

REDEFINING SUBURBAN PERIPHERIES

Robert Detwiler
Masters of Architecture
University of Detroit Mercy - School of Architecture
AR 510 & 520
Associate Professor Will Wittig
30 April 2007





Contents

Thesis Investigation

Abstract	1
Project Summary	2
Circumstance	3
Thesis	4
Precedent Study 1	10
Precedent Study 2	19
Precedent Study 3	23
Site Prospect 1	26
Site Prospect 2	29
Site Prospect 3	31
Site Prospect 4	40
Programming Summary	48
Programming Space Details	51
Programming Conclusions & Analysis	69

Design Process

Springboard	73
Schematic Design	87
Design Development	106
Final Presentation	115
End Notes	127
Annotated Bibliography	128
Closing Summary	129



ABOVE

The original area of the city's density is fading away, and developments are being replaced by less dense, and more horizontally active suburban establishments.

BELOW

The metropolitan expressway system continues to grow, following suit with the acceptance of automobiles as the primary method of transportation. New developments cling to the automotive transportation streams, with minimal consideration of pedestrians.



The perception of a city as a defined, communal entity is becoming rapidly less apparent every day. New developments result from business owners and developers working to achieve their primary motive which is profit. This motive is driving suburban development into a spreading pattern that is uncarefully planned and not designed thoughtfully to embrace humans. Rather it is an exercise of acquiring the most affordable land, and building the most affordable facility that will enable respective businesses to reap a profit. Victimized by this reality is not just the communal integrity of the original city, but also the value of location, architecture, and human intimacy. The population in America has become dependent on automobiles as their primary source of mobility, and this has further allowed suburban outgrowth issues to reach this state of blended extremes. Despite the problematic cases that the suburbs have presented over the past quarter century, there still remains opportunity to disrupt this current outgrowth pattern, and begin applying design and planning principles to the areas that more closely resemble a dense, urban environment. With a mixed use collection of carefully designed spaces, and an increase in density, it is possible to alter the standard behavior of present and future suburban function.

In America today our population density is decreasing and our geographical area of development is increasing. The emphasis on "pedestrian favorable" environments is minimal, and most of the energy in regards to planning and development is spent accommodating a comfortable environment for drivers and their cars. Business owners and developers are motivated by money, which is understandable, but unfortunately the result of this motivation is the perpetuation of an environment that is dominated by cars and space for storing those cars. Whether the building use is retail or commercial, the standardized system for development today is a multi-acre property containing a rectangular single story structure and a flat roof paralleling the flattened site. In between the front entrance and the main road of these developments is a parking lot that is large enough to accommodate four times as many vehicles than actually use it. For the developers the land was affordable and even under the worst conditions, their customers will never struggle for a place to store their vehicles. This is a system that succeeds as a functional plan, but ultimately results in an extremely inefficient and inhuman environment.

Despite the financial success that the above scenario has to offer, the effect on the city is an issue that is widely overlooked. The development pattern described above is not as concerning near the center of the city, but is most notable at the periphery of the city where the suburbs meet the rural country-side. Definition between suburban and rural areas is very unclear as a lack of density in the suburbs is blending the two mediums together. There are strip malls being constructed repeatedly on undeveloped land hundreds of yards away from a main road that once defined the suburban edge of a populated district. It only takes one of these meaningless developments to provide reason for a new developer to do the same thing in the same unorganized manner. The developing parties reap their profits, others eventually follow suit, and the pattern grows exponentially.

These development patterns need to be significantly altered. Vehicles need to move further down on the list of design priorities, especially in regards to developments at these peripheral conditions. There are many alternative methods for placement of vehicles that do not consume acres of space between the building and the main road. There needs to be more design emphasis on the pedestrians and the relationship between them and the buildings they are using. Parking needs to be mostly hidden and pedestrian paths and circulation space need to be showcased.

In addition to the emphasis on pedestrians, multi-use buildings in suburban areas bordering rural areas need to be redesigned in such a way that they are interacting with the existing context as opposed to the vacant context. Not only will this allow for more activity but it will also provide existing objects as sources for new developments to respond to. Furthermore it will offer a sense of value and intimacy with the existing community as opposed to a sense of force in the event that the existing condition is chasing the new condition away. If not that, then it is a sense of the new development running away, but at any rate it is clearly a lose-lose situation. This approach needs to be applied mainly to suburban patches that are beginning to show signs of isolating and can ultimately be considered a threat to the rural environment.

To achieve a better development pattern with the assumption that zoning and property values are not going to change, design and planning concepts need to begin with an open-minded strategy that embraces vertical solutions, pedestrian environments, and characteristics of urbanism in general. With a new concept of multi-use developments in these areas, projects here can adjust from a pattern that is more closely aligned with a rural sense of space to one that is more urban.

Given that the site for this project is likely to be on the perimeter of a suburban city or medium sized town, it must be considered what the status of typical suburban building uses generally are. It is clear that most of the building uses, especially those of strip malls fall under the category of retail, and then in other cases the remaining built spaces consist of commercial and residential. In an area where continued horizontal development is threatening an undisturbed rural context, the time is now to begin developing in a condensed manner, most particularly here at this suburban boundary, and put forth an aggressive and legitimate effort toward better mediating suburban and rural contexts.

In many metropolitan areas throughout the nation suburban development is creating rivers of unchecked development into previously undisturbed rural areas. These suburban channels need to be identified earlier, and developed differently to resist further penetration of our diminishing natural context. By developing a district that can accommodate a variety of mixed building uses, we can define the boundary of a suburban area and begin embracing the lower profile built space in an ambitious manner.

Looking at the building uses in present day suburbia, there are three main categories that seem to horizontally dominate our land. These categories include retail, commercial and residential space. All three of these categories are certainly essential for any city, and can be accommodated in a suburban peripheral condition such as this. Though they can be accommodated, the method in which this is done in present day society is not meaningful. The idea is to design a district to accommodate the multiple uses, and provide a comfortable relaxing environment for the people that will inhabit this space. In terms of land and building use, the list below is a rather direct way of presenting a variety of potential spaces that can co-exist on the same site.

- Walking
- Structural interaction with pedestrian space
- Eating – indoors and outdoors
- Retail Spaces commonly found in suburban strip malls
- Housing
- Commercial space to provide the opportunity for daily site use
- Layered parking, hidden from public communal space
- Trees, water, vegetation; natural entities that can filter through a new built environment
- Usable green spaces to link physical space (as opposed to asphalt ones to separate them.)

Ultimately the goal is to incorporate urban development patterns at the peripheral edge of suburbia. By accommodating the types of activities just previously listed, the combination of thoughtful architecture and planning can create a district in which this entire range of activities and building uses can co-exist, in both a physical and operational manner. Benefiting from the accomplishment of this goal will be the people using these spaces, the identity of the city that it is supposed to be a part of, and the environmental integrity of the adjacent rural context. It will assist in defining suburban space from rural space, and will hopefully set a trend in terms of new development at the outer perimeter of threatening suburban areas.

The concept of a city is a vision that one could agree is becoming less apparent every day in North America. The design guidelines from the recent decades passed have been transformed from an intimate composition of neighborhoods, pedestrian paths, and organized building relationships, to an increasingly isolated and fragmented system. The theories that have guided land-use planning for much of the second half of the twentieth century have contributed heavily to the separation of suburbs, separated people from each other, and created opportunities to reap economic profits and comfortable space for automobiles.

Developers have composed systems in which plans for “cookie-cutter” buildings have become extremely efficient for themselves along with business owners and corporations. The affordable land and the demand for product from these particular businesses has enabled these parties to become wildly successful, and previously desired attributes such as social networks, pedestrian spaces, and unification have been devalued. Vulnerable to this new development pattern are: rural land that does not need to be disturbed, the value of meaningful architecture, and human relationships. At what point must we move beyond a simple acknowledgement of this condition and put forward a legitimate proposal to resolve these issues?

A proposal is needed to address this recent development transformation, and to begin conforming to design principles that more closely resemble the roots of urbanism.² If condensed mixed use systems have worked in the past, then a similar concept can certainly work again, but it needs to begin with an idea that can be taken seriously not just by the business owner and contractor, but more importantly by the building users. A suburban transformation proposal will result in an improved sense of community, more friends and fewer strangers, and a staggering improvement in the efficiency of our land use. Shortly following will be a descriptive analysis of how the existing suburban development patterns have been created inefficiently and ineffectively, as well as a discussion of alternative development solutions.

One of the biggest driving forces of the suburban peripheral explosion is the functionality of the present day strip-mall. The reason for these entities operating in the manner that they do comes as a result of affordable land, affordable “cookie cutter” buildings to house individual businesses, and affordable prices for leasing or purchasing the respective individual spaces. The land-use pattern in which these strip malls are found, and the architecture which composes them are two separate problems for this particular building use, but more aggressive and thoughtful planning will provide an opportunity to remedy both of these problematic conditions.

In addition to the land-use and aesthetic conflicts that the strip mall building type presents, the thoughtfulness of interaction with the building occupants may be the most problematic condition of all. Standard suburban strip malls truly make no effort to interact with the people using them. The people who ultimately serve as customers to these developments are essentially forced to interact with the buildings. There are rarely specific human oriented elements to these buildings that actually reach out to the people. It is truly a matter of people walking lengthy distances to a bold entrance, and when they go to another retail space within the same complex they have to exit via the same bold entry way, and walk parallel to a solid building façade to their next destination where they can then repeat the cycle all over again.

A main reason for the human-forced interaction with strip mall building types is the emphasis that the planners and owners place on accommodating vehicles. This is not to say that a fair emphasis should not be placed on accommodating vehicles, the reality of this function must be accepted, but parking space does not need to occupy the center of the development, and it certainly does not need to be treated as a focal point. Planners do not intend to create these massive earth covering asphalt spaces as a focal point, but the carelessness and selfishness of the developers to achieve what is most economical, typically results in a greatly oversized parking lot that occupies the majority of the property.

The message that is sent from the building to the people in most strip mall building type, is that once they have completed their time in a particular space, and they plan on using another space within the same building, the natural tendency is for the customer to get into their car, and then drive through the parking lot in an effort to get closer to the next space. That action is followed by parking again, and then walking through more undesirable asphalt space to reach their next destination that may actually be located in the same building. It is ultimately leading toward a higher maintenance life style that could threaten to take over as the standard behavioral pattern of this culture in future generations. If there were enough thoughtfulness and care put into the planning and design of these spaces, humans would not be moving away from it to advance to another space within it. Buildings are used by humans so it can only be considered sensible that they should be designed for humans, and built to embrace humans, as opposed to chasing them away.

Present day suburban development patterns are also problematic in many other respects. An issue that needs to be noted is the lack of respect that new suburban developments are showing toward not only the rural context which they are destroying, but perhaps more importantly from the urban contexts that they are running away from.² The elusive pattern that suburban development is creating is causing disturbances beyond just land-use inefficiency, but it also causes the blending together of two completely different environments that do not fit together in most situations. This widespread lack of conformity between built and rural space is creating tension that it is damaging the identity and character of the city. Blurring the periphery is taking away definition of the suburban edge of the city, it is portraying the city as unwelcoming, it is increasing the intensity of the vehicular rush, and it is increasing the number of isolated strangers, while the unified and settled population in turn ultimately dwindles. While the suburban edge does not need to become a barricade and completely block of the neighboring rural context, it would be more beneficial for the existing city and suburbs if there were some definition between them, especially as development proceeds into the future.

Although there is a significant demographic variation all over the world in terms of population growth, an informative example for purposes of awareness would be the very near future of Southern California, particularly concentrated in the Los Angeles city and suburban areas. With a current population of just over 13 million, studies and calculations have estimated a population growth of roughly seven million people over the next 25 to 30 years.³ By American standards, if seven million people were to be accommodated within a dense urban community, the geographical and built space requirement would be approximately the equivalent of two cities the size of Chicago. Chicago is an extremely dense ecosystem that

functions very well as a result of solid planning for the present and future, but if these statistics for Southern California are accurate, then a built environment that would be equal in volume to two Chicago's has to be planned and developed within the next 30 years. With the current pattern of development at the typical suburban perimeter, the thought of adding enough space to accommodate two Chicago's is absolutely absurd. Planning needs to address the present, but far more importantly it needs to address the immediate future. The longer that the suburbs continue in their current development pattern, the more difficult it will be to remedy the issue further down the road.

An appropriate course of action that is fitting for this issue in its current condition would be focusing on a method of not totally separating, but rather mediating between the urban and rural environments. Steven Holl makes an interesting point in his book "Edge of a City" by arguing that an intensified urban realm could be a coherent mediator between the metropolis and the agrarian plain.¹ Holl experimented with various systems of mediation applied to peripheral city conditions all over the globe. Though many of these conceptual proposals were rather extreme in terms of practicality, the functionality of his ideas offered a sense of realistic hope, and positive inspiration. The new urban concept of designing communities for the pedestrian was at the forefront of Holl's design considerations. He envisioned new pedestrian sectors that could act as social condensers, and as a mainstream system surrounded by spaces for living, working, and recreation.

Cities were formerly planned and developed under a system in which three components would work together to create a desirable and fully functioning system.³ These three components included urban designers, planners, and architects. From a planning perspective, the emphasis on walking was a top design priority, it was important enough where a rule was established known as the "pedestrian shed" in which housing would not be located more than a five minute walk away from the daily amenities. Under this system, houses, shops, parks, and schools were planned and designed into a neighborhood format in which all of these entities would be within walking distance. The concept of the "pedestrian shed" also factored in the desirability of walking versus driving. If people within this system chose to drive from place to place then the planning for the particular development was considered to be unsuccessful. This is not to say that all planning must follow suit with this, but it does re-capture the idea of efficient land use, and the formation of better communal space.

Certainly the arguments against the patterns of suburban development lend themselves more closely to those of urbanism. It would not be sensible to propose a suburban system that paralleled the planned structure of the inner city, however it would be fair to insist that various components of the suburbs could share similar characteristics and principles with new urbanism, in an effort to allow these edge spaces to function in a manner similar to those of the inner city. Peter Calthorpe, Director of the Congress for New Urbanism claims that the most powerful element of the new urban style lies within the overall master-planning ability that it composes, as opposed to the individual micro-elements.³ In response to Calthorpe's analysis of New Urbanism, he is accurate in the acknowledgement of a more efficient master plan, but he does not attribute enough of the success to the individual elements that compose it. Just the simple principles of new urbanism such as vertical building set backs to

accommodate a human scale, and emphasizing the human as the most important aspect of the circulation space by providing seating, fountains, vegetation, and adequate lighting are so essential in allowing this development style to succeed.

There is little doubt that zoning and economic realities would disallow an immediate aggressive overhaul of the existing suburban development pattern. An option that presents itself as far more practical would be a more ambitious approach to developing an area that is referred to by many urban planners as the "speed zone."⁴ This is the area where the built medium begins to "leapfrog" breaking away from a solid whole, and begins to grow into a shattered inconsistency of displaced fragments, sharing no intrinsic relationship. Steven Holl refers to this area as the cities attempt to throw itself away. It is similar to having a pile of stones along a shoreline as a kid, and just carelessly throwing them into the lake. Based on that metaphor the city would be the little kid, and the airborne stones would be the elements that have so much promise. Rather, this zone acts as a battlefield for civil engineers and architects who have difficulties getting along based on their motivation to succeed at their particular professions. According to Lars Lerup, Dean of the Rice University School of Architecture in Houston, it is this zone in particular that needs to be remade, and it is not too late.³ Robert Fishman, Professor of urban design, planning, and architecture at the University of Michigan – Taubman College, feels less confident about the promise of developing within this "speed zone" region.³ In response to Dean Lerup's idea, Fishman questions the practicality of redesigning suburbia within this fragmented area, and left his response with an open-ended question: "Do you want to challenge the basic structure of suburbia?"

Cities all over the world, and particularly notable here in the United States are currently witnessing the voice of the suburbs speaking without permission from the city that they are physically attached to. The profit first motive of business ownership, contractors, and developers has been the primary reason for the suburban voice becoming even louder and more authoritative. In spite of this reality, there are alternative options that a lack of ambition and enthusiasm have failed to effectively unveil.

One element that the outward jumping of suburbia has left us with is opportunity. Not just for new developments, but for developments that have a chance to be designed better, with humans as the top priority, and secondly it provides a chance to interact with a variety of existing conditions in ways that are unconventional but favorable to human activity. Certainly a greater emphasis on humans and less of an emphasis on automobiles will act as the initial building block. Embracing New Urban design principles will be a subsequent step in an effort to allow for better efficiency with regard to planning, and an overall environment that humans will adapt to in a comfortable relaxing manner.

With the inspiration of a successful development that is geographically located in the suburbs, perhaps a model development could be constructed enabling the eventual physicality of suburban structures to transform. This new

physicality will express structural members far more aggressively, and express an environment that will allow the people to realize that it is actually designed for them, and not for meaningless profit. People will adapt easier, feel comfortable, and gain a much stronger sense of belonging. Given the reality of lifestyle and suburban function, building use, and business types are not something that can be modified, rather it will just be the physical environment of these spaces that will undergo modifications.

Given that there are hundreds of thousands of square miles all over the planet that require this type of treatment, this effort has to start small, and more importantly it has to start somewhere. This project will begin with the development of a district within a "speed zone" area at the northern periphery of Cincinnati near Interstate-75 in Ohio. Given the acknowledgement of the problematic condition of suburban strip malls, this district will initially focus on accommodating for the building uses that are found in typical suburban strip malls. This is not to say that it will be a strip mall compacted into a vertical tower or box, but it is to say that it will consist of all the same functions and places of an everyday strip mall, but the building will reach out to interact with the humans using the building. It will express to the people an attitude that will motivate them to walk around and interact with the structure. Humans will be drawn in and immersed within this environment that is designed for them. The label of strip mall is just a preliminary title for comparative purposes, it will likely include other functional components of suburbia such as commercial space, entertainment space, and residential space, all in addition the standard strip mall retail space. With a wider spectrum of functions, this district will operate better, and be far more versatile in terms of diversity of occupants and extent of operation time.

The northern edge of Cincinnati is an ideal location to begin showcasing this new suburban formula. Interstate-75 is the primary north-south vehicular artery through the entire city, and it will certainly create an excellent accessibility option. Another major road is Tylersville Road which is perpendicular to Interstate-75. Running east-west across the northern edge of suburban Cincinnati this has the opportunity to present itself as the backbone for the northern edge of the city. Similarly to Steven Holl's comments on mediating the two extremes, Tylersville Road will provide the necessary infrastructure for a mediating space to function along this northern edge. This area will have the demographic component working in its favor consisting of a wide diversity of age, race, income levels, and job types. Large residential districts, and perhaps more importantly many factories and industrial building uses that provide employment are in proximity to the area. This ensures a strong population base so that demand will be met if not exceeded. Furthermore, the area in its present state is posing a threat to the north toward potentially developing more of the standard strip mall type buildings. There is already a series of existing strip malls and department stores existing in the standard suburban form, but they are spread out from each other with a great deal of wasted and unused space in between. This new formula will respond to this space, to the existing buildings in their problematic state, and it will offer an insightful and effective resolution for maximizing the use of problematic peripheral conditions.

To enlighten on some potential elements that will assist in creating this as a human environment, it will begin with concentrating the pedestrian circulation spaces toward the center, or at least where all components are fairly easily accessible when

on foot. Resulting from this, parking space for vehicles will be forced to the perimeter but not in areas where the district is attempting to interact with the existing community. Given that other buildings within the area, although undesirable, will still draw use from the users of this district, the relationship between these other spaces will require a significant deal of design consideration. As opposed to asphalt, there will be an emphasis on natural features such as water, vegetation, and topography through which will filter the superstructure of this new district. Design criteria will demand that these natural features establish themselves as not just an element of the landscaping but also as part of the architecture. The vertical dimension will be explored. With the existing suburban condition, the Z dimension is typically ignored, for both financial reasons and for ignorance of proper design. In this case it will not only be explored but likely play a key role toward the function of the development. According to Steven Holl, the Z dimension just may be the most important of all three dimensions.¹

As argued by Andres Duany, author of "Suburban Nation," and Steven Holl, it has been long over due, but it is time for these single function, single story buildings to give way to a "hybrid" development. Even without the assurances of success, this country has reached a point where it is time to respond to growth. Not just as a safety and efficiency mechanism, but also as an aesthetic, artistic, and desirability mechanism. This project could benefit cities economically, but it could also benefit the users of the facility directly. It will take a previously high maintenance and disturbing system, and transform it into a relaxing and comforting system in which the occupants will hopefully be much happier. It will be a winning situation in all regards, and it is foreseeable that it could set some form of trend for developments in the near future. The northern suburbs of Cincinnati can become a quality testing ground that will be the first to experience the advantages of this new formula created through a process of careful and thoughtful planning to accommodate necessities at a human level. This new district will benefit from the existing demographic conditions of suburban Cincinnati, and the existing elements of the area will also be the beneficiary of this formula.

OVERVIEW PROCESS

The first precedent study was an analysis of the acknowledged condition, focusing mainly on suburban land use and the human activity patterns that took place in these particular spaces. For efficiency purposes the spaces analyzed for this study were concentrated locally, however the intention was to diversify the study objects to the greatest extent possible. As expected, most of the individual condition studies were representative of the problematic issues, typifying the view on suburbia as mentioned in the thesis. With the exception of the Birmingham study, these spaces exposed themselves as inefficient and inhuman, with the careful analysis of them further driving the intent for this project to reshape a portion of suburbia. Common to the spaces listed below which were carefully analyzed, the objective was to get the widest diversity possible of suburban building uses, and to gain an accurate perspective on their strengths and weaknesses. Many of the common features between them included a significant amount of excess parking, un-used green space, and predominantly single story vertical character.

SUBURBAN DETROIT SPACES SURVEYED

- Sashabaw, Michigan..... Strip Mall
- Sashabaw, Michigan Fast Food Retail
- Troy, Michigan Strip Malls
- Birmingham, Michigan "Main Street" District
- Novi, Michigan Fountain Walk Mall
- Warren, Michigan..... Universal Mall

ELEMENTS OF ANALYSIS

- Habitable vertical space
- Human used green space
- Unused green space
- Occupied parking spaces
- Unoccupied parking spaces
- Density of adjacent area
- Temperament of accessible vehicular paths
- Pedestrian designed space
- Designed and included vegetation
- Dimensions from property edges to buildings
- Relationship of humans to buildings in general
- Relationship of humans to specific uses within buildings
- Relationship of specific building uses to each other
- Façade material use



ABOVE

The relationship of different suburban building uses whether similar or different is primarily expressive of a pattern that attempts to separate themselves from one another, and to create a comfort zone for non-existent cars rather than people.

BELOW

There are few cases in suburban areas where the Z - Dimension is even considered as a useful element in designing and planning. This also applies to emphasis on pedestrians, and a use of vegetation to interact with human spaces.



PRECEDENT STUDY 1

Redefining Suburban Peripheries

Space: Strip Mall
Location: Sashabaw, Michigan
Major Roads: Sashabaw Road, Interstate 75



This Strip Mall located just south of Interstate-75 on Sashabaw Road is a typical example of standard suburban retail organizations. The location for this is slightly further out than the average suburb so its relationship to the city is not as strong. So for purposes of studying the middle ground between suburban and rural contexts, this was not a productive analysis however it did open the general thought matrix up to many more considerations.

Though not applied to this strip mall specifically, there are opportunities for building reaction base on what the site has to offer. There is a gradual but significant topography variation from the north end of the building to the south, but rather than manipulating the building to respond aesthetically to this, it just followed suit with the ground and sort of layered itself in a pattern that is hardly noticeable. This drew a great deal of interest in regards to future site consideration for potentially selection a site with an undulating topographic element to it.

Another weakness that this development consists of is that it does not propose an effort to interact with the surrounding community. Even though this context has more rural than urban characteristics, there are built elements near by that this development could have interacted with and really does not in any way. One of which is arguably most important is a residential district to the west, and this strip mall has its back directly turned to it, which is unfortunate because these types of building use relationships are a great deal of the cause for the disorganized and spread out suburban building patterns.

RIGHT

Unused green space and paved space occupies the majority of the development frontage.





ABOVE

Even during dinner time the parking space here shows that the service accommodates for much more than the demand. The attempt to incorporate green spaces outside only wastes even more space, it is not inhabited by humans, but acts as a blanket for cars.

Space: Fast Food Retail
Location: Sashabaw, Michigan
Major Roads: Sashabaw Road

Fast food establishments are a very common example of suburban building use poorly managing space. Despite the drive-thru accommodations, they still make a minimal effort to interact with pedestrians, and surrounding adjacent buildings. The development thought process of course revolves around profit, and resulting is excessive additional parking, and ignored green space.



LEFT

Additional unused space dominates the frontage between the "cookie-cutter" building facade and



LEFT

An opportunity presents itself to create an interactive pedestrian space linking the residential and retail building uses, but rather the space remains as an unused field, further spreading out the built pattern.

Space: Shopping Mall
Location: Warren, Michigan
Major Roads: 12 Mile & VanDyke



LEFT

On one public façade, the only interaction between parking and the interior is a shipping and receiving station.



LEFT

Beyond the abundance of dead parking space, it is clear to see that no attempt was made to interact with the adjacent community spaces.



LEFT

With a façade like the one shown, the building is not just turning away from its users but it is running away from its users.

This shopping mall which is essentially dead, is just one of many examples of what can happen from careless design. When the focus is on parking and not people, the building appears to be isolated from the community. Resulting from this are ultimately people isolating from the building and a financial, and land use disaster. Location and planning certainly factor is, but it goes to show the importance of planning and designing for humans in addition to cars.

Space:
Location:
Major Roads:

Strip Malls
Troy, Michigan
Big Beaver Road, Maple Road

RIGHT

Design and planning of these building types go as far as to bypass the human factor, and actually consider the roof. Typically in these cases they will have additional façade space above that does not consist of any depth, but is actually an attempt to envision habitable SPACE above.



RIGHT

Additional rectangular planned buildings are often times constructed in the middle of parking lots, with no economic effects

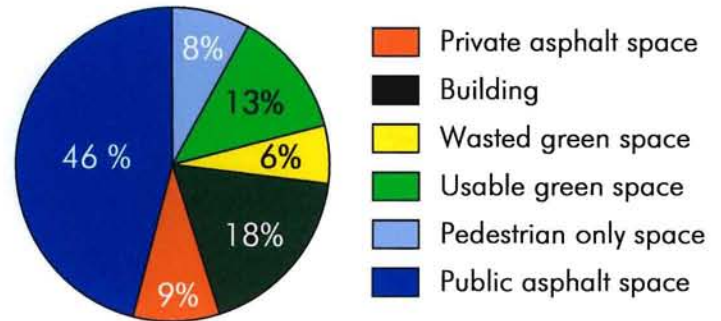


Two very average type strip mall buildings can be found in Detroit's suburb of Troy. One of which borders the north side of Big Beaver Road, and the other which is just to the south of Maple Road. Both require automobile transportation on a major road in order to be made accessible, and neither hint toward any effort to interact with surrounding buildings in the community. Much of this is do in part to the traffic volume that occupies these high maintenance vehicular streams, but there is also a typical separation pattern with these in relation to buildings on the same sides of these major roads. That is separation via parking lot or unused green fields, and with significant space in between that is completely unoccupied of anything purposeful. Again parking is far more abundant than the demand would suggest, and it is likely that people using these strip malls would prefer to drive from one space to another within the same building. As shown in the images to the left there is some consideration placed toward vegetation and green spaces but it is minimal at best. The planning of these exterior entities are not to assist in interacting with humans, but rather are simply plopped in as a side decoration, that will only be noticed by people driving in their cars.



Space: Pedestrian Oriented Retail
 Location: Novi, Michigan
 Major Roads: Interstate-96 & Novi Road

LAND USE PROPORTIONS



The Novi Fountain Walk Center occupies roughly 3.25 million square feet of land in the city of Novi, Michigan just off of Interstate – 96. The primary use of this land development falls in line with many of the contemporary developments that have been recently dominating suburban regions throughout the country. The Fountain Walk Center includes a narrow variety of mixed building uses, primarily concentrated on food, entertainment, and retail. Its location rests on the edge of a similar existing district in Novi that focuses significantly on the same types of building uses.

As shown in the aerial image to the left, there's a concept of symmetry involved in the planning. It's most active edge is to the east, where the land-use falls very much under the same category, however it's also the edge that is the least defined. Also notable is the dominance of pavement surrounding the buildings, which is ultimately a result of the standard vehicular dependency which is as common in Novi as anywhere.



ABOVE

This is one of the few public entrances that is supposedly designed for pedestrians. Massive vertical facades line the majority of the corridors with minimal alterations to the surface.

BELOW

With corridors that are only 54 feet in width, the verticality of the facades over power the pathways, especially given the lack of material variation.



Space: Pedestrian Oriented Retail
Location: Novi, Michigan
Major Roads: Interstate-96 & Novi Road



ABOVE

The lack of circulation space between interior and exterior offers a feeling that is repelling to pedestrians as opposed to embracing. The material composition is obviously dominated by masonry, and combined with the massive proportion extremity, this environment is more intimidating than it is welcoming.



ABOVE

The fountain area is surrounded by additional pedestrian gathering space in effort to create a node condition within the center of the development. Given the solid consistency of the facades and the filled out building pattern, the outward views from this space are all terminated by department store fronts anchoring the ends of the corridors, with the exception of the south corridor which opens itself into the oversized open-air parking lot.

With this development, it is clear that designers were attempting to deviate from the standard method of laying out shops and restaurants. The idea was to group the mixed building uses together in such a way that the interior spaces themselves would form a series of exterior corridors, in which the users would feel immersed, and also provided with a greater environment for social interaction. The use of color, material, and overall facade design are distant from the prototypical look for this brand of development. Though there was a design focus on the exterior corridors, there is minimal interaction with the buildings that frame them.

The idea of a node in the heart of this system intends to provide the building occupants with a set of balanced options in terms of which space they are going to use next. While the node represents the center, there are four main corridors that feed into it, three of which consist of store fronts at the ends of them, and the other which is open to the primary space designated for automobile storage. This opening in particular is where the majority of the public enter the space although there are similar gaps at the end of other corridors, this one is the obvious primary entrance.

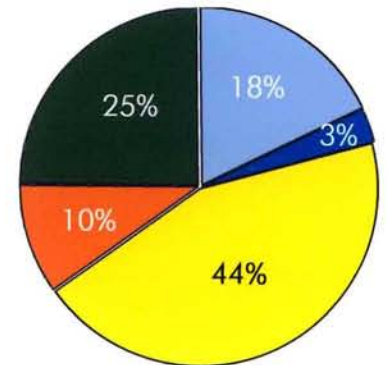
The corridors are 54 feet wide with an average building height of roughly 30 feet, though in some areas reach heights upward of 50 feet. The width to height ratios clearly did not seem to play a major design role here, especially when evaluating the dominance of masonry and colored pre-cast that expresses itself aggressively along the exposed facades. In addition to this, interaction between the interior spaces and the exterior corridors could not have been a design factor because these spaces do not interact at all. Part of this is likely attributed to the fact that many of these spaces are for retail, and consist of general business functions that are independent of natural light and outward views.

The absence of architectural details and overall planning for a human environment of this system have really rendered this brand new development into what is essentially a dead space. It again implies the importance of design and planning considerations from a human perspective to accurately imply the occupant perspective.

Space: Pedestrian Oriented Retail
 Location: Birmingham, Michigan
 Major Roads: Woodward Ave & Maple Road



- Pedestrian only space
- Usable green space
- Public asphalt space
- Private asphalt space
- Building



Birmingham is a suburb of Detroit that really sets itself apart from any others. The downtown district concentrated around Old Woodward Avenue creates a secluded environment that is very pedestrian friendly. The variation of building heights within this district characterizes the Z-dimension with the heights ranging from one to sixteen stories.

Every street is lined on both sides with sidewalks that share a direct relationship with the ground level building spaces. The spaces at the sidewalk and street level are primarily retail with some commercial. Not all the spaces at this level are directly accessible from the exterior sidewalk. In some cases there are interior corridors in which small shops can be accessed by entering a centralized interior corridor.

The majority of the building heights are three to four stories, and most of the upper units are composed of residential units. The structure heights appear to work well in this environment. They make extra use of the vertical dimensions but they are not so tall that they over power the context. They are scaled appropriately for this environment and the uses at the pedestrian level further enhance their relationship to the people.

One of the real nice qualities of this area is that every place in the district is within walking distance of each other. The building uses are mixed enough to the point where people who live in the area can just walk around outside and use the wide variety of spaces for a various number of reasons. The selection of restaurants, shops, and services accommodate a place for people to take care of many of their daily tasks, and in an environment that interacts with them.



PRECEDENT STUDY 1

Redefining Suburban Peripheries

Space: Pedestrian Oriented Retail
Location: Birmingham, Michigan
Major Roads: Woodward Ave & Maple Road

RIGHT

Signage successfully reaches out to the pedestrians.



ABOVE

Parking is layered, and hidden with the use of vegetation as a cover.



The weaknesses of downtown Birmingham in relation to the thesis present themselves much more discretely than the strengths. The main weakness is the general relationship of this district to the rest of the suburbs and the inner city. In a way there is a sense of barrier separating this suburban downtown district with the rest of the suburban landscape. Even though the community layout works well and is efficient, in a way it turns its back on the context that it is residing in.

The area in general, though unrelated to the surrounding context, is put together very well. It really favors pedestrians and this was proved by the amount of pedestrians using it. It felt like there were as many people walking from place to place as there were driving. Certainly vehicles have to be accounted for, but the method of layered parking organizes it in way that hides cars from the target environment, and stores them efficiently occupying minimal space. The buildings reach out to the people here creating a very welcoming system. There is a number of indoor/outdoor spaces, transparent facades, and balconies, all of which contribute immensely in tying the exterior public space the inside space.

There was no tentativeness to go vertical with the buildings, and the aggressive design approach ultimately created an expressionistic environment that feels busy in a positive way. Busy from the perspective of downtown urban contexts, people interacting with people and walking from place to place, where cars come second, but are still managed well enough to the point that they are not neglected. The reach for using the vertical dimension adds a rigidity to the already pedestrian environment, allowing for many building uses to work together, and letting architecture communicate to the people. It is a very small geographic area with a very large spectrum of activity. It appears to be a desirable environment, and more districts like this like this could really benefit the periphery of metropolitan areas.

Space: Pedestrian Oriented Retail
Location: Birmingham, Michigan
Major Roads: Woodward Ave & Maple Road

The city of downtown Birmingham appears to focus heavily on maximizing property use, and fulfilling the composition of the streetscape. Given that there is minimal to zero space in between separate buildings, the planning was sure to have considered the avoidance of wasted space.

The streets are small but wide enough for the volume of cars that pass through the area. The sidewalks that define the pedestrian space are proportioned adequately between the street edge and the building façade. Though the vertical proportion relative to the horizontal is much greater in some cases, there is never a feeling of the pedestrians being overpowered by the built structure in which they are using.

The building facades include an abundance of windows facing the street which enhances the amount of building interaction with public space. With many of the windows the upper portions are arched, and very much elaborated in terms of decorative framing details. The predominant use of brick adds to the overall image that the architecture here communicates, by adding a sense of richness and intimacy to a district and directly interacting with the people using it.



LEFT
The buildings reach out making a clear effort to interact with the pedestrians.



LEFT
There is not an issue here of wasted space mediating the street and building frontage. The vertical expression of these buildings at the edge, and their flexibility to follow the street increases the sense of importance. In some cases as shown, the tallest areas are set back to give the street edge a fitting proportion.



"Edge of a City" - Steven Holl



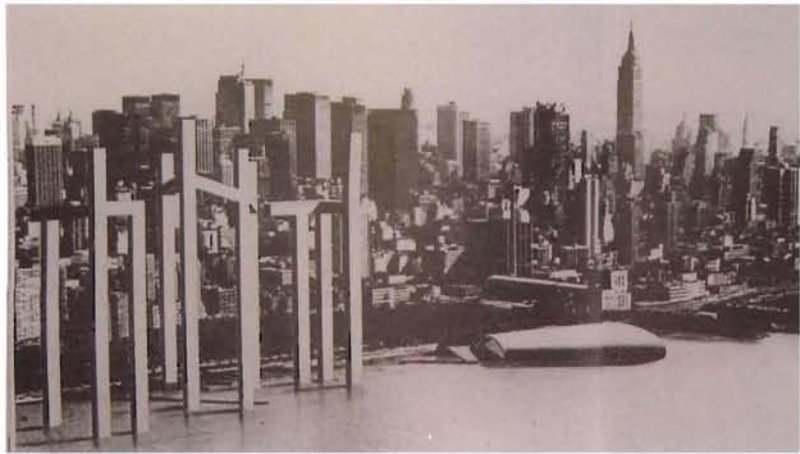
RIGHT

The application of high rise structures in peripheral settings was part of an effort to study juxtapositioning, by incorporating a variety of activities and new urban sectors.



BELOW

One of the more aggressive studies documented in Holl's book, was located off the coast of Manhattan, New York. Though it was not a periphery condition per say, it was an effort to mediate to extremes which in this case was the dense urban skyline, and the Atlantic Ocean. The design included habitable space that penetrated hundreds of feet under water.



In Steven Holl's book "Edge of a City," he explores the problematic issue facing the city's peripheral condition. His exploration is a world wide analysis of peripheral conditions the most extreme of which he attempts to create a design solution for at a certain point along the peripheral circumference. His arguments are based on his view of human life as a "spectrum of fluctuating activities and desires of restless populations." Holl's goal is to create a mediator at the city's boundary, and his solutions are radical but sensible. Holl stated in this book that the proposition of experiments in search of new orders can remedy some of the identified problems, and this experimenting process would consist of some very aggressive studies of new spatial relationships. They offer ways to mediate the city edge, but in some cases his proposals are more than just a mediator, they are bold defining points that could easily feel out of context, or overpowering to a context.

Holl views the suburban image as a fringe that is composed of displaced fragments without intrinsic relationships to the existing organization. This is an issue that is certainly applicable to the previous precedent study, as a result of the motive for profit, and non-existent consideration of planning and design relative to the surrounding context. Holl refers to new suburban developments as "thrown away" entities that have no relationship to the original city that they are supposedly a part of. His recognition of the horizontal dominance of suburbia is more than just a claim of wasted space, but he also argues that the Z-dimension is equal to, if not more important than the concentrated X-Y plane.

Programmatically, Holl desires to enrich the current status of suburban building function. Single function buildings that are typical to the edge of suburbia he feels need to immediately begin giving way to new "hybrid" building types.

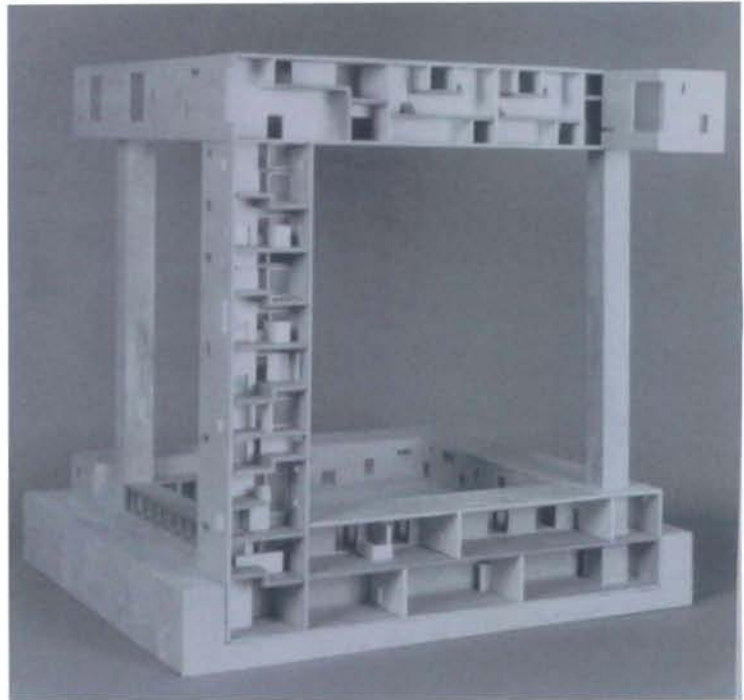
Spatial Retaining Bars - Suburban Phoenix, AZ

Holl's effort to mediate the boundary between the growing suburban regions of Phoenix, and the wide open undeveloped desert, consisted of a series of "spatial retaining bars." The general dimensions of these units were 180 feet cubed, with only about 10% of that cubic figure space actually being habitable. The structures are primarily open air, with habitable living sections that are typically 30 feet in height and width.

The habitable living sections were arranged in a way that had a couple vertical components in the corners with horizontal components at the top and bottom. These members were referred by Holl as bars, and from a distance only appear to offer a thick structural service. When viewed up close the spatial condition is much more vibrant, and a new hybrid residential typology presents itself. With 30 feet being the standard dimension of the cross-section, it enabled two stories of living in the horizontal bars, and a stacked housing arrangement in the vertical ones.

Views from the upper stories would enable the building users to see the entire city, and the mountains in the background. Circulation in this case was not at the forefront of design priorities because the proposed set-up does require a rather irregular pattern of horizontal and especially vertical circulation.

The proposed arrangement of these structures is linear, one after another, following the path that Holl defines as the edge of the city. The way it is arranged as shown in the image to the lower right suggests a very bold mediation as opposed to a subtle one between the rural desert space and the existing built environment. It was Holl's method to clearly mark the border of two extremes in this case, and it is difficult to gain the perception of a potential resident in this proposal.



ABOVE

The model suggests a fairly typical space for the residential units specifically, with the extremity of the design obviously lying within the overall formation and arrangement of them.

BELOW

The intention was not for these new units to be placed in the middle of the desert like the image suggests, but they are set on a planer pattern.



ABOVE

The overall composition is ultimately expressed as a longitudinal border that clearly divides the built and rural contexts.

Perimeter Stitch Plan - Cleveland, OH



ABOVE

In addition to being over-emphasized vertically, the real problematic issue is the plane levels on each side of the stitch. In reality, each of these planes would have to penetrate straight into the bedrock cliff that defines the sides of the river.

Holl's stitch plan for the southern boundary of suburban Cleveland consisted of a series of linear relationships created in effort to define developed "peninsulas" at the rural adjacent boundaries. As of now the distinction between built and rural is neither clear or mediated.

Holl identified 5 sprawling channels at the suburban edge of Cleveland. The plan was to create a crossing formation near the tip of these channels in attempt to limit the built environment within this defined space. It would create "gateway" to the city of Cleveland and respectfully disconnect itself from the rural context. His development proposal for the each of the respective stitches was to indirectly function as a plug to the built environment, acting as a cut-off point.

For each respective area, Holl essentially followed the existing pattern of development nearby, and then extended them outward in a habitable but terminating manner. Given that the existing built environment narrowed as it further penetrated into rural space, Holl used this narrowed pattern to mediate into two planes that would narrow to an intersection and then widen again to cap off the final piece of the built space, somewhat serving as an anchor to the city. The edge of these planes would be bold enough to define separate environments, but also sensitive enough to respect and embrace them.

The plan of which Holl focused most greatly was the center one in his master city plan, located in the suburb of Bedford. The reality of this proposal was not practical as it was presented in the book. Based on Ohio's preservation laws, and the natural formation of the lands topographic conditions and the river, Holl's proposal is extreme and impractical to this particular site. The area consists of an extreme topography condition that is a valley dropping from a height of about 200 feet at the primary city level, down the river level at the bottom of the valley, and the location for this proposal is essentially at the bottom of a cliff but on both sides. Holl then proposes a dam to accommodate for the elevation changes applied to the river, but then just above the surface of the water he has two planes extending outward at the same elevation as the existing built environment which in reality does not work given these levels though adjacent are 200 feet apart in elevation. Furthermore the proposal included an artificial lake to blend in with the river in which pedestrian space would revolve around, which is another reason for rendering this proposal impractical.

Despite the impracticality of this design, it would have been a great idea had the physical conditions been suitable for it to take place. The building program combined entertainment uses on the existing built side of the stitch, with more nature related used on the rural side. If the natural condition were more feasible, this would likely be a desirable and workable proposal.

Perimeter Stitch Plan - Cleveland, OH

The idea also included a feature that would allow the center of the stitch to serve as a focal point, right where the dam would supposedly be located. This idea would be interesting if it were proposed as a habitable bridge type space, in which the stitch could continue to proceed similarly in plan, but would be upwards of 200 feet higher in elevation. With this as a consideration, the focal point could remain the center of the stitch and people would have an opportunity to look down 200 feet at the river beneath them. This would also provide for an opportunity for the planer extensions of the stitch to be directly related to the existing built environment as shown in the image to the right. The state preservation laws would certainly prohibit this, but barring those, it would be a very neat idea.



ABOVE

The river banks get drastically steeper and taller around this corner, where the proposal would be located.



