The Formulation of Relationships

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Abstract

Architects and planners do not just design and place a building anywhere of their choosing. Cultural and environmental issues are among the key factors in the development of a design within a given city. The interests of the community, combined with certain design goals, can lead to the creation of a building(s) that will help to connect a site with the existing cityscape. It is also important to merge the exterior conditions to the interior to allow the understanding that the two can co-exist. For most people interior and exterior spaces are completely separate entities, but a connection between the two would create spaces that can combine important qualities of each to create a unique experience.

Figure ground drawings provide a visual analogy for a discussion of the relationships between site and architecture. This type of drawing is meant to express relationships between built and void spaces in an area, but instead only disconnect the two from one another. A similar disconnect occurs when a designer thinks first of the building before the site. In any drawing the paper seems to be unimportant because the work of art is what is drawn upon it, but without that paper, which can be thought of as the ground, there would be no possiblity of creating a “figure”. This analogy holds true with architecture because without the site you would have no where to place the building.

The cultural base of the community will have a great impact on the programming of the building because culture is also a kind of groundwork that separates neighborhoods, communities, and cities. Just as the design of the physical elements of the building hopes to connect the building to the site, the program of the building should also be established with a connection to its context. The climate and surroundings will also help create a unique mesh of the program with the exterior.

These connections are important because they allow relationships to form. One element alone can be combined with another which creates a whole new set of characteristics that allows the visitors a new experience that other spaces may not offer. It is hoped that studying these relationships will reveal a deeper understanding of how they can exist together and create a collaboration that highlights the relationships that define place.

The city of Marquette has been chosen as the overall location for the thesis project based on its size, the presence of topographic variation, and the city's desire for expanded cultural facilities. The specific site and its surroundings will play a detailed role in the positioning and design of the building. The location that is chosen should most importantly have a topographic change that can allow the building to be built into the ground and create multiple levels of penetration into the building. The precise location of the building will also be determined by the views that can be incorporated into the design, with hopes of a water connection. The general Marquette area has great attributes to work with such as its frontage to Lake Superior and complex topography, which is intense enough in some areas to have ski slopes. There are available sites that incorporate the site criteria which can create the connections to an urban context that the thesis hopes to explore. Marquette is a growing city so it still allows new projects to be added, unlike other cities that are so dense that in some cases it would be hard to find a site that is desirable without the need to replace another building. The study wants to explore the connections that can be created when designing a building that incorporates the land and exterior elements and this region has promise for a successful design.

The environment and its cultural basis will help develop the program and design guidelines within the study. The programming of the site will be influenced by the needs of the community, especially within the cultural realm. After researching the needs of the Marquette area, the current concept is to design a performing arts venue that has a direct connection to the exterior, which highlights the cityscape. The project not only hopes to form connections between building and site, but also between the overall project and the city, as well as the waterfront. Marquette's needs will play a factor in the design as well. This includes creating a venue that can become a destination that is used during the day, but also at night and weekends, which will bring more visitors to the downtown region.

Though styles of architecture have changed throughout time, the main purpose of a building is to provide shelter from the elements and keep our property protected from others. This concept is documented as far back as Vitruvius' De Architectura (ten books of architecture), where he stated that a building was built to protect against the enemy as well as "the diseases that might come from the ground and the chilly vapors that might rise out of it."[1] Every detail of architecture has always been important to the process of designing a building. It seems as if the detail of design has been getting lost throughout the decades. Modern buildings break the mold and try new things, but still do not have the same craft and personalization as buildings in our past. No matter if it is the intricate cornice or the specific details used due to site conditions, these things make the building stand out among others and have a certain specificity. All of the details create a relationship to one another and in turn help to design the environment and atmosphere of the building. The individualization should start when a project is first developing because the site selection creates an opportunity to allow for many relationships to form. A site that has unique natural features can be ignored by the designer or can be used to its full capacity and become incorporated into the design and in turn the building can become a strong element within its context. Architecture and landscape have always had an uneasy relationship due to their impact upon one another. If the two were designed with both in mind there could be a deep connection that allows critics from both sides of the spectrum to appreciate the work.

The location of a site is in most cases not chosen due to the relationships that can be created with nature and the existing conditions, besides what already artificially exists. Most buildings are placed in a certain location due to demographics of the specific program or the surrounding buildings that the new building can pull its population from. In a way these are valid decisions to use when determining a site for a potential project because it is key to keep the project alive and to ensure that the program will be able to survive financially. Certain areas that do not have the density

that larger cities have should always take the natural features into account during the site selection process because the elements can help enhance the design project.

In many cases when a site is chosen that has many attributes that can be used to the project's benefit, they are never even considered. The site in general is never even considered as a piece of the building. It is often just thought of as just what the building sits upon. Figure ground drawings provide a visual analogy for a discussion of the relationship between site and architecture. This type of drawing is meant to express relationships between built and void spaces in an area, but instead only disconnect the two from one another. A similar disconnect occurs when a designer thinks first of the building before the site. The result of this process becomes thoughtless architecture and endless parking lots because the expression of the buildings are reduced and the site looses its capacity to participate with the many elements that surround it. In any drawing the paper seems to be unimportant because the work of art is what is drawn upon it, but without that paper, which represents the ground, there would be no possibility of creating a "figure." This analogy holds true with architecture because without the site you would have no where to place your building. "Although a text is invariably indifferent to the paper it is written on, paper is an essential element of life for a drawing,"[2] just as the site is important to the building.

A building should not just replace the land it is inhabiting, but incorporate its existing features to create a space that eliminates the sense of struggle and creates a harmony that enhances both elements. Aaron Betsky feels that buildings replace the land and that is architecture's original sin.[3] Architecture in the most literal sense does of course replace the land by covering it but it seems the majority of buildings just sit

upon the land, which in fact means very little land is being replaced. The problem is the buildings are replacing the natural features and characteristics that once occupied the site. "What was once open land, filled with sunlight and air, with a distinct relationship to the horizon, becomes a building. The artifices of humans supersede what nature has deposited on a given place."[4] If a building is going to disrupt a natural site then its conditions should be taken into account. If it is flat land and the ability to dig is not possible then the connections must be made in another way, such as focusing in on the inside / outside connection to allow passage through the space. A building will always create a barrier from what was original on the site and its surrounding context, but to the degree that the building is turning itself to its interior context depends upon the design. If the site has topography or the ability to create grade change, then replace the land beneath the ground with the building. One should create a connection between land and architecture that does not just set the building upon the land to make it feel superior. Submerging the building changes the depth of a section and moves the ground line from below the structure to all around it. Building into the site is the underlying factor that helps create the connection to the other relationships architecture creates such as inside / outside. The architect can start to design moments that allow the visitor to interact with the building, such as walking out to the exterior from the underground space or climbing a flight of stairs to reach the surface. The relationship of views also will have more interesting connections with the relationship of site and building intertwined into the design.

The Nelson-Atkins Museum of Art expansion, by Steven Holl, takes into account its site as one of its main features of the concept. The addition is placed to the eastern edge of the site, which it shares with the original building, which is Neoclassical in style. Holl designed the building to be a series of "lenses" above ground that are connected beneath by a long gallery space. The building was placed within an exciting sculpture garden and that was a factor Holl took into account. The glass buildings or "lenses" are a part of the sculpture garden and do not interrupt the space,

which is a great example of how an architect can think consciously about the site and the building together as one cohesive environment. This solution also allows the modern building to stand next to an existing classical piece and not have either overpower the other.

The ability to think about the natural conditions on the exterior of the building can help to create a link between the never ending struggle of inside and out. Robin Dripps feels that "any theory for opening up, fragmenting, or blurring distinction between inside and out must have a better grasp on the nature of what is outside."[5] This statement seems to hold true due to the fact that as the architect you should have almost total control of the interior conditions, but the natural conditions on the exterior are details that you will have to work with because many are unchangeable or constantly changing. "When water, wind, light, rain and other elements of nature are abstracted within architecture, the architecture becomes a place where people and nature confront each other under a sustained sense of tension."[6] With an evaluation into the sun and wind patterns of the given site one can create some unique interior spaces the feelings of the exterior conditions can be experienced.

Architecture should not just be about defending against the natural elements and others who you do not want to take your property. Architecture, in many cases, should be about expression. Expression can come in many forms, but most of all it should reflect the elements that also inhabit its location. A connection between the interior and exterior should start with the site iteself. The interaction of a building and its landscape is a crucial detail that can reduce or optimize the ability to create these connections.

Endnotes:

[1]Aaron Betsky, *landscapers: building with the land*. New York: Thames & Hudson, 2002.

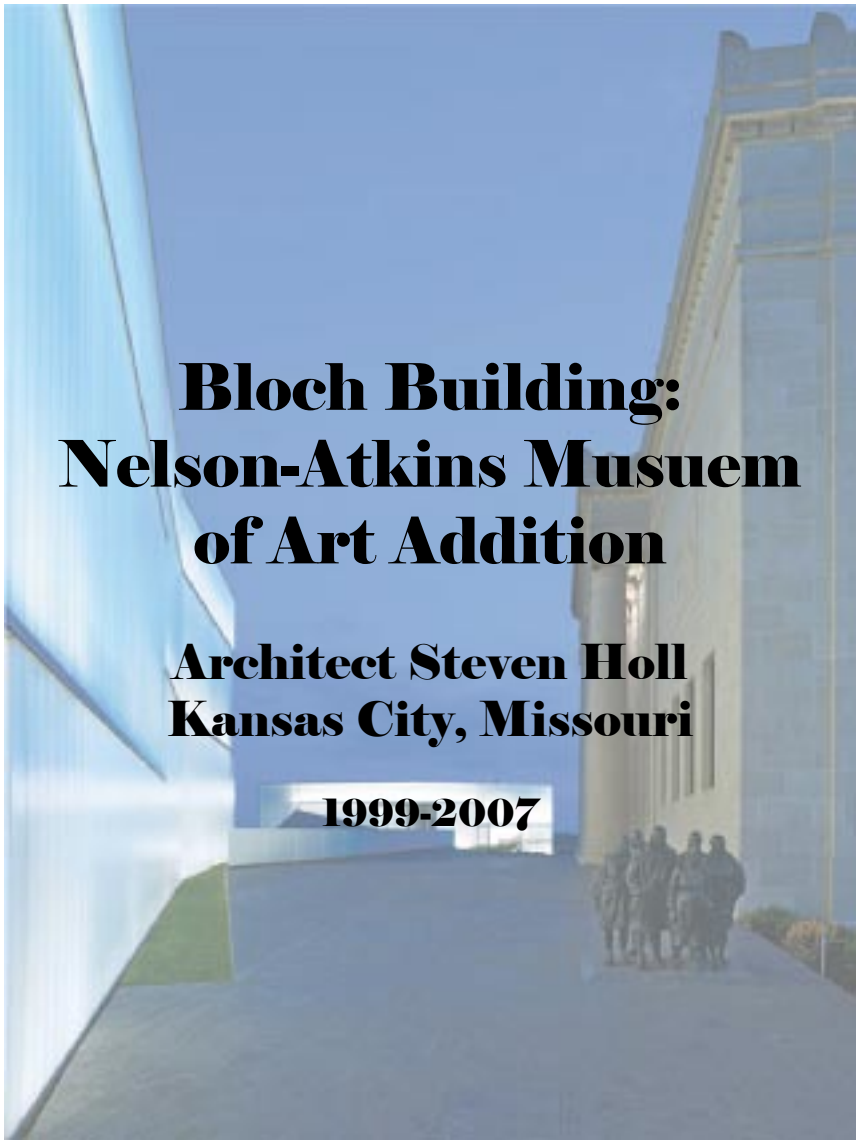
[2]Robin Dripps, *Site Matters*. Great Britian: Taylor and Francis Books, Inc.,2005

[3]Aaron Betsky,*landscapers: building with the land*. New York: Thames & Hudson, 2002.

[4]Idem

[5]Robin Dripps, *Site Matters*. Great Britian: Taylor and Francis Books, Inc.,2005

[6]Kate Nesbitt, *Theorizing a New Agenda for Architecture*. New York: Princeton Architec tural Press, 1996

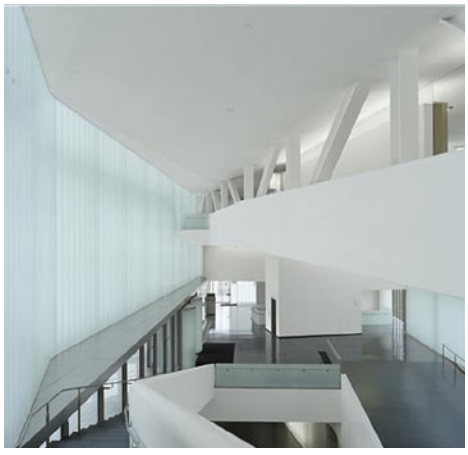


Bloch Building: Nelson-Atkins Musuem of Art Addition

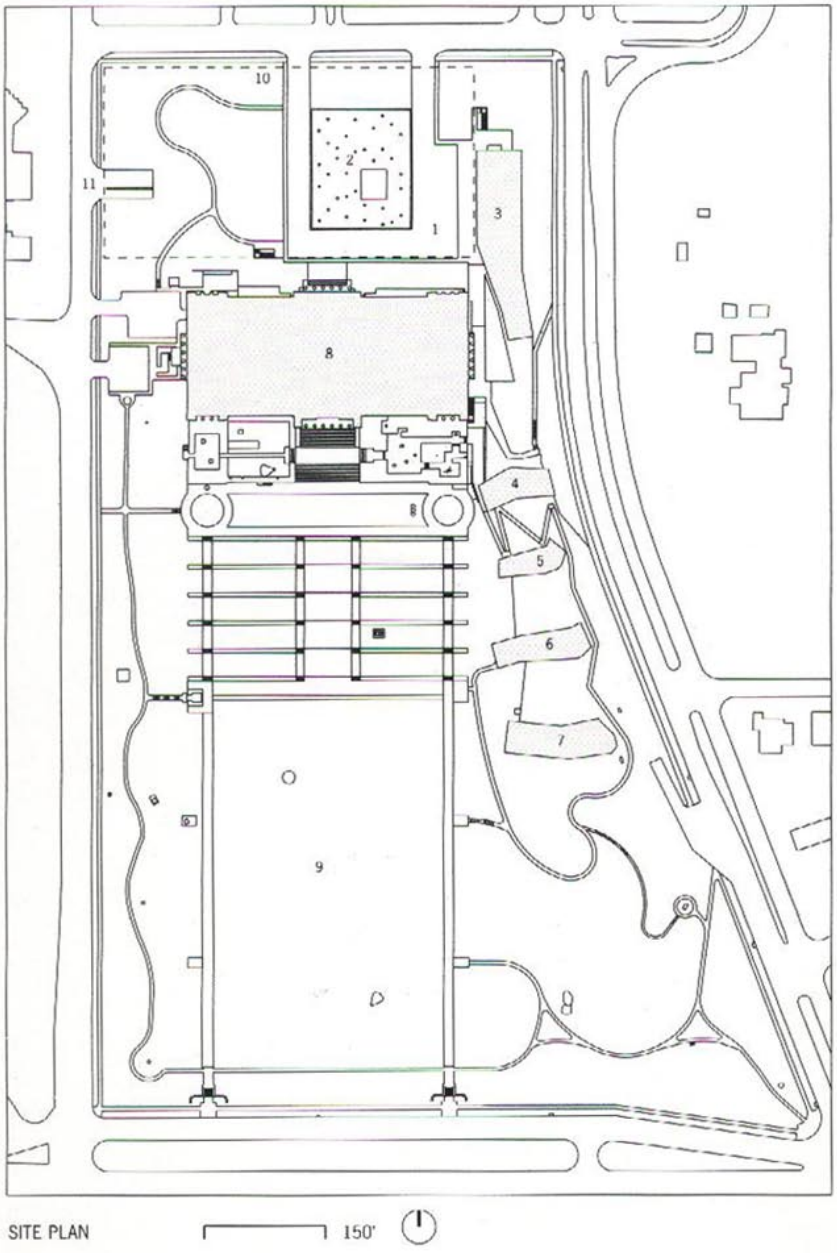
Architect Steven Holl
Kansas City, Missouri

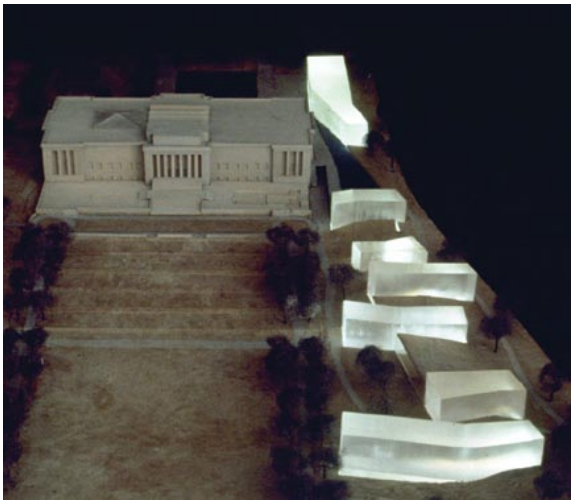
1999-2007

The Bloch Building is the expansion of the Nelson-Atkins Museum of Art, which was placed on the eastern edge of the site. The architect, Steven Holl, competed for the project and made an impression with his modern concept that embraced the old architectural history unlike the other architects who choose to mimic the existing building and placed the addition in the back in their proposals.[1] Holl's proposal placed the series of glass buildings along the side of the main museum which frames the sculpture garden. He calls the glass block buildings that putrude from the landscape "lenses" due to the natural light that comes in during the day and the light that radiates out at night.[2] The "lenses" are all connected underground by a long gallery, but above ground the "lenses" read as separate pieces. This allows the project to become a part of the surrounding sculpture garden rather then interupting it. Holl designed the museum to allow the circulation and exhibition to merge so visitors can see from different levels and inside to outside.[3] The natural light that illuminates inside helps bring the visitor through the space because at some points you are completely submerged underground without a connection to light, but as you continue through you can see reflections in the distance.

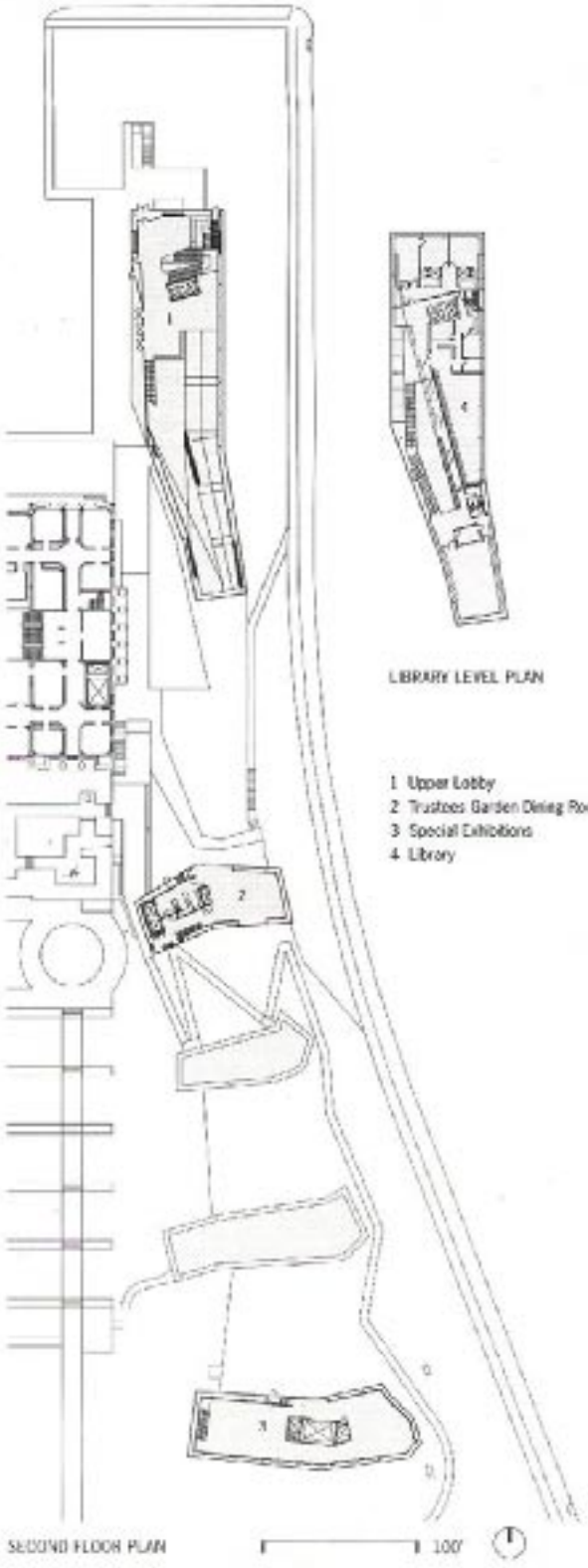


Site Plan



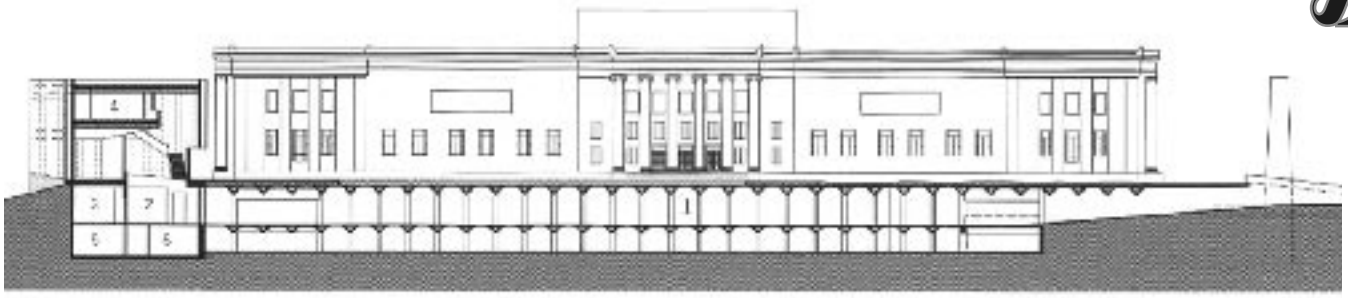


Plans

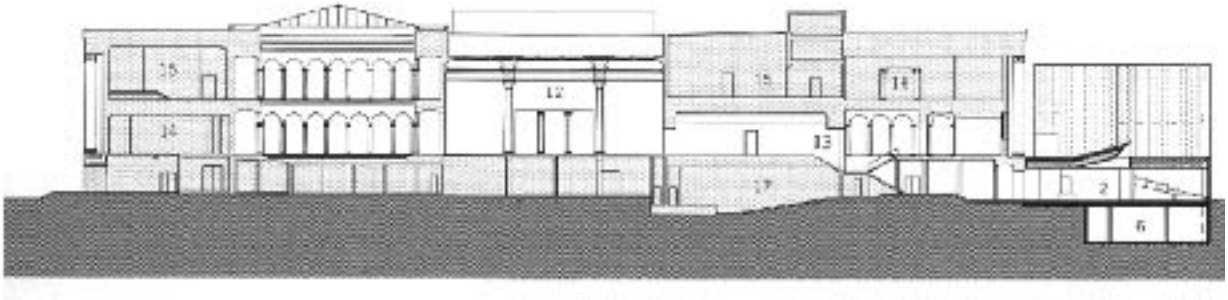


LIBRARY LEVEL PLAN

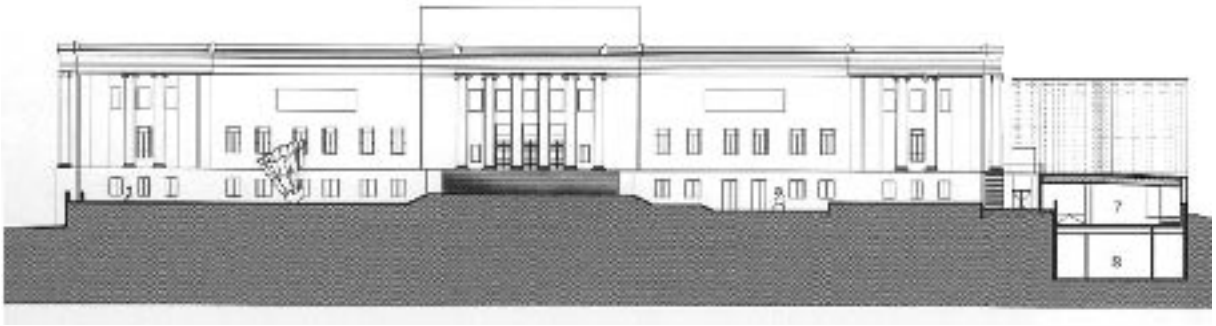
1 Upper Lobby
2 Trustees Garden Dining Room
3 Special Exhibitions
4 Library



CROSS SECTION THROUGH MAIN LOBBY & GARAGE

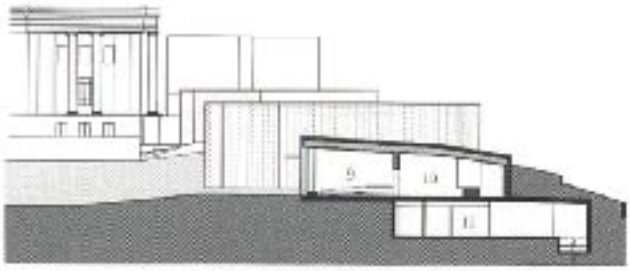


CROSS SECTION THROUGH LOWER LOBBY & EXISTING BUILDING

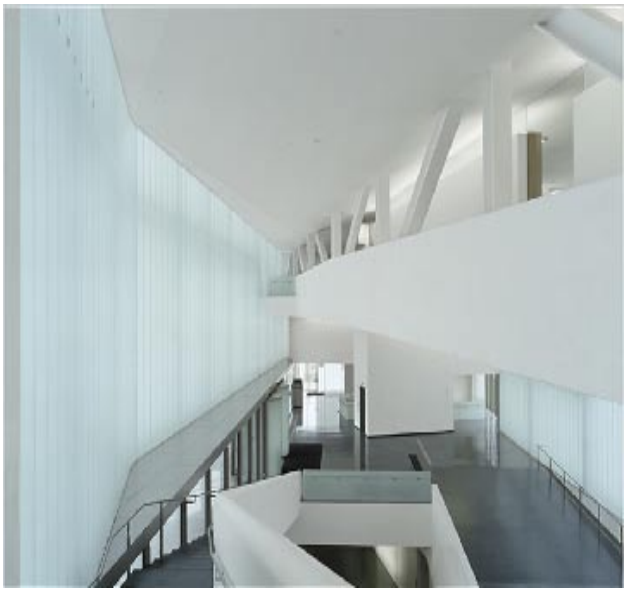


CROSS SECTION THROUGH MODERN & CONTEMPORARY GALLERIES

1 Parking Garage
2 Lobby
3 Museum Store
4 Library
5 Stacks
6 Mechanical
7 Modern & Contemporary Art
8 Collection Storage
9 Noguchi Court
10 Special Exhibition
11 Art Receiving
12 Existing Building
13 New Opening & Stair
14 European Art
15 Asian Art
16 American Art
17 Auditorium



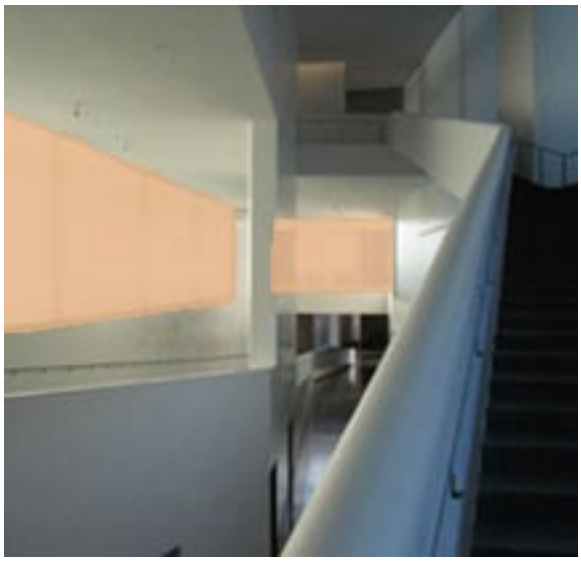
CROSS SECTION THROUGH NOGUCHI COURT & SPECIAL EXHIBITION



The Bloch Building is very successful in terms of the fusion of the historical museum with the new addition. The building does not overwhelm the existing in either size or material. The two buildings along with the landscape create a unified piece that allows the visitor to have an engaged experience. The topography changes and building height variation allow for the building to feel like a piece of artwork within the sculpture garden. The need for much of the work to not have direct light would typically compromise the overall feel of the environment. Holl is able to put much of the program underground and allow diffuse natural light in to create the right atmosphere. The circulation and the exhibition have limited boundaries to allow the visitors to see from one level to another and from inside to out.

