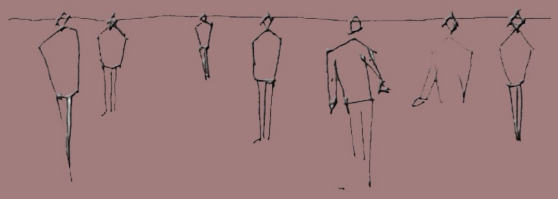
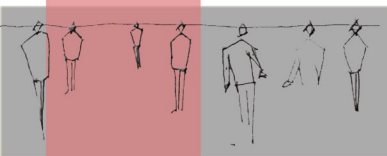
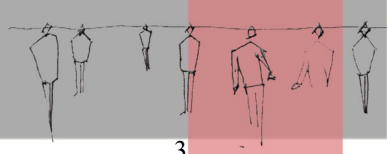
COMMUNITY BUILDING

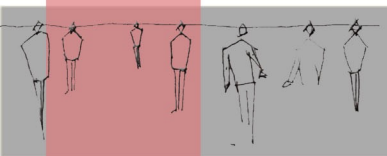
A MIXED-USE URBAN
REDEVELOPMENT PROJECT WITH AN
EMPHASIS ON
COMMUNITY SUSTAINABILITY



REBECCA L. COLLIS 2005 UNDERGRADUATE THESIS







Building Community:
A Mixed Use Urban Redevelopment Project with an Emphasis on Community Sustainability

St. Paul, Minnesota

AN UNDERGRADUATE THESIS SUBMITTED TO THE FACULTY OF THE DEPARTMENT OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE
NORTH DAKOTA STATE UNIVERSITY

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARCHITECTURE

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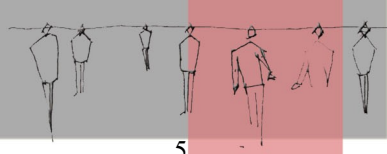

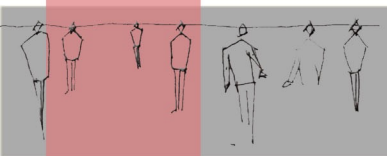

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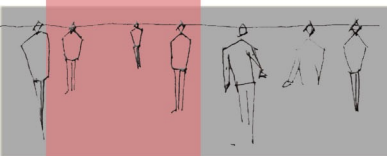
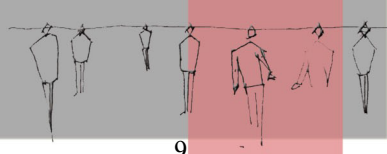
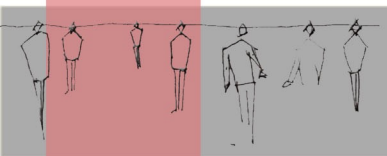


1 Abstract

This thesis will be a study of mixed use facilities in an urban area in an effort to find a design that is not only aesthetically pleasing, but encourages community growth and development. Research will look into reasons why Europeans are moving back to urban environments and the United States is still moving towards the suburbs. This thesis document will provide a solution as to what functions and building types encourage community growth and stability in the urban environment.





2 *Project Introduction*

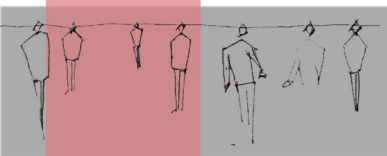
This thesis will take a look at placing a mixed use building in St. Paul, Minnesota in an effort to build community and stabilize a neighborhood going through a revitalization. It will look at both building types that aid in growth as well as different functions in an effort to maintain population and add to neighborhood value.

St. Paul itself has a rich history. It's population dates back to the 1800's with the installation of Fort Snelling along the Mississippi River just south of the current downtown. Industries began moving into St. Paul, more specifically, the Lowertown area. There are currently many historic buildings left in the district, many of which are old warehouse buildings.

The site chosen is in the Lowertown district on a site that is currently a parking lot. It is surrounded by both the new downtown and the old Lowertown buildings, making this a challenge not only in historic prec-edence, but in bringing modern into the picture. The exact location is along the south side of Seventh in between Sibley and Jackson Streets.

Figure 2.1 Map of Lowertown in St. Paul, Minnesota

The theoretical premise behind this project is what makes urban environments work, whether it be the function of the spaces inside and outside or if the architecture itself is the influence on how communities work. This thesis will examine different urban environments and what is it that makes them function and encourage growth back to those cities. It will also look into the different functions inside and outside of the building that either encourage or hinder community growth. Overall, the underlying premise of this design will be to use the principles of new urbanism with historical precedence in order to regenerate an urban neighborhood.



3 Project Description

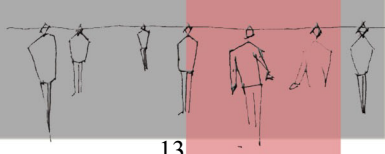
I. Conceptual Underpinnings

The idea behind my thesis is looking at the connections of people to community and how that community is influenced by its physical surroundings. I also wanted to look at the connections people have with the urban environment and what keeps people there as opposed to continuing suburban sprawl.

One place that seems to have mastered this is Europe. In the sixties, it seemed as though America has mastered urban redevelopment, seemingly bringing people back to the urban centers (Grebler). However, that quickly changed as the federal government provided funds for the interstate and highway system. This increase in accessibility to urban centers essentially paved the way to suburban sprawl.

So what is it that Europeans are doing differently to attract people back to the urban life? For one, they have a rich history that they are capitalizing on. By making local history a priority, it seems as though people take more interest in their community. They use the buildings that they already have and rework those to make them fit for the current situation. When people take an interest in their community and rebuilding it, they are forming community bonds.

The scale of the buildings has also changed throughout the years. One hundred years ago we may never have dreamed a building like those of the World Trade Center Tower, now the technology is here to support buildings even taller than are currently available. While this is a great innovation in building design, it also has a negative impact on people using cities. No longer has it been important to maintain the street edge and to provide pedestrians civility in buildings. Neglecting the scale of the building inevitably makes the city cold and uninhabitable. Lozano discusses in his book that while density of urban areas is highly important, so are aspects such as pedestrian friendly streets and day lighting. Just because buildings get taller and denser doesn't mean that daylight into the urban spaces has to decrease. There are some cities in the United States

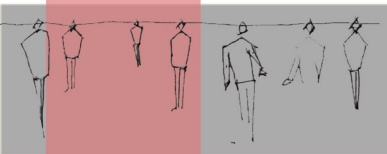


that have begun to handle this better. Cities like San Francisco have adopted a building code that allows for buildings to grow taller, but stepping up and drawing back the tower from the street. It is the small spaces and pedestrian thoroughfares that build a sense of community and make the urban environment inhabitable and day lighting into these spaces plays a significant role in that mentality.

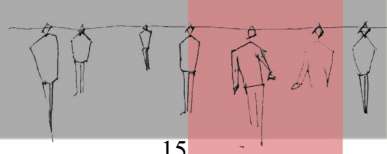
Another possibility as to why European cities are achieving the community vision better than America right now also has to do with districts and zoning. After World War II had destroyed many urban places, it was the job of the people to rebuild. This time, they chose to eliminate the districts and zones once held for more mixed use neighborhoods. Instead of an aristocratic private neighborhood, places richest in community were those that involved the poor and the rich into the design of the neighborhood. These were places where people didn't have to leave their neighborhood to work, shop, or get entertainment. Perhaps one of the best reasons the sense of community is greater in Europe than in the states is the proximity of needs to one's place of living and the ability of communal transportation for places outside that initial radius.

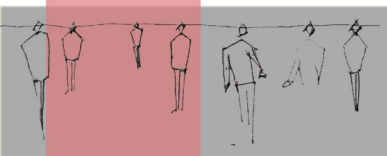
Throughout the research, it's consistent that it may not be the physical building itself having an impact on the community, but the uses and how they are addressed in the urban environment are essential in community growth and development. However, some communities work better than others and that may not all are dependent on the uses but the appeal of the buildings. It comes down to the place and the neighborhood itself.

If the community bond is great, the appearance of the physical environment won't matter. On the other hand, perhaps it's that physical environment that drew those people there in the first place and the places in that neighborhood only harbored those bonds to become stronger. In Appleyard's book, there is an article on a neighborhood in Rome that was a bit rundown, but the community bonds were very strong. For them, it was the plazas, the markets, the places along the sidewalk that fostered communication with neighbors and the proximity to get out into the neighborhood. Perhaps it's not the state of buildings but the places architects give to the public that foster community. The research would show that by giving people places to communicate and build relationships is



what makes urban environment different from the suburban environment. It is the interdependency people share with their neighbors, the easy access to meet with them, and the environments that foster growth that sustain the urban neighborhood. While density is important in what drives people to live in these neighborhoods, it is the humanity and scale of these environments that sustains community.





II. Major Project Elements

- **Plaza**

This would be a place on my site devoted to outdoor gathering. It would be a place located adjacent or in conjunction with normal foot traffic so that those pedestrians walking in the area could simply stop and gather.

- **Grocery Store**

Different than those supermarkets that people of today are accustomed to, this shop will mimic those of urban European cities. A small store that has most of the neighborhoods basics that's small and conducive for gathering and communicating with neighbors. This is one of the places that are essential in creating the urban neighborhood, a place where people within a five minute walking distance will come perhaps on a daily basis.

- **Restaurant/ Bar**

Places that encourage activity at all times of the day are also essential in creating an urban neighborhood. A restaurant not only provides sustenance but also a place of gathering and interaction for those in the community and beyond. Part of what makes an urban neighborhood so unique is its ability to function days, nights, and weekends.

- **Café/ Coffee Shop**

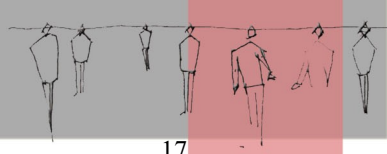
Small shop in the city block that allows for interaction on a daily basis and those connections made with those in the neighborhood.

- **Satellite Community Center**

One of the many new age pieces of the urban fabric is those of physical activity and community enrichment. This facility would be small and serve the community with limited meeting rooms and workout facilities. Part of a healthy neighborhood is healthy people. This is also another place that could be frequented daily by residents and give yet another opportunity to meet and gather in order to build community

- **Residential Units**

One of the aspects of urban development that was stated as essential in multiple sources was that of housing and how important it was to have it



in various places in the neighborhoods. What makes a neighborhood sustain is the mixed use of buildings. By providing residential spaces within these mixed use buildings, both to rent and to own, people are within walking distance to transportation, work, or shopping. Another key to making this work is not segregating housing by price either. All classes of people need to be mixed together because they each use neighborhood functions differently, all which are necessary.

- **Parking Garage**

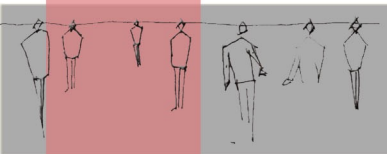
The city already has a lack of parking, by adding more uses to the site, more parking will be needed. Along with that, the site is currently a parking lot and those spots will need to be replaced elsewhere.

- **Courtyard/Small Park**

In addition to plaza space, some green space on the site would be ideal for making the area more humane. This would also be an exciting place for people to stop and gather in an effort to build community.

- **Leasable Office Space**

Finally, open office space for people to come into the neighborhoods with their businesses will be provided. In an effort to let people live and work in the same neighborhood, opening up the door to more opportunities will aid in community growth and stability.