PRECEDENT STUDY 3

Redefining Suburban Peripheries

Space: Pedestrian Retail District
Location: Suburban, Miami

Mizner Park - Boca Raton, Florida

Developed: August 2001
Property Size: 28.7 acres
Architects: Cooper Carry Associates
Retail Space: 236,00 sf
Commercial Space: 262,000 sf
Residential Units: 272 (Rental)



ABOVE

The district consists of heavy plaza space within a framework of retail and commercial space at the edges.

RIGHT

The building to street width proportions facilitate the application of high-rise components by setting the vertical edges back from the street. This also creates habitable green space opportunities on the roofs of the street side buildings.



OVERVIEW

This district in suburban Miami is inspirational on many levels. The multi-use feature in a suburban context was an initial draw, but to follow that up was the effort made to create more of an urban image in a context that was physically less expressive. In less than 29 acres of land, some of which included existing buildings, Cooper Carry & Associates managed to design a successful proposal that ultimately presents itself in a similar manner to a miniature downtown. The balance of three primary building uses assists in allowing this district to succeed, and the uses here parallel the ones proposed in my thesis. This of course includes retail, commercial, and residential, and for this case in particular, it was an obvious priority to formulate the layout based on how these particular uses facilitated the people.

INTENT

The concept for this development was centered around framing a large public enclosure, and ultimately depicting a sense of downtown in a suburban context. Like all downtown areas in major cities, their success is dependent upon a multiplicity of uses, and a variety of actions. This diversity aspect is accommodated for with the sub-components of the three general building uses. The name of this district "Mizner" is named after a famous architect who formerly practiced in this area, and some trends in his work served as an influence for Cooper Carry & Associates when they set out to design this project.

SPATIAL PROPORTIONS & RELATIONSHIP FUNCTIONS

The vertical dimension that is so often ignored in suburban development is expressed here rather aggressively. The proportions are not so extreme where it makes the occupants uncomfortable, but it is designed in such a way that it scales itself to the people. One of the new urban principles in regards to buildings is to use the vertical dimensions as best fit, but not to crowd the street. So the basic proportional ratios of building heights to street widths need to apply at the edge of the structure next to the sidewalk, so that the perceived vertical presence is only that of two or three stories. Then for layers beyond that, it works to set the structure back closer to the center of the building, allowing the street and sidewalk spaces some room to breath and be comfortable. This idea also enables the building itself to relate more intimately to the people. In the case here at Mizner Park, the typical building height at the street edge is about three stories, which is about the maximum height at this location before it begins to become over dominant. When navigating closer to the center of the plan, this is where the vertical building use extrudes itself much more aggressively, reaching heights of eight or nine stories. These raised vertical components do not create any feeling of discomfort because they are not visible from the ground, unless the occupants step back and visibility can be obtained from a further distance. In general this formula adds to the complexity of the building composition itself, but the image of the street pattern in relationship to the buildings is able to remain intimately simplified.

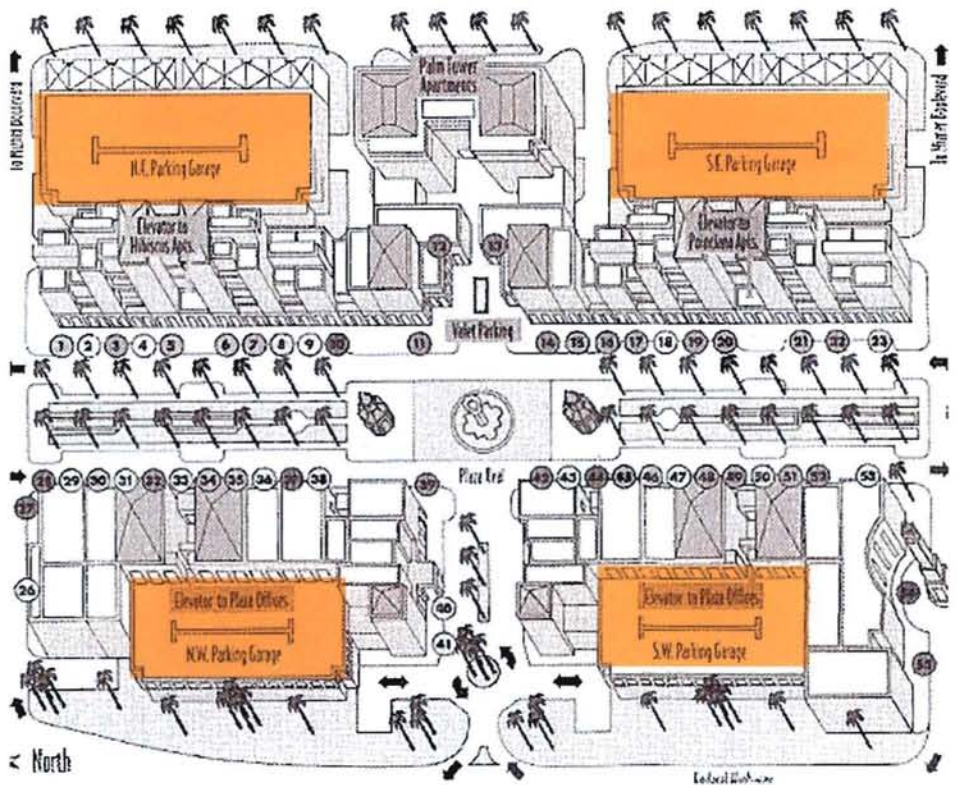


LEFT

The additional pedestrian paths to facilitate parking, create more corners and therefore the opportunity for more standout architecture.

BELOW

Parking decks in orange are hidden from public space but made easily accessible through centralized pathways



Space: Pedestrian Retail District
 Location: Suburban, Miami



ABOVE

The wider than standard sidewalks showcases more care toward pedestrians. The vegetation here not only assists in providing comfort to the context but it also serves as a nice mediating tool in between the vehicular space and the building. Opposed to the common reality of humans filtering through an automotive environment, this district expresses the opposite by carefully showcasing a path for automobiles to filter through the human environment.

FAR ABOVE

Outdoor eating spaces are not only a functional advantage for the retail spaces in particular, but they will heavily assist in the overall composition of the streetscape by enhancing the level of interaction between interior and exterior spaces.

KEY SPATIAL RELATIONSHIPS

The variety of different building uses that compose this district fit nicely together and also express appreciation of both indoor and outdoor environments. The retail spaces are interrupted efficiently with the inclusion of similar uses such as restaurants and theatres. The shops vary in size from very small personal stores to major department stores as shown with the Jacobson's building on the previous page.

One of the most important considerations that was particularly well thought out for this was the issue of parking. Certainly the reality of the situation for non-residents of this district is that they will be driving cars as a means of transportation to this location. 90 percent of the available parking space provided here is embodied within a structured system that is hidden behind the pedestrian mainstream, and accessible via the secondary street system. This concept works as a method of keeping the majority of cars out of the central public interaction area, and into areas where activity is significantly less.

RELATIONSHIP TO THESIS DIRECTION

There are more commonalities between the thesis direction and Mizner Park than there are differences, but it would still be beneficial to analyze some of those differences briefly. One major difference is the general context, although they share the suburban characteristic, the site for Mizner Park is completely surrounded by more suburban development while the one in Cincinnati lies notably at the edge of the built context. The intention of Mizner Park has little to do with acknowledging the problematic issue of the suburbs, and actually intends to serve as a "downtown-type" community.

One common ground that these two ideas share is that both programs have major intentions of accommodating a variety of building uses within a single district. They both have sincere intentions to favor people on foot as opposed to behind the wheel which is of course further representative of a more urbanized context. The cars need to get less attention and the people need to absorb more attention, this is an issue that can be formulated with a hierarchy pattern consisting of a form of mainstream pedestrian public space, and secondary vehicular circulation space. Like Mizner Park expresses, the intention was to embrace the vertical dimension and use it to an architectural and environmental advantage. The success of Mizner Park provided greater motivation to accomplish a similar programmatic objective in a different overall context.

Suburban Cleveland - Bedford, Ohio

SELECTION REASONING

Influenced by a conceptual design solution by Steven Holl, it was inspiring to have the opportunity to get a firsthand exposure of what he considered to be a workable city edge condition. Based on the images and design concepts that Holl included in his book "Edge of a City," I was very much interested in his conceptual proposal for defining the edge of this unique Cleveland suburb. Upon visiting this site and finding that the specific location in which Holl had selected for his conceptual proposal was actually not feasible, there were still many potential spaces within the immediate proximity that presented themselves as potential site candidates. It was more than just physical limitations that Holl specific site was not feasible, but perhaps more importantly is that it was government preserved land. In addition to these issues the original site intention was also secluded from the surrounding built environment, so relating to the immediate community would be an unrealistic proposition.

The surrounding context of this general surrounding area in Bedford still had some great qualities to offer. This was primarily due to the natural physical characteristics including a clear flowing river, exposed layered rock formation, very steep hills, and a wide spectrum of different style trees and vegetation. The layout of this suburban town is somewhat triangular in plan, pointing outward to the open rural region. After observing these various conclusions and identifying two main roads that ran through here, the site seemed like a great opportunity for architecture to engage the perimeter of suburbia, and potentially take advantage of a naturally gifted but underachieving suburban area.



LEET

The natural landscape of the southern Cleveland area is rigid and complex providing any built structure with many advantageous elements to respond to.

Suburban Cleveland - Bedford, Ohio

RIGHT

The river is already situated nicely in the natural context, but has been surrounded by development that has completely ignored it. It was an exciting and practical thought to allow the river to serve itself as a tool to in assisting the design, and could perhaps have had a direct effect on the ability to mediate the project in relationship to the rural extreme.



RIGHT

The bridge on Northfield Road towers roughly 50 feet over the river valley but functions as a flat plane linking the built suburban context on both sides.



RIGHT

An apartment complex is set back a significant distance from Broadway Avenue which is the primary vehicular artery here. There is nothing to really fill out the space between the building frontage and the road other than a vacant green field.



RIGHT

The undulating topography creates the opportunity for some unconventional path type systems in the area. It was interesting for this area specifically that the land in the image has remained so undeveloped, because the adjacent spaces surrounding it are mostly consisting of developed buildings. This type of area presents itself as having enormous opportunity to generate an aggressive architectural solution responding to the intense physical expression of this ground condition.



Suburban Cleveland - Bedford, Ohio



LEFT

The golf course by itself can serve as a nice mediating tool for this peripheral condition. One of the reasons that it is ineffective for that purpose here in Bedford is because of the manufacturing in the image just below it. These two different land uses are directly across the street from each other, and the recent development of the manufacturing plant has already begun to set a trend as other companies are following suit with their development idea, which is the reason for the cleared space in the background to the left of the manufacturing plant. These two images to the right are located at the tip of the triangle that extends itself into the rural context, and it is this type of planning or lack thereof that is the major reason for the problematic outcropping of the suburbs.



LEFT

The junkyard space shown to the right is currently located in between the "main street" and the river bank. This is such a valuable and desirable piece of land yet the current occupancy is that of a junkyard, and certainly not a space that is inhabited by humans. There is no acceptable reason for this type of land use, and this situation specifically pushes the thought of an alternative development plan for the specific location.



Suburban Detroit - Sashabaw, Michigan



SELECTION REASONING

This site is located on Sashabaw Road, just off of I-75 about five minutes north of Auburn Hills. This site, as it exists right now is in a developing context in which the planning appears centralized around automobiles and isolation. As shown in the aerial photograph to the lower right, developments are spaced out and oriented inconsistently. Design efforts were clearly not made to bridge separate districts, it appears more that they were made to separate them. A retail district and a residential district are separated by a couple hundred yards of vacant space with no interaction principles applied whatsoever. The wasted space in between the retail district and the residential district can be partially attributed to the path of least resistance for business owners and developers, but it can be more largely attributed toward a matter of careless planning and lack of thoughtfulness.

The context of these developments is situated as such that this idea could be vulnerable to the worst kind of horizontal and careless domination that we have seen yet. There is so much open space, and with suburban density patterns moving the way they are, this location will likely experience some notable population growth in the very near future. Despite the existing lack of organization, there are some advantages about this area, and that includes the fact that it is not too late to right the ship, and begin with the application of some new urban type concepts. There is plenty of space available for more development, but it needs to be sought out better before anymore "cookie-cutter" buildings begin to carelessly cover the land that is grounds for potential.

SELECTION FACTORS

- Two recently developed strip malls at the corner of main intersection on Sashabaw Road, have set the stage of a suburb that is extremely vulnerable to new and upcoming development.
- Commercial and retail space has its back turned on the adjacent residential district, creating a notable disconnect and feeling of isolation.
- Blends in significantly with rural context.
- Wasted land to work with is plentiful.
- Surrounding context is extremely vulnerable.

RIGHT

The vacant space between retail and residential districts is completely unused and has opportunity to facilitate a mediating and transitional brand of architecture.



Suburban Detroit - Sashabaw, Michigan



GEOGRAPHICAL STATUS

In regards to the positioning of this site in relationship to the rest of the city, it does present itself aerially as a gateway type point. With Interstate-75 within a couple hundred yards, accessibility would be promising, and this site would offer the ability for this district to serve as a metropolitan anchor and mediator. It is screaming for attention now, and if continues to be ignored it will likely become one of the worst blending regions in the metro area.



LEFT

The existing strip mall that is currently anchoring the main vehicular intersection, is standard, in terms of a typical suburban building style. This one however is particularly problematic based on its orientation to the road, and worse yet, its ignorance of the residential district just to the west.



LEFT

The orientation to the street in this case works, but the building use does not support an interactive environment, especially outside of standard business hours.

BELOW

From the perspective of the residential district, the retail and commercial buildings in place have absolutely no sense of a draw. There is a bold and uninviting mediation ground between these districts, and in addition to the presence of wasted space, it further promotes the issue of isolation within the community.



Suburban Detroit - Farmington Hills, Michigan



SELECTION REASONING

The location for this site is in western Oakland County, just east of the newly constructed M5 expressway, and concentrated around 14 Mile Road. The idea here is taking advantage of an opportunity to provide a clear habitable mediation between the suburban and rural regions. With the brand new M5 expressway now fully functional, and already shifting population density is very likely to continue shifting in this specific direction. Given that there is already an abundant amount of typical suburban development to the east side of M5, and almost nothing directly to the west side of the freeway, it is a sensible option to define these edges appropriately and prevent the horizontal wild fire from stepping into the way.

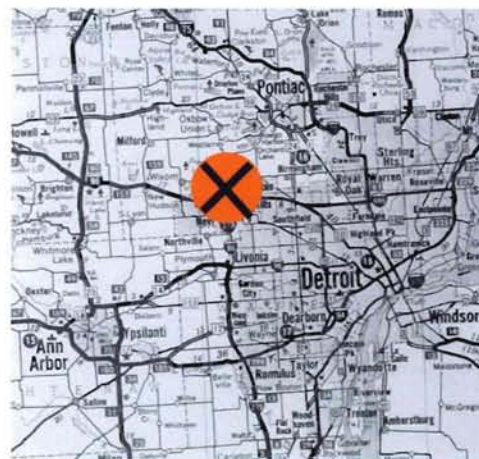
In addition to the alignment advantages that this site has to offer, it also provides the advantage of vacant land. To the south of 14 Mile Road and in between M5 and Haggerty, the land is almost completely vacant. It is also for sale at an area of 55 acres, and it is easy to envision the next developer taking over and spreading a strip mall over the top of it. The deal is even bigger for this case because the site is naturally gifted consisting of an abundance of thick vegetated areas, along with an excessive amount of undulating rigidity to the topography. Given the economical status of this site, the threat of continued strip mall development is crystal clear in this case. From the opposite perspective, with careful planning, the natural elements in this site could serve as a decisive design tool.

Selection Factors

- The M5 expressway provides a clear boundary between suburban and rural contexts.
- Heavy amount of single story strip mall type development concentrated around 14 Mile Road. It appears likely that this pattern will continue to spread west of M5 along 14 Mile Road.
- Heavily populated residential district is positioned adjacent just east of 14 Mile.

RIGHT

The location of this could also be represented as an anchor to the city as a result of its clear position on the western periphery of the metropolitan area.



Suburban Detroit - Farmington Hills, Michigan

SELECTION REASONING

The population density has increased drastically in the recent years to the east side of Haggerty Road, really making it easier to envision the continued rapid development to the west side of Haggerty, and eventually further on to the west of M5. With hungry developers preparing to select their next suburban region to mow down, this land seems as vulnerable as any. This is not just based on the fact that it is currently wide open with no development, but more so as a response to the recent population density trends in the new subdivision area just a couple of hundred yards away.

The area located just north of 14 Mile Road offers smaller areas of vacant land. A very recent development that is not shown in the aerial map to the left, is at the northeast corner of 14 Mile and M5. This new development includes a smaller strip mall containing about six compact retail spaces, a gas station, a fast-food restaurant, and a four story hotel. Further to the north and to the east of this corner is a mega flux of department store retail spaces, strip malls, and restaurants, all of which extend a single story off the ground. One of the appealing things here is that much of the land that is vacant is longitudinally adjacent to M5, and also has a twist to the edge of it. This provides an opportunity for mediation with the rural region to the west of M5, and some form of more direct interaction with the existing buildings within the same area.



ABOVE

This lake is located near the center of the suburban strip mall district to the north side of 14 Mile. This general area is undeveloped enough in its current state to welcome new development, and the lake could potentially lend itself as a design tool for a potentially new project to the site.



ABOVE

The land in between M5 and Haggerty to the south side of 14 Mile is pre-dominantly vacant and is for sale. Given the current development state of this community, the image above has asphalt and single story building written all over it. The economic reality of the situation applied to this site is a major driving factor toward the attitude regarding the future of the site.



ABOVE

The vacant land area to the south of 14 Mile offers a significant amount of natural and thick vegetation, small lakes, and undulating topography.

Suburban Detroit - Farmington Hills, Michigan

RIGHT

The vacant land that is directly adjacent to M5 is at a higher elevated level than most of the surrounding community. The existing strip mall system is visible from here, and the newly constructed hotel and gas station is located just to the south. This site specifically offers the opportunity for a real defining project that is respectful to both contexts. It could also be a potential trend setter for the future development pattern of northwest Farmington Hills and northeast Novi areas respectfully.



RIGHT

Haggerty Road does offer pedestrian circulation space, but the domination of asphalt and single story strip mall buildings do not invite the people to use these paths. People would rather drive short distances here than walk, which is an issue that still has opportunity to change.



RIGHT

The recent development at the northeast corner of M5 and 14 Mile consists of a four story hotel, gas station, fast food restaurant, and compact strip mall. Although it services many typical needs and it is in a prime location, this is the only form of an anchor to this major intersection.



RIGHT

The vehicular approach to the M5 & 14 Mile intersection lacks the presence of thoughtful buildings. It presents itself as a potential anchor point that could be perceived as a soft mediating gateway between the two "extremes."



Suburban Detroit - Farmington Hills, Michigan

FORCES AT PLAY

The most beneficial attribute of this site is likely the M5 expressway that is the barrier dividing the identified extremes which are built suburbia and un-built rural or natural contexts. Given that this expressway is four lanes in each direction, it is clear that the relationship from east side to west side is distinct enough to clearly define these separate areas. The threat that is posed however is that the development on the east side of M5 is a mix of residential and retail. These areas are separated, as the residential districts seclude themselves from thousands of asphalt covered acres that compose the single story strip mall mania. The intriguing factor of the north side of 14 mile was the wasted space that is presently serving as a disconnection space between the disorganized planning of the large scale retail developments. With this known condition, there is potentially an opportunity to build a relationship in this area, and use the adjacent M5 as the defining boundary line.



ABOVE

When observing the site from the west side of M5 looking east, the hotel draws most of the attention due to its use of the Z-dimension. Everything else is a single story structure, and resting on the undulating topography, there is a real blending effect taking place, leaving this edge condition very undefined.



ABOVE

The M5 expressway has become the backbone for recent planning and development. Without its presence the area would likely be even further blended together than it is now, and the natural elements that exist to the west side of the road would likely be forced to challenge the spreading suburbia.



ABOVE

The site specifically that ultimately is designated as the design area, is defined by the eastern edge of M5 and the southern edge of 14 Mile. The natural elements as shown in the panoramic, included vegetation, water, and undulating topography. These elements combined to eventually restrain the design as opposed to enhancing it.

Suburban Detroit - Farmington Hills, Michigan

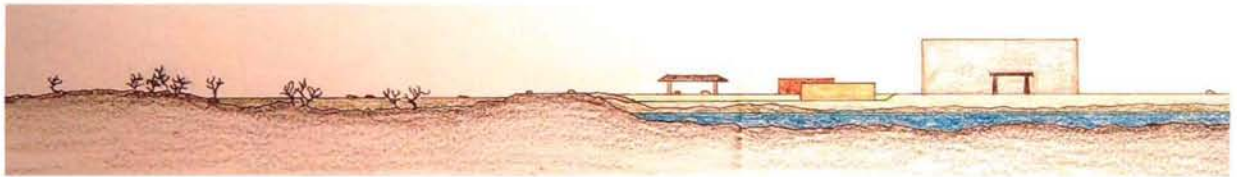
FIGURE
GROUND



RIGHT

Looking at the figure ground plan it is notable that there is no planned order for building development in the area. The structures do not make effort to interact with each other, and aerially they have an appearance that represents them as just floating in space. It also adds to the blending effect as it is hard to produce definition when the built environment is not working together.

NORTH &
SOUTH
SITE SECTION



EAST &
WEST
SITE SECTION



EAST - WEST

NORTH - SOUTH

This is cut through the rural space just to the south of 14 Mile Road, looking from north to south. With the exception of the water testing facility which is the cylindrical building on the left, this geographical area is predominantly vacant. The undulating topography presents itself has a potential design tool, but a greater issue of consideration turned out to be the issue of developing a rural site.

This is drawn through the lake on the north side of 14 Mile Road. The view is looking east to west, and one of the notable issues is the existing response to the topography. The building in yellow is the compact strip mall, so they adapted to the elevation change, but did not make an effort to alter the overall composition of the building.

Suburban Detroit - Farmington Hills, Michigan

SITE MAP ANALYSIS



CLIMATIC EFFECT ON DESIGN

The weather information as listed in relationship to this site was obtained from the values on record at the Detroit Metropolitan Airport. They are standard patterns for southeast Michigan and were intended to assist the design process for purposes related to angles, wall thicknesses, and materials selection.

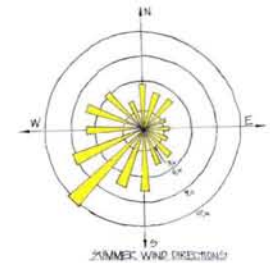
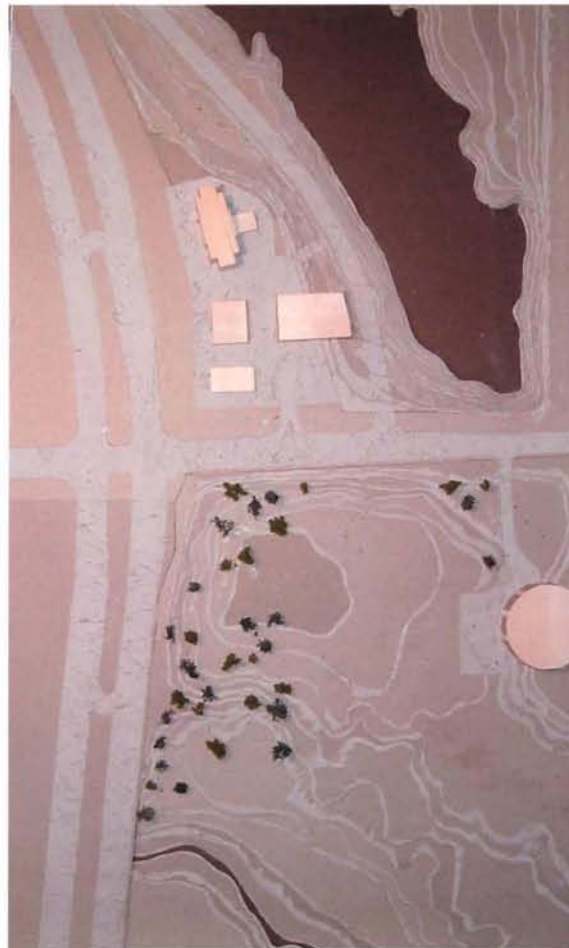
Weather Categories for Site	MONTH												YEAR AVERAGE OR MAX.
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Average Temperature	22.9	25.4	35.7	47.3	58.4	67.6	72.3	70.5	63.2	51.2	40.2	28.3	48.6
Maximum Temperature	62	65	81	89	93	104	102	100	98	91	77	68	104
Minimum Temperature	-21	-15	-4	10	25	36	41	38	29	17	9	-10	-21
% of Possible Sunlight	40	46	51	54	61	65	68	68	61	51	35	30	53
Average Rainfall (Inches)	1.76	1.74	2.55	2.95	2.92	3.61	3.18	3.43	2.89	2.10	2.67	2.82	32.62
Maximum Snowfall (Inches)	29.6	20.8	16.1	9.0	0	0	0	0	0	2.9	11.8	34.9	34.9
Average Wind Speed (MPH)	11.9	11.5	11.8	11.6	10.2	9.3	8.5	8.3	8.8	9.9	11.3	11.5	10.4
Prevailing Wind Direction	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	SW	SW	SW
Maximum Wind Gusts	66	51	60	64	58	56	54	47	54	52	53	59	66

COMPOSITION MAP (LEFT)

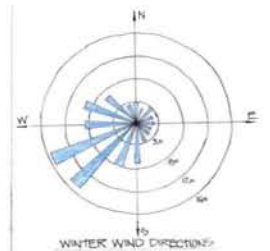
This study was assembled in effort to gain a rooted sensitive understanding of the existing site conditions. Objects taken from the built environment are shown on the right side of the map, while objects from the rural environment are displayed on the left. It really alters the sense of perception of the average medium in a given context. It is easy to consider them as different, but until the materials that compose these respective environments are dissected and observed more closely, the elements that bond to render these contexts can easily go

SITE CONCENTRATION

This site was initially selected as the site to use for the thesis development. This site had more to offer than the previous two in terms of meeting more of the identified criteria. Cleveland and Sashabaw both had some excellent strengths that seemed worthy of facilitating a successful project, but after evaluating all the factors this one seemed to meet more. Some of these determining factors included its direct exposure to built and rural contexts, its peripheral location, it's recent increase in population density, and certainly the noted threat of continued unplanned, horizontal suburban growth. The factor that was not considered enough prior to this site selection was the opportunity to play a role in the existing community, and interact with it. To accept part of a problematic condition, and try to work with it and around it was ultimately not feasible here, so an aerial investigation ensued elsewhere to find a better match.

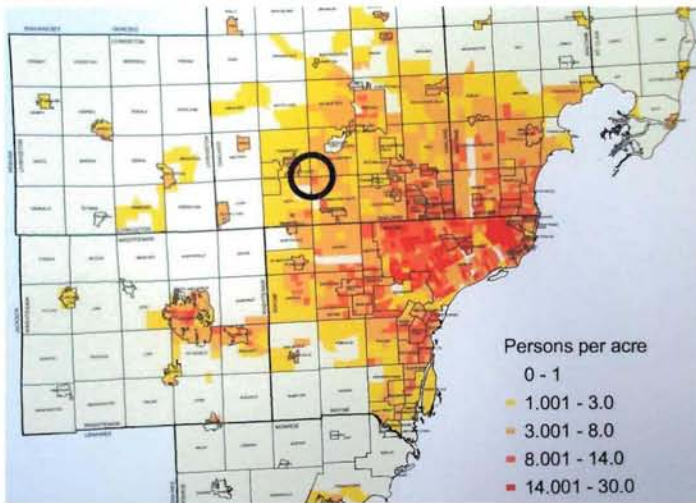


SUMMER WIND



WINTER WIND

Suburban Detroit - Farmington Hills, Michigan



ABOVE

In a local population study, (calculations provided by SEMCOG) it shows that this area specifically has obtained the highest density level listed on the chart. Given the western peripheral location, the standard suburban growth pattern poses a significant threat.



ABOVE

The vacant strip of space just to the north of the hotel building is large enough for a development, but is restricted by two vehicular paths and the existing hotel. It could facilitate a different type of building use quite efficiently, but for the program it hand, it is simply not large enough to accommodate the anticipated program.

RIGHT

Another one of the supporting reasons for this site selection was the opportunity to develop an anchor at the M5 and 14 Mile intersection. Given that the only existing building of substance is a chain style hotel, the corner to the south side of 14 Mile presented itself as an opportunity to draw a greater focus, but it turned out that the abundance of rural space became problematic in terms of showing acceptance to the existing community.



Suburban Cincinnati - West Chester, Ohio



SELECTION REASONING

Following a careful evaluation of the previous site, it was determined at the semester that a different site needed to at least be explored. After a peripheral aerial examination of a few Midwestern metropolises (Detroit, Chicago, Indianapolis, Cincinnati, and Cleveland) a particular site located at the northern edge of Cincinnati presented itself as a setting that could much better facilitate the project direction.

There was obvious suburban development taking place from the aerial photographs, and the proximity to existing residential and commercial districts were promising attributes for the presence of an adequate population. Tylersville Road is a seven lane highway running east and west that is presently a defining line between built and rural contexts. Unlike the Farmington Hills site, this area presents a pattern of buildings that are still problematic in regards to shape and form, but planned somewhat better in terms of plan organization. They waste a lot of space, but they are not as scattered and elusive from the mainstrems as they are with the Michigan site.

The primary determining factor here regarding this site selection was the opportunity to develop the thesis and program in a space that could better facilitate a direct response to the existing suburban condition.



ABOVE

West Chester is a suburb at the far northern periphery of Cincinnati, and it is here that a threat has presented itself to continue extending further north. There is presently a notable distinction between the built and rural masses, and this location offers a valid opportunity to accept this edge condition, develop a mediating design, and accommodate the needs of a large suburban population.

Suburban Cincinnati - West Chester, Ohio

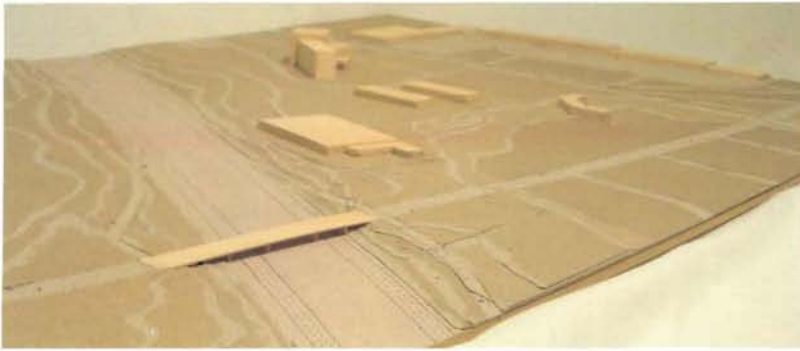
SELECTION REASONING

One of the primary transitions to focus on as a result of this new site is the interaction with the existing suburban community. With the Farmington site, the relationship with the existing suburban community was an impractical mission to achieve based on the size and traffic volumes of the adjacent vehicular paths. With this site, the Interstate-75 expressway is on the side so it does not serve as a barrier, and Tylersville Road which serves the east - west traffic though intense in traffic volume is manageable enough to work around, meaning that its presence can be worked around by a pedestrian path system likely spanning over the top.

The existing strip mall spaces that fill out a very large portion of the area are buildings that can be accepted and responded to with a new pedestrian oriented environment. The idea of developing a condensed system can be facilitated within this area, and the same type of building uses will be accommodated for.

BELOW

The existing formation of the suburban developments here is suitable for an aggressive intervention. For the most part the buildings will be left the opportunity to function as designed for, but the additional proposal will introduce a different form of actions that are more concentrated around humans as opposed to automobiles. The existing condition will be an interesting test to see how well different building systems can interact with each other.



SURROUNDING CINCINNATI



Cincinnati is a city that is more defined than most resulting from natural elements that compose its foundation. The Ohio River provides a clear definition along the southern and western boundaries, but adding even more significantly to the character is the extreme amount of topography throughout the area. Massive undulating slopes present themselves everywhere with the exception of the northern edge where the topography begins to settle. This flatter area to the north does lend itself more so to built and rural blending, and the selected site in West Chester can provide architecture and planning with an opportunity to assist in defining an edge, and contributing to the identity of Cincinnati.

Suburban Cincinnati - West Chester, Ohio



LEFT

A set of twin commercial buildings sit within the nucleus of the most undeveloped part of the site. Despite the fact that these buildings are aesthetic disasters, it would be sensible to respond to them in a way that would situate them into a better fitting system. As of now they are isolated by themselves with the nearest built structure being the Home Depot. With the addition of some carefully planned buildings placed in a relating manner to these twin commercial spaces, and the inclusion of some pedestrian spaces, the different types of building typologies will be given the chance to co-exist, in a manner that should ultimately be more successful.



LEFT

To the east of the twin commercial buildings and just to the north of an existing strip mall is a vacant rectangular site that is currently for sale. This is certainly the type of space that developers will seek, and its location does provide some functional design potential.



LEFT

To the south side of Tylersville Road is a system of typically designed restaurants and small-scale strip malls. There is an overabundance of parking and this can be considered an existing area that has some potential to function differently with the application of some landscape architecture and innovative exterior planning concepts.



LEFT

The topography variation is not as extreme here as it is near the river bank, but there are some undulating areas of note that could play a major role in the building design, especially for purposes of connecting exterior paths.

BELOW

The Home Depot functions relatively well with its existing system, but the immediate surrounding system can be re-designed so that a store like this has a sense of belonging within a bigger system, as opposed to being a completely independent entity.



Suburban Cincinnati - West Chester, Ohio

RIGHT

With retail spaces constructed on three of the four sides of this rectangular plan, it offers a bit of a sense of enclosure for the parking area. The building height to parking lot width ratio however is so extremely in favor of the flat dimension, that it further expresses the excess parking volume.



TRIPS RIGHT

An axial path attempts to draw pedestrians toward the public square, but there are not focal points to terminate these paths and they are ultimately washed away in the landslide of parking.



ABOVE

EXISTING STRIP MALL STATUS

The pedestrian space functions as wasted space that is shoved off to the side. The retail spaces in this typically planned strip mall are generally accessed by car, one after another as opposed to by foot.

The strip mall that was still under development in the aerial photograph prior to pursuing this site is now completed, and occupies a staggering amount of space. From surveying this space, the apparent parking capacity to actual usage ratio could not have been any greater than 8 to 1, and this analysis was conducted on a Friday just six days before Christmas. If vehicular storage space is remaining unoccupied during the middle of the season that it is most extremely designed for, it is just a further indictment on the lack of planning and consideration toward developing an environment for humans.

This issue of wasted space in this particular area presented itself as an opportunity to intervene with a proposal that would re-use much of this wasted space for designs that reflect a better compact and efficient form. The small scale pedestrian plaza shown in the image above is an attempt to draw people on foot, but again consideration was not careful here as this space is separated from the built retail space by 38 parking spots. No form of typical circulation is going to lead anyone into this area, and the result becomes another example of wasted space.

The idea of potentially removing many of these parking areas with a human designed built system in place of it seemed to be an exciting challenge. If the existing strip mall buildings were kept and used as they are now, it would be an interesting experiment to mingle in a new system, and see how it can function within a typical large scale problematic system.

Suburban Cincinnati - West Chester, Ohio



LEFT

The topography changes are more clearly defined from the opposite side of the expressway. This is one of the natural site provided tools that will intend to play a key role in the design of the building to ground relationship.



LEFT

Some of the existing suburban retail spaces will be provided a chance to interact with this new district, pending the development feasibility of a pedestrian circulation system over the main roads.



ABOVE

The small scale existing strip mall is currently an extremely inefficient use of space. Though the excess parking here is not as problematic as most other cases, this development has no relationship to anything in the surrounding context, it is basically floating in space, but with the implementation of the new district, it will be given the chance to fit in better by being part of a more clearly defined system.

BELOW

This vehicular path currently accommodates service vehicles to gain access to the shipping and receiving dock for the strip mall shown in the panoramic above. It is unexplainable as to why exactly this path continues for an additional 50 yards and then just terminates. If it is extended linearly without interruption it will continue on the same plane as the northern edge of the Home Depot as shown in the background. This path presents the opportunity to extend from the Home Depot store all the way to the eastern edge of the site at Cox Highway. By taking part in such a particular extension, this path could create a definitive northern boundary to the site for the new district. The other 3 major roads could assist this path in defining a site enclosure for the new district, and this one in particular would also help for orientation purposes so that the occupants can navigate through the site without disordered confusion.



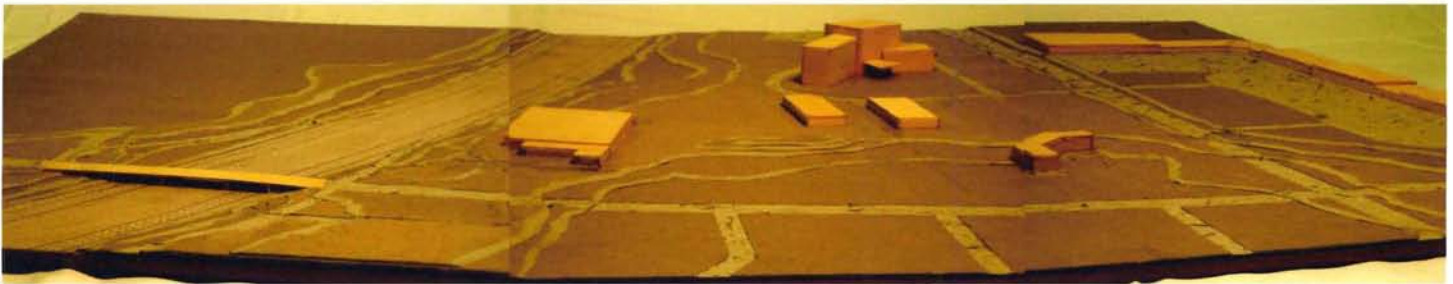
SITE PROSPECT 4

Redefining Suburban Peripheries

Suburban Cincinnati - West Chester, Ohio

RIGHT

The existing suburban structures in this area will have the opportunity to work as obstacles and layout generators in an effort to establish a cohesive response to the existing and accepted suburban composition.



ABOVE

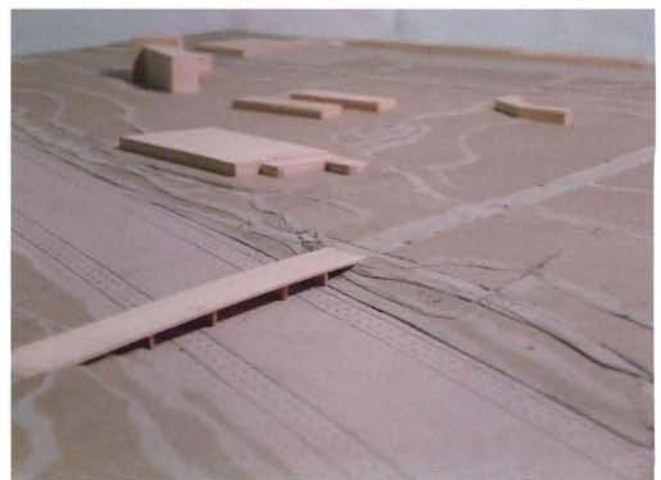
Looking outward to the north from the suburbs, the existing path and building pattern offer the necessary space for a dense and defining district.

LOWER LEFT

The most extreme of the topography undulation is concentrated toward the center of the site, just south of the twin commercial buildings and to the east of the Home Depot.

BELOW

The location has good access with the direct alignment to Interstate-75 and Tylersville Road. It does appear to have an opportunity to draw vehicular traveling occupants who were previously unaware of this development.



SITE CRITERIA AND FINAL SELECTION REASONING

The composed list below indicates preferable or mandatory characteristics that should be offered by the site selected.

- Suburban Context
- Adjacent or near by rural context
- Feeling of proximity to urban context
- Threat of suburban expansion into undisturbed rural context
- Presence of some natural elements (topography, vegetation, water)
- Vacant land
- Relationship with current suburban context
- Proximity to moderate or high population density
- Proximity to major people paths (high density road systems)

The site location absolutely must be that of a suburban peripheral edge condition, and preferably one that is posing a major threat of continued standard horizontal development.

The size of the site will need to be fairly large. The exact dimensions do not require specificity at this point, but a safe assumption is many acres of vacant land. It does not need to be completely vacant, it is certainly an option to work with and/or respond to existing suburban buildings. This may be beneficial depending on the condition from the perspective of potentially setting a trend here. If the type of development being composed within this thesis can serve as a model for future developments, then the presence of existing buildings in more of a problematic state will likely have to be worked into the mix. So this will certainly be an issue that this project will be open to in regards to determining which type of site exactly would be the most sensible for this project.

The project could gain a much better sense of belonging if integrated within some form for existing conditions to portray the attitude of hope for these suburban areas. Not hope from a sense that these areas are totally worthless, but hope from the perspective that these spaces can become human places, similar of what is found on the streets and in the parks of major downtown areas. We have heard the voice of peripheral suburban development and now it is time to respond. The site will need to enable a response that can be aggressive and potentially accept some of the existing conditions. As described it may essentially feel like a mixture of suburbia and dense urbanity and with that conception it would be totally impractical. A better conception would be the simplified thought of reinventing suburbia within an existing condition that is a typical representation of the problematic condition of the suburbs. With this in mind, the design challenge can be controlled by a mediated approach rather than a bold and careless one. Much design effort will be concentrated on respecting the job site, and accommodating aggressive features at the same time.



ABOVE

The comparison of several small businesses in their current formation relative to that of the newly proposed one will be drastic and proven as more desirable and efficient.



ABOVE

From a city definition perspective, Cincinnati will benefit from this. Tylersville road essentially serves as the northern most boundary of the built environment associated with the city. By developing here it will make the city a more inviting and communal place as opposed to an entity that is de-fragmenting into a series of unrelated isolated islands.

Suburban Cincinnati - West Chester, Ohio

SITE CRITERIA & FINAL SELECTION REASONING

Given the previous criteria, the site that was originally selected in Farmington Hills was changed and relocated to a better suited condition in Cincinnati. The site in Farmington Hills was originally fueled by the available undeveloped space and the notable edge condition that came as a result of adjacency to major highways. As it turned out these were two of the factors that actually lead to the most difficulty and the least opportunity for a sensible design solution. Part of the necessary criteria in order for this thesis to maintain some practicality includes partial acceptance of the existing suburban condition. With the Farmington Hills condition, the opportunity for existing suburban interaction was not a workable one primarily resulting from the formation of the major highways. The situation for existing suburban interaction is far more workable with the Cincinnati site, and will have the opportunity to be showcased more expressively. Suburban Cincinnati will be the site for the new proposed district, and will serve as the best setting for this thesis investigation.

RIGHT

The rural context to the upper right was not only contradictory in terms of land-use efficiency, but was separated rather than mediated by the existing highway condition.



RIGHT

Despite the existing presence of buildings that typify suburbia, the spacing and notable lack of planning that went into this condition presents itself with opportunity to intervene with a plan that is more thoughtful toward humans, and uses land in a more efficient manner.



OVERVIEW

Creating a multiuse district at the periphery of a suburban context is a development type that could greatly benefit from an unconventional physical environment. The building uses that will occupy this district, as they exist in the reality of suburbia, are primarily single level buildings at the back of a property that is dominated by parking. While this may be a system that works, it is no secret that these suburban entities become less dependent on architecture if at all as the pattern continues to spread. By creating a new type of physicality to these presently horizontal elements of suburbia, the building will have an opportunity to respond and relate to context that is not manually flattened out, as well as the vertical space above ground which is typically ignored in suburban development. It will create a setting that is focused on pedestrians as opposed to cars, but the reality of the automobile will certainly require accommodations, and ones that will be explored in great detail. Ultimately this idea will assist in changing our perception of the suburbs, at least for this area specifically. By applying design principles that are open to vertical expression, and challenge the success of horizontal expression, the image of this new district will create a more vibrant attitude toward our perception of the suburbs, and will allow for architecture to make a significantly greater contribution in letting the buildings interact with the people using them.

MAJOR COMPONENTS

With an attempt to accommodate the existing building uses that are presently found in suburbia, they can initially be broken down into three major types. This includes retail, residential, and commercial. Retail and commercial will work as the backbone of this new system, occupying the majority of the space. This application is appropriate given that these are the uses that have driven the environment into its problematic condition. This new district will accommodate space for all small businesses, many of which are found in single story suburban strip malls. There will be an attempt to create communal space which will include an emphasis on pedestrian systems, and detailed elements between the circulation space and the building entrance units. With this said, automobiles will be included in a hidden form. They must be taken into account, but one of the major goals is to assure that they do not interfere with the public interaction spaces. Listed below are some building uses and examples that may be included in this district without much difficulty, and others and that could be implemented but would have to be done so carefully.

