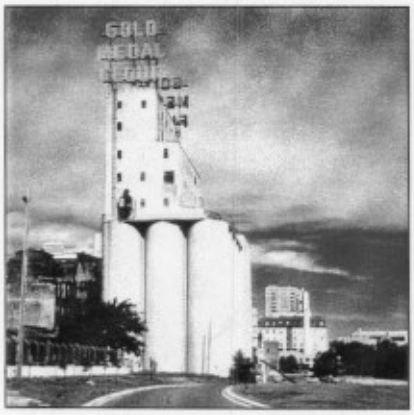
Historic Mills District Master Plan



Prepared for

Minneapolis Community Development Agency

by

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June, 1998

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Table of Contents

Acknowledgements i

I Executive Summary 1

II Planning Process 6
1. Planning Process
2. Development Program

III Analysis 11
1. Summary of Interviews and Focus Groups
2. Urban Design Analysis

IV Seven Overall Urban Design Concepts and Principles 17
1. Planning Objectives
2. Design Concept 1: Riverfront Park
3. Design Concept 2: Streets
4. Design Concept 3: Traffic Barriers
5. Design Concept 4: Historic Resources
6. Design Concept 5: Redevelopment Sites
7. Design Concept 6: Parking
8. Design Concept 7: Public Transportation

V Two Urban Design Alternatives 26
1. Introduction
2. Residential Development Alternative
3. Stadium Development Alternative

VI UDA Pattern Book™ Guidelines 42
1. Introduction
2. Prototype Blocks
3. Building Massing and Architectural Guidelines
4. Streetscape and Landscape Guidelines
5. Quantitative Analysis

VII Appendices 67
1. Transportation Recommendations
2. Study of Environmental Sites
3. Market Study and Recommendations

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I EXECUTIVE SUMMARY

Residential Development Alternative

The Historic Mills District Master Plan has two primary goals: to create new downtown housing and to attract new business that will revitalize the district and reconnect it in meaningful, productive ways with downtown Minneapolis. The urban design alternatives, concepts and guidelines contained in this Master Plan provide a framework for redevelopment of this section of the City that will enable the Minneapolis Community Development Agency (MCDA) to seek and evaluate private development proposals for the sale or lease of parcels of land owned by the MCDA and to spur private development in this sector.

A multi-disciplinary team of consultants, working with the Industry Square Staff team, conducted a participatory planning process from June 1997 to October 1997. Consisting of interviews and focus groups with citizens, City agencies and key stakeholders—and culminating in a three-day design charrette—the planning process resulted in a set of agreed upon urban design concepts and two urban design alternatives for the Historic Mills District. More details regarding the planning process and subsequent analysis are contained in Chapters II and III of this plan.

Seven Urban Design Concepts

Seven overall urban design concepts for the Historic Mills District Master Plan emerged from the participatory planning process. These concepts are predicated on sound, time-tested urban design principles. Enumerated

Residential Development Alternative

Baseball Stadium Development Alternative

in Chapter IV of this document, the seven urban design concepts which inform the redevelopment of the Historic Mills district can be summarized as follows:

1. Complete the riverfront park, trail and parkway system, connecting them to downtown;
2. Extend the downtown street grid to the river;
3. Provide improved pedestrian access across Washington Avenue;
4. Preserve and celebrate the riverfront historic sites and buildings;
5. Link new residential, cultural and recreational development to the downtown and the riverfront;
6. Create centrally located multi-purpose parking; and
7. Build a transitway to link the Airport, neighborhoods and parking with downtown and the central riverfront.