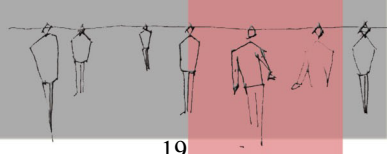
III. User/Client Description

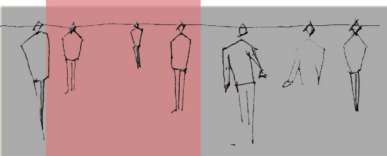
The developer of this property will be accepting funds from the Lowertown Redevelopment Corporation and the City of St. Paul in an effort to provide a building that benefits the long term of the neighborhood. With this, the developer understand that by providing a better building to the community, they can make more profits with the building over a longer period of time.

The City of St. Paul will automatically get a space within the building for its contributions, which will be used for the satellite community center. It will therefore house their staff for that facility and corresponding offices.

The developer will be leasing or selling the remaining units for their own benefit. Housing units will be sold or rented at various rates, based on the unit. They will also be leasing out the office spaces and retail spaces along the street to businesses that are approved by the Lowertown Redevelopment Corporation's plan for the neighborhood.

Most usage of the spaces will be toward the lower two levels where the community center and retail spaces will be located. Spaces on the upper floors will typically be used for residents and therefore will see a lesser amount of visitors.

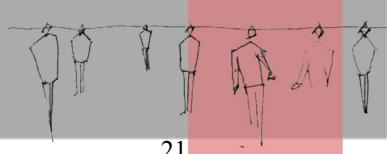


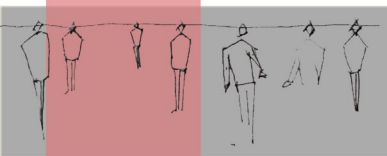


IV. Design Methodology

Research for this design will focus on urban revitalization and new urbanism efforts being made elsewhere to create sustainable urban communities. It will also focus on the intended use of the building with the spaces allocated above in mind.

Much of the rest of the research will be focused around the historical context of the site. The site is part of the 14 block historical registry of buildings and it will be key to looking into a mixture of those buildings as well as incorporating modern elements to mesh with the buildings on the opposing side which are more modern. The case studies for this project will examine urban areas that have been able to incorporate the new with the old in a fashion that brings out the beauty and function of both.





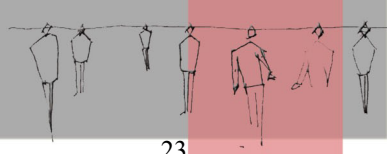
V. Project Emphasis, Goals, and Objectives

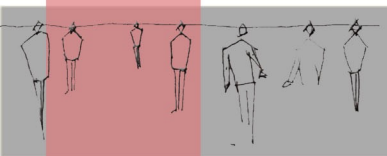
There are four major elements that I hope to focus on during this thesis. Community regeneration and stability will be the main focus. This part of my thesis will look at what makes cities work well and what can be done to make them more stable. Whether it be a specific building function or the aesthetics, finding out what influences people to stay in an urban neighborhood as opposed to moving out to the suburbs will play a key role.

Another important aspect of this thesis is looking at the historical context of the site's surroundings. This is a unique site which is sandwiched between both historical and modern buildings. It will be essential not to deny either but to find out what works with each of them in influencing community growth and development. This part will look at case studies of other urban areas where historical buildings have been revitalized and made appropriate for the current populations. Through research already conducted, it would seem as though much of why people move back to urban areas, or stay, is due to the local history and culture. Finding out what that is and marketing upon it may play an essential role in a functioning community.

Urban design principles are another topic I would like this thesis to look at. In recent years, many planners have looked back to historical precedence and what has worked in the past in an effort to revitalize our urban neighborhoods, in particular, the work of Duany Plater-Zyberk and New Urbanism. Though they have mainly worked with suburban communities, there are principles that can be taken away from their work that apply to building community within the urban environment.

Finally, looking at sustainability and materials and their role in a successful urban neighborhood. Lowering energy consumption and increasing natural systems within the building can not only enhance the experience of the community, but may also increase the lifespan of the building. Some of the best buildings in our history are those who used natural systems and with today's technology, sustainable building is a great way to increase value of a building.





4 Site Analysis

St. Paul has a population of almost 290,000, most of whom do not live in the downtown center. Lowertown, a section of downtown, is where the majority of downtown dwellers live. Located below is an engineering map of the proposed site. On the north-south roads, there are one ways in opposing directions. To the north along Seventh, it's a two way street. Directly to its south is a minimal access one way street, which will likely have little, if any, pedestrian traffic.

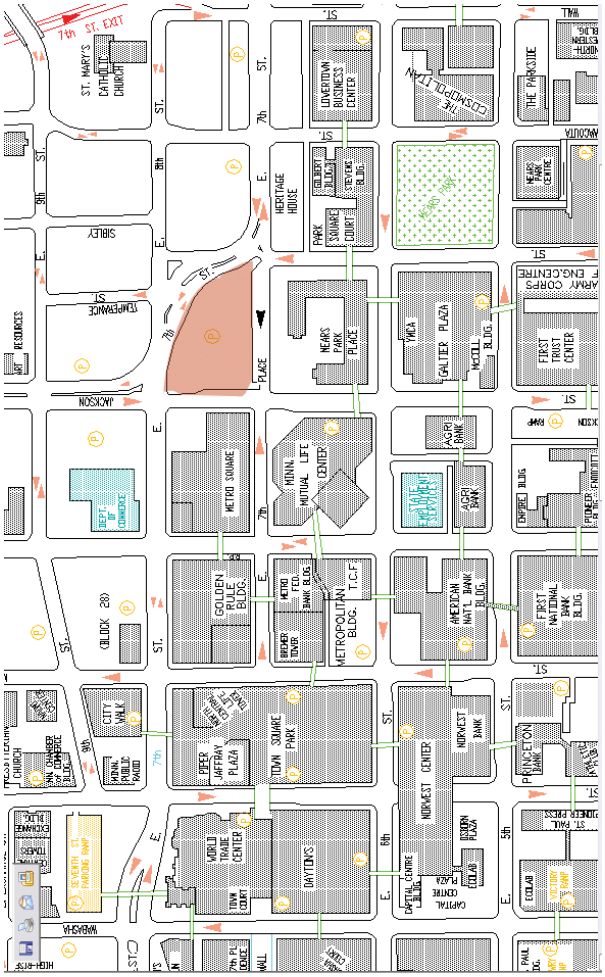


Figure 4.1 Engineering Map of Lowertown in St. Paul, Minnesota

On this next map, the overall building heights are depicted. Though this map has changed with time, it shows the general scale of the Lowertown area to be much smaller than that to the west in the Downtown area.

Figure 4.2 Arial Map of Lowertown St. Paul, Minnesota

This next map is a description of a proposed transportation system for the city. It details possible stations within a five minute radius of where people live, one station of which passes near the site for this thesis. Again, the proposed site is marked in red.

Figure 4.3 Transit Oriented Development Map for Mears Park Area

The location of the proposed site is unique in its own. Currently ill defined with a flat parking lot, any design choice would need to reflect both the relatively low heights and historical facades of the Lowertown neighborhood while trying to incorporate a bit of the modern from the buildings directly to its west. The Lowertown neighborhood ranges from about 4 stories on up, with the Gal tier Towers as the highest.

Due to the relative low of building heights in the Lowertown area, natural day lighting into the streets, parks and buildings is possible and encouraged. Historical facades and street greens all make up the urban pattern of this neighborhood.

Figure 4.4 Typical Building Façade in Lowertown Neighborhood

This neighborhood is also one that functions day, night, and weekend. However, you will see the most action here in the middle of the summer during the workday. Mears Park is a popular lunch spot and place for those who work in the city as well as those who live there. It is one of the more different parks in the city, with a more natural look to it.

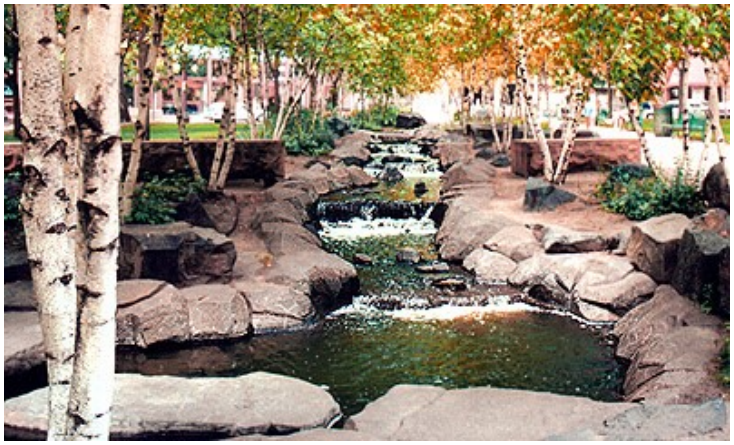


Figure 4.5 Mears Park

However, it also appeals to those of all ages. In the summers in particular, lunchtime and evening concerts are held in the bandstand, which is surrounded by greenery and trees. It is also home to the Farmer's Market. Parks and greenery make Lowertown one of the more appealing neighborhoods in St. Paul and the proposed site should incorporate these feelings into its design.

Figure 4.6 Southwest Corner of Mears Park

The site itself is fairly flat, with only one topographical contour entering from the Northwest side. The weather itself is also fairly temperate but has the four seasons. In the winter, temperatures can get as low as -34 degrees F, but on average a low of 3 degrees is to be expected in January. In the summers, temperature can rise in the 100 degree range but typically stays in the 80's. It is also relatively calm in terms of wind as well. Average wind speeds are usually around 10-15mph to calm. Unlike Fargo, ND, there is a lot more topography and wind speeds don't feel as bad as they do here. In the winter, prevailing winds are out of the Northwest whereas in the summer, they prevail from the South to Southeast (Climate.umn…).

Another site factor is noise. Along the North-South axis roads, there is only one way traffic that is quite minimal. However, along Seventh Street, there is two way traffic and is also a high traffic route due to its ability to cut through town. Sound buffers and greenery on the North side of the site will help to minimize noise distraction and continue to promote pedestrian traffic.

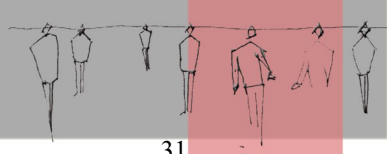
Figure 4.7 Collage of Images from Lowertown Neighborhood

5 *Case Studies*

In looking for good examples of urban environments and mixed-use environments done well, it was difficult to find any in the United States. Part of that is due to the youth of our country and therefore the lack of history. As stated previously, it was in part of historical buildings and culture that helped evoke a transition back to the urban environment in Europe.

Another part of that is the United States attempt over the past 100 years to build higher and higher while perhaps neglecting the pedestrian experience at street level. Due to the age of Europe, many of the buildings were already in place in urban environments when the technology for height came about. Perhaps it was their ability to be dense and humane that continued to attract people to the urban centers.

Whatever the case may be, European cities seem to be doing it right at this point of time in driving people back to urban environments. The following are examples of good urban neighborhoods or environments that have fostered community growth and development. These case studies will aid in my thesis discovery of what makes urban neighborhoods work, whether it be the physical environment or the functions they serve.



Madison, Wisconsin

I stated earlier that there are very few urban environments in the United States that foster community growth and development. I believe that Madison, Wisconsin and even more particular, their capital grounds area, exemplify what neighborhoods can do to foster community.