ACCEPTABLE OPTIONS

Small Shops: drug stores, shoe stores, clothing stores, hobby shops, printing shops, gift shops, party stores, dry-cleaners, post-office, sporting goods, hair/nail salons, music shops, card shops, book stores.

Food & Drink: bakeries, bars, fast-food chains, pizza chains, restaurants of all levels. Anything pertaining to food or drink service will be an acceptable fit, and a beneficial one from a communal perspective.

This type category will likely play a major role in strengthening the communal aspect of the program.

Small Commercial: finance groups, tax services, banks, law firms, architecture and engineering firms, marketing companies, publication companies.

Entertainment: cinemas, film rental spaces, small concert spaces. These types of spaces could create an opportunity to interrupt any consistent horizontal physical conditions, and provide some 3-dimensional variation.

Fitness: gyms (weights and cardio), tennis facilities, golf facilities, Frisbee golf, basketball facilities, pool and habitable water facilities.

Congregation: parks, courtyards

CAREFULLY PLANNED ACCEPTABLE OPTIONS

Department Stores: Wal-Mart, K-Mart, Meijers, Sears, Home Depot, Lowes, Toys R' Us, Best Buy, Staples, Office Max, Target, CompUSA, Bed-Bath-Beyond, Michaels, Joann Fabrics, JC Penny's, Art Van, local grocery chains, other applications closely related to these.

REQUIRED SPACES WITH SIGNIFICANT DESIGN CONSIDERATION

PARKING

Given the nature of the suburban system, people will obviously be arriving here by car. Their experience driving into the district should be a pleasant one, but at the same time vehicular circulation and storage space must remain isolated from the primary activity zone of this district. Parking strategies will be explored in great detail, and will likely resort to a form of stacking to conserve horizontal space. One feature that will likely be heavily applied to this is vegetation. Not just planted trees and flower gardens, but even natural bushes and brush can play a role here not just in hiding the cars, but also by providing us with a sense of natural environment. In situations where parking decks will expose themselves to public areas which is a very likely case scenario, for the most part these relationships can be moderated through a system of vertical vegetation such as ivy or vines. Lighting can also play a role here in enhancing the expression of this type of space at night time, serving more as a draw as opposed to a scare.

PEDESTRIAN CIRCULATION

This is one of the primary design components to this project. Following arrival at this district, it is intended that people will choose to walk around as opposed to drive around. In addition to the fact that they will likely have to, it will be considered when designing that the people would not even think twice, and that they would instinctively choose to walk through the district as opposed to drive. Given that the site offers a varying range of topography and undulating features this will provide for more characteristics to respond to, and this type of reaction will likely be most expressive in the form of pedestrian circulation, a space type that will flow throughout the entire area of the site. Building spaces may rise high above ground, and at other points they may sink well below ground. The pedestrian circulation space will consequently require stairs, bridges, tunnels, and ramps to be incorporated as need be into the design of the mainstream path condition. An effort will be made to apply courtyard type spaces that can be easily linked to increase the feeling of communal space here. Lighting will also play another role not just for purposes of walking at night. This can also provide another opportunity for architecture to accommodate a necessary component and could play a role toward influencing the design of this system.

PUBLIC CIVIC SPACE

Part of what will likely play a key role in acting as a draw to this district is attracting people who are not visiting to spend money by eating, shopping, or being entertained, but rather just to fit in with the mainstream congregation of people. The outdoor public spaces will be one method of attracting people, but for interior purposes, to attract those who are not looking to spend money, a civic type space would be an appropriate fit for this district. Given that there will already be the residential component to the system it will automatically serve as an easy accessible resource for them, but then for those who reside outside of this district, it will serve as a place that people can come and take care of common tasks from all ages, and from school to work related projects. Entities that will likely be included as building blocks for this area will include a library, computer lab, post office, and close proximity to other related building uses such as a copy and printing center, and a coffee shop type space. In order to function in the best manner possible this space should be open 24 hours a day along with the other space types previously listed that relate directly to it. This will help breathe life into the district not just from eight to five Monday through Friday, but all around the clock, also assisting to disallow and type of dead feeling to the district.

REQUIRED SPACES WITH SIGNIFICANT DESIGN CONSIDERATION**NATURAL FEATURES**

With the condition of the site being primarily in its natural state, there is an abundance of entities on site that can enhance an architectural response. The undulating topography is one that can and will force not only a variety of level changes, but can also open up for certain spaces to be sunken deep yet visible from the normal grade. The topography is a gift that will be taken full advantage of during the design process. Also the natural vegetation and water that is present on the site will be filtered through the built environment of the new district. This is not to say that every single tree will be protected, but an effort will be made to not only protect as much of the natural vegetation as possible, but also to use it as a tool for defining a path, or anchoring a courtyard, or shading a balcony. Trees are something that can even be expressed more successfully at night time if enough effort is put into the lighting design of the space. Simply pointing an exterior light upward into a tree canopy can add so much aesthetic value to a space, and ideas like this will add significantly to the overall image of the district in both day and night conditions.

RESIDENTIAL UNITS

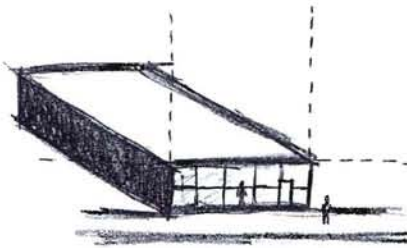
This building use will not only improve the suburban efficiency of living, that is not the focus, but it will significantly enhance the function of this new district by providing it with more life. Primarily from a circulation standpoint, people walking from their living units to their cars, or preferably to retail and other spaces within the district. The greater the circulation of people at all times, the more vibrant of an atmosphere that will benefit from it. People who will not be living in this district will be more attracted to keep coming back if they can depend on a vibrant atmosphere. Any signs of dead zones or inhuman patterns would be absolutely detrimental to the success of this district. In terms of this building use relating to the district from a physical perspective, the location of these space will likely be higher up to allow for the public spaces to occupy the ground and more public spaces. This will allow the respective building uses to function as they need to, and it will maximize the use of the building development in vertical space.

ENUMERATION OF ACTIONS

- Expressive interaction between indoor and outdoor spaces.
- Walk able district, walking preferred over driving.
- Emphasis on illumination, to embrace the night atmosphere and provide a feeling of comfort at all times.
- Public congregating (even among strangers)
 - People using built-in ledges as seats to maybe read the paper and have a cup of coffee.
 - Maybe throwing the football around in the usable green spaces.
 - People eating lunch in the usable green spaces or in the exterior extensions of food retail space.
 - People gathering to view a live band or show.
- People interacting with each other (strangers or friends) at restaurants and/or bars.
- People having the chance to walk around a desirable space and take care of typical daily tasks, in the same block of time without getting in and out of their car five times. An example would be: maybe someone needs to pick up their dry-cleaning, swing through the bank, grab a coffee or a bite to eat, and maybe pick up a birthday card for someone. This district will enable for those tasks to be performed, but in an easier and more desirable manner. Certainly that is just a very broad and arbitrary example, but the options of other similar case scenarios are endless.

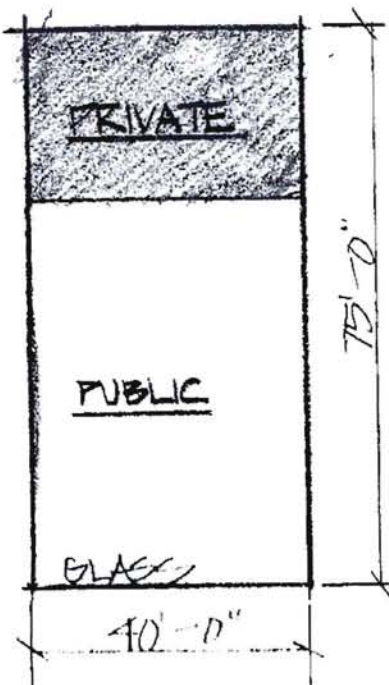
SPECIFIC ACTIONS

- Walking
- Greeting
- Eating
- Drinking
- Shopping
- Relaxing
- Observing
- Accomplishing
- Socializing
- Working
- Living
- Recreating
- Interacting



ABOVE AND BELOW

Given the confined area of these spaces, it will not be necessary to change the way they function within the perimeters of themselves. That would only lead to some form of an impractical solution. Their relationship to their surrounding context and human beings is where the change will be made relative to what is typical of suburbia. To assist the architecture one element that will be preferred for most of these spaces will be a predominantly transparent facade. This makes for a more intimate relationship between building and human, and it will also reduce the conventionality of the design as a whole. The sketch plan below is a brief example of potential interior layout and overall size for this type of space.



SPACE DETAILS | LOW CAPACITY RETAIL SPACE

Unit Capacity = 30

of Units

Entirety of District = 40+

Focus Zone = 15

Net Area / Unit = 3,000 sf

Total Net Area in Focus Zone = 45,000 sf

Purposes & Functions

This space type is arguably the primary building block for the entire district. These are the spaces accommodating the average type of small shop found in a typical suburban strip mall. Examples of tenants for these spaces would be shoe stores, gift shops, dry-cleaners, card shops, and other small retail spaces that people are dependent on to accomplish daily tasks.

Activities

Allowing people to take care of every day needs, or in other cases people just shopping as a leisure activity.

Key Spatial Relationships

Direct adjacency to pedestrian corridors, paths and gathering spaces. Preferably aligned with other units of the same type for design efficiency, and pedestrian flow efficiency.

Special Considerations

Lighting will be an element that can function as a primary attraction here. It will be situated so that every individual space of this type will have control of their own lighting, but the particular usage of lighting for each individual space will act as a key composition element to potentially enrich the overall image of the district.

Equipment / Furnishings

Will likely include standard shelving units and counter spaces. 3'-0" door widths will be enough to accommodate anything that will be moved in and out of these spaces.

Behavioral Considerations

Human dialogue will be permitted and encouraged to promote a vibrant dynamic. Noise of automobiles should be less of a burden.

Structural Systems

Will not require any additional structural system. Will simply be fit into the main structural system of the entire building. The likelihood of glass fronts would require a steel mullion system, but that can easily be implemented.

Mechanical / Electrical Systems

Each space will be provided their own controls, however extremities of units will be limited to ensure the safety of the facility as a whole.

Site / Exterior Environment Considerations

Based upon final design, it is likely that many of these spaces will be oriented to the exterior spaces so that they are easily accessible via the primary pedestrian path systems.

SPACE DETAILS MEDIUM CAPACITY RETAIL SPACE

Unit Capacity = 120

of Units

Entirety of District = 20

Focus Zone = 3

Net Area / Unit = 8,000 sf

Total Net Area in Focus Zone = 24,000 sf

Purposes & Functions

This space type is likely the secondary building block from a retail perspective, it will accommodate companies that are too large to fit within the parameters of the average (smaller) sized shop but also far too small to occupy as much space as a department store.

Activities

Allowing people to shop, particularly for specialty items.

Key Spatial Relationships

Direct relationship to pedestrian paths, corridors and gathering spaces. It is not essential for these space types to be aligned in any consistent formation like the small capacity retail spaces. These occupy more space, and it is less likely that people will be willing to go from place to place.

Special Considerations

Lighting will be a feature that can be controlled by the specific space tenants, but it will play less of a role architecturally for these spaces than it will for the smaller ones.

Equipment / Furnishings

Standard shelving units and counter features will likely be essential for these types of spaces. It is unlikely that any doorways wider than 3'-0" will be necessary, but in a case that there is, it will be made possible by leaving enough vacant wall space adjacent to the private circulation corridor where shipping and receiving is.

Behavioral Considerations

Human dialogue will be permitted and encouraged to promote more of a vibrant feeling to the space. Noise from automobiles will not be much of any burden, but emphasis on restraining these spaces from vehicular paths will be less than that of the small capacity retail spaces.

Structural Systems

Will not require any additional structural systems given the confined area of these spaces. Given that there will be a fair amount of open space here, columns serving load bearing purposes for the entire building will likely expose themselves in certain areas within this space. Rather than being ignored they will be embraced, and used to assist the quality of these spaces.

Mechanical / Electrical Systems

Each space will be provided their own controls but again they will be limited to ensure the safety of the entire facility.

Site / Exterior Environment Considerations

Based upon final design, it is likely that many of these spaces will be oriented to the exterior spaces so that they are easily accessible via the primary pedestrian path systems. It will not be as necessary to provide a significant amount of frontage to the pedestrian spaces though, so it will be okay to use this area as an anchor point to the space, but it could be beneficial for most of the area to be inwardly focused.

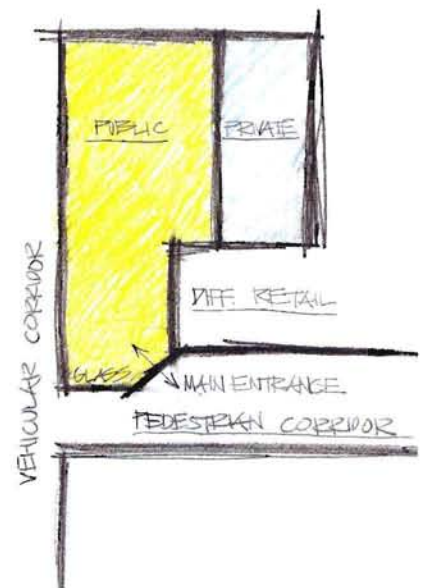


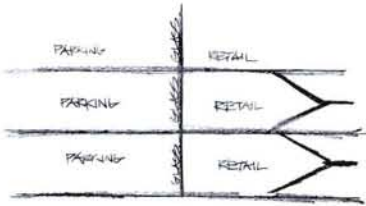
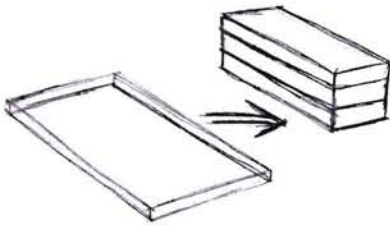
ABOVE

In many situations it is likely that the required floor area for these spaces will overlap the load bearing column spacing for the particular structure. Rather than being treated as obstacles, these will be embraced and have an opportunity to serve as focal points and draw people directly to them. Sales counters could wrap around them, or maybe decorative elements could use them as a support anchor.

BELOW

The majority of retail space for these units can be concentrated toward the center because transparent surfaces will really not serve much of an advantage for this type of building use. As long as there is a notable link to the pedestrian traffic, a greater amount of space can occupy the inward area of the building.





TOP

In general the physical transformation of these space types is achieved through using less horizontal area, and more vertical space. Through this concept, the same type of "big box" store can be accommodated using about an eighth of the standard footprint area. A benefit of this is not just more efficient land-use, but most notably the experience of the customers using the space. It will be more intimately designed for humans and lessen the rush of normal suburban culture.

ABOVE

This sketch is a general conception of the layout in section relating retail space to parking. The walk from an average parking spot to the building entrance will be significantly less, and far more inviting. The welcoming sense will be assisted by predominantly transparent facades facing the interior of the parking decks. This will decrease the amount of darkness along with any feeling of dead space, and allow people to be more excited to enter a space.

SPACE DETAILS HIGH CAPACITY RETAIL SPACE

Unit Capacity = 600
 # of Units
 Entirety of District = 2 - 4
 Focus Zone = 0 - 1
 Net Area / Unit = 90,000 sf
 Total Net Area in Focus Zone = 0 sf

Purposes & Functions

These space types will accommodate the "big box" stores, or what are commonly referred to as department stores. Given that many of these building uses have already been established in close geographical proximity, most notably across the street, it is foreseeable that competitors will seek to develop in the same area, and this will be a chance for them to take advantage of an unconventional physical approach which may be an attraction to some in order to promote sales.

Activities

Allowing people to purchase items in bulk, or items that are particular enough that smaller retail spaces do not carry them.

Key Spatial Relationships

It is absolutely necessary that these types of spaces are in direct relationship to the vehicle parking systems. These are the spaces that will be more prone to function as "single destination" spaces, meaning that customers planning on specifically using this space type will be less likely to be willing to explore other spaces. With that, the pedestrian path system will not be of essential use but it will still need to be accessible. Location for this building-use will not benefit the overall functionality of this district if centralized. Being closer to the perimeter would be preferable, adjacent to vehicular paths, and subsequently to the parking lots that will require close interaction.

Special Considerations

Lighting will be under the controls of store management, and will likely consist of a bright fluorescent system similar to what exists in the standard typology.

Equipment / Furnishings

Wide, overhead doors will be required to allow for necessary shipping and receiving. These areas will allow for semi-trucks and such to back up directly to the building to provide the most efficient system possible. Staircases will require some critical design emphasis, and the inclusion of escalators may be a valuable attribute. Given that these spaces are always just a single story in height, the conversion to multiple levels (maybe three or four) will require the additional design element of vertical circulation, and it will need to be made easy to avoid losing customers to inconvenience.

Behavioral Considerations

Noise will be minimally regulated to maintain a vibrant feeling within the space.

Structural Systems

Will fit within the network of the structure for the overall building. Load bearing columns will be present and embraced, possibly used as shelving anchors.

Mechanical / Electrical Systems

Typical to these types of spaces. Area of space will be standard divided by the number of floors.

Site / Exterior Environment Considerations

Will assist in filling out the less emphasized or excess designed space.

SPACE DETAILS "FAST FOOD RETAIL SPACE"

Unit Capacity = 40

of Units

Entirety of District = 12

Focus Zone = 5

Net Area / Unit = 3,000 sf

Total Net Area in Focus Zone = 15,000 sf

Purposes & Functions

To more efficiently facilitate the fast food type retail spaces without the design consideration of parking and the functional attribute of the drive-thru. These spaces will occupy a similar amount of square footage from a building perspective, and perhaps lend themselves to multiple stories, but the primary emphasis will be its interaction with humans and how they can be a usable attribute to a pedestrian oriented area.

Activities

Eating, sitting, taking care of meal consumption in a timely manner.

Key Spatial Relationships

Direct adjacency to the pedestrian path system. Accessible or at least viewable from the public congregation areas. Directly accessible to exterior space to provide for two mediums of seating.

Special Considerations

Lighting will be a feature controlled by each individual space tenant. Signage however will be regulated to resist the overemphasis on advertising and for the integrity of the aesthetics of the district. Respective logos will be permitted, but not in the form of a notably large plastic sign with fluorescent lights in the middle. Written space names will be preferred and should be illuminated, but they should have a thoughtful expression, and they should embrace the material of the respective facade or ledge in which they are encased in.

Equipment / Furnishings

Doors will be of standard 3'-0" width. Kitchen's will require all necessary system appliances and accessories. The public space will be composed of tables, chairs, booths, and accessory stations. Standard interior features for this space type.

Behavioral Considerations

Moderate volume, a vibrant atmosphere is nice but at the same time most customers intend to enjoy their food so it must be kept under control.

Structural Systems

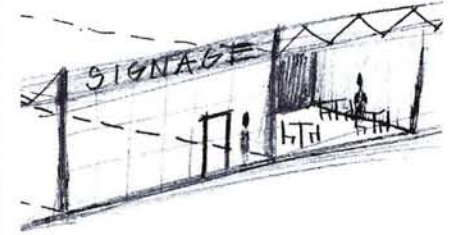
Will fit within the network of the overall building. Load bearing columns that present themselves in open space will be embraced and used by possibly anchoring a table setup, or an accessory station.

Mechanical / Electrical Systems

Will be standard for the type of building use. Particular consideration will have to focus on connecting the advanced ventilation system to the exterior without burdening the public space.

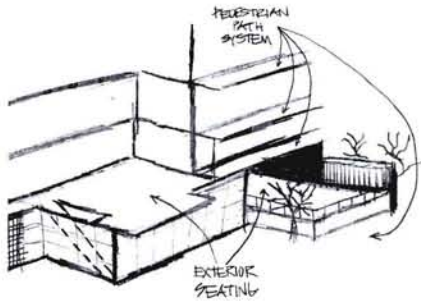
Site / Exterior Environment Considerations

Relative to these space types in existing suburbia, these new design solutions will present themselves much differently. They will consist of emphasized frontage along pedestrian systems, and consist of outdoor seating spaces where the opportunity presents itself. These spaces should also be treated as a mediating tool between the interior and exterior spaces of the buildings.



ABOVE

By respecting the dominant material of the overall building, the signage will be more successful. It does not need to blend in to the point that the signage is hardly noticeable but it should not take the focus off of the material at the same time. By working together the material and the signage can create a more fitting relationship.



ABOVE

The sketch above shows a potential spatial relationship situation in which an exterior sitting space can be defined by a slight elevation increase and comfortable surrounding vegetation. The space could be linked directly to an interior space of likely a congregating use to enhance the human feeling of this space use.

SPACE DETAILS RESTAURANT / BAR / GRILLE RETAIL SPACE

Unit Capacity = 160
 # of Units
 Entirety of District = 16
 Focus Zone = 6
 Net Area / Unit = 5,000 sf
 Total Net Area in Focus Zone = 30,000 sf

Purposes & Functions

To facilitate an assortment of authentic places to sit down and eat, or maybe just meet some friends after work. These areas are very common to the suburbs but almost always only accessible via automobile, and they are definitely treated as a single destination venue. This district will enable continued accessibility via automobile, but the direct access will be made through circulation use of the pedestrian path system. In addition to serving a quality form of mediation space, these venues will benefit more significantly based on becoming part of a multiple destination system, as opposed to a singular one.

Activities

Eating, drinking, relaxing, sitting, congregating, socializing

Key Spatial Relationships

Direct adjacency to pedestrian path system, reasonable distance from parking spaces, interior and exterior application, preferably located along edges or corners where views are most open.

Special Considerations

Lighting will be a feature controlled by the individual space tenants. Dimming will be a major characteristic that should create some diversity and individual authenticity amongst these space types. With an estimate of 16 of these space types within the district approximately half of them will be occupied by national chains that fit under this category, for example Chile's. The remaining half will be unidentified but provided to fit the role of authentic restaurants that often serve as landmarks for smaller towns or population areas. The sizes will vary depending on the location and situation at hand, but the physical form for most of these spaces will be unconventional from a vertical perspective and an indoor/outdoor perspective.

Equipment / Furnishings

Doors will be of standard 3'-0" widths, kitchen spaces must include walk-in refrigeration units, and freezer units. All major high level cooking appliances and fixtures, abundant counter space for employee order sorting, bar counter of tenant's choice and common shelving units for glasses and other dishes, in the public space a pretty standard assortment of tables and chairs. Emphasis on booths will be much more focused on here in an effort to adapt the building use directly into the framework of the architecture, so that they are not just seating solutions thrown into a space, but rather seating solutions that are built into the structure of the space.

Behavioral Considerations

Will vary from space to space, tenant to tenant, and atmosphere to atmosphere. In general it is expected that noise and other actions are regulated but still permitted enough to produce a vibrant atmosphere.

Structural Systems

In some cases additional structure may be required to allow for cantilevered systems, or balconies which would accommodate additional outdoor seating. When possible, and for all interior spaces these space types will filter through the master structural system for the particular building. This will work as an advantage and not an obstacle because columns that are located in open space can be treated as draws and devices for the interior space to respond to. Columns here can serve as anchors for important elements such as elevated booths, aquariums, wait staff stations, and other applicable resources.

Mechanical & Electrical Systems

Will be standard for these space types and tweaked based on the respective uniqueness of each individual space. The space to accommodate fixtures for this component will be located in the private sectors of these spaces, likely in the kitchen area and preferably adjacent to inhuman spaces such as refrigeration units and storage areas.

Site & Exterior Environment Considerations

Given that adjacency to the pedestrian path system is a necessity, it is foreseeable that most of these structures will be located on ground levels or in some cases second levels. In other cases, a situation may present itself in which a particular space of this type could benefit from an aggressive vertical position. It may be possible that an upper vertical level could accommodate this space type, but it will certainly not be a common trend given that the habitable vertical space is and should be primarily designated to residential applications. For spaces that are using exterior patios or balconies to accommodate additional customers, trees will be a nice feature to assist in defining the space and potentially creating a human friendly canopy and another source for lighting elements to respond to.

SPACE DETAILS **DELI / COFFEE / BAKERY RETAIL SPACE**

Unit Capacity = 30

of Units

Entirety of District = 8

Focus Zone = 3

Net Area / Unit = 3,000 sf

Total Net Area in Focus Zone = 9,000 sf

Purposes & Functions

To accommodate space for these smaller retail types that are not as systematic as a regular "fast food" space, but still serve food, snacks, deserts, and beverages within a timely manner. These will be most in demand during early morning hours and after dinner hours. These represent the times that people are starting their day and on their way to work, or in other cases when they have maybe just finished up dinner or are looking for refreshments to keep them up at night. A balanced dispersement of these space types will accommodate the various range of needs.

Activities

Eating, drinking, socializing, waking up, staying awake, studying, taking breaks

Key Spatial Relationships

Direct adjacency to pedestrian path systems, additional emphasis on locating closer to commercial spaces and residential spaces where people will be looking to go directly from those spaces to these spaces. Should fit into the overall retail spectrum similar to that of low capacity retail spaces, given that the sizes are comparable.

Special Considerations

Lighting will be standard of these space types, and for coffee shops with study areas that would likely mean a dimmer area at least applied to nighttime hours. Primarily glass facades with a secondary material to complete the composition would be a preferable material selection.

Equipment / Furnishings

Doors will be of standard 3'-0" widths. Private spaces will require commonly applied baking and preparation appliances, for the coffee shops some of these may be publicly visible. Each will consist of tables, chairs, and in some cases booths, sofas, and recliners. Countertops will likely play a role in defining the public and private spaces, with the private spaces here being designated for customer service.

Behavioral Considerations

Just enough volume and activity to breathe life into the space. Beyond this point, the spaces will become disruptive for their purposes.

Structural Systems

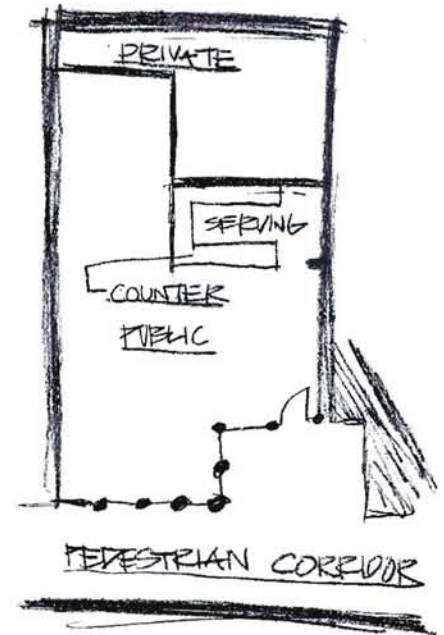
Will fit completely within the overall structural network. Columns in open space will be used as interior design tools, and not as obstacles.

Mechanical & Electrical Systems

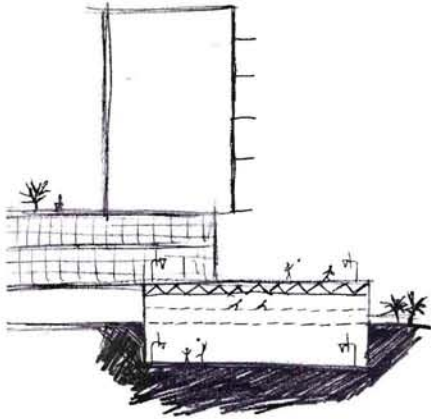
Standard for these space types. Will not require much square footage to accommodate the necessary units and fixtures.

Site / Exterior Environment Considerations

Located in public areas, adjacent to the pedestrian mainstream. In some cases, if necessary, these spaces could be located further up vertically in an attempt to serve specifically to residential and/or commercial spaces.

**ABOVE**

From a planning perspective these space types will not require much of any alteration from the standard simply because of their smaller size. The concentration on how these spaces are situated within the overall context will require more careful planning as will the material application process.



ABOVE

Part of the solution toward allowing this space to assist significantly in setting the tone for the district is the potential exposure to the public circulation and gathering spaces. To gain more attention, an expression of the sectional qualities of this space will showcase the interior volumes and higher activity levels. It is much different than simply viewing a series of stacked floors, and this type of unconventionality will draw attention, and ultimately benefit the entire district.

SPACE DETAILS FITNESS & ATHLETIC CENTER

Unit Capacity = 600

of Units

Entirety of District = 1

Focus Zone = 1

Net Area / Unit = 45,000 sf

Total Net Area in Focus Zone = 45,000 sf

Purposes & Functions

To provide residents of the district a full facility for physical fitness activities. Will also attract non-residents to the district, additionally benefiting the enthusiasm of the area. Unlike suburban fitness center's or YMCA's, this will have a major opportunity to break up any consistency of retail spaces, and provide a nicely concentrated architectural focus. Furthermore, it will have an opportunity to develop bulky interior space which will likely be present in a couple areas of the district.

Activities

Cardio exercises, weight lifting, basketball, tennis, racquet ball, volley ball, swimming, congregating, social interaction.

Key Spatial Relationships

Accessibility to the pedestrian mainstream will be less of a concern than that of the general retail spaces. This is because people that use this facility will not have just stumbled across it, they will have known about it in advance and likely use the space on a regular basis. It should be accessible via walking for circulation of the residents, but it will also need to have a direct relationship to a structured parking facility to accommodate those people using this space that do not live within the district.

Special Considerations

Exterior lighting will be used to illuminate any bold facades that would otherwise be aesthetically displeasing. Wherever possible, lighted spaces such as courts and exercise rooms will be located along the perimeter with transparent surfaces not just to create a desirable aesthetic appeal, but more importantly to showcase the life that the district is living. At nighttime when the sky is dark and these spaces are lit up and exposed, it will showcase a high activity level within a beautiful architectural space. This type of emphasis will be extremely helpful in establishing the positive tone of this district.

Equipment & Furnishings

Counters, table games, nets, basketball hoops, benches, cardio machines, weight lifting machines, lockers, plentiful bathroom and shower facilities, swimming pool, hot tubs, scoreboards, protective caging where necessary. Doors to the public will be of standard 3'-0" width, and a larger shipping and receiving station will be provided within the private space to allow for any necessary movement of large sporting equipment.

Behavioral Considerations

Active, high volumes and intensity will serve effectively for this space type.

Structural Systems

Concrete floor slabs @ ground level, and sunken levels. Reinforced pre-cast will support the loads horizontally and vertically, with open web joists or trusses supporting the ceiling structures.

Mechanical & Electrical Systems

Central heating system to function as standard but significantly oversized. Air Duct routes will have to be designed carefully to reach all spaces, especially provided the lengthy distance that some areas will be located from the central system.

Site / Exterior Environment Considerations

This space specifically will be emphasize a greater amount of mass than most others. The concern here is the visibility of it from the public spaces and the ensuing reactions. For this reason a concentrated effort will be focused on the building envelope and maximizing the effective application of materials and lighting.

SPACE DETAILS CIVIC ZONE

Unit Capacity = 600

of Units

Entirety of District = 1

Focus Zone = 1

Net Area / Unit = 15,000 sf

Total Net Area in Focus Zone = 15,000 sf

Purposes & Functions

This space is being included within the district to function as a draw for non-residents and as an adequate resource facility for all of the general public. There needs to be some valid consideration of drawing people to interior spaces without forcing them to spend money in order to use these interior spaces.

Activities

Congregating, researching, studying, reading, working, mailing.

Key Spatial Relationships

Direct adjacency to pedestrian path system, and central location relative to the rest of the overall master plan. Within this space itself, the different various features such as a library, computer lab, post office, coffee shop, and study space will fill out the space and be tied together with a public corridor space for gathering and efficient circulation. Relative to outside retail spaces, this zone should be very close to a copy and printing facility which is a retail type that really falls into the same category as the use of this space. People from each space will likely be dependent on each other so it only makes sense that they are located near each other.

Special Considerations

Lighting will be thoughtful and fitting to the space, it will vary at different areas within the space to accommodate the particular uses. Exterior lighting will also be used in a more subtle respect to represent a bit of sophisticated attitude toward the space. Material selection will be important. It is foreseeable to envision mostly transparent surfaces facing the public spaces, and maybe some white or light gray pre-cast as a supporting material, this could potentially mix contemporary building design with the older design standard for civic type spaces.

Equipment / Furnishings

Tables, chairs, benches, sit-able ledges, mobile and permanent shelving, counter space at service desks, computers, copiers, thoughtfully designed stair cases to emphasize vertical circulation as a major component of the building design.

Behavioral Considerations

Very much regulated tone in terms of volume and activity level. Any behavior going beyond this controlled level will become a disturbance to the people going about their activities within this space.

Structural Systems

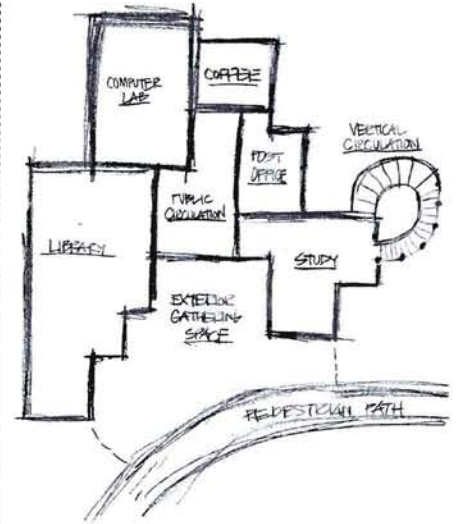
Likely a mixture of pre-cast concrete, and structural steel, with reinforced concrete slabs. The structural members will be exposed in many cases to help define spaces.

Mechanical & Electrical Systems

Source for system will be in hidden space. Given a potentially open system, in some cases ductwork and other elements may be exposed.

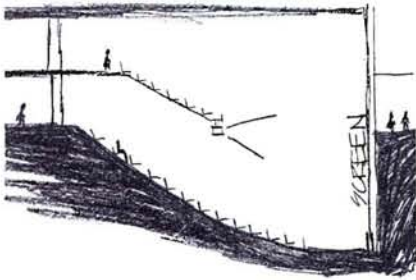
Site / Exterior Environment Considerations

Public oriented space, central location, should serve as a primary anchor to public.



ABOVE

The pedestrian path system should be directly integrated with an outdoor congregation space to assist in blending the difference of each space type. This will also work in favor of the civic zone providing added definition, and aesthetically solid landscape.



ABOVE

This space offers a great opportunity to use vertical space more efficiently from an underground perspective. It will require less of a structure to accommodate the load of seating, and this is a perfect space to be underground given that windows really have no place within theatre space specifically.

SPACE DETAILS THEATRE SPACE

Unit capacity = 900

of Units

Entirety of District = 1

Focus Zone = 1

Net Area / Unit = 28,000 sf

Total Net Area in Focus Zone = 28,000 sf

Purposes & Functions

To accommodate cinematic entertainment in a geographical area that is presently lacking it. It will also benefit the overall composition of the building from the standpoint that will require many unconventional design features to enable it to function properly. The application of this will disengage a standard perspective of layered stories, and create more of a voluminous hollow space in a central building area.

Activities

Showing films, viewing films, being part of a larger crowd of people, being entertained.

Key Spatial Relationships

Located within a bulkier building area since transparent surfaces to the exterior will not be of high demand. This will assist in filling interior space that would otherwise be a struggle because these spaces generally disallow most uses given the average dependency on windows. It will need to be in direct relationship to the parking structure system, along with the pedestrian path system. It will separate those respective spaces and allow for an inviting entrance for both kinds of circulation.

Special Considerations

Lighting will be brighter and more expressive in the public entrance areas where ticket and concession stands are located, the actual theatre space will obviously be much dimmer based on its function.

Equipment / Furnishings

Service counters, popcorn machines, refrigeration units, auditorium style fold-up seats, jumbo cinema screen, projector with facilitating booth, additional vertical circulation for access to upper deck, and projection booth.

Behavioral Considerations

Regulated more so within theatre than in public congregation space. In the general lobby area, this will be less of a concern, plus people will want to get excited prior to going into the film.

Structural Systems

Will likely require a combination steel and pre-cast, with a massive concrete foundation beneath. The lower bowl will be sunken below grade, so the foundation beneath that will have to not only support that, but also the forces taking place higher up. Concrete walls are also likely on the interior separating this space from the public spaces and parking spaces.

Mechanical & Electrical Systems

Standard for this type, will have to be adjusted to compensate for the vertical space.

Site / Exterior Environment Considerations

Sunken below grade, filling space that is somewhat hidden from the public areas.

SPACE DETAILS RESIDENTIAL UNITS

Unit Capacity = 16 (Only 4 for actual residency)
 # of Units
 Entirety of District = 400
 Focus Zone = 50
 Net Area / Unit = 1,200 sf
 Total Net Area in Focus Zone = 60,000 sf

Purposes & Functions

To accommodate residency within the district for purposes of keeping people here at all times. Without people actually living here, the spaces will function during the day but may become dead spaces at night, common to most suburban cases. The multiplicity of draws will be one factor to maintain life within the system, but with the residential component, this vibrant culture of this district can be maintained 24 hours a day, 365 days a year.

Activities

Living, relaxing, sleeping.

Key Spatial Relationships

Will occupy the majority of expressive vertical space within district. Given that the first couple of floors near the ground will be publicly designed spaces, using the vertical space will offer the residence more privacy, better views, and a greater role of importance regarding their involvement in the district.

Special Considerations

Though it is preferred that people will typically walk around from their residential unit to various retail places and such within the district, they will also more than likely have cars that should be easily accessible. Parking structure facilities will be available for these spaces and within very close walking distance. The design challenge here will be hiding the parking areas, and allowing for an interaction between residential and public spaces.

Equipment / Furnishings

Standard 3'-0" door widths will allow all furniture and like objects to be moved in and out without any unreasonable difficulty. Each unit will include kitchen spaces, bathrooms, laundry, bedrooms, closets, dining spaces, living spaces, and a balcony overlooking the public spaces within the district. This will avoid any feeling of disconnect. Other smaller items will likely include sofas, chairs, desks and dressers.

Behavioral Considerations

Standard to any apartment complex. Can be regulated by the particular tenant but their should be no activity that disturbs the neighboring tenants in any way.

Structural Systems

Will fit within the overall network of structure for the respective building. Horizontal load bearing members will not be exposed, but vertical ones in some cases will be, depending on the column spacing relative to the size and layout of the residential units. In these cases, they will be treated as decorative structures and used to enhance the overall interior feel of the unit.

Mechanical & Electrical Systems

Will be individually controlled for each space by each tenant. The extremities of which will be regulated for safety reasons.

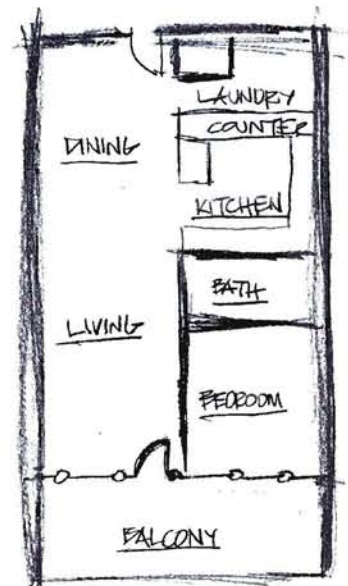
Site / Exterior Environment Considerations

Located higher up above the public plane, should bring good energy to district.



ABOVE

An example of how load bearing columns floating in open space can be dealt with in terms of being integrated into the architecture. By crowning these columns to make them look like martini glasses, they become much more desirable and feel much more like an actual part of the space. (Image - 55 West Canfield Lofts, Detroit).



ABOVE

A sketched example of a potential standard residential plan.



ABOVE

Vertical vines hanging from the open-web joists at the top and extending to the ground plane could express itself as a usable unifying element of the entire space. It will help in avoiding the perception of dead open air at the top, and make the entire volume of the space seem equally important. Pathways and fountains will filter through the vegetation and the lighting fixtures will assist in tying everything together.

SPACE DETAILS ATRIUM GARDEN

Unit Capacity = 50

of Units

Entirety of District = 3

Focus Zone = 1

Net Area / Unit = 8,000 sf

Total Net Area in Focus Zone = 8,000 sf

Purposes & Functions

To provide a visual focal point on the main block as the termination of the path connecting the focus zone to the Home Depot. It will enrich the quality of the building by providing some natural exterior senses to the interior of the building. It will serve as a nice anchor to tie together certain spaces namely vertical circulation, interior circulation and retail.

Activities

Relaxing, reading, observing, connecting, sitting, circulating.

Key Spatial Relationships

Located in between various spaces. For the focus zone it will serve as a method of mediating the space between interior and exterior. Should have at least one set of vertical circulation worked directly into it so that it can be appreciated from within. Vertically it will extend high (multiple stories) and be based maybe a few feet below grade so that people can step down into it.

Special Considerations

Lighting will be mainly point lights in many cases pointing upward to light up the tree canopies to assist in drawing focus to them. Lighting may also play a role as a tool to help define sitting spaces or pedestrian paths within this space. Water features will also have a role here to improve not just the visual image but the audio one as well, with the sound of water movement filtering through the garden filled space.

Equipment & Furnishings

Tables, chairs, brick, plants, trees, and fountains, ledges.

Behavioral Consideration

It is expected that people will stay on the pedestrian paths and gathering spaces that are worked into this system. Climbing trees and jumping in fountains would not be acceptable. Volume should be regulated to promote a peaceful space.

Structural Systems

Given that the envelope here will be almost all glass, a relatively thin structural system will be adequate in supporting the necessary loads. Along the top facing the sky, depending on the spanning distance in between glass pains, it will likely be a series of open web joists supporting this surface.

Mechanical & Electrical Systems

Most of the elements to support this will be toward the building side of the space as opposed to the street side. The only additional considerations here are assuring that the glass stay clean, and that natural plants can grow.

Site / Exterior Environment Considerations

Placed at the edge of the building near the street and sunken slightly under ground. Nothing will suffer from this space, the challenge will be growing exterior elements in an interior space.

SPACE DETAILS ■ INTERIOR CIRCULATION

Unit Capacity = Unlimited

of Units

Entirety of District = Undefined, Filtered throughout

Focus Zone = Undefined, Filtered throughout

Net Area / Unit = Undefined

Total Net Area in Focus Zone = Undefined

Purposes & Functions

To provide space in which people can move on foot to other spaces within the same structural system.

Activities

Walking, sitting, entering, exiting, talking, moving.

Key Spatial Relationships

Will provide direct access to everything within the particular building. Dimensions will be wider in spots where more spaces are feeding off of it, and narrower in places where there are fewer entrances, and also in private corridors. The most emphasis on these spaces will take place in voluminous spaces where they not only stack up vertically but are also exposed. This will certainly be the case in allowing these spaces to surround the atrium garden, but it could also be a strong point of emphasis in a lobby type space that serves as a mediator between the parking structure, movie theatre, and vertical circulation tower.

Special Considerations

Lighting will vary from location to location but there needs to be adequate lighting present at all times, not just for aesthetic purposes but also for safety ones. The ground level spaces here will require design emphasis at the perimeter when they convert from interior to exterior space, and the spaces on the levels above will preferably be exposed, at least when possible, and a significant effort will be made to ensure that they do not feel overpowering, but rather as a desirable space to be.

Equipment & Furnishings

Benches, waste baskets, ledges, railings, lighting fixtures, and planting fixtures where natural light is available.

Behavioral Consideration

Should not require a great deal of regulation. Volumes just can't get out of control, and movement should be restricted to walking.

Structural Systems

Will be filtered into the network of structure for the entire building. Exposed columns will be encouraged and likely for the vertical editions of this space type. They can serve as anchors for lighting fixtures, or other fitting elements.

Mechanical & Electrical Systems

Special requirements will not be necessary for this space type, it just needs to be controlled to the majority preference of the people using the space.

Site / Exterior Environment Considerations

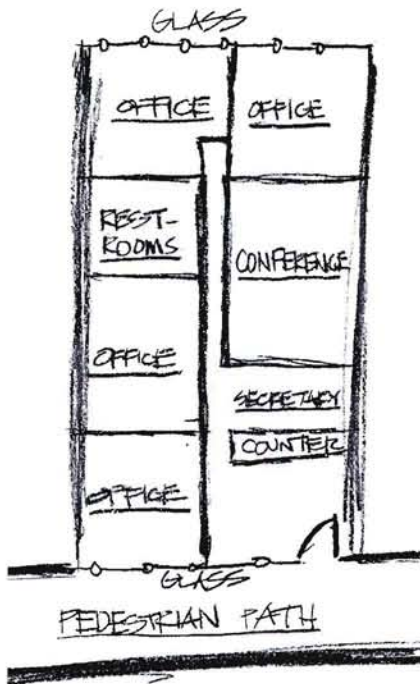
Will not significantly impact any exterior conditions. The site will be altered as necessary primarily in regards to elevation changes within the building. There will be some conditions such as the southern connection corridor in which an exterior path will transform directly to an interior one, but for the most part these spaces will be distinctive.



