

# interactive architecture :: music

## MUSIC PAVILION PRELIMINARY CONCEPTS



FAZ Pavilion  
Frankfurt

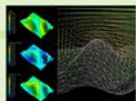


Scheffler & Partners  
2010

## MATERIAL RESEARCH



The membrane is a smart composite on top of the FAZ Pavilion. It allows structural elements relative to bending of the air. The membrane, still in its research process, will need to be reactive to air & wind.



An inspired by the "Smart Screen" FAZ Pavilion located in Frankfurt, Germany - I wanted to incorporate an adaptive membrane to cover the surface area of the pavilion. The membrane will adapt to the changing interaction of wind in the music & atmosphere, change it's porosity to help the projection & amplification of the music content.



## MUSIC PAVILION :: PROCESS MODEL



1. FLAT SHEET  
14 X 17



2. CURVED  
GRID PATTERN  
INFORMATION



3. REINFORCED SCOP  
NEW INTEREST



4. EXPERIMENT FOLDING  
PAVILION STRUCTURE



5. SCOP  
(OUP DOWN)



A CONTINUOUS MASS SHIFTS FOLDS  
ONTO ITSELF ALLOWING FOR GREATER  
FLEXIBILITY OF DESIGN



THE REAR AND/OR BOTTOM OF THE MUSIC  
ACTIVATES THE PAVILION TO REACT  
TO THE MUSIC BEING PERFORMED



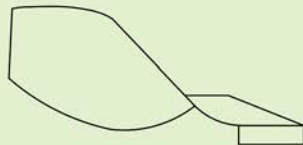
ADJUSTABLE MESH MATERIAL ALLOW

The interactive architecture pavilion is a portable and temporary music pavilion that not only serves as a home for the performers and a stage for the observers, but also a living piece of architecture. Through the influence of the music, the interaction of substance to viewer is immediate as the pavilion physically moves utilizing

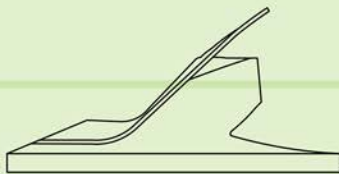
the natural elements of sound and air. In addition, the unique sweeping shape of the pavilion is paramount in its ability to project sound out and up for maximum amplification. The materials utilized are fiberglass, wood veneer, and aluminum.



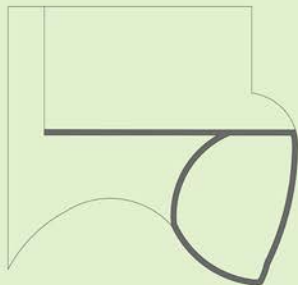
ELEVATION I



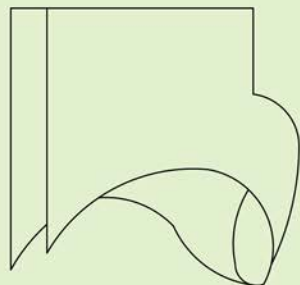
ELEVATION II



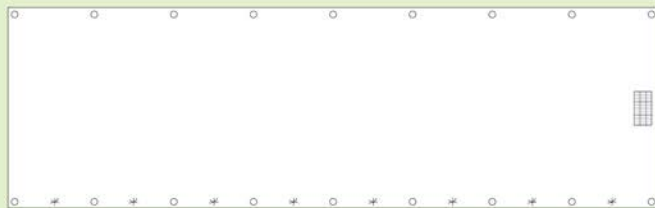
ELEVATION III



TRANSVERSE SECTION



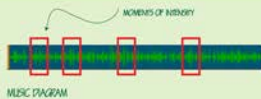
ROOF PLAN



SITE PLAN



HINGE DETAIL



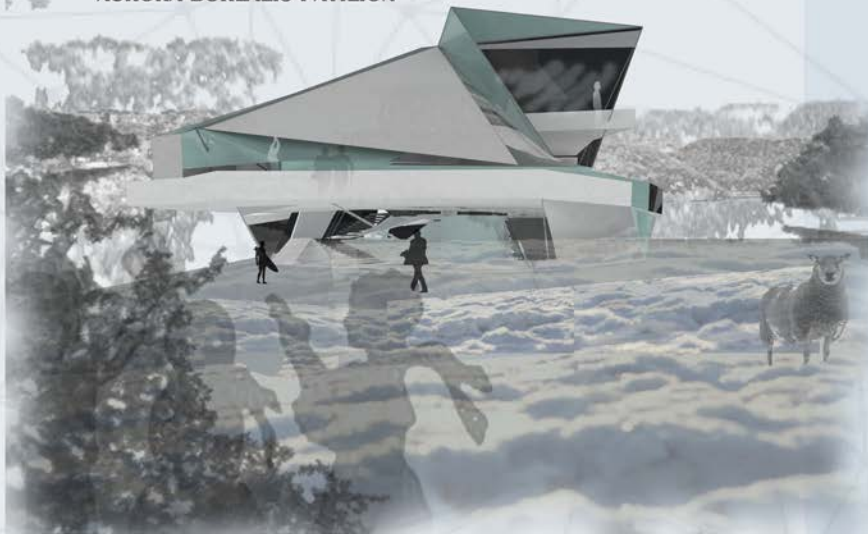
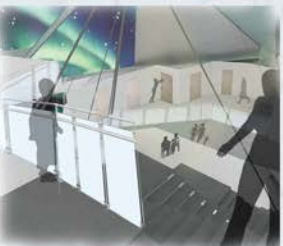
MUSIC DIAGRAM



PERSPECTIVE SKETCH

# TIP OF THE ICEBERG

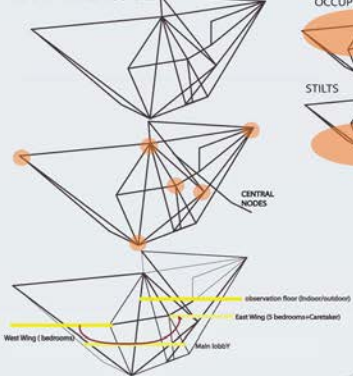
## AURORA BOREALIS PAVILION





PRECEDENT STUDY

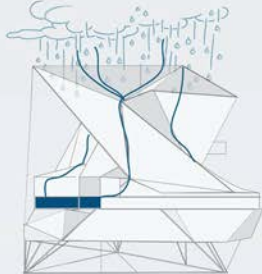
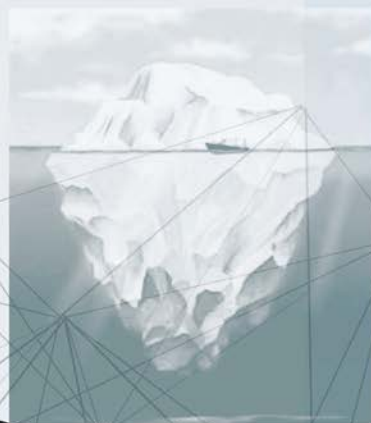
PRIMARY INFRASTRUCTURE



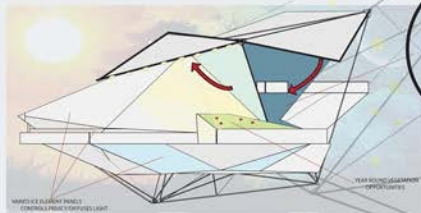
OCCUPIED



STILTS



RAIN COLLECTION SYSTEM



WINDS OR GLASS PANELS  
CONTROLS PANELS EXPOSES LIGHT



PREFERRED GLASS  
WIND PANELS IS LIGHT DIFFUSED

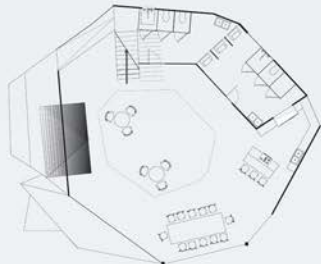


CLEAR GLASS  
NO PANELS LIGHT NOT DIFFUSED



NO GLASS COVERED PANELS  
PANELS NO NO LIGHT LEAK

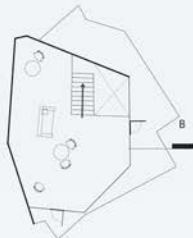
ADJUSTABLE PANELS  
CONTROLS NIGHT/DAY SIMULATION



FLOOR 1 PLAN  
SCALE 1/16"



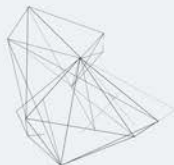
FLOOR 2 PLAN  
SCALE 1/16"



FLOOR 3 PLAN  
SCALE 1/16"



VAINED GLASS SKIN



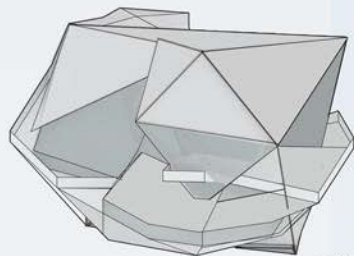
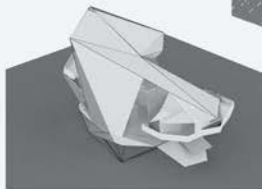
STEEL FRAME



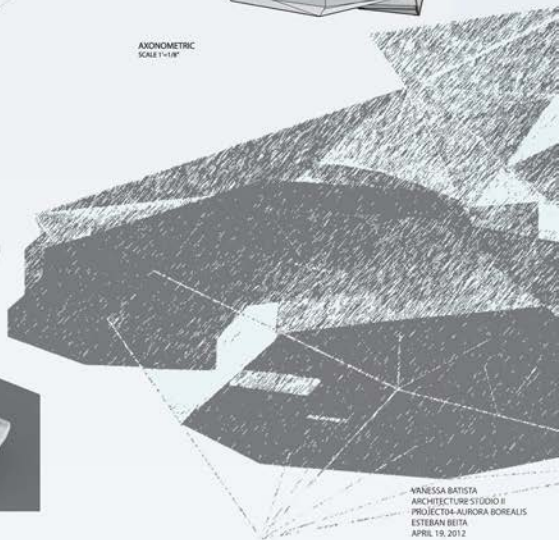
VERTICAL CIRCULATION



VERTICAL LEVELS

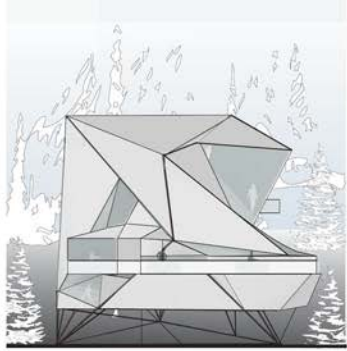


AXONOMETRIC  
SCALE 1/16"

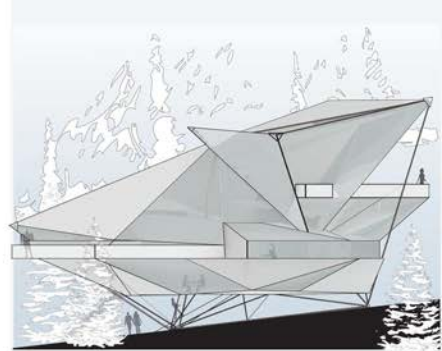




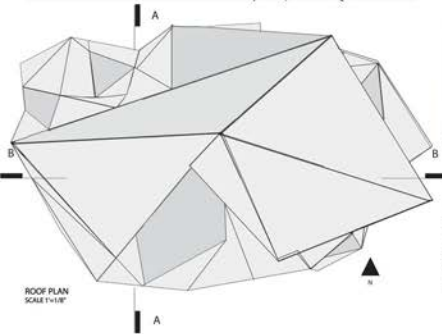
SITE PLAN  
SCALE 1"=150'



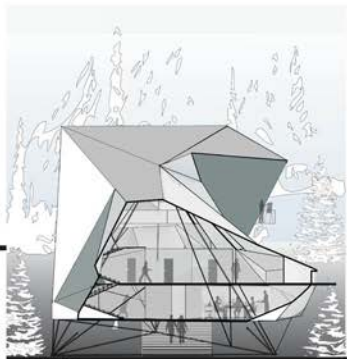
WEST ELEVATION  
SCALE 1"=150'



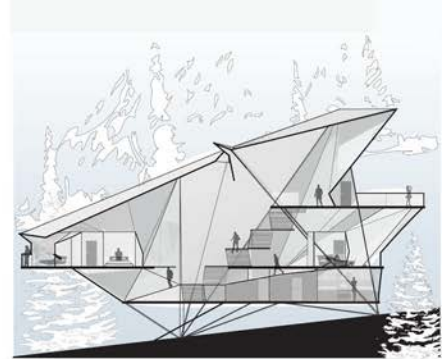
NORTH ELEVATION  
SCALE 1"=150'



ROOF PLAN  
SCALE 1"=150'



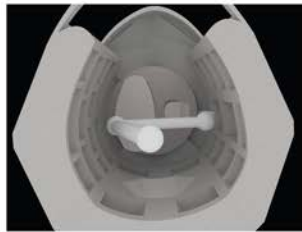
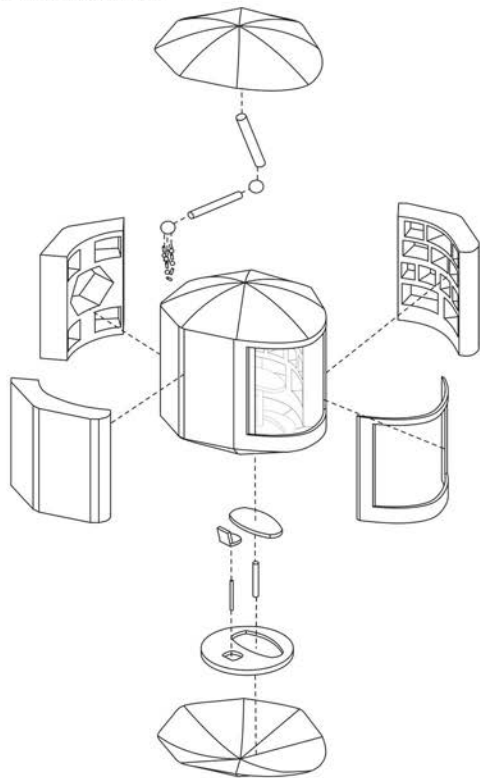
SECTION A-A  
SCALE 1"=150'



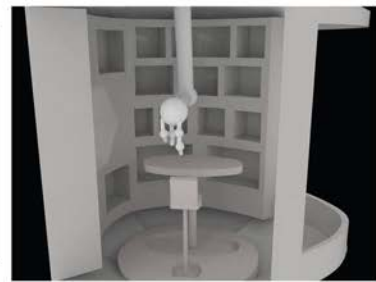
SECTION B-B  
SCALE 1"=150'

VANESSA BATISTA  
ARCHITECTURE STUDIO B  
PROYECTO-AURORA BOREALIS  
ESTEBAN BEITA  
APRIL 19, 2012

# Exploded Axonometric

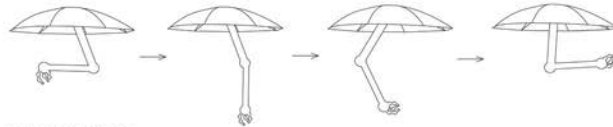


Top View



Interior View

## Diagrams



Movement of Robotic Arm



Movement Diagram of Chair and Desk

# NORTHERN LIGHTS

## Lodge and Retreat

### Synopsis:

The Northern Lights Lodge and Retreat was designed to have a very private living space with an individual less private but individual viewing space. The communal features such as the kitchen, dining hall, and bathrooms would all need water so they are centered between the cabins in a connected form. The retreat has a glass ceiling everywhere except for the communal kitchen, communal dining hall, bathrooms, and cabins. This allows for a more open feeling while you are still separated from the harsh environment of North Slope, Alaska.

### Northern Lights' Cabins

### Precedence: Rolling Huts

OSKA Architects



Section C  
Scale 1/8" = 10"

C  
A  
B  
I  
N

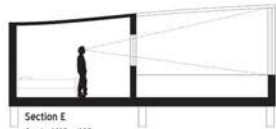


Plan of Cabin  
Scale 1/8" = 10"

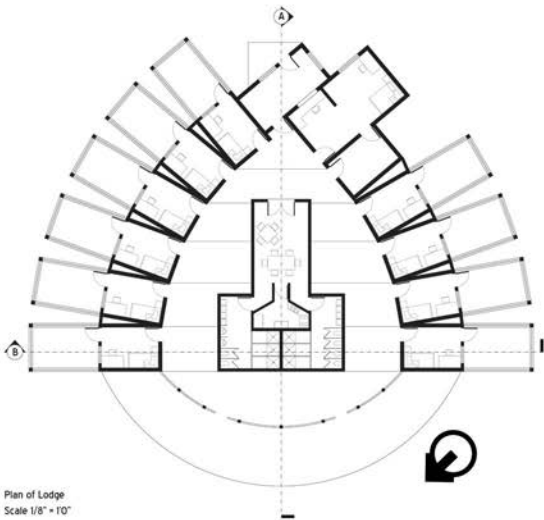


Cabin Elevation  
Scale 1/8" = 10"

V  
I  
E  
W



Section E  
Scale 1/8" = 10"



Plan of Lodge  
Scale 1/8" = 10"

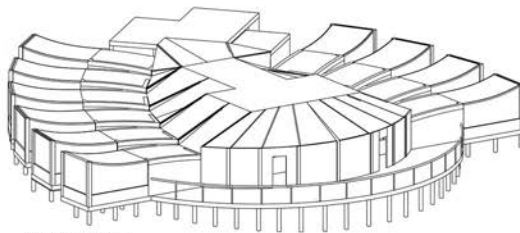


Section A  
Scale 1/8" = 10"

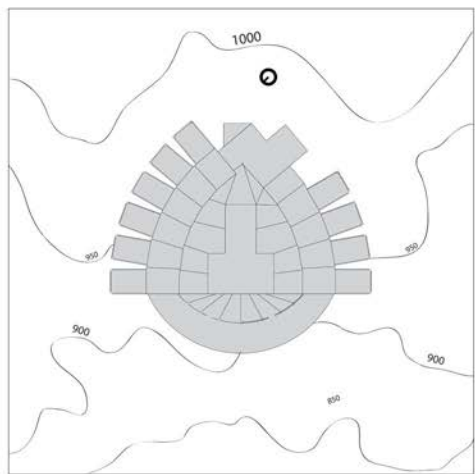


Section B  
Scale 1/8" = 10"



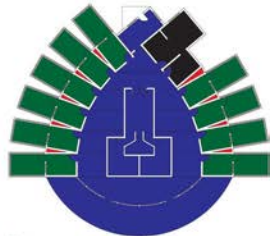


Axonometric Drawing  
Scale 1/8" = 10"



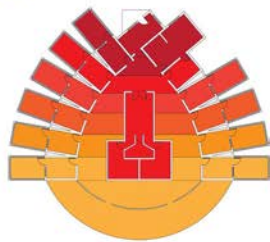
Site Plan  
Scale 1/16" = 10"

S  
P  
A  
C  
E  
S



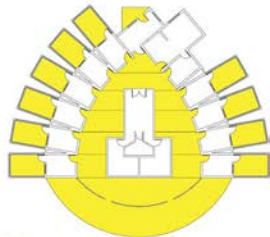
■ Private Space      ■ Restricted Space  
■ Communal Space

L  
E  
V  
E  
L  
S



Highest      Lowest  
Entrance      Observation Deck

V  
I  
E  
W  
S



■ View  
□ No View

# Space for Mineral Study and Robot Service



I chose to focus on the efficiency of my time on Mars. This caused me to want to interact with what would stay there the longest time, a Mars Rover. My design is approximately 900 ft<sup>3</sup> and is centered around an inner core for storage and work meant for the minerals the robots will gather and I will study.

A stationary position can be had in the standing chair that is able to be moved around the space using magnetic fields. This allows for comfort and efficiency at the same time while working inside of the space. The comfort comes from the exact proportions that I used to design the standing chair and the work stations and the efficiency comes from the interactability of the space and the components within it. Also the convenience of a space suit and tool storage keep one central location to go to work on rovers outside the ship in case of emergency. When there isn't an emergency however the robots can be mechanically switched out using a rotating lift. This life allows a changing work site without using any of the work space.

## Materials:

Chair and Movement Strip:

- Porcelain.
- Neodymium Magnetic sheeting.

Glass Screens:

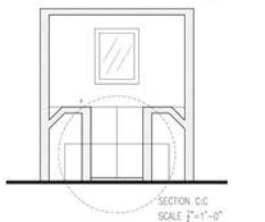
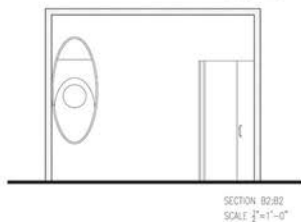
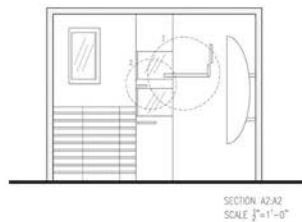
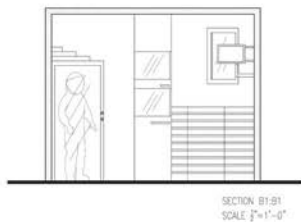
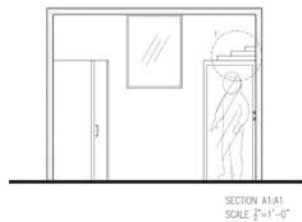
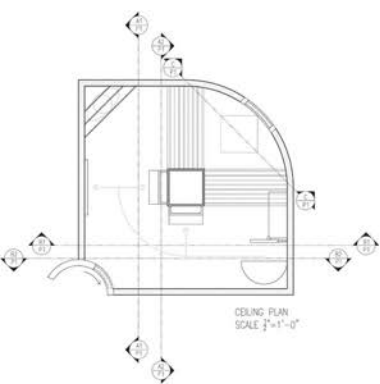
- Polycarbonate panels.

Wall, Floors, and Ceiling:

- Matte Chrome.

