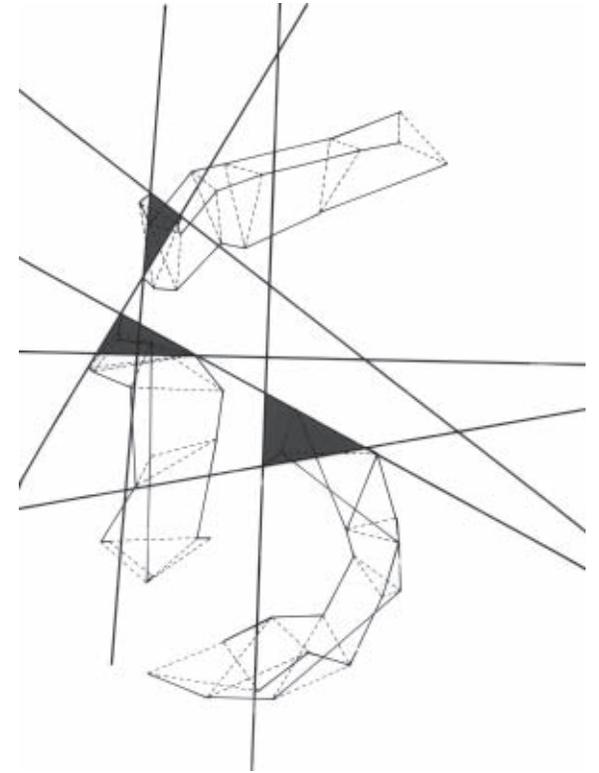


- 
- 1 RESIDUAL DEVELOPMENT**  
Fall 1998 - Chase Manhattan Plaza, NY
  - 2 SLIPPAGE OF AXIALITY**  
Spring 1999 - A suburban house, Pleasantville, NY
  - 3 EFFICIENCY OF PERFORMANCE**  
Fall 1999 - Multi-family housing, Bronx, NY
  - 4 A VIEW BEYOND**  
Spring 2000 - A single family house, Zurich
  - 5 ARCHITECTURE IS NEVER AUTONOMOUS**  
Spring 2001 - Zip-Manifesto, NY
  - 6 TECHNICAL SEQUENCE**  
Building Systems I, II; Adv. Curtain Walls

Jennifer Morlock  
**Graduate Design Work**  
Columbia University

1998 - 2001



**Chase Manhattan Plaza, New York**

Fall 1998 - Columbia University

Critic: Tom Kowalski

1

*Residual Development*

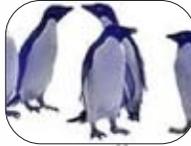
## **bats**

residual element: **eyes**  
adaptation to dark environment calls for use of hearing for navigation



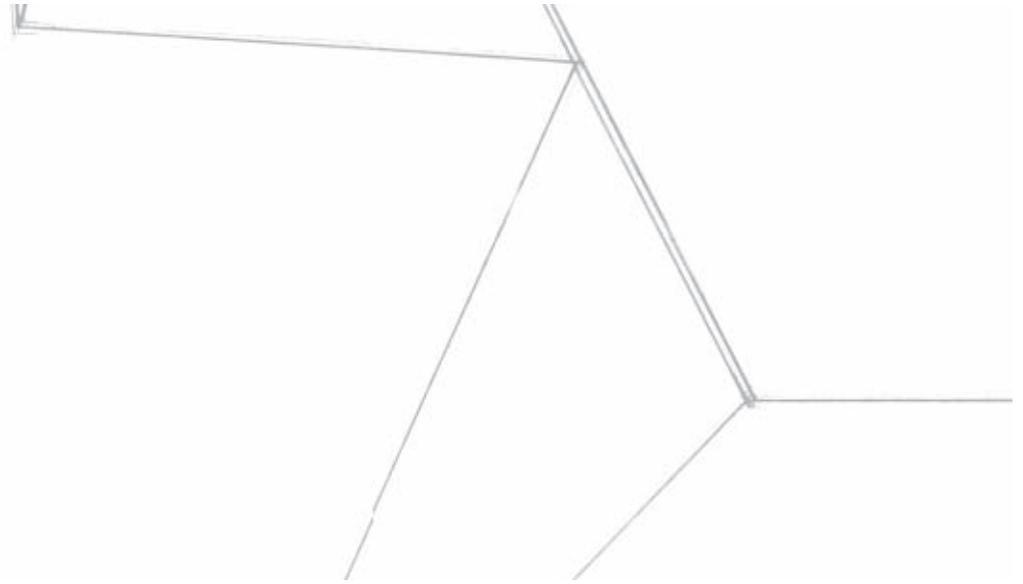
## **penguins:**

residual element: **wings**  
adaptation to aquatic environment calls for wings used as flippers not for flight



## **lizards**

residual element: **legs**  
vestigial limbs useless for travel. Body adapted to speed across flat surfaces w/ minimal appendages



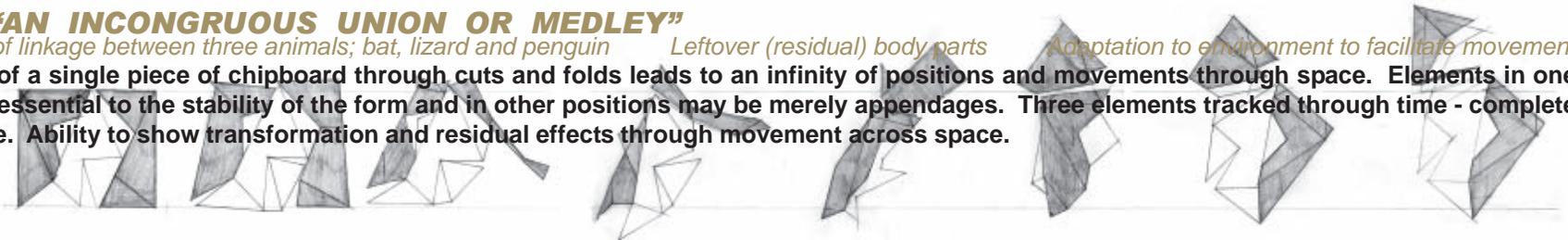
## **CHIMERA: "AN INCONGRUOUS UNION OR MEDLEY"**

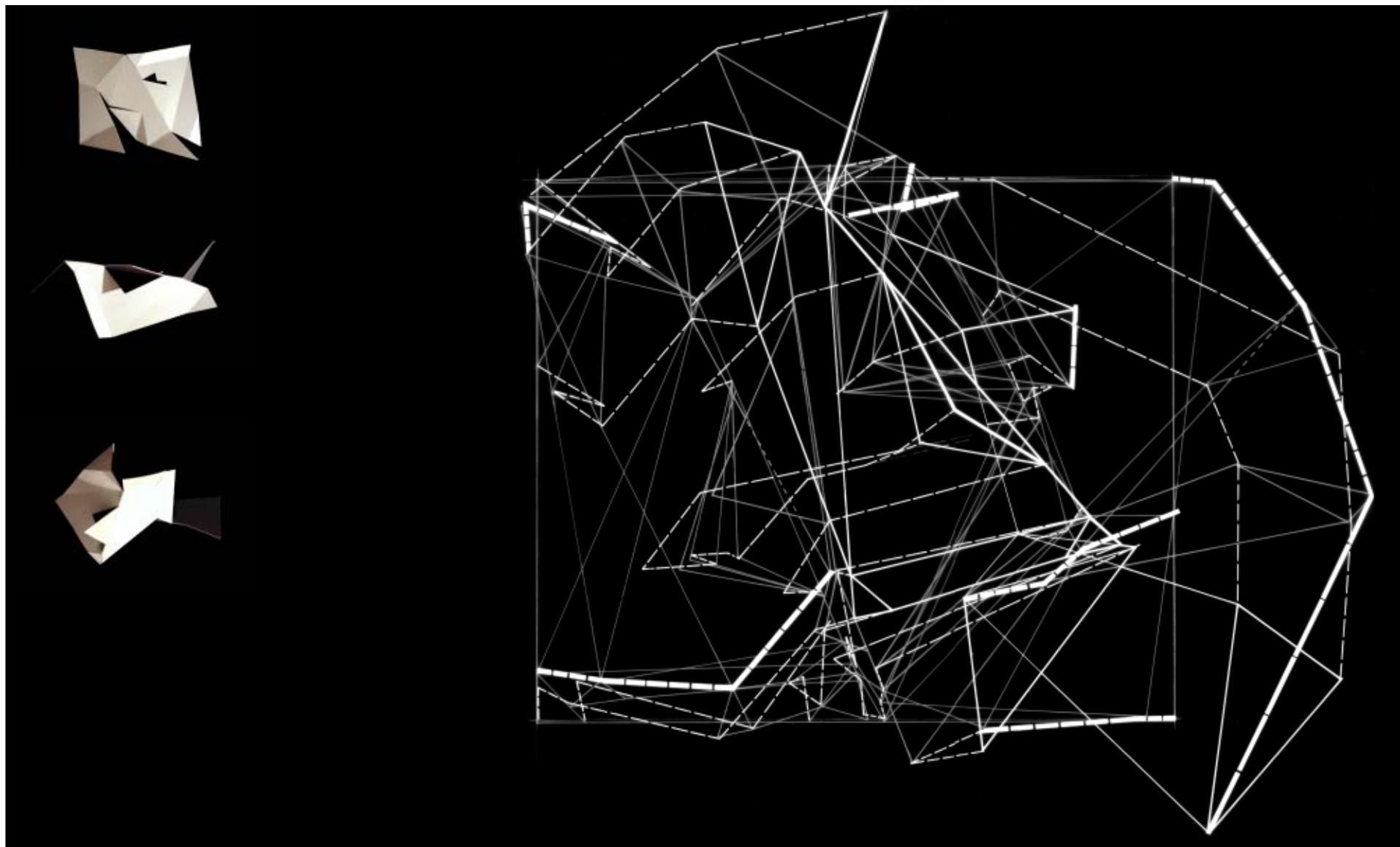
*An investigation of linkage between three animals; bat, lizard and penguin*

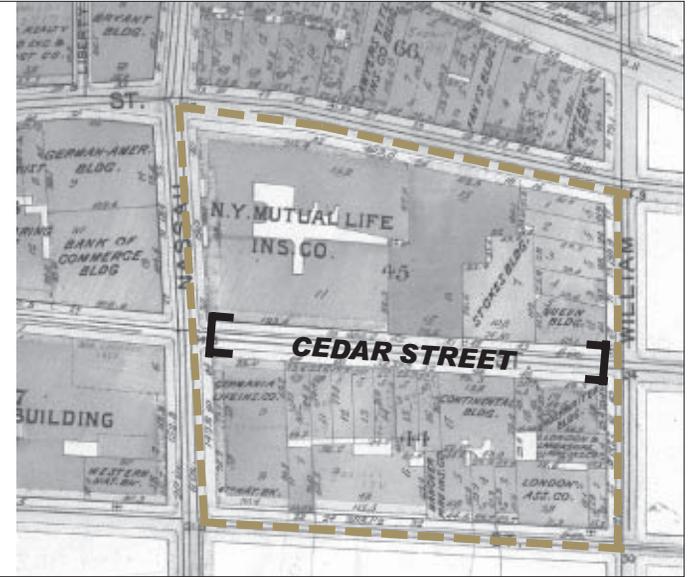
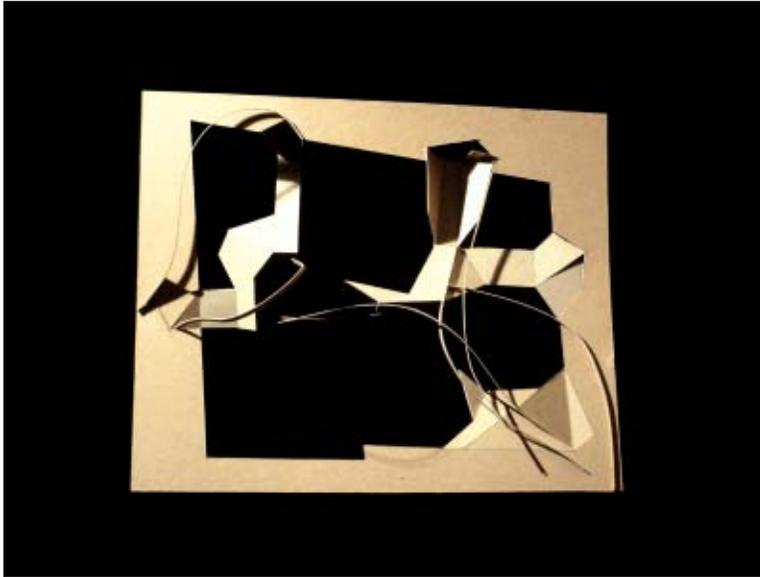
*Leftover (residual) body parts*

*Adaptation to environment to facilitate movement*

Transformation of a single piece of chipboard through cuts and folds leads to an infinity of positions and movements through space. Elements in one position can be essential to the stability of the form and in other positions may be merely appendages. Three elements tracked through time - complete interdependence. Ability to show transformation and residual effects through movement across space.

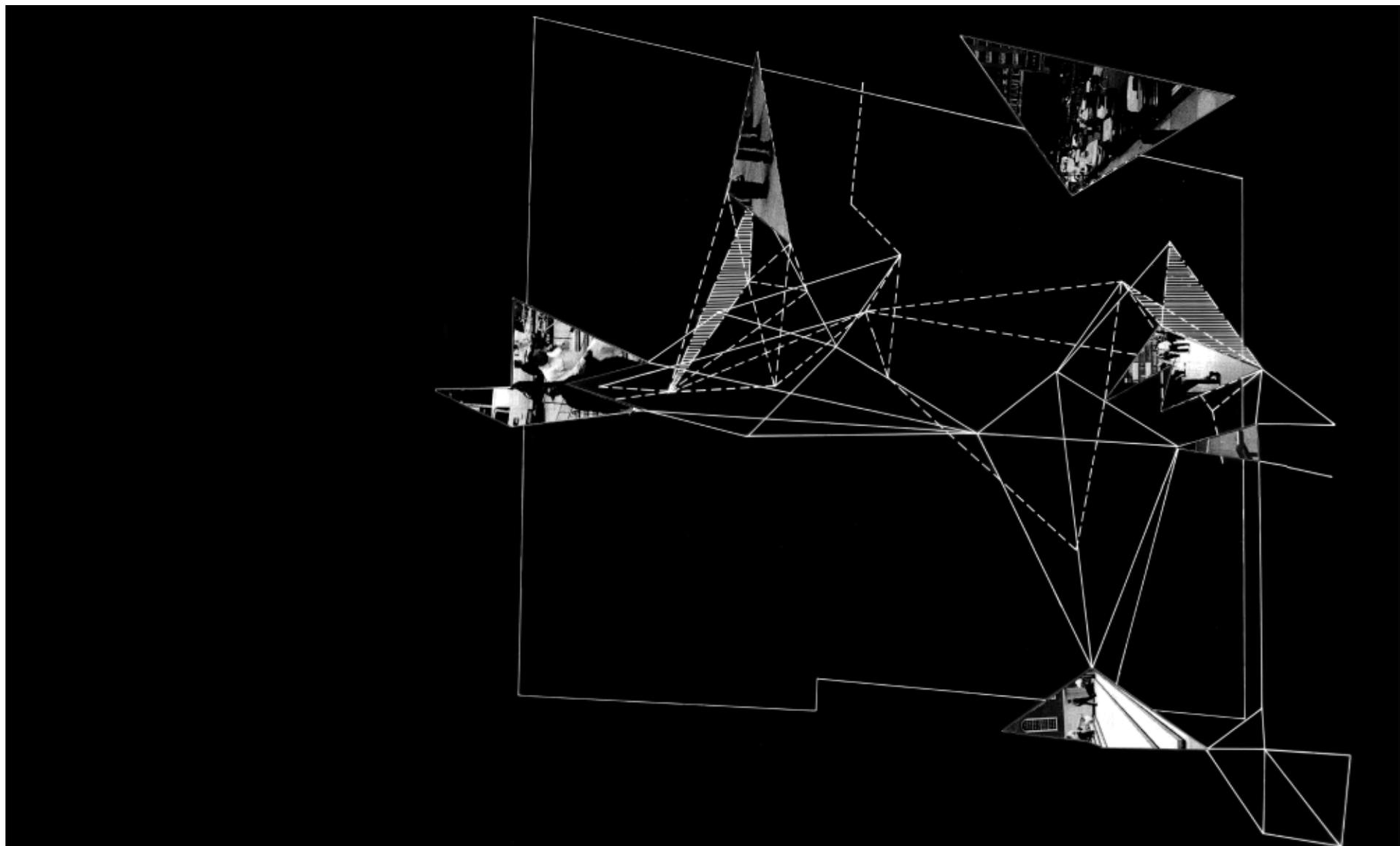


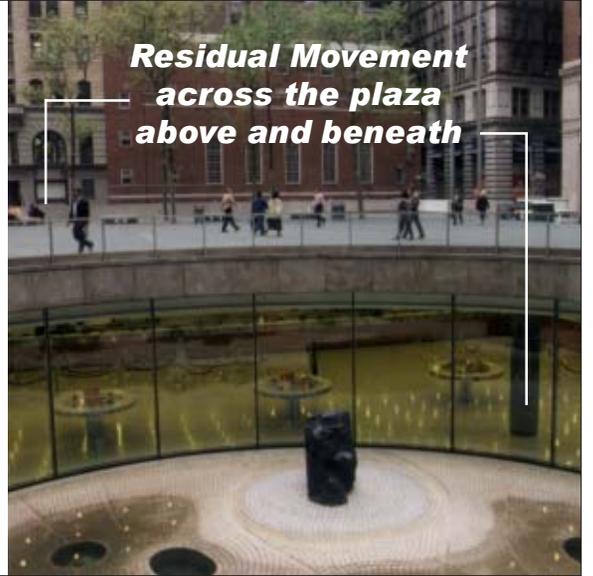
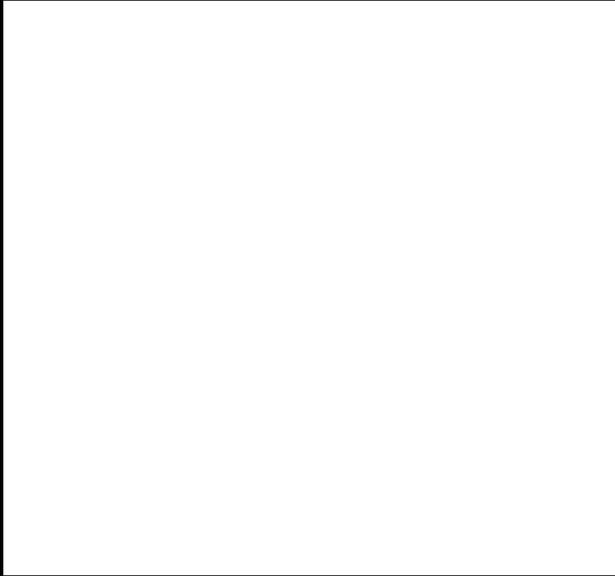
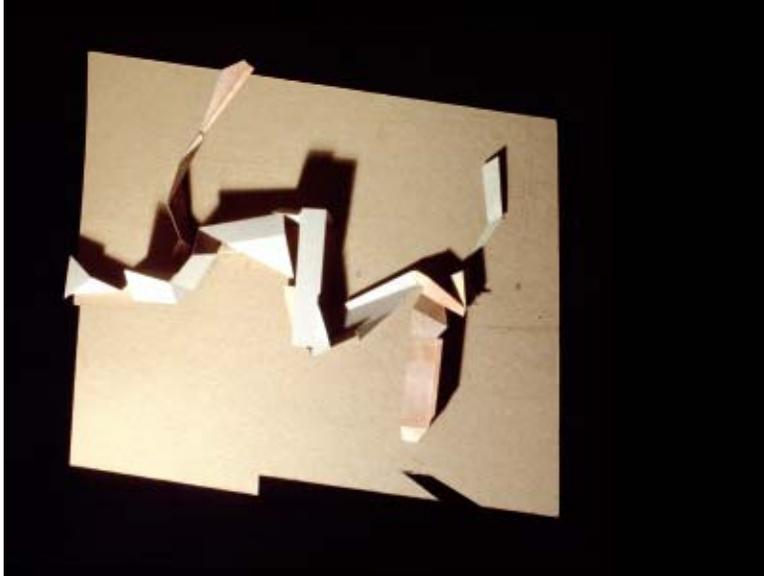




**SITE:**

The prior existence of Cedar Street through the center of the present Chase Manhattan Plaza is alluded to by the movement of people through the same corridor, the intrusion of streetscape on the periphery into the plinth, and the concentration of program and activity at the two ends of the “street”. The activity of Cedar Street was displaced to the periphery and to the concourse level by the installation of the monolithic plinth.

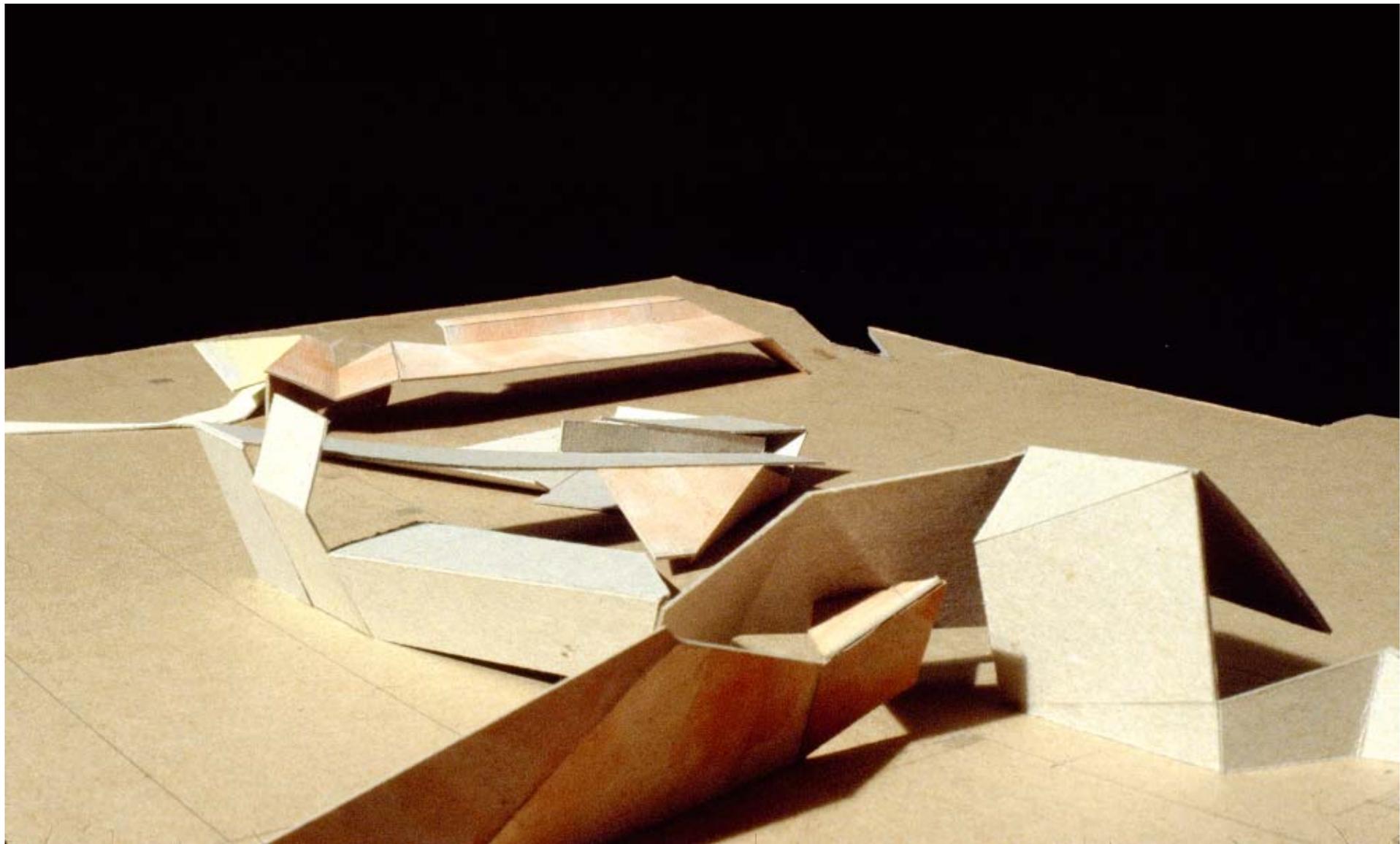




### ***SITE ANALYSIS:***

Tracking of the three residual forces (movement of people, intrusion of streetscape at periphery and concentration of program at the two ends) through Chase Manhattan Plaza.

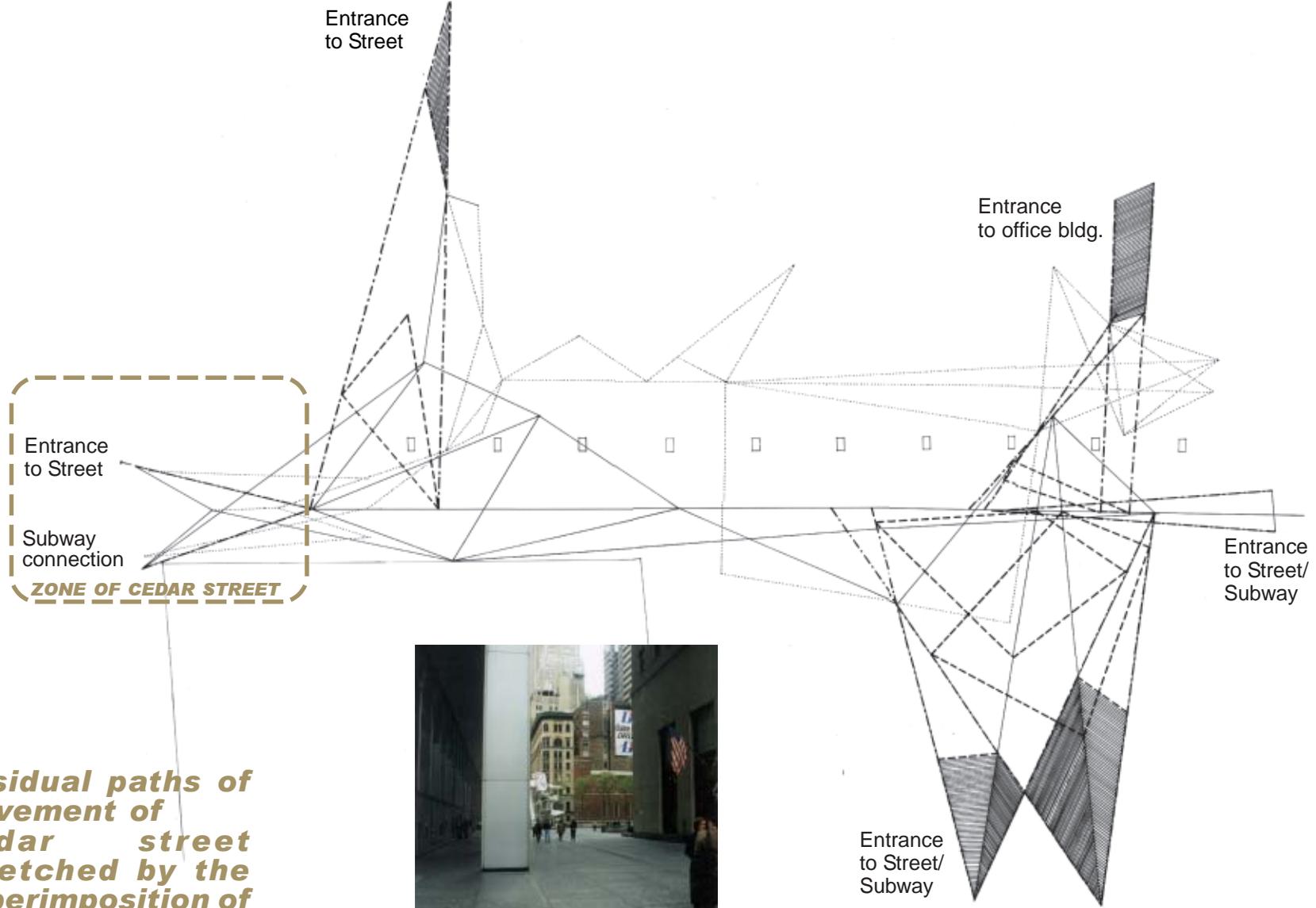
Study of evolution of three elements weaved through the site along existing vectors of movement. The objective is to investigate the residual volumes created through the interaction of the three elements.





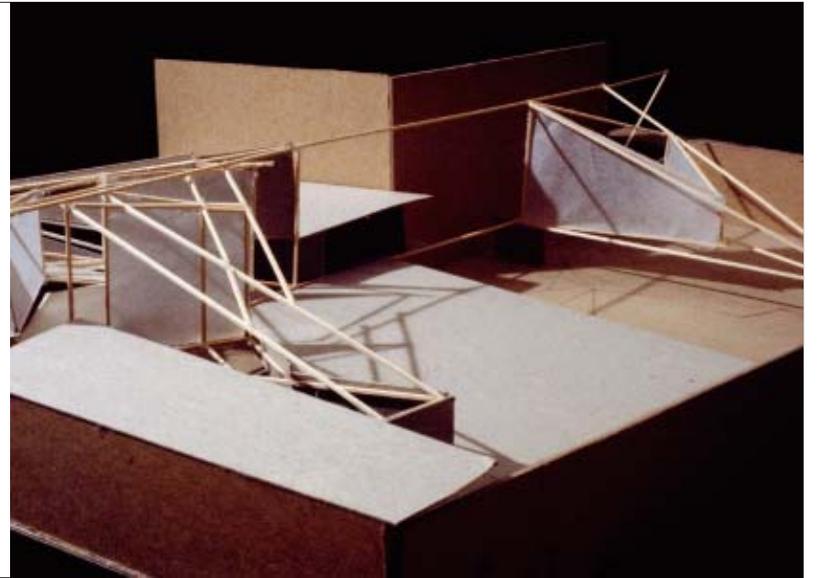
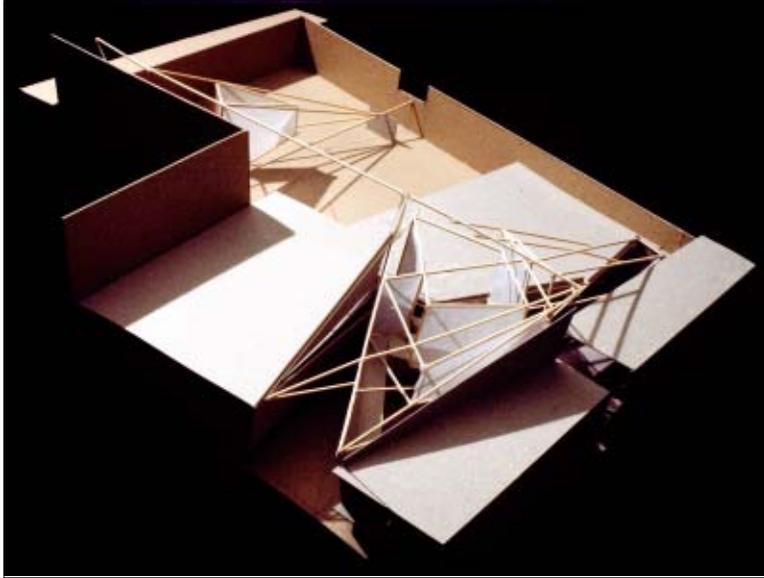
### ***FINAL INTERVENTION:***

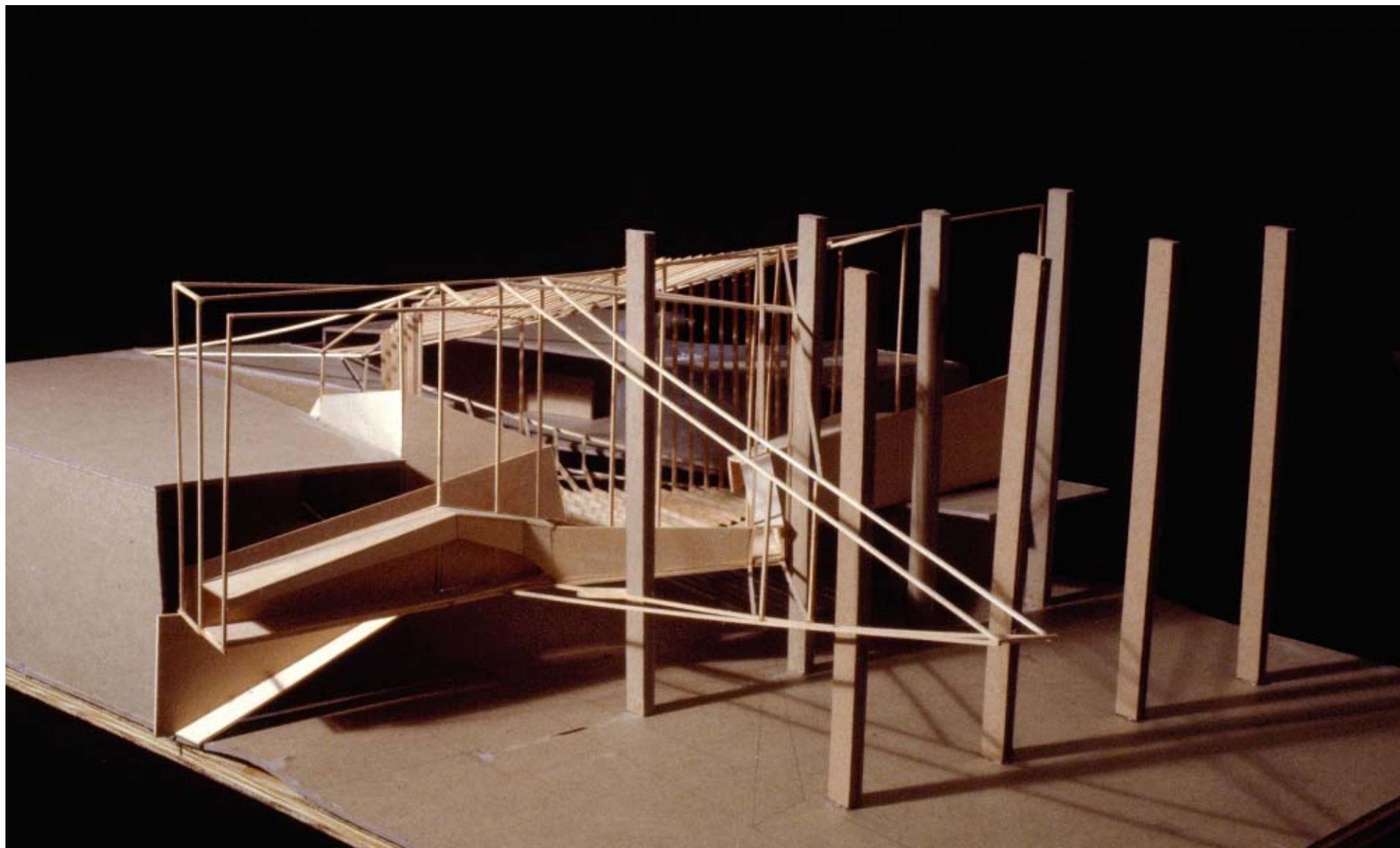
Using the previous study of the framework of forces in the site, the geometry is employed to open up the interior of the bank beneath the plinth. Seeing the vectors of movement across the site as forces pulling the activity of the street outward, it is possible to see the volume of the streetscape pulled and flattened across the plinth. As a result, residual volumes can be tracked along the vectors.