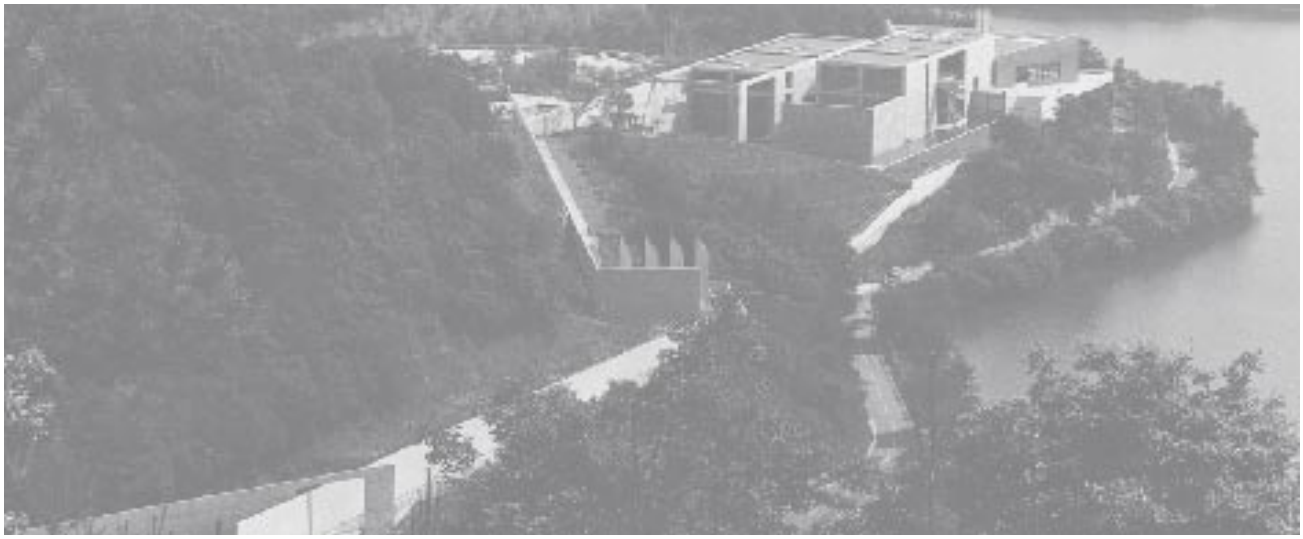
The building is stunning at night, but it does not create the same effect on the exterior during the day. It's exterior creates a dull effect, which was most likely not planned, when the light is not reflecting at the right angles. The main entrance to the addition is not very clear and could be confusing to a visitor unless the museum has left the main entrance within the existing building.

These images explore the connections between landscape and architecture as well as inside to out. The building was placed on the site in a way that gives the impression that the ground is holding the building. Holl seems to have successfully extruded the building in an appropriate manner so that it does not seem to be overwhelming or detracting from the existing museum. As expressed in the photo to the right, the landscape gives the visitor the ability to see the building at different elevations and have a unique experience while traveling through the exterior. The interior is a long space which is mostly underground. The glass and staircases are placed thoughtfully to allow the visitor to experience different views from multiple angles. As illustrated below, the exterior is incorporated in several ways for the visitor. The glass is mostly above eye level, but if you choose to take the stairway to a path above you can look out to the exterior instead of looking up to the glass.



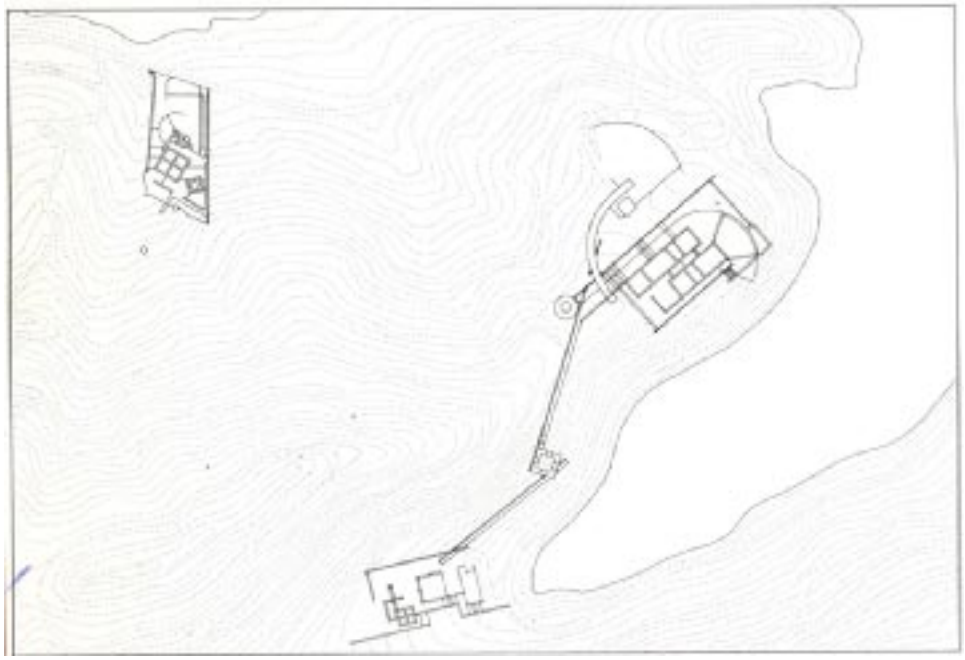
Children's Museum

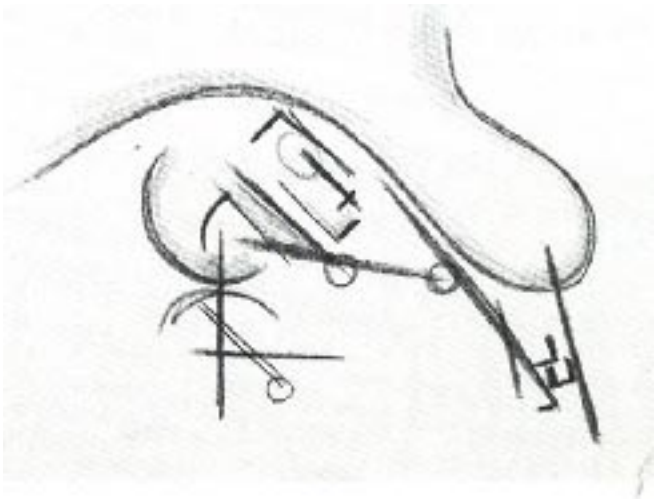
Architect Tadao Ando
Himeji, Hyogo
1987-1989



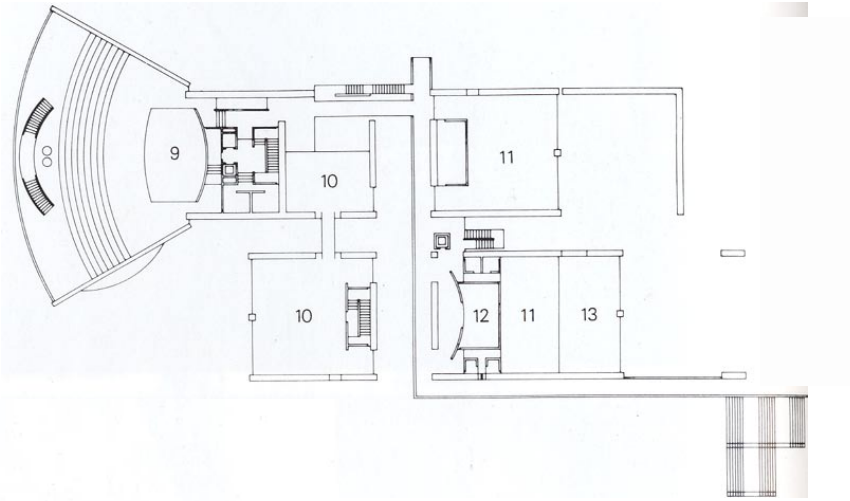
Tadao Ando's Children's Museum is placed within a wooded hillside that overlooks the lake. "While strongly influenced by landscape considerations, the design is an attempt to determine a prototype transcending funtion in the encounter between architecture and nature."[5] There are two building components that are connected by a long path surrounded by concrete walls, which incorporates an area that is sliced by a wall that contains 16 posts, which breaks the disconnection of the two buildings. The main building houses a library, theater spaces, an exhibition gallery, a multipurpose hall and a restaurant. There are two theatre spaces, one within the building and the second on top of the roof that has a view to the lake. The seconding building is a two story workship complex located at the rear of the site. Ando's design connects the visitor with the merging of architecture and anture with the numerous programs that are accessible indoors and out, also the exterior stairways that lead to a destination while interacting with the natural elements.

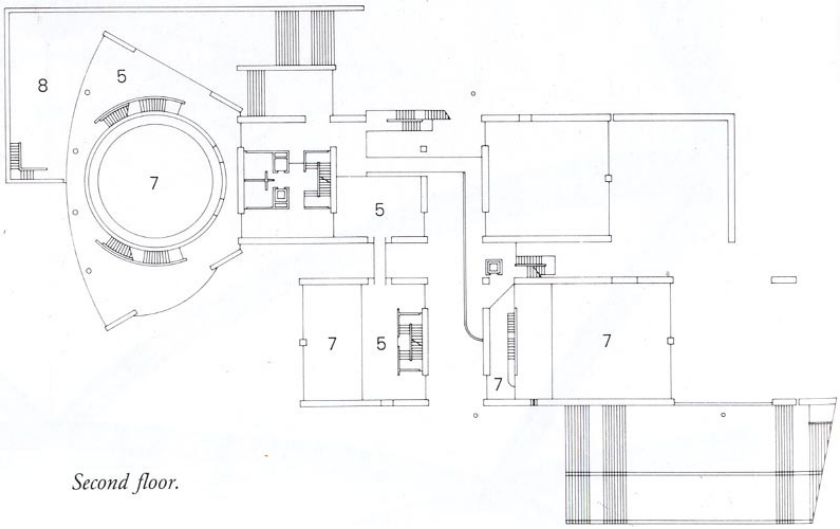
Site Plan



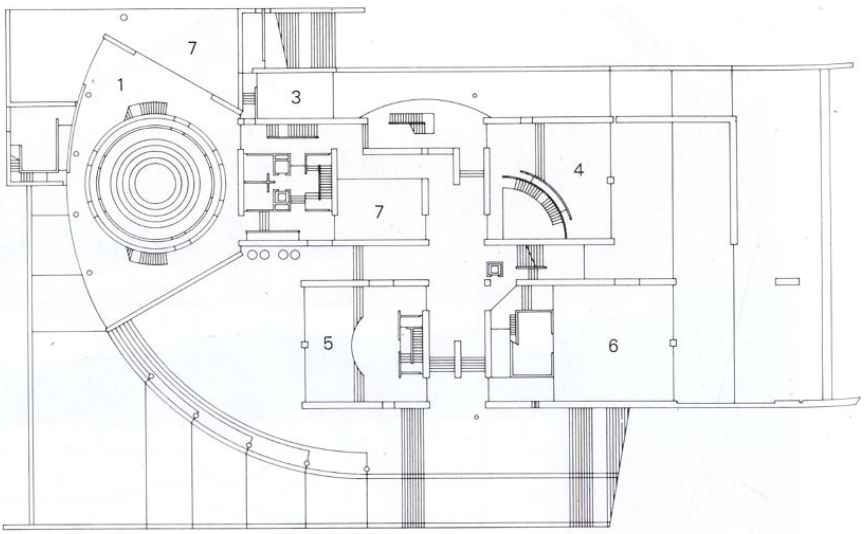


1 FOYER
2 INDOOR THEATER
3 MEETING ROOM
4 LIBRARY
5 GALLERY
6 MULTIPURPOSE HALL
7 VOID
8 DECK
9 OUTDOOR THEATER
10 OFFICE
11 SEMINAR ROOM
12 INFORMATION
13 TERRACE

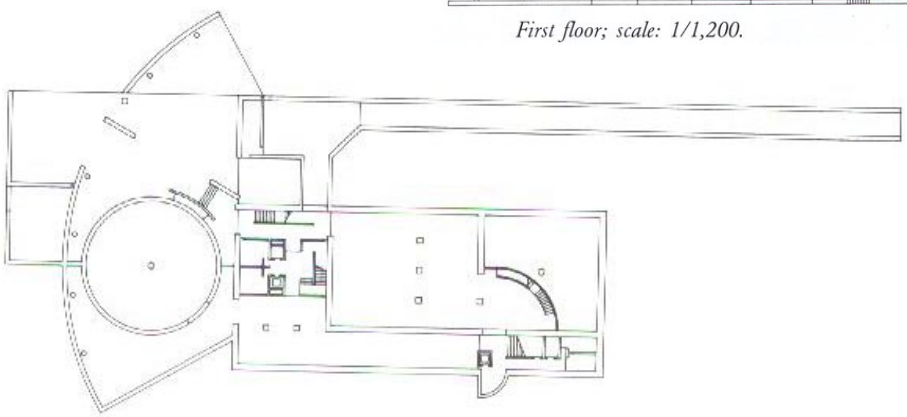




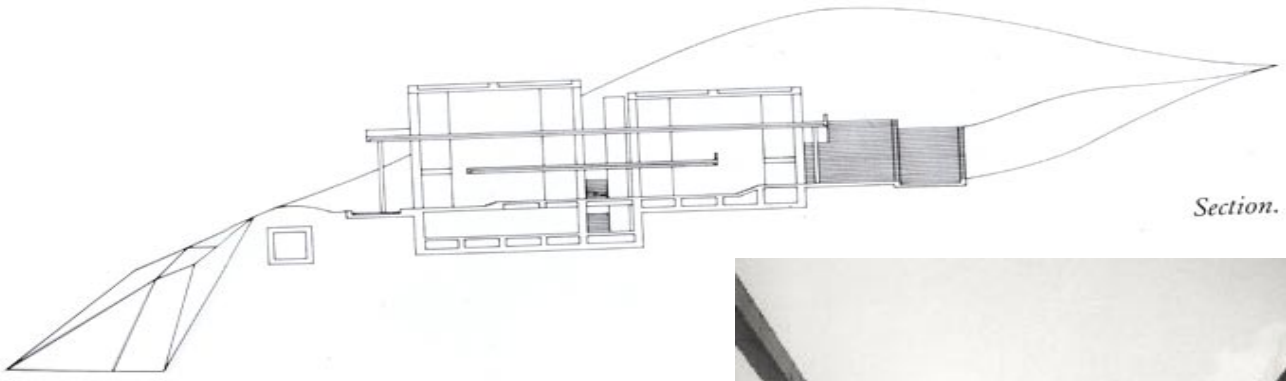
Second floor.



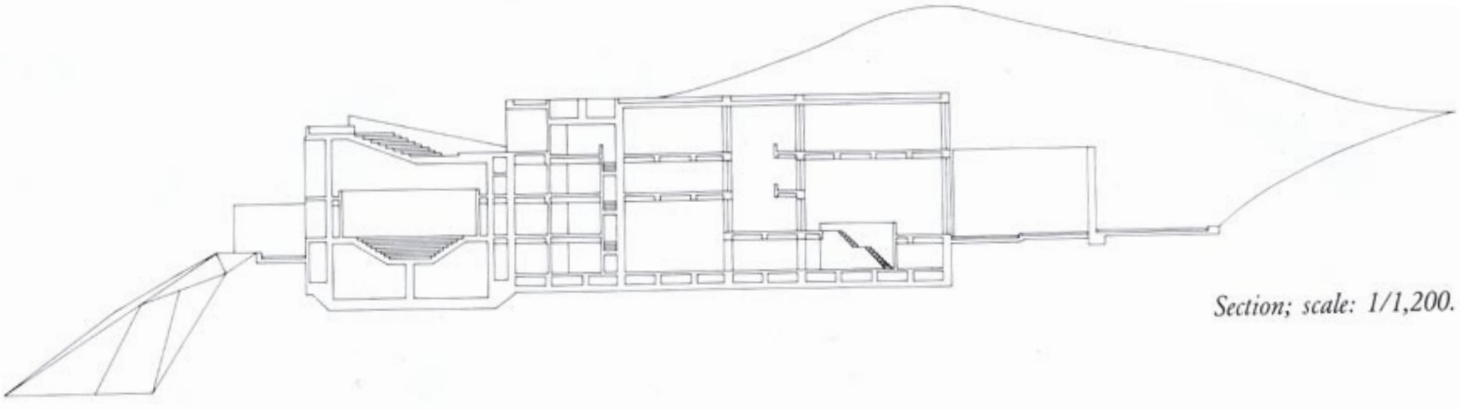
First floor; scale: 1/1,200.



Lower Level Floor

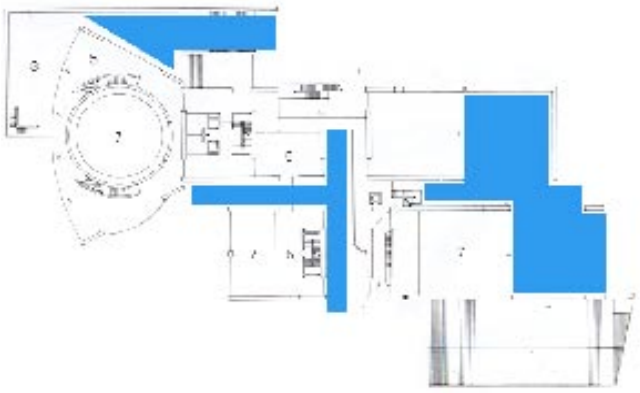


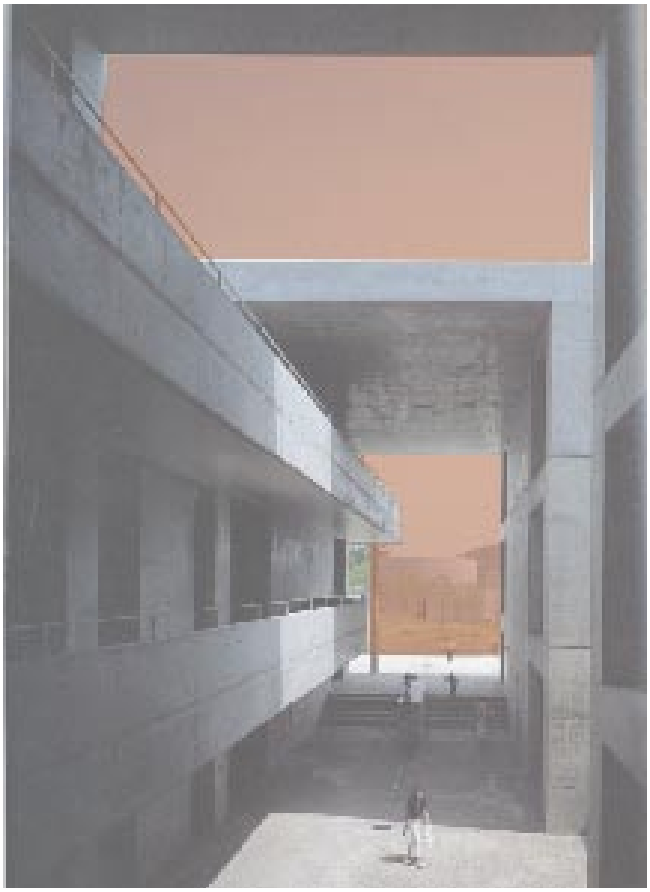
Section.



Section; scale: 1/1,200.

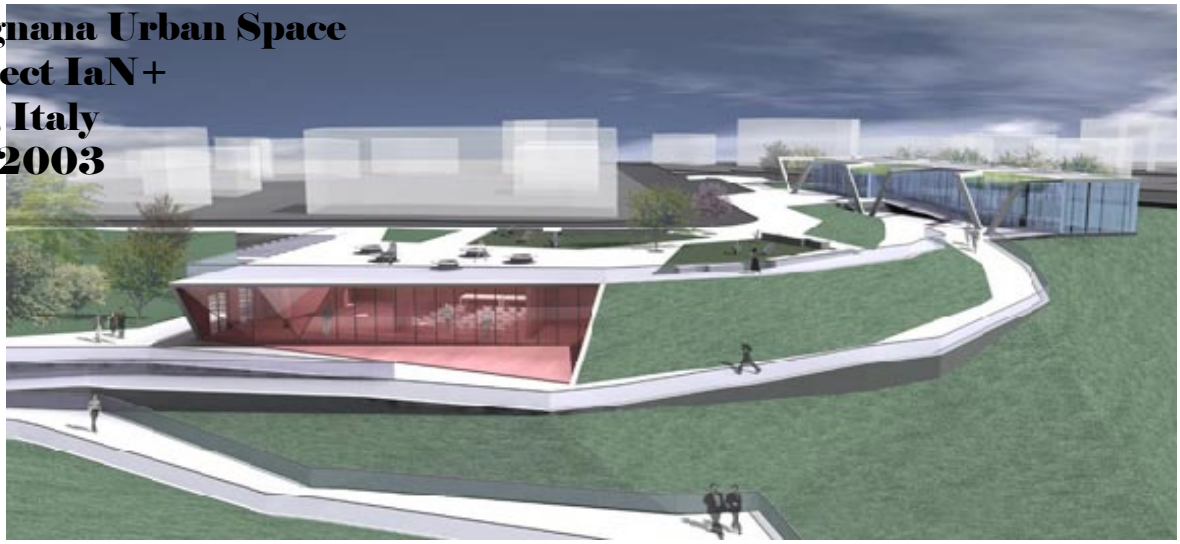
Ando creates a vast variety of views in many ways throughout the building. He manipulated the levels of the building along with thoughtful design of the many stairways, which will be helpful in the thesis study. Ando also creates large voids within the walls and small plazas that allow a linkage between buildings and nature. Some of the walls stand alone, but seem as if they are part of the building. This space begins to create a sense of enclosure within the exterior. Ando says he did this so "Nature may penetrate into the depth of the buildings to communicate people with Nature at all places."[6] The building material choice give a sense of how Ando wanted you to experience the spaces. His use of concrete creates a clear distinction of the spaces and what he wanted to reveal to the exterior. Though the long path is a key component to Ando's concept of connectiong the two buildings and creating a sense of nature and place it could have been a smaller span and still have the same feel. The distance between the two buildings is very long if someone needed to move from one space to the other with artwork or just in general.



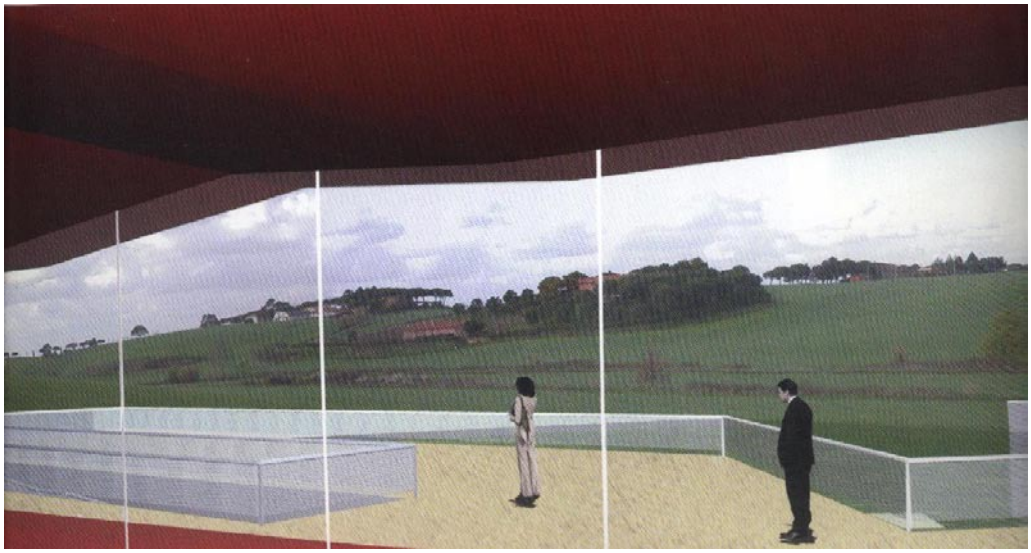


Ando's exploration into the collaboration of nature and architecture influences the thesis study. He creates walls that are meant to suggest invisible roofs and walls. In other areas he creates voids within the walls to allow nature to flow into the building. The images start to explore the voids and purposeful walls that create the connection between the two.

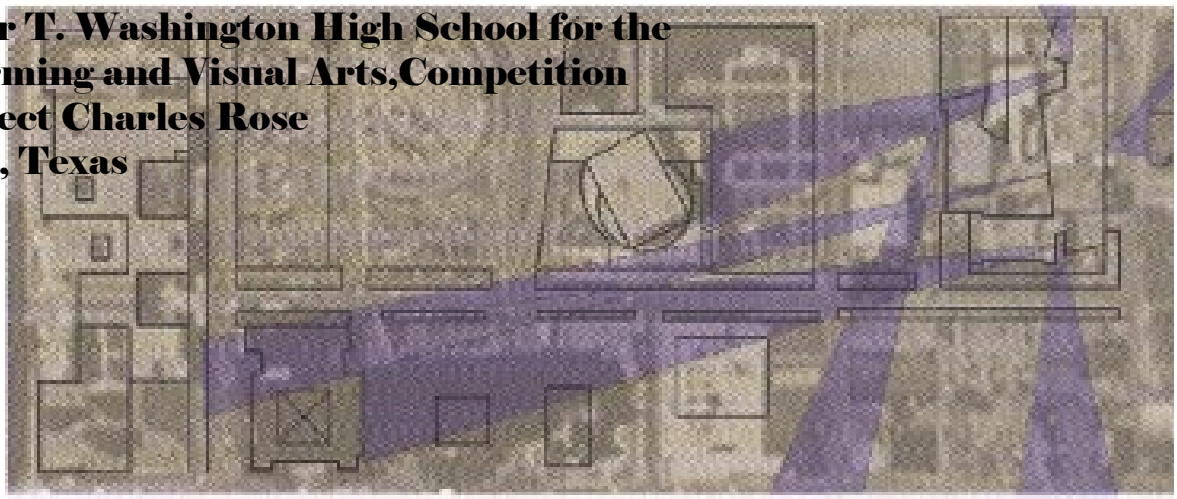
Falcognana Urban Space
Architect IaN+
Rome, Italy
2001-2003



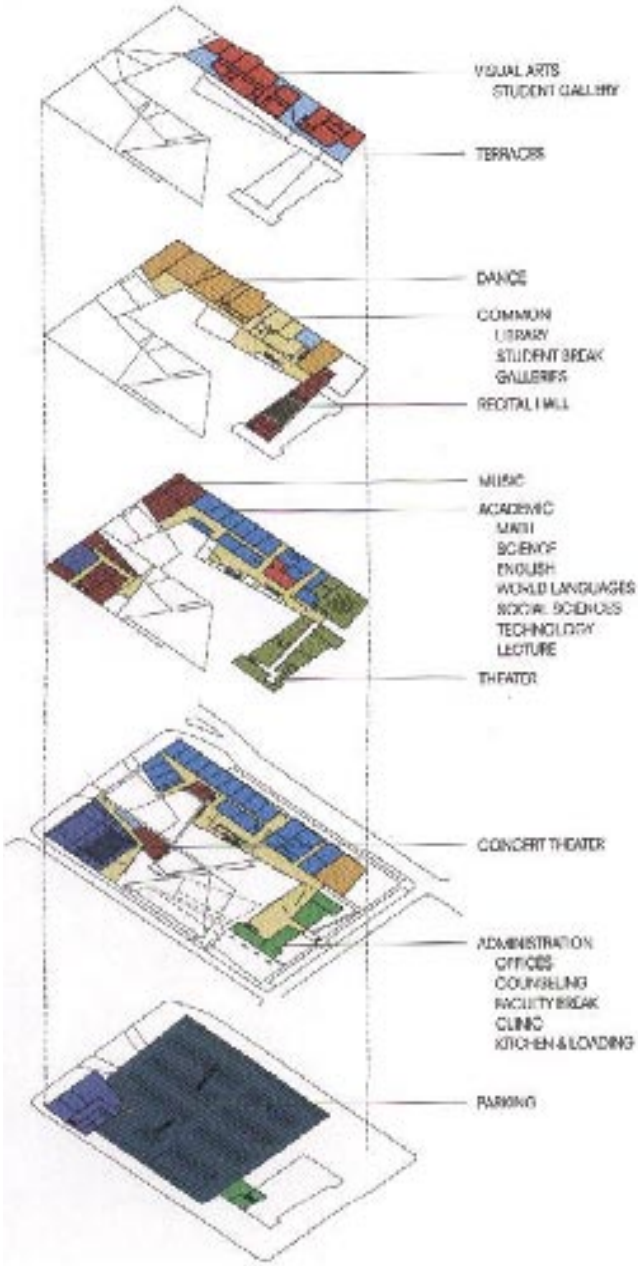
Falcognana is a working-class suburb that developed around many agricultural concerns. This urban space was part of a revitilization and redevelopment of the suburbs. The site is between a mix of irregular, dense residential fabric and the Roman countryside, which has a great deal of topographic change.[10] The space is meant to merge an urban open space with leisurely activities for the residents. IaN+ designed the site to avoid disturbing the natural conditions as much as possible while merging the countryside with the residential elements. The program would divide the slope into three levels that would consist of sports and open air activities on the highest, the middle level designed for community spaces, and the lowest level will be for parking and promenade. The building material also takes the connections the building makes with its context into consideration. The walls that are within the earth are “green walls”, which is a system of reinforced concrete pots filled with soil and vegetation, and the walls that are exposed are constructed of concrete and glass to reflect its residential fabric.[11] The design also incorporates ramps throughout that create a connection with the sloped topography that is designated for the visitor to move about the space. This allows the architect to choose where the visitor walks and creates a series of views that can create a certain experience throughout.