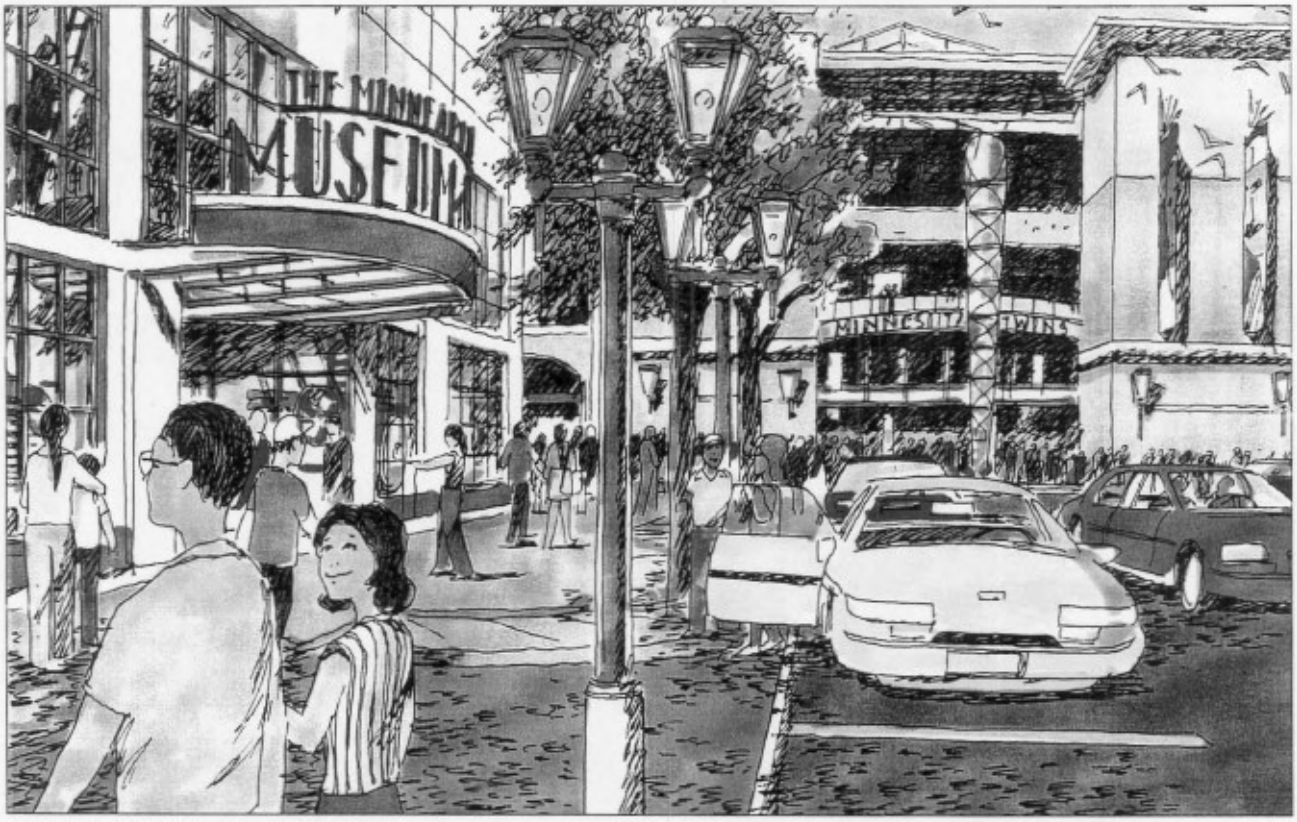
Two Urban Design Alternatives

Two urban design alternatives also grew out of the planning process. Both alternatives are consistent with well-established urban design principles and with the seven overall urban design concepts set forth as a result of the planning process. The two alternatives, detailed in Chapter V of the plan are:

The Residential Development Alternative—primarily medium density housing with neighborhood commercial and regional cultural facilities and parks; and

The Baseball Stadium Alternative—which locates a baseball stadium in the district along with new stadium-related retail (along with the uses proposed in the residential development alternative, albeit on a reduced scale).

Both alternatives connect the river to the district and to downtown with new boulevard streets at Chicago and Port-



