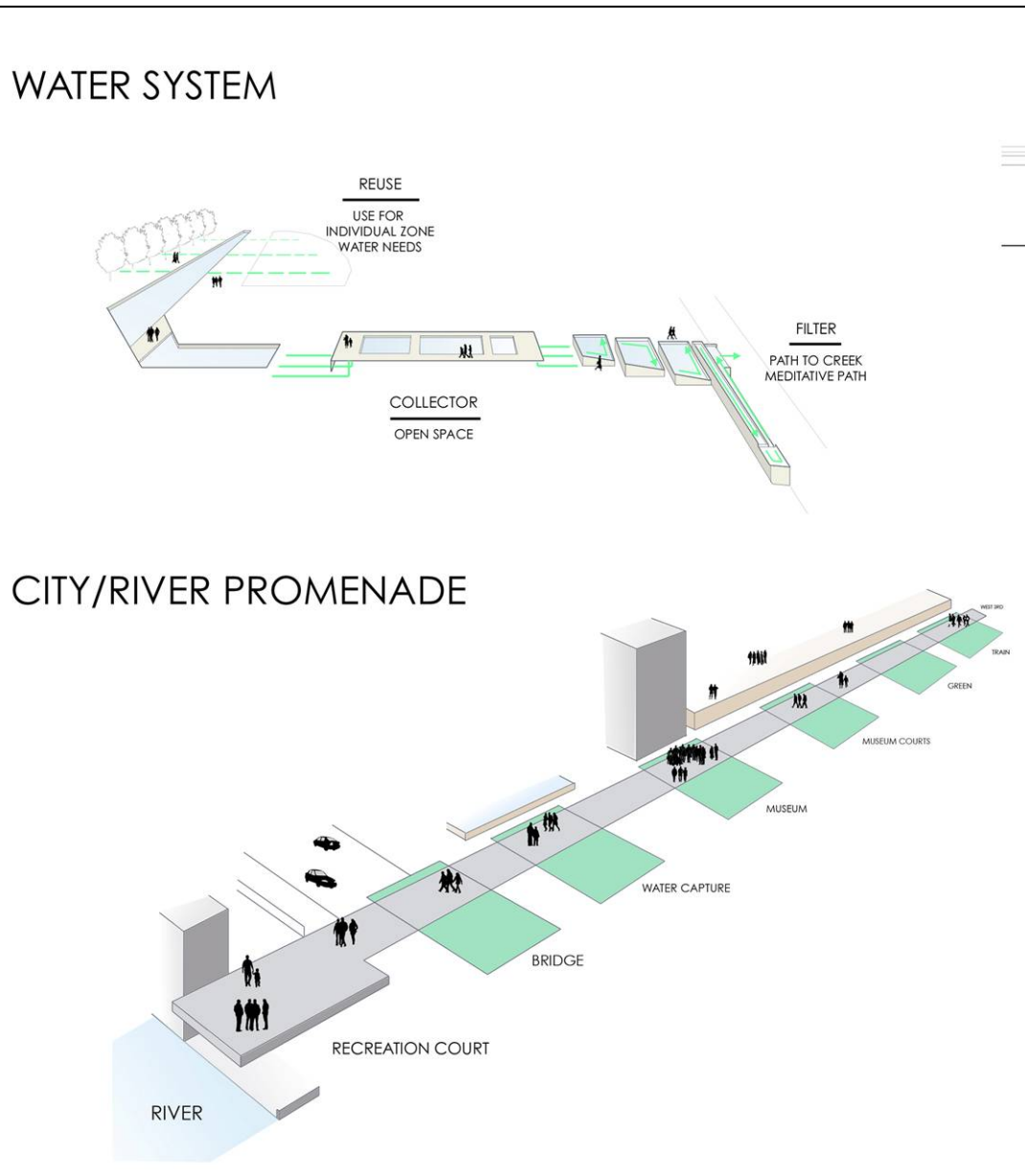


Figure 301. Site Systems Diagrams

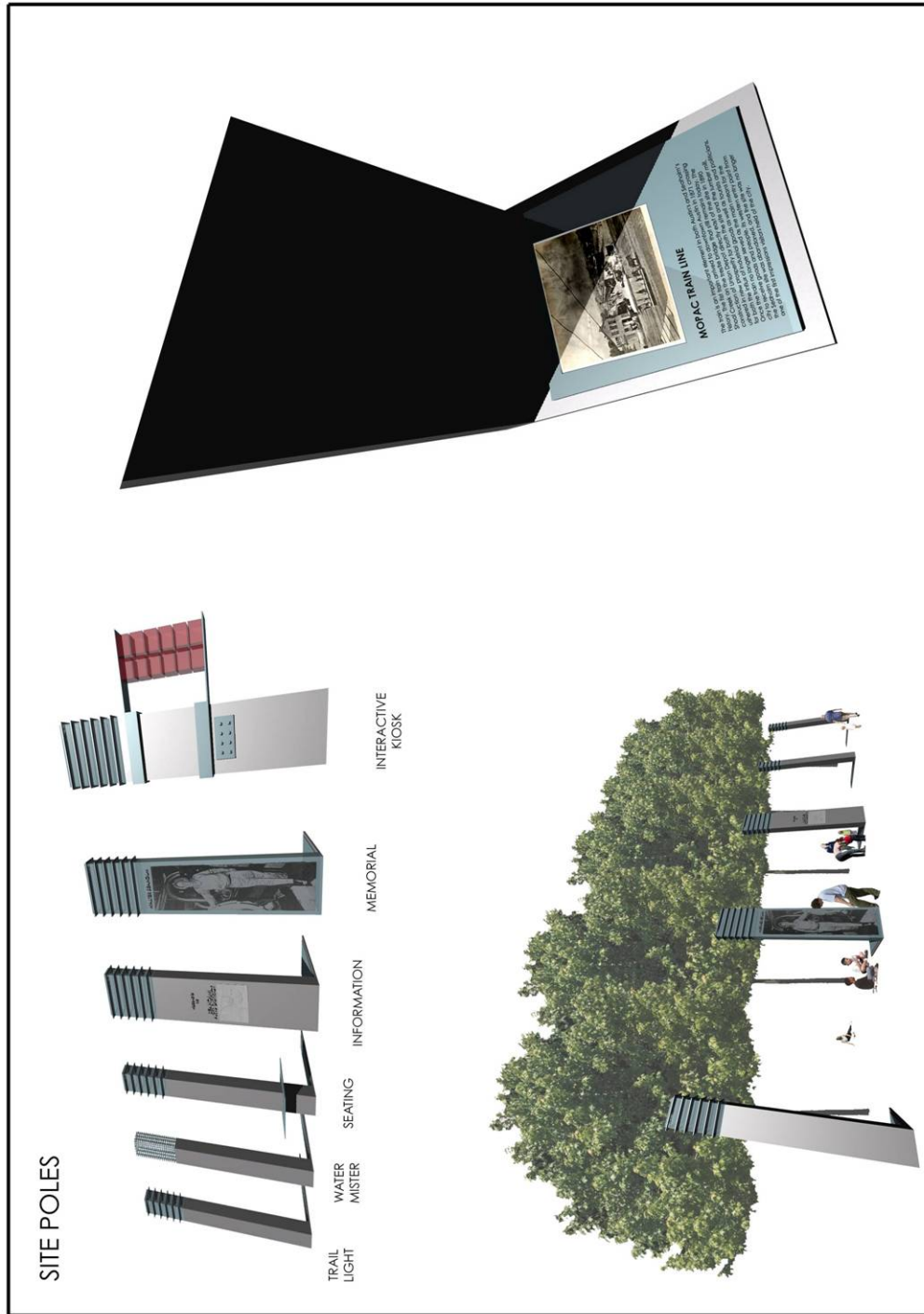


Figure 302. Site Pole Diagrams



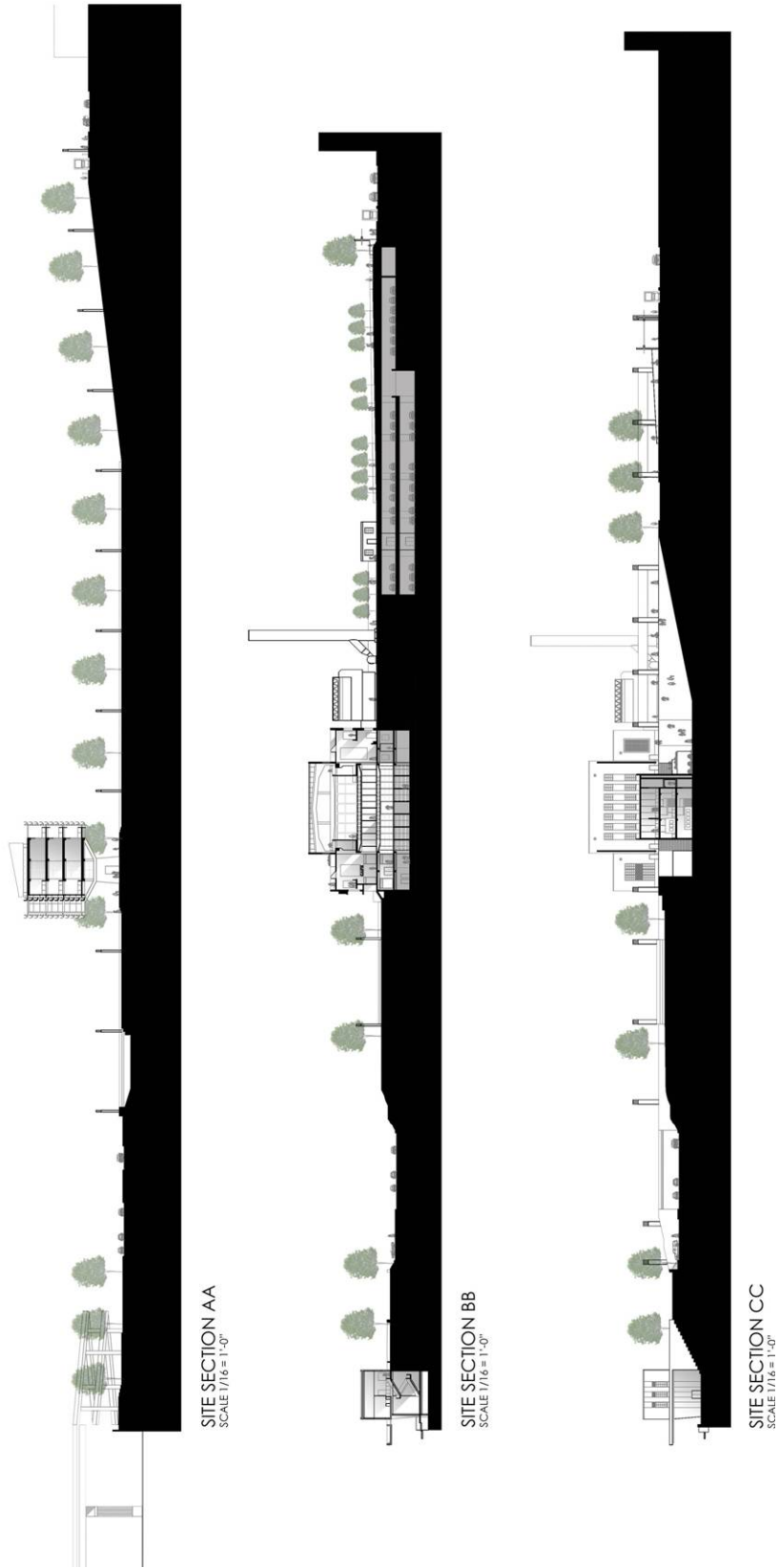


Figure 303. Site Sections North-South

SITE DETAIL D



Figure 304. Water Court Detail

SITE DETAIL G



Figure 305. Market Edge Detail

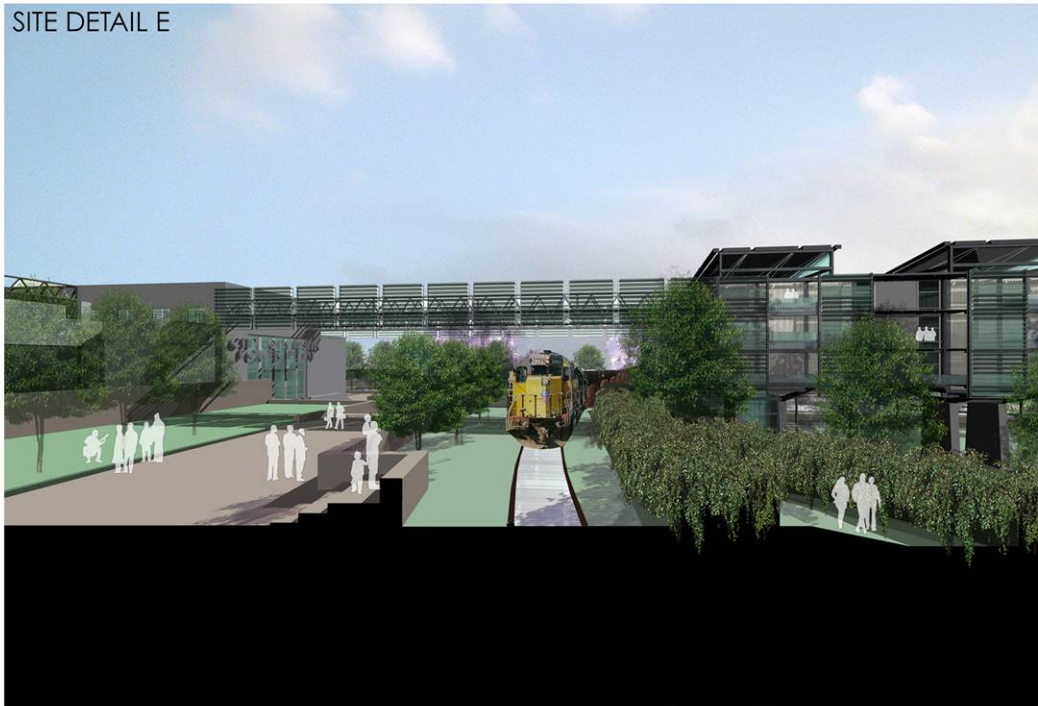


Figure 306. Train Promenade Detail



Figure 307. Shoal Creek Detail





Figure 308. Water Intake / Town Lake Detail