Madison itself has a very rich history and some pretty great influences on the city. The city has long valued design, green space, and community values. Nestled in between two lakes, the city itself has much natural beauty and presence. Following the cities values is the State Capital building. Instead of having one face, Wisconsin's State Capital has four with the grid of the city coming out of those angles.

Figure 5.1 Arial Photo of Madison, WI

What follows along those adjacent streets are what makes Madison so unique. Each has its own identity, its own community fabric. One such

street leads to the Monona Terrace which Wisconsin native Frank Lloyd Wright designed. Along this street are some of the more amazing architectural buildings in the city. Though perhaps that are not the most outrageous out there, they help to set the mood of the neighborhood and creates a processional to the terrace.

Figure 5.2 Rendering of Neighborhood Leading to Monona Terrace

Figure 5.3 View from Lake Monona toward the Monona Terrace

Along another such street are shops and restaurants that take on a European feel with seating into the street. State Street also is a closed road, open

only to public transportation and pedestrian traffic. Here, many of the local university students gather with many places and functions to gather at. Finally, Madison is a good
example of making mixed-use neighborhoods work. While retail is the main attraction along State Street, there are residential apartments above many and the overall greenery of the downtown area make this neighborhood one that functions at all hours of the day.

Figure 5.4 State Street looking towards the State Capitol

Figure 5.5 A View of State Street at Night

Rome, Italy

Figure 5.6 Roman Forum

European cities have known how great communities work for years. One of the first examples of this is the Roman Forum. What worked for the people of that era was the proximity of everything. They didn't have technology of today so everything that they needed had to be within walking distance. Though our technology has lead to great innovations, perhaps the only way to get back great communities is to look at a time that had less.

Figure 5.7 City Street in Rome

Even today, Rome has many small neighborhoods in her limits. Each is made up of its' own urban fabric but all have the same characteristics. All bring the scale down to the human level; there is always something along the pedestrian way to keep visual interest. They also exemplify the use of multi- use buildings. Many times you will see a restaurant next to an office with residential above. Due to the continuity of the pedestrian façade, this does not seem abnormal but continues the flow of the neighborhood. Each individual building and business adds to the neighborhood and expands upon the urban environment.

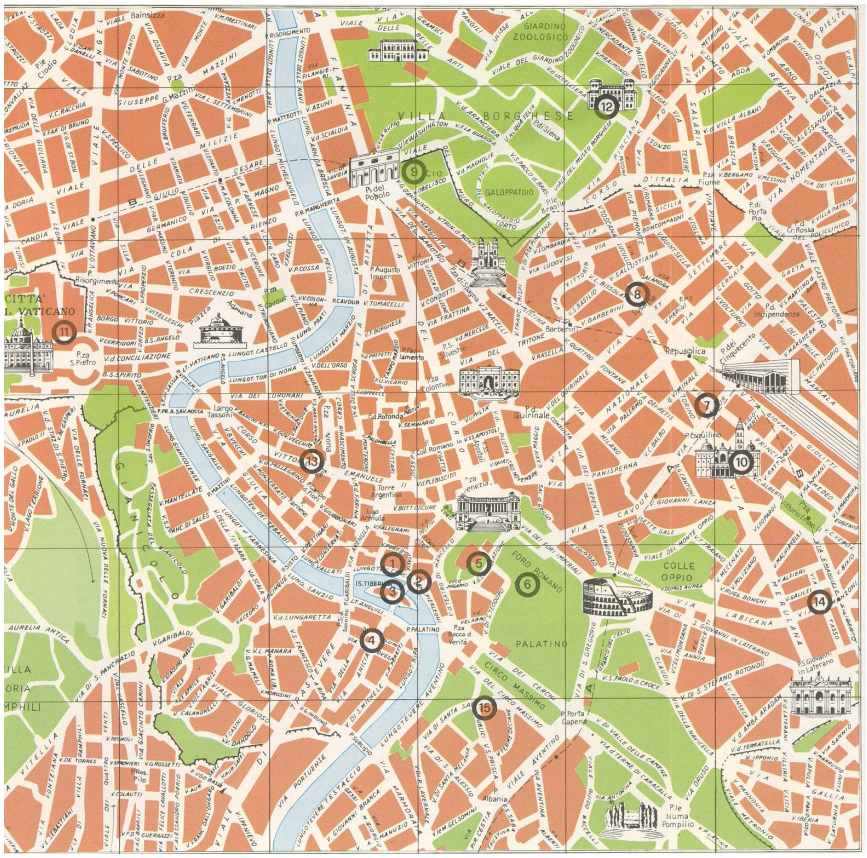


Figure 5.8 Map of Rome

Vancouver, Canada

Canadian cities have also found a way to make urban neighborhoods work. One great example of such city is Vancouver. Like St. Paul, it is also along a waterway and has a rich history. They have also placed an emphasis on making their city livable; a place where people can live and work. The population of Vancouver is around that of St. Paul-Minneapolis, at around 560,000. They have been able to create streets that people want to be on and in many ways, are quite similar to cities in Europe.

Figure 5.9 Downtown Vancouver

Figure 5.10 Mixed Use Building in Vancouver

In all parts of the city, they have done a good job of incorporating housing and retail as well as places to gather. They're streets are livable; people actually want to be on them and not feel intimidated by the car. They also incorporate a lot of design into the pedestrian thoroughfare. In Figure 5.11, you can see the use of trees and light fixtures to bring the scale of the urban environment back to the human level.

Overall, Vancouver is a very inviting and livable urban environment. What helps make it this way is the pedestrian friendly street front and the mixed use buildings that provide necessities, work, and housing for the population. By incorporating these principles into this thesis design, the ability to make St. Paul's Lowertown district more livable and sustainable is possible.

Figure 5.11 Vancouver Steam Clock

Grocery Stores

An important piece in the urban fabric is that of the grocery store. However, they are quite different from those we are accustomed to in Fargo. They are small, quaint, and have a familiar clientele. Part of what has failed in the past with these small stores in the United States is a lack of patronage and support. People began to leave urban areas and therefore there were less people using these stores, forcing many to close. This forces many to go outside their neighborhood to find quality product.

Due to the lack of successful urban neighborhoods in the United States currently, there are no real great examples. However, co-op grocers are most similar to that of the small neighborhood grocery store. They have a familiar clientele and offer rewards for loyal customers. The following images are from either co-op grocers or European cities and give a feeling for what makes them work.

Figure 5.12 An Indoor Market in Budapest

Figure 5.13 Grocery Store in Paris, France

Figure 5.14 Grocery Store in Switzerland

Figure 5.15 People's Co-op in Ann Arbor, Michigan

Community Centers

One piece of this thesis which will make it quite unique is the satellite community center it will house. St. Paul itself is quite large and in order to make a neighborhood work, places of frequent use need to be with a ten-minute walking distance. It will therefore be important that this function on multiple levels as to serve the greatest amount of people in the area. Many little pieces will make up the community center so the following images give a look at what the community center of this nature should encompass.

The first is that of a 26,000 square foot community center in downtown San Francisco. This one in particular resembles that of what I want my project to be as far as context goes. It meets the street in a way that is non intimidating to pedestrians and is inviting. It incorporates organization offices, a day care, a senior center, and 7000 square foot multi use room.

Figure 5.16 West Bay Community Center

Another community center example, however not in an urban setting, is the one in Eagan, Minnesota. Though this facility is larger than the previous example, it incorporates a few different elements. The highlights of this facility are again a daycare and workout facility, but it also has a teen center for area youth.

Figure 5.17 Workout Studio at the Eagan Community Center

Figure 5.18 Teen Center at the Eagan Community Center

Urban Housing

Urban housing is so unique and different depending on the neighborhood, era, and climate. There are so many good examples of urban housing done well and these images can't even begin to show it. What the following images will show is the variety of housing and the beauty it can add to the urban fabric when incorporated into other uses.

Figure 5.19 Row Homes in San Diego, California

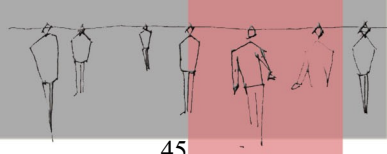
Figure 5.20 Housing in Hanoi

6 *Programmatic Requirements*

- **Grocery Store**

Different than those supermarkets that people of today are accustomed to, this shop will mimic those of urban European cities. A small store that has most of the neighborhoods basics that's small and conducive for gathering and communicating with neighbors. This is one of the places that is essential in creating the urban neighborhood, a place where people within a five minute walking distance will come perhaps on a daily basis.

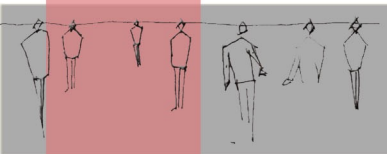
Public Spaces	Sq. Ft
Checkout	500
Restrooms	200
Customer Service	200
Display Space	300
Private Spaces	
Food Storage	2000
Offices	500
Loading	500
TOTALS	4200 sq ft



- **Restaurant/ Bar**

Places of that encourage activity at all times of the day are also essential in creating an urban neighborhood. A restaurant not only provides sustenance but also a place of gathering and interaction for those in the community and beyond. Part of what makes an urban neighborhood so unique is its ability to function days, nights, and weekends.

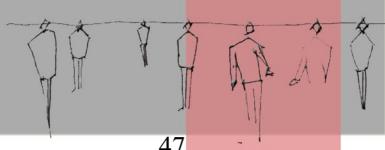
Public Spaces	Sq. Ft
Entry/Waiting	200
Reception	100
Seating	3000
Restrooms	500
Private Spaces	
Kitchen	1000
Offices	300
Loading	200
Storage	500
TOTALS	5800 sq ft



- **Café/ Coffee Shop**

Small shop in the city block that allows for interaction on a daily basis and those connections made with those in the neighborhood.

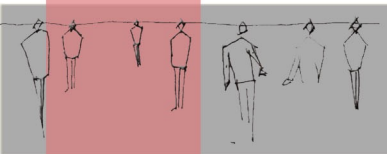
Public Spaces	Sq. Ft
Counter/Ordering	200
Seating	1500
Restrooms	300
Private Spaces	
Kitchen	500
Offices	300
Loading	200
Storage	200
TOTALS	3200 sq ft



- **Satellite Community Center**

One of the many new age pieces of the urban fabric is those of physical activity and community enrichment. This facility would be small and serve the community with limited meeting rooms and workout facilities. Part of a healthy neighborhood is healthy people. This is also another place that could be frequented daily by residents and give yet another opportunity to meet and gather in order to build community.

Public Spaces	Sq. Ft
Reception	200
Waiting	200
Restrooms	500
Locker Rooms	500
Meeting Rooms	1500
Gymnasium	5000
Aerobic Studios	5000
Work-Out Space	2500
Small Library	2500
Day Care	2500
Private Spaces	
Offices	3000
Storage	1000
TOTALS	22,900 sq ft

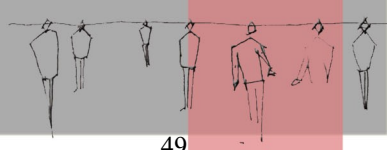


- **Residential Units**

One of the aspects of urban development that was stated as essential in multiple sources was that of housing and how important it was to have it in various places in the neighborhoods. What makes a neighborhood sustain is the mixed use of buildings. By providing residential spaces within these mixed use buildings, both to rent and to own, people are within walking distance to transportation, work, or shopping. Another key to making this work is not segregating housing by price either. All classes of people need to be mixed together because they each use neighborhood functions differently, all which are necessary.