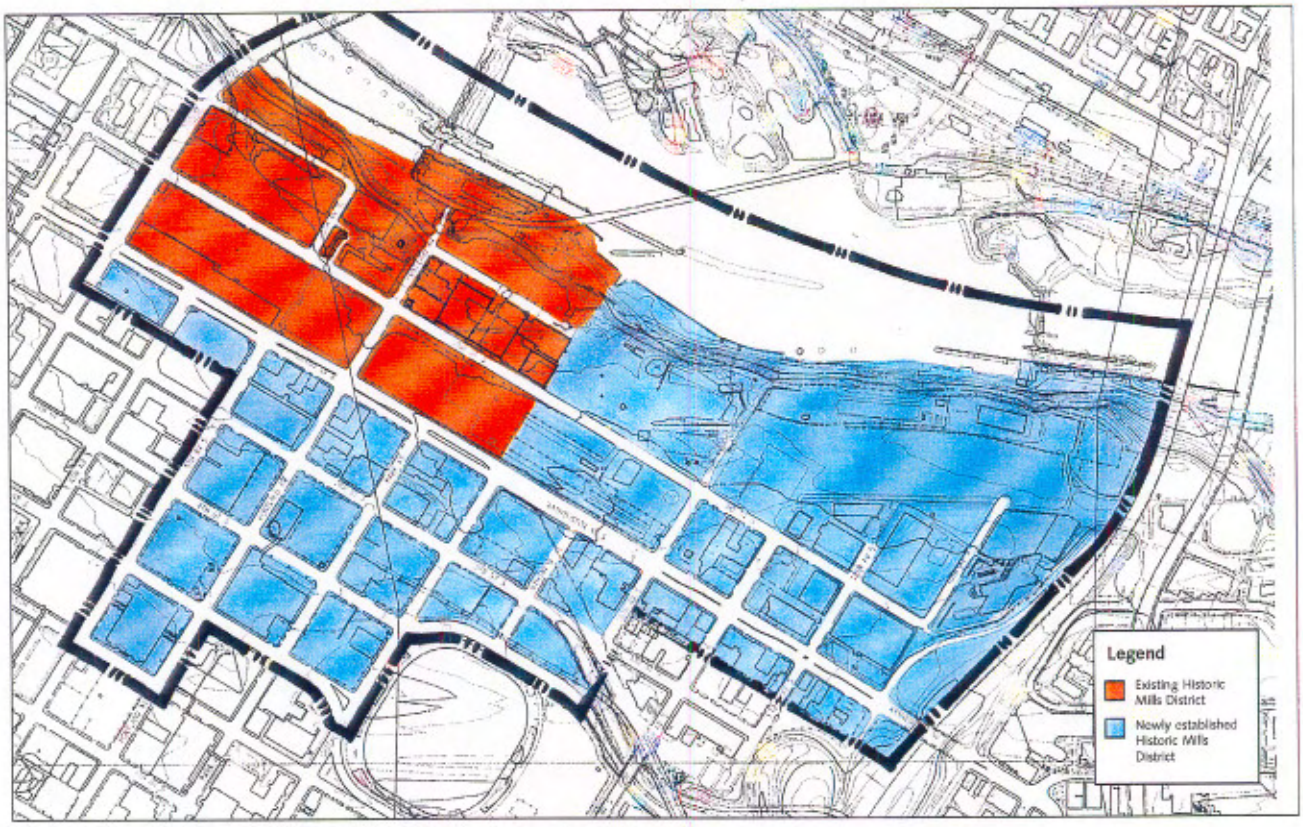
Baseball Stadium Development Alternative

land Avenues, new neighborhood open spaces, and the development of Mill Ruins Park. They each propose extending the grid of the downtown streets to the riverfront, including an extension of 5th Avenue, and recommend the redesign of Washington Avenue as a pedestrian friendly boulevard that can handle arterial traffic volumes effectively. Both options recommend restoration and adaptive re-use of the historic mill buildings as well as encourage private development of cultural and recreation facilities—such as skating and museums— in order to further link downtown and the riverfront.

The baseball stadium alternative clearly allocates more land to non-residential uses, but both alternatives include provisions for multi-purpose parking ramps, primarily underground, in the district to serve the new residents, visitors, fans (in the baseball stadium alternative), and downtown commuters.

Both the residential and stadium plans propose an east-west transitway route through the district, preferably in the median of Washington Avenue (and alternatively, but less desirably, using 3rd and 4th Streets).

Finally, the Master Plan recommends that the Historic Mills District be expanded to cover all of Industry Square to take advantage of the unique historic character of the existing buildings for marketing purposes and to celebrate the unique legacy and heritage of this nationally important historic place.



Newly established Historic Mills District will expand the existing district to include a larger portion of Industry Square.

Urban Design Guidelines: The UDA Pattern Book™

The Master Plan also includes urban design guidelines, set forth in the UDA Pattern Book™ in Chapter VI. These guidelines present prototype block patterns, massing and density guidelines, as well as parking, architectural and landscape guidelines applicable to both of the proposed urban design alternatives presented in the plan.