ABOVE

Interior public spaces can use the path systems to their advantage by the formation of a human inhabited enclosure surrounding them. This concept could also be successful if used in a light-well application with a public space at the bottom, path systems similar to balconies surrounding the edges, with a transparent ceiling structure allowing for natural light to filter its way into all components of the space.

SPACE DETAILS **SMALL COMMERCIAL**



The above sketch is a very simple and rough example of how the space for this building use could be laid out. Under the assumption that the space is oriented so that the narrow dimension faces the exterior, there could be a way to arrange the space so that maybe only one or no offices are left without a window. Glass surfaces will also be promoted along the pedestrian pathway whether interior or exterior to create as much of a communal environment as possible. Too many solid walls will make a space like this feel too isolated and entrapped. It seems possible that the glass surfaces facing the inside of the overall building may even be preferred to ones facing the outside of the building depending on what types of activities are taking place.

Unit Capacity = 18

of Units

Entirety of District = 16

Focus Zone = 4

Net Area / Unit = 1,500 sf

Total Net Area in Focus Zone = 6,000 sf

Purposes & Functions

To allow smaller, personally owned businesses to be given space within this district.

Activities

Working, managing, consulting, communicating.

Key Spatial Relationships

Adjacent to or near the pedestrian path system. In some cases these space types could succeed higher up vertically because the users are regular, and will go here regardless, so visibility is not a major concern.

Special Considerations

This will accommodate smaller businesses so issues such as lighting will be mostly standard for the existing space types but certainly under control of the individual tenant. Preferably, these spaces will be illuminated at night not just for the safety of themselves and the rest of the district, but also for the advantage of the public's view of the space from elsewhere in the district. Lighting will not over-emphasize these spaces at night but it will identify them in a subtle manner, particularly for the ones that occupy the upper levels further away from most pedestrian activity.

Equipment & Furnishings

Desks, tables, chairs, file cabinets, copiers, computers, water coolers, bathrooms, potentially conference room with table.

Behavioral Consideration

Equivalent to that of standard small offices. Most likely a quieter and more relaxed tone but these considerations will be at the discretion of the particular tenants.

Structural Systems

No special exceptions will need to be made unless there are small irregularities for a particular space such as a balcony or something. Other than small things like that, these spaces will be fit into the network of structure for the entire building.

Mechanical & Electrical Systems

Standard for this space type and regulated by the tenants themselves. The extremities of these systems will be limited to ensure the safety of the tenants space as well as for the entire building.

Site / Exterior Environment Considerations

When located on building corners or notable perimeter conditions, these spaces should extend beyond normal design features to assure that the outside of the building to this space is helping the overall aesthetic appeal of the district and certainly not taking away from it.

SPACE DETAILS ■ LARGE COMMERCIAL

Unit Capacity = 40

of Units

Entirety of District = 6

Focus Zone = 1

Net Area / Unit = 4,000 sf

Total Net Area in Focus Zone = 4,000 sf

Purposes & Functions

To allow businesses space for their practice within this district. This will not just draw more people here, but it will also potentially provide jobs that could be had by residents of this district. This could further promote the proposed pedestrian plan because if people live and work within this district, walking will be the preference to get to and from the respective spaces.

Activities

Working, managing, consulting, communicating.

Key Spatial Relationships

Adjacent to or near the pedestrian path system. In some cases these space types could succeed higher up vertically like the smaller commercial spaces. Again the reasoning here is that the users will be regular and will already have knowledge of their destination. This will work for spaces that do not require much interaction with the public, but if it is an organization that attracts a large number of clients as a part of their business function, then these would certainly be more successful if located at or near the ground level and associate with direct interaction to the pedestrian path.

Special Considerations

Lighting will be standard for these types of spaces and like other spaces in this district this feature will be under the control of the individual tenants. Preferably, these spaces will be illuminated at night not just for the safety of themselves and the rest of the district, but also for the advantage of the public's view of the space from elsewhere in the district.

Equipment & Furnishings

Desks, tables, chairs, file cabinets, copiers, computers, water coolers, bathrooms, conference rooms.

Behavioral Consideration

Equivalent to the standard of this space type, and depending on the business the extremity of the spatial temperament should be at the discretion of the responsible tenant.

Structural Systems

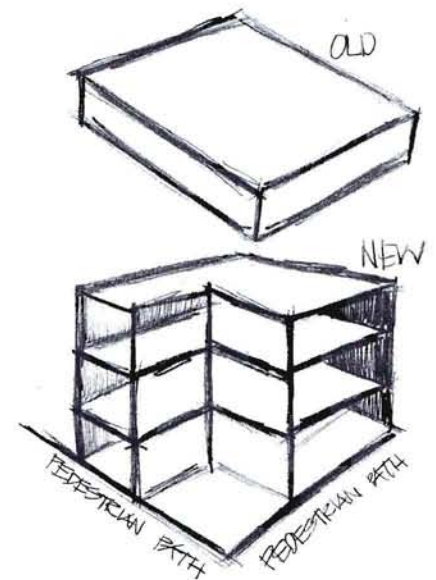
Special exceptions to standard structural systems of this type will not need to be noted at this point. With the exception of the interior feature of possibly having additional beams to support "loft-type" work spaces. This of course is under the assumption that some of these spaces will be occupying vertical space to reduce horizontal space which is a very likely scenario.

Mechanical & Electrical Systems

Standard for this space type and controlled by the tenants themselves. Extremities of these systems will be regulated for safety reasons.

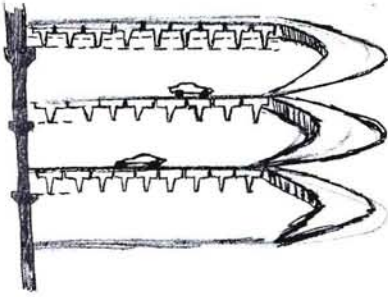
Site / Exterior Environment Considerations

For multi-layered spaces, transparent surfaces would be beneficial to draw attention from the public, and lighting can help define the space at night.



ABOVE

The vertical usage will certainly allow for a more efficient building use in plan, but the key factor here is the feeling that will be provided to the interior. Instead of having cubicles continuously spread across an oversized horizontal plan, work stations can overlook a hollow voluminous space that is enclosed with transparent surfaces, allowing views and natural light to be made available at almost all locations within the space.



ABOVE

The T-stem structural system provides such a strong load bearing capacity that the cars can drive right on it. For this district, flat parking spaces will be preferred over ramped ones to allow for a more consistent and direct connection to respective building levels.

SPACE DETAILS PARKING STRUCTURES

Unit Capacity = Undefined
 # of Units
 Entirety of District = 8
 Focus Zone = 2
 Net Area / Unit = 60,000 sf
 Total Net Area in Focus Zone = 120,000 sf

Purposes & Functions

To accommodate vehicles and store them within the district while people are away from them. Vehicles are to play a minimal role within this development, primarily just accounted for purposes of just arriving to and departing from this district.

Activities

Operating vehicles, parking vehicles, walking.

Key Spatial Relationships

The main objective here is to hide these spaces from the general public areas. The focus of movement within this district is to be pedestrian oriented, and an overexposure to automobiles, and especially of the parking of them, would contradict the thesis. For land-use efficiency these spaces will be stacked vertically similar to what is seen in denser urban parking garages, and completely unlike what is seen in standard suburban parking lots. They will need to present direct relationships to certain spaces, namely high capacity retail uses, and any other building use where the primary user is a non-district resident and driving here to use one space and one space only.

Special Considerations

Lighting will be a major factor toward the success of these spaces. Absolutely no dark or dead spaces will be permitted here because that would be recipe for disaster. To prevent these sorts of issues, efficient lighting will be at the forefront of design considerations. Lighting sources do not need to blind people, but they need to be bright enough so that all areas within the space can be visible from any point within the space. At the same time some thoughtfulness should go into the fixtures and the patterns so that it does not seem tacky or forced.

Equipment & Furnishings

Striping to define vehicle spaces, waste baskets, 3'-0" doors to interior spaces.

Behavioral Consideration

Not regulated. Greater commotion is actually helpful to reduce the chances of suspicious behavior or people.

Structural Systems

All reinforced pre-cast concrete panels. Double and single T-Stems will serve the horizontal components, and Load-bearing columns will anchor supports for these extremely heavy members. No additional surface will be necessary for driving, the cars can drive directly on top of the structural pre-cast.

Mechanical & Electrical Systems

Although the system is covered it is still essentially an outdoor space. This eliminates the need for mechanical outside of the building and electrical will be standard.

Site / Exterior Environment Considerations

Concentrated closer to perimeter, vertical circulation for cars will be showcased more freely because this will generate some enthusiasm and interest.

SPACE DETAILS ■ **EXTERIOR CIRCULATION**

Unit Capacity = Unlimited

of Units

Entirety of District = Undefined, filtered throughout

Focus Zone = Undefined, filtered throughout

Net Area / Unit = Undefined

Total Net Area in Focus Zone = Undefined

Purposes & Functions

To provide space for movement everywhere within the district. This entire district will be a pedestrian oriented facility and this will be the space type that ensures this type of mobility.

Activities

Walking, sitting, relaxing, moving, talking, taking care of business.

Key Spatial Relationships

Direct association to ALL spaces within district. This space will be present everywhere that there is an interior space bordering an exterior space, and at any linear plane in between two structures. It will primarily consist of longitudinal pathways bordered by retail fronts, interior corridors, trees, benches and sitting areas. For purposes of accommodating elevation changes it will certainly present itself in stair, ramp, bridge, or tunnel format when necessary. It will align almost all interior spaces tightly at the structure edge, and it will also navigate itself freely when necessary to lead toward other points within the district.

Special Considerations

Lighting will be a major tool in defining the boundaries of these spatial conditions. At night time a lighting arrangement will be constructed along the edges of the path system to define it's pattern in that respect, it will also light up the path space itself so that it stands out from the non-path space. Random kiosks and vendors will help promote activity, and keep a lively feeling to this space.

Equipment & Furnishings

Benches, waste baskets, ledges, railings, sit-able concrete blocks, lighting fixtures, planting fixtures, trees, kiosks, signs.

Behavioral Consideration

Runners, and bikers will need to be careful and preferably not use these spaces aggressively to avoid injuries and/or accidents. Noise will not really be a concern, but general behavior will only be regulated to a common sense type standard that is best for all parties involved with the district.

Structural Systems

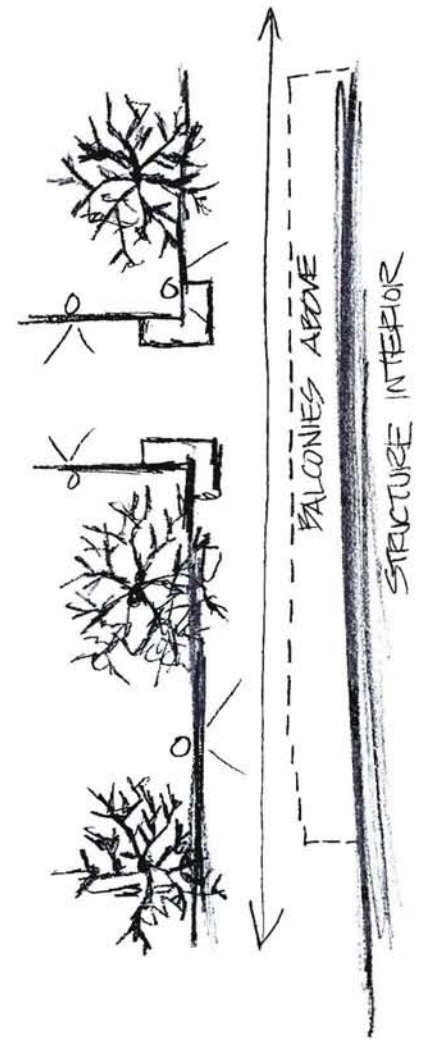
Will only require major design concentration where the surface is altered from ground level to alternative forms such as bridges, ramps, and tunnels. Reinforced concrete will be the primary material here, and in some cases a brick surface will be preferred not just to enrich the material, but to create some variation on the ground.

Mechanical & Electrical Systems

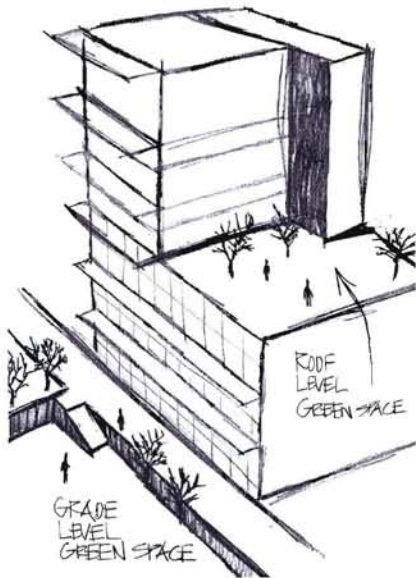
Some plumbing systems may have to be integrated to comply with certain built features surround this space, but will be covered with other materials and applications.

Site / Exterior Environment Considerations

This space is essentially the glue holding the entire district together. It will be present basically everywhere in the exterior portion of the district.

**ABOVE**

Pedestrian occupants of this space will not be bored as a result of the diversity of space types and physical expressions that this district will present. These spaces will primarily be present in the form of paths that will cover the entirety of the district. The complexity and widths of these spaces will be maximized in the more public areas, certainly some of these will be present closer to the nucleus of the site.



ABOVE

The green spaces will assist significantly in balancing the overall physical feel of this district. The people using the ground level green space will draw attention toward the natural condition of the district, while atop the roof structure, this will act as a draw that will automatically gain a greater appreciation of the building. In general these spaces will be as important as the exterior circulation spaces in terms of tying the entire district together.

SPACE DETAILS GROUND & ROOF LEVEL GREEN SPACES

Unit Capacity = Undefined

of Units

Entirety of District = 22

Focus Zone = 6

Net Area / Unit = 30,000 sf

Total Net Area in Focus Zone = 180,000 sf

Purposes & Functions

To provide comfortable exterior space and open space for the occupants. Also to ensure a human scale to the district as opposed to an overpowering one that is dominated by built structure.

Activities

Sitting, sleeping, walking, relaxing, swimming, playing ball, reading, listening to music, barbecuing, playing, observing, socializing, interacting.

Key Spatial Relationships

In some cases these spaces will be anchored to the ground consisting of natural soil and vegetation. In other forms, these spaces will be anchored to the roofs of buildings within the district to further maximize usage efficiency and create more of a private space for building residents if that is their preference. These will be used not just for the space occupancy demand, but also to help calm any physical dominance that begins to be established by taller, and wider buildings. So it seems possible that in some cases where there is a taller building edge, maybe one of these green spaces will be placed on the opposite side of the exterior circulation space to provide more balance to the specific area. In terms of the green roof applications, these spaces will likely be most successful where part of the building terminates and on top of that, but an additional factor would be situations where a different area of the same building continues upward. So these spaces would be elevated significantly above the regular grade, but also at a human level and below some levels relative to the portion of the building that is still rising vertically. This offers the opportunity for some less conventional and more desirable private green spaces.

Special Considerations

Lighting will play a key role for the 24 hour success of these spaces. It will be used to light the surfaces just enough so not very bright, and will also have some upward pointed situations where it is used strictly to illuminate the vegetation.

Equipment & Furnishings

Grass, vegetation, benches, waste baskets, ledges, railings, lighting fixtures, planting fixtures, trees, pools, kiosks.

Behavioral Consideration

Not to be regulated, as long as authorized occupants are not disturbed by activities in space, basically anything is permitted.

Structural Systems

Possibly retaining walls for the ground locations, for the vertical applications, will require a significant depth concentration at roof slab, especially in instances where there is grass, trees, and certainly swimming pools.

Mechanical & Electrical Systems

Will require additional hidden private space for the roof applications to allow for the more extreme features to be accommodated for. At the ground level these will not require any major challenges or issues.

Site / Exterior Environment Considerations

The application of these spaces into this district shows respect to the natural environment and serves as an efficient balancing strategy. The site consists of expressive topography and these spaces will allow that to be maintained by treating it as a design block that will ultimately work to the spaces compositional advantage. It will create a more thoughtful definition within these spaces and will also provide another feature for occupants to respond and react to.

SPACE DETAILS EXISTING CONDITION CORRIDORS

Unit Capacity = 300
 # of Units
 Entirety of District = 2
 Focus Zone = 1
 Net Area / Unit = 45,000 sf
 Total Net Area in Focus Zone = 45,000 sf

Purposes & Functions

To reach out to the existing suburban condition in its problematic state and basically enable its activity to co-exist with the new district. Given that two major roads separate these building spaces from the district it will be necessary to extend a corridor outward across these road systems and into these existing conditions. This concept will serve as a double draw, bringing people from standard suburbia into the reinvented suburbia and vice versa. People in each area will be curious about what is taking place across the street, and the challenge is beyond getting them from one side to the other, but rather it is inspiring the building users to want to go across the street. This will be made possible by carefully designing a human oriented space that will serve as a connection corridor.

Activities

Walking, talking, moving, exploring, sitting, relaxing, socializing, interacting.

Key Spatial Relationships

Given that the intensity level and traffic volume of the existing roads is much too high for humans to possibly interfere with, the circulation to cross them will have to be accomplished via tunnel or bridge. At lengths of over 100 feet, a tunnel would not be an inviting solution, it would probably scare people away instead of drawing them in. A bridge would be a much more sensible solution especially providing the habitable levels that will already be developed at the necessary locations. The second level of buildings within the new district in these spaces are for public users, so the people factor will be an automatic positive. This will enable an opportunity for edge spaces at these second levels to extend themselves to the south in one case and to the east in the other at a level that will be just high enough for the required highway clearance not to be interrupted. For the building to the east, there is already a single story building at the crossing point, so the crossing corridor can use the roof of this building as a landing point, and likely turn that into some form of green roof system. To the south side of the district is a series of four restaurants (KFC, Waffle House, Hardees and McDonalds). The landing point of the corridor on the south side of Tylersville Road will have to be built up and then designed to interact with these existing spaces.

Special Considerations

Lighting will be present in these spaces at the edges and as supplements to the vegetation features that will be included. When cars are driving underneath these corridors at night time, the lights will help define them, and the vegetation will be lit up creating a feeling of illuminated vegetation hovering over the road.

Equipment & Furnishings

Ledges, railings, vegetation, lighting fixtures, planting fixtures, benches.

Behavioral Considerations

Physical behavior will have to be regulated to assure that there are no instances where people are risk of falling off the bridge.

Structural Systems

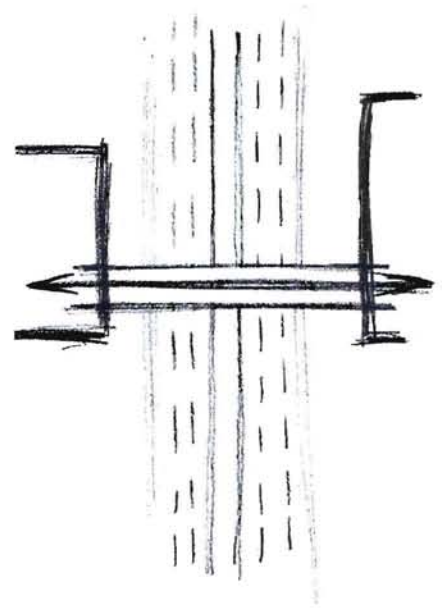
Cast iron beams or trusses will have to carry the load over top of the highway. The spanning requirement will be over 100 feet, so the horizontal load bearing members will require very careful selection and sizing. Fastened to these beams or trusses will be a corrugated metal decking system that will contain a six inch reinforced concrete slab that will serve as the surface material for this space.

Mechanical & Electrical Systems

Mechanical systems will not be necessary here. Electric circuits for the lighting will be run just underneath the corrugated metal decking and will have branches extending to the surface to provide for the lighting fixtures. Drainage will be another issue, it will be either a tube system in which all water collects and runs off to the same spot, or a simple series of impervious spaces to just let the various run-off spots leak through to the roads below.

Site / Exterior Environment Considerations

Initially this concept may appear to be overpowering and/or dominant to the existing suburban condition. Careful design consideration will be a must in terms of not abusing this design solution. It should be treated as more of a mediating utensil rather than a bold attention seeking one. It is ultimately showing a serious sign of respect to the community of West Chester and to the entire city of Cincinnati by accepting what is currently built and reaching out to include it in a more aggressively built area.



ABOVE

The layout of this space can easily be formulated into a perpendicular relationship to the existing spaces. This will help promote the respect factor and feel like more of a "fitting in" approach instead forced approach. The traffic system will not be bothered at all as long as drivers kept their eyes on the road.

SPATIAL ORGANIZATION QUANTITATIVE SUMMARY

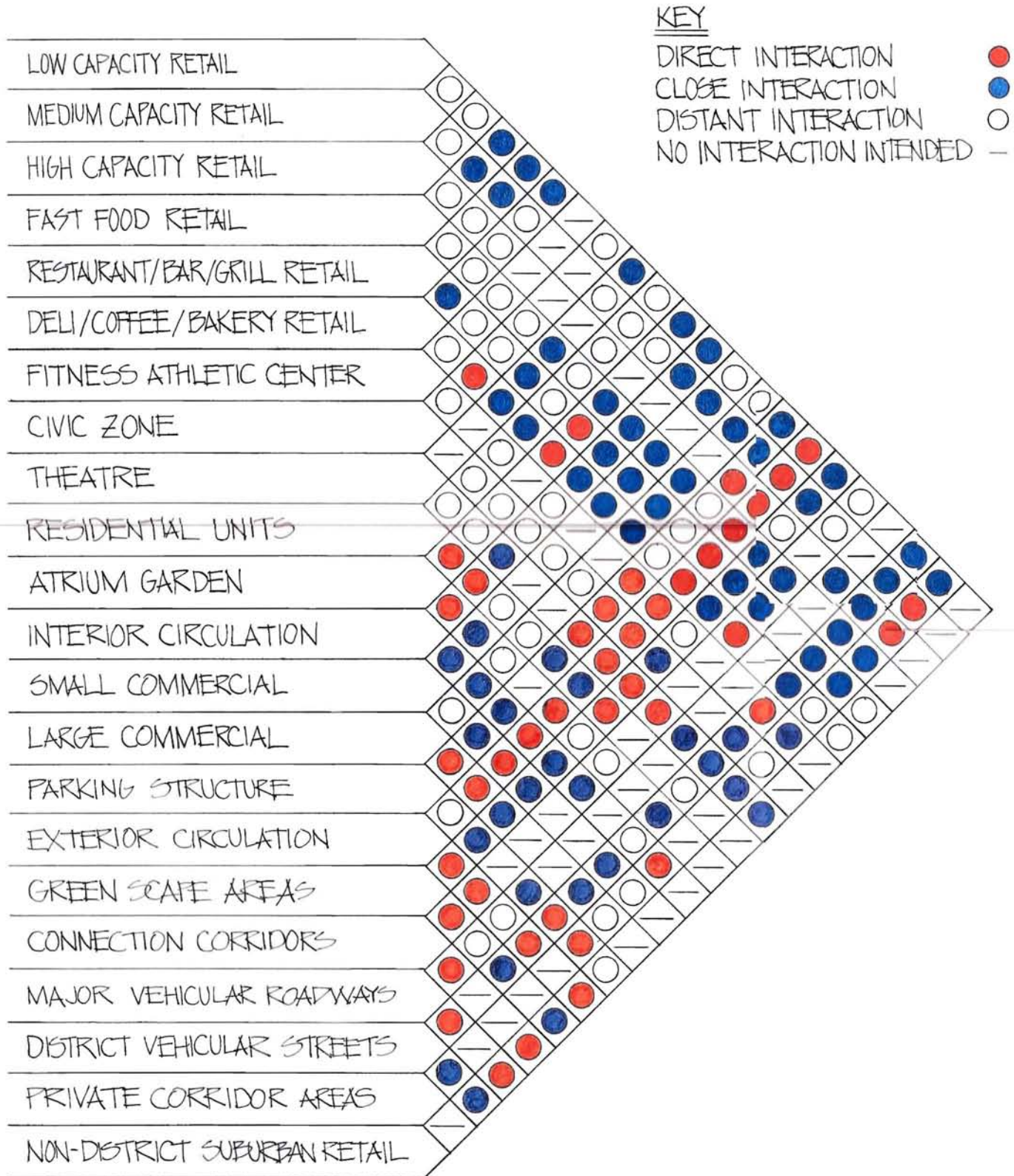
Interior Spaces	ENTIRETY OF DISTRICT		FOCUS ZONE	
	# of & Size	Total	# of & Size	Total
Low Capacity Retail	40 @ 3,000 sf	120,000 sf	15 @ 3,000 sf	45,000 sf
Medium Capacity Retail	20 @ 8,000 sf	160,000 sf	3 @ 8,000 sf	24,000 sf
High Capacity Retail	3 @ 90,000 sf	270,000 sf	0 @ 90,000 sf	0 sf
Fast Food Retail	12 @ 3,000 sf	36,000 sf	5 @ 3,000 sf	15,000 sf
Restaurant/Bar/Grill Retail	16 @ 5,000 sf	80,000 sf	6 @ 5,000 sf	30,000 sf
Deli/Coffee/Bakery Retail	8 @ 3,000 sf	24,000 sf	3 @ 3,000 sf	9,000 sf
Fitness & Athletic Center	1 @ 45,000 sf	45,000 sf	1 @ 45,000 sf	45,000 sf
Civic Zone	1 @ 15,000 sf	15,000 sf	1 @ 15,000 sf	15,000 sf
Theatre	1 @ 28,000 sf	28,000 sf	1 @ 28,000 sf	28,000 sf
Residential Units	400 @ 1,200 sf	480,000 sf	50 @ 1,200 sf	60,000 sf
Atrium Garden	3 @ 8,000 sf	24,000 sf	1 @ 8,000 sf	8,000 sf
Interior Circulation	Continuous	339,000 sf	Continuous	70,000 sf
Small Commercial	16 @ 1,500 sf	24,000 sf	4 @ 1,500	6,000 sf
Large Commercial	6 @ 4,000 sf	24,000 sf	1 @ 4,000	4,000 sf
TOTAL	-----	1,693,000 sf	-----	353,000 sf
Exterior Spaces	# of & Size	Total	# of & Size	Total
Parking Structures	8 @ 60,000 sf	480,000 sf	2 @ 60,000	120,000 sf
Exterior Circulation	Continuous	615,000 sf	Continuous	172,000 sf
Green Scape Areas	22 @ 30,000 sf	660,000 sf	6 @ 30,000 sf	180,000 sf
Connection Corridors	2 @ 45,000 sf	90,000 sf	1 @ 45,000 sf	45,000 sf
TOTAL	-----	1,845,000 sf	-----	517,000 sf

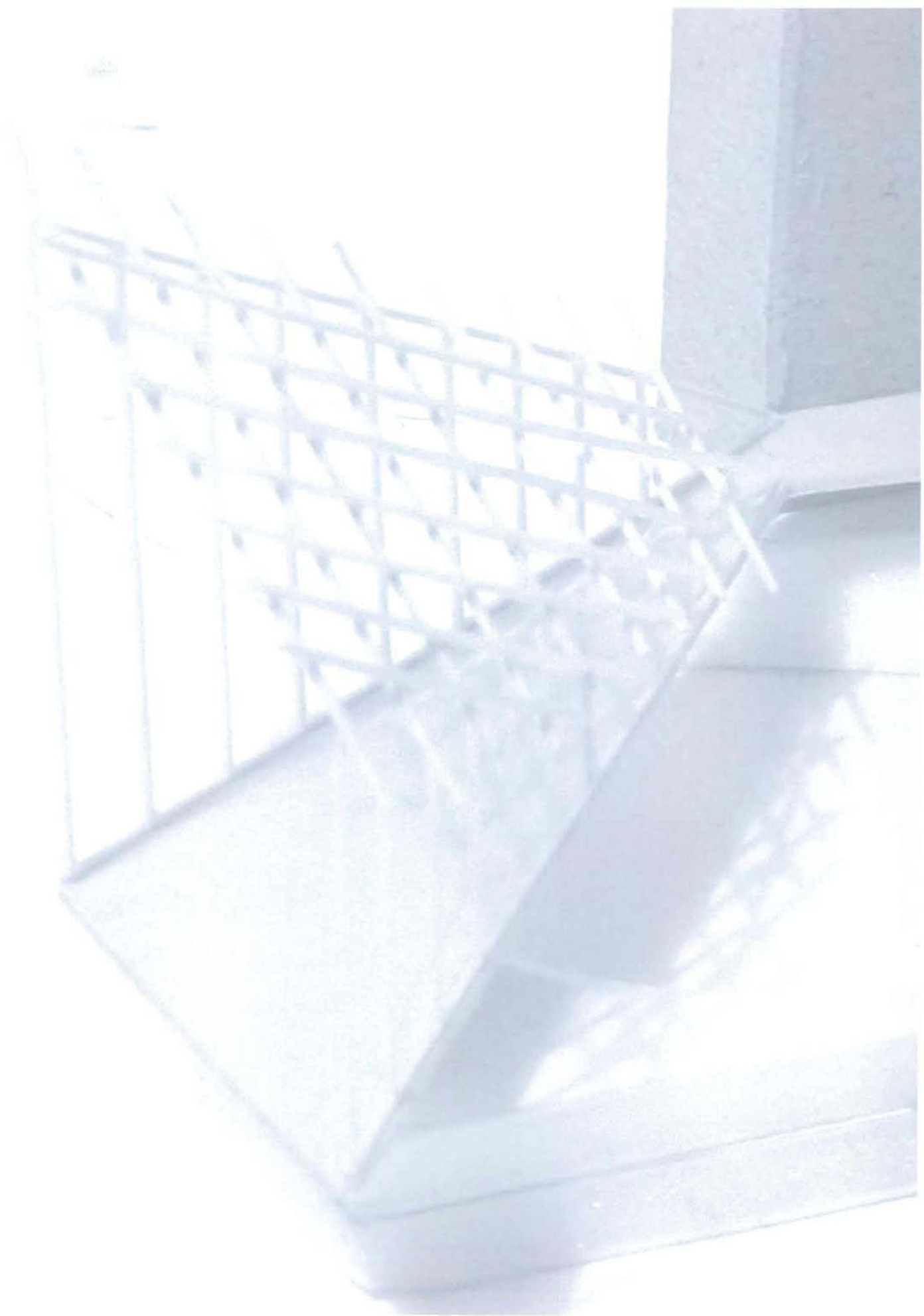
SPATIAL ORGANIZATION QUANTITATIVE SUMMARY

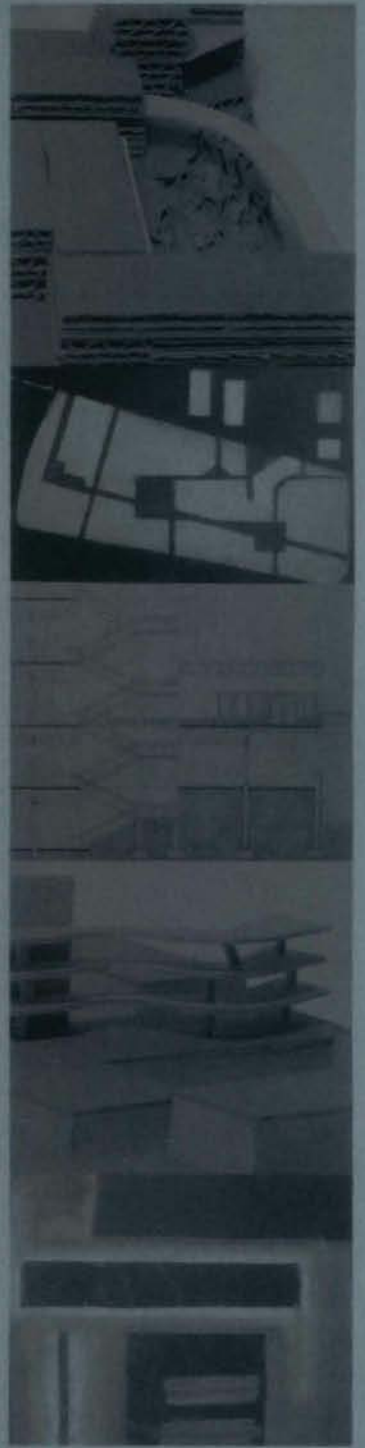
All of the figures listed in the quantitative summary above are preliminary estimates and absolutely will change. They are to provide the anticipated land use and floor area for the general breakdown of space distinctions. The interior and exterior circulation spaces are continuous through the entire site and that also applies to the focus zone. The interior circulation space was calculated by multiplying the total estimated interior area by 25 % and for the exterior spaces it was the total estimated area of exterior designated space multiplied by 50 %. Again these are estimates of the amount of circulation space that will be necessary for each condition. Numbers of units will change and so will sizes so this is a preliminary template.

STRENGTH OF RELATIONSHIP BETWEEN SPACES

SPATIAL INTERACTION MATRIX

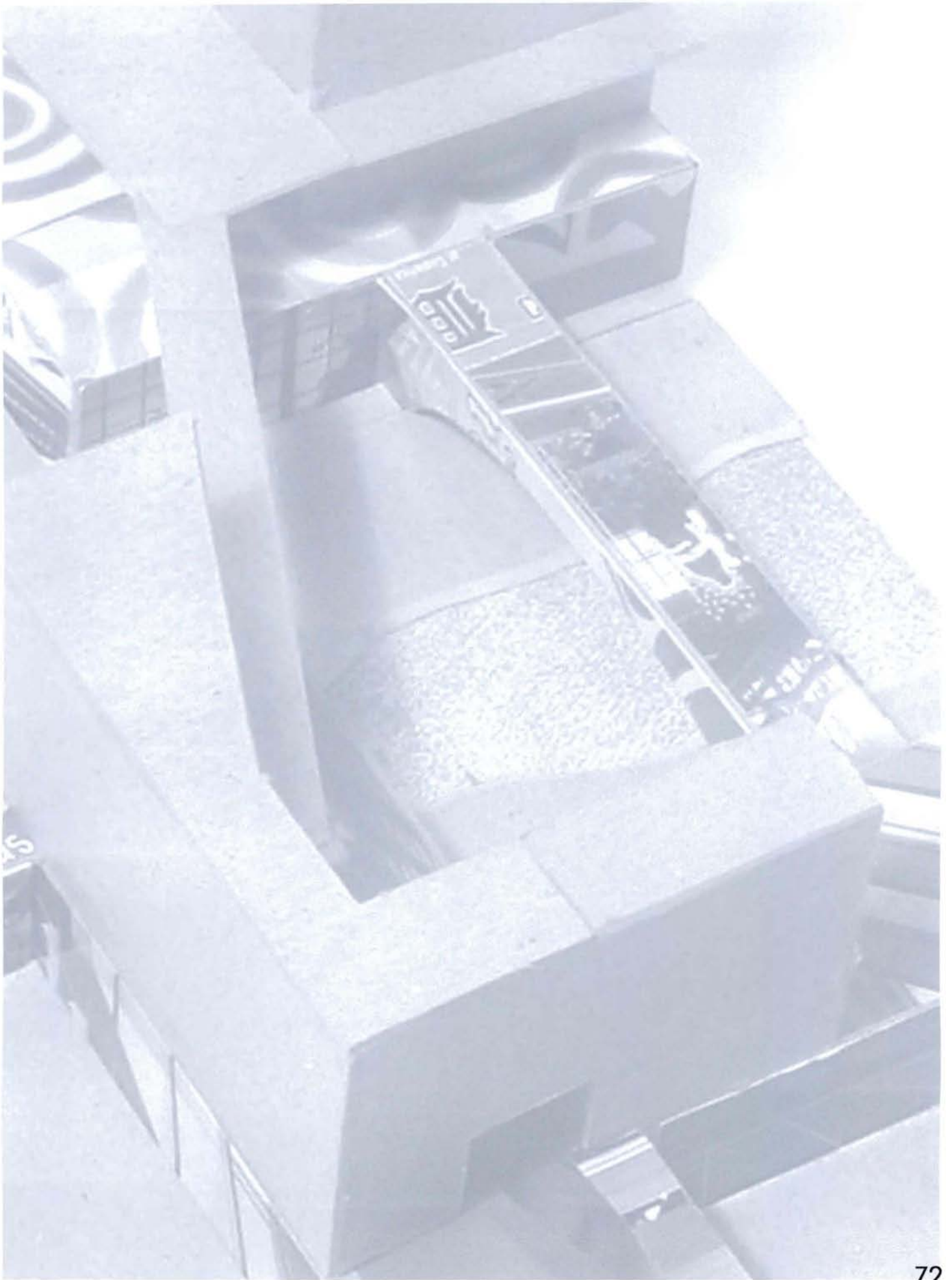






EVOLUTION OF DESIGN PROCESS





Conceptual Form Study #1



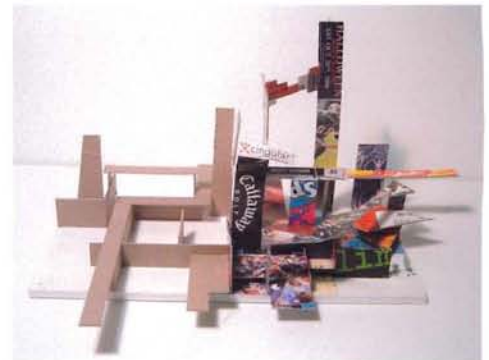
INTENTION & OBSERVATIONS

This initial study was the first of the springboard phase and ultimately kicked off the conceptual design process.

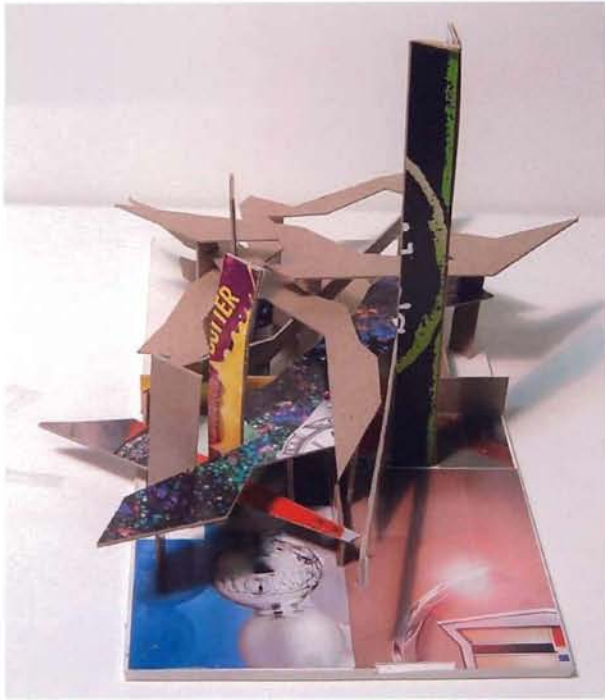
The intention here was to apply some of the general concepts relative to the thesis position in a method that could be expressed visually and physically. Some of the principles that were aimed at expressing included density, complexity, variety, and randomness.

Given that the "edge condition" was an issue that was investigated in depth, there was also an attempt in this study to contrast the physical and visual mediums of the built and rural contexts. This was explored through this model as shown in the images to the right by using plain chipboard to represent the medium of the rural context, and then an assortment of printed cardboards to represent the complexity and randomness of the built medium.

The line drawn here was probably done so too boldly and in an over exaggerated manner. Likewise the representation of the built half of the study is more complex than it necessarily needs to be, and would likely be representative of a context in an extremely dense area like downtown Chicago or New York City, as opposed to the typical suburb.



Conceptual Form Study #2



INTENTION & OBSERVATIONS

The purpose of the study was to serve as a follow up exploration to the previous one. Again there is an attempt to distinguish built and rural contexts by separating basic chipboard from printed cardboard that was reclaimed through recycling. Unlike the last study where the line between the two represented contexts was bold and essentially direct, there was a greater focus here to specifically blend the two mediums in a limited manner. This means that the two contexts were to interact with each other in a way that more closely simulates the blending of suburbia and rural countryside. So the difference between the two is apparent but also has a subtle expression to it. The rigidity of the platforms, edges, and surfaces was purely an attempt to showcase a less conventional form of built space, also while emphasizing the idea of path. It somewhat presents itself as a series of platforms that overlap and run through one another, and this was attempted to represent the concept of pedestrian circulation at a multiplicity of levels. Given that the project was not likely to be flat, the issue of circulation at multiple levels was a definite concern.

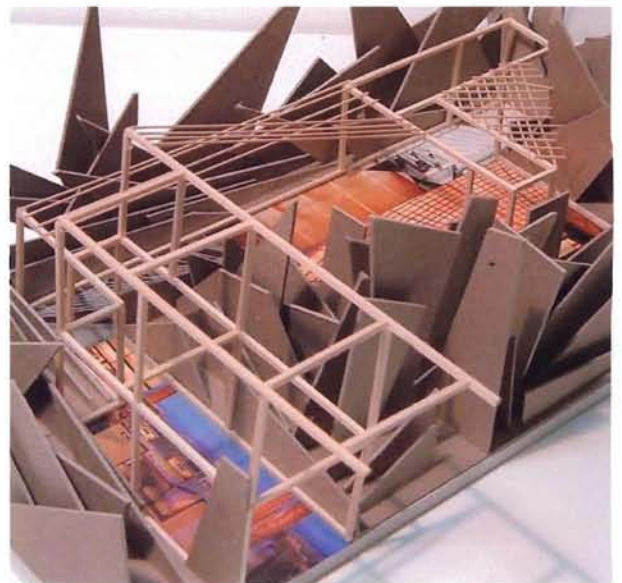


Conceptual Form Study #3



INTENTION & OBSERVATIONS

With this study, the concentration was centered mainly on the relationship of both interior and exterior circulation spaces with the natural landscape. Given that the site consists of an undulating topography and other natural features, these elements should be embraced within the function of the new design. The cardboard triangles shown in the images to the right are intended to represent topographic variation and vegetation. Though these objects are expressed in an abstract manner, as are the circulation spaces, the goal is to interweave the separate entities in such a way that is unconventional and forces the two components to interact with each other and really depend on each other for their individual success within the district.