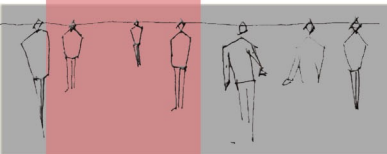
Rental Studios/Lofts	Sq Ft.
Kitchen	150
Dining	100
Bathroom	100
Living Room	100
Bedroom	150
Closets	50
Circulation	150
TOTALS	800 sq ft

Rental One Bedroom	Sq Ft.
Kitchen	150
Dining	100
Bathroom	100
Living Room	150
Storage	50
Laundry	50
Bedroom	150
Half Bathroom	50
Closet	50
Circulation	150
TOTALS	950 sq ft



Rental Two Bedroom	Sq Ft.
Kitchen	150
Dining	100
Bathroom	100
Living Room	150
Storage	50
Laundry	50
Bedroom	150
Closet	50
Master Bedroom	200
Half Bathroom	50
Closet	50
Circulation	200
TOTALS	1300 sq ft

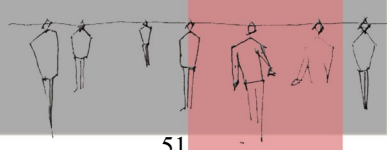
Purchased Units	Sq Ft
As per owner	1500-3000 sq ft



- **Parking Garage**

Although my project will be eliminating a parking lot (used for a rental company nonetheless), I believe that the neighborhood is sitting well in terms of alternative transportation and the promotion of mass transit. Along with that, this mixed use facility is directed towards a community of working-living-socializing all within a walking distance. For this reason, parking in my building will be limited and alternative forms of transportation such as bus, light rail, and the new hybrid car share will be encouraged.

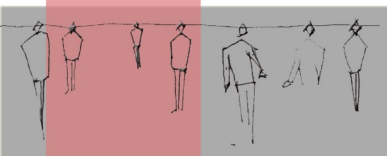
Public Spaces	Sq. Ft
Parking	30,000
Circulation	3000
TOTALS	33,000 sq ft



- **Leasable Office Space**

Finally, open office space for people to come into the neighborhoods with their businesses will be provided. In an effort to let people live and work in the same neighborhood, opening up the door to more opportunities will aid in community growth and stability.

Spaces	Sq. Ft
Circulation	3000
Speculative Offices	30,000
TOTALS	33,000 sq ft



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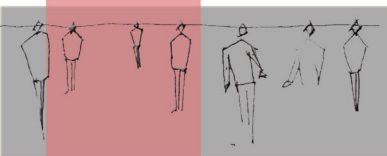


8 Design Process & Implementations

Design Process

I began this process by looking at the site itself. What its surroundings were and which of the neighborhoods it wanted to fit into; either the Downtown or Lowertown neighborhoods. After the site analysis and the beginnings of a 3-D site model, it became apparent that my building and its function would be better suited in the Lowertown style. Once the site analysis was complete, I began sketching and 3-dimensional study models to begin to play out different corner occurrences and heights. The following images are a selection of that design process work.

Figure 8.1 Context Model Under Construction

- **Site and Space Analysis**

The design process began here as I dealt with site and special issues unique to my building.

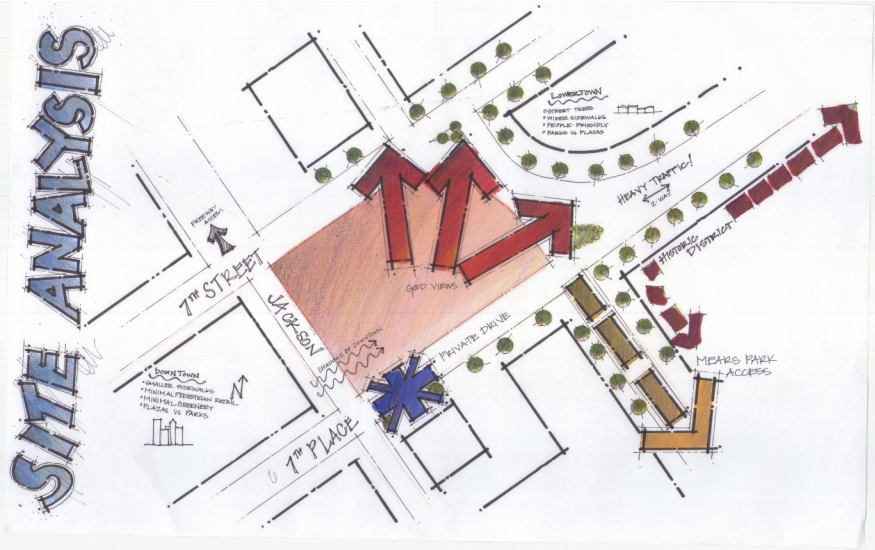


Figure 8.2 Site Analysis from January 2005

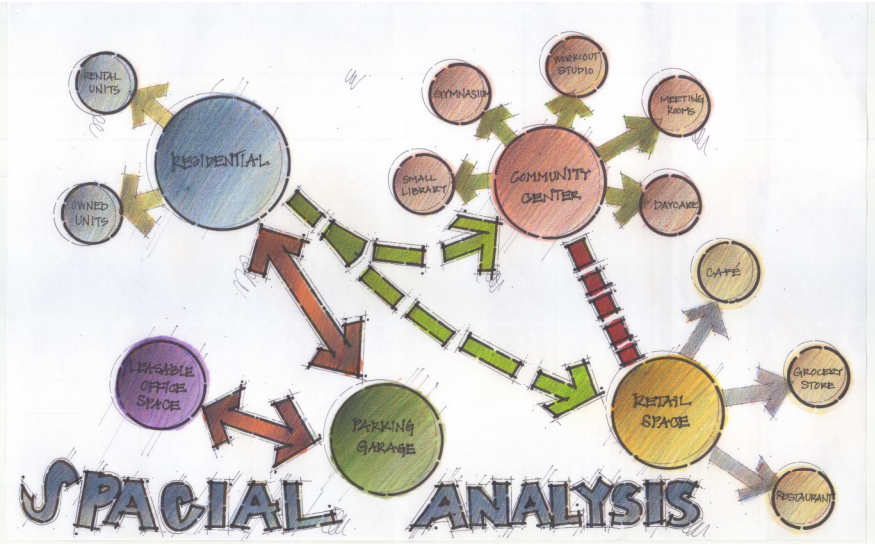


Figure 8.3 Spatial Analysis from January 2005

- **3-Dimensional Study Models**

The progression of form throughout the design process.

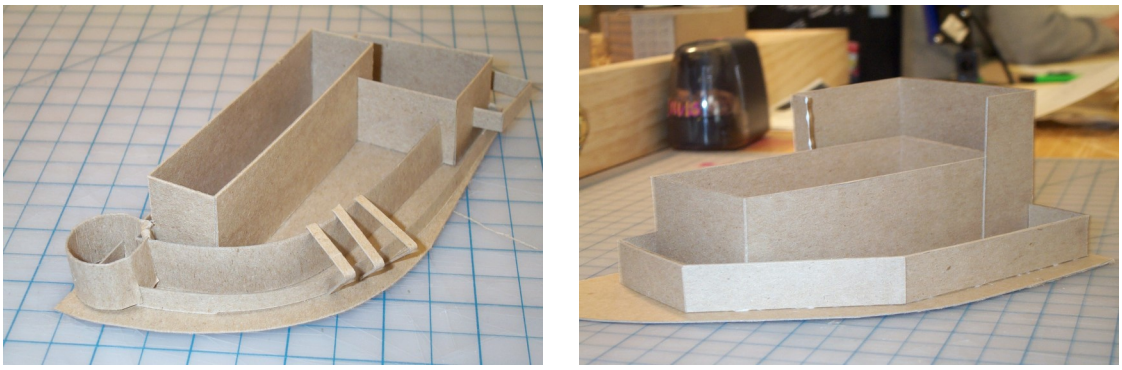


Figure 8.4 February 2005 Model Studies

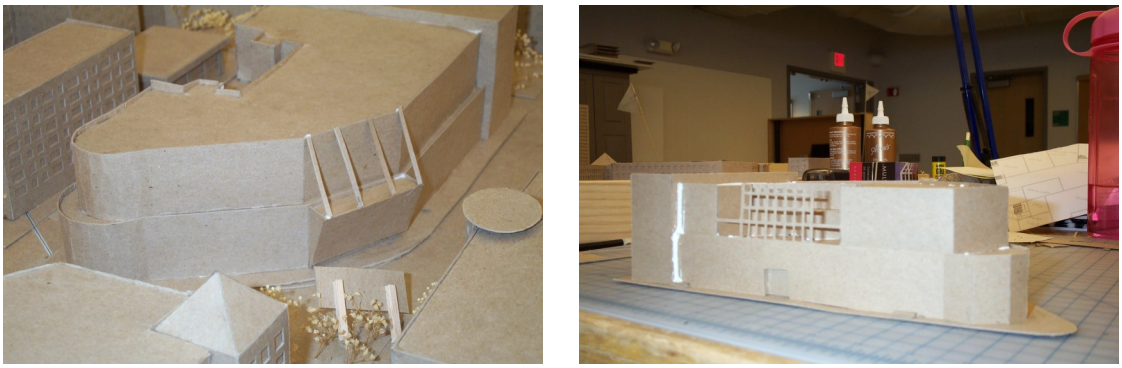


Figure 8.5 March 2005 Model Studies

- **Concept Sketches**

Furthering my design, I chose sketches to progress my ideas of layering and tapering my building

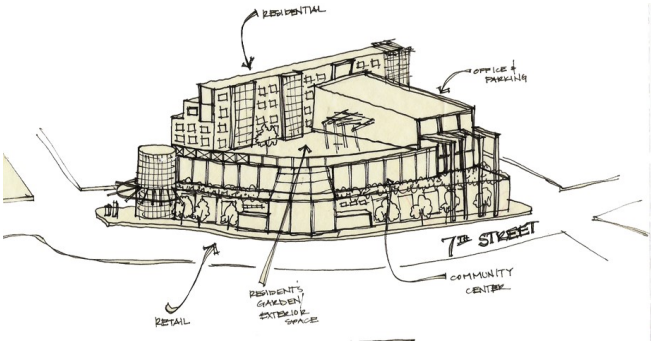


Figure 8.6 Original Concept Sketch

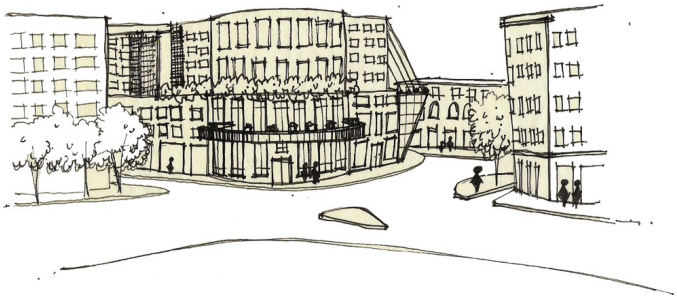


Figure 8.7 Sketches of the Design Progression

Figure 8.8 Sketch Prior to Final Design

Final Design

Ultimately, I chose a design that fit in with the Lowertown neighborhood. One that was not obtrusive in terms of height and was massed properly for pedestrian comfort. It also fits in with the neighborhood in terms of handling of the corners and materials. On the two major corners, there is a height increase and pediments at the top to create a bigger icon. In terms of materials, a regional Kasota stone was chosen in a shade of yellow-red to blend in with neighboring buildings. To add some visual contrast, green stone was used at the pedestrian level to increase interest during the day and the use of lighting to sustain that interest into the night. Another major point in my design was to create a building that was to be used 24/7 and also allow people to live-work-socialize within a 10-15 minute walking distance. This was accomplished by providing retail spaces at the base of the building that will sustain activity from morning (the bakery and café) to night (the restaurant and grocery store) and then again from weekday to weekend. This not only increases the vitality of the building, but increases a persons desire to live in the building. By nature, people want to be around other people, so the design of my building was to create those spaces where people can be around other people.