Touch Screens:

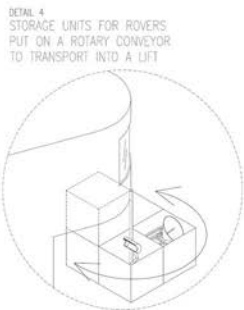
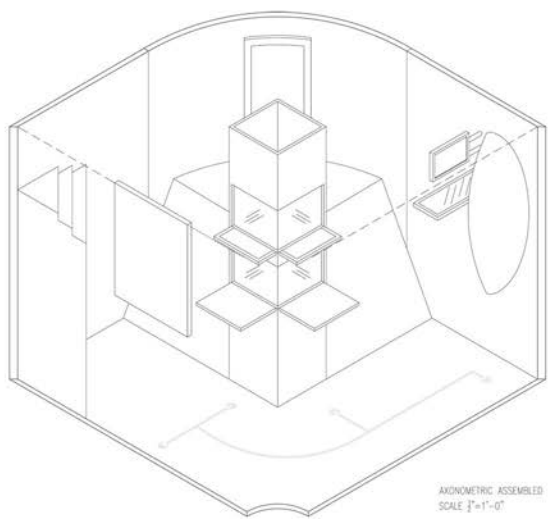
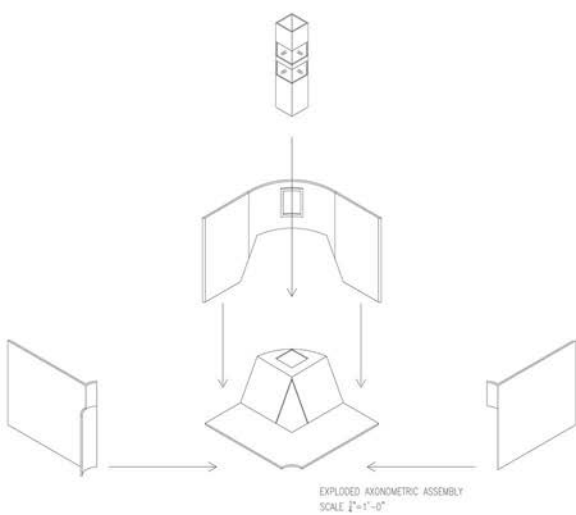
- Displax™ Overlay Multitouch



SOUTHERN ELEVATION PERSPECTIVE RENDER



NORTHWEST MODEL PHOTOGRAPH



Anthony Samaha

Arch 163

Workspace Project

# Aurora Borealis Pavilion

## Precidence



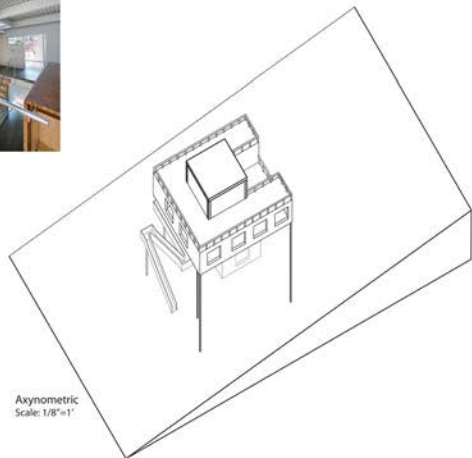
Render 1



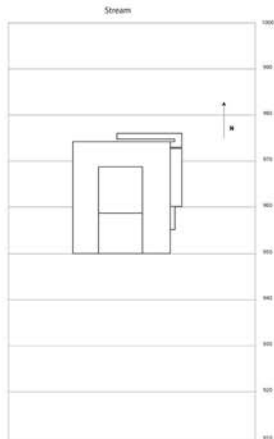
Render 2

## Concept

My overall concept is to use the over lapping roofs and floors in my design to create open outdoor areas to observe the Borealis and extended roofs for protection. In addition, I will use the pilings to surpass each floor for a more unified and supporting structure.



Axynometric  
Scale: 1/8"=1'



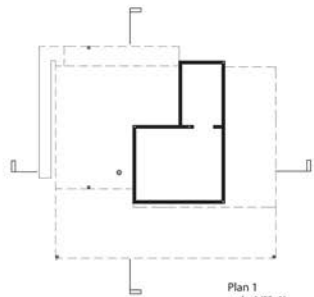
Site Plan  
Scale: 1/16"=1'



Render 3



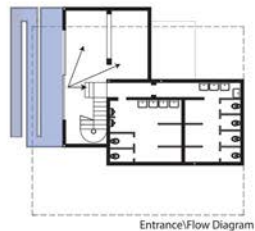
Render 2



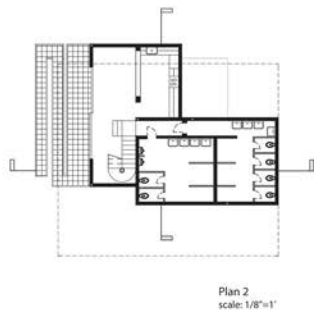
Plan 1  
scale: 1/8"=1'



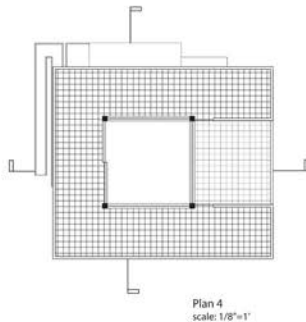
Plan 3  
scale: 1/8"=1'



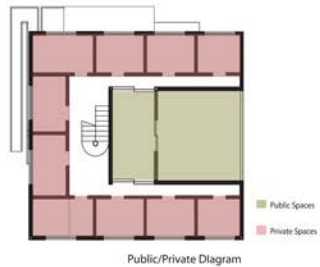
Entrance/Flow Diagram



Plan 2  
scale: 1/8"=1'



Plan 4  
scale: 1/8"=1'



Public/Private Diagram

Public Spaces

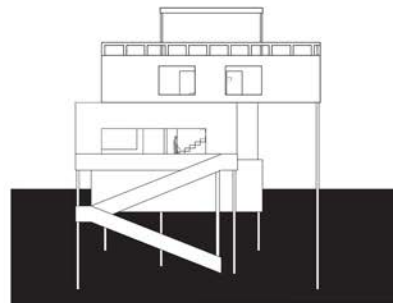
Private Spaces



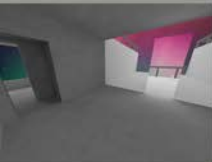
Render 2



Elevation 1  
Scale: 1/8"=1'



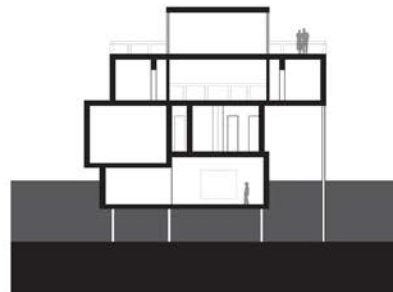
Elevation 2  
Scale: 1/8"=1'



Render 2



Section AA  
Scale: 1/8"=1'

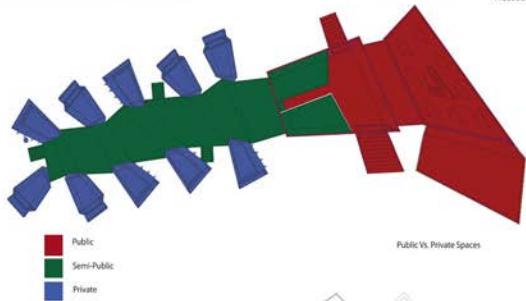


Section BB  
Scale: 1/8"=1'

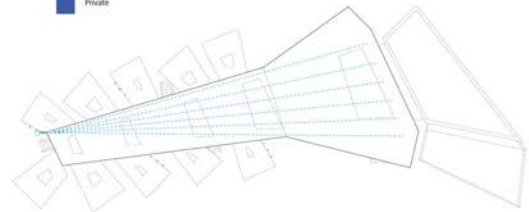
# TAPERING THE AURORA BOREALIS PAVILION



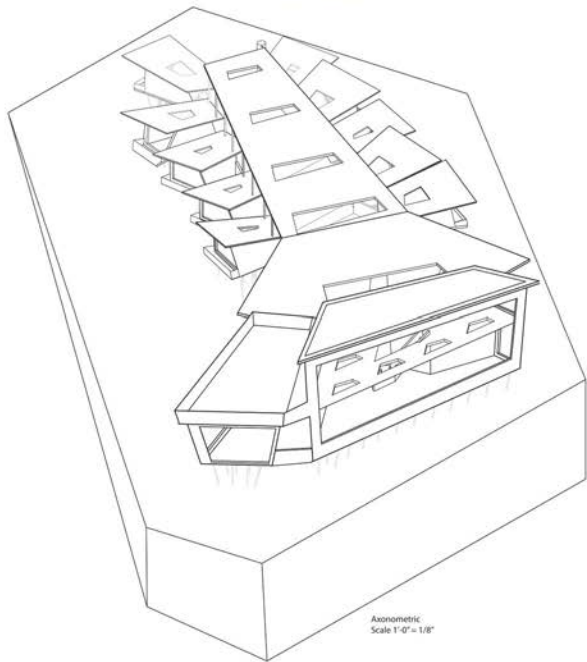
Precedent Studies



Public Vs. Private Spaces

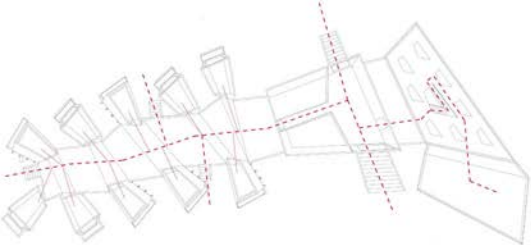


Water Collection Diagram

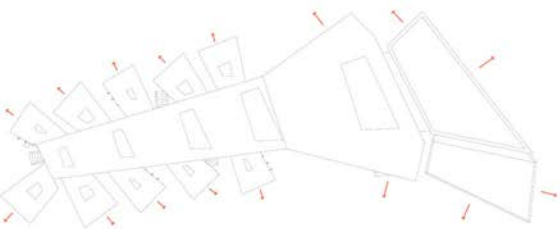


Axonometric  
Scale 1'-0" = 1/8"

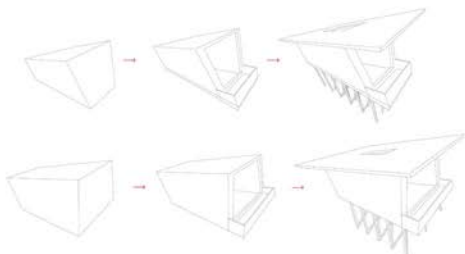




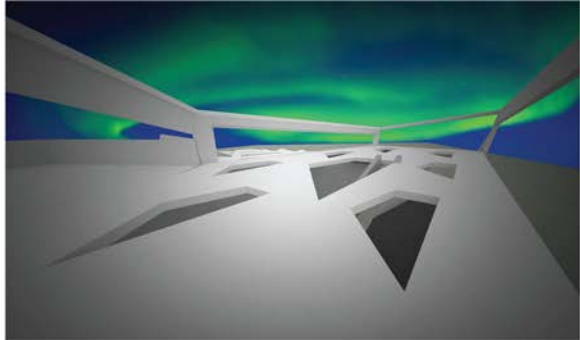
Flow Diagram



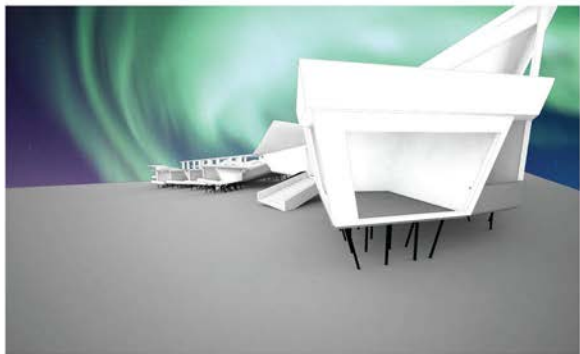
Viewpoints Diagram



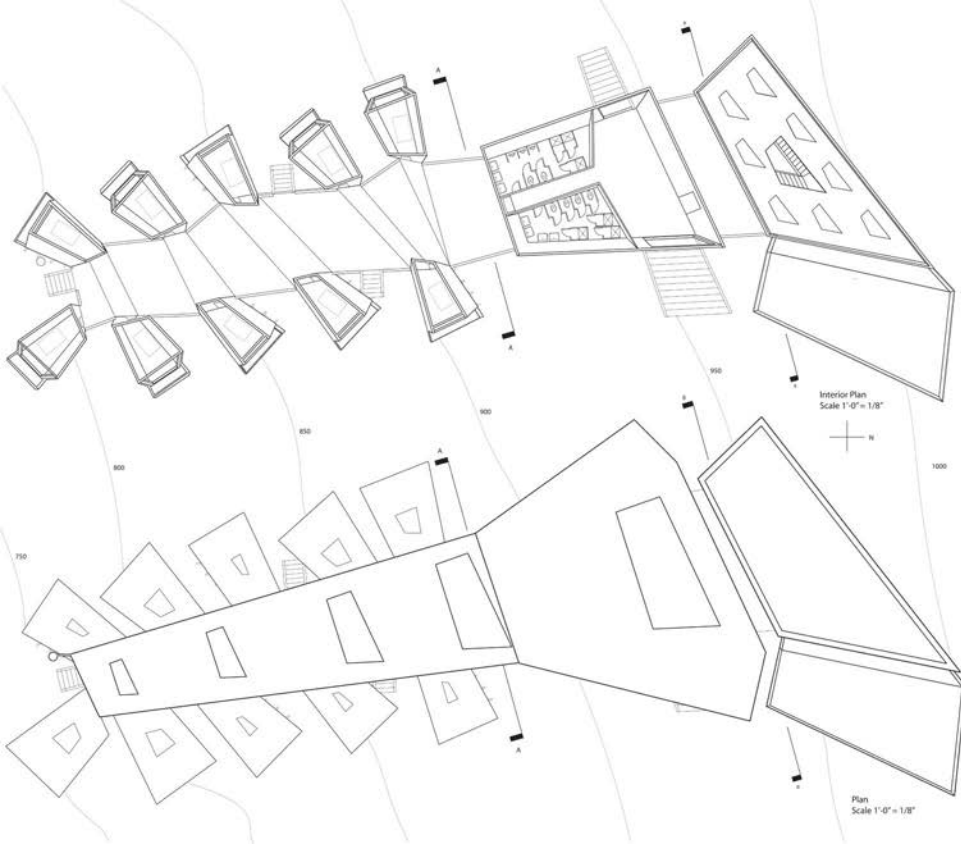
Shape & Form Diagram



Observatory Room Rendering



Exterior Rendering



Observation Room Rendering



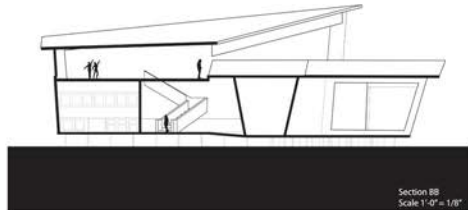
Private Room Rendering



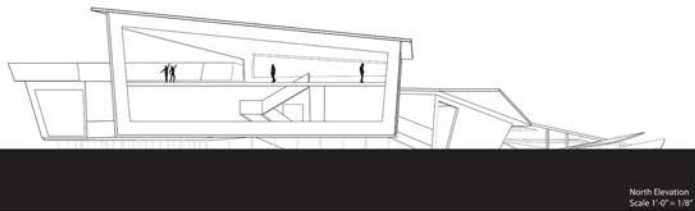
Interior Rendering



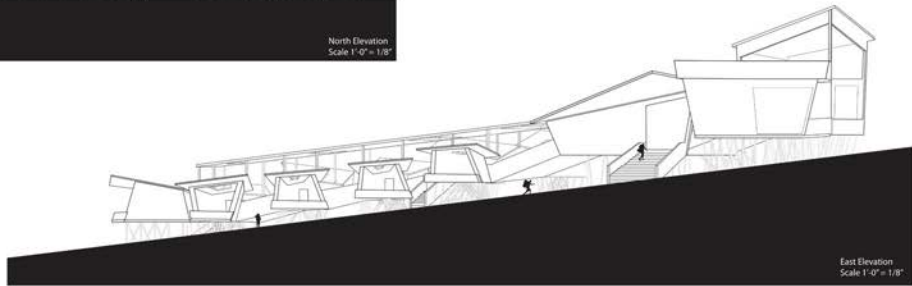
Section AA  
Scale 1'-0" = 1/8"



Section BB  
Scale 1'-0" = 1/8"



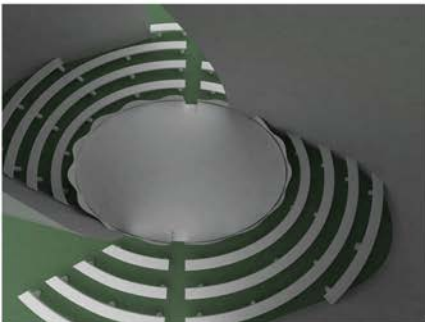
North Elevation  
Scale 1'-0" = 1/8"



East Elevation  
Scale 1'-0" = 1/8"

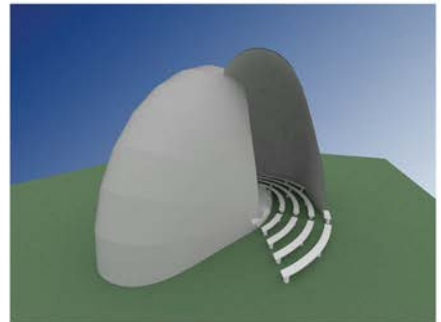


# Music Pavillion



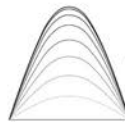
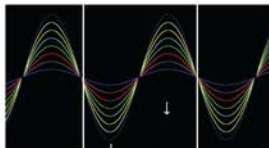
## Concept Statement

In this pavilion the concept was fluctuation in accordance the musical piece Wood Blocks by Steve Reich. The music was first analyzed and converted into a wave format. From there it can be seen that each of the five wood block players are perfect sync until they change roles. The music changes through a variety of fluctuation by each player, as seen through the waves. Through these ways, the shape of the overall pavilion was determined. A major peak of the waves was taken to form the overall shape. Thus, these waves became two interlocking arcs creating a flowing and inviting shape. When the pavilion is not in use, the flowing pattern creates an area for individuals to interact with the pavilion. However, when the pavilion is used in performance, the two large shells of the pavilion provide excellent acoustics for sound to travel within and outside the pavilion for all to hear.

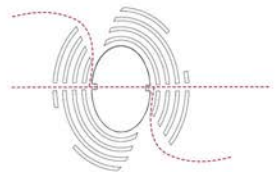
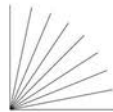


Interior View

Exterior View

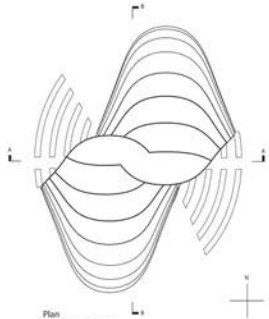


Structural Diagram

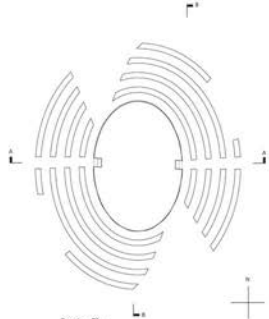


--- Pedestrian Traffic Flow Diagram

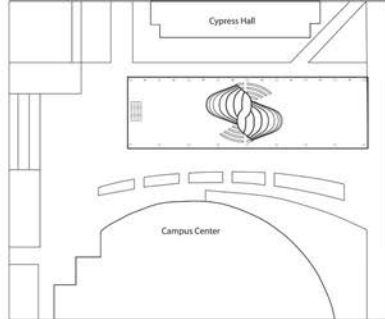
Section of Wood Block Music



Plan  
Scale: 1/8" = 1'-0"



Seating Plan  
Scale: 1/8" = 1'-0"



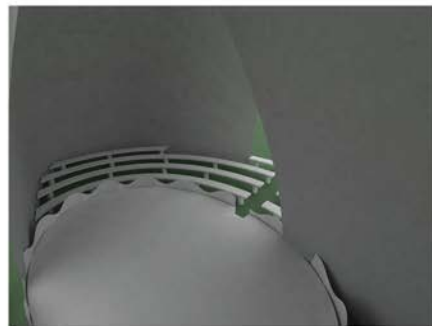
Site Plan  
Scale: 3/32" = 1'-0"



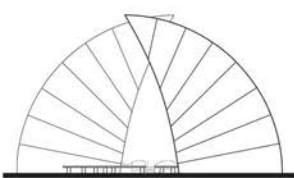
Section BB  
Scale: 1/8" = 1'-0"



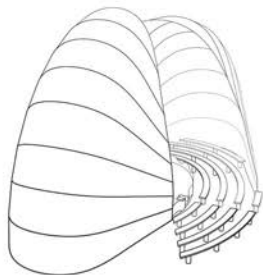
Section AA  
Scale: 1/8" = 1'-0"



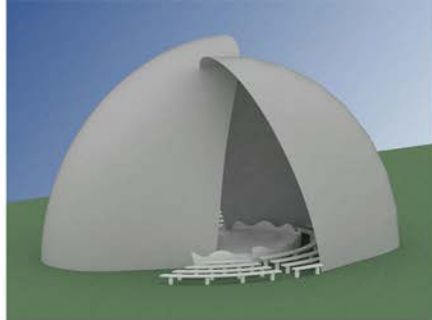
Interior View



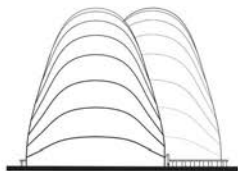
East Elevation  
Scale: 1/8" = 1'-0"



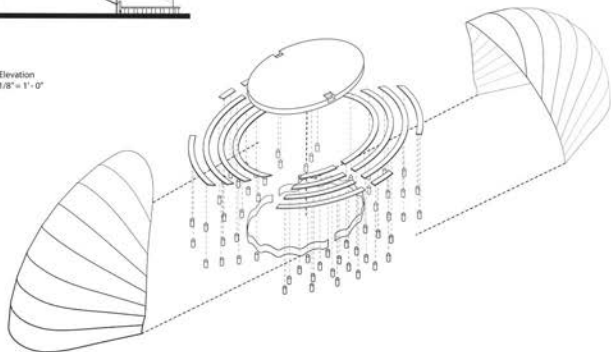
Perspective  
Scale: 1/8" = 1'-0"



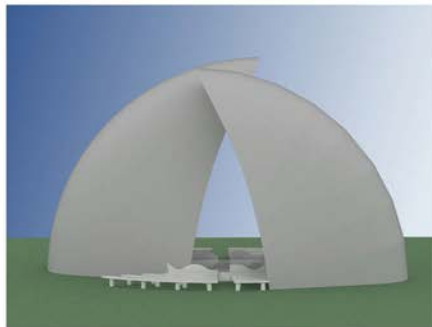
Exterior View



North Elevation  
Scale: 1/8" = 1'-0"



Exploded Axonometric  
Scale: 1/8" = 1'-0"

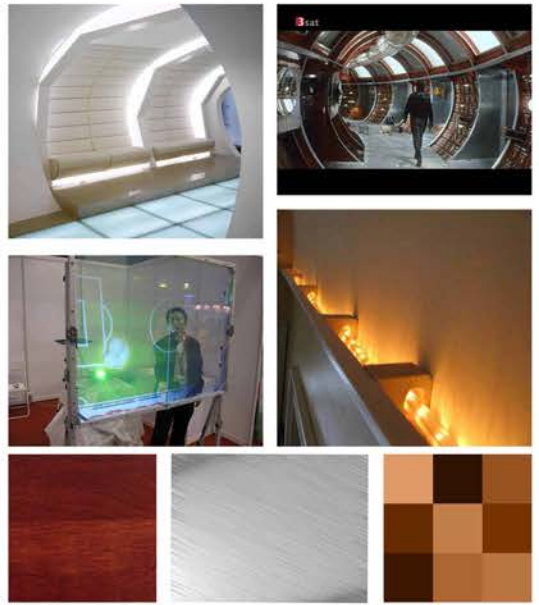


Exterior View

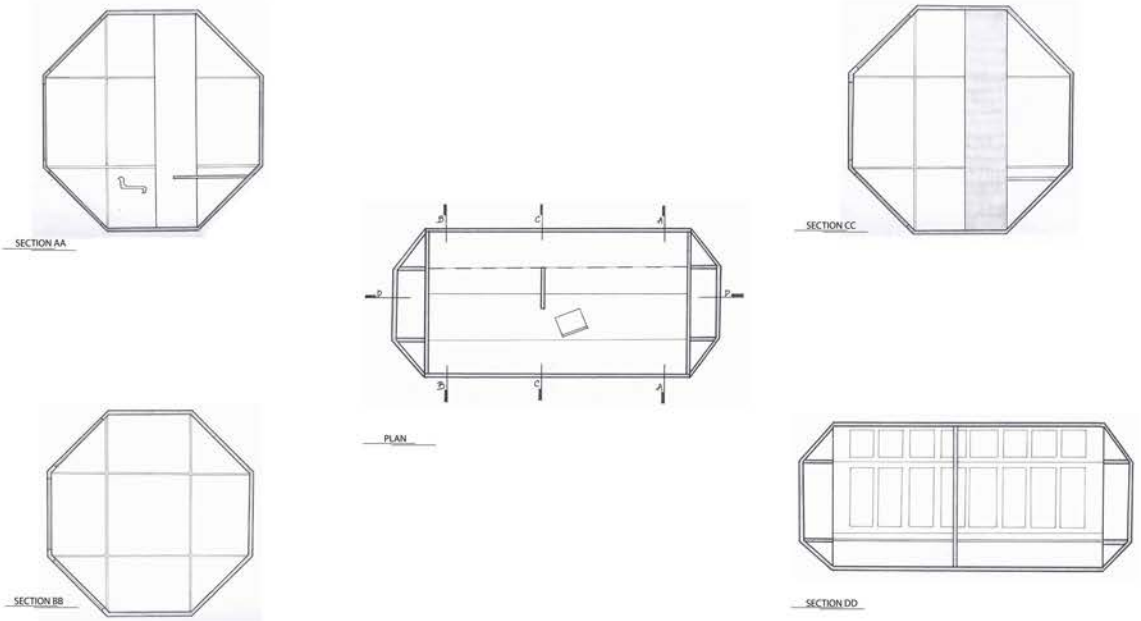
# Luxury Utility Command Center

The Luxury Utility Command Center is a capsule that strives to provide the user with the utmost level of comfort possible while simultaneously acting as a utilitarian workspace equipped for only the latest research and technology available. By utilizing state-of-the-art technology, inviting tones, & a streamlined simplified look, this work capsule aids the occupier's level of ease. It's dual ability to perform as a modern appealing work station and as a research and communications lab allow for a practical and sleek work environment fit for any research astronaut.