Conceptual Form Study #4



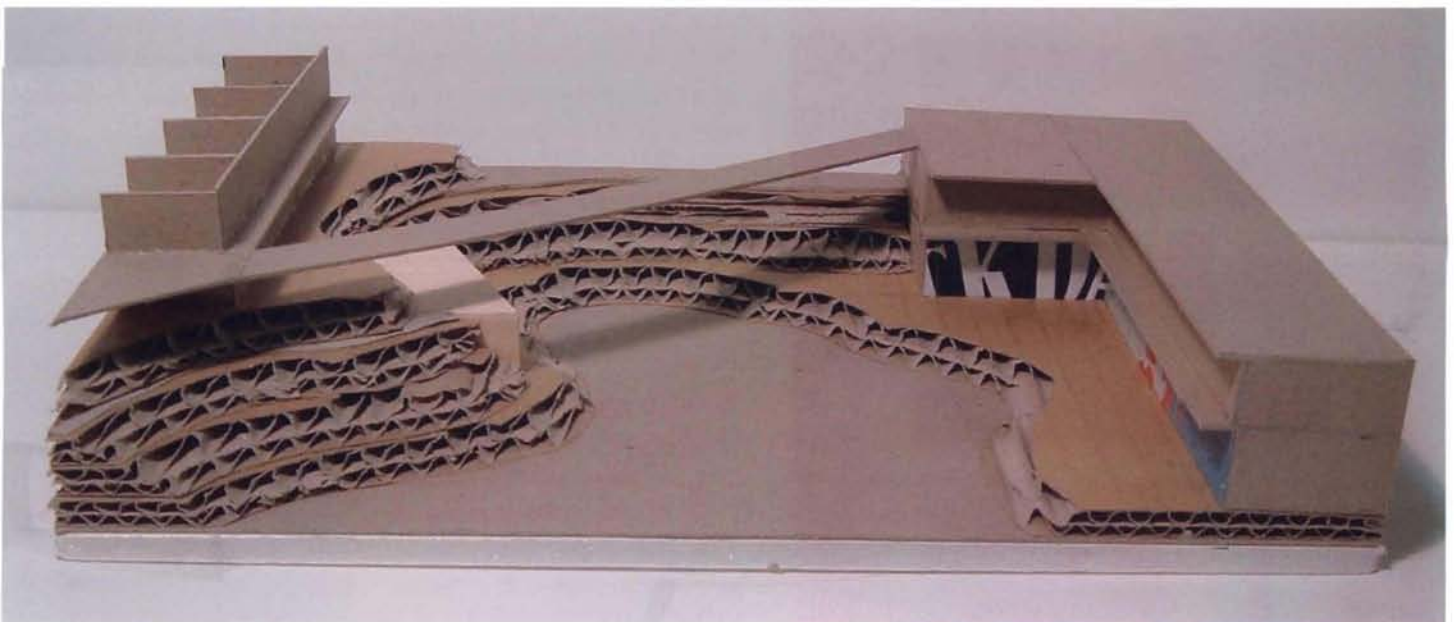
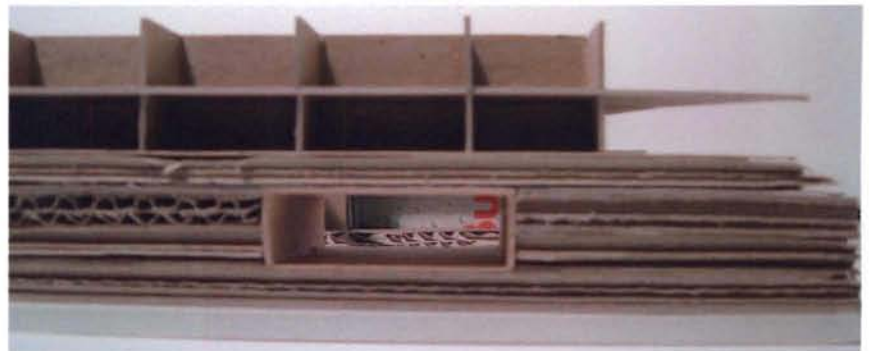
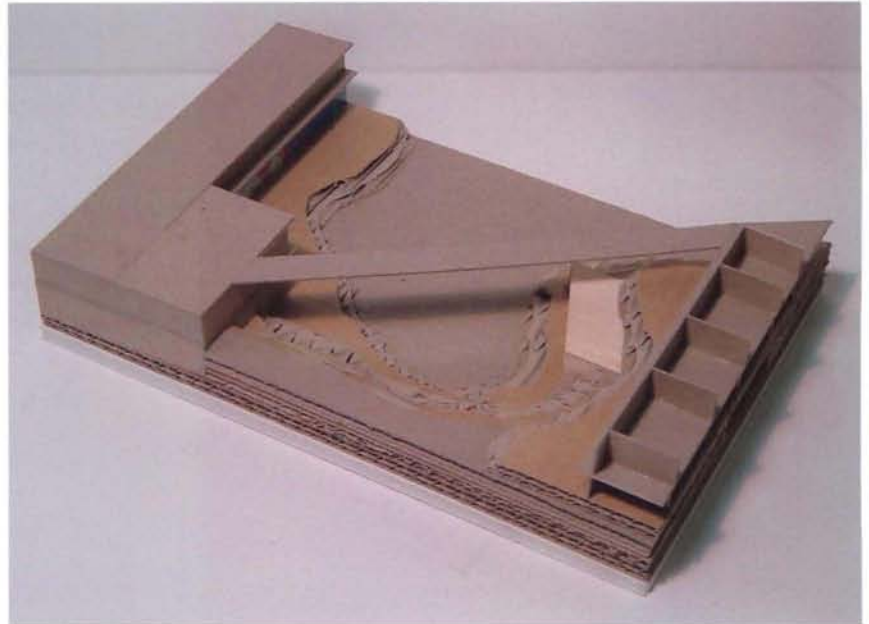
INTENTION & OBSERVATIONS

In what became the strongest study for communication purposes, "Model #4" offered the relationship of realistic building form, and more importantly concepts for circulation as a way to link them. It was the most comprehensive form of representation to this point, and this ultimately became the foundation and starting point for the ensuing set of springboard studies. The reason that this study had the greatest communication power to date was its emphasis on the built environment with the pedestrian path system. It had a more believable sense of scale and practical sense of structural development. Though simplistic in composition, it led to the deepest and most thorough analysis for the functional components of this project relative to the thesis. Namely pedestrian path systems, building scale and relationships, and the presence of natural site elements were identified and further explored as a result of this study.

Conceptual Form Study #5

INTENTION & OBSERVATIONS

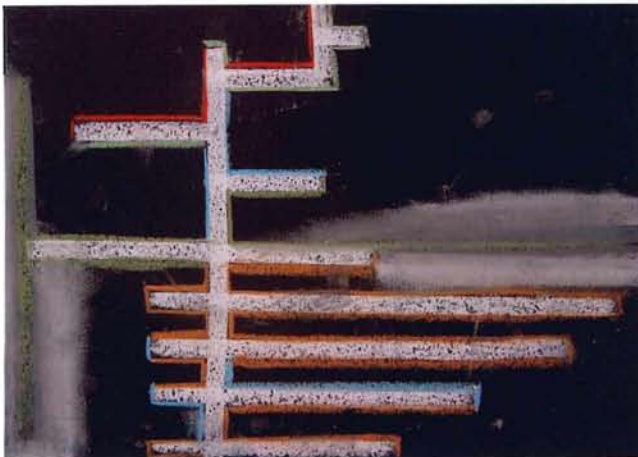
This study was specifically an attempt to gain a better understanding of building and pathway interaction with the ground. Even though this study was conducted in response to the Farmington Hills site, it still assisted the design given that the Cincinnati site offers many of the similar natural conditions, particularly in regards to the topography. Given the likelihood of topographic elements such as ridges and ravines, these features seemed like opportunities for pathway and building response. As shown in the images below and to the right, it was conceivable that elevated walkways and tunnels would be a method to moderate the circulation with the most extreme of topographic situations. In some cases where these concepts could generate a favorable design solution, and the natural condition did not quite meet the necessary level to allow it to happen, it would be required for the ground plain or vegetation composition to be manipulated by means of moving earth. This also applies to vegetation whether by way of clearing trees, or planting depending on the respective situation.



Abstract Section Study



The idea with this first abstract section was to show a potential spatial relationship between earth and building. In this case it is showing a possible slope with habitable space using it to sink itself deep into the ground. Supplementing this sunken interior space would be an overhead interior space above it that hovers over the deeper portion of the slope.



This attempted to experiment with a potential layering system that would have some consistency in terms of spacing in the Z dimension, but the horizontal dimension in plan would not have such an obvious pattern. The possibility of some levels extending further out than others (above or below) was of interest in an effort to develop interior and exterior spaces.



This is only a section through what may be a voluminous building area and the point here was to get a feel for the relationship between a larger scaled structure and the general public interaction space. The bridge-type walkway that appears to span across was another idea of connecting buildings by way of exterior path located above the ground plane.

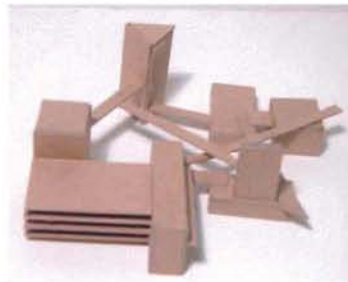


This was by far the most abstract of this section set, it was an attempt to create a relationship specifically between interior space and the natural environment in which that space would be embedded in. That is the reasoning for the brown and green coloring as representative of soil and vegetation. The placement of vertical space was not well thought out here, and really does not fit into any type of

Charette #1

STUDY #1

The first charette model was just a simple layout of how multiple buildings could be potentially laid out on site with elevated pathways to link them. Certainly the parking as shown in the bottom of the model was intended to be kept away from the general pedestrian circulation and congregation space.



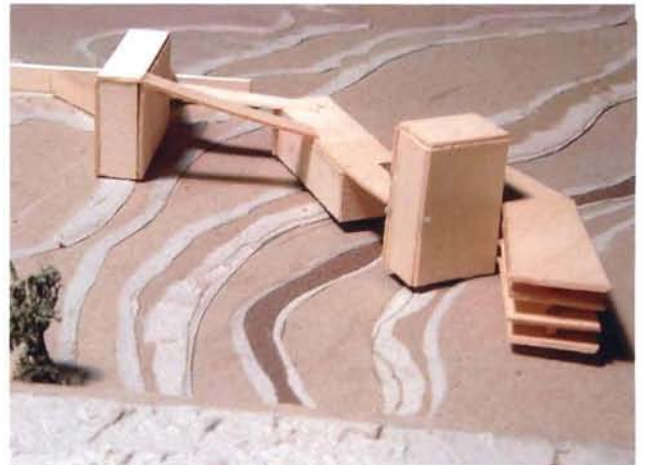
STUDY #2

The second study in this set was attempting to achieve the same thing as in the first one with a centralized congregation space surrounded by various buildings and elevated walkways. With the river flowing through the center of the system, and the built district surrounding it. This presented itself as a valid opportunistic method of letting nature filter through the architecture.

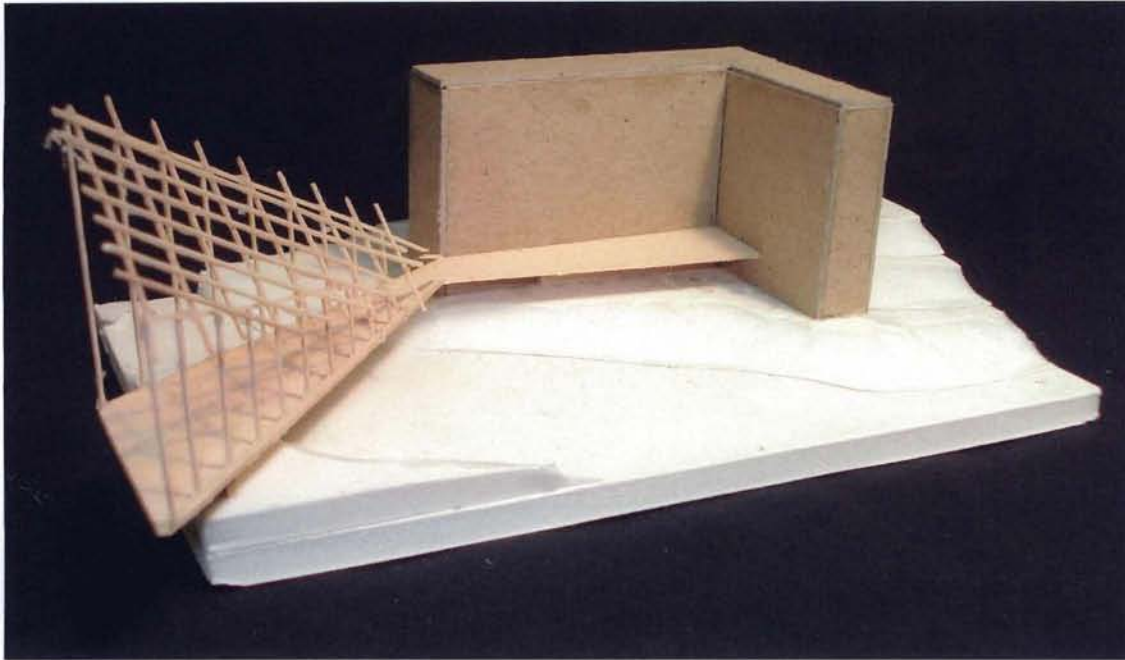


STUDY #3

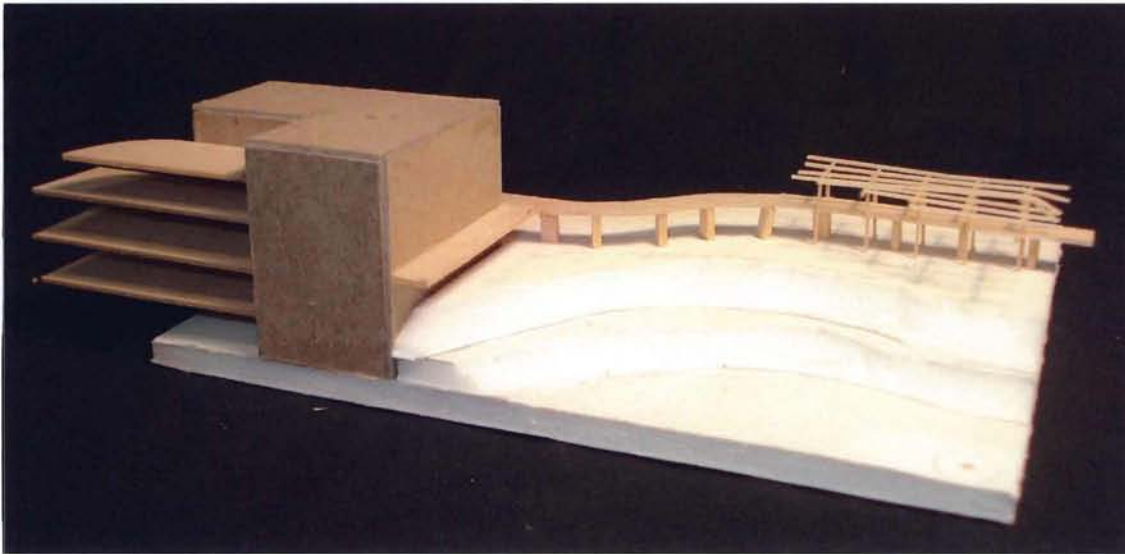
For the final charette study, there was a different concept in mind, one that was attempting to deviate from the central congregation idea which was previously dominating the pattern of thinking. The idea of a longitudinal plan was obviously in control of the form with this one, and eventually served as a tool to organize space based on edges as opposed to nodes.



Articulation of Pedestrian Path System



PATH STUDY #1

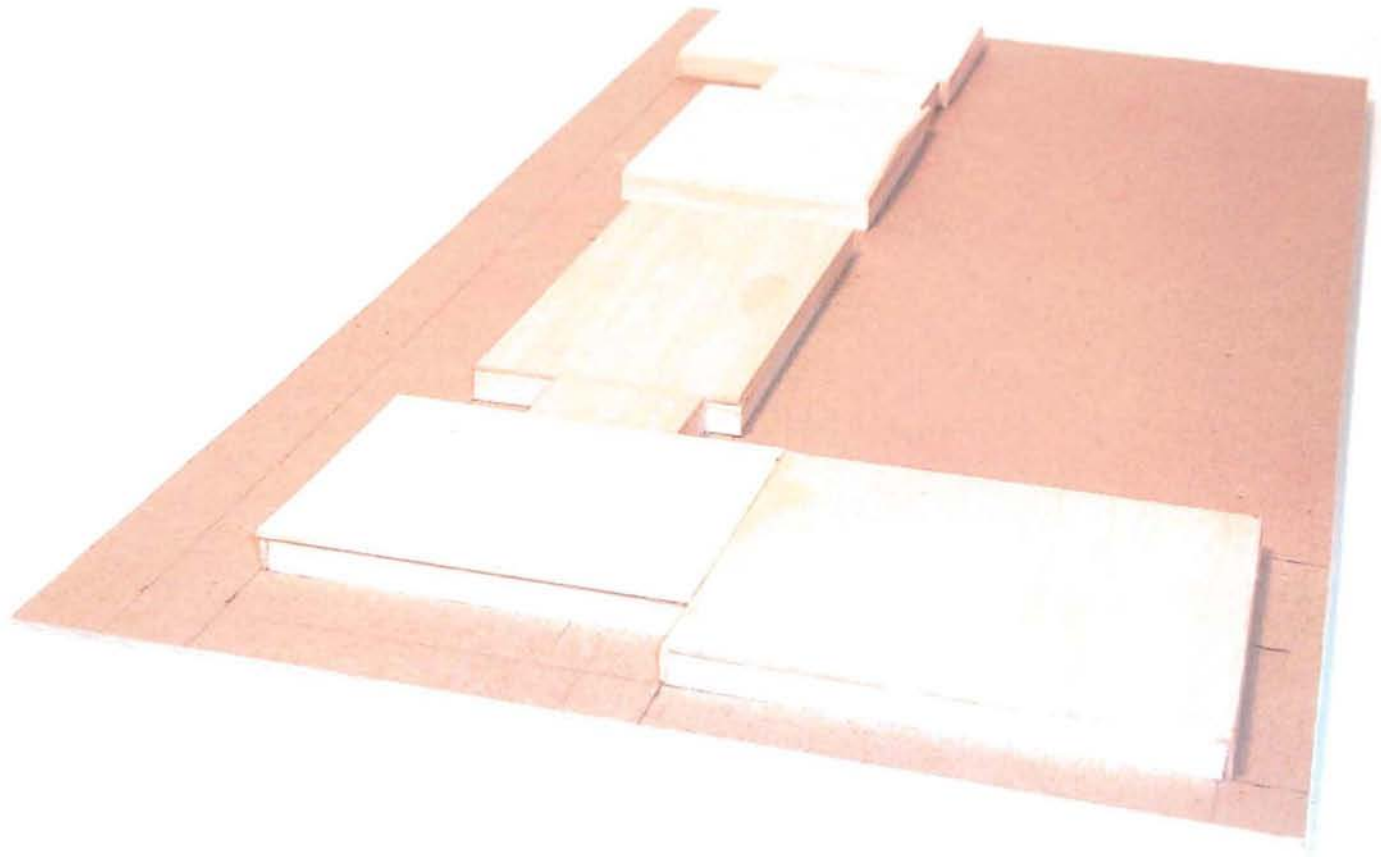


PATH STUDY #2

INTENTION & OBSERVATIONS

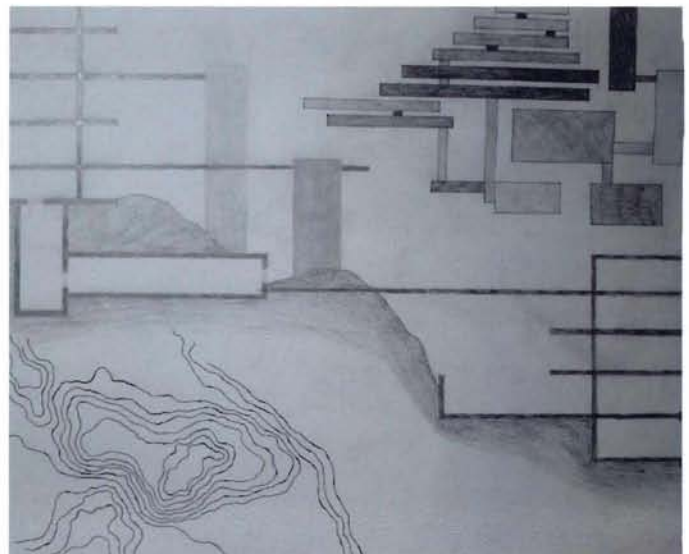
These study models were specifically intended to explore potential roles and formations of the pedestrian path system that will filter through the entirety of the district. Given that the pedestrian is essentially the catalyst for this project, the system which accommodates them had to be considered very thoughtfully in regards to both interior and exterior spaces. In above images, the models are assuming a sunken ground plane adjacent to a building within the district. The pedestrians would be placed at building level and the vertical point transition in these cases would remain relatively constant, and probably spanning over the natural landscape below. Various decorative elements would be beneficial as well whether created through wood, steel, or stone, to provide the overall space in this cases a notable sense of importance.

Reinventing the formation of Standard Strip Malls

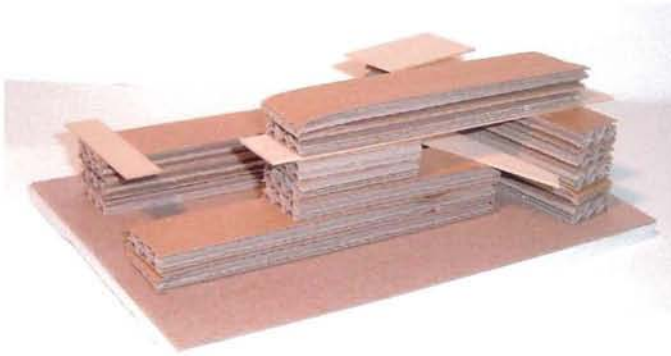


ACKNOWLEDGING PRESENT & PLANNING FUTURE

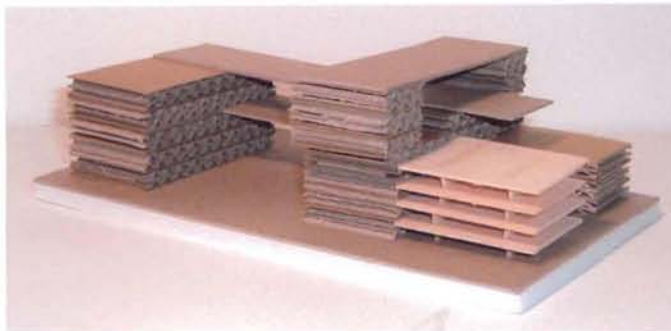
In order to gain a better sense of comparable space relative to that of an actual strip mall, a miniature scaled strip mall was constructed to use for reference and comparison to the ensuing set of form studies. This next set of studies which is shown in the following pages used this model as a template in order to match the overall volume of a typical strip mall, and the same necessary demands in regards to required space. The comparison of building typologies is bold and clear with the radical difference of expression regarding the respective physical forms of these strip mall type programs. The goal was to ultimately see how these spaces can transform their position from the image above into a significantly different environment, one that is designed more aggressively in an effort to embrace the human oriented element as mentioned in the thesis.



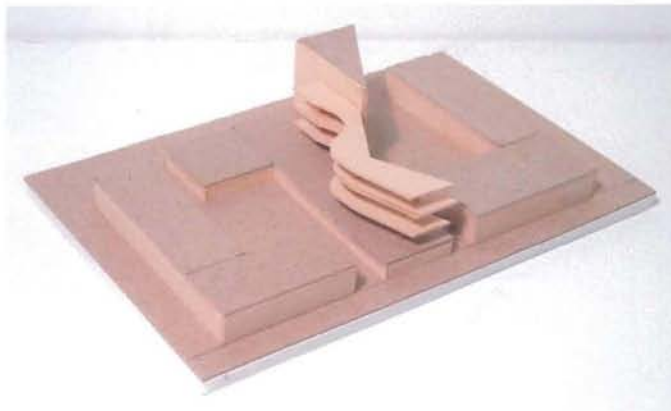
Strip Mall Physical Alteration Studies



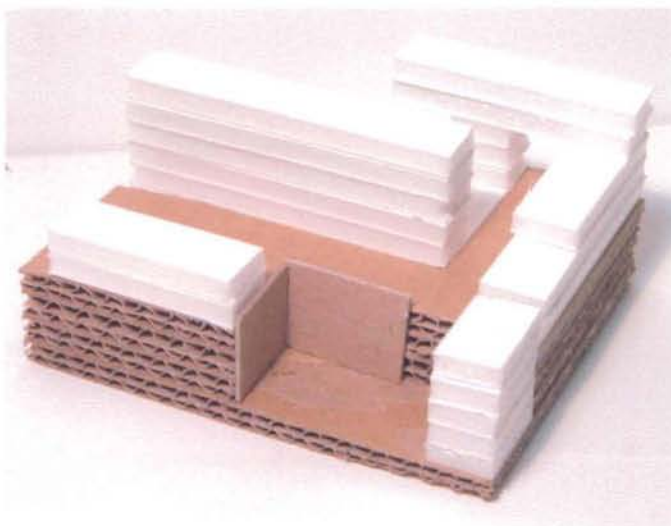
FORM EXPLORATION #1



FORM EXPLORATION #2



FORM EXPLORATION #3



FORM EXPLORATION #4

ELEMENTS OF CONCENTRATION

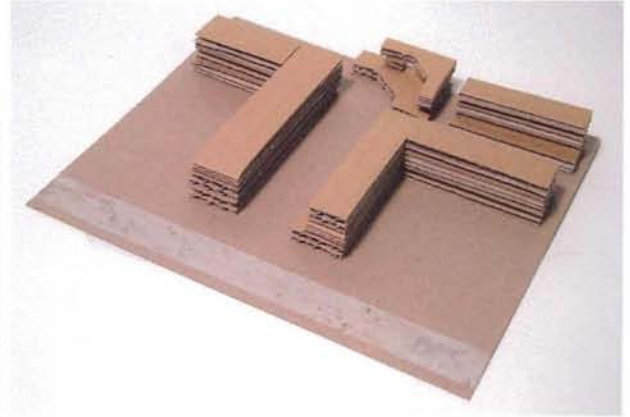
These studies for the most part did not take into account the ground plane as much as they did a conventional approach to pedestrian path and building. These solutions could only be workable options in specific areas of the site where the ground plane is less expressive. These studies did include some elevated exterior spaces that could be occupied by uses with exterior seating like a restaurant, cafe, or showroom. There was some attempt to express certain portions of the building more so than others, the reasoning here was to provide rigidity and to avoid having a dominating consistency to the form which is the reality of suburbia in almost all situations.

Strip Mall Physical Alteration Studies

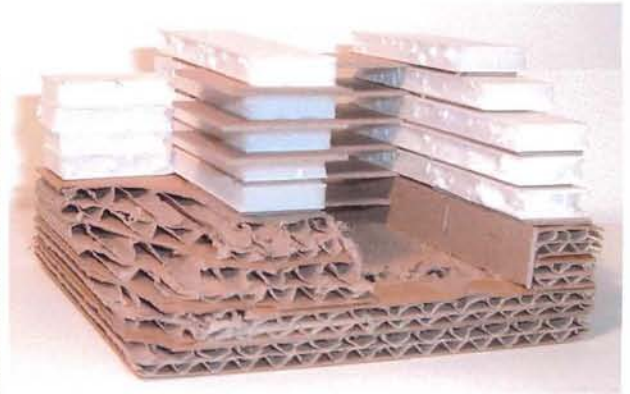
ELEMENTS OF CONCENTRATION

Most of the images show models that were dealing with layered conditions, and still not significantly emphasizing the ground plane. The building compositions were mostly formulated in a manner that unifies them or orients them relative to one another. Parking was one of the components considered and was certainly kept away from the centralized public spaces and oriented most toward the perimeter.

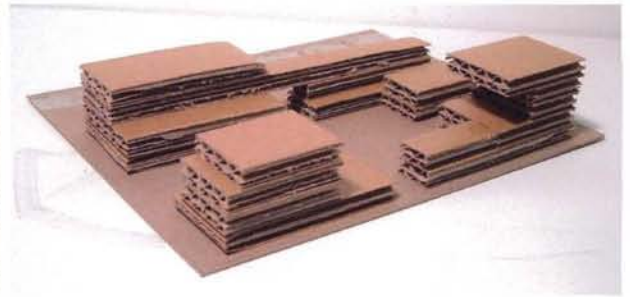
FORM EXPLORATION #5



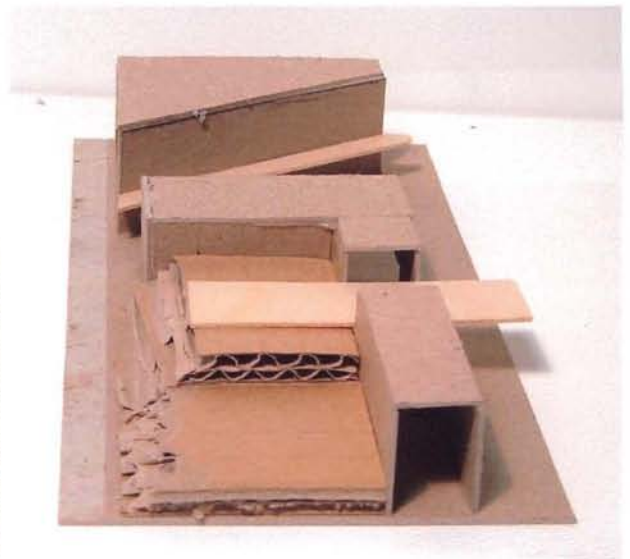
FORM EXPLORATION #6



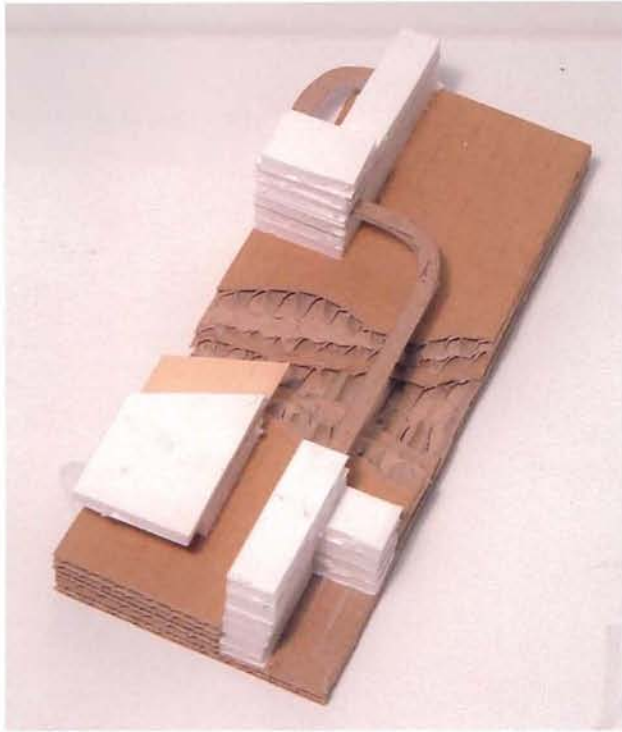
FORM EXPLORATION #7



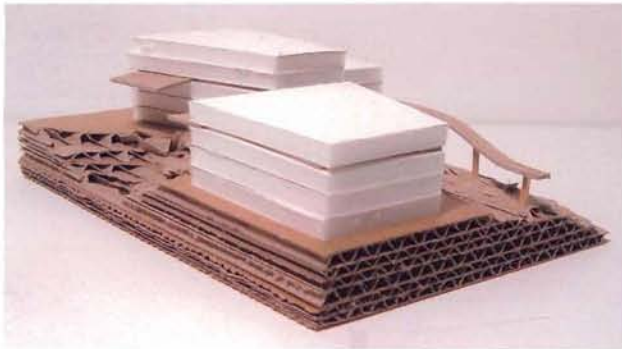
FORM EXPLORATION #8



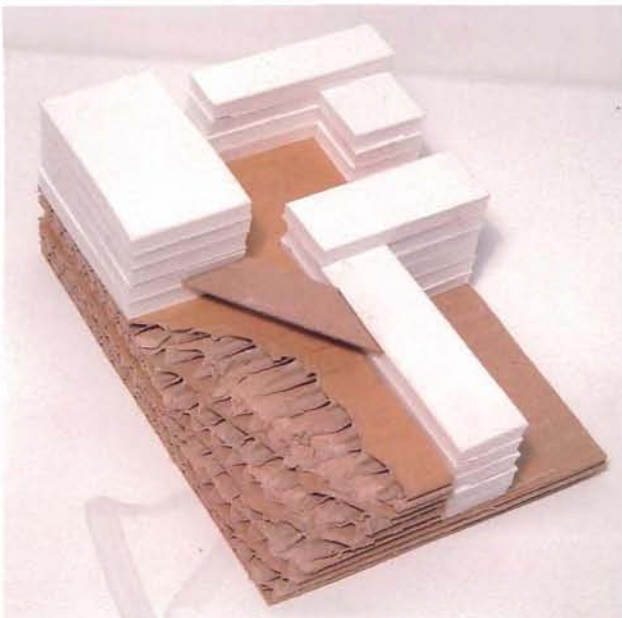
Strip Mall Physical Alteration Studies



FORM EXPLORATION #9



FORM EXPLORATION #10



FORM EXPLORATION #11

ELEMENTS OF CONCENTRATION

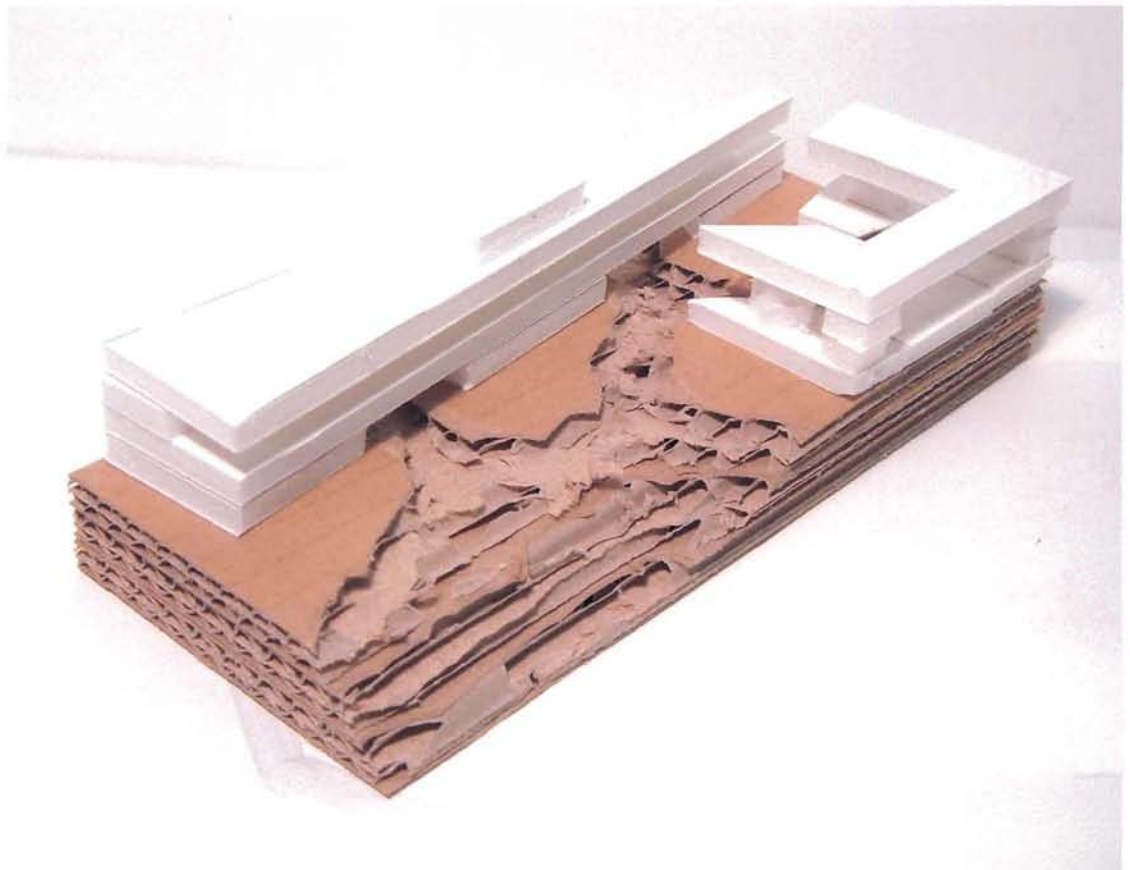
The natural landscape will play a role in dictating the plans and elevations of this new district. Rather than using earth-removal equipment as a means to totally eliminate the existing site condition, it will be used more so as a means to create pockets of built space that will be quilted into the given context. The topographic variation will be places where pedestrian paths can be more expressive by means of tunnels, bridges or exposed stair wells. The challenge for concepts like the ones displayed to the left will be accommodating retail in a manner that is directly interactive with the primary pedestrian system. This will likely require these spaces to be low to the ground which further emphasizes the importance of the ground plane for this development.

Strip Mall Physical Alteration Studies

FORM EXPLORATION #12



FORM EXPLORATION #13



ELEMENTS OF CONCENTRATION

For these last two studies, a greater effort was focused on letting natural elements, most notably in the above cases topography, allowing itself to really become part of the design solution. Where possible it is a sensible solution to let the site dictate the design as opposed to forcing the design to alter the site. The above model is an example of an edge condition that can result from a ridge or slope base in the ground. Once having responded to the natural condition, it can serve as a base for later design issues and decisions to work from.

SPRINGBOARD ANALYSIS & CONCLUSIONS

The springboard process provided a solid opportunity for integration of building and site. The combination of planning in 2-dimensions and 3-dimensions allowed for a broad perspective of thinking to take place that helped immensely in pushing toward the design stages.

The layout scheme which will be shown shortly coming, brought the community interaction problem to the surface. Not that it was absolutely necessary to incorporate itself within the existing surrounding context, but this exploration process did lead itself down an un-navigated road when everything was being experimented with, and there was really nothing tangible to respond to. The studies that were produced in this springboard process will really be able to open themselves up now that the site has been transferred to Cincinnati, and there are many existing conditions now to respond to. The way that the roads, topography, and existing built environment present themselves at the new location really allowed for a much greater sense of welcoming and belonging. The springboard models had a greater effect in the ultimate layout development than did the sketches that will be seen in the next few pages, mainly because of their relationship to the existing strip mall building type.

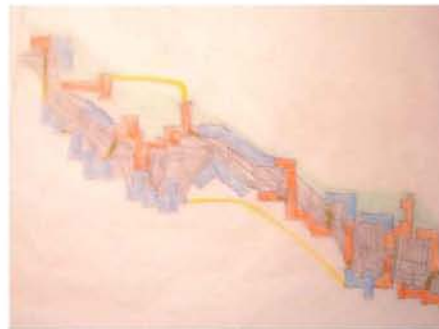
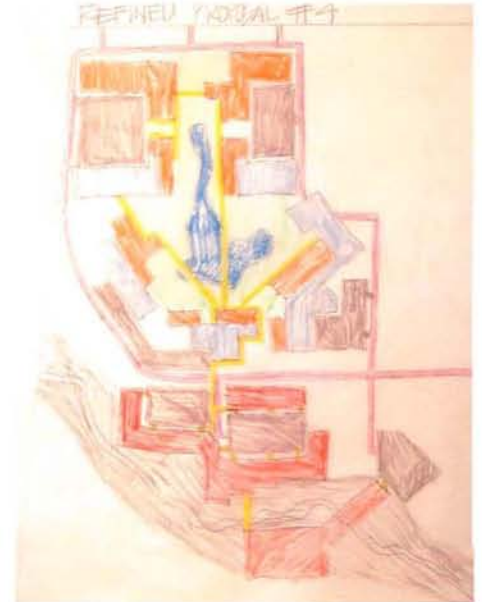
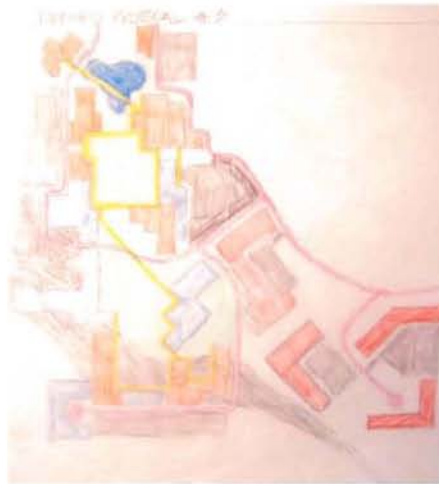
The study series that represented a transformation from the existing strip mall type to the more extreme and aggressive ones served as somewhat of a launching pad toward the overall design concept of the buildings and their layout within the district. It enabled for a more thoughtful sense of exploration regarding use of the vertical dimension and responsiveness to undulating natural conditions. It triggered more of an artistic sense of thinking as opposed to solely a technical one as a method of working with space toward a successful design solution. It would not be right to set out toward a design solution without exploring aesthetic ideas and patterns that could effectively benefit the project program and in this case the thesis as well.

This phase was productive, enlightening, and door opening toward alternative perspectives and depth regarding aesthetics that would have likely been ignored without it. It really offered a more thoughtful sense of what was going on in terms of designing a building that responded favorably to the thesis. Though site was used for this investigation perhaps more than it needed to be, the reality that this project is site specific allowed for these components to play a role in the springboard process.

Potential District Master Plan Layouts

FARMINGTON HILLS - SET #1

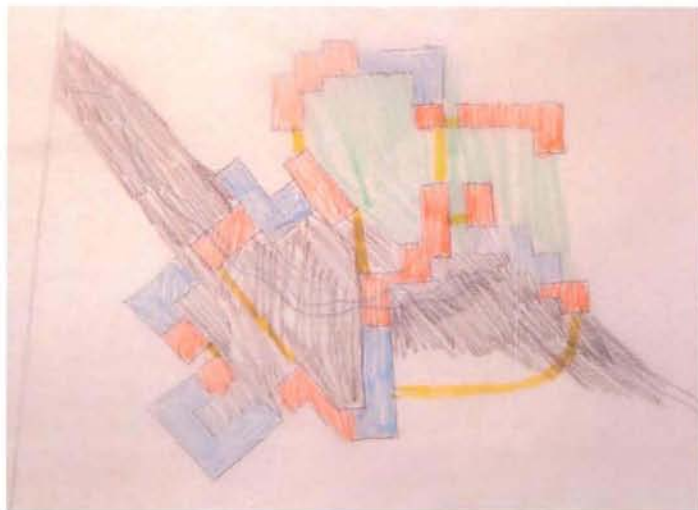
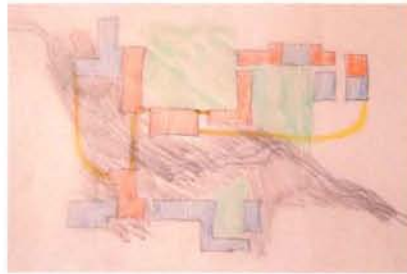
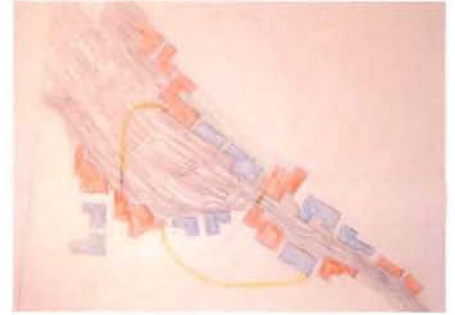
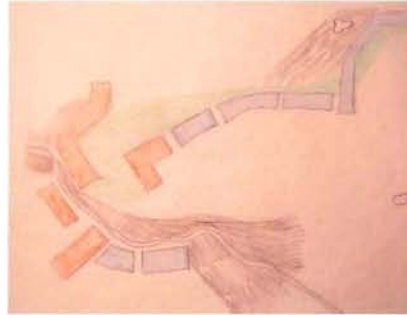
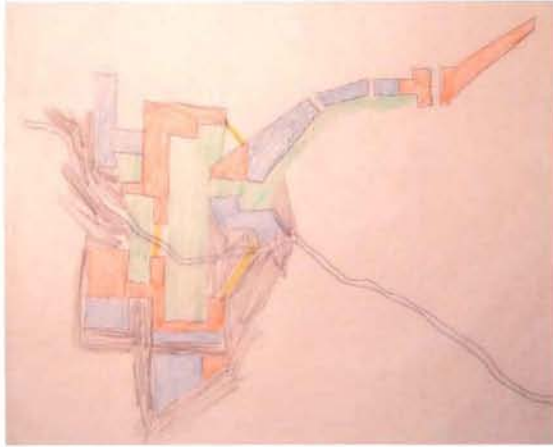
This first series of master plan layout schemes is basically irrelevant to the final master plan since it was done conforming to the Farmington Hills site, back in the fall of first semester. These site layout schemes were a definite struggle. Mainly the scale was not taken into consideration and the assumption of scale lead to many fragmented elements creating an over-clustered composition on the site. The primary focus when developing these schemes was pathways and building relationships, but they are ineffective due to the lack of scale consideration.



Potential District Master Plan Layouts

FARMINGTON HILLS - SET #1

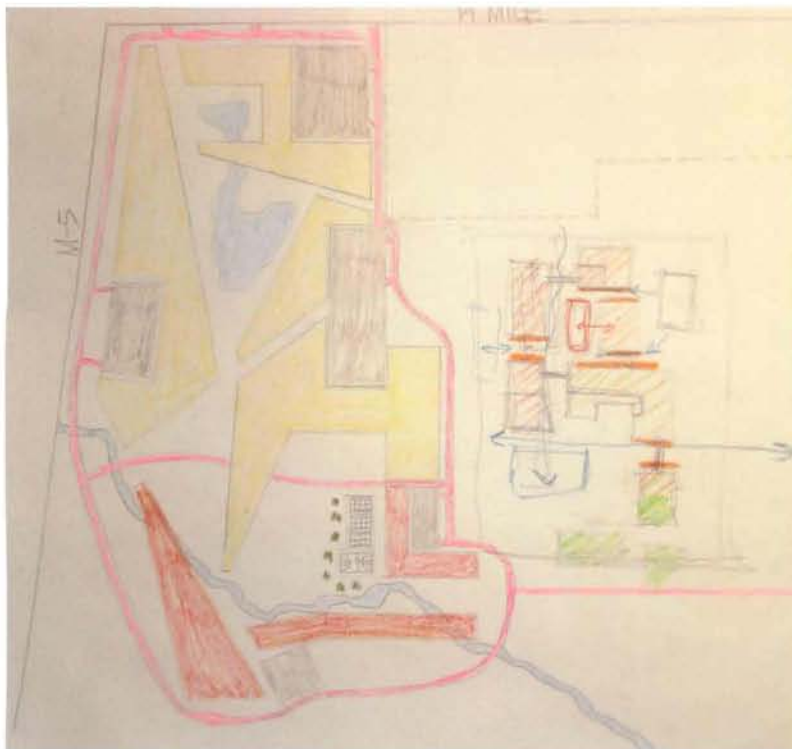
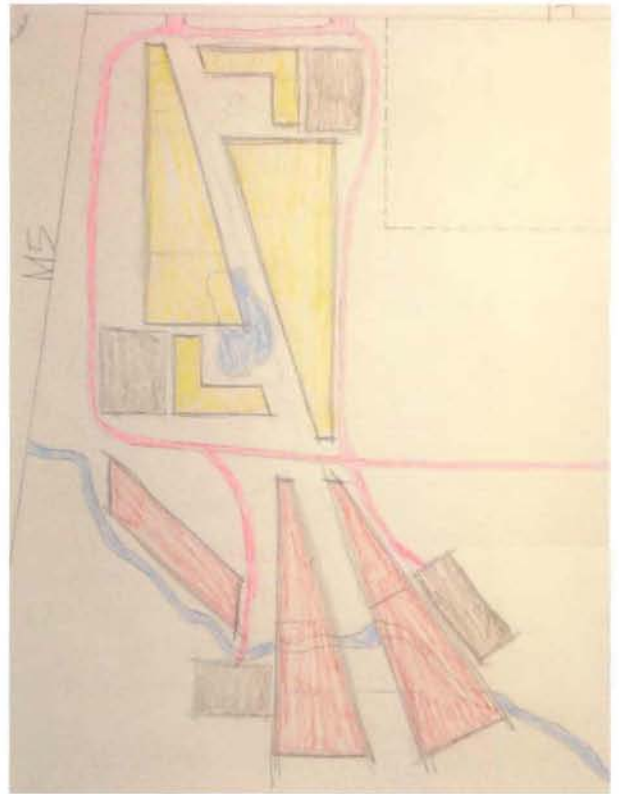
The second half of the site layout schemes had greater success than the first ones in terms of filling out the site and relating to each other on the site. In spite of this they did not turn out to be very successful in general given their relationship to the highway system and the surrounding community. Upon initial site selection the road system seems to anchor the program perfectly but following the built layout schemes on the site, it turned out that the roads were more problematic than they were beneficial, because they were separating the activity on site from the rest of the community and it was feeling isolated as opposed to connected.