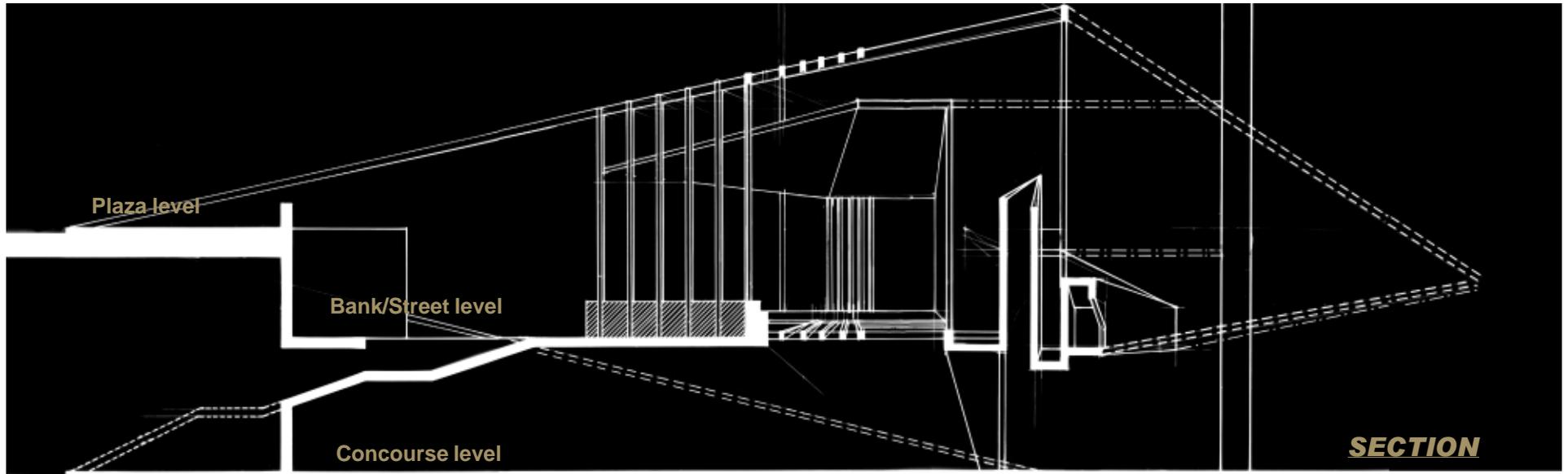


***Residual paths of movement of Cedar street stretched by the superimposition of the plinth***



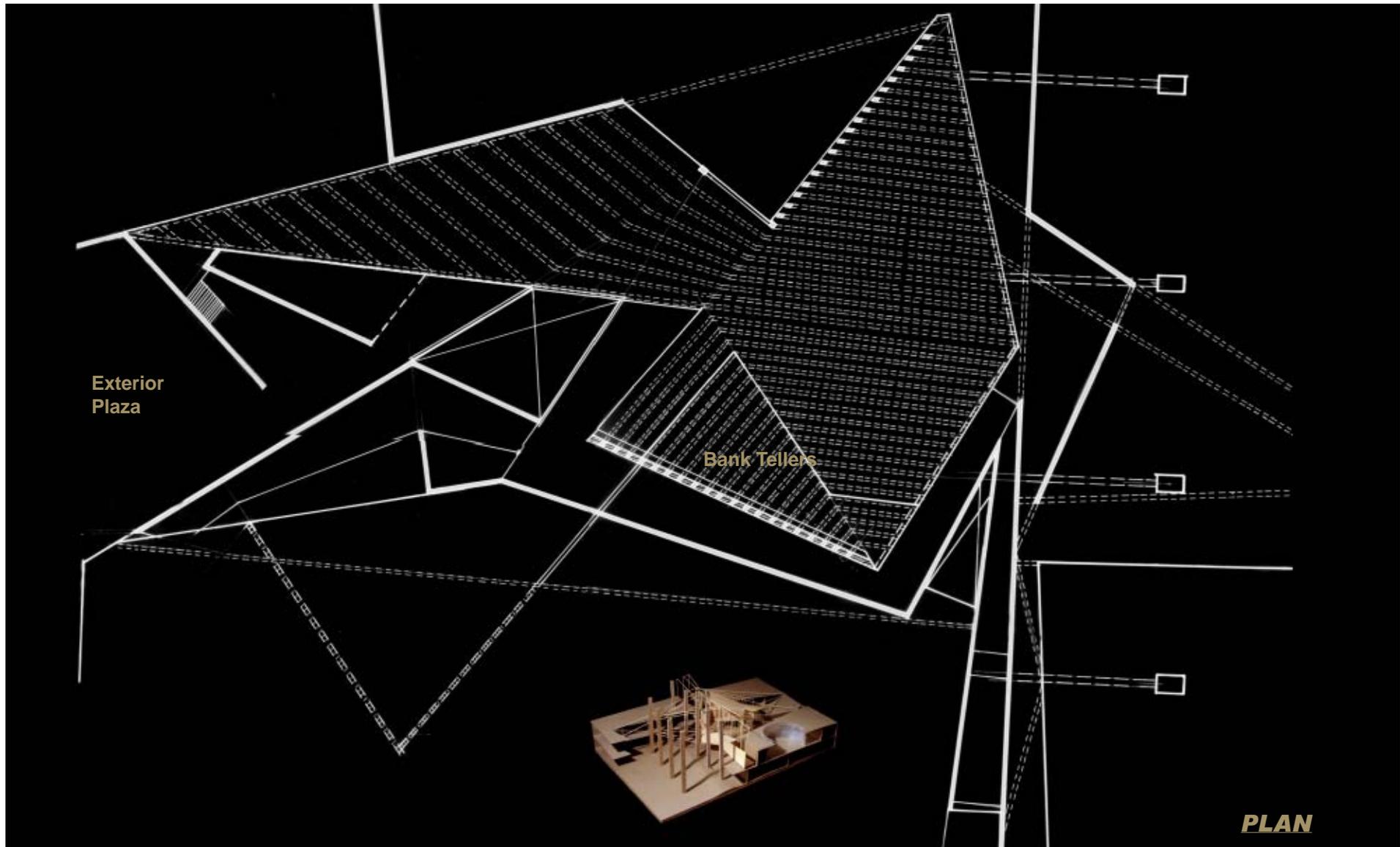






### ***MOVEMENT INTO THE PLINTH***

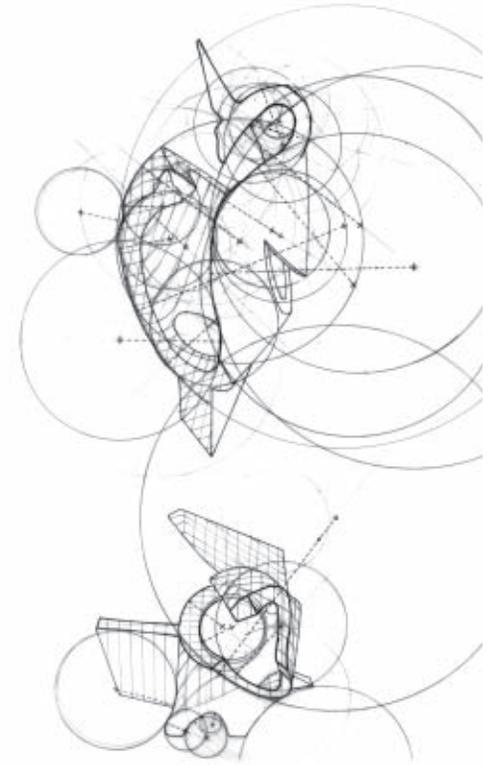
Using this idea of a framework of forces and volumes within space, the three residual elements are weaved through the site in order to open up the interior of the bank and create a greater zone of exchange. There is an intermixing of movement from the lower subway, street and bank areas. The bank becomes more of a public element and part of the urban fabric.



Exterior  
Plaza

Bank Tellers

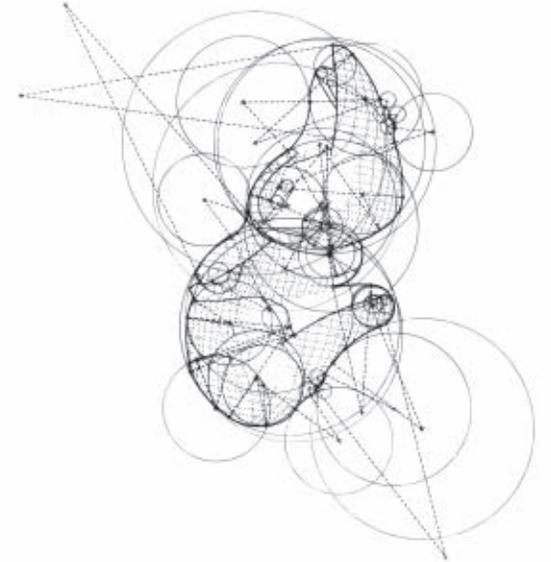
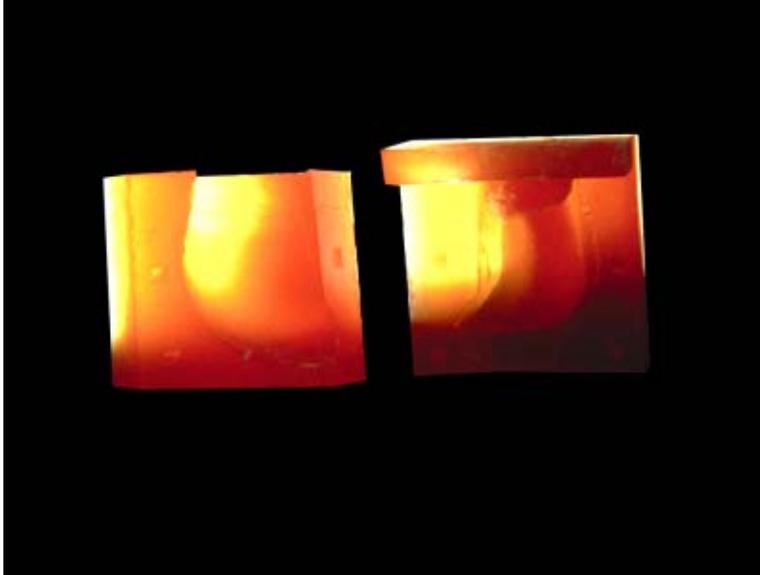
**PLAN**



**A suburban house, Pleasantville, NY**  
Spring 1999- Columbia University  
Critic: Evan Douglis

2

*Slippage of Axiality*



### ***SUBURBIA AND THE DOMESTIC OBJECT:***

Our objective is to design a suburban dwelling in Pleasantville, NY, a small community within commuting distance of the City. The site lies in between two radically different approaches to suburbia: Frank Lloyd Wright's vision of Usonia and the current trend of a high-end track of developer-produced homes. One embraces nature, individuality and cooperation and the other denies all of the above and discusses ideas of status, fads and display.

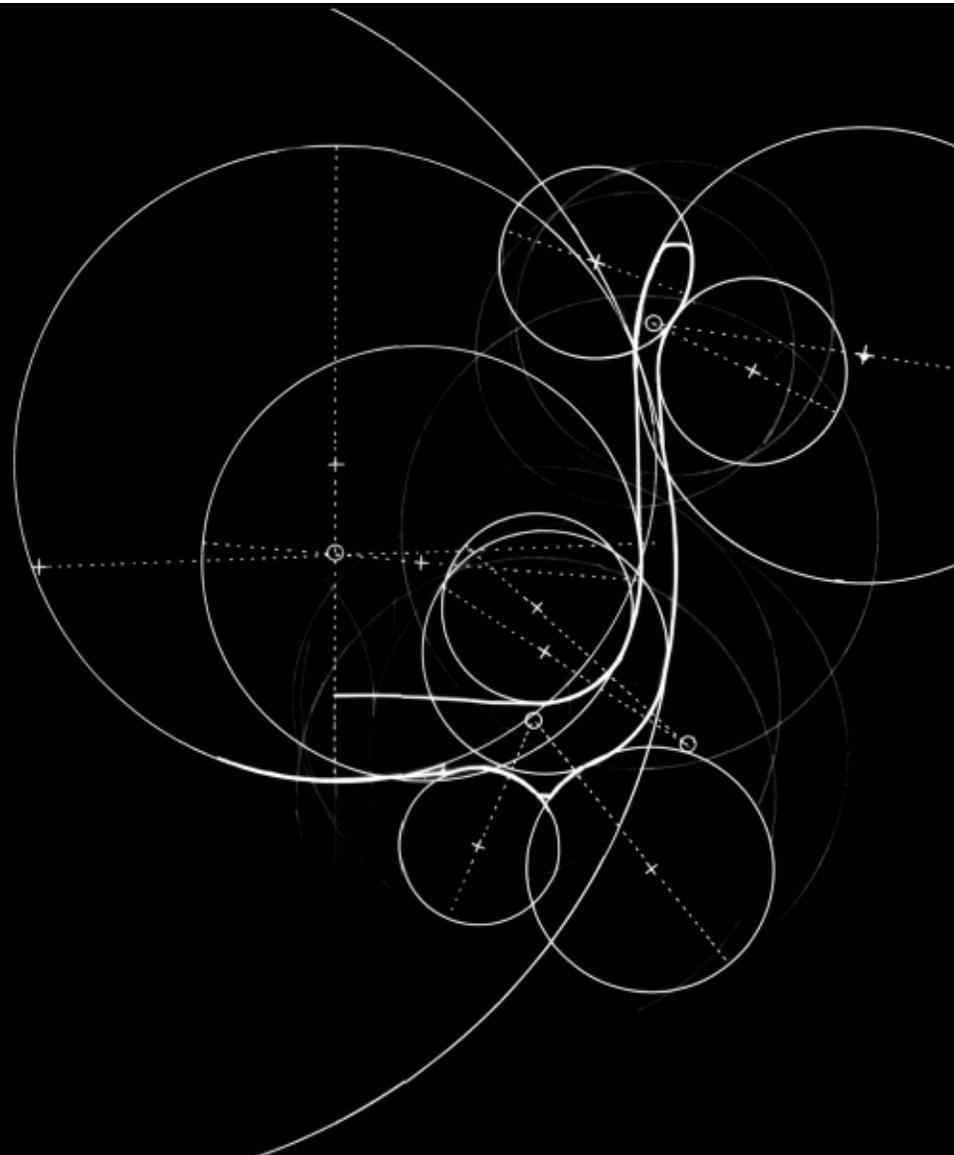
This studio is a study and reevaluation of the idea of domesticity in America and the mass-production of our homes.

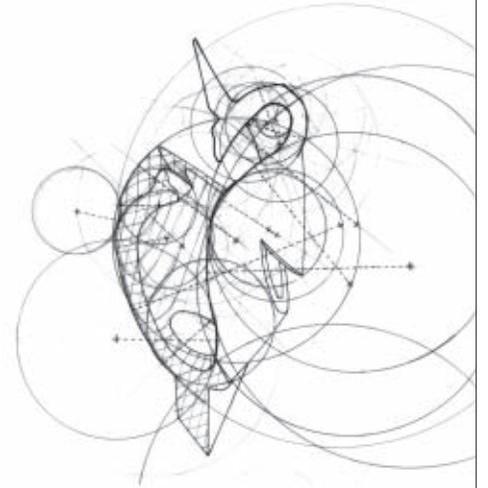
4 bedrooms, 3 baths... **2 FORDS**





***DOMESTIC OBJECT***





### ***SLIPPAGE THROUGH AXIALITY***

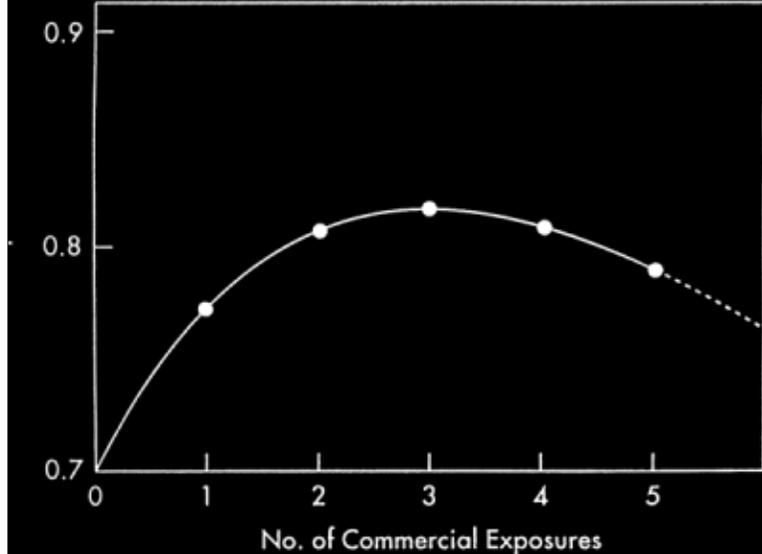
Through the usage of the mold as an operative technique, the axial relationship of the original bowl can be reconfigured. A type of disjunction can be described then through this household object. The same idea of disjunction can be seen at the site which endeavors to reconcile two disparate suburban visions.



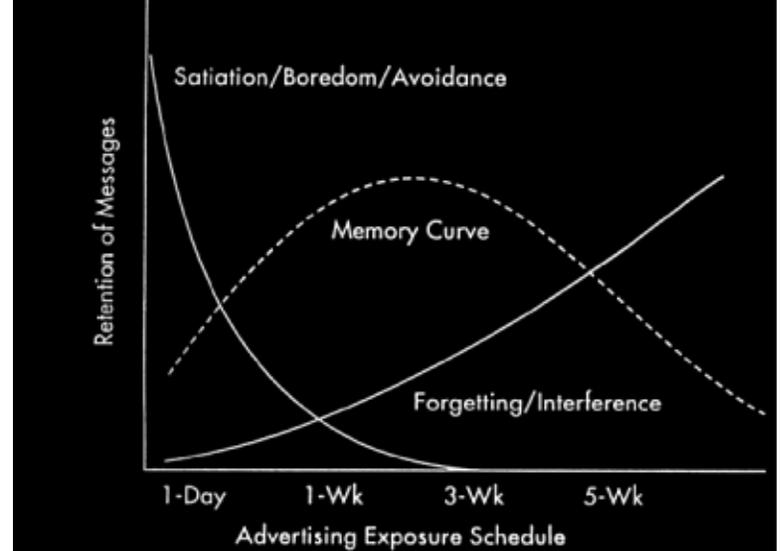
## ***DISTURBANCE***

The slippage in the configuration of the original mold allows a thickening of two of the sides of the bowl. These sides resist any deformation thereby throwing the disturbance to the untouched areas of the bowl. In addition, the added mass changes the balance of the bowl and the state of equilibrium it holds. This slippage in the axial relationship of the bowl is one of many explorations in the attempt to reconfigure the object.

**ATTENTION PAID TO TV COMMERCIALS VS. EXPOSURE FREQUENCY**



**ADVERTISING EXPOSURE**

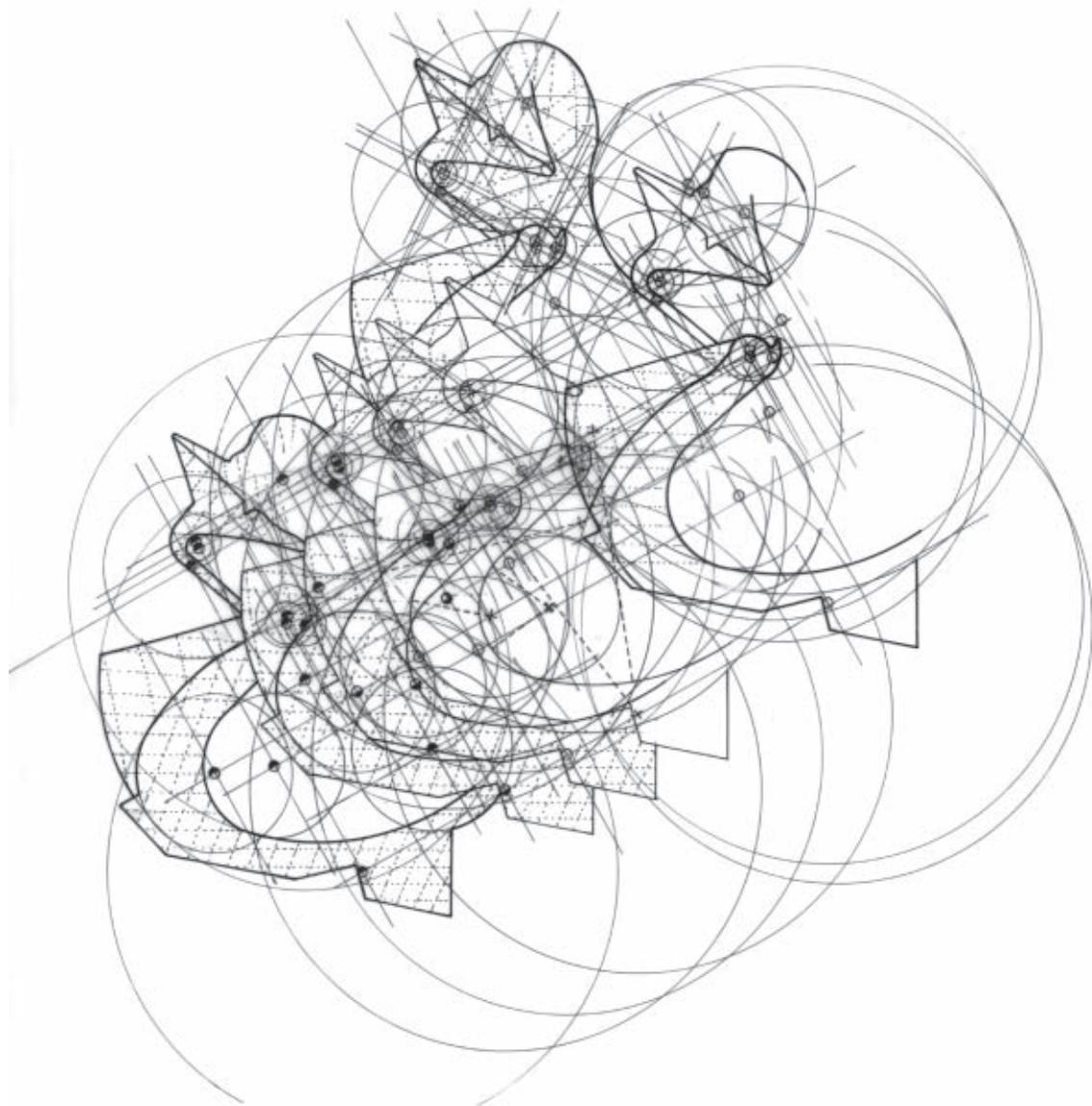


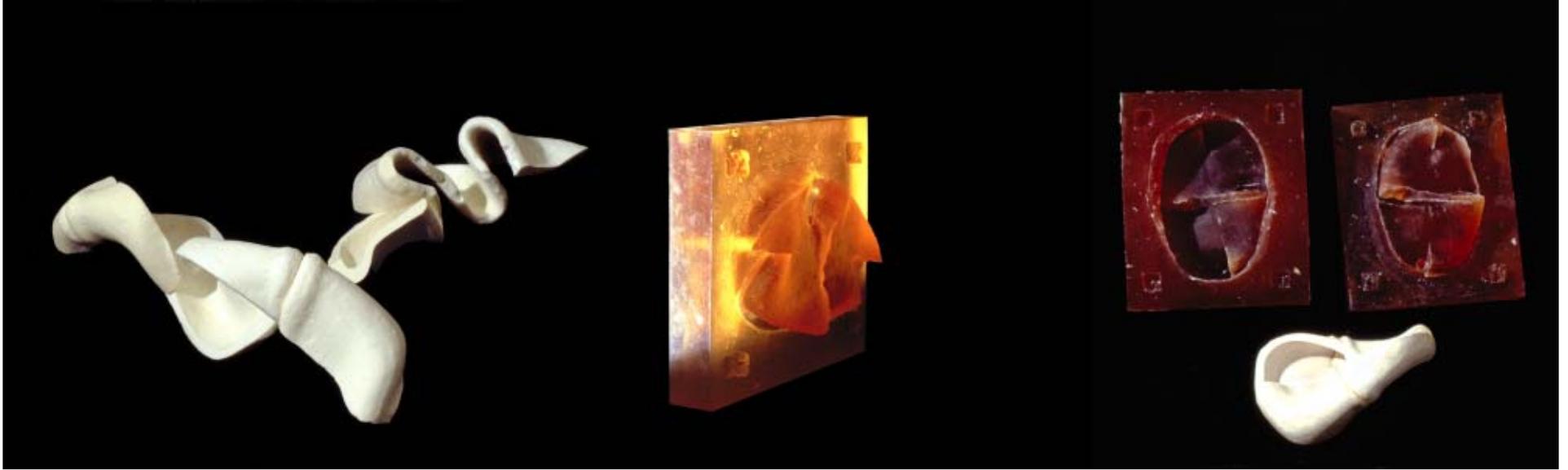
**EFFECTIVE FREQUENCY:**

The TV has been used more as an advertising medium, rather than for entertainment or information. As a result, the “box” often controls the purchases of households by manipulating one’s memory. This project is a study of this idea of frequency and subliminal and methods to disturb the pattern that is in place.

“ Television in the main is being used to distract, delude, amuse and insulate us”

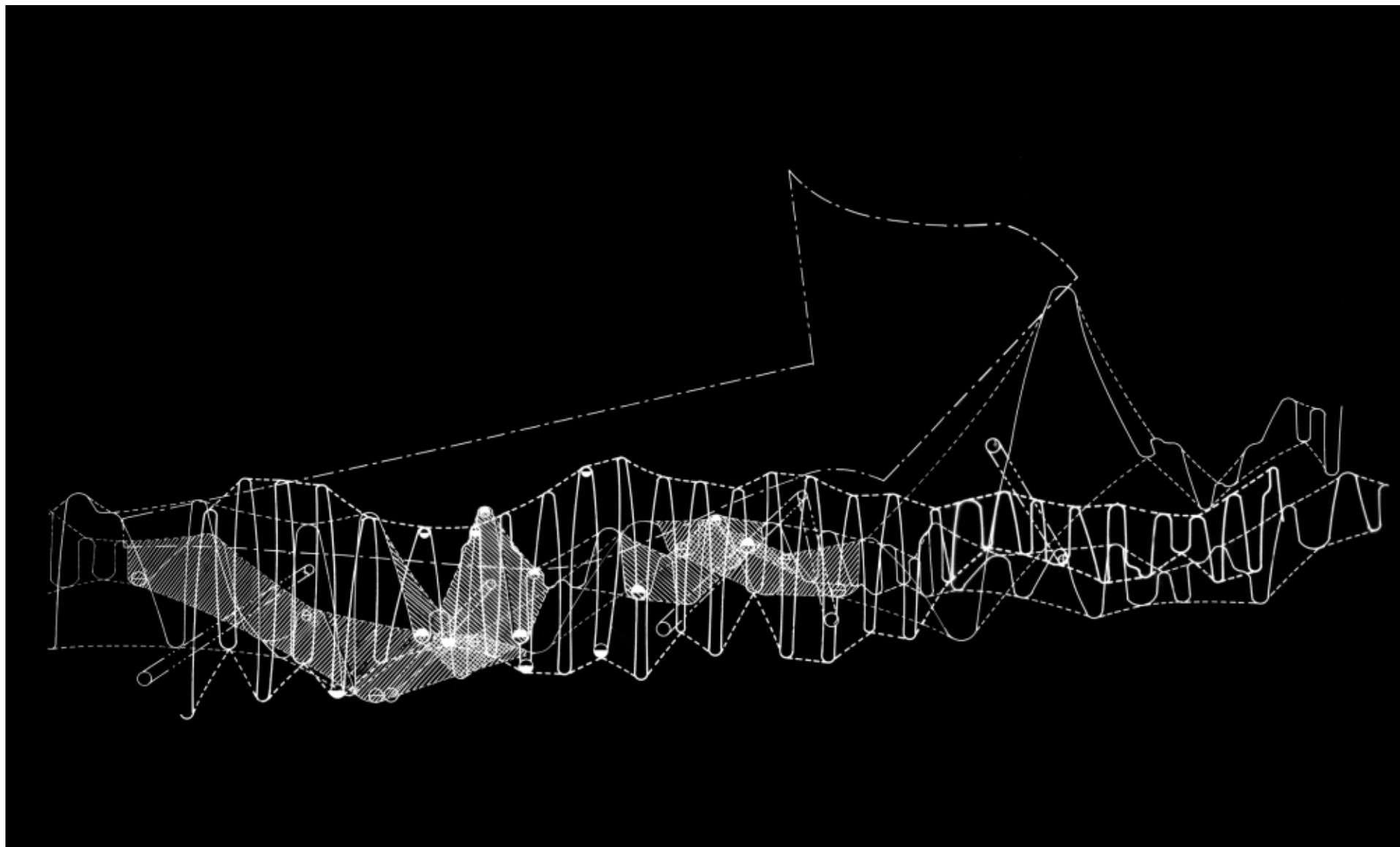
*Edward R. Murrow 1958*

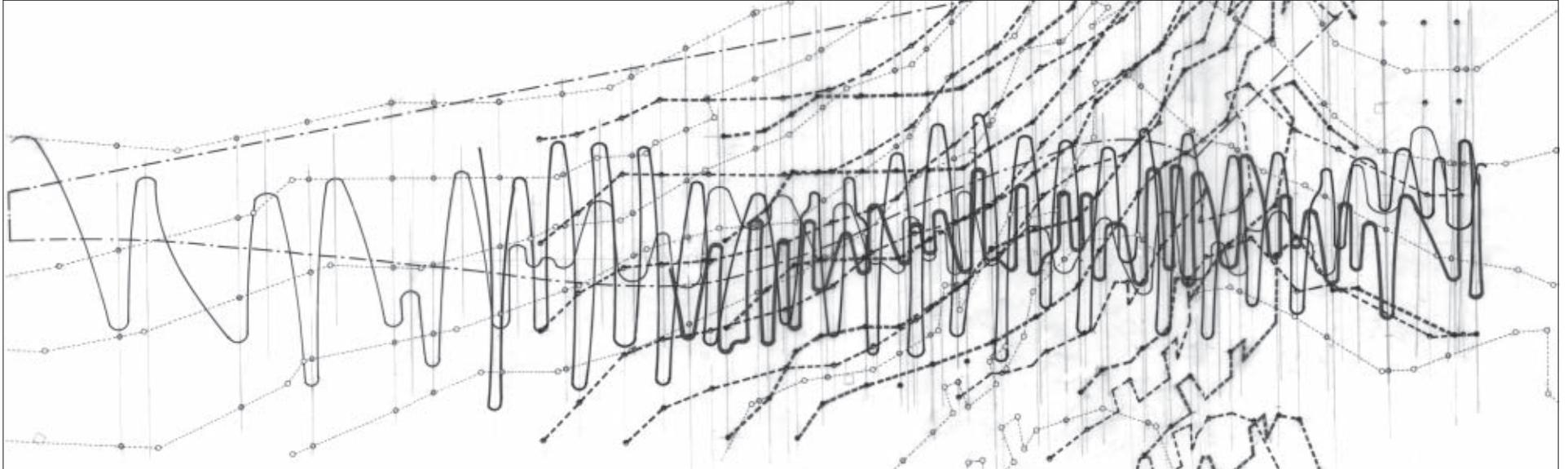




### ***MOLD STUDIES:***

Beginning with the first mold and its resultant deformation of the bowl, further adjustments are made. Reducing the original deformation to its most reductive, but informative module, additional molds allow the mass production of this new module. With the idea of frequency in mind, re-configuration of these new elements result in a new, more complex form that has both spatial components as well as the question of frequency.