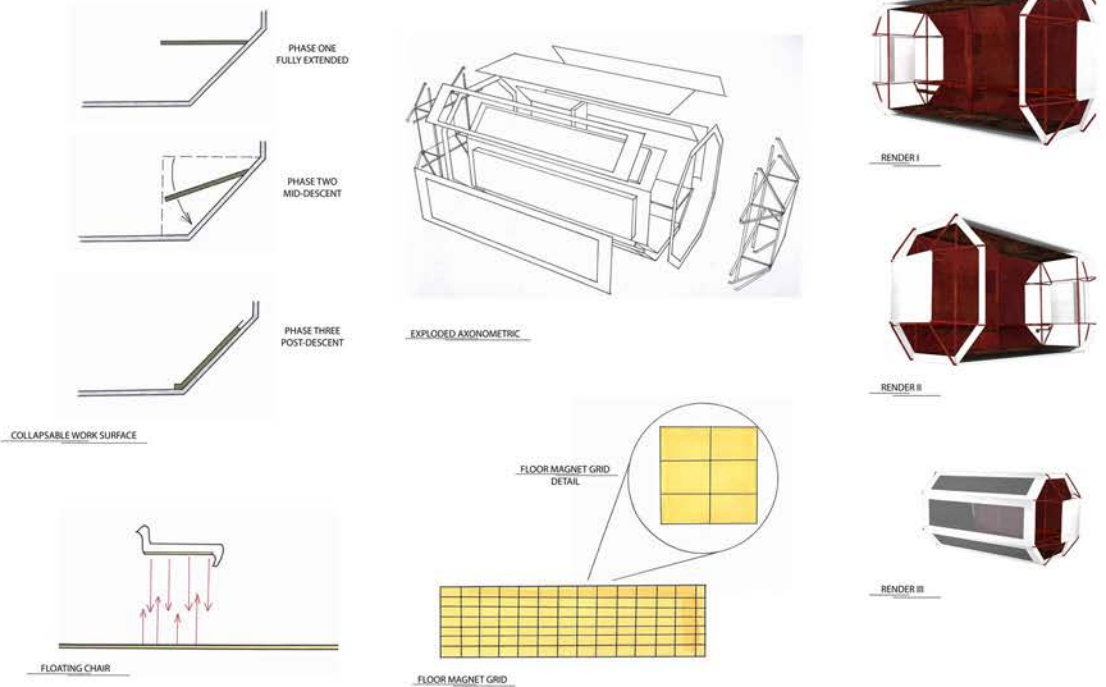
The materials that comprise the capsule provide for a streamlined and interesting work space. Wood paneled walls give the feeling of a warm and comfortable work environment while doubling as hidden storage within the wall space. The collapsable work surface that spans the length of the capsule possesses a fiery tone of amber resin, prime for optimal and clean research purposes. The floor, which is a padded leather provides a cushion of soft material while still keeping a streamlined modern appearance. Lastly, the windows, made of a tempered glass material, double as touch-screen interfaces that serve as the main computer and communication systems for the capsule.

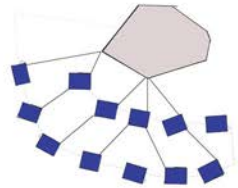


## PLANS // SECTIONS

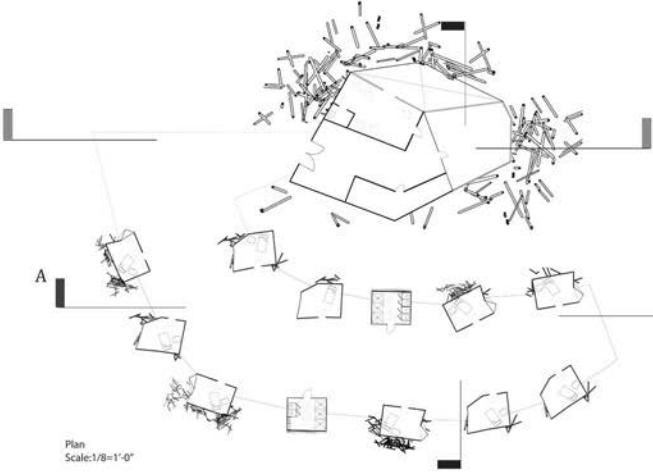


## DIAGRAMS // DETAILS





Radial Programming



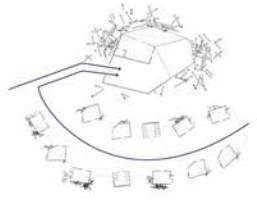
A

A

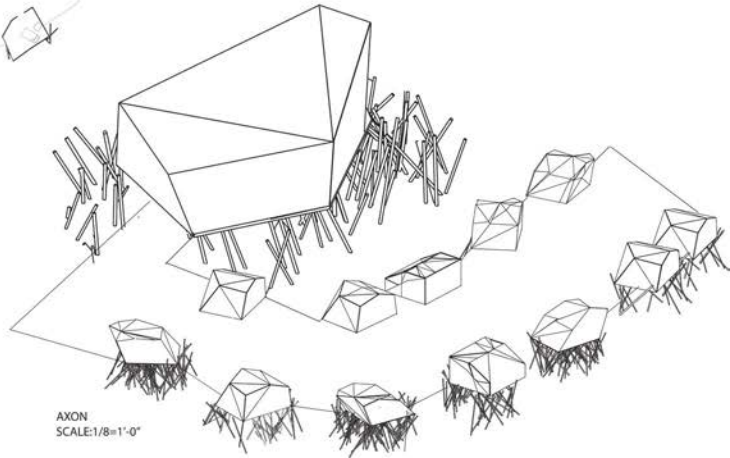
Plan  
Scale:1/8=1'-0"



Light Filtration

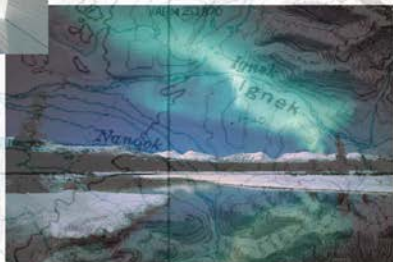


Entry Sequence



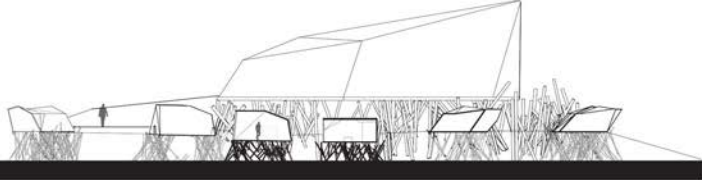
AXON  
SCALE:1/8=1'-0"



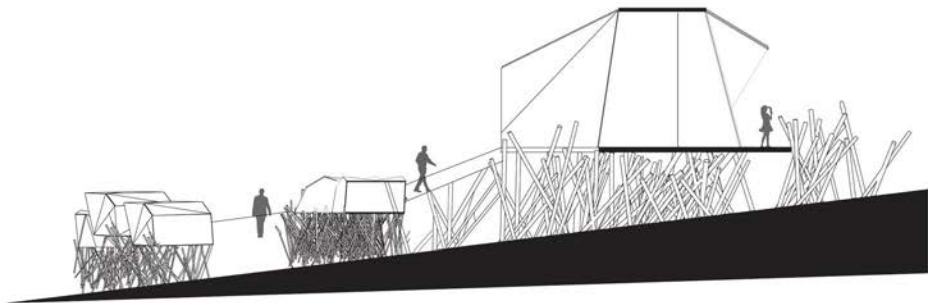


## AURORA BOREALIS PAVILION

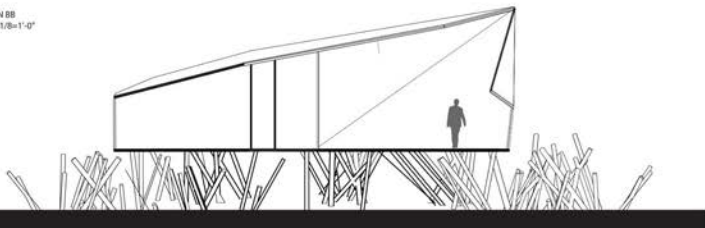
Nehemie Francois  
First Year Design Studio NJIT



SECTION AA  
SCALE:1/8=1'-0"



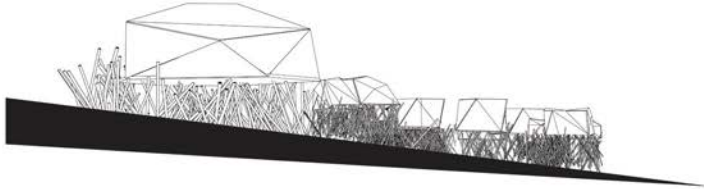
SECTION BB  
SCALE=1/8=1'-0"



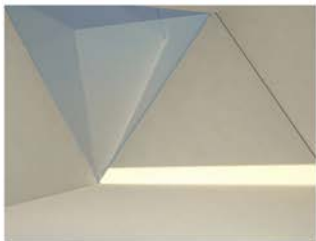
SECTION CC  
Scale:1/8=1'-0"



Cabin A Interior View



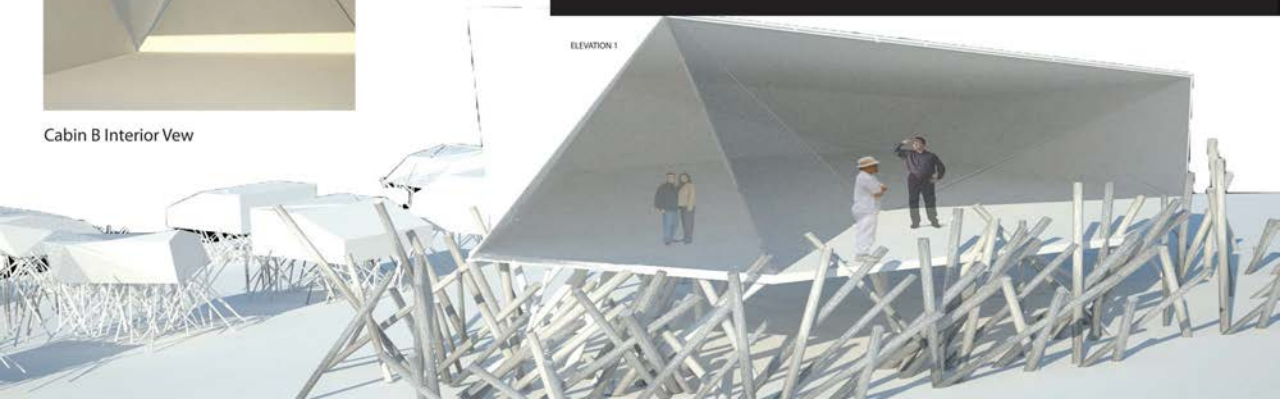
Elevation 2  
Scale: 1/8"=1'-0"



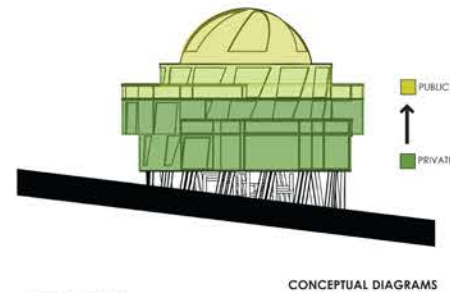
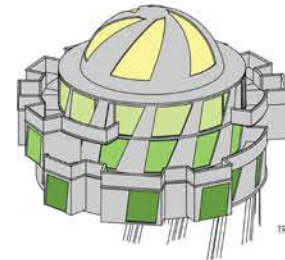
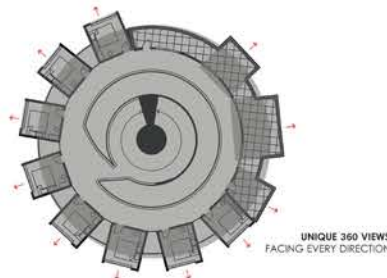
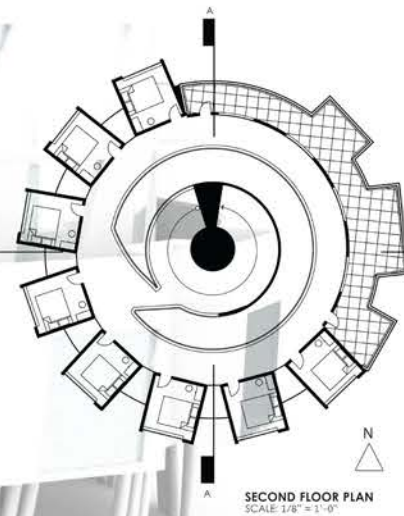
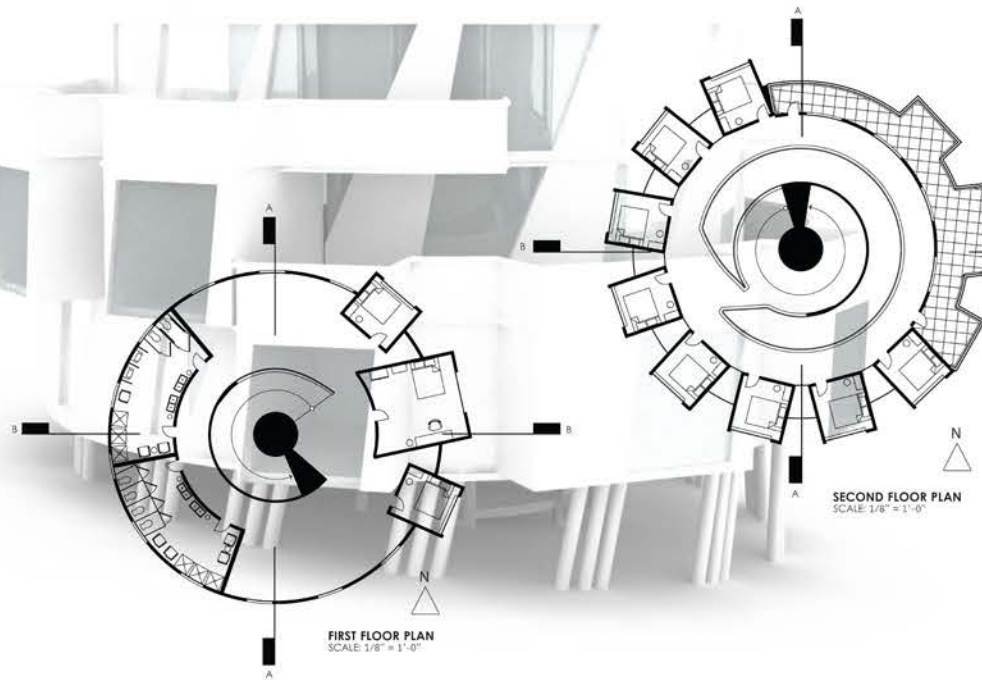
Cabin B Interior View



ELEVATION 1



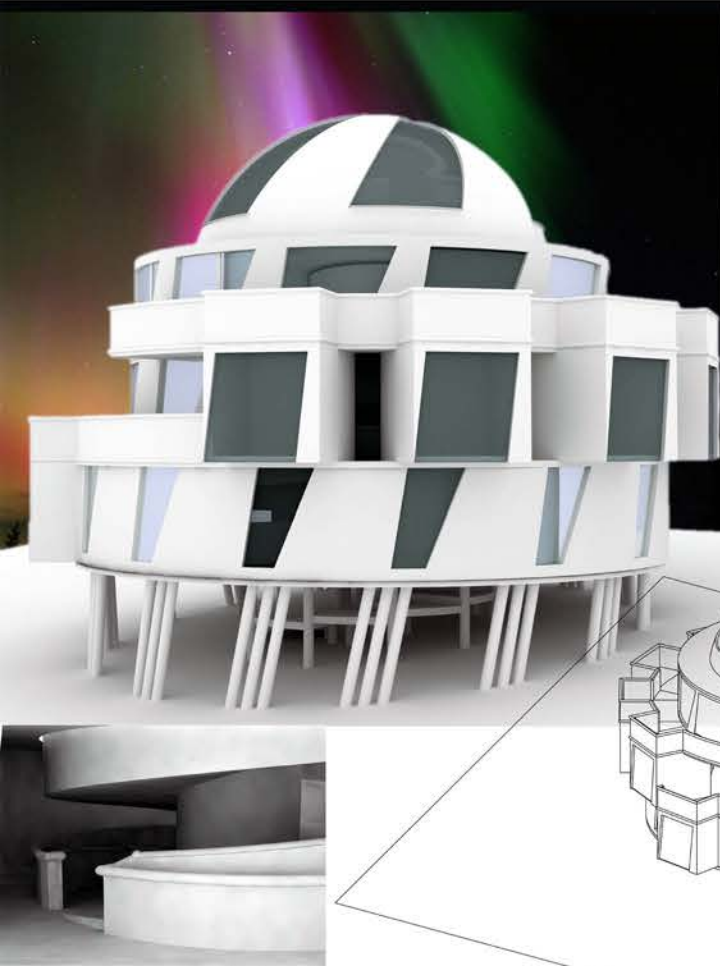
# THE AURORA BOREALIS RETREAT



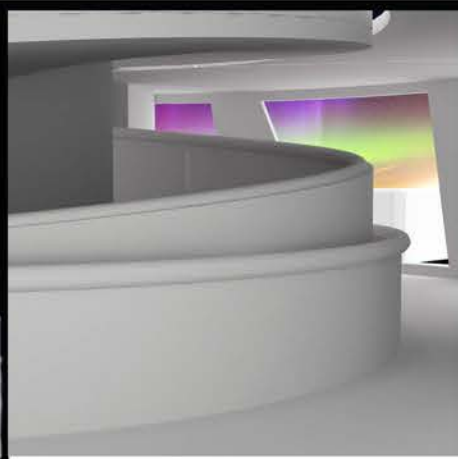
SENSE OF ROTATION  
THROUGH WINDOW PLACEMENT

UNIQUE 360 VIEWS  
FACING EVERY DIRECTION

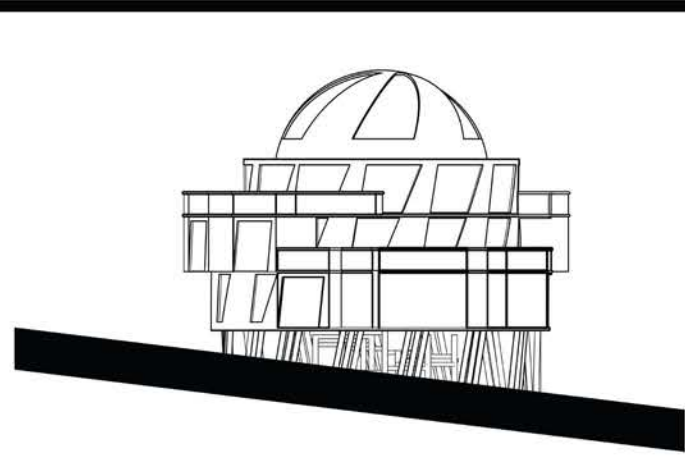




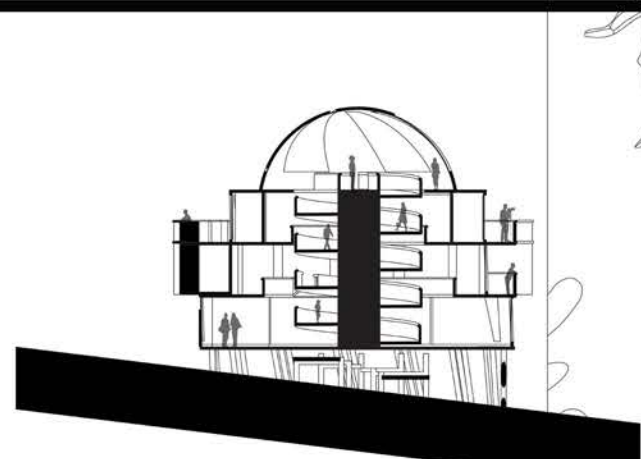
INTERIOR PERSPECTIVE



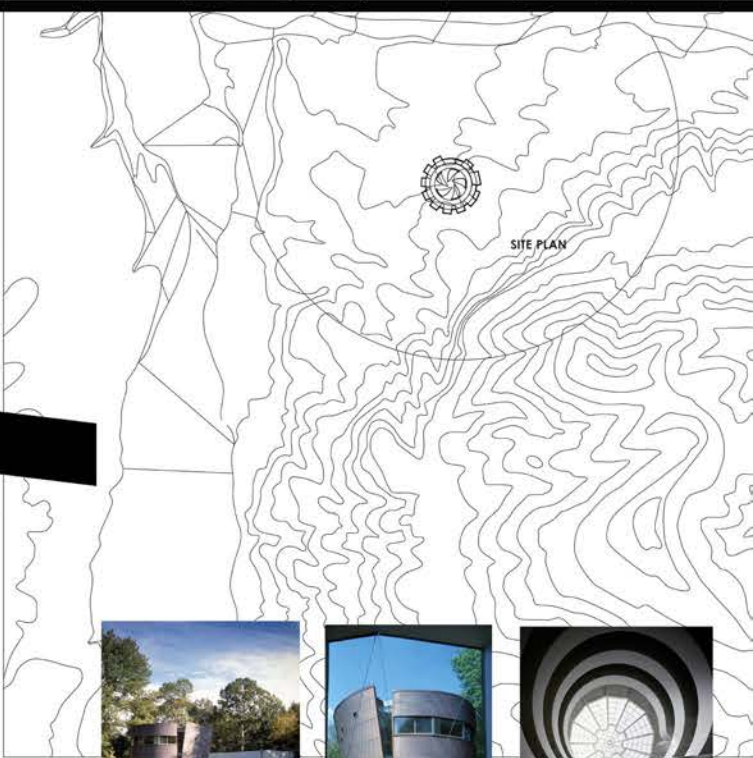
INTERIOR PERSPECTIVE



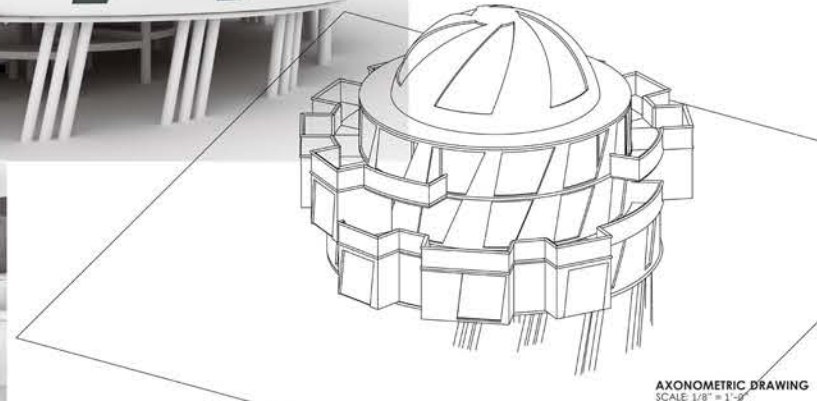
EAST ELEVATION  
SCALE 1/8" = 1'-0"