Potential District Master Plan Layouts

FARMINGTON HILLS - SET #2

Given the lack of feasible results from the first set of attempted master plans, the concept shifted from such a fragmented set of separate buildings. The idea with this next series was to increase the scale of the individual structures, and decrease the numerical amount of them to be included in the district. Ideas were exercised in terms of unifying the buildings or planning them in such a way that it would produce a systematic or cohesive pattern. The most significant challenge presented here was creating a centralized public space that would be occupied by pedestrians and used for activities in which people would congregate. This surfaced one of the major problems regarding this site, that there was simply an overabundance of vacant land available and not nearly enough building program to fill it out effectively. Regardless of the solution the proposal would be open to an extreme amount of fair criticism based on the randomness of the proposal and the ignorance of the existing community. The colors on the surrounding sketches are as follows: Red = residential building space, yellow = retail building space, grey = parking structure, pink = vehicular path system.



Preliminary Master Plan Composition Schemes

PRELIMINARY PROPOSAL #1

The first of two informal proposals to conclude the first term offered an excessively large area to serve as a public congregation type space in the center of the district. It was enclosed by a gate-like entrance way to the north, even though this would not function like an actual gate it ultimately was serving more as a barrier than a community mediator. Parking was okay with its perimeter location and but the overall scheme was too simplified in regards to building formation and path systems.



PRELIMINARY PROPOSAL #2

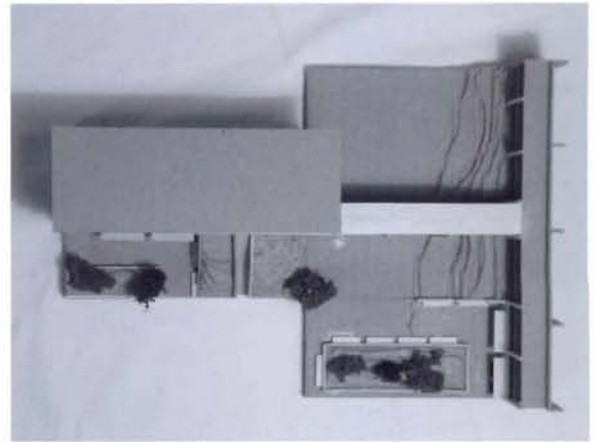
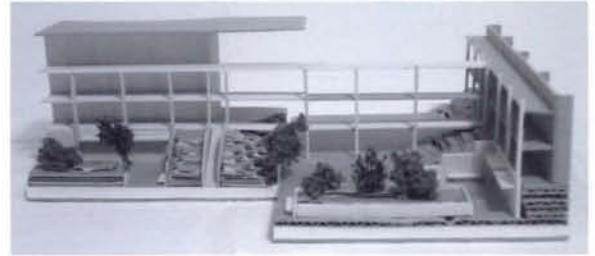
The second scheme again proposed too large of a central congregation space. The building program did not support an open exterior space of this size, so it ultimately would turn out to be a central zone of wasted space that would result in a dead space before too long. Further adding to the problematic issues of this scheme is the parking which is just too isolated from the building entrances.



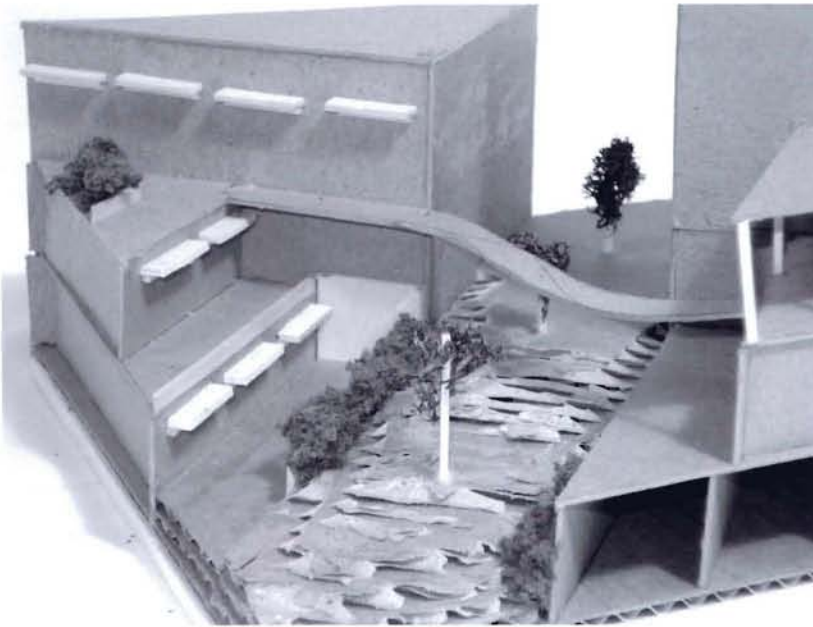
District Detail Exploration Series

ZOOMED-IN STUDY MODEL #1

This detail study concentrated on showcasing the potential attitude and expression of elevated walkways. It simulates the edges of two longitudinal buildings that would form a gap, meeting in a perpendicular formation as shown in the images to the right. The walkway would moderate the distance between them at the ground level, but also in a narrower pattern for the two or three levels above. This would allow the pedestrian oriented space to be showcased in a vibrant manner and really give it a sense of top priority in the hierarchy of spaces for the district.



District Detail Exploration Series

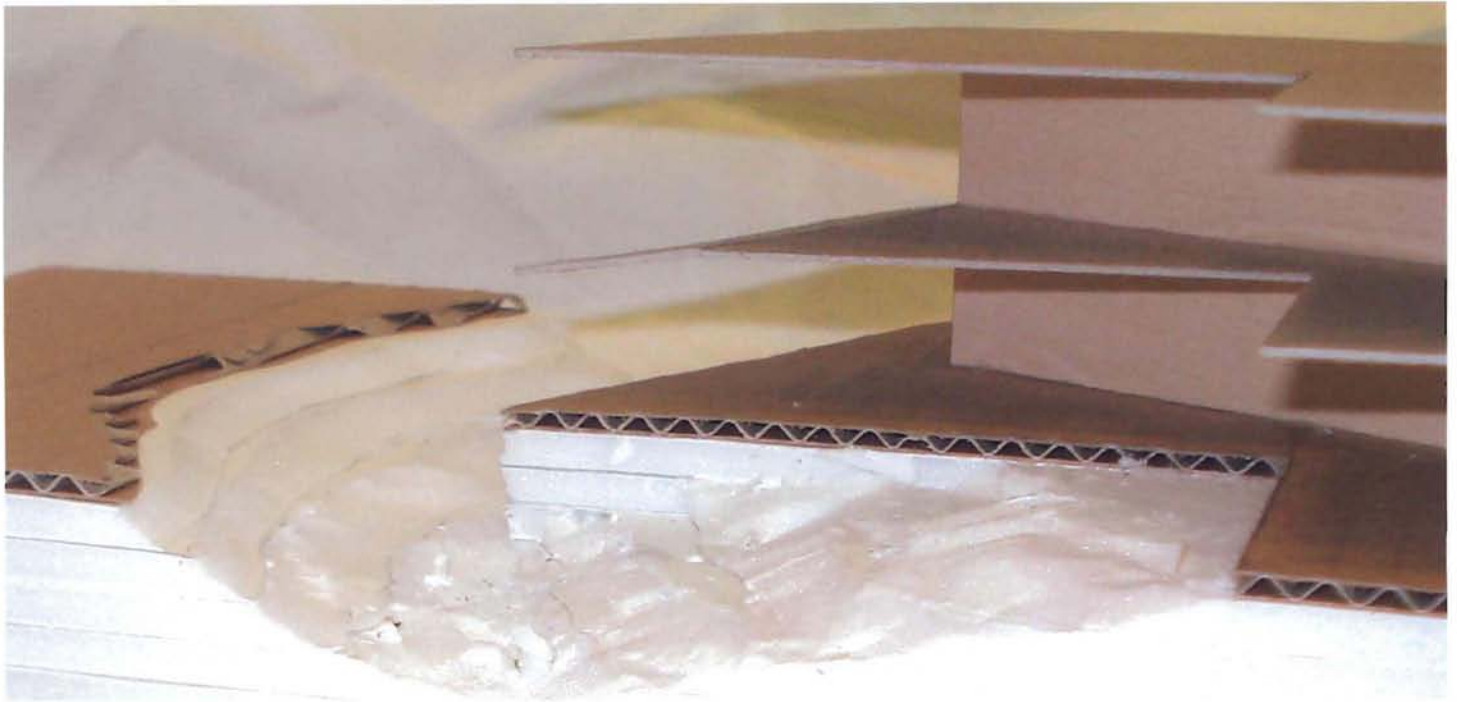


ZOOMED-IN STUDY MODEL #2

This study provided the opportunity to experience a corridor type space as it may be situated in between to forces of heavier masses. It allowed for the visioning of softening the space by means of awnings at the base facades, trees to characterize the pedestrian space lining the axial corridor, and integration of multiple levels all coming together to share a communal space. Though the materials are not rendered accurately through this model, it turned out to provide some encouraging signs that heavier massing in tighter spaces can lead to some aesthetically favorable and human oriented design solutions.



District Detail Exploration Series



ZOOMED-IN STUDY MODEL #3

This study was a direct analysis of the building edge as located at the base of a slope or undulating condition. Cantilevers to accommodate balconies would be efficient here and offer some aesthetic unconventionality as applied to suburbia. It would provide a more enthusiastic generator for outgoing pedestrian paths as well.



ZOOMED-IN STUDY MODEL #4

This study was a simplistic method of tying in a pedestrian path with a focused public congregation space. It was ineffective toward the progression of a related design solution.

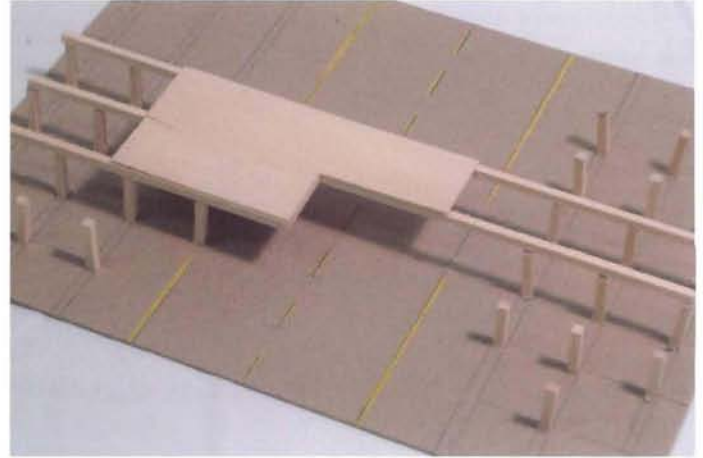


Charette #2



VERTICAL SYSTEM STUDY NEAR STREET

The goal of this charette exercise as related to this project was to explore the aesthetic effect of the joint between building and street. This exercise was composed of four section sketches, a zoomed-in district plan, and a model, all of which had some form of building relationship to an adjacent street. It was hopeful that some perspective of attitude of this space type gained and it was, it was enlightening toward the thinking of the design process particularly for these areas.

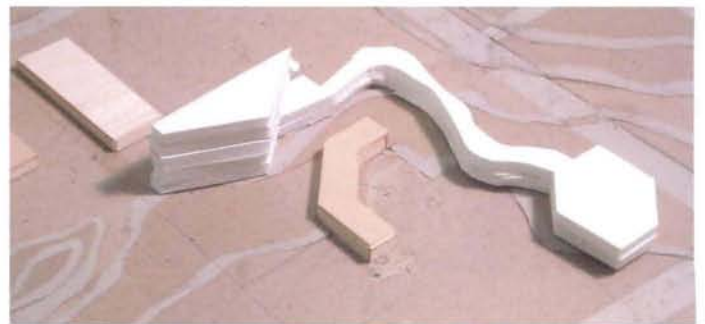
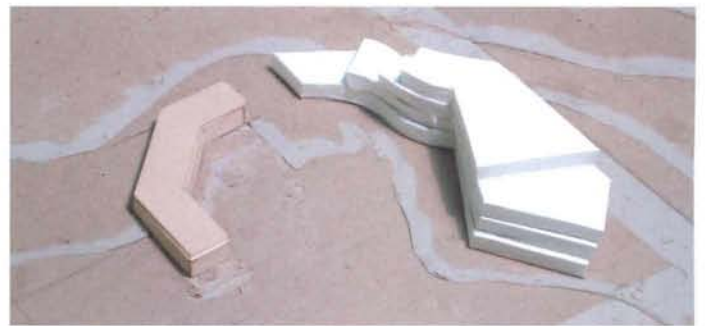
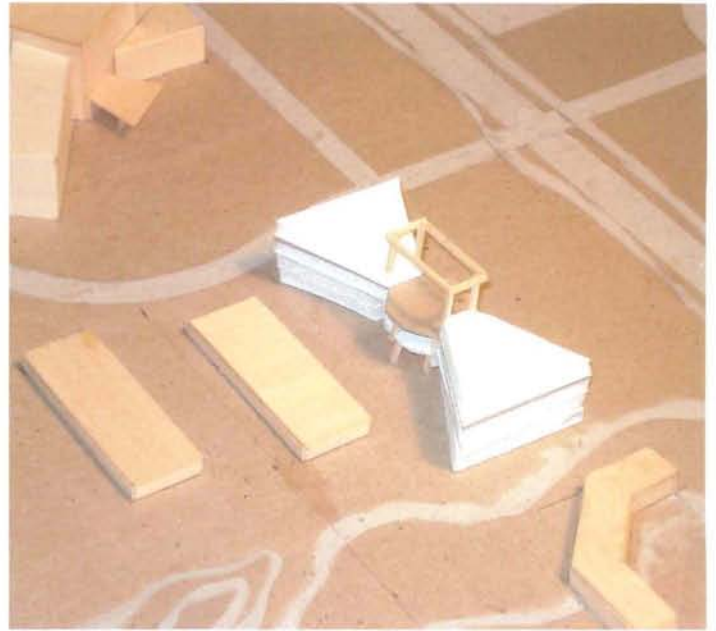


New Formation & Typology Concepts

EXPERIMENTAL FORM STUDY SERIES

After the site officially changed from Farmington Hills to Cincinnati, the surrounding context was situated in such a way that new concepts had to rise to the surface. The surrounding images are some poorly planned early studies that were conducted at the beginning of the second term.

The analysis of these expressions ultimately directed the design process into a much better state, but as for these concepts in particular they were impractical and a brutal misfit with the surrounding context.

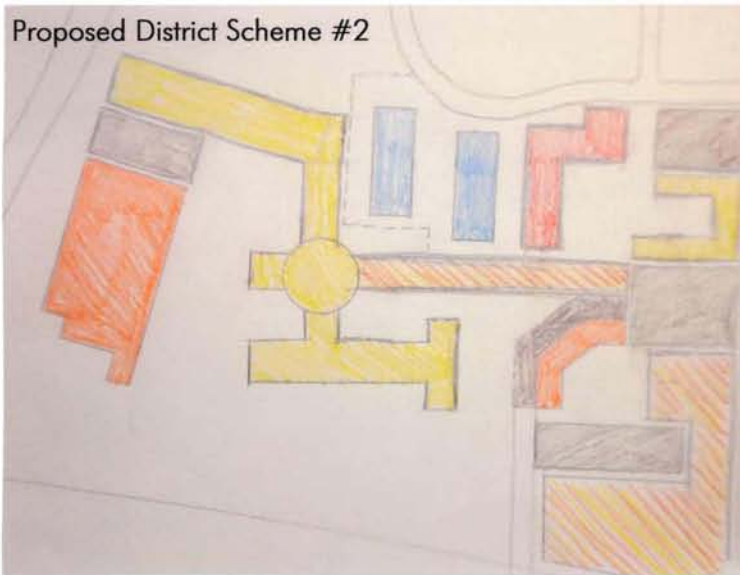


Site Plan Transition Point

Proposed District Scheme #1



Proposed District Scheme #2



Proposed District Scheme #3



RESPONSE & NEW DIRECTION

The three district layout proposals shown to the left were ultimately just another version of the problematic design process. Order needed to be made present, and limitations were needed to dictate the control of the master plan. The fragmented system was not cohesive and was not interacting efficiently with the surrounding context. It was at this point in which the design of the district was determined to be limited to the space shown in the bold box in the aerial map below. Originally it was acceptable for the entire highlighted space to be grounds for potentially new development, but the scale was just far too large to maintain order and organization to the design. From this point on, the district design would be confined to the space within the bold box, and would be respectful of the surrounding developments. The building design would also take a new approach to increase density, and ensure comprehensive organization.

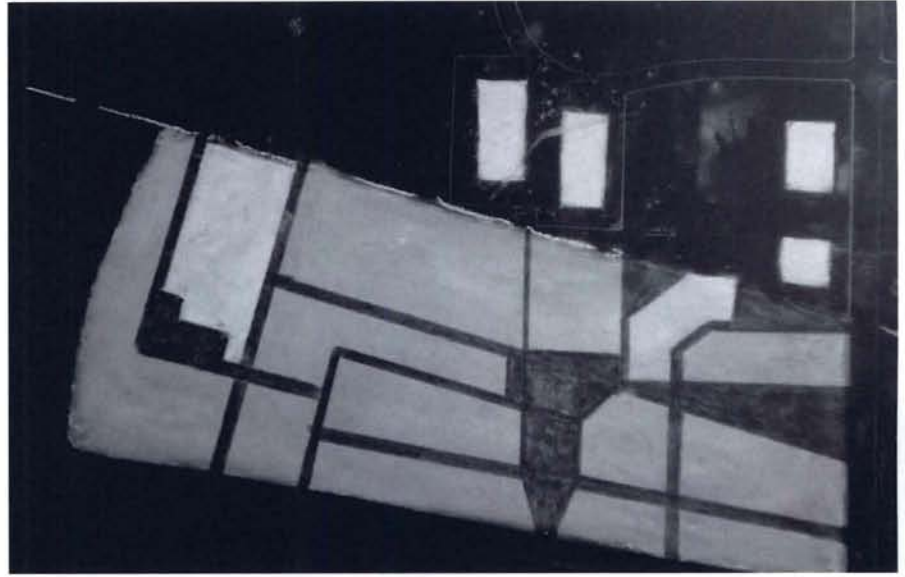


Continued Site Plan Studies

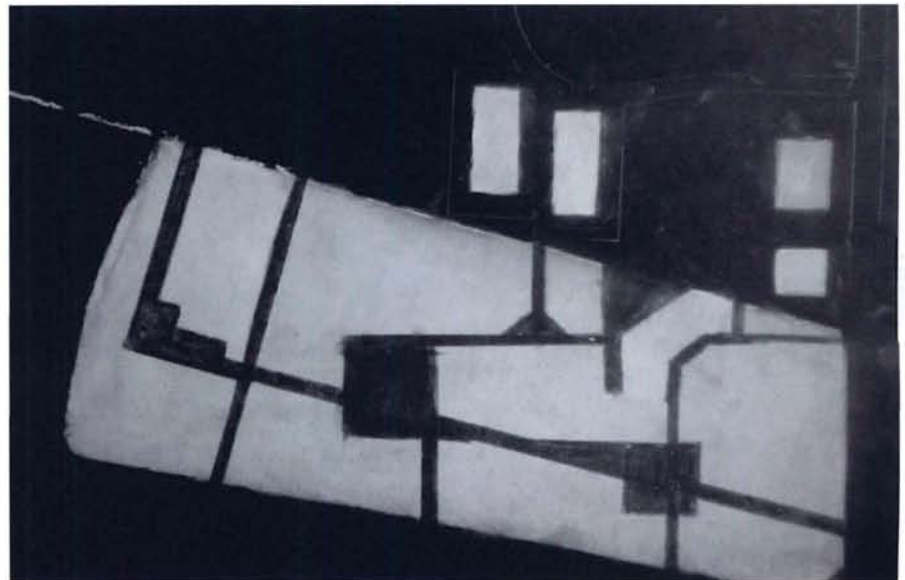
NEW APPROACH TO MASTER PLAN

The development to the layout of the district had to take a new approach in order to achieve an order and organization to the plan. The concept of considering the entire area as a built entity, and then carving away negative space turned out to be a far more efficient method to create built and open space. The existing buildings and roads were treated as starting blocks in terms of determining angles and edges.

DISTRICT STUDY #1



DISTRICT STUDY #2



DISTRICT STUDY #3



Continued Site Plan Studies



NEW APPROACH TO MASTER PLAN

There became a definite tendency to over-emphasize the central space a nodal public space intended for congregation and general pedestrian usage. In the studies to the upper left, these spaces were again overdone in terms of size and precision central location. This issue was learned from these studies, and modified more effectively in the following ones, this meaning that these spaces will be created but more subtly.

DISTRICT STUDY #4



DISTRICT STUDY #5



DISTRICT STUDY #6

Continued Site Plan Studies

NEW APPROACH TO MASTER PLAN

For the final third of this study series, the design of the district began to surface, so for the final three studies here in particular, they began serving as working drawings with each one serving as a guiding tool for the next. Upon completion of the ninth study, the plan seemed to satisfy the program for the district, the relationship to the surrounding context, and the aesthetic appeal of people who would likely be using the space. So the rough design of the district is based off of study #9, and tweaked in minor ways to meet the specific needs of the components within the district.

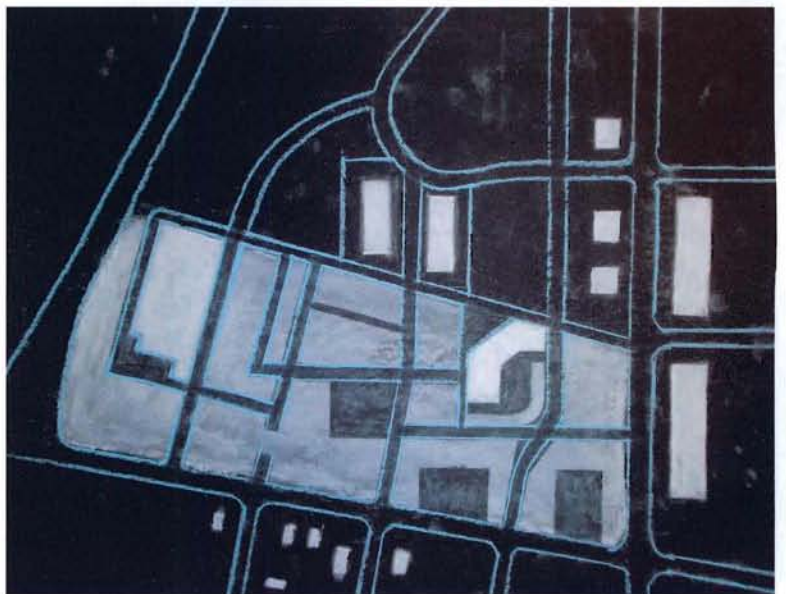
DISTRICT STUDY #7



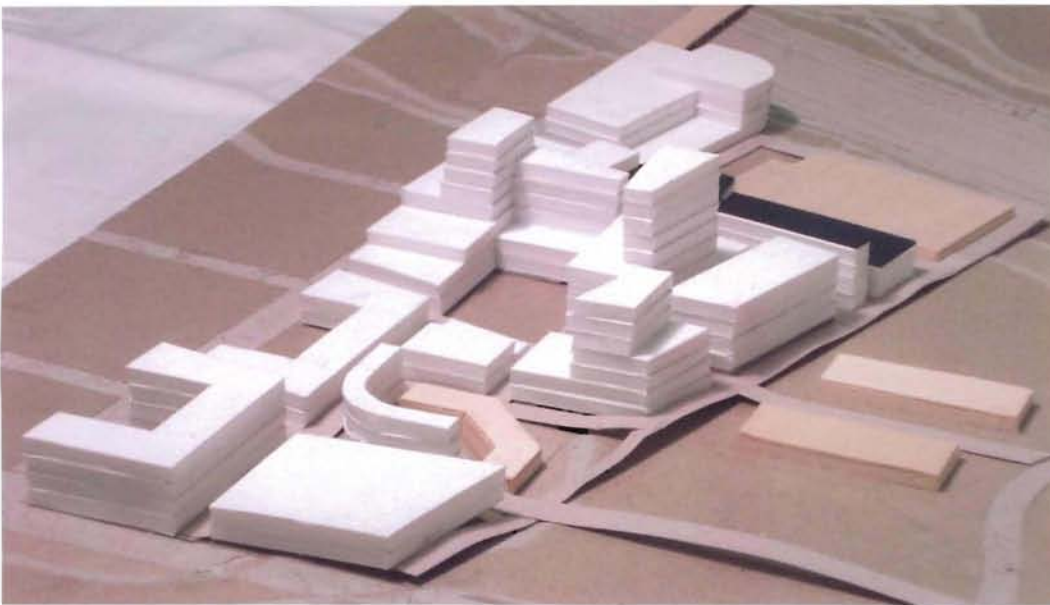
DISTRICT STUDY #8



DISTRICT STUDY #9



Continued Site Plan Studies



PHYSICAL EXPRESSION OF DISTRICT

Following the determination of the layout for the master site plan, the overall physical form had to be considered as well to assure that all three dimensions work together in a cohesive manner. The proposed vertical solution for the district is extremely dense but would be set up at the edge in such a way that it would interact effectively with the surrounding context. The specifics of these vertical components will be assumed for the district and calculated specifically for the "Focus Zone."

Conceptual Physical Study for Focus Zone

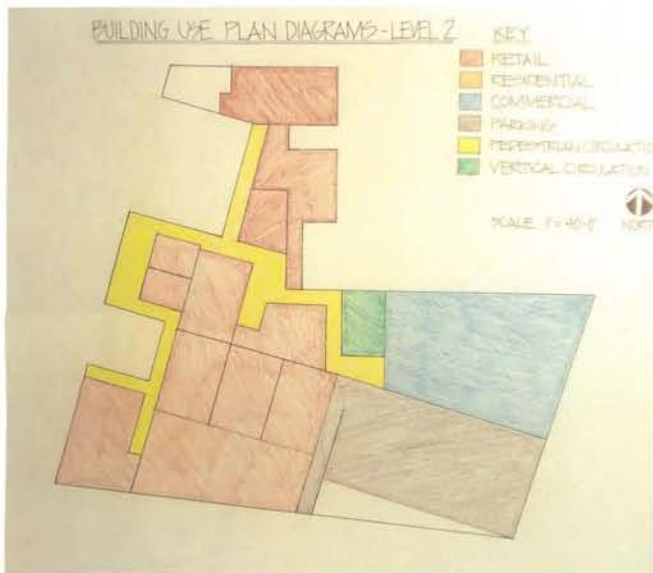
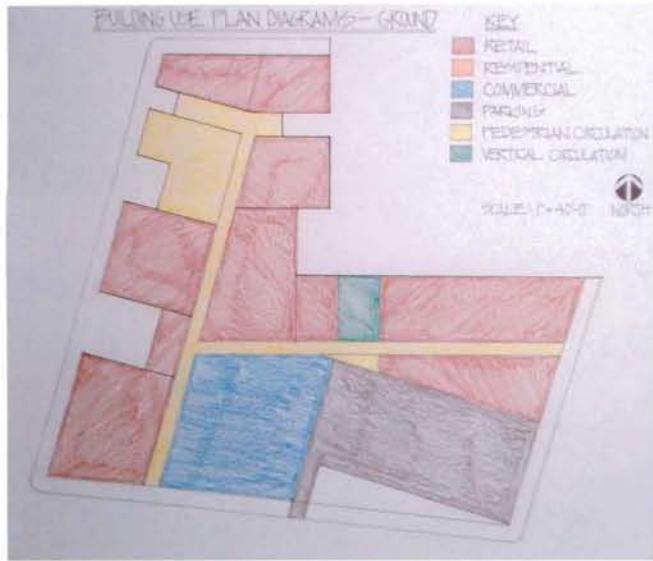
BEGINNING WITH FORM

The design of the focus zone actually began by studying the form ahead of studying the plan.

The images to the right are working studies of the anchor building that will be the central space of the focus zone. The reason for beginning the design process through studying the form was to gain a better concept of all dimensions relative to the surrounding conditions, and also to understand the potential attitude that may be generated through this expression within the actual district. Much was learned from the preliminary study process to the right. One of the strengths was the overall proportions of the system, but the general image that was being expressed need to be thought out in better detail. Ideas were adjusted and tweaked based on this original study, and a more careful approach to the surrounding context also became a notable concern.

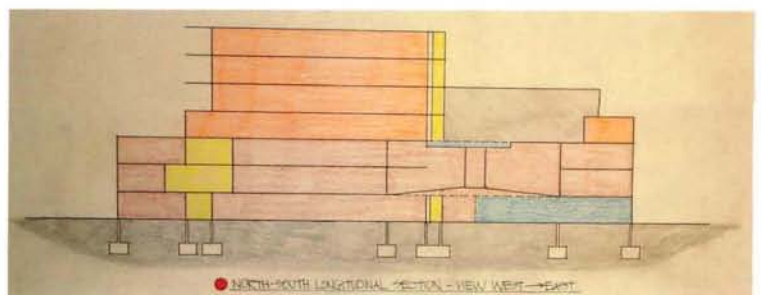
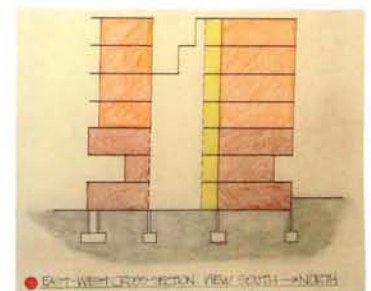
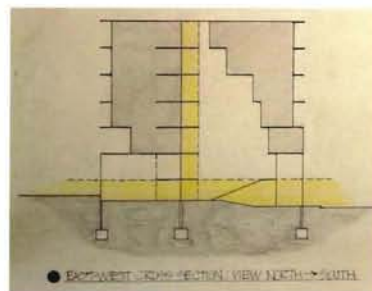
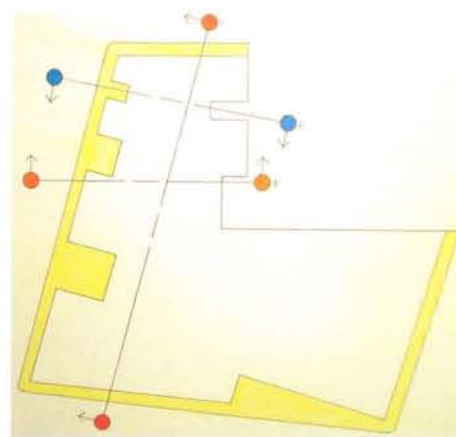


Conceptual Study for Focus Zone



DIAGRAMMATIC PLANS & SECTIONS

These plans and sections are purely diagrammatic and intended solely for the purposes of building organization. This study was done at a point where it was simply too early in the process to begin designing specific elements of the project. Once the organization was figured out, that would lead to the precision layout which would then be followed by the details.



Path System Hierarchy & Green Space Analysis



PATH SYSTEM HIERARCHY (ABOVE)

One of the instruments used to assist in establishing a sensible order to the district was creating a hierarchy of path systems. This was broken down into five different path types namely:

Primary Vehicular to function as main streets similar to that of a central artery of a village type setting.

Secondary Vehicular to function as circulation space for cars primarily as a means to provide access to parking and private entrance type spaces.

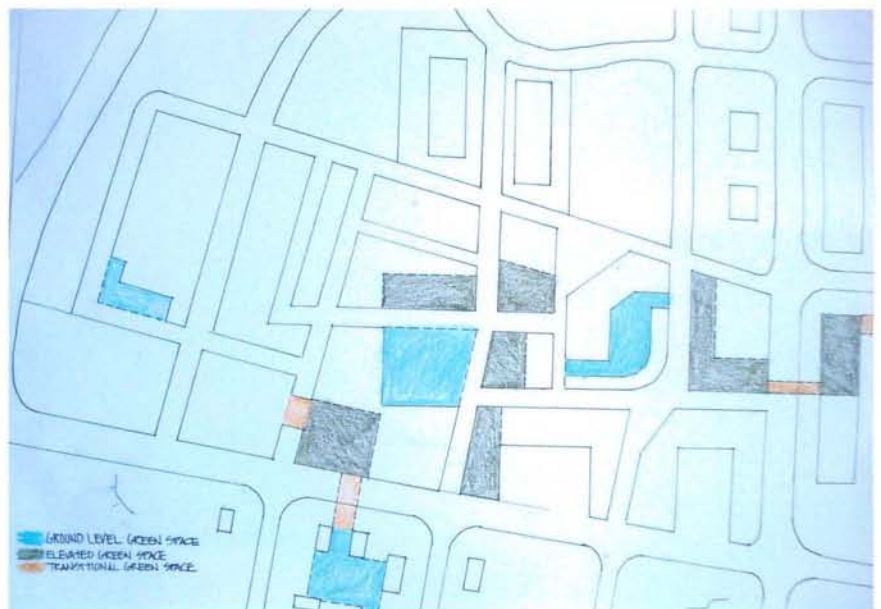
Service Vehicular which would be for private use and mainly for shipping & receiving purposes, garbage trucks and other maintenance vehicles.

Exterior Vehicular for all road systems adjacent to or perpendicular to any district edge but not actually within the premises of the district, and of course

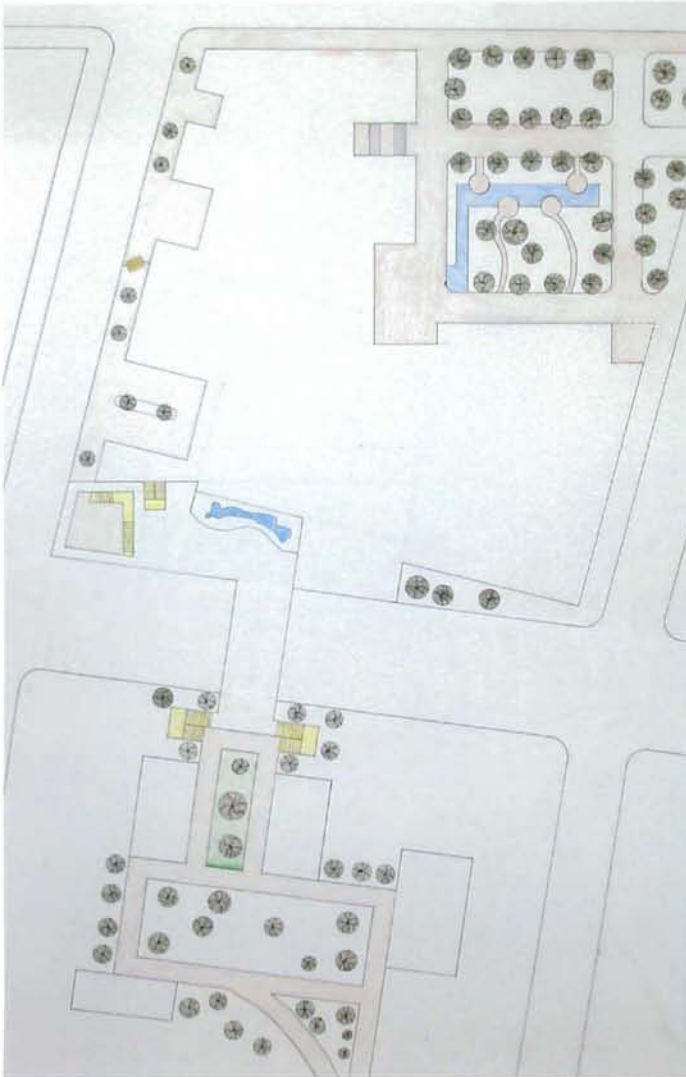
Pedestrian Only which is the major point of emphasis regarding the entirety of path systems, this being the component in which people are circulating on foot and must be prioritized and designed effectively in order to achieve the targeted pedestrian usage.

GREEN SPACE INTEGRATION (RIGHT)

Balancing the district between built structure and landscape played a key role in effectively creating a system that offered a notable density increase, but not in a distracting manner. Part of the blending solution for this was by implementing green roof systems in various areas to supplement the general park type spaces at the ground level.



Preliminary Land-use Planning



DISTRICT LAND-USE ORGANIZATION

There are three basic building uses to achieve the purpose of this district and in addition parking in order to ensure function. This allowed the building use to be broken down into four general categories at least for purposes of the preliminary planning and organization of the layout for the district. Namely these categories were labeled as **retail**, **commercial**, **residential**, and **parking**. The retail space was concentrated on the street level and partially on the second and third levels of buildings depending on accessibility and visibility of their locations. Same applied for commercial spaces except they were given a greater allowance to be located vertically since they are not necessarily public spaces. For the same reason it was also less important that their orientation was in direct contact with public space, it was of most importance for commercial spaces that they were accessible from points of arrival which would most notably be the dispersed parking structures. Parking structures for the district needed to be plentiful and within close distances to all spaces within the district. The key thing here was making the most effort to place these necessities near the perimeter of the district when possible so that most the pedestrian circulation space could occupy the areas toward the center. The residential spaces are the primary vertical space fillers making use of the space available in the Z dimension. Given that these are private spaces it is not important that they line or surround public spaces, the main concern here is that the vertical circulation towers can be made accessible for the tenants of these residential units.



Finalized Land & Building Use Plans

BALANCE OF LAND USE

The plans to the right indicate the general plans for buildings use throughout the entirety of the district. This is subject to minor variation, but for the most part this use plan will be assumed for the district and comparable to the values indicated in the quantitative summaries of the program.

	vehicular path
	parking
	retail space
	commercial space
	residential space

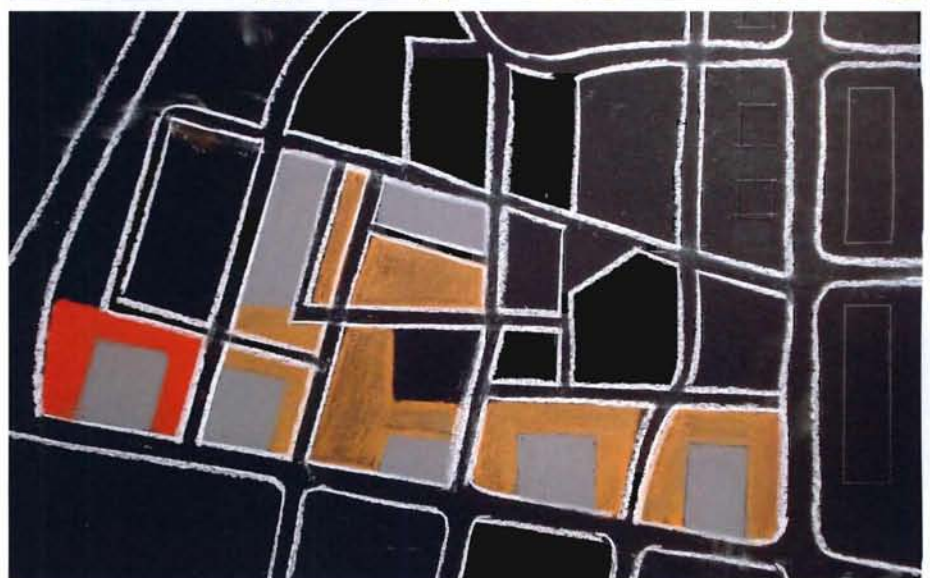
STREET LEVEL



SECOND LEVEL



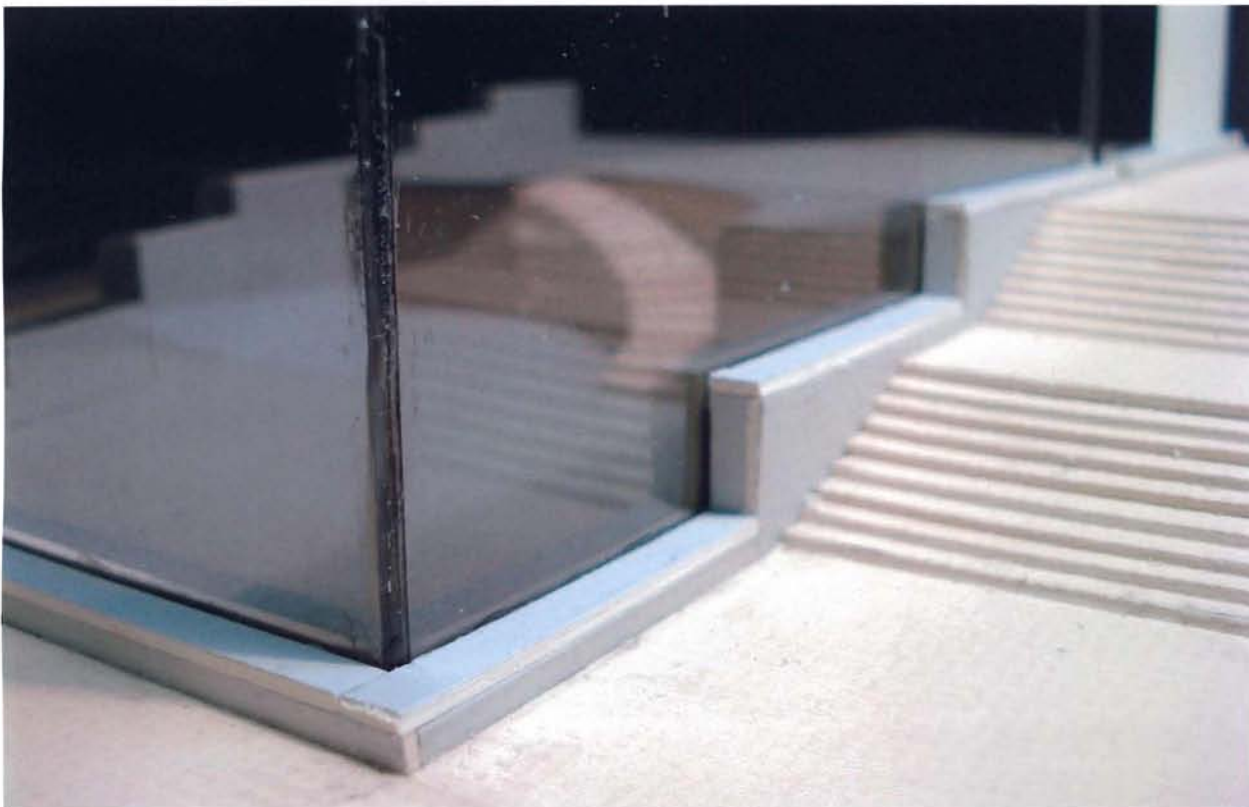
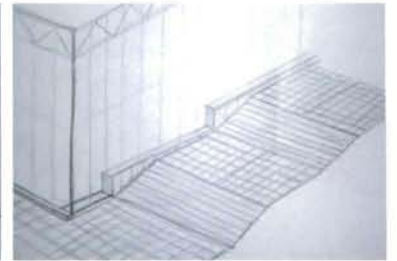
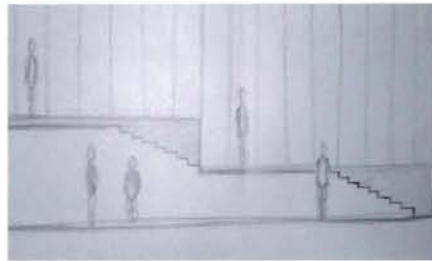
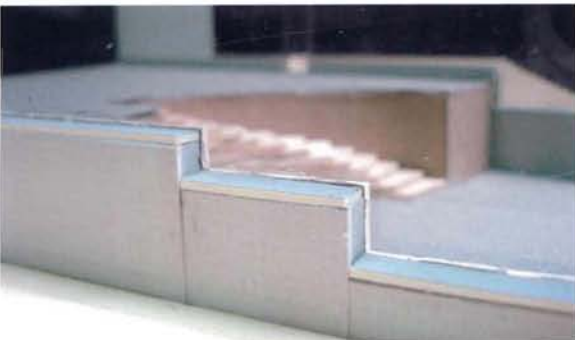
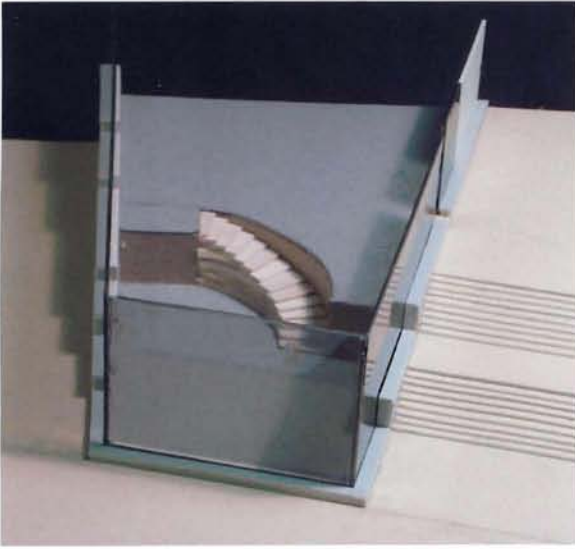
UPPER VERTICAL LEVELS



UNCONVENTIONAL RETAIL FEATURES

NEW PROPERTIES TO DRAW PEDESTRIANS

One of the primary aspects in regards to separating the spaces of this district with the norms of suburbia will be the details of the public spaces themselves. Since low-capacity retail spaces will be a major building block for the public occupancy, these added features need to be expressed and showcased clearly to the public. The surrounding images show an example of what could work for a "Seven-Eleven" type retail space which is set to be located on the street level at the northwest corner of the focus building. This includes an exposed concrete base in which the glass surfaces adjacent to the pedestrian paths would be embedded directly in the concrete. This type of detailed unconventionality is planned to be included for all spaces within the building and the district.