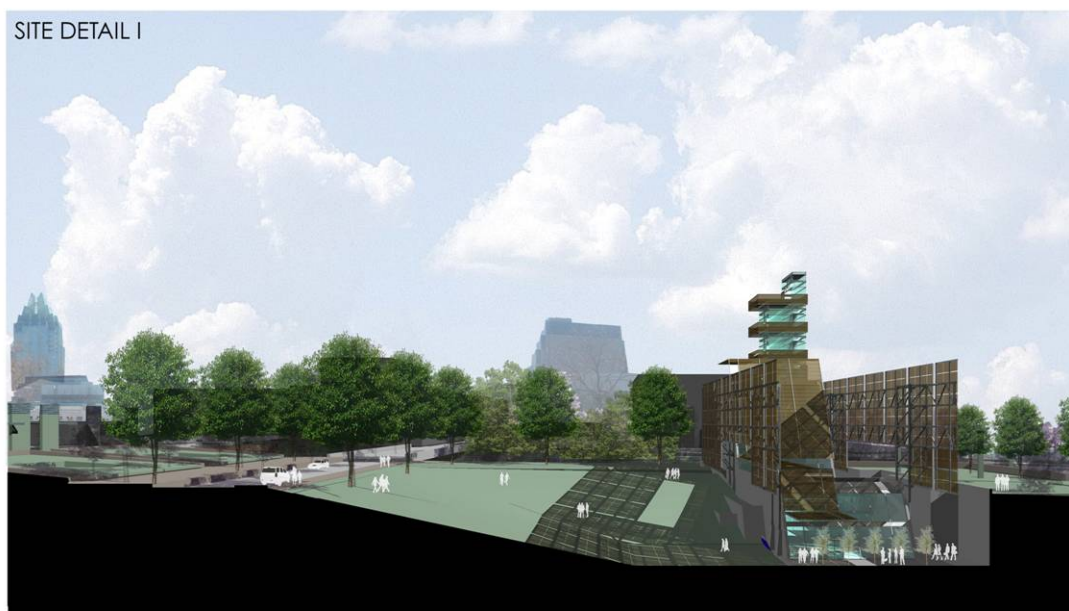


Figure 309. Arthouse Green Detail

# SITE MEMORY

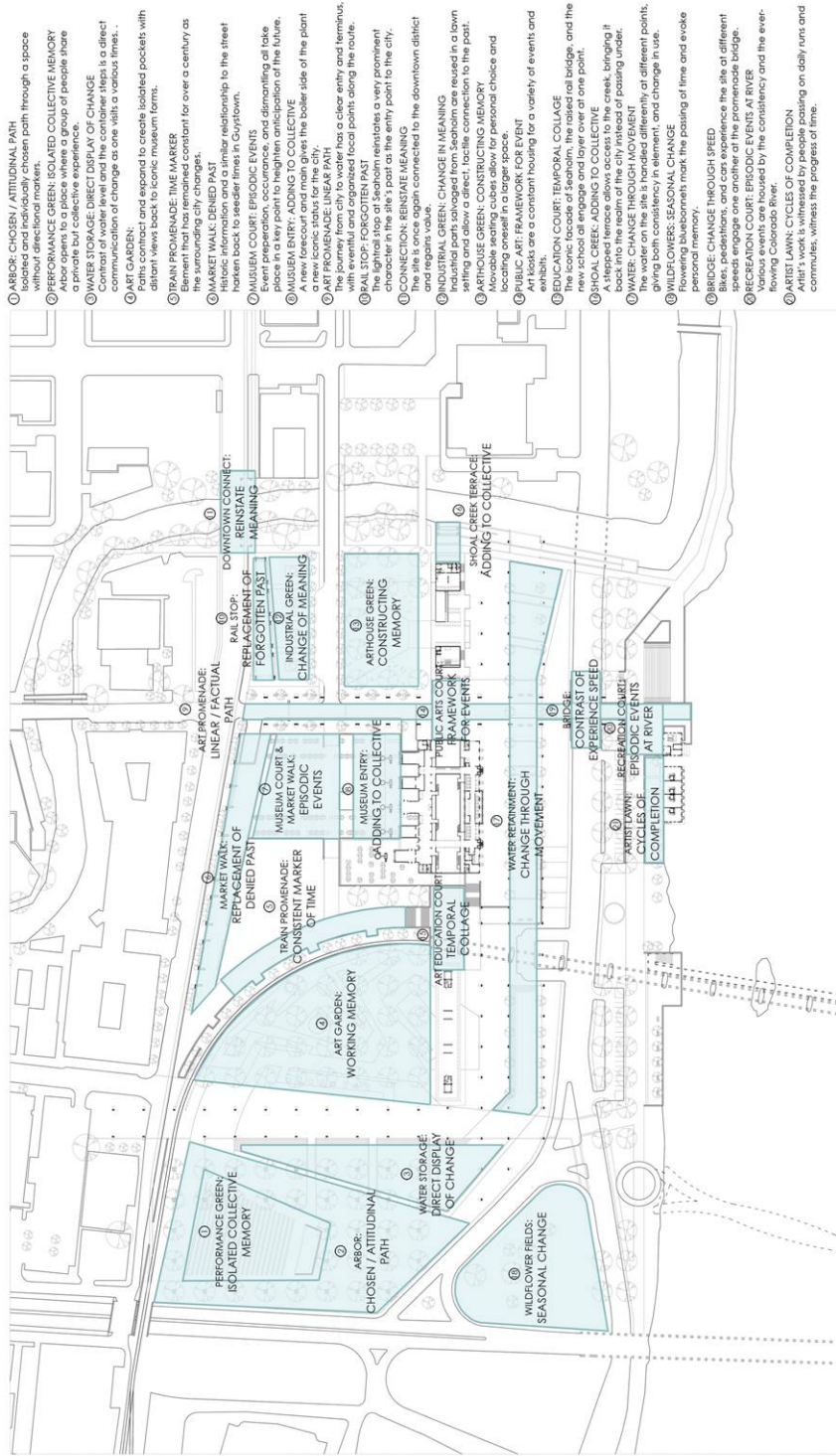


Figure 310. Site Plan - Memory

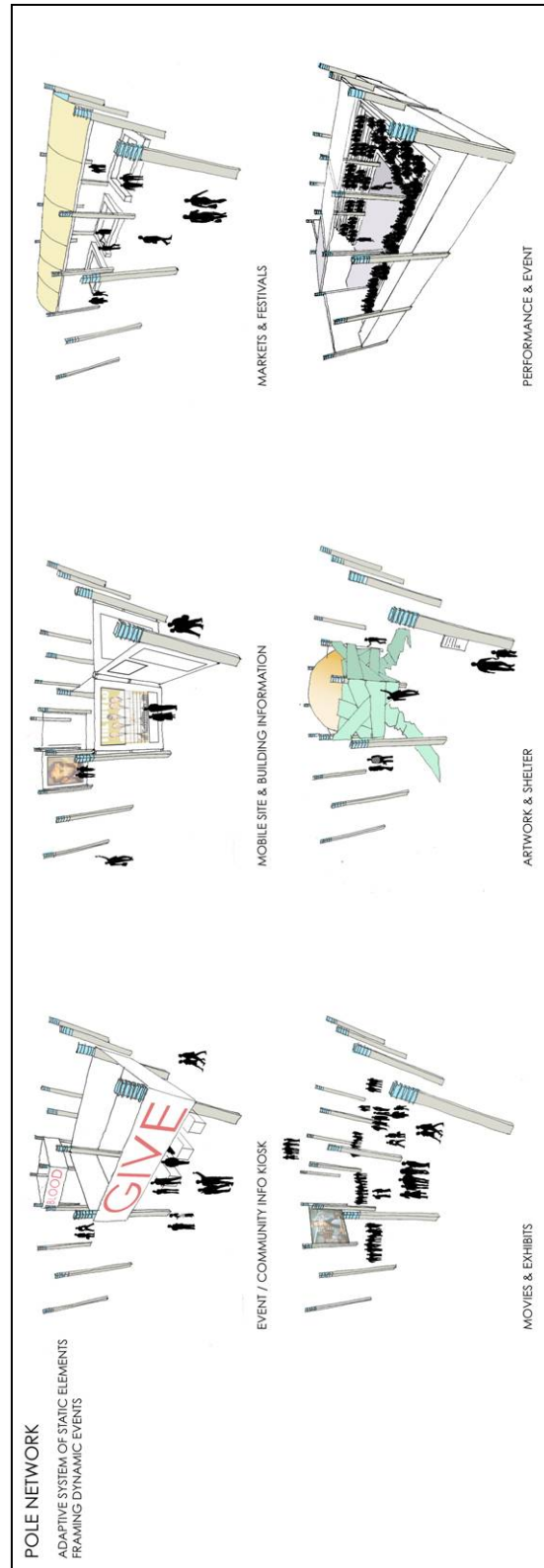


Figure 311. Pole Network Options

## EXPERIENCE THROUGH MOVEMENT

THE SPEED, DIRECTION, INTERFERENCE, AND VOLUME CAPACITY OF SPACES AND PATHS ON THE SITE DETERMINE THE LEVELS OF ISOLATION AND COMMUNAL EXPERIENCE IN BOTH EVOLVING AND STARK CONTRASTS