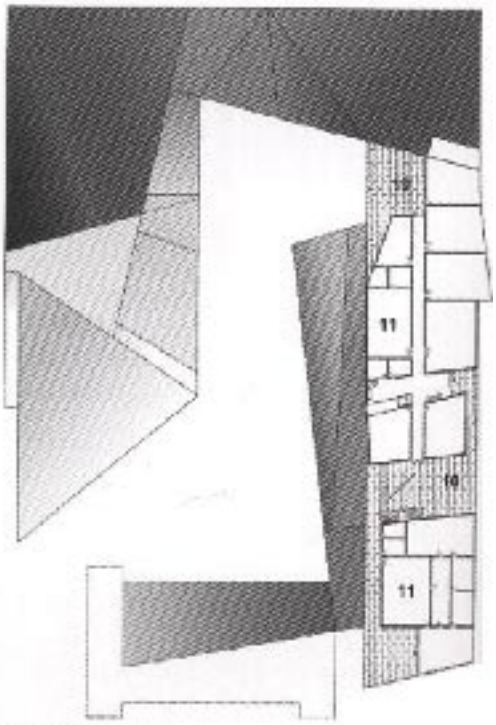
Booker T. Washington High School for the Performing and Visual Arts,Competition
Architect Charles Rose
Dallas, Texas
2001



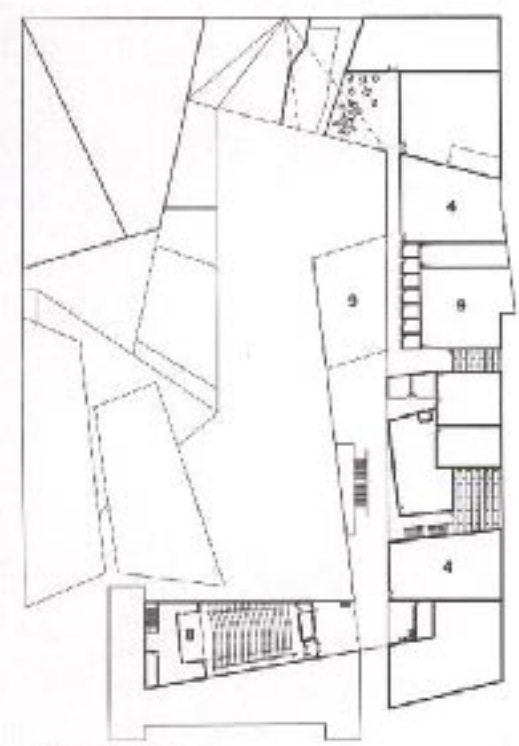
Views of downtown from site



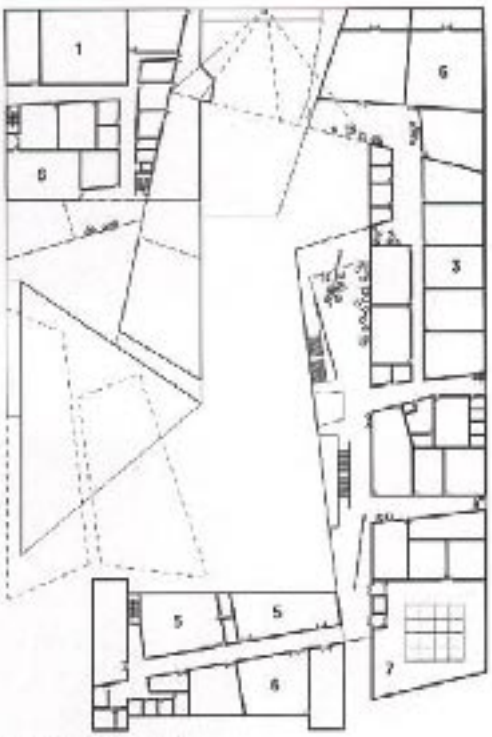
This Performing and Visual Arts school is located within the downtown Dallas Arts District. Though the program is a Performing Arts school and not a venue, it will still be helpful in the study. This design was from a competition for an expansion to the school that would incorporate the existing historical building. Charles Rose's design merged the roofscape with the courtyard, which helped to incorporate the building elements with the landscape elements. The firm also thoughtfully angled walls and placed glass to force views to specific areas. The building creates a horseshoe shape with a courtyard in the middle which helps connect the interior with the exterior. The architect also created a pavilion type structure in the space where the horseshoe does not exist, which helps to enclose the space within the middle but since it is not a solid feature it also creates a viewport.



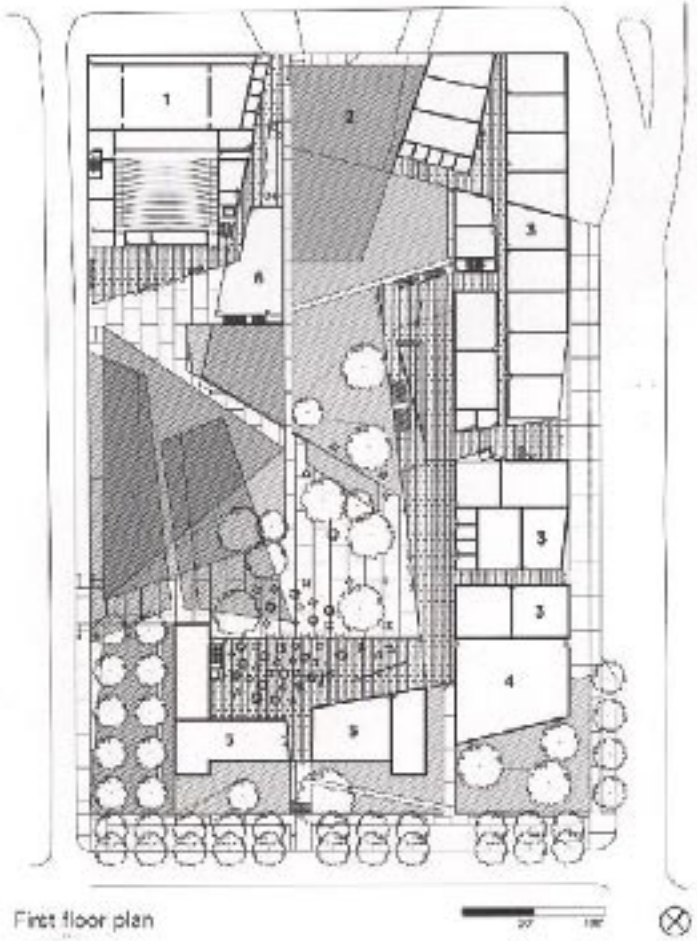
Roof plan



Third floor plan



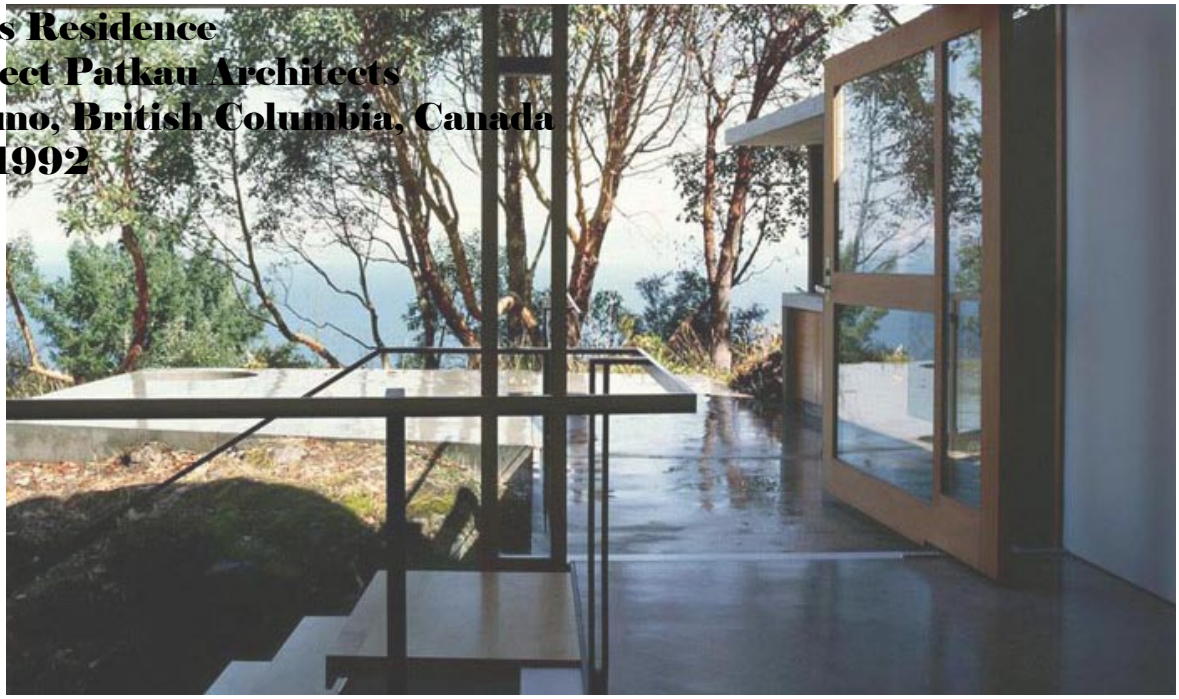
Second floor plan



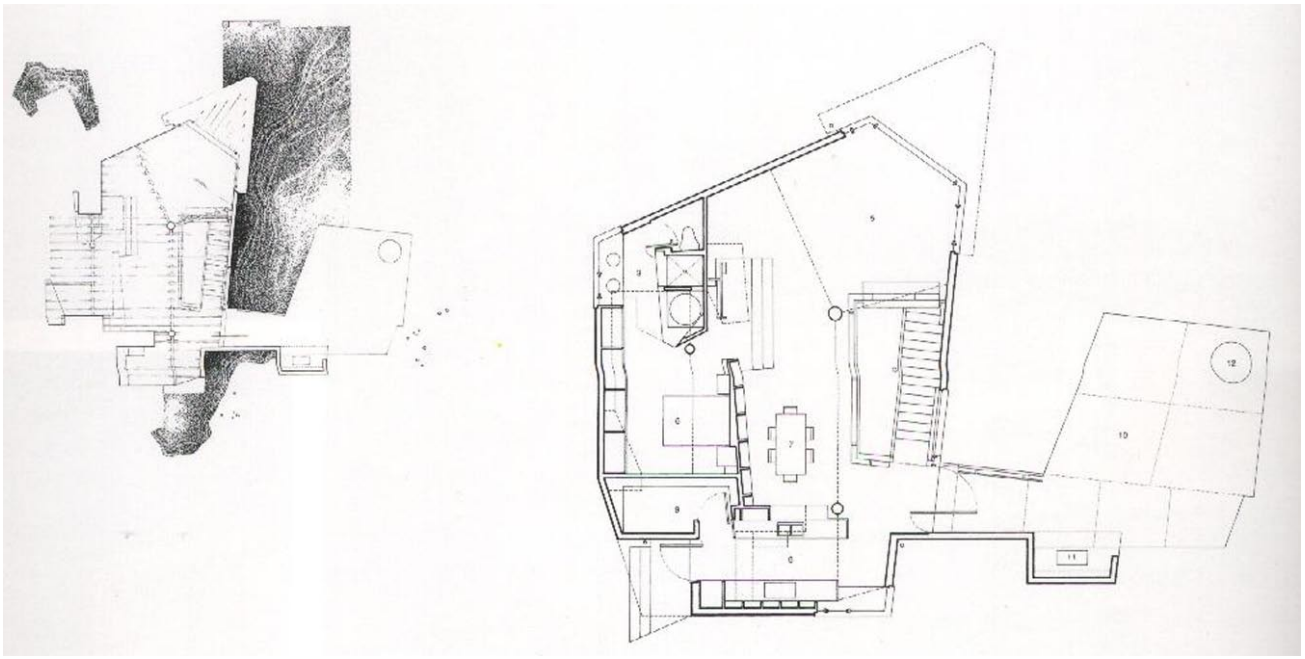
First floor plan

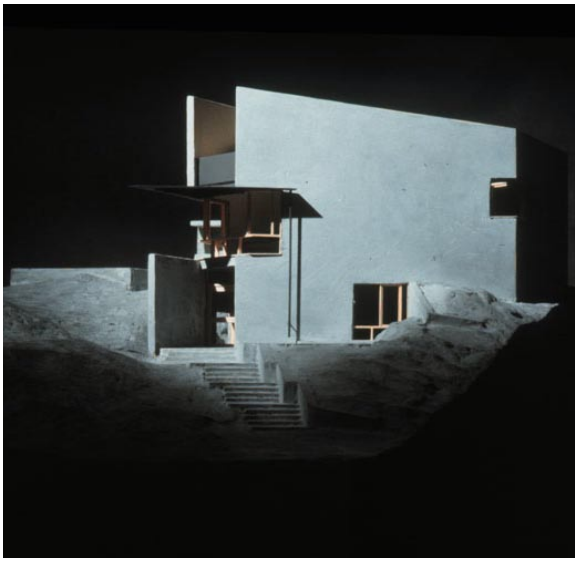
1 Concert theater
2 Outdoor theater
3 Academic spaces
4 Dance
5 Administration
6 Music
7 Theater
8 Recital hall
9 Common areas (library, student book, galleries)
10 Terraces
11 Visual arts

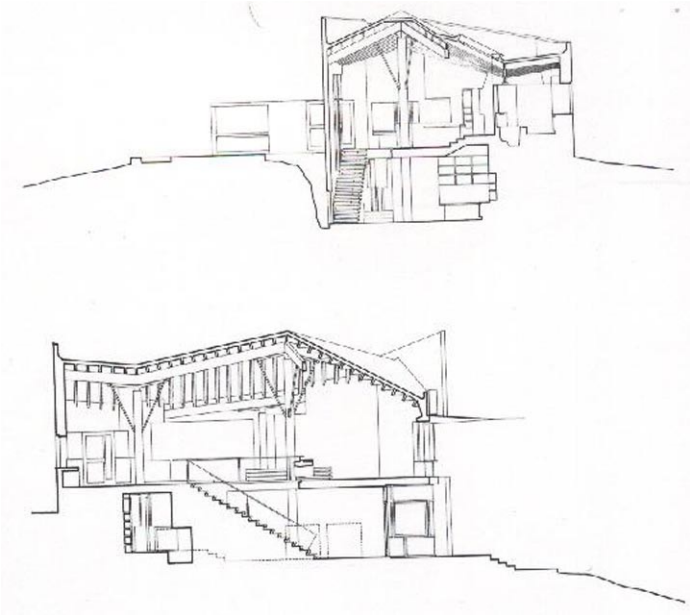
Barnes Residence
Architect Patkau Architects
Nanaimo, British Columbia, Canada
1990-1992



The Barnes Residence creates a topographical theme in the architectural promenade where the site sits between two rock outcroppings.[12] The base of the building along with the parking terrace are at a much lower elevation than the living room which is on the canopy level. The placement of glass also creates a strong connection between the interior and exterior. The glass is placed in spaces that expose the true nature of the site, for example the window that exposes the rock that the architects had to work around to place the building (pictured in the bottom left). The way that the landscape was kept in its raw state adds that much more of a connection to the site. The site was not modified to allow the building to be placed comfortably upon the site; the building was altered to allow the site to stay in its nature state. Patkau Architects uses materiality to reflect the topography theme by using stucco-clad walls that are placed in precise ways to fit between, over, and above the rocks. The interior of the house also reflects the exterior, especially a forest and its canopy, by polishing concrete columns with metal diagonal braces that are supporting the roof.[13]

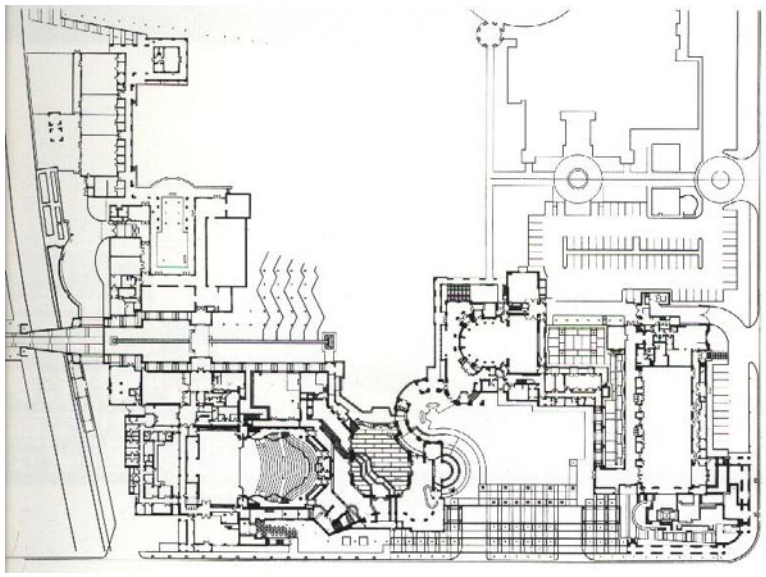


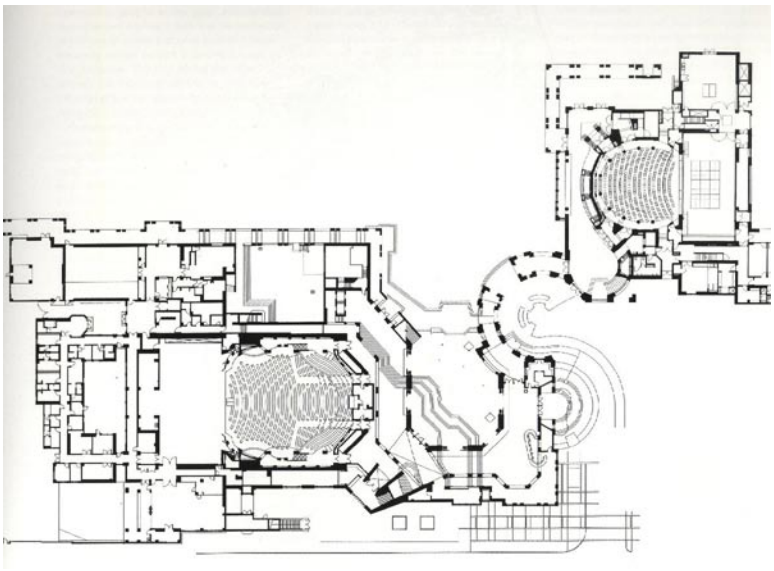


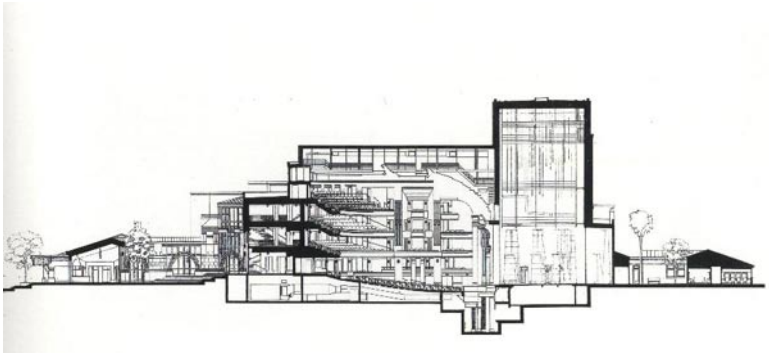


Center for the Performing Arts
Architect Moore Ruble Yudell
Escondido, California
1994

The Center for the Performing Arts was designed in the Mission Style. The Center houses a 1,532 seat lyric theatre, 400 seat community theatre, art centre with museum, studios and small library, and conference center. The large theatre was placed at the main intersection in order for the fly tower to hold the corner as a focal point. The building is "woven together with more than a dozen courtyards and outdoor spaces of varying size and scale, each of the buildings participate in a richly composed sequence of arrival and movement through the Center." [14] The lobby space spills out to the courtyard, which is a large "outdoor room" at the heart of the building which is a celebrating its setting and spirit of place.[15] The exterior and interior relationship that the Center creates really helps with the building proposal and the connections that are trying to be made. This building really incorporates alot of gallery/ gathering space throughtout the building and into the exterior.

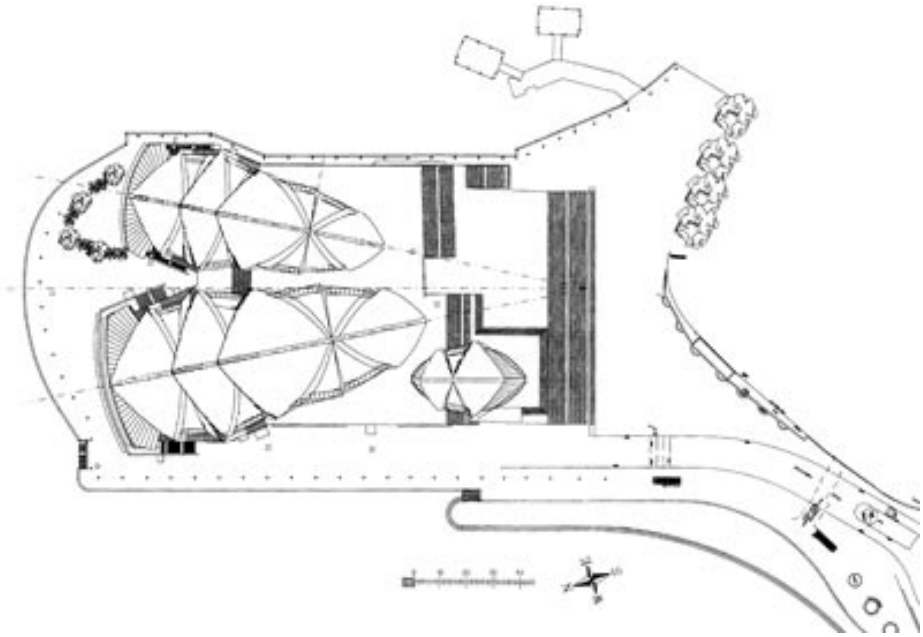


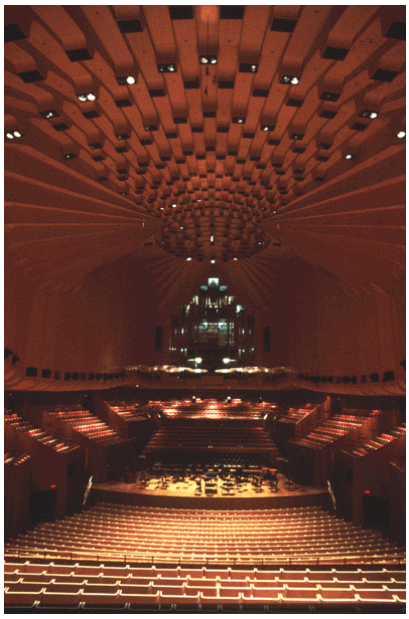


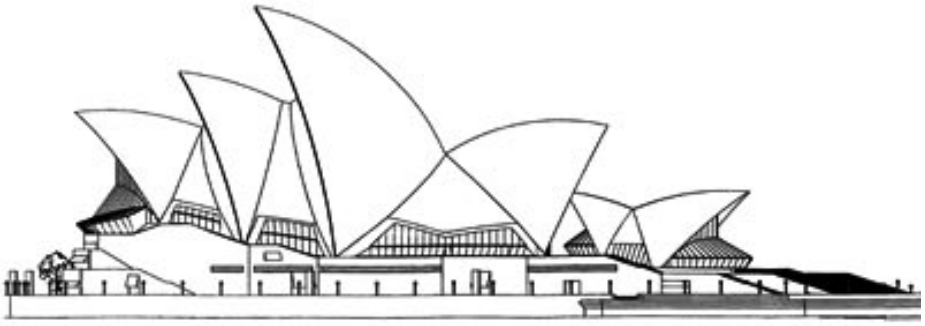


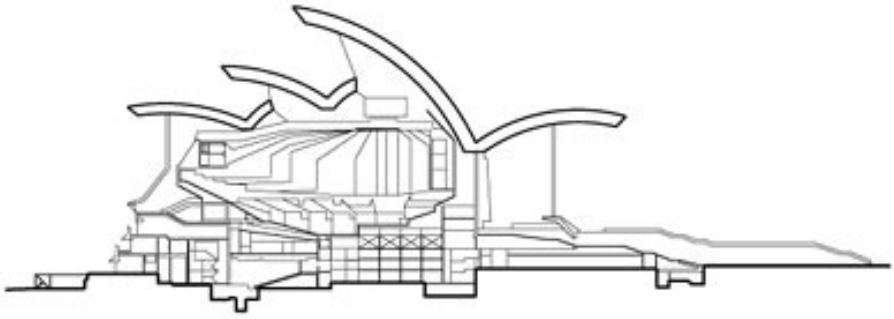
Sydney Opera House
Architect Joern Utzon & Hall Todd & Littlemore
Sydney, New South Wales, Australia
1957-1973

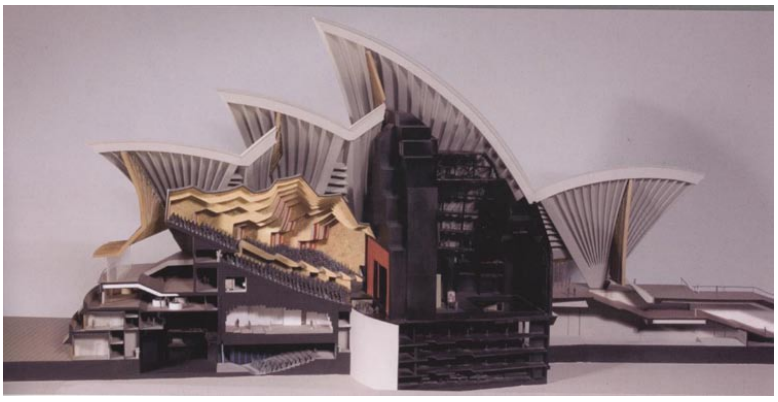
The Sydney Opera House is made up of around 1,000 rooms with five theatres, five rehearsal studios, two main halls, four restaurants, six bars and many souvenir shops. The five theatre spaces are the Concert Hall (2,679 seats), the Opera Theatre (1,547 seats), the Drama Theatre (544 seats), the Playhouse (398 seats), and the Studio Theatre (364 seats). The two largest performance spaces sit side by side on the platform, which made Joern Utzon's dramatic sculptural elevations possible. This only caused other problems with the conventional side and backstage spaces that were fixed by placing all of the preperations and secondary elements beneath the stage and left only the primary functions above. Timber was the main material choice for the interior. Timber was not only chosen for the good acoustical value, but also to provide a contrast against "heavy, monochrome, load bearing concrete of the podium and sails.



