

ARCHITECTURE AS MEDIATOR

A Conflict Resolution Center

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Design Thesis submitted to the faculty of the College of Architecture and Urban Studies, Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Architecture

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Abstract

No one needs to lose in order for someone else to win. The increasing number of mediation centers throughout the world shows the desire of conflicting parties to find some type of resolution where both may be satisfied. While most centers present the process and rules for mediation, few centers emphasize the environment in which the negotiation is conducted. Retrofitted office buildings, resorts, and agreed 'neutral' sites are common destinations to conduct mediation services.

How can Architecture influence private contemplation and public negotiation?

This thesis attempts to investigate the effect of our built environment on how individuals work together. To explore this question, a conflict resolution center becomes the vehicle to study the physical, social, and intellectual impact on thinking and decision-making.



Acknowledgements

While the Faculty of Virginia Tech's Washington-Alexandria Architecture Consortium led me through every stage of my professional degree from beginning to end, and my colleagues in the architectural profession inspired me during this long and arduous process, I must give special thanks to my dear wife, Jovanna Bello. You let me focus, dwell, procrastinate, hate, appreciate, love, and finally complete this incredible journey. How I could have done this without your support, I truly don't know.

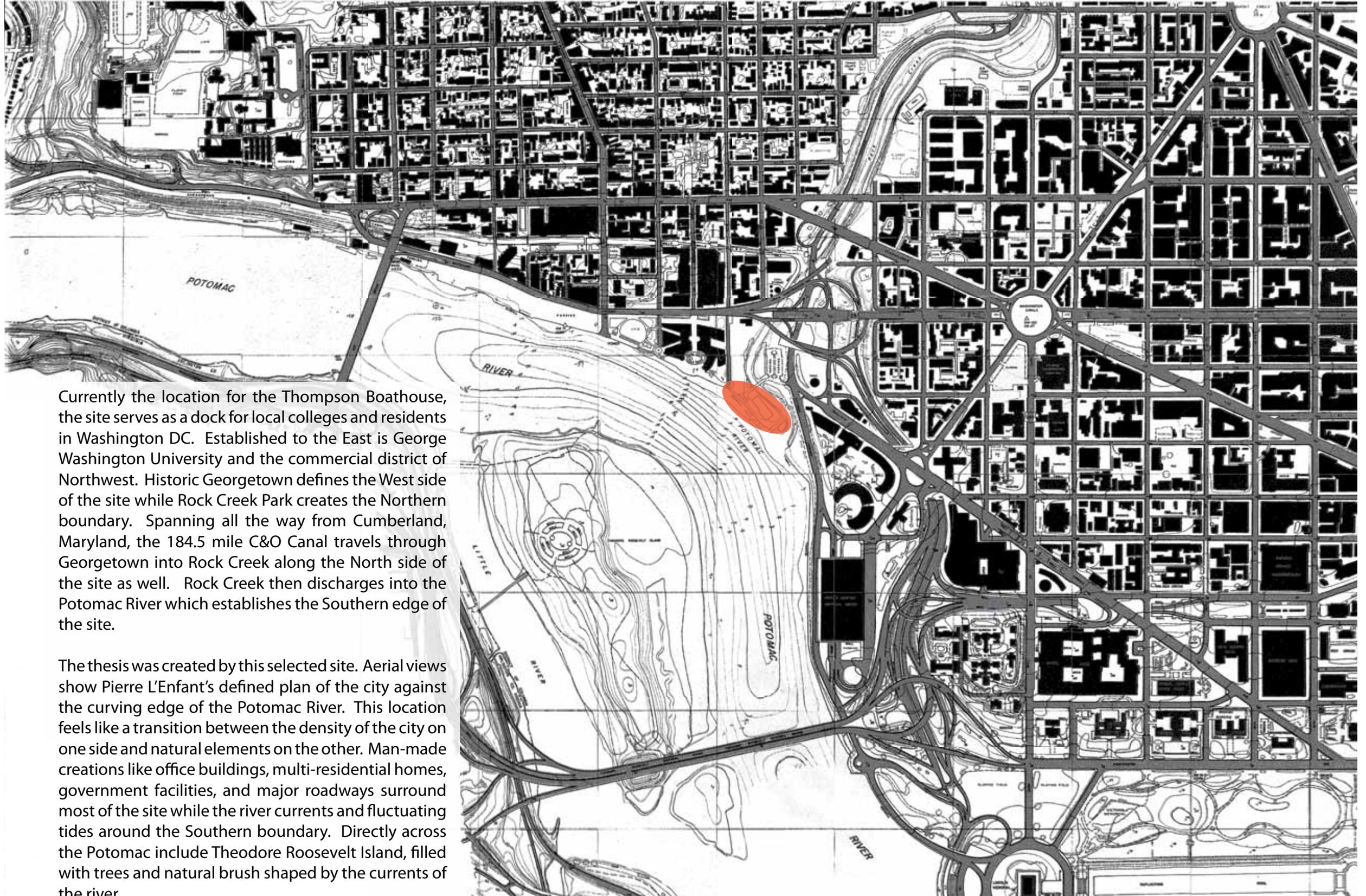
This book is dedicated to you, Jovanna. *Mahal kita.*

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A STUDY OF MEDIATION

Site as a Conflict Mediator



Currently the location for the Thompson Boathouse, the site serves as a dock for local colleges and residents in Washington DC. Established to the East is George Washington University and the commercial district of Northwest. Historic Georgetown defines the West side of the site while Rock Creek Park creates the Northern boundary. Spanning all the way from Cumberland, Maryland, the 184.5 mile C&O Canal travels through Georgetown into Rock Creek along the North side of the site as well. Rock Creek then discharges into the Potomac River which establishes the Southern edge of the site.

The thesis was created by this selected site. Aerial views show Pierre L'Enfant's defined plan of the city against the curving edge of the Potomac River. This location feels like a transition between the density of the city on one side and natural elements on the other. Man-made creations like office buildings, multi-residential homes, government facilities, and major roadways surround most of the site while the river currents and fluctuating tides around the Southern boundary. Directly across the Potomac include Theodore Roosevelt Island, filled with trees and natural brush shaped by the currents of the river.

Site as a Conflict Mediator

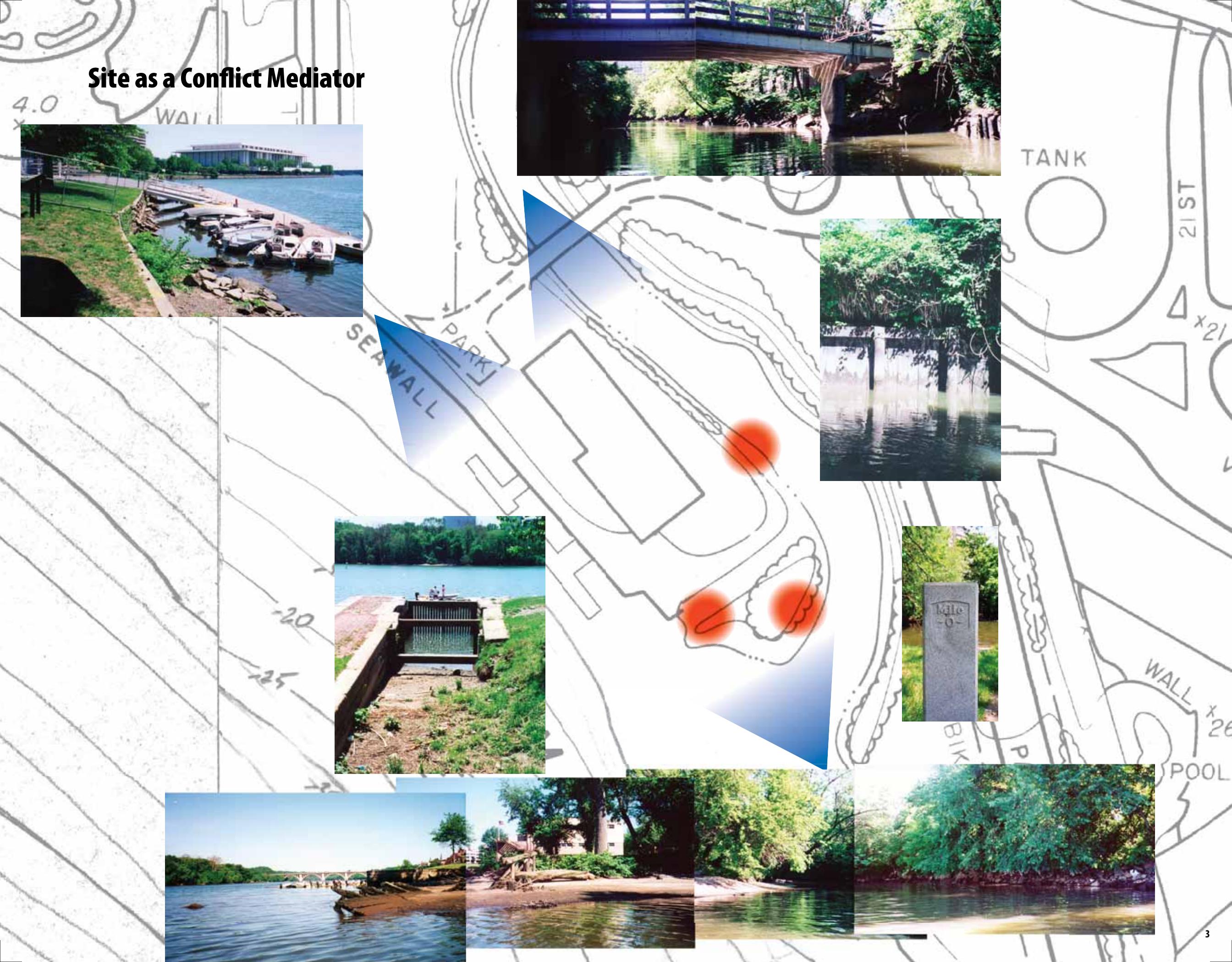


Beyond the contrasting views at this central location, the experience through the site stimulates other senses. The dense traffic expels smells of vehicular emissions while swirling with the river smells of seawater. The sounds of wind-driven and tidal currents crashing onto the site intertwine with the roaring engines of aircraft heading to National Airport and the hubbub of convertibles and SUVs on Rock Creek Parkway. During the warmer seasons, the area becomes filled nearly shoulder to shoulder with many people, whether on a business lunch or visiting from out of town or setting sail down the river.

Another inspiration defining the thesis was the link between Rock Creek and the C&O Canal terminating at the final canal lock into the river. This now abandoned sandstone structure is the location for nautical mile marker 0 at the mouth of the creek. Rock Creek Park also terminates at the site. Between man and nature, controlled waterflow and natural waterflow, built environment and natural environment, this site is an example various polar opposites converging together at one middle location.



Site as a Conflict Mediator



A STUDY OF MEDIATION

Architecture as a Conflict Mediator

Man creates artificial conditions. This is Architecture. Physically and psychically man repeats, transforms, expands his physical and psychical sphere. He determines "environment" in its wildest sense.

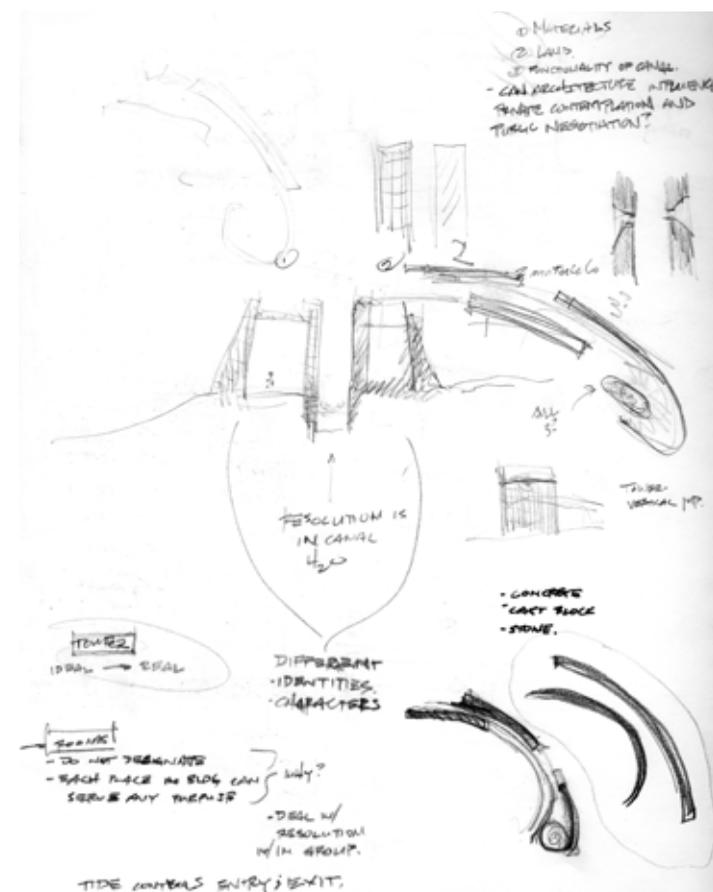
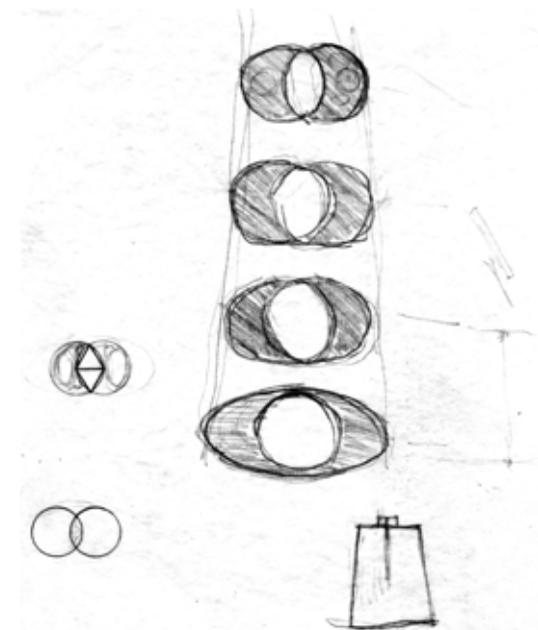
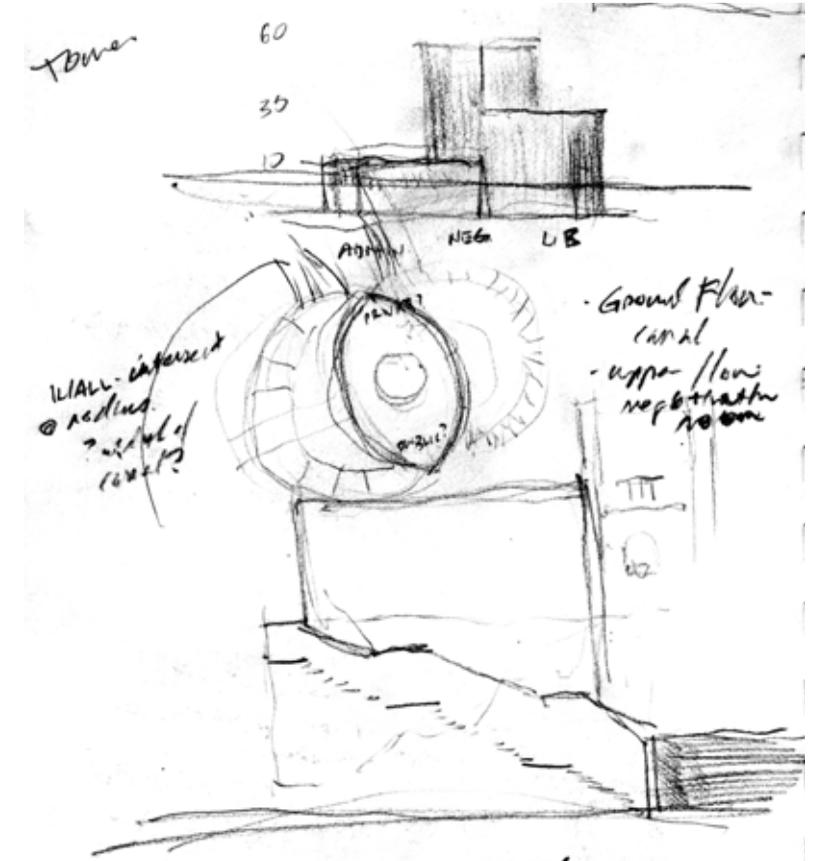
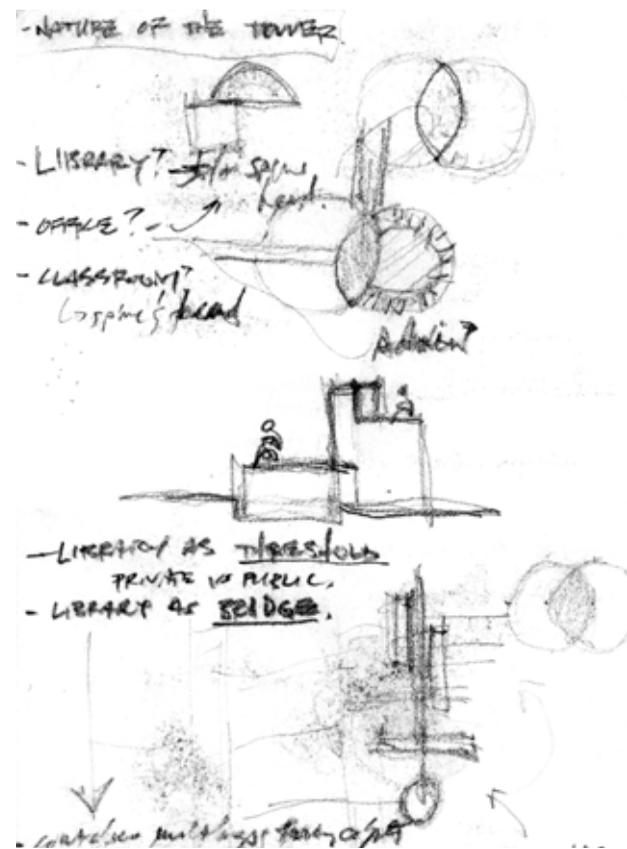
According to his needs and wishes he uses the means necessary to satisfy these needs and to fulfill these dreams. He expands his body and mind. He communicates.

Architecture is a medium of communication.