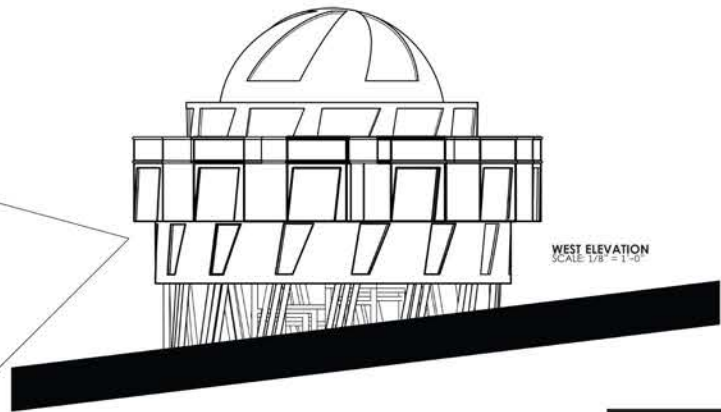
SECTION A-A  
SCALE 1/8" = 1'-0"



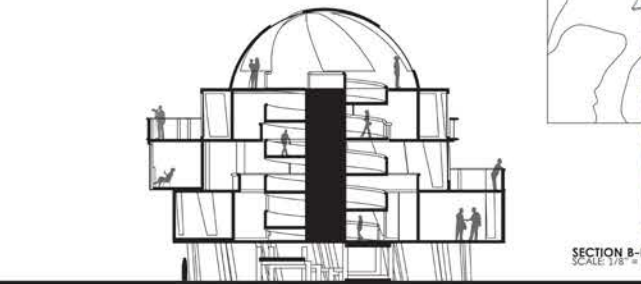
SITE PLAN



AXONOMETRIC DRAWING  
SCALE 1/8" = 1'-0"



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



SECTION B-B  
SCALE 1/8" = 1'-0"



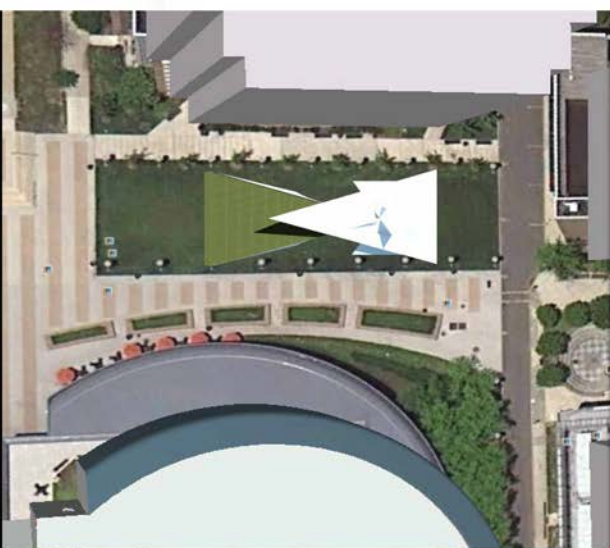
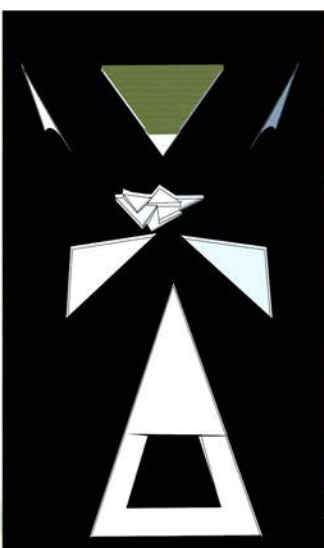
THE DOUBLE HOUSE  
NEW CANAAN, CONNECTICUT



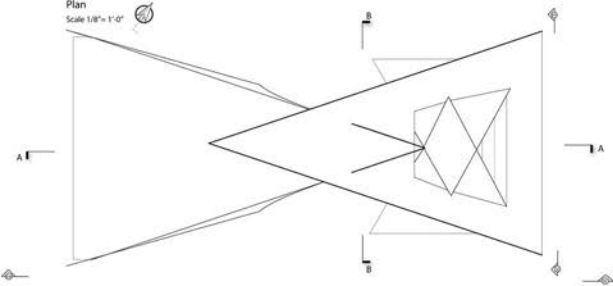
THE GUGGENHEIM  
BY FRANK LLOYD WRIGHT  
PRECEDENT STUDY/INSPIRATION

# Intersecting Pavillion

The concept of this pavillion began with the idea of converging and intersecting objects. The "clapping music" by Steve Reich has many overlapping elements and repetitive beats. The music inspired thoughts of physical hands clapping and overlapping peaks of beats. The musical peaks of the music are sharp and inspired pointed inorganic structures. I used the music to create an image of intersecting hands creating two distinct triangular shapes. The two intersecting peaks inspired two more peaks to act as protection for the seating created from one of the sloped triangles. The seating lays parallel to the stage. The stage was based off of the physical number of musicians (5), the 5 performers lead to a five level stage based off of the specific moments of music each person is responsible for (specifically in the wood block music). The pavillion is designed to be interactive with the plane it is layed upon. The plane which houses the multi leveled is able to be inhabitable. The inhabitable space replaces the ground taken up by the pavillion and helps aid in sound proofing the area. The structure is seen as being constructed out of steel and layered with sod over the stage area. The stage is constructed of light weight wood joined together to create a movable but sturdy stage.



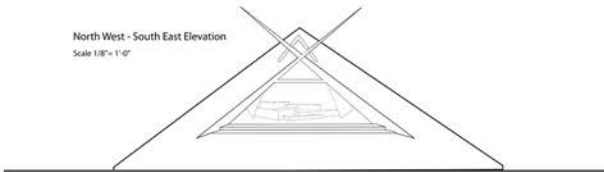
Plan  
Scale 1/8" = 1'-0"



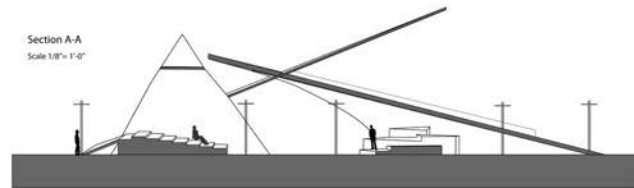
South West - North East Elevation  
Scale 1/8" = 1'-0"



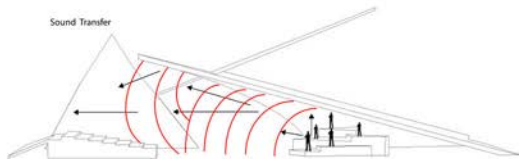
North West - South East Elevation  
Scale 1/8" = 1'-0"



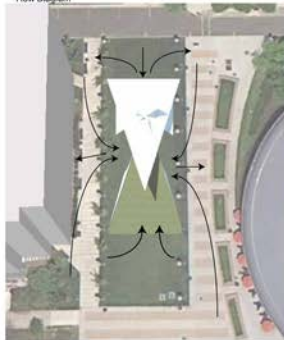
Section A-A  
Scale 1/8" = 1'-0"



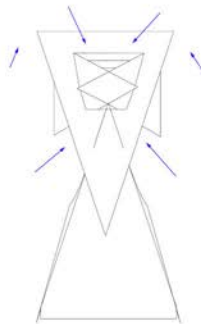
Sound Transfer



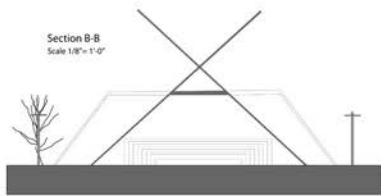
Flow Diagram



Entry Sequence



Section B-B  
Scale 1/8" = 1'-0"



# Aurora Borealis Pavilion

Precedent Study



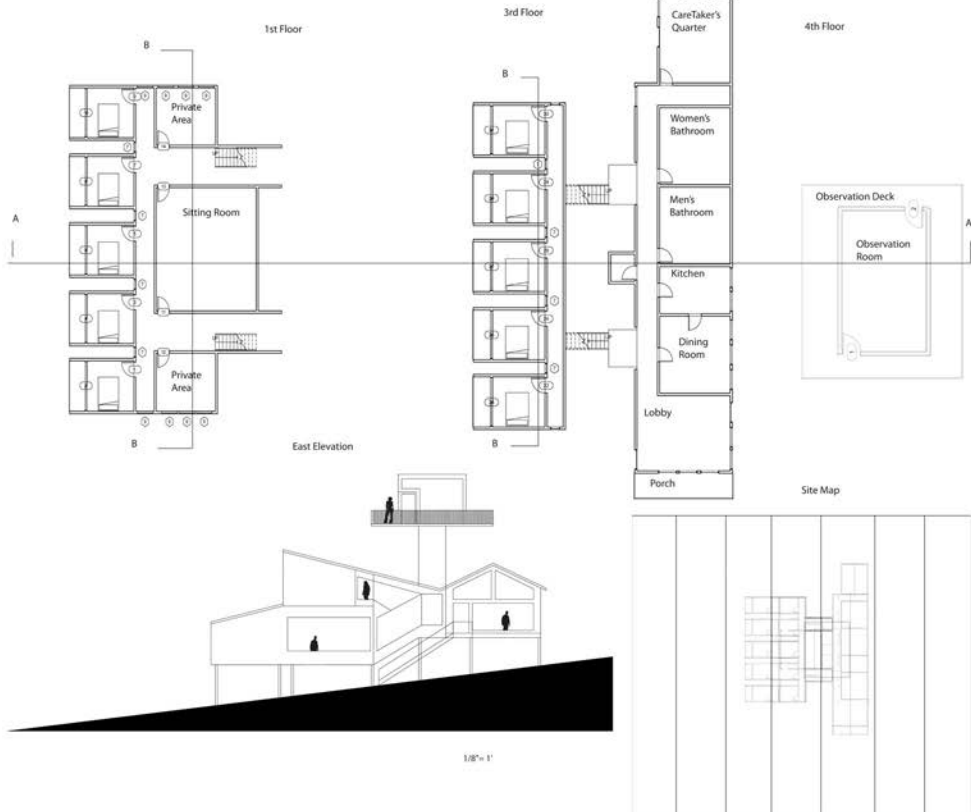
Pinohuacho observation deck, Villarica  
Rodrigo Sheward



Wimbeldon Retractable Roof

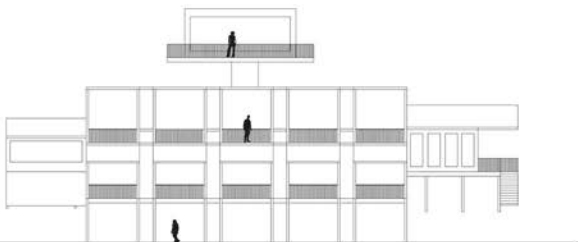


Wood Pilings





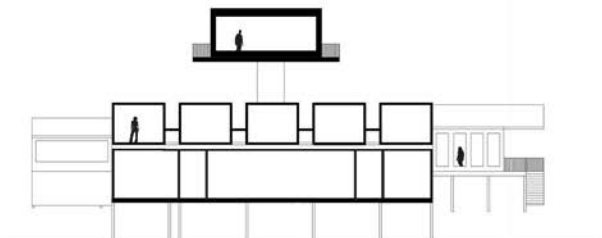
South Elevation



West Elevation

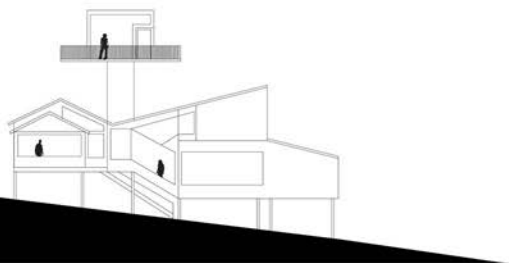
1/8" = 1'

Section BB



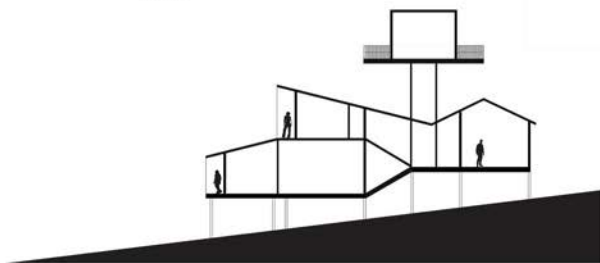
1/8" = 1'

Section AA



Retractable Roof

1/8" = 1'



1/8" = 1'



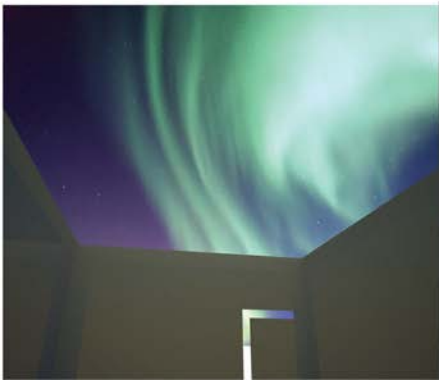
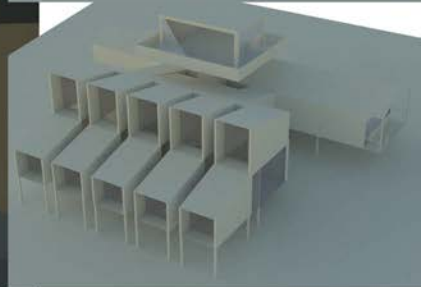
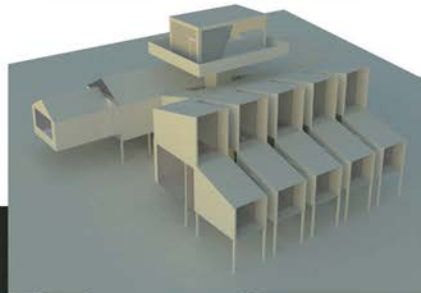
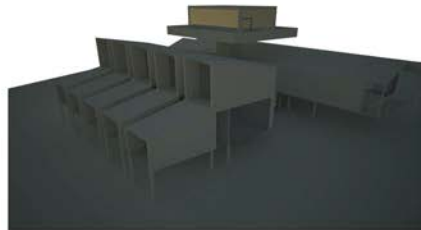
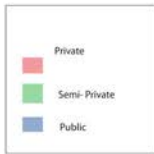
Public and Private Areas

2nd Floor

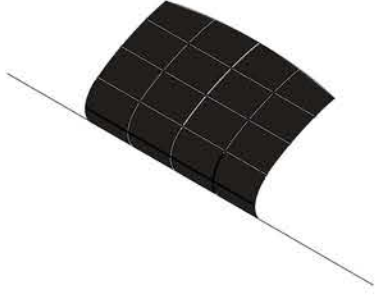
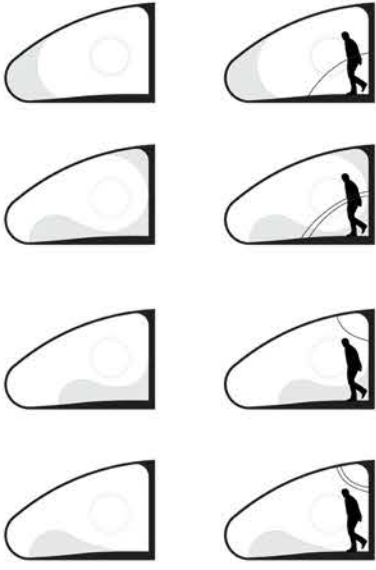
1st Floor

3rd Floor

4th Floor



DIAGRAMS  
NOT TO SCALE



MATERIAL DEVELOPMENT

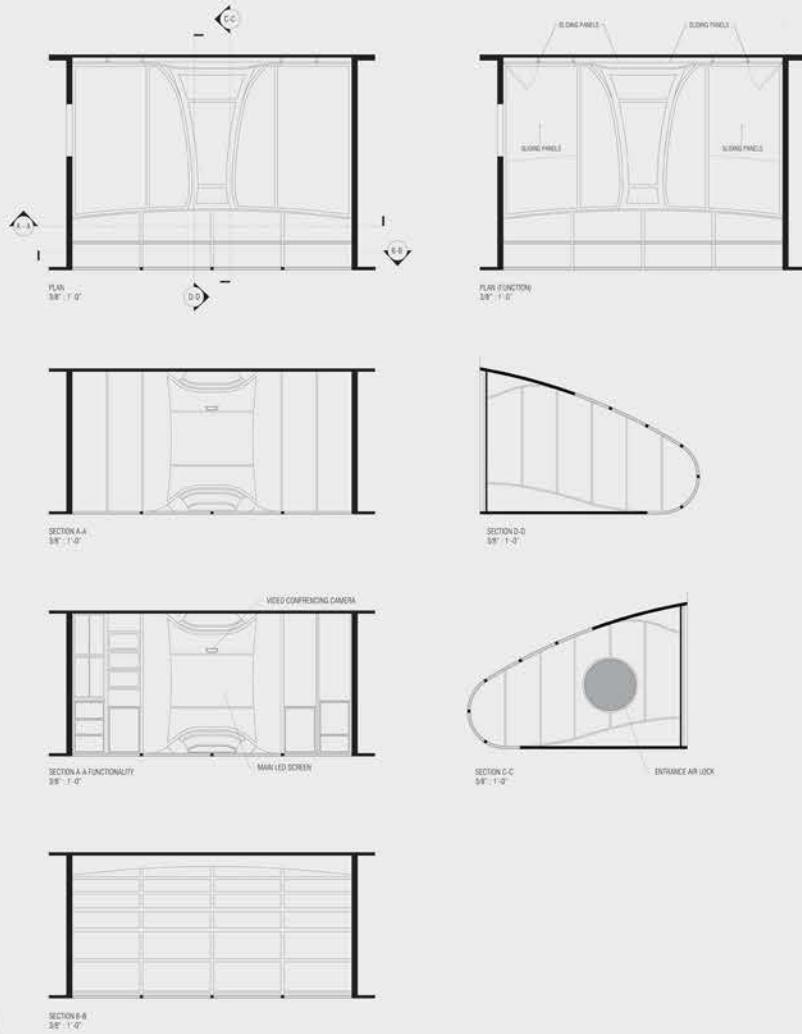


# MARS EXPEDITION WORKSPACE

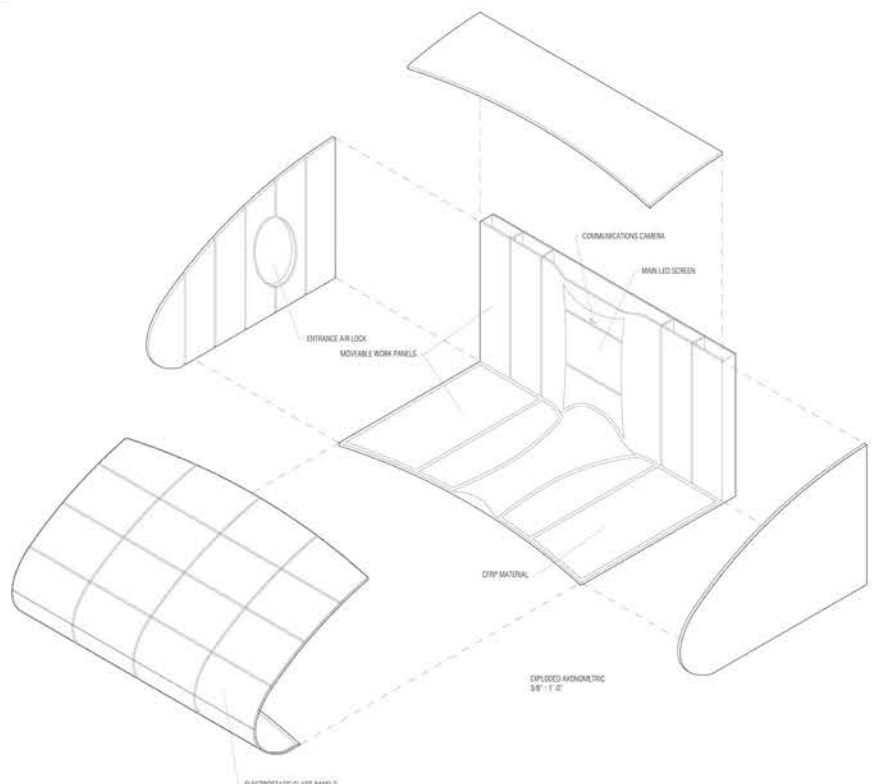
MARS EXHIBITION TERRAFORMING WORKSPACE

THIS MARS BOUND CAPSULE WAS DESIGNED TO BE HOUSE A WORKSTATION FOR ONE SCIENTIST RESEARCHING THE FEASIBILITY OF TERRAFORMING MARS. FOCUSING ON SLEEK AND SEAMLESS DESIGN, THIS CAPSULE FEATURES A COMPLETE CUSTOMIZABLE LAYOUT, ALLOWING FOR UNLIMITED USAGE POSSIBILITIES. EXTRANEOUS FEATURES ARE EITHER LEFT OUT OR HIDDEN WITHIN THE WALLS AND FLOOR. LIGHTWEIGHT AND HIGH TECH MATERIALS CREATE AN EFFICIENT AND COMFORTABLE WORKSPACE. ALLOWING FOR MAXIMUM WINDOW SPACE, THE UNIT COMBINES FUNCTIONALITY, VERSATILITY, AND BEAUTY.