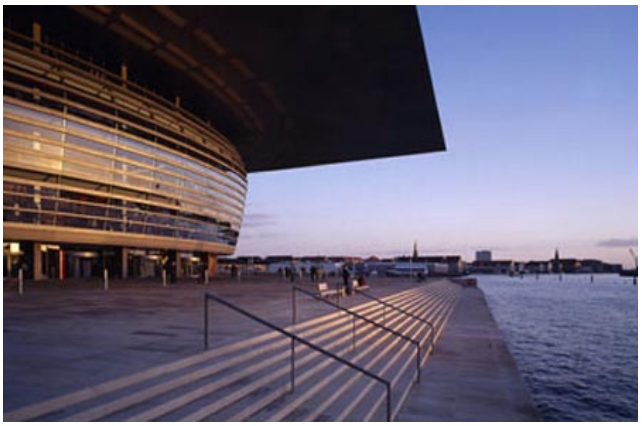




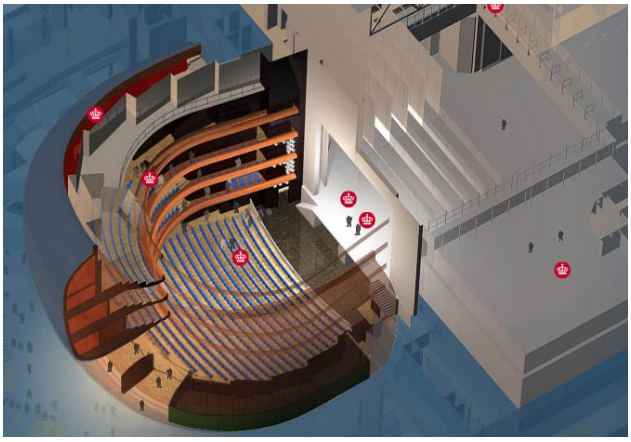


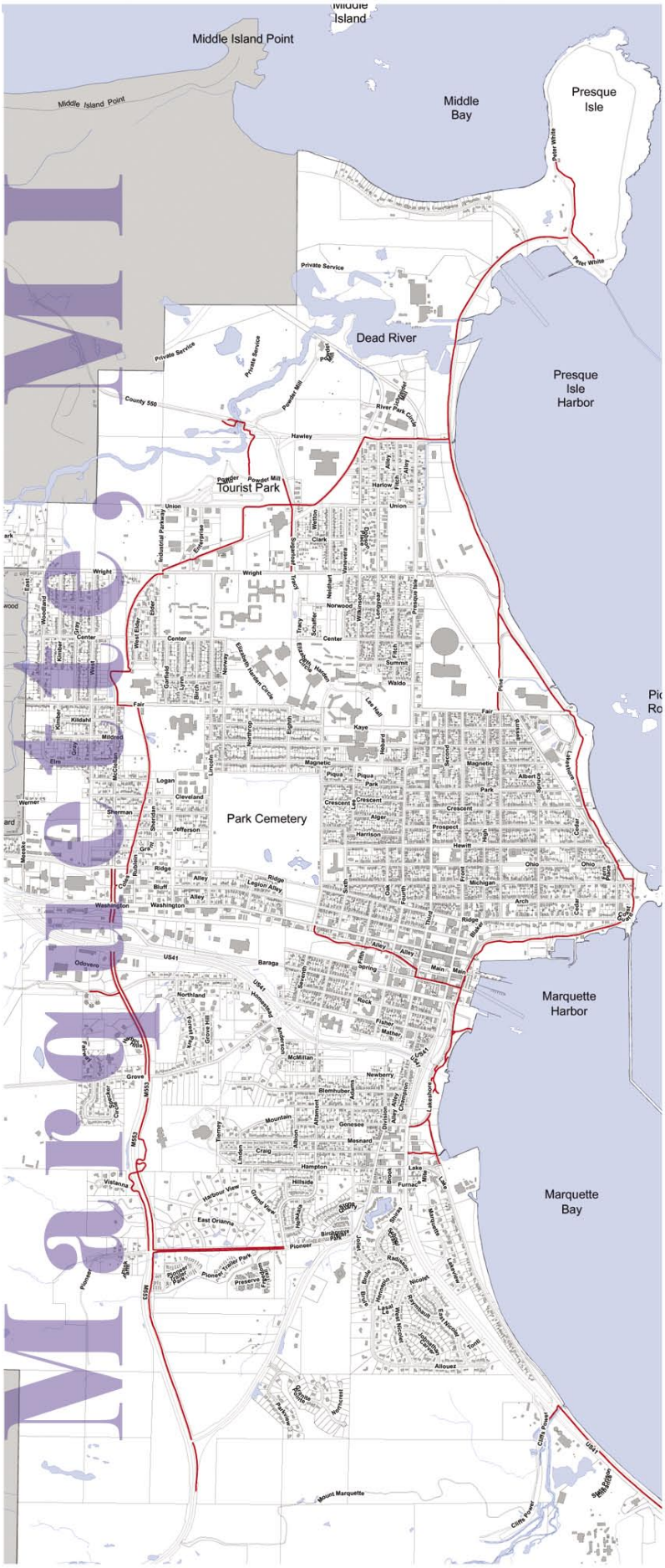


Opera in Copenhagen
Architect Henning Larsen Architects
Copenhagen, Denmark
2001-2004



The Opera theatre is located in the middle of the inner harbor, which allows the visitors to view the Copenhagen skyline. They dug canals to make the building look as if it were sitting upon an island not much bigger than the building and by doing this there was a need for bridges to access the site. This created a unique envirnoment to experience when you need to visit the space that would seperate it from most other buildings. The building houses six different stages with the largest seating 1,641, rehearsal rooms for choir, orchestra, soloists, and ballet, as well as 81 dressing rooms, workshops, and administration. The building is around 41000 square meters with 14 floors, 5 of which are underground. This building was designed to show many relationships through views not only within the building, but also the elements in the exterior. The circulation within the building allows for one to watch what is going on within, but also to look to the outside at the surrounding water and city.





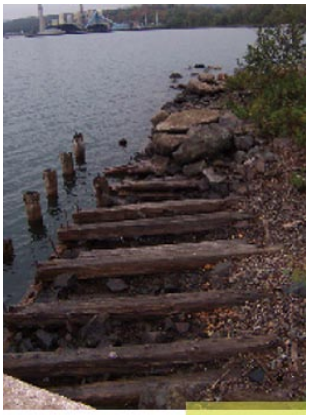
Marquette, MI is located in the northern part of the Upper Pensisula and is the second snowiest city in the contiguous United States.[7] It is located right along Lake Superior and is a major port primarly for iron ore. The city population is estimated at 20,714[8] and on the rise. The city would like to become a vibrant destination year round, but currently is not due to the intense winters.

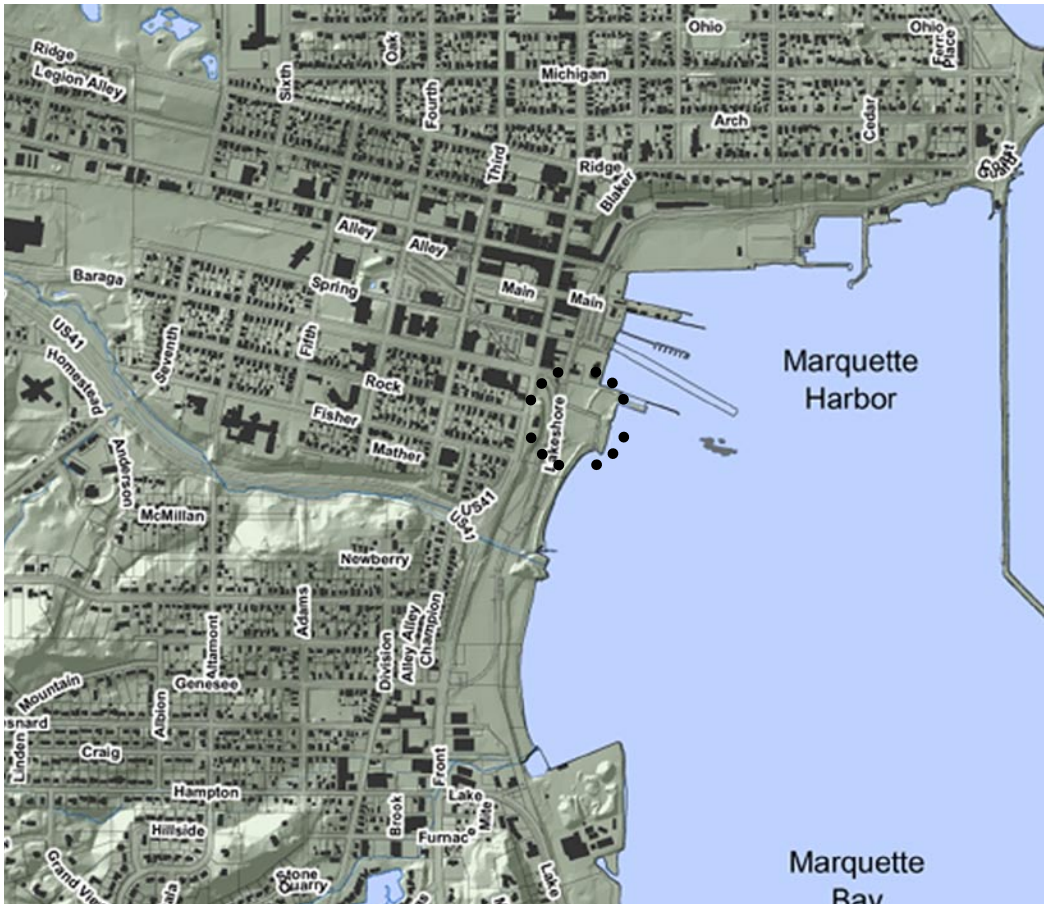
Baraga & Lakeshore

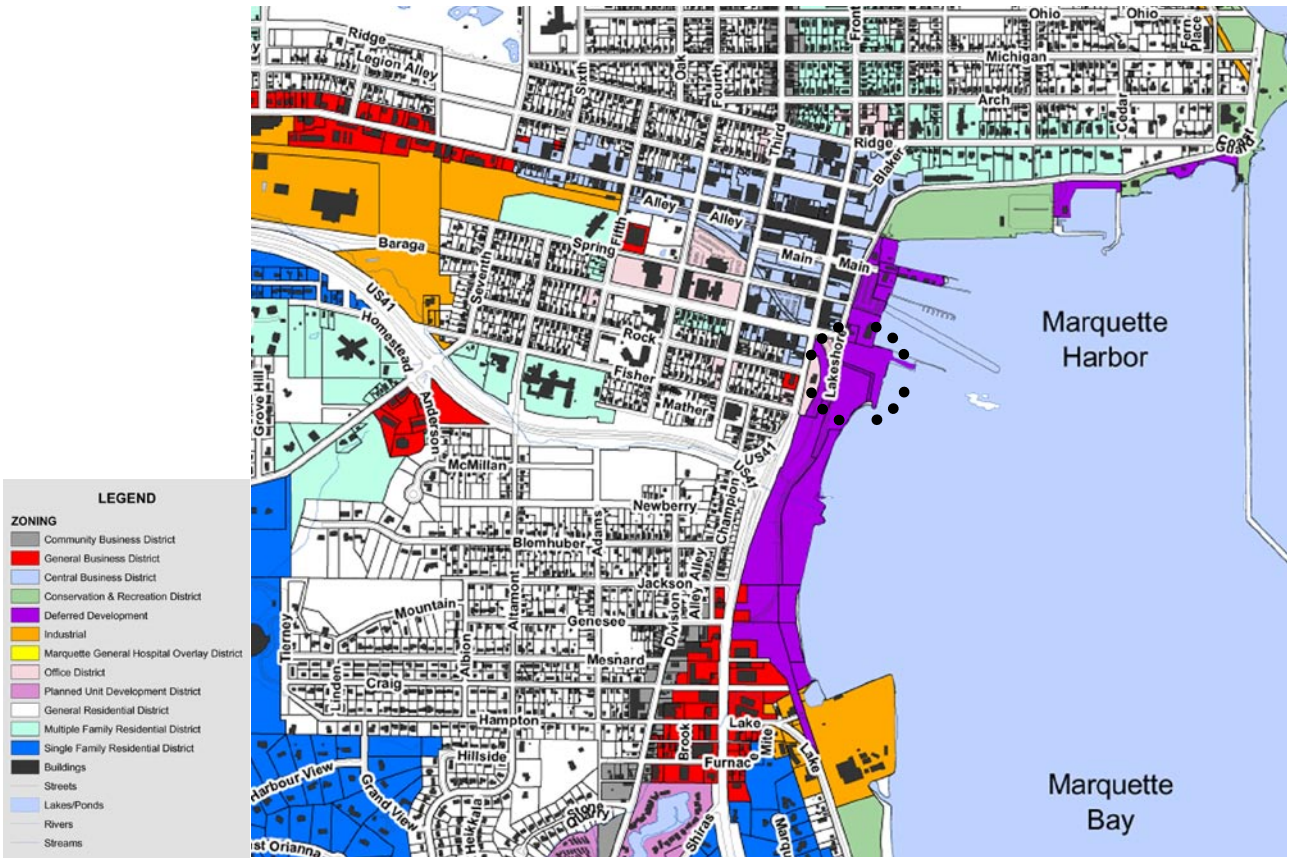
The site at Baraga Avenue and Lakeshore Boulevard in the Lower Harbor is situated on the Marquette Bay. The site is to the south of the old Ore dock and east of the downtown. The location is ideal because it has a connection to the downtown and the water and will help with the relationships that are being studied within this thesis. Most of the change in topography is within the center and provides about an 18 foot variation. The north and east sides of the topography slope are steeper than the other sides. This is a benefit because the side that faces the water could allow access to the building from the lower level. The entrance of the building will most likly be on the west part of the site because that is near the existing street and pedestrian walkways, and this allows you to enter a level above where you might enter on the opposite side. Digging a bit further into the ground and building up the site are possibilities to create a more dramatic effect, also the size of the site is not too constricting.

Historical Past

Marquette's Lower Harbor was used for industrial purposes in the 1800's and early 1900's, which included multiple docks for importing and exporting of goods. Some are still intact since being abandoned in the mid 1900's. There are also traces of the railway that use to run through the site.




Ridge
Legion Alley
Sixth
Oak
Fourth
Michigan
Ohio
Ohio Farr Place
Arch
Cedar
Third
Ridge
Blaker
Alley
Alley
Baraga
Spring
Main
Main
US41
Homestead
Seventh
Fifth
Rock
Fisher
Mather
Lakeshore
Anderson
McMillan
US41
Newberry
Adams
Division
Alley
Champion
Mountain
Genesee
Albion
Craig
Front
Lake
Hampton
Hillside
Brook
Furnace
Stone Quarry
Marquette Harbor
Marquette Bay


LEGEND
ZONING
Community Business District
General Business District
Central Business District
Conservation & Recreation District
Deferred Development
Industrial
Marquette General Hospital Overlay District
Office District
Planned Unit Development District
General Residential District
Multiple Family Residential District
Single Family Residential District
Buildings
Streets
Lakes/Ponds
Rivers
Streams
Ridge
Legion Alley
Sixth
Oak
Fourth
Michigan
Ohio
Ohio Farr Place
Arch
Cedar
Third
Ridge
Blaker
Alley
Alley
Baraga
Spring
Fifth
Main
Main
US41
Homestead
Rock
Fisher
Mather
Lakeshore
Anderson
McMillan
US41
Newberry
Blomhuber
Adams
Division
Alley
Champion
Jackson
Mountain
Genesee
Albion
Craig
Mesnard
Hampton
Hillside
Brook
Furnace
Lake
Front
Harbour View
Grand View
Marquette Harbor
Marquette Bay


Streets
Proposed Site
Park
Parking Lots
Bike Path
Topography 612-692 Ft.
Topography 712-792 Ft.
(Contour Interval is 20 Feet)


BARAGA AVENUE
SOUTH RIGHT-OF WAY
1.89'
N14°50'23"E
LENGTH = 149.06'
DELTA = 08°49'56"
RADIUS = 967.00'
CHORD = N10°25'25"E 148.92'
8 FT. WIDE GREEN SPACE/
UTILITY EASEMENT
PARCEL NO.4
FOUNDERS LANDING
SEE SHEET 1 OF 4
FOR PARCEL BOUNDARY
PARCEL NO.3
PARCEL P.O.B.
BikePath
Contours_Site
SanitarySewerCleanOuts
FireHydrants
SanitarySewerManholes
StormCB
StormMH
WaterShutOff
WaterShutOff
WaterValves
SanitarySewerLines
StormPipes
WaterMains
0 25 50 100 Feet
N
W E
S

Picture taken while on the site.

Picture taken while looking onto the site.

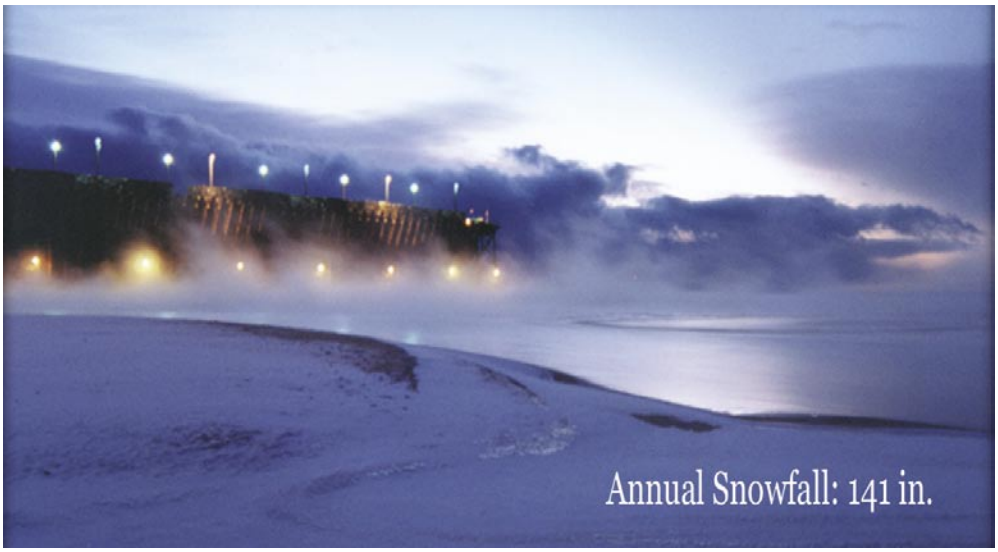
Panaromic Views


Precipitation 2.6 in
January
High 19.7
Low 3.3


Precipitation 2.79 in.
April
High 45.8
Low 26.9


Precipitation 3.66 in.
October
High 50.9
Low 34


Precipitation 3.01 in.
July
High 75.2
Low 52.5


Annual Snowfall: 141 in.

Program Summary

Most cities have a designated area that is considered their “downtown” regardless if they are large or small. There is always an area that is in some way recognizable as the center. The ability to add on to the downtown atmosphere while not necessarily connecting directly to the downtowns’ built form is both a challenge and an oppurtunity. Creating a Performing Arts Center in the Lower Harbor of Marquette, which is located along the water and to the east of the downtown, creates the opportunity for new connections. The downtown has no true connection to the waterfront due to its lack of programs or building frontage directly on the water. This building program not only responds to the City’s Master Plan which addresses specific needs within the local community, but will also create more circulation out of the contained downtown. The building is to be designed to create a connection between the waterfront and the downtown area with its placement on the site and also by creating an open connection to its natural context. The specific program of a Performing Arts Center creates different needs for different spaces, especially with respect to natural lighting. Specifically, some program spaces could easily be placed below ground, while others will require a more direct connection to the exterior. The program will include 3 indoor theatre spaces, in which all will have different interactions with the site. Throughout the space there will be many gathering spaces to allow interaction of the visitors while they have the oppurtunity to explore the buildings multiple gallery spaces.

The exterior programming of the site is also an important feature of the design. The site will include features that will draw its inhabitants to the area even if they are not coming for a staged performance, such as a skating rink and sculpture garden that will include park like features. The exterior will also incorporate an outdoor ampitheatre that can be used during the summer. The site is designed to allow all activites that take place on the site to be a performance, including the visitors interactions.

Building A

Name	Size (sq. feet)	Number of Spaces	Sub-total (sq. feet)
Theatre A			
Seating space (500 seats)	6,000	1	6,000
Stage space	1,200	1	1,200
Fly space	500	1	500
Lobby - Theatre	1,500	1	1,500
Restrooms (lobby)	250	2	500
Restrooms (backstage)	250	2	500
Group Dressing Rooms	300	2	600
Solo Dressing Rooms	70	4	280
Coat Check	300	1	300
Administration Office	300	1	300
Refreshment Bar	500	1	500
Ticket Office	400	1	400
Lighting	400	1	400
Sound	400	1	400
Mechanical Space	1,000	1	1,000
Subtotal			14,380
Net/Gross Sq. Footage Allowance			2876
Theatre A Total			17,256
Entry			
Lobby - Building	1,500	1	1,500
Restrooms	250	2	500
Subtotal			2,000
Net/Gross Sq. Footage Allowance			400
Entry Total			2,400
Lounge			
Space	3,000	1	3,000
Restrooms	250	2	500
Balcony/Patio	300	1	300
Subtotal			3,800
Net/Gross Sq. Footage Allowance			760
Lounge Total			4,560
Choir Spaces			
Space	1,000	1	1,000

Storage	500	1	500
Restrooms	150	2	300
Subtotal			1,800
Net/Gross Sq. Footage Allowance			360
Choir Space Total			2,160

Instrumental Space

Space	1,700	1	1,700
Storage	700	1	700
Subtotal			2,400
Net/Gross Sq. Footage Allowance			480
Instrumental Space Total			2,880

Classrooms

Space	600	8	4,800
Restrooms	150	2	300
Subtotal			5,100
Net/Gross Sq. Footage Allowance			1,020
Classroom Space Total			6,120

Building A Total			**35,376**

Building B

Theatre B

Seating space (200 seats)	2,400	1	2,400
Stage space	800	1	800
Lobby - Theatre	800	1	800
Restrooms	250	2	500
Group Dressing Rooms	300	2	600
Solo Dressing Rooms	70	2	140
Coat Check	300	1	300
Administration Office	300	1	300
Refreshment Bar	500	1	500
Ticket Office	400	1	400
Lighting	200	1	200
Sound	200	1	200
Mechanical	700	1	700
Subtotal			7,840
Net/Gross Sq. Footage Allowance			1,560
Theatre B Total			9,408

Entry

Lobby - Building	1,500	1	1,500
Restrooms	250	2	500
Subtotal			2,000
Net/Gross Sq. Footage Allowance			400
Entry Total			2,400

Gallery

Enclosed to exterior	4,000	1	4,000
Exposed to exterior	500	1	500
Storage	500	1	500
Restrooms	250	2	500
Subtotal			5,500
Net/Gross Sq. Footage Allowance			1,100
Gallery Total			6,600

Cafe

Dining Space	2,500	1	2,500
Kitchen	1,500	1	1,500
Storage	700	1	700
Dishwashing	500	1	500
Restrooms	250	2	500
Patio	500	1	500
Subtotal			6,200
Net/Gross Sq. Footage Allowance			1,240
Cafe Total			7,440

Dance Spaces

Spaces	1,500	3	4,500
Restroom	250	2	500
Changing Room/Locker Room	400	2	800
Gathering Space	400	1	400
Subtotal			6,200
Net/Gross Sq. Footage Allowance			1,240
Gallery Total			7,440

Theatre B Total

33,200

Theatre A+B Shared Space

Scene Shop	1,500	1	1,500
Costume Room	700	1	700
Greenroom	700	1	700
Storage	1,500	1	1,500
Gallery	2,000	1	2,000
Gallery Storage	1,000	1	1,000
Subtotal			7,400
Net/Gross Sq. Footage Allowance			1,480
Theatre A+B Shared Space Total			8,880

Shared Space Total **8,880**

Building C

Theatre C

Seating space (150 Seats)	1,800	1	1,800
Stage space	600	1	600
Lobby	2000	1	2000
Restrooms	250	2	250
Group Dressing Rooms	300	1	300
Solo Dressing Rooms	70	1	70
Coat Check	300	1	300
Administration Office	300	1	300
Refreshment Bar	500	1	500
Ticket Office	400	1	400
Storage	400	1	400
Lighting	200	1	200
Sound	200	1	200
Subtotal			7,570
Net/Gross Sq. Footage Allowance			1,514
Theatre C Total			9,084

Theatre C Total **9,084**

Outdoor Space

Skating Rink	4,000	1	4,000
Amphitheatre	2,000	1	2,000
Sculpture Garden	10,000	1	10,000
Plaza	5,000	1	5,000

Parking	115,500	1	115,500
Outdoor Total			136,500
Grand Total			**221,240**

Theatre Seating - A

A. Quantities required
1. Space capacity - 500 seats
2. Number of Units - 1
3. Net Square Feet – 6,000 sq'
4. Total Net Area – 6,000 sq'

B. Purpose/Function – This theatre is the largest of the three theatres that will house 500 people and will function as a full scale performing arts theatre. The seating area of the theatre will be submerged under ground and will not be visible to the exterior.

C. Activities - The audience will be experiencing a performance from their seats.

D. Spatial Relationships - The theatre will be 3 levels to accomodate a balcony for seating as well as a lighting and sound box. The floor in the seating area will be sloped to allow viewing for all.

E. Qualitative Considerations - The theatre will have no natural light from the exte rior.

F. Equipment/Furnishings - The theatre will have the usual seating arrangement with an advanced lighting and sound systems that are common in a performing arts theatre.

G. Behavioral Considerations - No, this theatre is meant to be hidden beneath the ground.

H. Structural Systems - long span is required.

I. Mechanical/Electrical Systems - The roof will need to meet standards that allow it to be submerged under the ground. Heavy ventilation requirements for an assembly space.

J. Site / Exterior Environment Considerations - The landscape will come up over the roof of the building with the possiblity of some areas that are walked apon being bare to show the connection of the landscape to the architecture in this moment.

Theatre Stage/Support/Fly Space - A

A. Quantities required
1. Space capacity - 50
2. Number of Units - 1
3. Net Square Feet – 1,000 sq'
4. Total Net Area – 1,000 sq'

B. Purpose/Function – The stage will be the main focal point within the theatre. The fly space above will putrude from the ground above and be transparent to allow the visitors on the exterior to see the pulley system that changes the scenes. The fly space will also create the signage for the entire Performing Arts Theatre.

C. Activities - Where the performances take place as well as the storage for the scenes above the stage.

D. Spatial Relationships - If a section where cut through the area it would show the relationship the space creates above and below ground. The space will be very longitudinal and encounter different moments.

E. Qualitative Considerations - The lights from the performance should be able to be reflected up into the fly space and out into the exterior to create a focal point, but it is also important to block the natural light from reaching the stage.

F. Equipment/Furnishings - There will be a semi-permant divider between the stage and the "behind the scenes" area to allow set up for upcoming scenes without the audience knowing that anything is taking place. There will also be a cat walk above the stage, but it should be positioned to allow the lights to bounce up into the pertruding fly space.

G. Behavioral Considerations - The stage and back stage areas should be designed to allow the stagehands to get their duties completed without distrupting the performance.

H. Structural Systems - Span the length of the space so no columns are needed.

I. Mechanical/Electrical Systems - Electrical needs for the lighting, sound, and pulley systems in the theatre.

J. Site / Exterior Environment Considerations - The area around the fly space should be designed to allow it to be the main focus.

Theatre Seating - B

A. Quantities required
1. Space capacity - 200 seats
2. Number of Units - 1
3. Net Square Feet – 2,400 sq'
4. Total Net Area – 2,400 sq'

B. Purpose/Function – The theatre will be for a small audience and for a performance that can work with some natural light coming into the building. The performances will be smaller because there will be no fly space to allow storage for backdrops for scene changes.

C. Activities - A performance will be taking place on stage and the audience will sit in this area.

D. Spatial Relationships - This space will have a high ceiling to allow for lighting and sound systems, but will not have a second row balcony. The seating will be on a determined slope to allow everyone to see the performance comfortably.

E. Qualitative Considerations - There will be natural light that is designed into the seating area of the theatre. It will be up higher so it is not a main focus, but it will be present to allow the relationship from the interior and exterior.