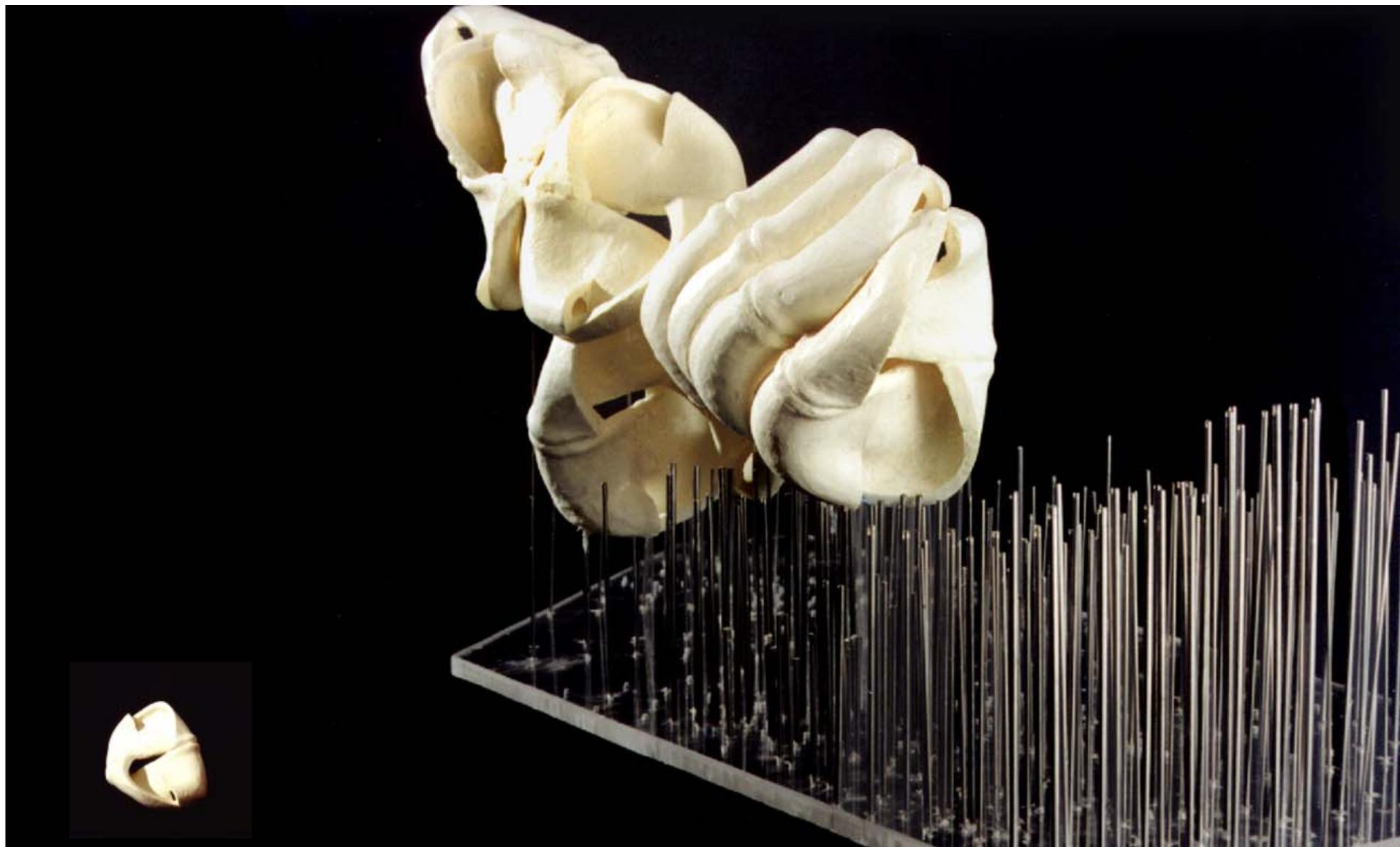


### ***TOPOGRAPHY AND THE HOUSE:***

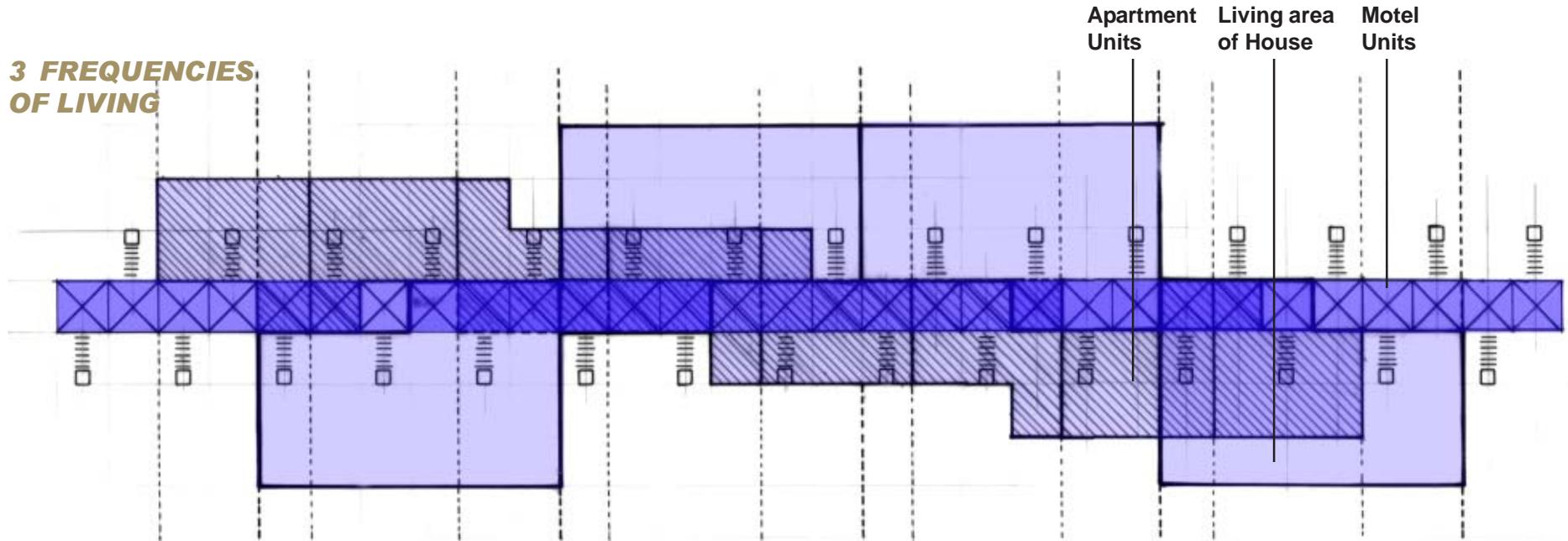
The street, like the TV, is an intruder into the private area of the home.

Using the brain waves as operative devices on the site, the relationship of the road to the house can be changed depending on the time of day. As a result, the topography has a more fluid quality with different states. And the relationship of the private realm of the house and the public arena of the street can be continuously in question.

The final site/house model brings together the idea of the changing frequency of topography and the house itself. In both topography and the structure, there are areas of constriction and areas of relaxation as a result of the input of different frequencies.



### 3 FREQUENCIES OF LIVING

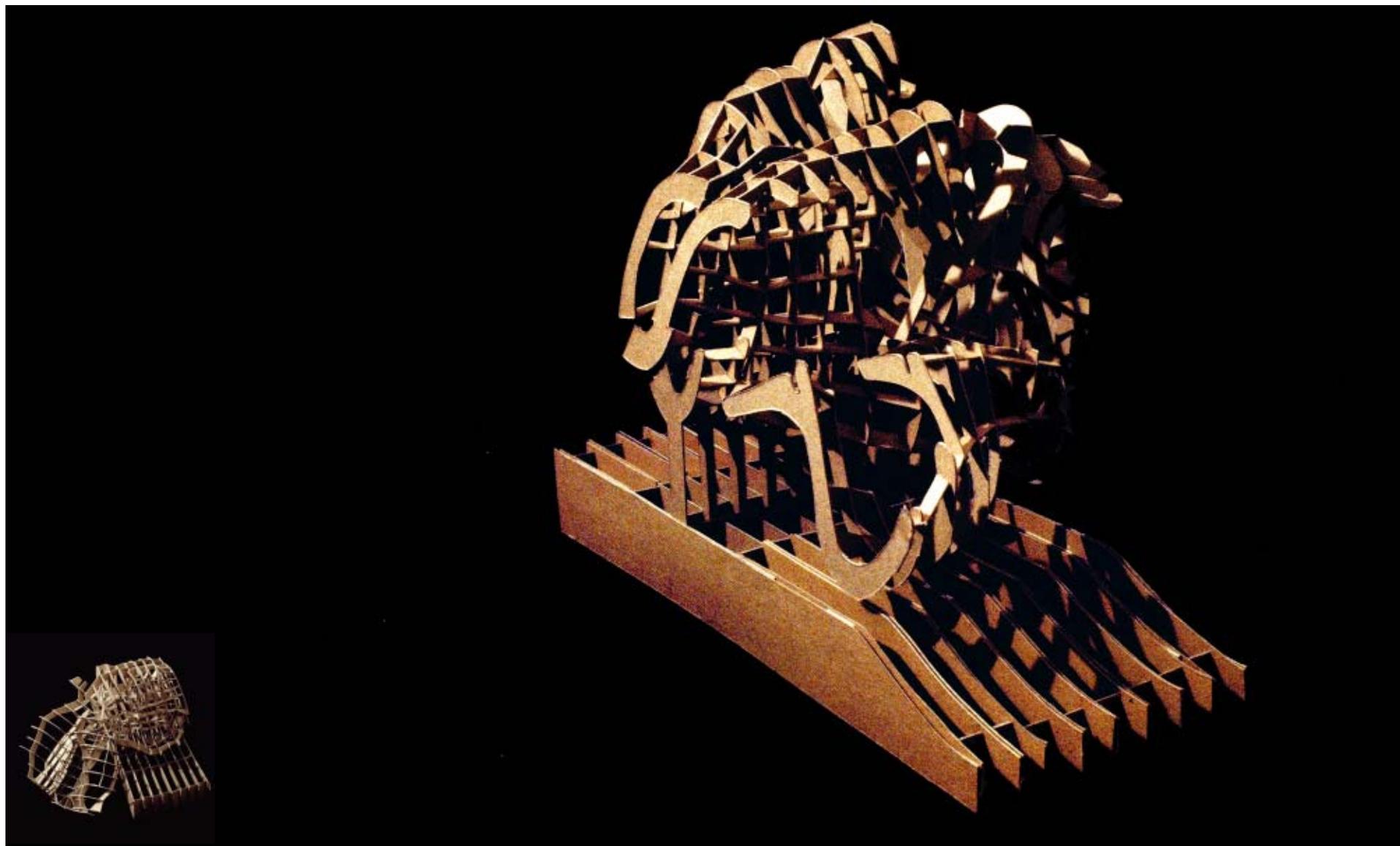


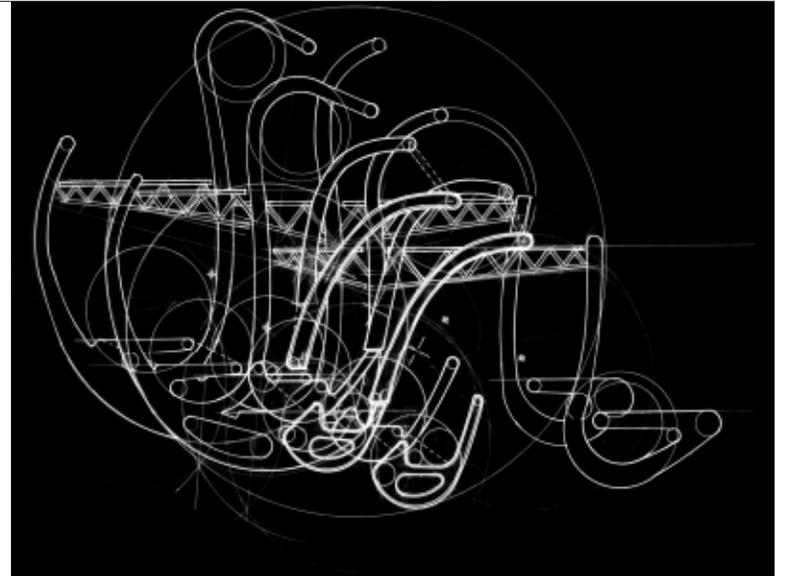
### FINAL HOUSE:

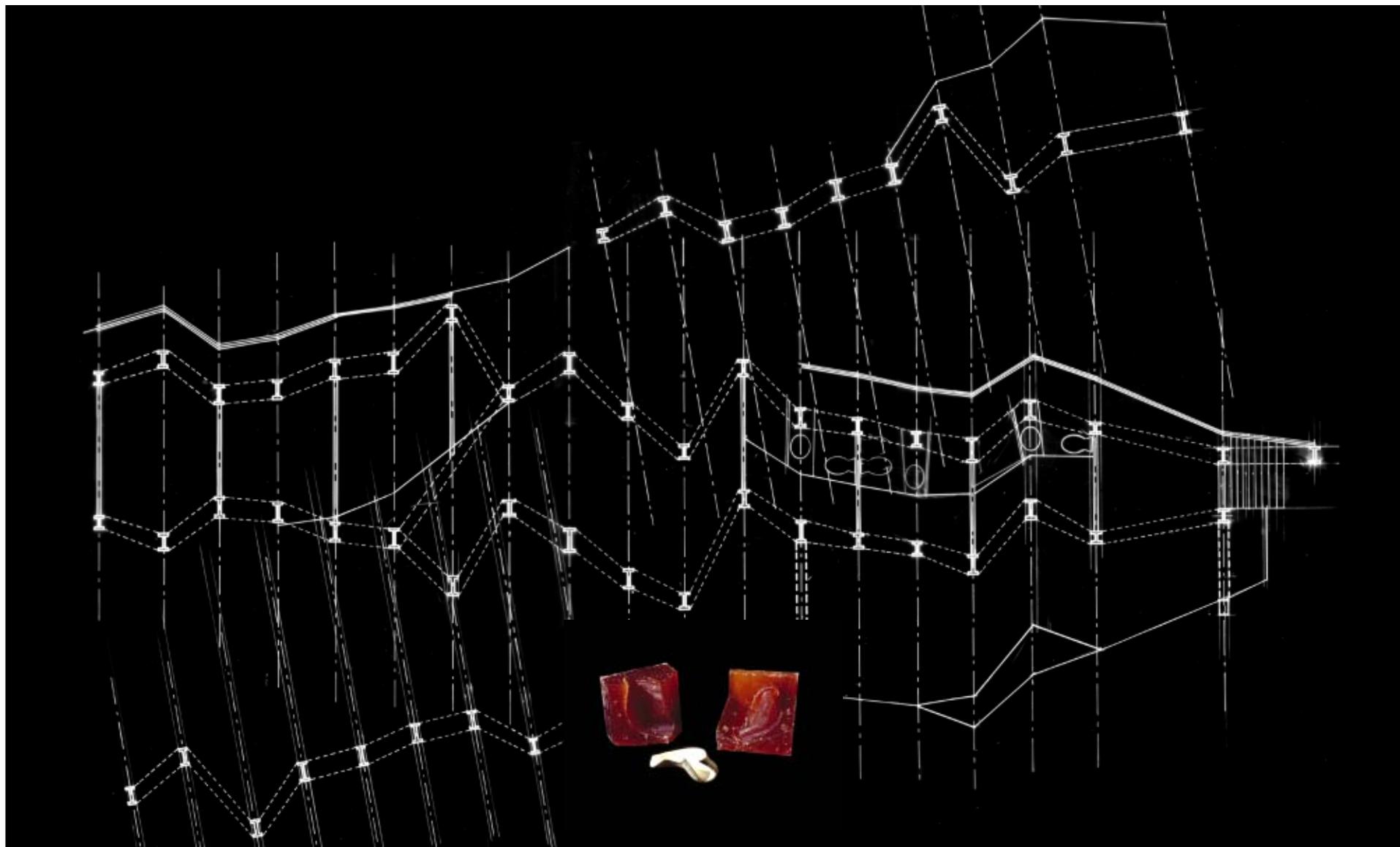
Beginning with sections cut through the plastic base module (see above), the house is constructed based on three frequencies of living:

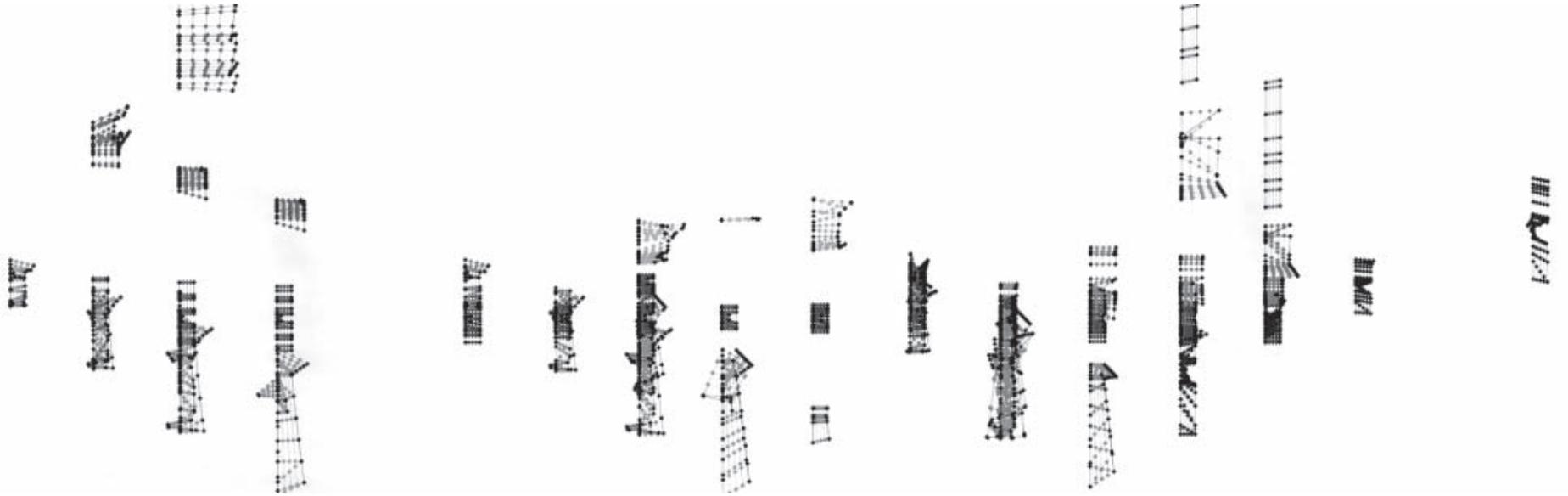
*High frequency= Motel    Med. frequency= apartments.    Low frequency= house*

The living area of the house is intertwined with the “invasion” of the motel units and the apartments complexes. To go from place to place in the home, one must engage the other frequencies of living.





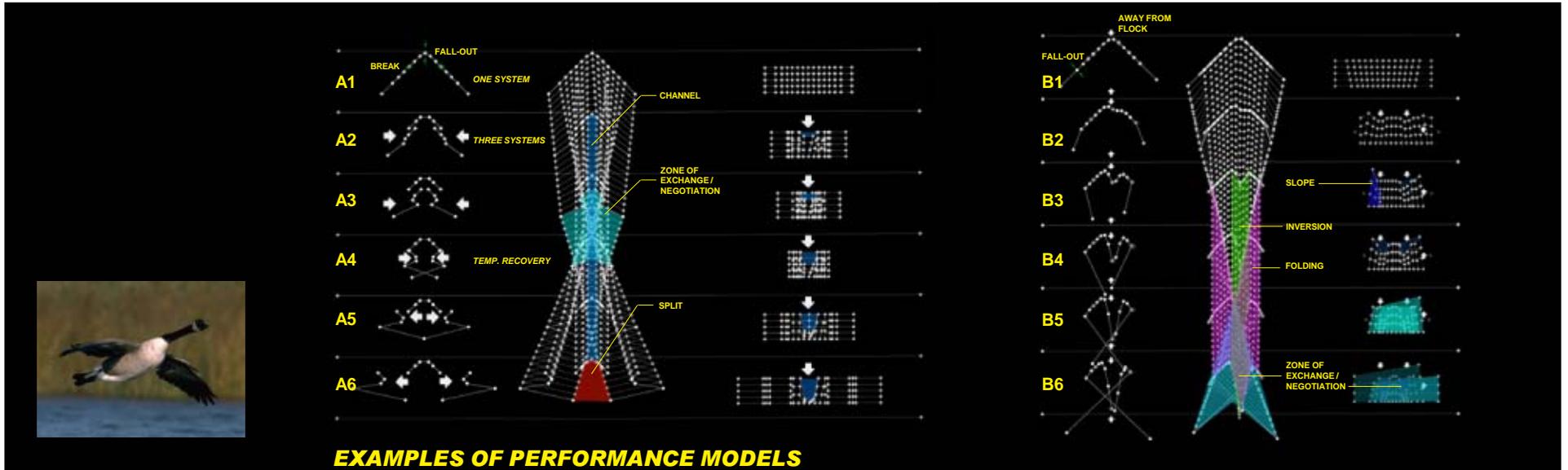




**Multi-family Housing, Bronx, NY**

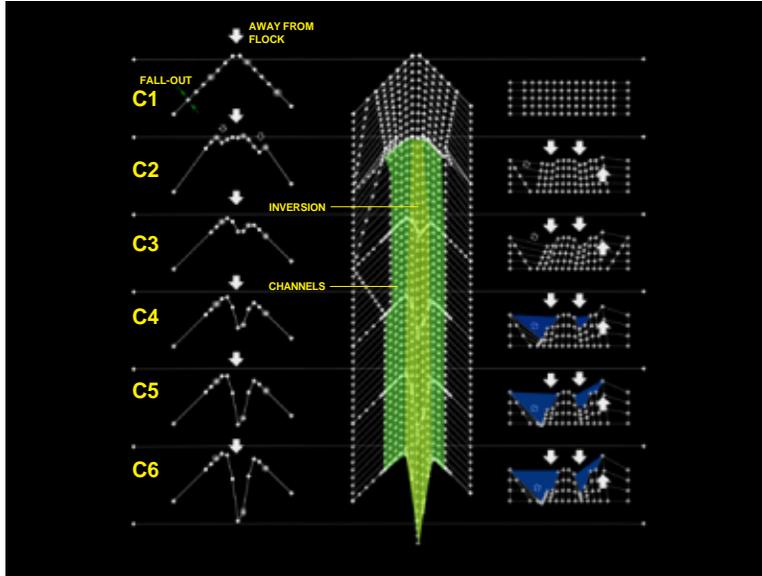
Fall 1999- Columbia University

Critic: Greg Pasquerelli

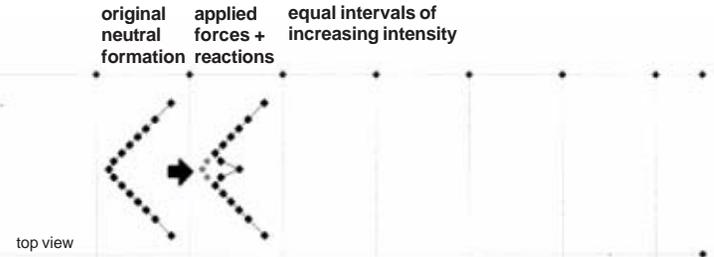


### **PERFORMANCE OF FLIGHT PATTERNS OF CANADIAN GEESE:**

We used the flight formation of canadian geese to provide us with a performative model to use in our urban housing design strategy. We looked at various ways different variables acting together could effect the efficient “V” formation. Such combinations of variables yielded various performative qualities such as inversion, splitting, channeling to happen to the flight formation. By mapping out ten (10) variations of these models we were able to have a set of rules that could be used to govern the process of our housing design.



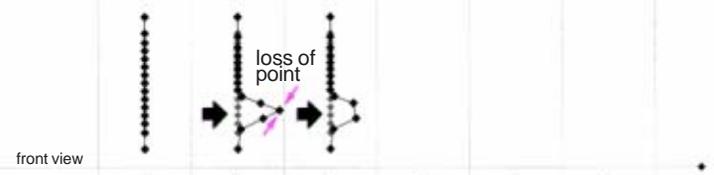
**A1** Single horizontal force;  
single reaction; one inverted  
system w/ increased  
intensity



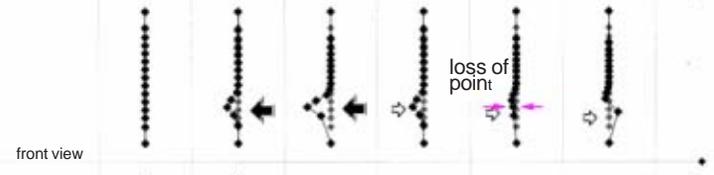
**A2** two horiz. forces (wind gust);  
two reactions; one inverted  
system; possible split



**B** downward fallout (hawk attack);  
instant downward move-  
ment; creating a symmetri-  
cal channel; void in system



**C** upward fallout (hunters);  
gradual removal from  
system; movement upward,  
then downward void in  
system



**D** movement away from flock;  
loss of flight efficiency with  
disturbance to wind tunnels

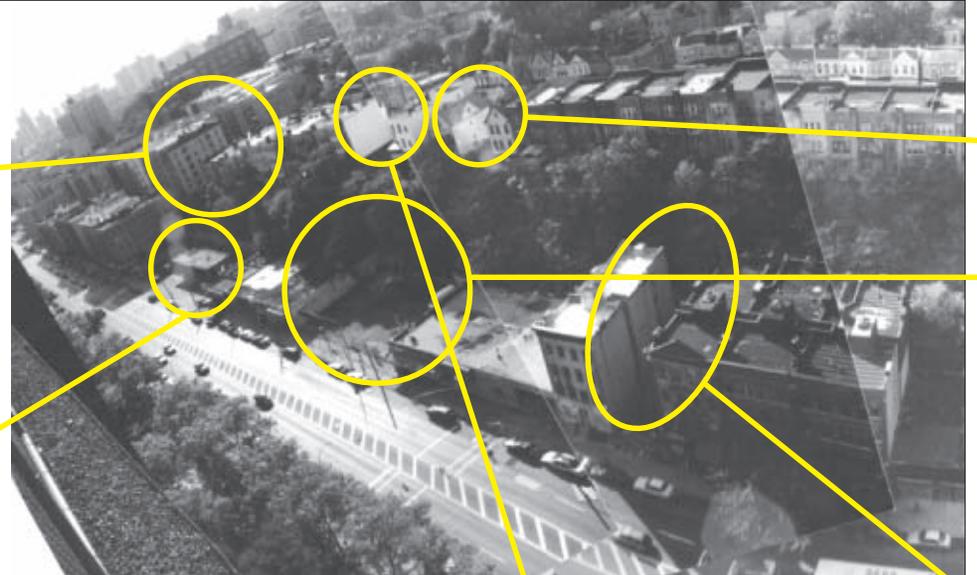


**E** breakage of continuous  
formation; creation of  
independent systems



**QUALITATIVE ANALYSIS OF  
VOIDED CONDITIONS**

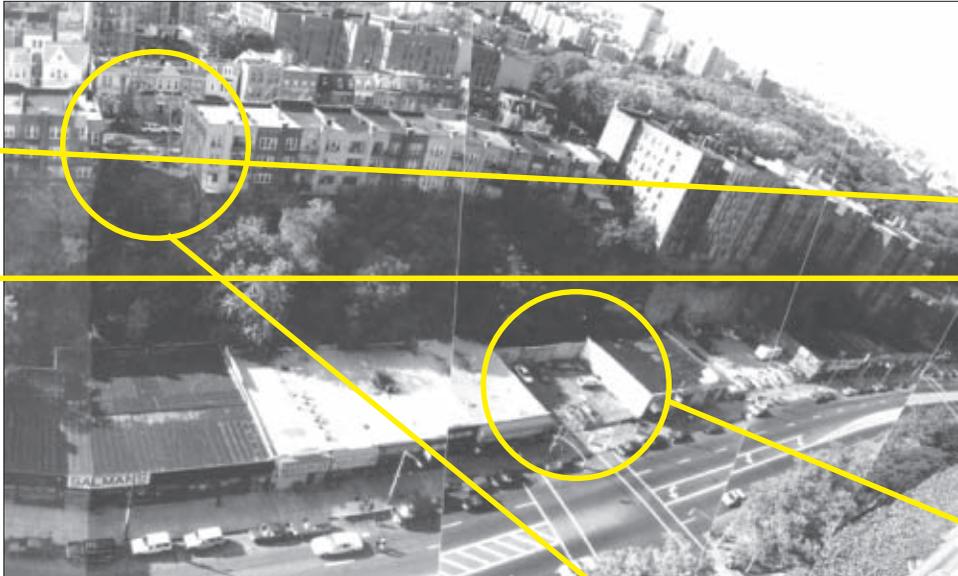
**Stair:** Intersecting element which splits the surrounding urban fabric, providing connective link between edge conditions.



**Gas Station:** Programmed void which attempts to provide neutral zone for adjacent social edge conditions

**Vacant property lot:** Affords opportunity for connective link between two site edge conditions



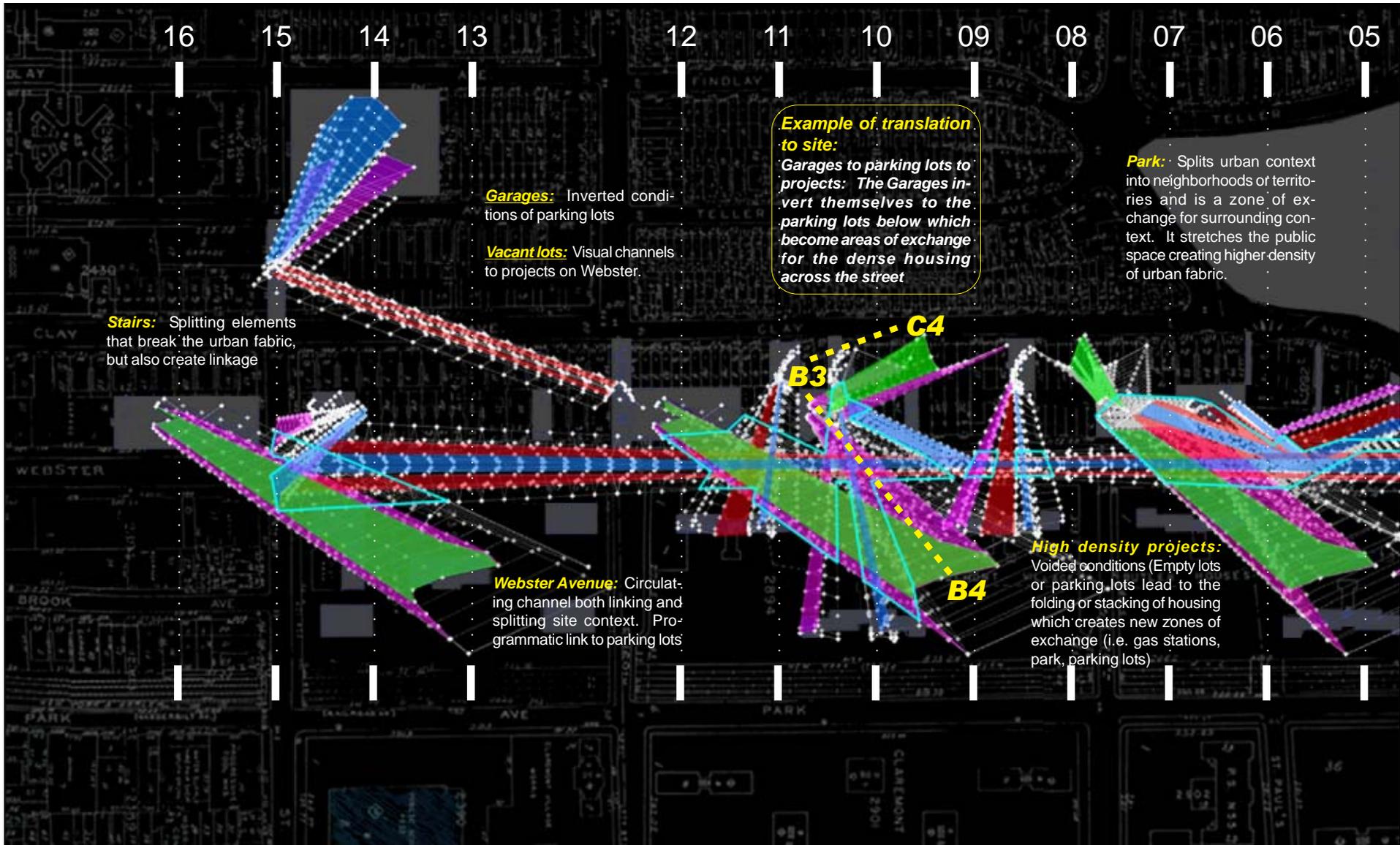


***Parking lots:*** Voided conditions with other program; ineffective response to lack of cohesiveness.



**Void in remaining fabric affords possibility of replacing a moment in a once efficient housing system**





**Stairs:** Splitting elements that break the urban fabric, but also create linkage

**Garages:** Inverted conditions of parking lots

**Vacant lots:** Visual channels to projects on Webster.

**Example of translation to site:**  
*Garages to parking lots to projects: The Garages invert themselves to the parking lots below which become areas of exchange for the dense housing across the street*

**Park:** Splits urban context into neighborhoods or territories and is a zone of exchange for surrounding context. It stretches the public space creating higher density of urban fabric.

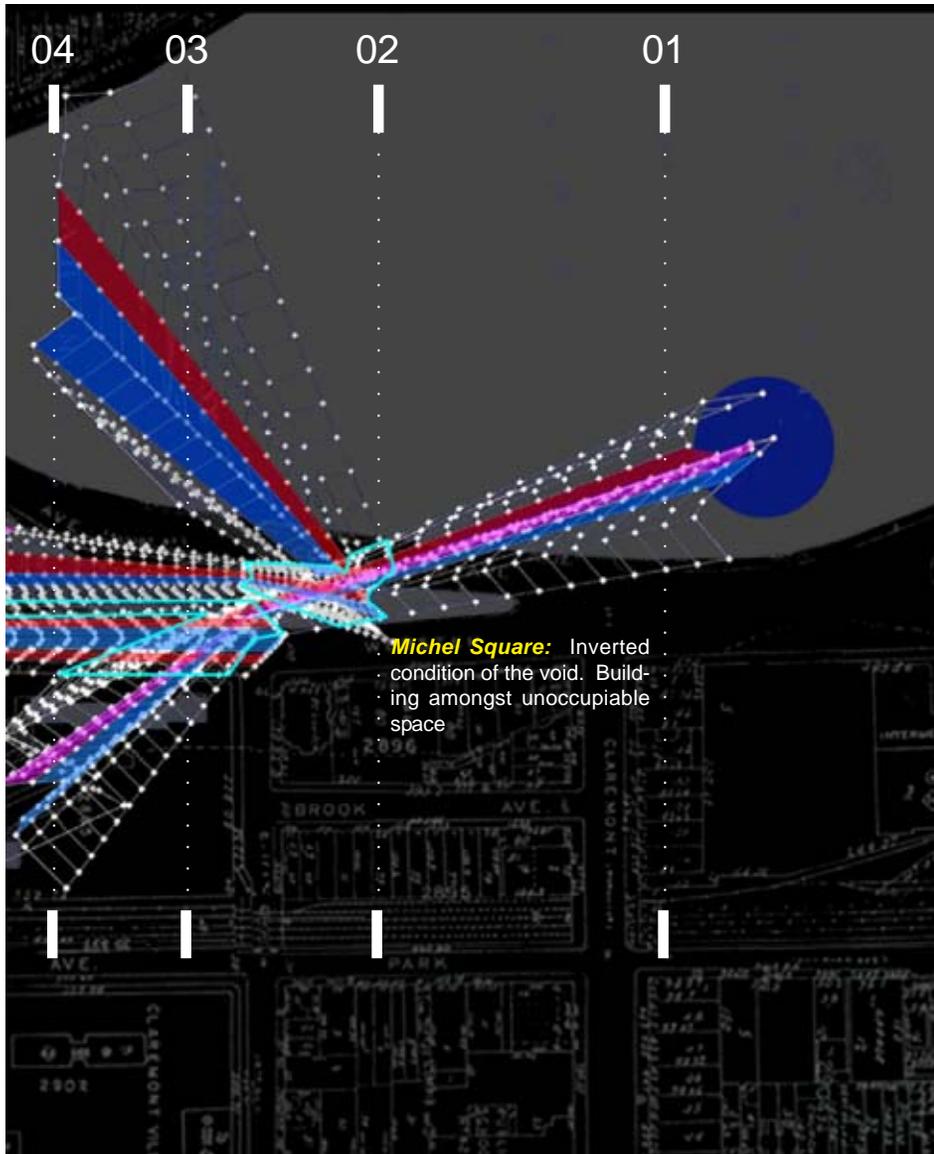
**Webster Avenue:** Circulating channel both linking and splitting site context. Programmatic link to parking lots

**High density projects:** Voided conditions (Empty lots or parking lots lead to the folding or stacking of housing which creates new zones of exchange (i.e. gas stations, park, parking lots)

**B3**

**C4**

**B4**



## Operative Systems and Programmatic Intentions:

- 1) **Channel** = Circulation
- 2) **Folding/Stacking** = High Density Housing
- 3) **Splitting** = Empty public space
- 4) **Inversion** = Retail/Commercial
- 5) **Stretching** = Displaced Program
- 6) **Zones of Exchange** = Areas of negotiation between intersecting program elements

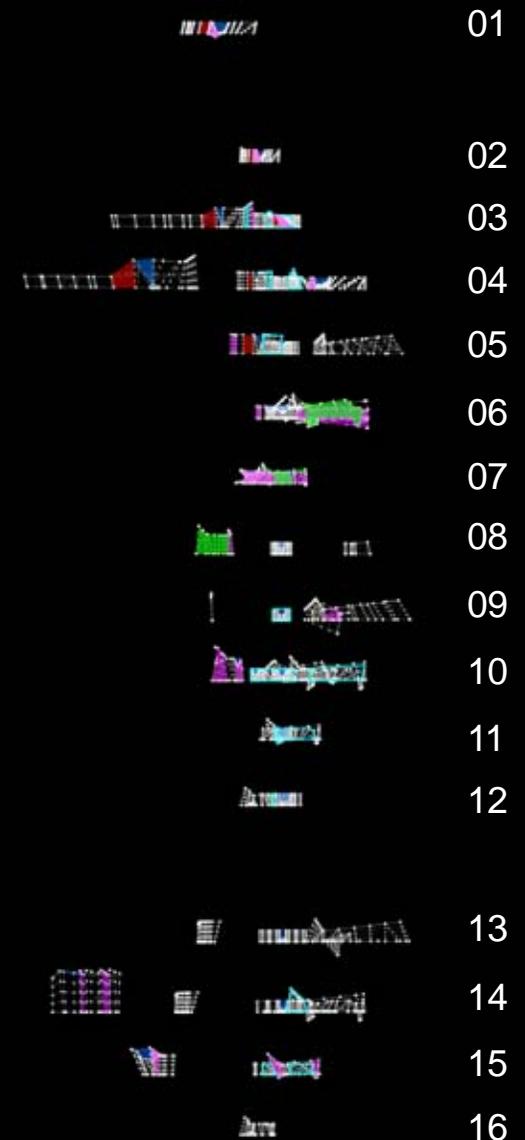
### Logic:

Correlation of performance in provisional model with that of site conditions and context.