-Hans Hollein (460)

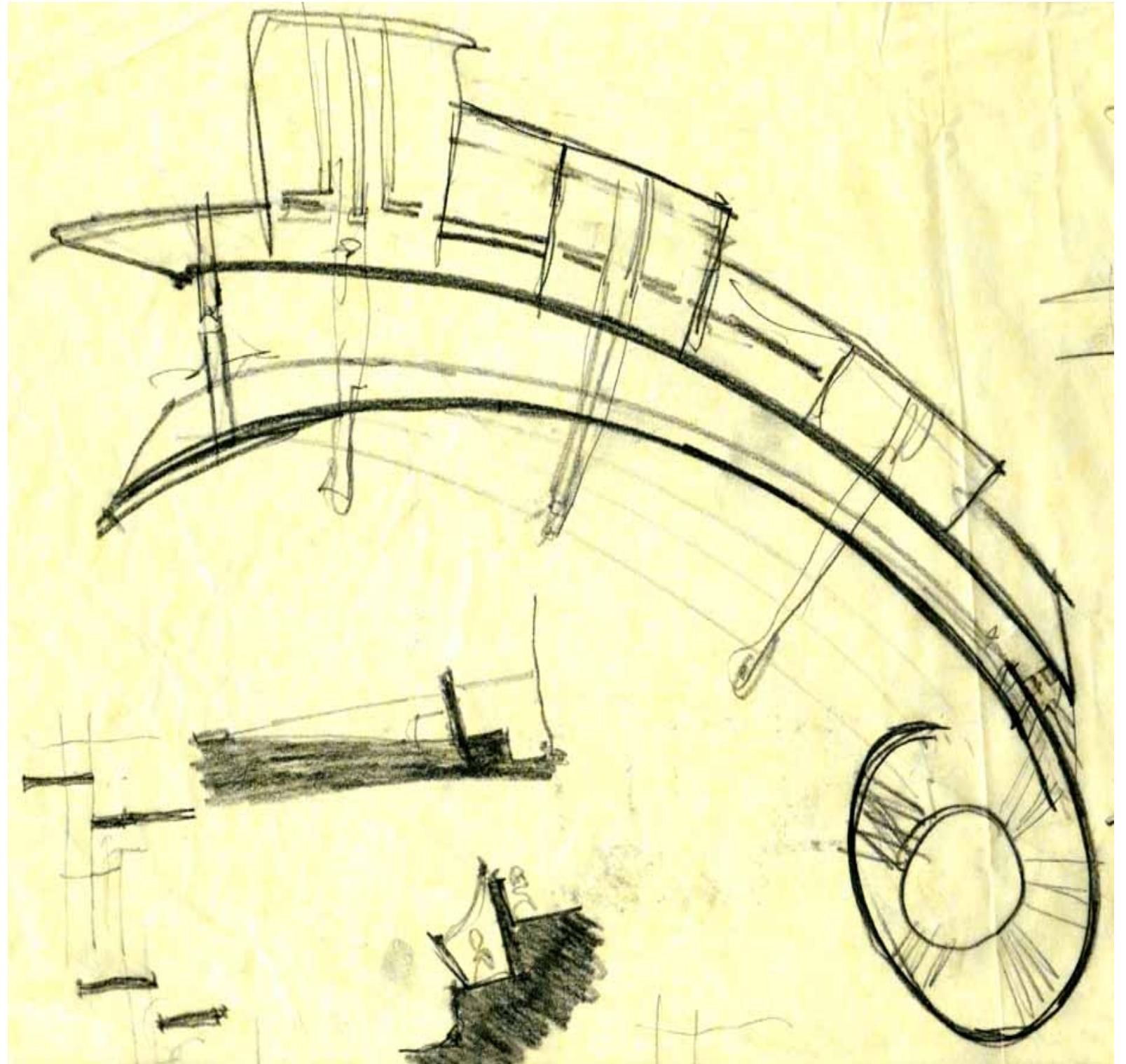
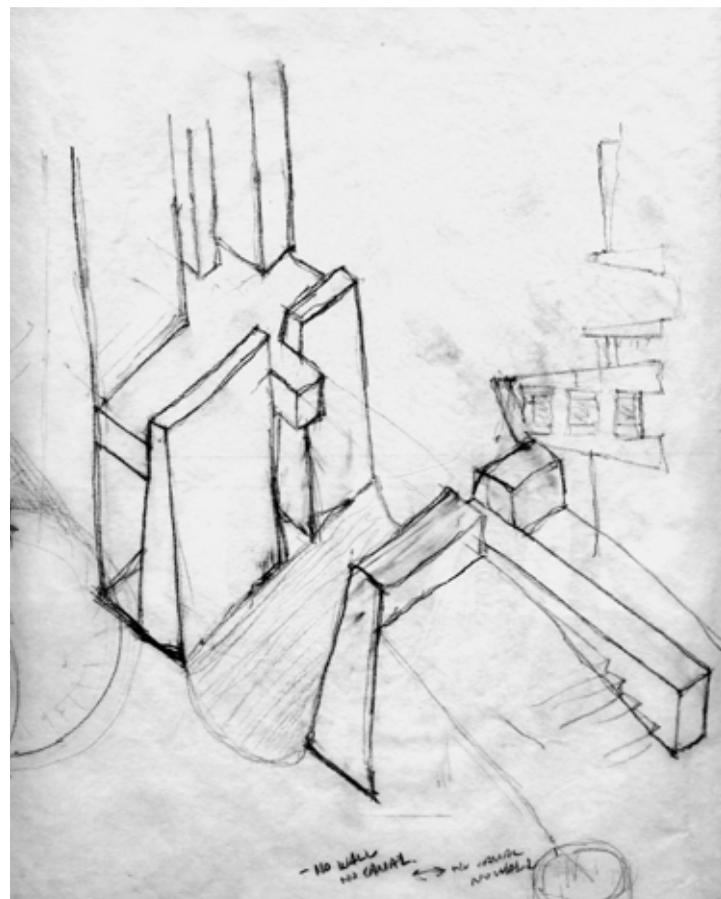
The influence from the site led to investigating an architecture that can serve as a place for mediation. While buildings clearly define physical boundaries, architecture can also gather and unite. Like the process of bringing two opposing sides together to mediate an acceptable compromise between them, appreciating the urban and natural context while integrating it with the built environment helps create a harmony of place both physically and symbolically.

The program began with the idea of a central location where the origins of Vesica Pisces was the primary inspiration. This tower would have two opposing sides that intersect at a central point where formal negotiation would occur.



Architecture as a Conflict Mediator

Due to the other program elements needed to support the mediation center, the design called for extensions beyond the central element. Thus, heavy poché walls follow the curve created by the Potomac River, blending the design with the site. With inspiration from the historic C&O Canal, developing a controlled water system that allows parties to arrive and depart on water instead of land was considered in the design as well. Through these evolving ideas, the parti was born.



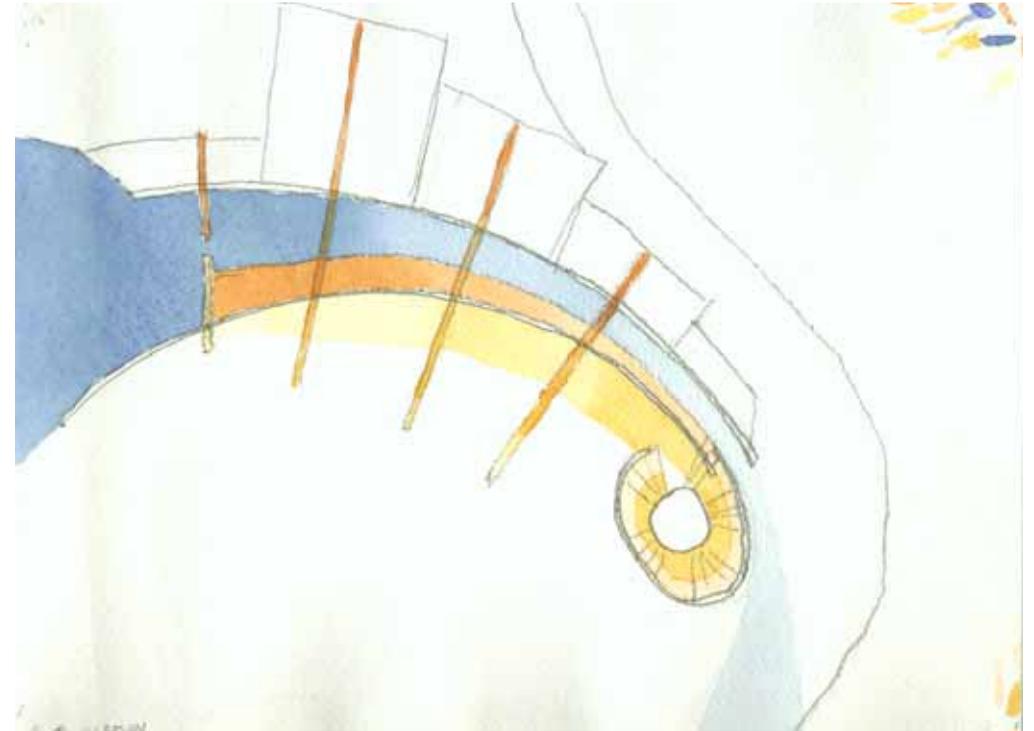
Architecture as a Conflict Mediator

Paddling via canoe will be the primary means of arriving to and departing from the center. Circulation by foot also follows the retaining walls as people move from one end of the building to the other. Bridges intersecting the curved walls help define the presence of the channel below while serving the other functional elements of the complex.

The location is not already there before the bridge is. Before the bridge stands, there are of course many spots along the stream that can be occupied by something. One of them proves to be a location, and does so because of the bridge. Thus the bridge does not first come to a location to stand in it; rather, a location comes into existence only by virtue of the bridge.

-Martin Heidegger (154)

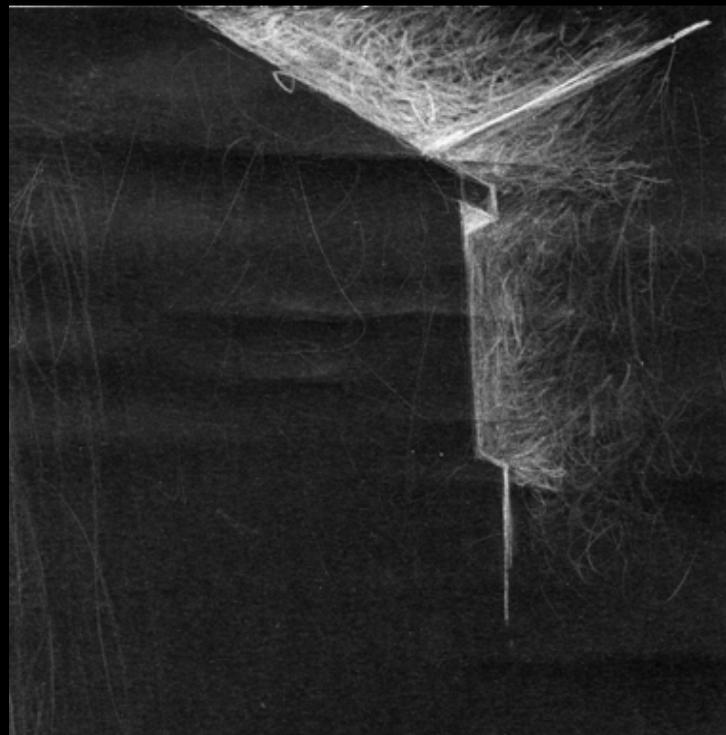
A study of the tides demonstrates the constant changing nature of the site. Water travel would be defined by the height of the tide.



Architecture as a Conflict Mediator

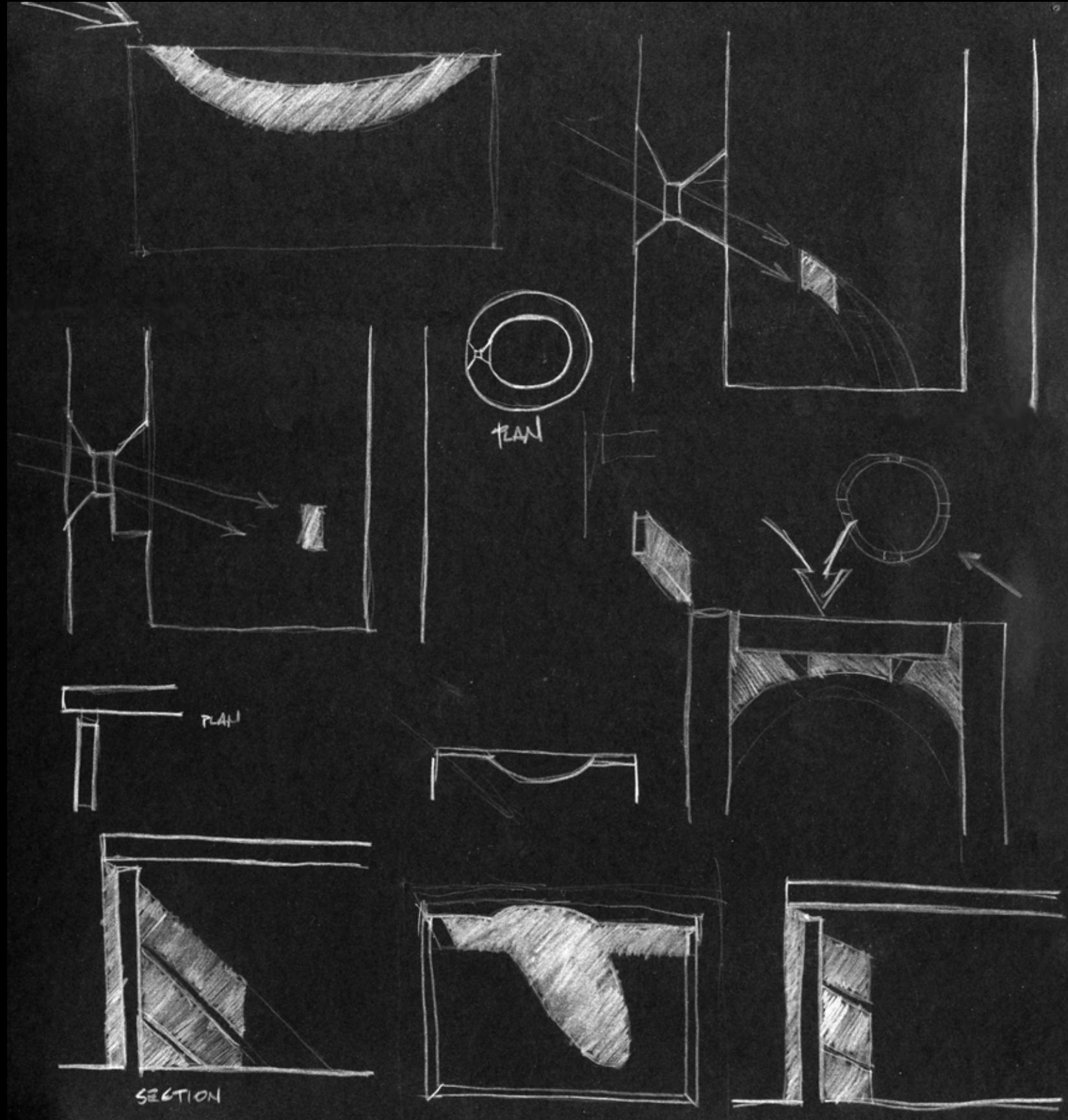
In addition to the interplay between land and water, light is also investigated as a way to pull the outside in. Inspired by works from Steven Holl and Tadao Ando, all penetrations into and through a wall were closely considered. Windows are not just created to define views but are also created to define how light defines and shape a place.

Other studies show the exploration of light from above, across, and below a defined area.



Nature in the form of water, light, and sky restores architecture from a metaphysical to an earthly plane and gives life to architecture. A concern for the relationship between architecture and nature inevitably leads to a concern for the temporal context of architecture. I want to emphasize the sense of time and to create compositions in which a feeling of transience or the passing of time is a part of the spatial experience.

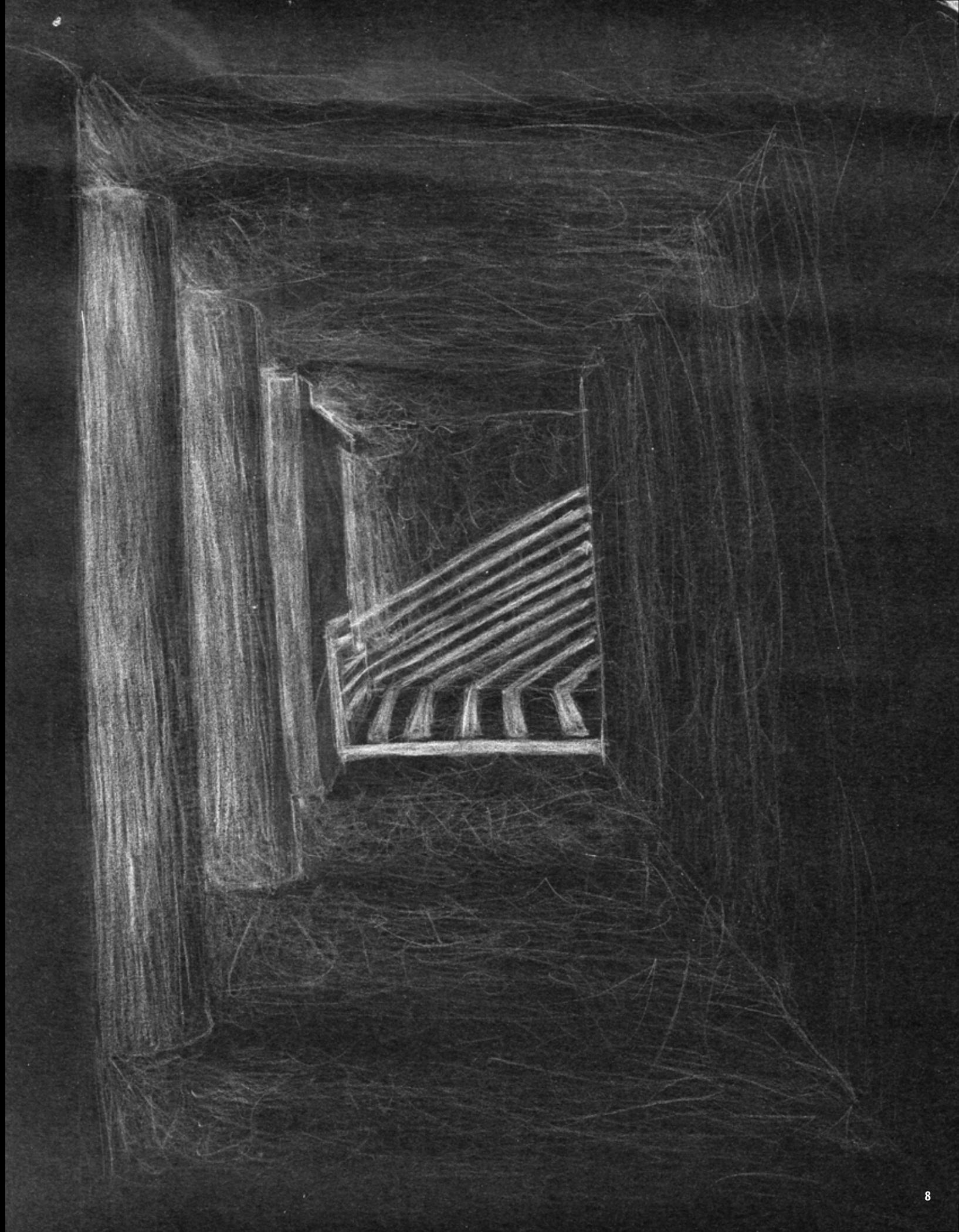
-Tadao Ando (Complete Works 465)



Architecture as a Conflict Mediator

Light can be read both as the phenomenon of light in words and the pressure of light in science. Language without sentences, just like natural light, has essences that transcend specific meanings and purposes. Language becomes a form of light while light becomes language. Face to face with light in a volume, luminous space becomes dreamlike. A moment of intense sensibility ignites the intuition. Sideways, forward, backward...the empty words of light are spoken in utter silence.