Figure 8.9 Overall Building View from the Southeast Corner

- **Public Spaces**

The spaces where people can get those "chance meetings" with neighbors and allow the interaction between human and built environment.

Figure 8.10 Outdoor Reading Area

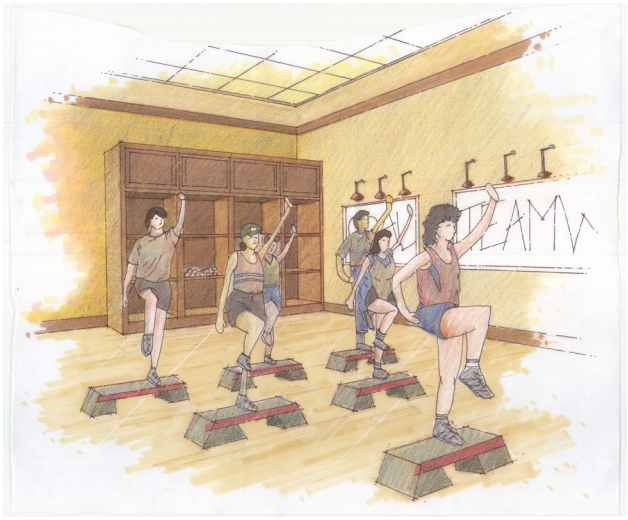


Figure 8.11 Aerobic Studio

- **Private Spaces**

These are the spaces where neighbors can get to know one another as a unit rather than as a stranger on the street. These spaces can also be just for the resident themselves; a place where they can call home.

Figure 8.12 A View Inside a Residential Loft

Figure 8.13 The Rooftop Resident's Garden

- **Overall Site Layout in Plan**

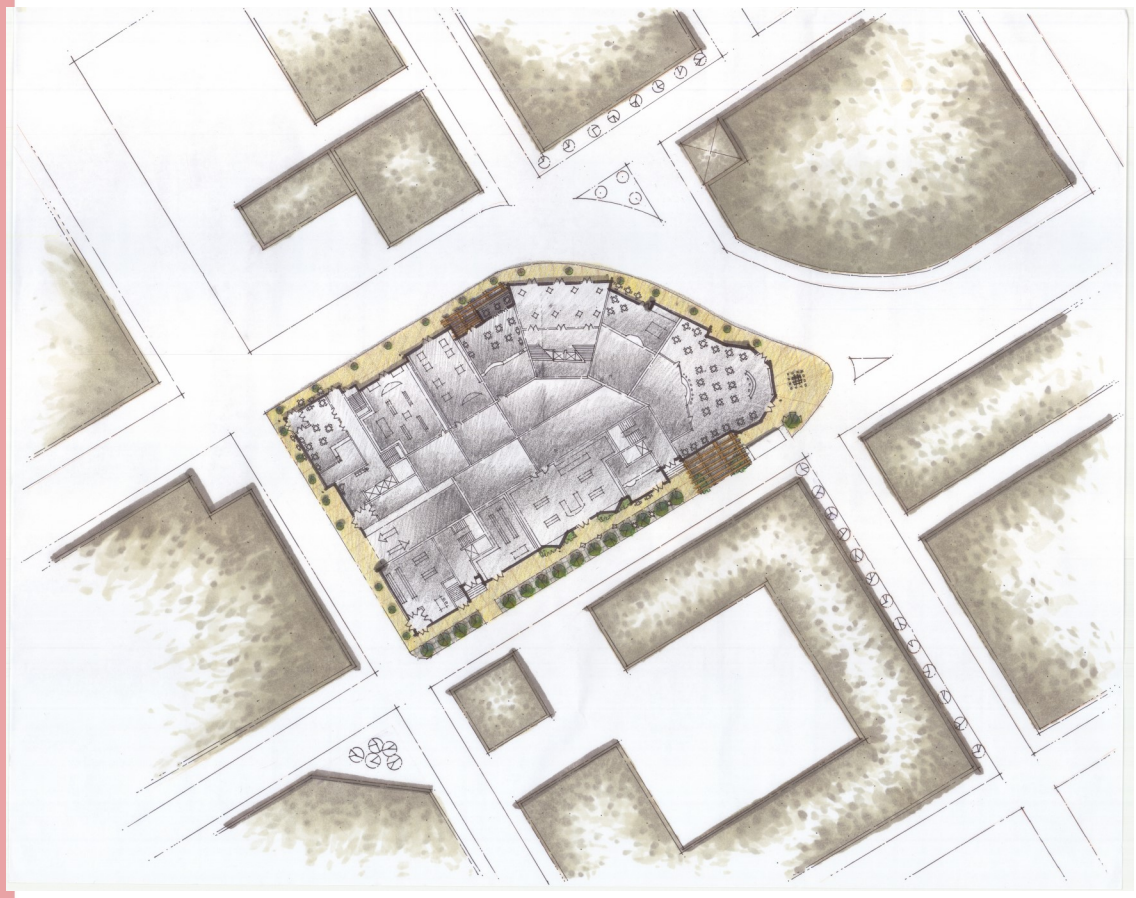


Figure 8.14 Site Plan

9 Appendix A

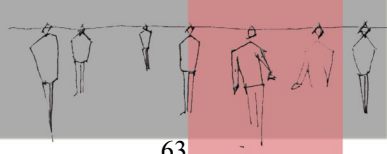
Statement of Intent

Building Community
Redevelopment of a Downtown through a Plaza and Mixed-Use Facility
St. Paul, Minnesota

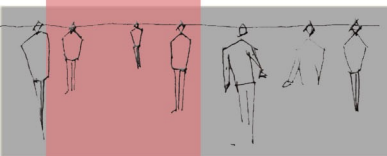
Since the end of WWII, European cities have increased in density. The revival of activities and support spaces in these urban cities has prompted many Europeans to return to and regenerate their cities. There are a variety of reasons as to why these people are choosing high densities over suburban sprawl. The important issue here is to determine why city centers are growing and reviving in Europe while suburban out-migration is still prevalent in the United States. The urban community presents dwellers a larger support base of neighbors and a greater interdependency which differs from that of the suburban community which focuses on independence. The focus of this project will be to discover how certain building types can influence the regeneration of city centers and what functions are necessary for the success of such a project.

In the past decade, the city of St. Paul has been undergoing a period of revival which began in the city's downtown center and is now focused in a division just off of it referred to as Lowertown. The design will feature public outdoor space in union with mixed use facility that will range in size from 5-7 stories in order to acclimate with the area. This facility will hold community need based retail outlets (i.e. grocery, restaurant, etc) on the street level, a satellite community center, and residential rental units toward the tops of the units. Overall, this design will develop on a site the size of one city block.

The idea behind the project will be to create a more viable solution than those of the recent past by integrating a variety of sources who are dedicated to the sustainability of the downtown neighborhood. The private developer on this project will be working with the Lowertown Rede-



velopment Committee and the City of St. Paul, which has a hand on each project in the area in order to continue adding a variety of services and housing to the area. It will integrate the principles of urban design in order to establish a place that is inviting to people and encourages activity Downtown. The underlying premise of this design is that by using urban design techniques along with historical precedence and modern elements of human behavior, Downtown communities can regenerate and sustain themselves.



Proposal

a. Title

Building Community: a Mixed Use Urban Redevelopment project with an Emphasis on Community Sustainability

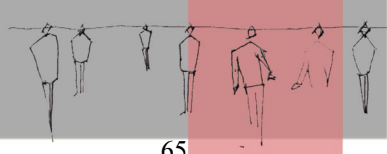
b. Building Type

My thesis design will be a mixed use facility focusing on urban redevelopment. It will house a variety of uses in an effort to create a more sustainable urban environment. Retail space will be the forefront of the building with a focus on pedestrian travel and spaces that encourages neighborhood connectivity. Also included in this building will be a community center to promote communication and create a space of gathering in the neighborhood. Finally, the building will accommodate residential rental units on the upper floors. The overall building type will look into historical precedence and modern urban movements to create a more sustainable urban environment.

c. Conceptual Basis or Unifying Idea

The downtown area of St. Paul is currently undergoing a revival period that has begun to spread into the Lowertown neighborhood of the area. This is an area that has a committee whose goal is to attract a variety of commercial, residential, and retail entities towards a more sustainable community. By using a site in this neighborhood, the importance of these entities becomes almost as important as the design itself in initiating growth.

It is also a very historical neighborhood, with many of its original structures still in tact and undergoing renovations. It will be important to keep with the style of the neighborhood and design to reflect such existing structures. The site chosen currently has no building on it and will be used to incorporate the historical precedence of the neighborhood with



modern urban revitalization concepts in order to further develop a sustainable neighborhood.

c. Project Justification

The site as it stands now is a flat parking facility for a rental car company. One factor in urban development is determining whether a facility is encouraging growth in the neighborhood. The other factor that would influence rebuilding would be looking at whether the existing facility is not only accommodating, but works within the tight knit structure of the area. The rental car company that now stands on the site not only is an eye sore in terms of appearance, it also has no use for those in the neighborhood. It is in my opinion, that the site would be better suited as a multi-story building that would better mesh with the built topography around it.

As far as function, it will serve a growing need for retail and gathering space in the neighborhood. As it stands, the residential population is growing in the area and services to these residents have remained constant. A project such as this would invite the opportunity for an increase in these services as well as provide more residential occupancy spaces which would in turn, help sustain such retailers.

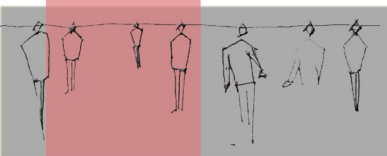
d. Emphasis

- *Community Regeneration and Sustainability*

Using the principles of urban revitalization to determine what functions are best served in this neighborhood to make it more sustainable. It will also look at the influence of architecture in the downtown setting and how it can aid in this effort of sustainable communities.

- *Historical Precedence*

Though this site has no building on it currently, it is sandwiched in between a modern commercial building and a street lined with historical structures. It will become an important task to relate to the nearby historical district and look into what made city's of the past successful.



- *Urban Design Principles*

These are the principles which define an urban environment. It will be important to review such principles and incorporate them into the design not only to aid in community regeneration, but in keeping with the historical precedence of the neighborhood.

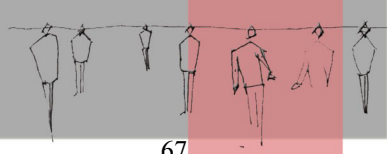
- *Material and Design Sustainability*

A principle involved with any architectural design is to look at the sustainability of the building itself. Many historic buildings took into account passive systems to lower costs and maximize efficiency. The use of local and sustainable materials will not only aid in those ideas of the past, but will add aesthetic value and meaning to the design.

e. Site

St. Paul's roots can be dated back to the early 1800's with the construction of Fort Snelling, which was built directly to its south. The railroad's introduction to the area, along with access to the Mississippi River, helped drive people to the city. Many warehouses began to pop up in the district referred to as Lowertown, as well as a neighborhood. Today, all 14 blocks of Lowertown are included in the National Register of Historical Places. When many of these businesses went bust, the buildings they owned were eventually abandoned. In recent years, these buildings have been under redevelopment and have been adapted to other uses such as lofts, commercial development, and retail spaces. There were also many gaps left in the neighborhood as many of these buildings were destructed in the mid 1900's. It is one such gap in the Lowertown's quilt that will be the focus of this thesis design.