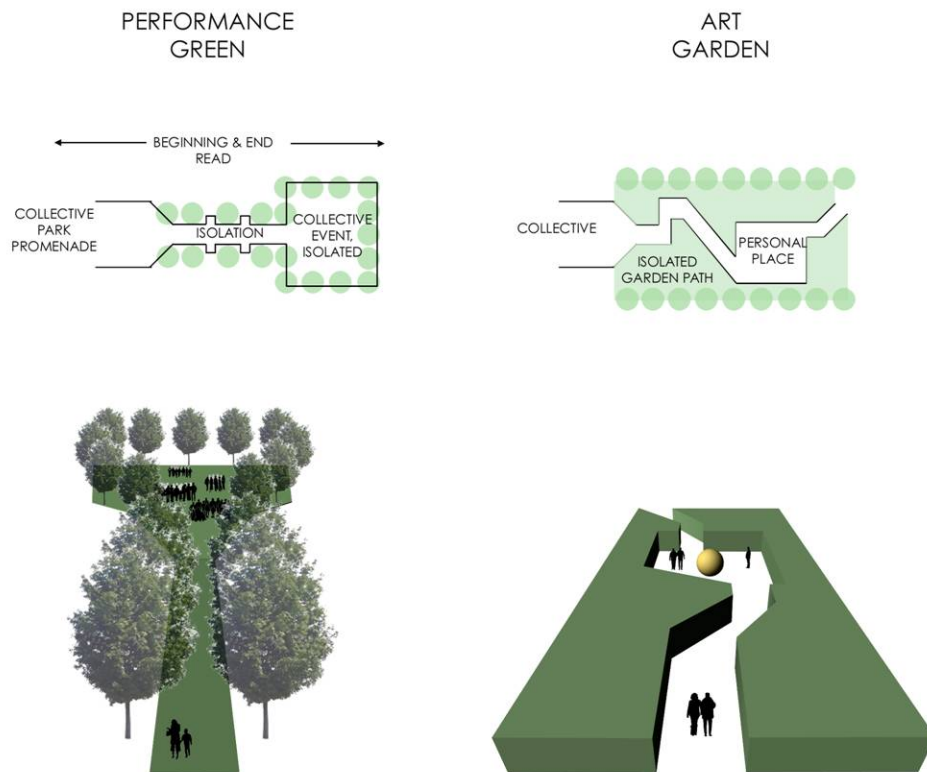
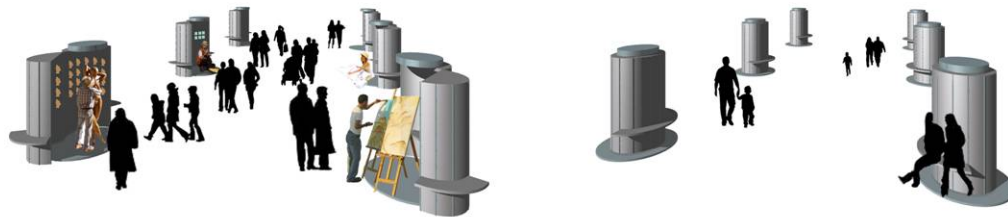


Figure 312. Path Memory



## PUBLIC ART COURT

SINGLE ELEMENTS SERVE A VARIETY OF PURPOSES AND MOMENTS IN TIME,  
AS WELL AS BEING BOTH COMMUNAL AND PERSONAL



## INDUSTRIAL GREEN

MECHANICAL RELICS FROM SEAHOLM GAIN A NEW MEANING AND PLACE IN THE ACTIVITY OF THE CITY  
AS OBJECTS IN A SOCIAL SETTING

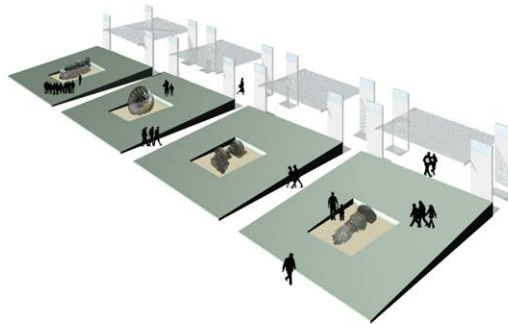
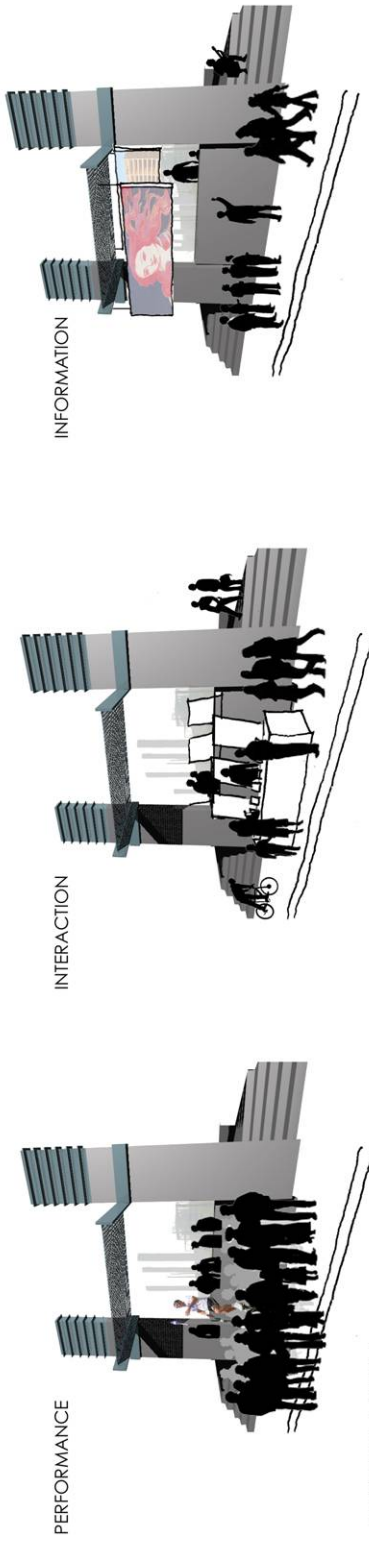


Figure 313. Public Court Memory

## MARKET WALK STRUCTURES

IN ADDITION TO MARKING THE HISTORIC PLACE OF GUYSTOWN STRUCTURES, THE STREET EDGE SERVES AS AN ADAPTABLE BACKGROUND ELEMENT FOR THE CHARACTER AND ACTIVITIES OF PLACE



## ARTIST'S LAWN

GREEN SPACE OUTSIDE FELLOW'S HOUSING AT WATER INTAKE IS A PLACE FOR THE MAKING OF ART, WHICH THE PUBLIC CAN WITNESS THE DAY TO DAY PROGRESS AND COMPLETION OF

