

ABSTRACT

Title of Thesis: REGENERATIVE PLACE-MAKING AT
BENNING ROAD METRO STATION:
ARCHITECTURE AS A DETERMINANT OF
IDENTITY IN THE 21ST CENTURY.
Michael A. Way, Master of Architecture, 2004

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Where “placelessness” occurs, inhabitants’ potential for finding an existential foothold is compromised. Residents’ identities are existentially dispossessed. The effect of such dispossession generates a spectrum of unfavorable behavior patterns, ranging from apathetic malaise to criminal activity.

“Regenerative Place-Making” will explore design in a viable but overlooked urban environment. Located near a Metro Station at East Capitol Street and Benning Road, the site is the geographic center of Eastern Washington and is a potential gateway intersection for the district. The urban design will investigate exterior space issues, mixture of uses, and transit-oriented development as stimulus for surrounding neighborhoods. The architectural design will address creation of a landmark, to set

character and programmatically anchor the intervention. Character will be rationalized by mnemonic and tectonic aesthetics. Approached holistically, “Regenerative Place-Making” can revitalize neighborhoods, individual identities, and community pride, all of which can reduce crime and raise the median quality of life.

REGENERATIVE PLACE-MAKING AT BENNING ROAD METRO STATION:
ARCHITECTURE AS A DETERMINANT OF IDENTITY IN THE 21ST CENTURY

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DEDICATION

For my parents.

To my mother, Jameya Way, who's spent a lifetime's worth of love and an army's worth of strength giving all she had and more to afford me this education, always willing to sacrifice her dreams, her comforts, and even her dignity so her children might have the opportunity to thrive and excel. May this project be the first of many accomplishments to fill her heart with joy and pride about her sons, may the deeds of my life constantly reassure her that her sacrifices were poignantly fruitful, and not made in vain.

To my father, Michael Way Sr., my first and greatest teacher. Everything I am or ever will be is thanks to him; every fragment of wisdom, every twinge of vision, every shred of anything about me worth talking or writing about, I got it from him first, and I'll always be grateful. He taught me how to be a human, then a man, then a man of God. He told me that anything the mind could think of, willpower and faith could manifest into reality. I believed him then, I believe him more now.

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INTRODUCTION

“Architecture represents a means to give man an existential foothold”

“‘Dwelling’ in an existential sense is the purpose of architecture. Man dwells when he can orientate himself within and identify with an environment, or in short, when he experiences that environment as meaningful.”

“A place is a space which has a distinct character... The place represents architectures share in truth. The place is the concrete manifestation of man’s dwelling, and his identity depends on his belonging to places.”

Christian Norberg-Schulz, Genius Loci

I grew up in the twilight zone of the inner city, an area of Southeast D.C. that was constantly teetering on the edge of blight. If you went more than a block from my house in any direction, you would find yourself amidst a housing project; in a place that, for all the good intention of its designers, had become a dilapidated wilderness, a place of death and dark things, a place one only went when one’s life no longer mattered. For sixteen years, I watched from the relative safety of my front porch or living room window, watched as the quality of the neighborhood went down, watched as the frequency of violent crime went up, watched as everyone I knew either moved out, went to jail, or met an unfortunate end through violence or drugs.

From experiencing these realities, several elementary, but important questions come to mind. What conditions made these circumstances for existence possible? Are some people pre-ordained to be criminals, substance abusers or derelicts? Why don’t these conditions seem so prevalent in other parts of the District? There seem to be relationships between quality of behavior and quality of life, and between quality of life and quality of environment. What impact does quality of environment have on quality of

behavior? Can one be altered to have a positive authentic influence on the other? How does one establish new realities?

This thesis will explore the applications of architectural and urban “place-making” as a regenerative force in depressive urban environments. The argument for this thesis claims that depressive urban environments occur a) when opportunities afforded by an area are not properly taken advantage of, and b) when challenges presented by a given site are not properly addressed. The result is an environment that fails to fulfill its potential. The ability of such an environment to provide an existential foothold for its inhabitants is compromised. Consequently, the capacity for development and/or sustenance of “resident identity”, a kind of collective self-esteem typically shared by people of a given region or shared background, is adversely impacted.

Without a substantive foundation for identity, the basis for any morality is relatively arbitrary, formed more by habit and social custom than conviction, and is easily undermined by the pressures and temptations of attainable short-term pleasures, conveniences, conquests, and continuances of survival. The circumstances of such an environment are, in effect, de-moralizing, and manifest themselves in a variety of behaviors, ranging from a passive, but paralyzing apathetic malaise, to substance abuse and short-term hedonism, to criminal activity and lifestyles predicated on violence. Such an environment offers very little in the way of constructive influences for development of identity, and offers even less in the way of options and access to amenities and opportunities. Too often, the greatest achievement a neighborhood resident can claim is merely to have survived the neighborhood.

The early 21st Century is an important moment in building history, a time when American place-making strategies are in transition. Enamored with the writings of Swiss-born architect Le Corbusier, and his idea of “the tower in the landscape”, the architecture of the latter half of the twentieth century was too often about the architecture of the object while the landscape failed to have the impact described in Le Corbusier’s vision. The proliferation of the automobile in the urban environment turned the idea of “tower in the landscape” into “tower in the parking lot”. The urban environment was devastated by too many decades of such design and, about ten years ago, a small philosophical revolution began, which has since burgeoned into an impending movement. The movement is the New Urbanism, and it argues that between suburban sprawl, the proliferation of highways and office parks and the un-integrated zoning of building uses, the world is indeed heading towards a ruinous state, but it can be saved by reverting to space-making and planning strategies that pre-dated World War II. The three primary models for New Urbanist strategies seem to be the European city, the garden city as expounded upon by Ebenezer Howard and Lewis Mumford, and the traditional American neighborhood pre-World War II. New Urbanism argues that the hubris of modernism is costing the nation its urban environment, and the zealotry of this movement is contagious, spreading through the academic and professional community like a brushfire through dry grass.

However, for all its momentum, one crucial failing of New Urbanism stands to doom it to eventual obsolescence. As respectful as New Urbanism is of the relevance of planning strategies as a generator of space and path, and consequently a determinant of quality of environment, it has yet to fully appreciate the relevance of architecture as a generator of character, gravity and hierarchy, as a consequent determinant of quality of

environment. New Urbanism, without saying so, seems to believe that good architecture will take care of itself, that it will just happen if the urbanism is “good”, much the same way modernism believed the landscape and urban environment would take care of themselves, that they would just happen if the architecture was “good”. Christian Norberg-Schulz defines place as “a space with a distinct character,” placing equal emphasis on space and character to make “place”. This thesis argues that any relevant “place-making”, with long-term regenerative properties, must necessarily be a holistic exercise, taking into the fullest possible account all that both architecture and urbanism have to offer the proposed built environment.

In addition to being holistic, “place-making” must be reflective of the real and idealized values of its intended occupants. If the place is the manifestation of man’s dwelling determinant of truth, and dictator of identity, then it is reasonable to deduce that a new place, one that has yet to be received and assimilated into the culture of the region, must appeal to the truth of the demographic identity of that region. Usually place already exists when the majority of an existing population have arrived at it; occupants merely annex, refine and expand upon what is already there. To create a new place, or significantly change an existing one, is an act of taking charge, of assuming leadership, of questioning what existed before and challenging it with an alternate solution. Looking at Genius Loci, “To create a place is to express the essence of meaning.” Designing a “nice” place is not a sufficient solution; man-made place must reflect the identities of the inhabitants of the area, it must belong to them, it must mean something to them before they will ever belong to it, before they trust it and allow it to change their existential foothold and affect their identities. It is easier to operate in depressive areas where

inhabitants are constrained by lack of options, but deductive reasoning and common sense infers that the long-term viability of any urban intervention will be dependent on its ability to visually and physically appeal to the emotive cultural psyches of its occupants.

As a thesis, “Regenerative Place-Making...” will explore the possibilities of taking a site adjacent to Benning Road Metro station, integrating four basic uses, housing, retail, commercial and recreation into a cohesive, “imageable” urban master plan, and anchoring that plan with a relevant architectural landmark. If a relevant place can be created, appointed with enough amenities to sustain itself economically, such a place can have regenerative properties that will have positive cultural and economic reverberations through surrounding neighborhoods, uplifting depressive identities and altering the scope of standard regional behavior and quality of life.

SITE

Urban History: Washington, D.C.

History of DC based on “History of Planning in Washington” by the National Capitol Planning Commission, found at http://www.ncpc.gov/about/hist_plann/histplann.html

Originally a ten mile square region that acquired land from both Maryland and Virginia along the Potomac River, the plan of Washington D.C. (Fig. 3) was designed in 1791 by French architect Major Pierre L’Enfant.



Figure 1-Maryland/Virginia Regional Locator

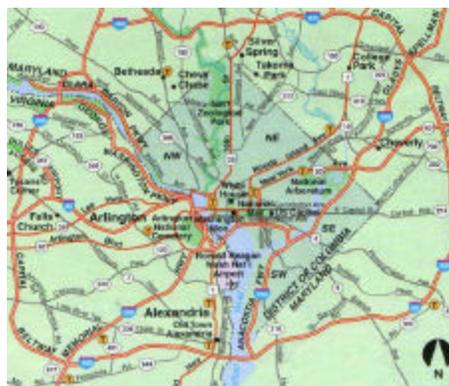


Figure 2 - DC Metro Area

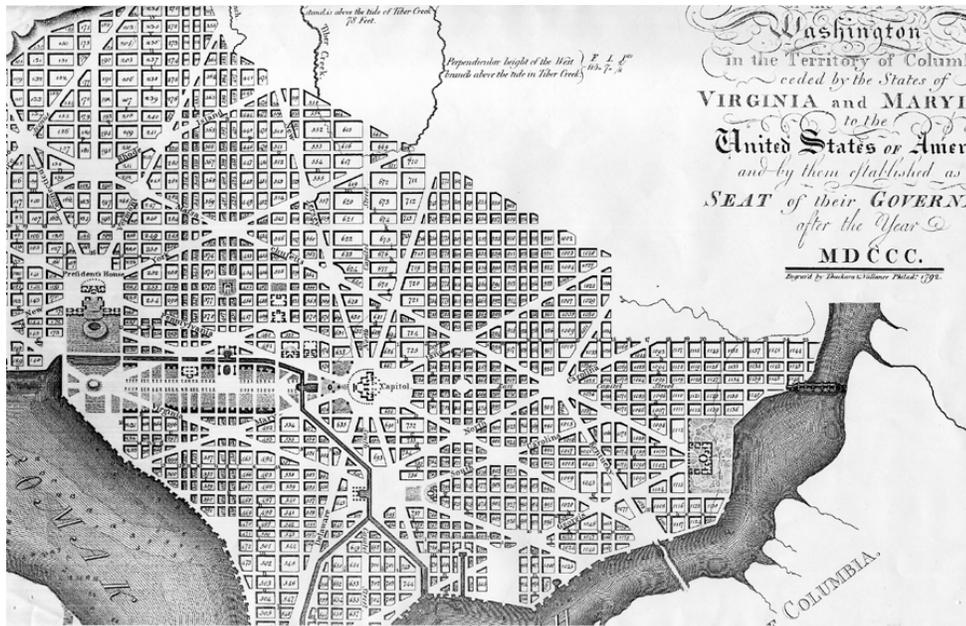


Figure 3 - L'Enfant Plan for Washington, 1791

President George Washington, who wanted the seat of the national government to be situated near his home in Mount Vernon, Virginia, commissioned L'Enfant, only to replace him, with city surveyor Andrew Ellicott and African-American mathematician Benjamin Banneker, during the construction phase.



Figure 4 - George Washington



Figure 5 - Pierre L'Enfant



Figure 6 - Andrew Ellicott



Figure 7 - Benjamin Banneker

L'Enfant's baroque design was driven by a vision of a rectilinear grid, selectively disrupted by long, broad avenues that would physically traverse the diagonal axes of the city while simultaneously providing visual connections between major landmarks and spaces (Fig. 8).



Figure 8 - Dupont Circle as Active Space



Figure 9 - Pennsylvania Avenue

The avenues lead to the National Mall, itself designed as a broad grandiose avenue, while vistas created by the intersection of these avenues frame views of the city's three hierarchical landmarks, the Washington Monument, the White House and the Capitol Building (Fig. 10).



Figure 10 - Aerial Photo of National Mall and Pennsylvania Avenue

While the plot for Washington was originally conceived as covering one hundred square miles, actual development of the city did not follow such an idealized linear, path. The bulk of the District of Columbia's land lies between two rivers, the Potomac River on the west, and the Anacostia River, one of the Potomac's tributaries, on the east.

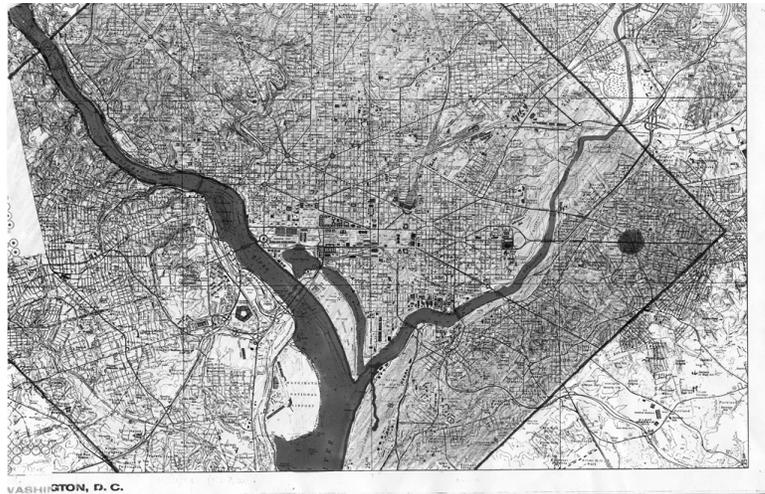


Figure 11 - Districts of the District

Inadvertently, the rivers divide Washington into three distinct districts (Fig. 11): The Virginia side, where Alexandria had resided since 1748, the central bulk, which was planned according to L'Enfant's design, and the eastern corner, most of which was undeveloped countryside well into the 1900s. In 1847, Alexandria formally seceded from the District and became a viable part of the Virginia state economy (Fig 12).



Figure 12 - King Street in Historic Alexandria



Figure 13 - War of 1812, Burning of Washington and White House

The latter portion of the 19th and early part of the 20th Century was spent repairing and restoring the damage done to the central area of the city during the War of 1812 and the Civil War (Fig. 13). The McMillan Commission revisited L'Enfant's plan in 1901-1902, and made recommendations on how to best situate the buildings on the Mall, where to locate what is now Union Station and how to resolve the Washington Monument's failure to align with the axes generated by the Capitol Building and the White House. The Federal Triangle was proposed, converting a slum neighborhood in the heart of the federal bureaucracy and revitalizing Washington's "Main Street", Pennsylvania (Fig. 14).



Figure 14 - Aerial Photo of Federal Triangle

Central Washington not only benefited from the "City Beautiful" Movement, it became one of the nation's best examples of the ideals of "city beautiful" (Fig 15).



Figure 15 - McMillan Commission's Downtown

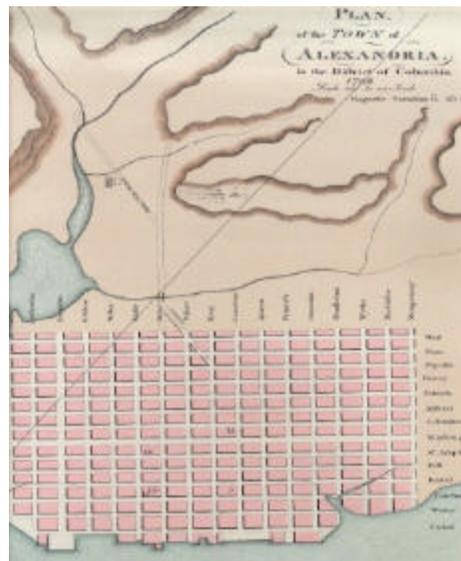


Figure 16 - Street Grid of Historic Alexandria

While Alexandria developed its own urban character, ordering a rectilinear grid about the intersections of King Street and Washington Street, and Central Washington was revitalized by the ripple effects of the McMillan Commission and the “City Beautiful” movement, the eastern corner of the city remained sparsely developed, written off as woodlands by L’Enfant and McMillan.

Urban History: Ward 7 and Benning Heights

According to the DC Council's online history of Ward 7 (www.dccouncil.washington.dc.us/CHAVOUS/content/ward7history.shtml, 2003), the portion of the District located east of the Anacostia, the first inhabitants of the area were the Nacotchtank, or Anakosten, Indians, for whom the Anacostia River was named after.

“The Nacotchtanks were an agricultural people who preferred the flatlands along the two rivers as opposed to the high inland bluffs. Some sixty years after they came into contact with Europeans, the Indians disappeared from the banks of the Eastern Branch.”

The first non-Native American developments to arise were situated at or near old forts, which had served as a hyper-coordinated line of defense from Confederate invasion during the Civil War (Fig 17).



Figure 17 - Proposed Fort Drive

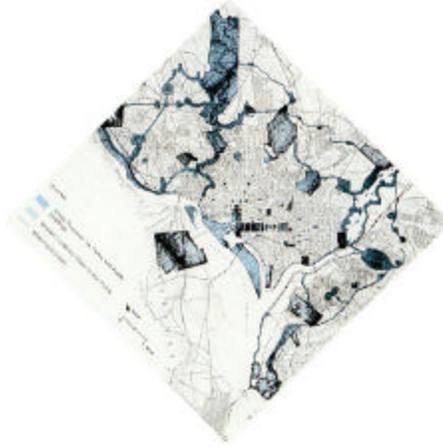


Figure 18 - Washington D.C. Park System

Much of the eastern portion of the District was developed in physical deference to park and green spaces that had been established before formal development began in the twentieth century (Fig 18). The area around Fort Dupont, which is now the city's second largest park, was one such settlement, springing out of the woodlands to develop into what is now known as Marshall Heights.



Figure 19 - Fort Dupont Park



Figure 20 - Plan of Fort Dupont Park, Impact on Street Grid

In 1895, the twenty-three acre Woodlawn Cemetery was established, and became historically and programmatically significant as one of the few local places where African-American burials were permitted (Fig 21-23).



Figure 21 - Woodlawn Cemetery, Memorial Statue



Figure 22 - Woodlawn Cemetery, Headstones



Figure 23 - Woodlawn Cemetery, Overgrown Path

Woodlawn is the site for a number of locally and nationally famous African-Americans, including the first African-American Senator to serve a full term, Virginia's first African-American congressman as well as one of Frederick Douglass' sons. Many of Woodlawn's "noteworthy interments" are significant as educators, as having played pivotal roles in the development of the DC public school system and the emergence of local universities.

Development of the Benning Heights area began in 1927, but did not fill out until the mid 1940s. Infill only occurred when the Second World War created a job market, raising overnight the need for more local housing. However, unlike Central Washington, which had been ordered by L'Enfant's plan and the McMillan Commission's proposals, there was no master plan regulating development in Eastern D.C.



Figure 24 - Ward 7, Street Grid

The lack of regulation in development was detrimental, and manifested itself in the texture of the urban fabric, which is devoid of even a fraction of the level of clarity and visionary intent present in L'Enfant's plan for Washington (Fig. 24). Presently, East Capitol Street is the only artery that carries across the Anacostia River through Ward 7 without becoming distorted by the discordantly episodic street grid.

URBAN ANALYSIS

Traveling through Washington D.C., a number of definitive characteristics might be noticed by the average visitor, characteristics that are signature to Washington. While some features may be arguably positive or negative determinants of the potential of the urban environment, they are all significant as helping to understand the existing "spirit of the place".

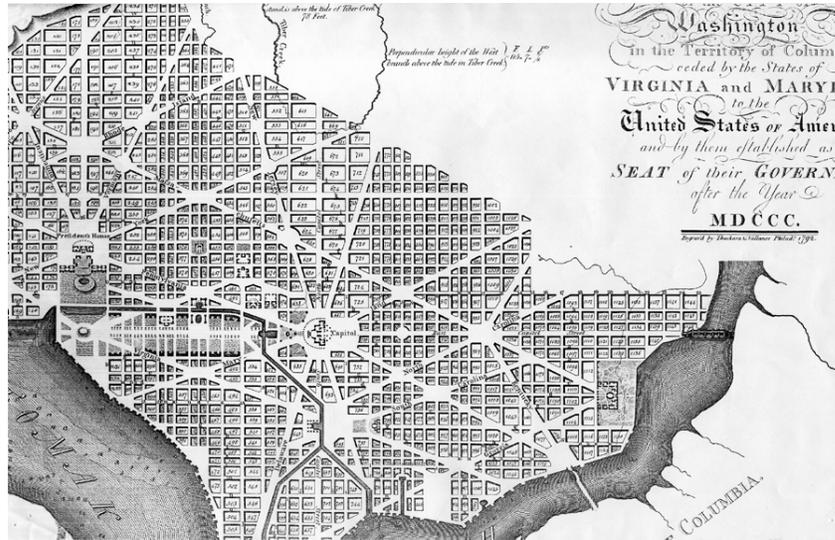


Figure 25 - L'Enfant Plan recap

Looking at the city in plan, probably the most notable feature is the L'Enfant grid, as can be seen in Figure 25, above. The way the diagonals cut through the city, they challenge the authority of the rectilinear grid, typical of American cities. The presence of the diagonals in the grid creates a series of special intersections where events can occur. Movement through the city is syncopated by these events; each event rewards an observer with a panorama of framed vistas to other significant spaces, landmarks and avenues (Fig. 26 & 29).



Figure 26 - Dupont Circle as Convergence of Avenues

At the heart of the grid, along the Potomac, is the National Mall, spatially anchored by the mass of the U.S. Capitol Building and the height of the Washington Monument. At the monument, the plan opens up to reveal the Jefferson Memorial, the Potomac River and a view of the Arlington skyline on the Virginia shore (Fig. 28). In plan, the city sets up its hierarchal space and buildings to occupy the seam where urban fabric disintegrates into nature (Fig. 27).



Figure 27 - Aerial Photo, Relationship of National Mall to Potomac River

Looking at the city in section, because the heights of all buildings in the district are capped, the Monument and the Capitol dome command the skyline of the city; much the same way Brunelleschi's dome on Santa Maria del Fiore commands the skyline of Florence. Consequently, Washington stands out as a surprisingly low-lying city, much more horizontally than vertically expressive.



Figure 28 - Aerial Photo of National Mall and Potomac Skyline



Figure 29 - Pennsylvania Avenue as Link Between Capitol and White House

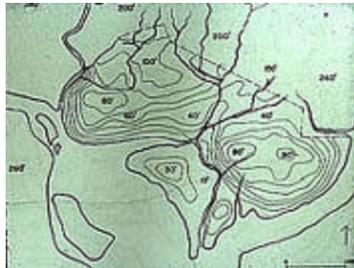


Figure 30 - Washington DC, General Topography

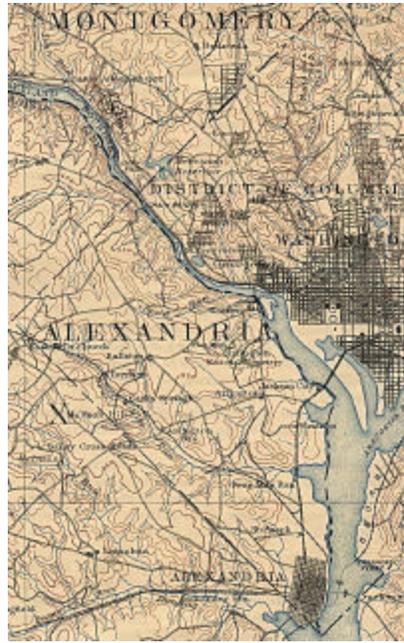


Figure 31 - Historic Survey Drawing of Western Washington and Alexandria/Arlington area

As can be seen in Figure 32, below, there is a concentration of landmarks and amenities at and around the National Mall. East Capitol Street is the primary connection between the two regions, and its continuity is interrupted by the presence of Robert F. Kennedy Memorial Stadium. The connection between the heart of the city and the general site area for this thesis is tenuous at best.



Figure 32 - Relationship of Downtown to Site

There are three additional ideas to intuit from Figure 32. First, note the organizational clarity of the city on the west side of the Anacostia. Even today, the grid has managed to hold true to its original intention while accommodating, albeit strenuously, such invasions as the highway system, the rail and rapid transit systems, and large infill projects such as Union Station, RFK Stadium and the Convention Center. Second, it is important to compare the clarity and charm of the urban fabric on the west side of the Anacostia with everything to the east. It must be emphasized that it appears at least half a dozen grid ideas overlap and slam into each other with little to no resolution. Third, it should be noted that the intended site area for exploration is not only significant as the center of this misshapen region, but is also the last intersection of two primary roads encountered before leaving the District [or the first encountered upon arriving].

Figure 33 is a diagram illustrating the relationship of the three short-listed sites to the nearest major landmark, RFK Stadium. As an aerial photo, this diagram shows how in addition to the Anacostia River, a series of highway underpasses and overpasses physically and visually separate the sites from the site. However, it should be noted that, due to the topography of the area, a vista between RFK Stadium and the site would be impossible even if the overpasses did not exist.



Figure 33 - Relationship of Site to Nearest Landmark, RFK Stadium

Figure 33 also makes clear that the character of the urban fabric is so divergent from the ideas prevalent in Mainland Washington that an intervention here does not necessarily need to be bound by the organizational strategies of L'Enfant's grid. One wonders whether such an area would still be considered as being "of the District" by its inhabitants and visitors, but even the most divergent fathomable solution would be only minimally different than the existing conditions, in terms of Washingtonian imageability.

One last point of interest shown in Figure 33 is the amount of land devoted to park space. The possible sites for this thesis are located near historic Fort Dupont Park, Fort Chaplin Park and historic Woodlawn Cemetery. The presence of such an ample supply of natural landscape in the urban fabric is an opportunity that should be explored. If a walk- able promenade can be designed establishing a network between the three

parks, that amenity alone could have significantly positive effect throughout the community. While this thesis will allow for the future development of such a park promenade, especially in the generation of viable access points, such an important and necessarily intensive effort as the creation of a park system is most likely a substantive enough topic to merit its own discrete thesis exploration.

Figure 34 shows in greater depth the existing park system and the relationship of the three short-listed sites to each other and East Capitol Street, the primary traffic artery. Going from left to right, the first shaded region, Site C, is the location of a recently torn down housing project, one of the most dangerous in the area. Revitalization efforts have already begun there with the establishment of a private boarding school and dormitory complex, a previously anomalous entity in this community. Site B is the location of a public housing project that currently houses a series of dumbbell-shaped apartment buildings, two churches and a small but well-patronized convenience store. Site A, the site ultimately chosen for this thesis, is actually at the intersection of East Capitol Street and Benning Road, and includes the Benning Road Metro Station, an assortment of low budget retail outlets and franchise restaurants (Fig. 36), mostly fast food (Fig. 37), and the Shrimp Boat (Fig. 35), a surprisingly renowned seafood delicatessen that is currently the only regionally imageable landmark for the surrounding community



Figure 34 - Relationship of 3 Possible Sites to East Capitol Street



Figure 35 - Benning Road Metro Station and the Shrimp Boat



Figure 36 - Benco Shopping Center, Across from Shrimp Boat on East Capitol Street



Figure 37 - Fast Food Franchise Typical for Site Area

SITE DESCRIPTION AND ANALYSIS

As mentioned before, the selected site is located at the intersection of East Capitol Street and Benning Road (Fig. 38). The targeted area covers approximately fifteen total acres, using each corner of the intersection in an attempt to create a nodal event (See Fig. 39).

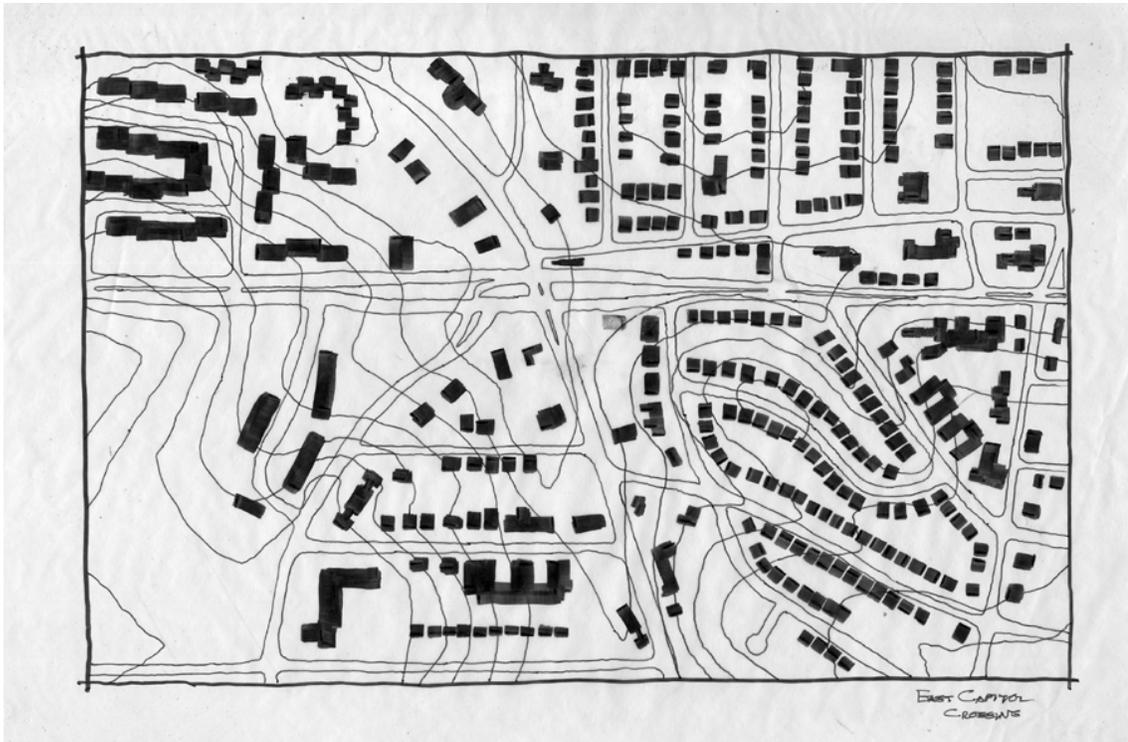


Figure 38 - Site Plan, Intersection of East Capitol Street and Benning Road

The existing street grid is amorphous and idiosyncratic, more typical, and probably more suited to a suburban development than a metropolitan area (Fig. 39). The only line of Baroque clarity is East Capitol Street, which drives straight through the grid, widening at the intersection to allow for a landscaped median to emerge (Fig 40 & 41)

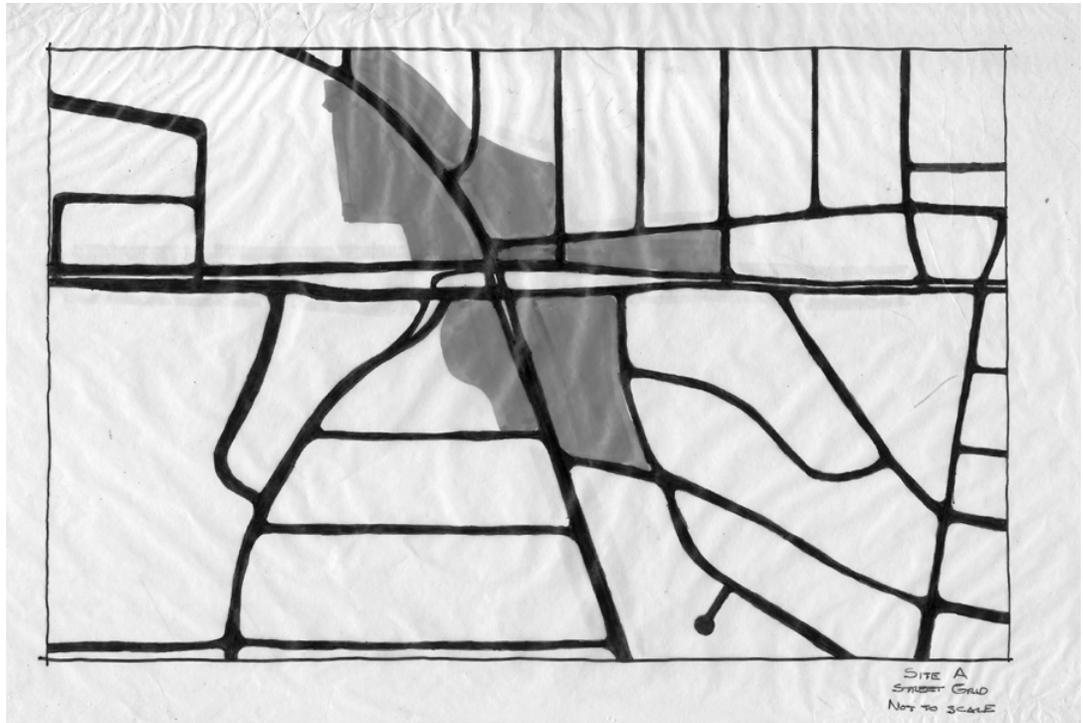


Figure 39 - Existing Street Grid and Intended Intervention Area



Figure 40 - East Capitol Street Median, Looking West



Figure 41 - East Capitol Street Median, Looking East

The figure/ground drawing, Figure 42, brings to light the dominance of the site area by residential buildings, mostly traditionally planned attached duplex houses and subsidized apartment buildings. The larger upside down L-shaped mass towards the bottom left is Plummer Elementary School. The gray buildings towards the center are an assortment of freestanding low-budget retail outlets. The lightest shaded buildings are housing units that can be argued as having too stagnant a visual impact on the street for the level of frontage they command. Any relevant intervention should consider ways to address these structures; that is of course if they are not to be removed altogether.

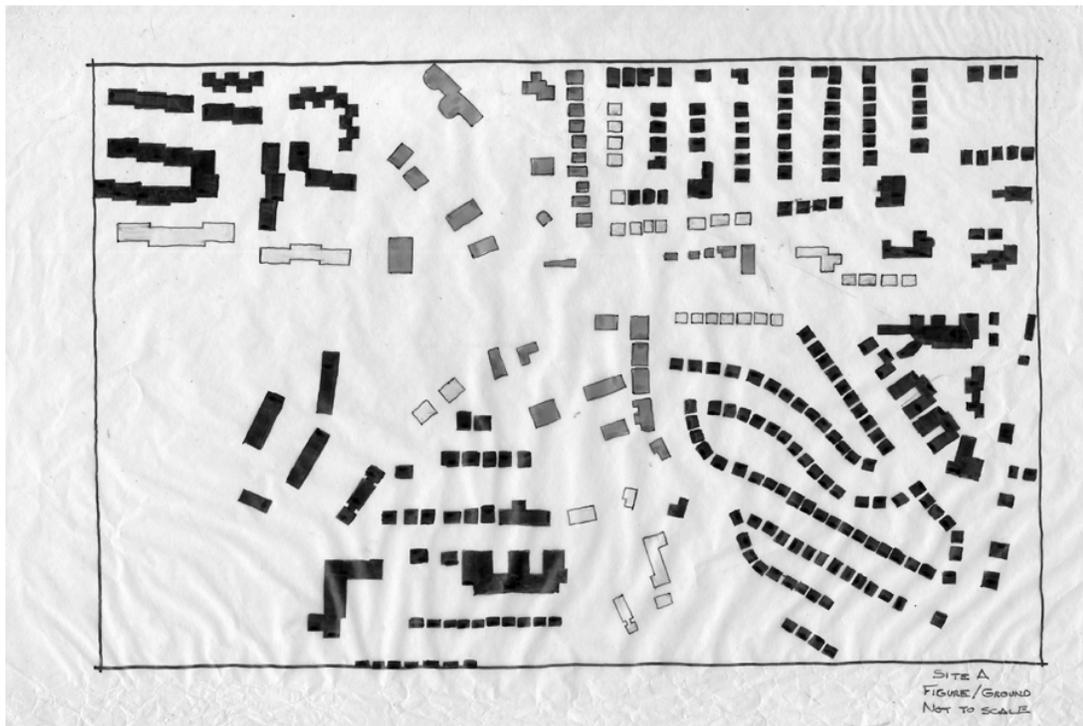


Figure 42 – Existing Figure/Ground



Figure 43 - Plummer Elementary School



Figure 44 - Typical Existing Retail



Figure 45 - "Soft Site" Housing

The topography diagram in Figure 46, above, reveals a valley located at the intersection, bounded with almost perfect symmetry by four adjacent hills. The site is essentially located in an implied valley, through which Benning Road and East Capitol Street cut and from which Texas Avenue ascends (Fig. 47-51).

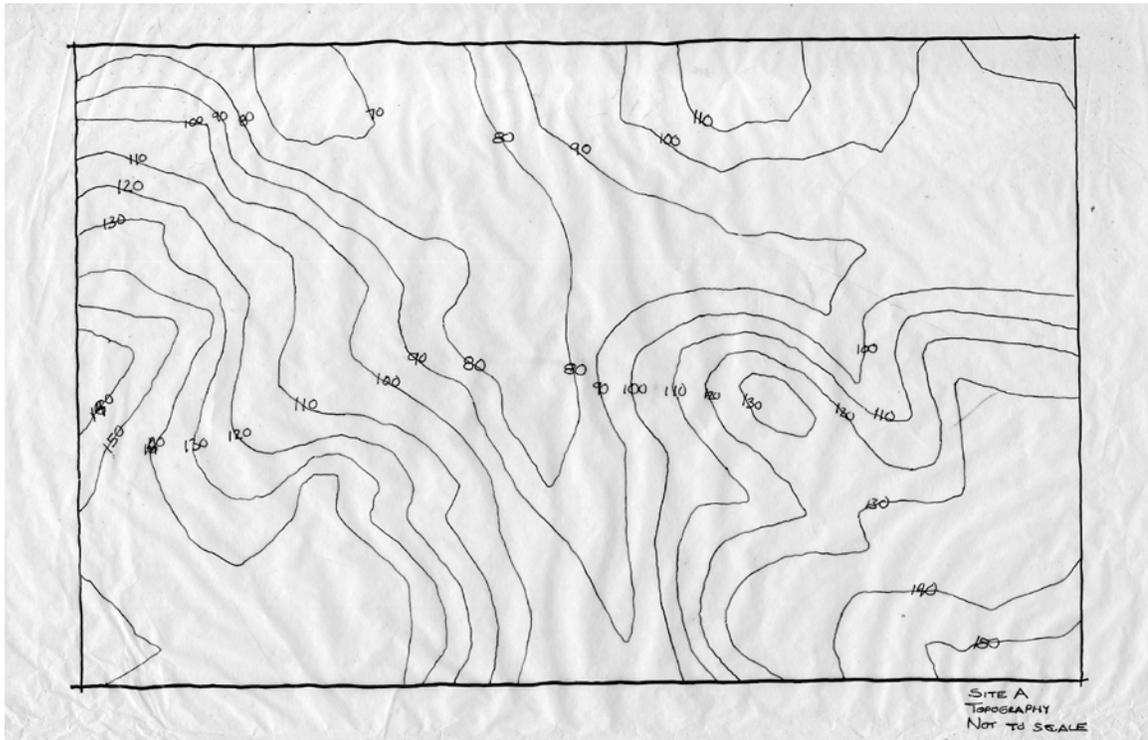


Figure 46 – Existing Topography



Figure 47 - East Capitol Street, Looking Uphill From Median near Benco Shopping Center



Figure 48 - Texas Avenue, Looking Uphill From East Capitol Street



Figure 49 - East bound Lane of East Capitol Street, Looking Downhill Towards Shrimp Boat

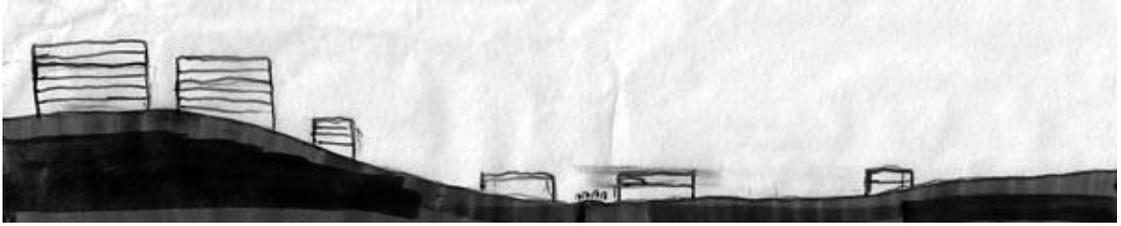


Figure 50 - Diagrammatic Site Section, Longitudinal Through East Capitol Street (East is Left)

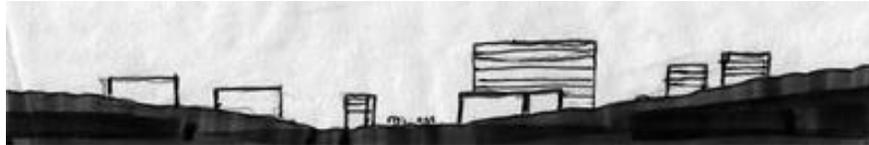


Figure 51- Diagrammatic Site Section, Longitudinal Through Benning Road (South is Left)

The consistency of street frontage varies, from almost clearly defining a space to completely ambiguous serrated edges (Fig. 52). To the area's credit however, the existing street frontage is strong enough to allow the primary streets to read in Figure 52.