-Steven Holl (104)



Architecture as a Conflict Mediator

A conscious consideration for materiality in architecture influences the experience of mediation as well through tactile expression. How do materials separate? How do they unite? The experimentation of applying different materials in various forms at different locations forms enhances areas of private contemplation and public negotiation. Concrete roots itself firm to the ground. Stone blocks stack themselves in an integral fashion, working together to achieve a higher purpose. Glass allows vision to pass through while defining a physical boundary. Trees stand aligned while creating a natural canopy from the elements.

In the architecture of stone the single stone became greater than the quarry. Stone and architectural order were one.

A column when it is used should be still regarded as a great event in the making of space. Too often it appears as but a post or prop.

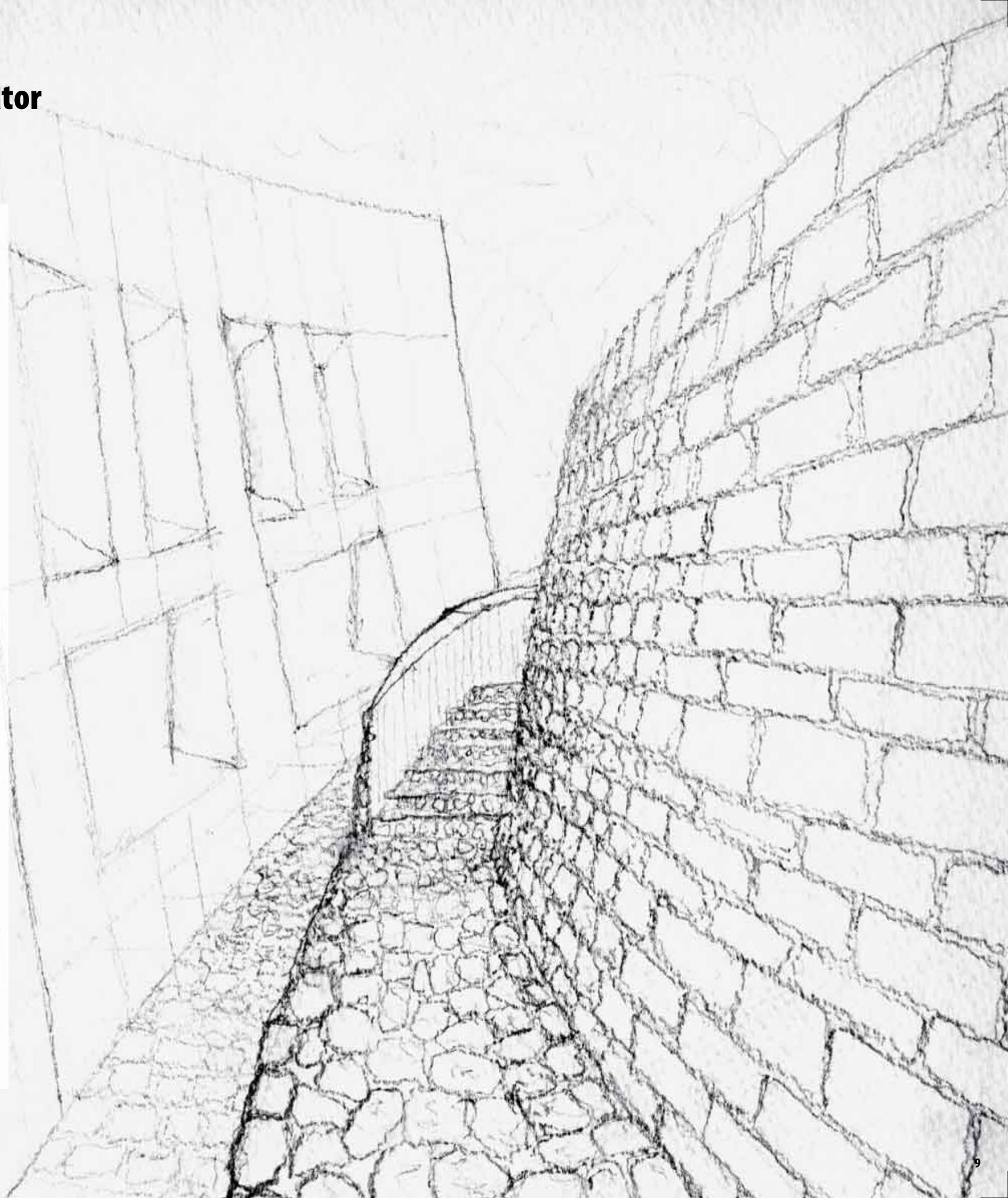
What a column is in steel or concrete is not yet felt as a part of us.

It must be different than stone.

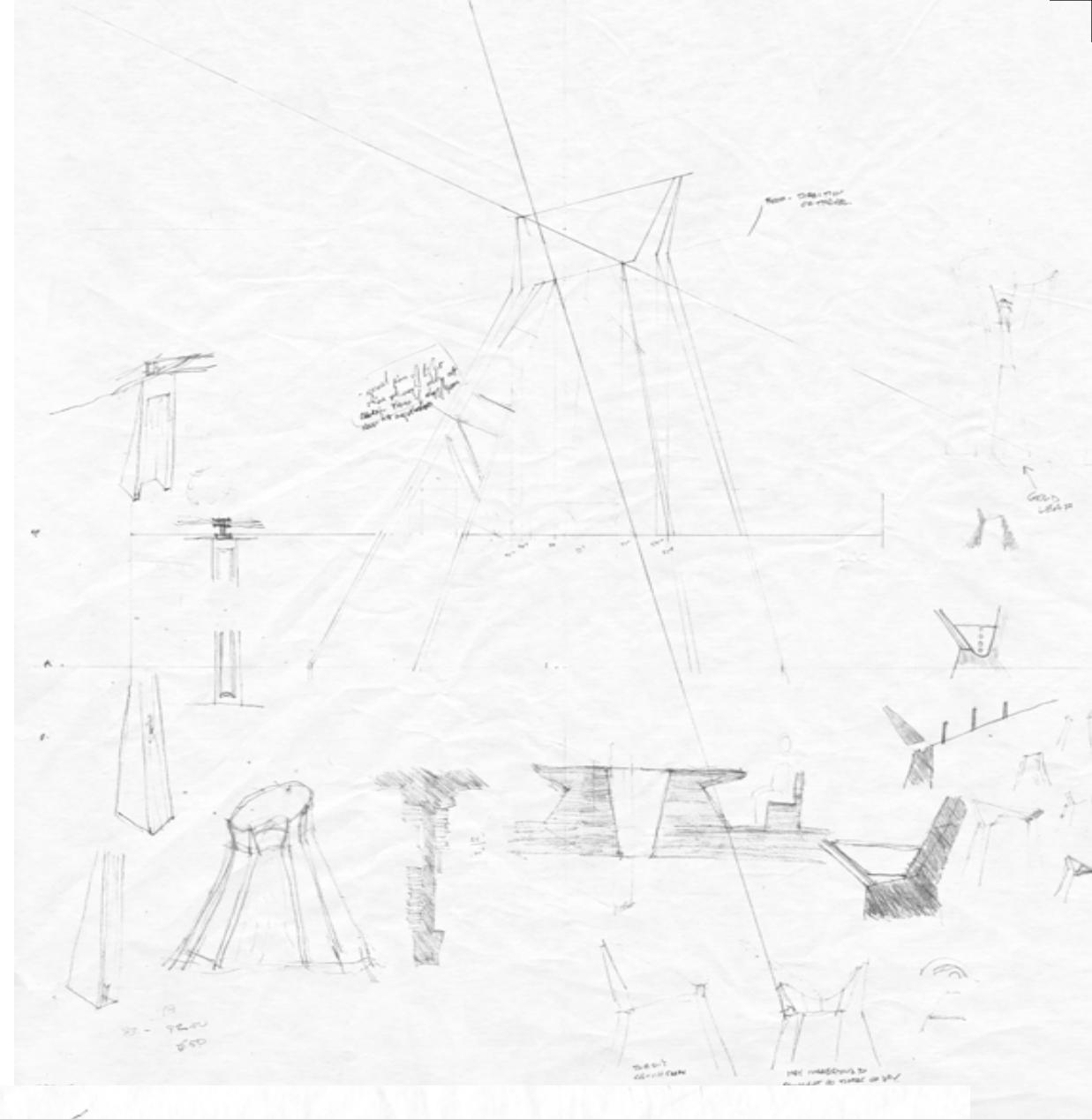
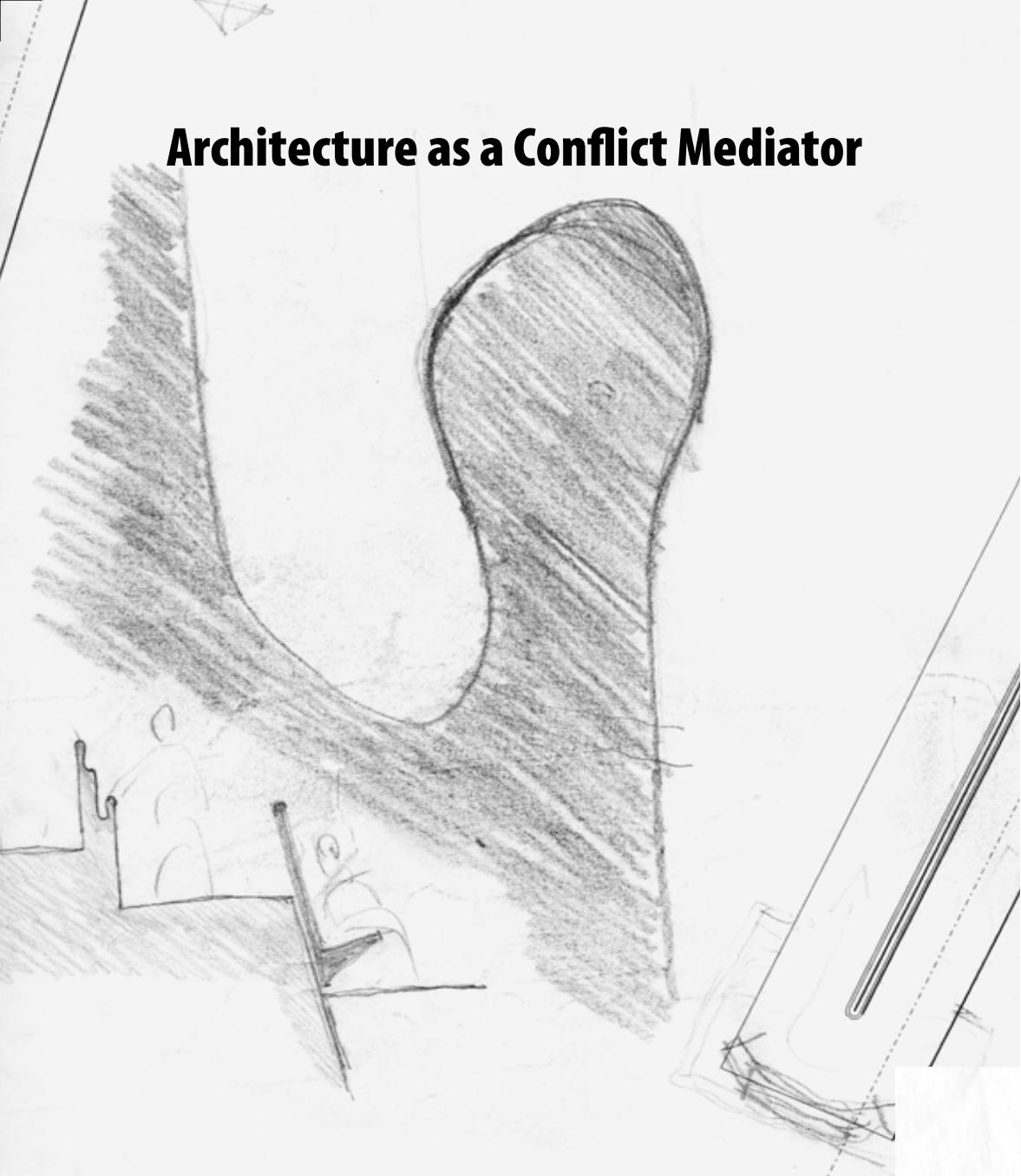
Stone we know and feel its beauty.

Material we now use in architecture we know only for its superior strength but not for its meaningful form. Concrete and steel must become greater than the engineer.

-Louis Kahn (271)