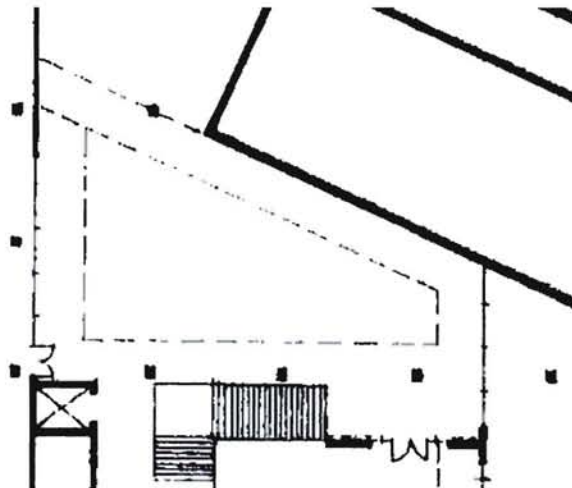
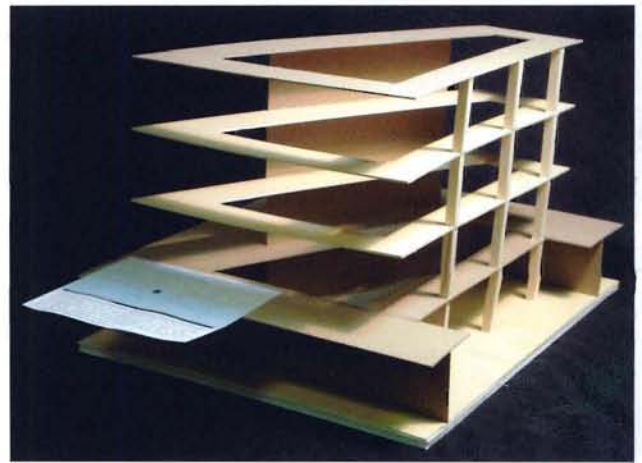


UNIFYING SPACE THROUGH VERTICAL DESIGN

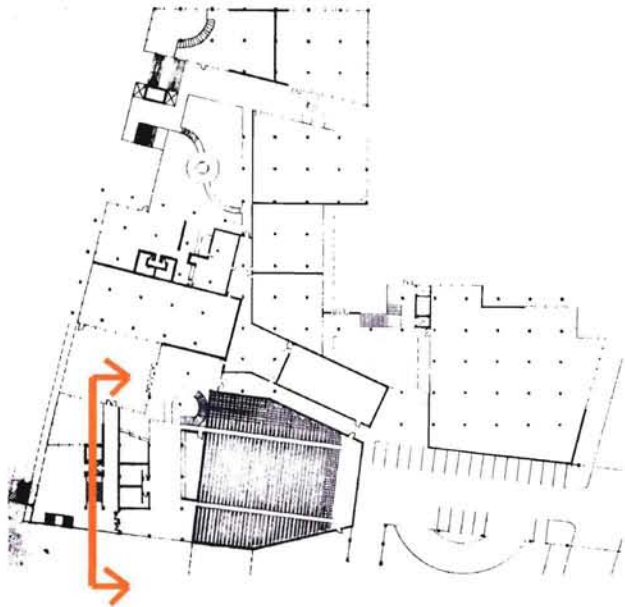
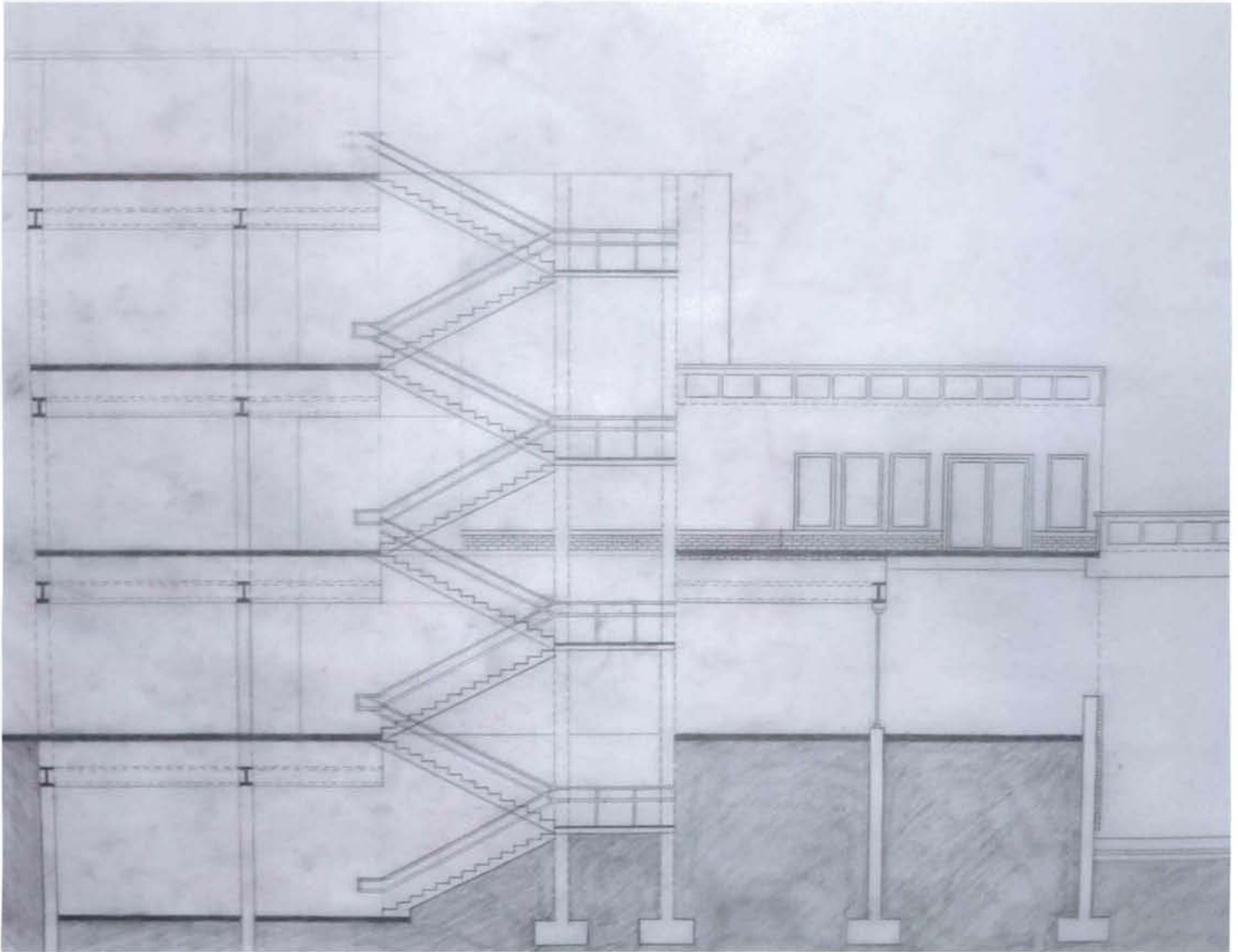


LIGHTWELL SPACE AT CIRCULATION NODE

In probably the most active circulation point for the entire focus building, this node type space is likely to be a very busy and somewhat crowded area. To avoid any perceptions of over-confinement, a vertical open space in the form of a light well spanning from the top story ceiling all the way to the base of the lowest floor would provide the perception of more breathing room and linkage to surrounding spaces. It will require a transparent surface at the roof, and railed off balconies at its perimeter for each floor. Ultimately, a crucial circulation node in the building will be perceived as much less congested, and actually benefit the overall aesthetic effect of the building.



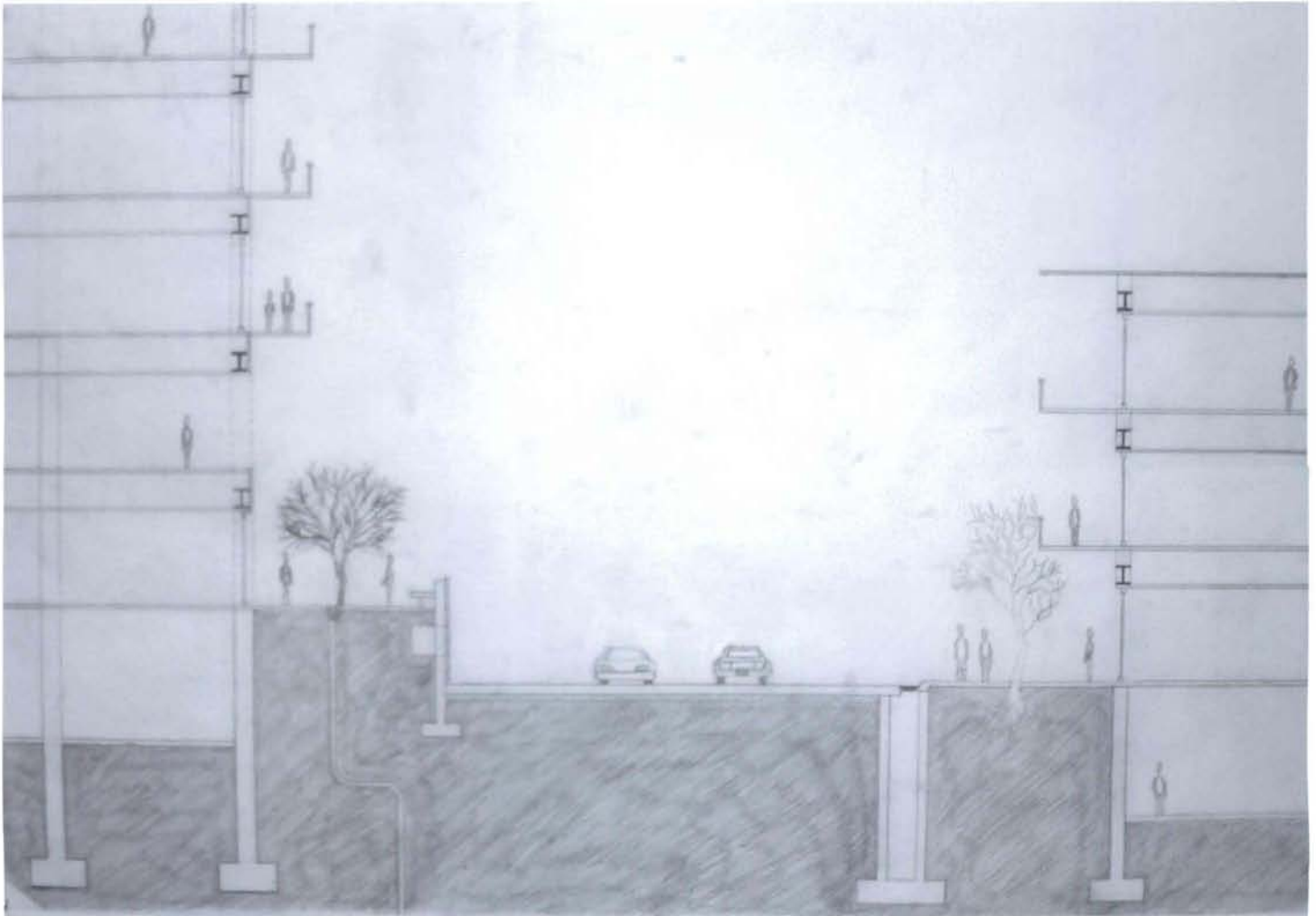
SCALED-UP SECTION CHARETTE - STUDY #1



NORTH-SOUTH EDGE STUDY AT TYLERSVILLE RD

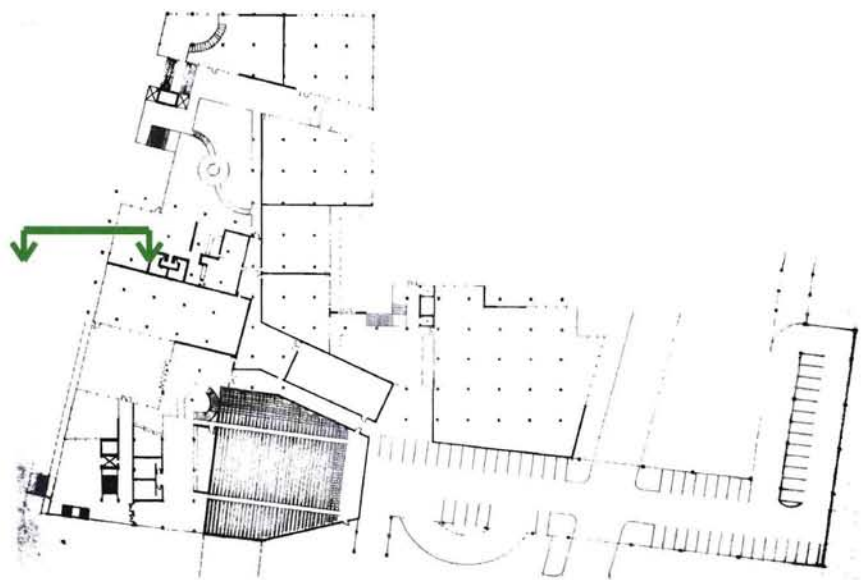
The reason that a section study was done here was to gain a better feel of the composition taking place at the south side of the building where the connection corridor meets the building. Though there were significant design changes to this area in particular, this study provided an accurate feel of how this fragment of the building was put together. The selection of this space is also very much based on the diversity of activities taking place here. It is right at an exposed vertical circulation tower, the base of a bridge spanning across Tylersville Road, and the elevated exterior space mediating the building itself and the highway directly adjacent to it.

SCALED-UP SECTION CHARETTE - STUDY # 2

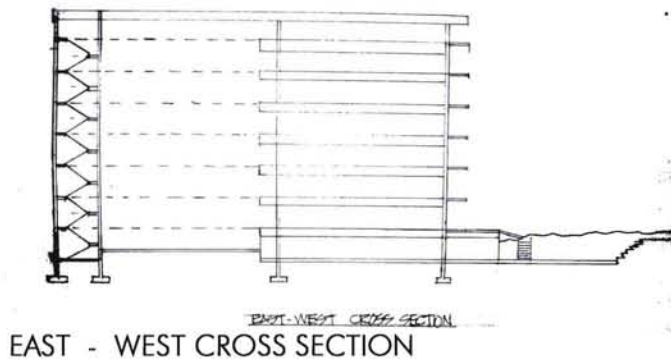
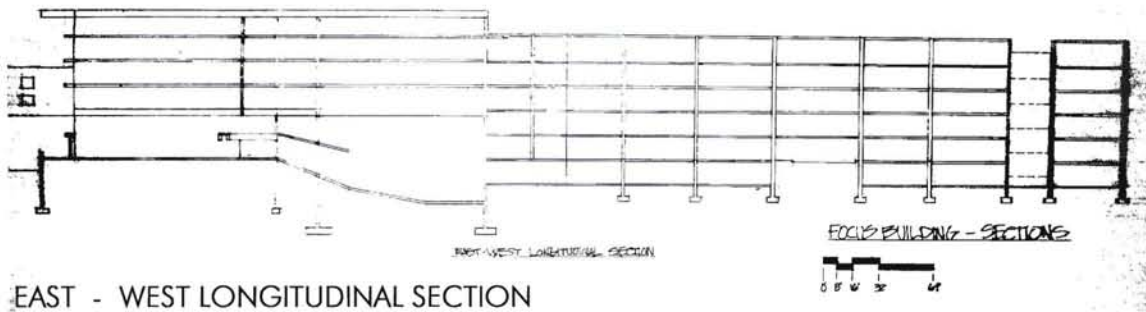


EAST - WEST STUDY THROUGH STREET

This study was to gain an effect of the sub-grade structure, and the building envelope at a point of high activity where a corridor is present and it has a similar effect to a sidewalk feel on "main street" of a town or village type setting. It was able to present a standard conception of a pedestrian system in an urban environment, and ultimately worked as grounds to alter the standard, and really allow for concentration on designing the space specifically for humans.



PRELIMINARY PROPOSALS

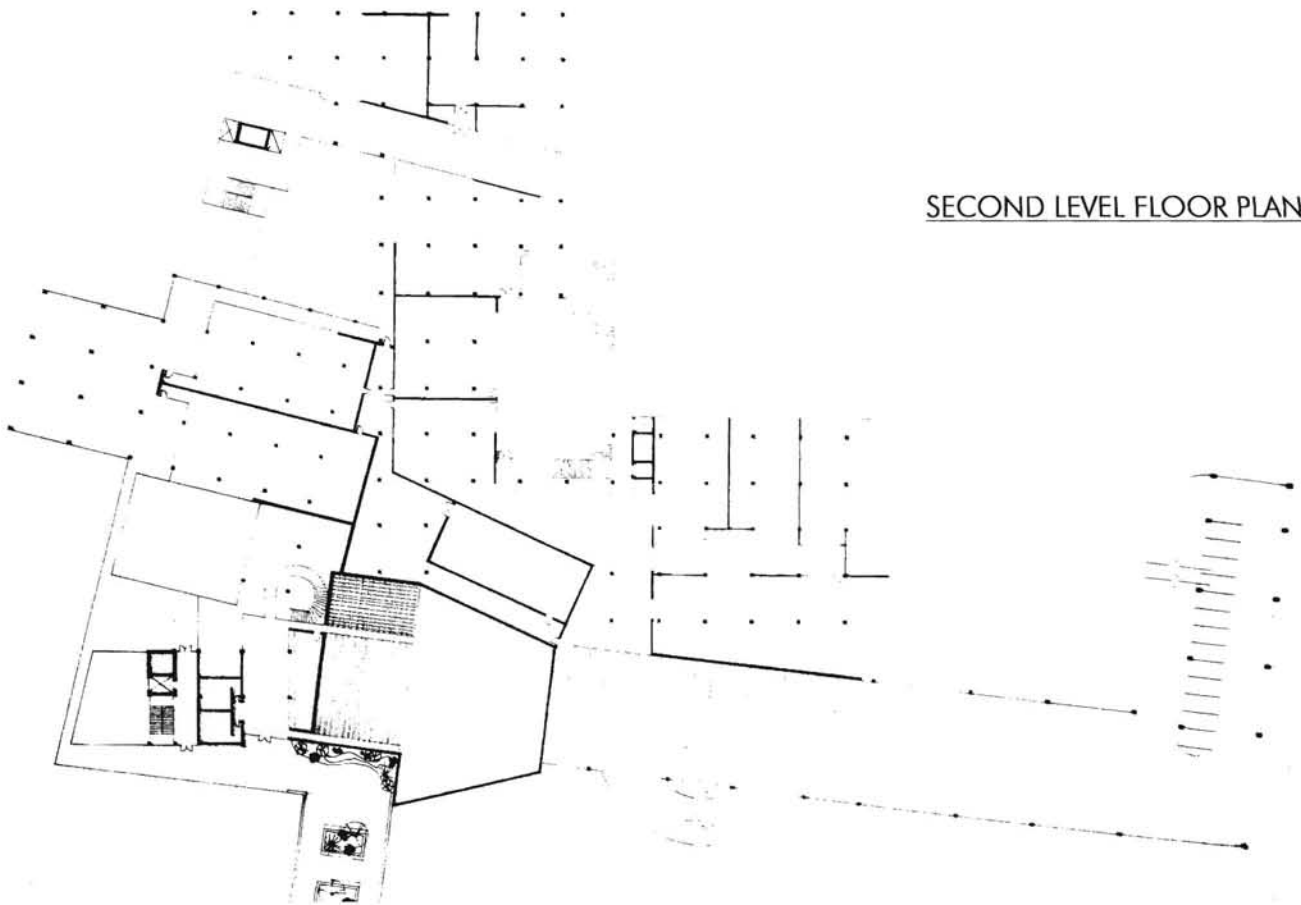


PRELIMINARY PROPOSALS

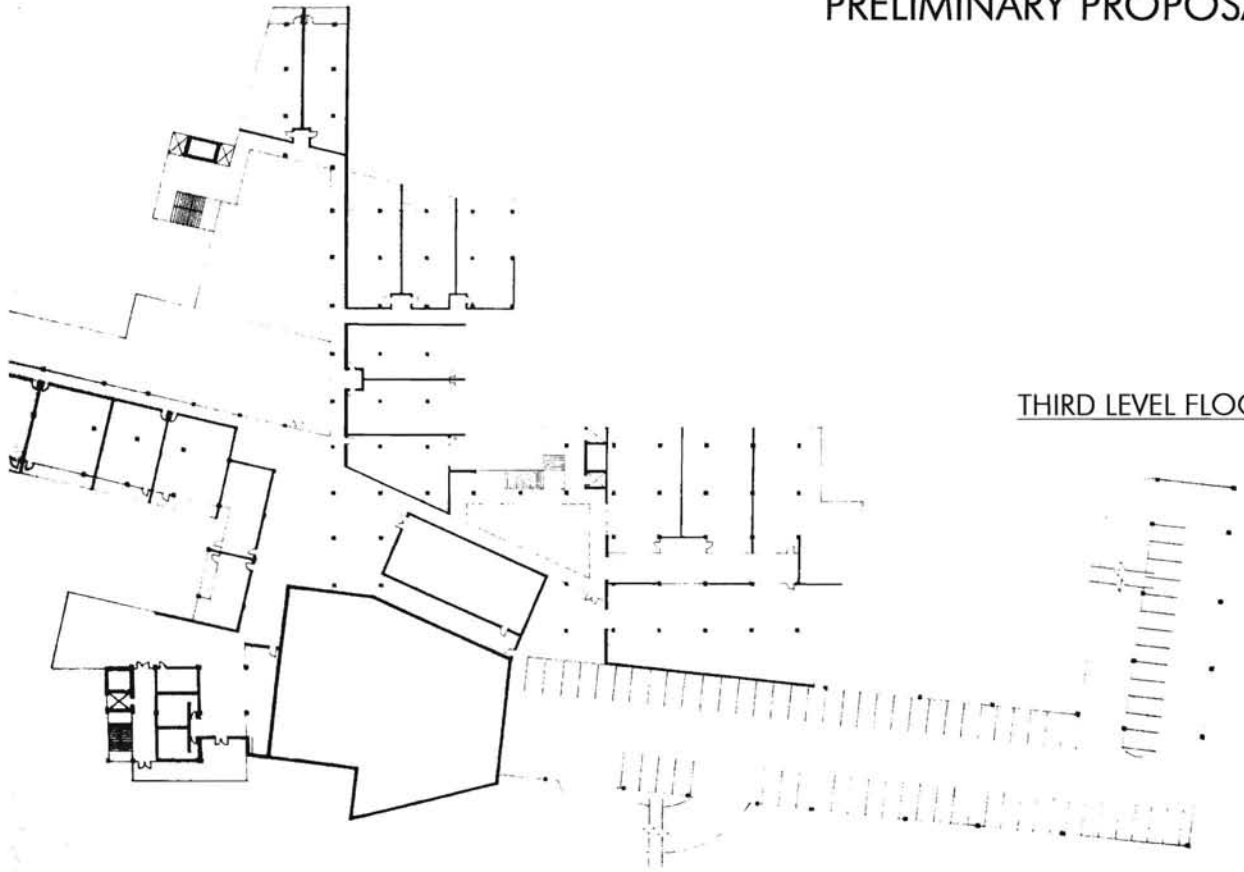
STREET LEVEL FLOOR PLAN



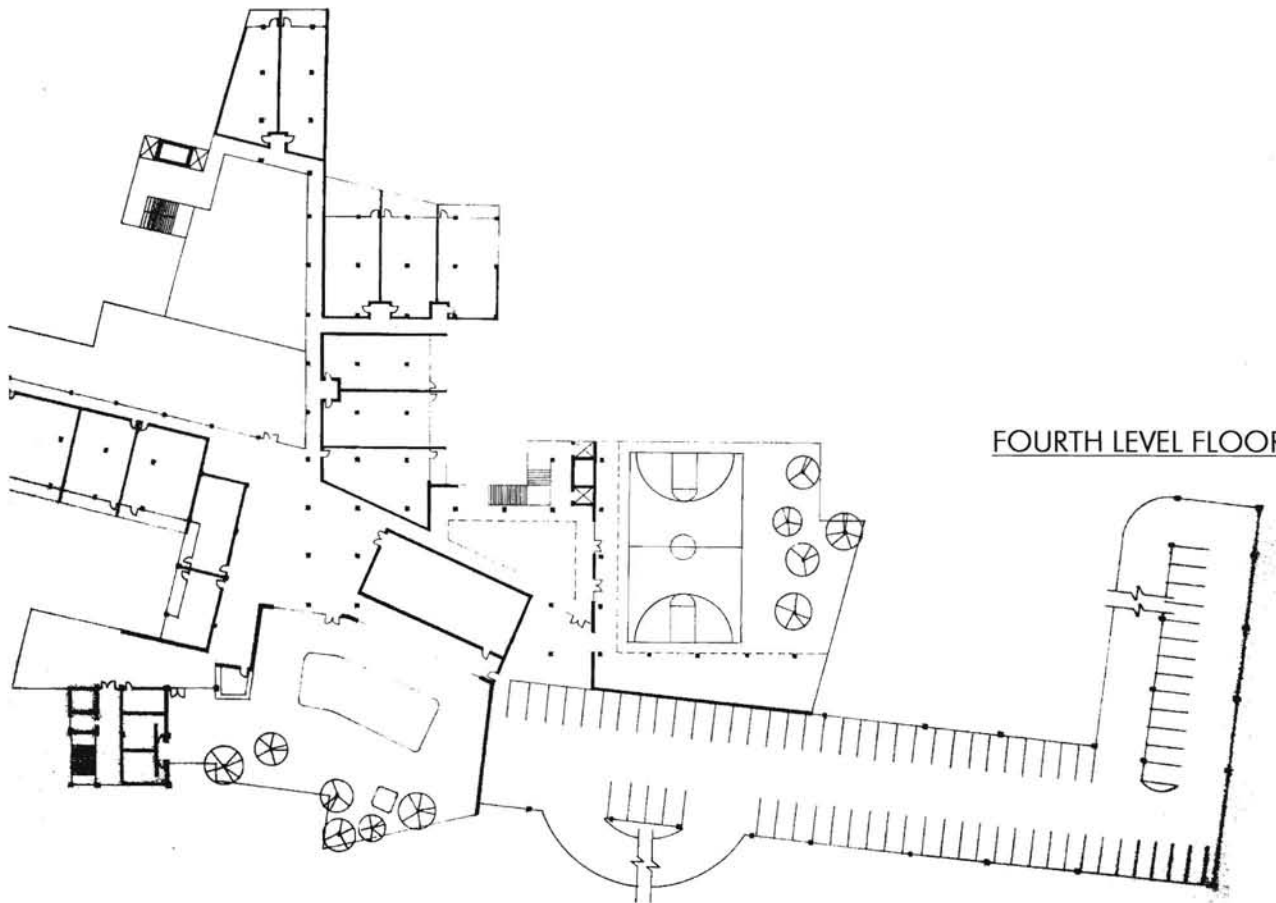
SECOND LEVEL FLOOR PLAN



PRELIMINARY PROPOSALS

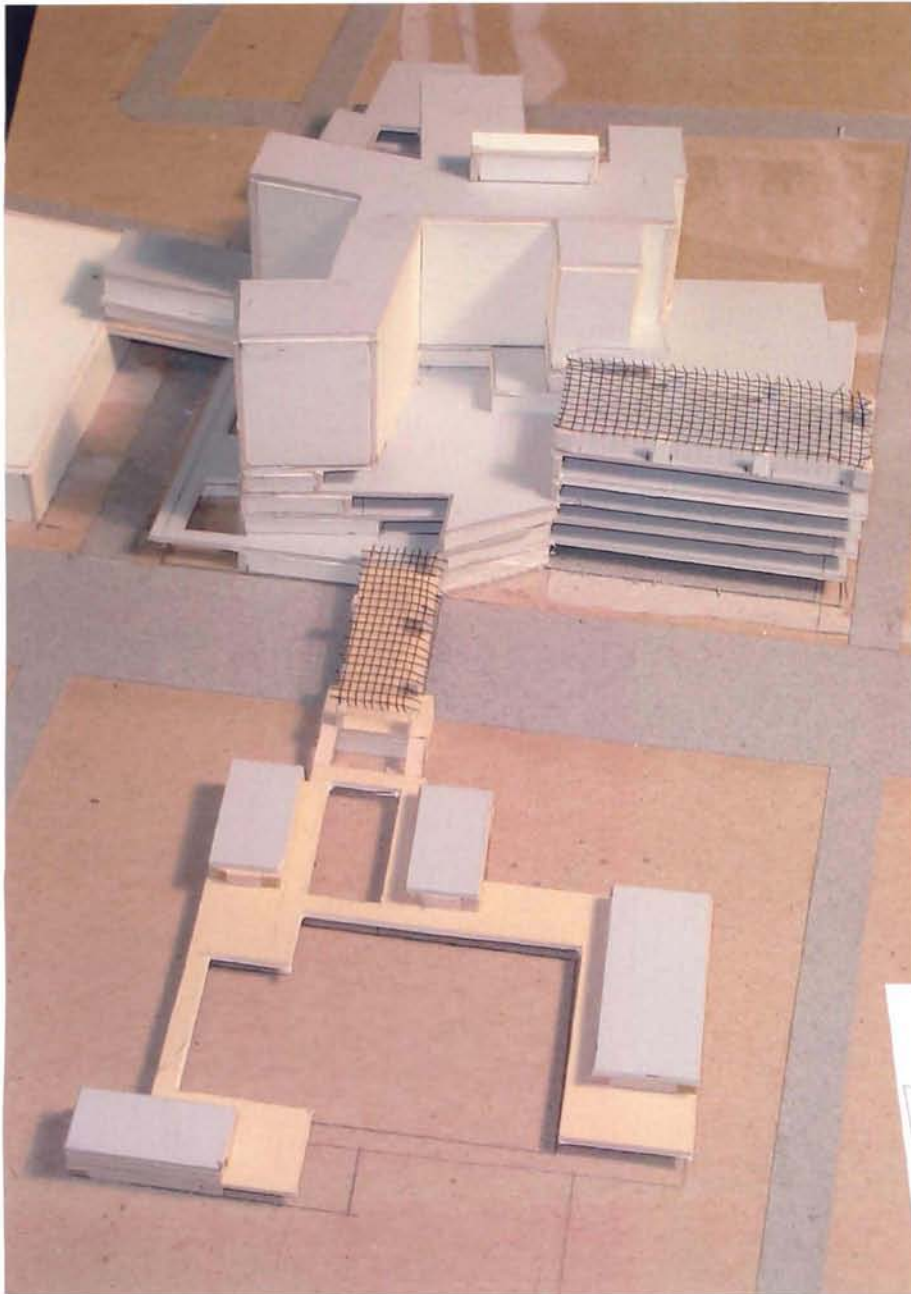


THIRD LEVEL FLOOR PLAN



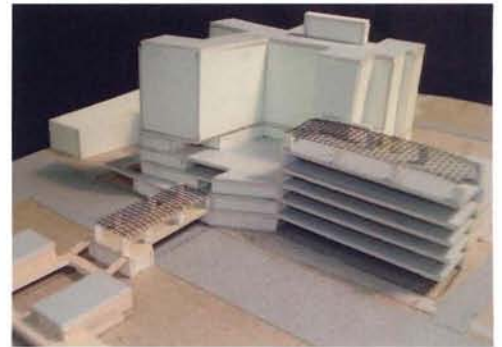
FOURTH LEVEL FLOOR PLAN

Final Form Study Check



PURPOSE FOR LAST STUDY MODEL

Given the abundance of late design changes there was still an uncertainty regarding the final composition of the focus building. This last study assured that the form was in check so that the development process could proceed to the final presentation.

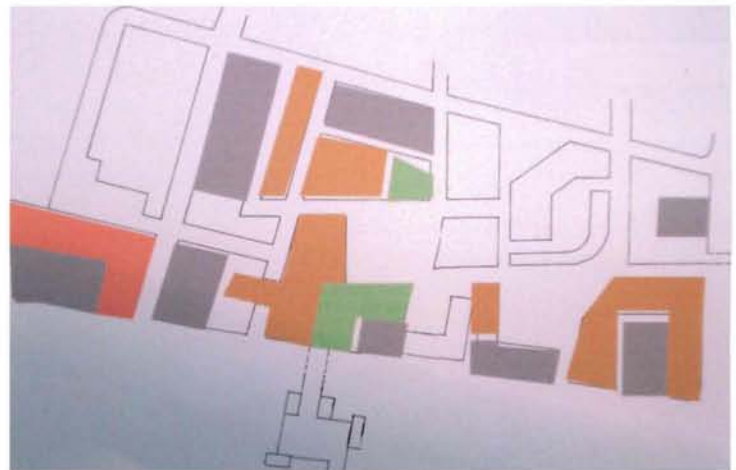


District Development Effect Details

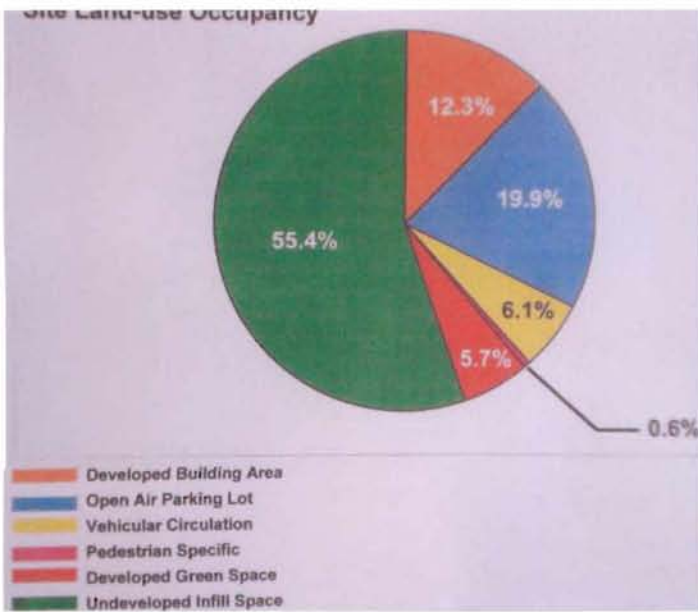
INCREASED LAND-USE EFFICIENCY

The organization of building uses is fairly evenly dispersed and parking follows suite with the anticipated building occupancy by way of layered structures that are mostly hidden from public and pedestrian spaces. The most notable aspect regarding the land use for the district is that residential space is predominantly located high in air making use of the Z dimension, and retail space is primarily concentrated at the ground level.

Commercial space is situated in between these vertical extremes but certainly closer to the ground plane than the higher vertical levels. Most existing retail structures have been retained but surrounded in a much more aggressive manner. Though the physical expression has changed, the function has not, and this development will now embrace humans before automobiles, making for a more desirable suburban space.

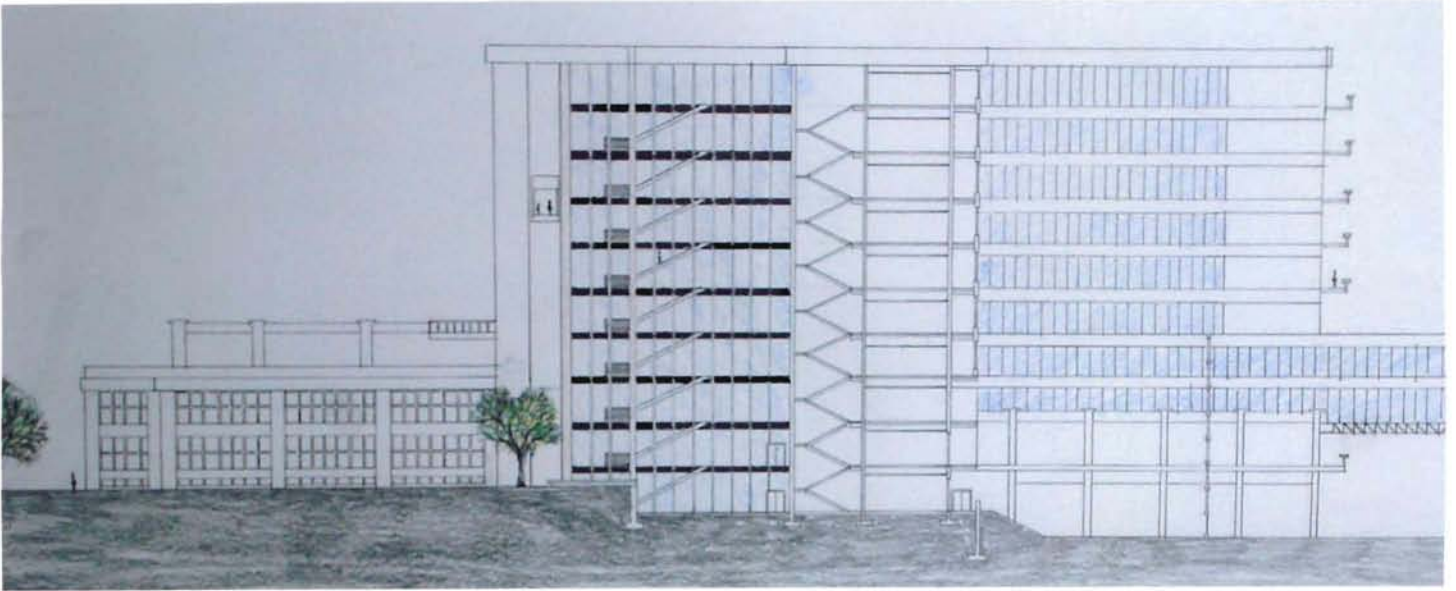


Developed Building Area	47 %
Open Air Parking	2 %
Vehicular Circulation	11 %
Pedestrian Space	18 %
Developed Green Space	19 %
Undeveloped Infill Space	3 %

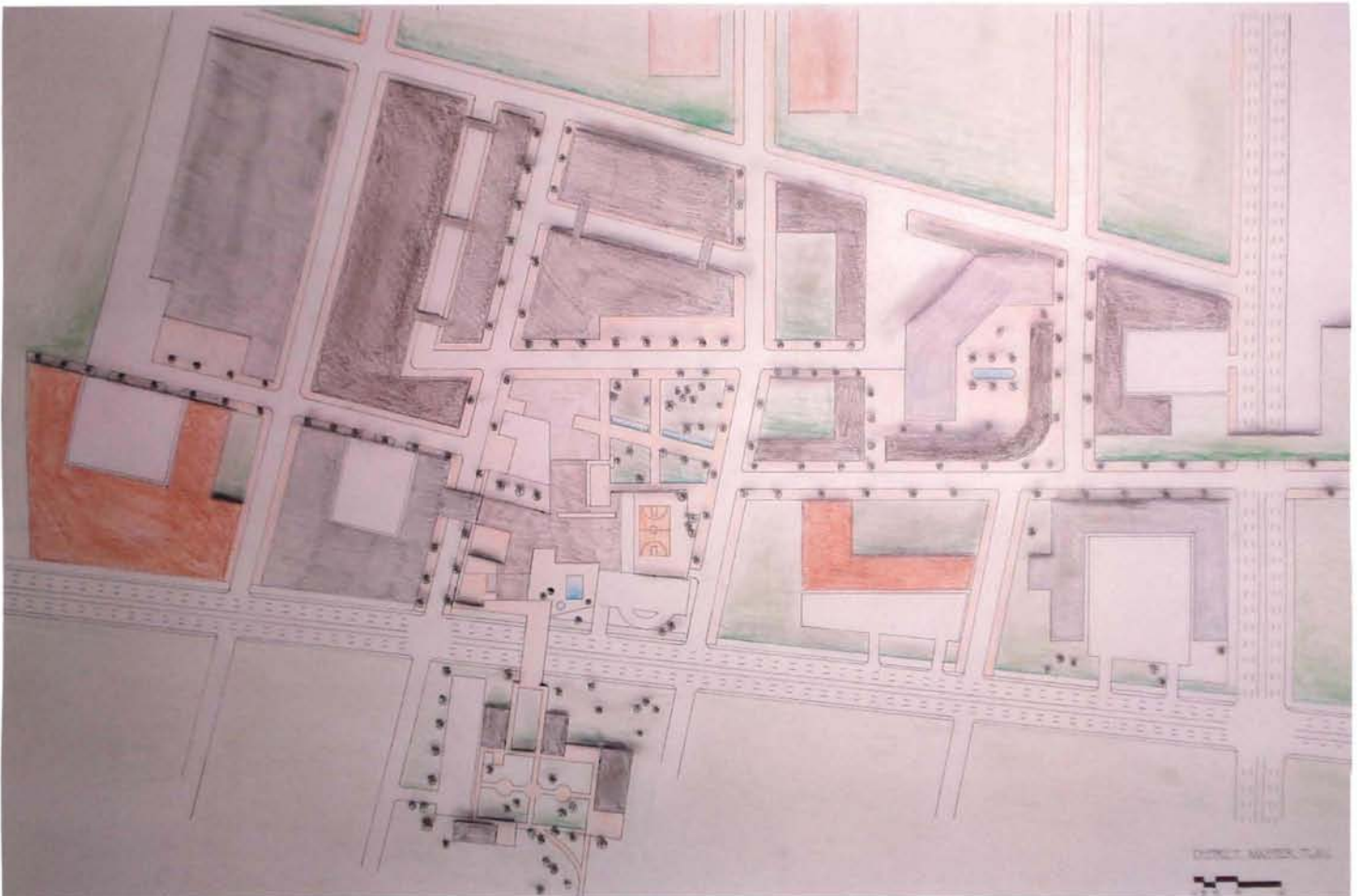


LAND-USE PROPORTION CHANGE

	Formerly	Modified	Total Change
Developed Building Area	12.3 %	47 %	34.7 %
Open Air Parking	19.9 %	2 %	- 17.9 %
Vehicular Circulation	6.1 %	11 %	4.9 %
Pedestrian Specific	0.6 %	18 %	17.4 %
Developed Green Space	5.7 %	19 %	13.3 %
Undeveloped Infill Space	55.4 %	3 %	- 52.4 %