F. Equipment/Furnishings - The typical seating in a theatre space with lighting and sound equipment. Possibly a system that will close off the glass features in case it is necessary to not allow the natural light within the space.

G. Behavioral Considerations - The glass/transparent material must be high enough on the wall, if not within the ceiling, to not completely distract the audience from the performance.

H. Structural Systems -Fairly long span so no columns are needed.

I. Mechanical/Electrical Systems - Heavy ventilation and electrical systems.

J. Site / Exterior Environment Considerations - standard

Theatre Stage/Support - B

A. Quantities required
1. Space capacity - 50
2. Number of Units - 1
3. Net Square Feet – 1,000 sq'
4. Total Net Area – 1,000 sq'

B. Purpose/Function – The stage will be the main focal point within the theatre. There will be no fly space within this theatre, but there will be enough space on the stage for the backstage to hold smaller scene changes.

C. Activities - Where the performances take place as well as the backstage area.

D. Spatial Relationships - The space will be about two stories high to allow the taller pieces for the performances to have adequate space.

E. Qualitative Considerations - The area should be well cooled so the performers and stage hands are at a comfortable temperature. The backstage should have enough room to organize props for the next scenes with comfortable room so they will not be noticed by the audience or cause a distraction to the performers.

F. Equipment/Furnishings - A simple curtain system to allow for scene changes.

G. Behavioral Considerations - The support space should be designed so that every thing is in a typical area so it is easier for the stage crew to be efficent.

H. Structural Systems - standard

I. Mechanical/Electrical Systems - standard

J. Site / Exterior Environment Considerations - standard

Theatre Seating- C

A. Quantities required
1. Space capacity - 150 seats
2. Number of Units - 1
3. Net Square Feet – 1,800 sq'
4. Total Net Area – 1,800 sq'

B. Purpose/Function – This theatre is the smallest of the three theatres and has hopes to have the greatest connection to the exterior. The seating will be facing to the stage, but past the stage is a glass facade over looking the water that the structure is suspended on.

C. Activities - The seating area for the performance.

D. Spatial Relationships - You will walk into the theatre up the stairs/ramp so you will gradually see the view that will be in front of you. The space will be much smaller than the previous to theatre spaces both in the plan and section.

E. Qualitative Considerations - The space should feel light through its material choices.

F. Equipment/Furnishings - seating for 150 seats, also lighting and sound systems.

G. Behavioral Considerations - The space should feel like it wants to be walked. The audience should not want to walk right to their seat, but over to the front of the seating area to get closer to the glass. There could possibly be a ramp that brings the audience around to the front and then they find their seat from the front of the seating area.

H. Structural Systems - Fairly long span as well as structure that will support the areas of the space that are suspended over the water.

I. Mechanical/Electrical Systems - HVAC system will be a top priority due to the glass in the space.

J. Site / Exterior Environment Considerations - Depending on how the building meets the ground, there will have to be a consideration of how the space is held if it is truly suspended over the water.

Theatre Stage/Support- C

A. Quantities required
1. Space capacity - 30
2. Number of Units - 1
3. Net Square Feet – 700 sq'
4. Total Net Area – 700 sq'

B. Purpose/Function – This space will be private to the performers and the stage hands that are involved.

C. Activities - The stage and the backstage support areas.

D. Spatial Relationships - The back wall of the space will come up above the roof line and the ceiling will meet it on a slant to accentuate the glass facade over looking the water. The support spaces with be off to the sides to allow the performance to have the exterior as the backdrop.

E. Qualitative Considerations - The space will need some extra heating due to the large glass and the climate of the area. The space should feel very light with the exterior and backdrop of the space being the water.

F. Equipment/Furnishings - There will be no needed backdrops for the space due to the main backdrop being the exterior so only the needed props for the per formances for the space.

G. Behavioral Considerations - Having a curtain system that will close of the glass if needed.

H. Structural Systems - The glass will have a special construction. Also looking into a glass that has protection against the sun and some sort of extra protection against the cold weather if that is possible.

I. Mechanical/Electrical Systems - seperate heating and cooling system within the area to help with climate control.

J. Site / Exterior Environment Considerations - The space will be over the water, which will need extra support depending on the final design of the component.

Lobby-C

A. Quantities required
1. Space capacity - 200
2. Number of Units - 1
3. Net Square Feet –2,000 sq’
4. Total Net Area – 2,000 sq’

B. Purpose/Function – The space where all the needed amentities are for the theatre.

C. Activities - Gathering space before entering the Theatre that is above.

D. Spatial Relationships - The space has stairs and ramps within the get to the main level. The above theatres base is set low to allow it to be seen, which cre ates change in the ceiling height.

E. Qualitative Considerations - The space is lined with the ramp that is going to the theatre above. The east facade is made of glass to allow the water to be seen sense the space is sitting above the water.

F. Equipment/Furnishings -

G. Behavioral Considerations - Having a curtain system that will close of the glass if needed.

H. Structural Systems - Fairly long span to allow for an open space. The building will be set above the water so the structure will have to be either cantilevered or on columns.

I. Mechanical/Electrical Systems - The heating and cooling will be an important factor due to the glass and extreme weather conditions.

J. Site / Exterior Environment Considerations - The building will be suspended over the water.

Restrooms-Public

A. Quantities required
1. Space capacity - 6 stalls
2. Number of Units - 14
3. Net Square Feet – 250 sq'
4. Total Net Area – 3500 sq'

B. Purpose/Function – There are many restrooms throughout the 3 main buildings so they are accessible for any visitor that comes for a specific function. All of these facilities will be a public space.

C. Activities - self explanatory.

D. Spatial Relationships - Keep the spaces out of the main gathering spaces. They should be able to be easily found, but not the main attraction.

E. Qualitative Considerations - Since these are more private spaces they should be wrapped into the building over being expressed on the exterior.

F. Equipment/Furnishings - toilets, sinks, trashcans

G. Behavioral Considerations - Each stall must be at least 3' by 5' and there must also be a handicap accessible stall, which is at least 5' by 5'. The sink area must also meet the ADA standards.

H. Structural Systems - standard.

I. Mechanical/Electrical Systems -Ventilation system.

J. Site / Exterior Environment Considerations - standard.

Restrooms-Backstage

A. Quantities required
1. Space capacity - 6 stalls
2. Number of Units - 6
3. Net Square Feet – 250 sq'
4. Total Net Area – 1500 sq'

B. Purpose/Function – These spaces will be private for the performers and the stage help in each of the three theatre spaces.

C. Activities - self explanatory.

D. Spatial Relationships - These spaces will be easily accessable from the stage and the dressing rooms to allow a performer to quickly use it between scenes.

E. Qualitative Considerations - These spaces will be a basic restroom since they are backstage. There will most likely be no natural light, but the materials should be soft so they space doesn't seem too unpleasent.

F. Equipment/Furnishings - toilets, sinks, trashcans

G. Behavioral Considerations - Each stall must be at least 3' by 5' and there must also be a handicap accessible stall, which is at least 5' by 5'. The sink area must also meet the ADA standards.

H. Structural Systems - standard.

I. Mechanical/Electrical Systems - standard.

J. Site / Exterior Environment Considerations - standard.

Group Dressing Rooms

A. Quantities required
1. Space capacity - 20
2. Number of Units - 6
3. Net Square Feet – 300 sq'
4. Total Net Area – 1800 sq'

B. Purpose/Function – A private space backstage that each theatre has.

C. Activities - A place for the performers to change and store their belongings.

D. Spatial Relationships - Standard room.

E. Qualitative Considerations - The space must have many places to store personal belongings as well as places to hang costumes. There should also be mirrors for easy convienence. The space could be seperate for seperate areas for each performer or left as a collaborative space to share.

F. Equipment/Furnishings - chairs, mirrors, cubby spaces, many closets, curtains for changing.

G. Behavioral Considerations - There will be a seperate male and female dressing room in each theatre. They do not have to be seperated by gender if not requested by the performers.

H. Structural Systems - standard

I. Mechanical/Electrical Systems - Good lighting within the rooms.

J. Site / Exterior Environment Considerations - standard

Solo Dressing Rooms

A. Quantities required
   1. Space capacity - 1
   2. Number of Units - 7
   3. Net Square Feet – 70 sq'
   4. Total Net Area – 490 sq'

B. Purpose/Function – A private space for one individual. There is at least one in each theatre space.

C. Activities - A changing room that is designed for one person, but suitable for others to be in the room.

D. Spatial Relationships - Standard room.

E. Qualitative Considerations - The space will be a bonus for the individual that gets the privlidge to use it. It should have a nice material palette and if possible have a window.

F. Equipment/Furnishings - mirror, chair, closet, couch

G. Behavioral Considerations - If there is a window in the room there must be a window treatment that creates privacy, but also is in sync with the design of the over all design.

H. Structural Systems - standard

I. Mechanical/Electrical Systems - Good lighting.

J. Site / Exterior Environment Considerations - standard

Theatre Receiving

A. Quantities required
1. Space capacity - 20
2. Number of Units - 1
3. Net Square Feet – 1000 sq'
4. Total Net Area – 1000 sq'

B. Purpose/Function – This space will be for loading and unloading props and sup plies needed for the two theatres in the main building.

C. Activities - Props and supplies will be loaded and unloaded in this space. There will be some available space to allow things to be left until an appropriate place is made or if the items are waiting to be picked up.

D. Spatial Relationships - The loading area will have a small road that has access from the main road. There will be an area dug out to avoid visibility from the road and the major walkways to the facility.

E. Qualitative Considerations - The space should be open enough that when moving props and the like it will not be damaged.

F. Equipment/Furnishings - Must have a loading dock that the truck can unload on to, as well as a ramp that leads up to the main doors, which should be large bay rolling garage doors. The area should also have high ceiling to allow for large prop access into the area.

G. Behavioral Considerations - The area must be secured when no one is present with either a camera or alarm system.

H. Structural Systems - standard

I. Mechanical/Electrical Systems - standard

J. Site / Exterior Environment Considerations - The area will be behind a hill or down a ramp so it is not visable to the street or where the main pedestrian traffic is.

Gallery Space

A. Quantities required
1. Space capacity - varies
2. Number of Units - 3
3. Net Square Feet – A-4,000; B- 1,000; C- 2,000
4. Total Net Area – 7,000 sq'

B. Purpose/Function – Public space that is for walking and gathering while viewing the works displayed.

C. Activities - A place for art work to be displayed

D. Spatial Relationships - High spaces that possibly view more than one level. In Building A, the gallery will be on multiple levels that are connected by ramps. The main wall will be glass and have a view of the water.

E. Qualitative Considerations - There will be large glass facades that will lighten the spaces and allow a connection between the interior and exterior. The space should also have the ability to spill into the exterior space.

F. Equipment/Furnishings - Clean finishes within the space to not deter from the display.

G. Behavioral Considerations - The space needs to flow that the exhibition will be used to its full capacity.

H. Structural Systems - standard

I. Mechanical/Electrical Systems - spot lighting for displays.

J. Site / Exterior Environment Considerations - The spaces within the exterior of the gallery spaces should be conditioned to allow the gallery spaces to escape into the exterior.

Dance Spaces

A. Quantities required

1. Space capacity - 25
2. Number of Units - 3
3. Net Square Feet – 1,500 sq'
4. Total Net Area – 4,500 sq'

B. Purpose/Function – A private studio that will be used to hold lessons that are offered to the community or for rehearsals for future performances in the theatres.

C. Activities - studio for dance practice.

D. Spatial Relationships - The space should have a high ceiling and be a rectangular shape.

E. Qualitative Considerations - The floor should be made for dance to prevent injuries. The two long walls should be one with mirrors and the other with a ballet barre. One of the three spaces will be an exterior dance space that will have a retractable covering in case of bad weather, but there will be no walls.

F. Equipment/Furnishings - Mylar mirrors, Wall Mounted Ballet Barre, Stereo System, Specific dance floor. The Exterior Dance Space will not have a dance floor, but will have a concrete floor or type of floor that is safe for all elements.

G. Behavioral Considerations - The room should be designed in a rectangular shape for a traditional space that is easy to practice in. The long wall with the barre should not have windows on it, but it would be a nice feature for one of the smallest windows to open up to the exterior.

H. Structural Systems - A system for the exterior dance space that can be moved over the top of the space, but does not have to always be there.

I. Mechanical/Electrical Systems - small sound system in the studios and a system routed to the exterior studio.

J. Site / Exterior Environment Considerations - The exterior dance space will have unique characteristics to have the capacity to allow dance, but also able to withstand the elements.

Lounge

A. Quantities required
1. Space capacity - 75
2. Number of Units - 1
3. Net Square Feet – 3,300 sq'
4. Total Net Area – 3,300 sq'

B. Purpose/Function – A public space that allows people to congregate and wait if they are in between an activity. The space could also be rented out for meetings.

C. Activities - A gathering space.

D. Spatial Relationships - The space will be accessable from a main entry lobby by a set of ramps that will take you through the space before you reach your destination. The lounge will be on the second level and open up to an exterior balcony that overlooks an interesting viewpoint.

E. Qualitative Considerations - The space will have great views to the exterior as well as to its surroundings within the building. The area will be designed for relaxation and the furniture will be arranged to allow planned meetings and informal gatherings with friends.

F. Equipment/Furnishings - tables and chairs, couches

G. Behavioral Considerations - The space will be very open to allow free access to the space and a welcoming feeling.

H. Structural Systems - standard.

I. Mechanical/Electrical Systems - standard.

J. Site / Exterior Environment Considerations - exterior balcony will be designed with its viewpoints in mind.

Cafe

A. Quantities required
1. Space capacity - 40
2. Number of Units - 1
3. Net Square Feet – 5,700 sq'
4. Total Net Area – 5,700 sq'

B. Purpose/Function – A space for visitors to relax and enjoy a meal. This cafe does not just have to be for those viewing a performance.

C. Activities - Dining space

D. Spatial Relationships - The space will have direct access to the exterior with a glass facade, as well as, an exterior dining space.

E. Qualitative Considerations - There will be a direct view to the exterior and the surrounding buildings and lake. The cafe will be located on the level that connects Building A and B together.

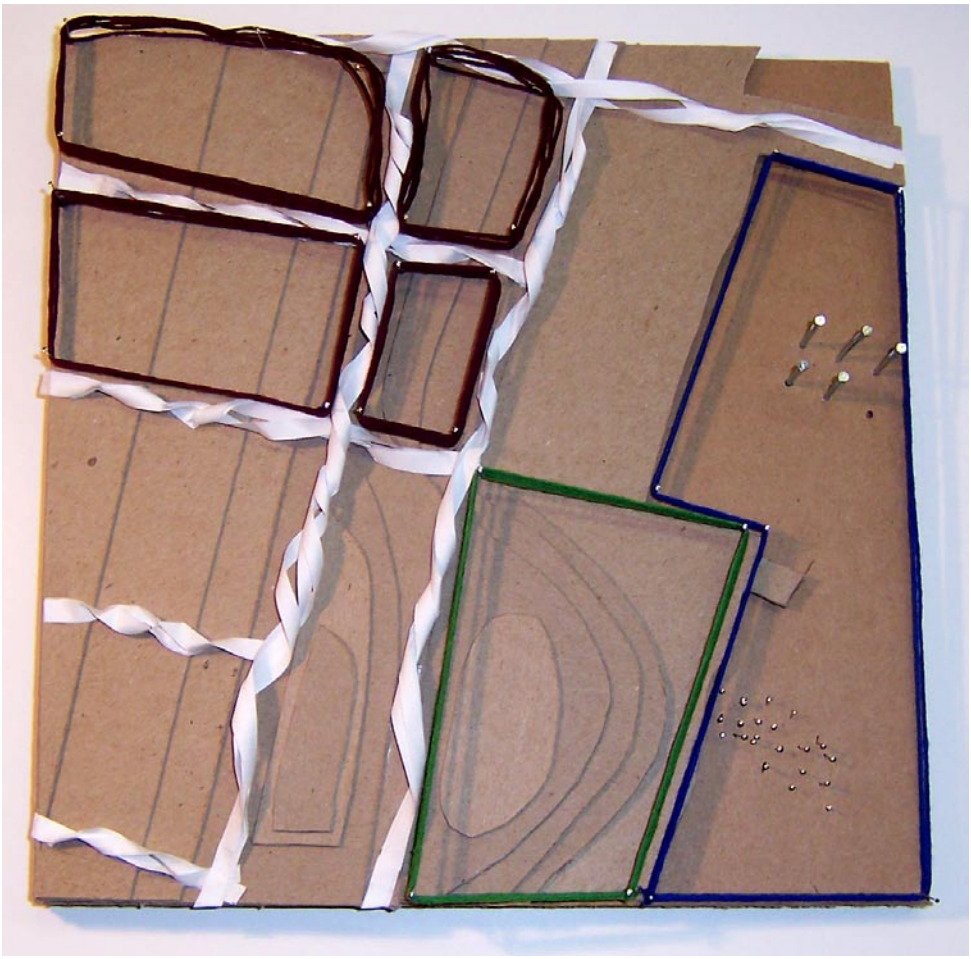
F. Equipment/Furnishings - typical dining items

G. Behavioral Considerations - The space will be easy seen and accessed, but is not a place for just relaxing, it will be ran as a restaurant.

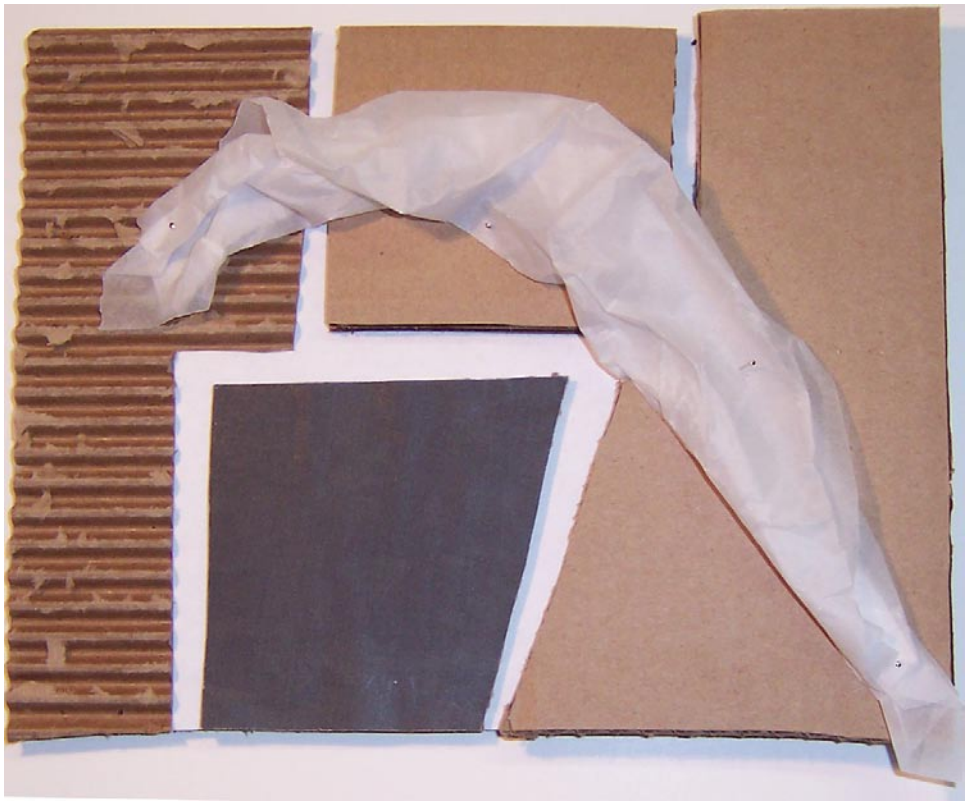
H. Structural Systems - standard.

I. Mechanical/Electrical Systems - Ventilation for the kitchen

J. Site / Exterior Environment Considerations - Will be located on an exterior wall and have an exterior dining space.

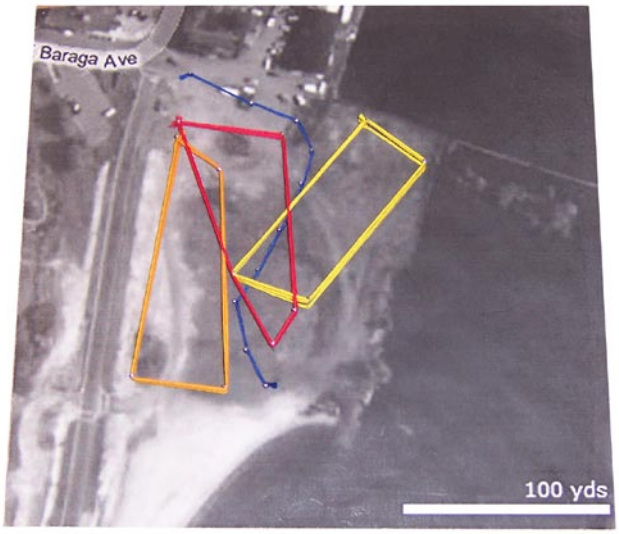


This was the first study model with an overview of the area, with the city in red, the site in green, and the water in blue. The circulation is in white and the detail of where topography lies is also included, this is all represented to get a general starting point of what the conditions are.



This model represents the relationship between the city, site, and water, with which the design wants to create a strong connection.

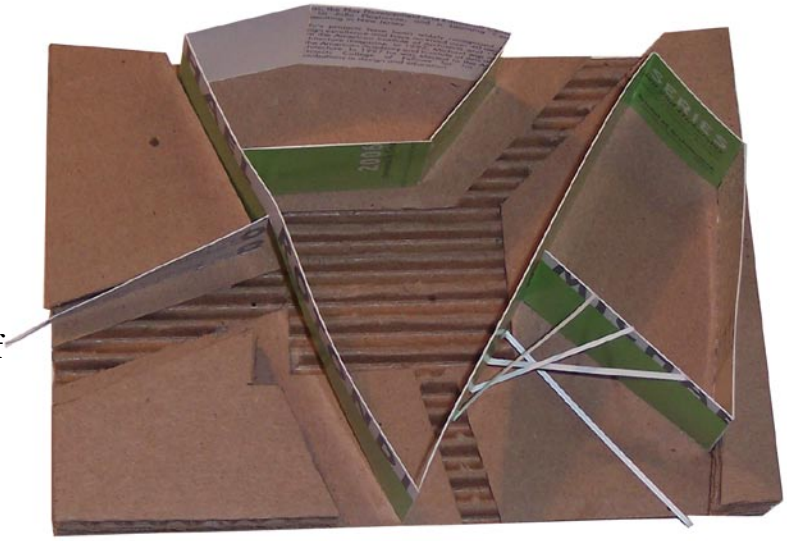
The abstract model is showing how the design wants to intertwine the landscape and architecture. Also, it shows how the pedestrian traffic could move through the both of them.

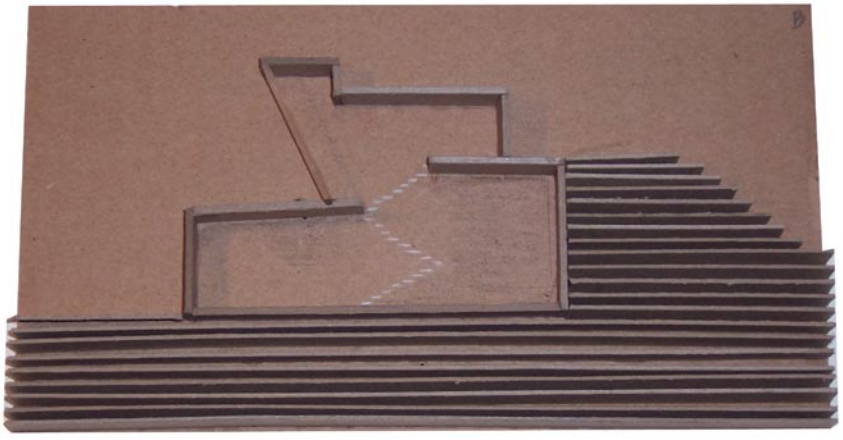


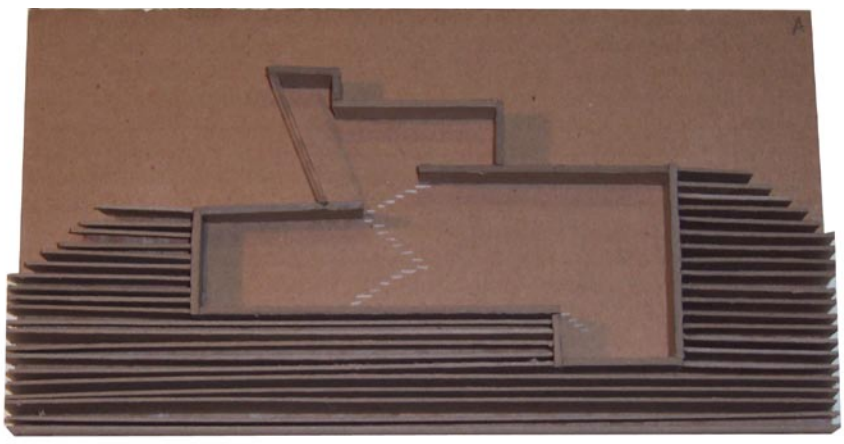
The model is expressing how the original intent was to have three separate buildings that connect in some area so the visitor could get to any space without exiting to the exterior. The blue string represents the pedestrian movement having the possibility of traveling through the building to the waterfront.

This model is showing another concept of how the pieces could be separated, but then connected with a transparent piece that would allow the relationship between the inside and outside to express itself.

This abstract model wanted to show other alternatives to create a feeling of enclosure by creating a series of walls. Some of the walls are extensions from the building they are connected to with a slant that ends by fading into the ground, which starts to touch on the relationship of site and building. The model begins to feel as one and not as seperate pieces. The buildings and walls create an interior plaza that blur interior from exterior.

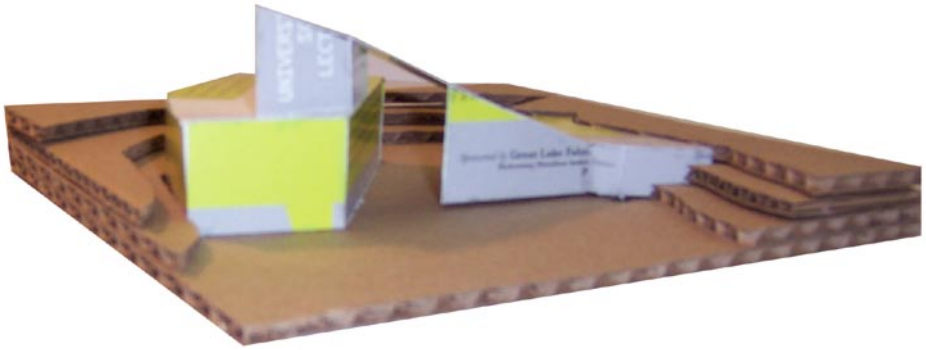




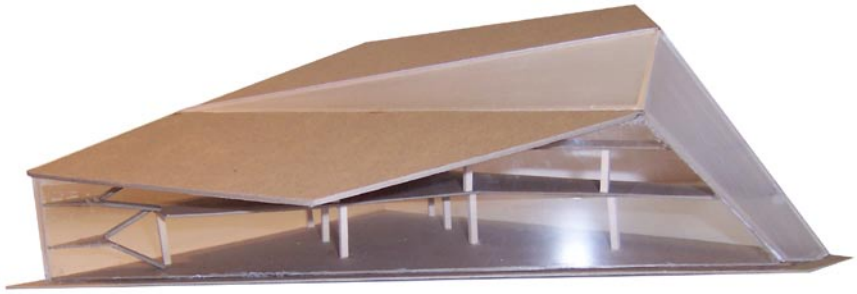


The three dimensional section studies are to experiment with the connection between the site and architecture as well as how one can enter the building from different sides and their experience through the interior.

Concept model with another strategy of creating the feeling of an interior space within the exterior elements.