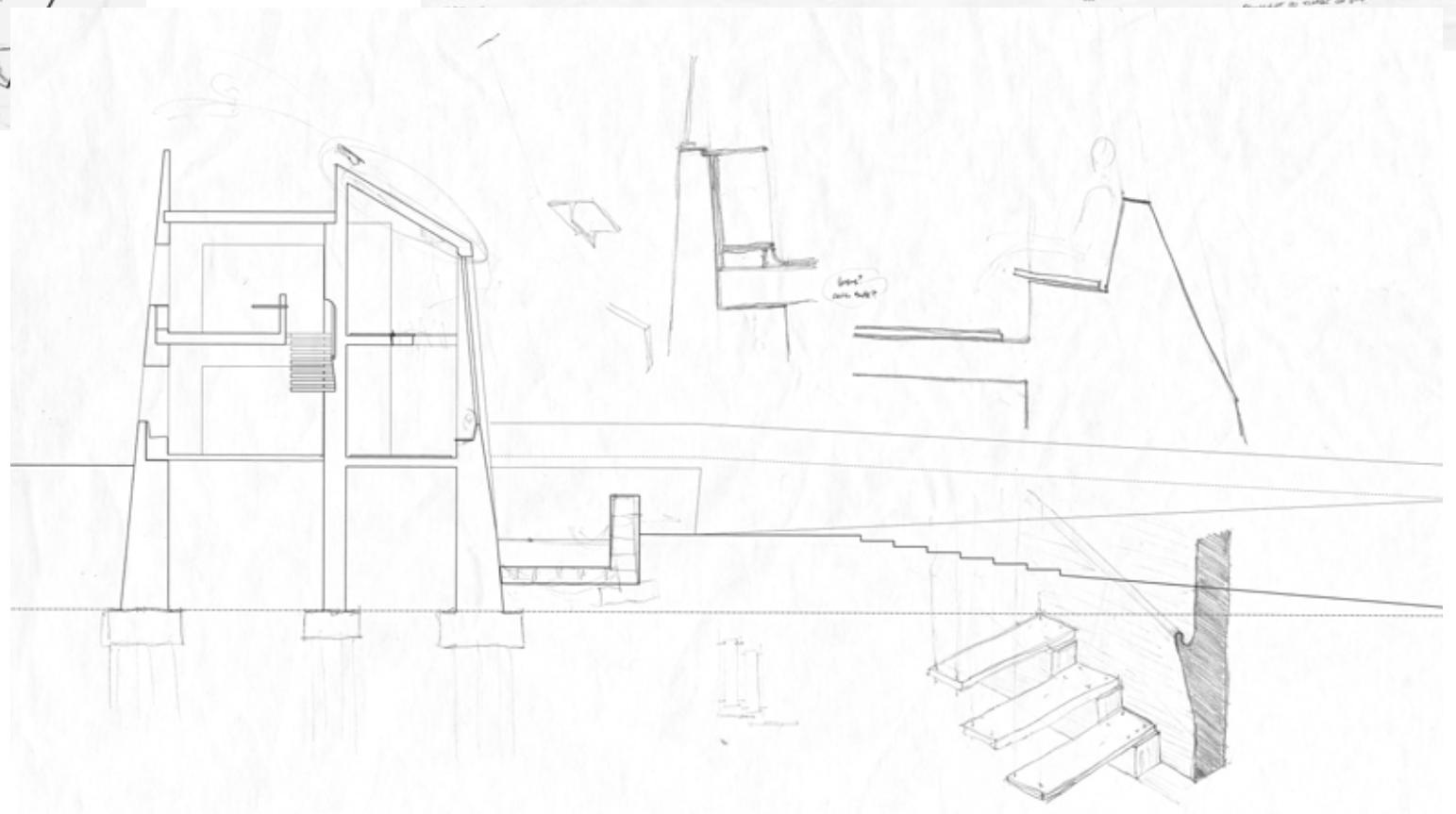


Architecture as a Conflict Mediator

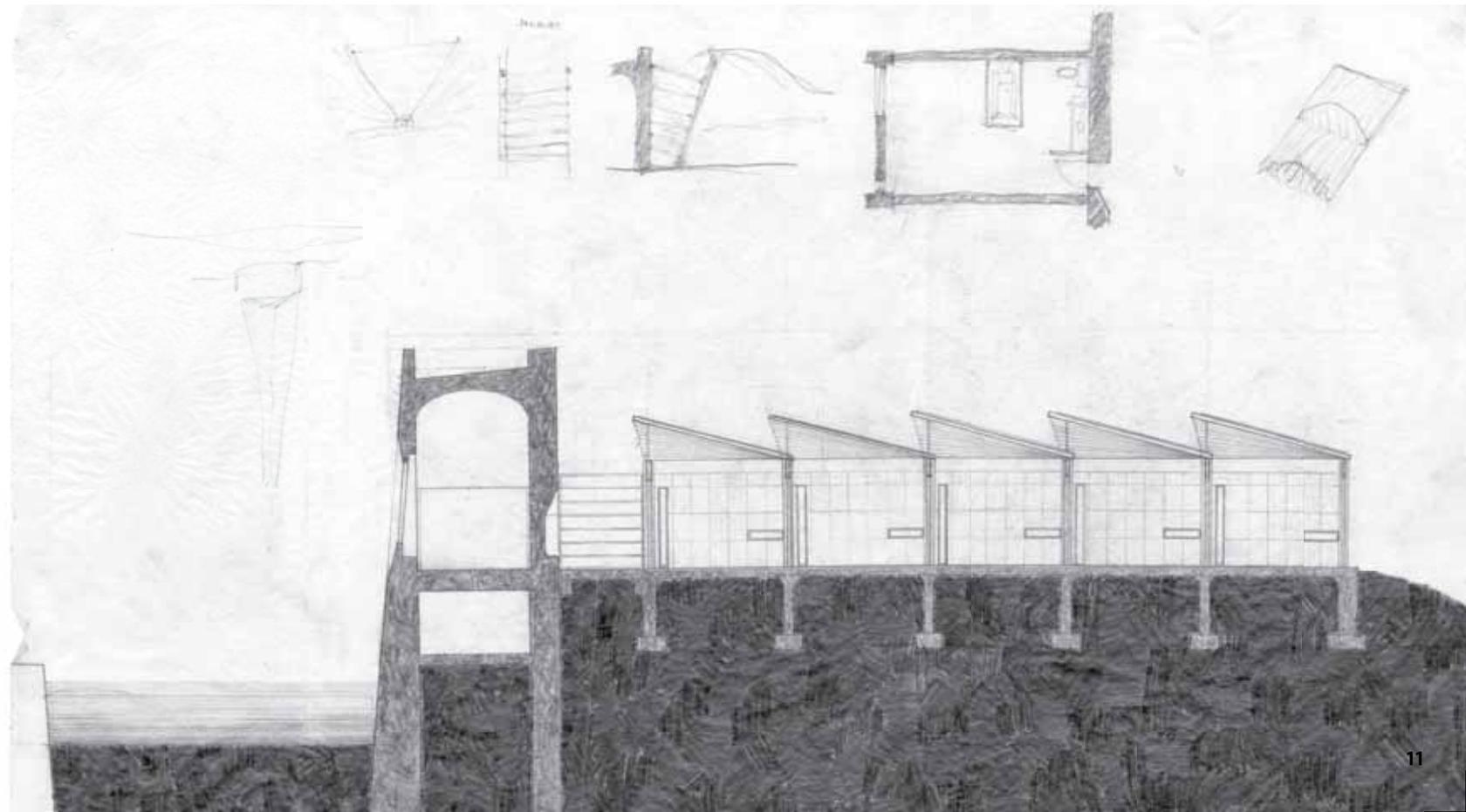
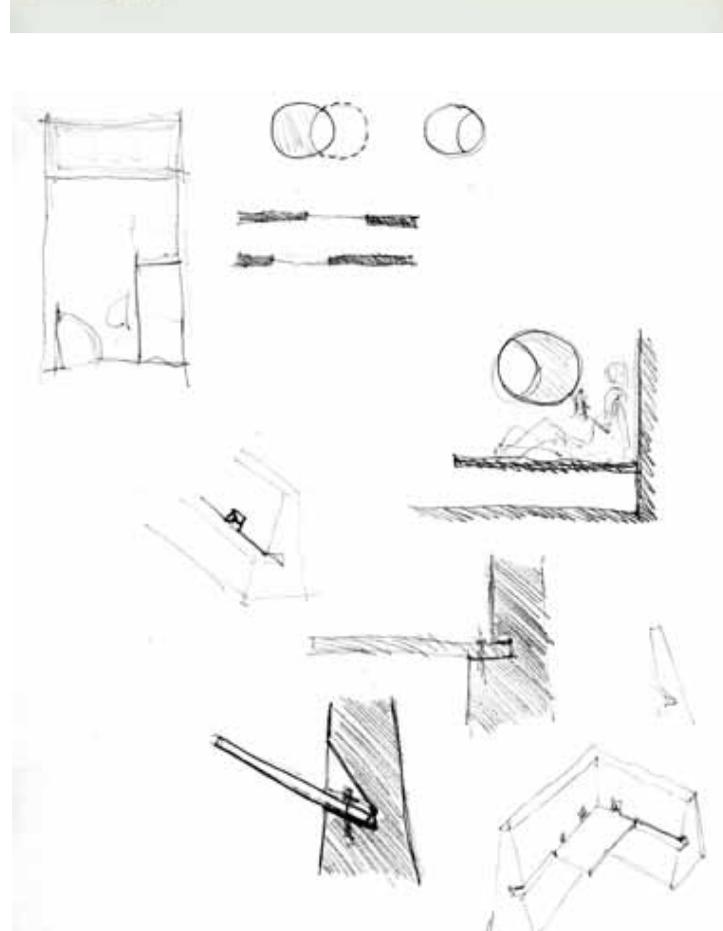
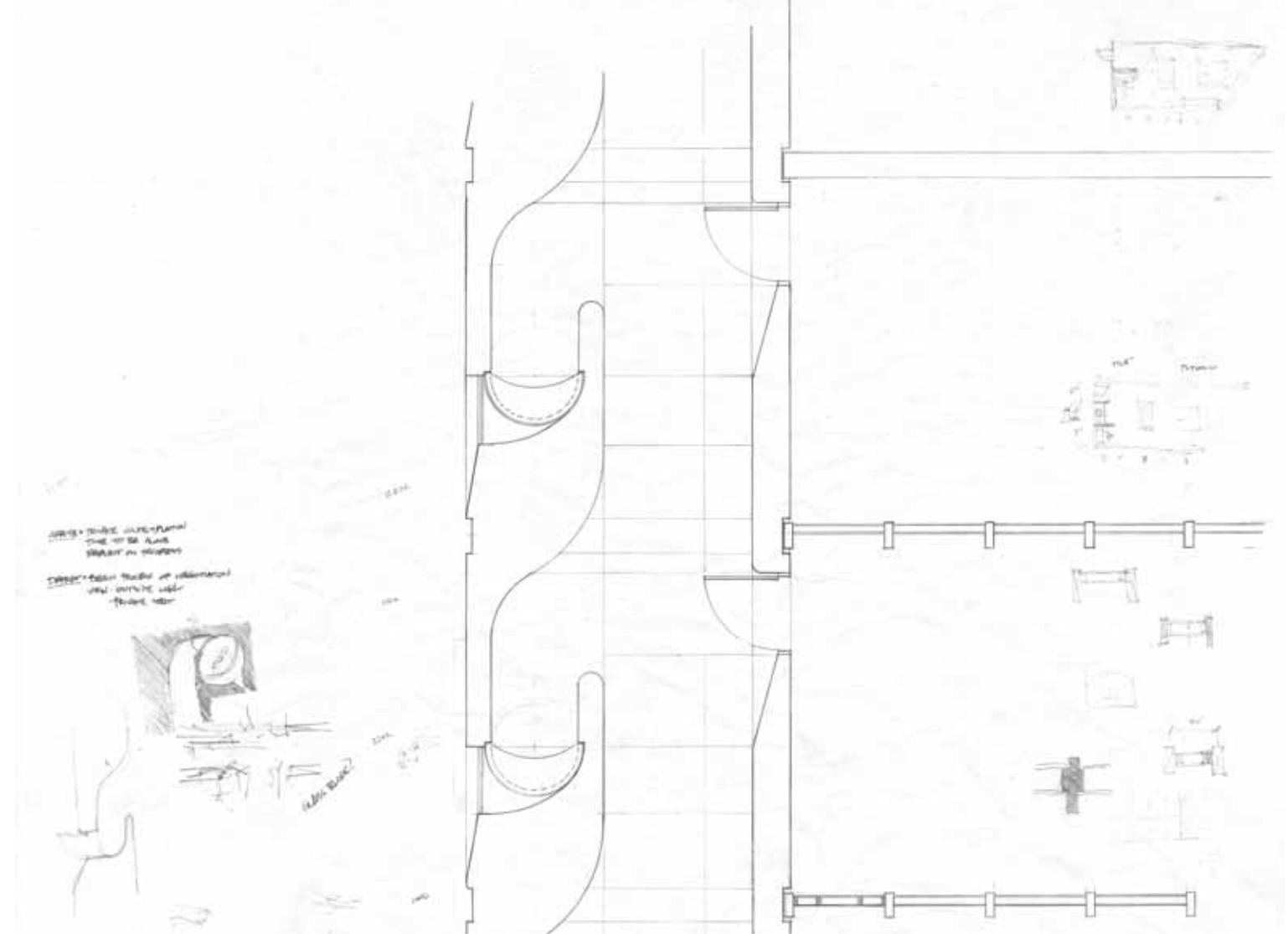


Careful detailing is the most important means for avoiding building failure, on both dimensions of the architectural profession – the ethical and the aesthetic. The art of detailing is really the joining of materials, elements, components, and building parts in a functional and aesthetic manner. The complexity of this art of joining is such that a detail performing satisfactorily on one building may fail in another for very subtle reasons.

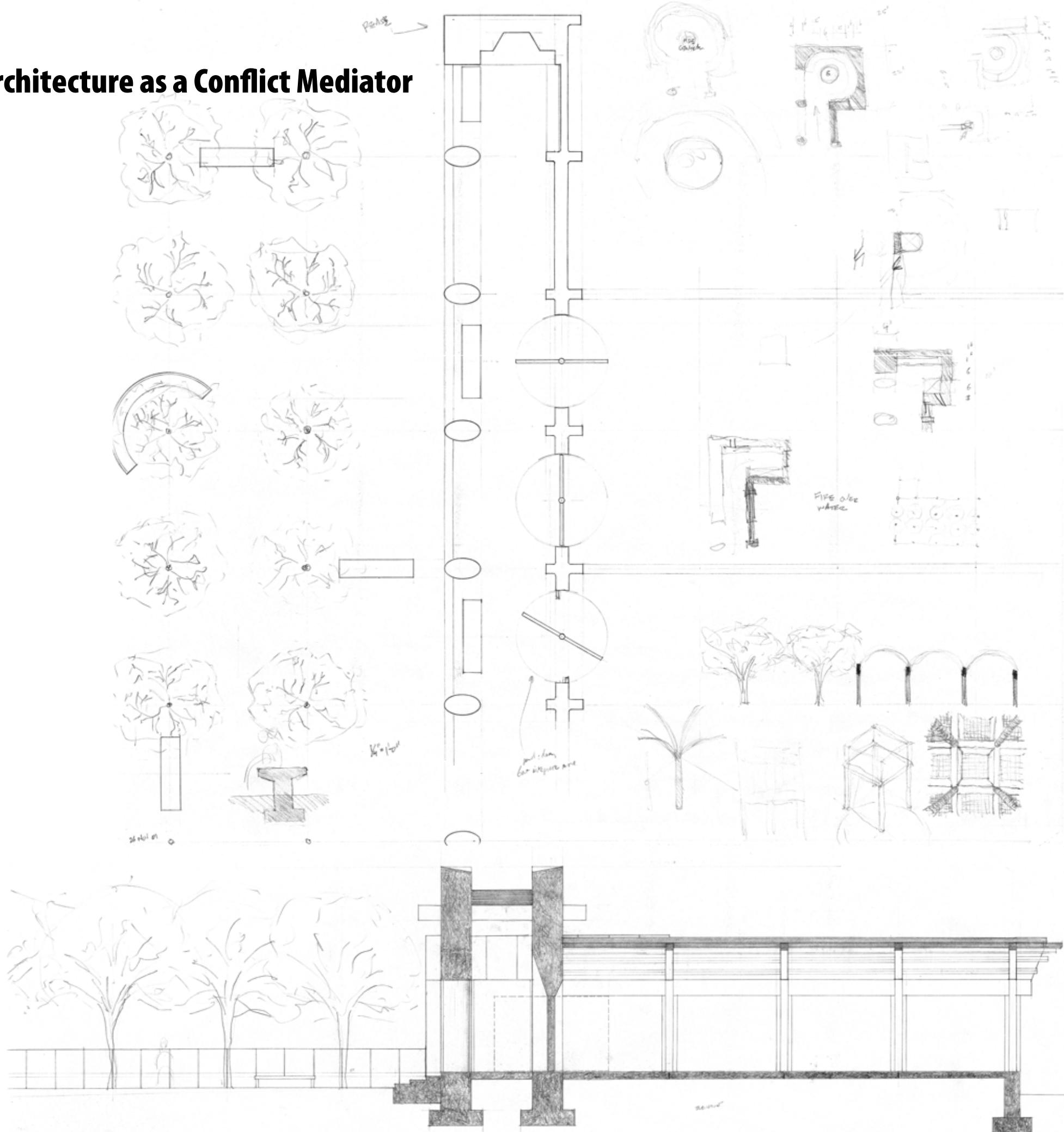
-Marco Frascari (501)



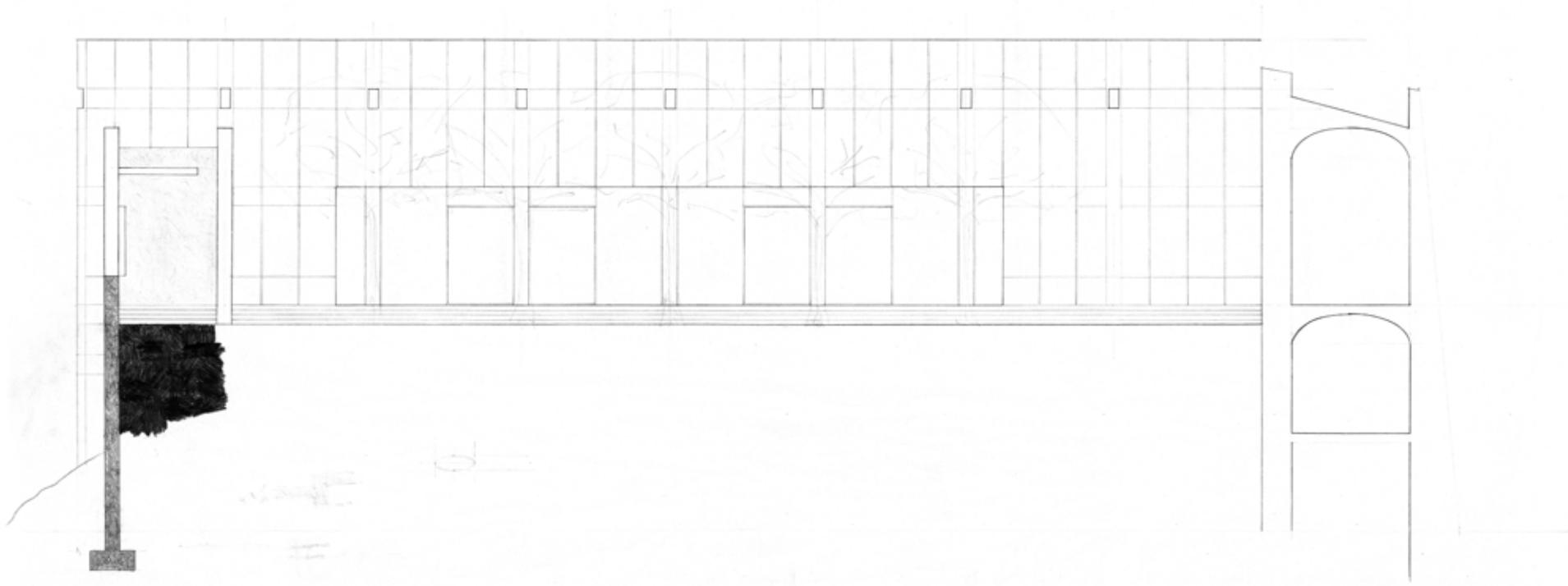
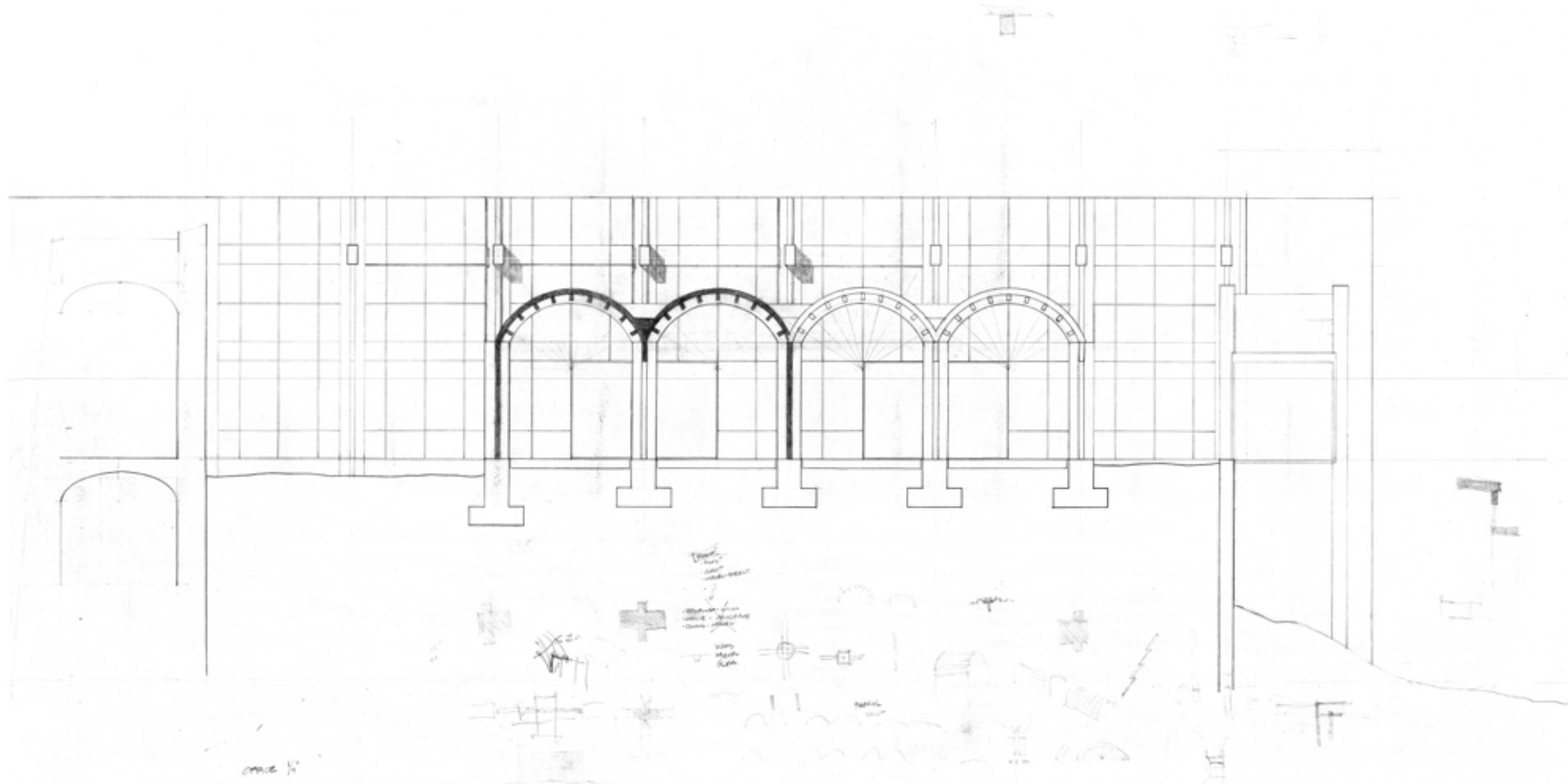
Architecture as a Conflict Mediator