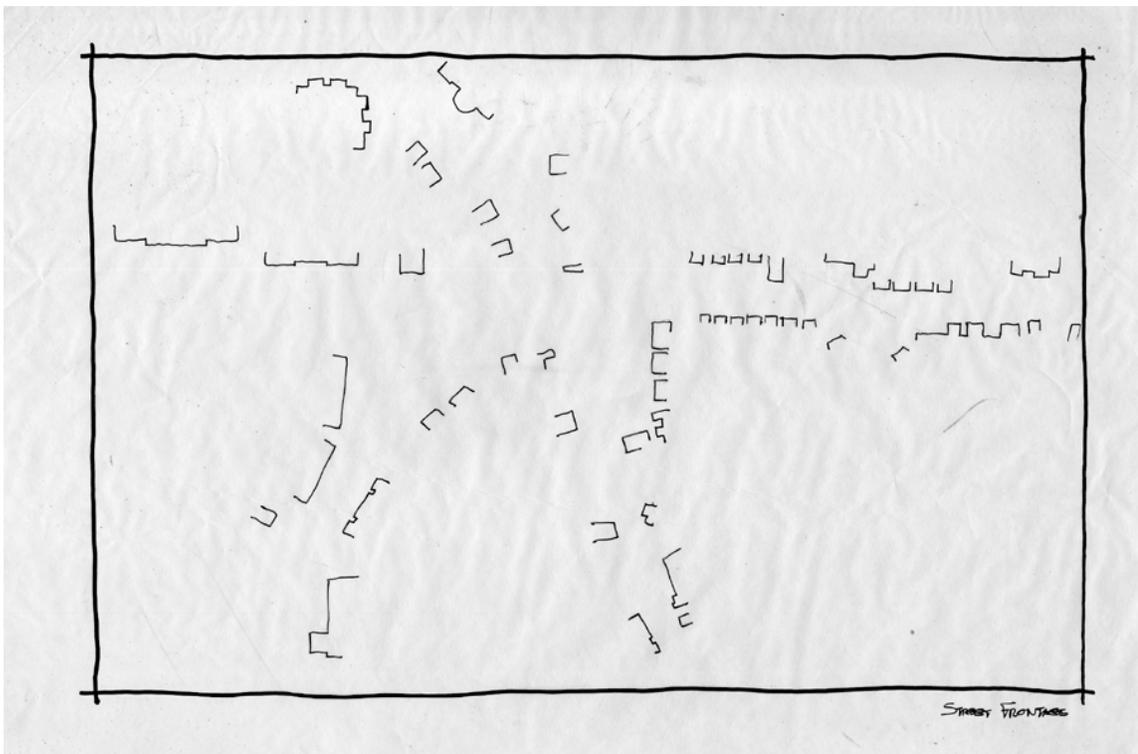


Figure 52 - Existing Street Frontage

The street sections drawn in Figures 53-55, are typical of the streets found in this area. Dimensionally, the streets are equivalent, with the exception of East Capitol Street, which has three lanes of traffic in each direction with a forty-foot median in between. Secondary streets are distinguished from tertiary streets by the presence of a lane of on street parking in both directions. Traffic is slower in these areas; with the exception of metro buses, streets are quieter.

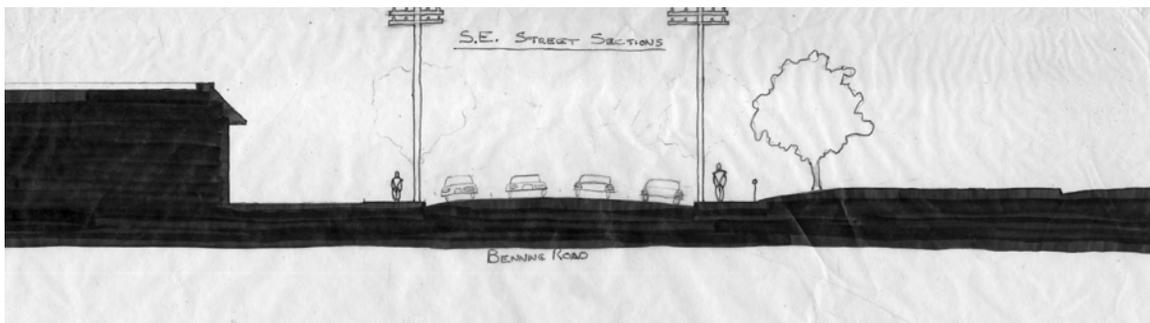


Figure 53 - Street Section, Cut Through Benning Road

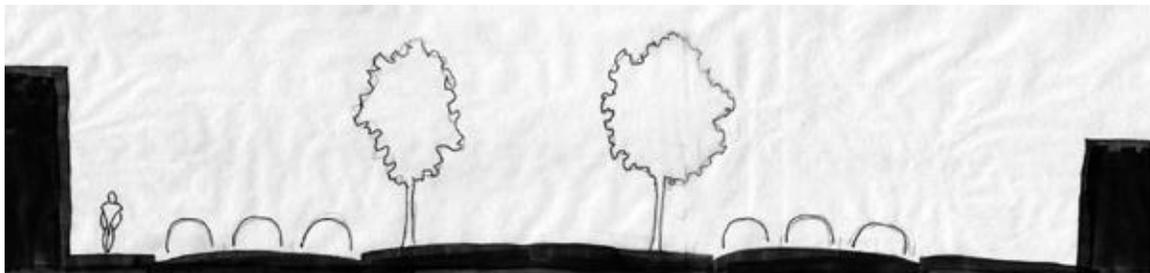


Figure 54 - Street Section, Cut Through East Capitol Street

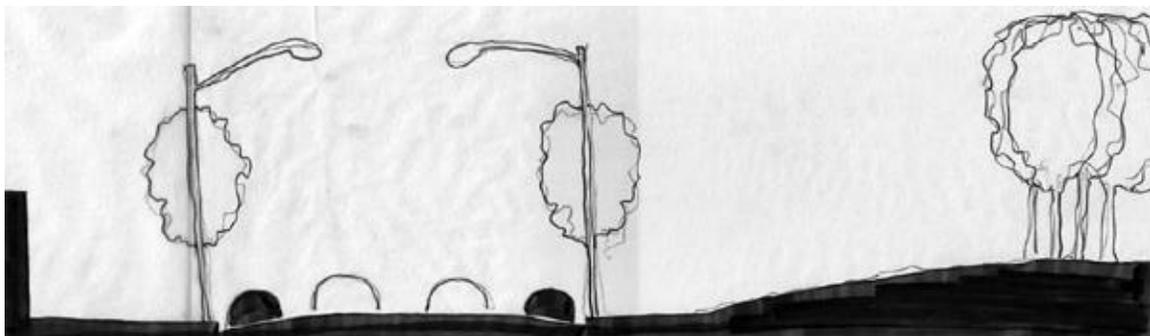


Figure 55 - Street Section, Cut Through Texas Avenue

While the character of the site is in fact depressive, there exists a framework to the neighborhood that is promising. Already sustained by its physical access to transit and convenient location at a convergence of multiple traffic arteries, a thoughtful intervention at Benning Road and East Capitol Street could transform a relatively nondescript urban locale into a vibrant, viable “place”.

THEORY

“The purpose of architecture is to move us. Architectural emotion exists when the work rings within us in tune with a universe whose laws we obey, recognize and respect.”

Le Corbusier

“The important determinant of any culture is the spirit of the place.”

Lawrence Durrell, 1960

The Importance of Making Place

This thesis is driven by an understanding of “place” as the highest form of architecture. Phenomenologist Christian Norberg-Schulz, (Norberg-Schulz, ____) makes the case for place when he argues:

“...architecture belongs to poetry (makes human existence meaningful, and meaning is the fundamental human need), and its purpose is to help man to dwell. The basic act of architecture is therefore to understand the “vocation” of the place.”

“Place” is to architecture as Zen or spiritual transcendence is to a religious person; there is nothing greater to be attained on this earth. “Place” is important because, as opposed to wilderness, Man knows where he is while occupying a place. According to Genius Loci: Towards a Phenomenology of Architecture, place is essential for man to “gain an existential foothold”, to “know where he is”. Philosophically, if life is a journey, if every day is a journey, “place” is important because it is only when Man knows where he is that he can decide how to get where he ultimately wants to go.

The built environment may one of be one of human civilization’s greatest achievements, one the same level of significance as the invention of the wheel or the

discovery of fire. In Design of Cities, (Bacon, 13), the author extrudes the argument to cities, as the collective manifestation of architecture in the world:

“The building of cities is one of man’s greatest achievements. The form of his city has been and always will be a pitiless indicator of the state of his civilization. This form is determined by the multiplicity of decisions made by the people who live in it. In certain circumstances these decisions have interacted to produce a force of such clarity and form that a noble city has been born.”

Achievements like fire, the wheel and the built environment are related in that the creation of each considerably reduced the amount of physical exertion and toughness necessary for a human being to perpetuate his own survival. The natural environment, though beautiful and true, can be deadly to humans whose exposure to it is too prolonged. Between the wild animals, the daily and seasonal cycling of hot and cold climatic conditions, and the unpredictability of the weather, Man would not last long if forced to face the elements continuously, with no relief. The built environment is special because, by intervening in the natural environment, it improves the probability of human survival.

Place-Making as Language and the Dangers of Contemporary Design

Because early built structures were so anomalous to the natural environment and consequently hierarchical, their sites attained a level of prominence within the human community. Just by being buildings, they became “places”, and it was assumed that the created place had merit. Meaning was attached almost automatically, as documented in Architecture and Identity, (Abel, 149-150):

“Herbert Blumer, a disciple of [George Herbert] Mead, claims that in so far as objects have meanings, then they must enter into the human group consciousness much as the meanings we attach to our own behavior and the behavior of other persons do. A theory of mind that disperses the processes of human mentation among the group must also take into

account the role of the physical environment in the evolution of the mind. Such claims support the related claim made by [Gordon] Pask, that there is no such thing as an inanimate object. That is to say, there are no artifacts -including buildings – in the human realm of being without meaning, and thus no artifacts that do not somehow become animate within the processes of human interaction and individuation. We do not have architecture, therefore, but rather, a part of us is architecture. Architecture is a way of being, just as science, art, and the other major culture-forms are ways of being. So when we come to define the true and deeper functions of architecture, we will not be simply describing the production of a certain type of artifact, but explaining one of the original ways in which we know ourselves.”

Unfortunately, this phenomenon seems to have perpetuated itself on a subconscious level, even and especially today. In erecting buildings, designers and builders seem to presume the presence of meaning automatically suggests the creation of “place”, when what more often happens is the occurrence of a building, and some leftover space with landscaping strewn about. Just because something has a meaning, does that imply that the meaning has a positive and substantive impact on the human psyche? What happens when the meaning detracts from the human experience? In cases where the power of the inadvertent meaning exceeds the power of the intended message, what does that do for place? Concurrently, what does that do for Man? How do bad places happen? How do good places happen? These questions do not seem to have been applied rigorously enough to the contemporary design process, as is apparent in too much of our built environment, and the result is a culture of environmental negligence and fickle, novelty-based design trends.

Intrigued by Daniel Libeskind’s designs for the World Trade Center and the Berlin Jewish Museum, one of the books reviewed for this thesis was his theoretical treatise The Space of Encounter. Libeskind is significant in the world of architectural theory because of his background in music, art, culture, and history, and his ability to tap

into the emotive properties of his Jewish background to generate a design stimulus. But there is a jarring disconnect between Libeskind's words and the actual intuitive properties of his work.

Focusing on Libeskind as exemplary of the times, he claims to rationalize composition according to symbolic and gestural cues he discovers within or around the site and the identities of his intended client(s) and audience. Being that he is a musical virtuoso and the closest example of a raw genius in architecture today, one can be led to give him the benefit of the doubt and believe that perhaps he does rationalize his compositions the way he describes in The Space of Encounter. What is less believable is that any layperson or even architect who hasn't read his book can really intuit his intentions or message merely by looking at his built work. Once stripped of exhibitions what about the Jewish Museum in Berlin says "Jewish", or "Berlin", or even "Museum"? Are the spatial events really demonstrative as having a cultural identity?

One can patiently scrutinize his plans, sections, models and photo montages, and have still yet to find a clue. Are his facades really telling us anything decipherable or is it just "cool" and fascinating to have ribbon windows slash chaotically across the surface? Is Libeskind really relevant in the long-term history of architecture, or is it that the perceived dynamism of his work is tied to the way he violently shirks history and context? What will the work of his disciple's look like, and how will that impact the built environment and human psyche? His massing, while at times seductive, seems arbitrary and sections reveal large amounts of egregiously wasted space resulting from a single-minded design approach. The World Trade Center is a compelling design and the Berlin Museum is a precedent for this project, but as defined by Colin Rowe in his essay on

Paradigm vs. Program, Libeskind is definitely a hedgehog, dedicated to ramming forward with one forceful, dogmatic idea, and not a fox, capable of subtlety and crafty adaptation to changing times.”

In all honesty, it is possible that youth, or not being able to personally visit the site of his works, or even a reluctant bias towards classicism has led me to overlook some keystone for comprehending the work of architects like Libeskind. But my general interest as an architect lies in the enrichment of lives, the lives of people who most likely will not have any more training in interpreting architecture than what the accumulation of cultural instinct and their daily life experiences allow. If architecture is a language, then a responsible building has to be broken down to a level of clarity where the average layperson can intuit its intended meaning. Architecture where visual intuition is insufficient to comprehend meaning is lingual gibberish, and subject to losing its possibly positive meaning behind a cloud of frustrated perceptual ambiguity. While some ambiguity is necessary for richness in design, if the intended meaning is too ambiguous, the presence of the architecture in the city can be psychologically more problematic than advantageous.

In writing Architecture and Identity, Chris Abel, a British scholar and practicing architect, comprehensively examined technology’s and culture’s impact on the field of design from its many facets, including how the forerunners of the field understand the virtue of complexity and execute architecture on the basis of that understanding. He notes his findings in the following remarks:

“A distinguishing feature of much architecture in the 1990s has been a preoccupation with complexity for its own sake, most of all with its formal expressions. Rejecting both the reductionism of early Modernists and the eclecticism of Postmodernists – healthy reactions

in themselves – many architects and students instead favor irregular and hard-to-fathom compositions based on mixed geometries, fragmented or folding surfaces and other abstract devices. Project drawings, which are treated as having a purpose and value of their own, often seem intentionally obscure and offer few clues to the uninitiated. Usually, but not always convincingly, such exercises are rationalized by reference to the complexities of the program, the context, or even modern life in general.” -p.48

“Like Tschumi, Peter Eisenman bases his approach on Derridan literary theory and other non-architectural sources, on the assumption that they will offer critical insights into and a way out of outdated conventions. These do little, however, to disguise the ultimately willful nature of this cerebral architect’s highly abstract compositions and forms, which invariably negate whatever cross-disciplinary exercise might otherwise be involved.” -p.60

“One way or another, whether by suspending conscious design control, applying complicated transformational techniques or simply ignoring conventions of scale or purpose, all these architects [Tschumi, Eisenman, Hadid] attempt to replicate larger real-world complexities by spurious means. Though the methods employed are purposefully arbitrary they are assumed by their users to impart a legitimacy to their designs that more rational methods would not. Yet the resultant architecture has little to do with the complexities of the real world, especially those of real cities, which arise out of more mundane but genuinely complex processes of decision making.”
-p.62

Today’s American urban environments are plagued by the manifestations of this hedonistic design mentality; placeless locales with no legible character, no definition of space, and no perceivable higher meaning except a profound state of malcontent with the existing state of the world, or at least design. What is the intended behavioral manifestation of these meanings? This thesis contends that there is a difference between creating a built environment with meaning and meaningful “place-making”. The existing ills of the built world are a result of a practical failure to understand that difference, combined with an inadvertent gravitation towards the former for the sake of short-term

problem solving. The exploration for this project will investigate the difference by exploring the components of “place”.

Image, Place, and Identity

Architecture exists to create “place”. Architects are the only ones who can knowledgeably make “place”, and architects must because “Place” is necessary for man’s survival and sanity. Looking at the writings of Christian Norberg-Schulz:

“Since ancient times, the genius loci, or “spirit of the place”, has been recognized as the concrete reality man has to face and come to terms with in his daily life.”

“Architecture means to visualize the genius loci, and the task of the architect is to create meaningful places, whereby he helps man to dwell.”

“Human identity presupposes the identity of place.”

In reality, every location on earth is a “place,” only some places are illegible and therefore resonate with an observer as a wilderness or meaningless realm. For “place” to be perceived, for place to have a positive impact on its observer, the environment has to be “imageable”. According to Kevin Lynch, “A good environmental image gives its possessor an important sense of emotional security [and allows one to] establish a harmonious relationship between himself and the outside world.” If having a legible environmental image is related to “our sense of balance and well being,” one can infer the consequences of living in an illegible environment.

Referring to Lynch, there are five types of elements that comprise city image: paths, edges, districts, nodes and landmarks. As defined by Lynch, paths are channels along which the observer moves, edges are boundaries between two phases of the city,

districts are medium to large sections of the city, nodes are entry points and activity foci, and landmarks are external point references, usually a rather simply defined physical object. When these five elements are not clearly defined it is easier for a visitor to become “lost” and for inhabitants to have a weak if not negative environmental image. Crafting a legible urban image is pivotal to “place-making” and will govern the urban aspects of this project.

If the place is the manifestation of man’s dwelling determinant of truth, and dictator of identity, then it is reasonable to deduce that a new place, one that has yet to be received and assimilated into the culture of the region, must appeal to the truth of the demographic identity of that region. Usually place already exists when the majority of an existing population have arrived at it; occupants merely annex, refine and expand upon what is already there. To create a new place, or significantly change an existing one, is an act of taking charge, of assuming leadership, of questioning what existed before and challenging it with an alternate solution. Man-made place, as a potentially invasive entity must reflect the identities of the inhabitants of the area, it must belong to them, it must mean something to them before they will ever belong to it, before they trust it and allow it to change their existential foothold and affect their identities. The long-term viability of any urban intervention will be dependent on its ability to visually and physically appeal to the emotive cultural psyches of its occupants. For that reason, based on the demographic makeup of the neighborhood, precedent analysis in the realm of detailing will search for cues on how to best relate to African-American and other minority cultures.

Landmarks and Place, Landmarks and Identity

No city image is complete without a landmark. Sadly, so many areas of the Nation's Capitol, including and especially the depressive areas are devoid of significant cultural landmarks, with a concentration occurring in the institutional heart of the city. Residential landmarks include mostly schools, recreation centers and churches. Even where retail nodes occur, they are generated by access to circulation, not by an institutional or cultural presence. Yet such landmarks are necessary for urban imageability and place making, if only to declare that said area is not a wilderness, that it is a recognized part of the city whose significance is manifest.

One of the most powerful landmarks of modern times is the museum, typically the art museum. Because of its non-religious affiliation and potential for drawing business from outside the resident community, museums as landmarks, according to Hugh Pearman, have become a mainstay of contemporary revitalization:

“Art museums are built for various reasons, few of them to do with art. They are built to provide a cultural destination for a provincial city with a dull reputation, or to refresh the waning arts credentials of a capital needing to keep the overseas tourist pouring in... The patrons of such buildings are less concerned with the technicalities, and crave the cultural landmark, frequently as a means to urban revitalization.”

Concordant with the interests of completing the urban image, holistically designing “place” by setting character, and establishing a sense of belonging with the neighborhood, a landmark is necessary, regardless of whether the building is a museum, a civic structure or an iconic retail facility. As a landmark in the “ghetto”, as a landmark to heal the “ghetto”, this building will have to be a landmark of the “ghetto”. The ghetto, though less vocal than in times past, has been and still is a place of pain and struggle, a

place where opportunities are few but circumstantial disadvantages are numerous. For those who don't seek asylum in drugs or the trappings of the criminal underworld, hope is the foundation of survival, and it never hangs on by more than a thread. Pervading everything is a sentiment of "hardness" of having to be "real" because it's a "real" [cruel] world out there. Pervading everything is a sentiment of disillusionment and cultural resentment, blaming everyone and no one for a general state of inexplicable, inescapable dispossession. Pervading everything is a deepening fog of apathy and lethargy, dulling people's minds and eroding their resolve by incrementally forcing tolerance of the unacceptable, forcing tolerance for the sake of sanity. For all that pervades through the ghetto, through the blight, through the dilapidated outskirts, any landmark built here, must be a beacon of hope, a wake-up call to the comatose and most importantly, a symbol of revival and change.

Place and Character

"Character depends on how things are made" -Norberg-Schulz

In reference to architecture and detailing, two primary strategies will be employed intermittently to set the character for this thesis. The first is based on technology and tectonic expression, asking: "What can be done with these materials (steel, brick, and glass) that wasn't possible or being done when the majority of the neighborhood was built? What can be built that says 21st Century Washington DC?" According to Genius Loci, "the meaning of the building is related to its structure." Can structure be expressive of culture? The second strategy will attempt to derive an aesthetic based on mnemonic

devices, asking: “What visual archetypes can be used to evoke the memories of the people this area?”

Concerning technology and architecture, Renzo Piano best described the paradox when he spoke at the 1996 Jerusalem Seminar:

“There are many contradictions in architecture. One is surely the interaction between technology and place. Technology today is universal and if you are not careful, you may easily destroy the spirit of a place. On the other hand, place is by definition local, and local traditions or other constraints may inhibit the fantastic potential of technology.”

“I believe that the architect must lead a double life. On the one hand is a taste for exploration, for being on the edge, an unwillingness to accept things for what they appear to be; a disobedient transgressive, even rather insolent approach. On the other hand is a genuine, and not merely formal gratitude to history and nature; the two contexts in which architecture has its roots, perhaps this double life is the essence of the only humanistic approach possible today.”

The Jerusalem Seminar in 1996 architecture gathered some of the most respected tectonic architects from around the world to discuss the relationship of technology to architecture. While each architect had their own perspective, the primary themes that arose from the forum included: climate as a generator of built form, the site as a generator of urban form, the rationalization of a design aesthetic according to the physical capabilities of a given material, and the necessary sensitivity technology must evince as a physical contributor to a given locale’s spatial and visual culture. There is an implicit language to architecture, and the “truth” of architecture resides in the way a building is constructed.

Finally, concerning mnemonics, James Ingo Freed explained the role of memory in rationalizing architectural character when he spoke at the Jerusalem Seminar in 1994:

“I prefer memory to history because I prefer the authentic to the reconstructed. History erases detail at a painful cost. It gains consistency through abstraction and it yields a loss of the richness of life. As a physical artifact of a given time, place, and culture, architecture is an undistorted and unchanged thread of memory woven into the tapestry of history. Yet this thread is constantly strained by the ravages of man and nature.”

“The industrial architecture period of the 1920s was remarkable because it was one of the few times in history when architects had to invent a new language to contend with new kinds of functions and activities and a completely different scale.”

In Contemporary World Architecture, author Hugh Pearman corroborates the intuitive properties inherent in Freed’s method, discussing the visual expression of the U.S. Holocaust Museum:

“Freed was dealing with forms that were deliberately evocative of some of the places associated with the Holocaust. External pyramidal towers echo the watchtowers of concentration camps. Gantry bridges are reminiscent of the Warsaw ghetto, and sinister doors and enclosed claustrophobic spaces remind observers of the horrific experience of those imprisoned or killed.”

Memory differs from history because the former is subjective and personal. In many ways, memory is more authentic because it does not seek to generalize under an objective microscope the way history does, but rather abstracts important experiences and allows powerful, stream-of-consciousness events to emerge from the abstraction. For this reason, many of the architectural precedents to be discussed later deal with the Jewish Holocaust, a thematically intense topic that lends itself well to expression through mnemonic devices.

For “place” to occur, there needs to be definition of legible space and distinction of meaningful character. Space can be made imageable by clearly defining the paths, edges, districts, nodes and landmarks of a given area. In a place where there is no

decipherable character, a new aesthetic character can be rationalized according to tectonic capabilities and/or memory. Technology is a double-edged sword, because by the nature of its universal applicability (i.e. electronics), high technology inherently avoids being place-specific. Applied carelessly, technology can have a devastating impact on the context of the surrounding built environment. Technology however, can be grounded through implementation of mnemonic devices. Memory is inextricably linked with the definition of identity; in an existential sense Man defines himself by what he has experienced. Therefore, memory is vital to both creating a meaningful place and emotively connecting the created “place” with the inhabitants of the surrounding community.

Place-making, as defined by phenomenology, is the chief virtue of architecture. The city is important as the most concentrated form of man-made place. While many factors introduced over the passage of time affect the quality of place and the implicit identities of its occupants, the first responsibility for place and its inhabitants, as stated in a quote of Christof Theones, taken from Steen Eiler Rasmussen’s Experiencing Architecture, rests first with its designers, because architects define reality:

“Architects are artists; their medium is called imagination. Yet whereas the painter simulates a new world, the architect intervenes in the real one, thereby establishing new realities.

PROGRAM

MASSING CONSIDERATIONS

The existing context ranges from single story retail buildings to two-story homes, three-story schools, and four-story apartment buildings (Fig. 56-59).



Figure 56 - Typical Ward 7 Semi-Detached Single Family Home



Figure 57 – Mid-rise Apartment Buildings Lining East Capitol Street



Figure 58 - Abandoned Single Story Retail

Designing this project taller than four stories may be out of sync with the character of the neighborhood and could be potentially destructive to the already minimal nature of the existing urban environment. Excluding the landmark building, which may assert its hierarchy by standing several stories taller or shorter, the fabric of this thesis is projected to stand at a maximum height of four stories above grade.

SITE AREA CALCULATIONS

By Street Block:

○ Shrimp Boat Triangle:	51,347sf
○ Benning Road Metro Station:	197,175sf
○ Convenience Store, KFC, Denny's:	154,593sf
○ Popeye's:	67,235sf
○ Popeye's Neighbor:	33,342sf
○ Benco Shopping Center:	169,883sf
○ Total Area of Site:	673,575sf or 15.46 acres
○ Working Area of Site:	650,000sf or 14.90 acres

Table 1 – Site Area Calculations

EXISTING ZONING

The bulk of the site is zoned C-3-A, reserving it for moderate density community commercial use and multifamily housing. The housing shown in the axon above are two-story semi-detached single-family homes, one of the most frequently occurring housing types in the area. The site has a Floor Area Ratio or FAR of 4, of which 2.5 can be commercial. Unlike other Metro stations throughout the city, which have already had TOD-based master plans developed, the DC Office of Planning has not yet approved a proposal for revitalizing the area around the Benning Road site.

DENSITY CONSIDERATIONS

To develop an appropriate, rather than overwhelming density level within the context of the existing neighborhood, programming for housing, parking and

civic space will only be at half of possible capacity allowed by site. Office space will be programmed at 75% of possible capacity. The areas for the museum, recreation and retail spaces are close to optimal and will be programmed at 100% capacity. This allows for creative distribution of access to light, air, and unencumbered views of the surrounding environment, all while accommodating universal design and ADA accessibility issues

PROGRAMMATIC PRECEDENT ANALYSIS

Hismen Hin-nu Terrace by Michael Pyatock



Figure 59 - Hismen Hin-Ni Terrace, Courtyard Photo



Figure 60 - Hismen Hin-Nu Terrace, Entrance Photo

Total Site Area: 63,803 sf (1.46 acres)
 Density: Apartments = 88 dwelling units/acre, townhomes = 35 du/ac
 Total built square footage: 135,699 sf
 Four stories on boulevard, three stories on side streets
 Housing occupies 60% of built square footage
 12% of housing is 1BR @ 585sf
 34% of housing is 2BR @ 800sf
 38% of housing is 3BR @ 1,050sf
 16% of housing is 4BR @ 1,250sf
 Circulation, Lobby and Offices occupy 2% of built square footage
 Commercial occupies 8% of built square footage
 Day Care occupies 1% of built square footage
 Community Room occupies 1% of built square footage
 Parking occupies 26% of built square footage

Table 2 – Program for Hismen Hin-Nu Terrace

Cascade Court Apartments by GGLO Architecture and Interior Design



Figure 61 - Cascade Court, Aerial Photo



Figure 62 - Cascade Court, Courtyard Photo

Total Site Area: 28,827sf (0.66 acres)
 Density: 151 dwelling units/acre
 Total built square footage: 141,723 sf
 Five stories over two levels of underground parking

Housing occupies 43% of built square footage
 25% of housing is Studio @ 400sf
 34% of housing is 1BR @ 600sf
 33% of housing is 2BR @ 740sf
 18% of housing is 3BR @ 1,200sf
 Commercial occupies 6% of built square footage
 Courtyard occupies 9% of built square footage
 Parking occupies 40% of built square footage

Table 3 – Program for Cascade Court Apartments

Frank G. Mar Community Housing by MacDonald Architects

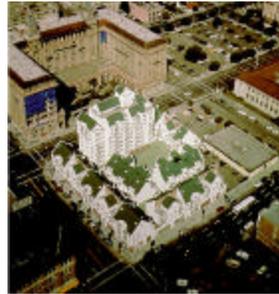


Figure 63 - Frank G. Mar Community Housing, Aerial Photo

Total Site Area: 39,700 sf (0.91 acres)
 Density: Family Housing = 55 du/ac, Senior Housing = 70 du/ac
 Total built square footage: 210,000 sf
 Three stories for family housing, nine stories for senior housing, two levels of underground parking
 Housing occupies 42% of built square footage
 29% of housing is 1BR @ 500sf
 32% of housing is 2BR @ 800sf
 30% of housing is 3BR @ 1,000sf
 9% of housing is 4BR @ 1,200sf
 Courtyard/Play area occupies 6% of built square footage
 Commercial occupies 6% of built square footage
 Community Room occupies 0.5% of built square footage
 Parking occupies 45% of built square footage

Table 4 – Program for Frank G. Mar Community Housing

Fruitdale Station by Seidel/Holzman

Total Site Area: 8.67 acres
Density: 51.3 du/ac
445 units of flats, townhomes
13,400 sf of retail
200,000 sf of office space
1-acre park

Table 5 – Program for Fruitdale Station

Mixed-Use Prototype by University of Arizona

Total Site Area: 3.59 acres
Density: 16.7 du/ac
60 housing units (40 market rate, 20 affordable)
10,800 sf of ground-floor retail
18,000 sf of office space
120 parking spaces below building, 60 at grade

Table 6 – Program for Mixed Use Prototype

Swans Market



Figure 64 - Swans Market, Courtyard Photo

17,000sf of office space
25,000sf of storefront retail with 18 parking spaces
18 live/work 1000sf rental units priced at 50-60% of median rent with 15 parking spaces
20 Co-housing condominiums with 1:1 parking

Table 7 – Program for Swans Market

MASTER PLAN - DESIGN OBJECTIVES

The goal of the master plan is to take four uses, housing, retail, commercial and recreation, and mixed them in such a way as to allow the presence of one use to sustain the other, in a kind of “urban ecosystem”. Additionally, facilities like retail, commercial and recreation need to be substantial enough to accommodate outside business, which should be drawn to the site by the museum, if nothing else.

Based on the programmatic precedent analysis, the following allotments seem appropriate for the following uses:

Housing:

40% of built project

3% of housing is 250-400sf dormitories for persons who would otherwise be homeless and need a place while they get back on their feet. Two to a dorm, no drugs or alcohol, maximum duration of stay, 21 days

7% of housing is 450-600sf studio apartments

25% of housing is 600-750sf 1BR apartments

25% of housing is 750-900sf 2BR apartments/condominiums

20% of housing is 900-1,200sf 3BR apartments/condominiums

10% of housing is 1,200-1500sf 4BR apartments

10% of housing is 750-900sf 1BR live/work apartments/condominiums.

Maximum rental term without purchase, 12 months.

The dormitories and the live/work units are temporary footholds, to give a person time to get a business started or to get their life sorted out so they can have a fruitful emergence into society. However, it should be made clear, this is not a homeless shelter or a node of poverty. Rental term and stay limits are deliberately designed, in a rather Darwinist fashion, to motivate a person to expedite their success.

- Parking: 25% of built project
Can afford to be on the low side because of transit-oriented nature of project
- Landmark Building: 12% of built project
- Civic: 02% of built project
- Recreation: 03% of built project
- Retail: 12% of built project
- Office: 10% of built project
- Public Realm: 30% of available site @ grade

Based on the space-rationing model shown above, the tentative space allocations for the master plan are as follows:

- Public realm/court space: ~ 200,000sf
- Programmable site: ~ 450,000sf
- Total programmable square footage: ~ 1.8 million sf
- Housing (accounting for circulation and service): 237,500sf

24 dormitories @	250-400sf
36 studio @	450-600sf
100 1BR @	600-750sf
75 2BR @	750-900sf
50 3BR @	900-1,200sf
20 4BR @	1,200-1,500sf
30 1BR lv/wk @	750-900sf

Parking: 437,500sf ~ 738 spaces

Museum: 144,000sf

Civic Meeting Hall: 18,000sf

Note: Meeting Hall can be an adaptive reuse of Shrimp Boat and tie into the Museum through an adjoining stair hall

Recreation Center: 54,000sf

Retail: 216,000sf

Include grocery/market @ 35,000sf

Office: 135,000sf

15% of office space is job training center ~20,000sf

Table 8 – Program for Thesis Master Plan

LANDMARK - DESIGN OBJECTIVES AND NARRATIVE DEVELOPMENT

Although the specific identity is extremely tentative at this stage in the project, the landmark for the Benning Road/East Capitol Crossing is conceived of as a museum celebrating one or more special aspects of the Ward 7 region. While the contents and vocabulary of the museum are intended to be regionally and culturally specific, the idea

for the landmark is to commemorate America's successes and failures in reconciling its diverse population. The exhibition sequence and correspondingly the architecture of the building will have three thematic components/goals: 1) To document and report the history of ethno-cultural strife in the area, and where pertinent, the nation, 2) To celebrate those who have catalyzed greater diversity in changing times and circumstances, and 3) To espouse hope, to articulate how much more can and has to be done for "authentic" harmony to occur. The museum typology is important because it necessitates a deliberately symbolic, almost musical architecture that will appeal to the visceral spirit of the region, create a unique genuine tourist attraction, and set a distinctive character for place.

In researching the history of the site, hoping to learn more about the spirit of the place, three interesting adjacencies were discovered that might provide clues concerning the optimal use of the landmark building. First, the site is near the home of the Nacotchtank Indians, the agricultural tribe of Native Americans for whom the Anacostia River was named after. Second, the roads leading to the site link a park system built around the historic locations of old forts, part of a highly coordinated defense network that protected the Nation's Capitol from Confederate invasion during the Civil War. Finally, Woodlawn Cemetery is located three blocks south of the site, and is significant as one of the first local cemeteries to allow African-American interments. A number of locally and nationally elite African-Americans are buried there. If a museum is to be used as an anchor for the site, then its form could be the expression of an imaginary dialogue between these three historic entities.

With the exception of art galleries, which can have an endless number of rooms and possible promenades, most museums, especially those dedicated to history, focus on the celebration of anywhere from one to three hierarchical spaces and the development of the promenades that link them. Much like a church, there is a comparable nave-narthex-parvis relationship, with various support galleries, arcades and chapels located just off the main space.

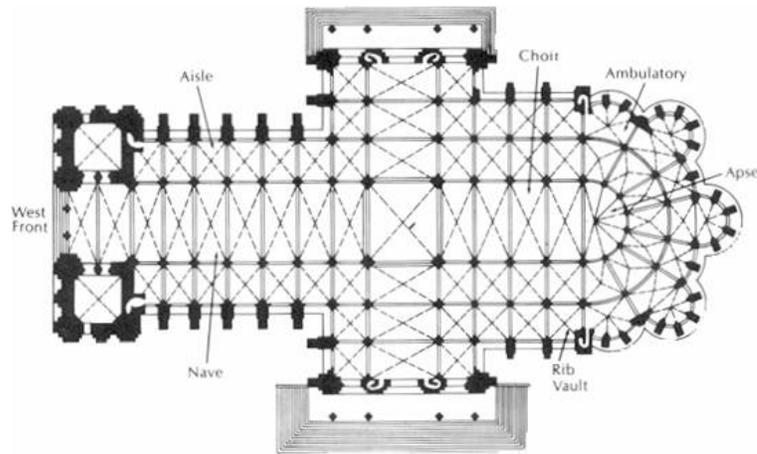


Figure 65 - Plan of Gothic Cathedral, showing Narthex, Nave, Nave Arcades and Private Chapels

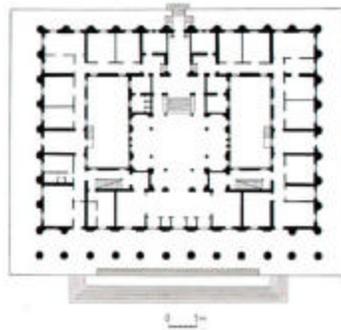


Figure 66 - Basic Museum Plan

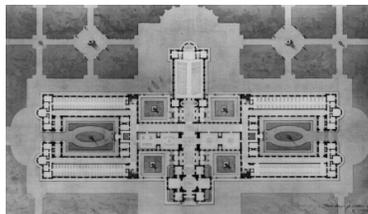


Figure 67 - Museum Plan with Exterior Spaces and Auditorium

Deductively, a museum featuring three historically discrete themes should program each theme in turn based on the notion of building up to the arrival at a hierarchical space and then transitioning from one hierarchical space or programmatic epicenter to the next. Assuming modest thematic hierarchy among the three phases of the building based on historic recency and cultural relevance for surrounding neighborhoods, the schematic program for the Ward 7 Museum reads as follows:

Total Available Space:	144,000 sf
Building Footprint, Based on FAR of 4:	36,000 sf
Circulation, Based on assumption of Museum circulation as consuming 25% of available space:	36,000 sf
Stair Hall Can link Museum to Shrimp boat or other iconic building:	5,000 sf (total, not footprint)
Main Entry Hall:	2,500 sf
Reception:	250 sf
Information Center:	400 sf
Main Hall-Nacotchtank Indians:	8,000 sf
Support spaces/galleries–Nacotchtanks:	6,000 sf
Main Hall-Civil War Forts and the City:	10,000 sf
Support spaces/galleries-Forts:	7,500 sf
Main Hall-Historic African-Americans:	12,000 sf
Support spaces/galleries-African-Americans:	9,000sf
Roof Garden:	24,000 sf
Restrooms @200sf:	2,400 sf
3 Auditorium/Screening Rooms, 1 @ 4,000 sf, 1 @ 5,000 sf, 1 @ 6,000 sf:	15,000 sf
Administration:	3,000 sf
Conference and Seminar Rooms:	4,000 sf
Retail/Dining:	20,000 sf

Table 9 – Tentative Program for Museum

PRECEDENT ANALYSIS

The search for relevant precedents has been a two-pronged effort, one relating to urban design and how best to resolve the irregular street grid, the other related to landmark architecture of a culturally intense nature. The criteria for selecting urban precedents: Is the space able to act simultaneously as center and threshold, as node and gateway? Architecturally, given the thematic intensity and specificity of what was originally conceived of as a Museum of Cultural Harmonics for the landmark building, three primary precedents have been chosen to compare how they each address the same topic, the Holocaust, in their own way.