ORTHOGRAPHIC PROJECTIONS

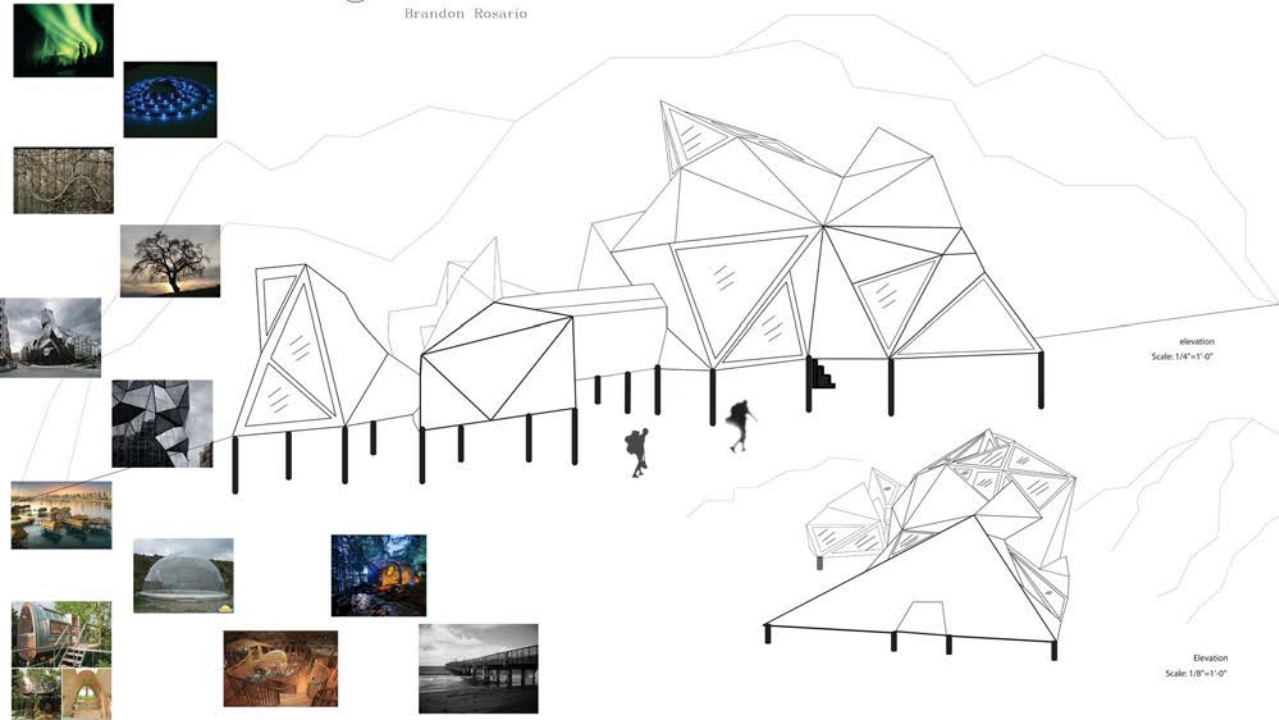


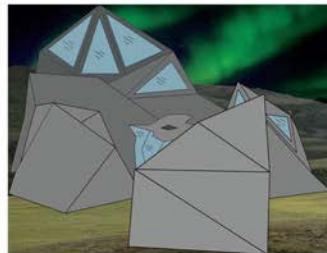
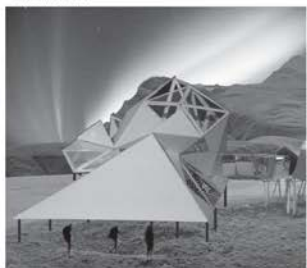
ORTHOGRAPHIC PROJECTIONS



# Aurora Borealis Hiking retreat

Brandon Rosario

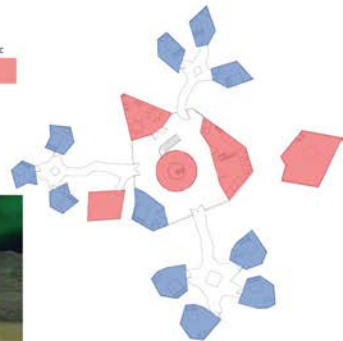




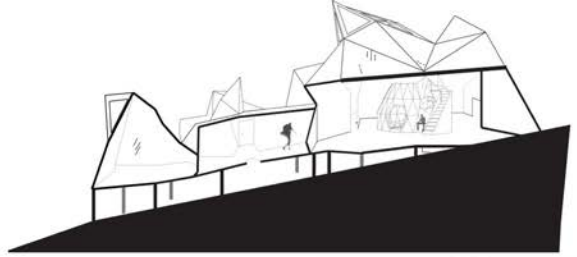
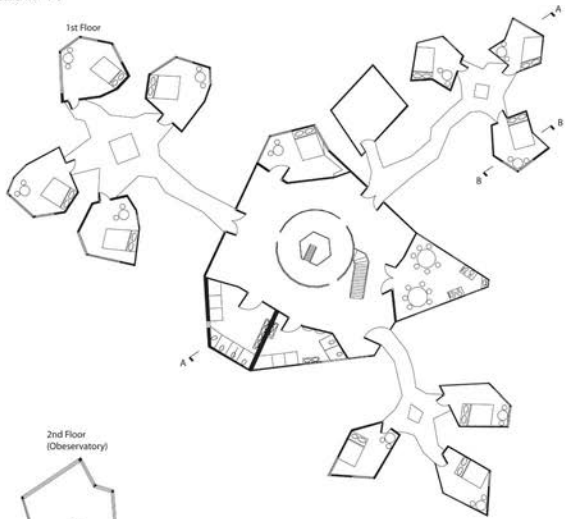
Interior entryway and stair



Entry Sequence and Flow diagram



Site Plan  
Scale: 1/8"=1'-0"



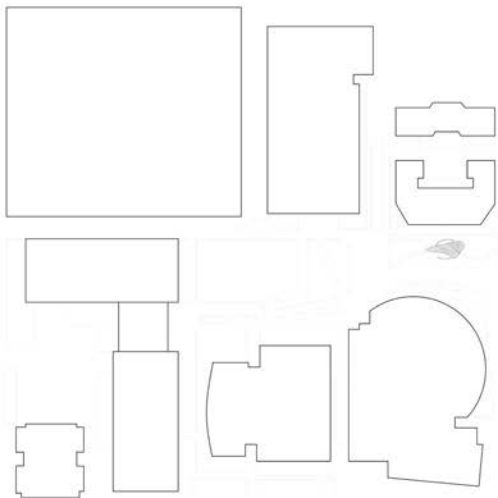
Axonomic



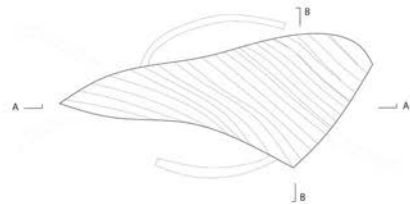
# Music Pavilion NJIT

Nehemie Francois's 1st Year Design Studio

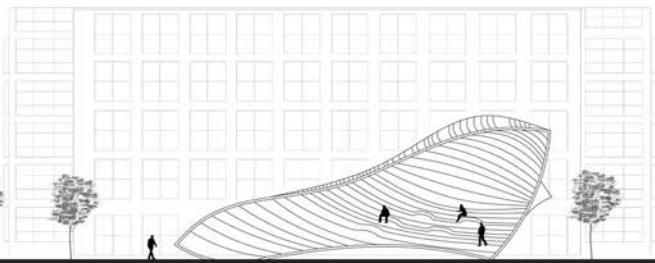
Composition of Form



Conceptual Site Plan  
Scale: 1/64 = 1'-0"



Plan View  
Scale: 1/8 = 1'-0"



Section AA  
Scale: 1/8 = 1'-0"



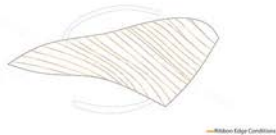
North Elevation  
Scale: 1/8"=1'-0"



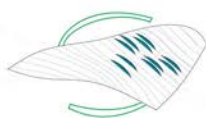
South Elevation  
Scale: 1/8"=1'-0"



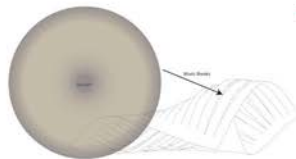
Pathways



Ribbon Edge Conditions



Indoor Seating  
Outdoor Seating



Wood Block



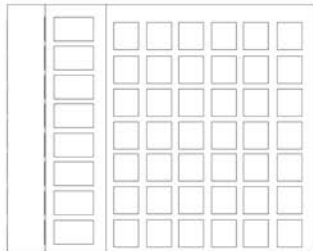
Wooden Effects

### Concept:

Using Steve Reich's Music for Wood Blocks as an inspiration for my overall design I created a **continuous** structure made of translucent fabric membrane, supported by internal steel that embodies the music. After analyzing this exceptional musical piece, I mainly noticed the merging of different repeated elements throughout his piece, which led me to my design of **transformation** and **integration**. Throughout the selection all five players are of their own beat and note, leaving them to be independent of each other in those moments, then simultaneously their sounds merges into one **fluid** piece. In the midst of the performance one can notice the highs and lows of the strokes from the wood blocks and the breaks and separation of notes during the song. In this Musical Pavilion I emulated **merging** and **separation** by incorporating five independent structures transforming into one fluid piece, which represents the music, then unraveling back into independent structures in representation of these **five** distinct beats. The pause in the song are shown through the openings caused by my **ribbon** like structure, which serves as outdoor spatial effects, by which natural sunlight shines through to enhance the audience's experience. Standing not only as pavilion but as landscape leading up to Steve Reich's musical performance, this musical pavilion becomes totally adaptable of its surroundings by providing areas for relaxation and indoor and outdoor seating areas.



Section BB  
Scale: 1/8"=1'-0"



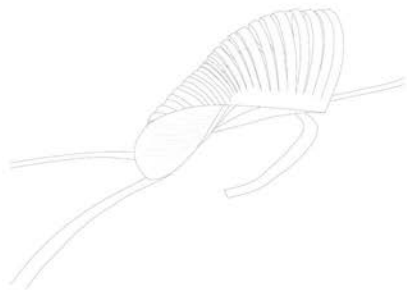




West Perspective  
Scale:1/8=1'-0"



East Elevation  
Scale:1/8=1'-0"

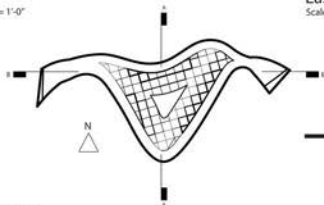


Asymmetric  
Scale:1/8=1'-0"



Music and motion are synonymous in certain aspects. Musical pieces can be analyzed and broken down into sound waves. The spacing of the waves can generate higher or lower tone sounds. So, for my musical pavilion, I focused on different shapes of wavelengths. I came up with the shape of my structure by analyzing Steve Reich's Clapping Song (1972) and taking two different wavelengths – a short wavelength and a long wavelength. In Reich's song, two performers clap to two different beats. In my pavilion, one wavelength would represent one performer's clap, and the other would be the second performer. The two different wavelengths represent the two different clapping patterns. The two beat patterns create one fluid song. I took the same concept of two pieces creating a single product and incorporated it into my design process. My pavilion has two different wavelengths creating one solid, singular structure. The exterior shape of the pavilion has a fluid motion to it. The movement of the music is clearly illustrated through shape of the pavilion.

Plan  
Scale: 1/8" = 1'-0"



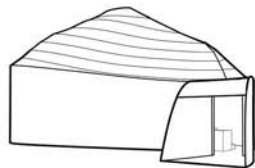
East Elevation  
Scale: 1/8" = 1'-0"



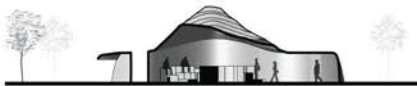
Section A-A  
Scale: 1/8" = 1'-0"



Exterior Perspective



Section B-B  
Scale: 1/8" = 1'-0"

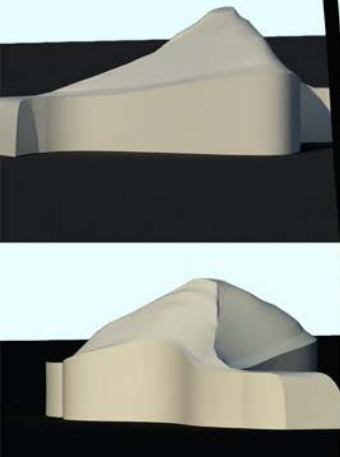
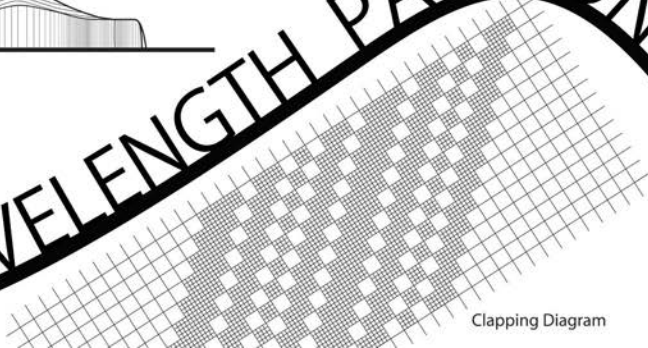


South Elevation  
Scale: 1/8" = 1'-0"

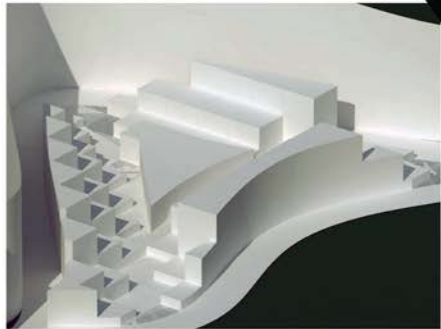
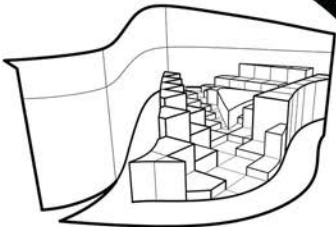


THE WAVELENGTH PAVILION

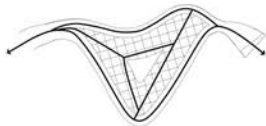
Clapping Diagram



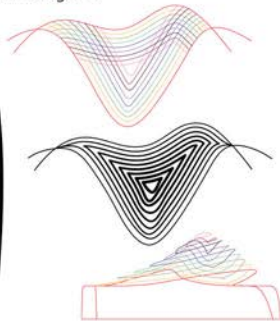
Interior Perspective



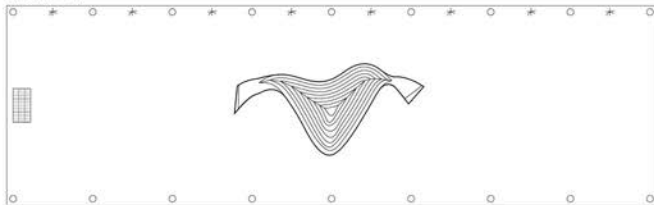
Circulation Diagram

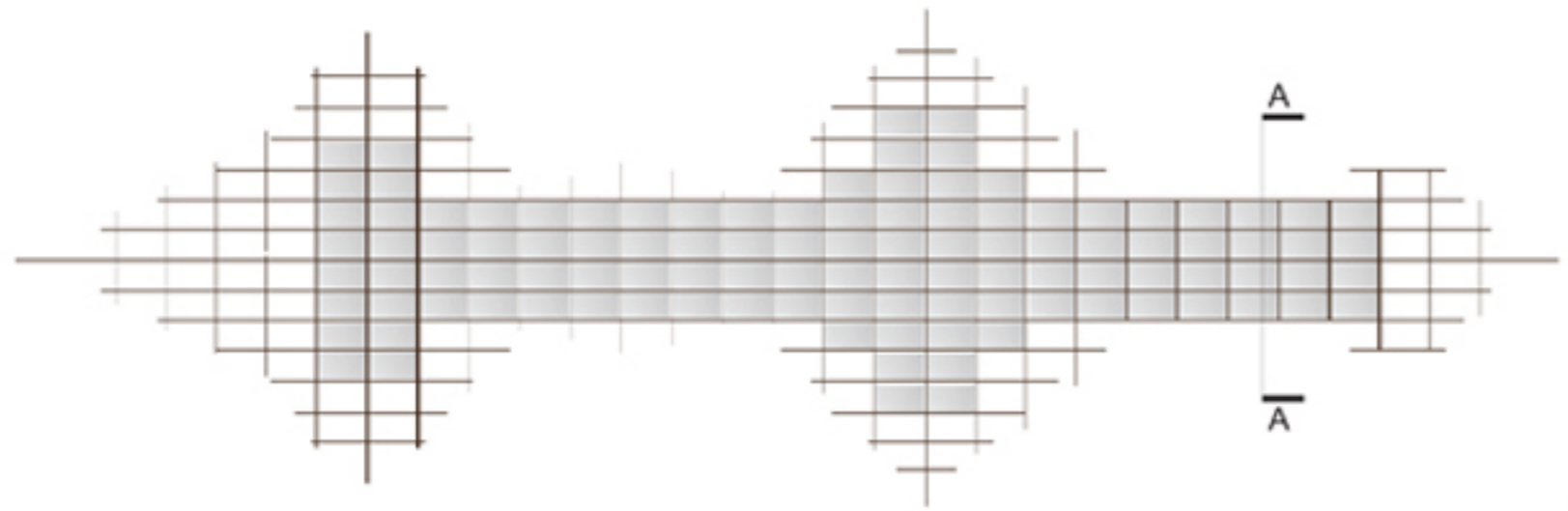


Form Diagrams

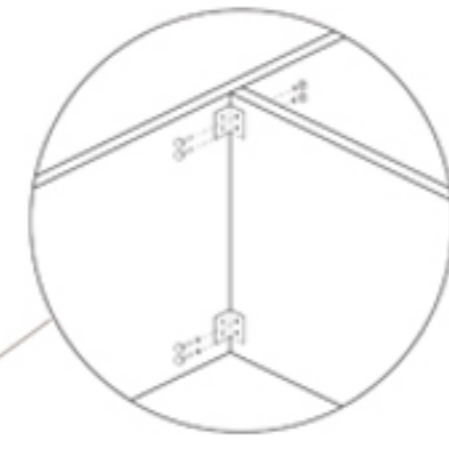


Site Plan  
Scale: 3/32" = 1'-0"

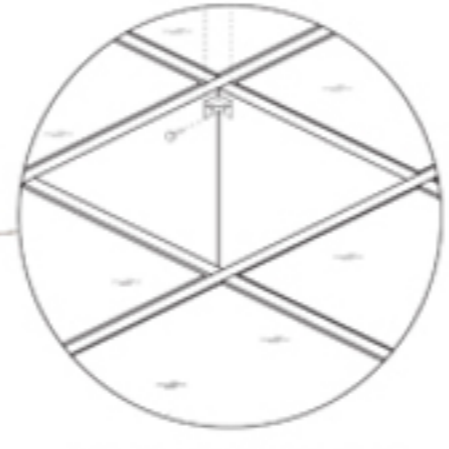




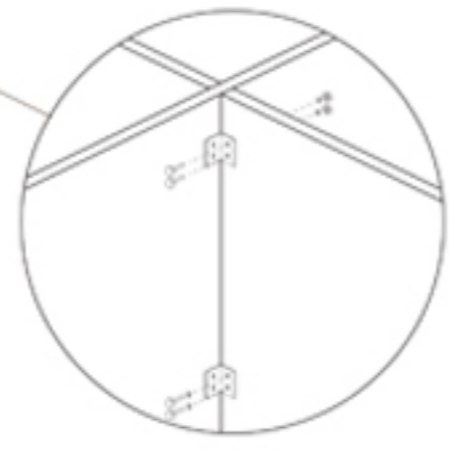
PLAN 1/8" : 1'-0"



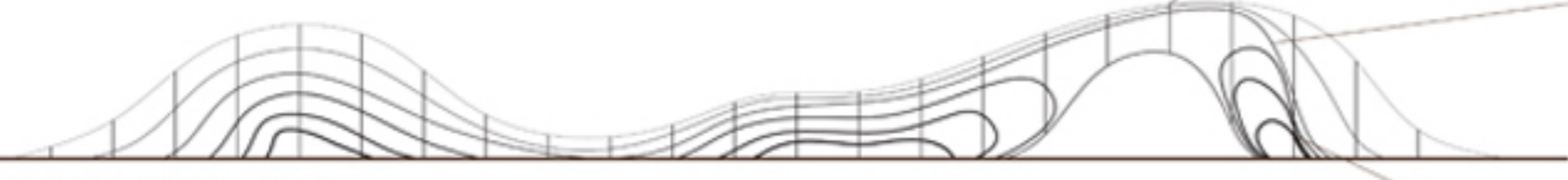
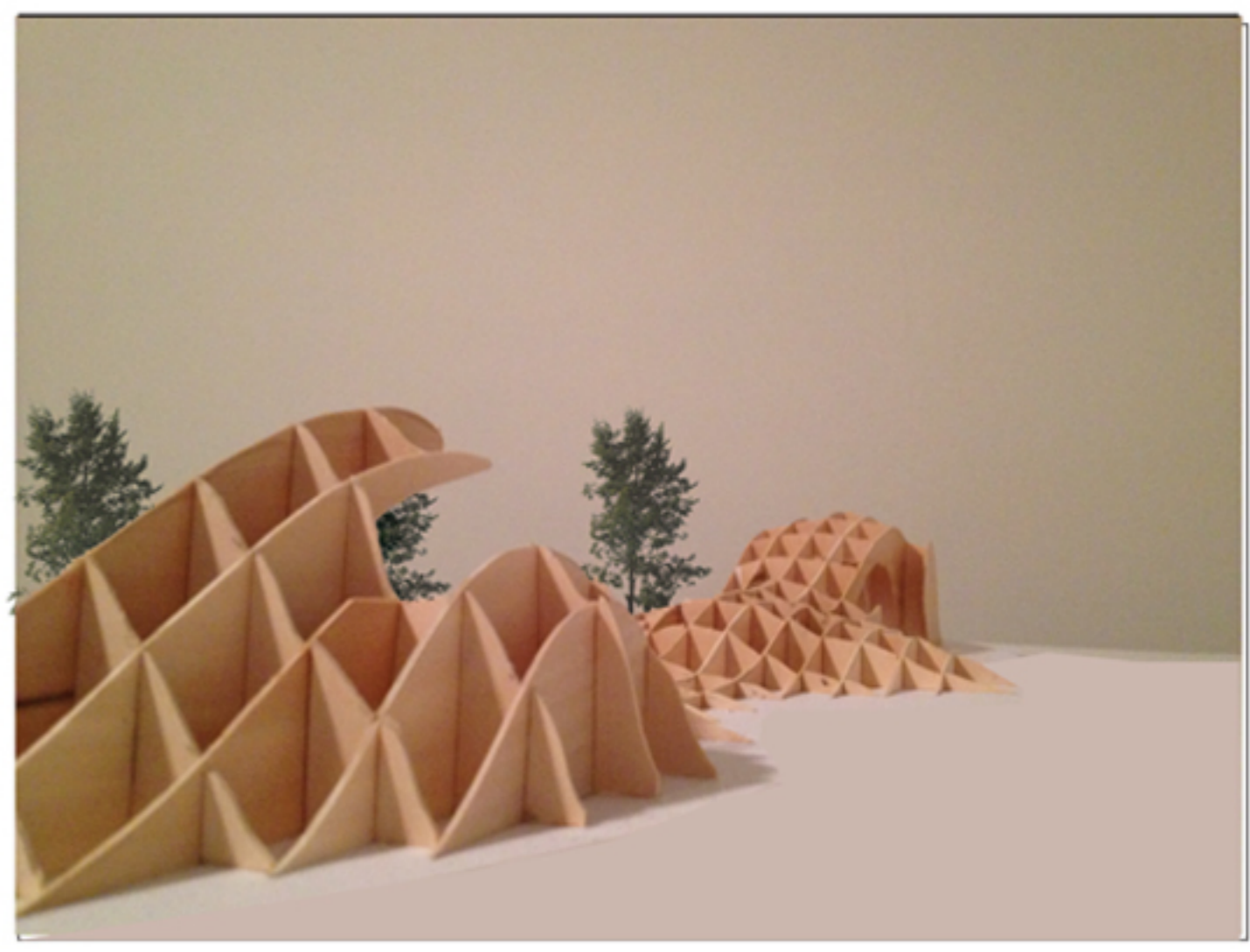
ASSEMBLY DETAIL 1