### Technique:

Appropriate sequences from model diagrams applied to "like" conditions on site.

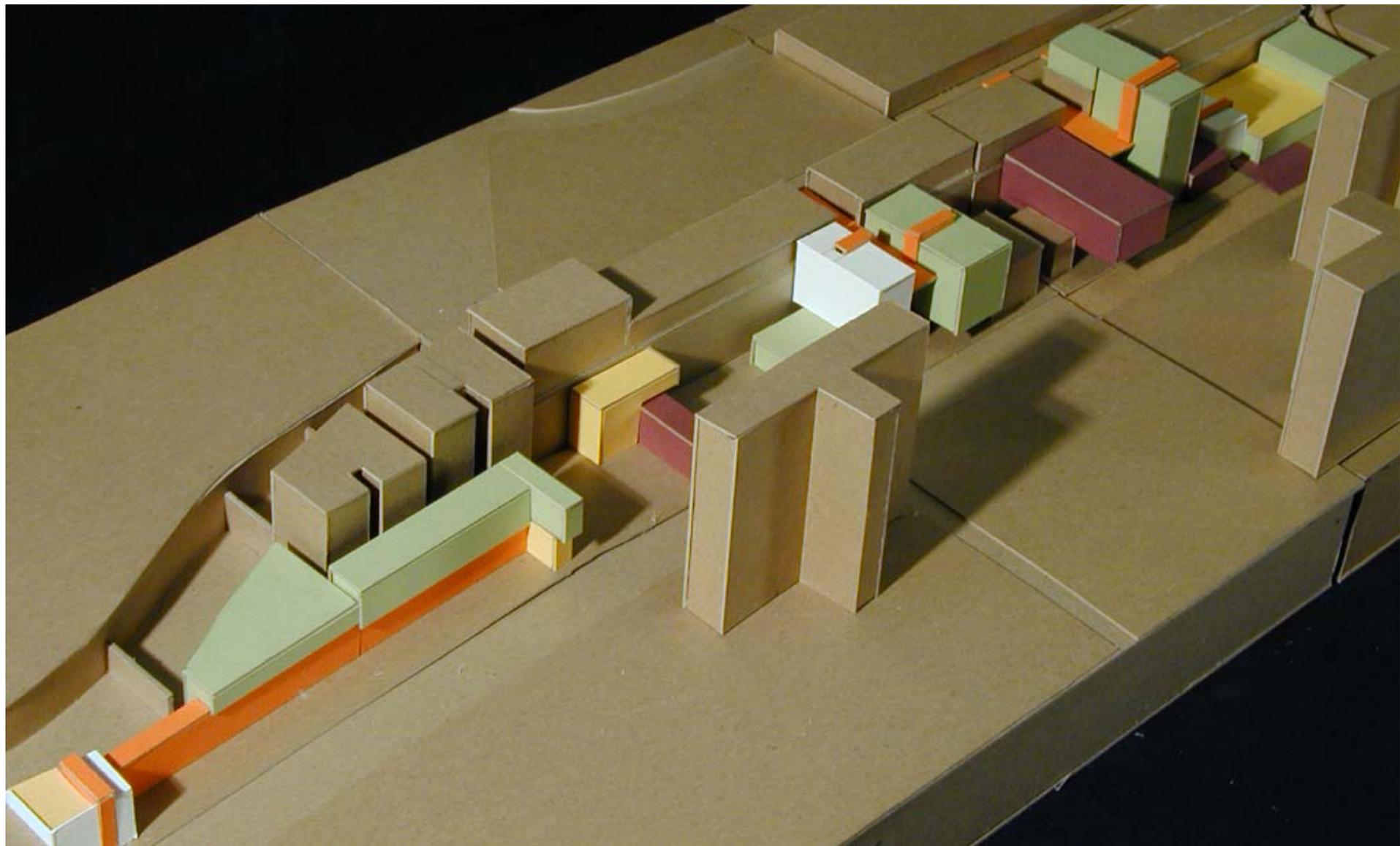
**Result:** New conditions of operative techniques found within site performance

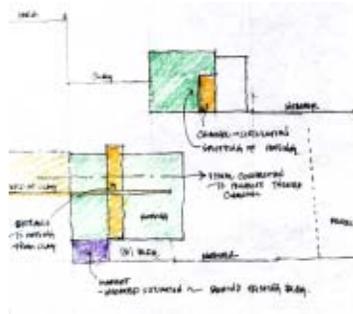
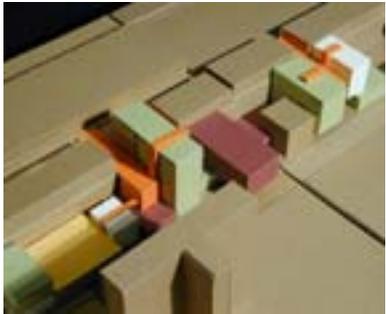
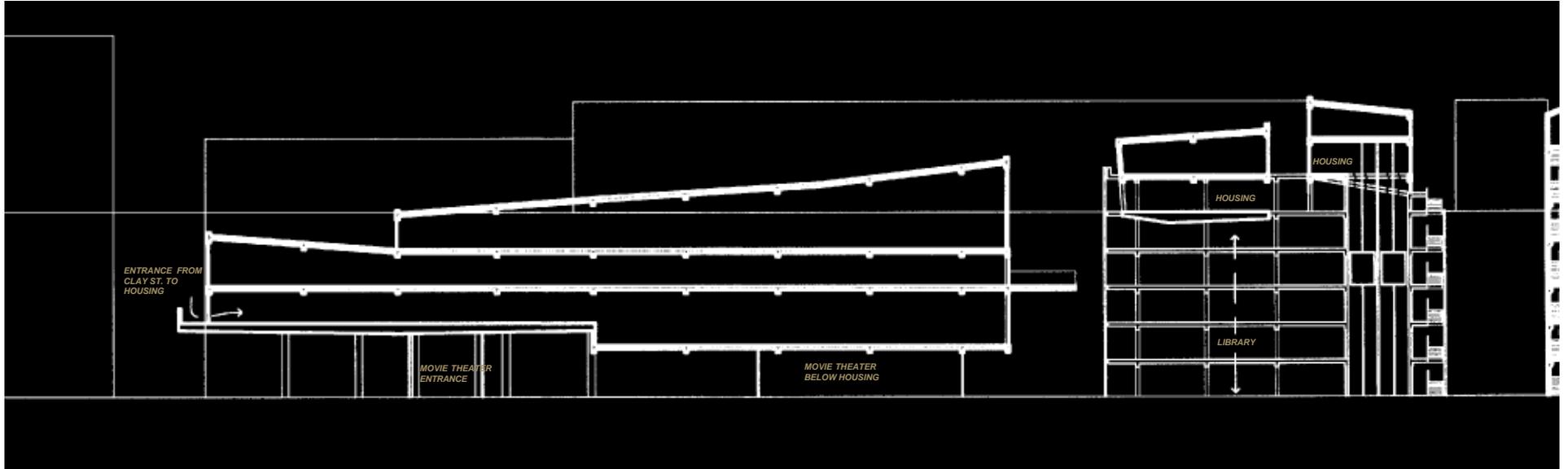


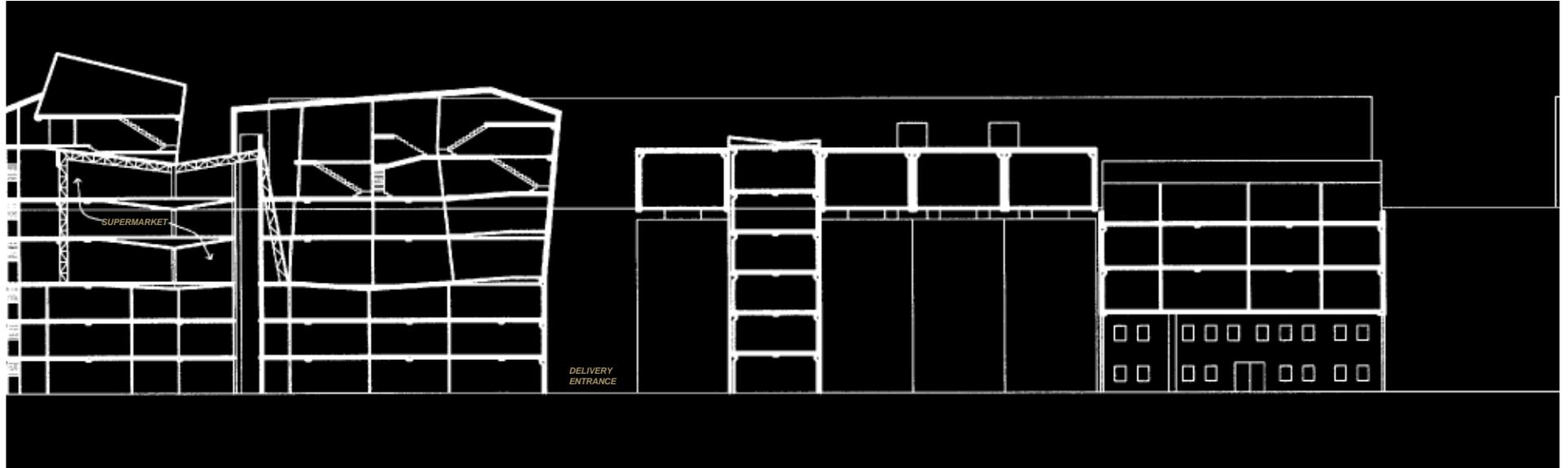


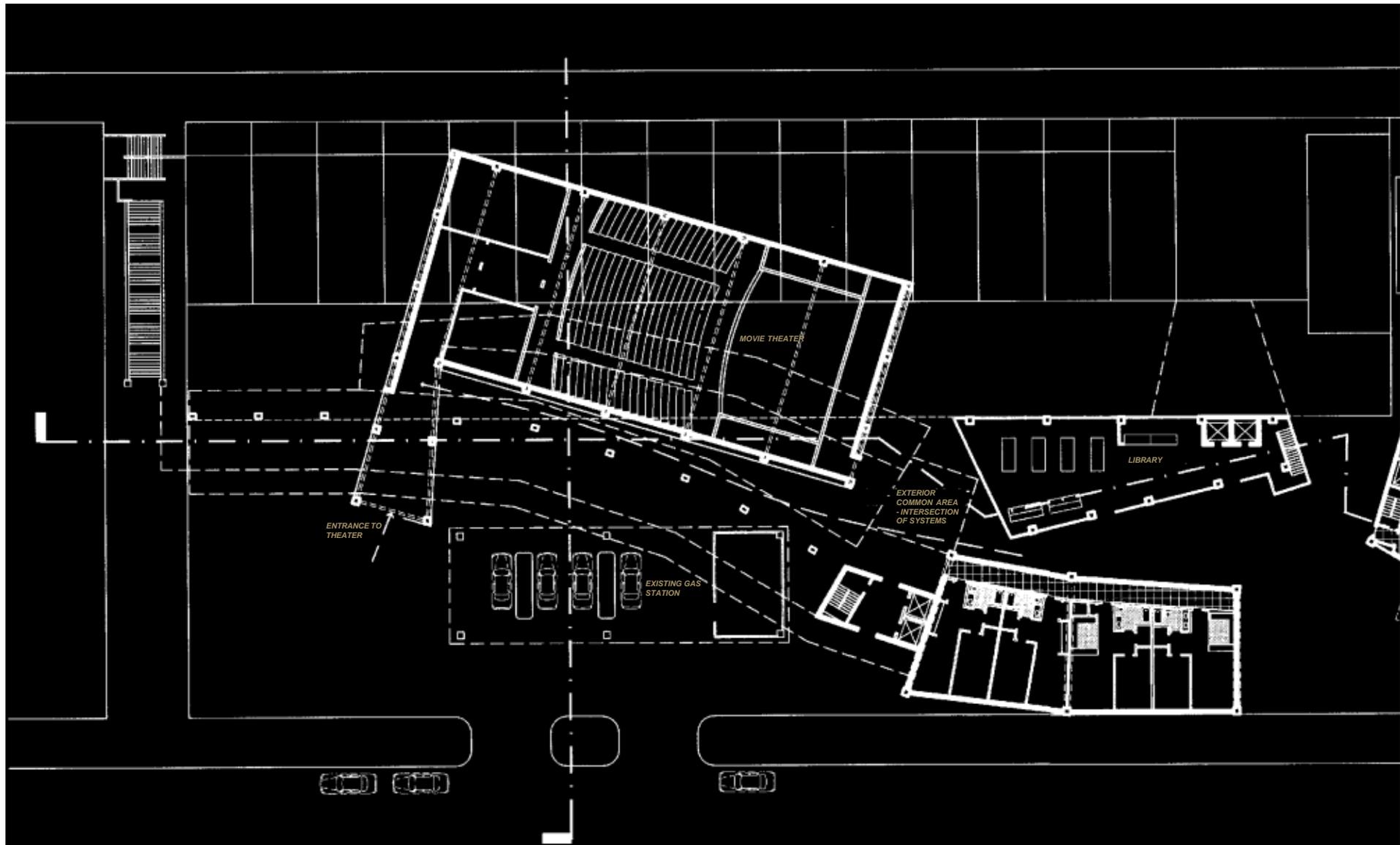
## SITE ANALYSIS:

We qualified voids on the site in the same manner as our previous geese models. For example, the empty parking lots on Webster Avenue are inverted conditions of the garages above on Clay: an enclosed void becomes an open void. The change from housing to empty parking lots on Webster caused the development of the high density projects on the other side of the street, or in the terms of our model, they caused a “folding” effect of housing.







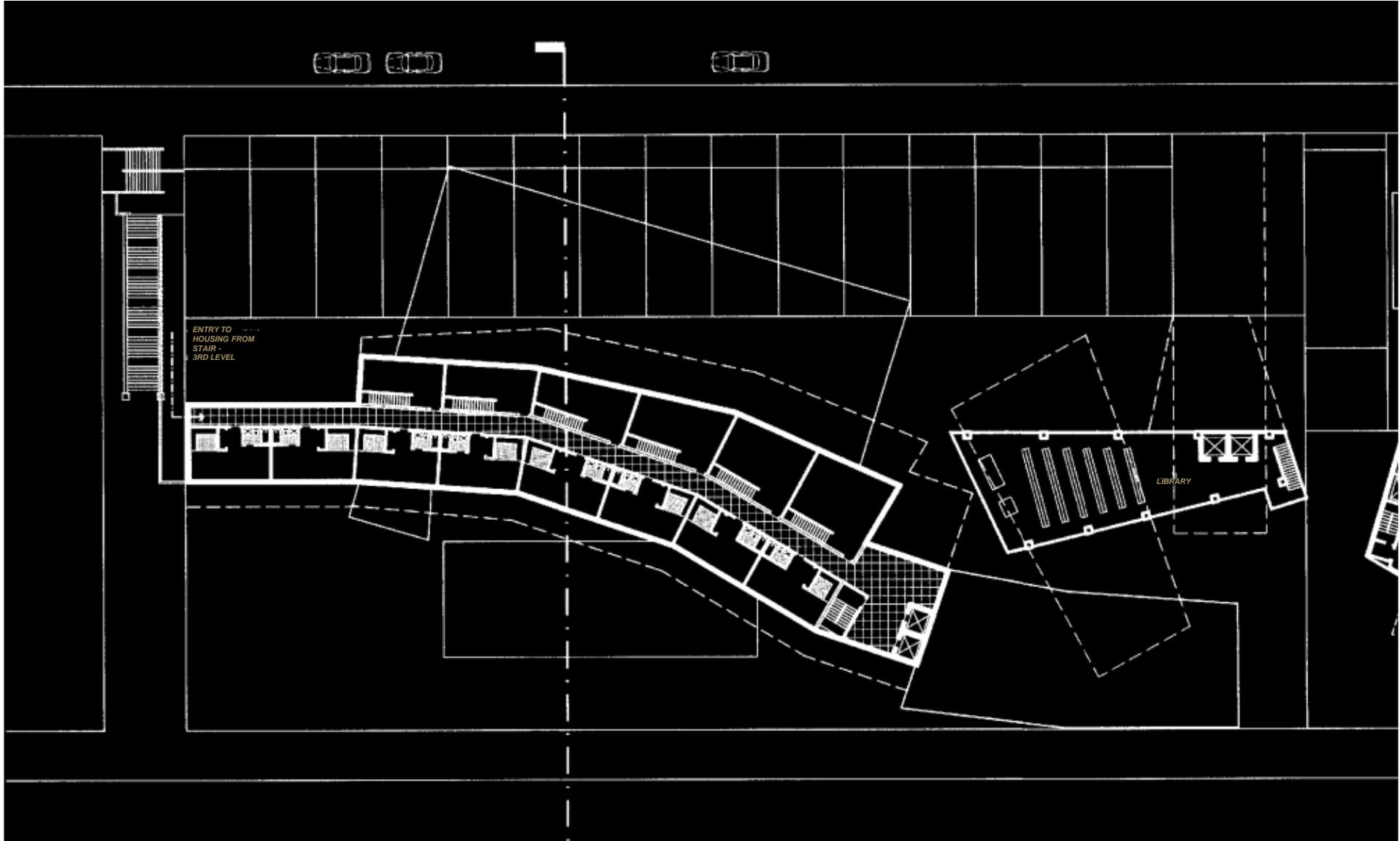






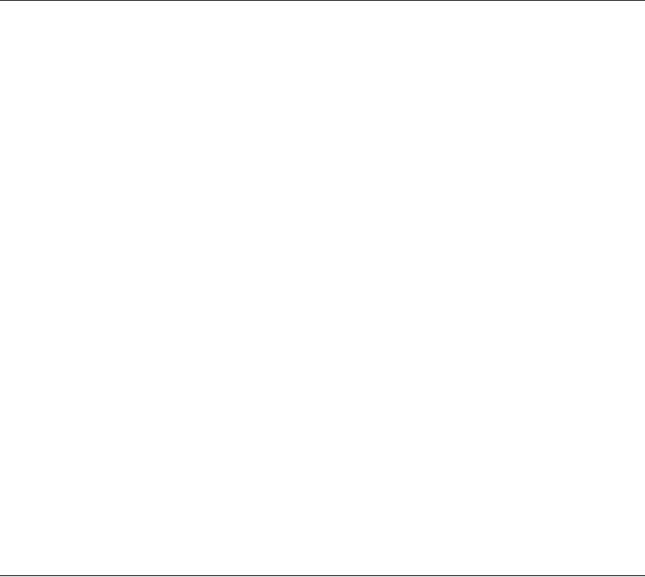
ENTRY TO  
HOUSING FROM  
STAIR -  
3RD LEVEL

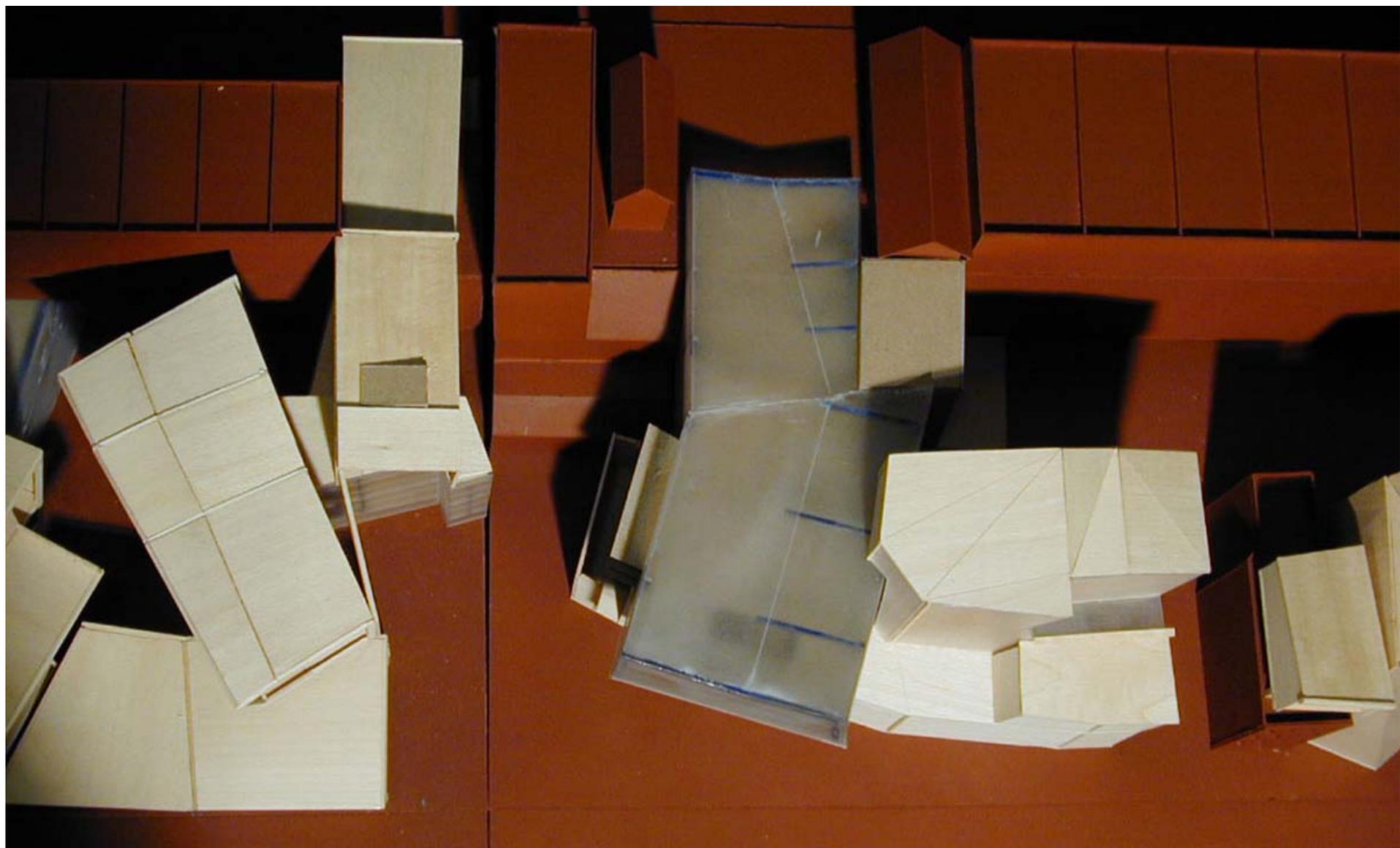
LIBRARY

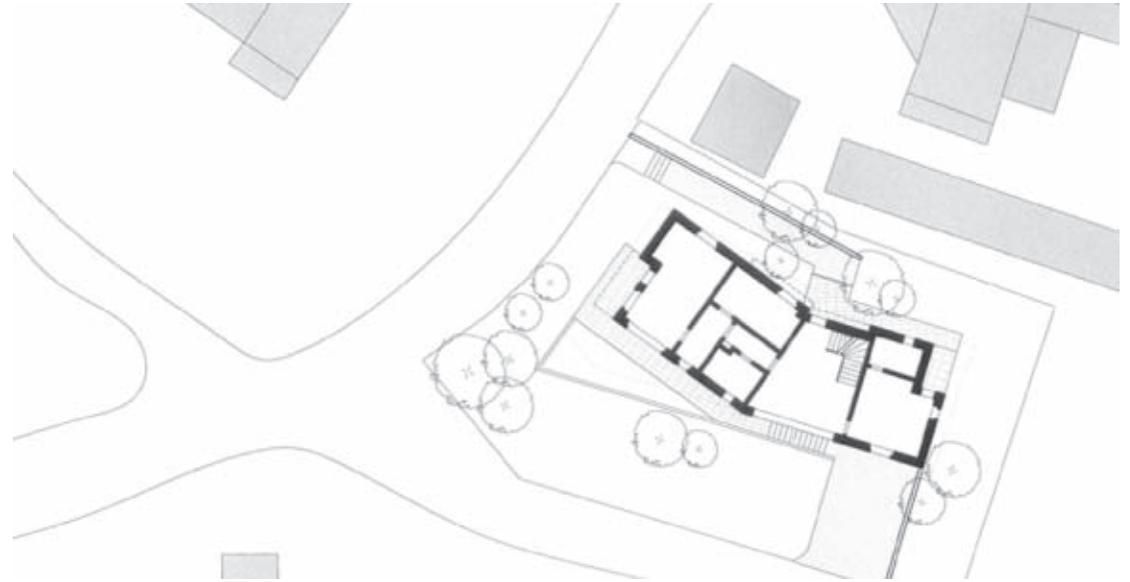




HOUSING ABOVE  
EXISTING BUILDINGS





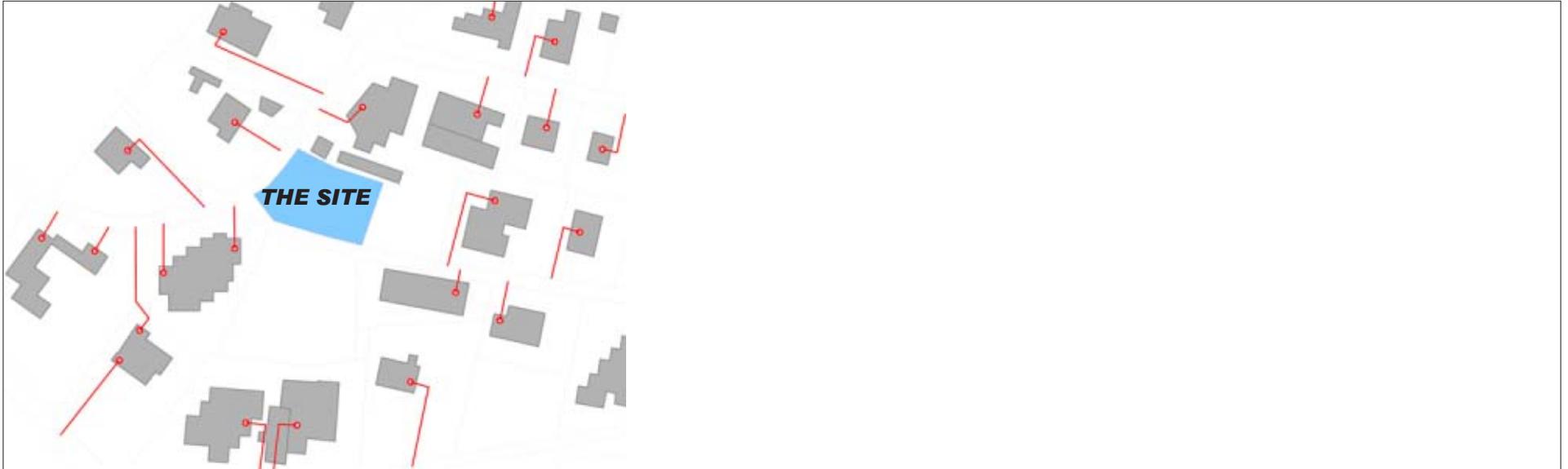


**A single-family house; Meilen, Switzerland**  
Spring 2000 - ETH Zurich  
Critic: Hans Kollhoff

4

*A view beyond*

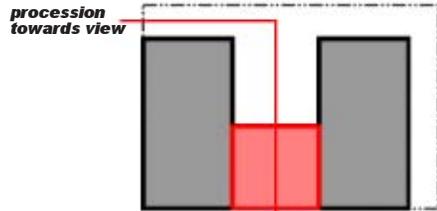
**ANALYSIS OF ENTRY POINTS IN VICINITY OF SITE**



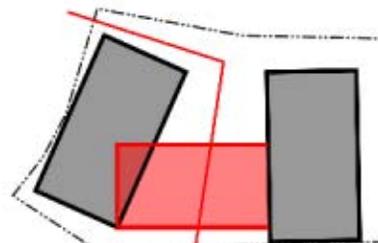
**ANALYSIS OF BUILDING PLACEMENT AND MOVEMENT THROUGH THE SITE**



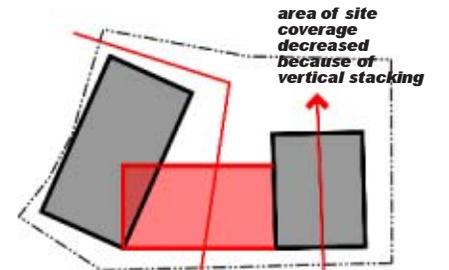
**STAGE 1**



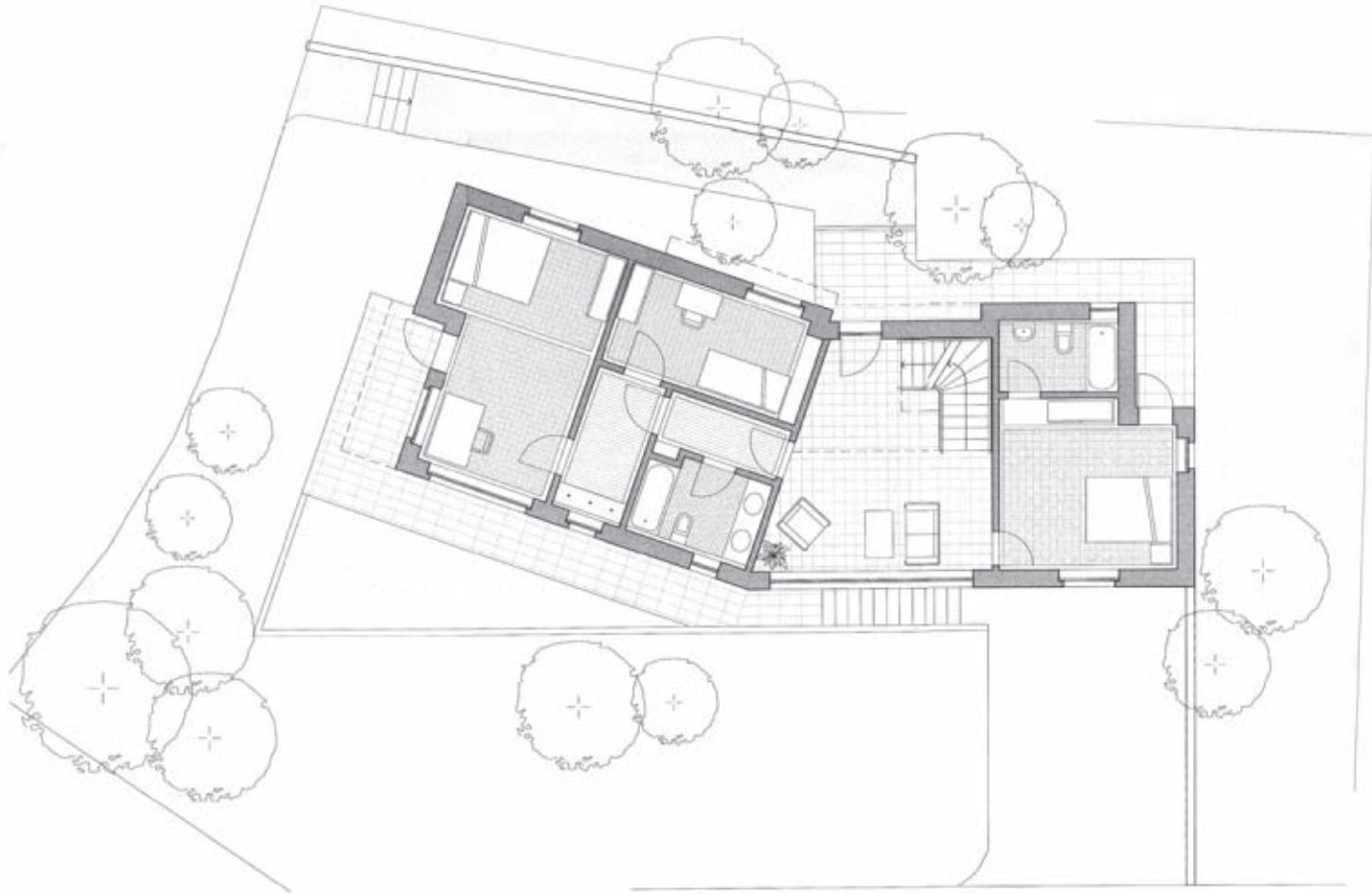
**STAGE 2:**  
Insertion of public/living zone  
and emphasis of view beyond



**STAGE 3:**  
Introduction of the site geometry



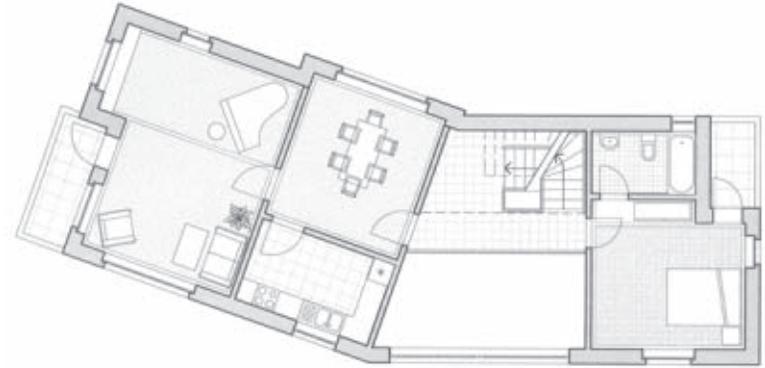
**STAGE 4:**  
Consideration of change of  
elevation above street.  
introduction  
of sub-grade  
garage



**GROUND FLOOR PLAN**



**ENTRY ELEVATION**



**SECOND FLOOR PLAN**

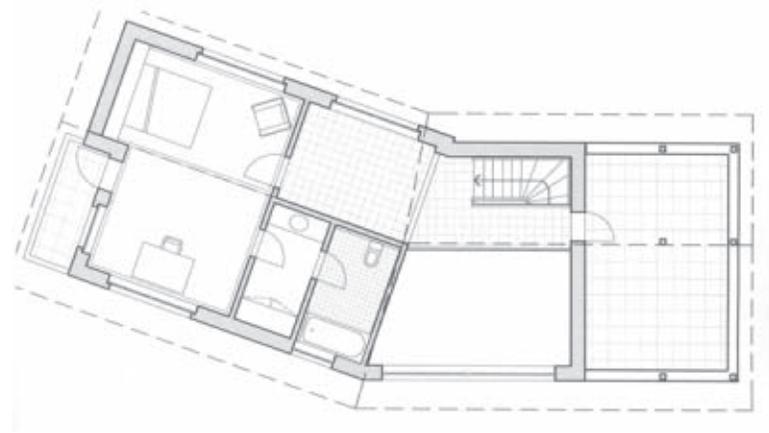
### ***PROCESSION AND ENTRY:***

This project explores the idea of entry and procession towards an expansive view in a single-family house. Located in a beautiful residential neighborhood, the site is dominated by a fantastic view of the lake of Zurich and the alps beyond. An analysis of the adjacent homes indicated a pattern of entry from the street to the house. In most cases, the entry was into the side or rear fo the house creating a procession toward the front which always faces the view. As a result, the design for this single-family house revolves around the idea of public entry. The public entry from the back of the site acts to split the private realm of the home into two different parts connected by a public hall. Each side is then oriented to the two major views available from the site: the front, lake view and the side, countryside view.