URBAN DESIGN PRECEDENTS

The first precedent reviewed was Sixtus V's Piazza del Popolo in Rome (Fig. 68).

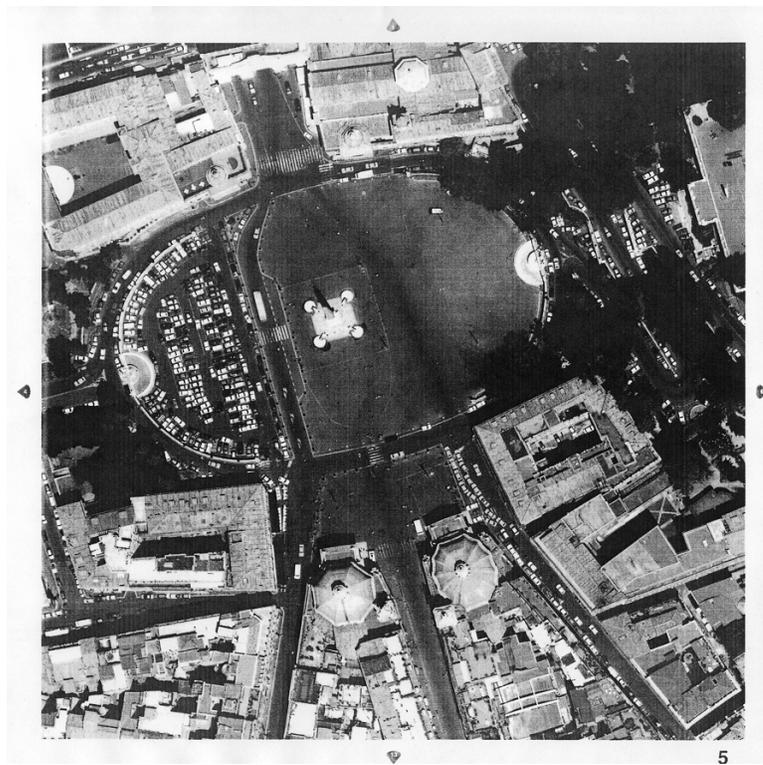


Figure 68 - Piazza del Popolo, Aerial Photo

The Piazza del Popolo is remarkable because, as can be seen in the diagram below (Fig. 69), in a rather Baroque fashion, it uses a single center point to resolve and reflect a number of important, but potentially discordant axes. As can be seen in Fig. 70, the piazza lies at the base of a hill (hence the blank space on the right of the figure/ground) and the opening at the top of the diagram is one of the major gateways to Rome.

Note that the long axis of the space is oriented perpendicularly to the central movement axis, gesturing towards and away from the hill to the right. North is on the right of this diagram, meaning that the orientation of the piazza is designed to minimize the amount of un-shaded sunlight that can have access to the square on a given day.

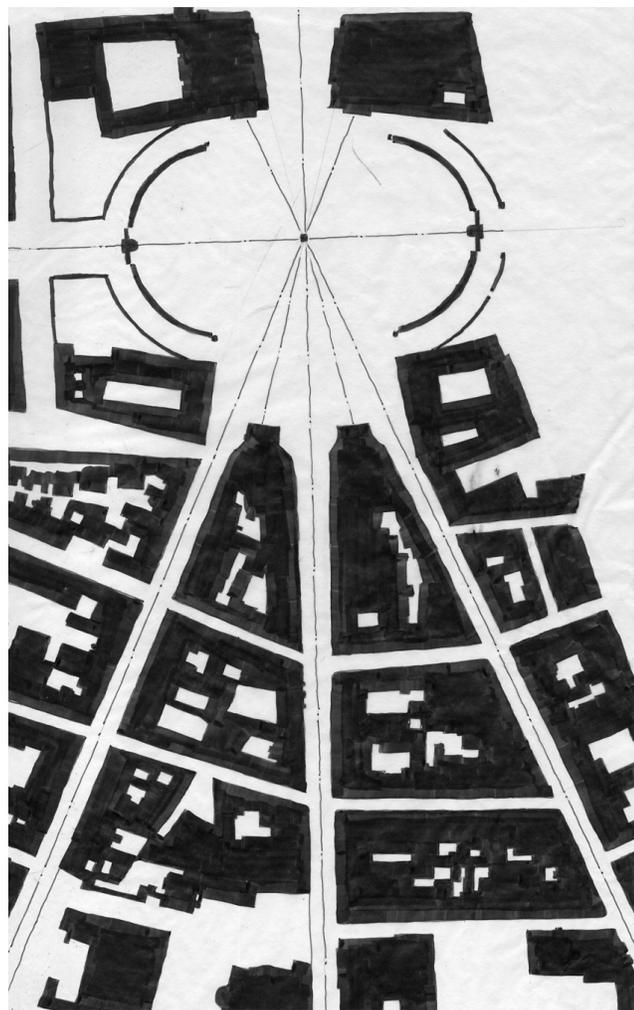


Figure 69 - Piazza del Popolo, Figure/Ground



Figure 70 - Piazza del Popolo, Assorted Photos

An important idea to note about the spatial character of the piazza is the layering of enclosure. While the surrounding building masses suggest a bulging rectilinear space, the outer walls of the square create a baroque oval inside the potentially ambiguous space. With this kind of move, the alignment of building masses is less pivotal to the reading of space. However, what the building masses do provide in an irreplaceable way are thresholds, visually framing all four major axial views seen from the center of the space. The idea for building mass as a frame for a threshold space may have applications in the design of East Capitol Street and Benning Road.

Another key precedent was the Arc de Triomphe in Paris (Fig.71).



Figure 71 - Arc de Triomphe, Aerial Photo

As can be seen in Figure 71, above, the urban fabric of Paris does not conform to the American idea of the straightforward rectilinear grid. Though originally an ancient Roman new town, Paris is a primarily a medieval city that follows a different set of urban design guidelines. In the Baroque era, between 1600 and 1750, Napoleon III and Baron Georges Eugene Haussmann cut through the existing fabric to establish a network of interconnected axial boulevards, including the Champs Elysees, Paris' triumphant procesional "Main Street" (Fig. 72).



Figure 72 - Arc de Triomphe from the Champs Elysees

The Arc de Triomphe sits atop a large traffic circle located where the majority of these major boulevards converge (Fig. 73). The aerial photo in Figure 71 brings to light the drama of the space, and how willfully the boulevards radiate from it and cut through the city fabric, like crop circles in a field of wheat.

As can be seen in the street block diagram (Fig 74), the traffic circle for the Arc de Triomphe resolves the intersection of six major boulevards. The intersection of so many streets at so many angles created a number of small idiosyncratic street blocks surrounding the circle. At the current massing of these buildings, the space is difficult to enclose in section. The Arc solves the problem by becoming a dominating, commanding object in the center of the space, and making observers mindful of their movement about it. Here, it is arguable that the circular movement, or the legibility of path, combined with the legibility of landmark make this circular space imageable (Fig. 75).



Figure 73 - Paris from Atop the Arc de Triomphe

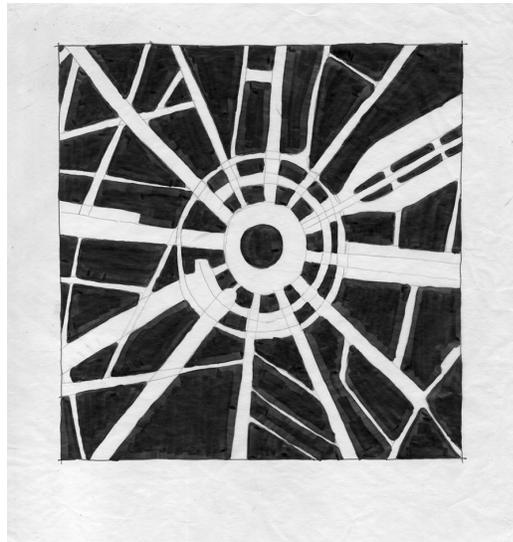


Figure 74 - Arc de Triomphe, Street Grid

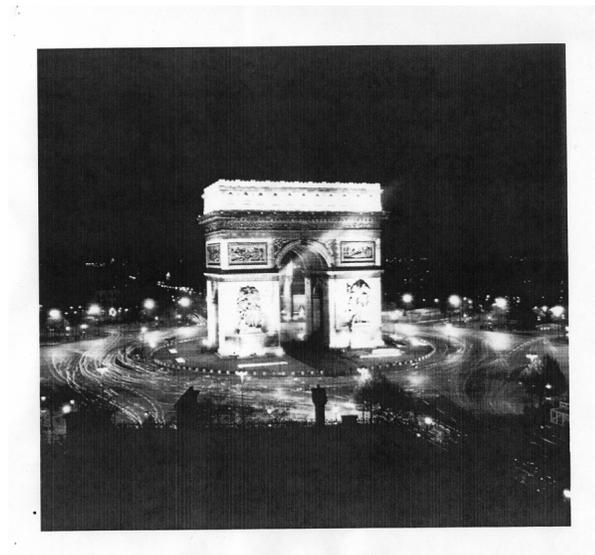


Figure 75 - Arc de Triomphe, Night Photo

.The third major precedent relating to urban design was the Third Street Promenade in Santa Monica (Fig. 76). Built across the length of three street blocks on Third Street, the Promenade is a retail corridor that uses the street as an urban space.



Figure 76 - Third Street Promenade, Entrance Statue

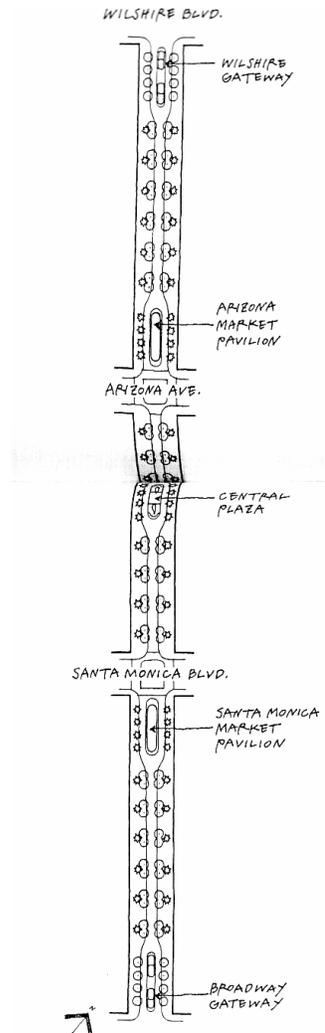
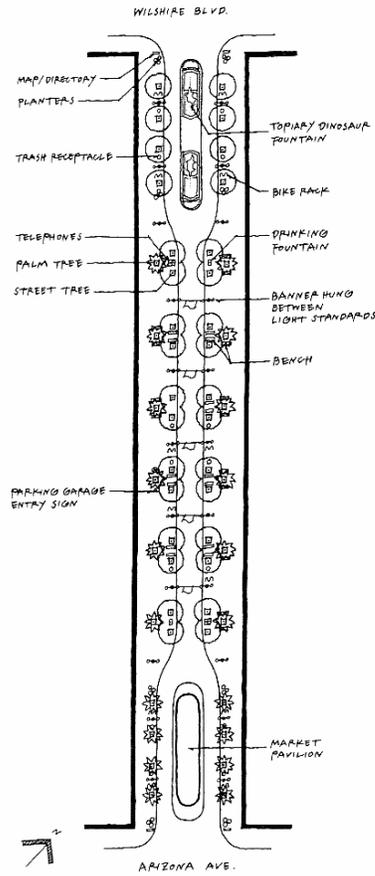


Figure 77 - Plan of Third Street Promenade

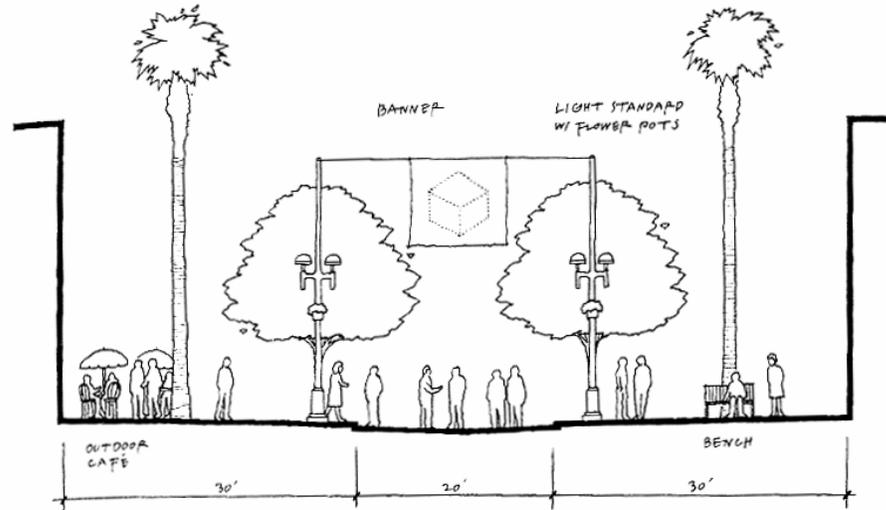
PEOPLE PLACES



1-55, Third Street Promenade: details of one block. Note the high level of street furnishings and planting.

Figure 78 - Block Blow-up of Third Street Promenade

As shown in the street block detail in Figure 78, a carefully thought out rhythm for compression and expansion of the sidewalks and the placement of the medians slows down automobile traffic, reduces the dimensional curb-to-curb width of the street, and creates a pedestrian friendly shopping environment, where shoppers can move from one side of the street to the other with relative ease. The street section on the next page shows in greater detail how the entire street really is a public domain and the automobile is an invited guest.



1-56. Third Street Promenade: typical cross section. Pedestrian scale is achieved via use of planting, banners, definition of differently paved zones, street furniture, and more. (Drawing based on materials provided by Roma Design Group)

Figure 79 - Third Street Promenade, Street Section

Note in the photograph below how park-like the avenue is, much like a scaled down version of the Champs Elysees. Furthermore, it is also interesting to observe the organization of the facades along the street, how the street frontage is very much reminiscent of an idealized “typical American Main Street”, an increasingly novel nostalgic archetype in these contemporary times.



Figure 80 - Third Street Promenade, Aerial Photo



Figure 81 - Third Street Promenade, Entrance Frontage While all three precedents have markedly different spatial agendas, all three share an interest in using a street or intersection of streets to create activated public space.

ARCHITECTURE PRECEDENTS

In spite of conclusions drawn about the intuitive nature of his theory, the first architecture precedent is Daniel Libeskind's Jewish Museum in Berlin (Fig 82). The most immediately striking feature of the Jewish Museum is the plan; an irregular zigzag that meanders back and forth across a linear spatial datum that, at various points, appears, disappears and reappears throughout the building in the form of corridors, bridges, and atriums (Fig 83). The form of the plan is rationalized by a complex linear matrix of Libeskind's own design, whereby simultaneously abstracts the Jewish Star of David while using the facades and corners to gesture toward important Jewish and Holocaust-related landmarks located throughout the city.



Figure 82 - Berlin Jewish Museum, Aerial Photo showing Memorial Garden

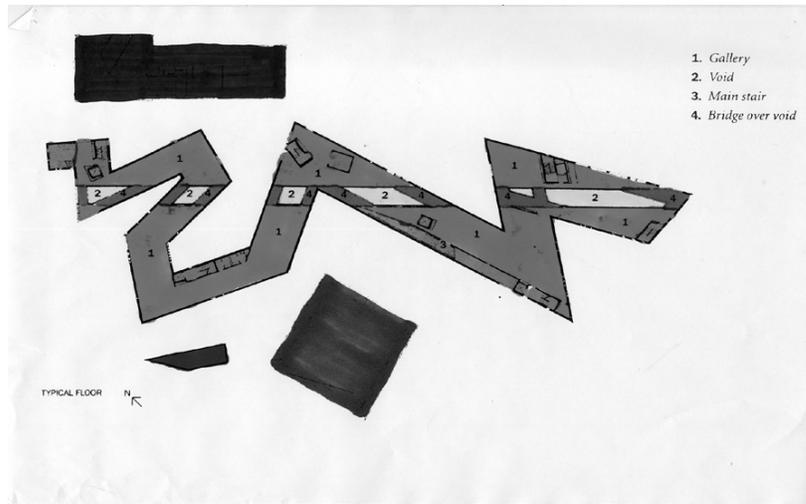


Figure 83 - Berlin Jewish Museum, Plan Diagram



Figure 84 - Berlin Jewish Museum, Aerial Photo Showing Skylights in Roof and Original Berlin Museum



Figure 85 - Berlin Jewish Museum, Facade Photo



Figure 86 - Berlin Jewish Museum, Interior Space

The Jewish Museum is an addition to the Berlin Museum. Programmatically, the Berlin Museum mandated that the existing museum be the only point of physical access to the new addition. In section (Fig. 87), a stairwell takes one down from the existing facility to a subterranean entry gallery, lit from above by ribbon windows that slash openings in the façade. Promenade through the building is about ascent up through the building, on a very austere, very processional single-run of stairs. The stairs lead to galleries on the upper levels and a symbolic memorial garden outside.

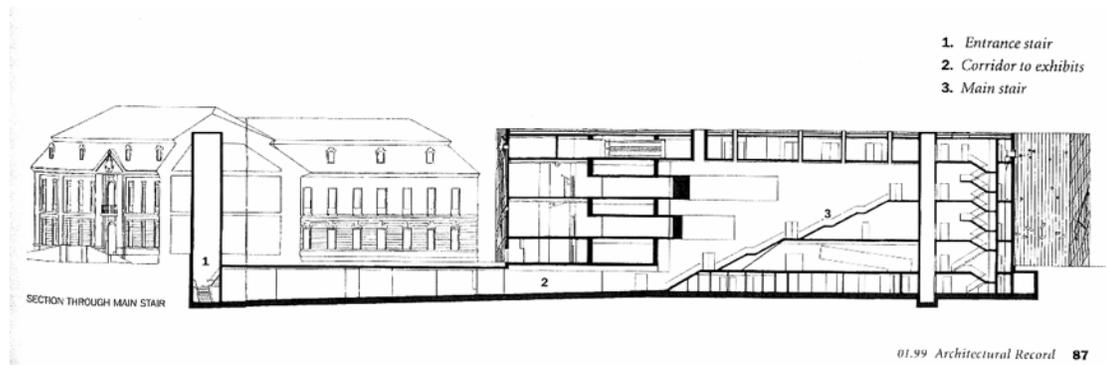


Figure 87 - Berlin Jewish Museum, Longitudinal Section

In the site plan (Fig. 88), it can be seen that the Jewish Museum is just slightly larger than the scale of most of its neighbors, but the short length of its many facades helps to break down that scale, especially along the main road the Lindenstrasse (Fig.

88). For the amount of perimeter wall the museum boasts, the building exterior spaces are inaccessible or un-usable, save the memorial garden on the south. The presence of so many residual spaces implies that the priority for this design was on bringing daylight to the interior, not on creating superfluous activity or reflection spaces on the exterior.

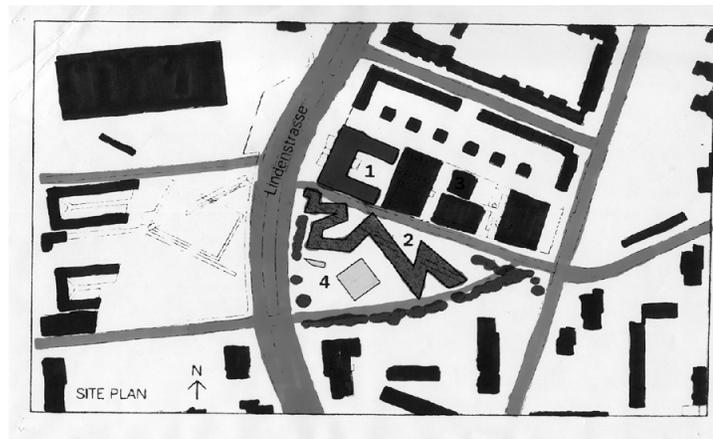


Figure 88 - Berlin Jewish Museum, Site Plan

The second precedent on Holocaust architecture is James Freed's U.S. Holocaust Memorial Museum in Washington D.C. (Fig. 89). Libeskind's and Freed's museums are often compared as diametrical opposites, one taking an abstract approach to create a powerful procession that threatens to overwhelm its exhibits, the other using slightly more literal mnemonic cues to create a procession built around the exhibits. A composition of regular forms mixed with non-traditional circulation, Freed's museum is a small metropolis of organized events, all contained in an exterior shell that is contextual and respectful of its Washingtonian locale.



Figure 89 - U.S. Holocaust Museum, Washington D.C.

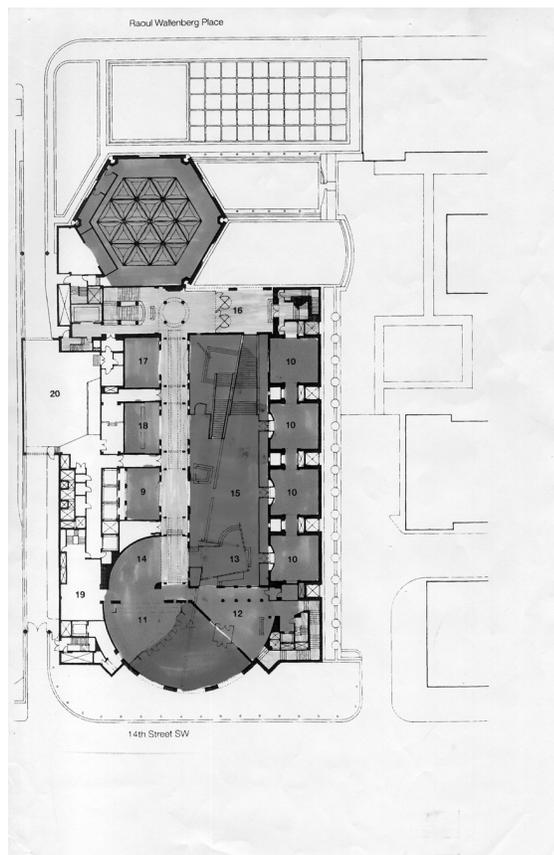


Figure 90 - U.S. Holocaust Museum, Ground Floor Plan

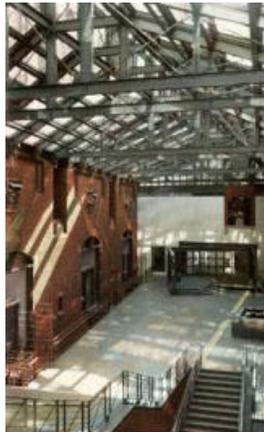


Figure 91 - U.S. Holocaust Museum, Assorted Photos of Atrium Space and Exhibit Hall

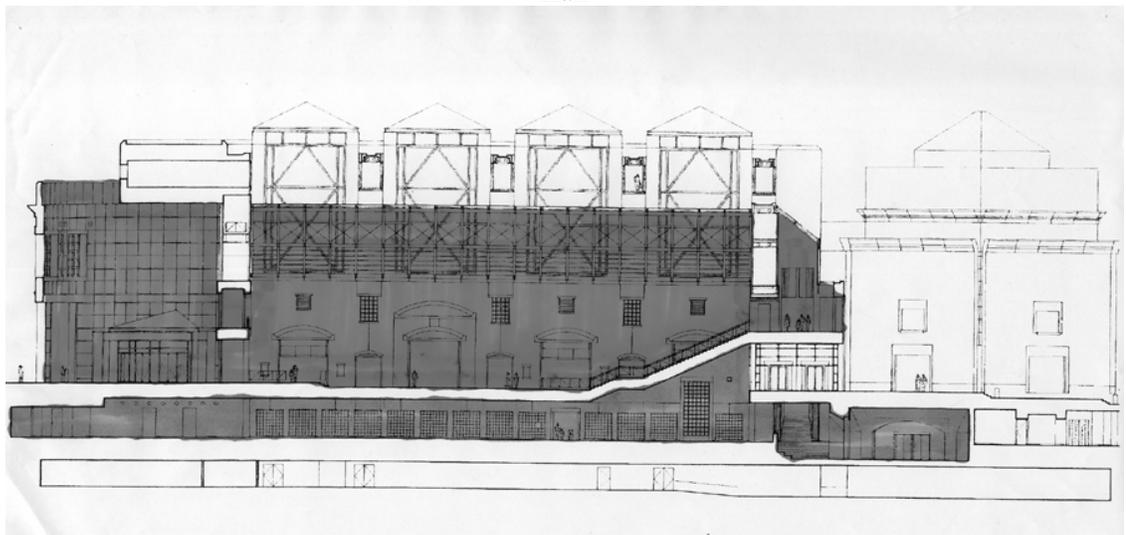
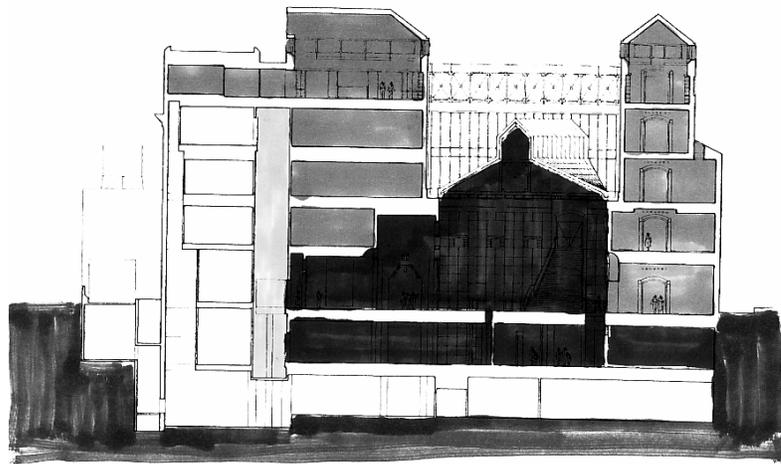


Figure 92 -U.S. Holocaust Museum, Longitudinal Section

As can be seen in the plan and sections, The U.S. Holocaust Museum weaves an exhibition promenade between three major events, the entry hall and lobby, the central atrium space and the hexagonal Hall of Remembrance. Abstracted smokestacks are used to evoke imagery of the Holocaust and enclose a light court, which illuminates the central atrium below. Beneath everything, on the lowest level, is a gallery for presentations, smaller exhibitions and the display of artwork.



Cross section through Hall of Witness

Figure 93 - U.S. Holocaust Museum, Transverse Section

The third and final architecture precedent relating to the Holocaust is the Memorial for the Deported in Paris, by Georges Pingusson. Located on the Ile de la Cite, an island where much of original Paris was first established, the Memorial for the Deported is completely abstracts the theme of the Holocaust and builds a promenade based on movement, enclosure and imagery. Imagery is central to the power of this design, as can be seen in the photo below of the metallic sculpture (Fig. 94), which implicitly conveys the ideas of imprisonment, barbed wire and despair.

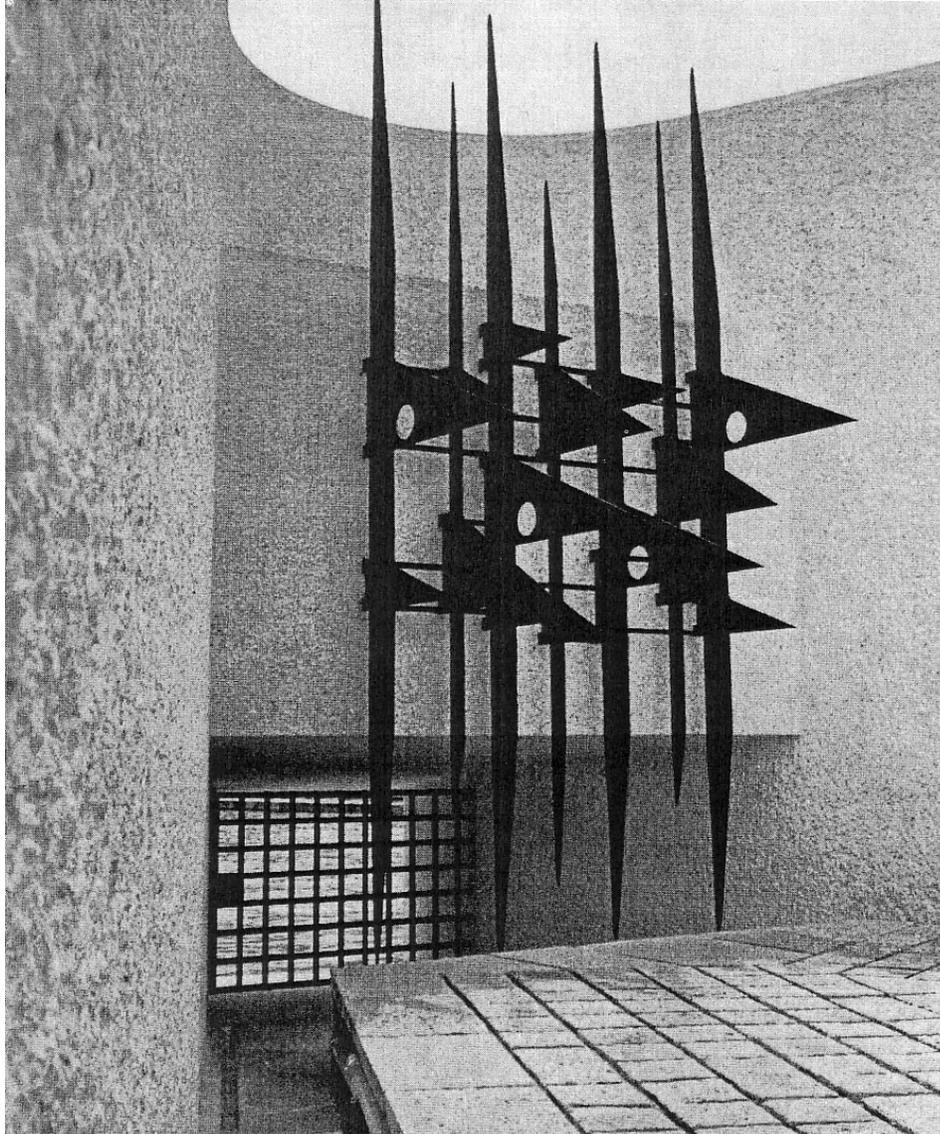


Figure 94 - Memorial for the Deported, Memorial Sculpture

The plan and section of the memorial build a movement system as a means of telling a story. Much like the Vietnam Memorial in Washington D.C., the observer descends into the memorial where there is space for reflection, and reemerges back at ground level. While in the space, the enclosure of the concrete walls is so great that any visitor is completely shut away from views of the outside world.

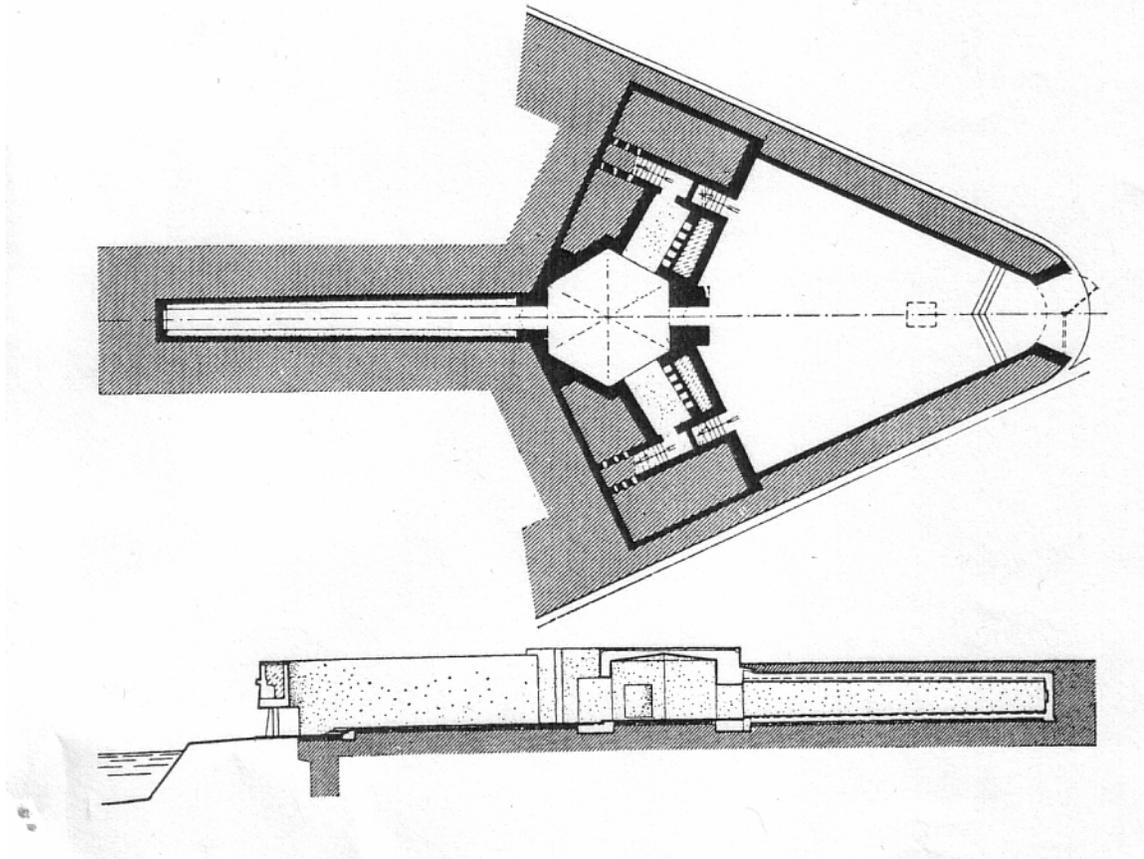


Figure 95 - Memorial for the Deported, Plan and Longitudinal Section

Looking at Figure 96, it appears the memorial sits at the tip of a peninsula, meaning that visitors are audibly and mnemonically conscious that they are surrounded by water, the entire time they occupy the space.

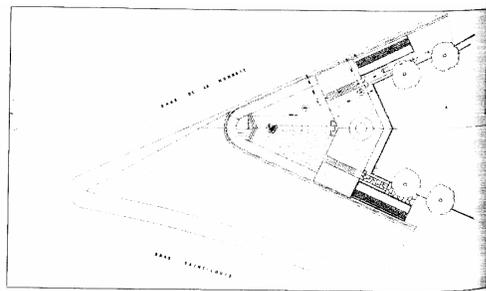


Figure 96 - Memorial for the Deported, Site Plan

On the interior, the visitor is even more shut away from the outside world, almost buried alive underground (Fig. 97). A dark place is created, symbolic of despair, but relieved by the shafts of light admitted from punched openings in the walls.



Figure 97 - Memorial for the Deported, Interior Space

These precedents have been useful because they have taken a common, thematically intense subject matter, and extrapolated it spatially in three different, but equally provocative ways. Ideally, the architectural portion of this thesis will use ideas culled from all three strategies to create a powerful landmark that helps solidify and electrify the genius loci of Benning Road and East Capitol Street.



Figure 98-Entry Corridor Facing Memorial Sculpture

DESIGN APPROACH

Given the nature of this thesis as an exercise in “holistic place-making”, schematic design has been focused on developing the urban and architectural aspects of the project in tandem with each other. For the urban design, emphasis has been placed on taking three relatively basic formal strategies and generating multiple iterations for each. Concerning the landmark building, which was initially conceived of as a museum, three partis have been developed for discussion, each one related to an explored formal strategy.

Urban Design Development

While this project is architectural and urban, and the primary focus for the project is the development of a landmark building, urban issues must be addressed in depth before the building design can proceed in a non-arbitrary fashion. At this stage in the project, urban design development has been about evaluating the potential of the existing environment by exploring schemes that, with one exception, can be grouped by their interest in being contextually sensitive and preserving the existing built fabric. The next stage of exploration will investigate varying degrees of intervention, including several that completely do away with the existing Ward 7 street grid and propose a new urban concept altogether. The final stage of urban design development will attempt to take principles discovered in studying the first two extremes and synthesis them into a coherent, viable solution.

At each stage of parti development, design always began with diagramming the existing site, to evaluate opportunities and challenges presented by existing conditions.

The site diagram, Figure 99, focuses on the intersection of East Capitol Street and Benning Road, as well as the surrounding fabric. Benning Road, a lateral street on the western side of the Anacostia, turns, just before intersecting East Capitol, to become a longitudinal street, driving through the remainder of Southeast and running alongside the eastern edge of Fort Dupont Park.

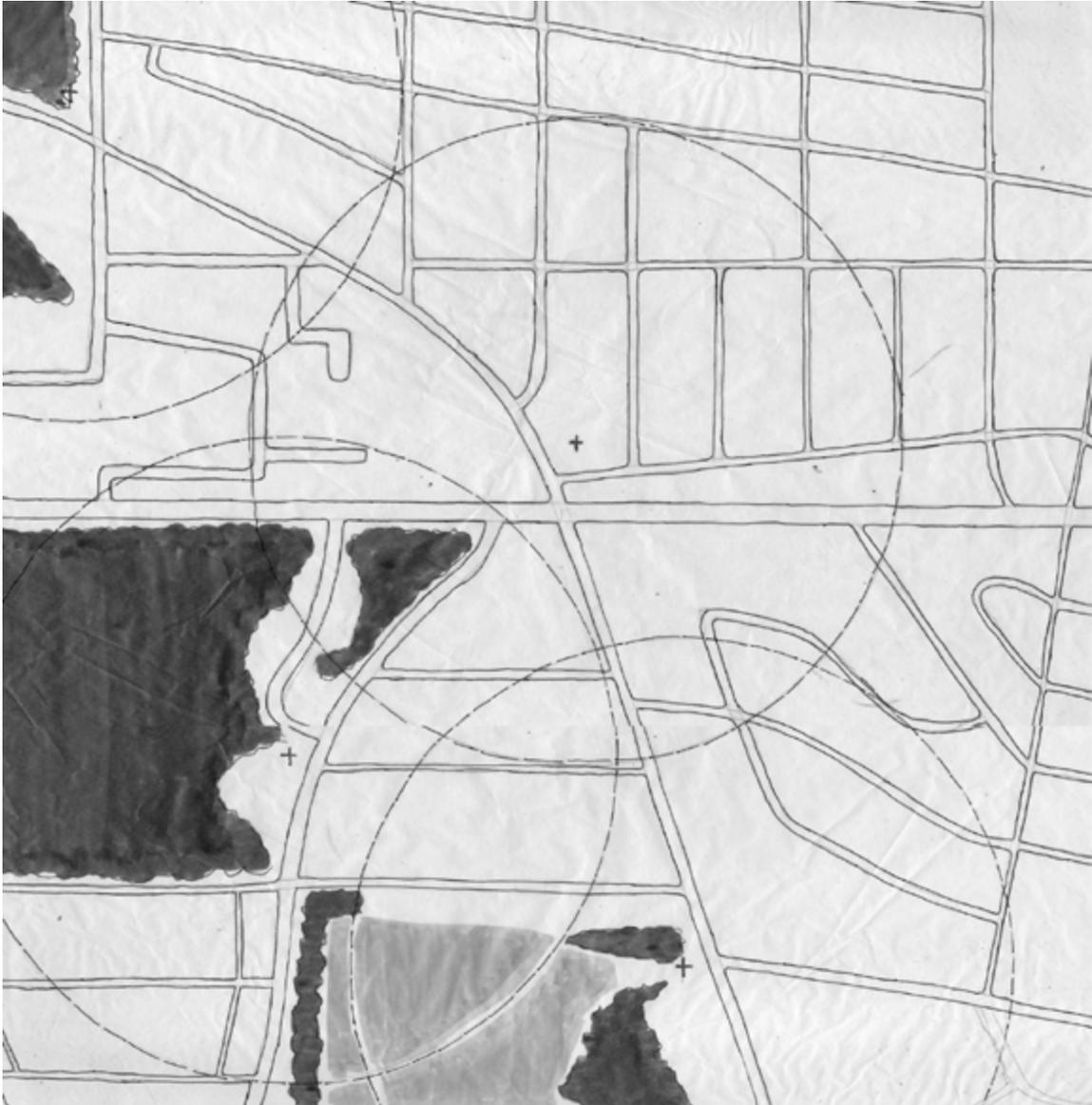


Figure 99 - Existing Street Grid and 5-Minute Walkability Between Points of Interest

There are four markers shown on the preceding site diagram, each one with a circle around it illustrating the five-minute walking radius. The marker at the top left is the corner of Fort Mahan Park that sits nearest the site, an opportune location for a possible threshold into the park. The marker on the lower left is the existing threshold to Fort Chaplin Park on Texas Avenue, a clearing in the thicket of trees that is currently used as an informal ball field and picnic ground. The marker at the bottom center is the entrance to Woodlawn Cemetary, which recently joined the National Registry of Historic sites. Finally, the marker just above the center on the right side is the location of the escalator for Benning Road Metro Station, the last stop in the District of Columbia on the Blue Line, one stop after the Blue-Line, Orange Line Split at Stadium Armory.