The city itself is diverse and has plenty to offer. In 2002, the population of St. Paul was 284,037 and is the smaller of the "Twin Cities" (its sister city, Minneapolis, had a population of 330,000 in that same year) allowing for it to be a more ideal location for a building type encouraging community growth and development. St. Paul is also home to many corporate offices including Ecolab, 3M, and Xcel Energy. It is transportation friendly from

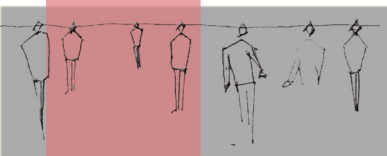


within with bus and future light rail lines, and abroad with an extensive highway system and international airport nearby.

The Lowertown neighborhood is the oldest currently the fastest growing area in St. Paul and is attracting a wide variety of new residents to the area. With all the regeneration and reconstruction work going on in the area, it has also become one of the most livable parts of the city. Work in the area has been done to restore it to its 19th century state by lacing the streets with trees once again and adding features such as decorative light posts and park benches. The ongoing effort began in Lowertown's center, Mears Park, and is spreading outward. The site for this design is located 2 blocks north of Mears Park on the block surrounded by 7th, Jackson, and Sibley Streets, where redevelopment efforts are starting to occur. Buildings around the site are in a variety of conditions but include historical buildings as well as a modern, high rise structures. Overall, this area is an idea location where many incentives are currently in place to encourage such development and regeneration.

f. Major Project Elements

- Plaza
- Grocery Store
- Restaurant/Bar/Café Spaces
- Satellite Community Center
  - -Conference Rooms
  - -Workout Space
  - -Reception Area
- Residential Rental Units
  - -Lofts
  - -Studio, 1, and 2 bedroom units
- Parking Garage
- Courtyard/Small Park
- Lease able Office Space
- Restrooms



g. User/Client Description

The purpose of this site will be to develop spaces that encourage community. It is the purpose of the Lowertown Redevelopment Committee to facilitate and provide minimal monetary aid to developers in tune with their goals for the neighborhood. In this instance, the private developer is accepting funds not only from the LRC but also from the city of St. Paul, who has asked to lease space within the future complex to house a small community center for the area. The developer is looking to maximize profits in a long term setting and is looking to sustainable design of both the building and neighborhood to accomplish this task.

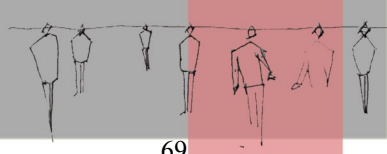
h. Design Methodology

Research for this design will focus on urban revitalization and efforts being made elsewhere to create sustainable urban communities. Other such principles of urban redevelopment will be key in establishing uses and building features necessary for this project. Looking at case studies will be an appropriate resource for this task.

Other research will be focused on materials and historical design in order to accomplish a sustainable building that meshes well with the surrounding neighborhood. It will be important to involve the nearby historical buildings while not necessarily replicating them. Studies on other such communities will be necessary to determine the best way to incorporate these ideas.

i. Realization of the Design Method in the Design Process

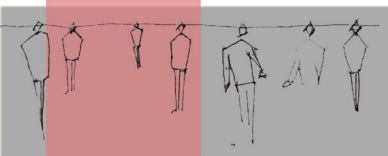
Urban revitalization techniques will be the top priority and other research topics will only aid in further development of this topic. The sustainable community that is used at all times of the day is the goal of the techniques and will influence the site design.



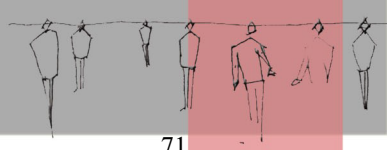
j. Schedule

FALL SEMESTER 2004

Week 1	*October 4-8*
5 Oct	**Revise Proposal**
7 Oct	Thesis Proposal due (2 copies)
	Student critic and faculty preference slips
Week 2	*October 11-15*
	Research
Week 3	*October 18-22*
19 Oct	**Research**
21 Oct	Primary and Secondary critics announced
Week 4	*October 25-29*
26 Oct	**Begin Program**
28 Oct	Last day of AR/LA 561 Class
eek 5	*November 1-5*
	Work on Program
Week 6	*November 8-12*
9 Nov	**Work on Program**
11 Nov	Veteran's Day Holiday
Week 7	*November 15-19*
	Final week of AR/LA 571 Studio
	Finish Draft of Program
Week 8	*November 22-26*
	Revise and Refine Program
24 Nov	Draft Thesis Program due to Primary Critic
25 Nov	Thanksgiving Day Holiday
Week 9	*November 29-December 3*
	Organize Information
Week 10	*December 6-10*
	Review and Refine Program
9 Dec	Final Thesis Program due to Primary
10 Dec	Last day of classes
Week 11	*December 13-17*
	Finals Week
Week 12	*December 20-24*
	Research
Week 13	*December 27-31*



	Research
Week 14	*January 3-7*
	Research
SPRING SEMESTER 2005	
Week 15	*January 10-14*
	Begin Schematics
11 Jan	Classes Begin
Week 16	*January 17-21*
	Schematics
17 Jan	Martin Luther King Jr. Holiday
Week 17	*January 24-28*
	Schematics/Design Work
Week 18	*January 31-February 4*
	Schematics/Design Work
Week 19	*February 7-11*
	Schematics/Design Work
Week 20	*February 14-18*
	Design Development
Week 21	*February 21-25*
21 Feb	President's Day Holiday
Week 22	*February 28-March 4*
	Design Development
Week 23	*March 7-11*
	Design Development
7-11 Mar	Mid-semester Thesis Reviews
Week 24	*March 14-18*
	Begin Presentation Week
	Spring Break
Week 25	*March 21-25*
	Presentation Work
25 Mar	Easter Holiday
Week 26	*March 28-April 1*
	Presentation Work
28 Mar	Easter Holiday
Week 27	*April 4-8*
	Presentation Work
Week 28	*April 11-15*
	Presentation Work



Week 29 *April 18-22*

Presentation Work

Week 30 *April 25-29*

25 Apr Thesis Projects due at 4:30pm in the MU Ballroom

26-27 Apr Annual Thesis Exhibit in the MU Ballroom

29 Apr Draft of Thesis document Due to Primary Critics

Week 31 *May 2-6*

6 May Last day of classes

Week 32 *May 9-13*

Final examinations

12 May Final Thesis Document due at 4:30pm in the office

13 May Commencement at 4:00pm Fargo dome

k. Documentation of the Design Process

This project will be documented through a variety of methods including research material, sketches, models and renderings. Use of such materials will directly affect the outcome of the design and will therefore be dated and used in the final presentation of the thesis.

l. Reference List

Books

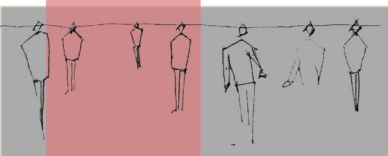
Black, J.T. (1983). Downtown Retail Development. Washington D.C.: Urban Land Institute.

Cassidy, R. (1980). Livable Cities. New York:

Holt, Rinehard, and Winston. Downs, A. (1981). Neighborhoods and Urban Development. Washington D.C.: Brookings Institution.

Francis, M. (1984). Community Open Spaces. Washington D.C.: Island Press.

Gauzin-Muller, D. (2002). Sustainable Architecture and Urbanism. Boston: Birkhauser.



Peterson, C. (1993). Architectural Edges. Thesis Project 1993.

Internet
(2001, September 21). Lowertown Redevelopment Corporation. Retrieved September 26, 2004 from the World Wide Web: http://www.lowertown.org/LRC/index.html.

City of St. Paul. Retrieved September 26, 2004 from the World Wide Web: http://www.ci.stpaul.mn.us.

m. Previous Design Studio Experience

2nd Year

Fall (Vince Hatlen)

Nativity Elementary School Addition

Spring (Phillipe D'Anjou)

World Trade Center Memorial
A Place of Living
School of Architecture; Copenhagen, Denmark
Lachine Canal

3rd Year

Fall (Steve Martens)

Ft. Abercrombie Museum
Winona Airport

Spring (Carol Prafcke)

Children's Theatre for the Arts
Fargo Assembly of God Church

4th Year

Fall (Cindy Urness, Mark Barnhouse, Josh Walters)

Urban Design: Fargo, North Dakota

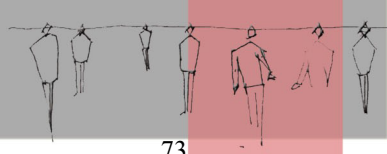
Spring (Frank Kratky)

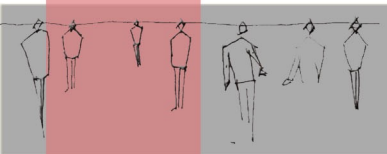
San Francisco High Rise

5th Year

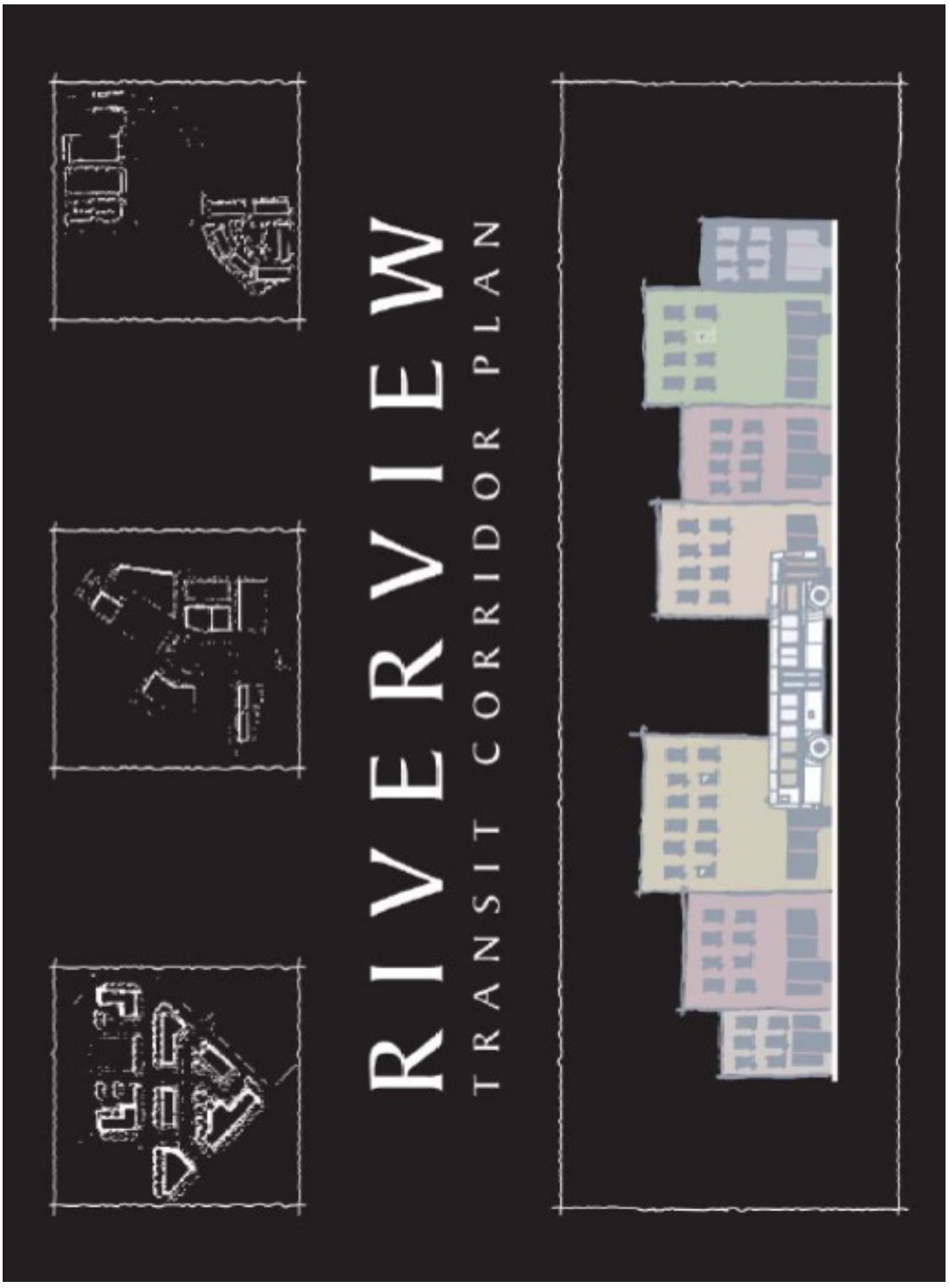
Fall (Jay Waronker)