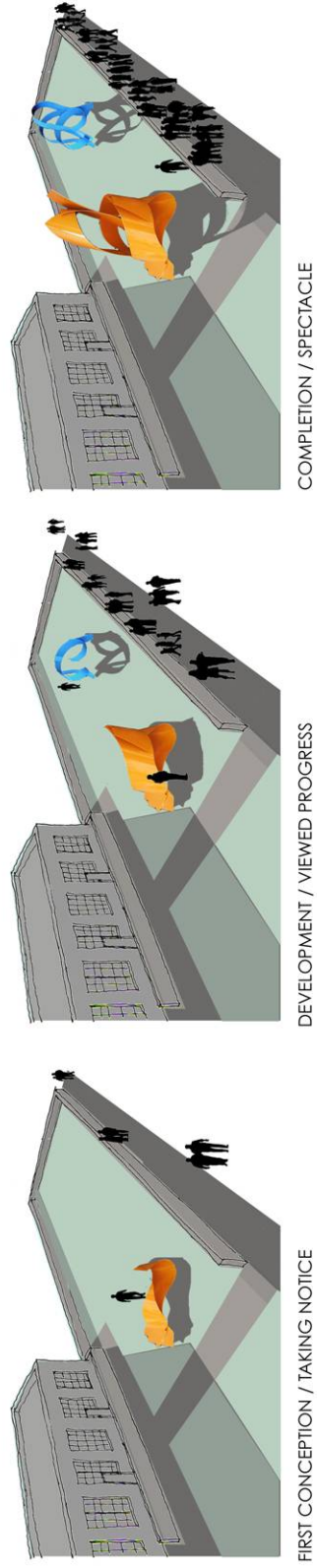


Figure 314. Site Memory Options



Figure 315. Dougherty Art School from Park Promenade

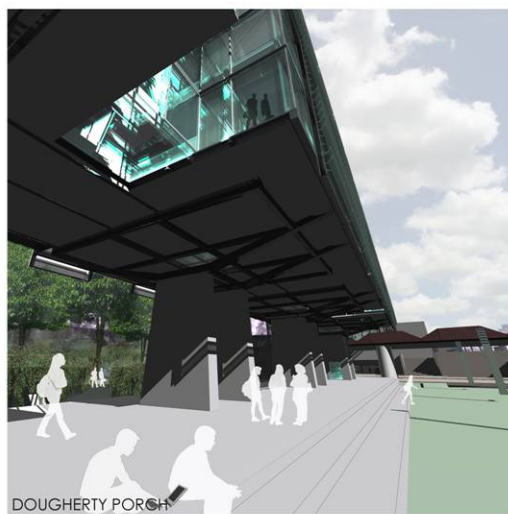


Figure 316. Dougherty Porch



Figure 317. Dougherty from Water Court

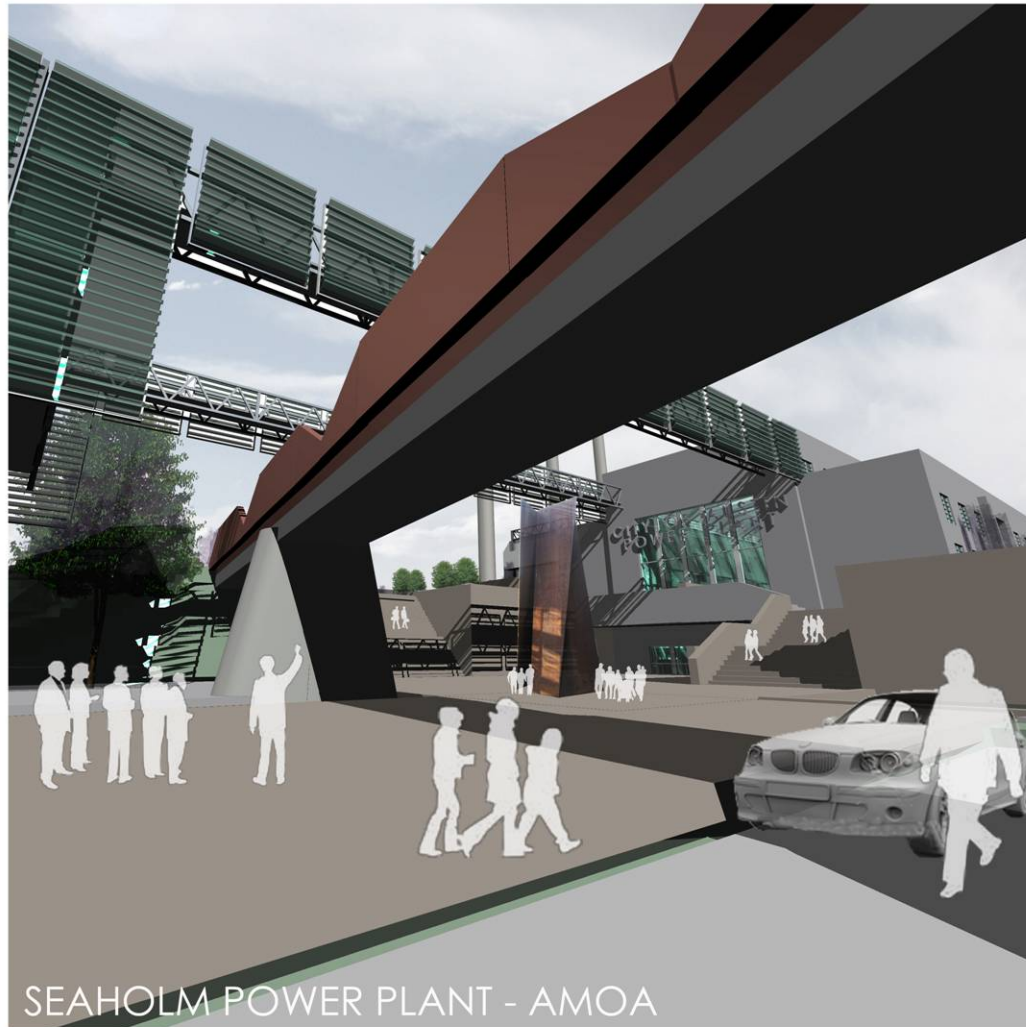


Figure 318. Seaholm Power Plant from Art Education Court



Figure 319. Seaholm from north side



Figure 320. Seaholm from south side





Figure 321. Arthouse Museum from north at night

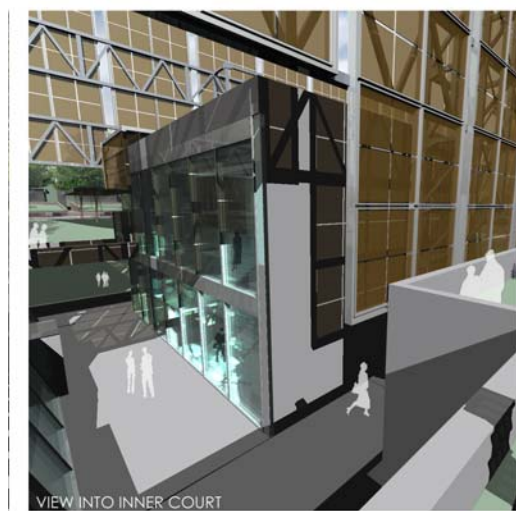


Figure 322. Arthouse inner court



Figure 323. Arthouse from Shoal Creek

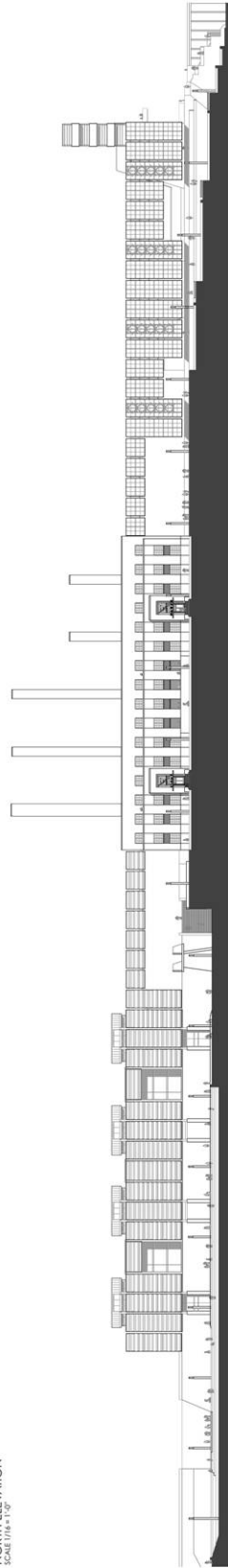


VIEW SOUTHEAST

Figure 324. Aerial view of site from northwest

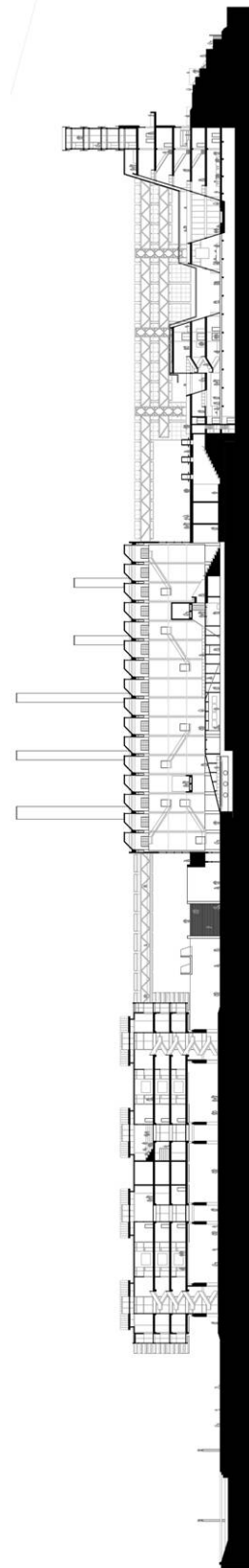


NORTH ELEVATION  
SCALE 1/8" = 1'-0"



SOUTH ELEVATION  
SCALE 1/8" = 1'-0"

Figure 325. Building Elevations – North (top), South (bottom)



SECTION LOOKING NORTH  
SCALE 1/8" = 1'-0"