Figure 100 - Ascending the Escalator at Benning Road Metro



Figure 101 - Escalator for Benning Road Metro Station



Figure 103 - Piazza Parti, Plan

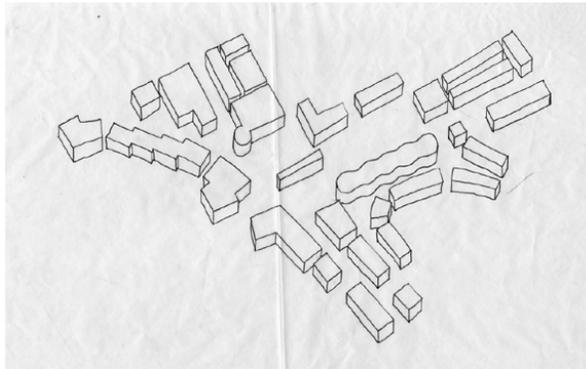


Figure 104 - Piazza Parti, Massing Axon

The second parti, “Boulevard” (Figs. 105-106), was based on the notion of playing up the existing landscape median that divides East Capitol Street, and creating a responsorial space along Benning Road. In the “Boulevard” parti, the landmark building attached to the wedge-shaped Shrimp Boat by a circular stair tower, extruding the wedge-shaped footprint to further define East Capitol Street and Central Avenue, located one block to the north.

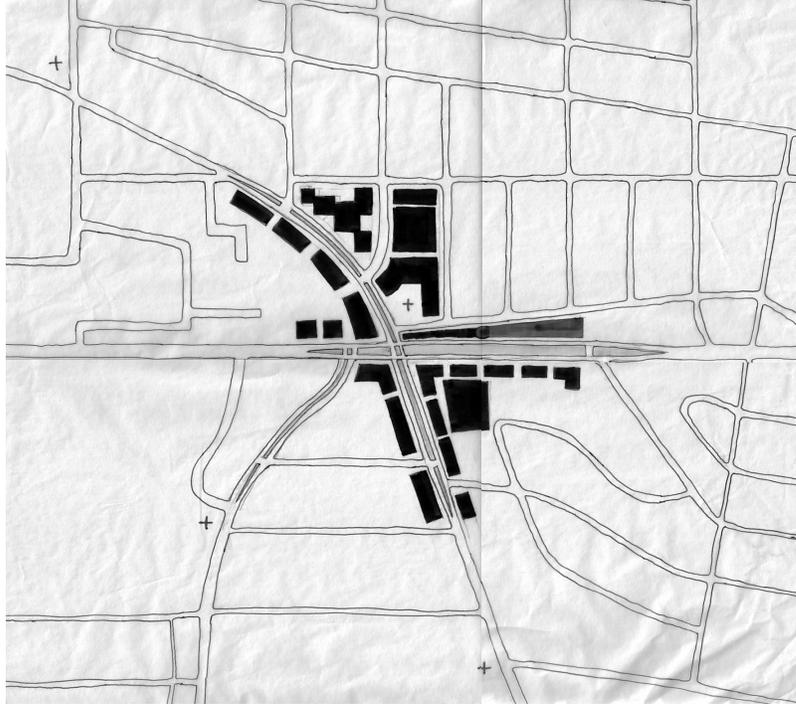


Figure 105 - Boulevard Parti, Plan

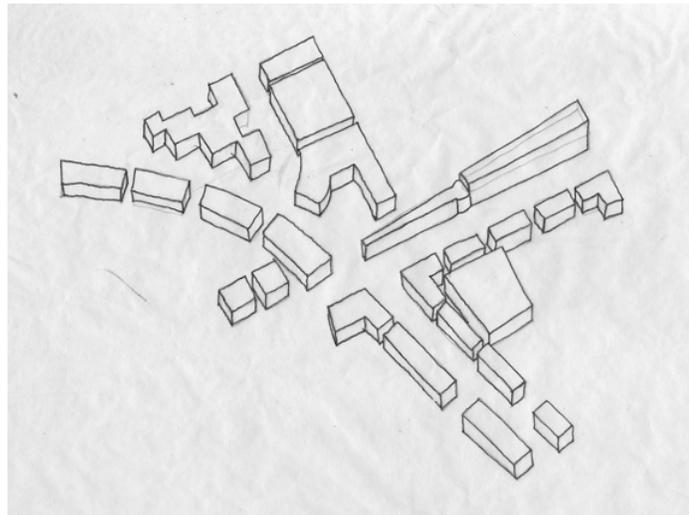


Figure 106 - Boulevard Parti, Massing Axon

The third parti, “Center” (Figs. 107-108), attempts to resolve the multiplicity of streets that intersect at or near East Capitol and Benning with a Arc de Triomphe – style monumental traffic circle. In this iteration, the landmark building is located in the center of the circle, as a visual focal point for observers approaching from all directions.



Figure 107 - Center Parti, Plan

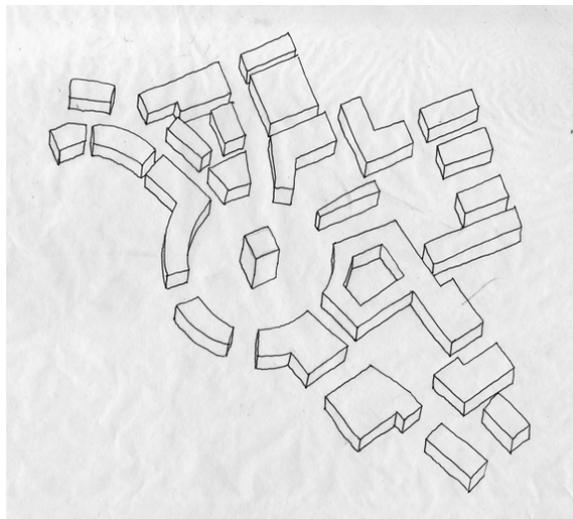


Figure 108 - Center Parti, Massing Axon

For the most recent iteration of schemes, which still attempts to be preservative of the street grid, if not the buildings, the built fabric and street grid were examined at a closer scale (Figs. 109-111).



Figure 109 - East Capitol Crossing, Area of Interest

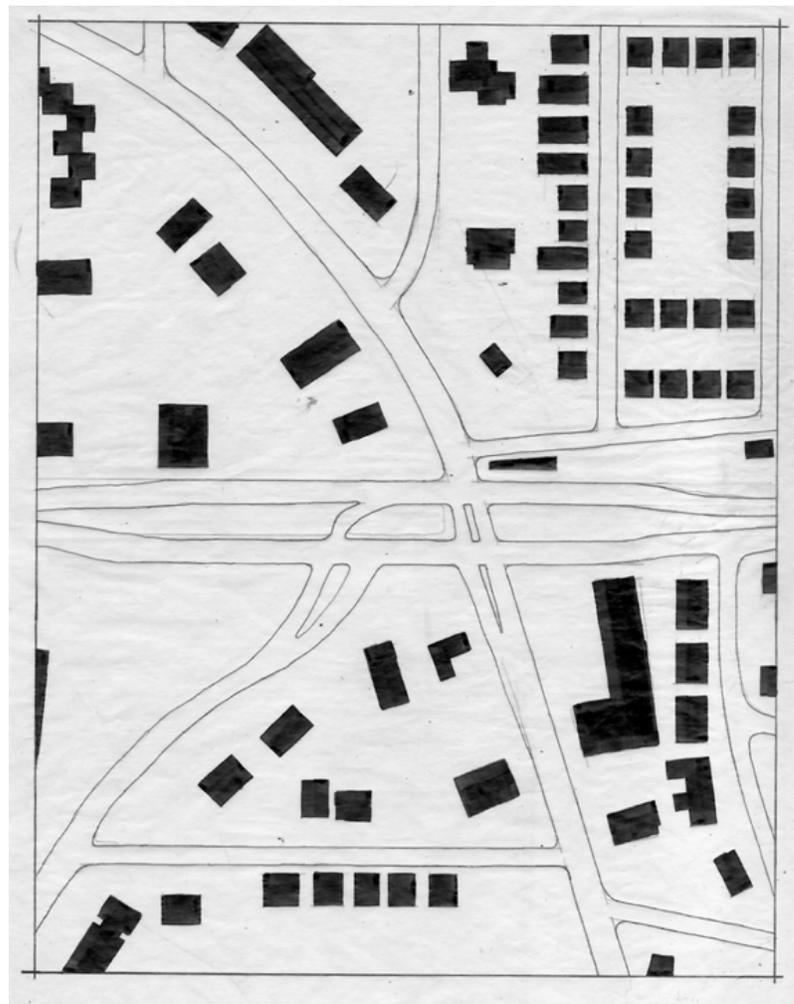


Figure 110 - East Capitol Crossing, Plan Blow-up

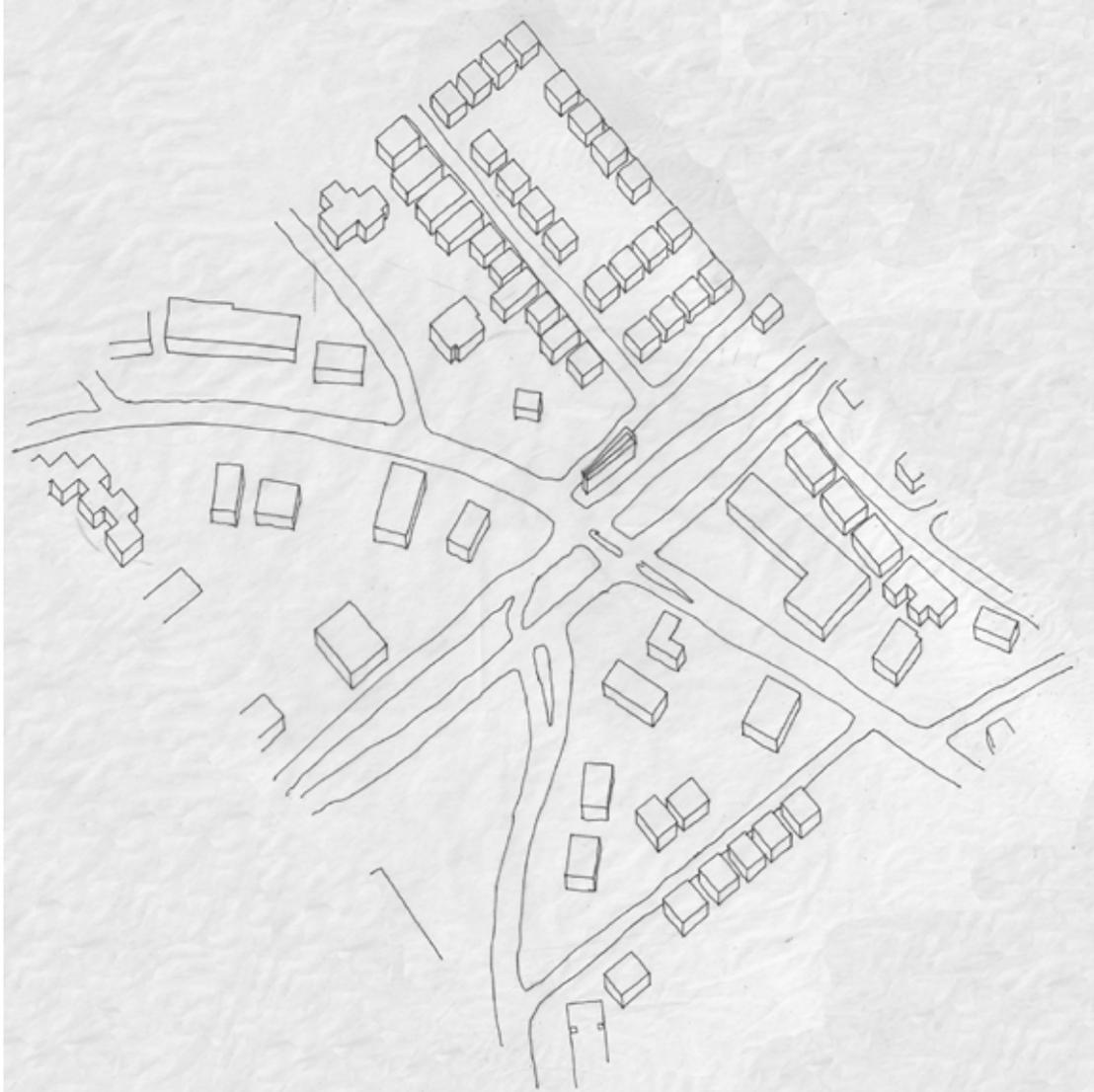


Figure 111 - East Capitol Crossing, Massing Axon

The bulk of the site is zoned C-3-A, reserving it for moderate density community commercial use and multifamily housing. The housing shown in the axon above are two-story semi-detached single-family homes, one of the most frequently occurring housing types in the area. The site has a Floor Area Ratio or FAR of 4, of which 2.5 can be commercial. Unlike other Metro stations throughout the city, which have already had TOD-based master plans developed, the DC Office of Planning has not yet approved a proposal for revitalizing the area around the Benning Road site. However, two vacant

sites have been earmarked by DCOP as particularly fertile real estate, and can be seen in the diagram below (Fig 112). The first site is located on Benning Road on the north side of East Capitol Street, and is conceived of as a sit down restaurant to respond to the Denny's across the street, which is currently the only sit-down restaurant in all of Ward 7. The second site is located on Benning Road on the south side of East Capitol, and is being marketed as a possible site for a small grocery store or drug store.



Figure 112 - Sites for Development Proposed by D.C. Office of Planning

The following three schemes were executed in the spirit of Michelangelo's Campidoglio (Figs. 113-116), which refrained from proposing the removal of existing buildings, instead choosing to infill between them in the hopes of creating more formalized, deliberate spaces. While the density levels vary, the emphasis is consistently on the portion of Benning Road north of East Capitol Street as fundamentally vital to activating the Metro Station and existing retail corridor.



Figure 113 - Piazza Del Campidoglio



Figure 114 - Original Capitoline Hill

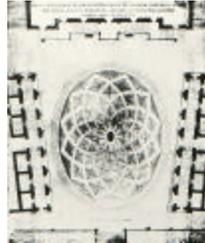


Figure 115 - Campidoglio, Plan



Figure116: Campidoglio, Aerial Photo

In the low-density scheme, seen in Figures 117 and 118, the existing retail strip is filled in along the Benning Road to create a unified, defined shopping corridor. Two small shops are placed in the median of East Capitol Street to bridge the two sides of Benning Road. While a number of small façade setbacks are used to give variety to the street face and activate the skyline for the pedestrian, two public squares are created from the existing fabric, separated by the wedge-shape of the Shrimp Boat: the one at the escalator for the Metro Station, the other at Benco Shopping Center. These squares or piazzas will recur throughout the design process.



Figure 117 - Preservative Strategy, Low-Density Plan

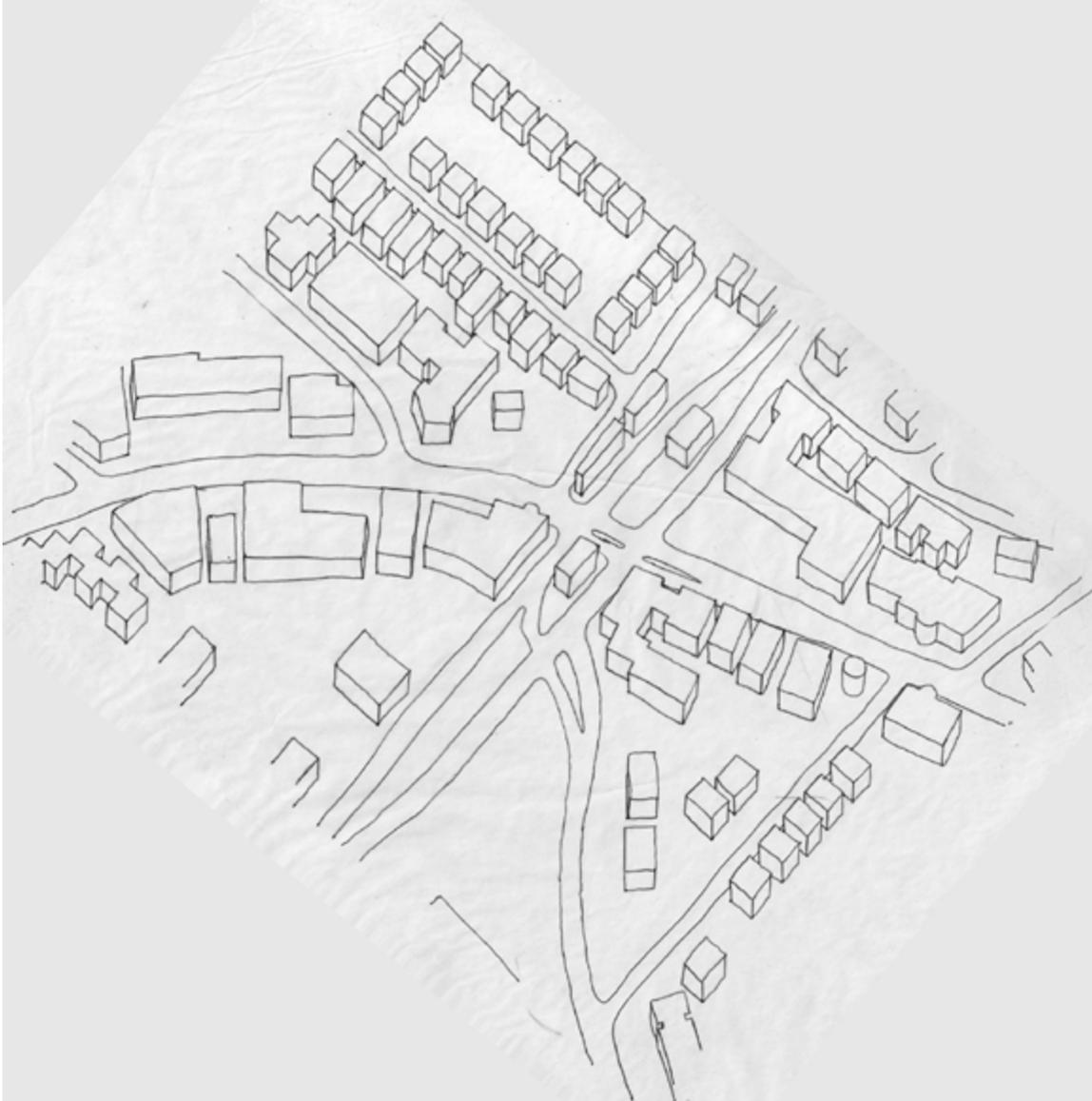


Figure 118 - Preservative Strategy, Low Density Massing Axon

The moderate density scheme (Figs. 119-120) attempts to use a larger percentage of available land on the site, unlocking a potential for developing East Capitol Street as well as Benning Road. Along Benning Road, infill is used to create a serrated but imageable assemblage of retail structures, with housing on the upper levels. The receding façade of the serrated structure is a promising location for a small plaza to relieve the west side of Benning Road as it transforms from a lateral to longitudinal street. Along

East Capitol Street, housing, commercial structures, and the landmark footprint provided the frontage necessary for enclosing and defining a landscaped boulevard. The unification between the north and south sides of Benning Road no longer exists, but each side has been developed to sustain itself as an independent-yet-coexistent entity, with a metro station on the northern side and a grocery store on the south.

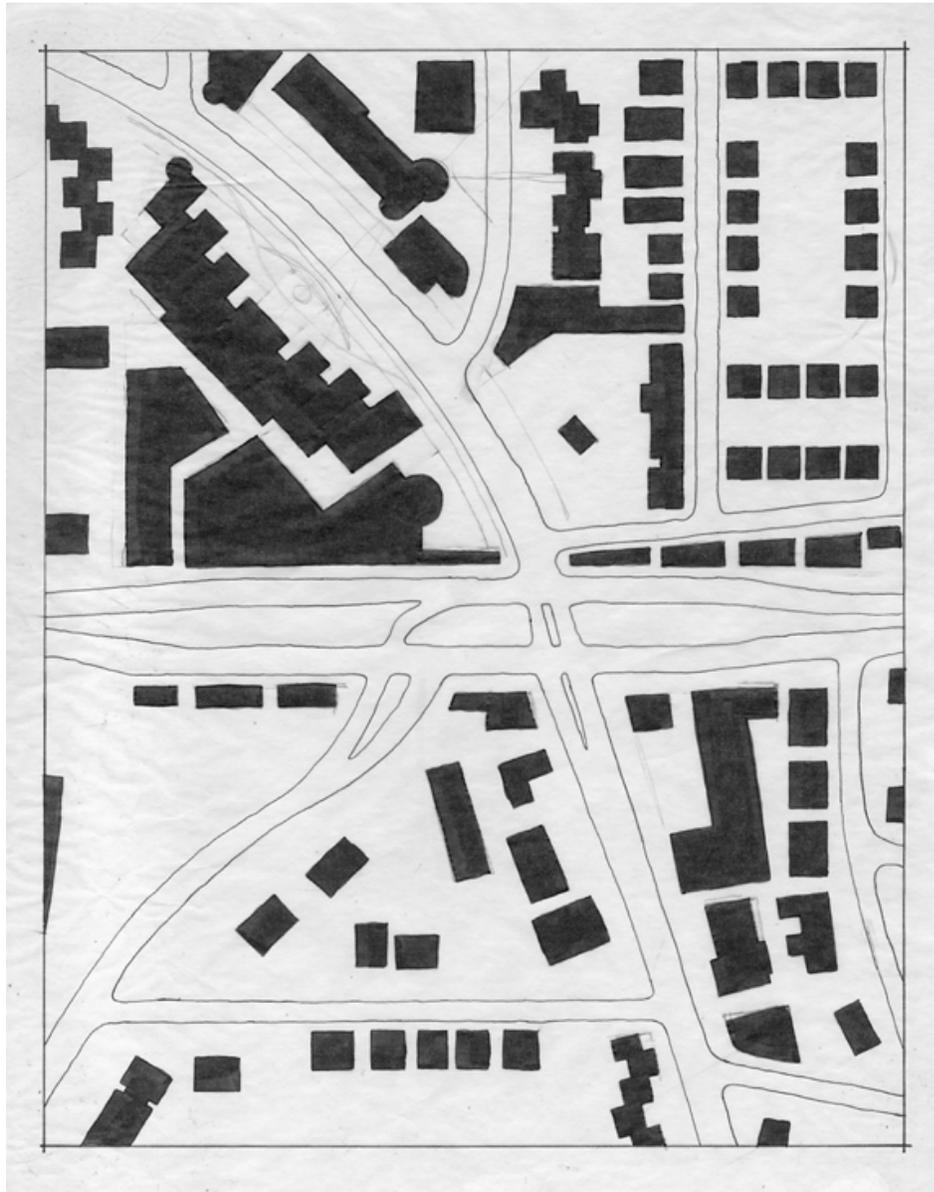


Figure 119 - Preservative Strategy, Moderate-Density Plan

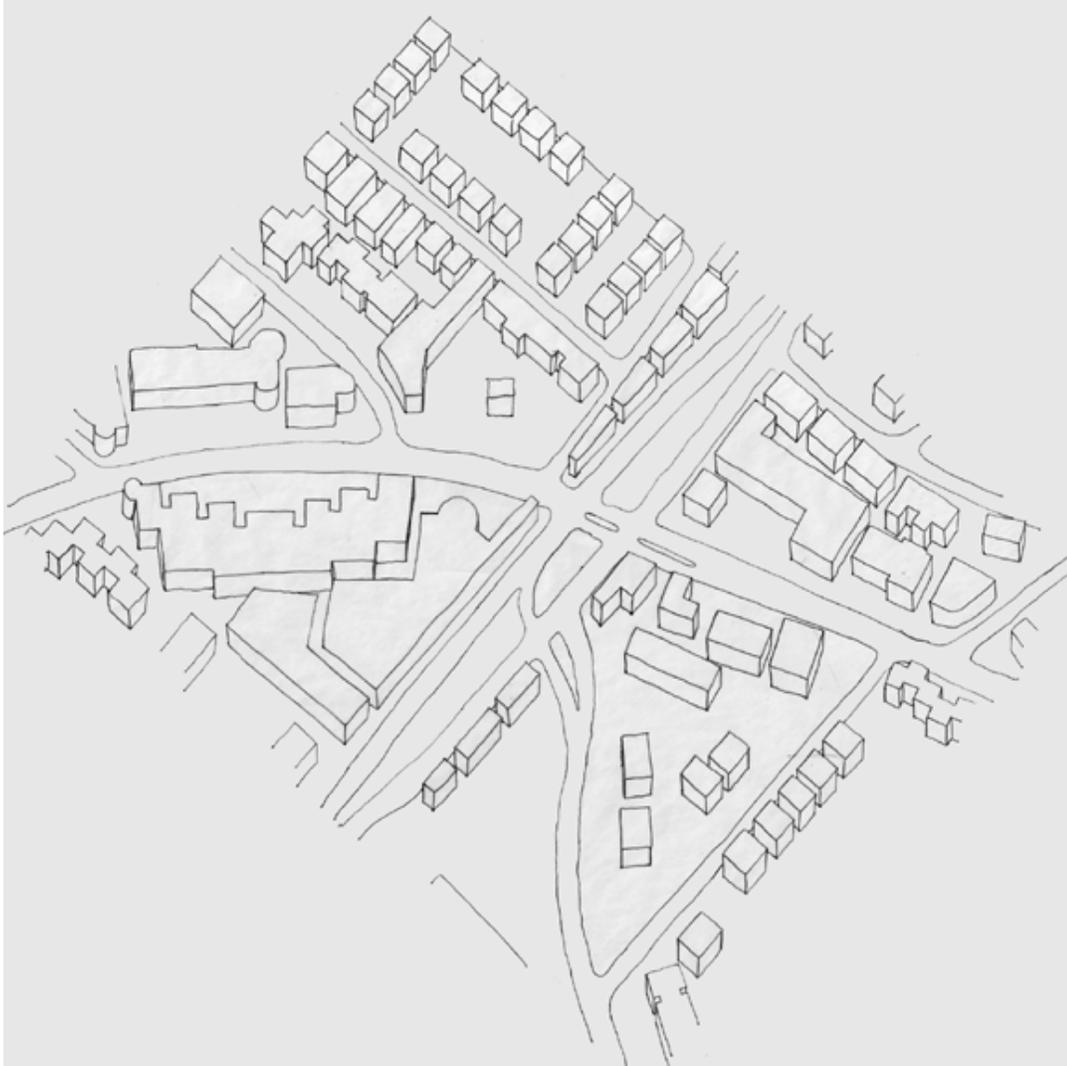


Figure 120 - Preservative Strategy, Moderate-Density Massing Axon

The high-density scheme (Figs. 121-122) seeks to maximize land use and definition of primary street corridors. Infill strategies applied here are reminiscent of the Federal Triangle and the insertion of the Reagan Building. The street wall along Benning Road is now constant, with only the Metro Station square and the Benco Shopping square as moments of relief, both occurring on the east side of Benning Road. Buildings are more aggressively placed in East Capitol Street's median with openings only occurring at the thresholds of intersections. Whereas in the low-density scheme, the buildings stood as objects in an open space, here they strive to be read as a strip or block of built fabric unto

themselves. A chance for a cathedral-like parvis, or gateway green, occurs at each end of the strip, a chance that could be significant in articulating the project area as not only a node, but also a threshold to the city.



Figure 121 - Preservative Strategy, High-Density Plan

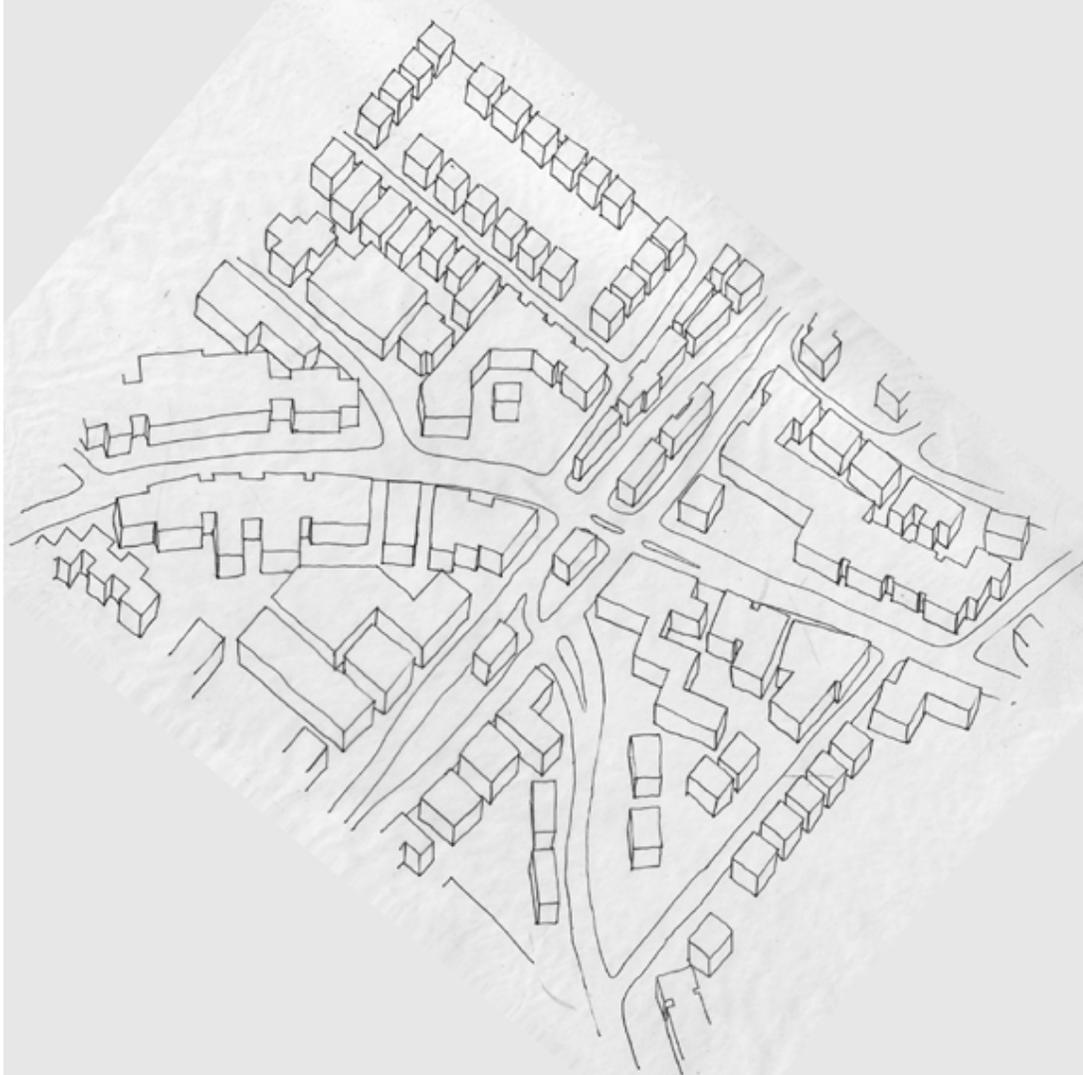


Figure 122 - Preservative Strategy, High-Density Massing Axon

The next three schemes were developed in the spirit of two significant French urban planners. Baron Georges Eugene Haussmann was memorable for willfully imposing a network of grandiose Baroque urban avenues and spaces in what had been a devoutly medieval Paris fabric (Fig. 123). Major Pierre L'Enfant, in designing the Baroque grid for Washington D.C., used monumental traffic circles to resolve intersections of multiple avenues while connecting vistas throughout the city (Fig. 124). Each of the next three schemes experiments with the notion of a traffic circle, as a means

to creating an imageable place whose formal language is synonymous with “Washington, D.C.”



Figure 123 - Aerial Photo, Haussmann's Avenues Driving Through Paris Grid



Figure 124 - Artist's Rendering, Dupont Circle as Nodal Garden Space

The first scheme, shown in Figures 125 and 126, aims to define the circle and the roads leading to it as articulately as possible. The circle is approximately 350 feet in diameter with three lanes of traffic circulating around it. While East Capitol Street and Benning Road are only slightly altered, 46th Avenue and Texas Avenue are implicitly linked as one by the circle, a relationship that has the potential to alter the identities of both residential access roads. An addition is annexed onto the Shrimp Boat and mirrored

on the opposing side of the street to frame the East Capitol entrance into the circle. The built fabric is also pulled back to allow the threshold facades to be read by observers approaching from the east. On the west end of the circle, a similar gesture frames the entrance to East Capitol Street signifying it as the hierarchical movement corridor. A large, blunt, wedge-shaped building sits to north of the circle denoting the location of the landmark building, which implicitly uses the circle as its parvis, commanding the space without occupying it. The metro escalator is almost completely enclosed by built fabric, occupying a small court, secluded from the noise of the circle beyond.

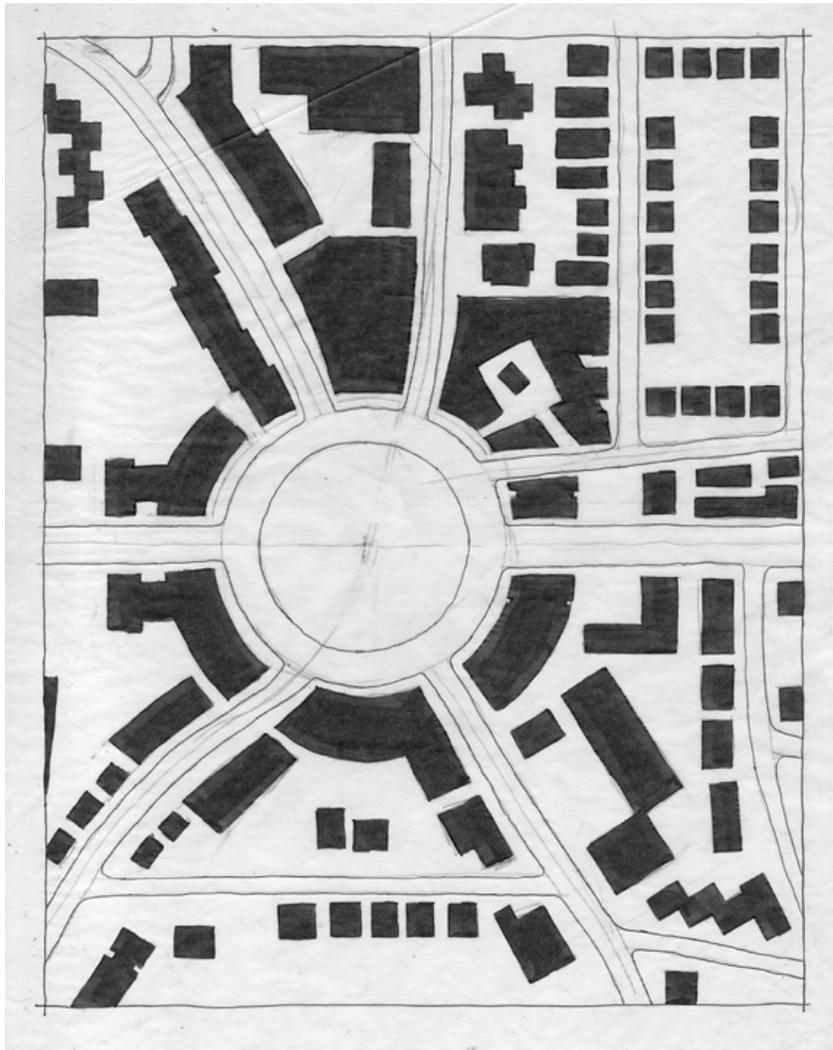


Figure 125 - Circle Strategy, East Capitol Threshold Plan

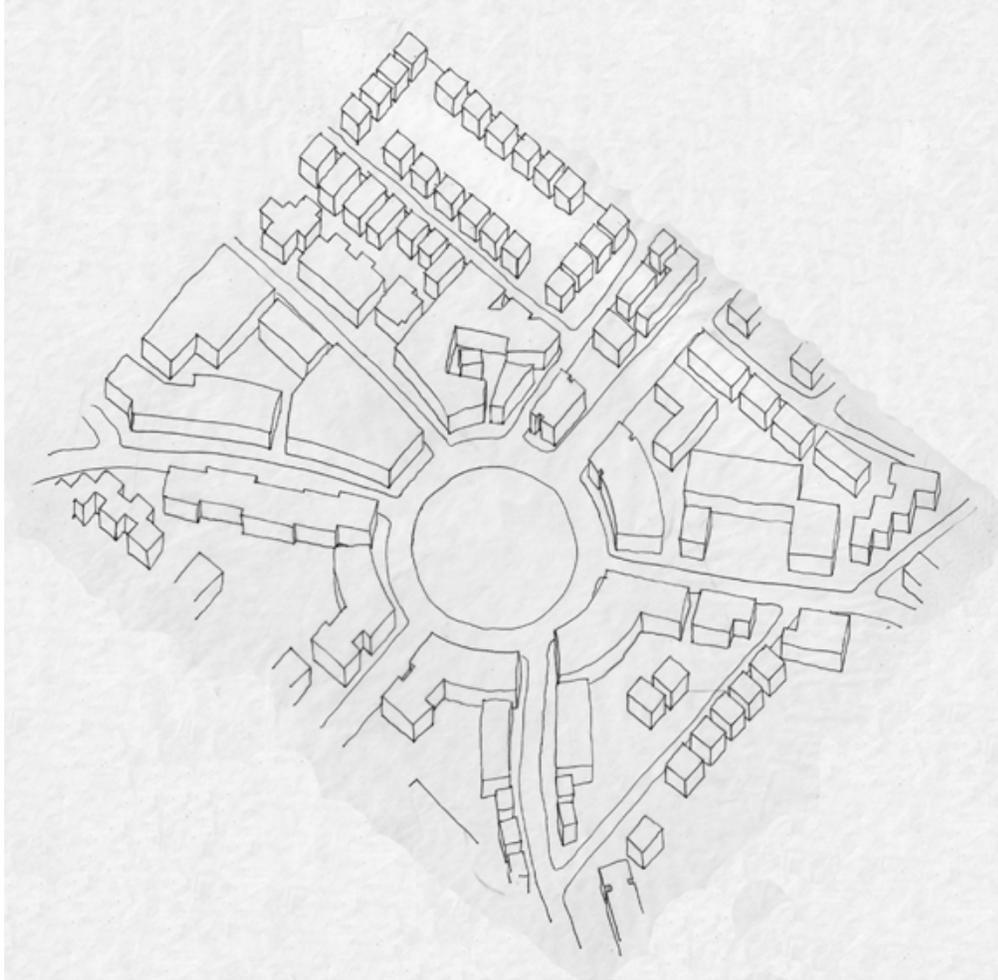


Figure 126 - Circle Strategy, East Capitol Threshold Massing Axon

The second scheme (Figs. 127-128) is about re-asserting the street hierarchy through the use of the traffic median and landscaped boulevard. A monument occupies the center of the circle here, as opposed to the landmark building proposed during the first session of parti design. The street frontage defining the circle is pulled back on one block, revealing the metro station and charging the space with a sense of imageable destination and understood directionality. The building forming the backdrop for the metro station is the probable landmark building, with the smaller structure on the due south end of the circle serving as a workable alternate. Here, the attempt to unite 46th Avenue with Texas Avenue is not as forceful as the previous scheme, but the relationship

between the two is perceivably more dubious. In addition to using the circle form in a way that celebrates the street hierarchy, this scheme is also significant because of the discrete spaces it creates, which are completely privatized from the circle, yet accessible to the retail arteries.