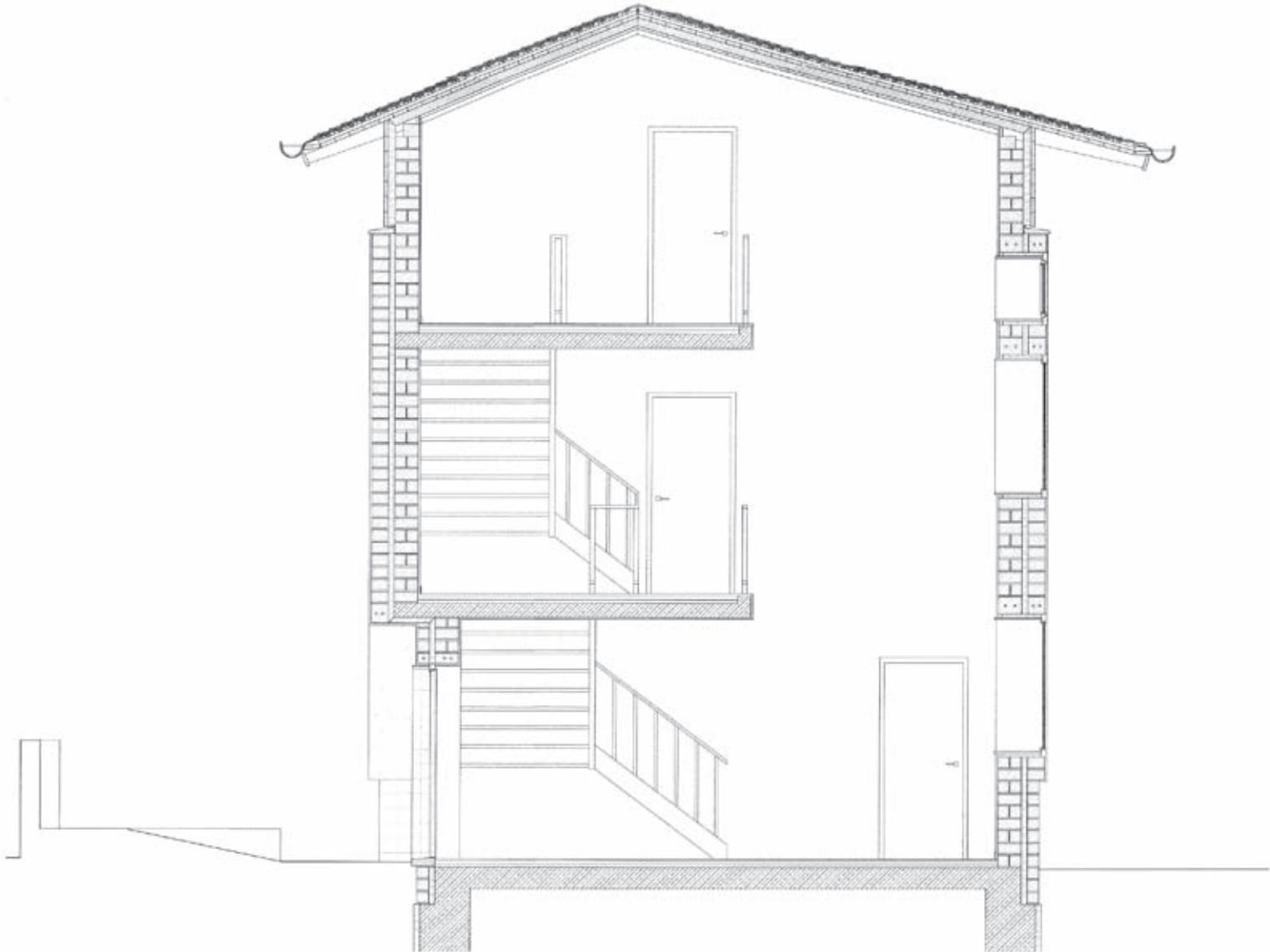


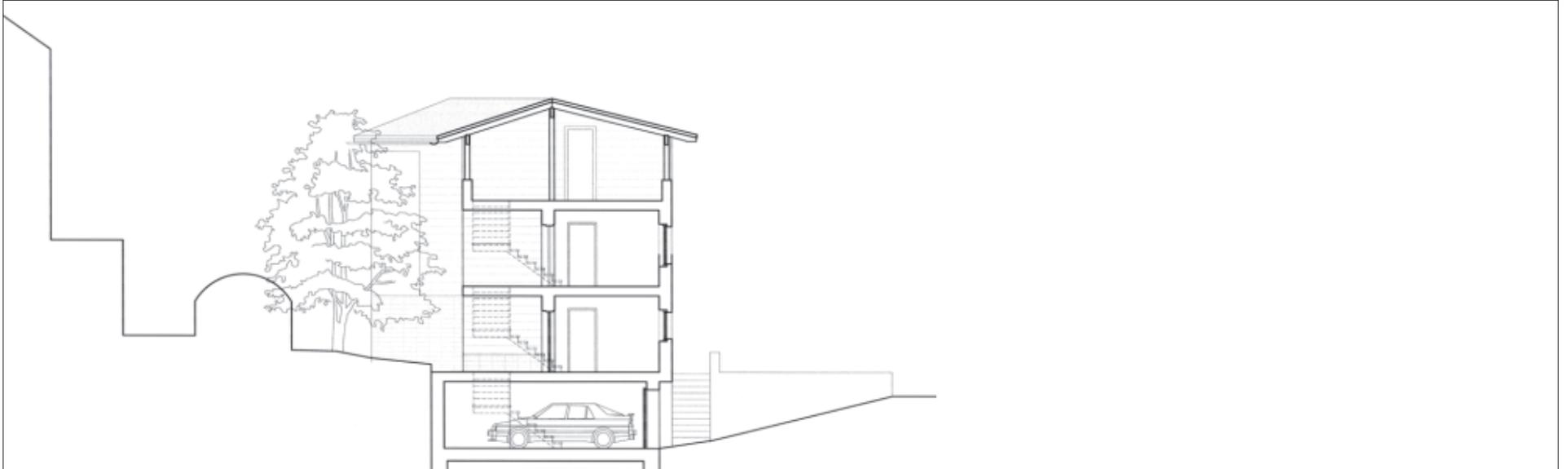


**SIDE ELEVATION**



**THIRD FLOOR PLAN**

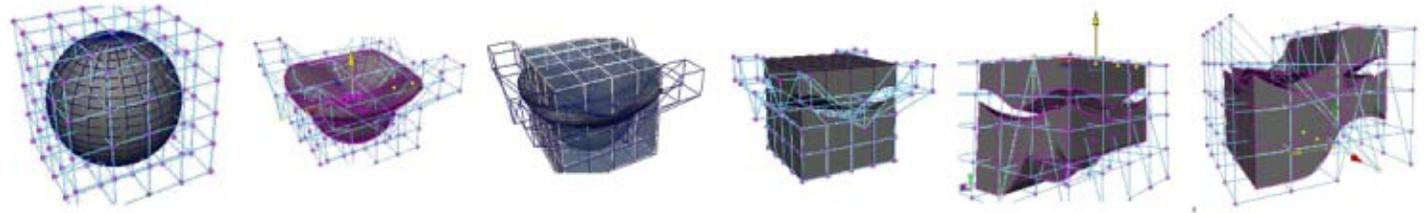




### ***THE HOUSE:***

The challenge of this studio especially after the process-intensive Columbia environment was to deal with the reality of architecture as objects. Here, the building could not remain an abstraction, but must be confronted for what it really is.





**Office Headquarters, Atlanta, GA**

Fall 2000 - Columbia University

Critics: Kadambari Baxi, Reinhold Martin

5

***CNN Center Headquarters***



### ***INVERSION AND ATLANTA:***

As discussed by Rem Koolhaas in his article on Atlanta, the city's public spaces are inverted into interior atriums in the many office buildings and hotels downtown, many designed by John Portman. The city as a whole, is yet another inversion; the center, the downtown, is empty of life because everyone lives in the bordering suburbs. Our first task was to tackle the topology of the atrium in its abstract form. The drawing to the right is an illustration of the process of deformation of a pure atrium. ***Objectives: 1) Use atrium to break apart exterior shell. 2) Create an interaction between the two resultant parts. 3) Interior void interacting with the exterior void. 4) Create an atrium space that is not entirely perceivable from any given point.***

STEP 1

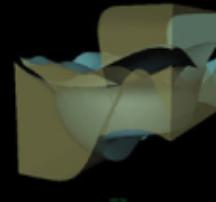
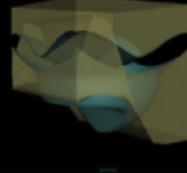
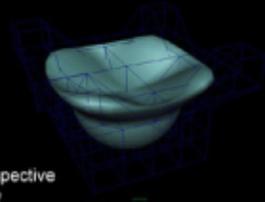
STEP 2

STEP 3

STEP 4

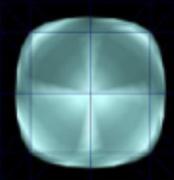
STEP 4A

Perspective View

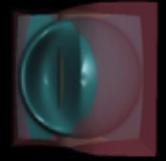
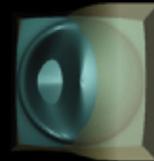
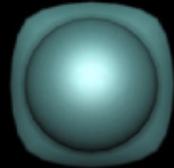


**MIXING OF PROGRAMS . . . . INTERSECTING BOUNDARIES . . . . PUBLIC VS. PRIVATE . . . . SPATIAL CONFUSION**

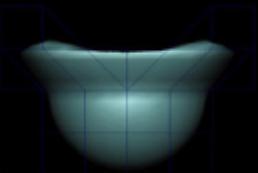
Top View



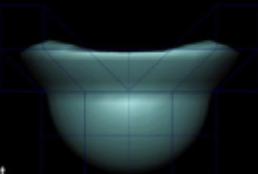
Bottom View



Side View



Front View



**PLAYBACK CONTROLS:**

user has control over speed, direction of a clip.

**TELEVISION/WEB CONNECTION:**

Connect the video with appropriate news page from CNN's web page.

**CHANGING BOUNDARYS:**

user can drag video to another location on the map. Does the video change, once it is in another position? Or does the user begin to invade the loop pattern?

**SCALING THE INTERFACE:**

user can scale the individual videos based on a preset module or "real estate"

**LINKING AND SCHEDULING:**

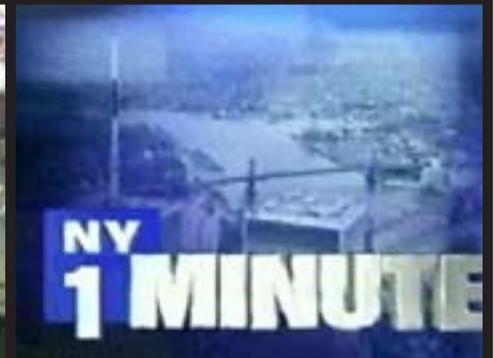
closed-loop interface, user can control viewing schedule, however CNN still creates a continuous link between categories

**THE INTERFACE:**

Alongside the atrium study, an investigation of the interface of CNN news was also made. Since the atrium study was dealing at one level with the level of control of the inhabitants perception of space, I was also interested in the level of control the user can have over his/her interface and consequently the perception of the news. CNN's announced strategy is "raw news"; they deliver only the information, not filtered in any way. However, the very television interface can affect ones reading of the information. This study was to allow the user to have control over the scheduling, the physical arrangement, the speed, etc. of the CNN news broadcast.

**THE INTERACTIVE INTER-  
FACE - USER CONTROL OF  
PERCEPTION OF NEWS**

**Choice of program, ability  
to pre-set schedule, ability  
to change scale, speed of  
playback, and arrangement  
of screen**





### ***THE COMMUTE:***

#### **THE LOOP: HOME - FREEWAY INTERCHANGE - PARKING GARAGE - ELEVATOR/CORE - OFFICE**

Since Atlanta appears to be void of human activity, the place where people actually congregate are the freeways and parking lots that dominate the landscape. As a result, they are the true public arenas of urban life in Atlanta. However, the shelter of the personal automobile negates this public character and allows one to negotiate through one's day in an entirely private realm.

The user interface is then extended to the three environments that one has; the home, the car, and the office. Each has different needs and levels of interactivity.

## THE SUBURBS

### VARIABLES:

Home as Work  
Home as Relaxation  
Schedule/Frequency



## THE INTERCHANGE

### VARIABLES:

# of Stops  
Length of Drive  
Amount of Traffic



## THE OFFICE

### VARIABLES:

Media as information  
Media as distraction  
Length of Workday  
Computer Usage



- VIDEO ONLY
- AUDIO ONLY
- VIDEO + AUDIO
- LENGTH OF BROADCAST
- LINEAR, PRE-PROGRAMMED SCHEDULE
- NON-LINEAR, INTERACTIVE SCHEDULE
- TYPE OF BROADCAST
- CONNECTION TO INTERNET
- SIZE OF INTERFACE/VIDEO
- SIMULTANEOUS BROADCASTING
- MIX AUDIO AND VIDEO
- VIDEO CONTROLS
- POSITION OF VIDEO ON INTERFACE

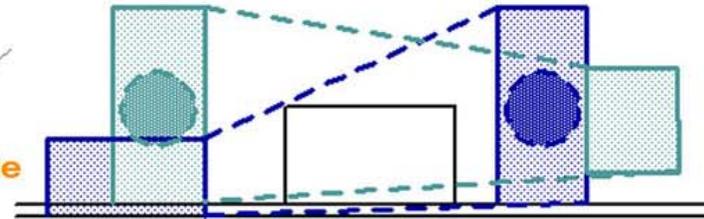
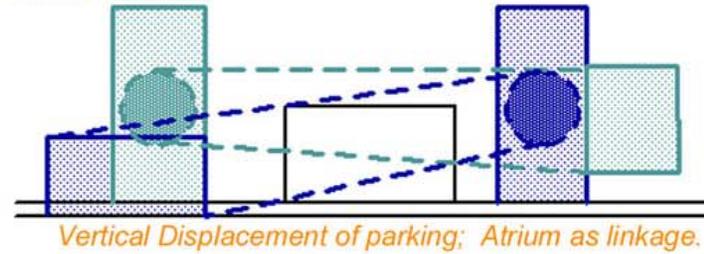
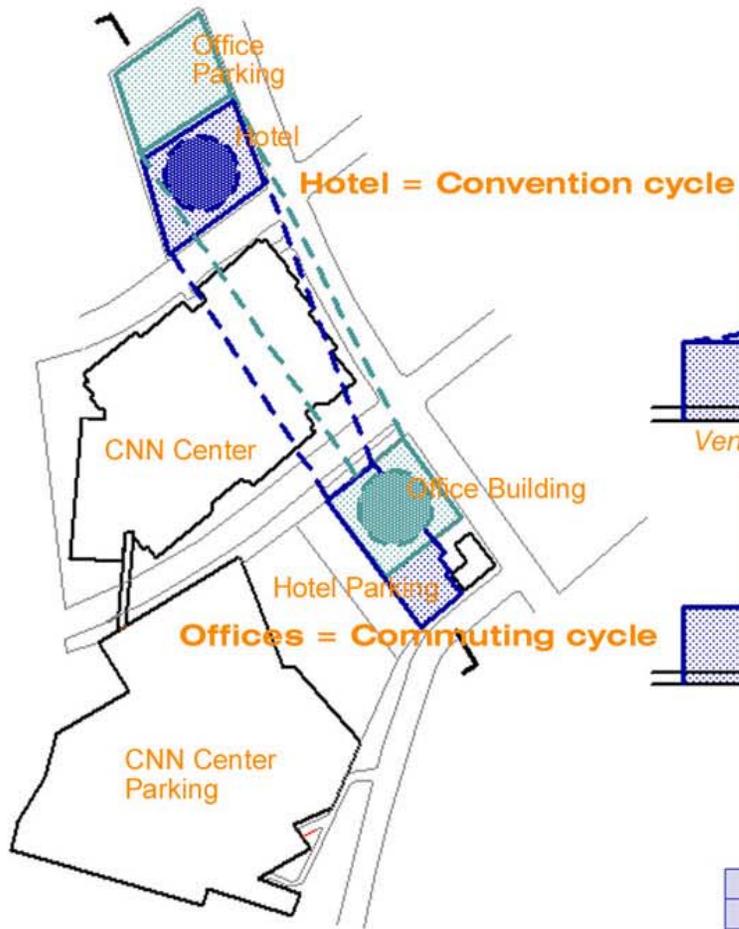
## PUBLIC TRANSIT

### VARIABLES:

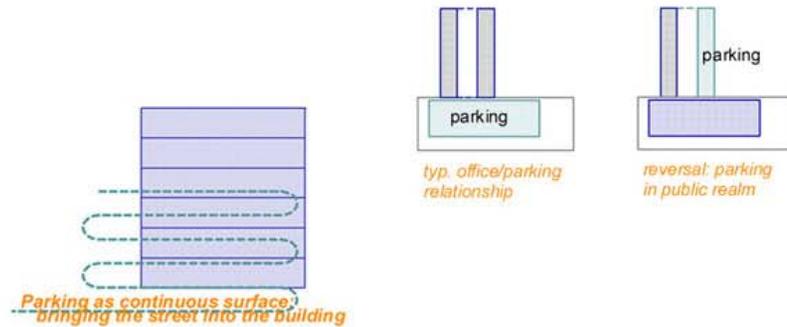
Length of Commute  
# of Stops  
Public Arena-No Audio

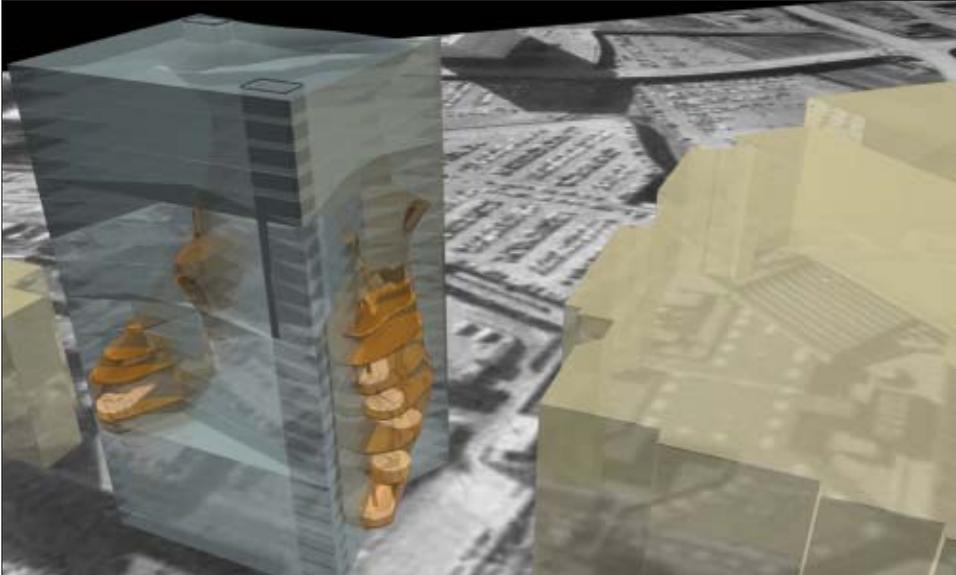


- One floor = approx. 200 ft. of travel and ramping - Average speed: **5 mph** - One mile = 5280ft; therefore, **12 minutes** to travel one mile - 200 ft = **27 seconds** - 5 minutes maximum travel time to parking spot - maximum **11 floors** above street level - one (1) SF of circulation for one (1) SF of parking - **700 spots** required = 10'-0"x20'-0"(200SF) each = 140,000SF + 140,000SF of circ. = **280,000SF total parking SF** - maximum one-half of floorspace per floor for parking - maximum 175,000SF of parking per floor -  $280,000\text{SF} / 17,500\text{SF} = 16$  floors minimum containing parking - 11 floors maximum **above** streetlevel, 5 floor minimum **below** street level - First two floors below street level have one-quarter floorplate with office-space facing truck level area and the remainder as parking space. The lower levels will be all parking because of lack of exterior access. - L1, L2 = 26,250SF for parking/per floor = 52,500SF of parking - L3-L6 = 35,000SF for parking/per floor = 105,000SF of parking - Total subterranean parking = 157,500SF - Remainder for upper floors =  $122,500\text{SF} / 11$  floors = 11,136SF per floor, **minimum 28 parking spaces per floor**



*Horizontal displacement of parking*





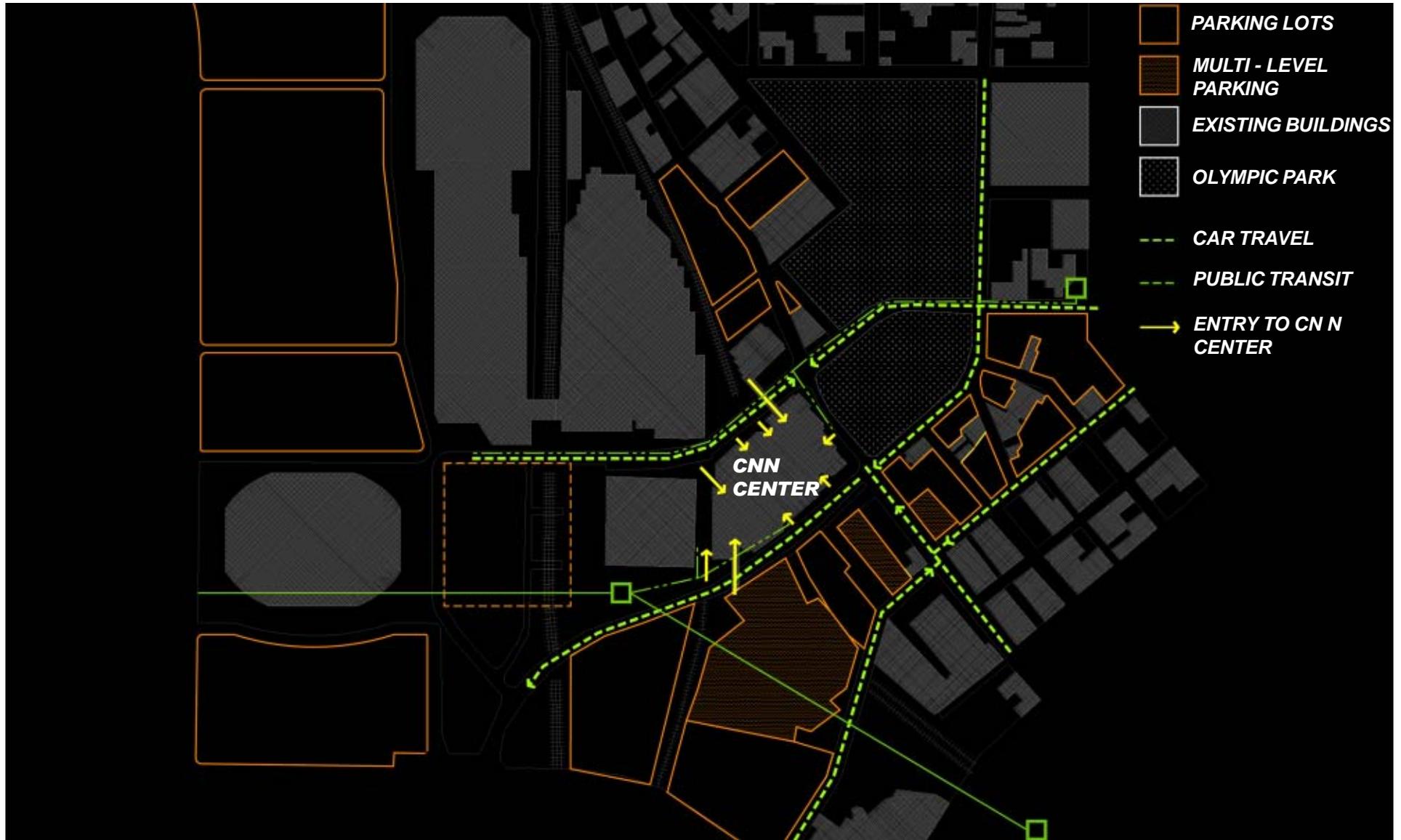
*“Parking decks should be designed to look like buildings and contain commercial uses on the ground floor where appropriate.”*

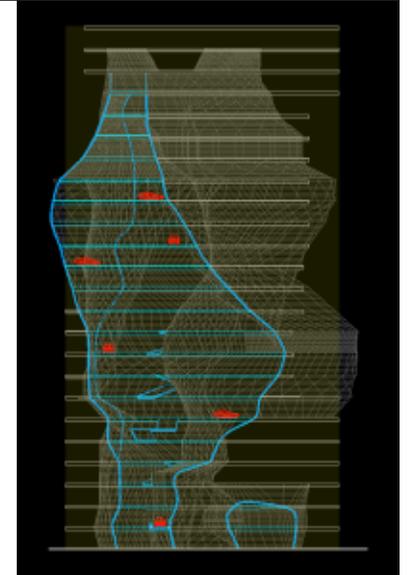
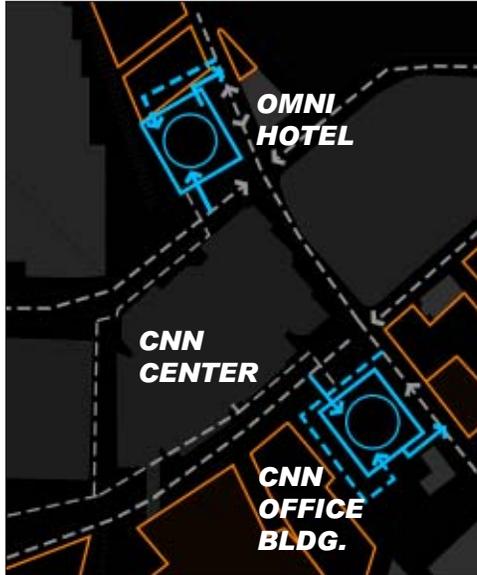
*“Limit the negative visual impact of parking facilities”.*

### ***THE PROJECT AND THE SITE:***

One of the original atrium studies became a starting point to deal with the CNN office building.

**BUILDING STRATEGY:** Mix the Parking Garage program with the “generic” office building typology thereby replacing the traditional public atrium space with a program that is not public or private, but more infrastructure. Replace the atrium with the parking lot and, as a consequence, extend the “public” street into the office building and cause a confusion between parking and offices. The realistic “bandwidth” of parking was determined, so any remaining atrium space is then to have the character of the parking lot, non-programmed, and media-free.

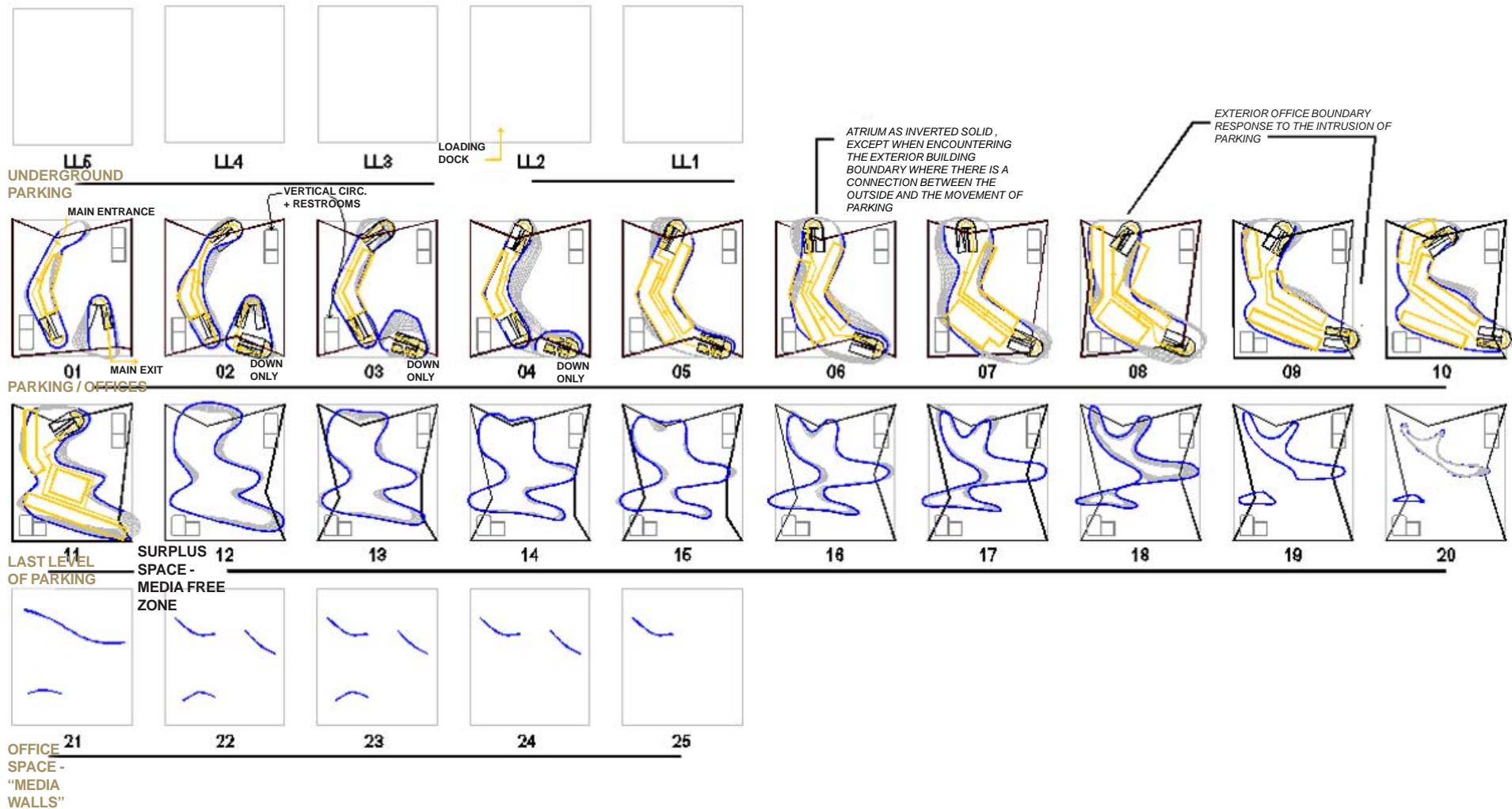


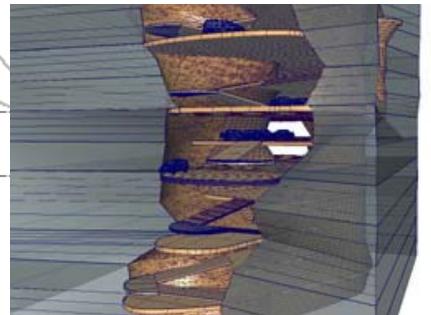
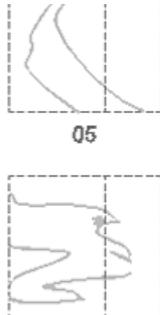
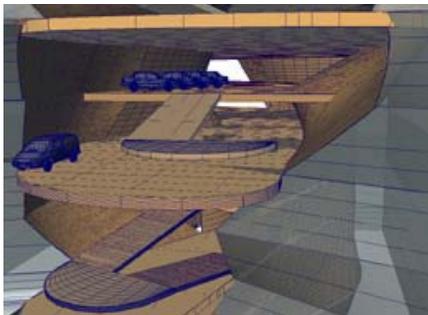
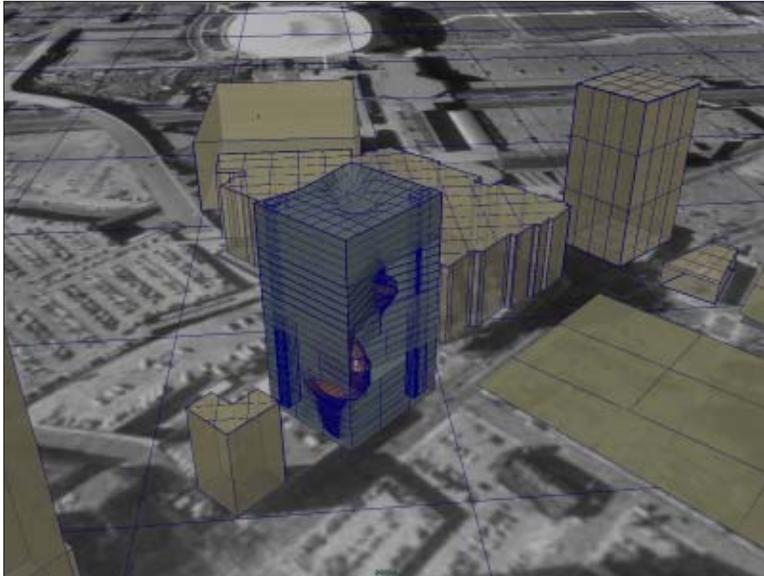


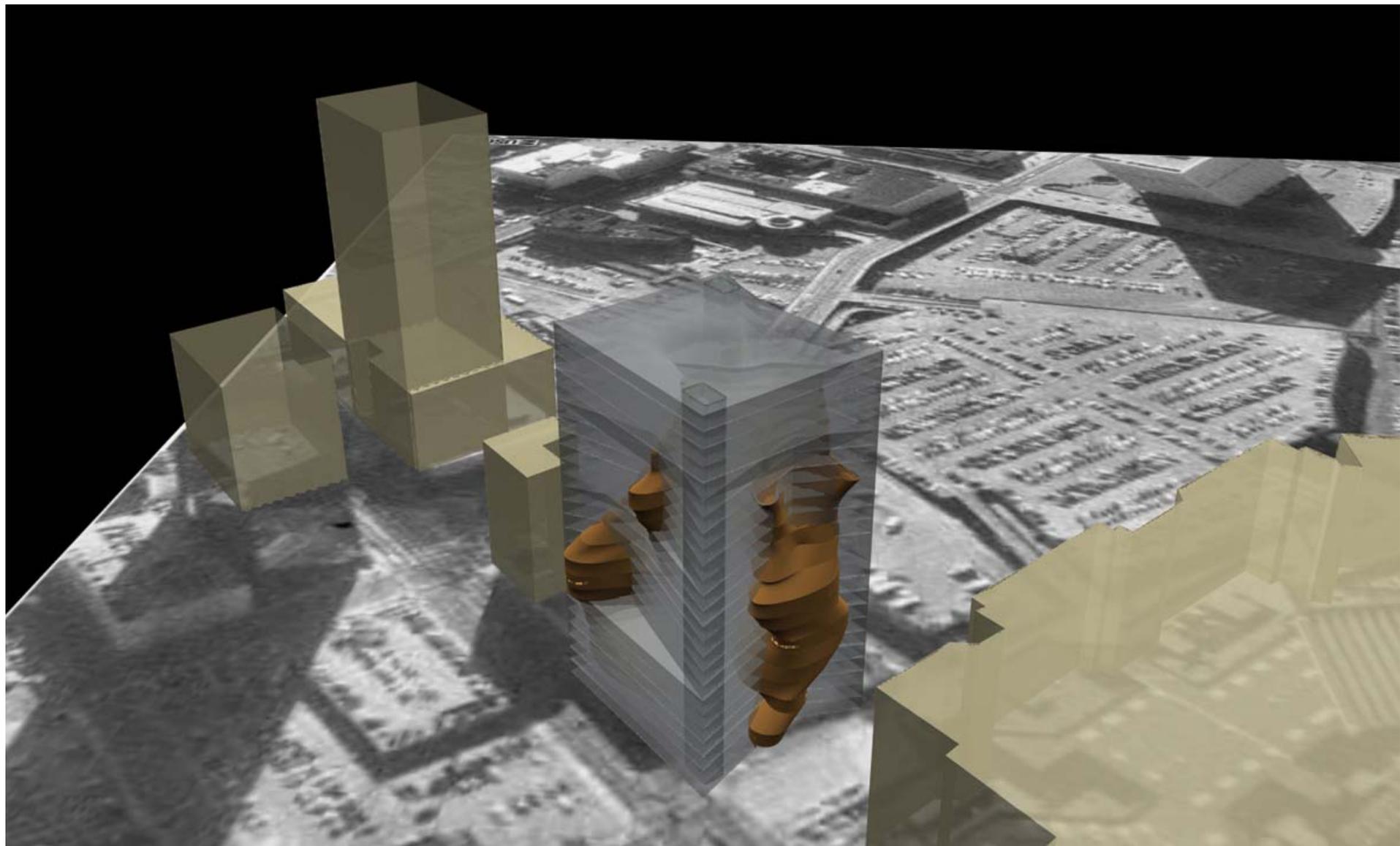
### ***THE PROJECT :***

The program as assigned by CNN consisted of a new office tower and a new Omni Hotel tower. The same strategy is used for both, insert a center atrium into each, and convert it to the parking garage, therefore inverting the atrium itself. As a result, the ensemble will consist of three related, but autonomous buildings, the Omni Hotel tower, the existing CNN Center with its interior atrium/food court, and the new office tower.