Figure 326. Overall East-West building section



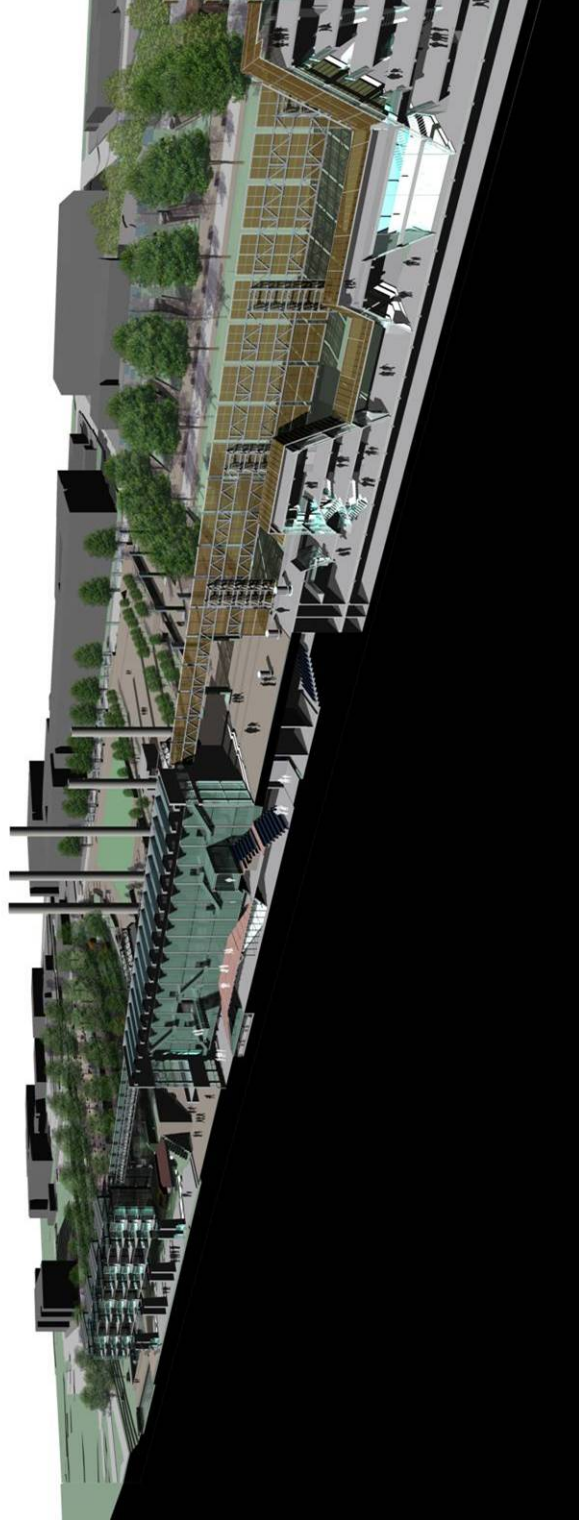


Figure 327. Overall East-West building section perspective

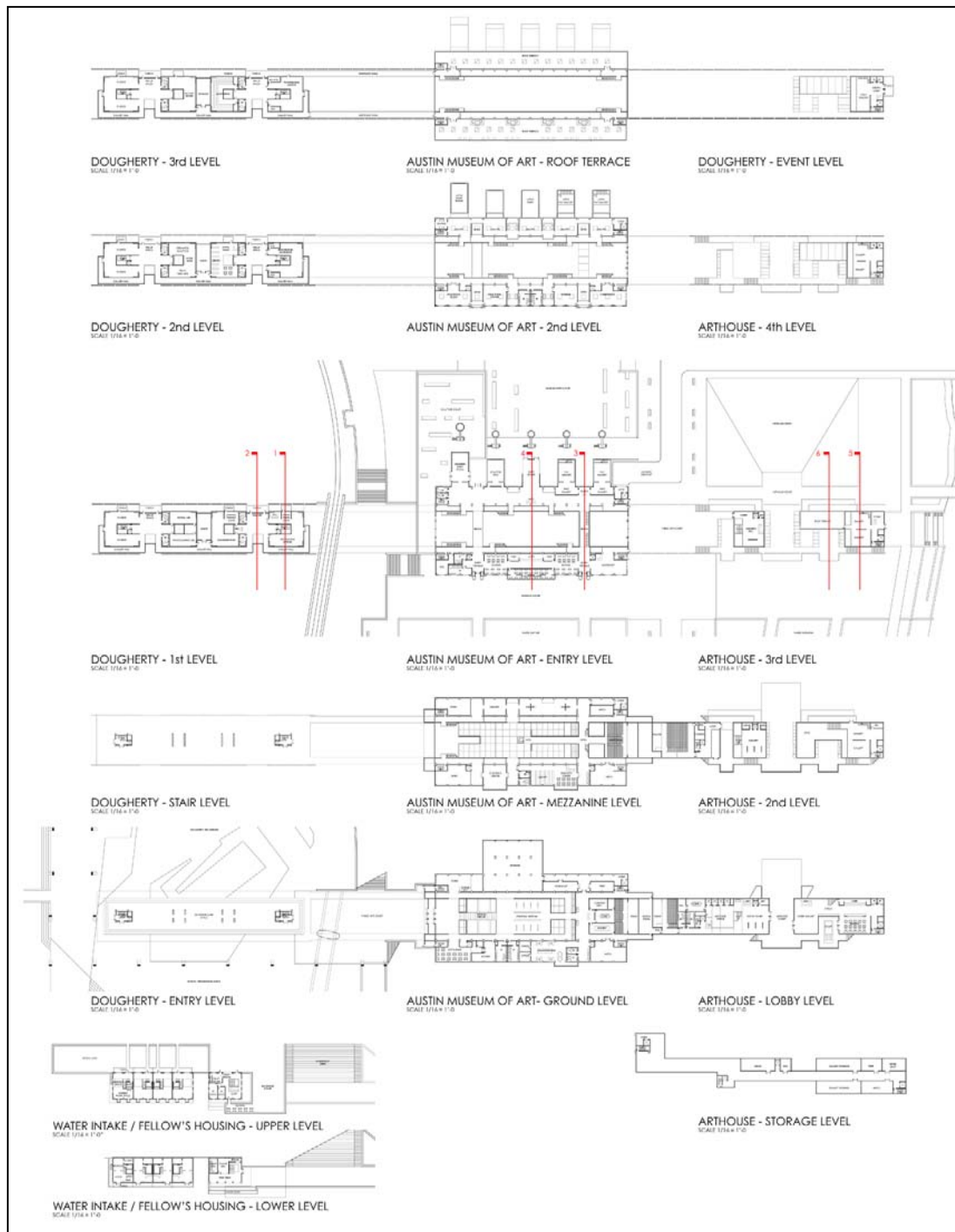


Figure 328. Arts Complex plans

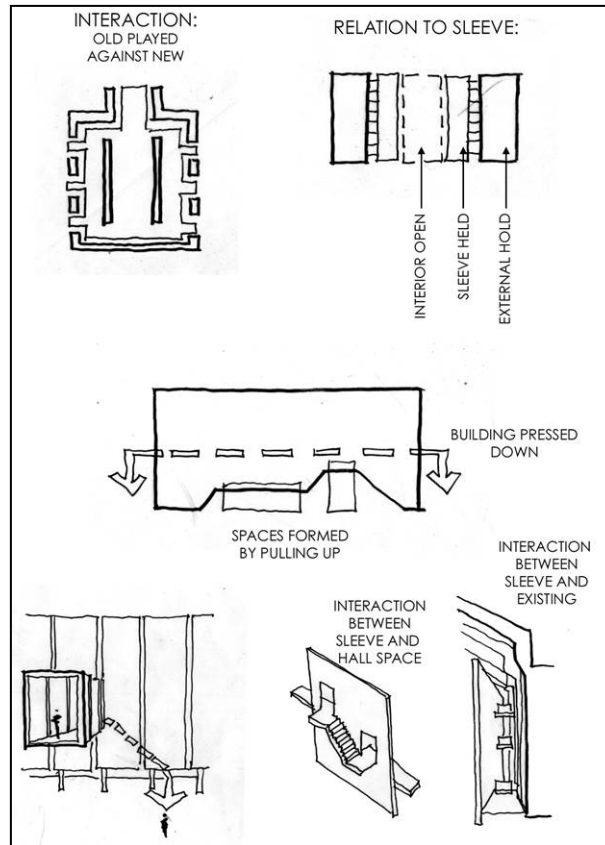


Figure 329. Seaholm building diagrams

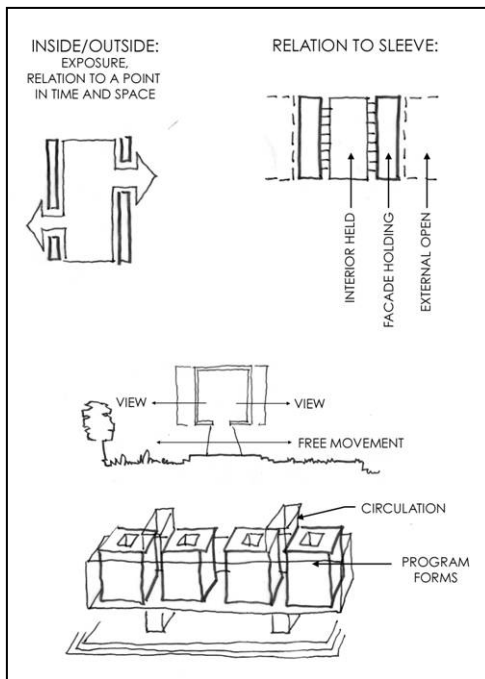


Figure 330. Dougherty building diagrams

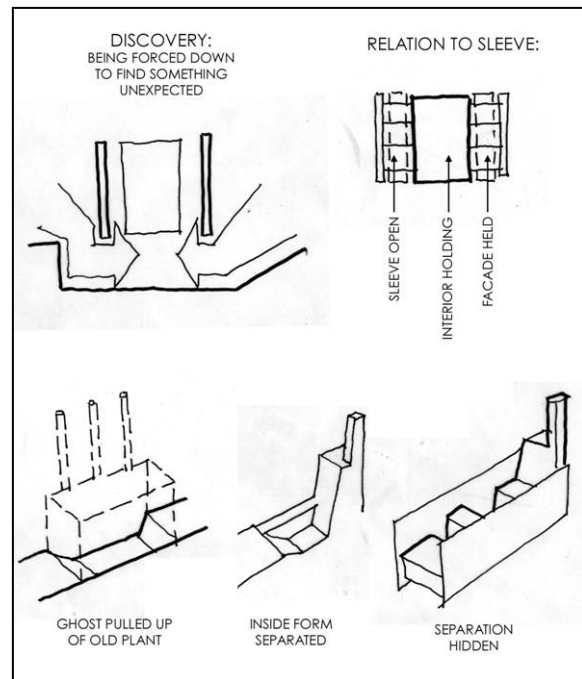
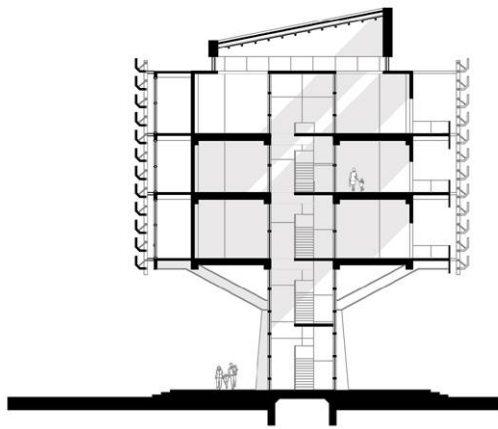
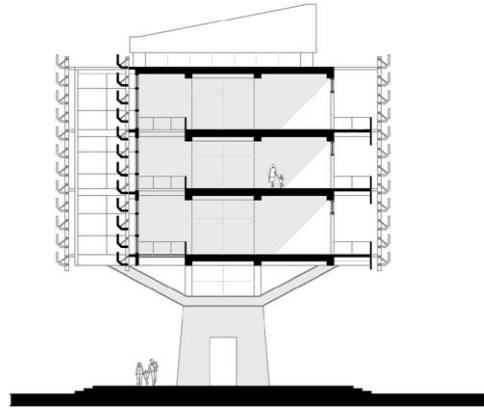


Figure 331. Arthouse building diagrams



1 - DOUGHERTY SECTION  
SCALE 1/16 = 1'-0"



2 - DOUGHERTY SECTION  
SCALE 1/16 = 1'-0"