Olympic Gallery
U.S. Supreme Court





11 Appendix B



Mears Park Station Area

For the Mears Park area, the eastbound station location has been established at Fifth Street between Sibley and Wacouta streets. For the westbound direction, three sites on Sixth Street were considered:

- just east of Sibley Street adjacent to the Park Square Court building;
- just west of Wacouta Street;
- just east of Wacouta Street adjacent to the Lowertown Business Center.

Station Location Issues

The eastbound station location is quite limited in size (the sidewalk is approximately 10 feet wide from curb to building face). There may be some potential to integrate the station into the Mears Park Centre building.

Proposed eastbound BRT station location at the Mears Park Centre building.

The potential westbound site just east of Sibley Street is located at the perceived center of Lowertown pedestrian traffic and activity, has direct connections to the downtown skyway system, is across the street from Mears Park and is perceived as an open, enjoyable environment. It is located on the Sibley Street corridor, which is a primary pedestrian path between the river and new housing in the North Quadrant.

The potential westbound site just west of Wacouta Street lacks a direct connection to the skyway system, but is directly adjacent to Wacouta Street, identified in the Downtown Development Strategy as part of a network of "Park Streets" (also including Fifth Street) that will link new and existing parks, including the new Wacouta Commons in the North Quadrant Urban Village.

View southwest, along East Eighth Street, with Mears Park to the left.

The potential site just east of Wacouta Street has a direct connection to the skyway system through the Lowertown Business Center, but lacks the direct connection to Mears Park, is further removed from perceived activity centers, and is viewed as a less-inviting environment.

The Mears Park area is part of the Lowertown Heritage Preservation District and therefore any new construction or rehabilitation will be subject to review by the Saint Paul Heritage Preservation Commission.

View northeast, along East Sixth Street, to the Lowertown Business Center.

Recommendations

Locate the eastbound station adjacent to the Mears Park Centre building as planned, with consideration to integrating the station with the building.

The westbound station should be located on Sixth Street just east of Sibley Street. Consideration should be given to integrating the station into Park Square Court, with a direct connection into the skyway system.

Figure 3-14

Mears Park Station Area

Forces / Issues

December, 2002

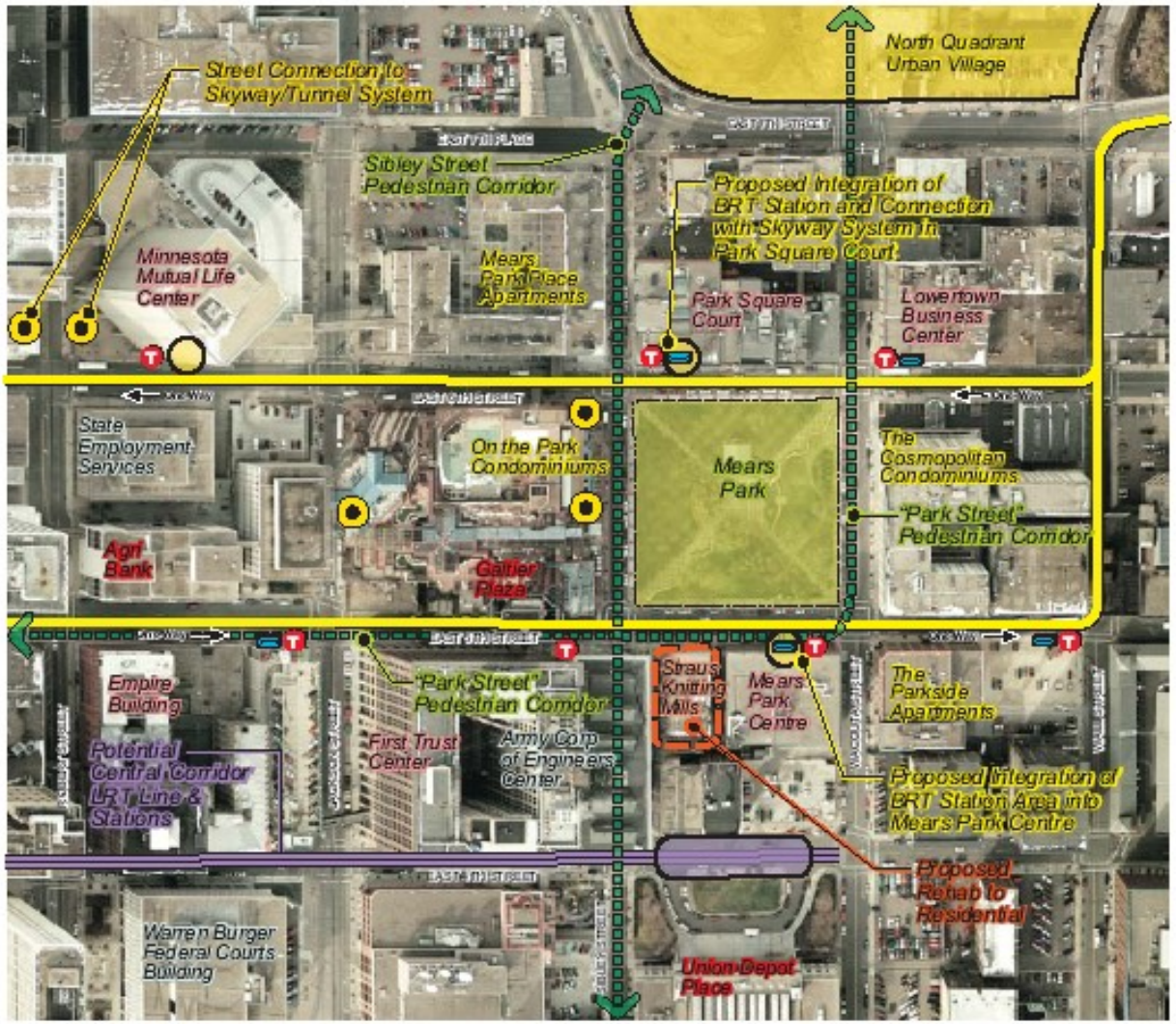


Figure 3-15

Mears Park Station Area

Concept Plan

December, 2002

Proposed BRT Route

Proposed BRT Station

Signalized Intersection

Existing Bus Stop

Existing Bus Stop with Shelter

CITY OF SAINT PAUL

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

UDS

Appendices

Appendix 1: Design Guidelines

Appendix 2: Acknowledgements

Appendix 3: References

Design Guidelines

The following guidelines are recommended for consideration as part of the site plan review process for new nonresidential or multifamily buildings in station areas. They address the relationship of new buildings to the street and to neighboring traditional buildings. Additional guidelines may be applied in connection with existing zoning districts (i.e., the Shepard-Davern Overlay Districts) or proposed zoning changes to the TN Traditional Neighborhood Districts.

- New development should **relate to the design of adjacent traditional buildings**, where these are present, in scale and character. This can be achieved by maintaining similar setbacks, façade divisions, roof lines, rhythm and proportions of openings, building materials and colors. Historic architectural styles need not be replicated.

New buildings should maintain scale, setbacks and proportions consistent with adjacent buildings.

- **Primary building entrances** on all buildings should face the primary abutting public street or walkway, or linked to that street by a clearly defined and visible walkway or courtyard. Additional secondary entrances may be oriented to a secondary street or parking area. Entries should be clearly visible and identifiable from the street.
- In **pedestrian-oriented commercial districts** (generally characterized by storefront commercial buildings built up to the sidewalk) the following guidelines should be followed:
  - Buildings should be as close to the sidewalk as practical.
  - At intersections, buildings should "hold the corner," that is, have street facades at or near the sidewalks of both streets.
  - Buildings should have direct pedestrian connections to the street.

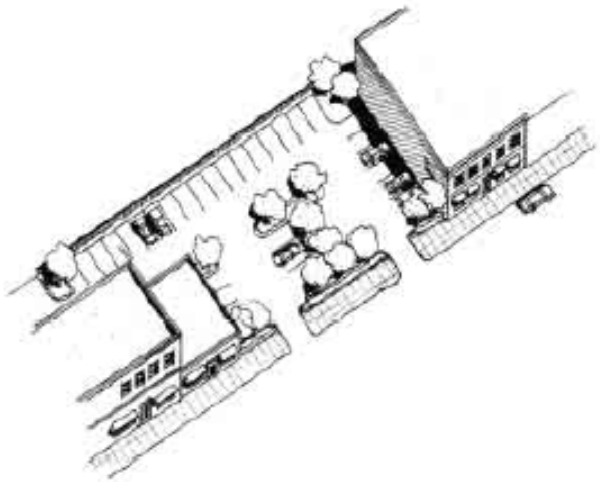
Buildings should "hold the corner" at intersections.

  - No blank walls should be permitted to face the public street, sidewalks, or other public spaces such as plazas.
  - Signage should be appropriate for pedestrians.
  - The width of sidewalks should be maintained.

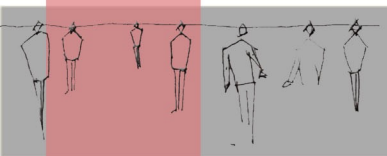
Primary entrances and window and door openings should face the public street.

Appendix I: Design Guidelines

- Buildings should have **window and door openings facing the street**; windows facing parking lots are also encouraged.
- **All rooftop equipment** shall be screened from view from adjacent streets, public rights-of-way and adjacent properties. Preferably, rooftop equipment should be screened by the building parapet, or should be located out of view from the ground. If this is infeasible, the equipment should be grouped within a single enclosure. Exterior mechanical equipment such as ductwork shall not be located on primary building facades.
- If **transit facilities** are needed to serve existing or proposed development, provisions should be made, where practical, for location of a bus stop or sheltered transit waiting area in a convenient and visible location.
- The number of **curb cuts should be minimized** where possible, and shared curb cuts for adjacent parking areas are encouraged.