ASSEMBLY DETAIL 2



ASSEMBLY DETAIL 3



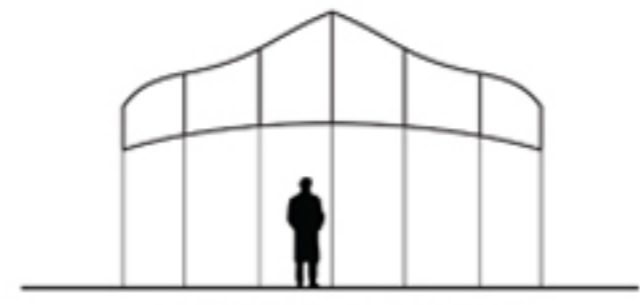
ELEVATION 1/8" : 1'-0"



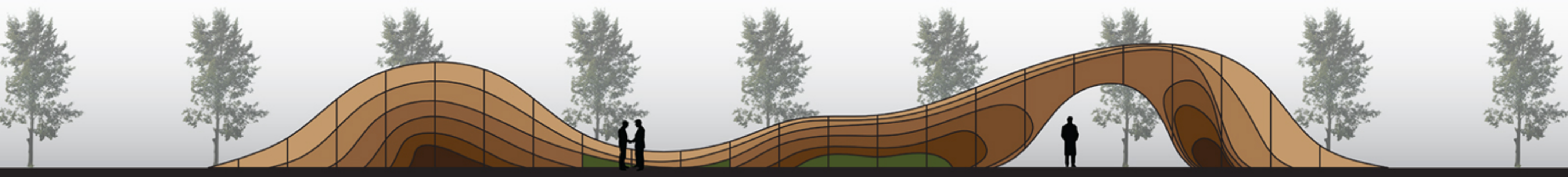
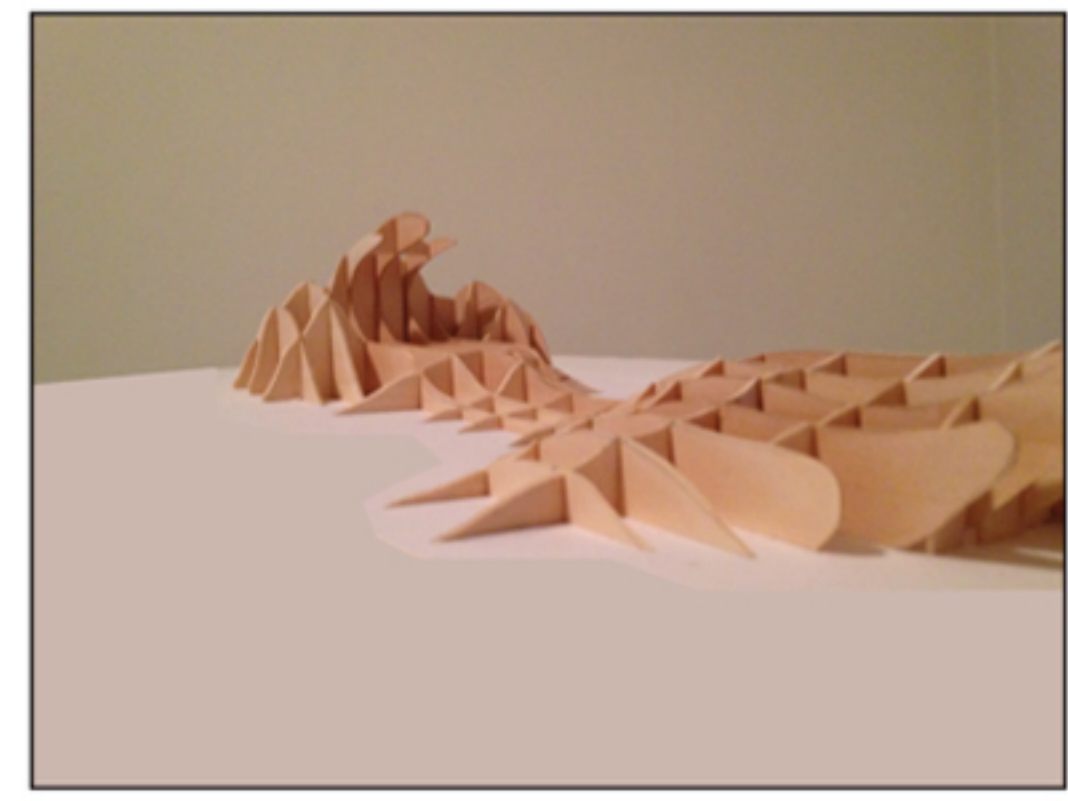
ELEVATION 1/8" : 1'-0"



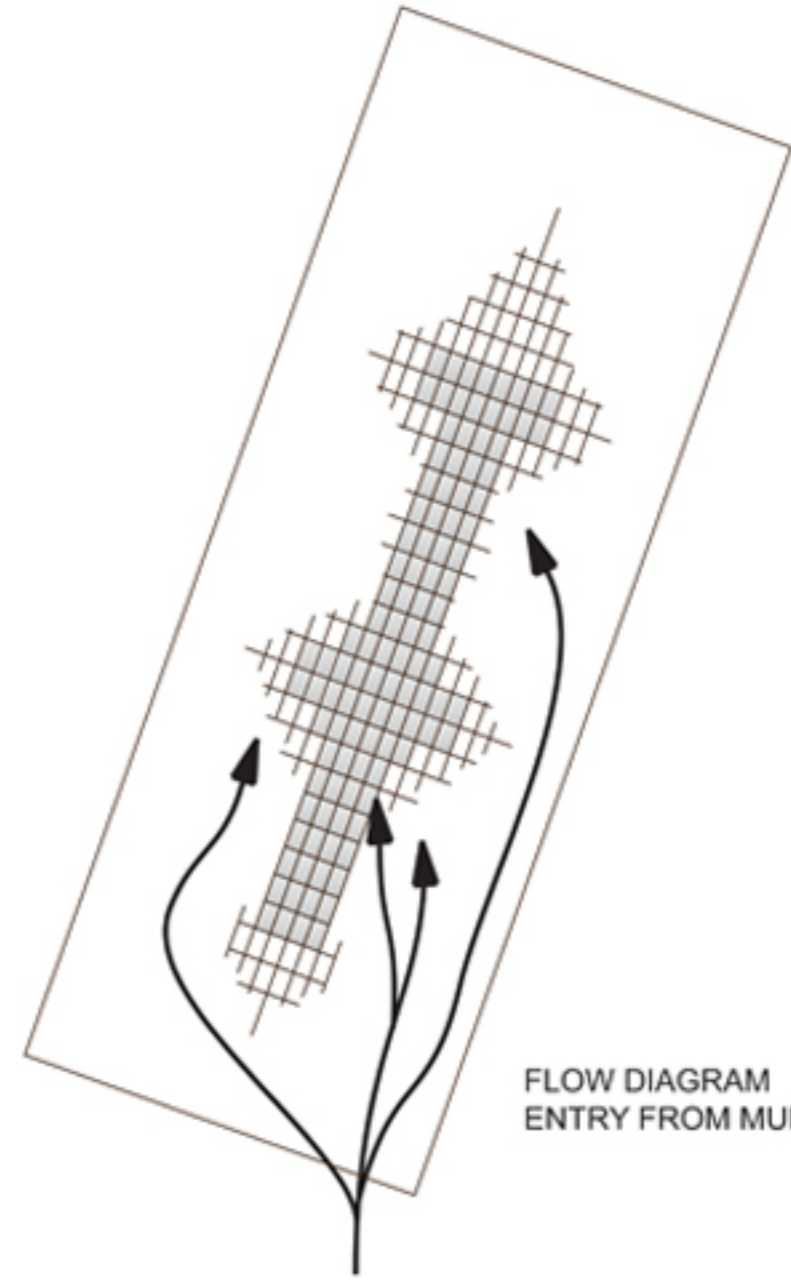
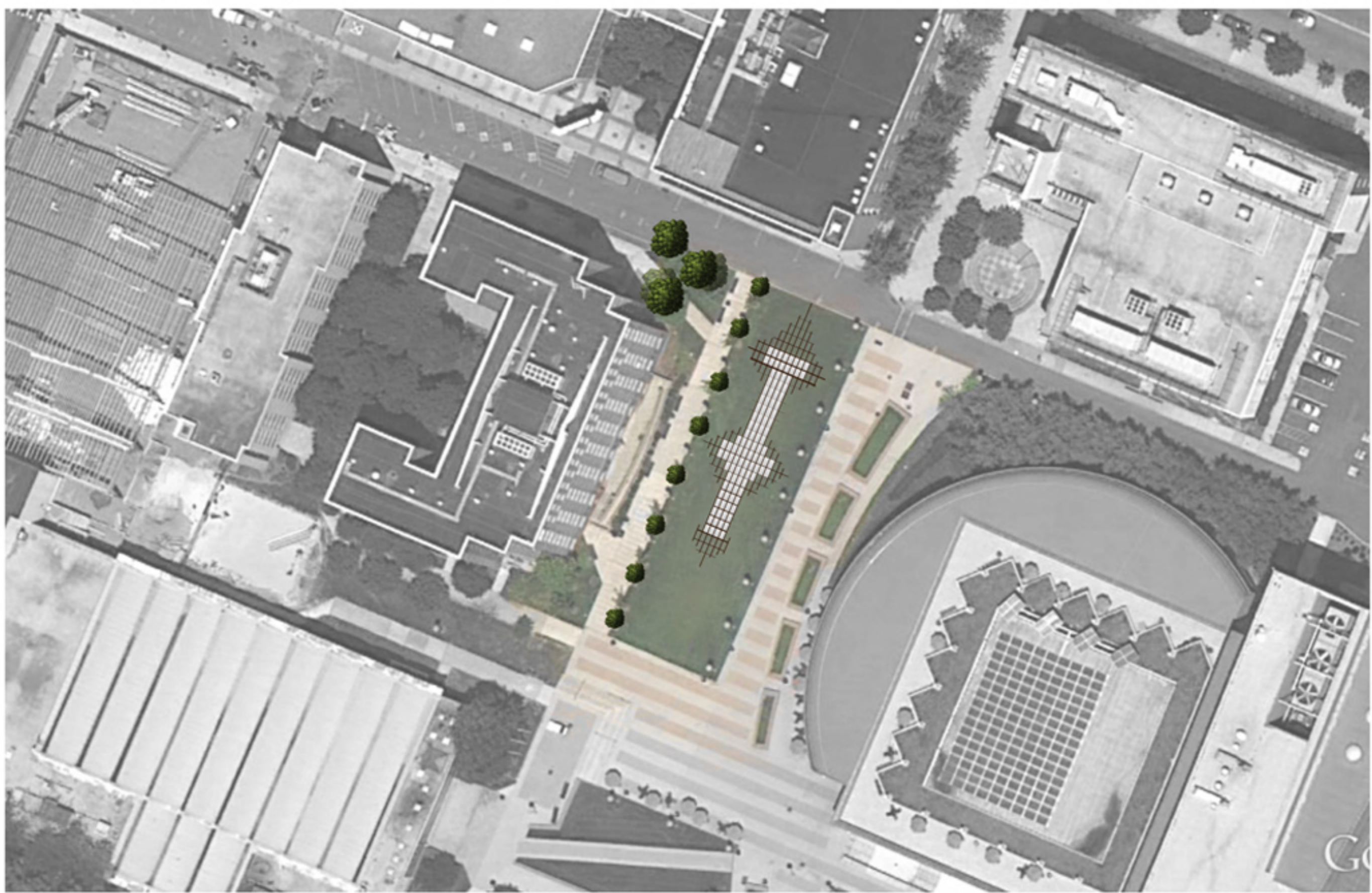
ELEVATION 1/8" : 1'-0"



SECTION A-A 1/8" : 1'-0"



# NJIT MUSIC PAVILION

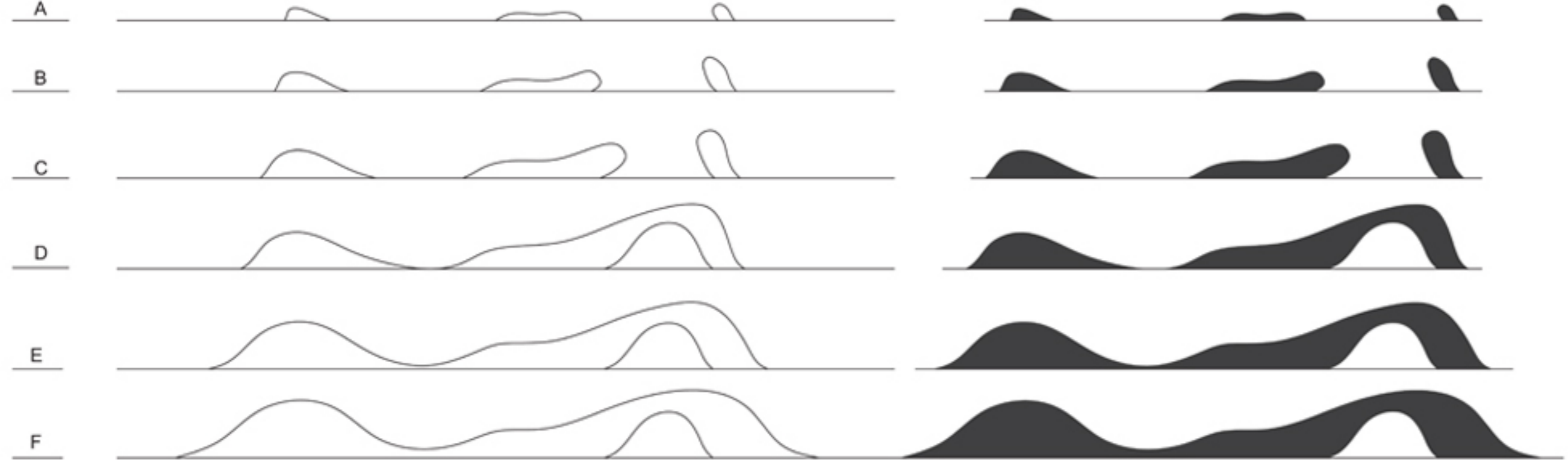


FLOW DIAGRAM  
ENTRY FROM MULTIPLE POINTS



LINE OF SIGHT POSSIBILITIES

DIAGRAM OF LONGITUDINAL CONSTRUCTION



## NJIT MUSICAL PAVILION

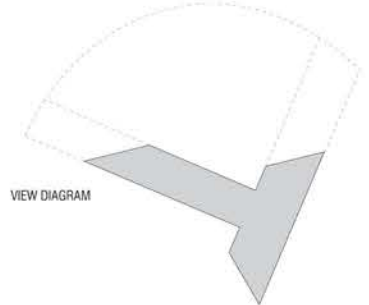
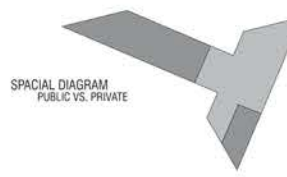
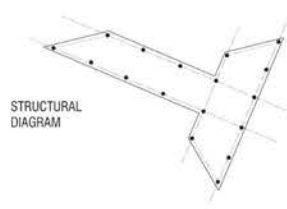
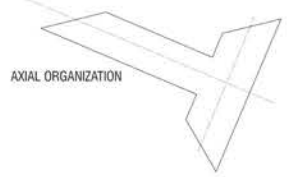
DESIGNING AROUND MUSIC CREATED BY WOOD BLOCKS ALLOWED FOR DISTINCT MUSICAL AND PHYSICAL REFERENCES. THIS PAVILION WAS INSPIRED BY THE FLOWING CURVES OF MUSIC AND THE PHYSICALITY OF WOOD AS AN INSTRUMENT. THE PAVILIONS CURVES ERUPT FROM THE GROUND AS IF THE STRUCTURE HAD BEEN THERE FOREVER, BUT REMAINS EASILY CONSTRUCTED AND TRANSPORTED. INFINITE VIEWING POSSIBILITIES CAN BE FOUND ON THE STRUCTURE, AND A VERY INFORMAL SEATING CAPACITY SEEKS GUESTS TO FIND A PERSONAL SPACE OF THEIR CHOOSING.

EASILY CONSTRUCTED WITH NUMERICAL CODED FASTENERS

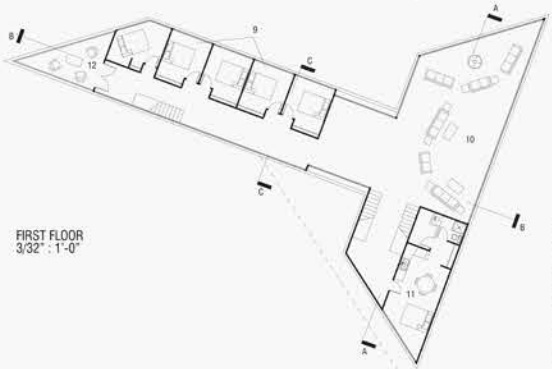
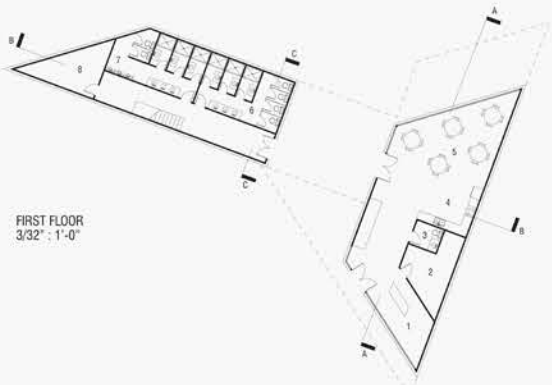
FLAT-STACKABLE FOR EASY TRANSPORTATION

# AURORA BOREALIS RETREAT

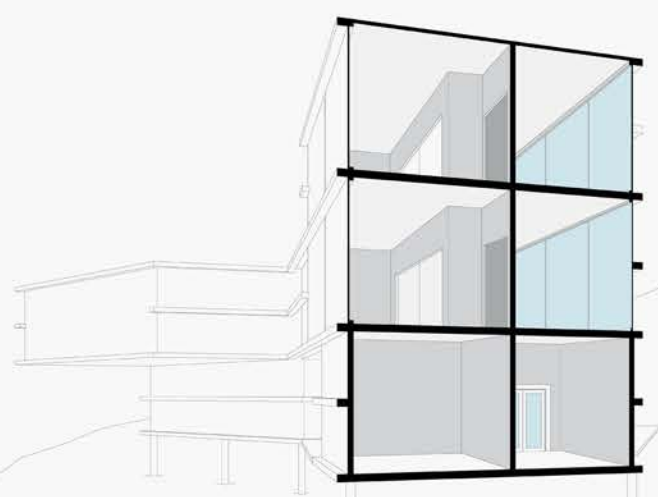
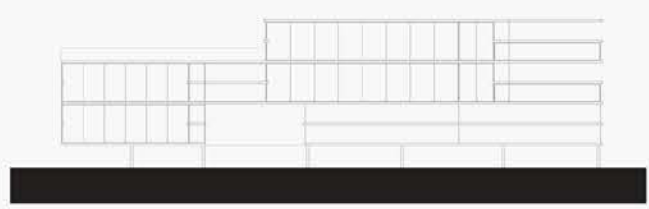
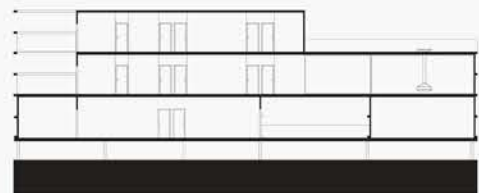
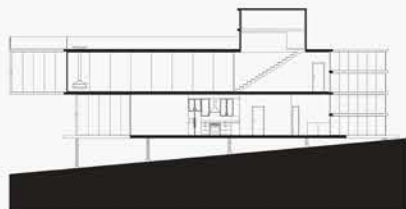
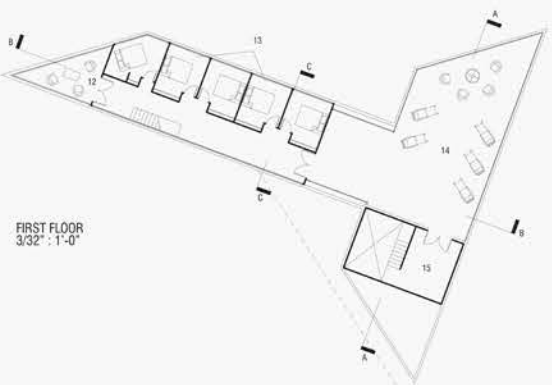
LOCATION:  
ARCTIC NATIONAL WILDLIFE REFUGE  
NORTH EASTERN ALASKA



NORTH ELEVATION



- 1 FRONT DESK
- 2 OFFICE
- 3 LAVATORY
- 4 COMMUNAL KITCHEN
- 5 COMMUNAL DINING ROOM
- 6 WOMEN'S RESTROOM/SHOWERS
- 7 MEN'S RESTROOM/SHOWERS
- 8 MECHANICAL
- 9 2ND FLOOR BEDROOMS
- 10 OBSERVATION ROOM/ LIVING ROOM
- 11 CARETAKER'S QUARTERS
- 12 DECK
- 13 3RD FLOOR BEDROOMS
- 14 OBSERVATION DECK
- 15 VESTIBULE



# AURORA BOREALIS PAVILION

MAURO PALOMBA  
ARC 164 SPRING 2012  
ESTABAN BEITA



PRECEDENT



PRECEDENT



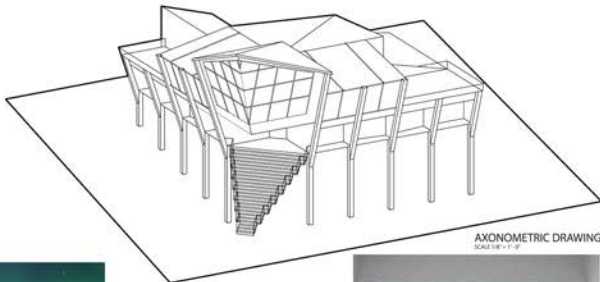
PRECEDENT



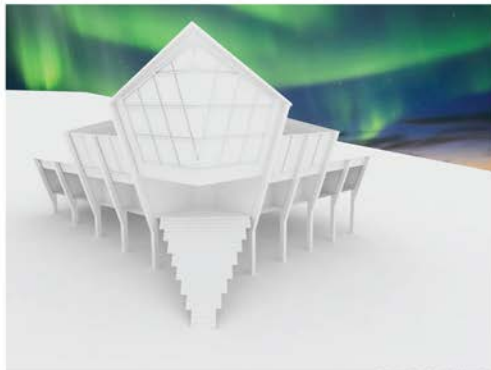
PRECEDENT

## CONCEPT

THE OVERALL CONCEPT WAS TO KEEP THE PRIVET AND PUBLIC SPACE SEPERATED AS MUCH AS POSSIBLE, WHILE DOING THIS GIVING THE GUEST OPTIMAL CHANCES TO HAVE A BREATHTAKING VIEW OF THE AURORA BOREALIS.