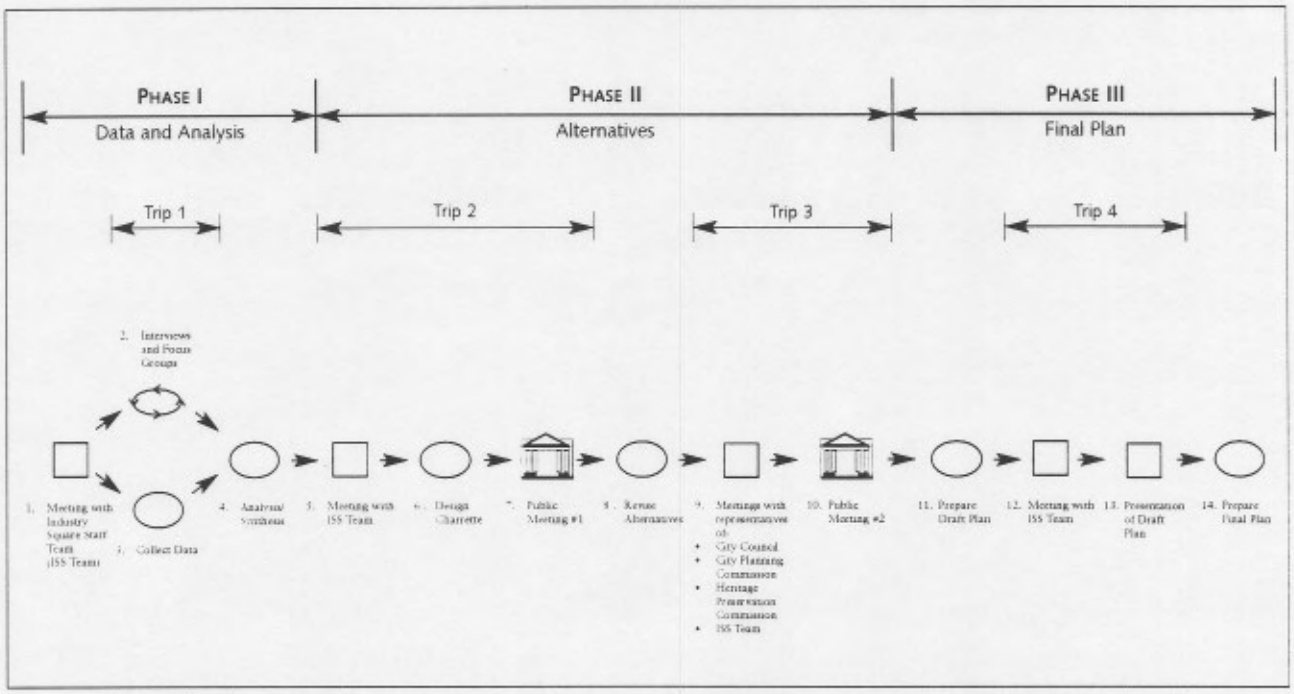
These guidelines can be used to revise the zoning ordinance for the district and to negotiate with developers. For instance, both the urban design plan and the architectural guidelines recommend that the baseball stadium be built without a roof, that the playing field be 15 feet below grade, and that the orientation of home plate and the transparency of the building respect and take advantage of vistas and provide a pedestrian-scale experience for the fans.

Appendices

The Master Plan also contains three technical reports which address transportation options, environmental issues and housing market conditions.

Please Note: In this document, the use of the term Historic Mills District refers to the expanded new Historic Mills District.