# DIAGRAM OF PARKING LAYOUT IN OFFICE TOWER:









**Zip Manifesto, New York, NY**  
Spring 2001- Columbia University  
Critic: Mark Wigley

6

*Architecture is never autonomous*



### ***A ZIP-MANIFESTO FOR MANHATTAN:***

The objective of this project was to develop our own beliefs in architecture in a manifesto format, and then create an architectural design that meets its goals. After the development of the manifesto, we were randomly assigned a zipcode in Manhattan and a “non-polemical” program. My manifesto applauds a world of *non-autonomous architecture*. In any context, there exists several interacting forces that can influence a project. Social, cultural, historical and physical factors can inform architecture and allow it to participate either with or against them. While connections and linkages should be sought with these existing forces, challenges should also be made, but always with a conscious of context. The context has embedded within it several systems to inform a project, but since there are different variables from design to design, the interactions will vary. As a result there must be a nonlinear and non-hierarchal system of connections in each context.



**ACTIVITY**



**USER**



**VARIATION**



**ADAPTABILITY**



**TIME**



**PRESENCE**



**INTEGRATION**



**ECOLOGY**



**PROCESS**

### **Interaction of movement.**

A "conflict" between the movement of people outside the building and the activity in the surrounding urban context will exist and should become part of the design.

### **Architecture is felt.**

Architecture is inhabited in some manner by human participants. Therefore, the design should be conscious of the needs of the direct user and those of the indirect spectators.

### **Architecture should not be fixed.**

Challenge the existing conventions of architecture and realize that its physical existence will evolve over time. Resist the generic, but allow for change.

### **Contextualism is not imitation.**

Contextual design encompasses social, historical, cultural, political as well as physical issues. Be conscious of the context of the design to create linkages between the many systems at work.

### **Use time.**

Time is an active participant, influencing the perception of the design. The design can warp the reality of time.

### **Architecture is not benign.**

Architecture has an effect on its surrounds, and can be either beneficial or detrimental. Be conscious of the power of architecture and its limits.

### **Design from the inside out and the outside in.**

The programmatic instances inside the building will extend outward into the urban fabric. The urban fabric, in turn, will extend inward into the building. Therefore, the building will act as a mediator between these two directions.

*"The house is to be seen as an extension of city events and a momentary pause in the digital transfer of information."*

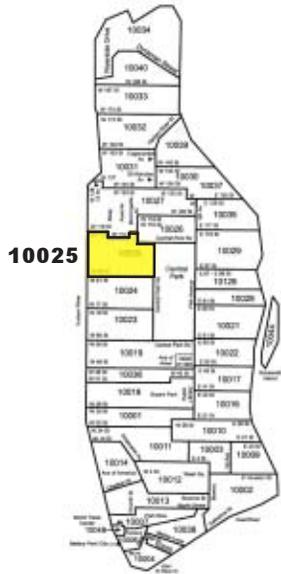
*Bernard Tschumi*

### **Integrate ecology into the museum.**

Ecological considerations should be part of the design. Ecology is part of the design process, not a branch.

### **Emphasize process, not end-product.**

*Process is more important than outcome when the outcome drives the process we will only ever go to where we've already been. If the process drives outcome we may not know where we're going. but we will know we want to be there."*  
*Bruce Mau Design*



### ***THE SITE, ZIPCODE 10025:***

The zipcode assigned to me was 10025, which connects the Upper West Side to Columbia University to Harlem. Within this zipcode, resides at least two different communities, one within the other, *Manhattan Valley*. Ravaged from earlier urban renewal projects, this area of Manhattan can act as an important link between larger, disparate zones of the island.



**Urban Renewal Zones** - - - - -

**Existing Museums** - - - - -

**Commercial Streets** - - - - -

**Public Housing/Bldgs** - - - - -

**MANHATTAN VALLEY** - - - - -



## **ANTI-AUTOMONY**



*“I can think of several more desirable places in the world to build his great museum,” Wright wrote in 1949 to Arthur Holden, but we will have to try New York.”*

## **A BUSSTOP | MUSEUM:**

The program, an art museum, is something that is not scarce in New York. However, what is scarce, is a museum that embraces the city in which it is situated. Most art museums are inherently autonomous, escapes from reality, like the Guggenheim designed by Frank Lloyd Wright. With the manifesto for non-autonomous architecture, this museum must be extroverted and a link to the many systems at work within its context. As a result, the idea here in this project is to link the art museum with an existing infrastructure, the bus system. The art museum would be then decentralized within the zipcode, attached to various busstops as desired. Consequently, the museum would be part of an existing network, while also creating its own, recognizable system.

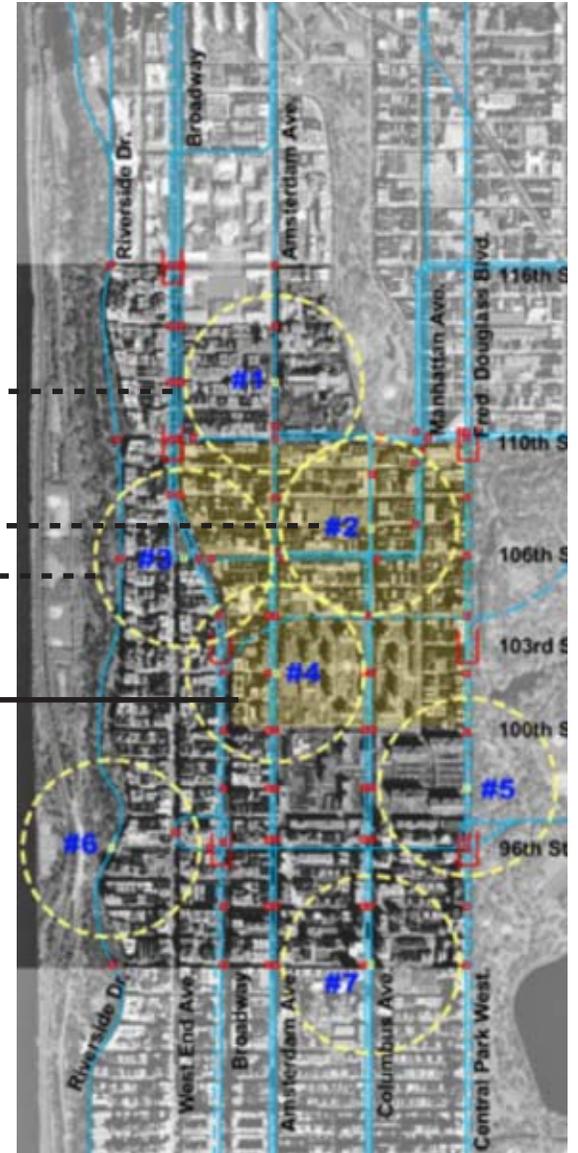


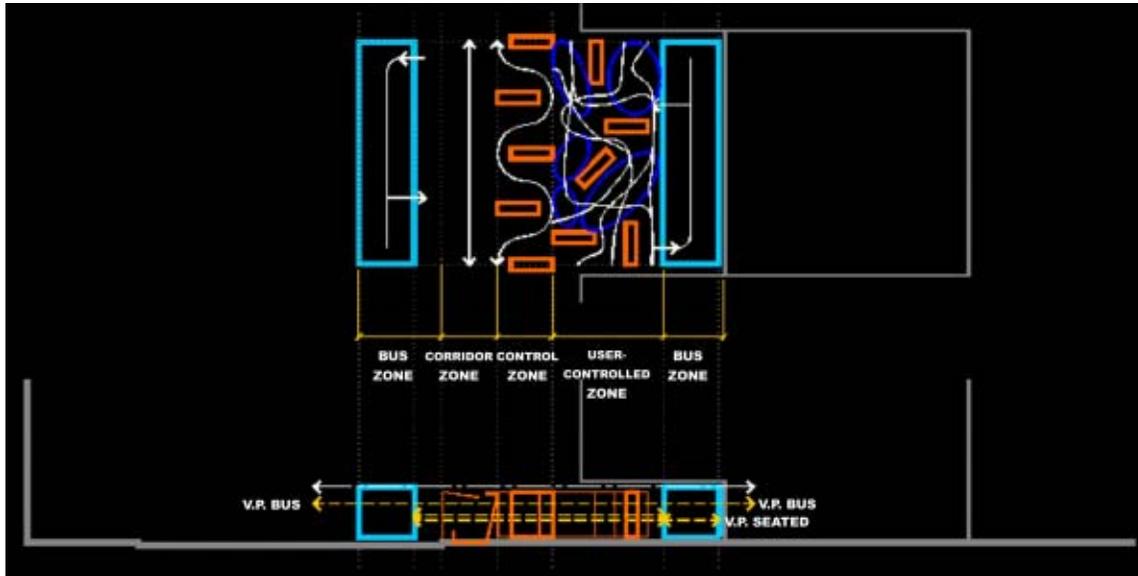
**Bus Route + Stops** - - - - -

**Final Project Location** - - - - -

**Busstop/Museum Node** - - - - -

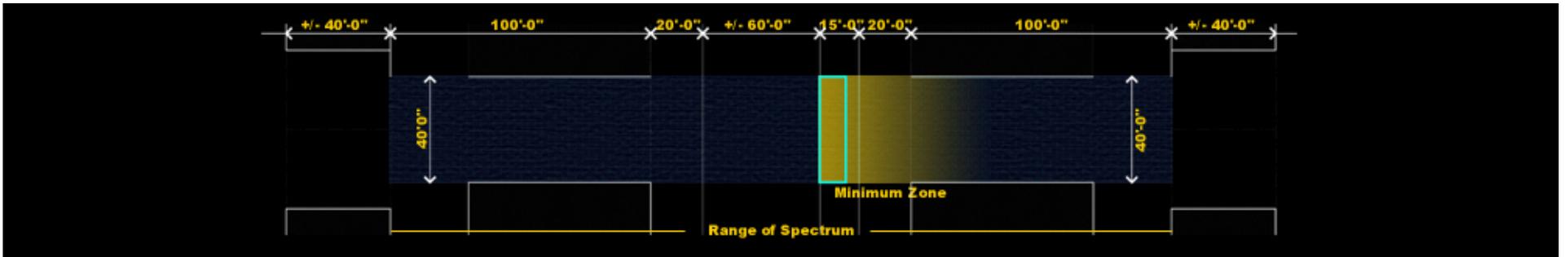
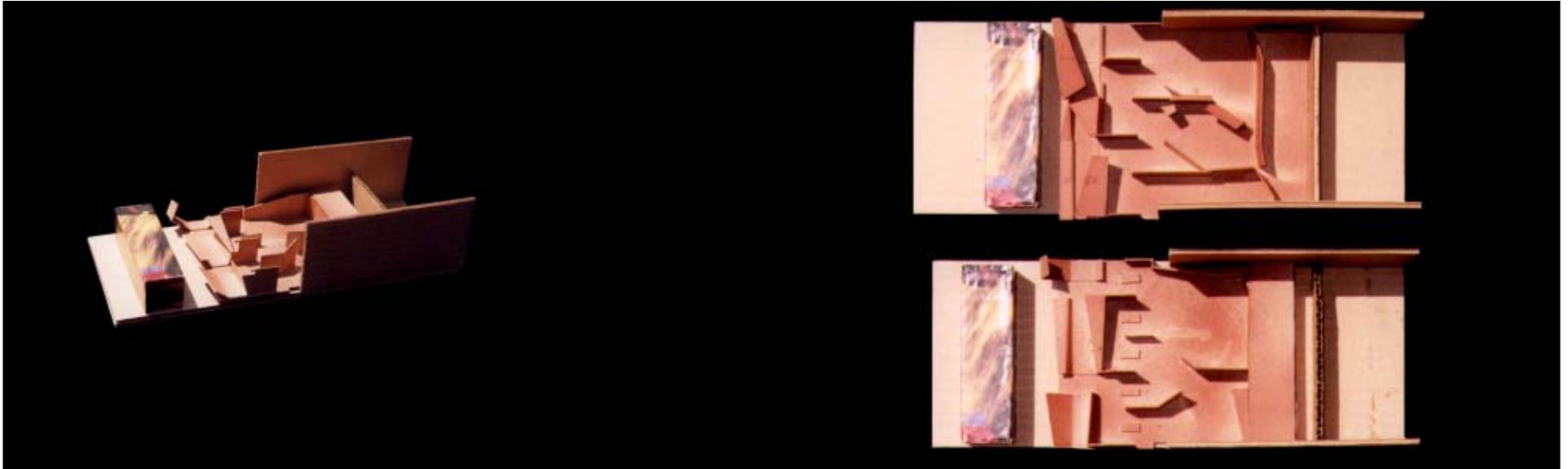
**MANHATTAN VALLEY** —————



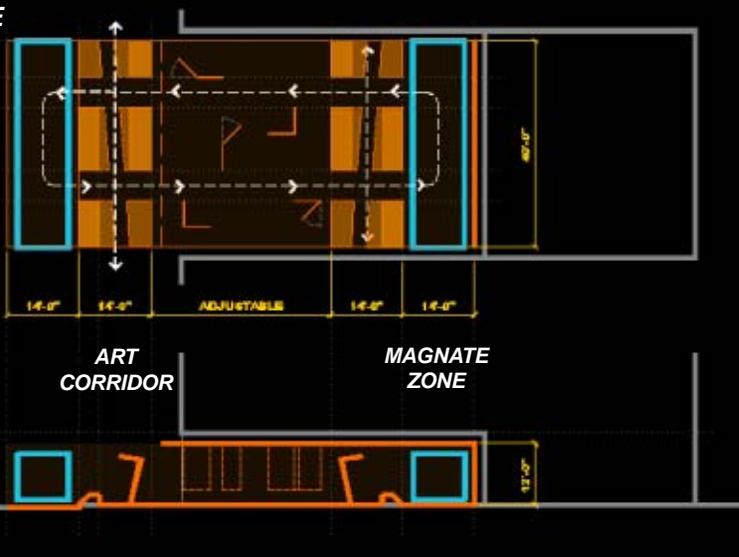


### ***PRELIMINARY PROTOTYPES:***

Several studies were made to develop a prototype design for the art museum / busstop. In order to create a design that was always anti-autonomous, every attempt was made to bring the element of the street into the interior of the city block. The dimension of the city bus was used as a standard width for the prototype, and its extent into the block would depend on local context. Particular attention was paid to the method of circulation through the museum and how this can effect one's perception of the art. Different levels of user control were studied.



## FINAL PROTOTYPE



### **ART CORRIDOR and MAGNATE ZONE:**

Adjacent to the bus in the prototype is a “art corridor” where the museum takes on the linear movement of people along the sidewalk. The art corridor allows both the movement of people as well as a waiting area for the bus. The walls of the corridor are lined with art above the seating, so as to create a confusion as to whether the art, or the people seated are on display. In the final prototype, this element is repeated in the rear of the zone, adjacent to a “magnate zone” which acts as an interior element in the back. The magnate zone contains community-related programs that will act to lure people through the art from the street.

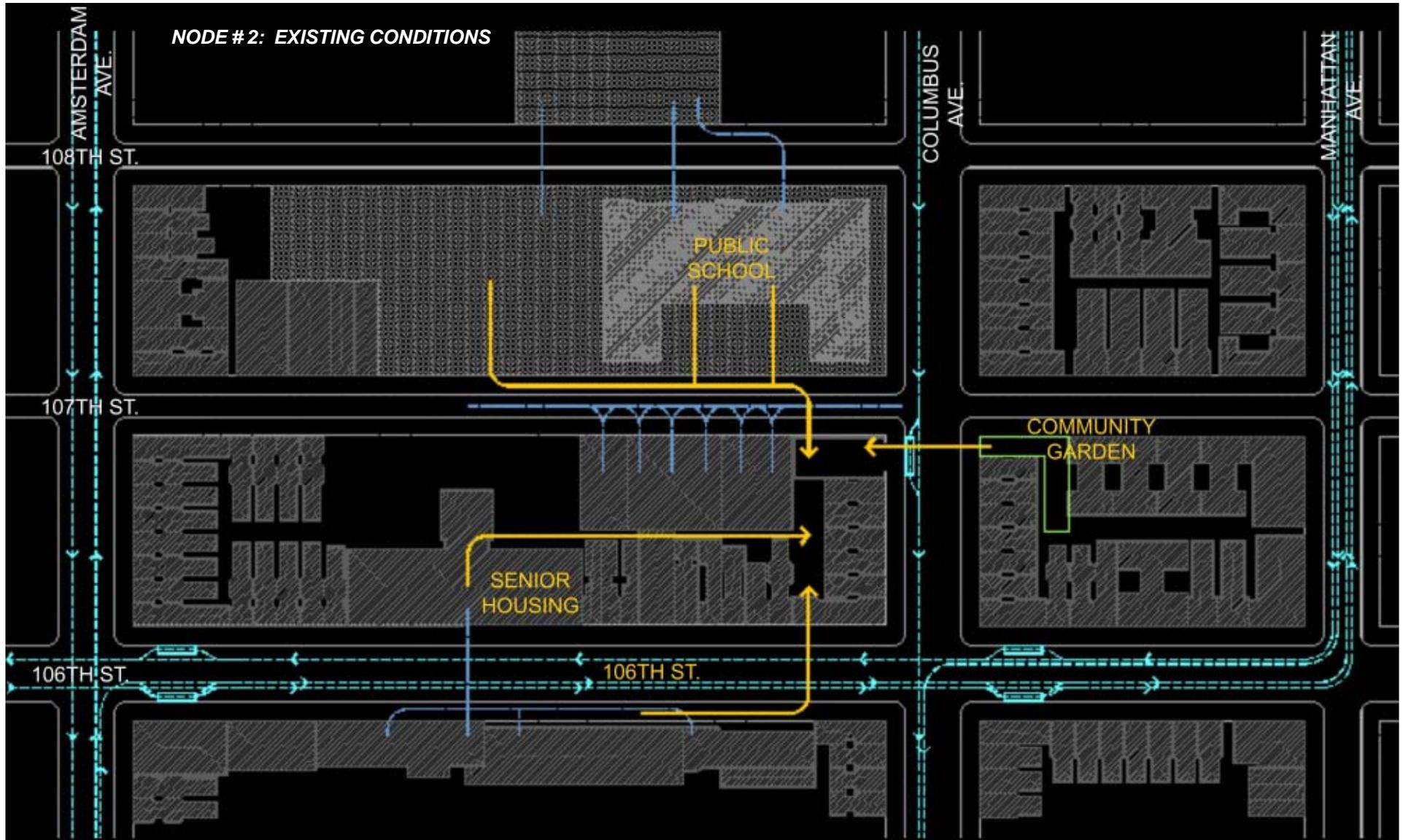
**UNDER EXISTING  
BUILDING**

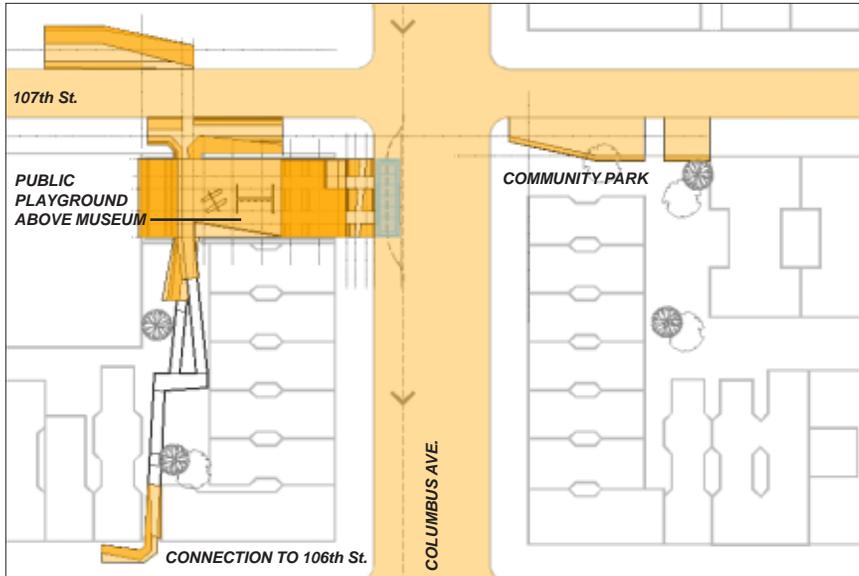
**IN FRONT OF  
EXISTING BUILDING**

**IN AN EMPTY LOT**



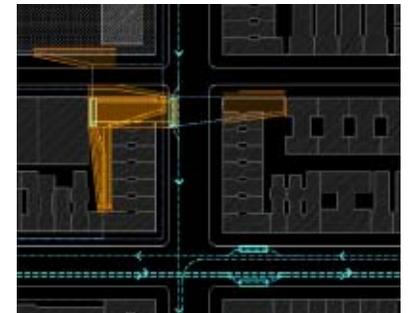
**NODE #2: EXISTING CONDITIONS**

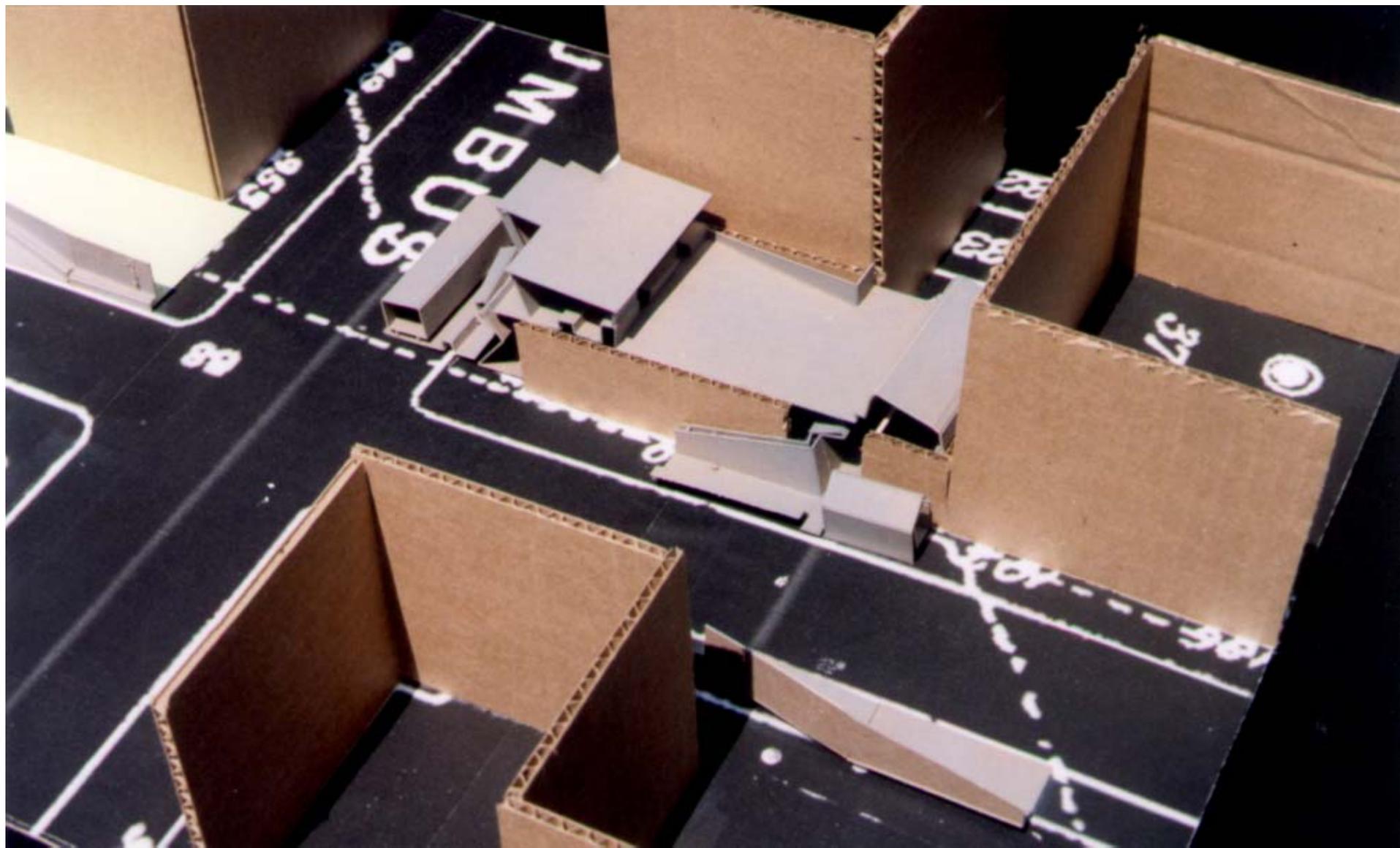


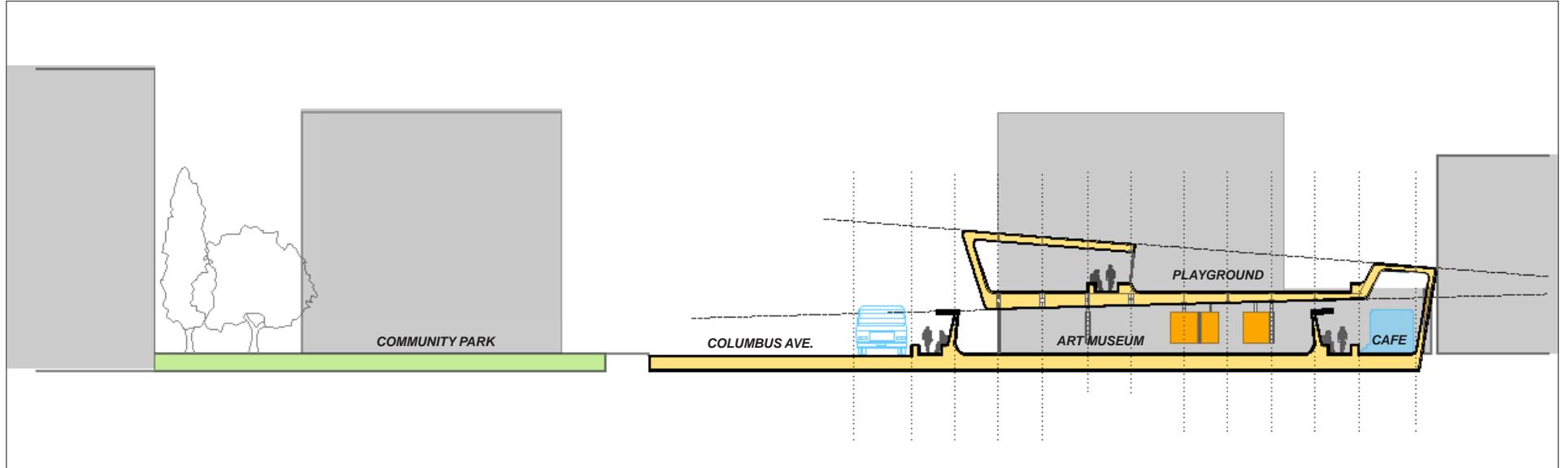


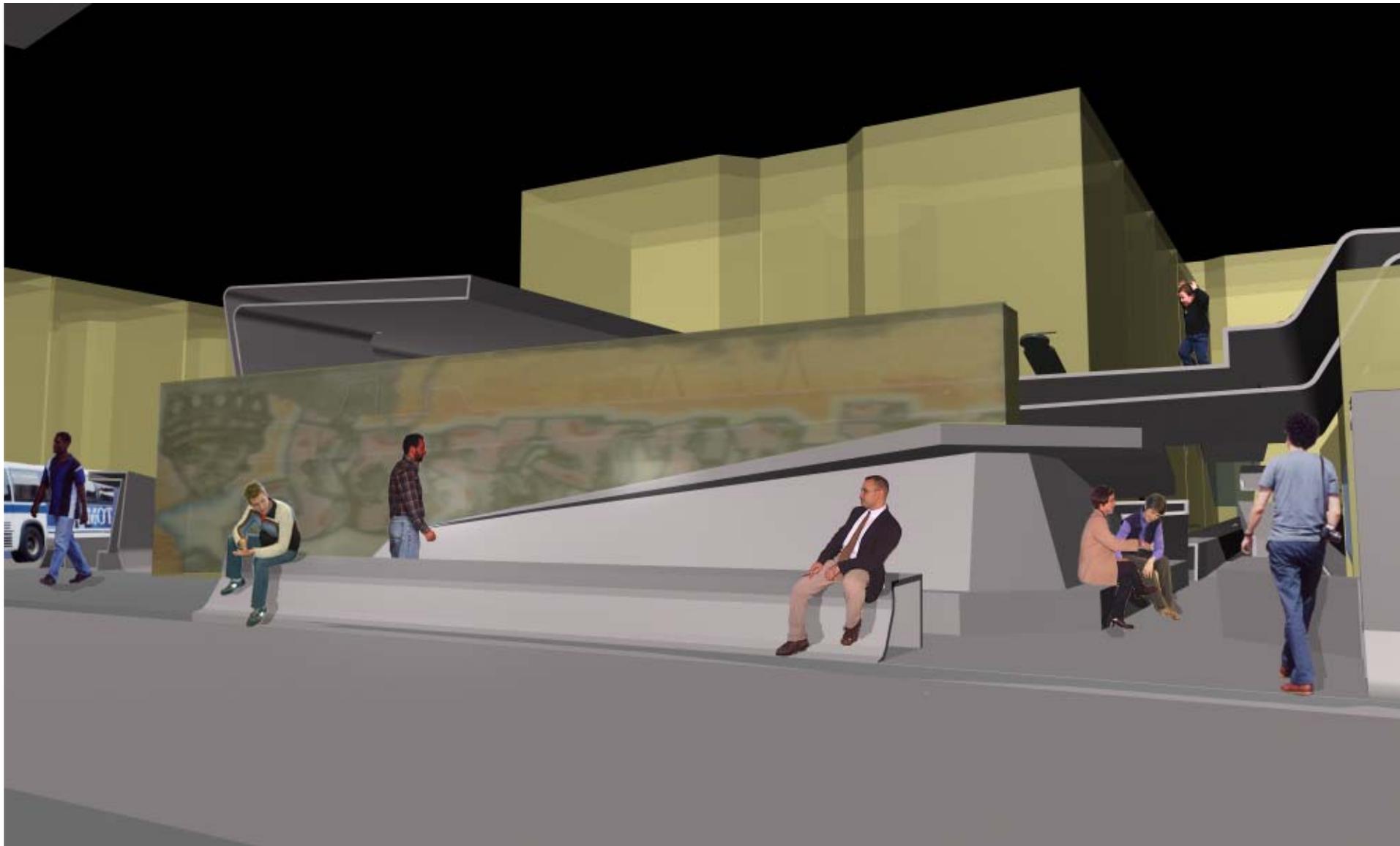
### **FINAL PROJECT:**

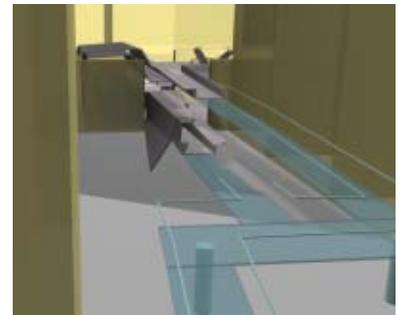
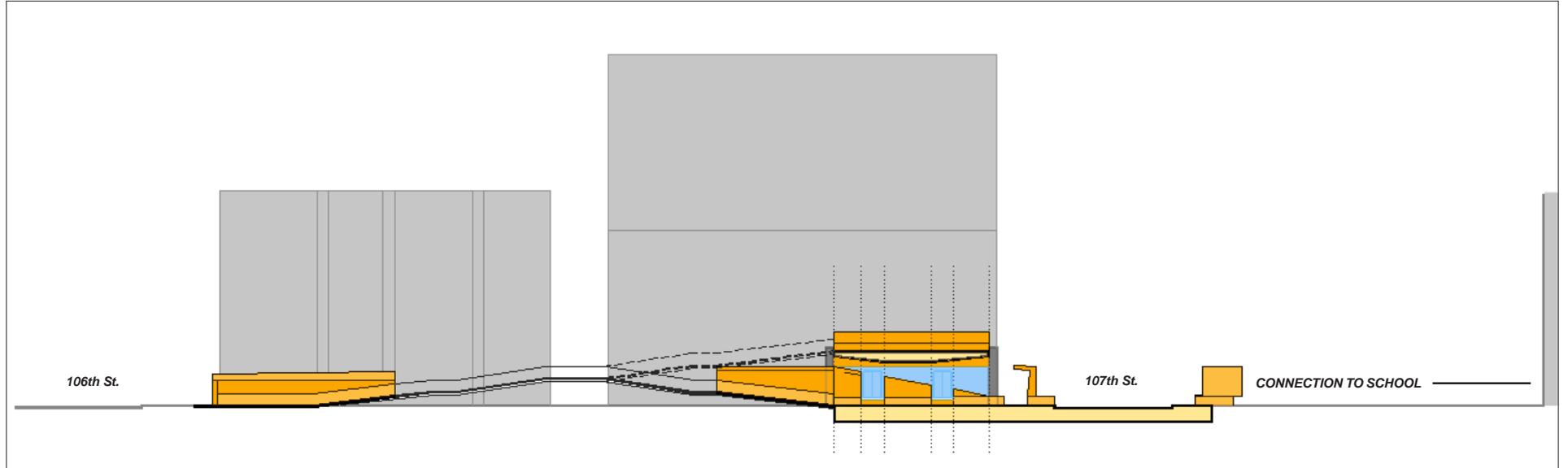
After the prototype studies were made, one of the initial museum nodes in the zipcode was picked for further development. Here, the connections from the community park, the public school, and the crosstown corridor of 106th St. morphed the form of the prototype design. The final design acts as a single, folding surface that is the street surface extending itself into the block. As a result, the public nature of the street is always present in the museum design. Since this site was empty, the prototype was able to extend upwards to a second level, and this was used to contain a community playground as well as viewpoints for the oncoming buses.