Figure 332. Dougherty Arts School North-South sections



Figure 333. Dougherty Arts School North-South section perspective

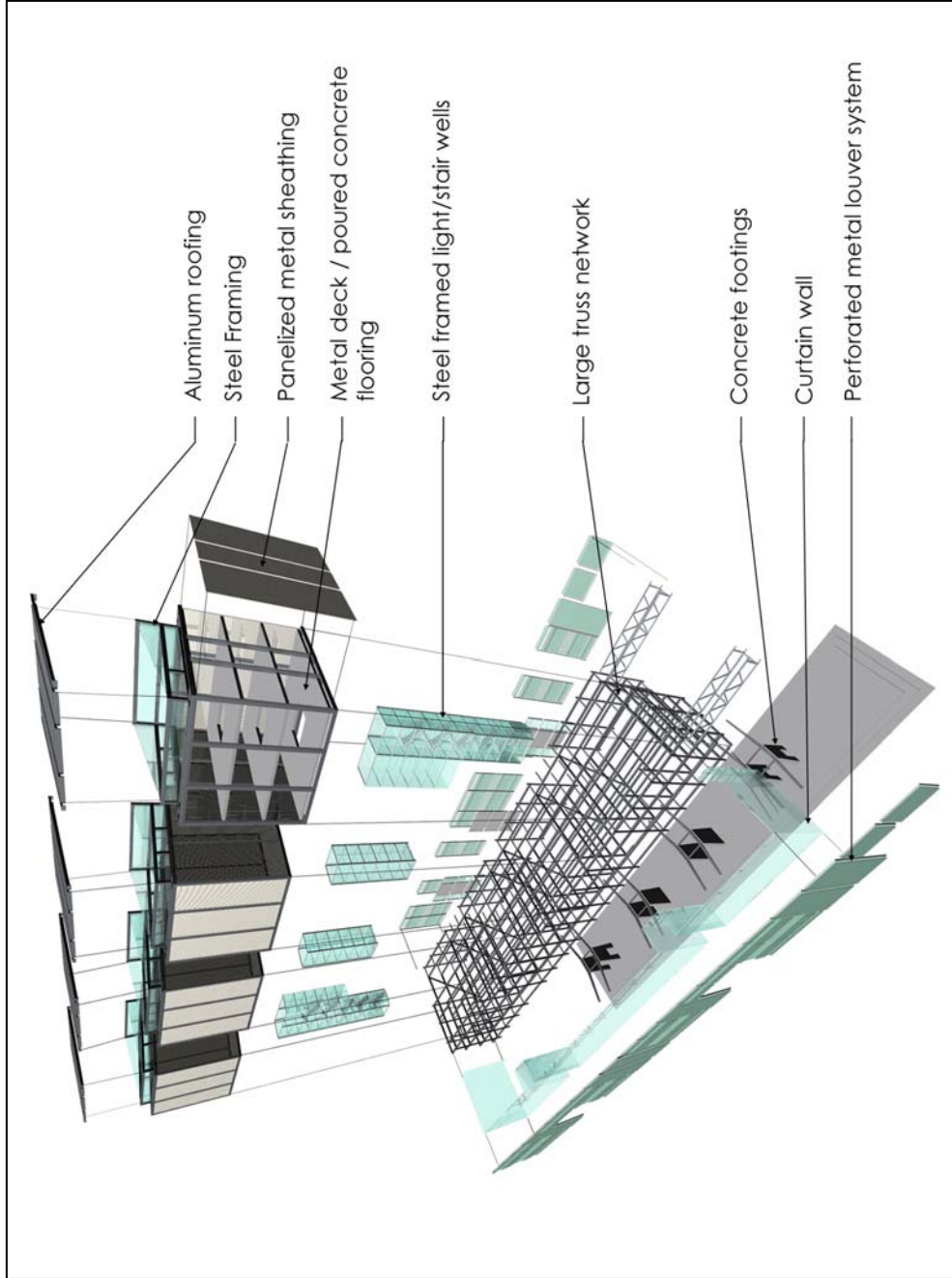
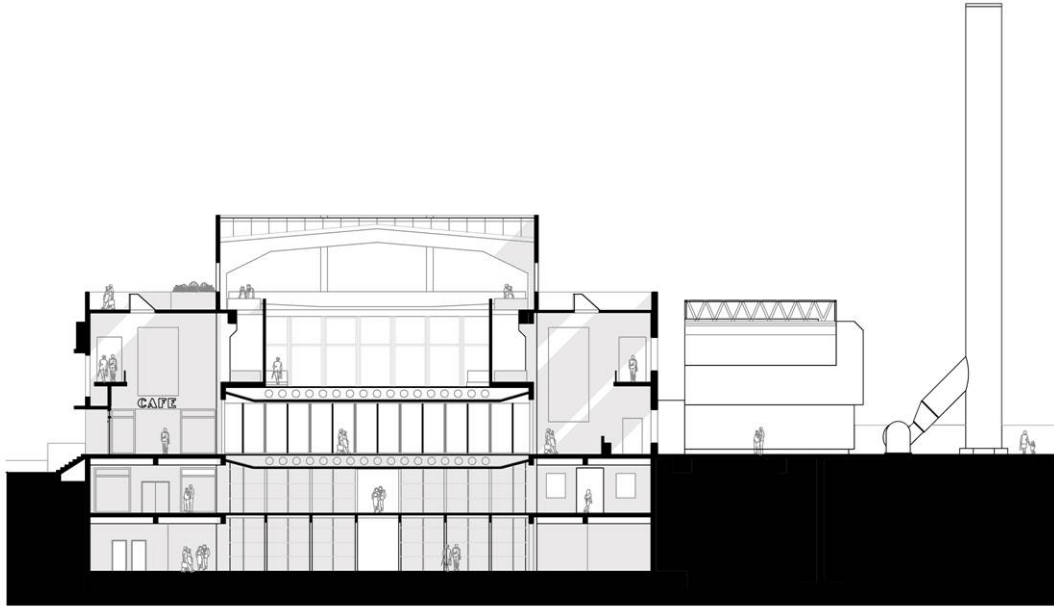
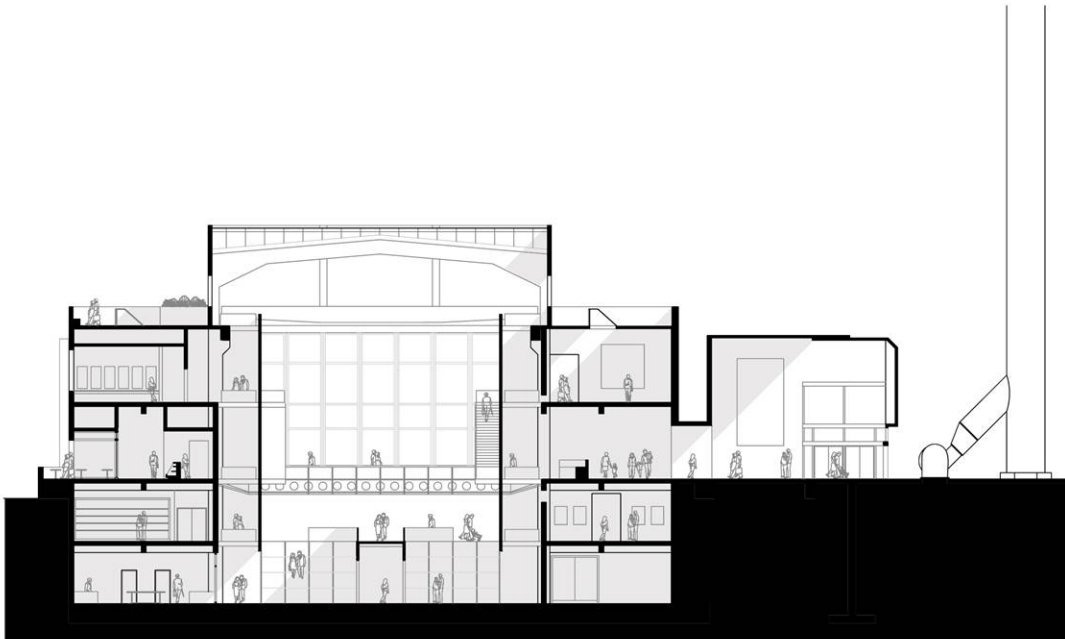


Figure 334. Dougherty Arts School construction diagram



3 - SEAHOLM - AUSTIN MUSEUM OF ART SECTION  
SCALE 1/16" = 1'-0"

Figure 335. Seaholm North-South section



4 - SEAHOLM - AUSTIN MUSEUM OF ART SECTION  
SCALE 1/16" = 1'-0"