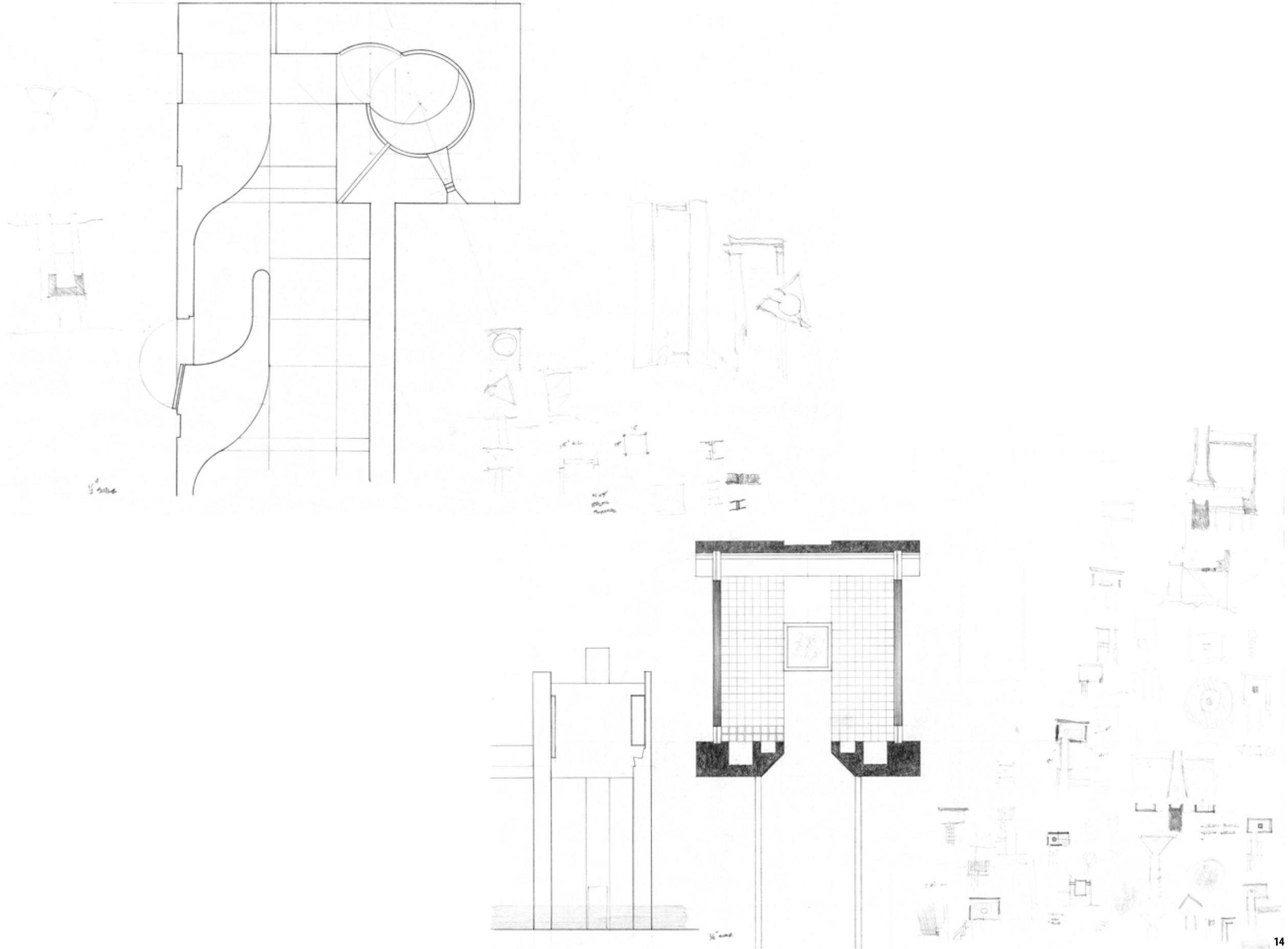
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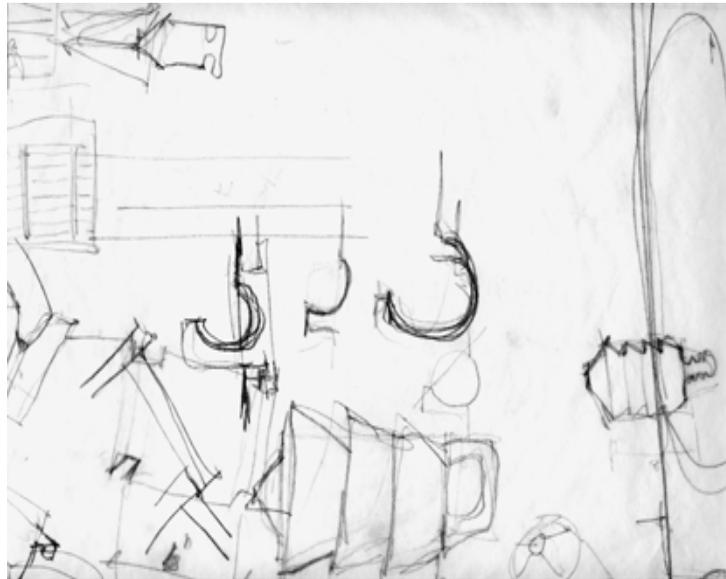
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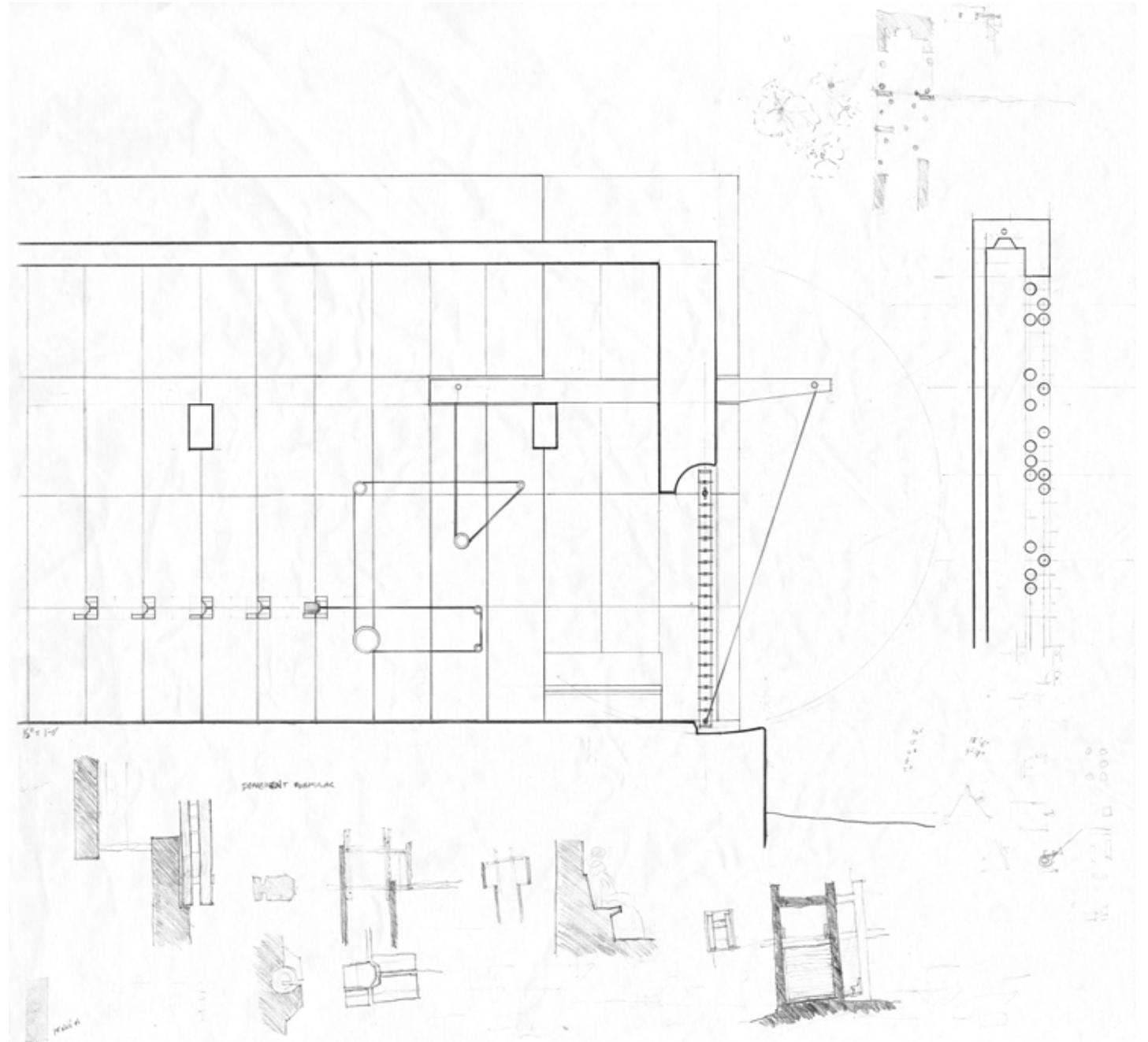


Architecture as a Conflict Mediator



The evolution from thought to idea is often rapid, but the period of gestation between idea and built form – where the architectural character holds the original thought, integrating it into an architectural whole – requires tremendous patience.

-Todd Williams and Billie Tsien (27)



A CONFLICT RESOLUTION CENTER

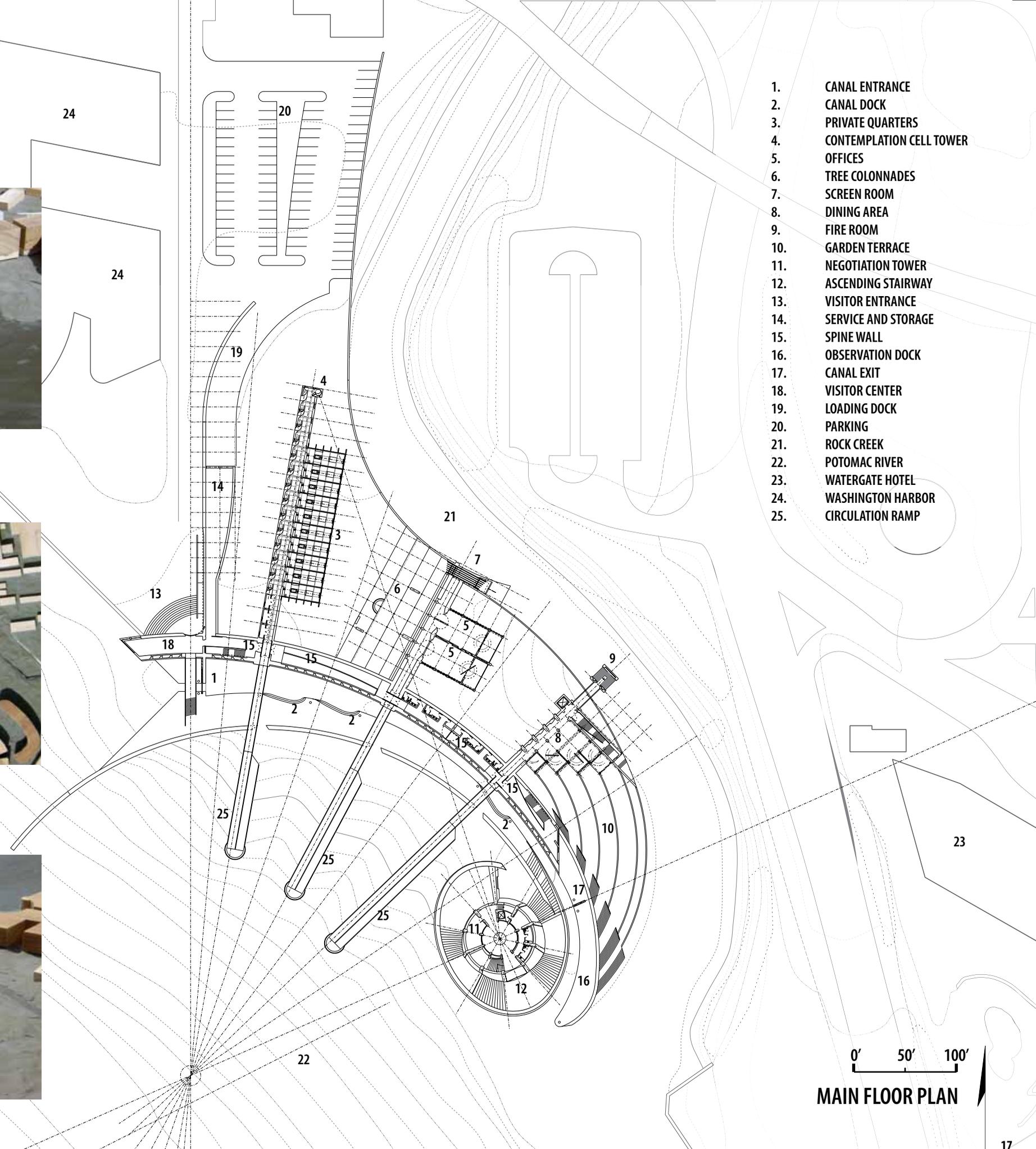
Revelation

The final manifestation of this thesis reveals itself in the final design. Beginning across Roosevelt Island along the Virginia border, each opposing party will start their journey by paddling via canoe during high tide. Such a physical task navigating through the Potomac would symbolize a cleansing as the parties make their way through the currents, creating a haptic passage through the river currents. The urban sounds and smells slowly morph into splashing seawater and rustling trees along Roosevelt Island

Approaching the resolution center brings the parties to the primary entrance from the West. A canal lock would be opened to allow each canoe to maneuver inside and dock at one of two designated locations. Immediate observations would show bending walls, concrete on the land side and local sandstone guarding canal from the river. The concrete wall on the land side provides administrative and facilities services throughout the mediation center and can also be used by the parties during extreme weather conditions. A series of tall vertical windows are canted outward along the spine curve to provide natural light into the space. The spine also serves as time piece with the amount of sunlight streaming in at different angles and different times along the bending wall.

Bisecting the dominant curved walls is a series of walkways. These paths bridge the two sides as a means of intertwining the various architectural elements in addition to reinforcing the continually changing nature of the canal. At each intersection of the bridges and the curved wall is a door system arranged to control desired circulation.

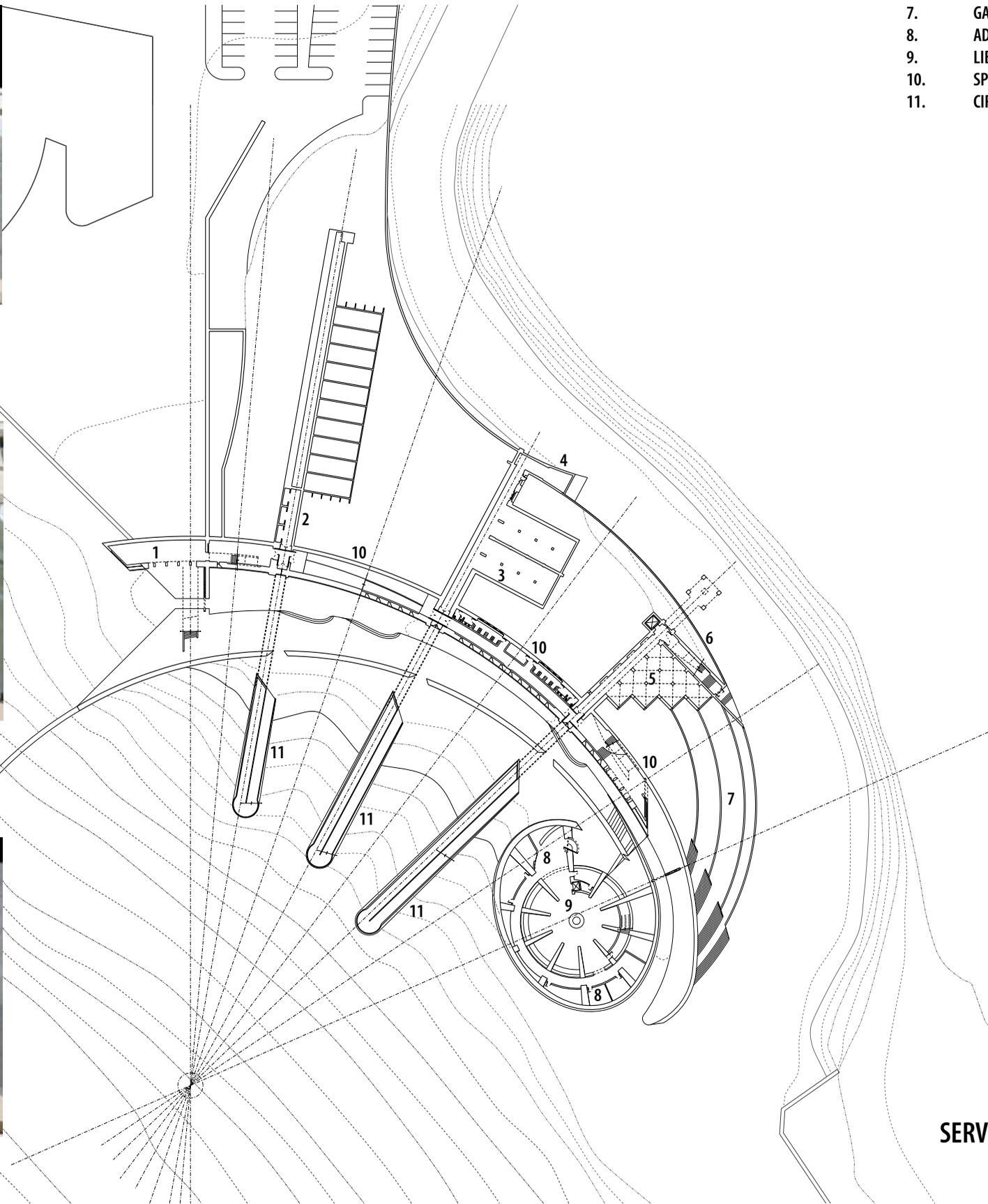
Revelation



1. CANAL ENTRANCE
2. CANAL DOCK
3. PRIVATE QUARTERS
4. CONTEMPLATION CELL TOWER
5. OFFICES
6. TREE COLONNADES
7. SCREEN ROOM
8. DINING AREA
9. FIRE ROOM
10. GARDEN TERRACE
11. NEGOTIATION TOWER
12. ASCENDING STAIRWAY
13. VISITOR ENTRANCE
14. SERVICE AND STORAGE
15. SPINE WALL
16. OBSERVATION DOCK
17. CANAL EXIT
18. VISITOR CENTER
19. LOADING DOCK
20. PARKING
21. ROCK CREEK
22. POTOMAC RIVER
23. WATERGATE HOTEL
24. WASHINGTON HARBOR
25. CIRCULATION RAMP

0' 50' 100'
MAIN FLOOR PLAN

Revelation

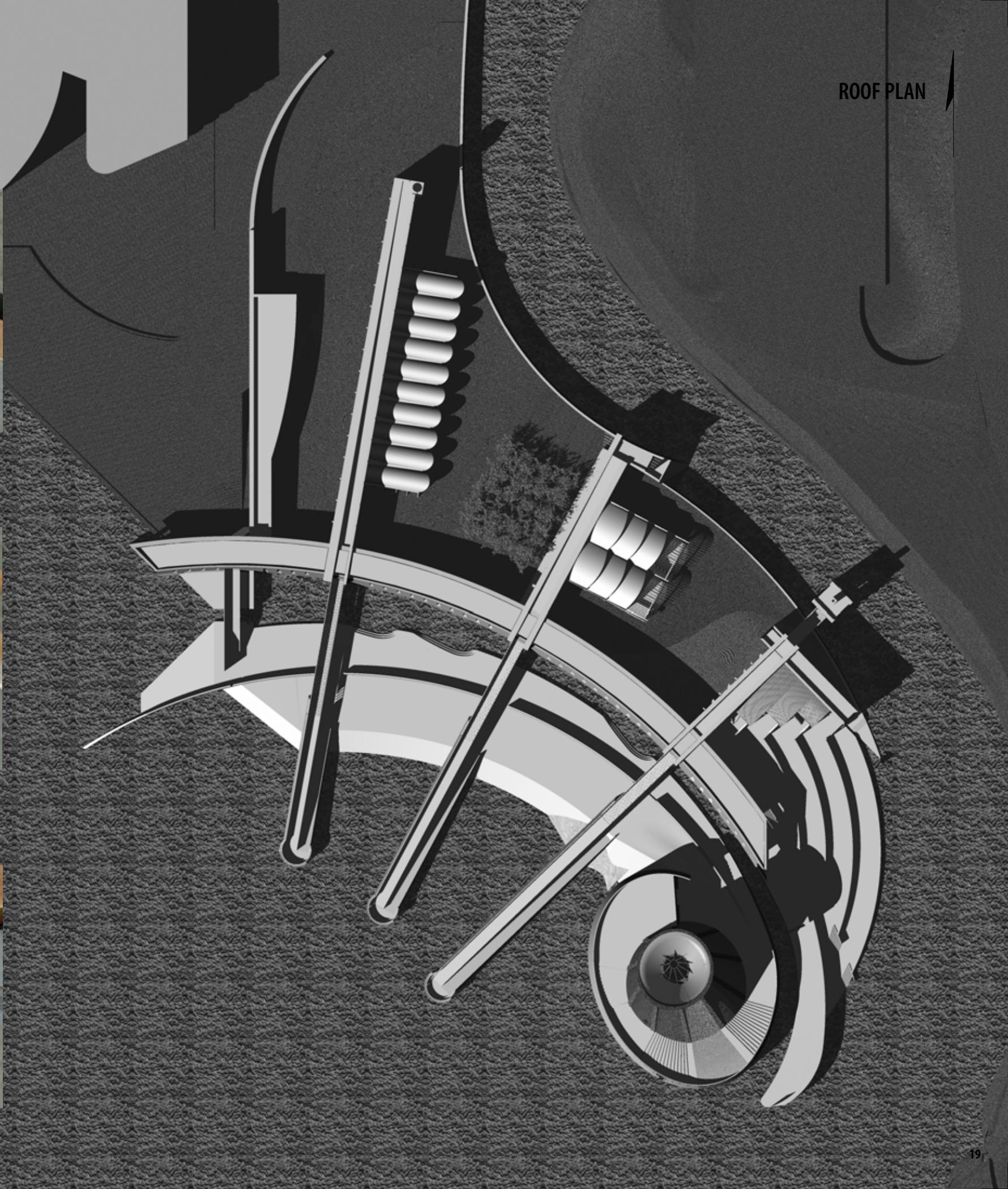


- 1. VISITOR CENTER
- 2. HOUSEKEEPING
- 3. IT / TELECOM
- 4. LIGHT ROOM
- 5. KITCHEN
- 6. SERVICE DOCK
- 7. GARDEN TERRACE
- 8. ADMINISTRATION
- 9. LIBRARY AND RESEARCH
- 10. SPINE WALL
- 11. CIRCULATION RAMP