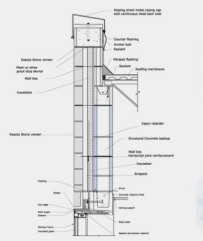


Curb cuts and parking should be shared where feasible.



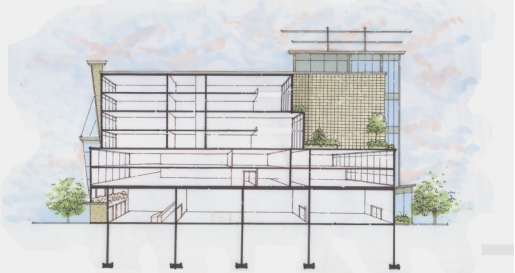
11 Appendix C

Final Boards



Wall Detail

North Facade showing the connection between the kasota stone and the window



Section
Scale 1/16"=1' 0"

URBAN DESIGN ELEMENT

Ecological Responsibility

Although urban environments are mostly a concrete desert, green spaces and sustainable practices are essential for continued growth and success. Building a strong community stems from a pride in the neighborhood and the built environment. The proposed design takes into consideration the environmental impact in a variety of ways. The material choices are regional and thereby prevent unnecessary transportation costs and fuel consumption. There is also a rooftop garden for residents that not only provides an area where people can begin to grow their own food and plant life but also provides residents a place to gather and form bonds with neighbors. Residents also have access to South sun year round whether or not their dwelling has a Southern facade. A sunroom on the fifth level is accessable to residents year round. Plant life around the space is deciduous and thereby provides shade to the space during the summer months to minimize cooling costs and provides some natural heat in the winter months. Finally, trees will be planted at the base of the building to continue the greenway already underway in the Lowertown neighborhood. These trees will not only provide some fresh air and elminate exhaust of cars from nearby busy roads but will provide a buffer to pedestrians, making the thoroughfare more people friendly.

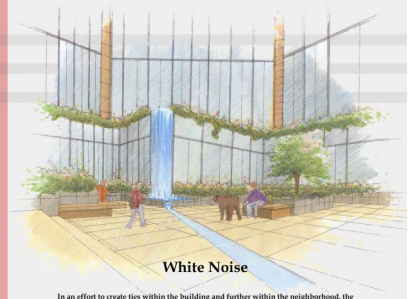
Lofts

An important aspect to this project was providing housing to people with various economic backgrounds and needs. The units available in this complex range from the traditional one level apartments to more trendy loft style apartments. On top of the resident's ability to choose the type of dwelling that best serves their needs and desires, they will also have the ability to choose between renting and owning their unit. To create a community that not only encourages growth but maintains stability, there needs to be the option for people to flourish and take ownership of their neighborhood while maintaining a bond with the more transient population.

URBAN DESIGN ELEMENT

Transit

Transportaion within a community not only addresses ecological factors of fuel consumption but also addresses community concerns. What makes an urban community different from a suburban or rural environment is the ability to work, live, and build realationships all in the same neighborhood. Residents of an urban community also have a different view on transportation. Walking and public transportation are essential and independent car ownership takes on a secondary role. The Lowertown neighborhood is taking in an active role in continuing the use of these urban forms of transportation by introducing transit stations in each neighborhood, creating more pedestrian friendly thoroughfares, and introducing programs such as the hybrid car share program. The proposed building plays into that continuing effort of creating sustainable neighborhoods by limiting underground parking to residents and making it a rent separtate from living, encouraging these alternative forms of transportation.

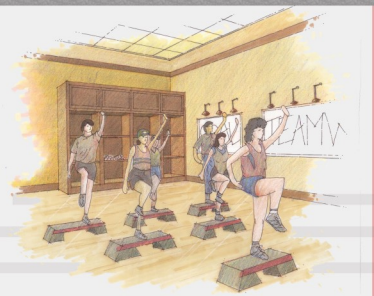


White Noise

In an effort to create ties within the building and further within the neighborhood, the residents of this building will have access to a garden on the third level. This garden will provide space for individuals to plant their own food and plants and to gather with one another. Another important element of urban design is giving residents a getaway and providing white noise other than that of neighbors and traffic. A two-story waterfall in this garden will not only provide that white noise but offer a serene water feature in an urban context.

RESIDENTIAL UNITS

COMMUNITY CENTER

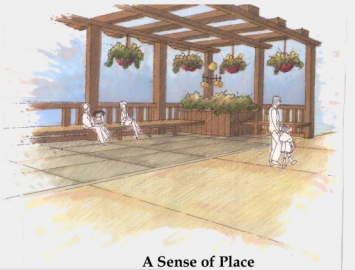


Community Activities

URBAN DESIGN ELEMENT

Streetscape

Almost as important as the building is the streetscape around it. If there are a lack of visuals or safety, pedestrians will avoid the block and the establishments in them. This design has established two forms of paving, one to promote circulation and the other to promote social gathering. It was also important to provide interesting entries into retail establishemnts and provide protection from vehicle traffic. Awnings and trees help enclose the pedestrian thoroughfare and provide interest along the way. There is also the ability for people to become part of the streetscape. Since humans by nature crave to be around one another, a streetscape that incorporates seating and other activities onto it will have more life and be more interesting to passerbys. Having people as part of the streetscape also helps create the feel of safety and will encourage people to patron the building.



A Sense of Place

Important for those who live in a urban environment with a large population is a sense of place and a sense of belonging in that neighborhood. In an effort provide these places for residents, I've created places for social interaction at the ground level. One such place is the outdoor reading terrace near a proposed location for the bookmobile. Though the bookmobile would only visit the site every other week, the objective was to give it a place when it's there, and the people a place to enjoy it together.

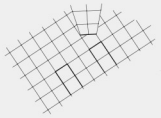
URBAN DESIGN ELEMENT

Community Regeneration

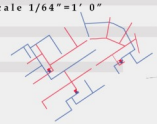
For years, there has been a steady decline in urban populations in the United States. However, in Europe, the opposite is occuring. People are migrating back into downtown environments and reclaiming the urban neighborhood. What makes them different from our urban cities is their devotion to creating a neighborhood that fosters living, working, and social opportunities. The goal of this project was to capture some of those European qualities in an effort to revive the community and sustain it for years to come. Making the community and the people the focus will ultimately determine a buildings success. This building incorporates a variety of functions and is designed to foster social encounters that build a community. There are designed places for social interaction such as the community center, the rooftop garden, and the gallery. However, it's the unofficial spaces that will determine the building's effectiveness. The connections pepole make while walking along the sidewalk or at the local coffee shop is really what makes an urban neighborhood work.

Elevation
Scale 1/16"=1' 0"

Structural Plan
Scale 1/64"=1' 0"



HVAC Plan
Scale 1/64"=1' 0"



View from the Southeast Corner

The American city should be a collection of communities where every member has a right to belong. It should be a place where every man feels safe on his streets and in the house of his friends. It should be a place where each individual's dignity and self-respect is strengthened by the respect and affection of his neighbors. It should be a place where each of us can find the satisfaction and warmth which comes from being a member of the community of man. This is what man sought at the dawn of civilization. It is what we seek today.

1. Cafe
2. Office Lobby
3. Bookstore
4. Gift Shop
5. Gormet Fast Food
6. Gallery
7. Bakery
8. Restaraun/Bar
9. Resident's Lobby
10. Coffee Shop
11. Gormet Grocery
12. Video Rental
13. Convenience Store
14. Parking Entrance
15. Offices
16. Kitchen
17. Cooler

Site Plan
Scale 1/32"=1' 0"

Pedestrian Thoroughfare Along Seventh Street

Materials

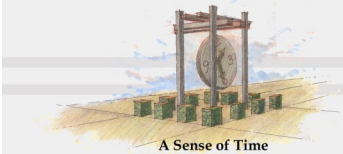
Kasota Stone Facade

Granite Light Blocks

Wood Veneers

Chance Meetings

The ability to socialize with your neighbors on a daily basis is an essential role to the urban environment. Places such as grocery stores make excellent locations for such encounters. The provide necessary items within a walking distance to residents allowing them to shop for more fresh foods and meet with neighbors. Retail establishments at the ground level also need to be available at all hours of the day to intermingle both the residents of the community and the transient working population.



A Sense of Time

An exciting element to urban design is incorporating the fouth dimension of time. There are a variety of ways to depict that sense of time mostly involving transportation. In this design, I chose to literally offer that sense of time as an icon to fit into the Lowertown neighborhood that is made up of a great number of artists. The piece, sitting on the Southeast corner of the site, would be made of gray/black steel with green marble light fixtures around it.

URBAN DESIGN ELEMENT

Human Scale

Keeping the scale of the building down for the pedestrians is an important method of making the built environment appealing. My design incorporates awnings at most entrances to help bring down the scale of the building. On top of that, the glazing of the facade goes up 15 feet where the Kasota stone begins and creates a built awning to further bring down that scale. The building was also designed to step back and allow for greenery and make for a more pedestrian friendly environment.

URBAN DESIGN ELEMENT

Pedestrian Experience

What the pedestrian views and interacts with at the base level of any buildings is the most important urban element in terms of community vitality. Pedestrians need to feel safe in terms of their surroundings and they also need to be involved with the environment. As described before, the human scale was incorporated into my design and these ideas also play into the experience a pedestrian will have around my building. There are a variety of other ways I've addressed the pedestrian experience in my design. I've introduced an outdoor reading terrace on a subsection of the pedestrian thoroughfare. The corner of Sibley and 7th Street was another key pedestrian zone. I saw this area as the highlight of social interaction and a gateway from my site to the nearby Mears Park and the heart of Lowertown. Here, I introduced an artistic clock and seating for people to gather. Interesting lighting not only makes this corner intruiging during the daytime hours, but at night as well. Finally, a greenway was provided to create a buffer between the heavy traffic and the pedestrian. Trees and shubbery were added to visual interest at a variety of eye levels for the pedestrian.

RETAIL DEVELOPMENT

Below Grade Parking
First Level
Second Level
Third Level
Fourth Level
Fifth Level
Sixth Level
FLOOR PLANS
SCALE 1/32" = 1'-0"
BUILDING COMMUNITY
REBECCA L. COLLIS
2005 UNDERGRADUATE THESIS

12 Figures

Figure 5.4 State Street looking towards the State Capitol (pg 34)
Source: http://www.geology.wisc.edu/prospective_stu/madison_living.html

Figure 5.5 A View of State Street at Night (pg 34)
Source: http://www.360geographics.com/Central/Wisconsin/Southern/MadStateNight1.jpg

Figure 5.6 Roman Forum (pg 35)
Source: http://hometown.aol.com/meechiec/images/roman%20forum.jpg

Figure 5.7 City Street in Rome (pg 35)
Source: http://www.romanreference.com/280s.jpg

Figure 5.8 Map of Rome (pg 36)
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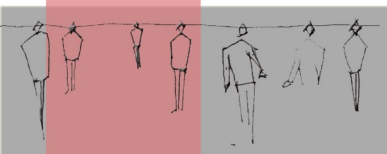

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The Designer

Becky Collis

Hometown:

Why I took interest in this project:
Mentorship senior year of high school in the neighborhood sparked my interest in how to make it better for those to live there and how the built environment plays a role in a persons desire for a place.

This thesis is dedicated to all my studio classmates – those late nights would not have been the same without you – and to my friends and family who have graciously put up with me during my time at NDSU – Thank You.