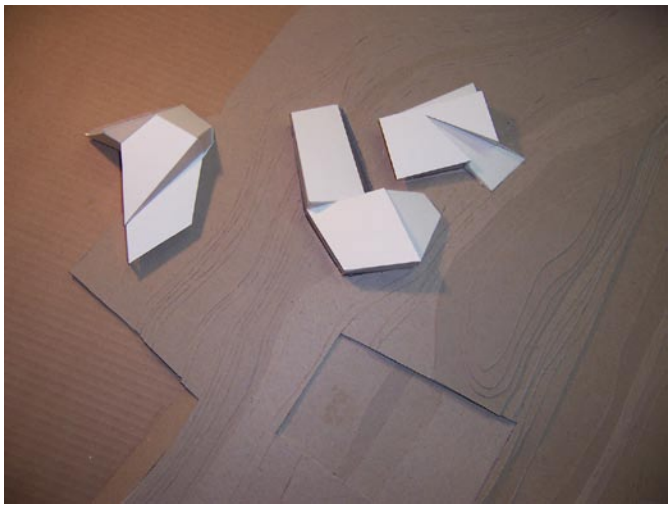


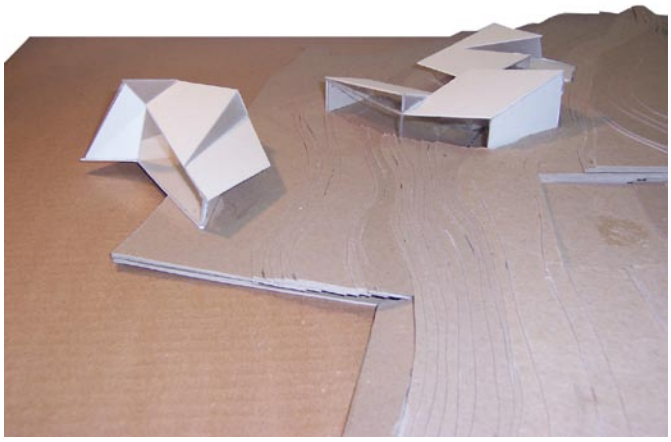
This model expands further from the one above by pulling one of the theatre spaces from the main building and having it placed to sit on the site and also be suspended above the water. The model also starts to play with the paths and ramps that could be used to reach a specific area.

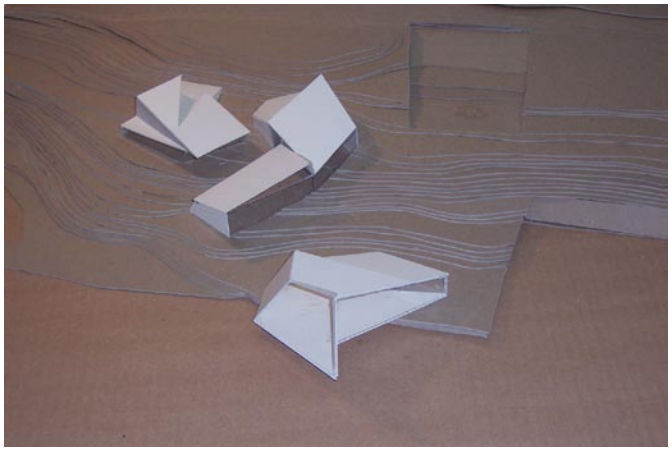


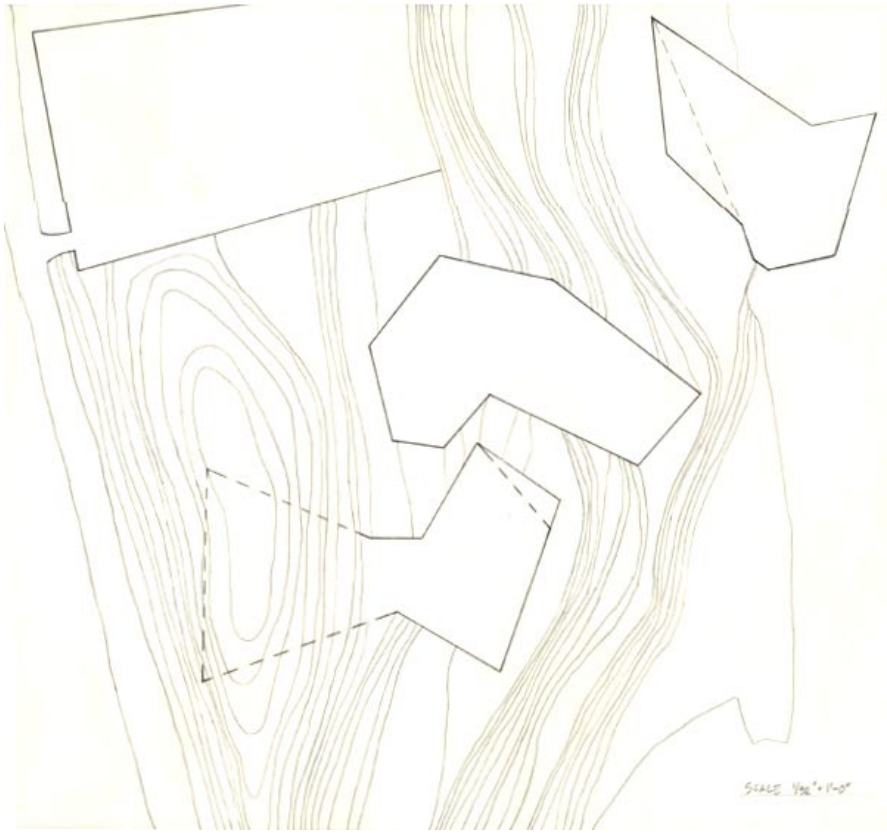
Overall, the design wants to embrace the relationships that can be created when designing a building. These relationships include how the design can establish an inside and outside connection, and not just by having a sufficient amount of glass. This could be accomplished by allowing certain programmed spaces to spill out into the exterior, which will force a visitor to walk out of the building to finish the activity they are engaged in. Another way would be by creating large cantilevered or carved out spaces that seem as if they are an interior space, but do not have the presences of walls. The relationship that the landscape or ground has with the building is an important aspect to the design, especially due to the fact that the site allows the ability to dig parts of the building into the ground. By placing pieces, and in some cases, whole parts of the program into the ground it gives the visitor more to take in. By pulling a visitor through a space that has artificial light and few or no windows, then into a space that is filled with natural light and an abundance of glass, and finally have it spill into the outdoors is something that would engage the visitor with the building. The placement of the building helps create views from one space to another or from a space to an exterior element. Lastly, the design was trying to incorporate the connection between the city, site, and water. Though the connection to the city was weak, the connection to the water was established with the theatre that was suspended over the water.

The design of the building broke up the program into three pieces, with each piece having a theatre among other activities. Each of the theatres was to have its own connection to the exterior from being completely submerged to having the whole backdrop of the performance being the outside. When the visitor is pursuing their destination they are able to choose how they would get to their destination, especially if it were the theatre on the water. On the pathways, the topography will slope up in some areas to make you feel enclosed and in other areas it would be declining, which would hopefully help one be more aware of their surroundings. The two main buildings away from the water are placed to create a plaza space between them to allow for activities to flow into the space.

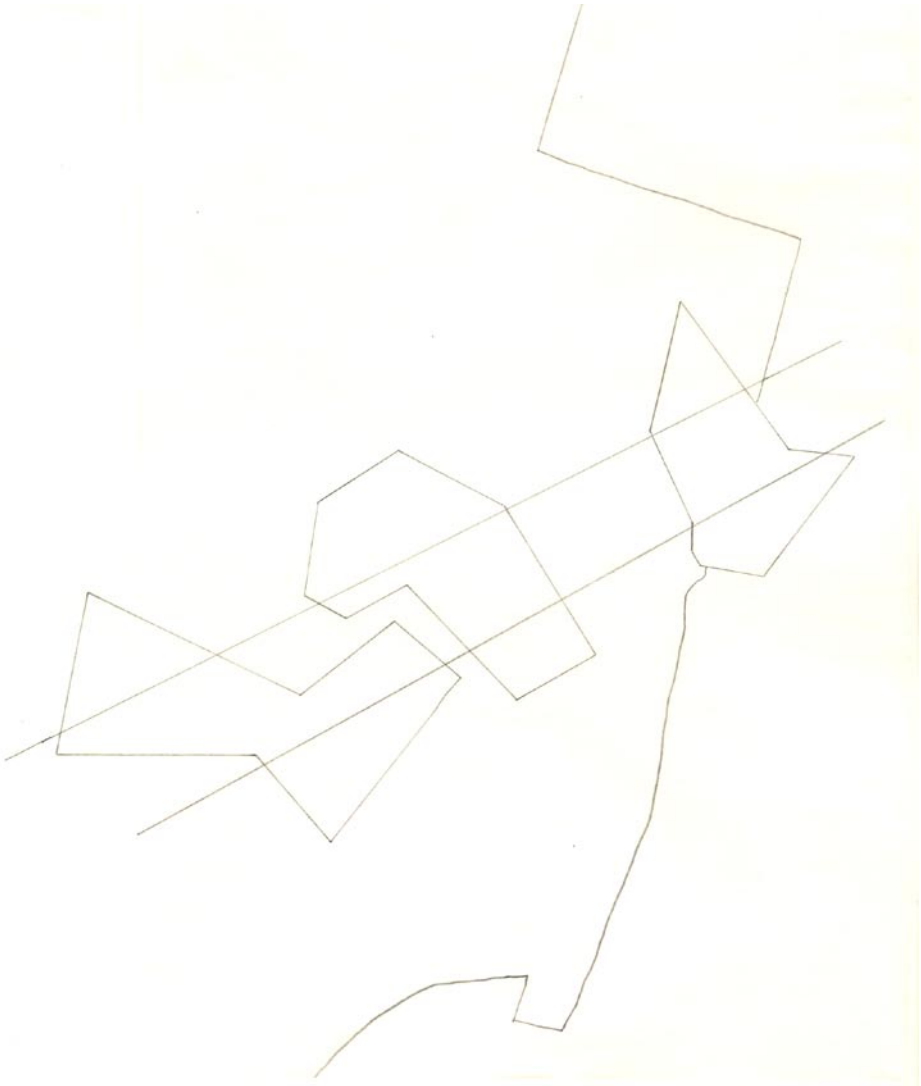


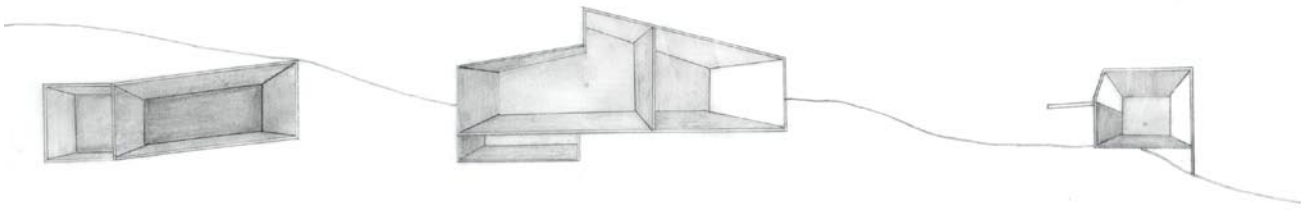


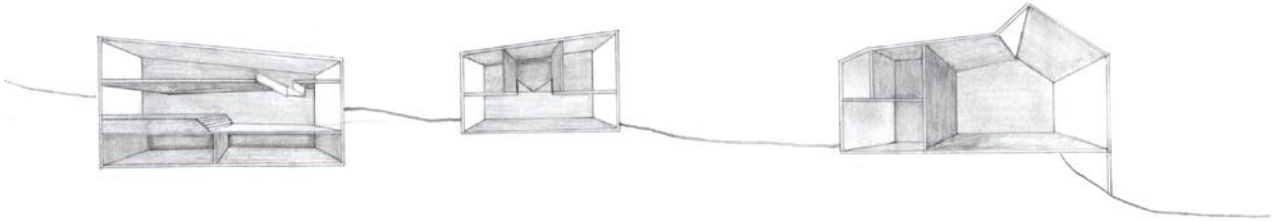




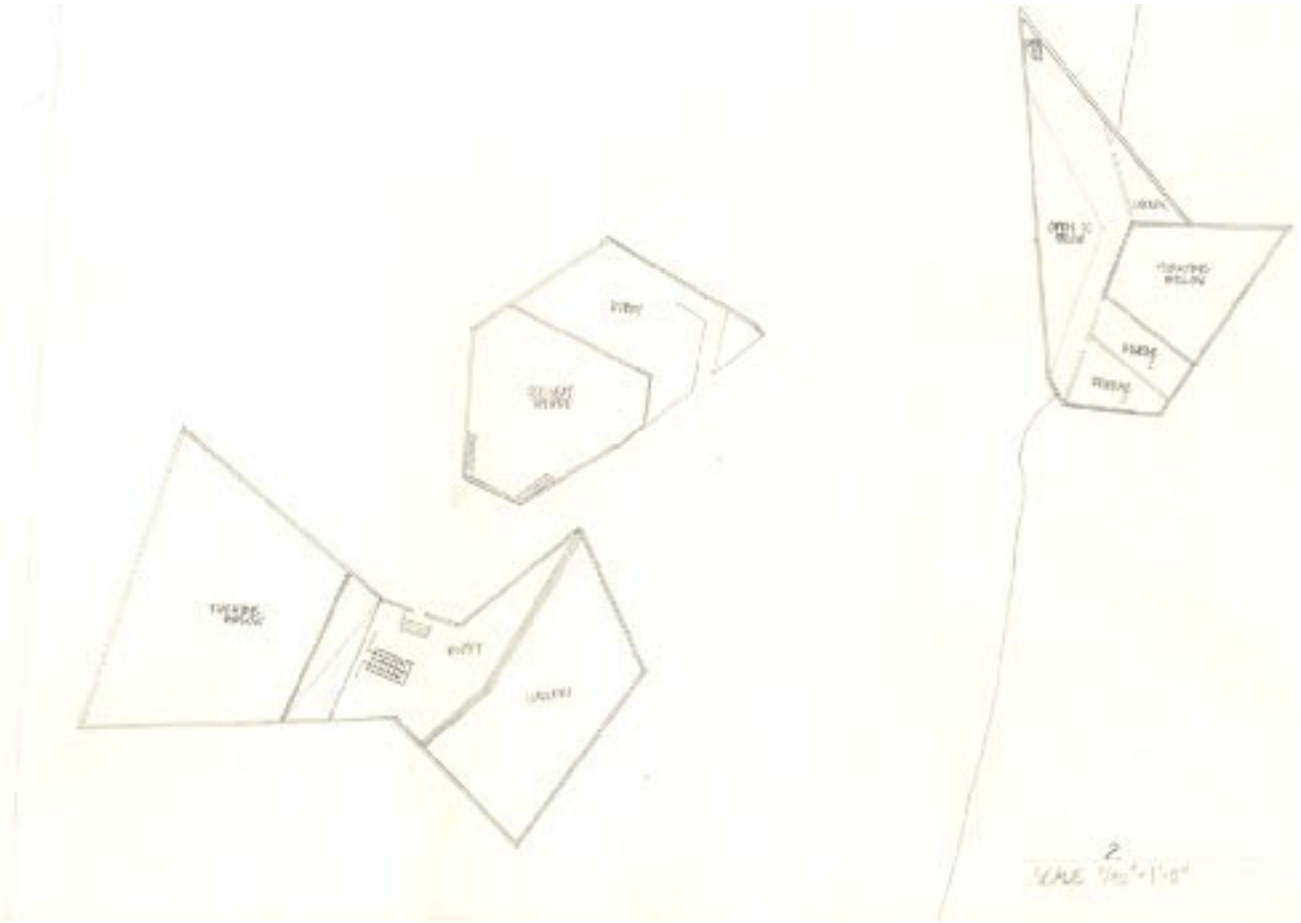
Site Plans

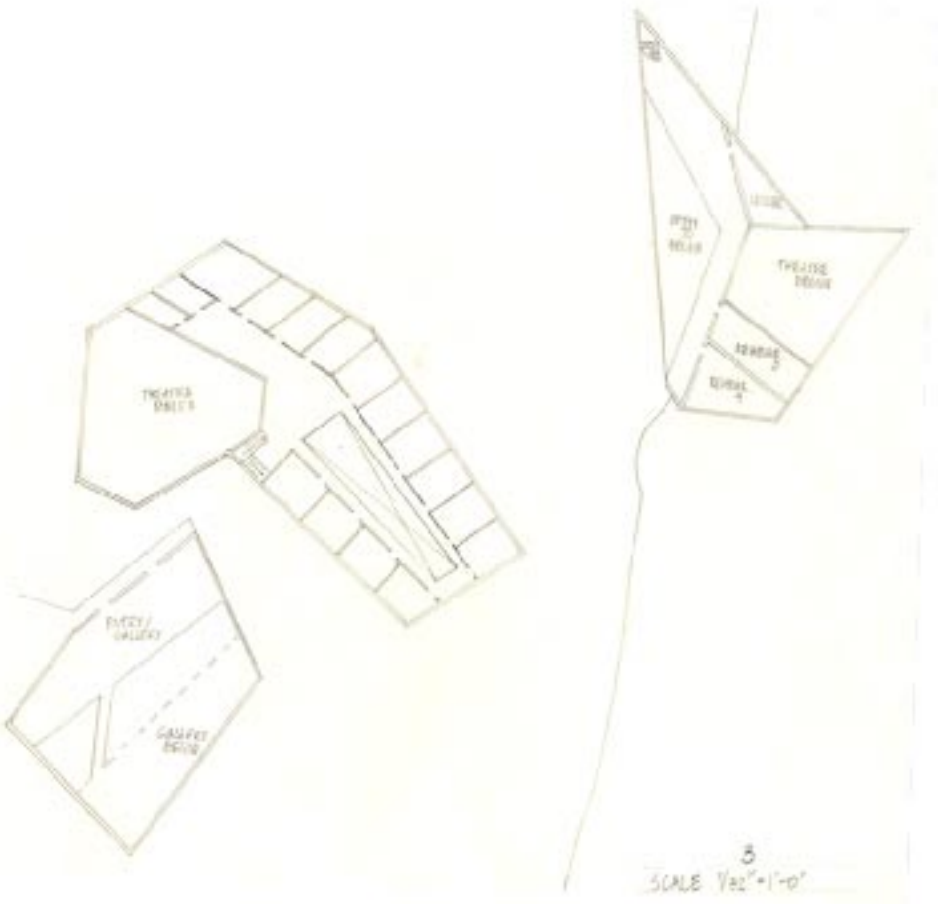






Sections




THEATRE
GALLERY
GALLERY
3
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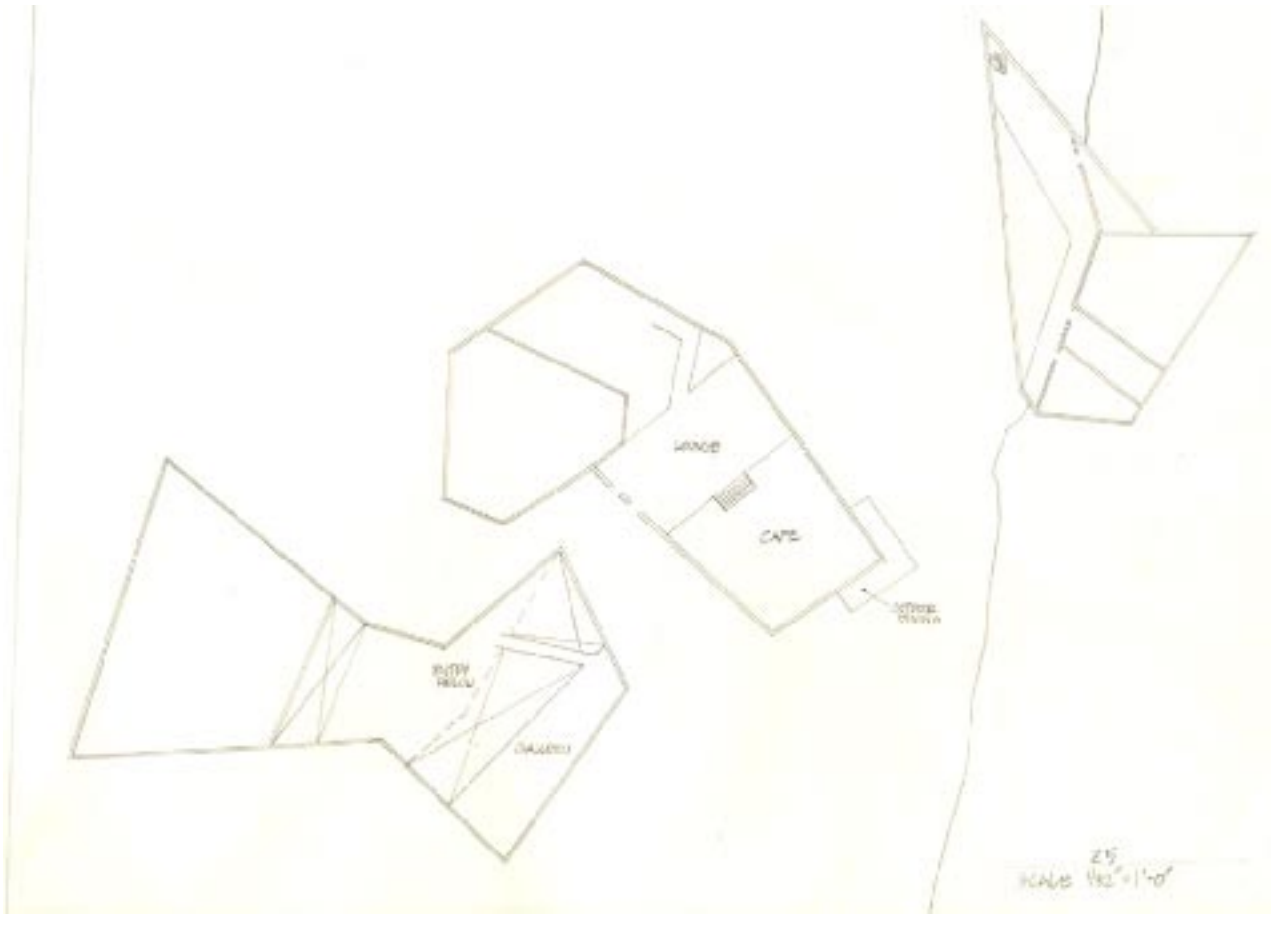
LOUNGE
CAFE
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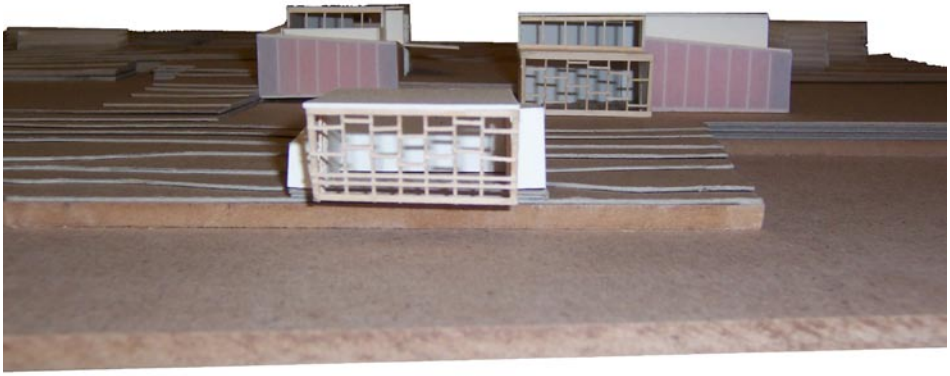
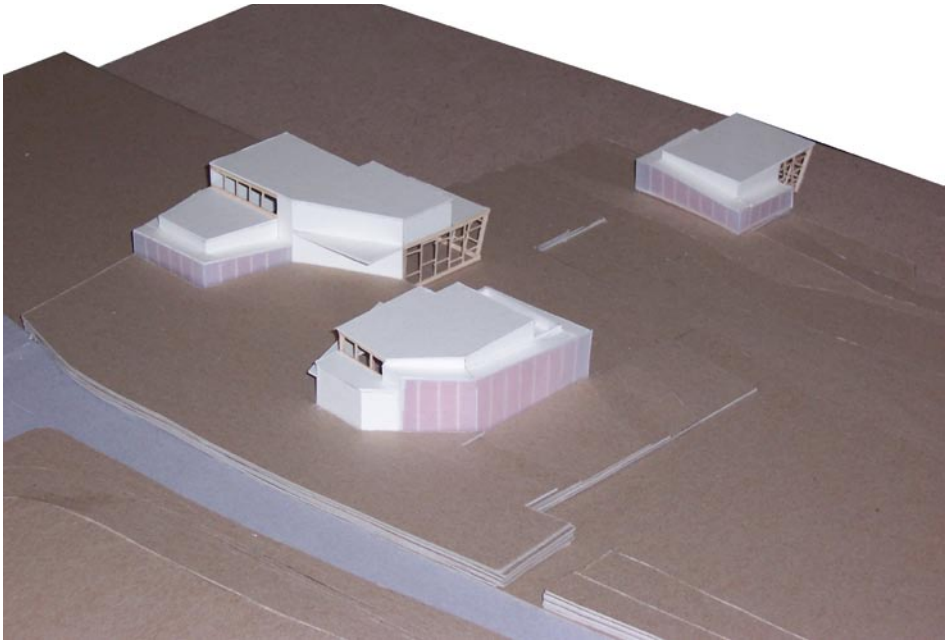
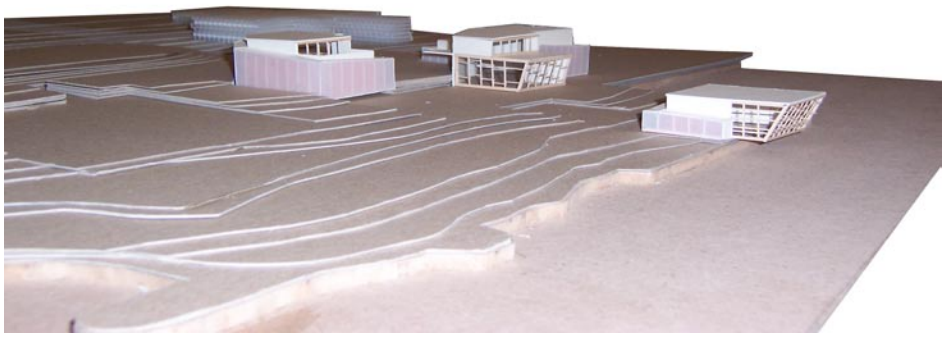
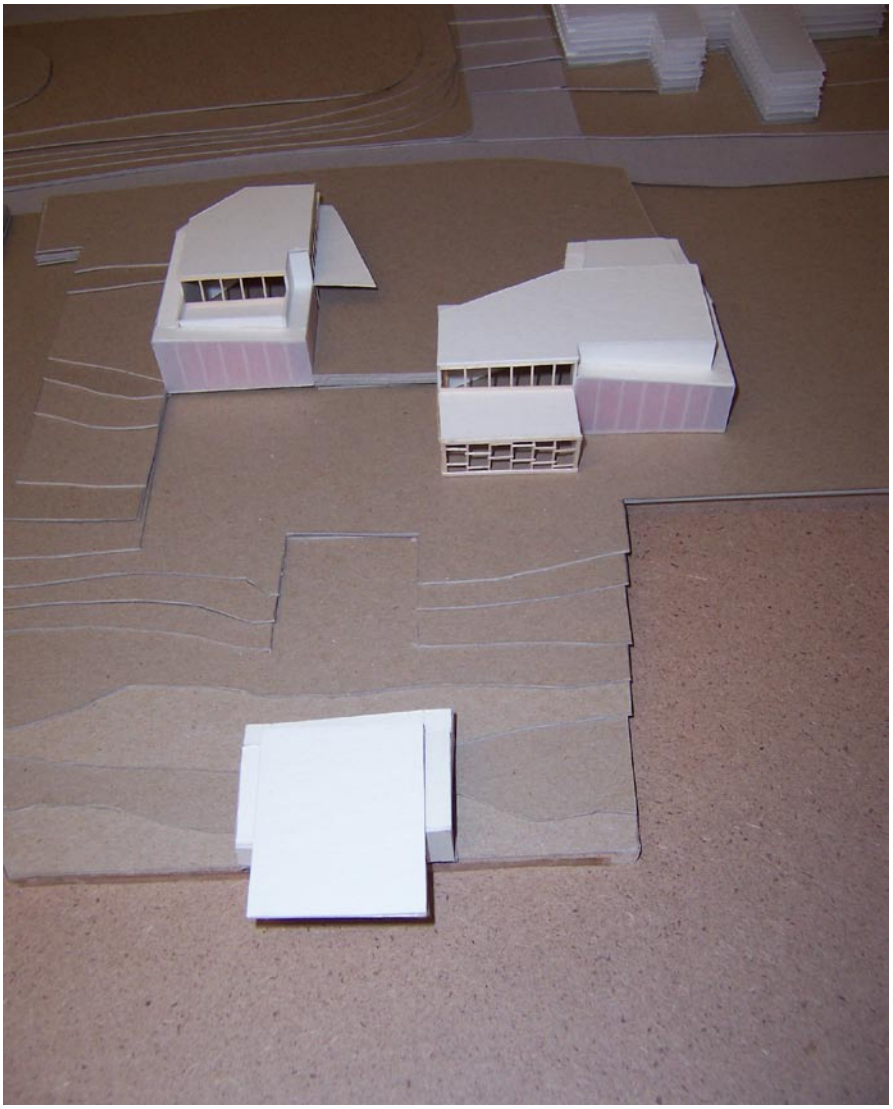
25
SCALE 1/32"=1'-0"