Figure 336. Seaholm North-South section



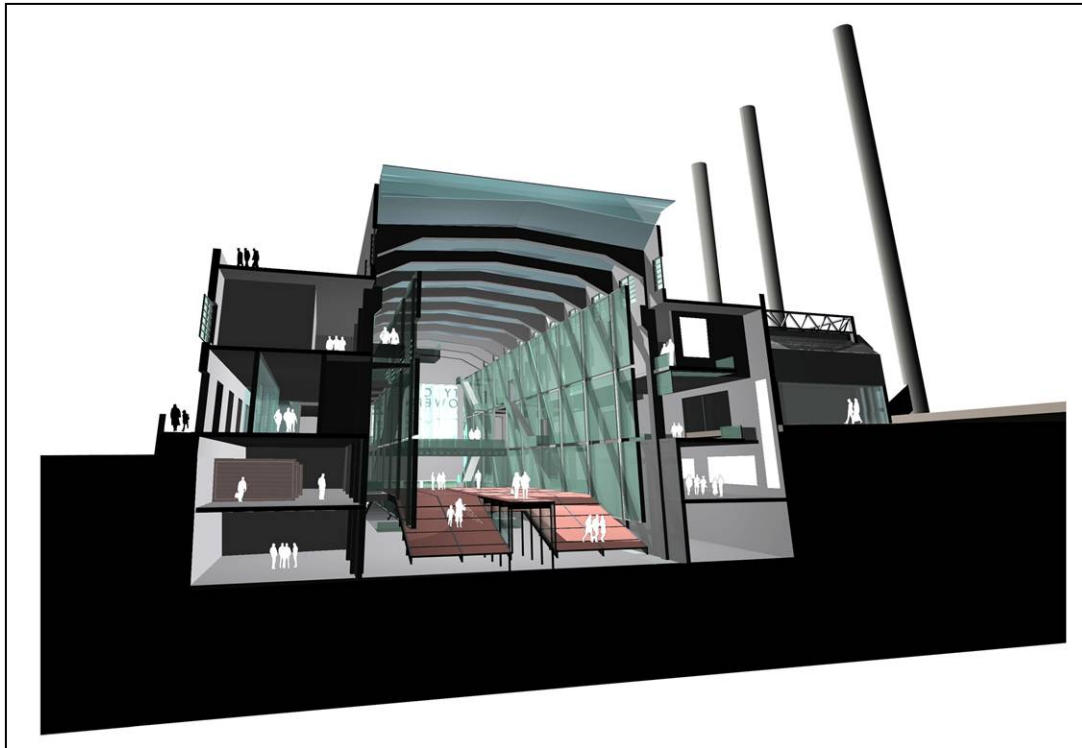


Figure 337. Seaholm North-South section perspective

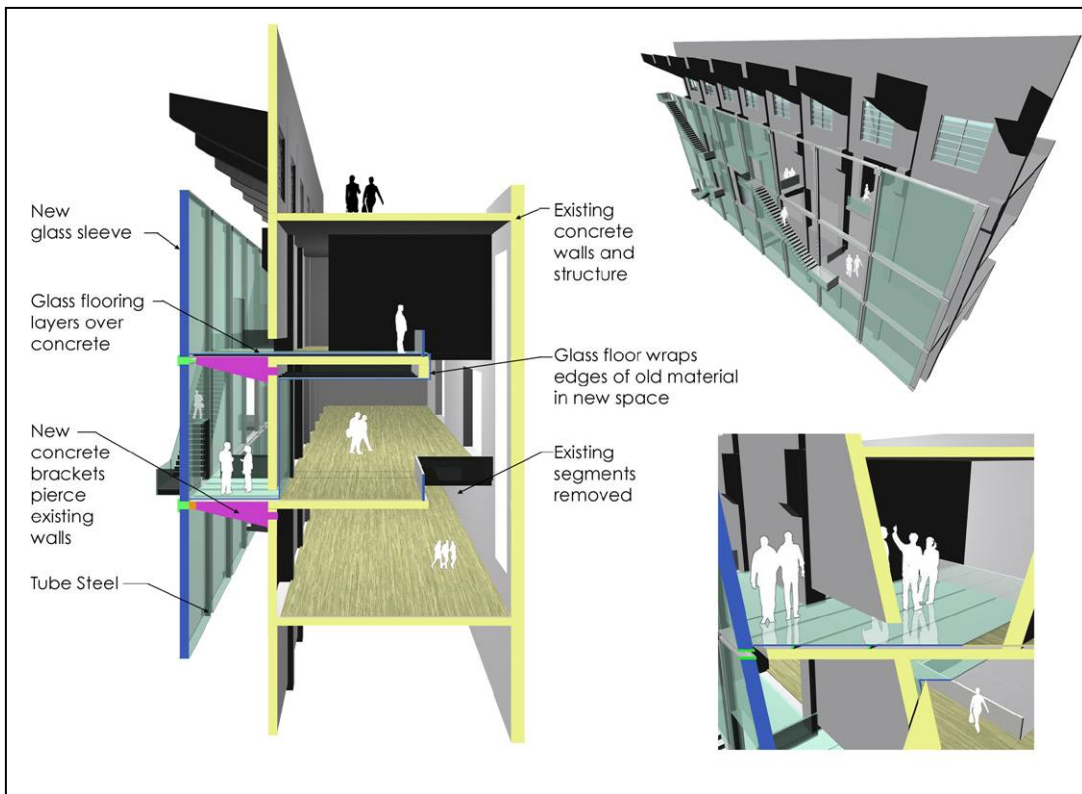


Figure 338. Seaholm construction details



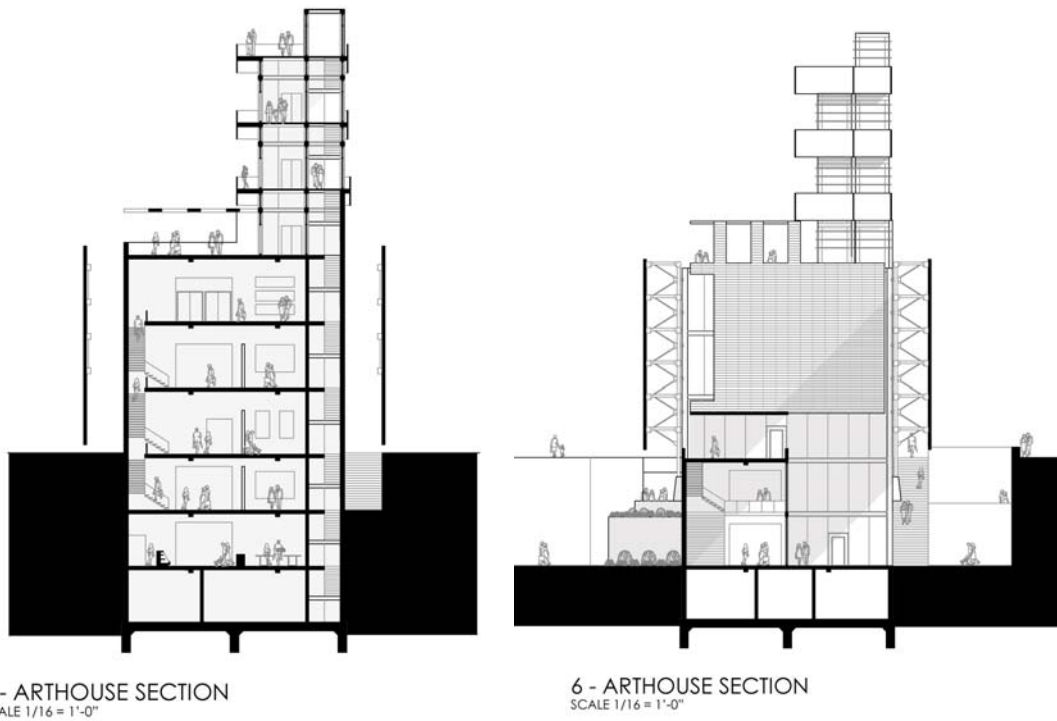


Figure 339. Arthouse North-South sections

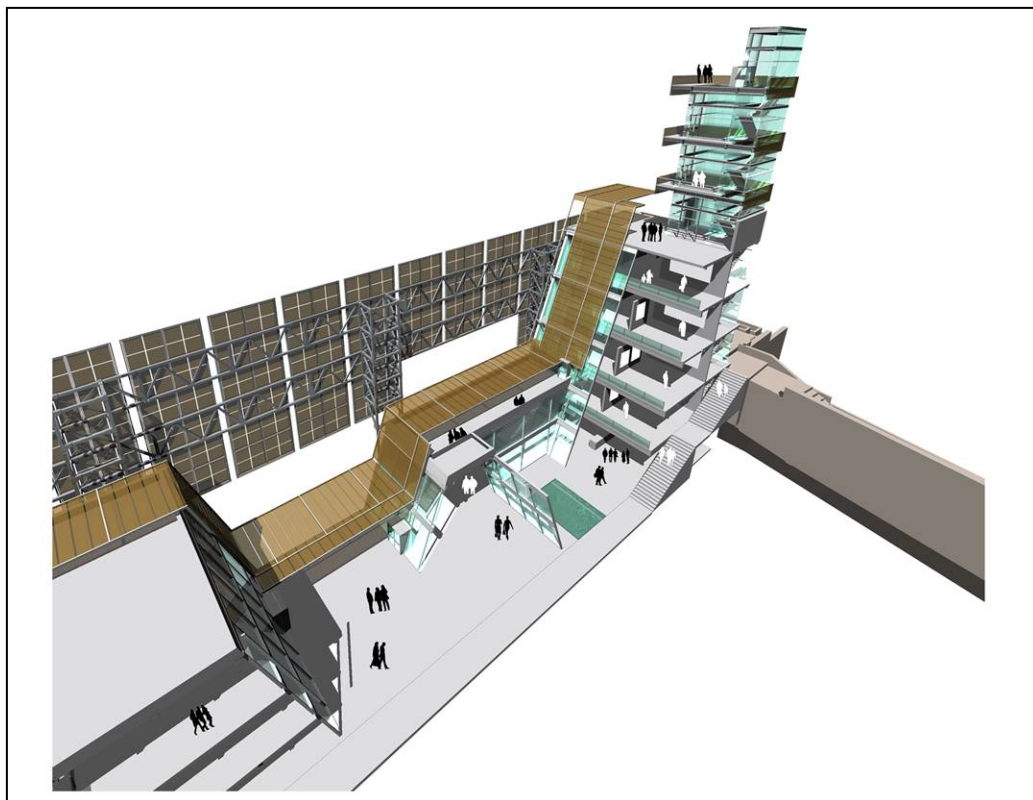


Figure 340. Arthouse North-South section perspective

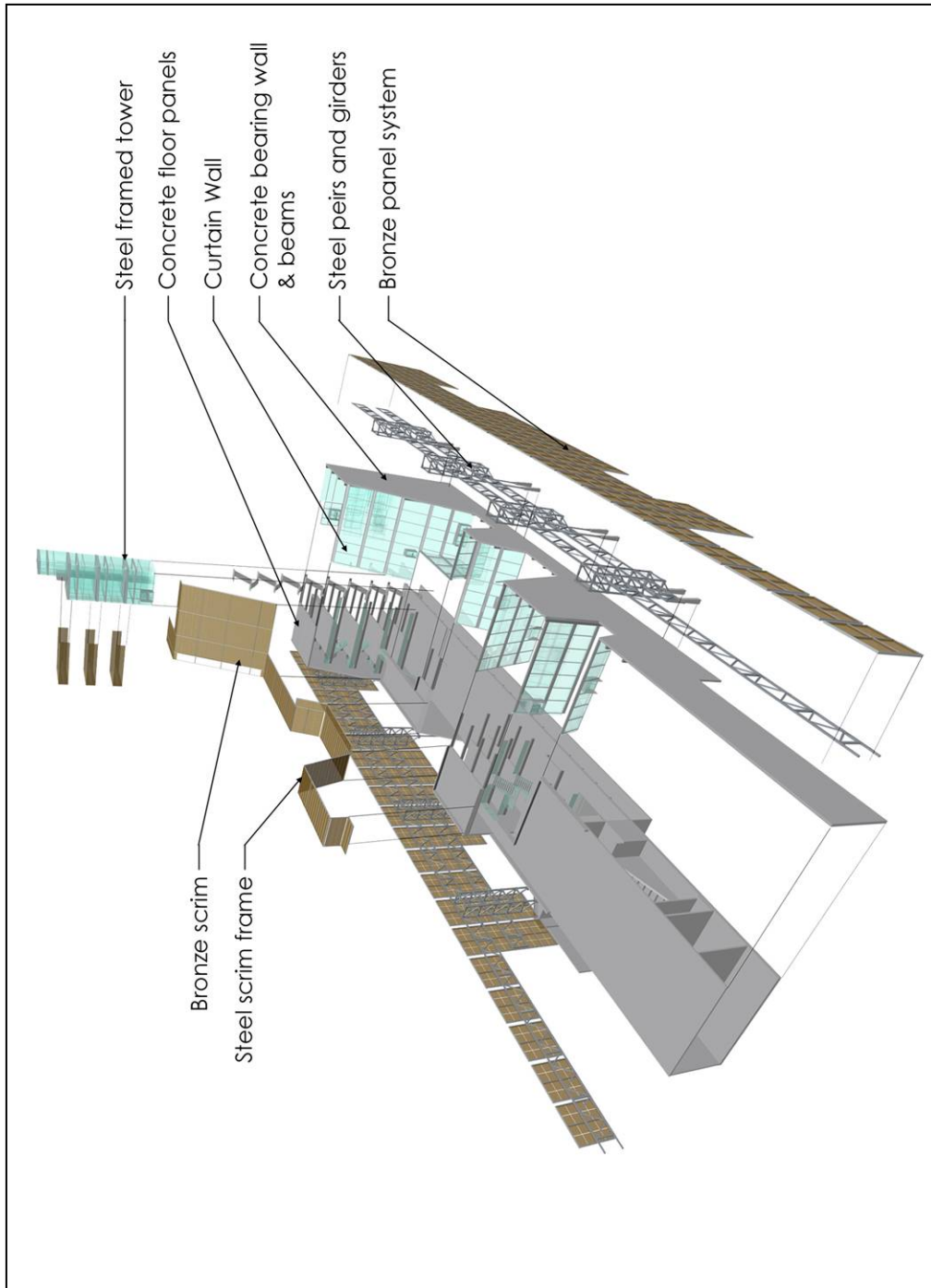


Figure 341. Arthouse construction diagram

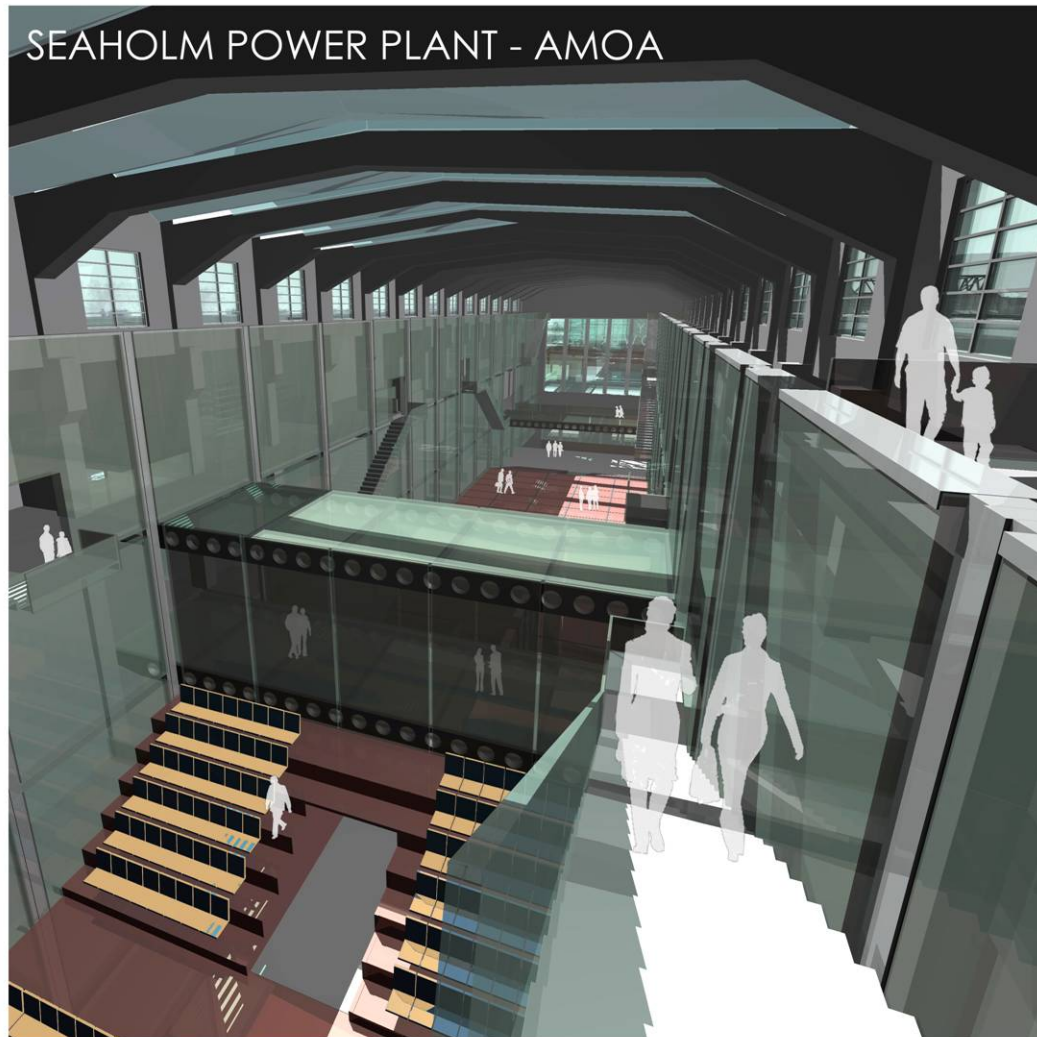


Figure 342. Seaholm Turbine Hall



Figure 343. Inside Seaholm sleeve