0' 50' 100'
SERVICE FLOOR PLAN

Revelation

ROOF PLAN



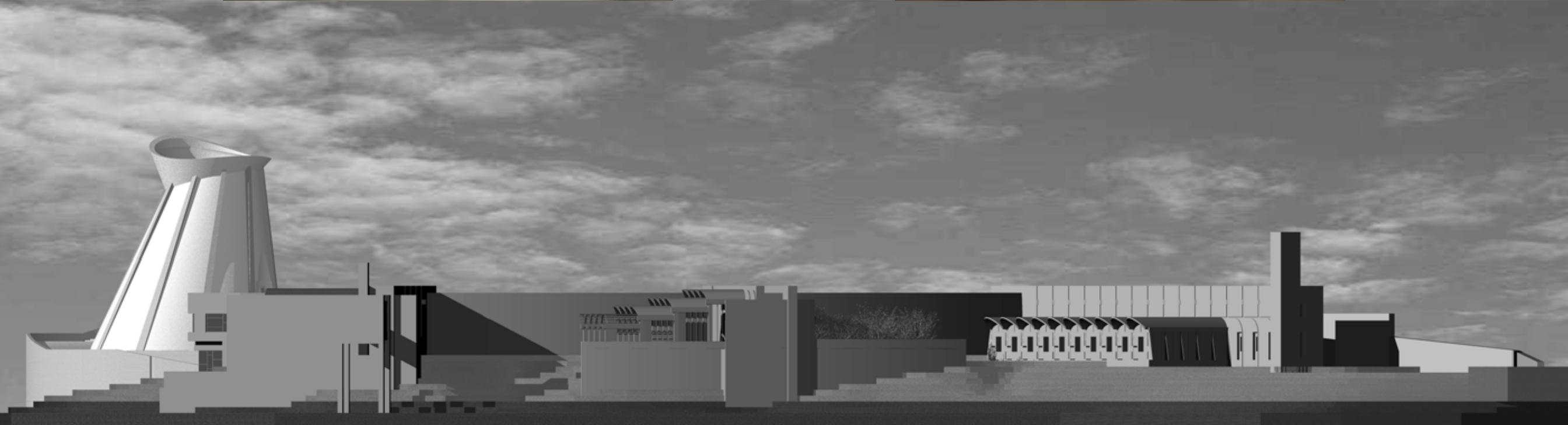
Revelation



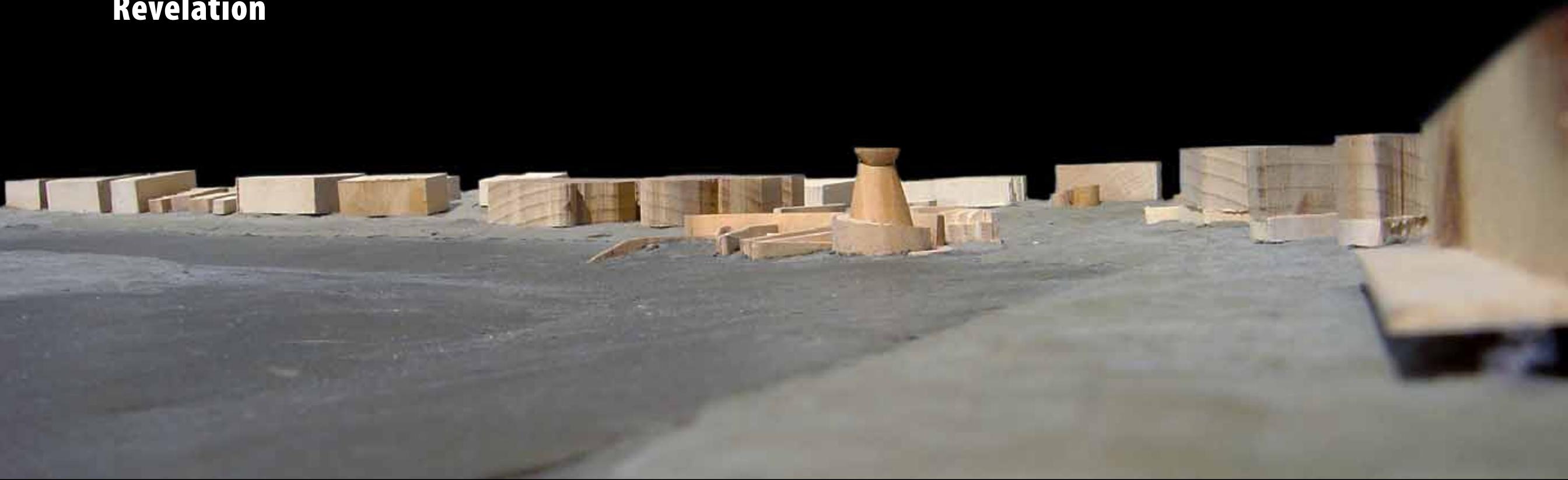
Revelation



Revelation



Revelation



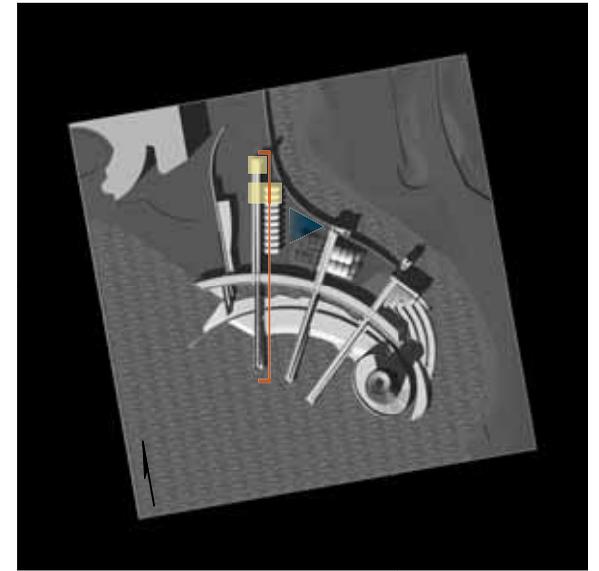
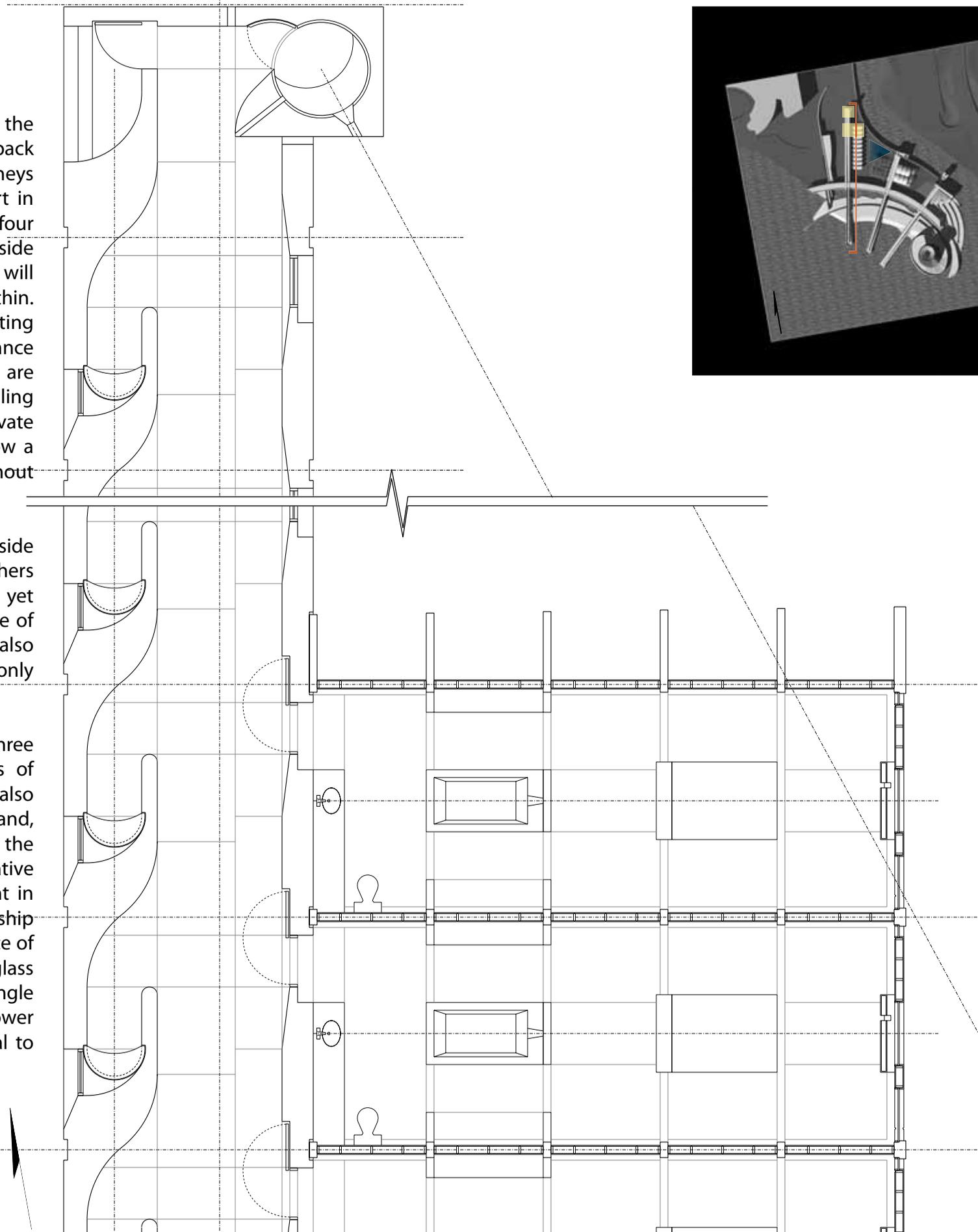
A CONFLICT RESOLUTION CENTER

Isolation

Upon docking at the canal, the guests proceed to the privacy quarters. A long ramp brings the parties back out into the river as a reminder of both the journeys that they had taken physically and will take part in intellectually. Representatives of no more than four from each party along with the mediators all reside along this row of bedrooms. Exactly one guest will reside in each room with personal amenities within. Both the walls and flooring have a wood finish, creating a warm and comfortable setting both in appearance and in tactile sensation. The bed and bathtub are centered in the room to allow the barrel-shaped ceiling above to encase the resident during these more private and relaxing activities. Windows at the end allow a relationship between inside and the outside without providing a clear view of the court beyond.

Across the hallway, the individual's study tucks inside the wall. Its curvilinear nature discourages others from peering in when arriving from the bridge, yet when leaving the private quarters, a brief glimpse of someone in the space could be seen. These zones also hug the individual with its concrete form, allowing only one person to use at a time.

At the end of the walkway resides the first of three special rooms designed to further the process of contemplation to negotiation. This individual cell, also enclosed in concrete and embedded into the land, surrounds the patron with little connection to the outside. The top of the private tower is angled relative to the formal negotiation tower, inviting sunlight in from the oculus above and establishing a relationship between the two towers. Visible from the entrance of the private quarters is a small portal filled with glass that illuminates when the space is occupied. A single view window is placed on axis to the negotiation tower as well- a constant reminder of the ultimate goal to reach a compromise between parties.



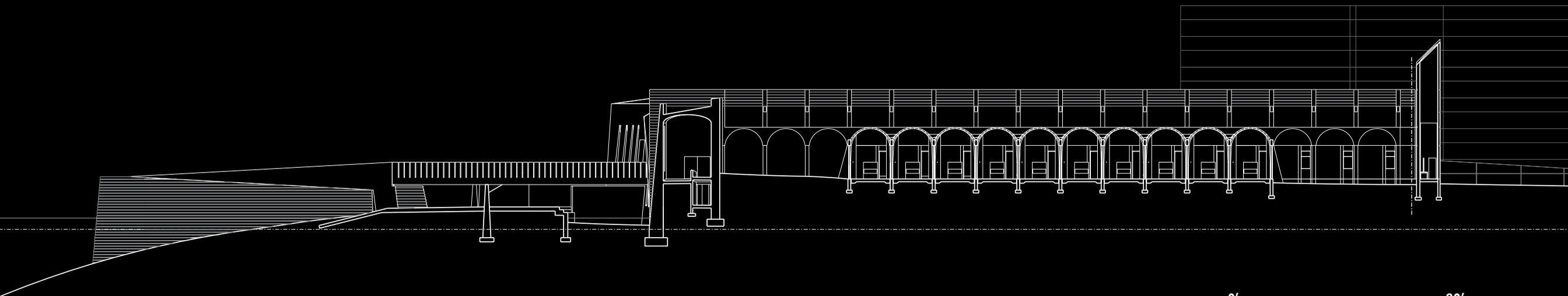
0' 10'
PLAN AT PRIVATE QUARTERS

Isolation



0' 32'

ELEVATION AT PRIVATE QUARTERS



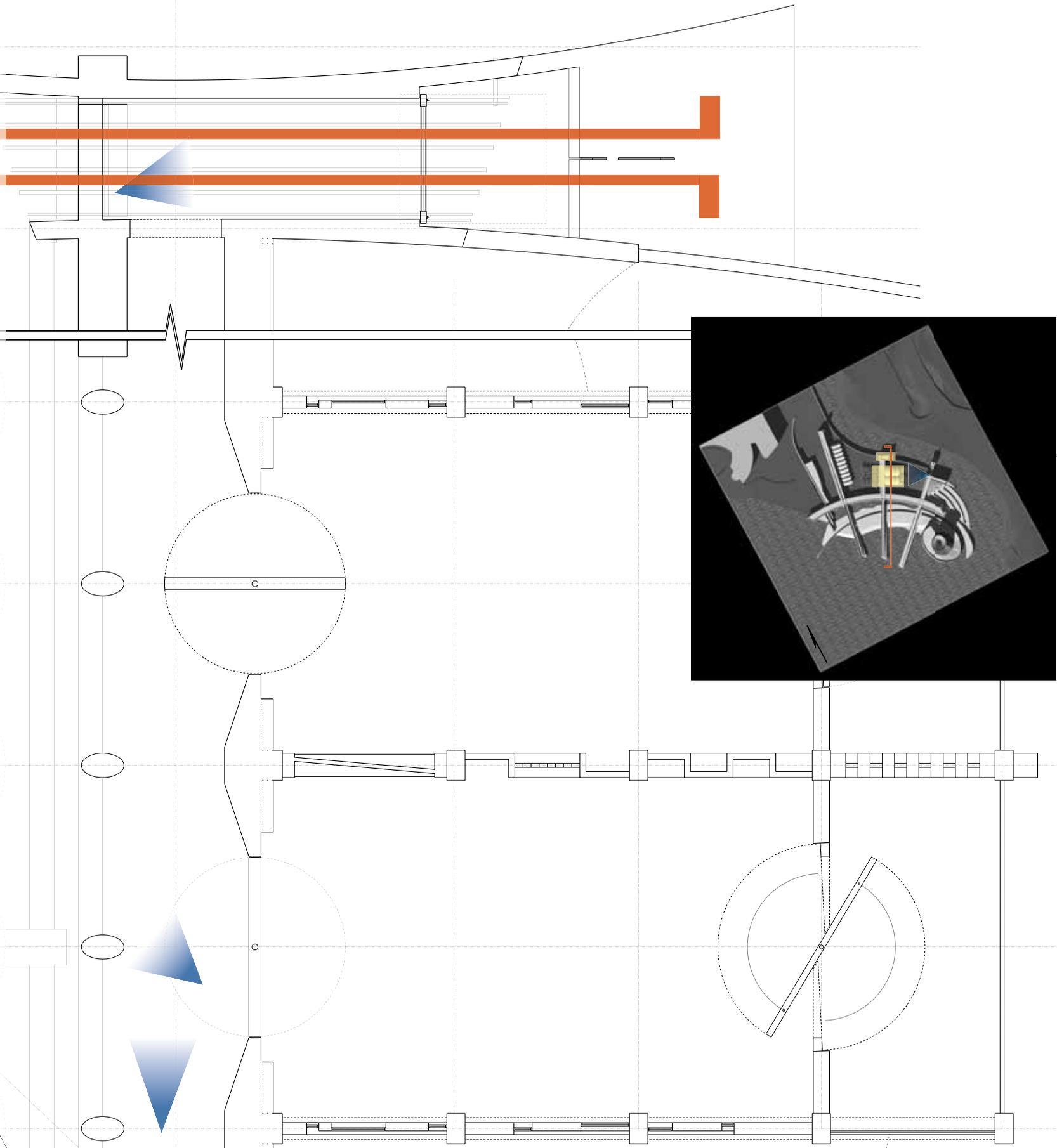
0' 80'

SECTION AT PRIVATE QUARTERS

Opposition A CONFLICT RESOLUTION CENTER

For the parties to organize and develop their points of view, they journey out across canal to the river side. The coursing of the sandstone wall serves as a reminder of how everyone will need to work together towards a higher goal. Traveling up the second ramp and across the bridge, parties are brought to their respective office locations.

Heavy copper-cladded doors are delicately balanced to rotate open at each office entrance, a reminder of each group's objective of finding a middle ground. Between the pair of offices is a wall that folds and interweaves the two opposing spaces together. Layered wood finish construction is used again to provide a level of warmth and comfort within the offices. Also reminiscent of the private quarters are the arched ceilings that step upward to allow natural light to illuminate the spaces. Wider column bays allow for greater flexibility of use for each opposing party to operate as effectively as possible. Exterior walls are more porous, inviting more light into the offices while framing wider views of the surrounding environment.