II PLANNING PROCESS



Planning Process Flow Chart

1 Planning Process

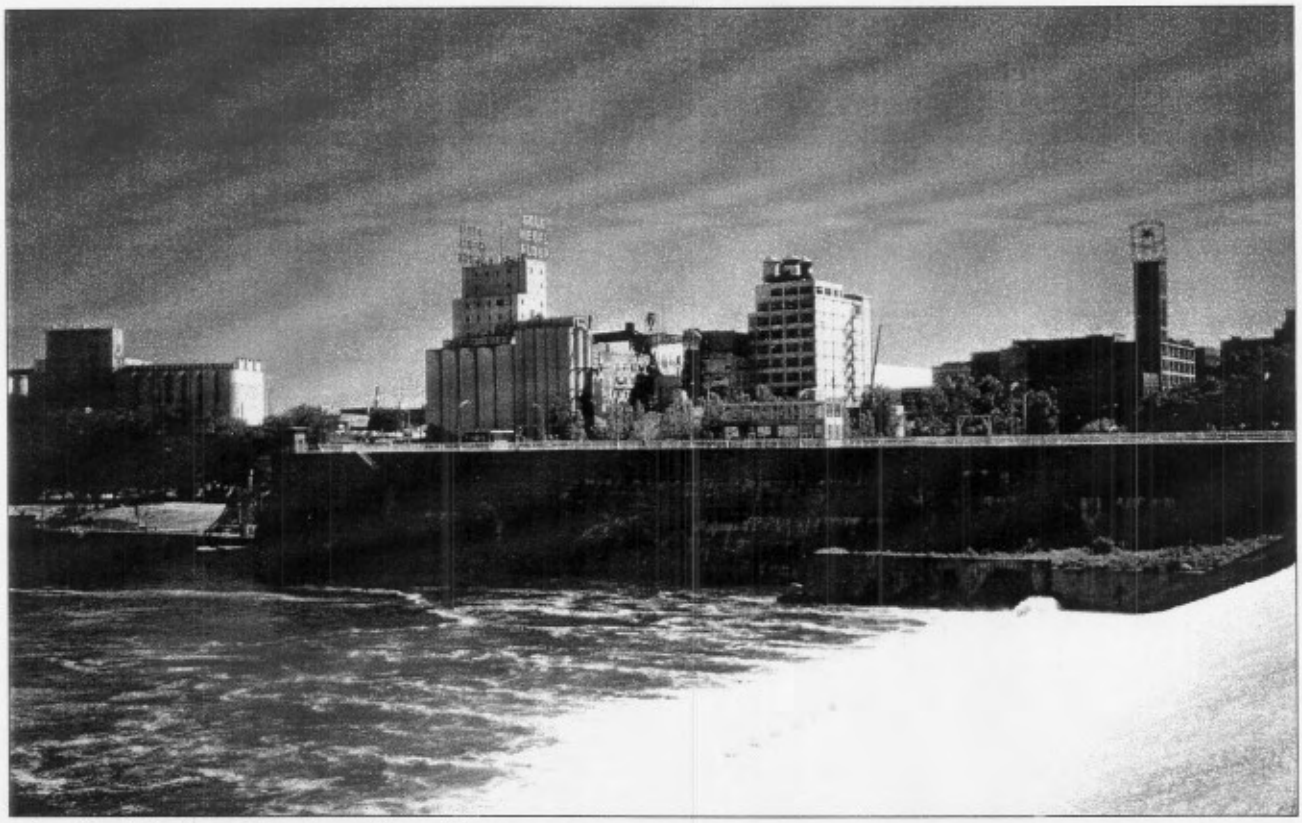
In June 1997, the Minneapolis Community Development Agency (MCDA) commissioned Urban Design Associates (UDA) to complete a master plan study for the central Mississippi riverfront district known as 'Industry Square.' The goals established by MCDA for the redevelopment of the Historic Mills District are to:

- Create new downtown housing
- Attract and retain businesses
- Respect the historical integrity of the district

The master plan will act as a framework within which to seek and evaluate private development proposals for the sale or lease of parcels of land owned by MCDA. Issues addressed in the plan include: cultural resources, notably the historic mills and grain elevator buildings; the Minnesota Technology Corridor, an economic development district linked to the University of Minnesota; the possible location of a new ballpark for the Minnesota Twins; current development proposals; market conditions; future development; and the potential for a transitway.

The team included UDA (team leader and urban design), LaQuatra Bonci Associates (landscape design), Glatting Jackson Kercher Anglin Rinehart Lopez (transportation); and Environscience, Inc. (civil engineering). In addition, a market analyst, Economic Research Corporation, was retained by MCDA to work with UDA in developing a master plan which would take into account private market opportunities and constraints.

The Industry Square Staff team, comprised of representatives from MCDA, Minneapolis City Planning Department, Hennepin County, Park and Recreation Board, and St.



Historic Saint Anthony Falls and remaining milling structures

Anthony Falls Heritage Board, served as the steering committee directing the work of the UDA team.

Citizen Involvement

Citizen participation was central to the planning process which included focus group meetings with downtown and adjacent neighborhood interests, interviews with key stakeholders and two public meetings. In addition, presentations were made to representatives of the City Council, the City Planning Commission, and the Heritage Preservation Commission. A feature of the planning process was a three-day design working session ('charrette') at the MCDA offices during the week of August 18, 1997.

The planning process was organized into three phases: Data and Analysis; Alternatives; and Final Plan. Each phase included working trips to Minneapolis by the UDA team.