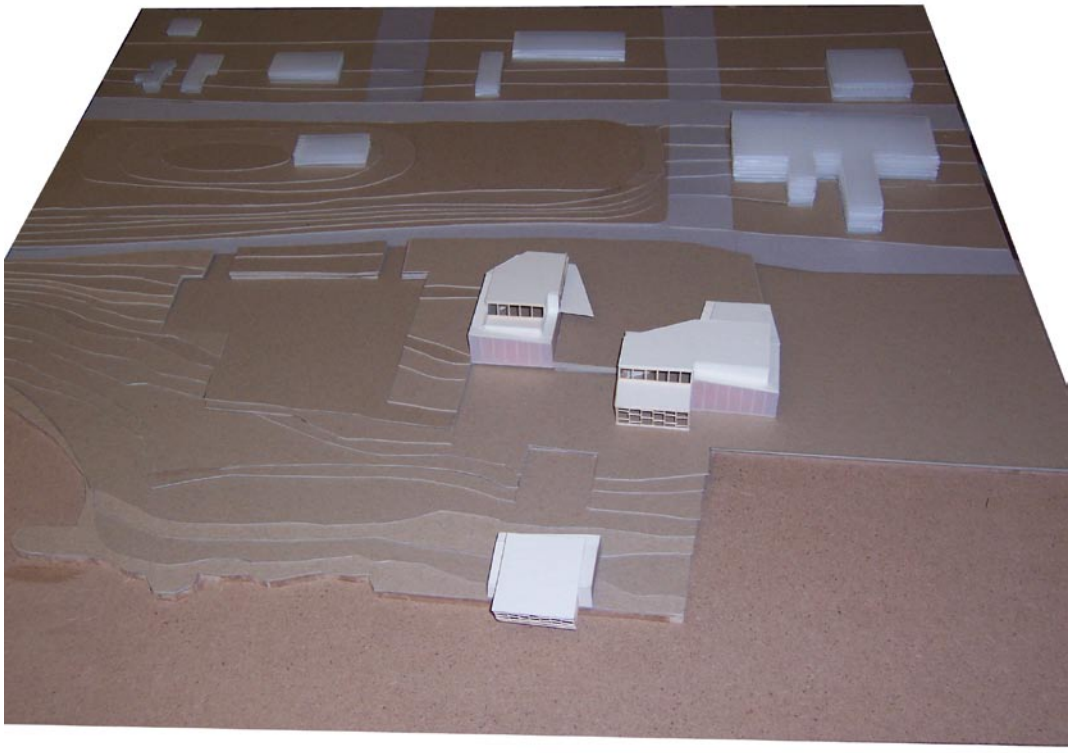


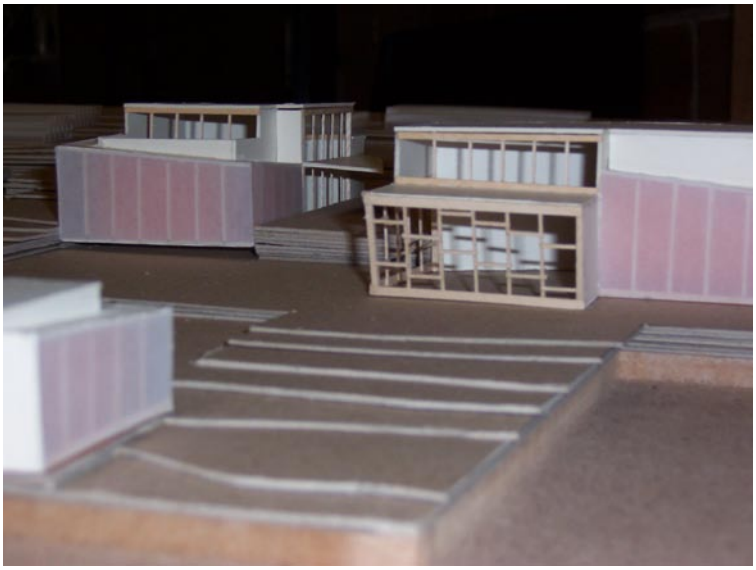


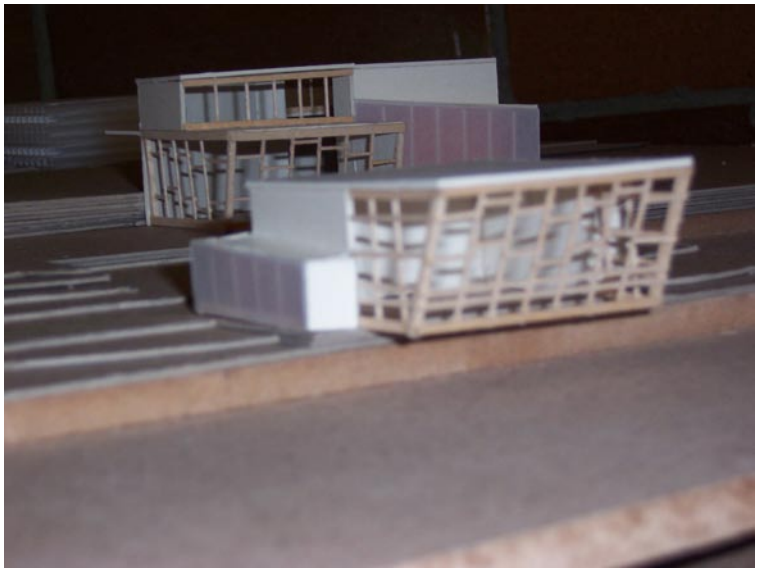


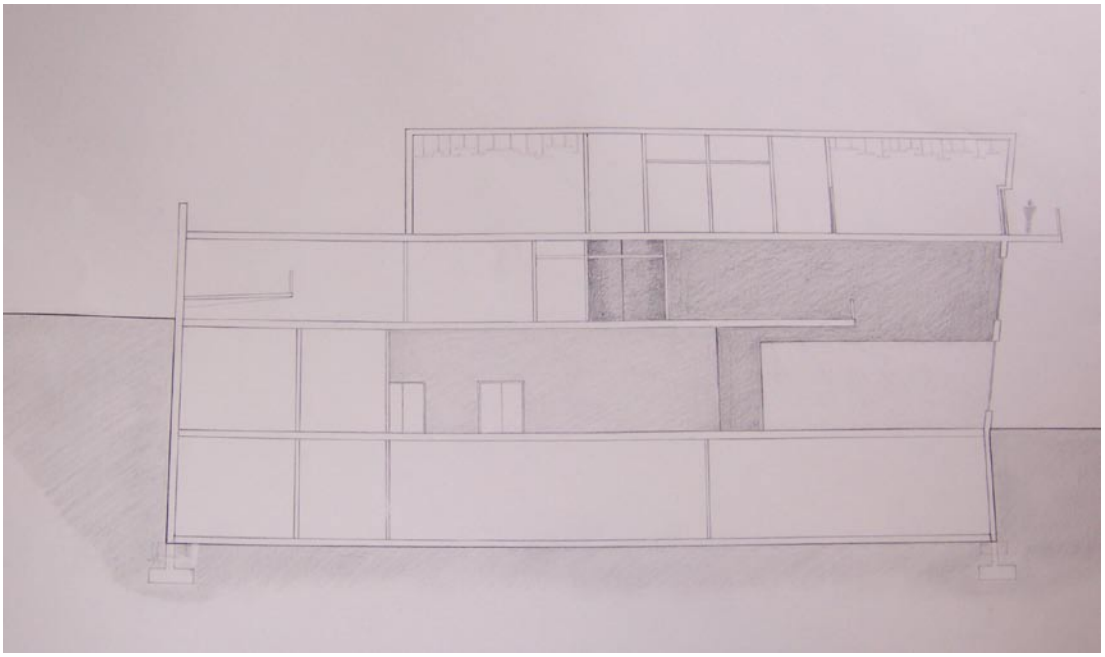
Model starting to show fenestration, material, and massing.



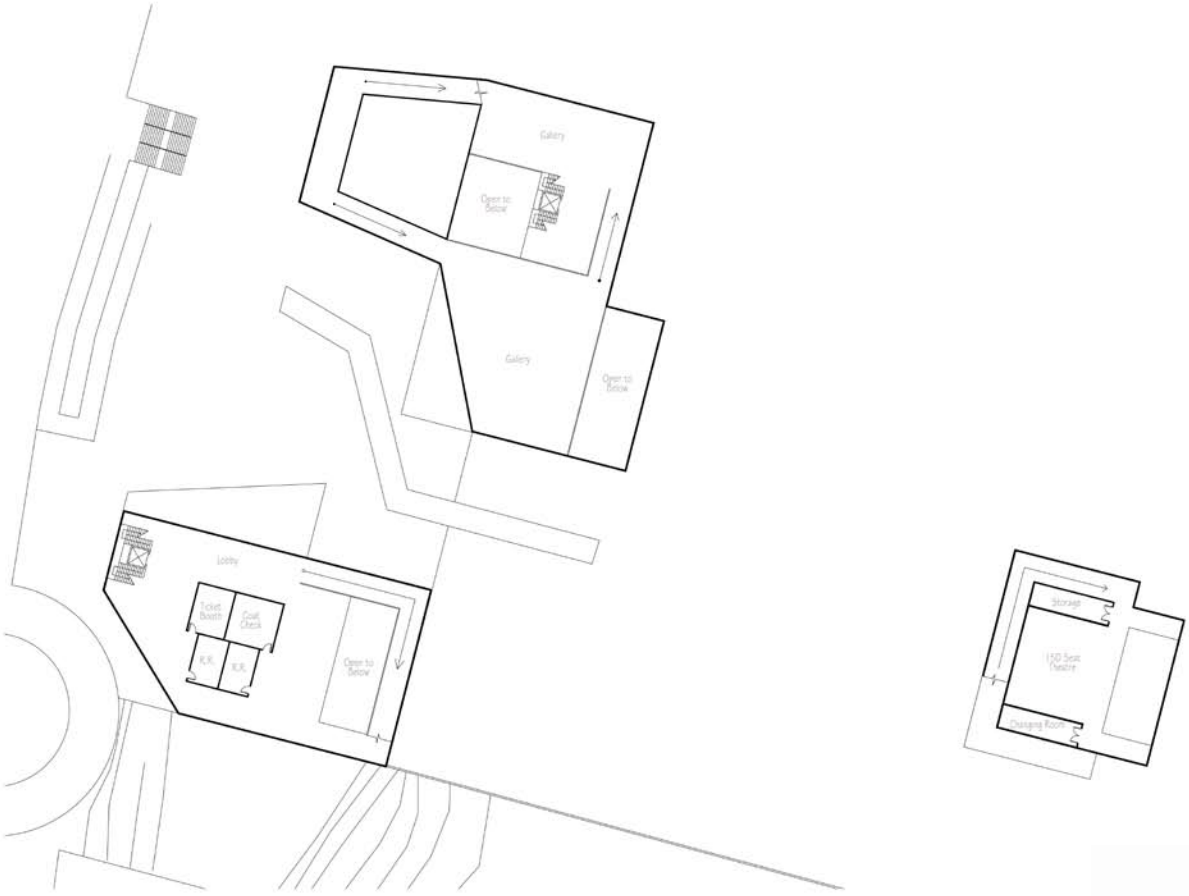




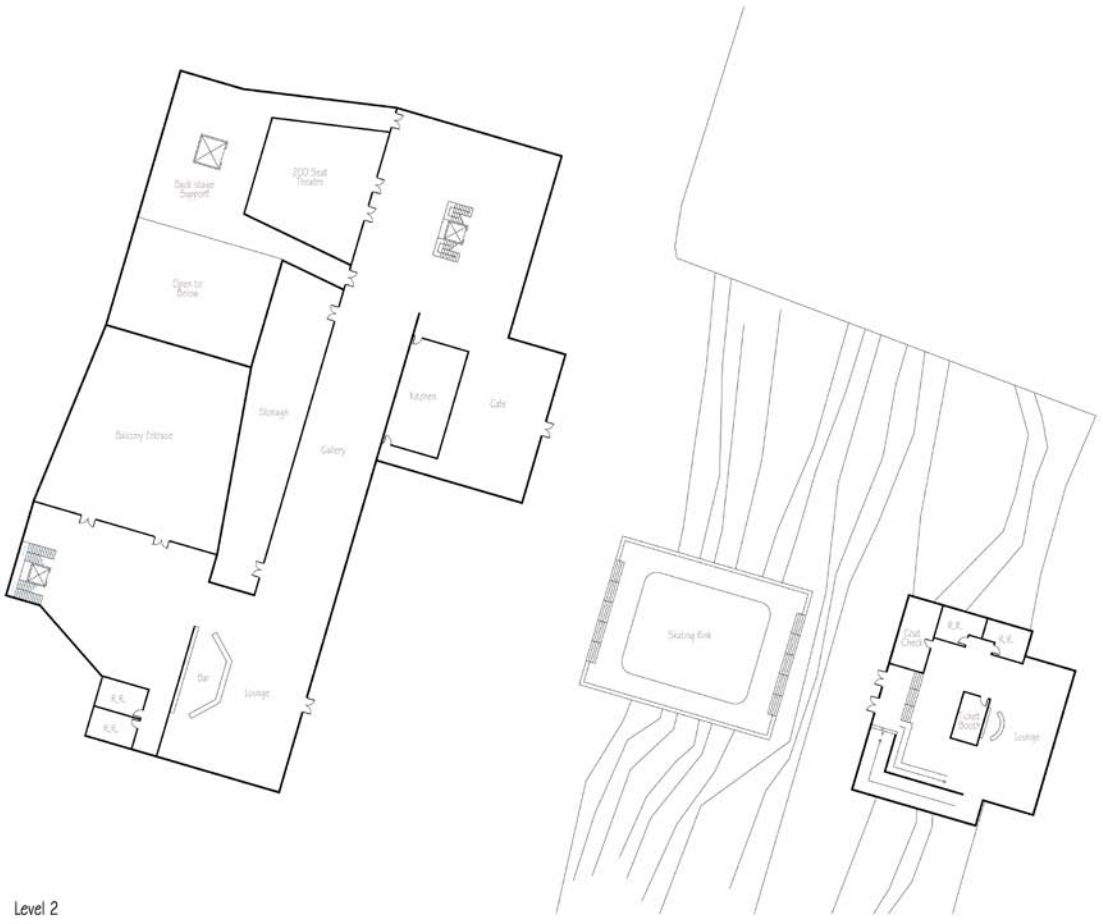




4th Level

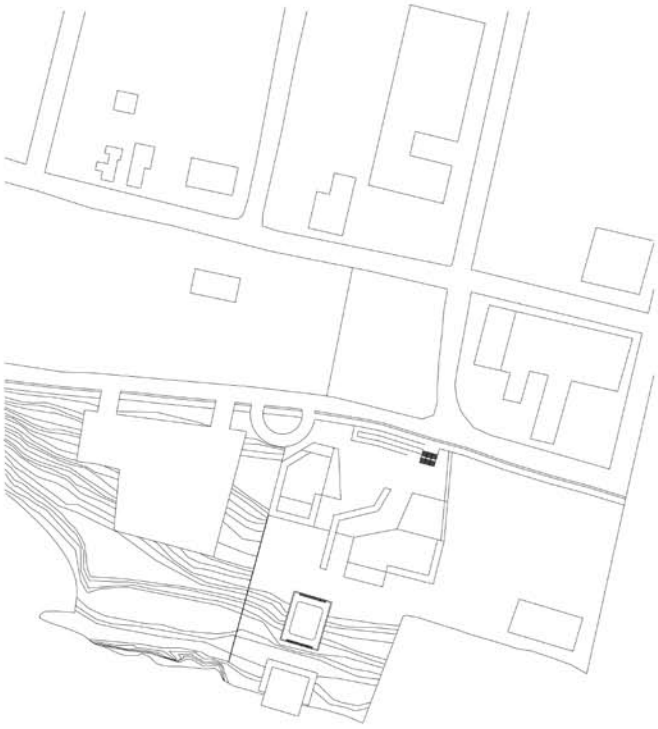


3rd Level

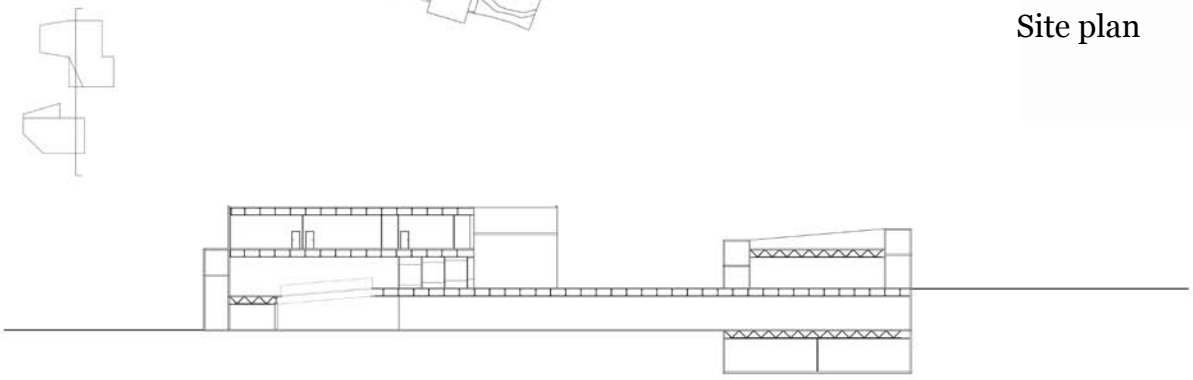


Level 2

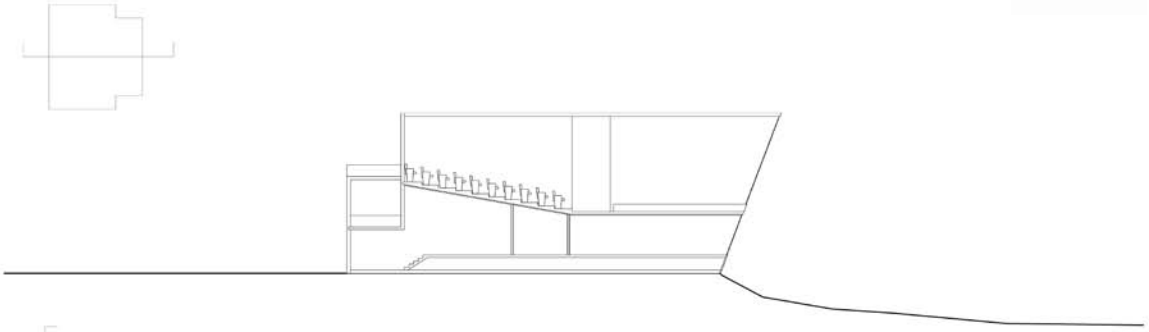
Level 1



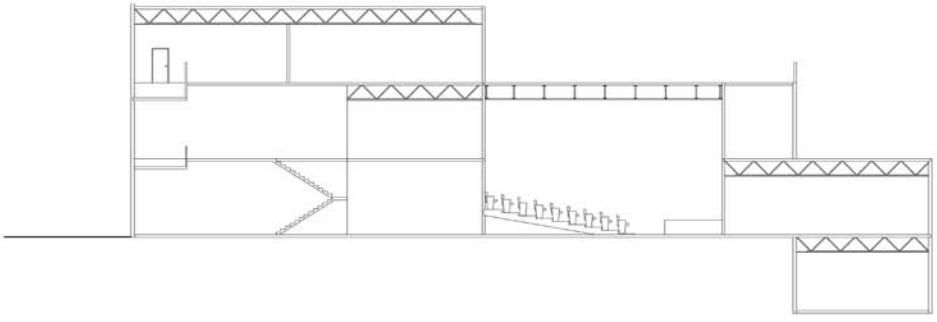
Site plan



Section

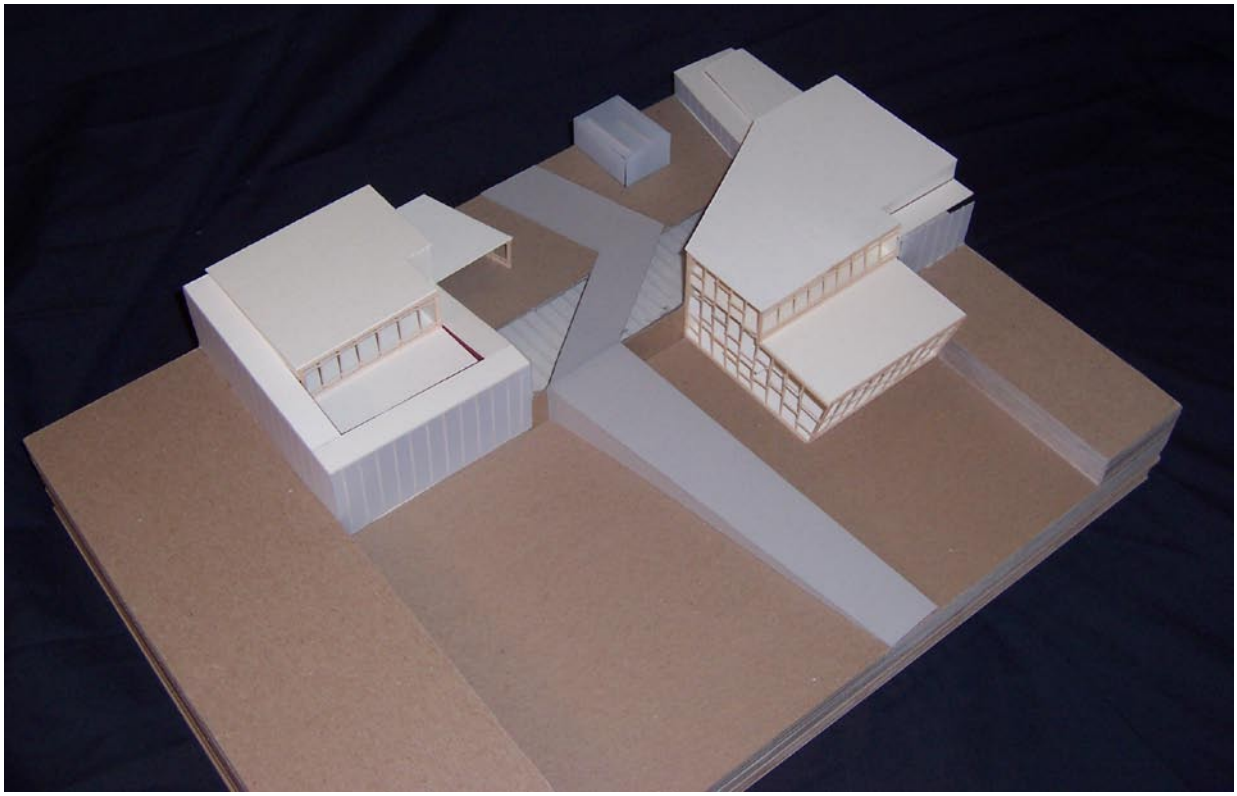


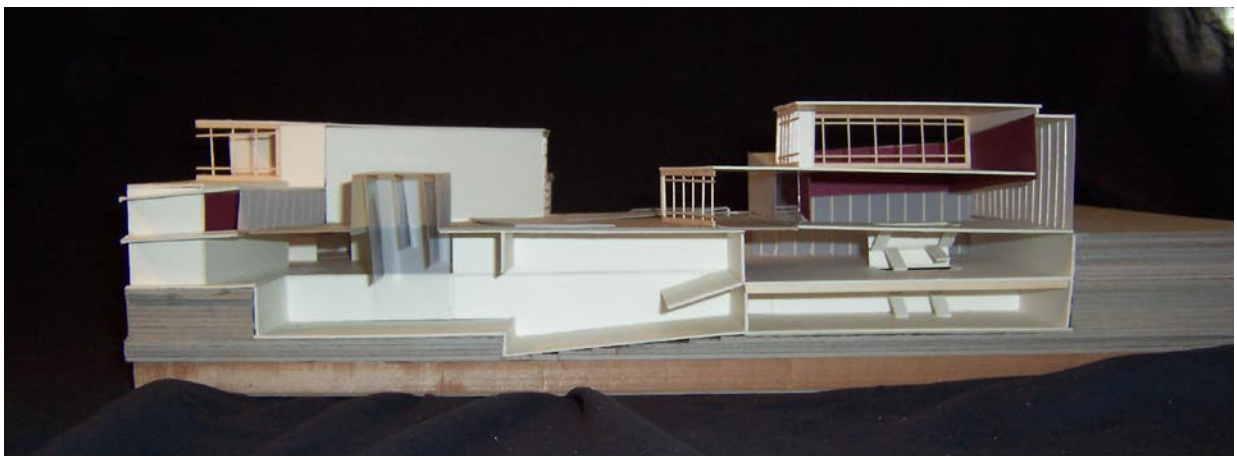
Section

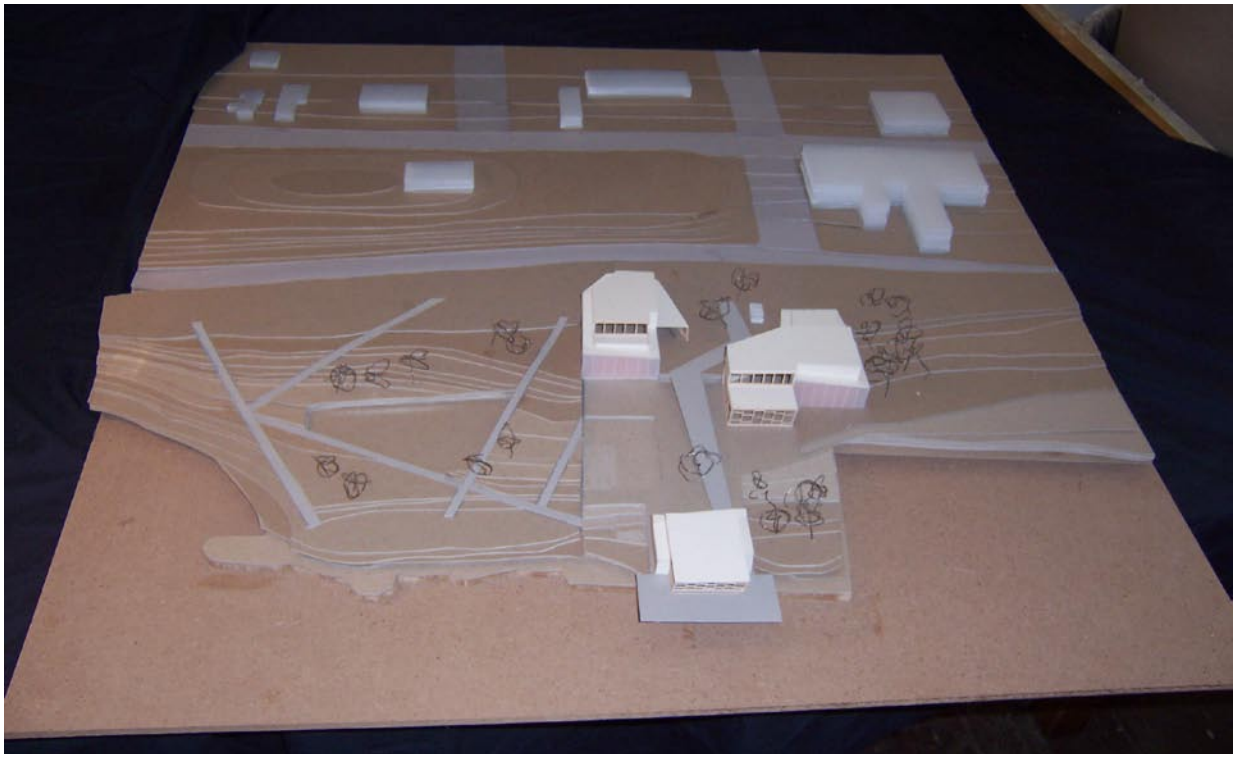


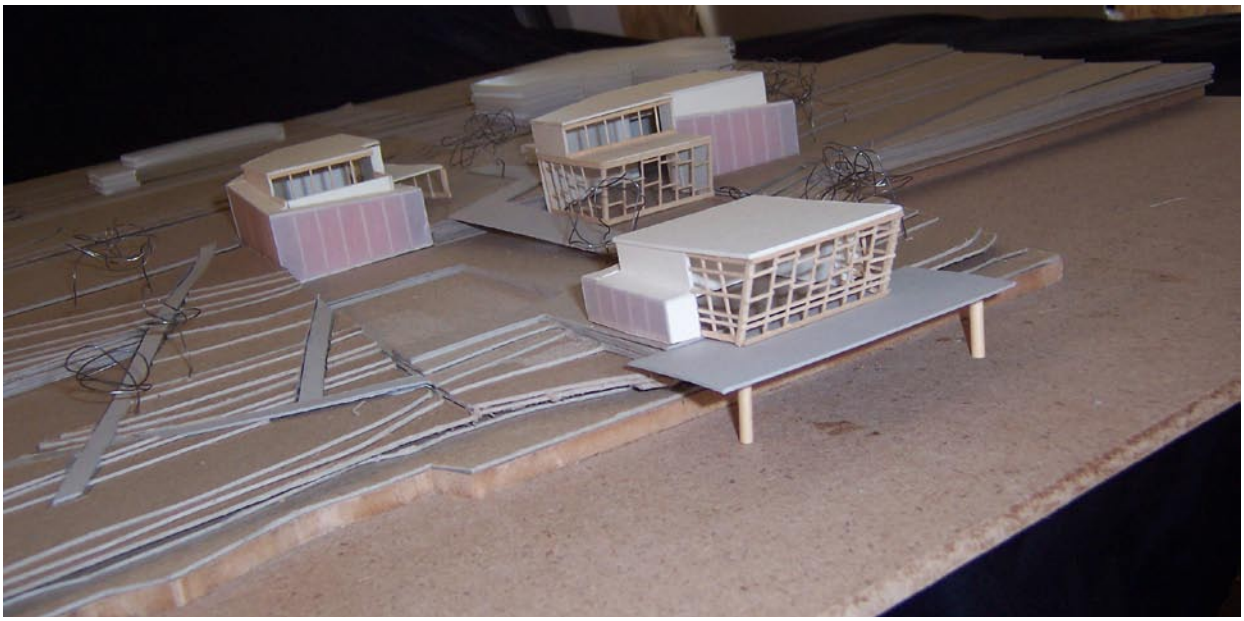
Section

Section Model cutting through two of the three theatres.