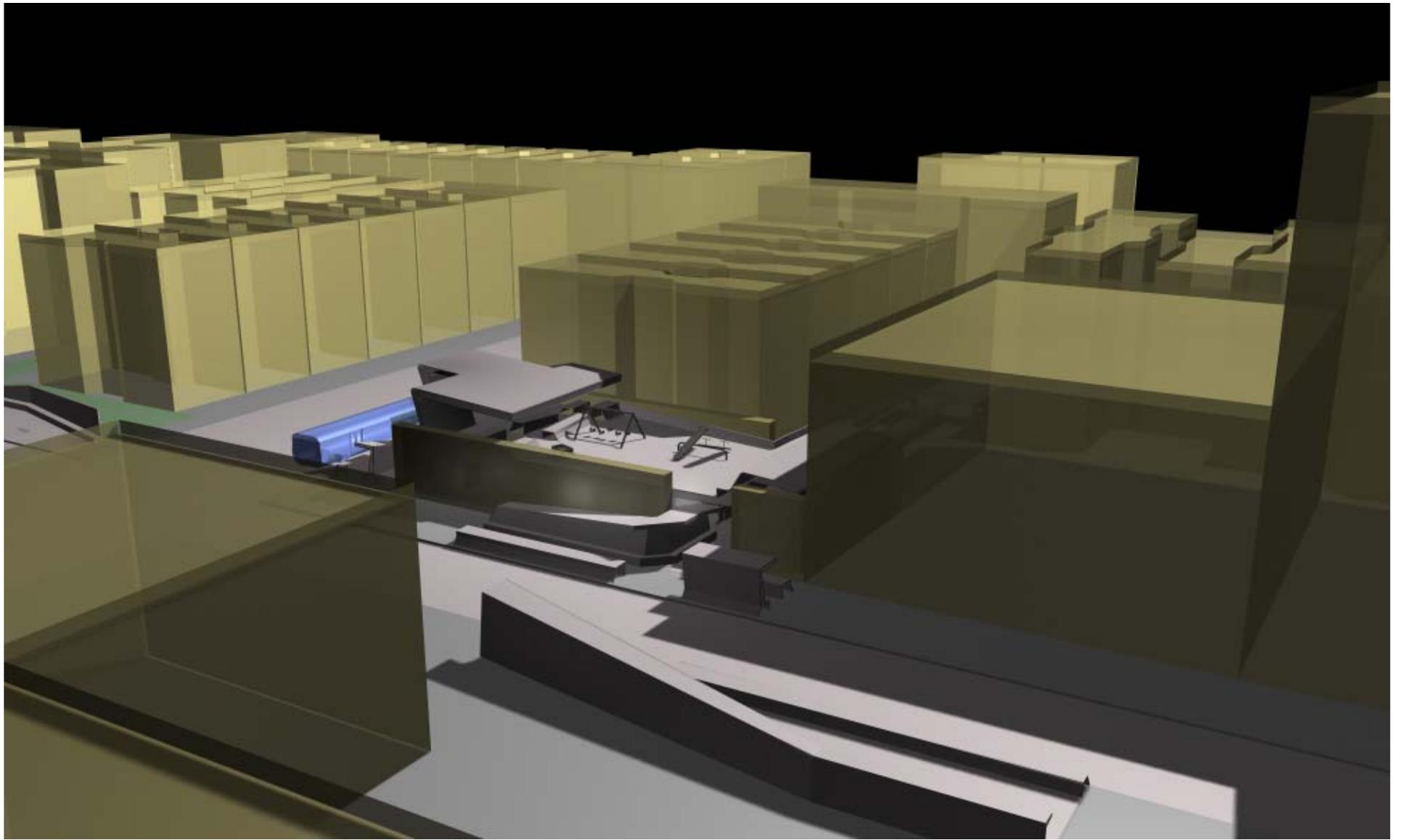


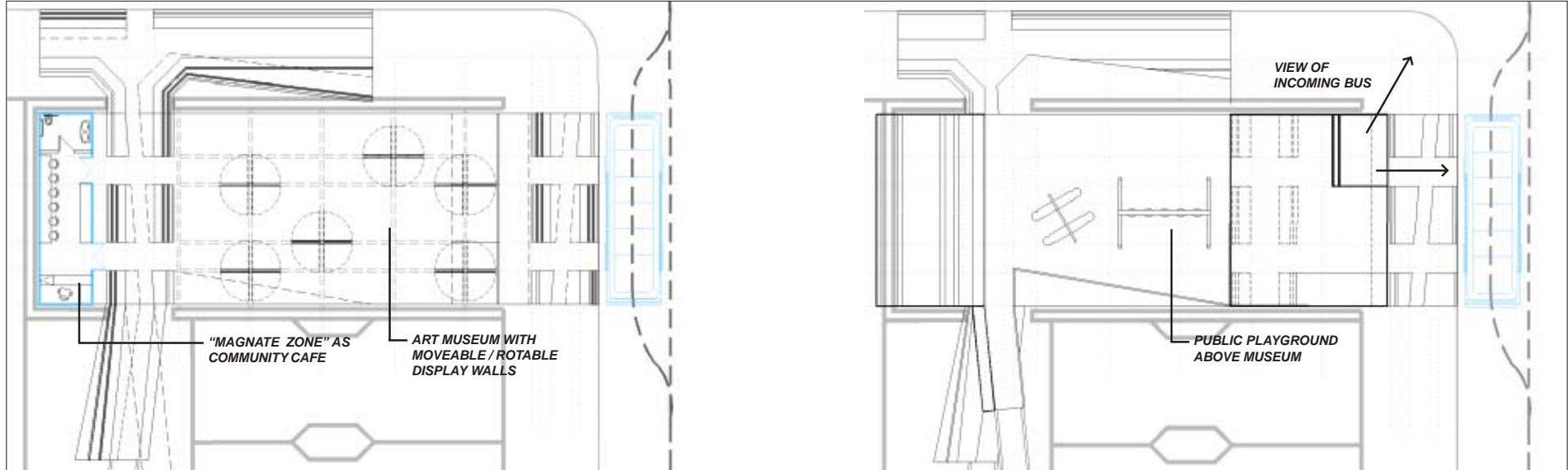
















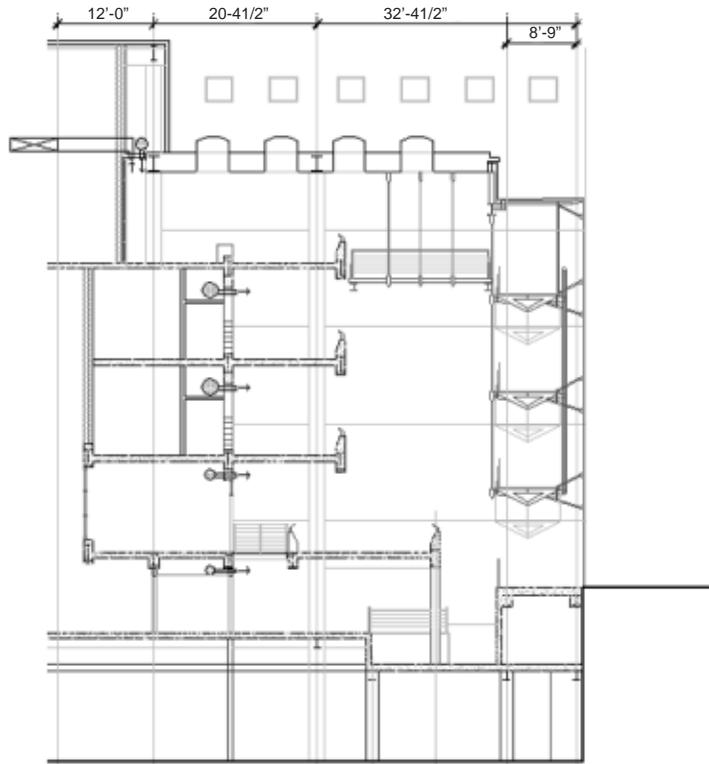
***Building Systems I***

*An Analysis of Lerner Hall; Architect, Bernard Tschumi*

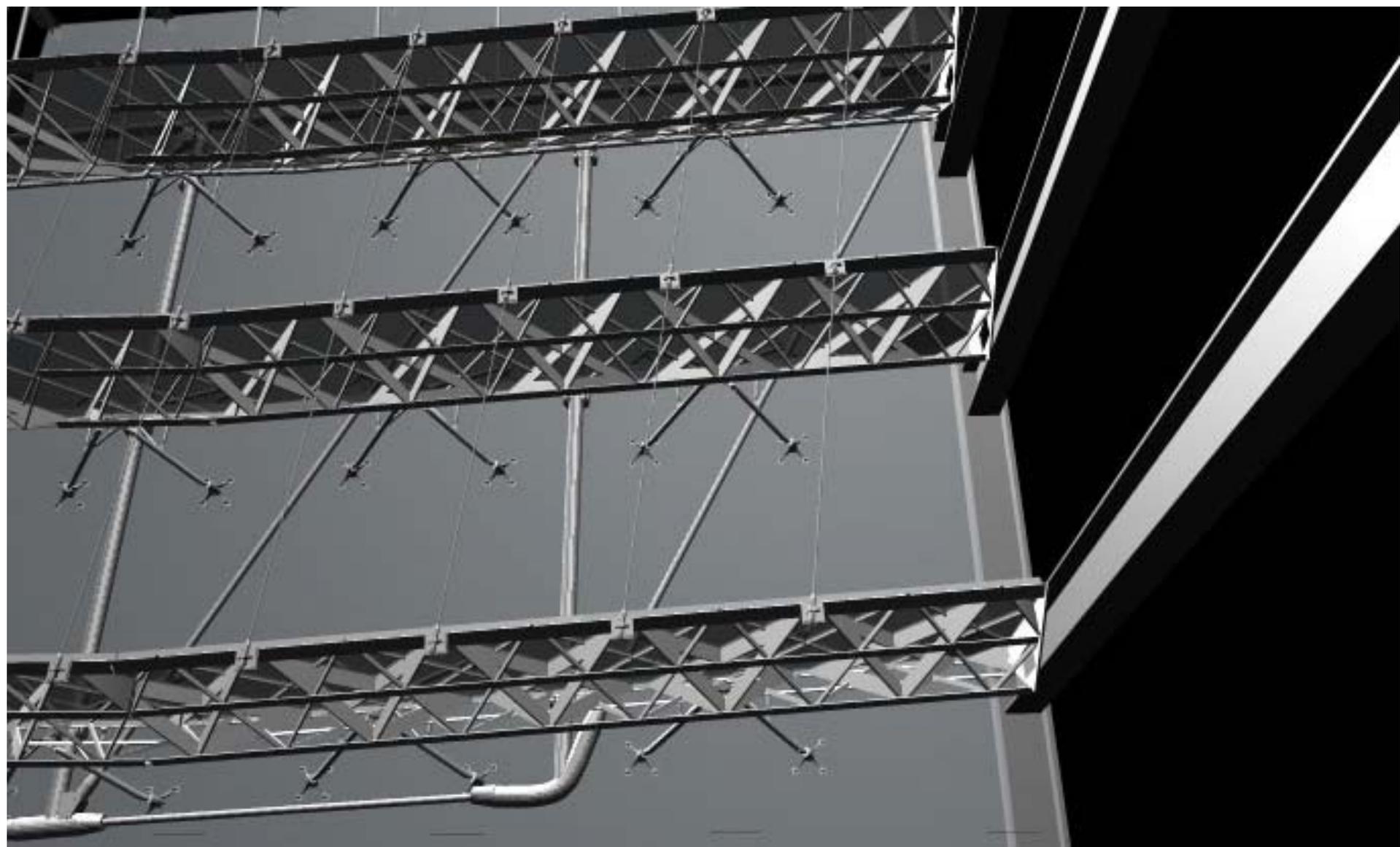
Critic: Jay Hibbs

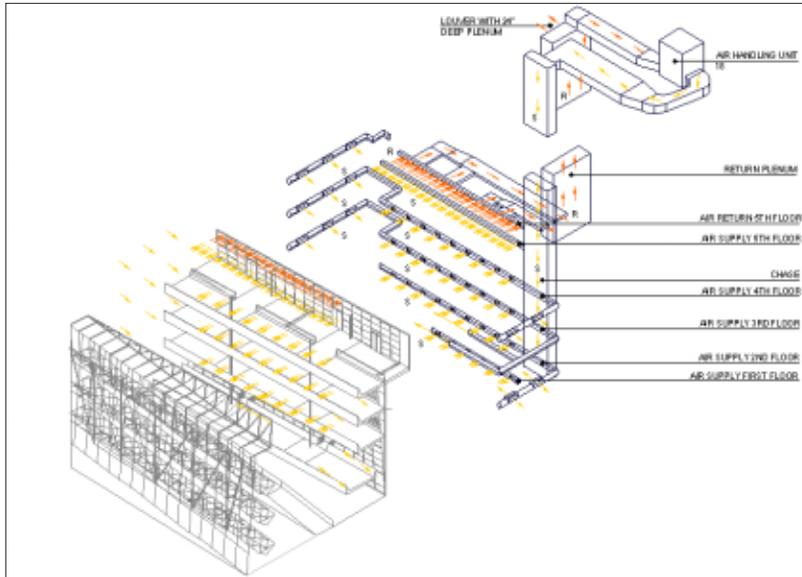
Group: Jennifer Morlock and Elisa Orlanski

***A Building Analysis***

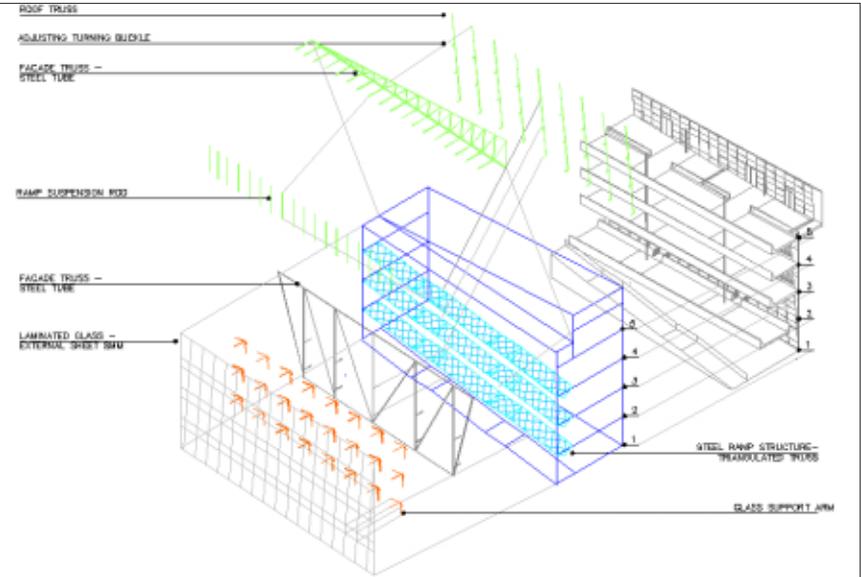


**CROSS SECTION THROUGH LOBBY**

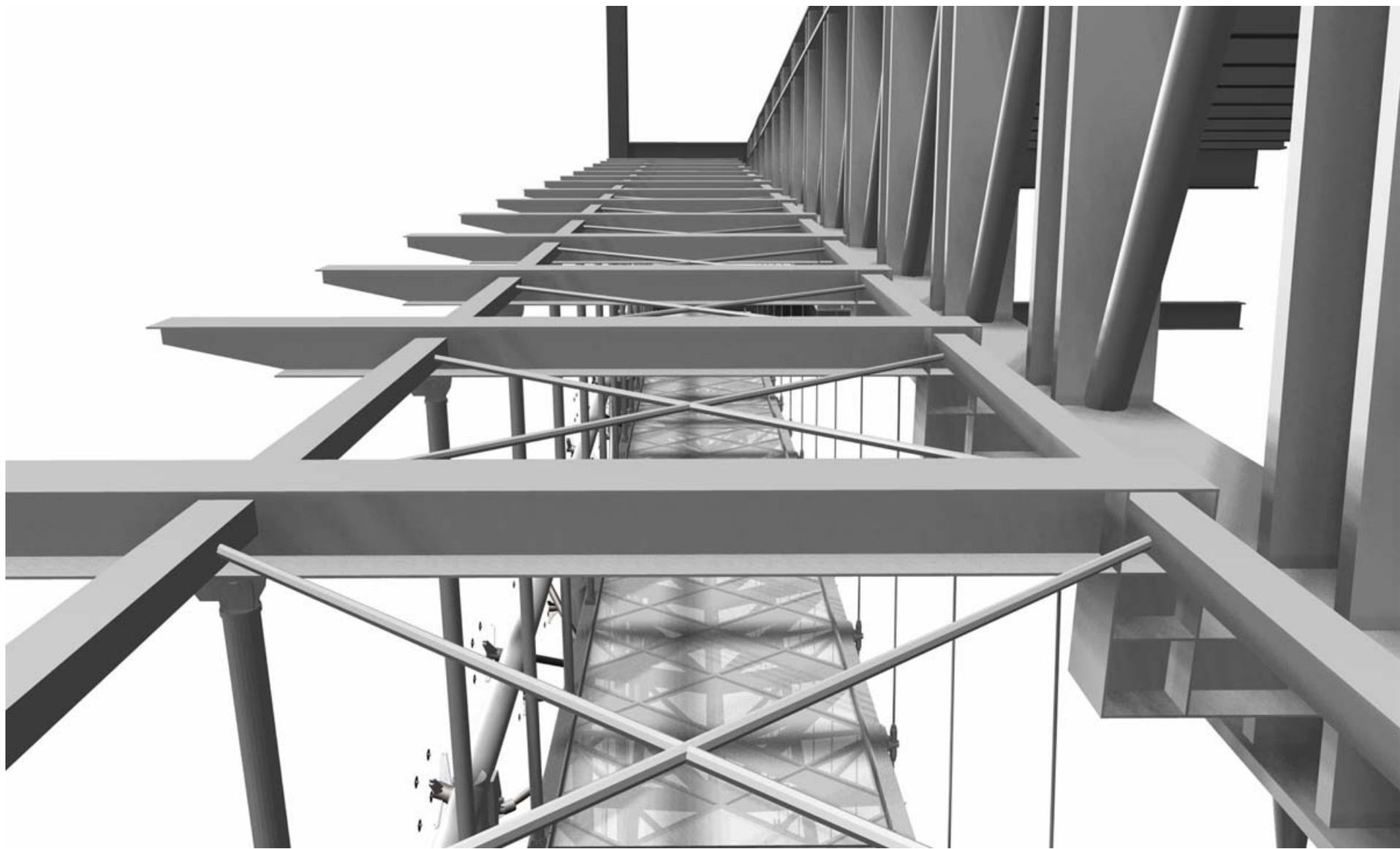


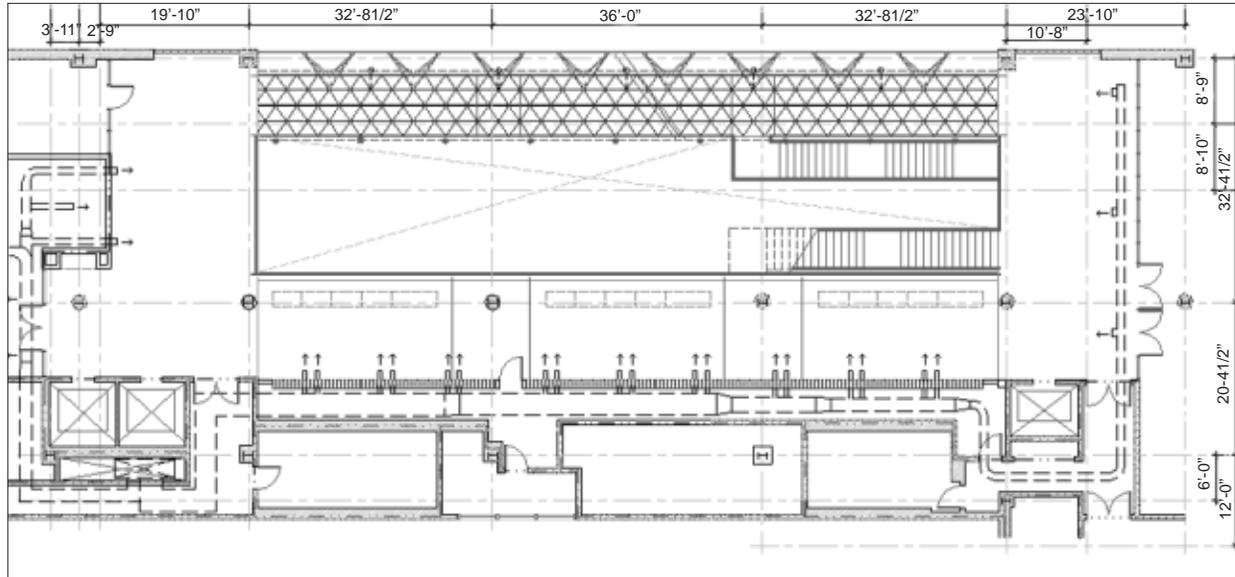


**AXONOMETRIC OF MECHANICAL SYSTEM**

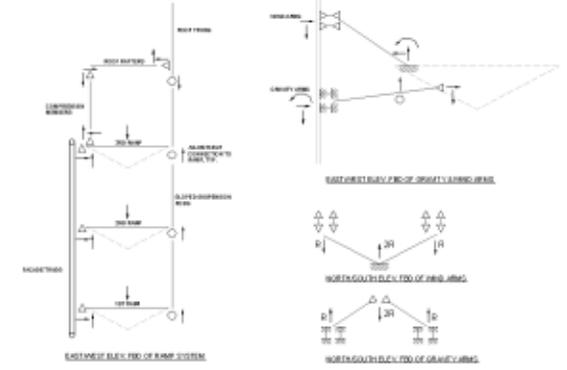


**AXONOMETRIC OF STRUCTURAL SYSTEM**

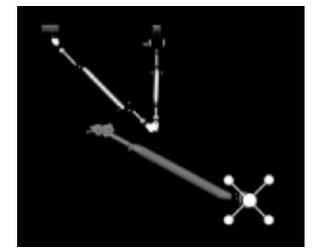
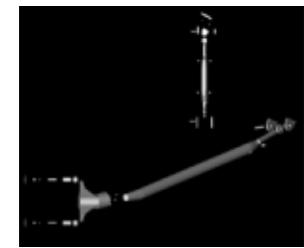
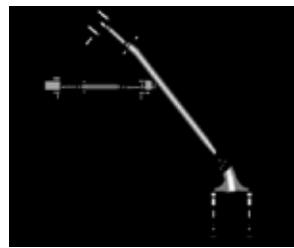


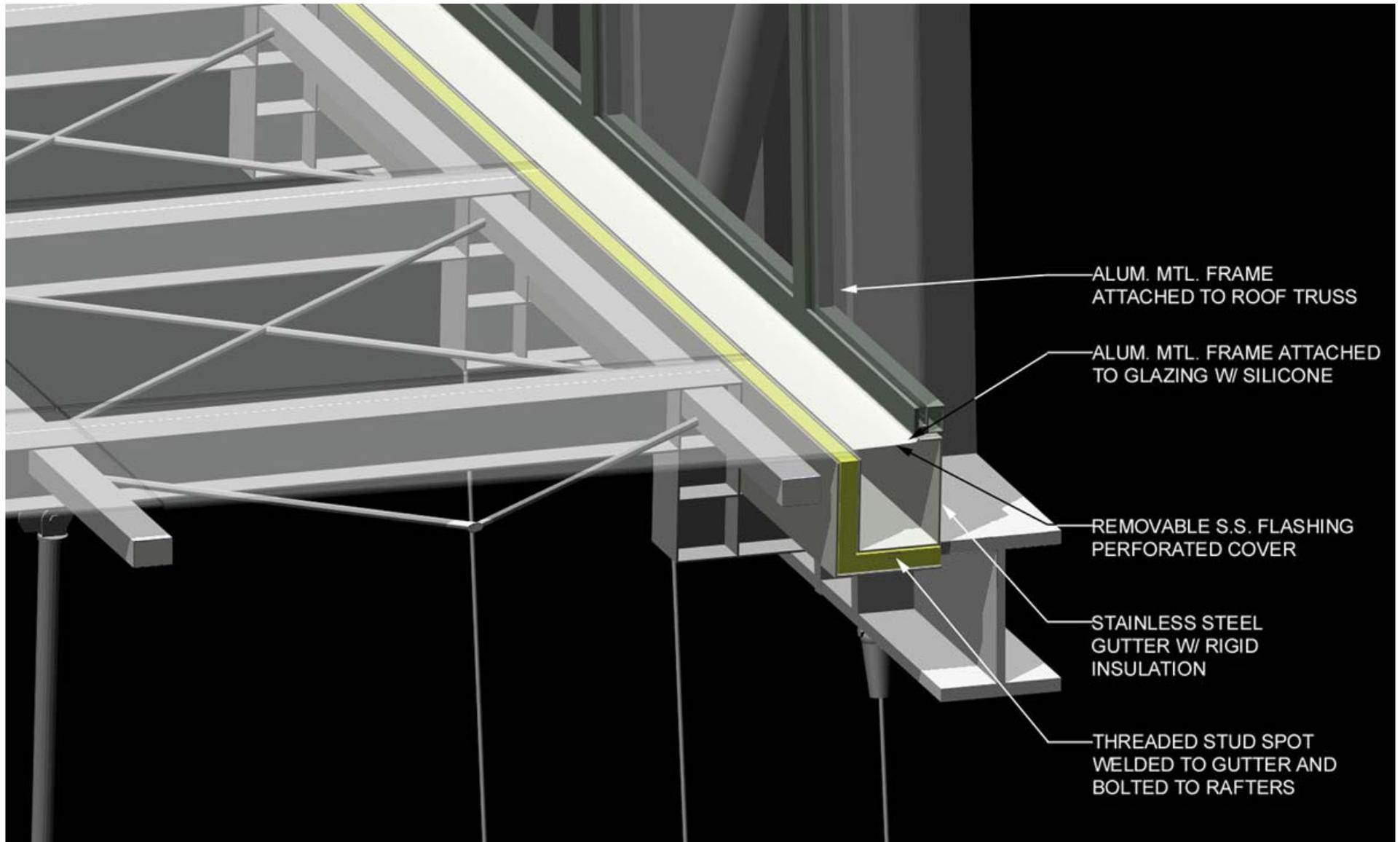


**THIRD FLOOR PLAN OF LOBBY ZONE**



**FREEBODY DIAGRAMS OF RAMP STRUCTURE**





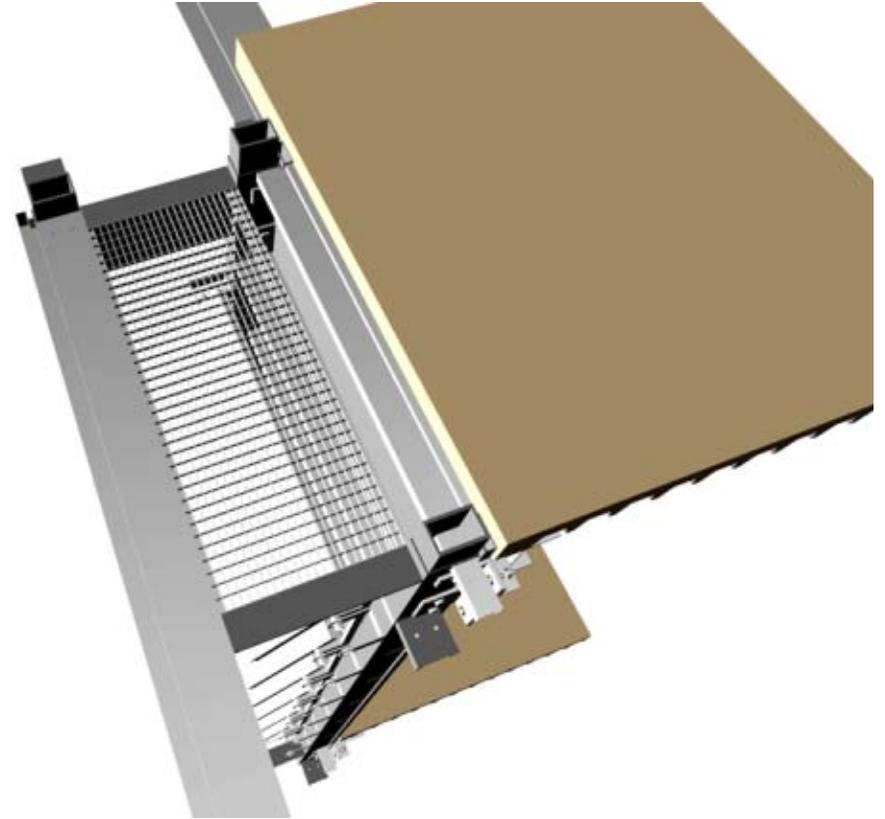
ALUM. MTL. FRAME  
ATTACHED TO ROOF TRUSS