Phase I Data and Analysis

The UDA team began with a two-day trip to Minneapolis in June 1997 to meet with the Industry Square Staff team and to interview individuals and groups, including elected officials, downtown groups, sports team owners, developers, neighborhood groups, and staff of civic and cultural institutions. Data on land use, zoning, plans, market data, historic sites, and transportation were collected. The products of Phase I were base drawings, UDA X-RAY™ analysis

Historic Stone Arch Bridge

drawings, a housing market conditions study, and a summary of the interviews and focus groups.

Phase II Alternatives

This phase was the heart of the study. The design charrette was held the week of August 18, 1997 at the MCDA offices. Follow-up meetings were held that week with the stakeholder focus groups interviewed in Phase I. Urban design concepts based on best practices principles were developed. The charrette week culminated in a major public meeting at the Lutheran Brotherhood on August 21, 1997. Urban design alternatives which evolved from these meetings were then refined and presented at a second public meeting on October 9, 1997. A final working meeting with the Industry Square Staff team was held. Written responses were later received from MCDA, City Planning and citizen groups.

Phase III Final Plan

Based on the input and feedback from the final meetings of Phase II, a draft plan was prepared for review and comment by MCDA and the Industry Square Staff team. This plan, upon adoption by the City Council, MCDA Board and other agencies, becomes a part of the Minneapolis Plan.

Recently restored Ceresota and Crown Roller Mill buildings

2 Development Program

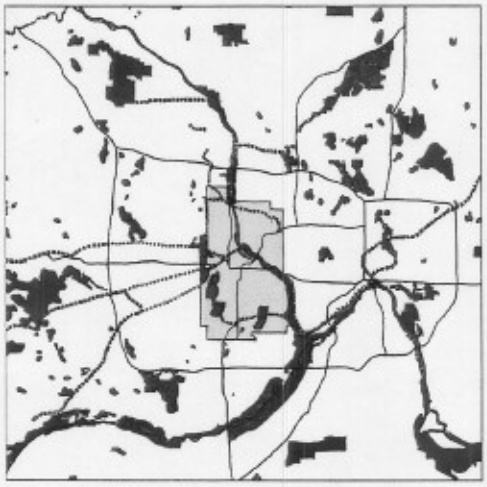
The Master Plan is composed of several elements, each of which will encourage new residential and economic development in the Mills District. The first key element is to provide a variety of desirable new housing options in the district. The market study (see Appendix) confirms that there is an annual demand for over 300 new housing units in the downtown area. Much of this demand can be accommodated in the Mills District through adaptive re-use of the historic mill buildings and by new construction.

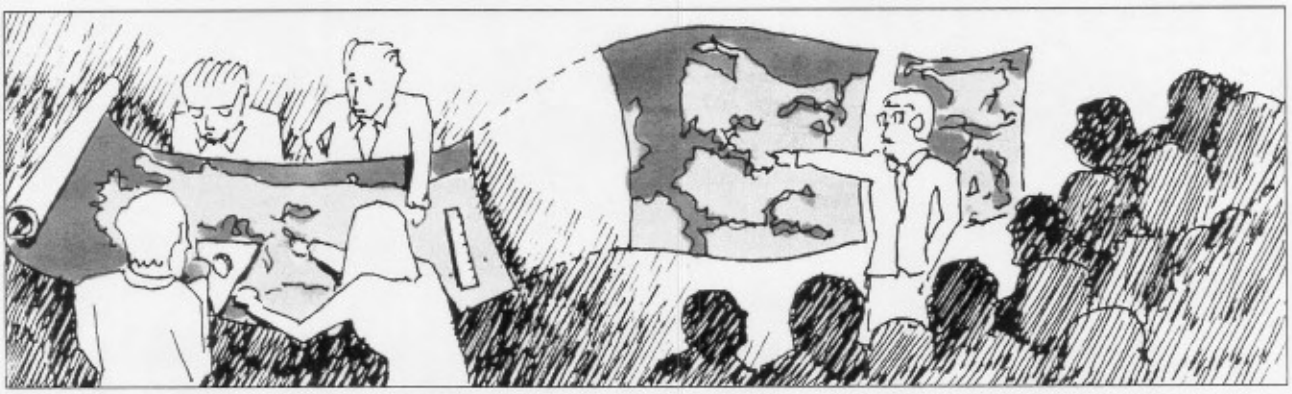
A second major element is the proposed Twins baseball stadium. This Master Plan presents two alternatives for the district: one which includes a 42,000 seat baseball stadium and one which does not.