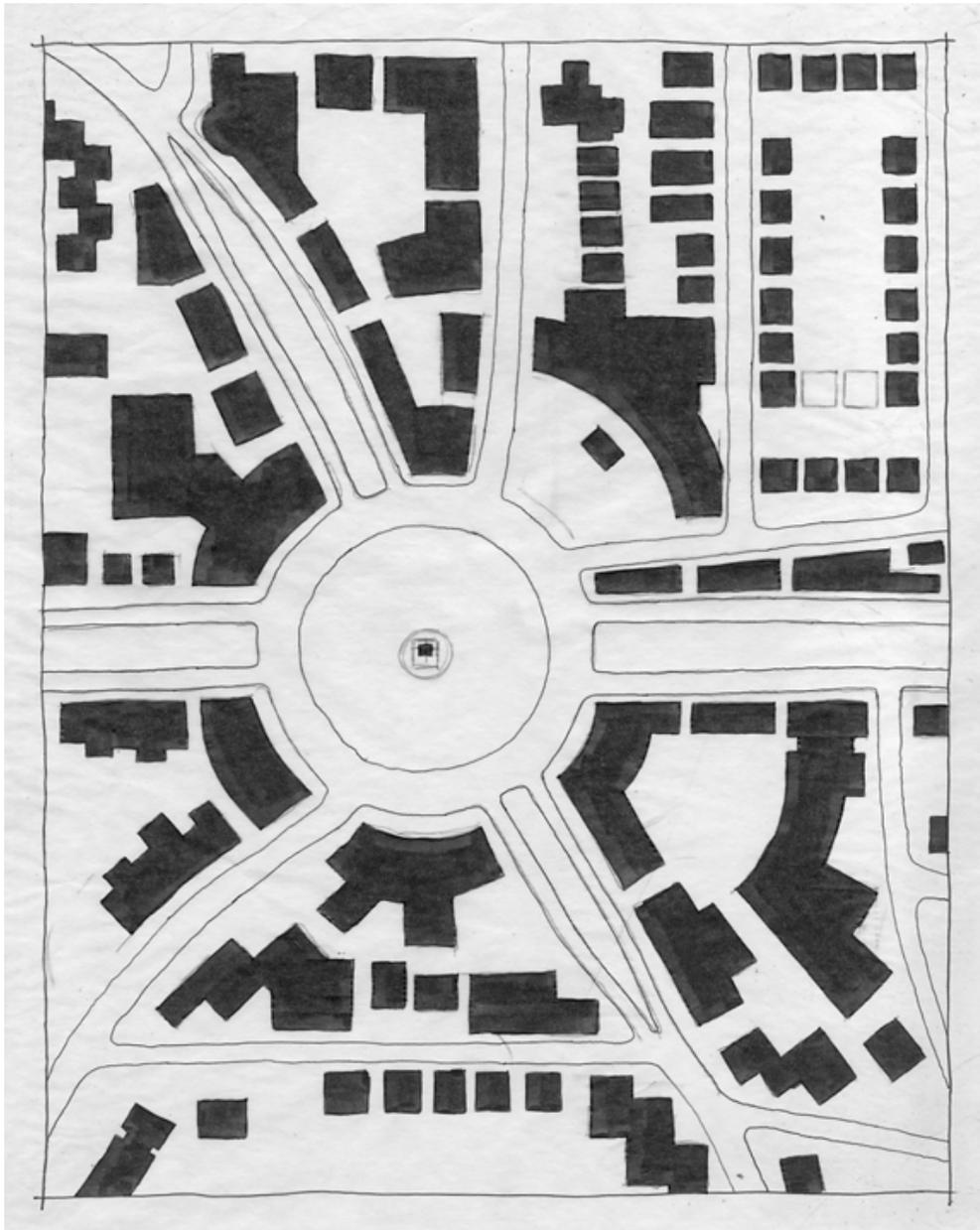


Figure 127 - Circle Strategy, Boulevard Plan

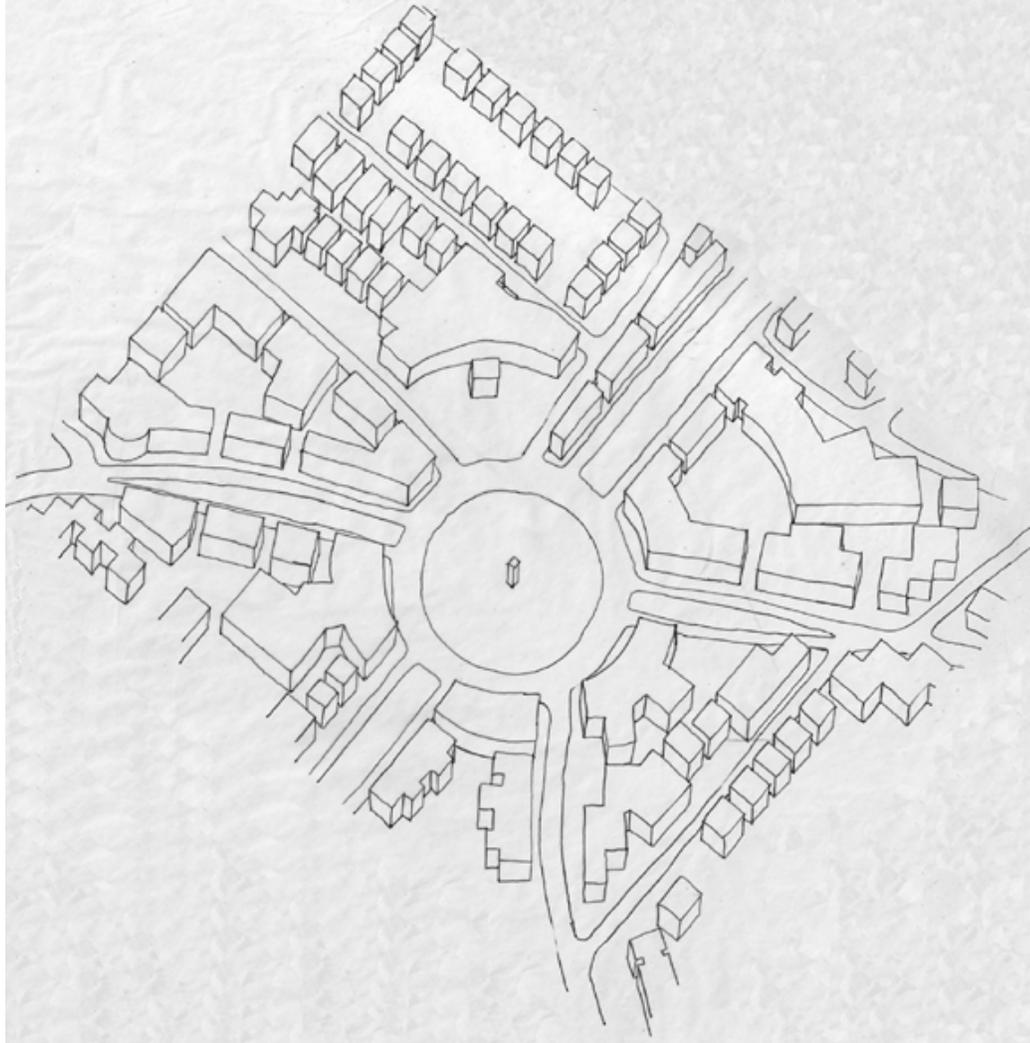


Figure 128 - Circle Strategy, Boulevard Massing Axon

In an effort not to hamstring design with overzealously preservative thinking, the third scheme, shown below in Figure 129, illustrates the design ramifications of removing the Shrimp Boat, the area's only imageable landmark. Whereas the other circle schemes are unable to accommodate the existing Denny's, a brand new sit-down restaurant, and its adjacent retail neighbors, this scheme allows for their conservation. While the formal strategies employed here are roughly similar to the previous two schemes yielding little basis for a value judgment, the situation of the circle here is clearly more reasonable once the existing topography is taken into consideration.

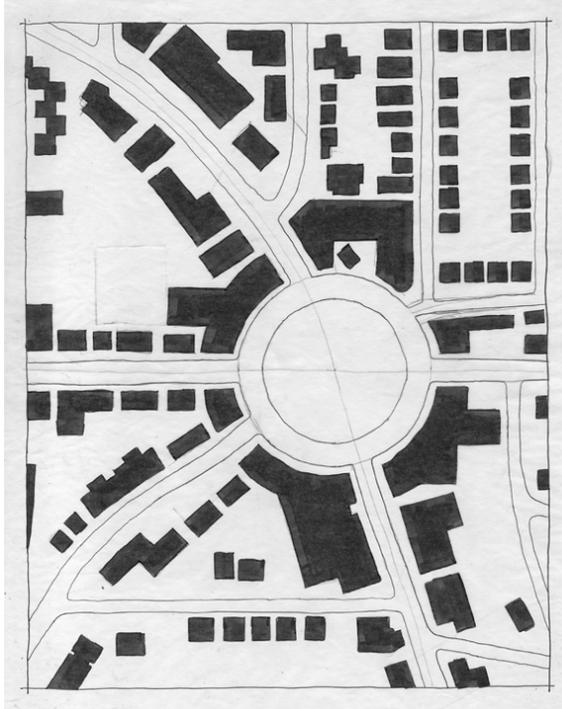


Figure 129 - Circle Strategy, Topography-as-Generator Plan

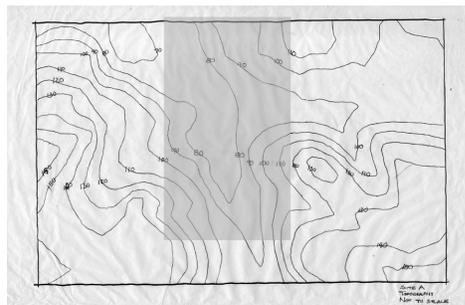


Figure 130 - Area of Interest, Topography

The final scheme (Fig. 131) was looked at in the spirit of Sir Christopher Wren, who prophetically designed a radical master plan for London and was ready to present it when the city actually burned down in 1666. This scheme disregards the existing built fabric and the street grid, everything except for East Capitol Street, the south end of Benning Road and Texas Avenue, all of which a topographically convenient. The scheme attempts to set up a semi-rectilinear grid on the site, opening onto an American town square, where the metro escalator is located. This scheme is formally problematic, generating blocks that are too small, with cumbersome frontage and alley issues, and a

street grid where hierarchy is not only nonexistent, but would be arbitrary even if it could in fact be generated. Additionally, because of the even-handed approach of the grid, the rationalization for locating a retail corridor is lost, although there is still an opportunity for a landmark building to occur.

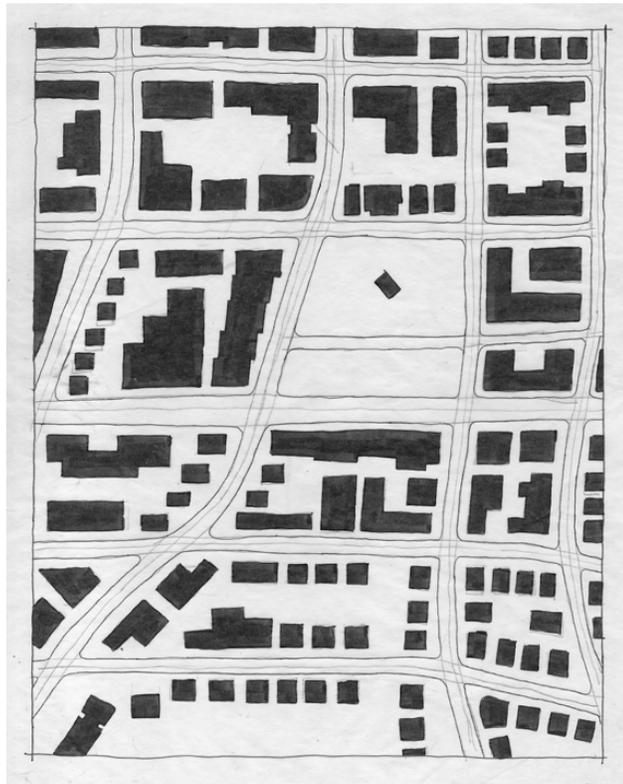


Figure 131 - Obliterative Strategy, Grid-with-Town Square Plan

The primary issue revealed in this crudely unresolved final scheme, as well as the design process to date, is the question of rationalizing urban decisions. To answer that question, investigations throughout the remainder of this project will zoom out in scale, examining Ward 7 in its larger context, evaluating what is worth holding on to or acknowledging, and proposing interventions based on conclusions drawn from that evaluation. Currently, the presence of the following stand out as basis's for rationalizing design: the park system, the Metro Rail stops, the topography, East Capitol Street, the idea of a retail and restaurant corridor, the Anacostia River, the eastern borders of

Washington, D.C. The number and priority of these amenities in relation to each other will be subject to change throughout the project.

Structural Parti Development

As an exercise in “Regenerative Place-Making”, the purpose of the landmark building is to relate to the “spirit of the place” and the identities of the place’s inhabitants. As discussed in the theory section of this document, place and technology, place and memory, are all tied together in the mind of the observer. In architectural history, structural systems have been related to specific cultures, regions, and climates. Examples of culturally specific structural systems are illustrated on the following pages (Figs. 132-137):

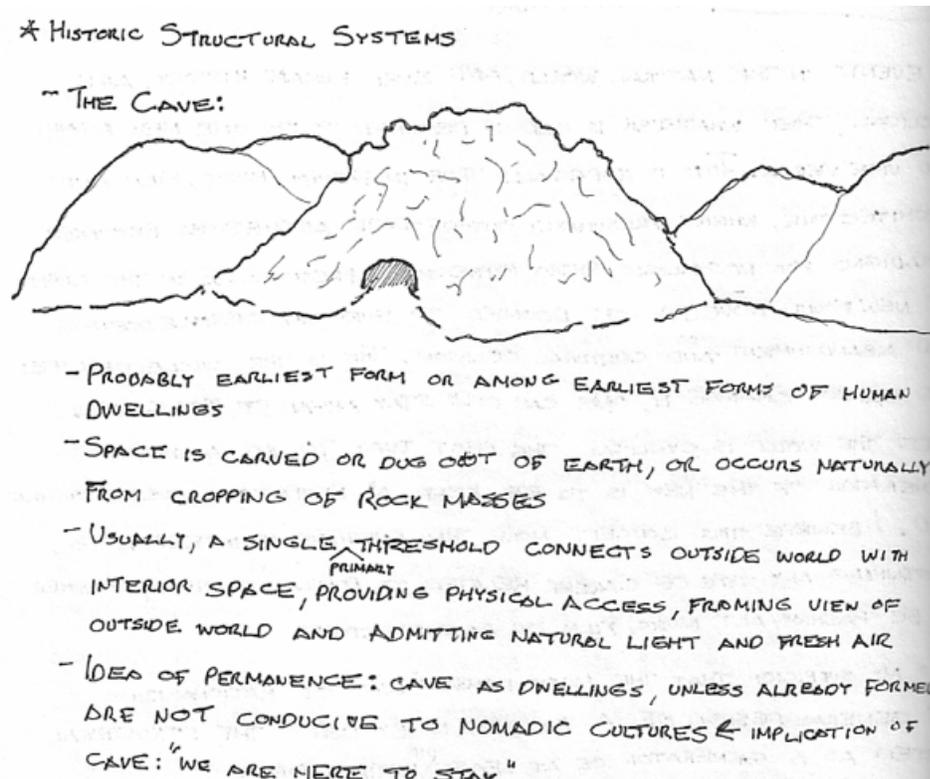
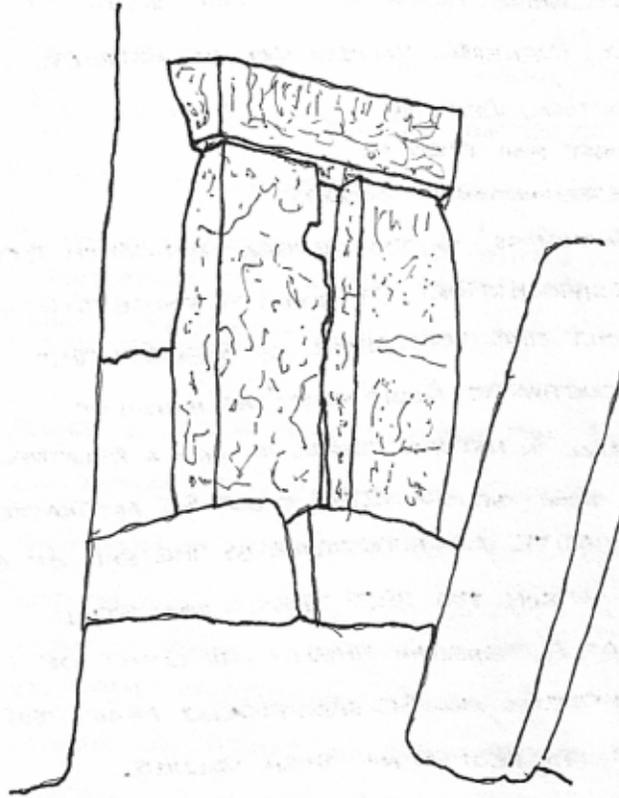


Figure 68 - Sketchbook Notes, Cave as Cultural Structural System

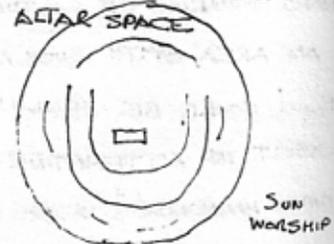
DESIGN APPROACH - ARCHITECTURE - HISTORIC STRUCTURAL SYSTEMS (CONT'D)

- TRABECATED ARCHITECTURE (PRIMITIVE POST-AND-BEAM):



- STONEHENGE, SALISBURY PLAIN, ENGLAND, 3000 B.C.

- SERIES OF TRILITHONS (POST-AND-BEAM) ARRANGED IN HORSESHOE PATTERN AROUND ALTAR SPACE

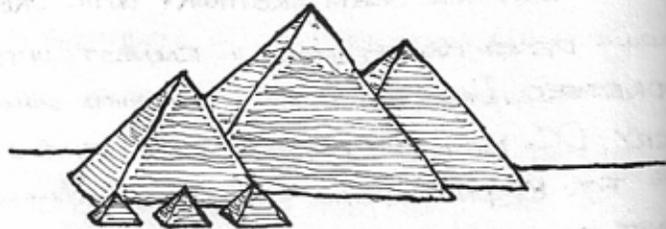


- PLAN IS SIMULTANEOUSLY CENTRALIZED; LONGITUDINAL
- ORIENTED IN DEFERENCE TO SUN. THRESHOLD OF HEELSTONE FRAMES VIEW OF RISING SUN ON DAY OF SUMMER SOLSTICE
- POSTS ARE 13 1/2 FEET TALL
- OPENINGS AND DESIGN OF PLAN RELATE MAN TO NATURE

- EGYPTIAN PYRAMIDS:

- MYCERINUS - 2500 B.C.
- CHEFREN - 2530 B.C.
- CHEOPS - 2570 B.C.

- PYRAMIDS ORIENTED TO CARDINAL POINTS
- MEGALITHIC CONSTRUCTION
- REGIONAL: BRICKS FASHIONED NEARBY ALONG NILE RIVER



- TAPERING OF BRICKWORK IN SECTION: GREATER LATERAL STABILITY?



- MAN-MADE MOUNTAIN
- COMMANDS SKYLING, BUT TECTONIC IS STILL CLEARLY EGYPTIAN AND CONTEXTUAL TO NATURE

(58)

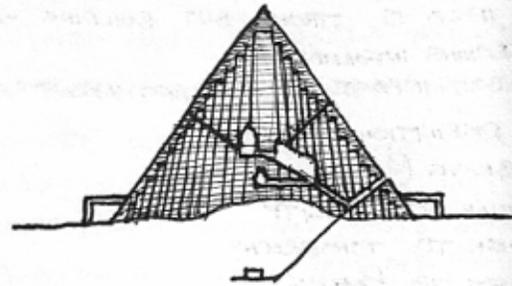


Figure 133 - Sketchbook Notes, Stonehenge and Pyramids as Cultural Structural Systems

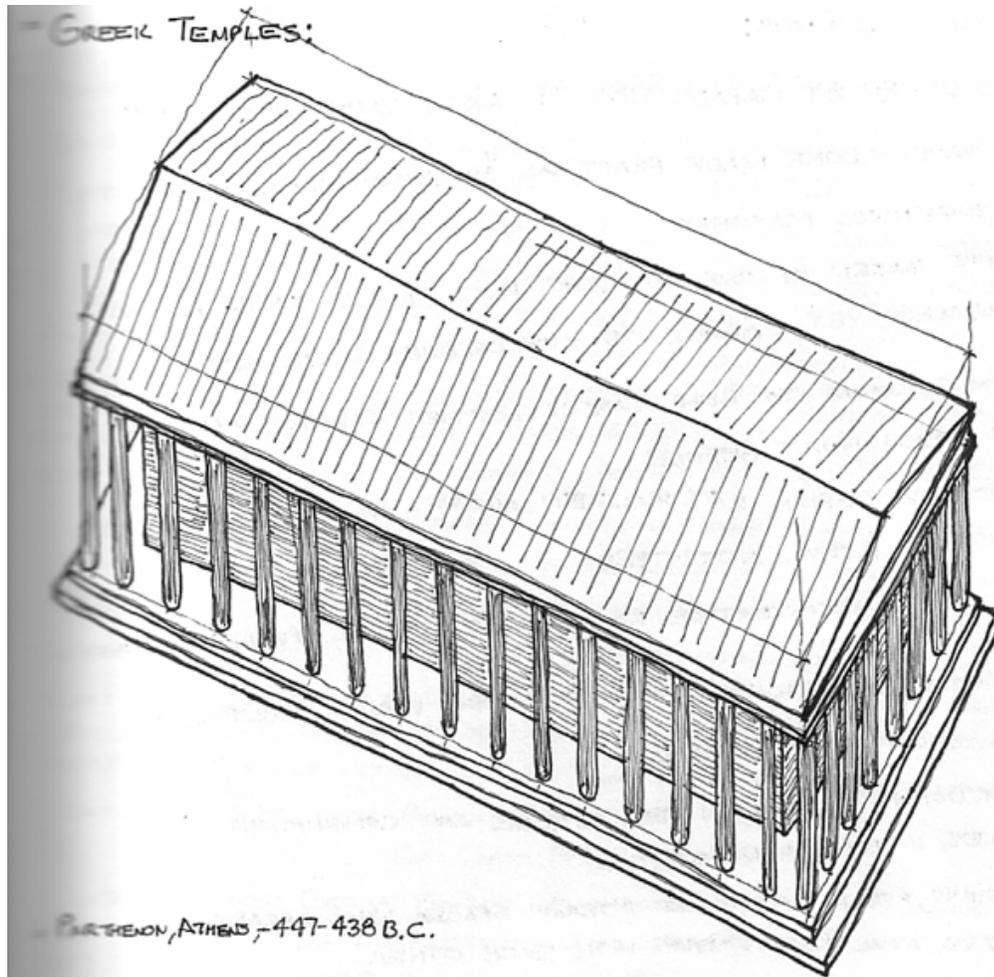


Figure 134 - Sketchbook Notes - Greek Temples as Cultural Structural Systems

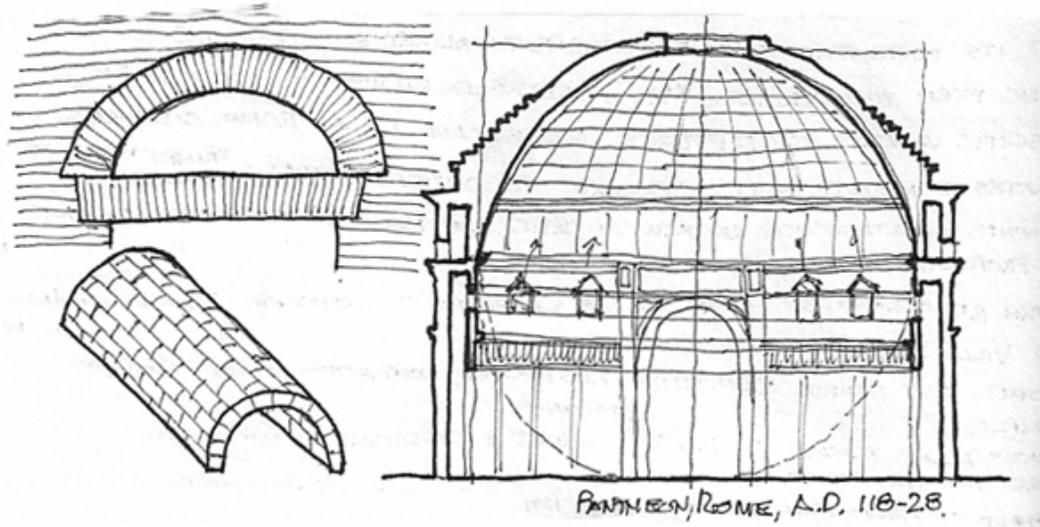


Figure 135 - Sketchbook Notes, Pantheon and Arch as Cultural Structural Systems



Figure 136 - Vaulting for Renaissance Basilica



Figure 137 - Nave for Gothic Cathedral

It is possible that the most “honest”, the most culturally significant means of rationalizing the general design of a building is by using the structural system as a generator of at least the initial form in design. Each structural system shown above is

instantly imageable; all are so unique and distinctive that they become representative of the people and culture indigenous to them. It cannot be overlooked that all of these remarkable structural systems are either religious or residential facilities. If “museums are the cathedrals of our age” as Hugh Pearman wrote, then it seems appropriate that the landmark building for this project take advantage of the same potential for cultural expression through structure.

To date, three structural partis have been explored. The first, generated in coordination with the “Piazza” parti, was based on the idea of morphing two indigenously American structural ideas, the Alaskan igloo and Thomas Jefferson’s serpentine walls from the gardens of the University of Virginia campus (Figs. 138-146).



Figure 138 - Standard Alaskan Igloo



Figure 139 - Igloo Megastructure



Figure 140 - Thomas Jefferson's Serpentine Walls at the University of Virginia Campus



Figure 14169 - Serpentine Walls as a Celebrant of Movement and Path

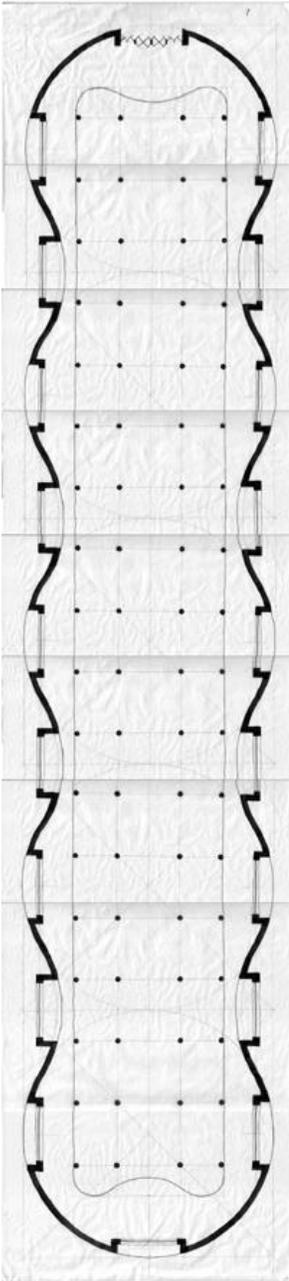


Figure 142 - Serpentine Igloo, Plan

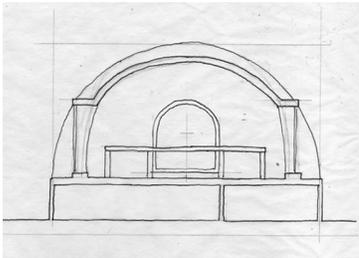


Figure 143 - Serpentine Igloo, Transverse Section



Figure 144 - Igloo Detail Showing Centering of Dome



Figure 145 - Serpentine Wall, Aerial Photo

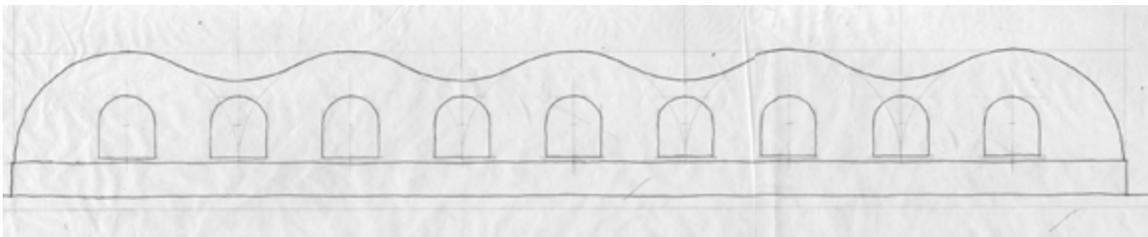


Figure 146 - Serpentine Igloo, Elevation

It should be noted that each structural parti was generated with the notion of using “free plan”, to delineate promenade and location of programmatic components of the landmark building.

The second parti was based on the Native American Teepee, and the idea of building a system of cantilevered floor slabs on its inwardly slanting frame. Such a

system would be more resistant to gravity and lateral wind forces than the standard “Maison Dom-Ino” style of construction. A structural glass ceiling illuminates the atrium that naturally occurs in the heart of the building. Mechanical equipment is located under the building with a ring of removable catwalk grate providing access from the ground level (Figs. 147-152).



Figure 147 - Native American Teepee, indigenous to Midwestern Native Americans, but implicit signifier of Native American culture



Figure 148 - Teepee as Object in Clearing

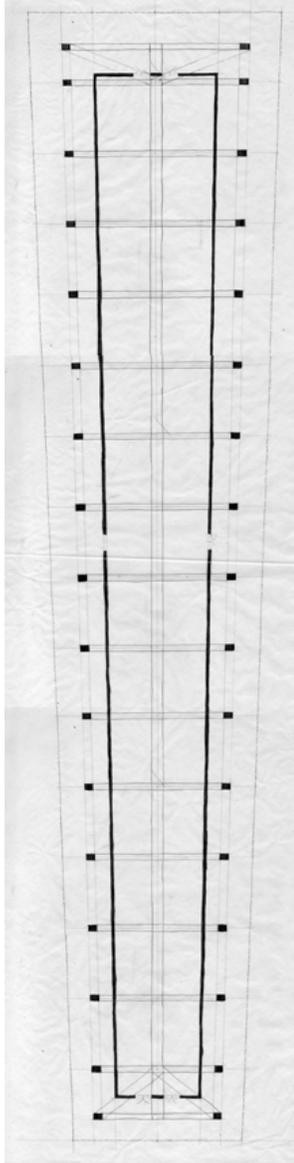


Figure 70 - Teepee Cantilever System, Plan

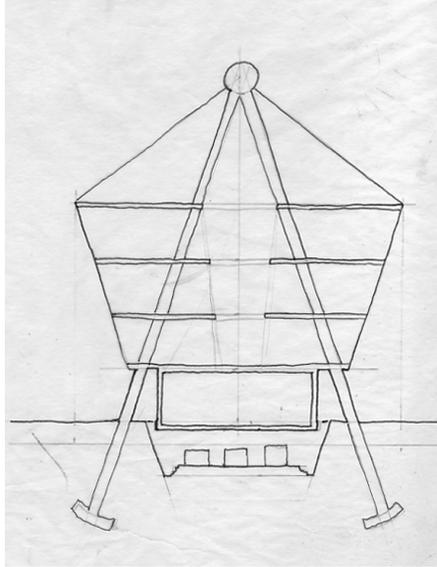


Figure 150 - Teepee Cantilever System, Section

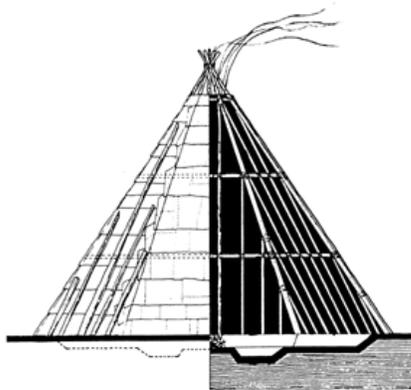


Figure 151 - Teepee Section Showing Structure and Ventilation

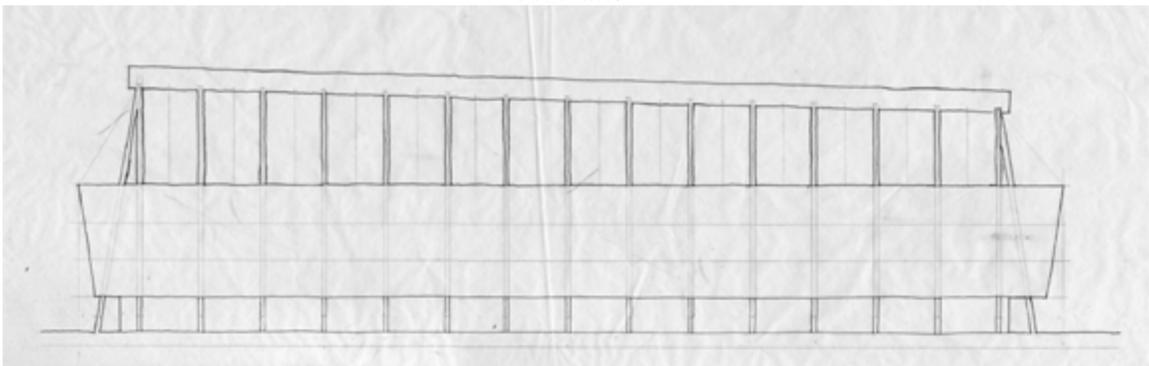


Figure 152 - Teepee Cantilever System, Elevation

The third parti specifically pursues a formal strategy more closely tied to the African-American demographic, which comprises more than ninety percent of the

population for the site's region. Based on the Islamic Kaaba, the massive cube of Mecca that serves as the center of the earthly universe for Muslims around the world five times a day, the third part is a one-hundred by one-hundred foot cube, featuring a structural carbon fiber skeleton, organized on a grid of twenty feet by twenty feet, and suspended fiberglass walls that are able to recede from the mass of the building at will, acting as a insulating heat shield in the summer and a thermal blanket in the winter (Figs 153-156).



Figure 153 - The Islamic Kaaba as Cosmic Cultural Entity

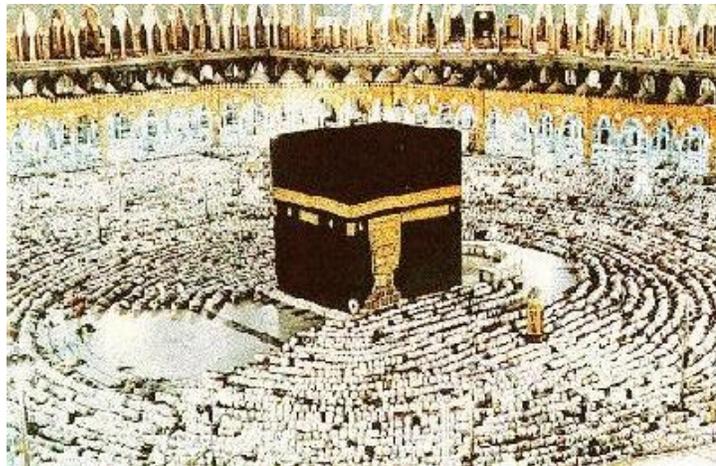


Figure 154 - The Kaaba as Center of Community

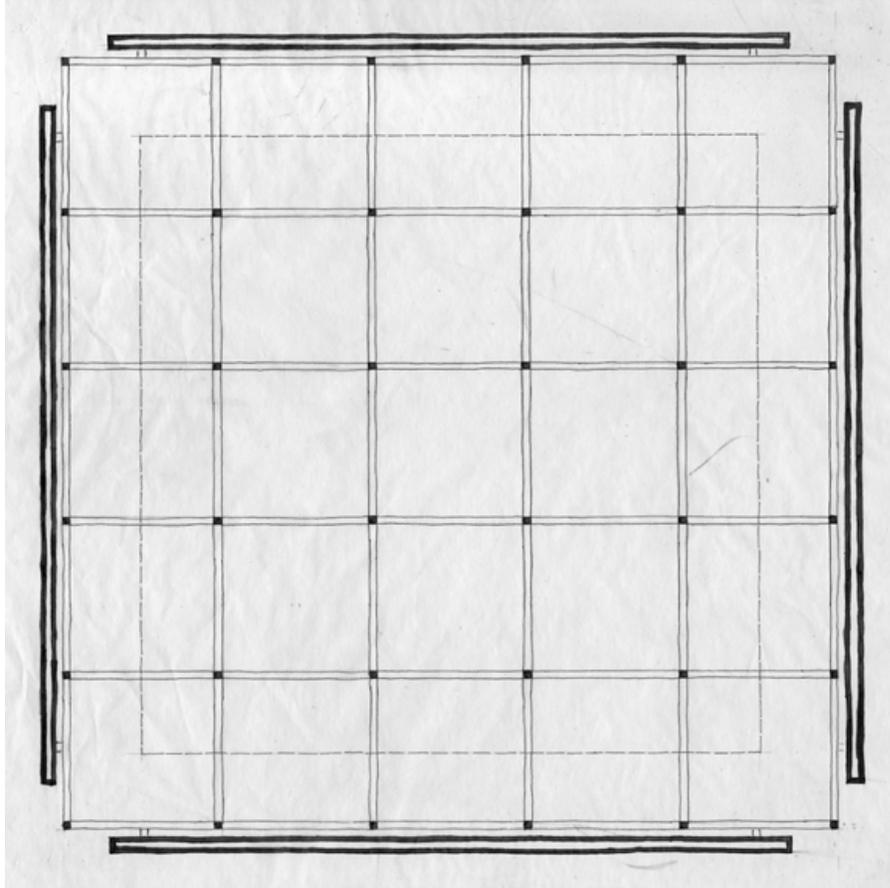


Figure 155 - Cosmic Cube System, Plan

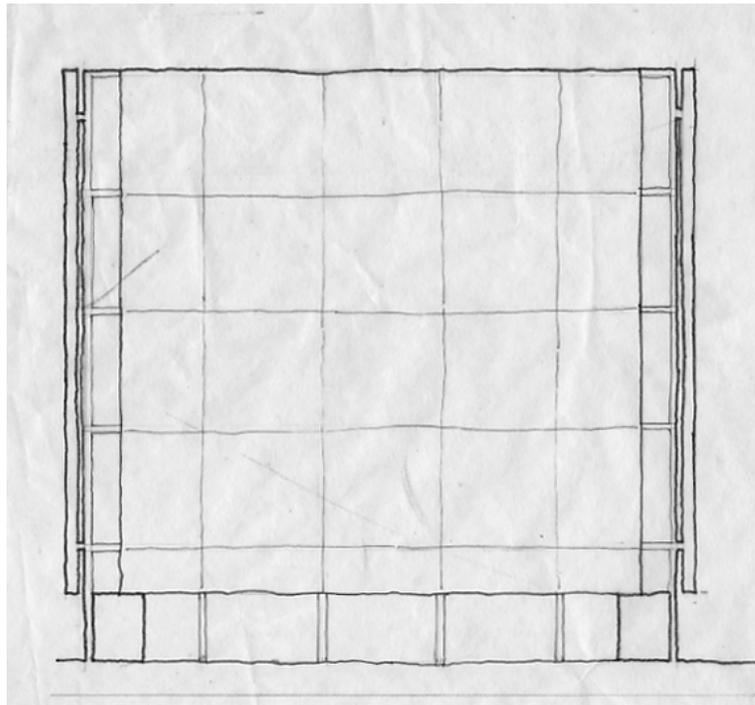


Figure 156 - Cosmic Cube System, Elevation

The partis illustrated thus far, though diagrammatic, hopefully shed light on the necessity and limitless potential of using structural systems as a means of culturally rationalizing a landmark and setting the visual character for place in a relevant way.