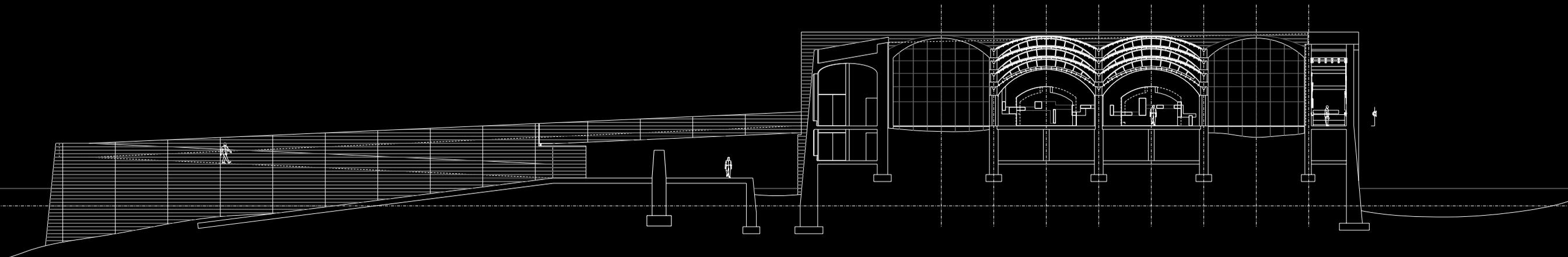


0' 10'
PLAN AT PARTY OFFICES

Opposition

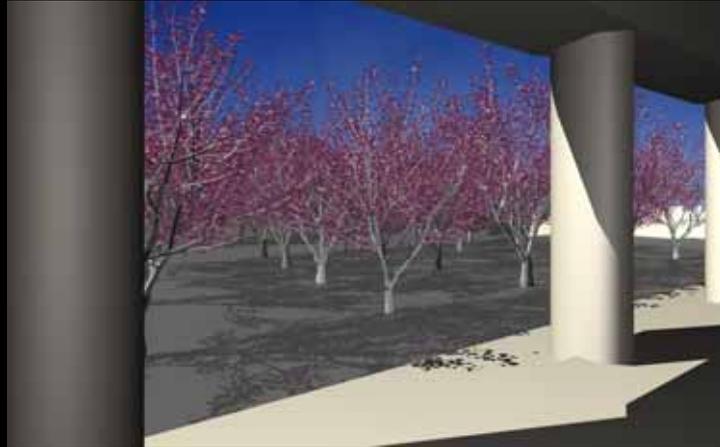


0' 16'
ELEVATION AT PARTY OFFICES



0' 60'
SECTION AT PARTY OFFICES

Opposition

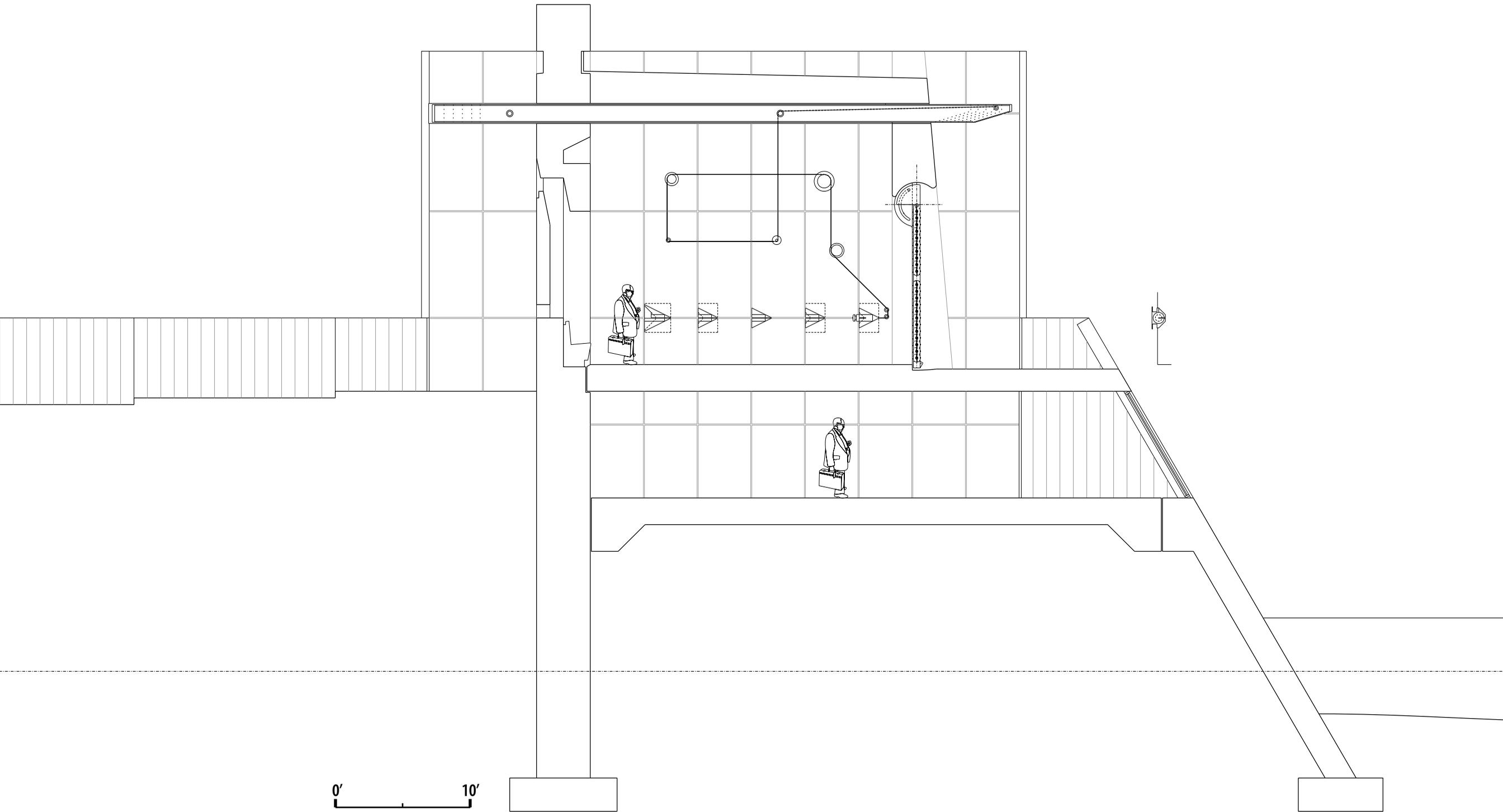


Directly across the offices are the tree colonnades. Inspired by Louis Kahn's Kimbell Art Museum, a series of cherry blossom trees form a grid identical to the structure of the offices. The trees also align with the elliptical columns at the edge of the walkway. This open area creates a natural canopy overhead, defining a less rigid space for anyone to contemplate or negotiate points of view at an informal level.

Continuing past the offices, the screen room serves an area to encourage groups to work together. Operated by independent pulley systems along each side of the room, the screen will operate properly only when two individuals are coordinating their efforts. This integrated web of cables and gears is reminiscent of Carlo Scarpa's steel cable system (tirante) at Brion Family Tomb (Olsberg 1988). Physically, this room is in transition; the entrance side is rooted into the land while the patio and screen defines the edge of Rock Creek.

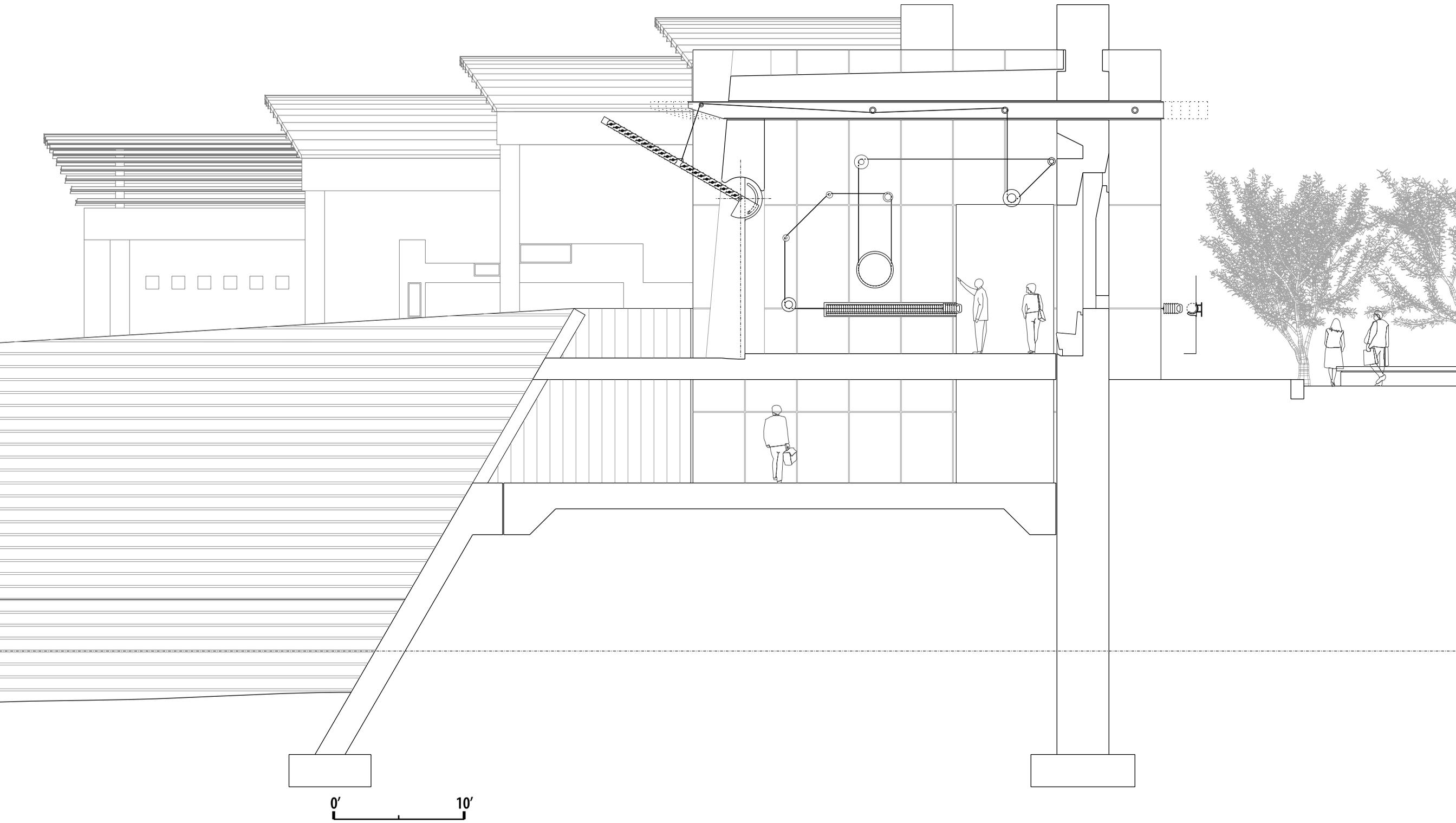


Opposition



SECTION AT SCREEN ROOM

Opposition



SECTION AT SCREEN ROOM

Opposition



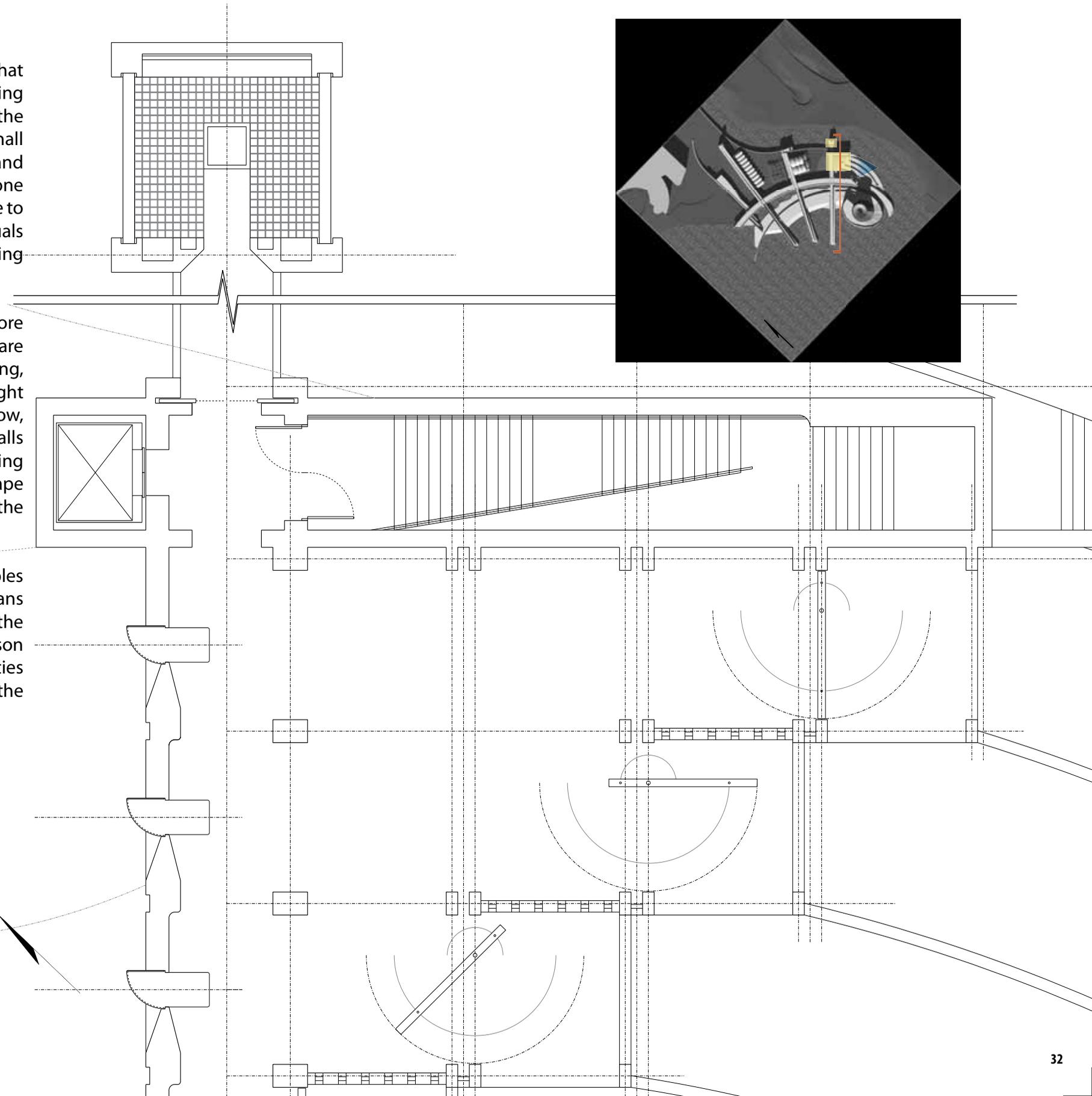
A CONFLICT RESOLUTION CENTER

Interconnection

Walking across the longest of the three ramps that project into the river places attendees into the dining area. While the bay spacing modular is similar to the other areas of the resolution center, the dining hall detracts from the private nature of the bedrooms and the binary nature of the offices. Instead, this zone becomes a more intertwined place, allowing anyone to sit anywhere without defining either side. Individuals are more exposed and available, encouraging conversation and negotiation.

The physicality of the space also becomes more open with fewer boundaries. The ceilings above are constructed of translucent glass and steel framing, maximizing natural light into the dining area. Sunlight shines through the windows of the service floor below, reducing the need for artificial lighting. Rotating walls pivot open into the patios to accommodate dining outside and to provide views of the terraced landscape below, designed to provide local vegetation for the facility.

At the other side of the dining hall, several fixed tables are integrated through the poche wall. The table spans from inside to outside as an intersection between the vertical wall and the horizontal table. These two-person tables serve as another potential location for parties to negotiate informally. The walls cant inward to the windows, sculpted to bring more sunlight inward.