Other proposed elements include neighborhood retail (to support the new housing), restaurants related to the river front and the stadium (if built), cultural and recreational activities (such as a skating complex, the Mill Ruins Park Visitor Center, and other museums), hotels, and multi-use parking.

Finally, the Minneapolis park network will be enhanced by the completion of the West River Parkway, Mill Ruins Park, and new parks, boulevards, and civic spaces to enhance the new housing development and the stadium.

III ANALYSIS





Focus Group Meeting: An integral part of the design process

1 Summary of Interviews and Focus Groups

On June 25 and 26, 1997 the UDA team conducted interviews and focus group meetings which involved several hundred citizens. Focus group topics included:

- City Concerns;
- Redevelopment Goals;
- Transportation Issues;
- Parks/Recreation/Historical Views;
- Ballpark Dreams;
- Design Issues;
- Neighborhood Concerns;
- Housing/Developers; and
- Other Local Inputs.

All participants were asked the same questions: what are the assets and liabilities of the Central Riverfront and what is your vision for the future? The assets most cited were the Mississippi River, the historic mills, proximity to Downtown, and the West River Parkway. Liabilities included the vacant image of the place, Washington Avenue as a barrier, concern about the scale of a Twins ballpark on the site, and lack of connection to the river. Visions included making the district a front door to the city, new housing on the river, a transitway, cultural and recreational activities and museums, new jobs linked to adjacent neighborhoods, access to the river, and the creation of a new neighborhood in the City.

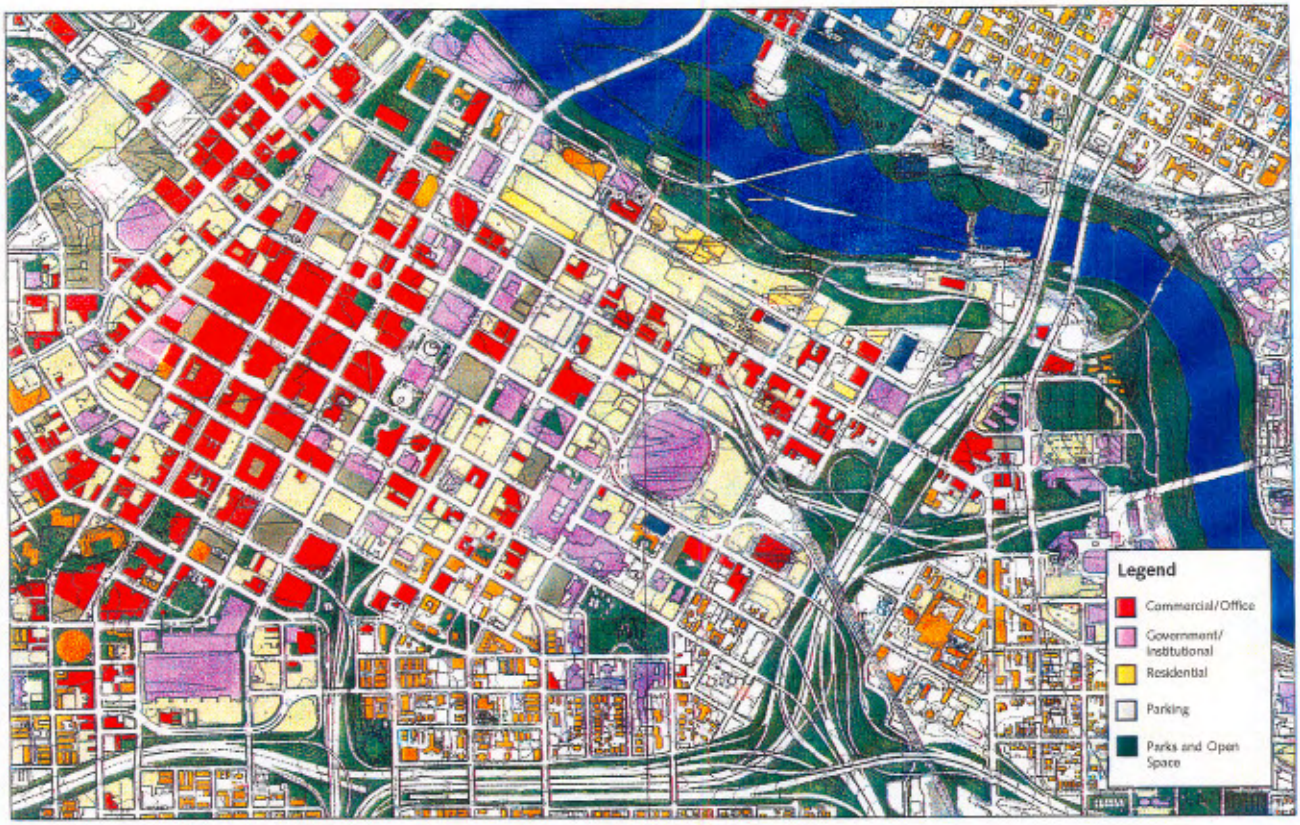
During the design charrette of the week of August 18, 1997, UDA met with nine special interest focus groups concerned with parks and recreation, housing development, adjacent neighborhoods of Elliot Park, Marcy-Holmes and Cedar-Riverside, baseball stadium, urban design/historic preservation, social equity, transportation, and commercial/mixed use development. The focus groups were asked to respond