AXONOMETRIC DRAWING  
SCALE 1/8" = 1'-0"



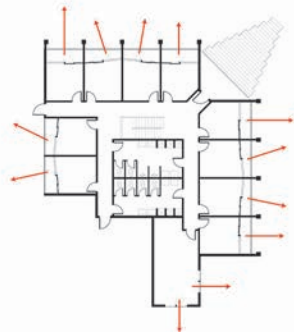
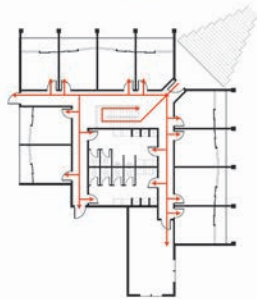
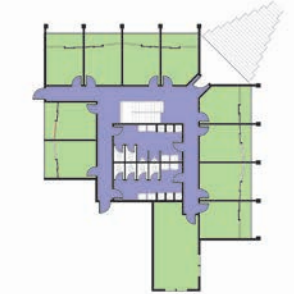
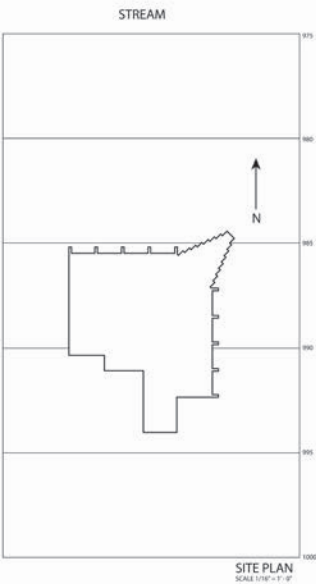
EXTERIOR RENDERING 2



INTERIOR RENDERING 1



INTERIOR RENDERING 2



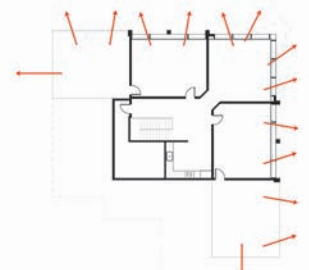
PUBLIC/PRIVET DIAGRAMS

■ PUBLIC

■ PRIVET

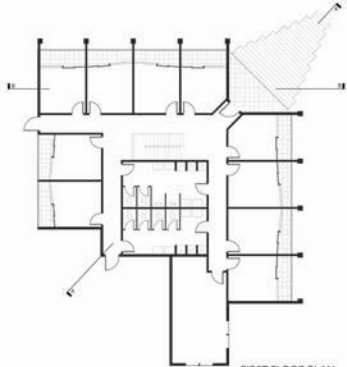


FLOW DIAGRAMS

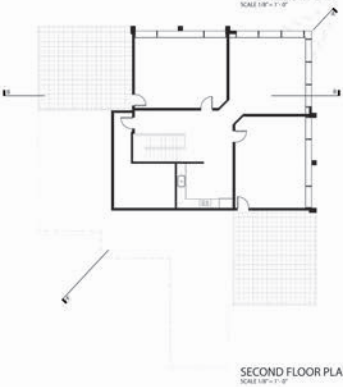


VIEW DIAGRAMS

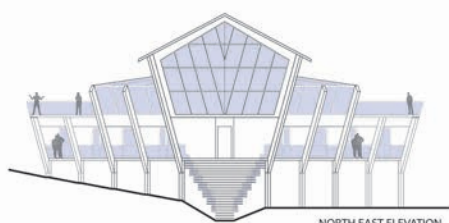




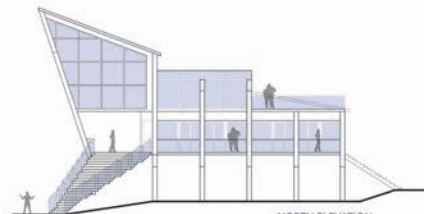
FIRST FLOOR PLAN  
SCALE 1/8" = 1'-0"



SECOND FLOOR PLAN  
SCALE 1/8" = 1'-0"



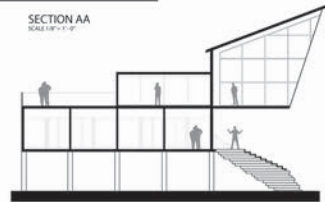
NORTH EAST ELEVATION  
SCALE 1/8" = 1'-0"



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



SECTION AA  
SCALE 1/8" = 1'-0"



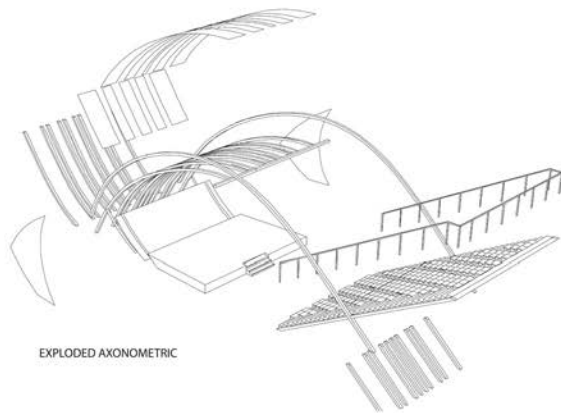
SECTION BB  
SCALE 1/8" = 1'-0"

# MUSIC WAVE

MAURO PALOMBA  
ARC 164 SPRING 2012  
ESTABAN BEITA



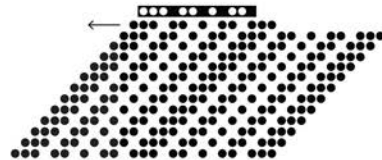
INTERIOR RENDERING



EXPLODED AXONOMETRIC

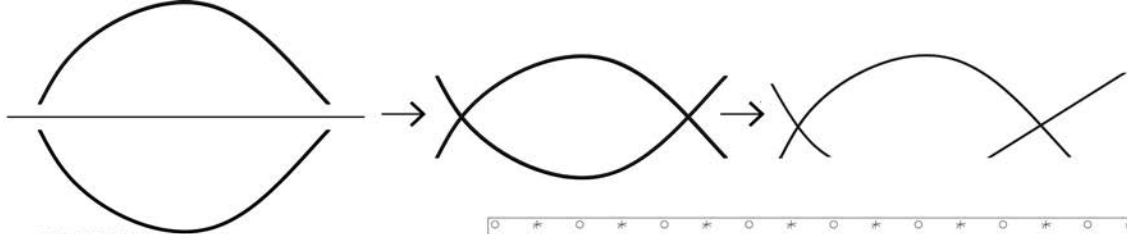


EXTERIOR RENDERING

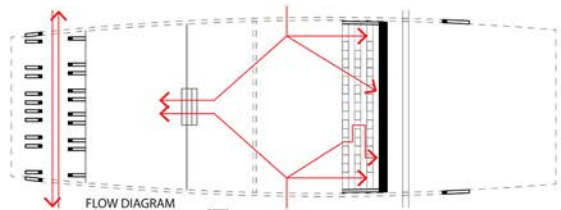


MUSIC DIAGRAM

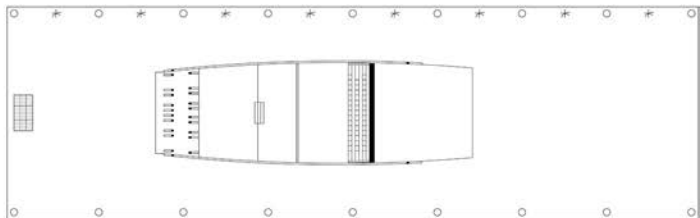
The overall concept of my project was to take the song clapping music and relate it to my music space. I created an amphitheater with the stage in front of bleachers. The canopy over the stage has the pattern of the clapping beats in it. The seats also have the pattern in them also showing the shifts in the song as well helping tie the song to the music space.



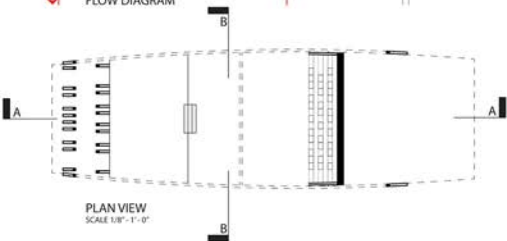
FORM DIAGRAM



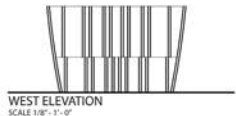
FLOW DIAGRAM



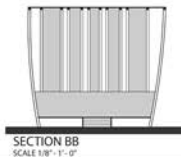
SITE PLAN  
SCALE 3/32" = 1'-0"



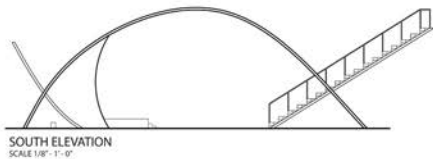
PLAN VIEW  
SCALE 1/8" = 1'-0"



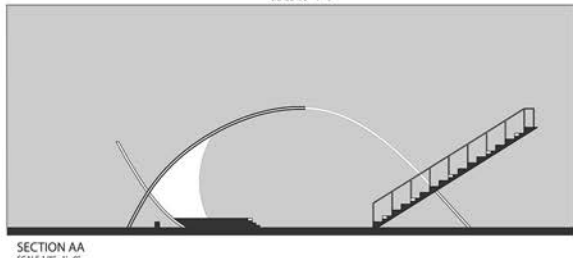
WEST ELEVATION  
SCALE 1/8" = 1'-0"



SECTION BB  
SCALE 1/8" = 1'-0"



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



SECTION AA  
SCALE 1/8" = 1'-0"



PLAN  
SCALE 1:1/2"



SECTION A-A  
SCALE 1:1/2"



SECTION A-A Compressed  
SCALE 1:1/2"



SECTION B-B  
SCALE 1:1/2"



SECTION C-C  
SCALE 1:1/2"



SECTION D-D  
SCALE 1:1/2"



SECTION E-E  
SCALE 1:1/2"



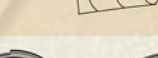
SECTION F-F  
SCALE 1:1/2"



SECTION C-C Compressed  
SCALE 1:1/2"

# "FOCUS ON SPACE"

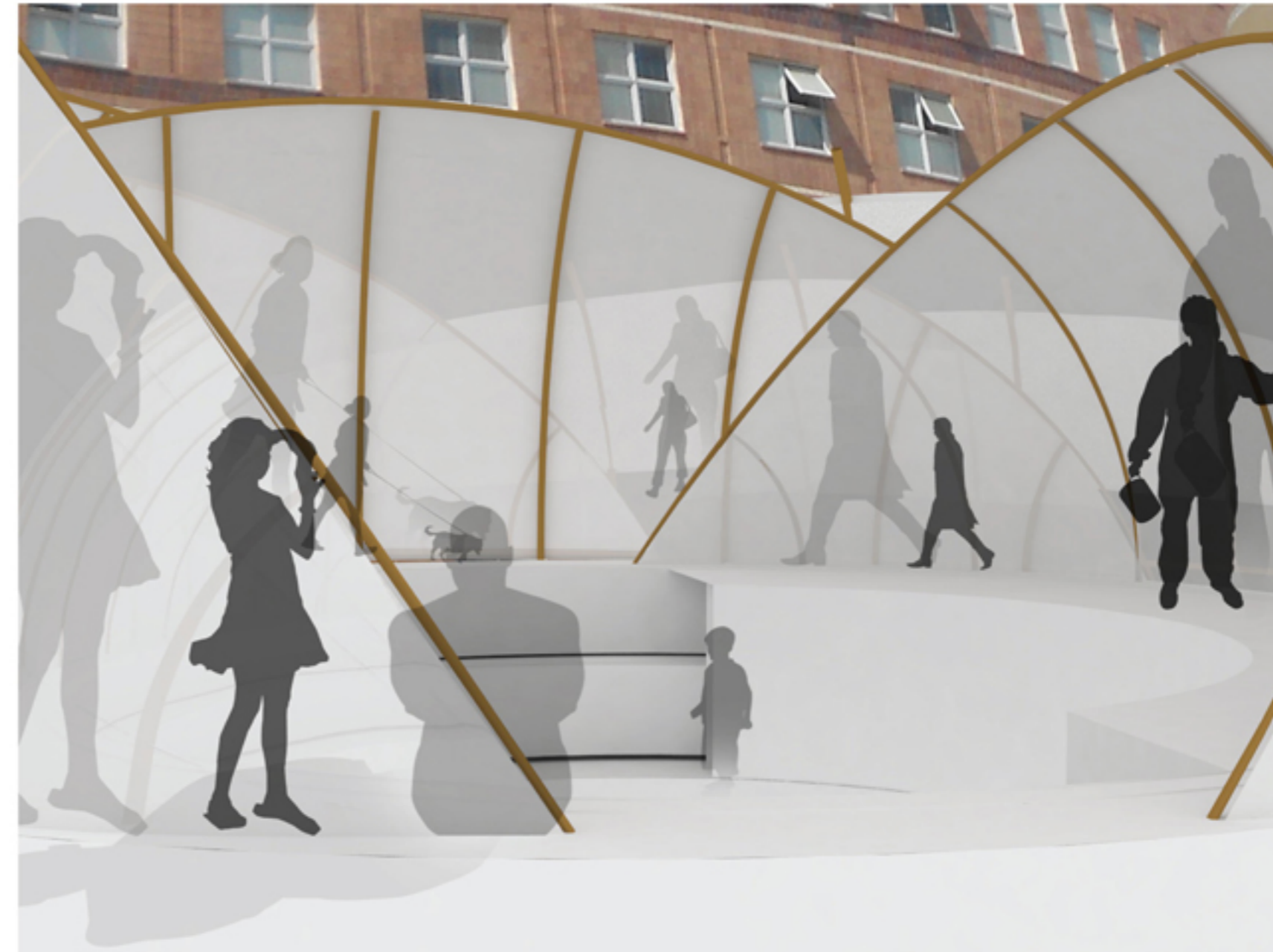
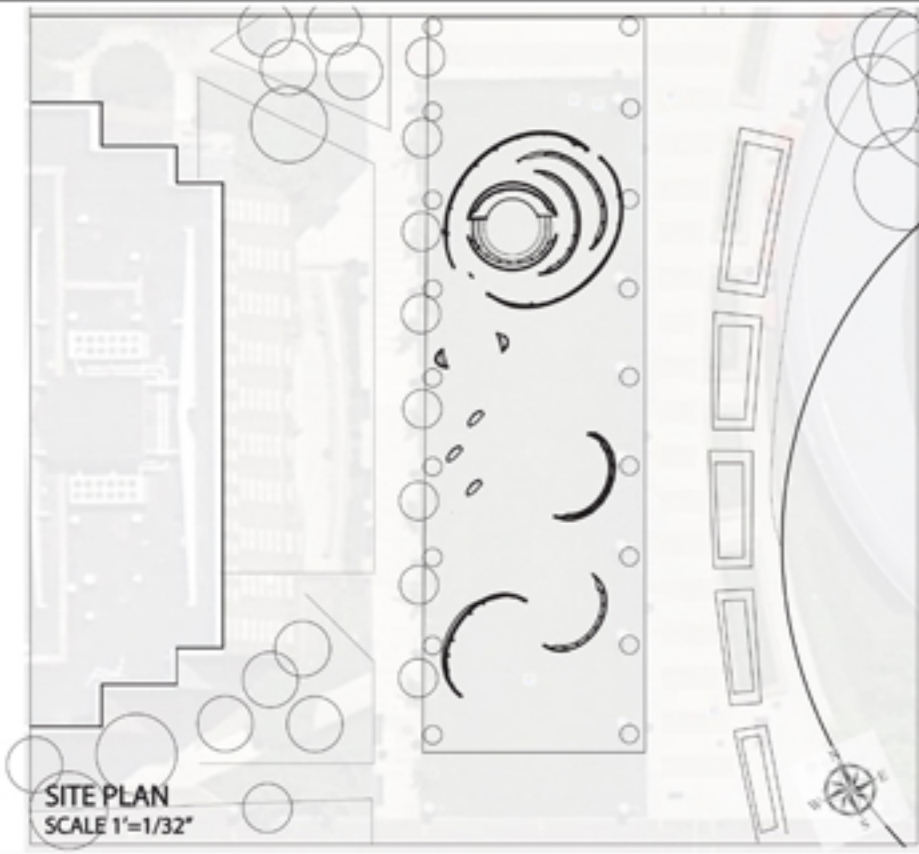
L  
A  
Y  
E  
R  
  
D  
I  
A  
G  
R  
A  
M



COMPRESSION/MOVEMENT DIAGRAM

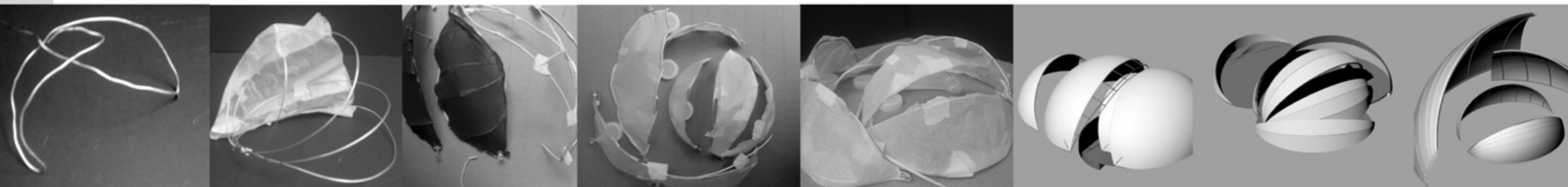


# Musical Silhouettes



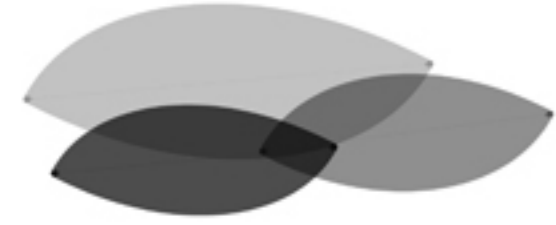
*Musical Silhouettes* addresses a particular element that is vital to any community space regardless of its temporary status. As a musical pavilion its formation derived from the efficiency in sound reverberation and visual layering to enhance both of Steve Reich's performances. Steve Reich's Clapping Music and Wood blocks will not only be heard but will be seen, felt and remembered as an unconventional approach to orthodox performances. The pavilion is designed to accentuate the minimal movement that is created during these pieces to maximize the effect and rhythm of the musical pieces; the audience also becomes part of these visual enhancements as their silhouettes are projected throughout the pavilion.

*Musical Silhouettes* is an experience that begins from the engaging pieces that 'peel' away from the pavilion; strategically placed to involve the public. The pavilion is also designed with the intention to encourage interaction while still maintaining various private spaces if the visitor so chooses to remain in a less social space; however the intrigue created by these musical silhouettes are hard to ignore. This is especially true when the pavilion is free of performances and the space becomes an adventure to anyone willing to experience it, certainly the glowing silhouettes will catch anyone's attention as the pavilion becomes a potentially colorful social scene at night. *Musical Silhouettes* is made from tightly woven vinyl-covered polyester which is perfect for acoustic reflection and highlighting silhouettes. Over all the *Musical Silhouette* pavilion really captures what a true performance should be engaging, inviting and stimulating.