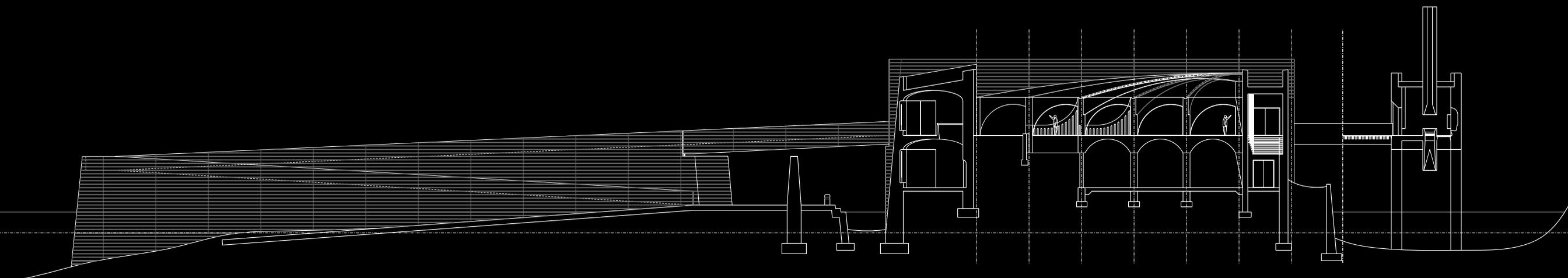


0' 10'
PLAN AT DINING AREA

Interconnection

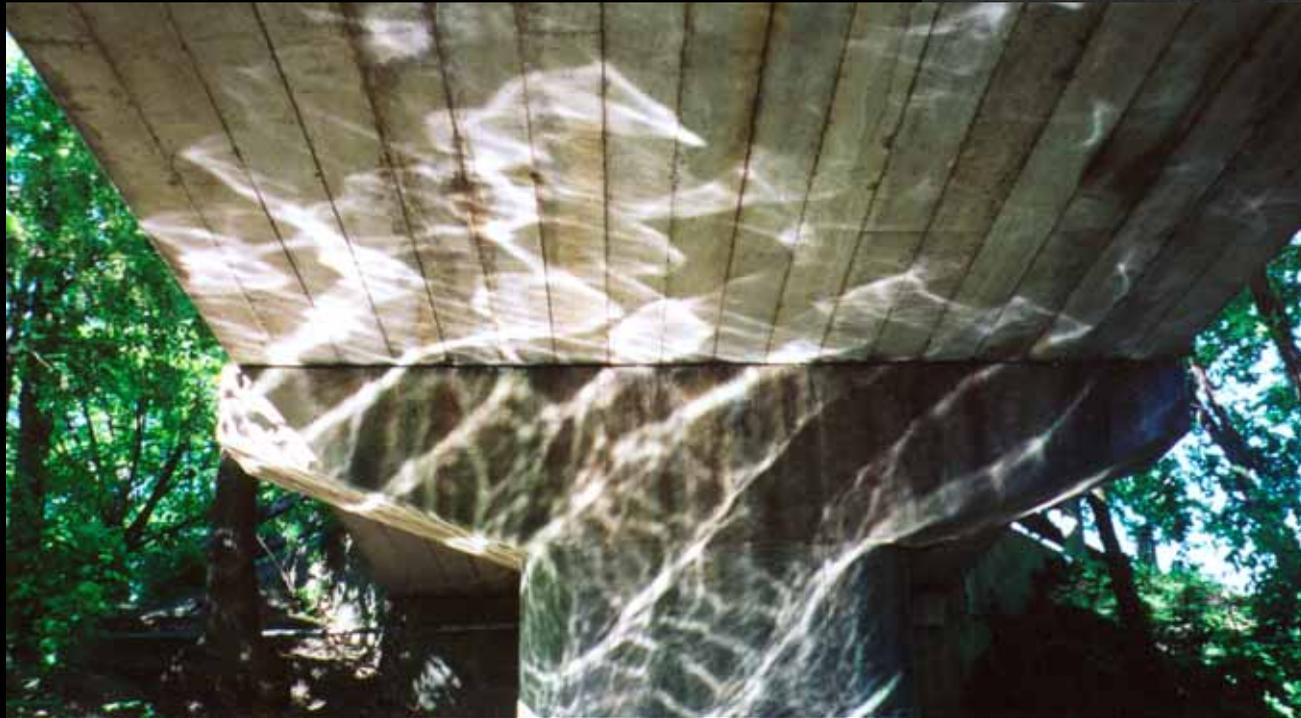


0' 16'
ELEVATION AT PARTY OFFICES

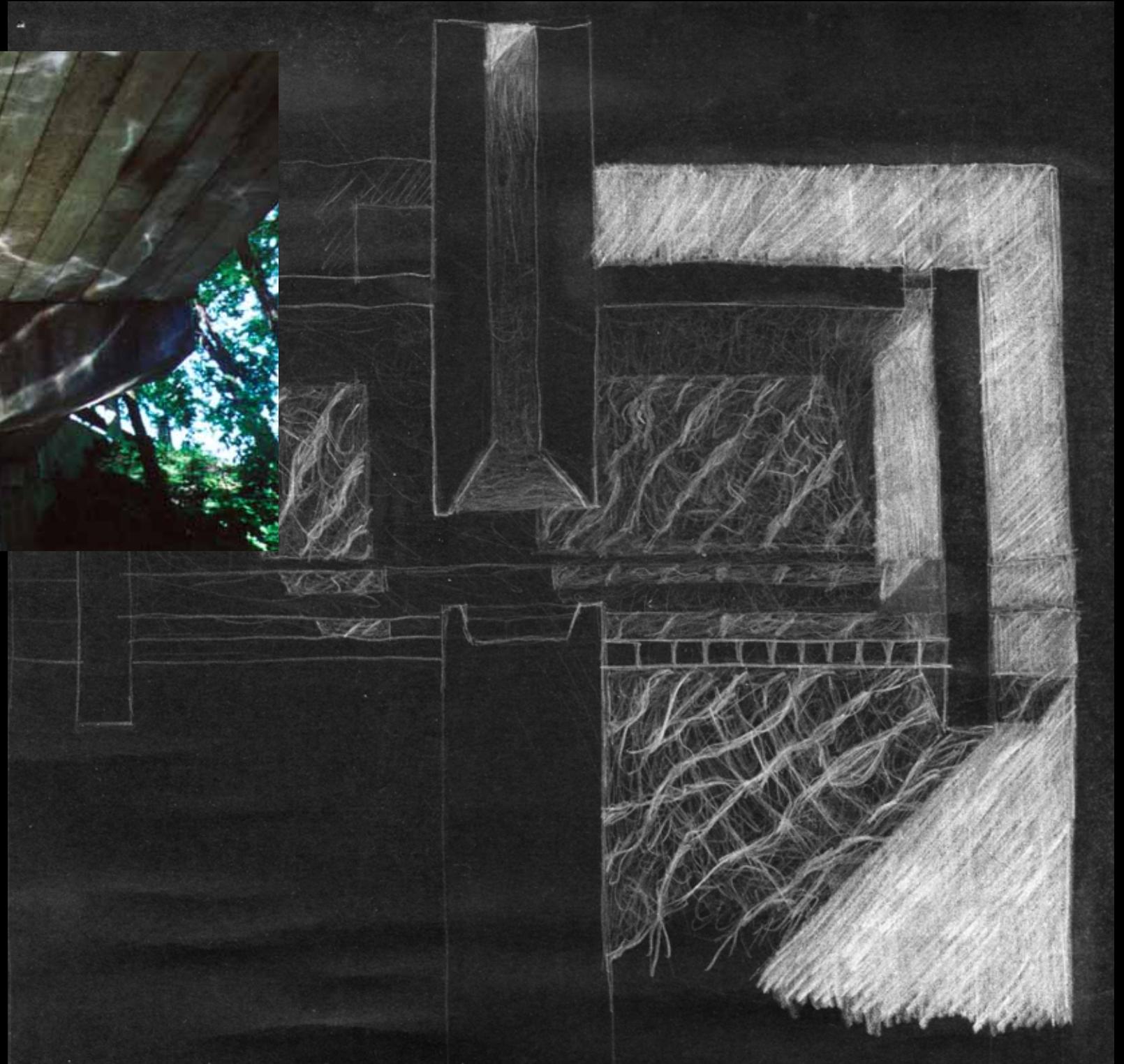


0' 60'
SECTION AT DINING AREA

Interconnection



The circulation extends through the elevator lobby and back outside onto a small bridge. The floor of the bridge consists of square concrete panels with open joints between them, influenced by Antoine Predocks' Zuber House (81). Hints of the creek below become more evident during the day while uplighting from below the bridge provides small slits of directional light at night. Walking across the bridge, parties can converge into the fire room located in the middle of Rock Creek. A hearth is located in the center of the room, providing heat and light along all sides. Similar to the dining room ceiling, the floor is constructed of glass block. The transparent floor allows sunlight reflecting off the creek back up into the space, creating a fluid display of dancing light. More uplighting below the glass block illuminates the room during the evening hours.



A CONFLICT RESOLUTION CENTER

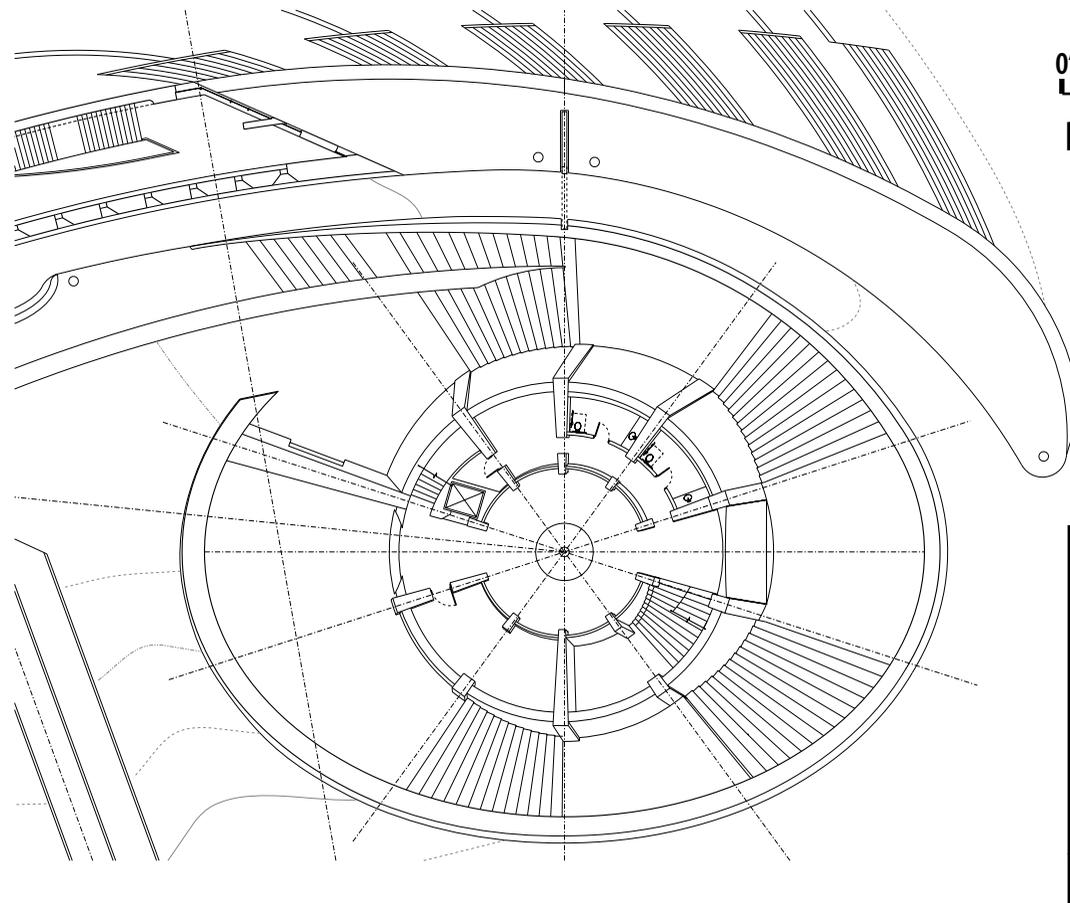
Negotiation

The image of the tower, having loosed itself from specific associations, has become sufficiently multivalent to tolerate every transformation.

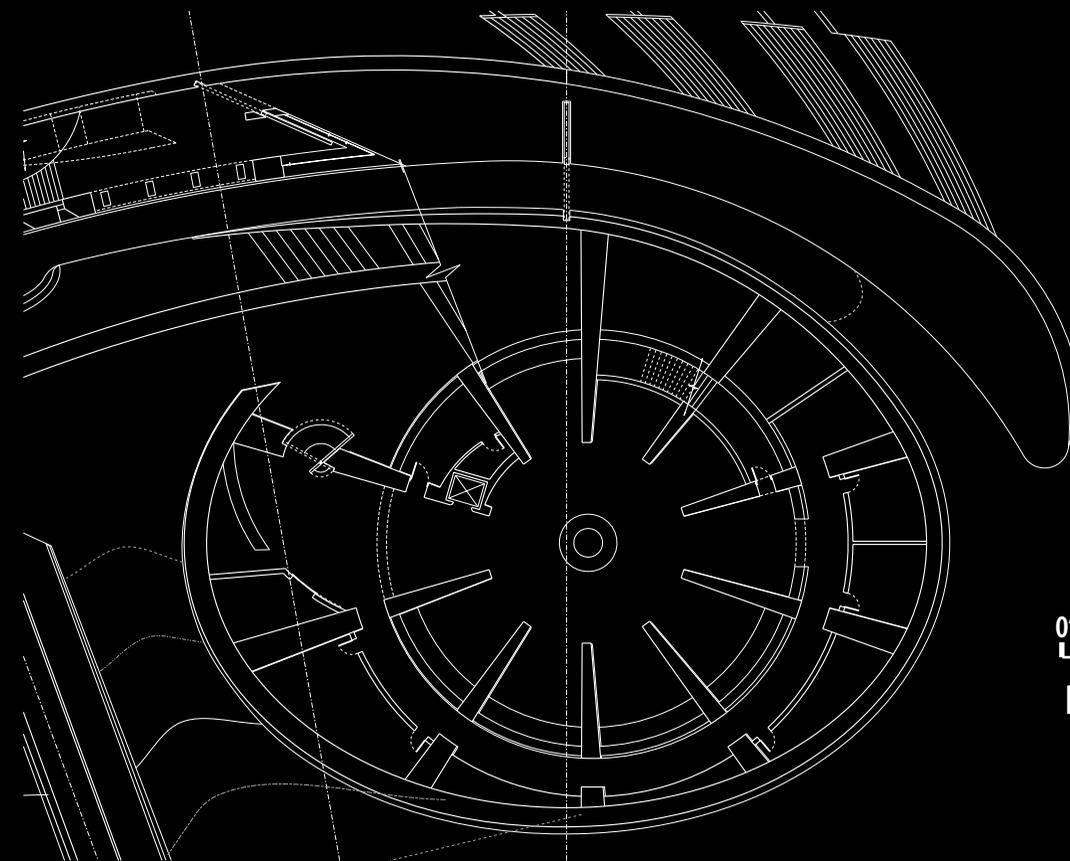
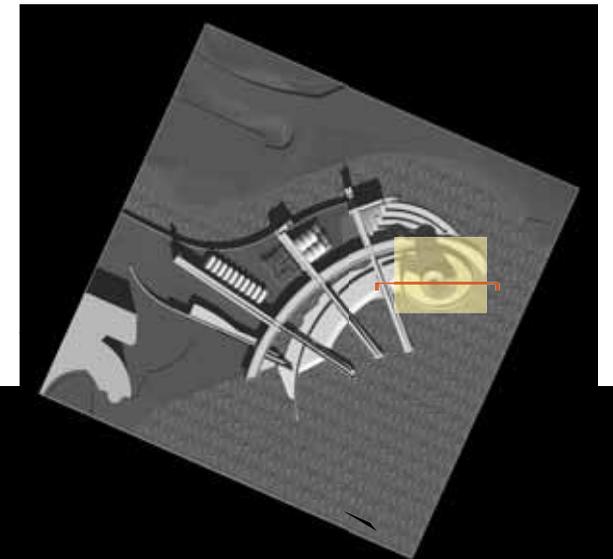
-Theodore Ziolkowski (Ziolkowski 165)

Of all the primary architectural elements, the negotiation tower is the only structure situated on the river side. The metamorphosis from land to water, from man to nature, from private contemplation to public negotiation, culminates across the canal and into the tower. The tower itself is created of a concrete framework with copper cladding between structural ribs. The copper finish will patina and malleate through time, changing its appearance and altering its skin during the life of the center. The outer conical shell is flexed and shifted to define the tower entrance. Featured at the top of the tower is a sculpted bowl that controls the sunlight filtering below into the negotiation room.

After crossing the bridges, the parties walk along the stone wall to the main exterior stairway, wrapping itself up and around the tower to the entrance above. Displayed towards the Southern end of these flights of stairs, a water feature spans across the path. Rainwater gathers at the top basin of the tower and gradually streams evenly down the wall to the landing between stairs. The water then branches apart through a series of fissured grooves just below the walking surface. Next, the water filters through the outer wall and finally runs down to the Potomac River below. Like the physical transformation defined by the architecture as a whole, the falling water branching into different paths and taking different forms represents the evolution of separate ideas into refurbished, congruous solutions.



0' 40'
PLAN AT NEGOTIATION TOWER MAIN FLOOR



0' 40'
PLAN AT NEGOTIATION TOWER SERVICE FLOOR

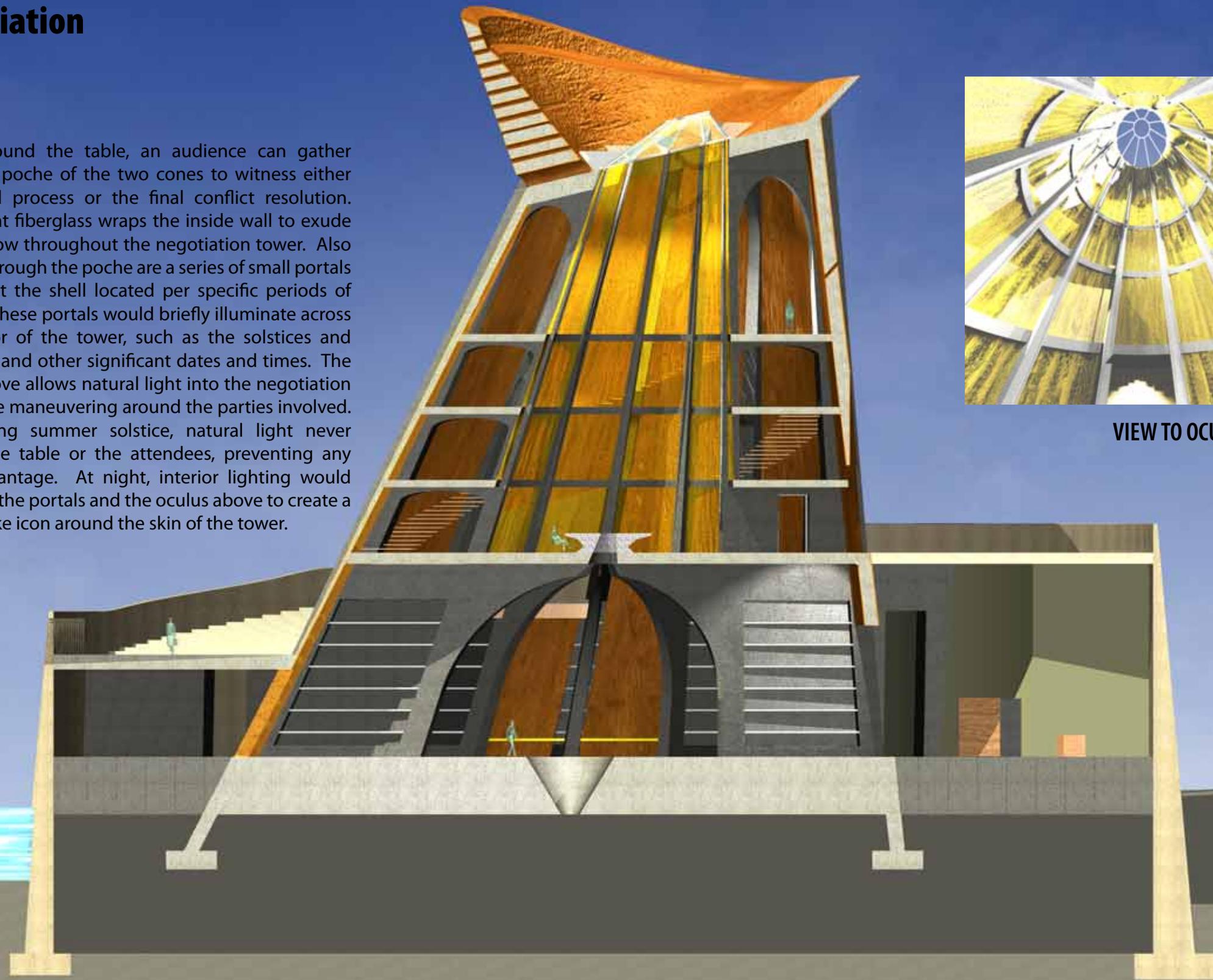
Negotiation

A single circular table stands in the center an inner conical form that defines the formal negotiation place. The table integrates itself as part of the structural floor with a small oculus open to below. Visible through this opening is the library and research center. Centered in the library is another opening in the floor finished with structural glazing. Though the glass, time is displayed in the form of the fluctuating tide; time limits for resolving issues are dependent on these tides since exiting via canoe can only occur during high tide.



Negotiation

Sitting around the table, an audience can gather inside the poche of the two cones to witness either the formal process or the final conflict resolution. Transparent fiberglass wraps the inside wall to exude a warm glow throughout the negotiation tower. Also running through the poche are a series of small portals throughout the shell located per specific periods of the year. These portals would briefly illuminate across the interior of the tower, such as the solstices and equinoxes and other significant dates and times. The oculus above allows natural light into the negotiation room while maneuvering around the parties involved. Even during summer solstice, natural light never reaches the table or the attendees, preventing any visual advantage. At night, interior lighting would illuminate the portals and the oculus above to create a celestial-like icon around the skin of the tower.



VIEW TO OCULUS ABOVE

Upon achieving a resolution, the attendees exit out of the tower and down the grand stairway. Following the outer wall, the stairway takes them to a single canoe dock where both parties are now situated in one single vessel. The unified team works together as they exit the canal and begin their journey through the Potomac River and into a newly negotiated resolution.

SECTION AT NEGOTIATION TOWER

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