CONCLUDING REMARKS AND FINAL PRESENTATION

“How can one design for identity?” was the driving question throughout the thesis semester, ordering both urban and architectural design development. A conscious duality between architecture and urbanism was maintained throughout the semester, although urban exploration was primarily concentrated in the first half of the semester and architectural ideas were cultivated during the remaining nine weeks of the project.

On the urban side of the project, the primary concern was to alter and enhance, with almost surgical sensitivity, the existing Ward 7 community while leaving its residential fabric and urban identity in place. The primary means of improving the area included a) tying together the loose ends of the street grid to make the area more navigable and resolve the ad-hoc collisions of the half dozen different grids that dictated the area’s character, and b) reworking the street section, using successful urban models as precedents. Special care was to meet three ends, deemed by the author as having top priority: 1) to preserve as much of the existing single family housing and infrastructure as possible, respecting lot lines, and water and sewer line placement, 2) to develop a full New Urbanist transect, anchored by a transit oriented core or strip of business and mixed-use facilities, and 3) to create an activated public space that would take advantage of access to Metro Rail.

Architecturally, the goal was to create a highly designed civic building that could anchor the community and reinvigorate the pride of its residents. Considering that the demographic of the region east of the Anacostia is more than 95% African-American, the building was designed as a museum dedicated to Senator Blanche K. Bruce, celebrating the role education and the access to it has played in the evolution of African American

culture. The intended thematic parallel suggests that, just as education empower a disadvantaged people, an architecture of identity can empower a disadvantaged community. To execute design for the project, it was necessary to explore what it means to be an African American in the 21st Century and decide how architecture can reflect that meaning. Extensive research was carried out looking at the different types of indigenous regional architecture that flourished throughout Africa, and aesthetic values were extruded from that research. One of the most recurring questions that dominated discussion throughout the semester was the believability of resolving an Eastern architectural aesthetic with a Western urban vocabulary, on a site in the Nation's Capital. In the end, the aesthetic path chosen shied away from a more literal importation of African tectonic and formal precedents, moving instead towards an abstracted palette of visual cues that hint at African building values and fascination with cosmic form-making, while still attempt to allow for a new 21st Century identity to be imprinted on the building by the community and vice versa. While a project of this nature can be designed and redesigned perpetually, the terminus of this thesis presents what will hopefully be seen as a snapshot of an idea in progress, a question in its larva stage, still offering the promise of more refinement and design maturity to come, the notion of an architecture of identity and place.

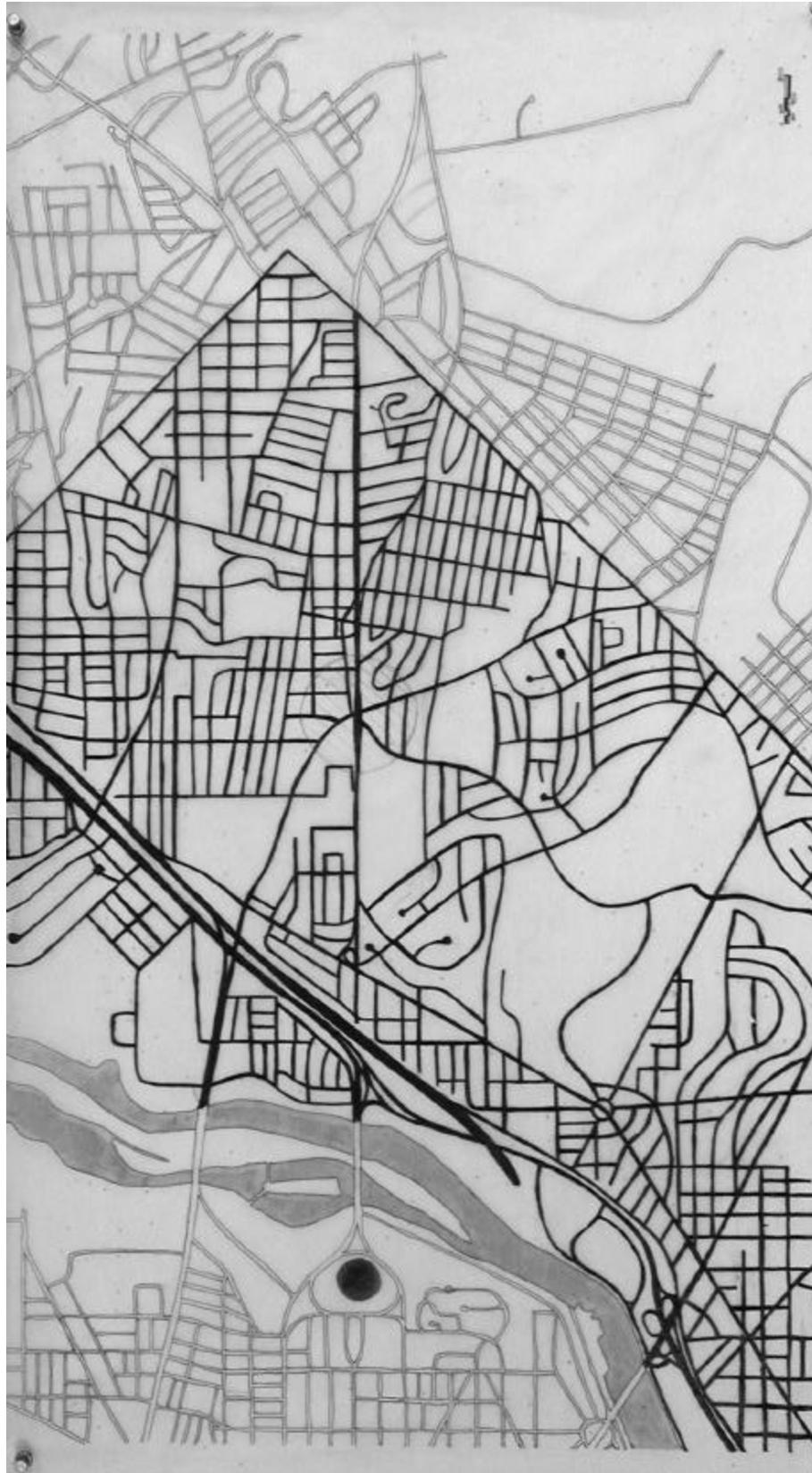


Figure 157: Existing Eastern DC

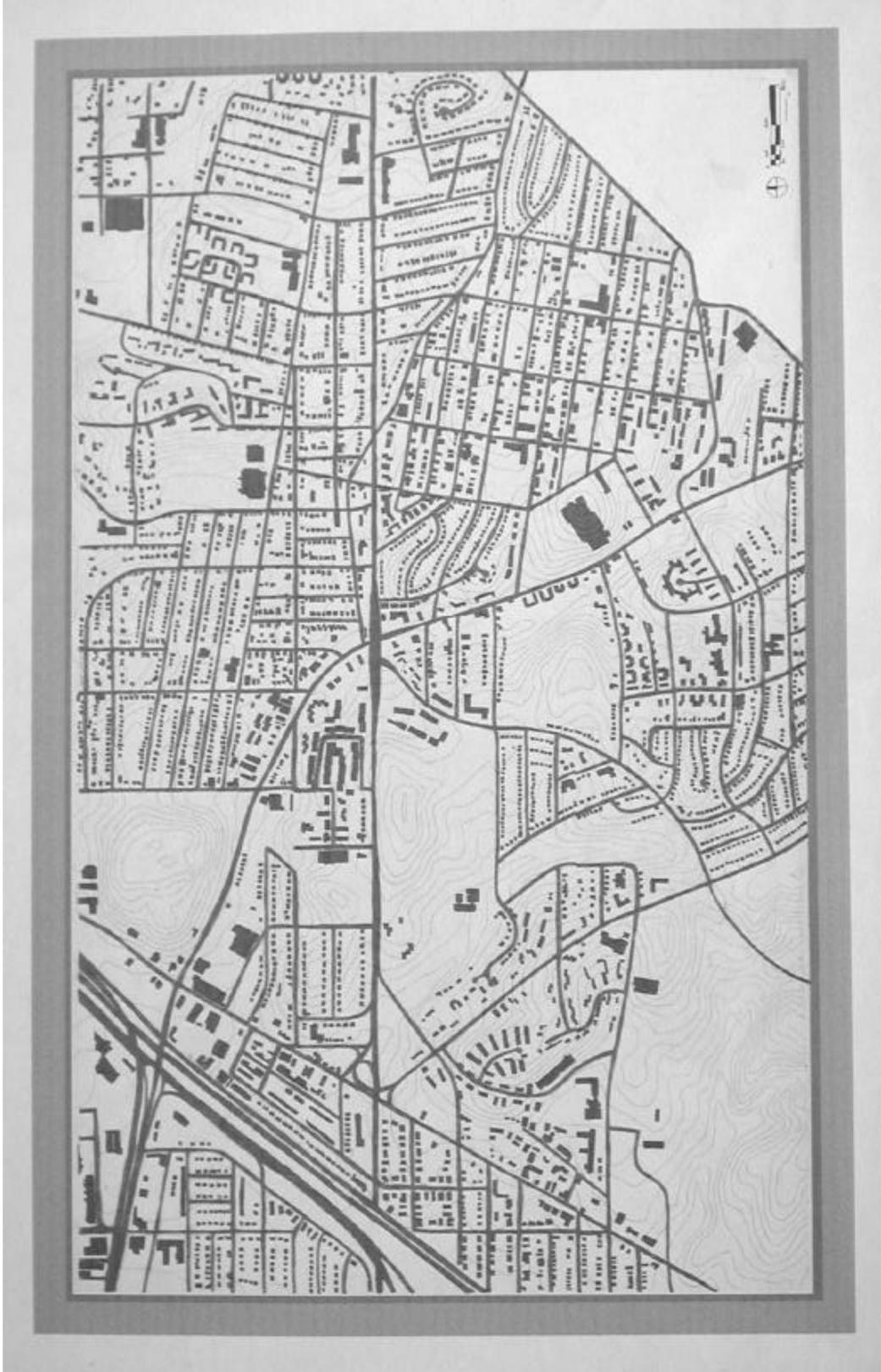


Figure 7158: Existing Ward 7

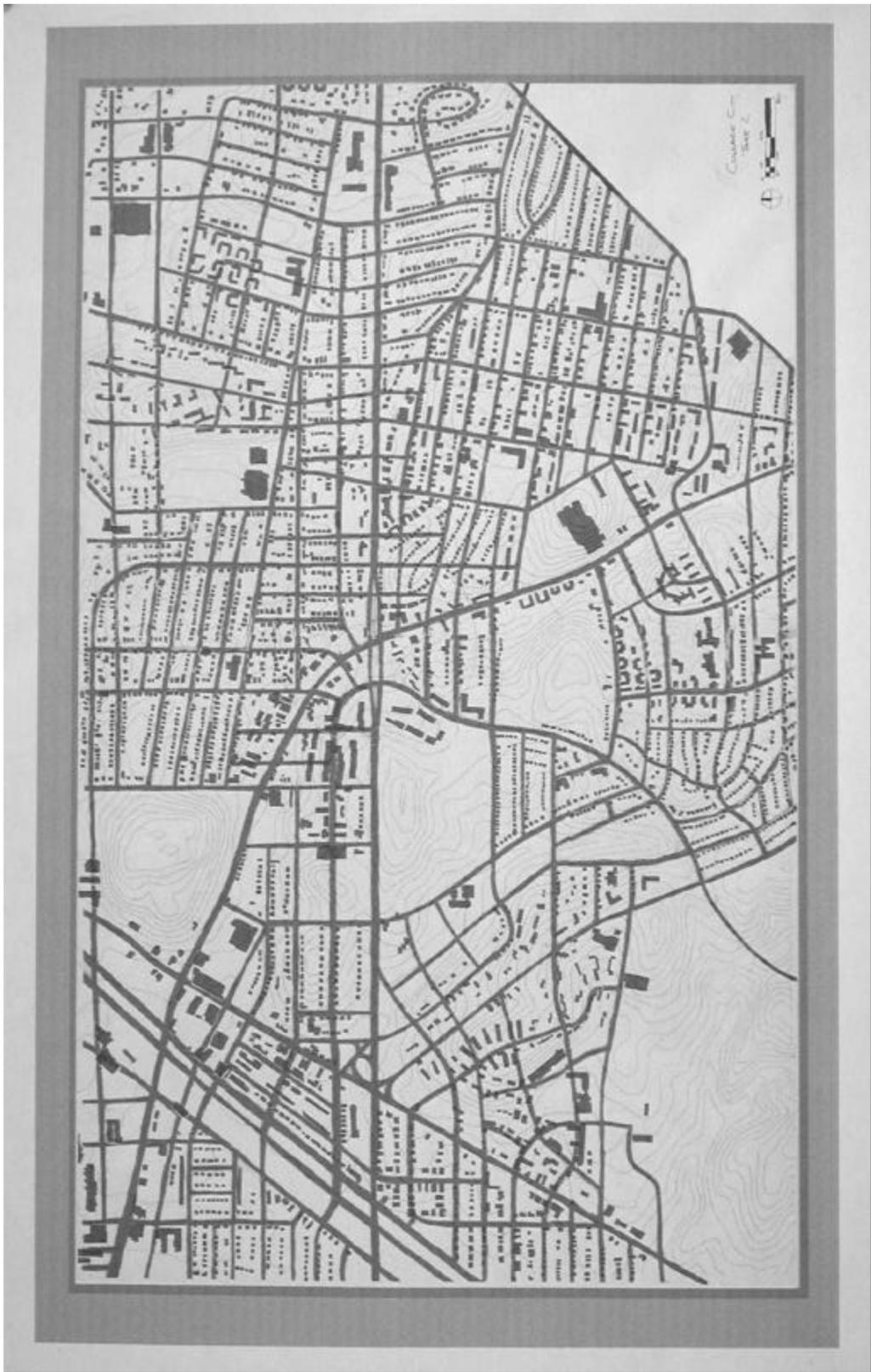


Figure 159: Proposed Ward 7



Figure 160: Proposed Neighborhood Plan

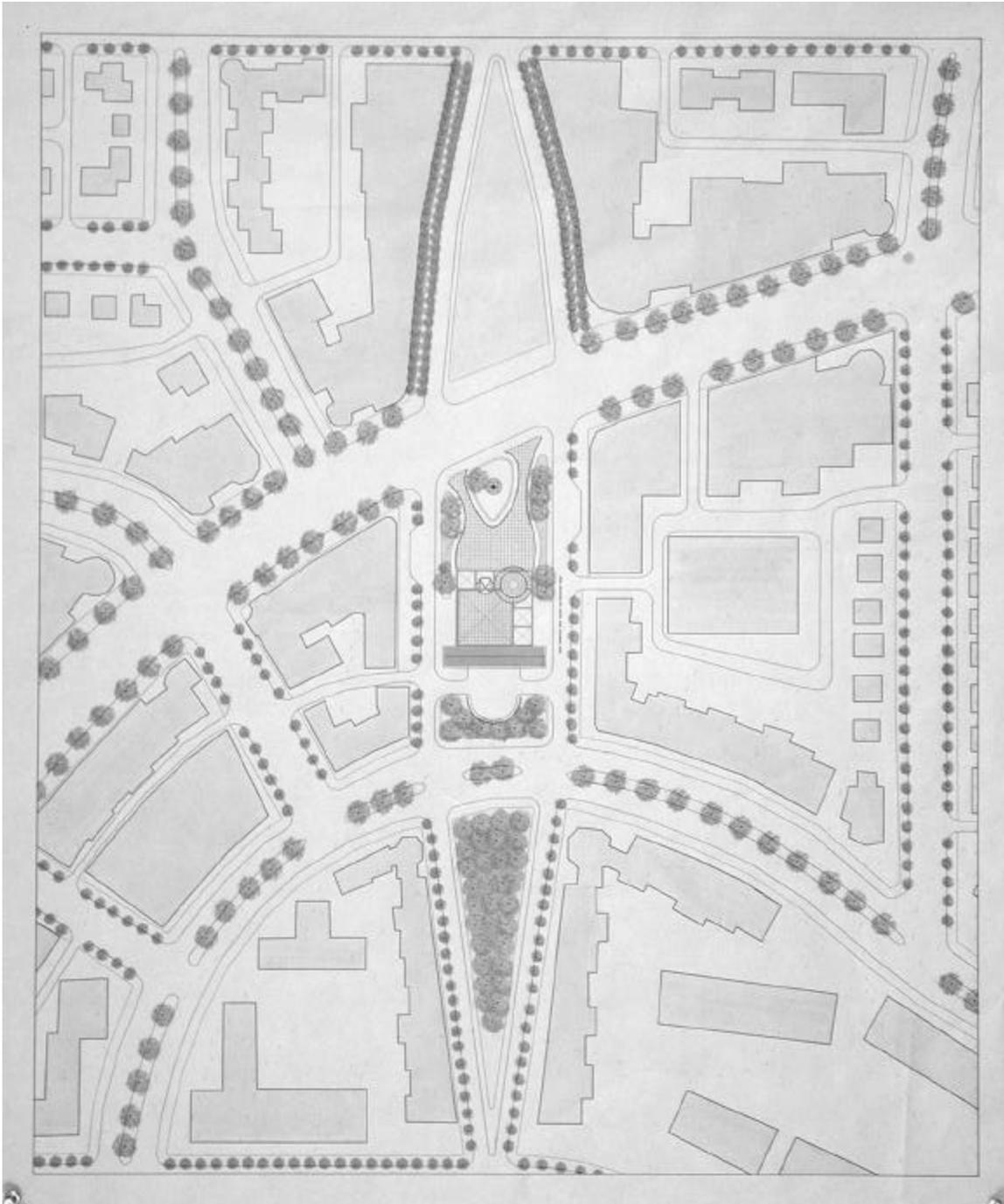


Figure 161: Proposed Master Plan

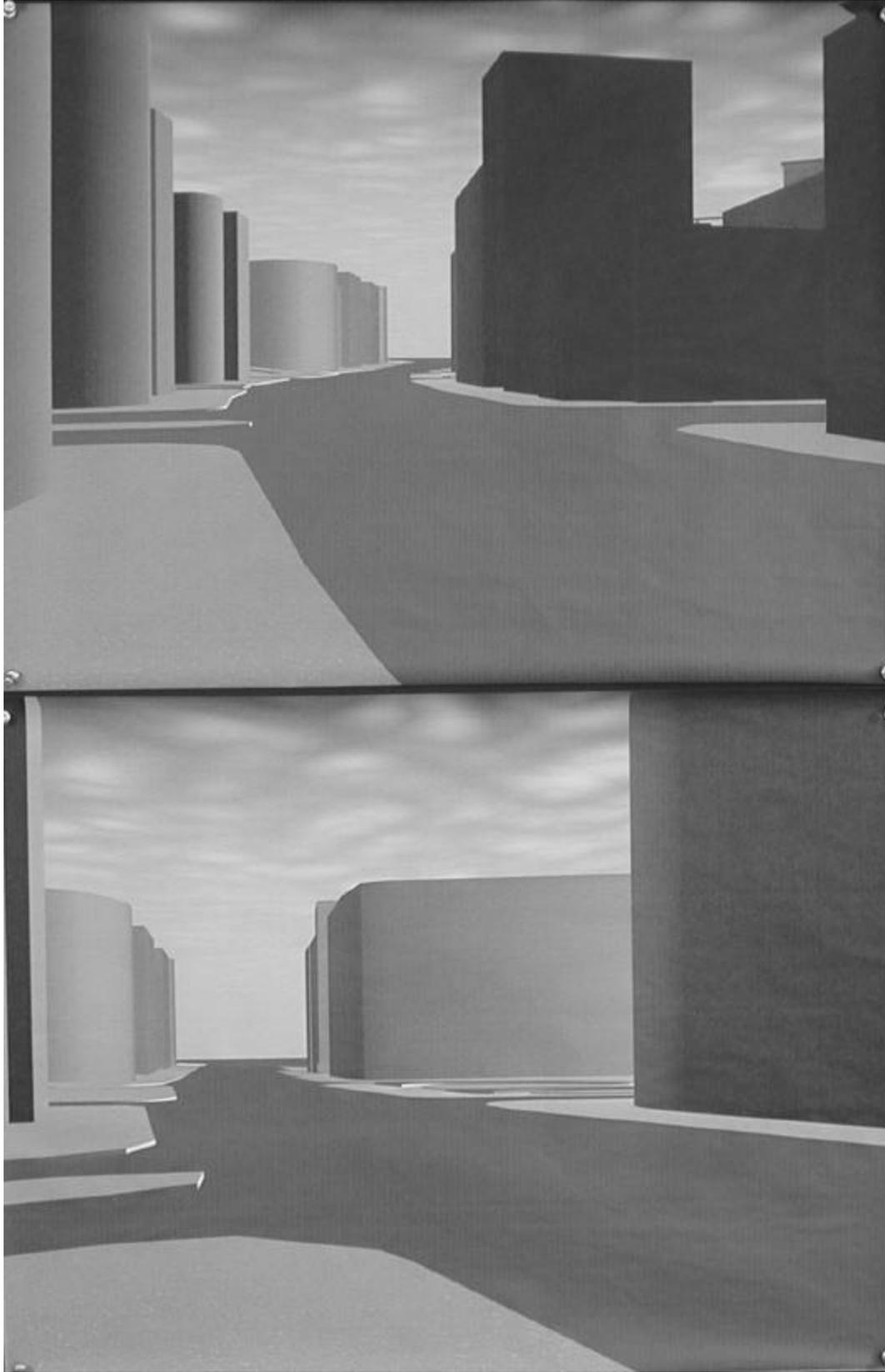


Figure 162: Urban Perspectives



Figure 163: Site Model, Image 1

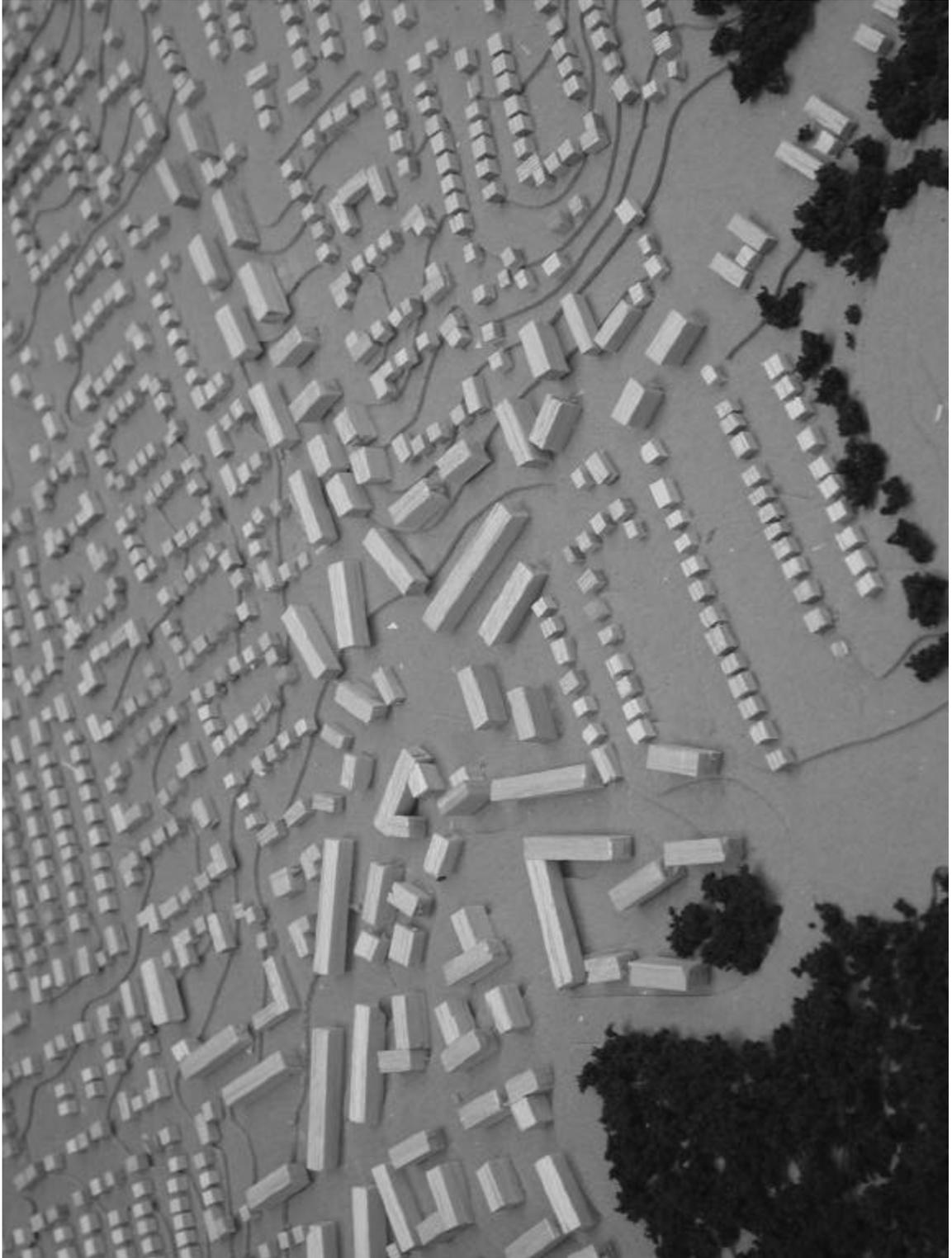


Figure 164: Site Model, Image 2

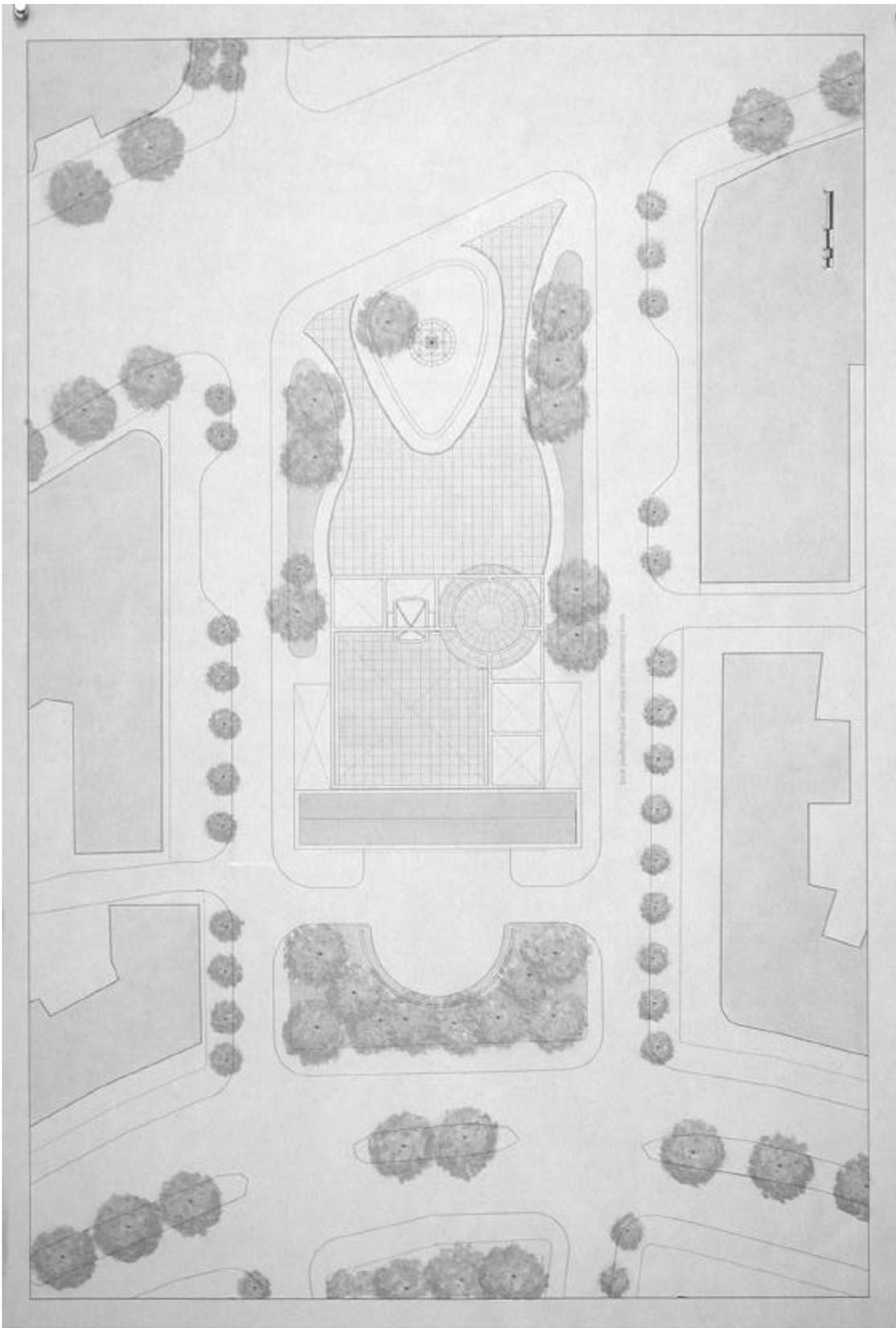
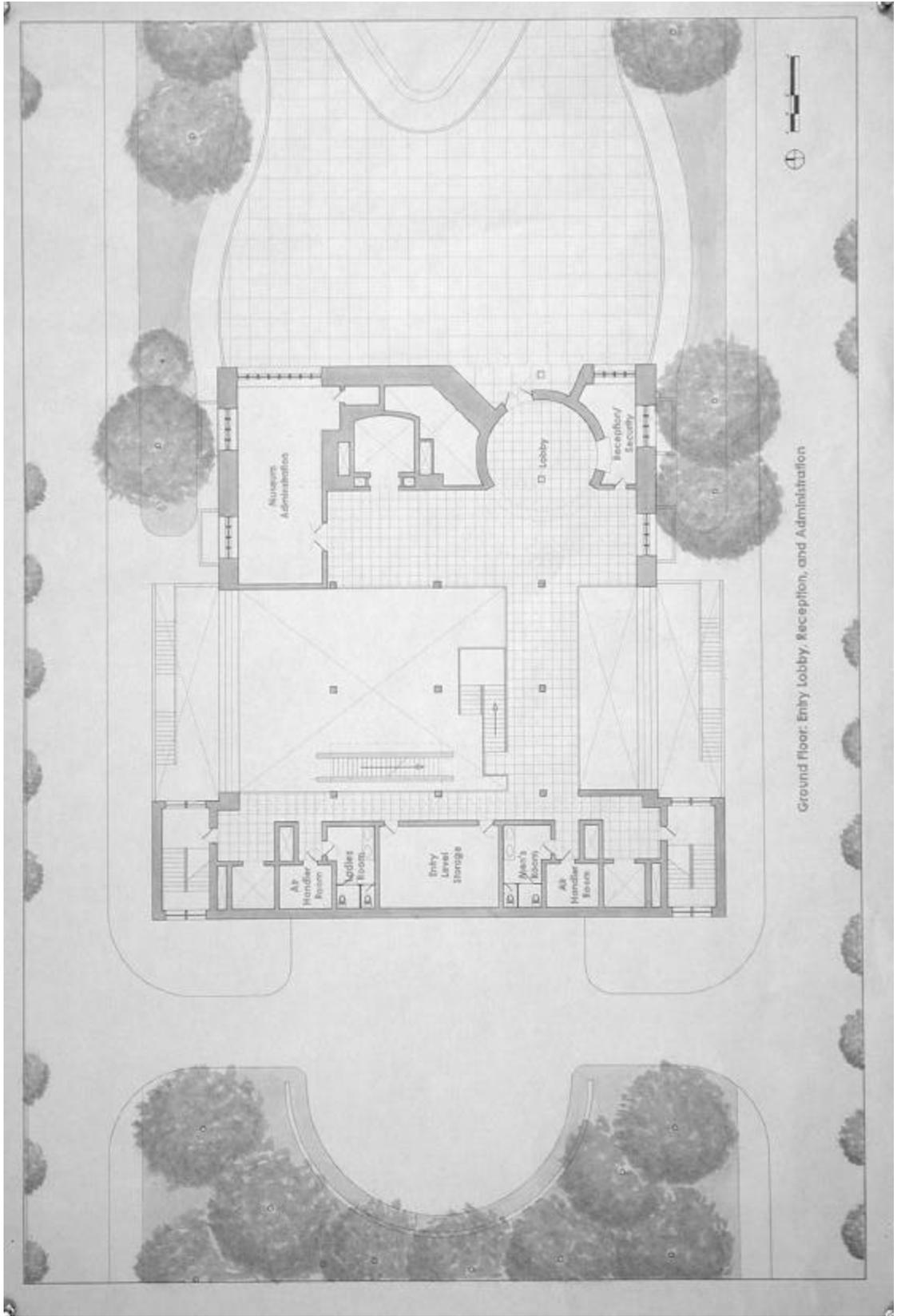