ALUM. MTL. FRAME ATTACHED  
TO GLAZING W/ SILICONE

REMOVABLE S.S. FLASHING  
PERFORATED COVER

STAINLESS STEEL  
GUTTER W/ RIGID  
INSULATION

THREADED STUD SPOT  
WELDED TO GUTTER AND  
BOLTED TO RAFTERS



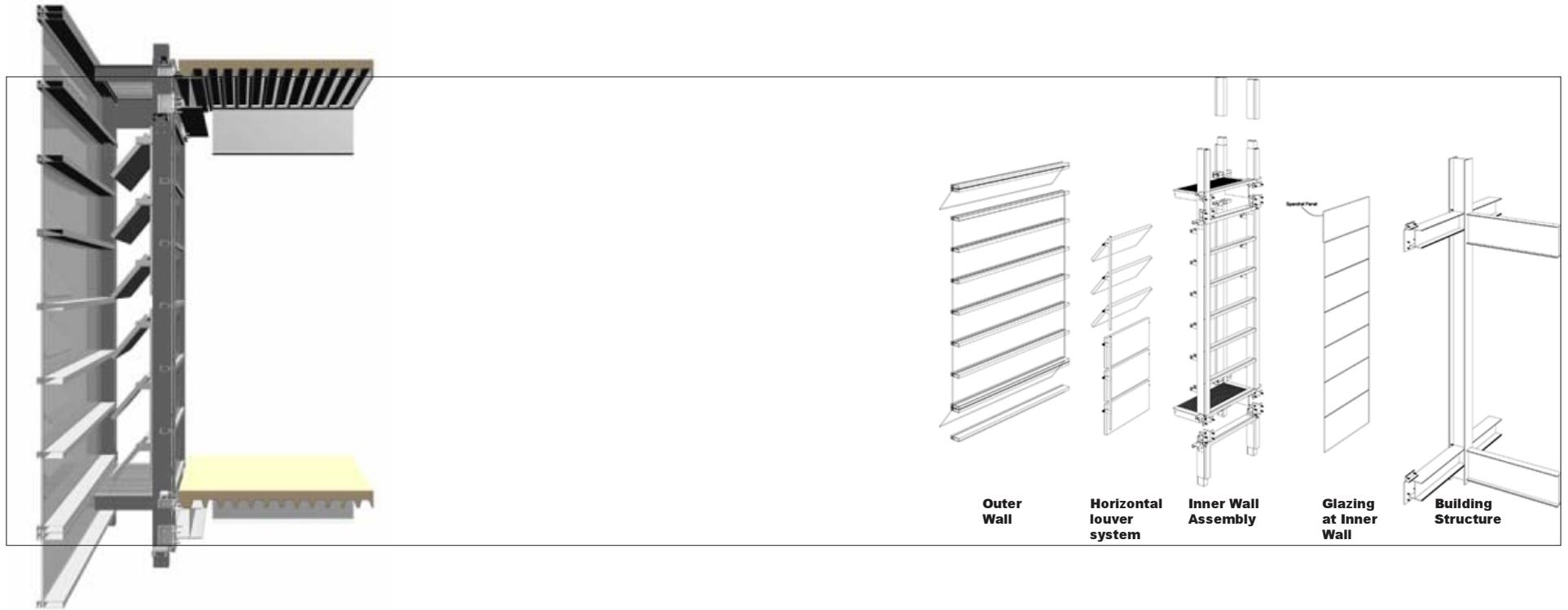
## **Building Systems II**

Fall 2000 - Columbia University

Critics: Jay Hibbs, David Wallance

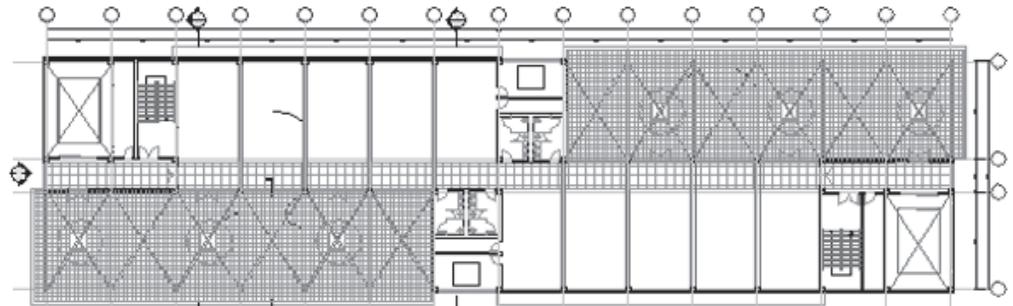
*Jamie Chan, Keiko Mano, Jennifer Morlock, Elisa Orlanski*

***An Industrial Loft Building***

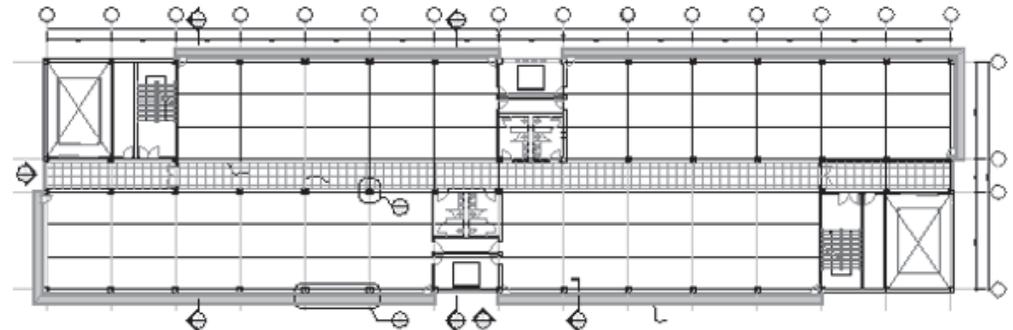


### ***AN INDUSTRIAL LOFT BUILDING:***

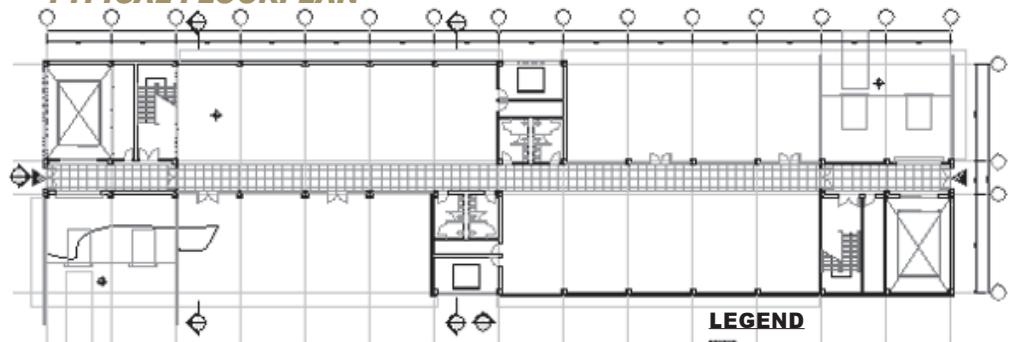
The project was to design a simple industrial loft building with a concentration on the design of the exterior curtain wall. We chose to design a double wall system in order to exploit its thermal properties. The objective was to allow the double wall cavity to heat the building in the colder winter months and to allow ventilation in the summer months through the stack effect that would push air up through the cavity. A set of thermally insulated horizontal louvers inside the cavity allow shading when needed and create an interesting variation on the exterior facade.



**SEVENTH FLOORPLAN**



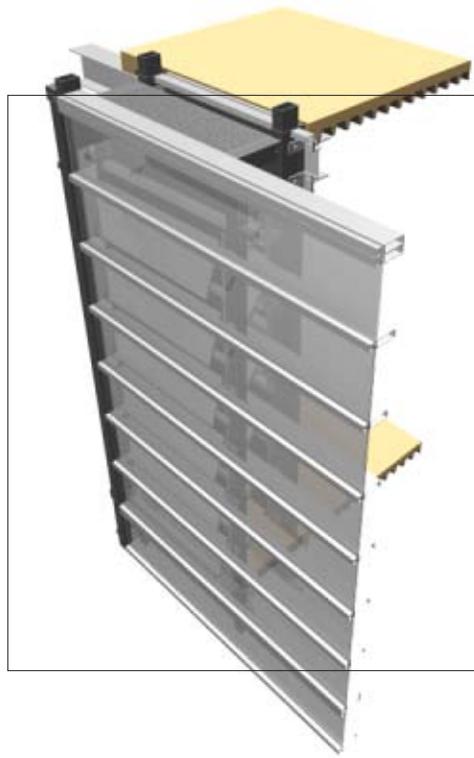
**TYPICAL FLOORPLAN**

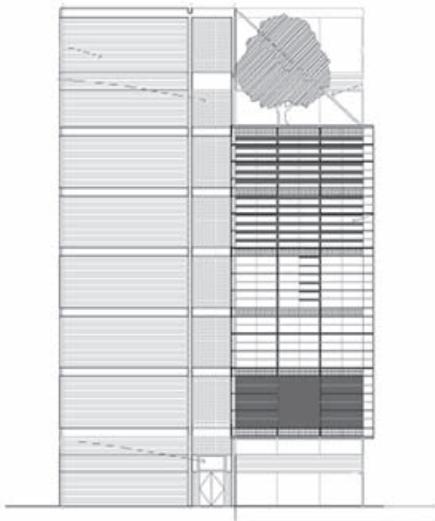


**GROUND FLOORPLAN**

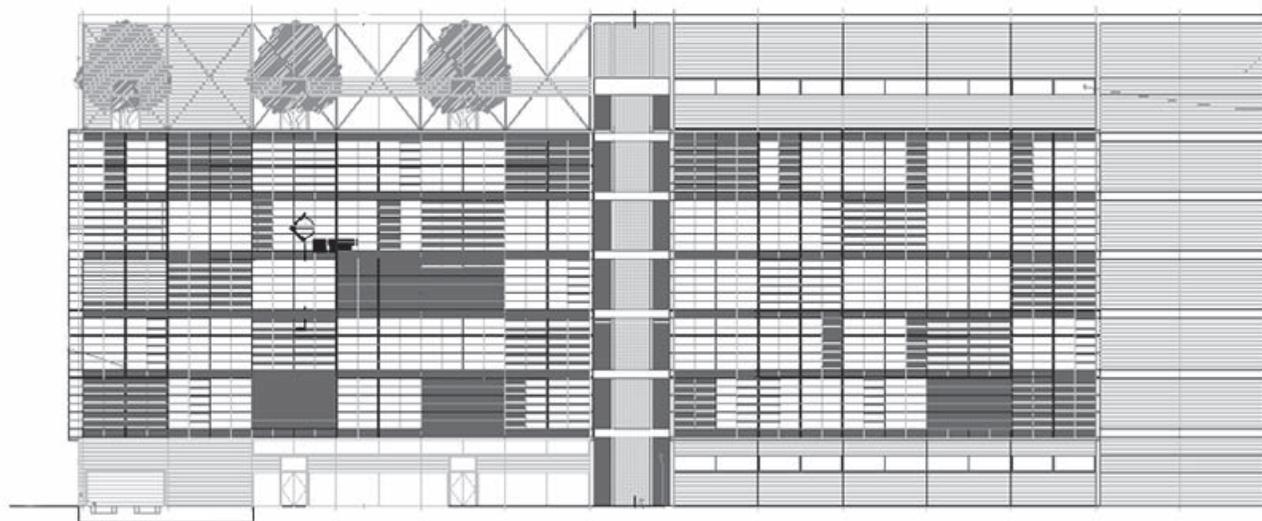
**LEGEND**

-  Concrete decking pavers
-  Concrete interior corridor





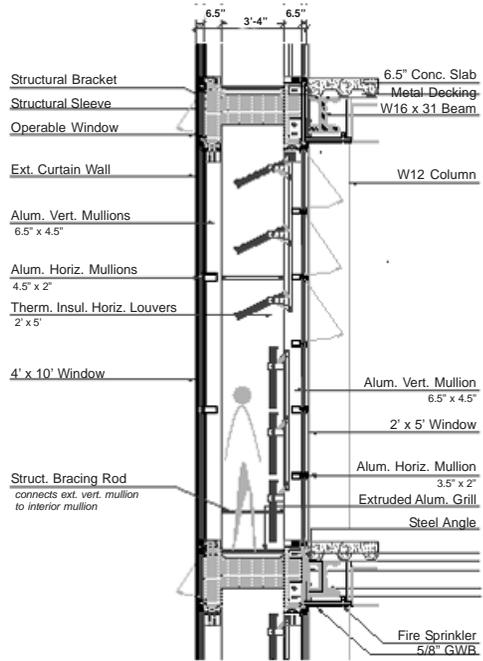
**WEST ELEVATION**



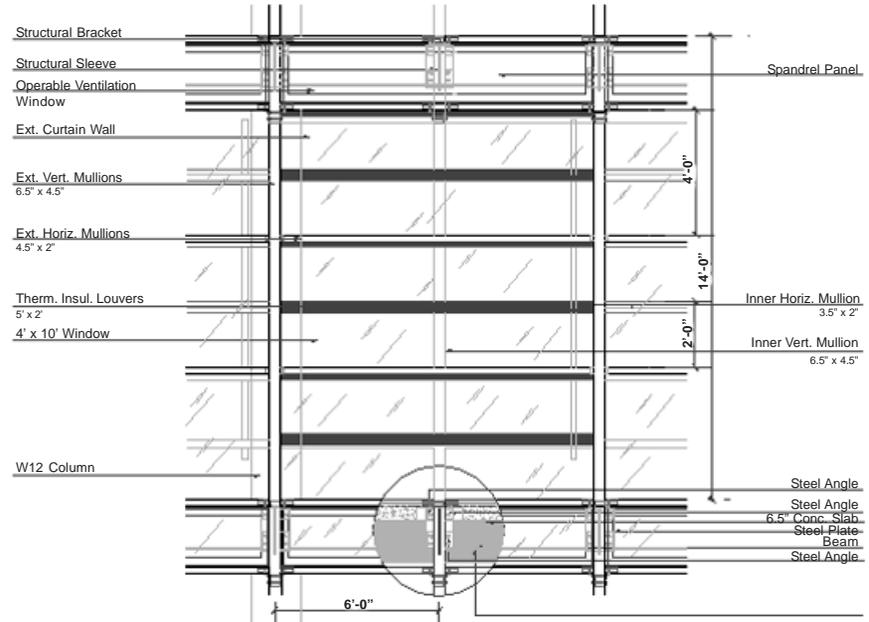
**SOUTH ELEVATION**

- +216'-0" Top of roof
- +188'-0" 7th Flr./Terrace
- +174'-0" 6th Flr.
- +160'-0" 5th Flr.
- +146'-0" 4th Flr.
- +132'-0" 3rd Flr.
- +118'-0" 2nd Flr.
- +100'-0" 1st Flr.
- +86'-0" Loading Dock

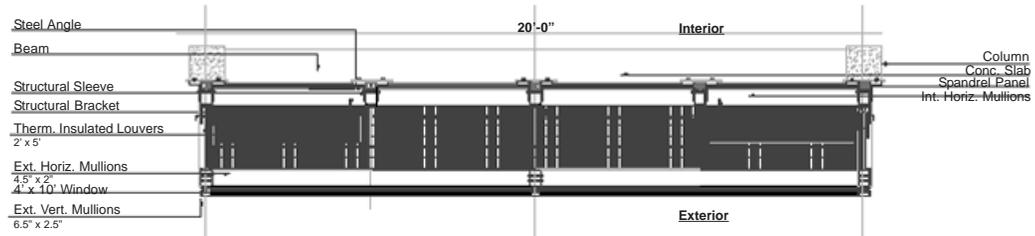




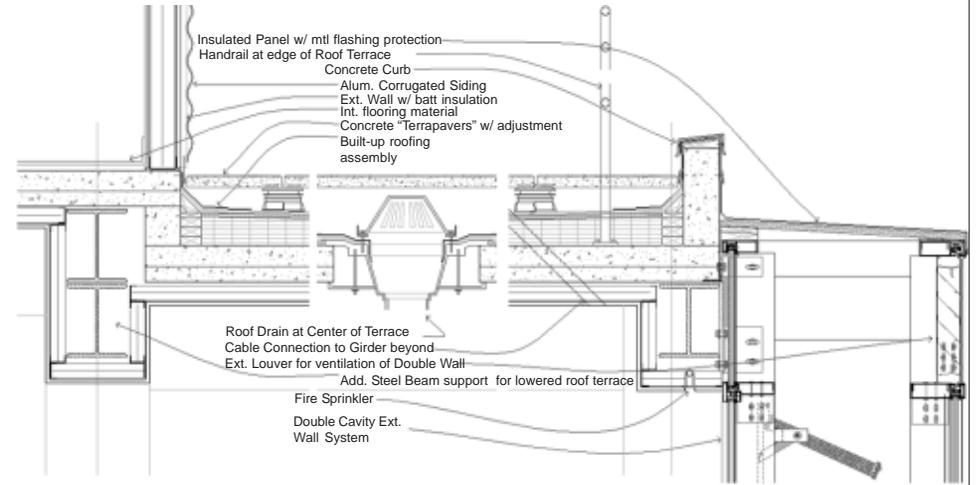
**TYP. NORTH/SOUTH SECTION**



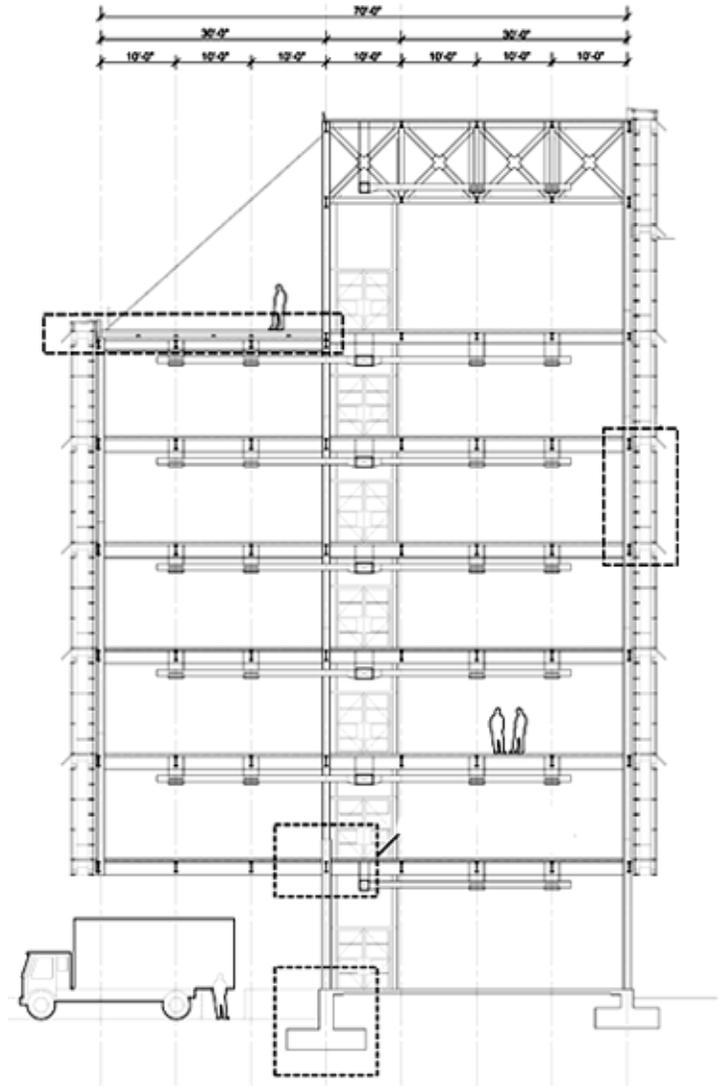
**TYP. NORTH/SOUTH BAY ELEVATION**



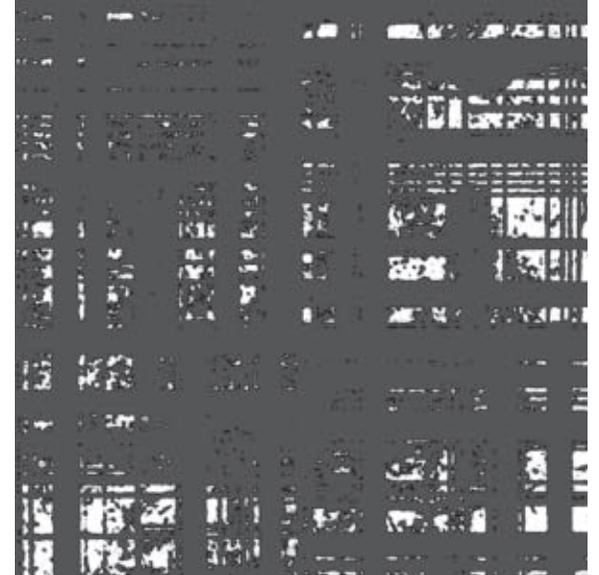
**TYP. NORTH/SOUTH BAY PLAN**



**ROOF DETAIL AT TERRACE**

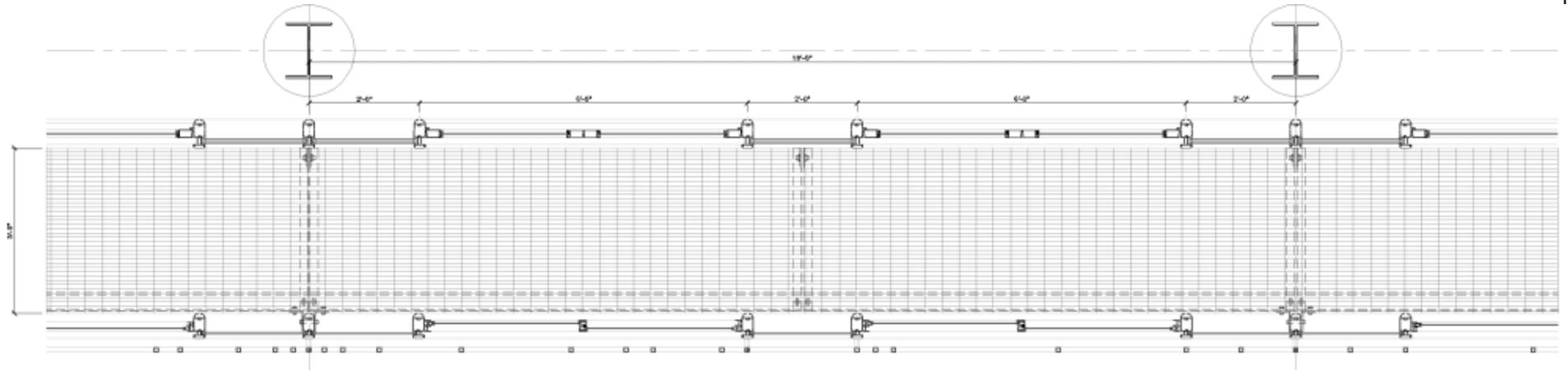


**TYPICAL CROSS SECTION**



**Advanced Curtain Walls**  
Spring 2001- Columbia University  
Critic: Robert Heintges

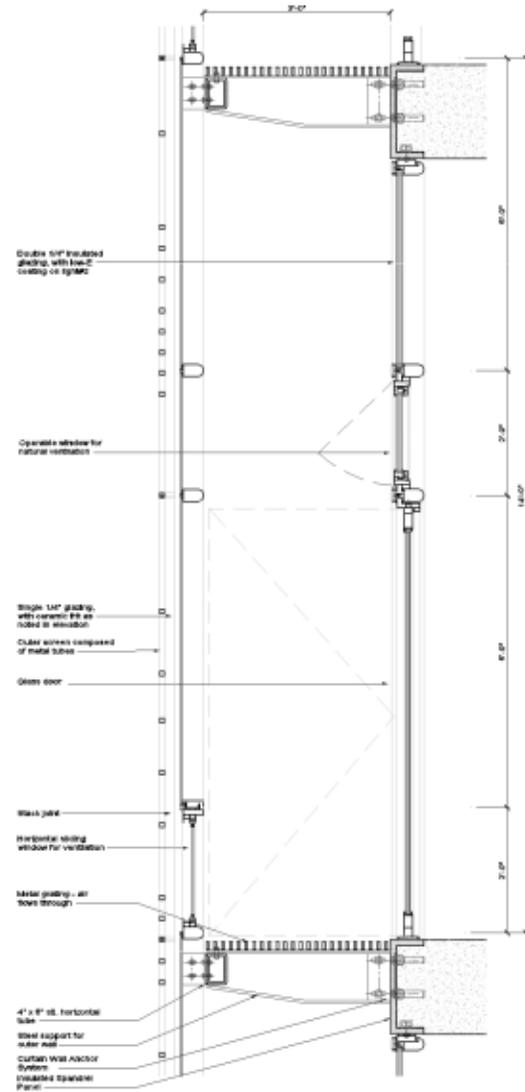
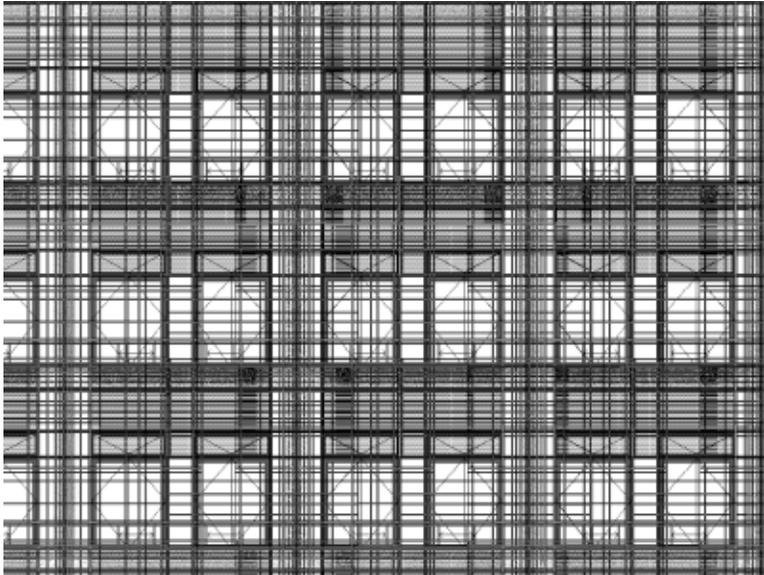
***Curtain Wall Excursions***



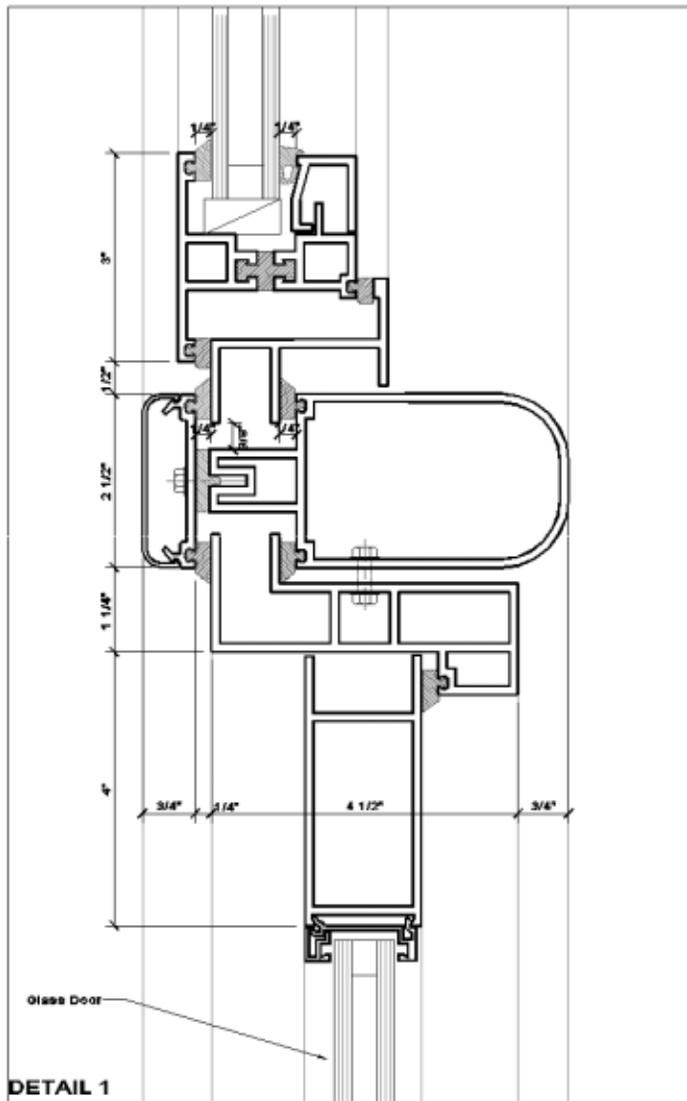
**TYPICAL BAY PLAN**

### **CURTAIN WALL DESCRIPTION:**

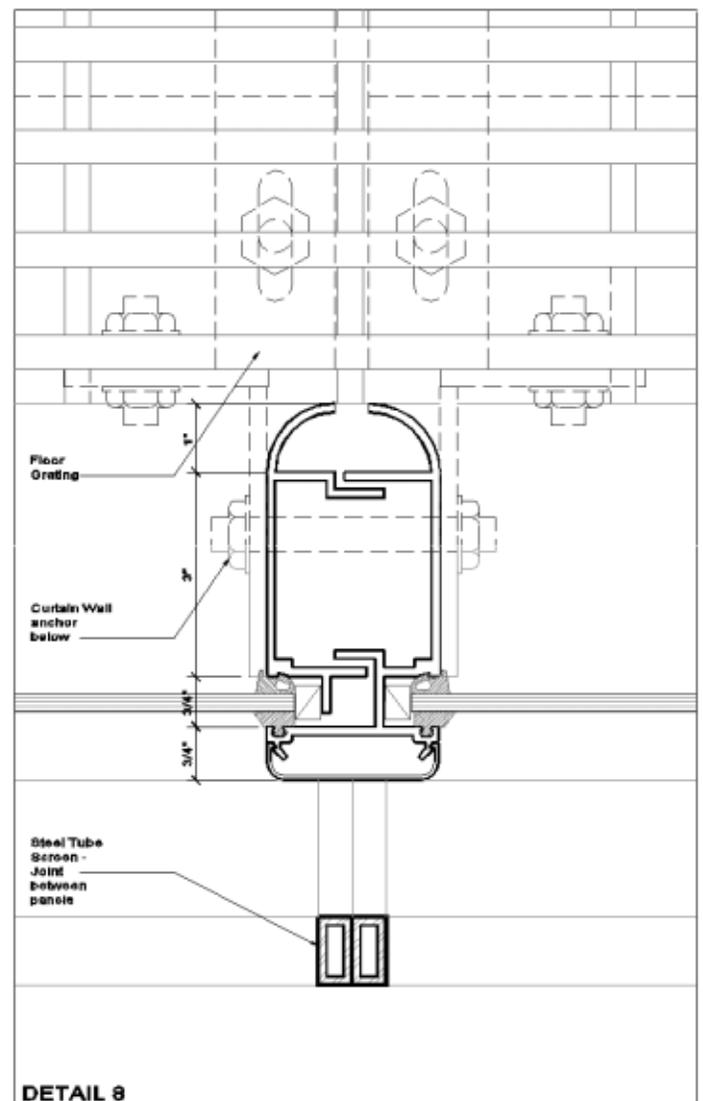
System consists of an inner wall with 1" insulating glass with 1/4" minimum thickness clear outer lite, 1/2" airspace, and 1/4" minimum thickness clear inner lite with low-E coating on the no. 2 surface. (Both lites to be Type HS or FT as required by design load or by code.) At spandrel areas, system incorporates 3/16" minimum thickness aluminum panel with integral insulation. Inner wall incorporates an operable transom window as well as glass doors out to curtain wall cavity. Stationary glass panel dimensions are 3'-0" x 6'-0", 2'-0" x 6'-0", 2'-0" x 3'-0", and 2'-0" x 2'-0". The Outer wall consists of single monolithic glass (Water white glass) at 1/4" minimum thickness with ceramic frit pattern on the no. 2 surface as noted on drawings. (Lite to be Type HS or FT as required by design load or by code.) The Outer wall is directly supported from the building structure. Stationary glass panel dimensions are 5'-0" x 6'-0", 2'-0" x 2'-0", 2'-0" x 6'-0" and 2'-0" x 5'-0". Supported from the Outer Wall, is a decorative shading screen comprised of 1" steel tubes.



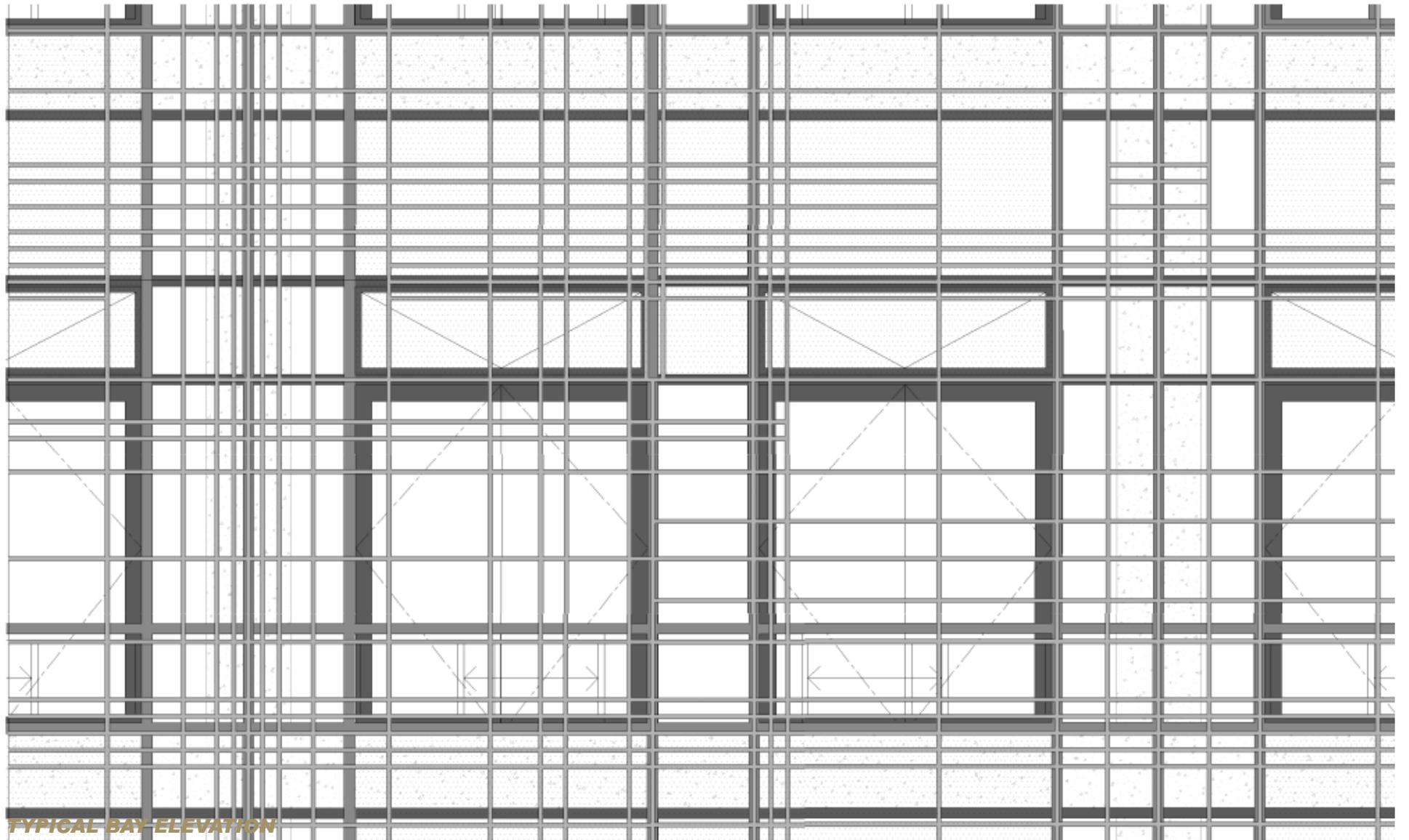
**TYPICAL BAY SECTION**



**DETAIL 1**  
SECTION OF INNER WALL @ GLASS DR. & OPER. WNDW.



**DETAIL 8**  
PLAN OF OUTER WALL AT ANCHOR CONDITION



**TYPICAL BAY ELEVATION**