EAST - WEST CROSS SECTION & ELEVATION



DISTRICT SITE & MASTER PLAN

FINAL DOCUMENTS

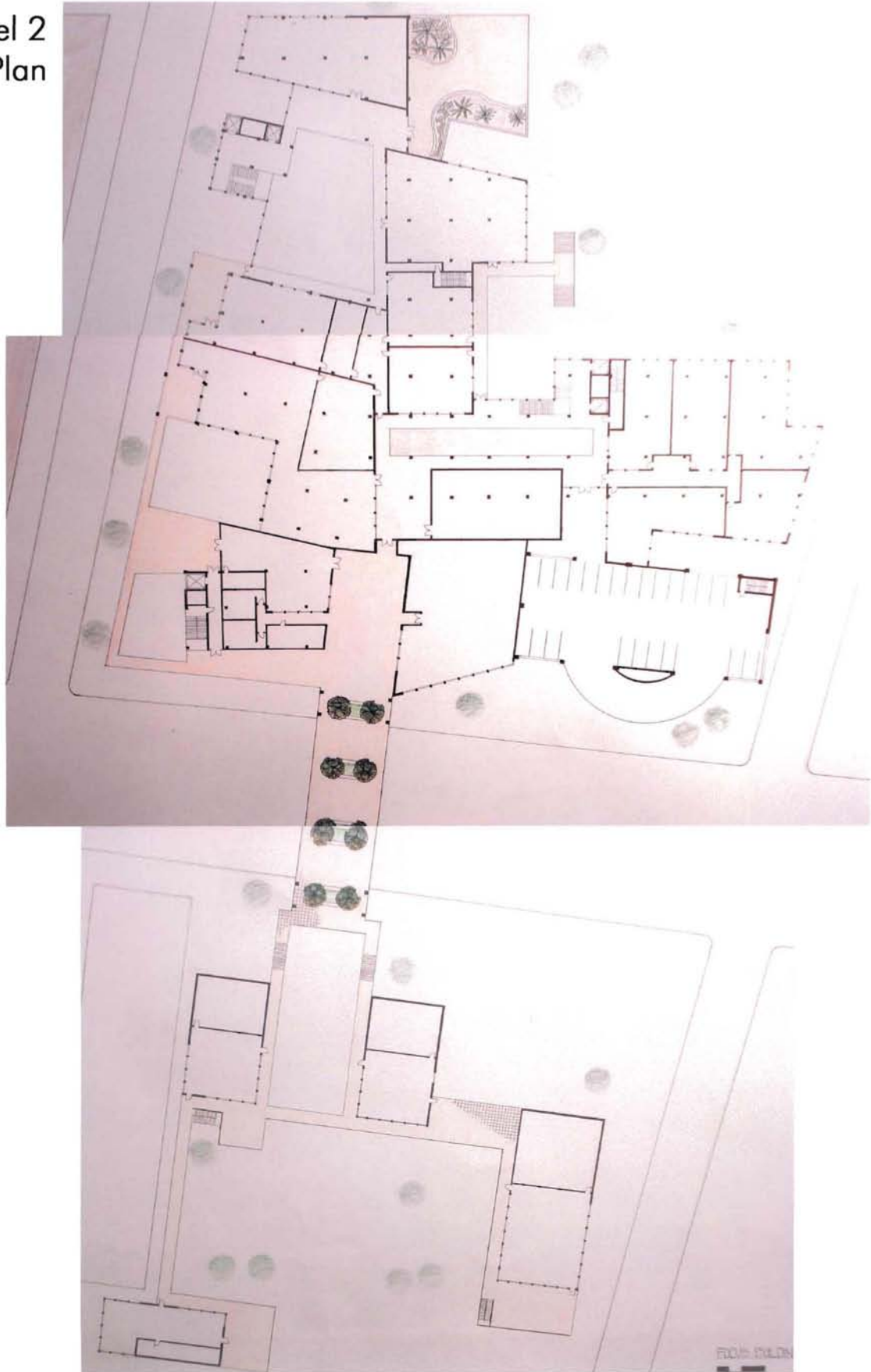
Redefining Suburban Peripheries

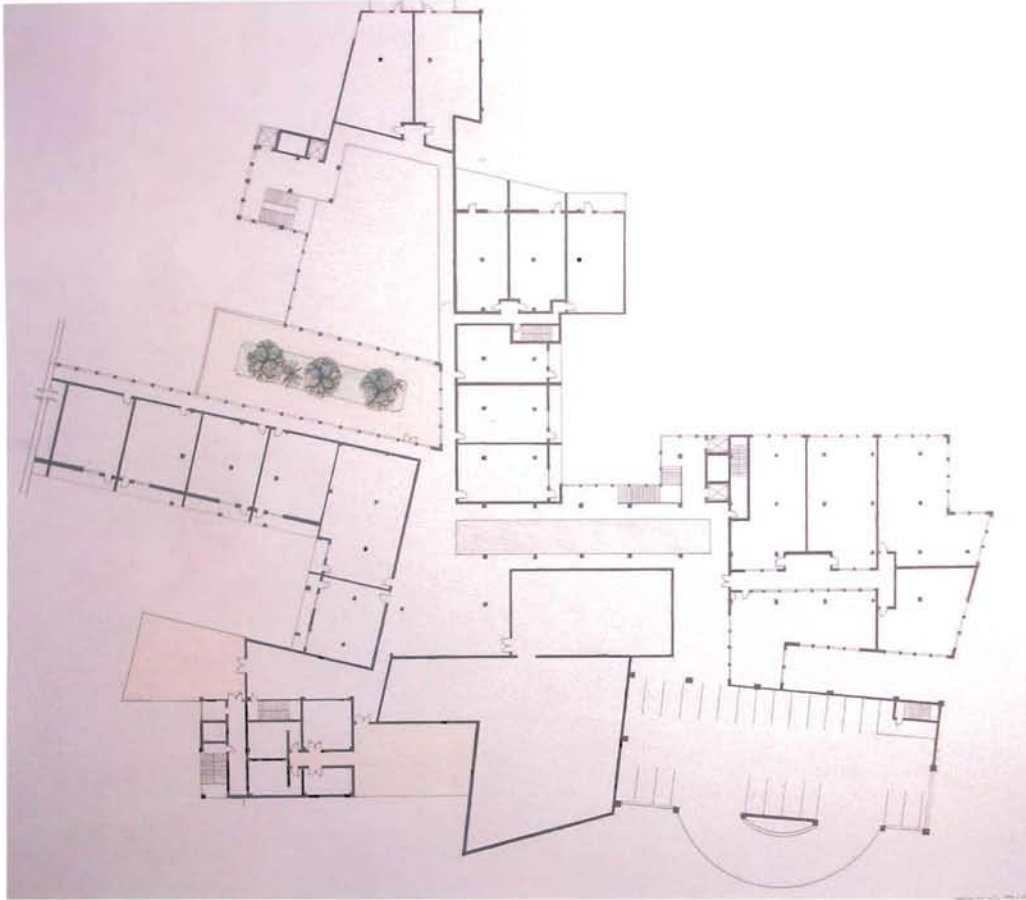


Street Level
Floor Plan

FOCUS BUILDING - LEVEL 1
1:1000

Level 2
Floor Plan

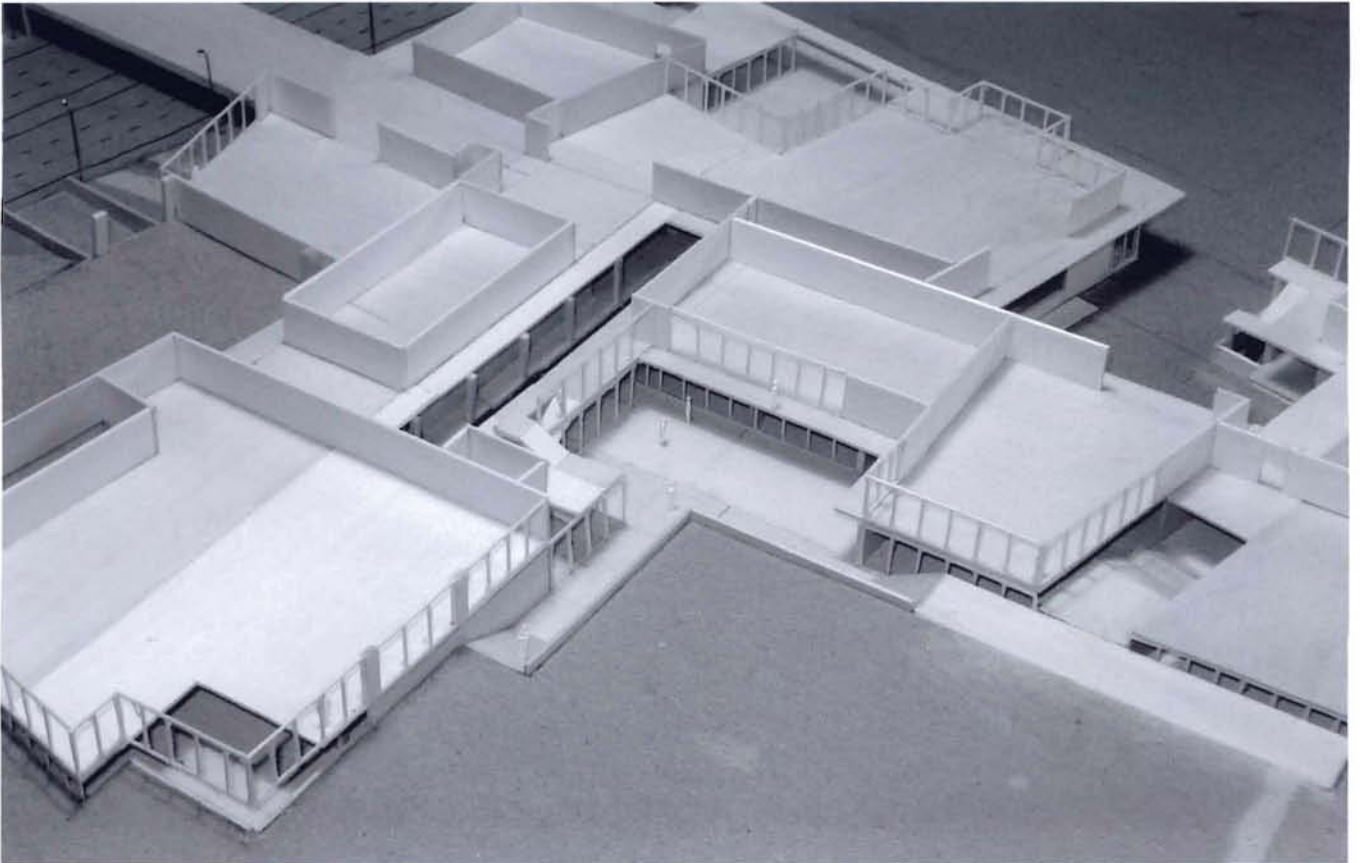
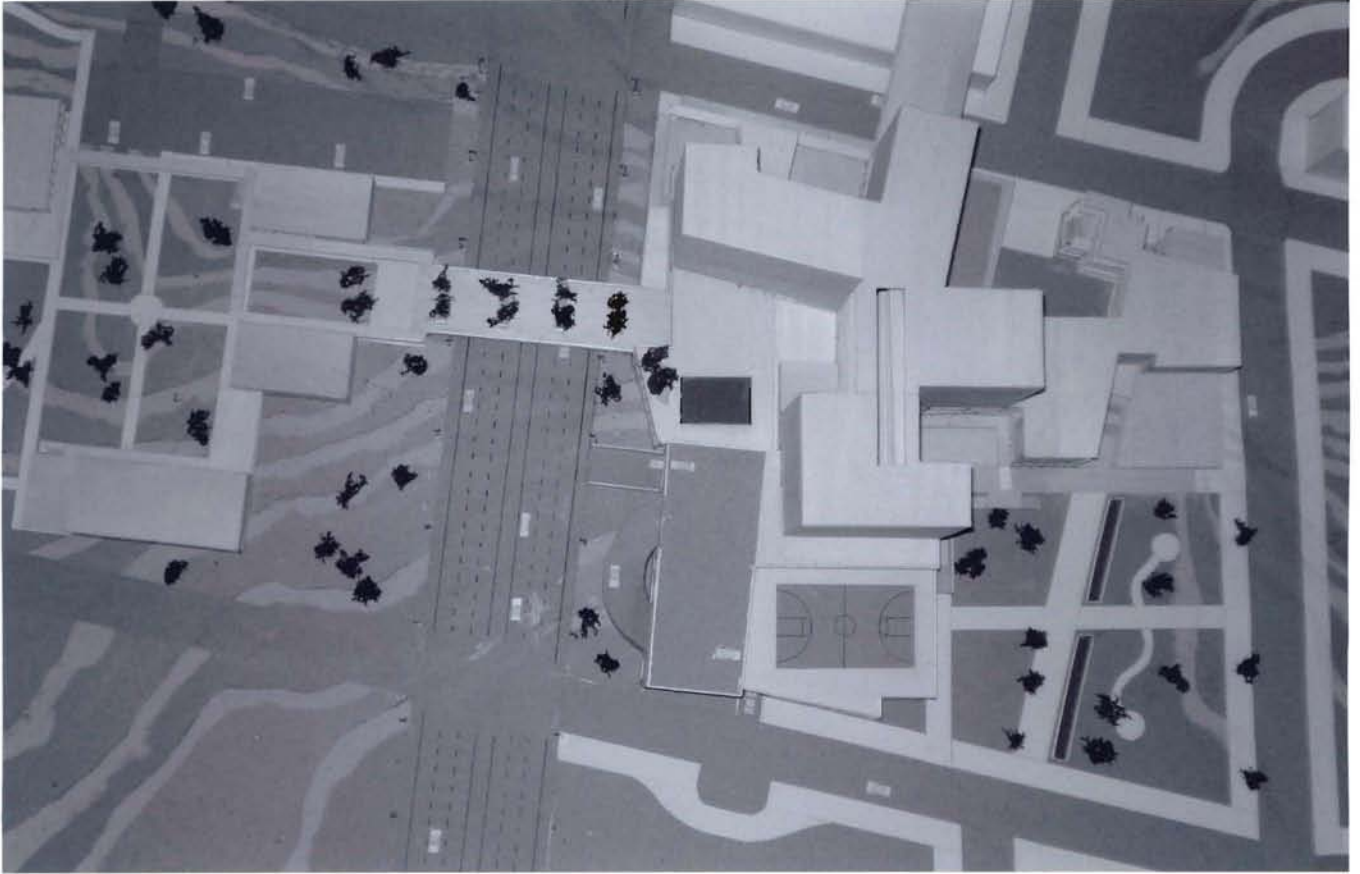


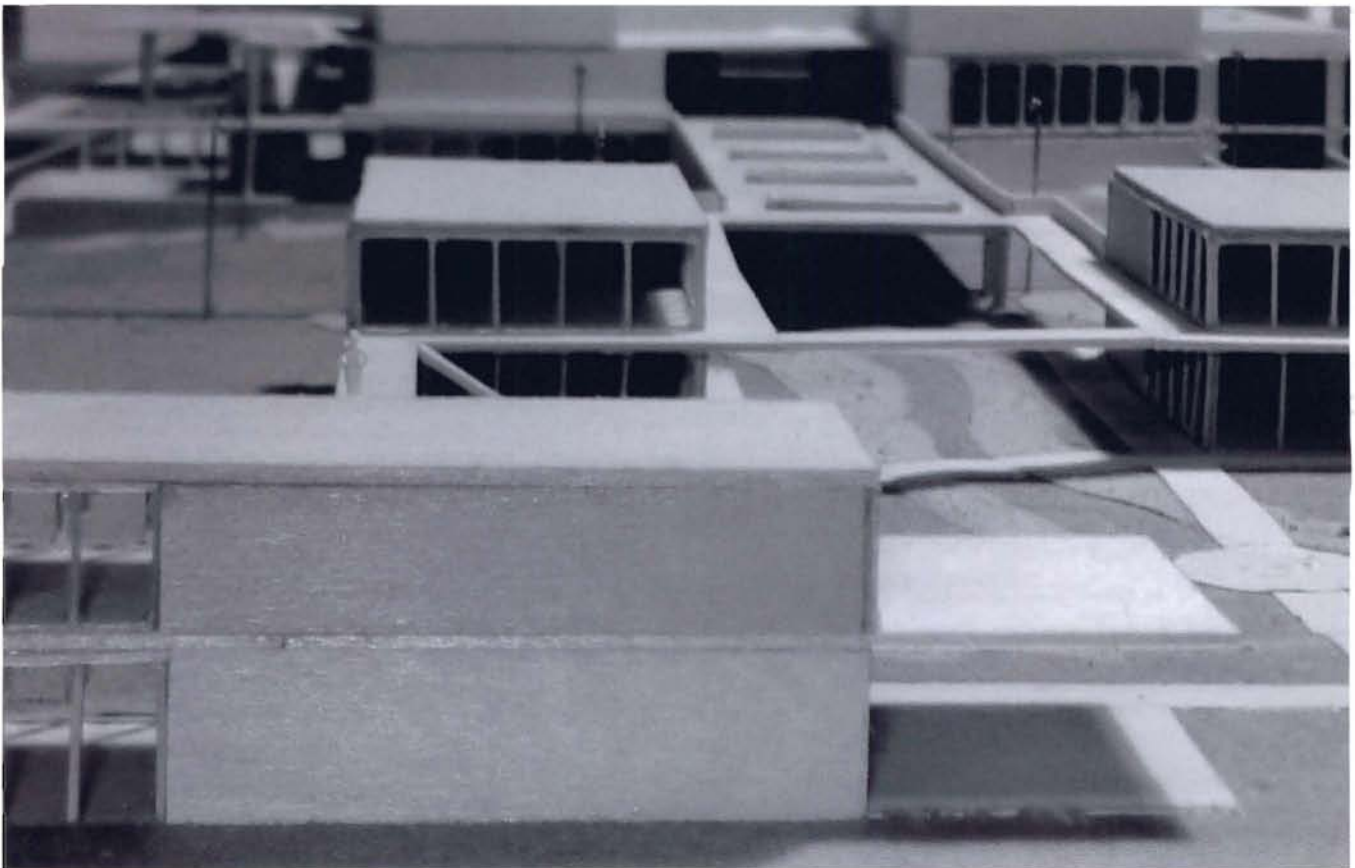
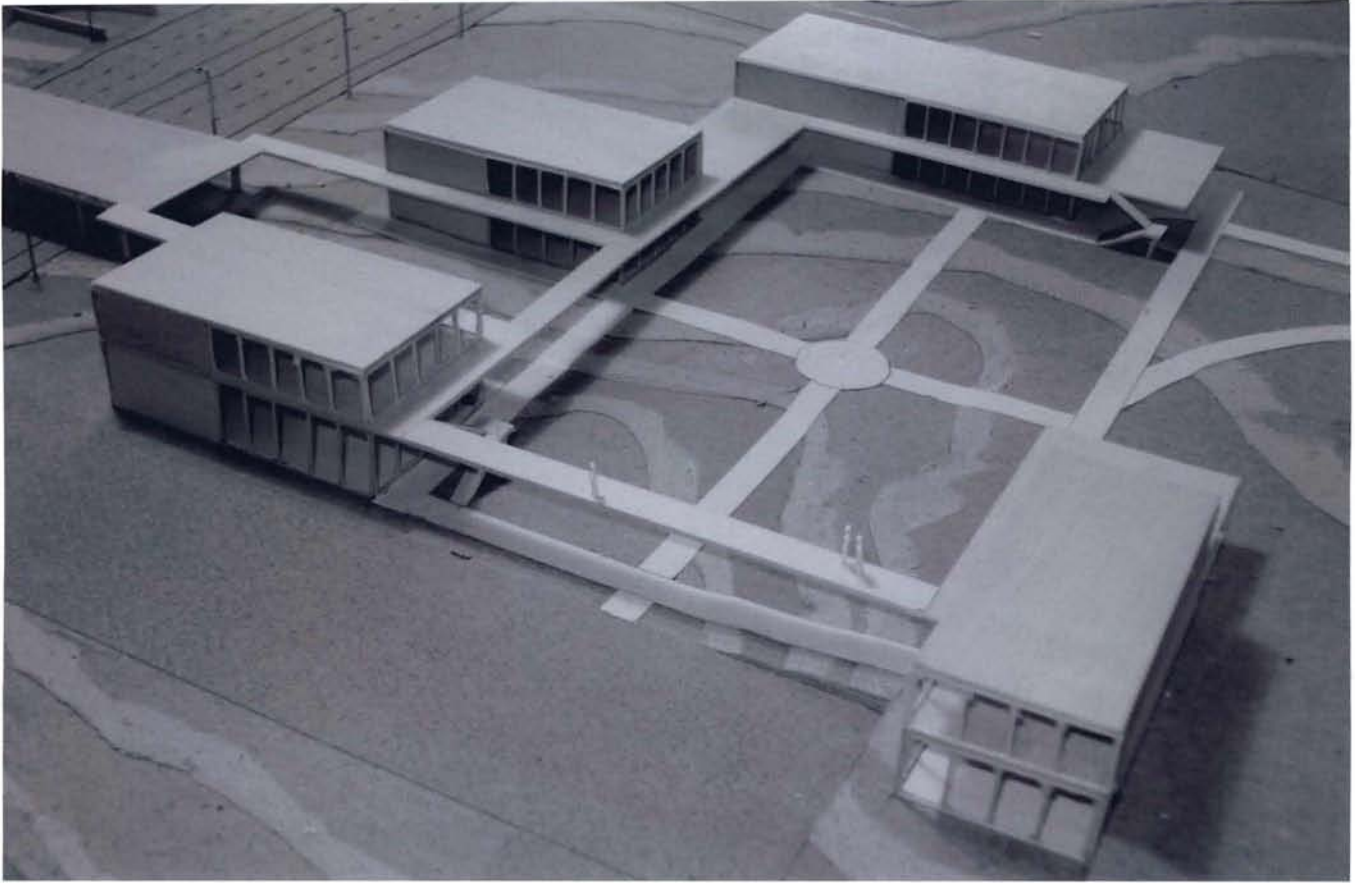


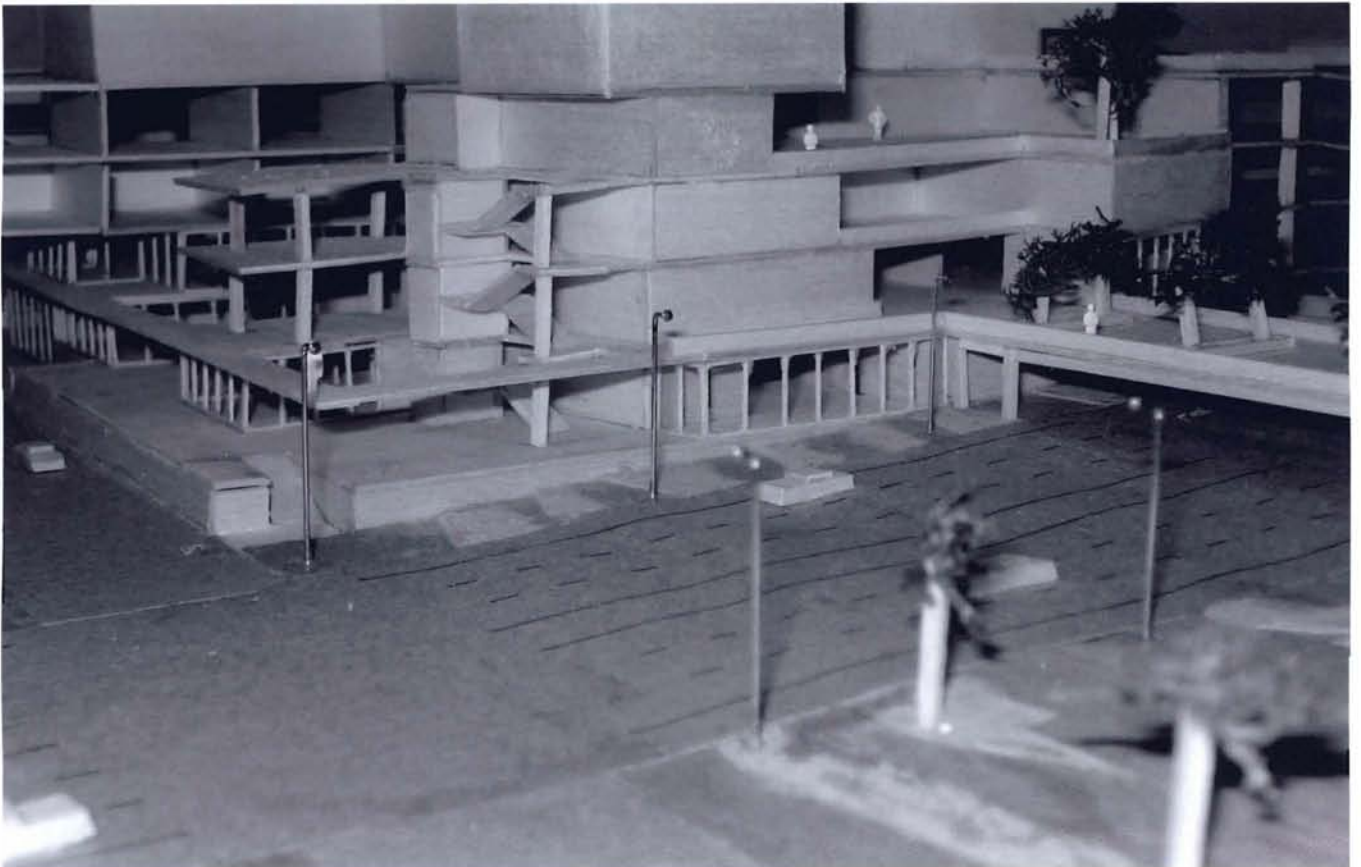
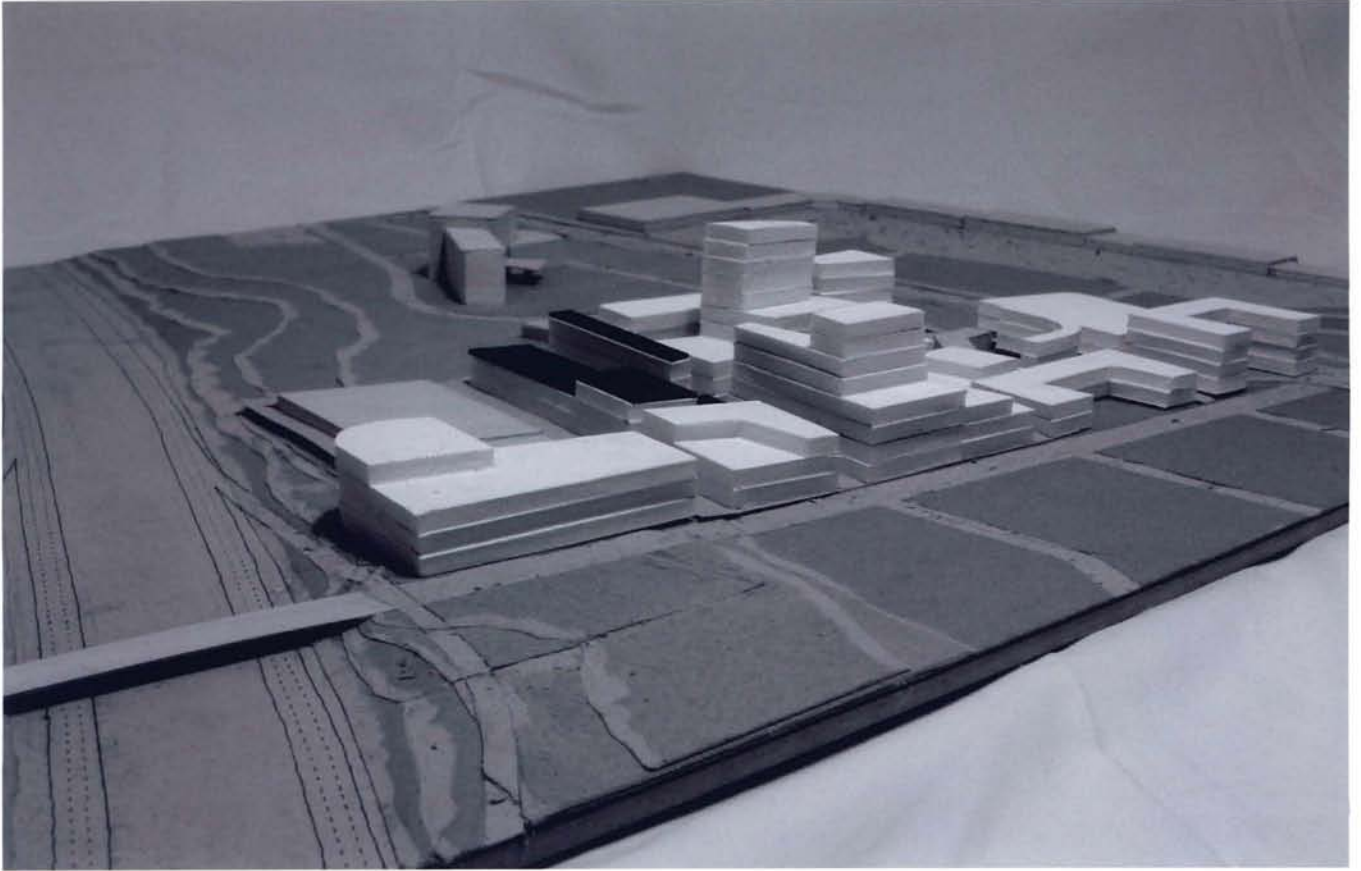
Level 3
Floor Plan

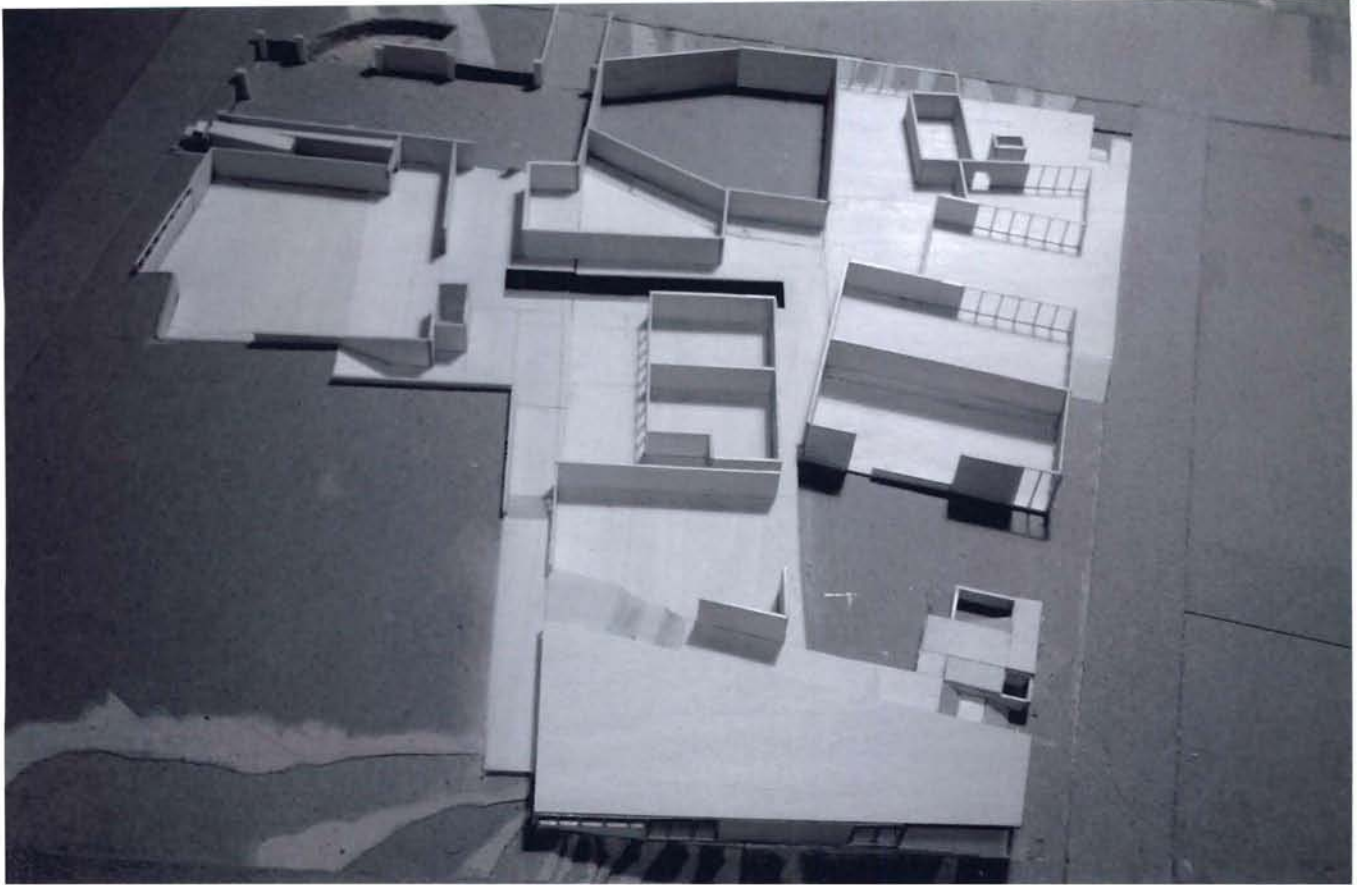


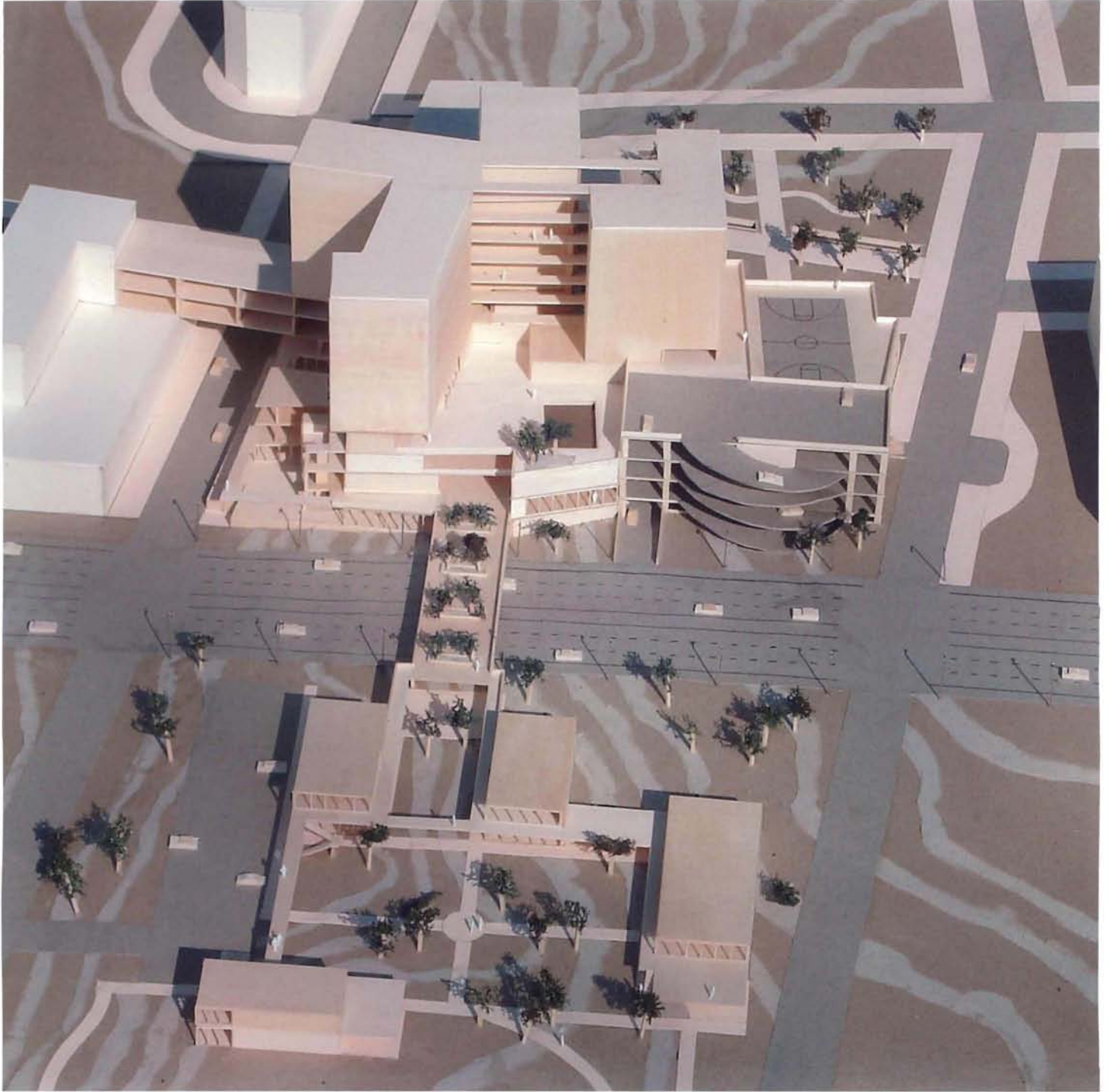
Level 4
Floor Plan

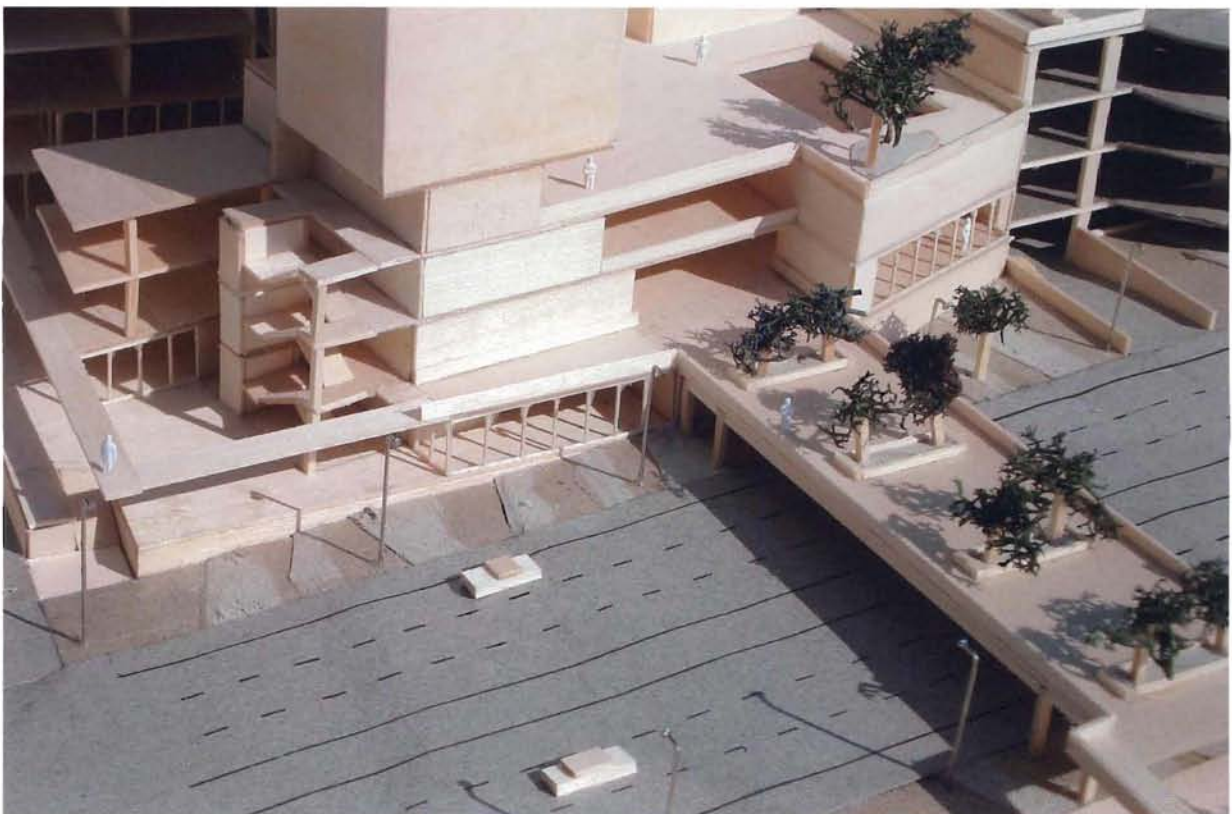














Endnote References & Additional Sources

1. Holl, Steven Edge of a City.
New York: Princeton Architectural Press, 1991
2. Duany, Andres Suburban Nation.
New York: North Pointe Press, 1999
3. Fishman, Robert New Urbanism.
2001
4. Kelbaugh, Douglas Repairing the American Metropolis.
5. Lynch, Kevin The Image of the City.
Massachusetts Institute of Technology, 1960
6. Garreau, Joel Edge City.
Princeton Architectural Press, 1992
7. Orfield, Myron Metropolitics.
Washington D.C: Brookings Institution Press, 1997
8. Altshuler, Alan & Luberoff, David Mega-Projects.
Washington D.C: Brookings Institution Press, 2003
9. Szold, Terry Smartgrowth.
Massachusetts Institute of Technology, 2004

Annotated Bibliography

Edge of a City

This book by Steven Holl was by far the most effective in regards to altering my thinking process to one that is aggressively radical and far less conventional. Holl's various studies and proposals for various edge city conditions were inspiring and enlightening, and really provided a sense of curiosity for potential solutions to similar issues and conditions, ones that have been experienced firsthand.

Suburban Nation

This text was very helpful in confirming the reality of the problematic issues being explored as part of this thesis investigation. The writing was both direct and poetic at times, but it clearly defined the reality of present day suburbia. Furthermore it provided awareness of future conditions as a result of current development patterns, and it's language was truly motivating toward creating a plan to intervene with the existing reality of suburbia.

New Urbanism

This text provided a very accurate perspective on the reality of political forces interacting with one another in regards to issues directly related to suburban outgrowth. It consisted of tremendous dialogue which also assisted in introducing language and terminology what lead toward deeper thinking and ultimately a more thorough investigation.

Repairing the American Metropolis

The information provided here was primarily concentrated on conceptual visions and ideas that could be potentially feasible toward applying to present day suburbia. It offered comments from random people living in the suburbs and allowed for many valid points to be taken into account, not just ones that flowed parallel to the thesis but also some that were highly contradictory to it. Regardless of the perspectives being stated it is always helpful to be exposed to as many views as possible.

The Image of the City

This information was helpful from a terminology and general conceptual perspective. It was not significantly related to the overall scope of investigation, but in terms of composing design solutions it was helpful because it discussed successful methods of organizing space, and also highlighted some key components in regards to what elements generally go into well designed spaces. The concepts of paths, nodes and edges are a specific example of simple design elements that this text discussed in very helpful detail.

Edge City

This provided a realistic view of relevant issues and also related them to how they are effected over time. It discussed the effects of suburbanization from past decades and how it has transpired to the reality that it is labeled with today.

Metropolitics

The main issues in this reading did not have much of a direct impact on the thesis at hand. It went in depth regarding political issues in suburbia relative to the city, but was primarily based on financing.

Mega-Projects

This focused in detail the process of many major developments as they progressed from the planning stage through final completion. It was enlightening in terms of considering this project as a reality, and realizing all other additional factors that would play a role in its development, primarily political ones.

Smartgrowth

This acknowledged similar relevant issues and introduced potential remedies to correct them. To some extent it focused on better planning and design, but it was mainly based on financial roles at play.

This project was intriguing throughout the year and it was certainly favorable for the long span of time that was provided to investigate it. A weakness in regards to the thesis that did become apparent throughout the exploration, primarily in the first term, was that there was not a significant amount of disparity in response to the thesis statement directly. This was an issue that had to be addressed and instead of simply identifying the reality that there was a problem, it became solution specific, and there had to be a good argument toward responding to the acknowledged condition.

I am pleased with the concept in general despite the fair criticism and points that were surfaced regarding potential disruptions to it. One thing that absolutely has to be understood in order to allow this thesis to be tolerable is the reality of suburbia, the ease of how it functions, and how it is responsive to our life-style. That has to be stated with caution because it is responsive to the human life style but it is not responsive to the human specifically. The automobile has played a major role in dictating human trends, and resulting from this is diminishing effect in regards to the once authentic and community oriented trends. While new urbanism is one example of remedy to this, it is very narrow in terms of its ability to really take off and become effective.

The proposal that this thesis investigation offers is certainly radical and likely over-aggressive based on the steps that have been taken so far that would be similar in concept. Increasing density is a common preference for new suburban development, but it is something that has been ignored, typically speaking, and does not have valid reasoning to continue being ignored. It is probably not practical to propose a mega-project that is as intense and aggressive as the one offered in this thesis, but it is conceivable from this vision that this type of development could become a reality in the near future. Crawling is typically a pre-requisite to walking, and perhaps this type of development is in need of a pre-requisite, or series of them to lead toward it becoming a viable solution.

Despite the resistance that would present itself in offense of this project, I am very confident that it would lead toward better things for the suburbs and the entire metropolitan system as a whole. Architecture can play a major contributing role toward rendering this into a workable deal. It will provide a restored sense of order and organization to the environment that we use and live in, but more importantly it will reach out to humans, and provide an environment that we are ultimately more comfortable living in. It is something that I feel can truly become a winning situation for all parties involved, and the ideas explored through this investigation are ones that I will carry with me into my professional career, and apply in the practice of my future work to come.