Figure 165: Site Plan



Ground floor: Entry Lobby, Reception, and Administration

Figure 166: Entry Level Plan

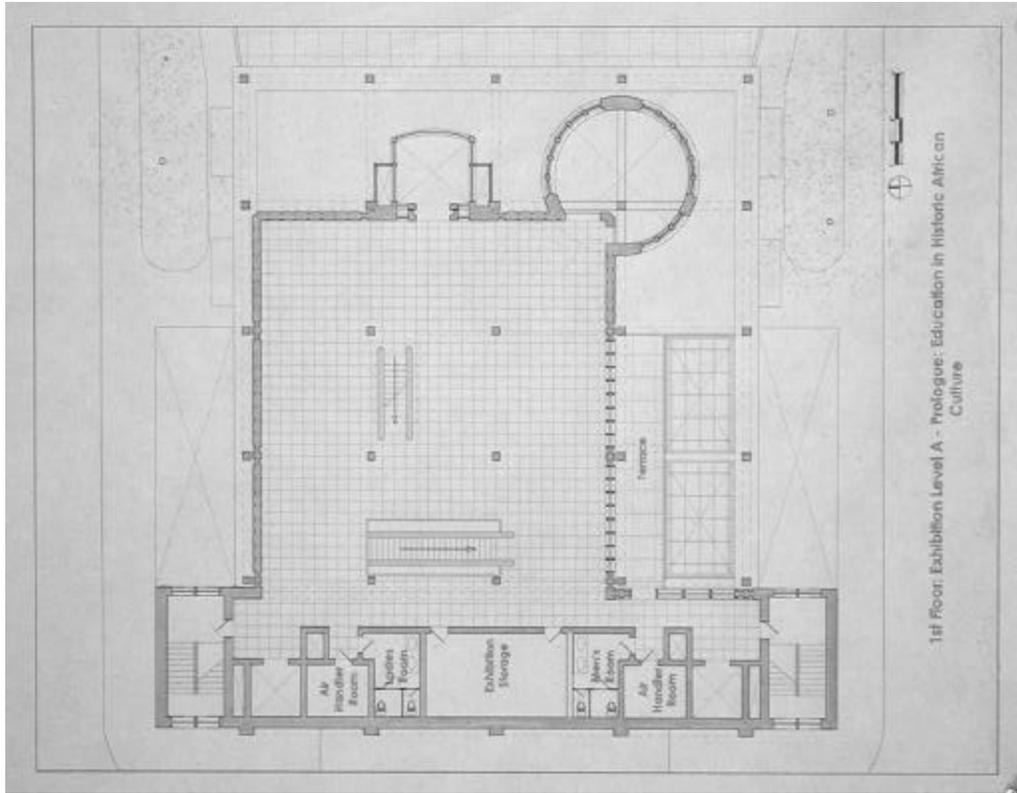


Figure 167: First Floor Plan

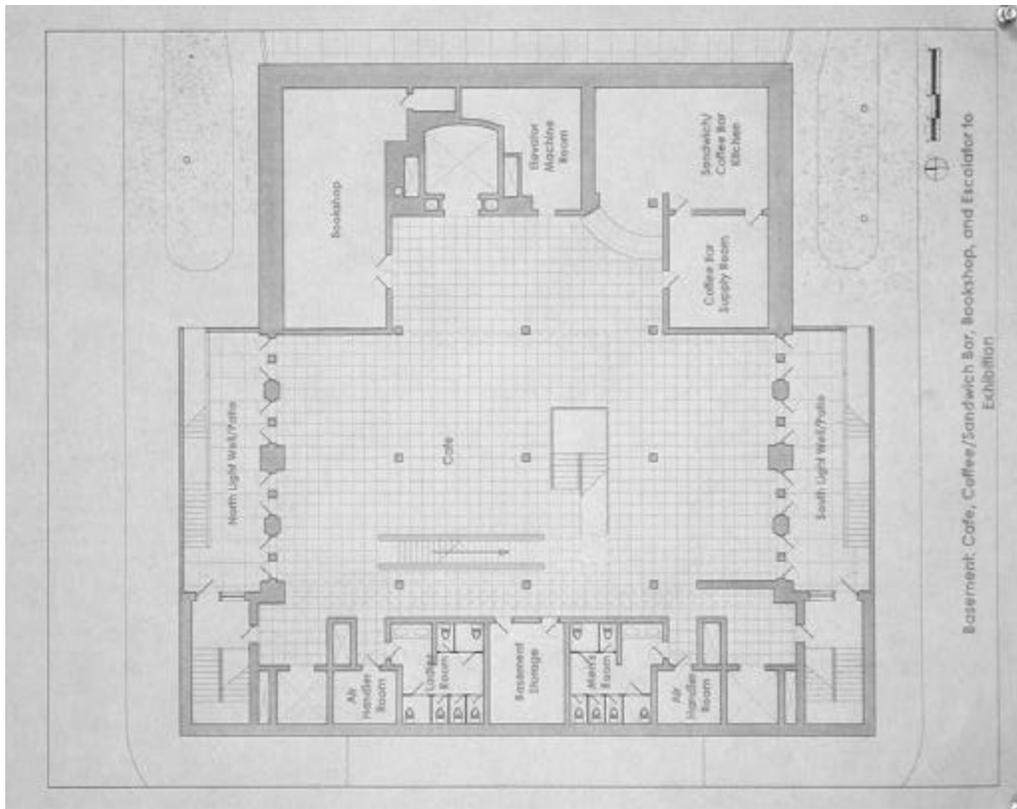


Figure 168: Basement Plan

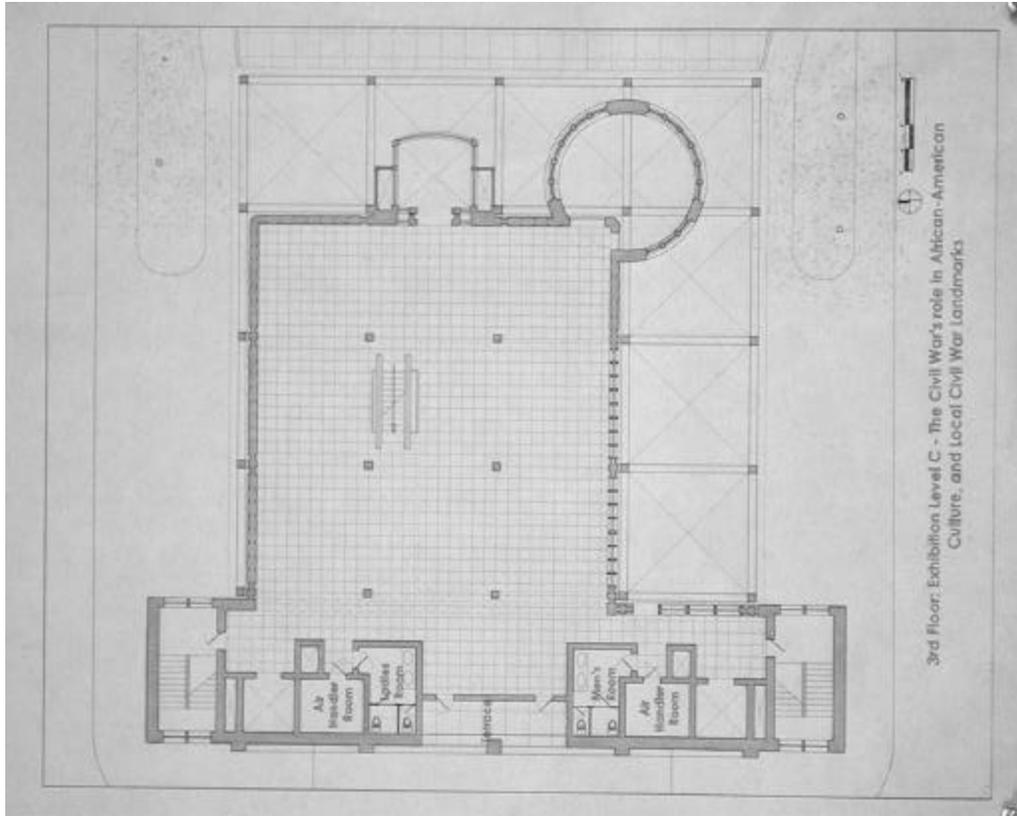


Figure 169: 3rd Floor Plan

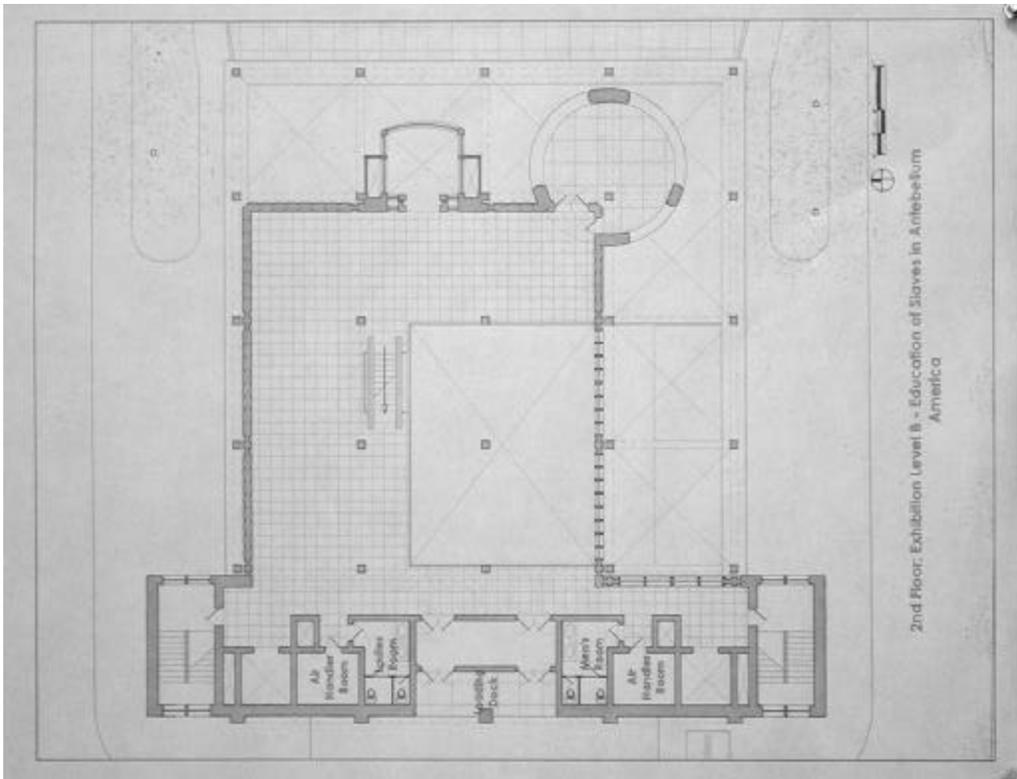


Figure 170: 2nd Floor Plan

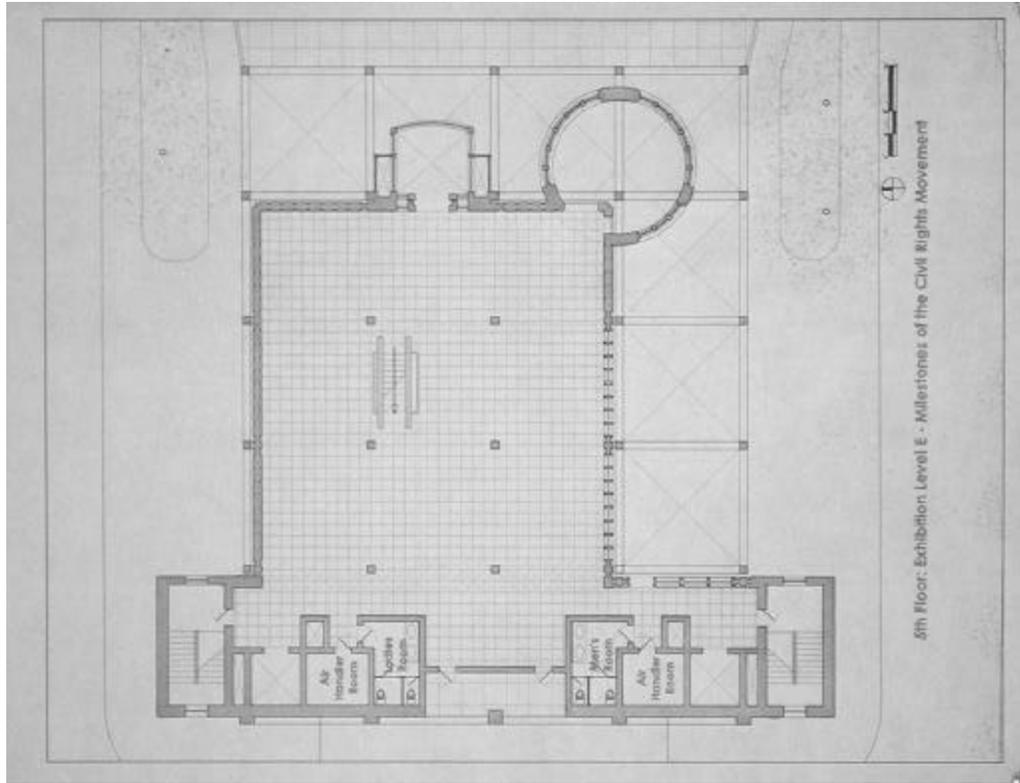


Figure 171: 5th Floor Plan

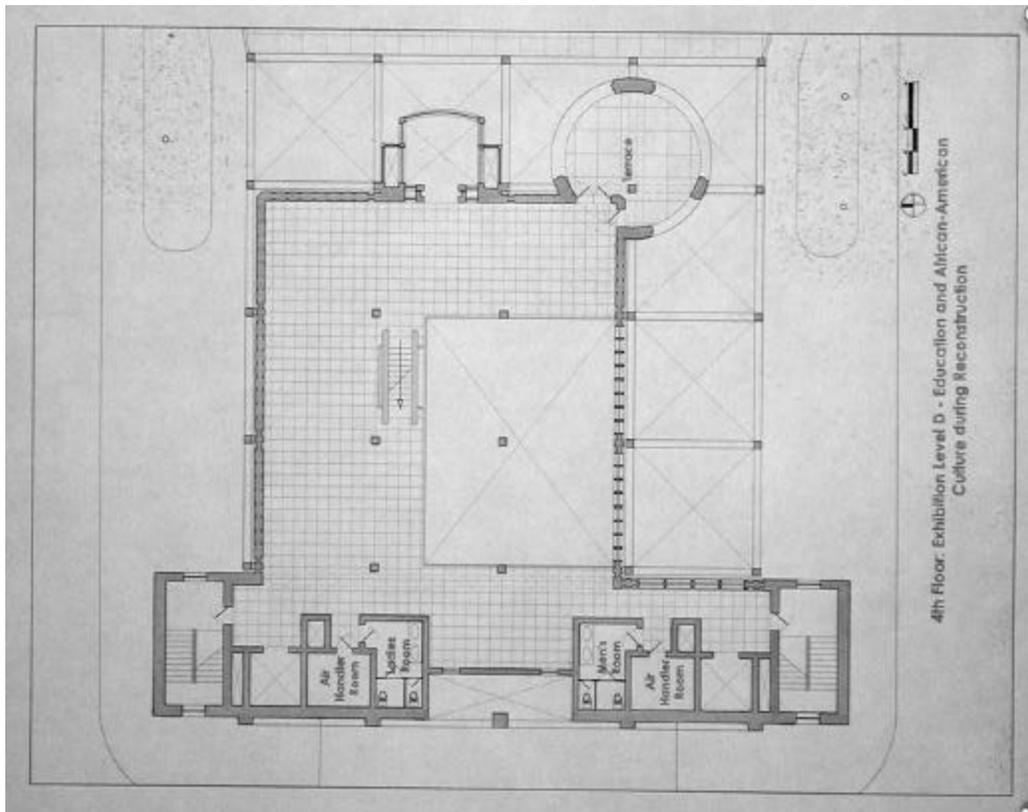


Figure 172: 4th Floor Plan

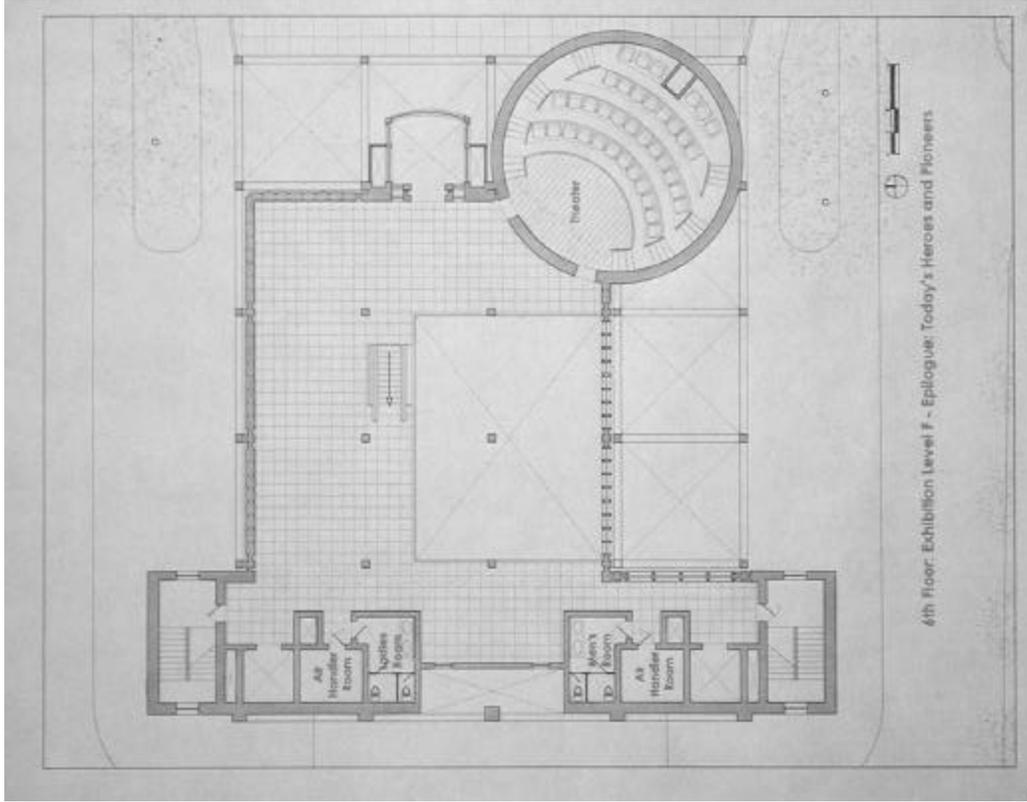


Figure 173: 6th Floor Plan

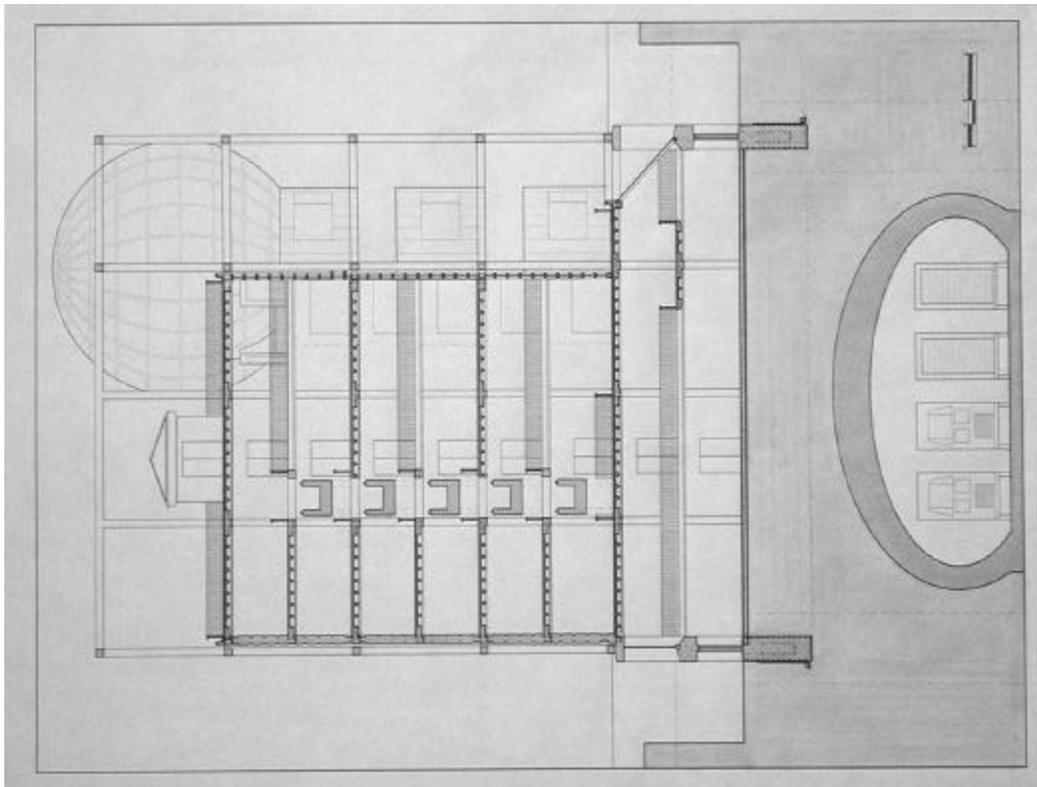


Figure 174: Section A-A

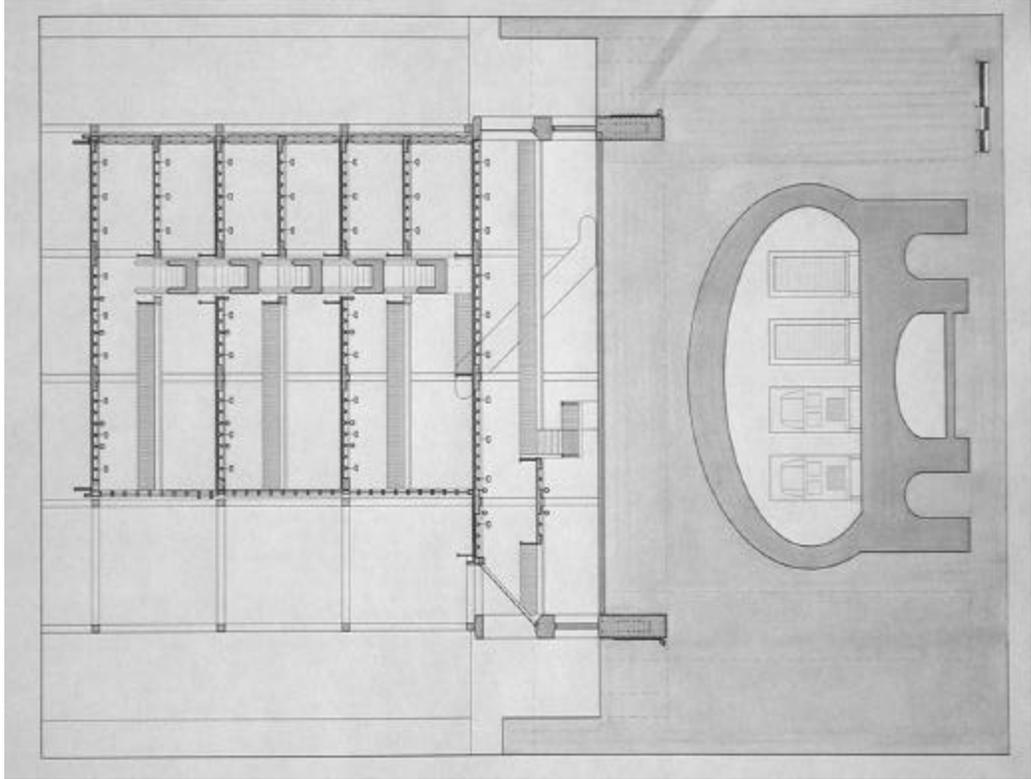


Figure 175: Section C-C

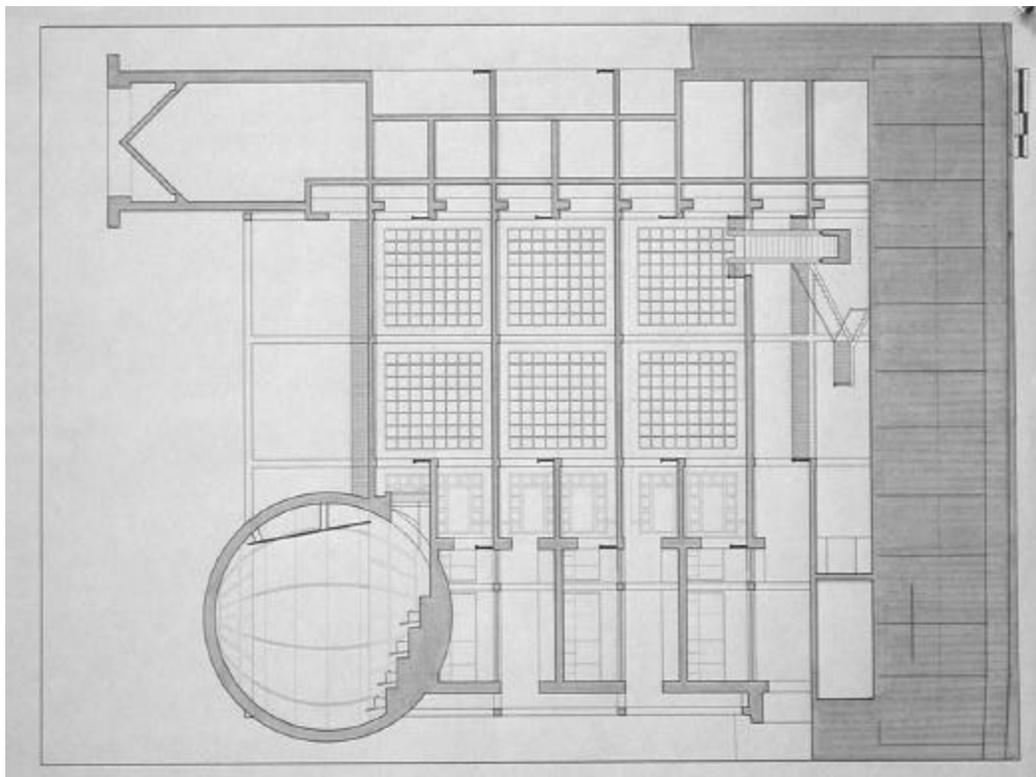


Figure 176: Section B-B

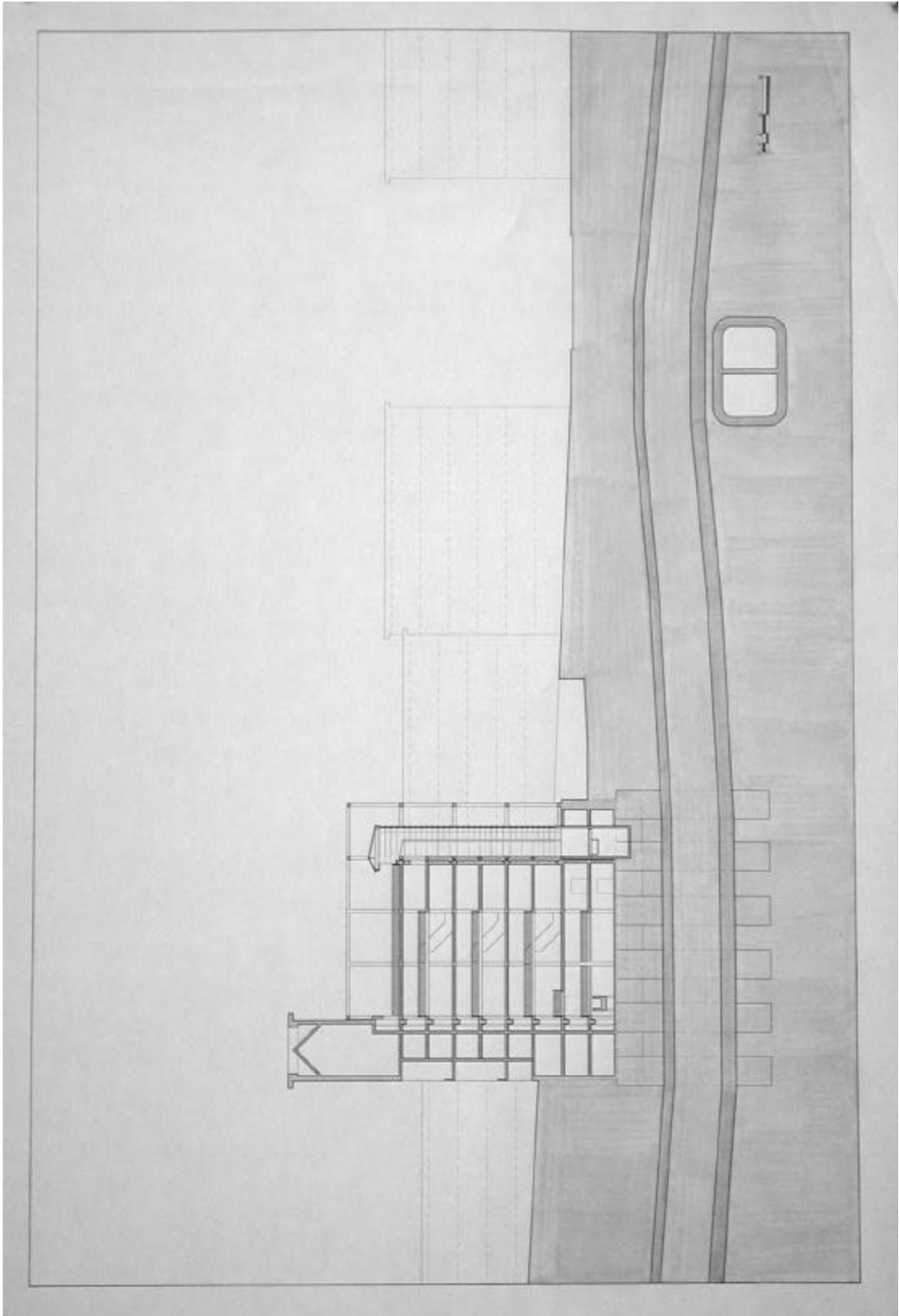


Figure 177: Site Section

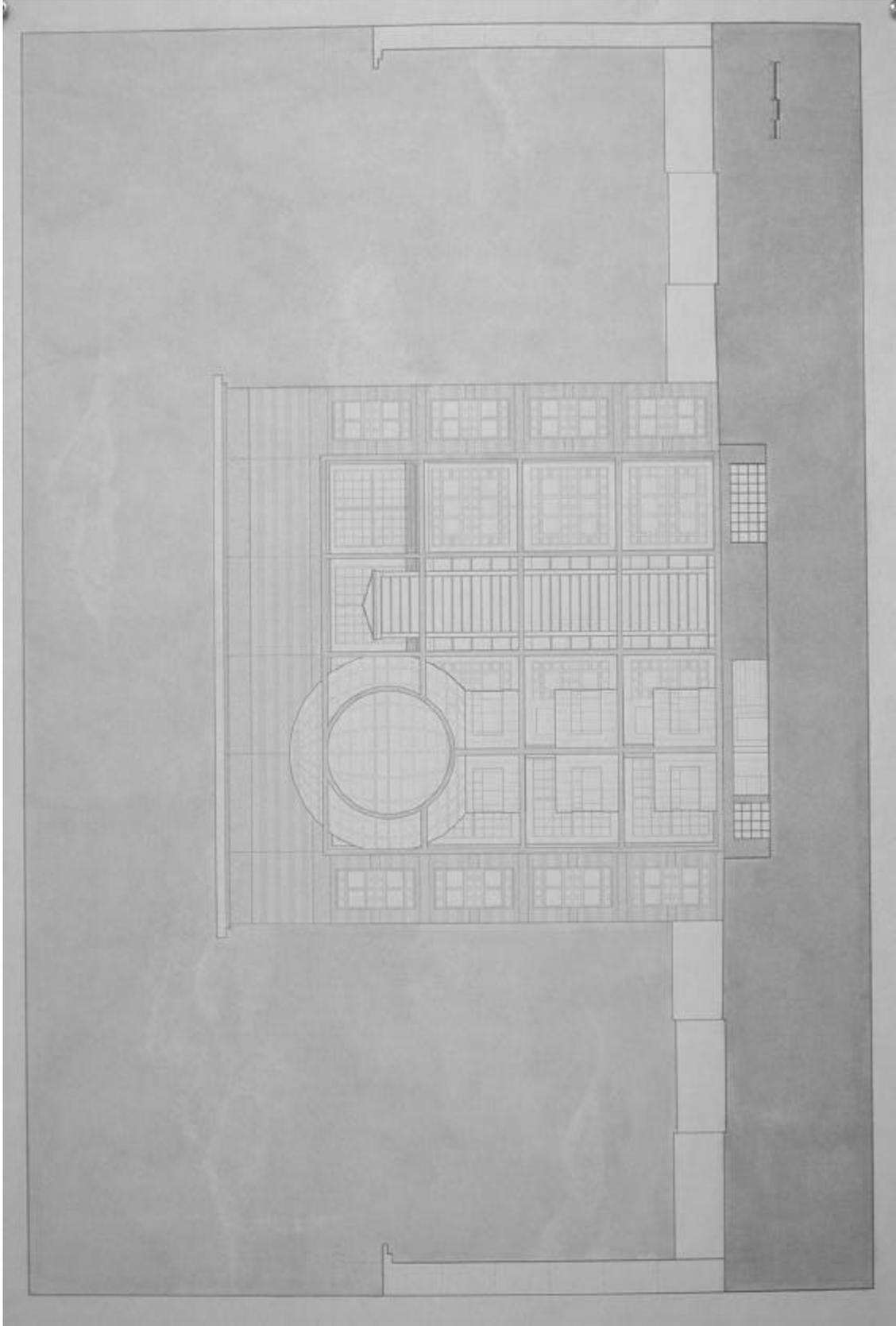


Figure 178: East Facade

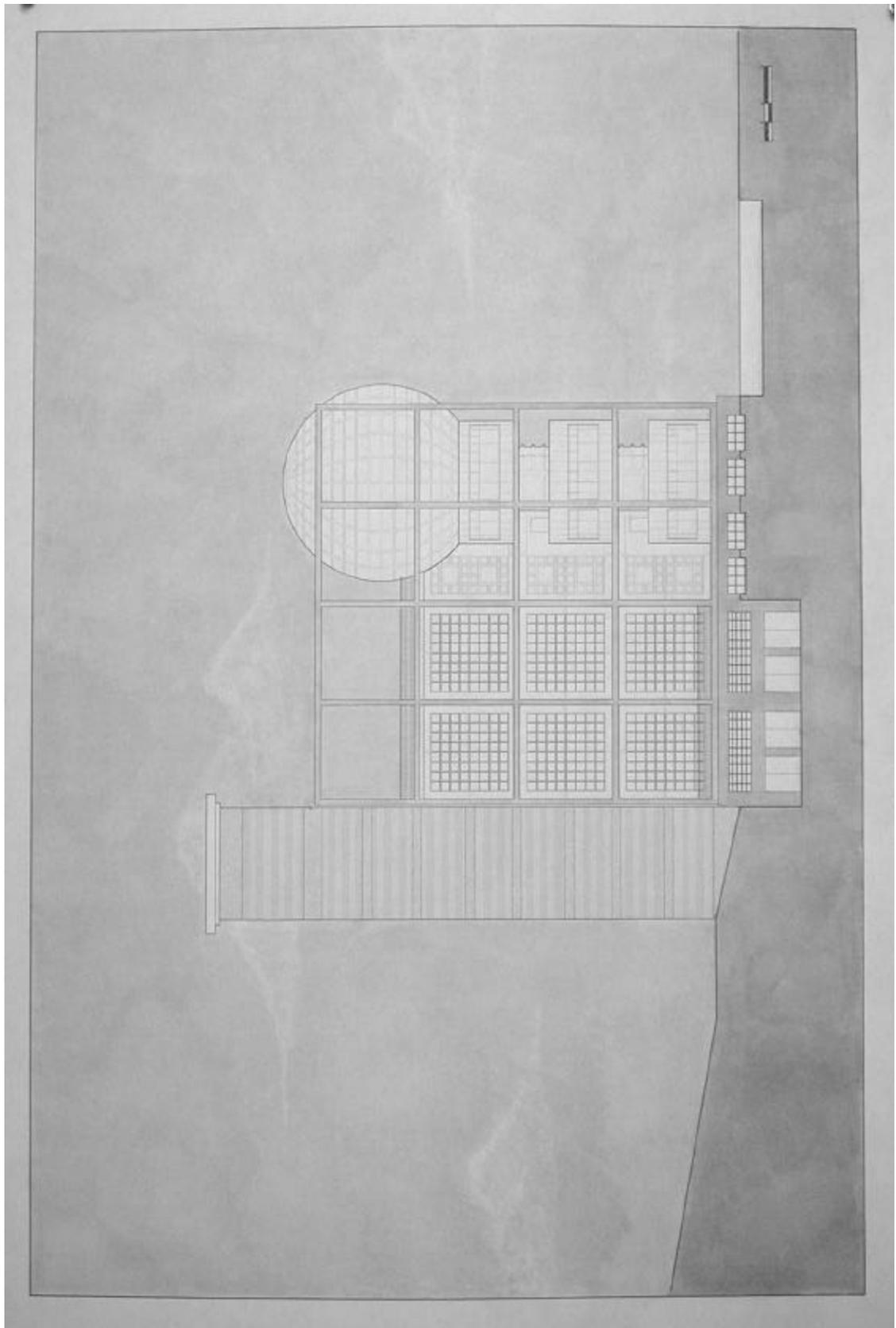


Figure 179: South Facade

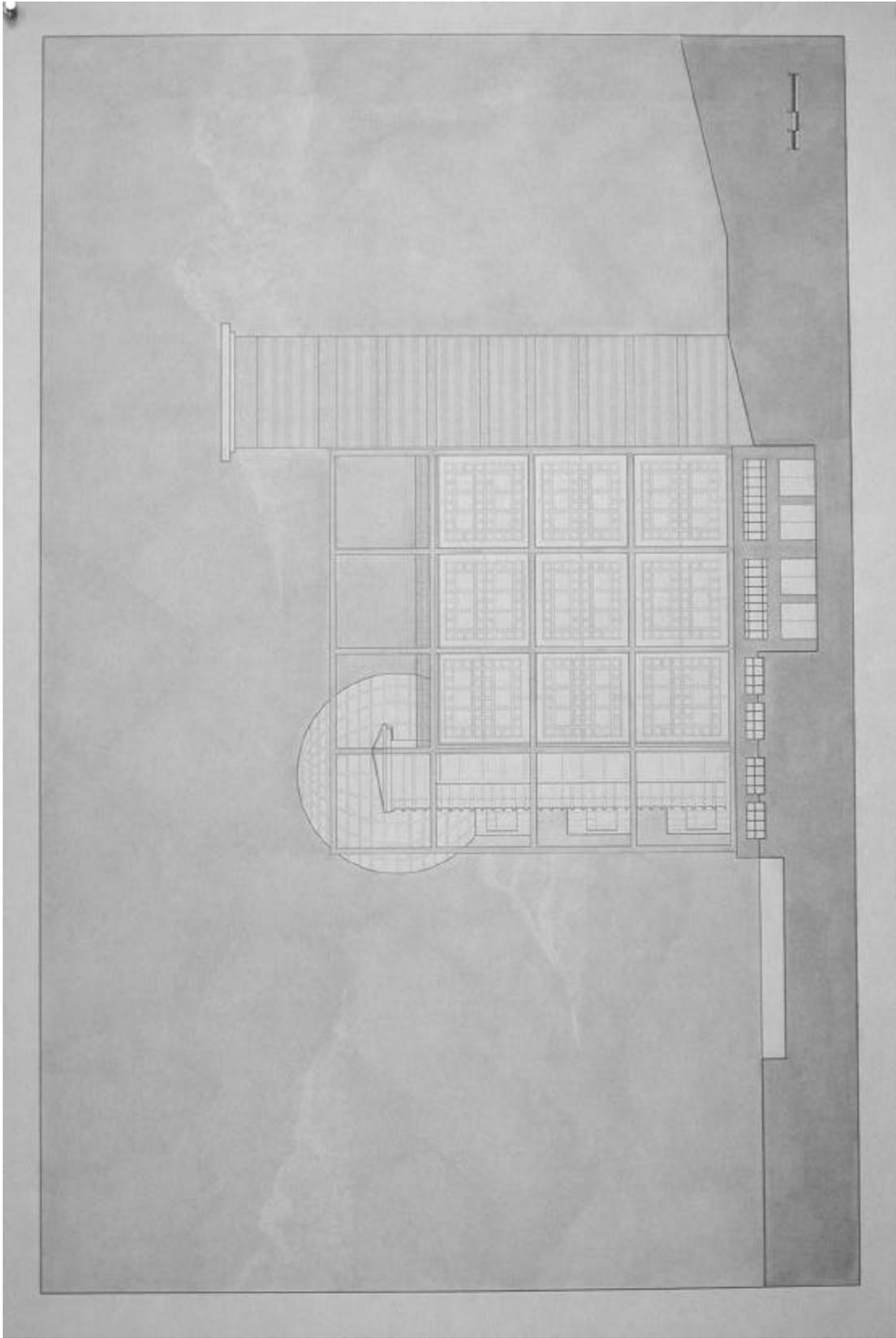


Figure 180: North Facade

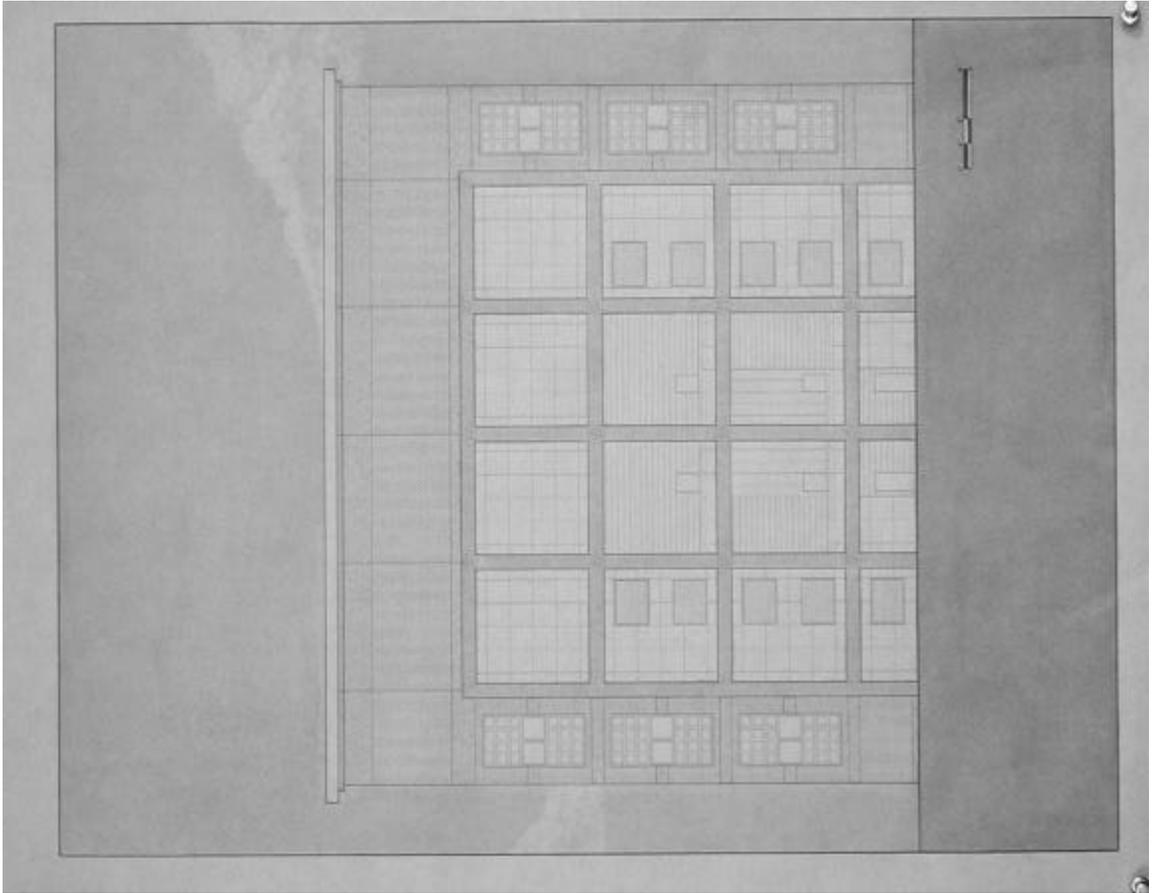


Figure 181: West Facade