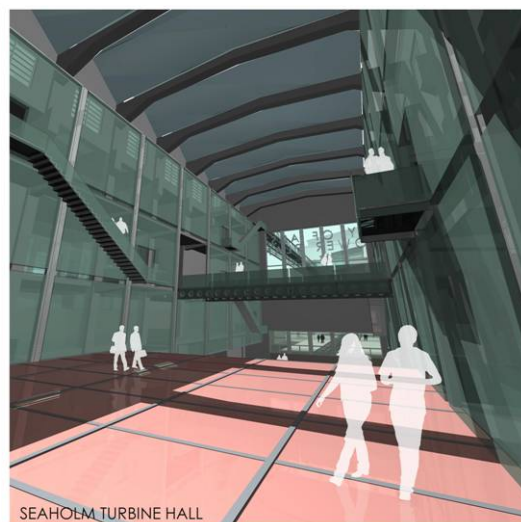


Figure 344. Floor of Turbine Hall



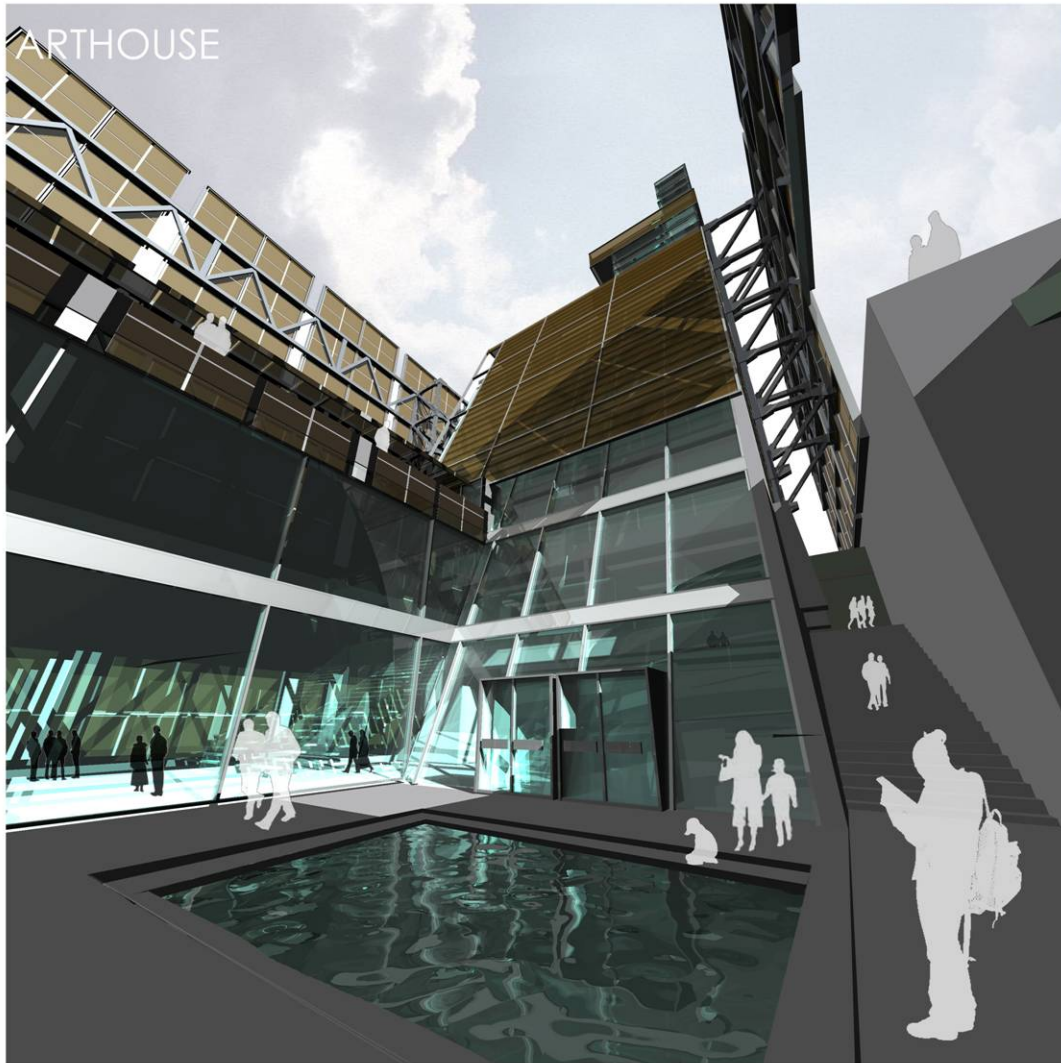


Figure 345. Exterior Arthouse Museum court

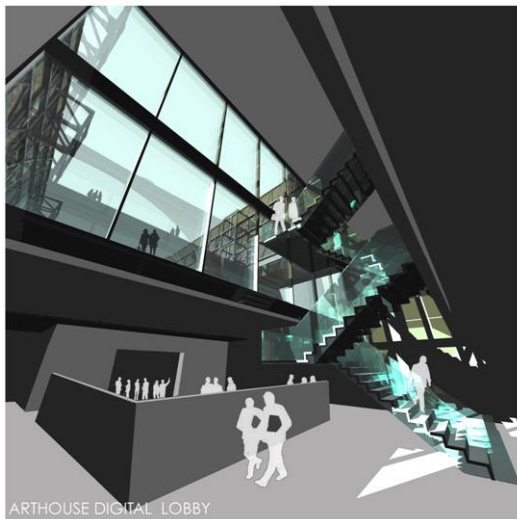


Figure 346. Arthouse digital galleries

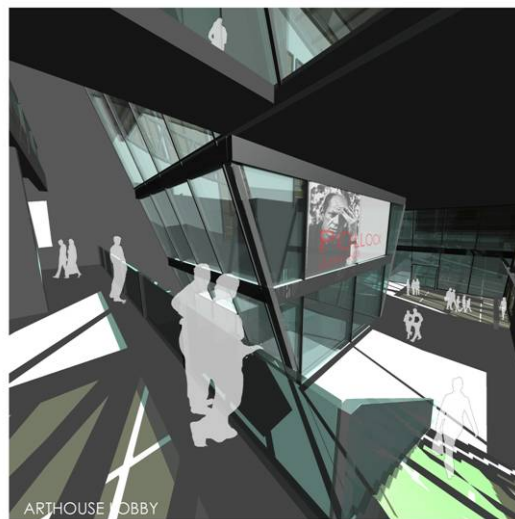


Figure 347. Arthouse main atrium

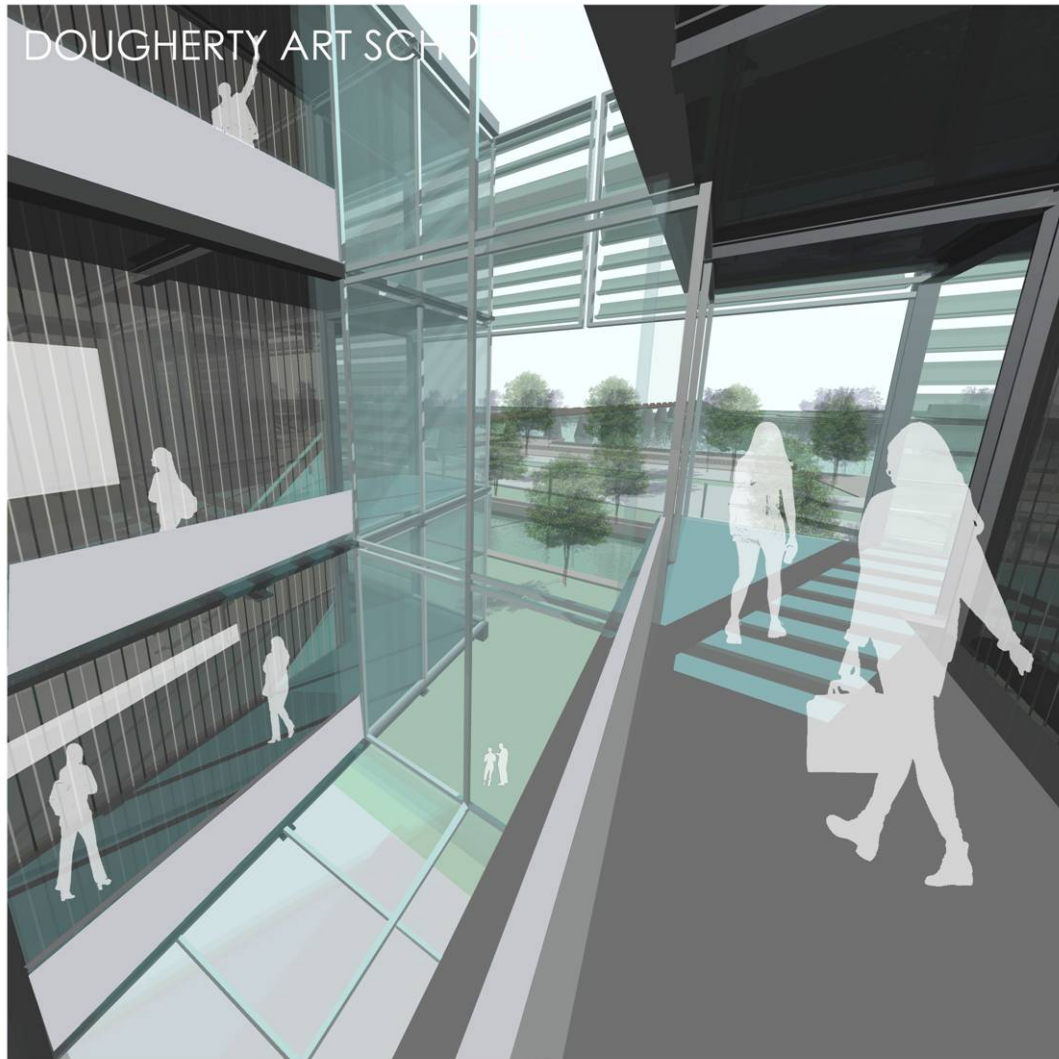


Figure 348. Dougherty Arts School interior atrium



Figure 349. Dougherty gallery hall

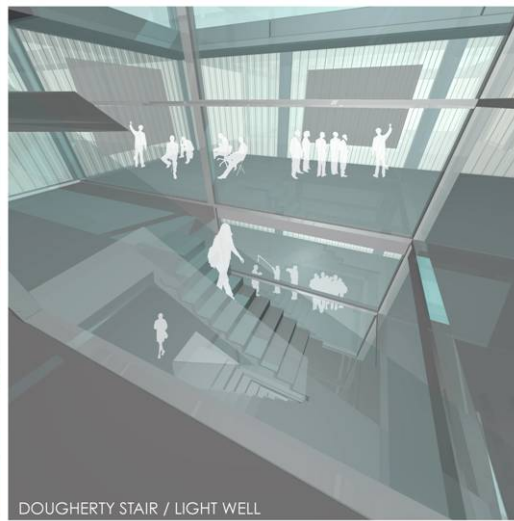


Figure 350. Dougherty stairwell

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