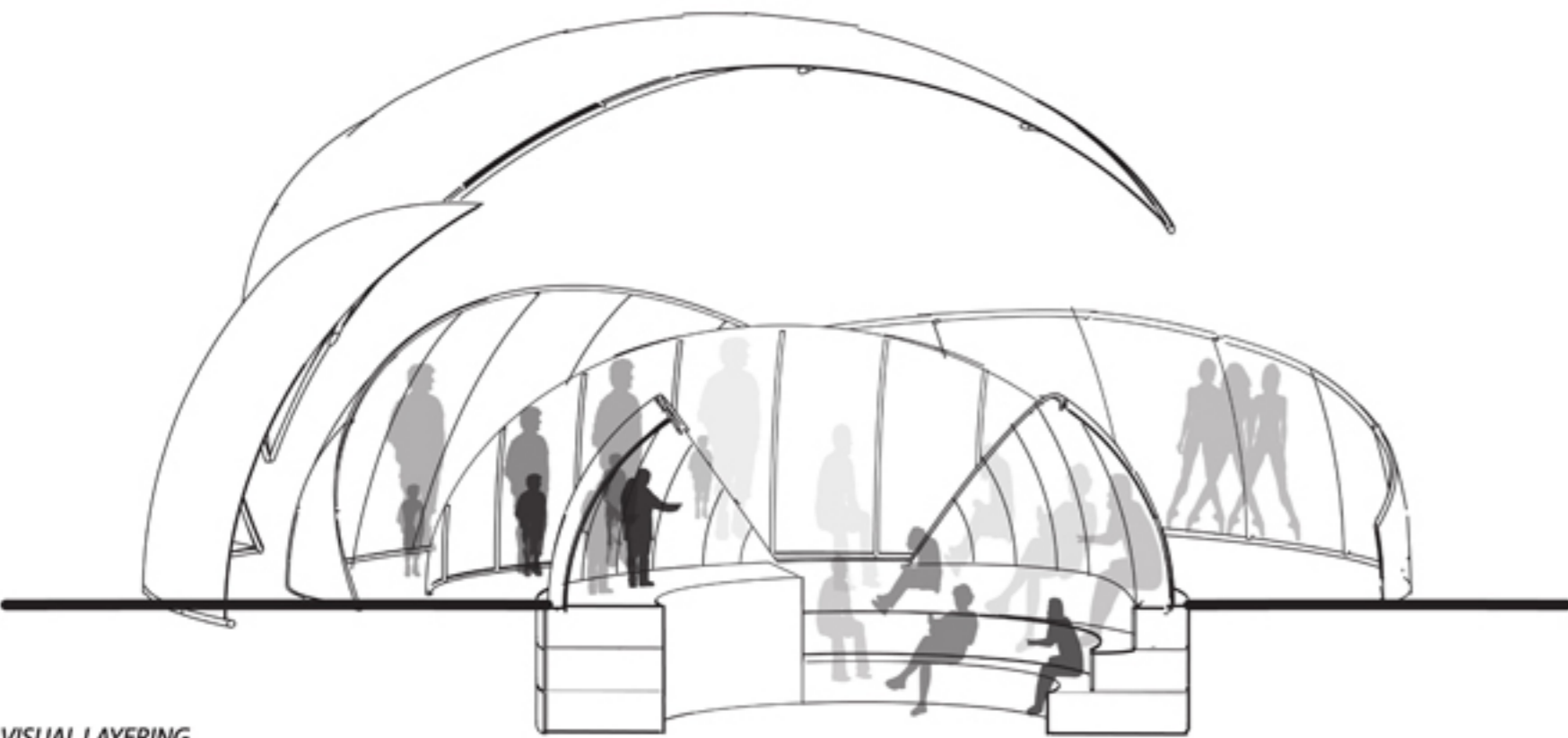


VANESSA BATISTA  
ARCHITECTURE STUDIO II  
PROJECT03 MUSIC SPACE  
ESTEBAN BEITA  
MARCH 19, 2012

FORM DEVELOPMENT



INTERACTIVE SILHOUTTES

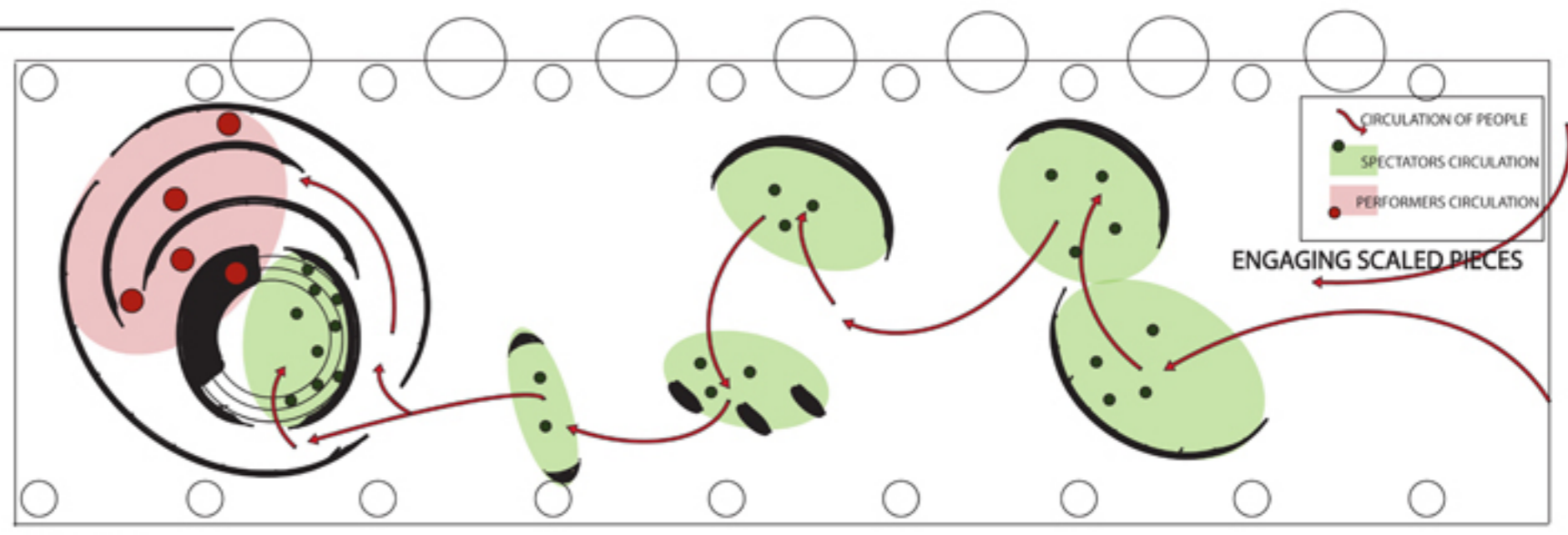
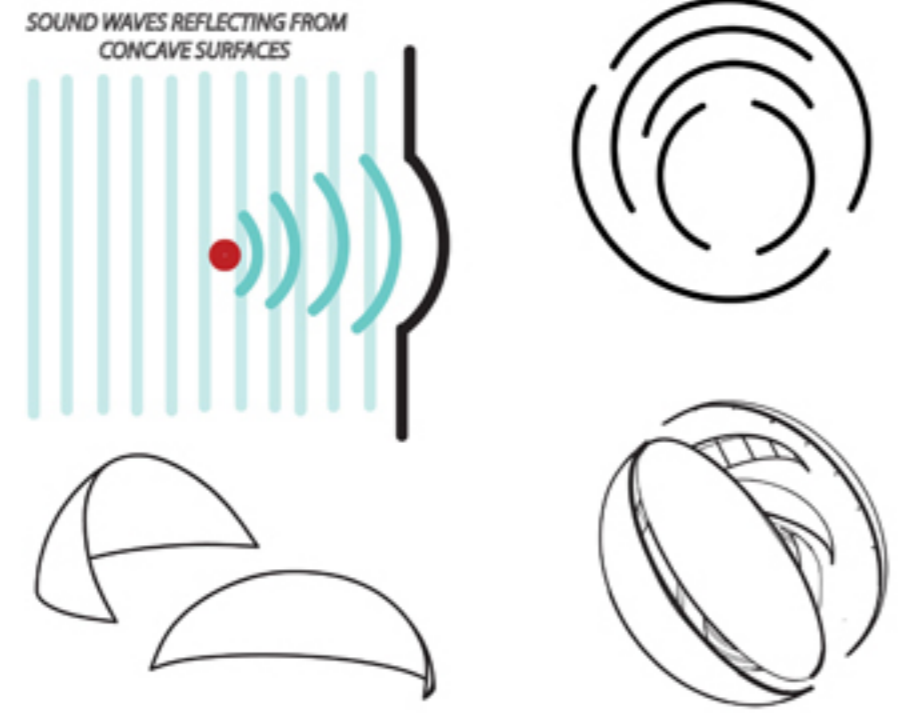


VISUAL LAYERING



PERFORMANCE

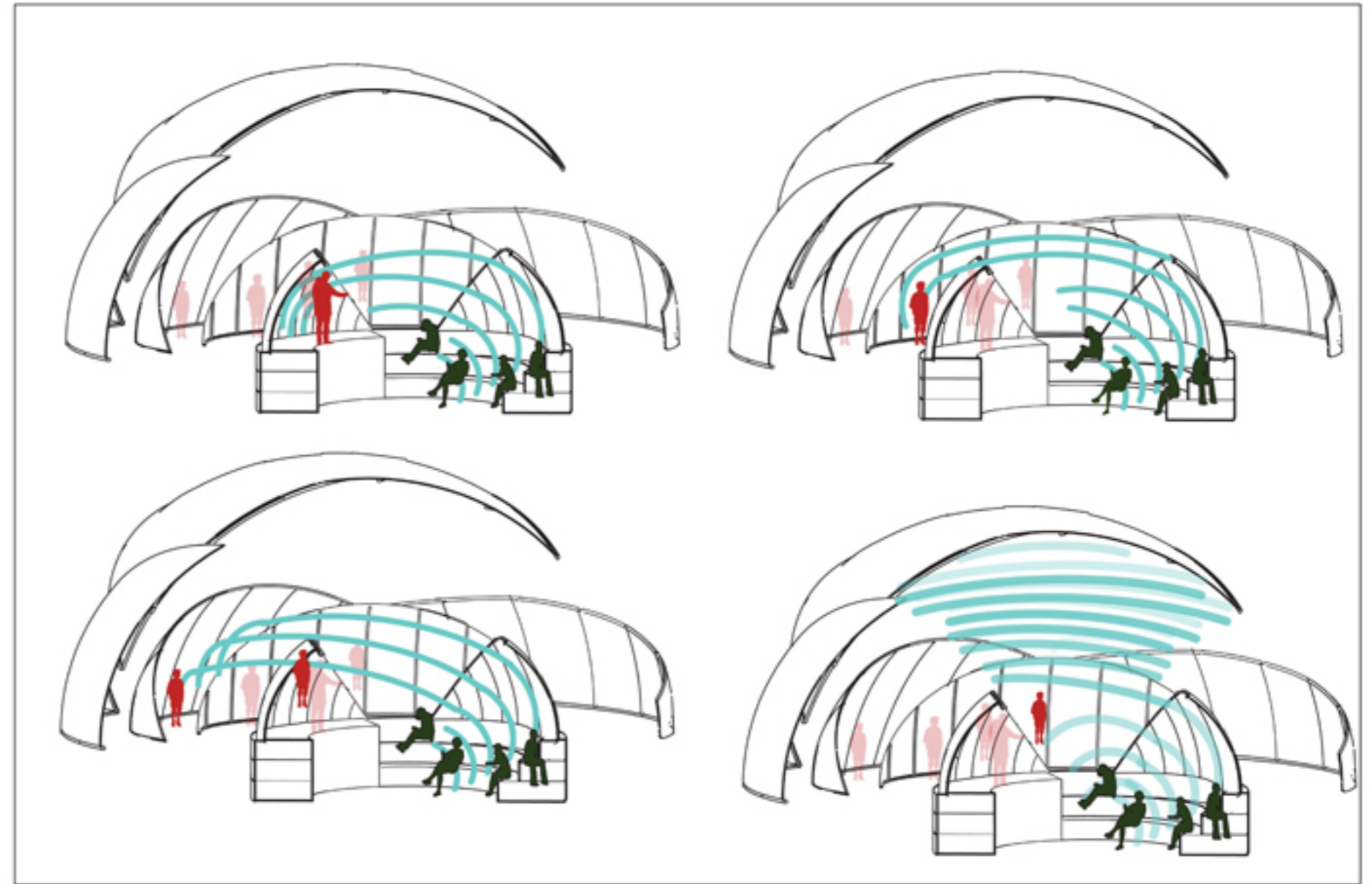
SOUND REVERBERATION



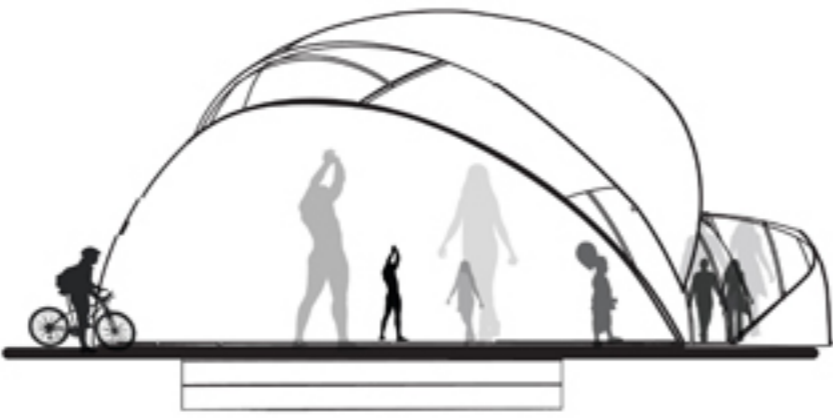
CIRCULATION



ENGAGING SCALED PIECES



LAYERING SOUND CIRCULATION

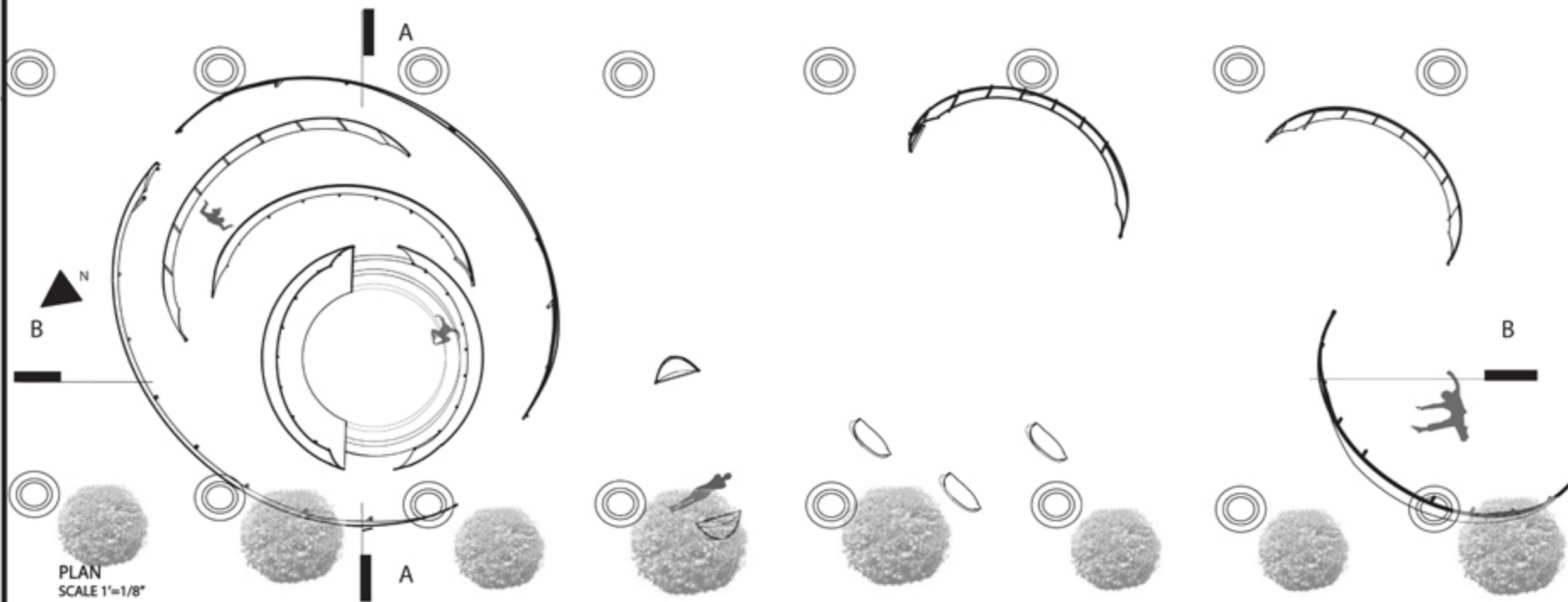


NON-PERFORMANCE

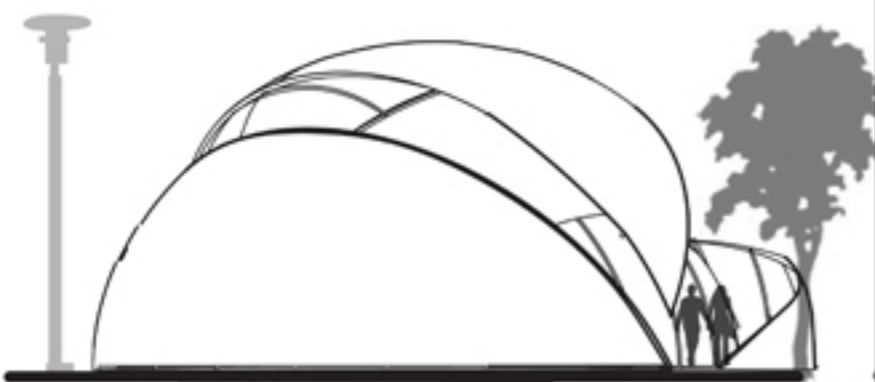
PAVILION



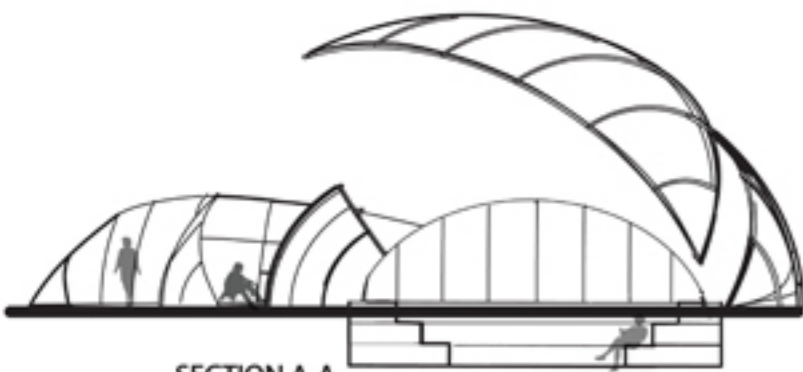
ROOF PLAN  
SCALE 1"=1/8"



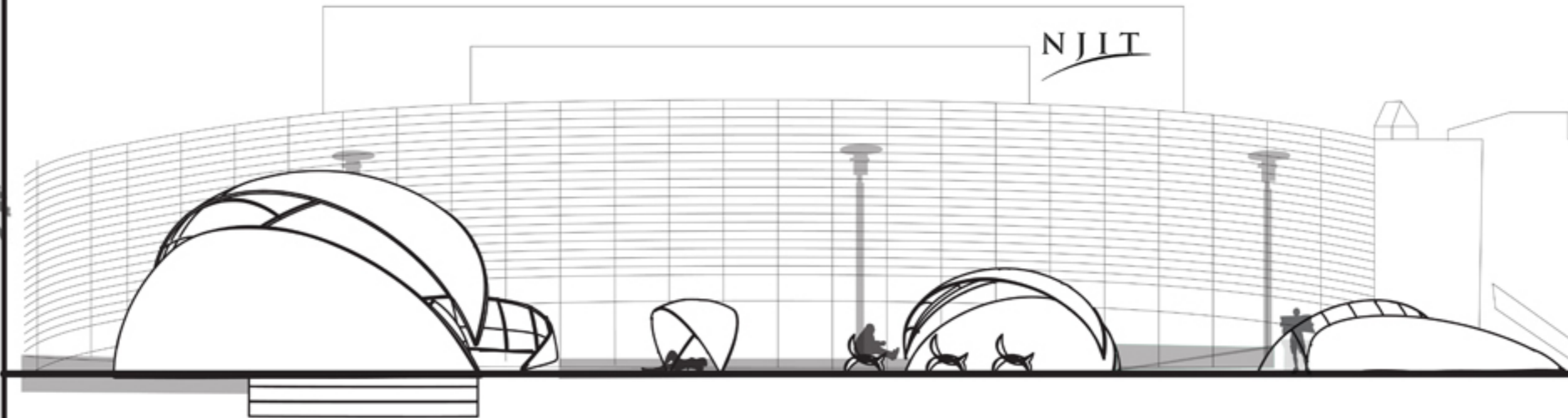
PLAN  
SCALE 1"=1/8"



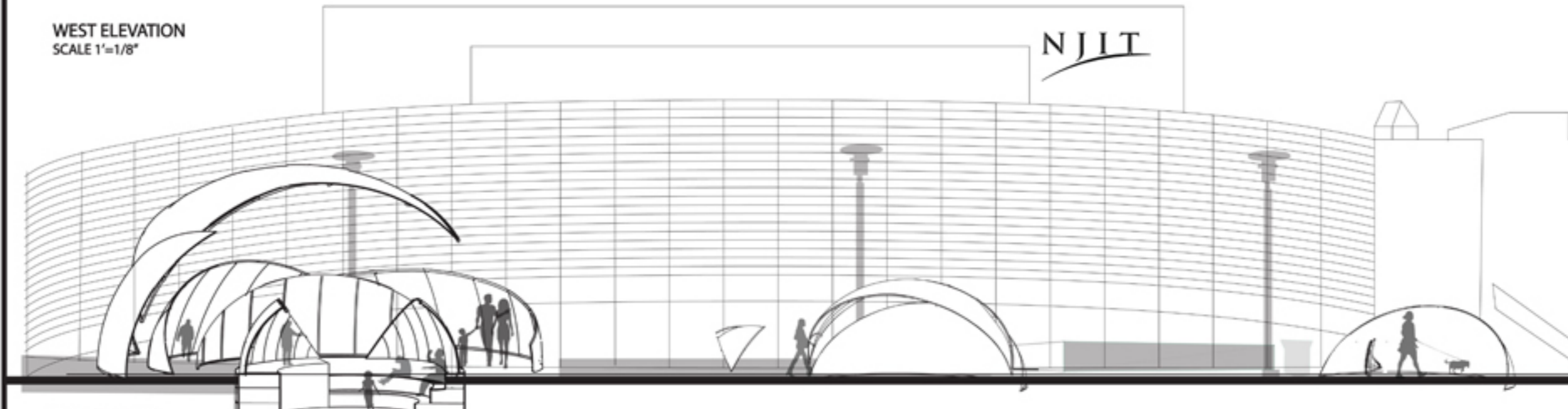
NORTH ELEVATION  
SCALE 1"=1/8"



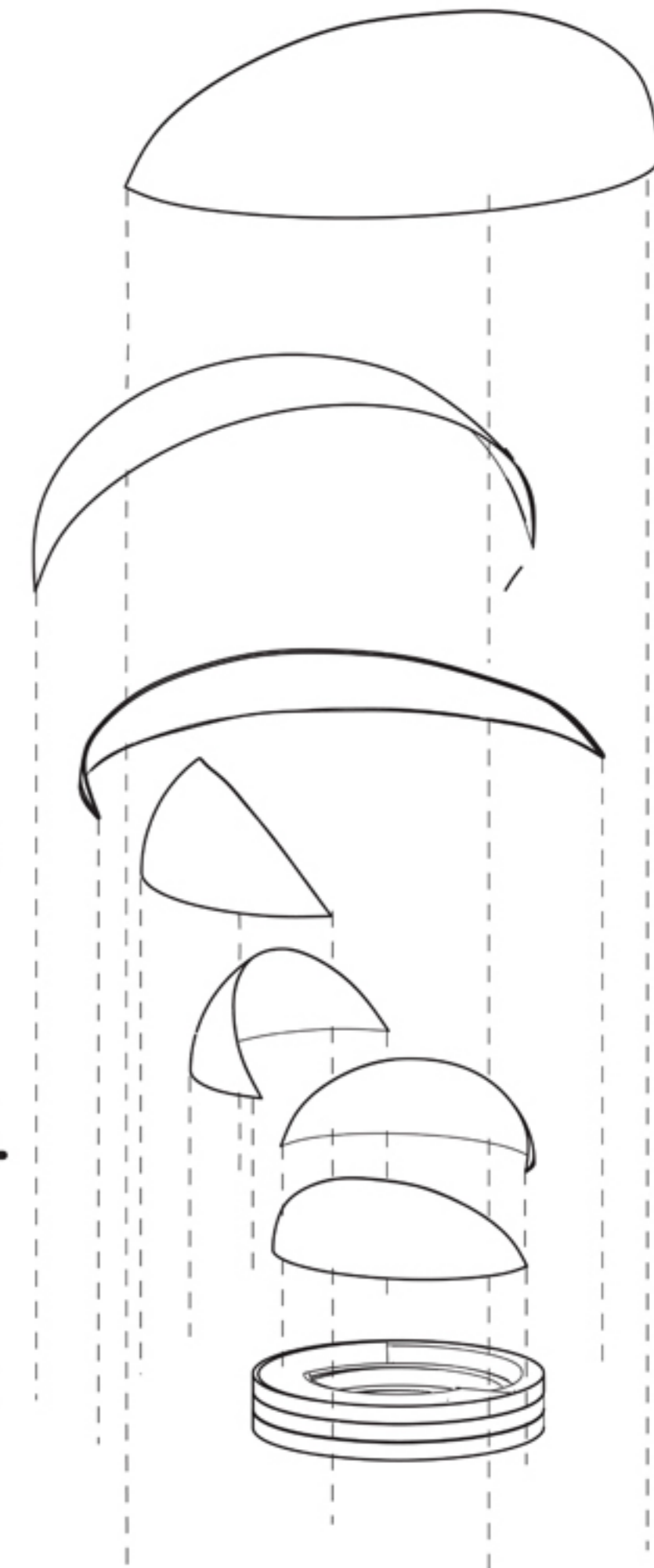
SECTION A-A  
SCALE 1"=1/8"



WEST ELEVATION  
SCALE 1"=1/8"



SECTION B-B  
SCALE 1"=1/8"



AXONOMETRIC  
SCALE 1"=1/8"