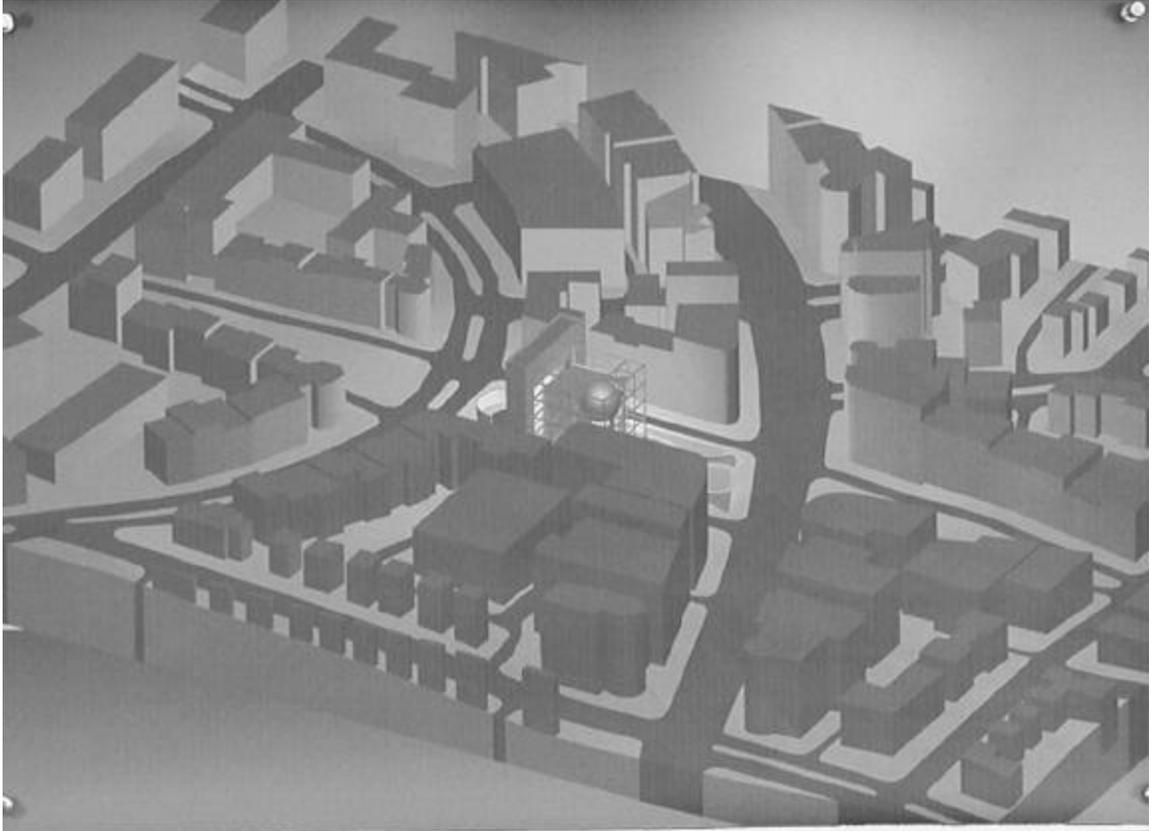


Figure 182: Exterior Images, Distant

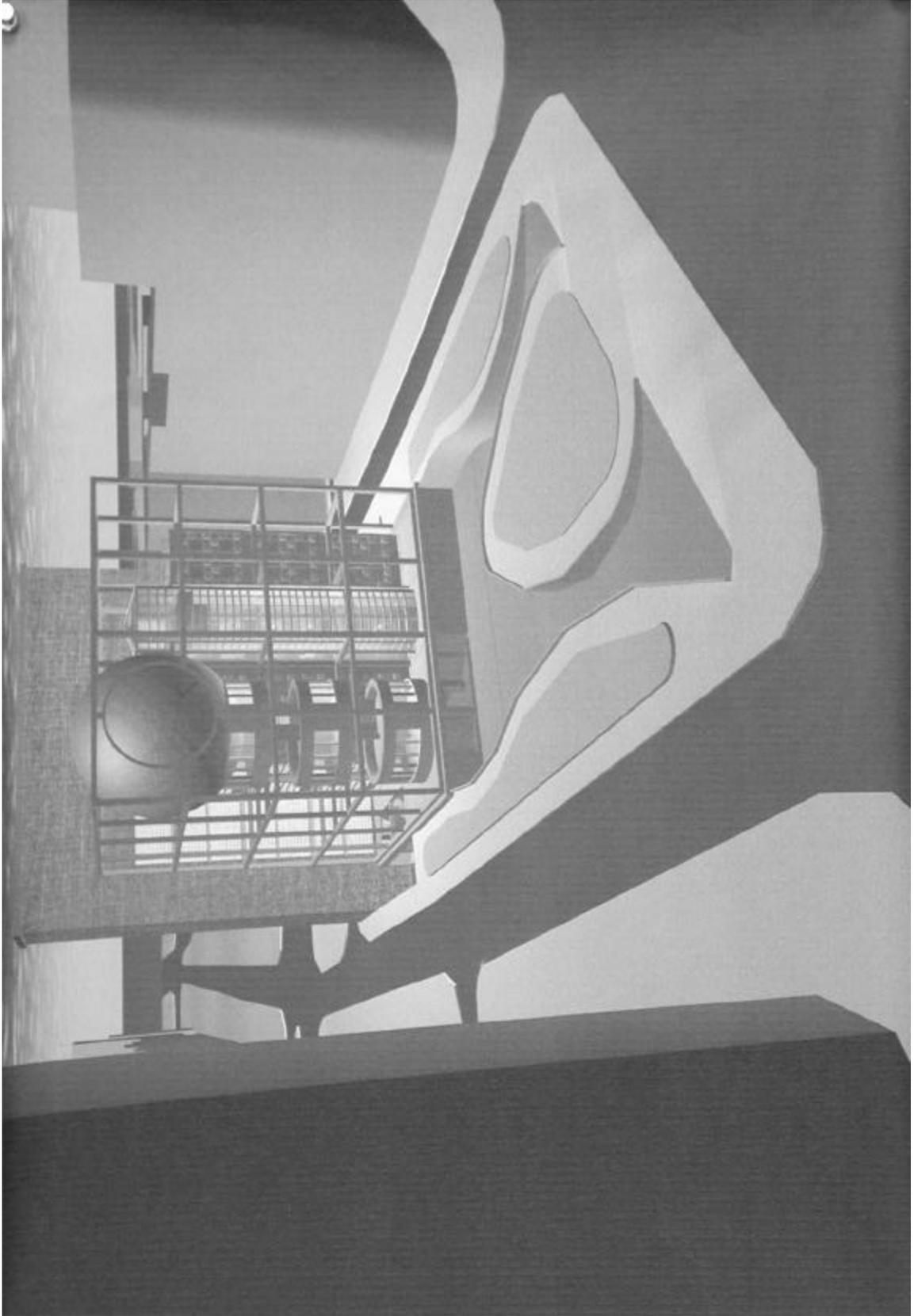


Figure 183: Aerial 1



Figure 184: Aerial 2



Figure 185: First Sight



Figure 186: Entering Plaza

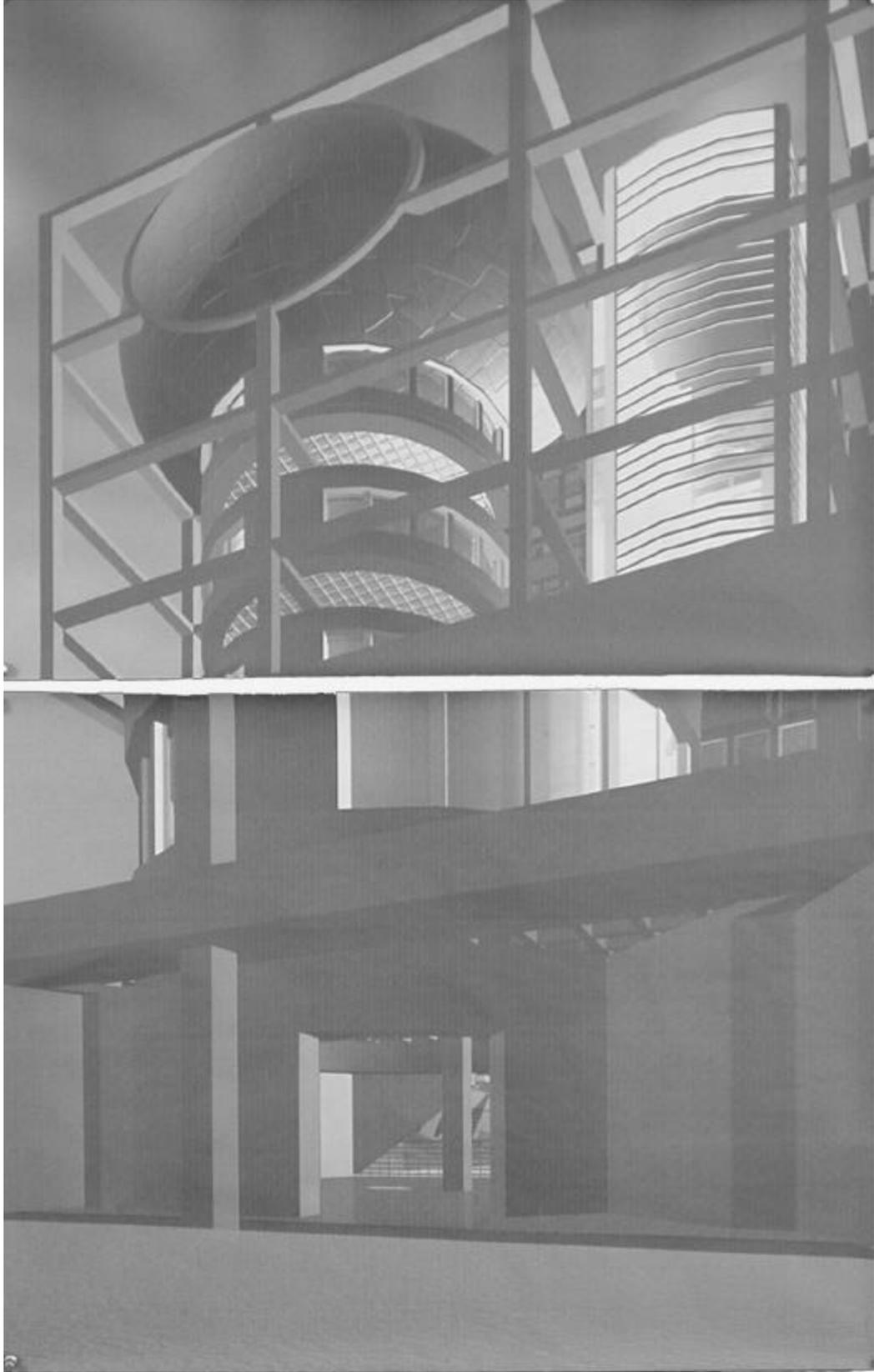


Figure 187: Exterior Images, closeup



Figure 188: Entering Museum



Figure 189: Looking Down Into Cafe



Figure 190: Cafe, Looking South

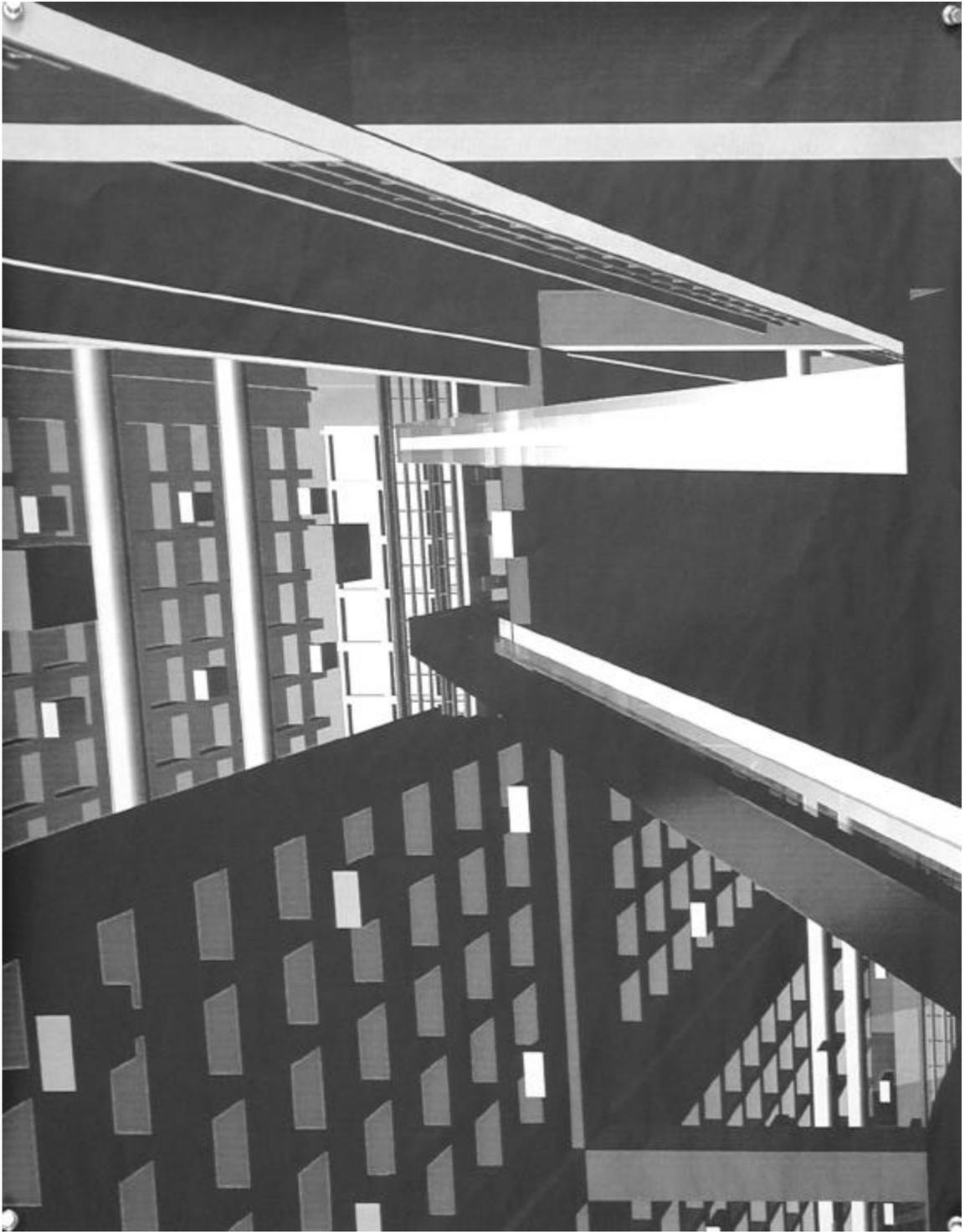


Figure 191: First Escalator



Figure 192: Exhibit Floor 1a

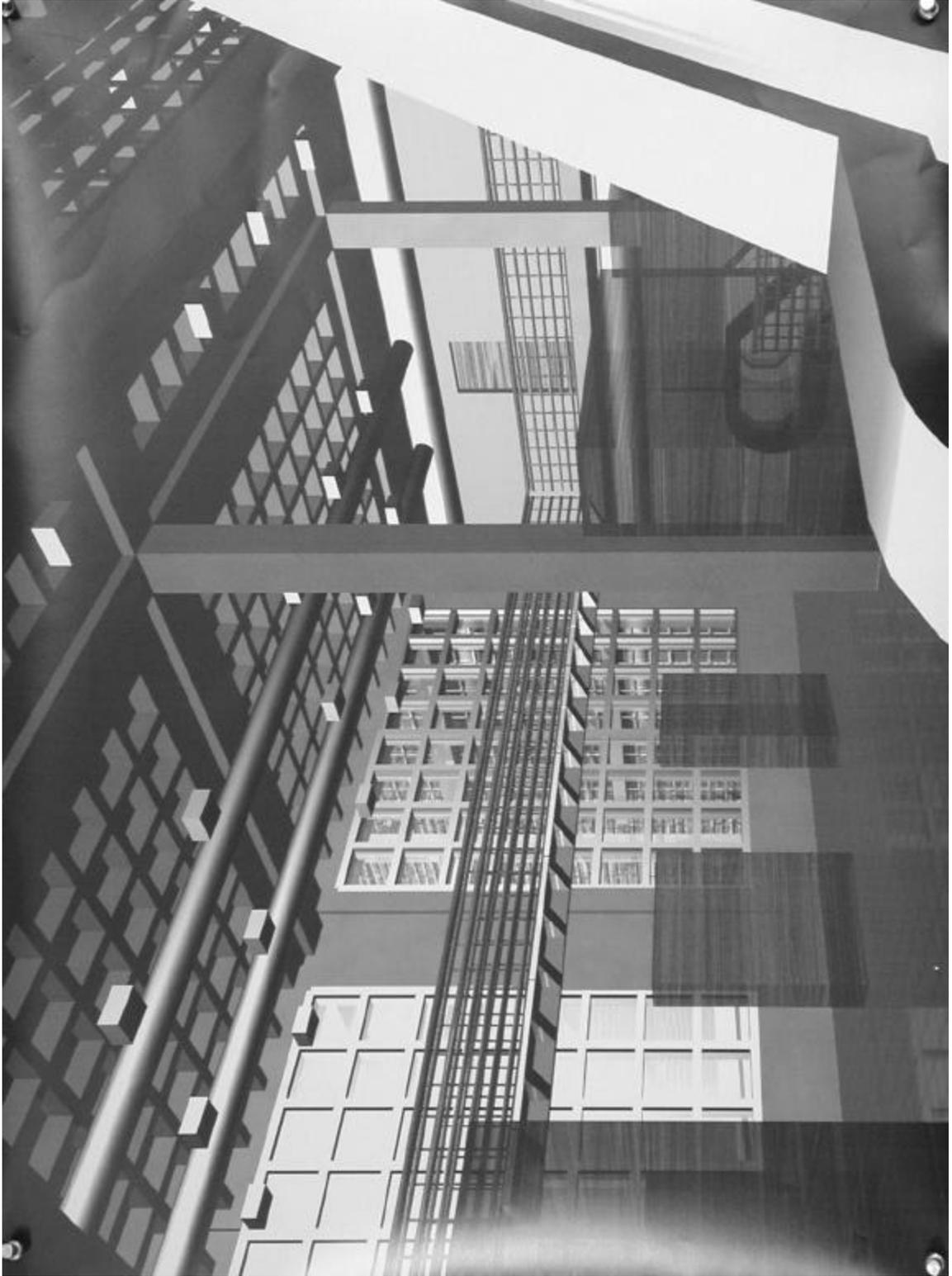


Figure 193: Exhibit Floor 1b



Figure 194: Exhibit Floor 1c



Figure 195: Exhibit Floor 1d

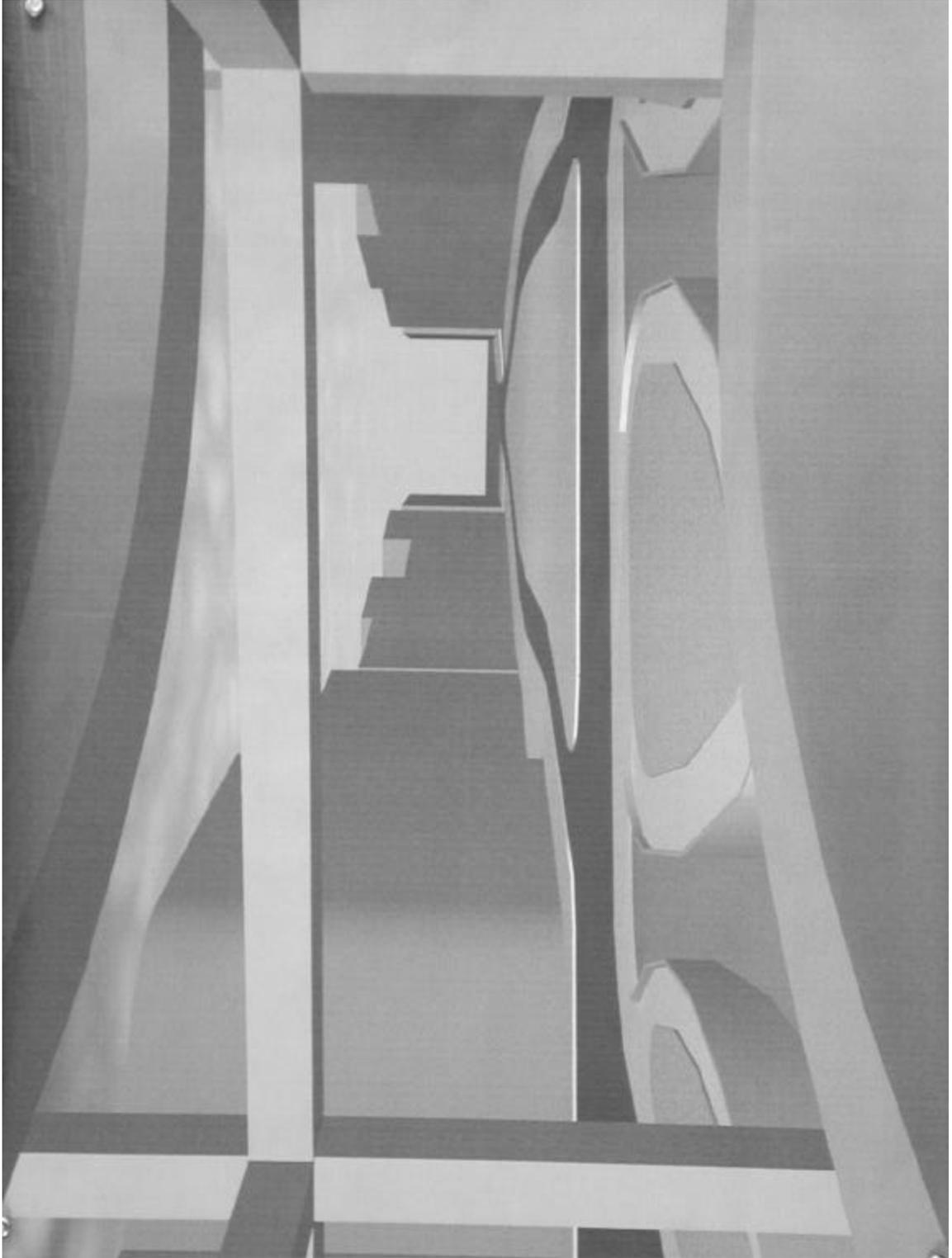


Figure 72196: Terrace A

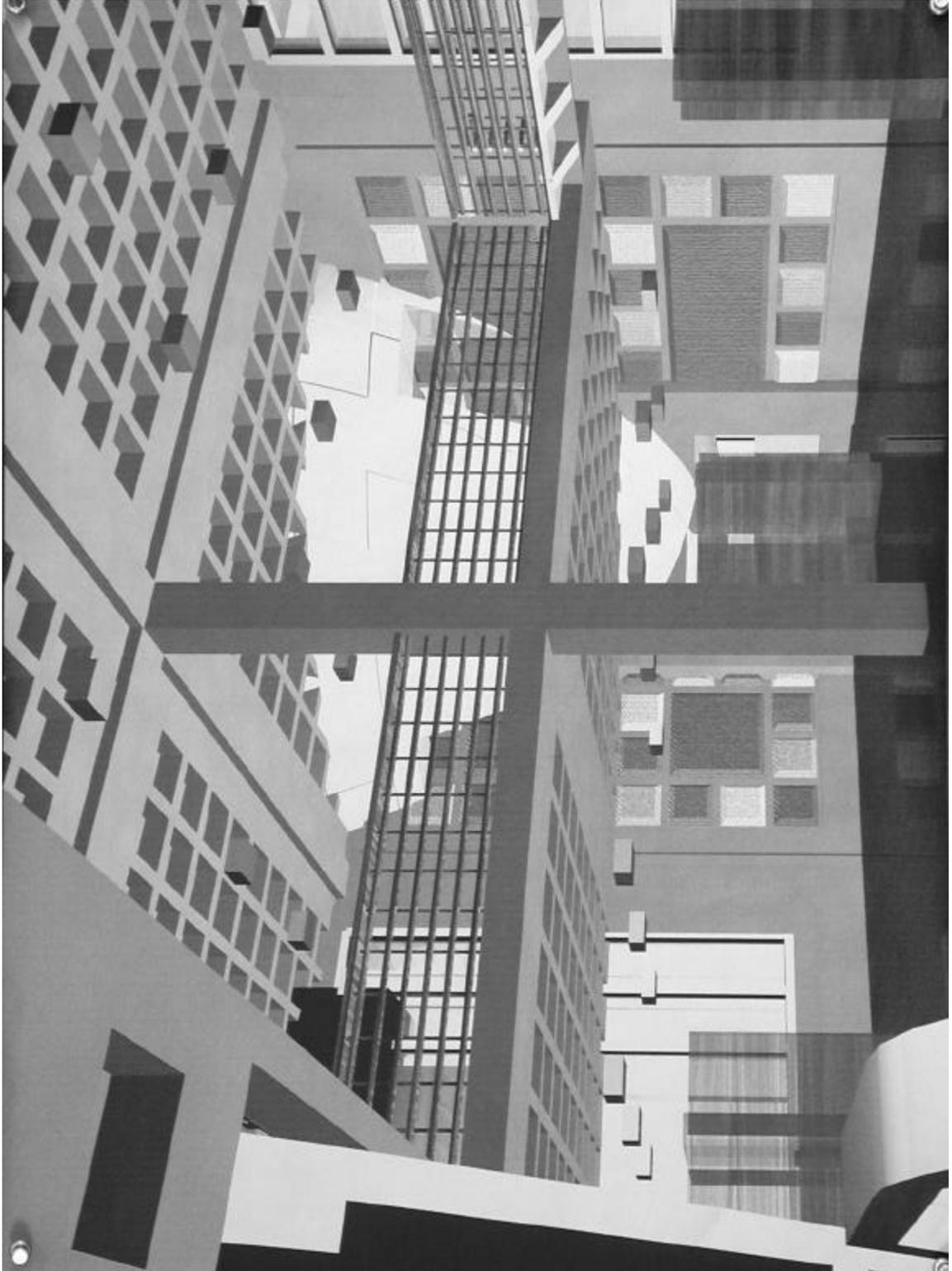


Figure 197: Exhibit Floor 3a

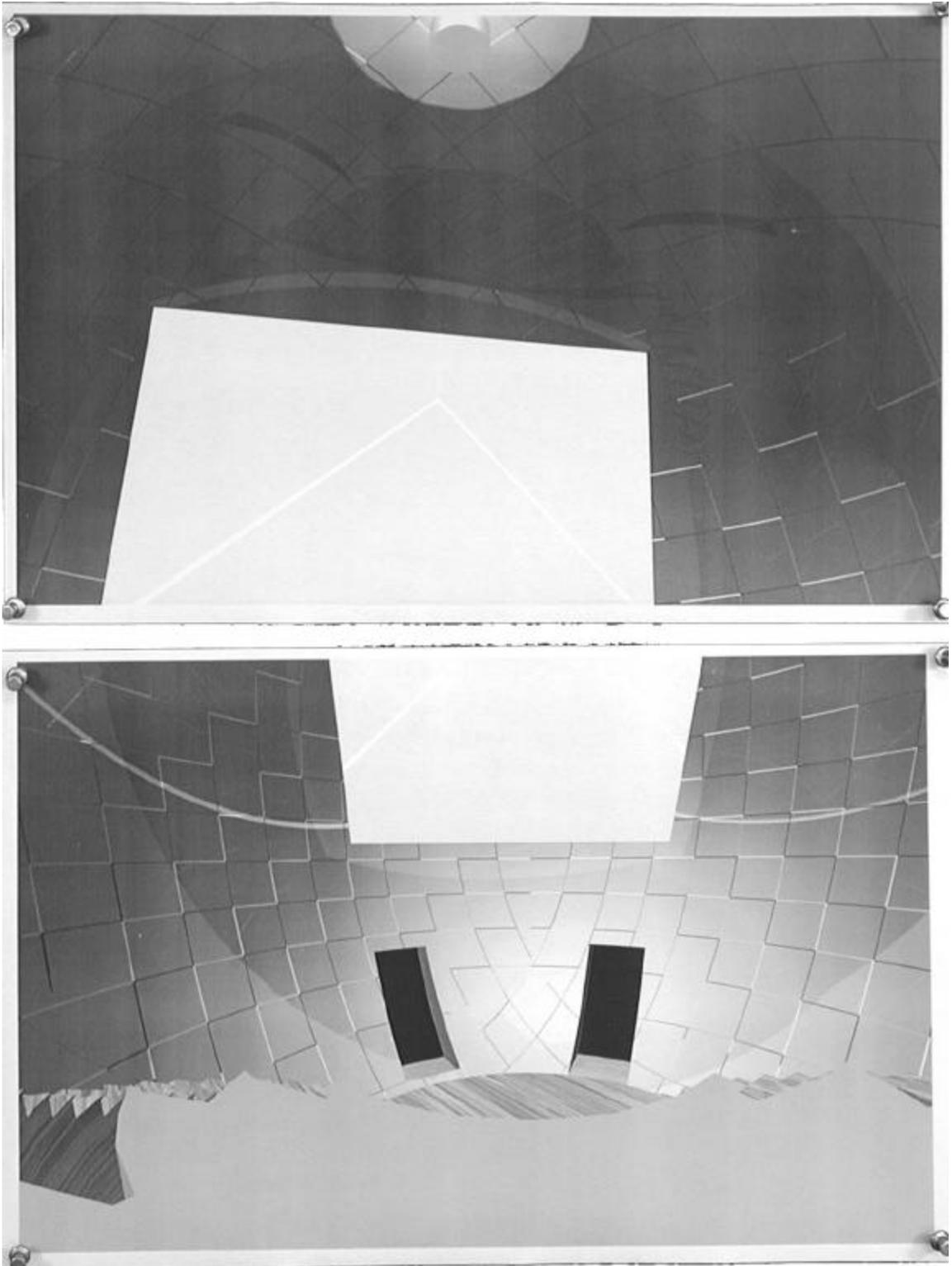


Figure 198: Images from Inside Sphere



Figure 199: Roof Terrace

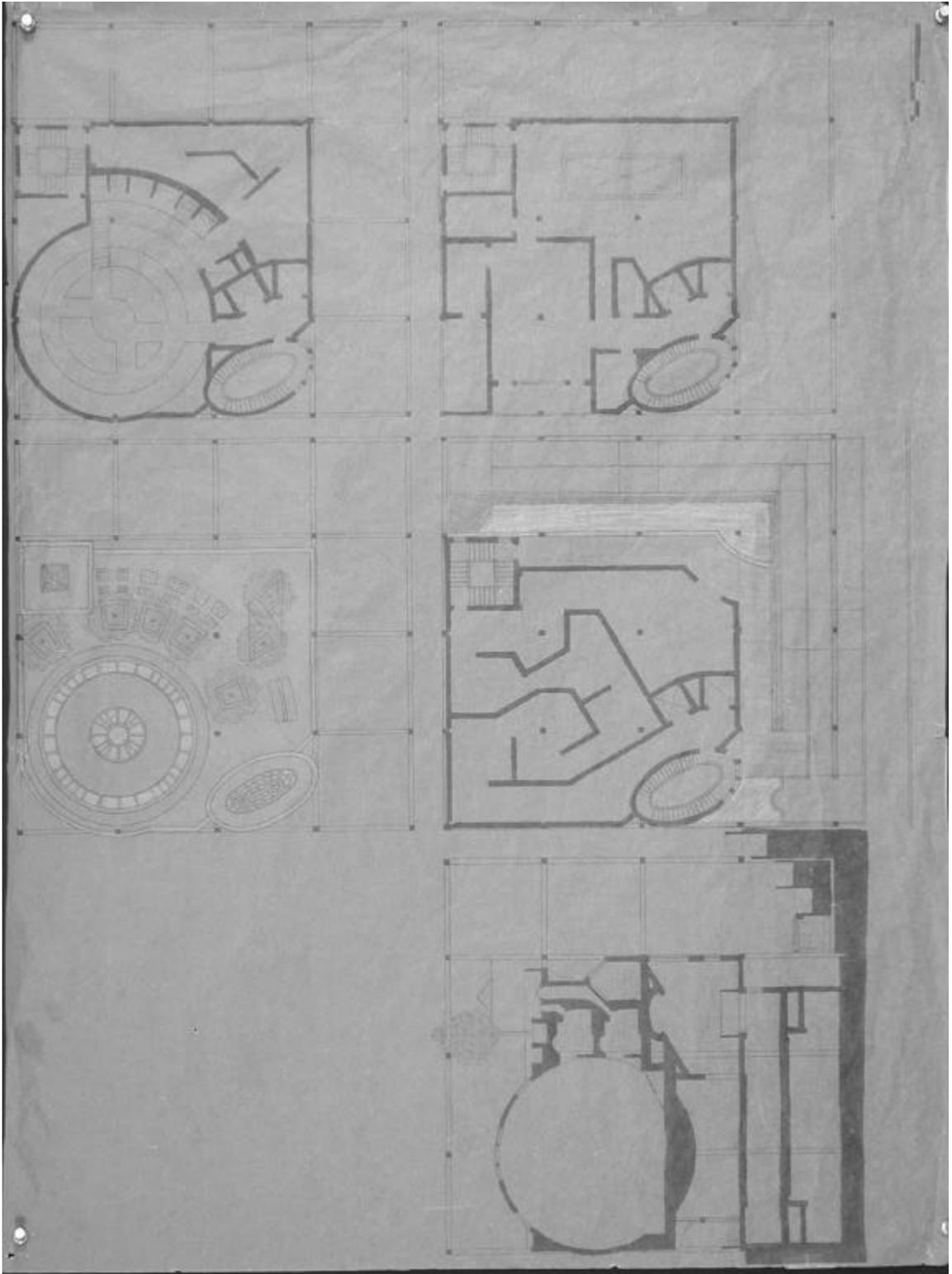


Figure 200: Museum, 1st Iteration

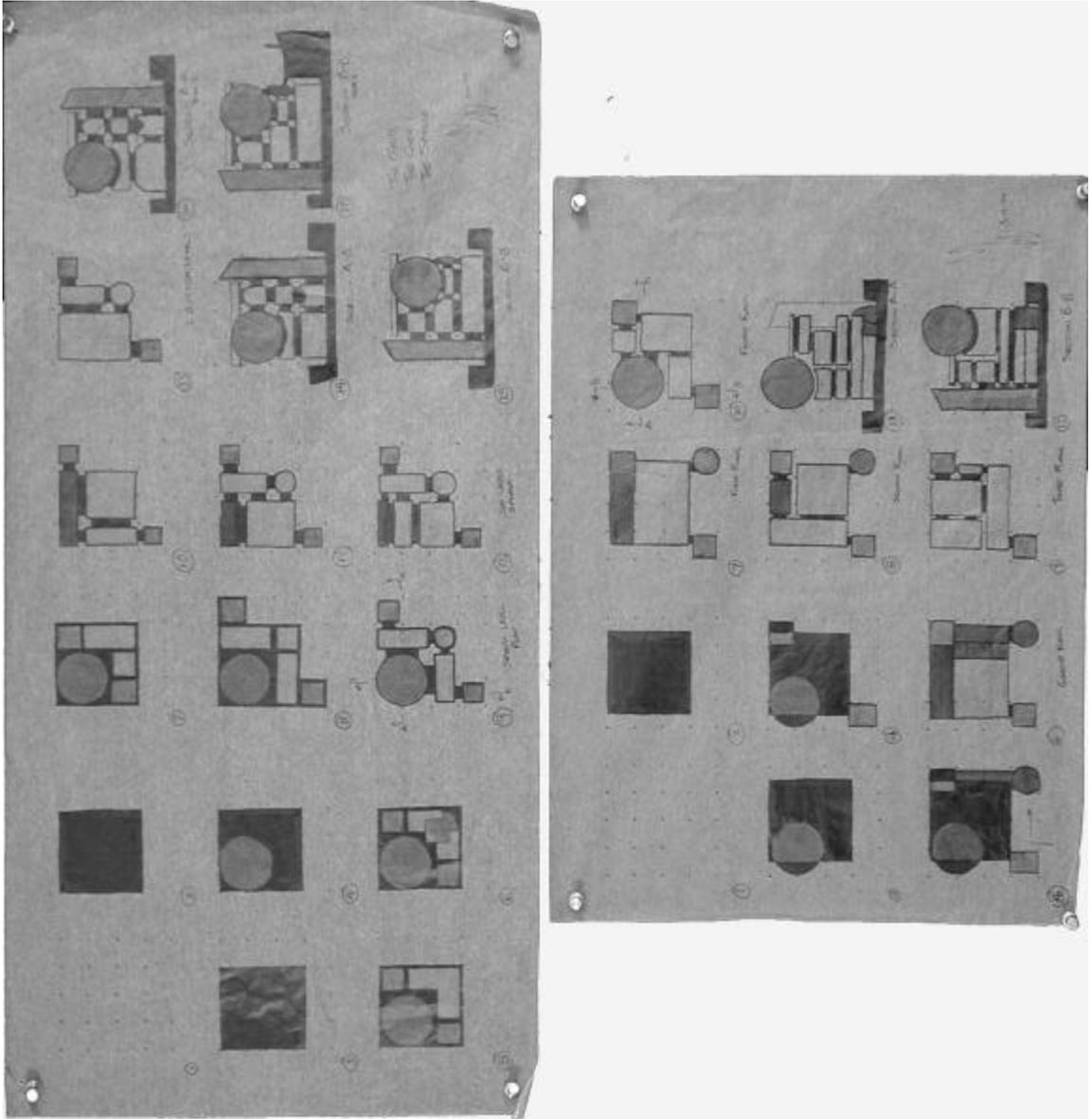


Figure 201: Museum, Clarification Diagrams

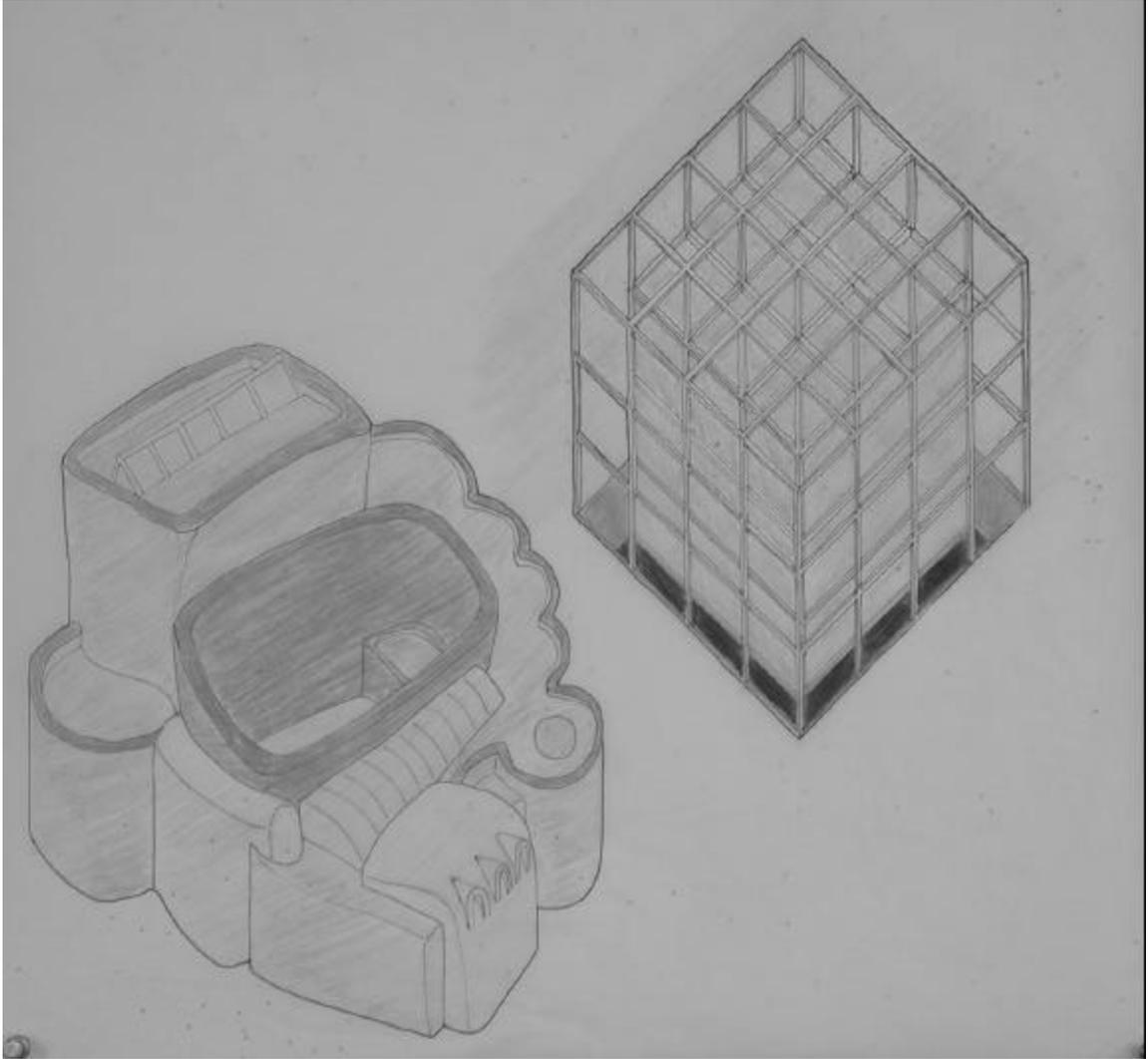


Figure 202: Literal or Abstract?

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