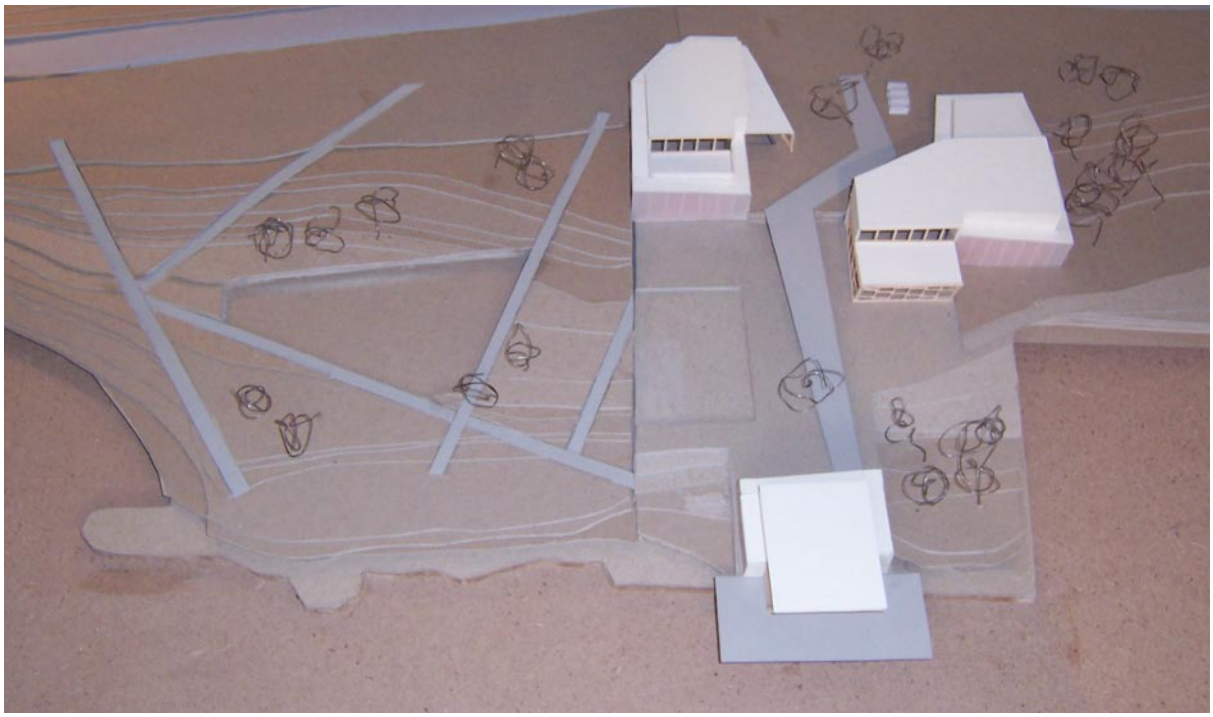


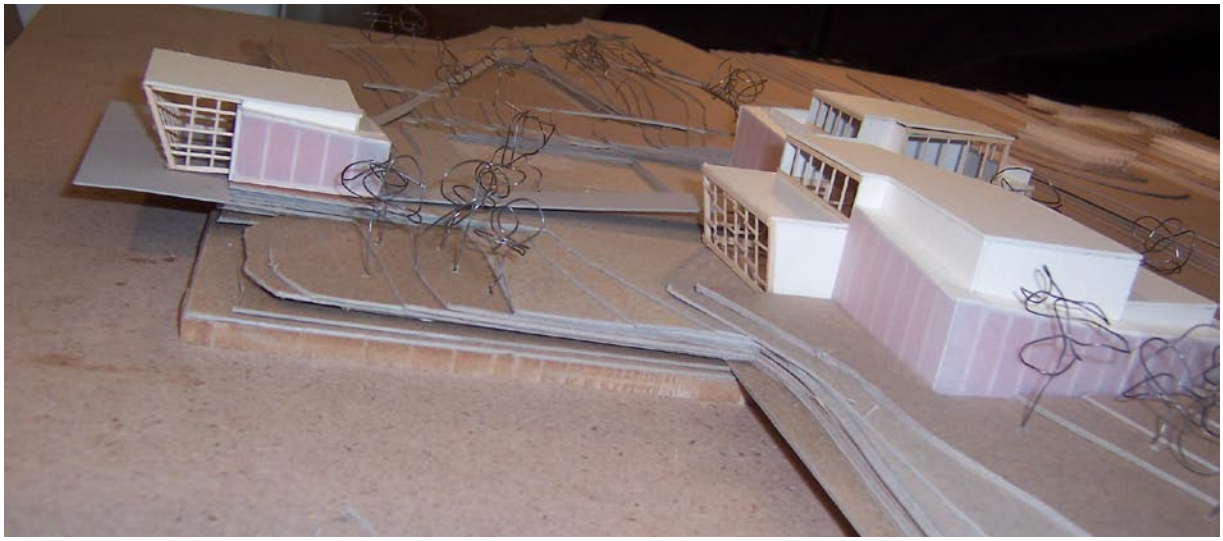


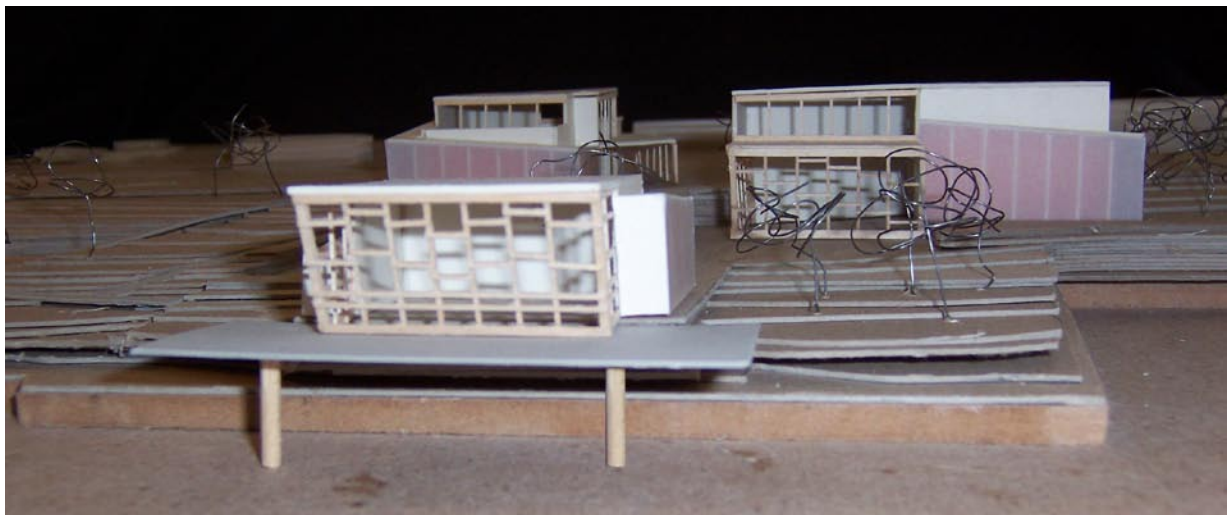




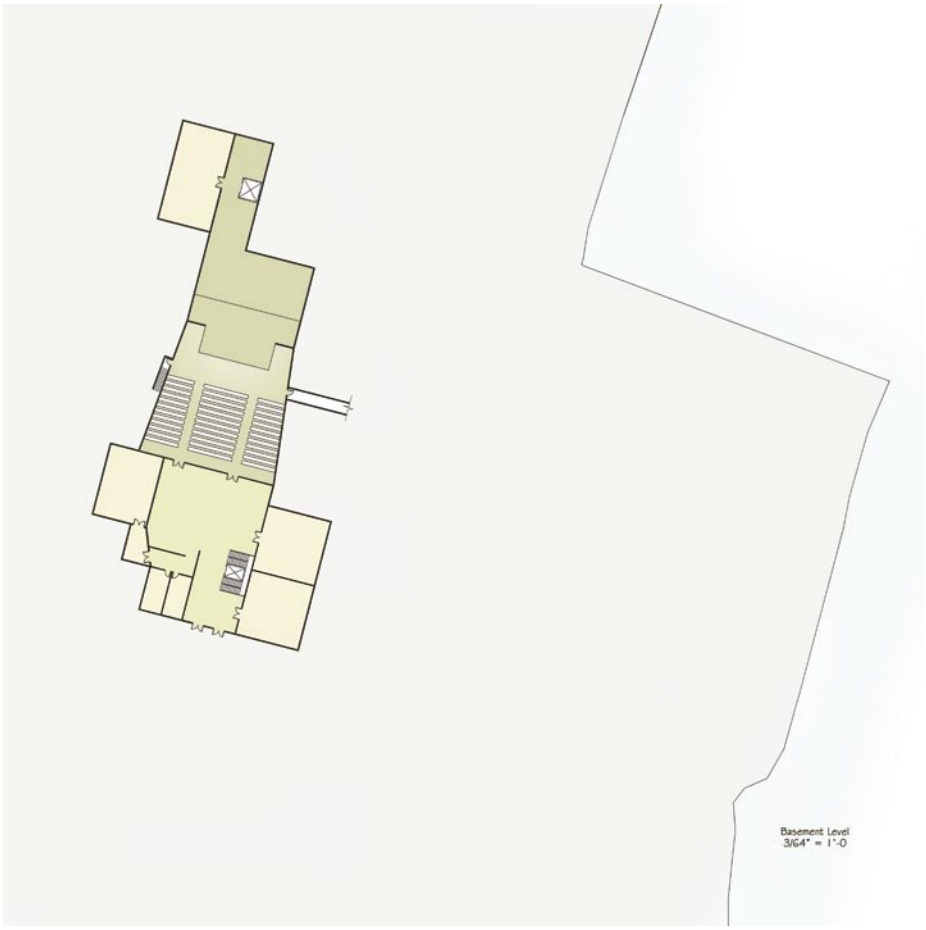
This model shows the final massing, fenestration, and material detail choices for the design. The site also shows how the pathways and parking would interact with the rest of the site and the buildings.



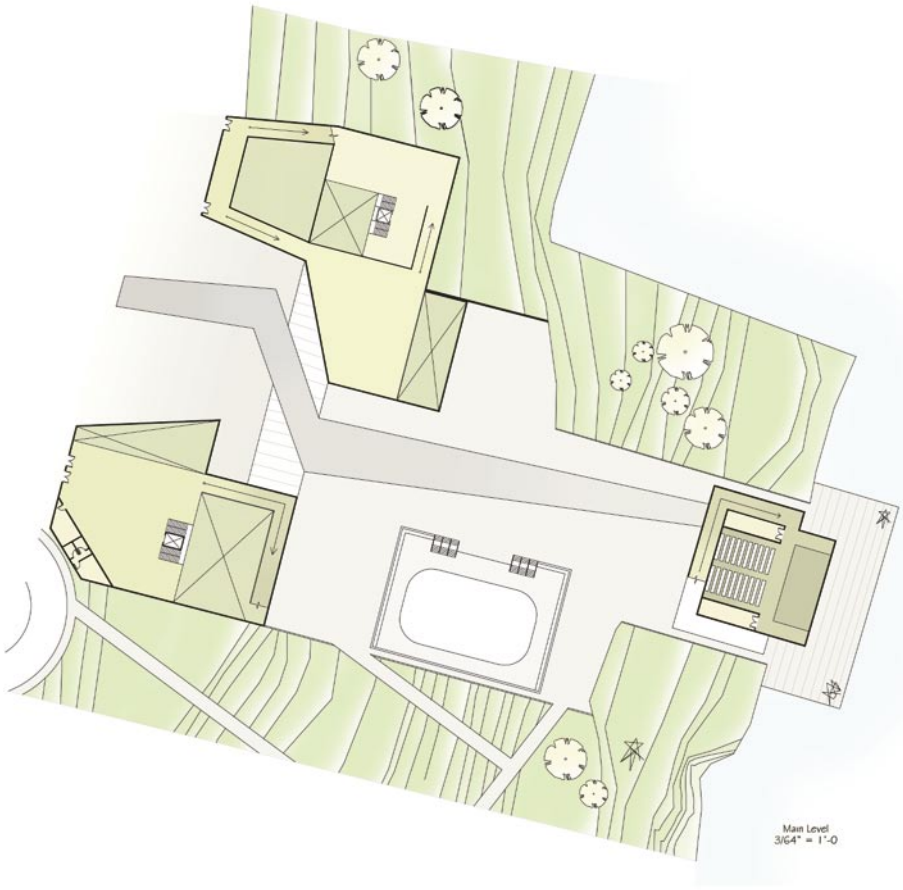


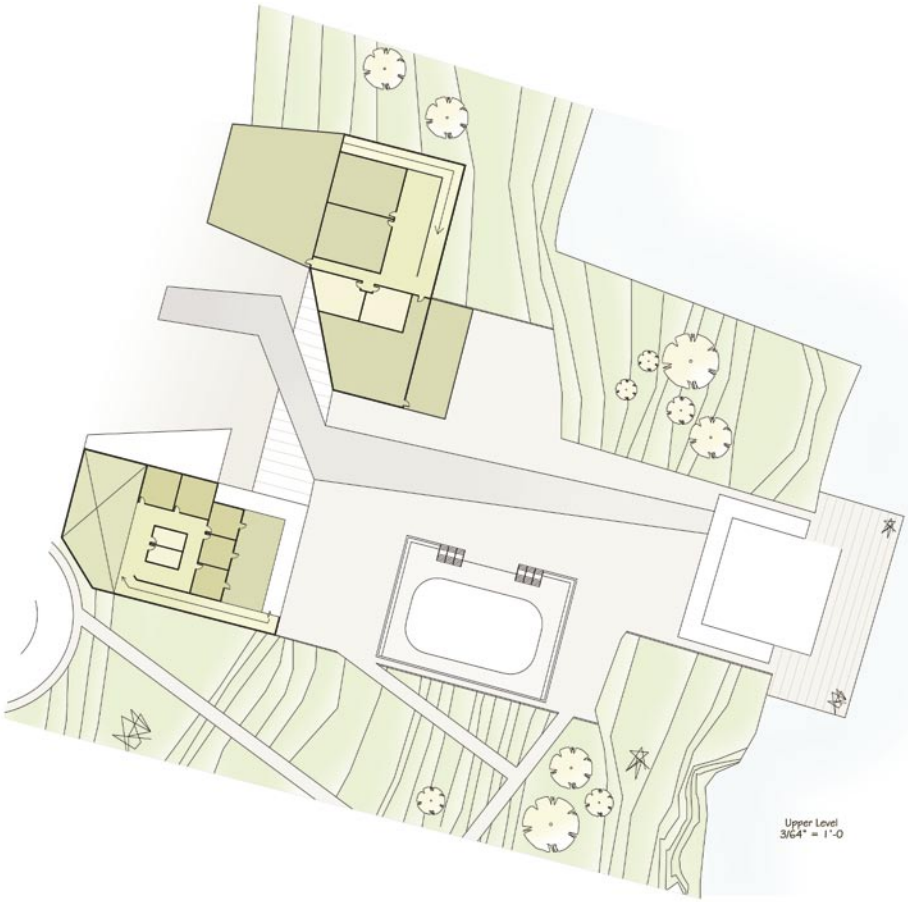


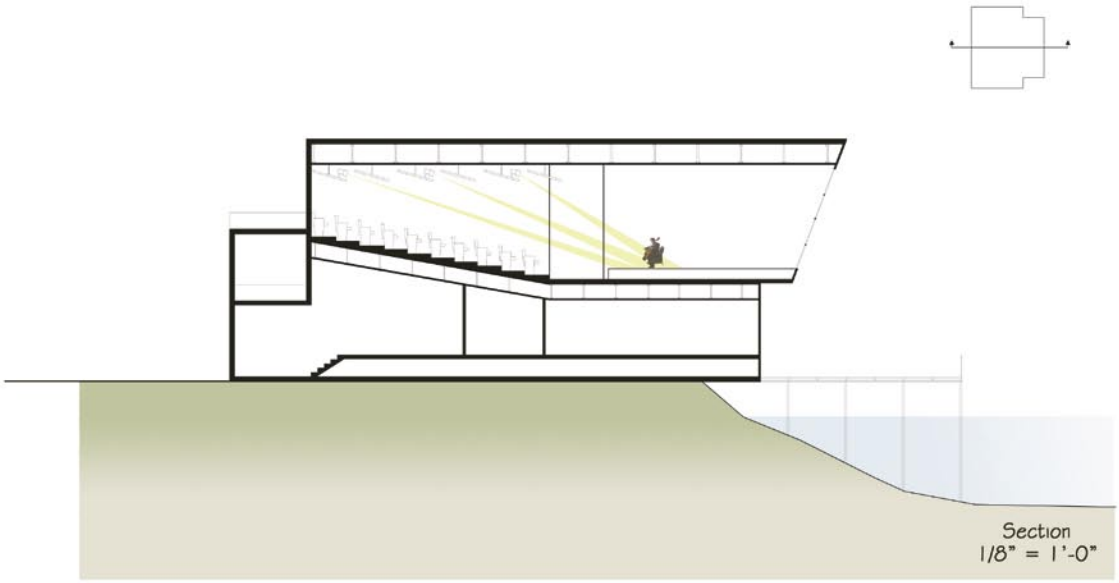
Site Plan

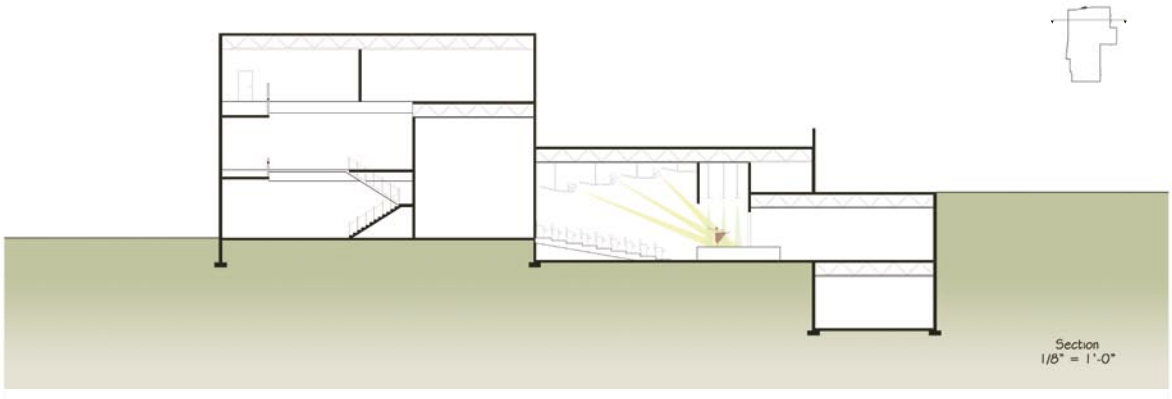

Basement Level
3/64" = 1'-0

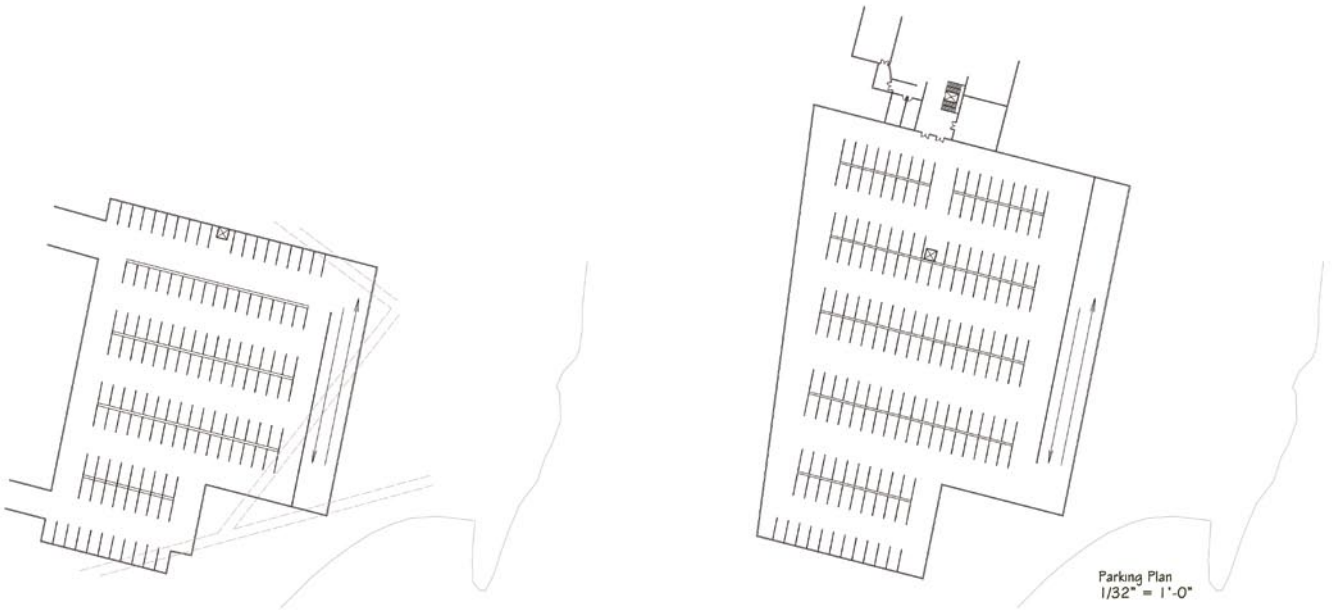

Lower Level
3/64" = 1'-0


Main Level
3/64" = 1'-0

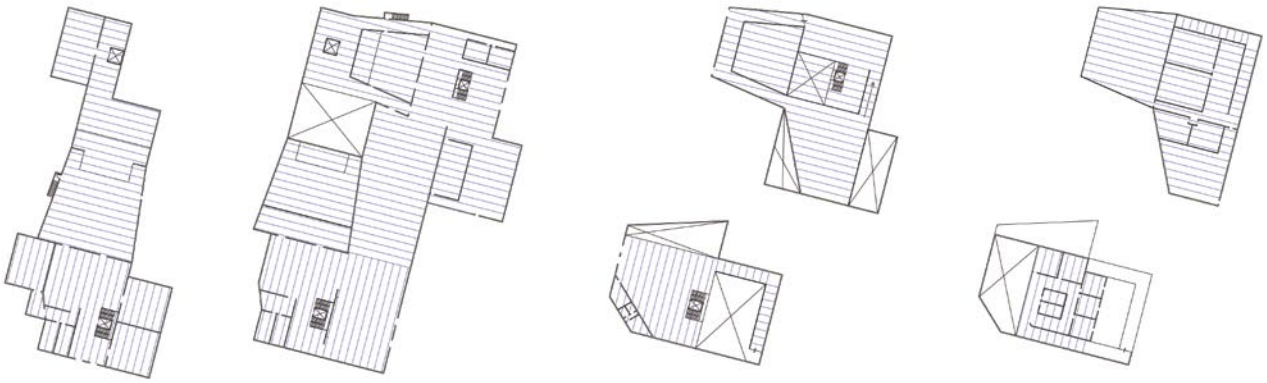

Upper Level
3/64" = 1'-0


Section
1/8" = 1'-0"


Section
1/8" = 1'-0"



Parking Plan
1/32" = 1'-0"



Structural Plans
1/32" = 1'-0"

Conclusion

The thesis project was meant to question the relationships that are formulated when a building is constructed. These relationships include connections to the site, its context, as well as its interaction within itself.

The design process throughout the year has taken me through several different design schemes as well as building forms, which were drastically different from one another. Though the designing phase was a long process, I feel at the end of it that it was needed to accomplish were I ended with my final project. There will always be more detail needed and things that could be redesigned, but I was happy with the overall outcome.

As the project progressed I encountered many problems, some that were dealt within the design and others that are still unanswered. The location of the buildings and their massing as well as the design of the parking were both issues that I feel were dealt with in a way that was thoughtful both to the site conditions and the design itself.

My first instinct when the project began was to create a very abstract building form that was in the center of the site. I though by placing it within the center it would allow for more of a connection with the site. In the end, a more conservative building form that was placed to the north of the site was the best decision. By having a more typical building form it allowed for more exterior spaces placed on the rooftops. The placement also helped with the connection to the downtown.

My shortcomings of the project definitely go into the detail of the interior of the spaces. The need for more sections and perspective drawings are crucial to get the clear understanding of the building across. If I had an extra semester there would be the possibility of an in depth investigation into the atmosphere of the interior spaces and how they interconnect with the exterior space. These studies would help strengthen the projects overall investigation of relationships and how each detail is interrelated. If this project was able to go into a further investigation I would begin to question more the interaction of the user and how the building can begin to develop connections between the users of the building, such as moments of isolation, separation, interaction, ect.

Precedents:

[1]Richard Lacayo, “Light at the Museum”, in *Time,* 2007, June 11.

[2]Steven Holl, *Architecture Spoken*. Pg 206

[3]Idem

[4]Idem

[5]Tadao Ando Architect and Associates Children’s Museum, Hyogo. in *The Japan Architect* 66 (1991) 68.

[6]Tadao Ando, *Tadao Ando: 1983/1992*. Madrid: El Croquis, 1994.

[7] Moore Ruble Yudell, Moore Ruble Yudell Architects Website.

[8] Idem

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- Nelson-Atkins Museum of Art Addition Precedent Study

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- Chapter 4 Groundwork, Research on figure ground

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-Photographs and research of Nelson-Atkins Museum

The City of Marquette Homepage. October 2, 2007. The City of Marquette. 8 Oct 2007 <http://www.mqtcty.org>.
- Information and Maps of Marquette.