Design alternatives were developed during an intense three-day public working session

to the analysis and the array of design alternatives being prepared by the UDA team for the Public Meeting which concluded the design charrette.

Members of the nine focus groups and other citizens attended the public meeting on August 21, 1997. After a presentation by the UDA team, break-out groups were asked three questions about the urban design alternatives: what do you like best?; what do you like least?; and what other ideas do you have? A second public meeting was held on October 9, 1997 to review the revised alternatives. The same three questions were asked again in break-out groups.

In general, the most liked aspects of the alternatives were: new housing; Chicago and Portland Avenues as landscaped boulevards; Mill Ruins Park; connections to the river; the inclusion of areas south of Washington Avenue in the plan; a transitway; the new street grid in the district; and the celebration of the historic buildings and sites. Liked least were: the scale of the proposed Twins ballpark; concern about the scale and diversity of new housing; traffic concerns; loss of inexpensive surface parking; and constructing parking ramps on the site. Other ideas included: a community center and local retail stores for the new residential neighborhood; restaurants overlooking the river; consideration of the seasonal aspects of the design; and naming the new neighborhood the 'Historic Mills District.'



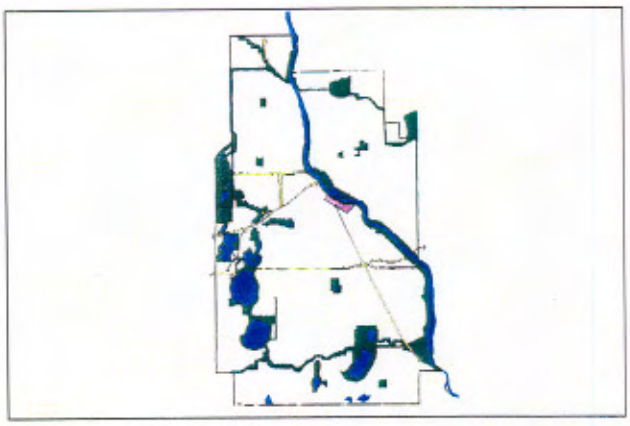
Portrait of Existing Uses

2 Urban Design Analysis

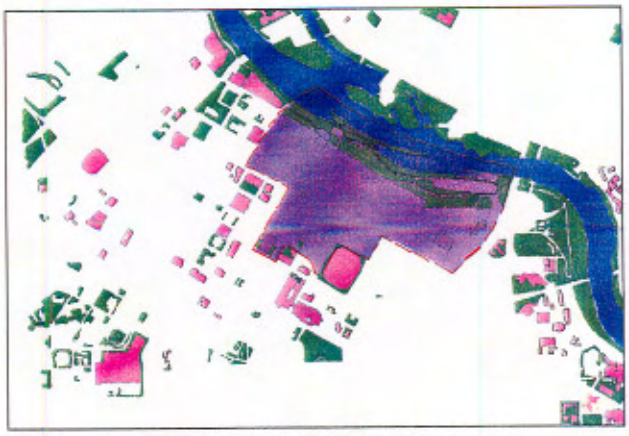
The design team prepared a series of analytical drawings focusing on downtown Minneapolis and the central riverfront. We refer to these drawings as x-rays because they describe specific layers of information.

Downtown Minneapolis is situated on a flat plane to the southwest of St. Anthony Falls and the Mississippi River. The river is for the most part hidden within a shallow gorge surrounded by mature trees and aging industrial development. The best views to the water are from the various historic bridges and the lock viewing room at the head of Portland Avenue.

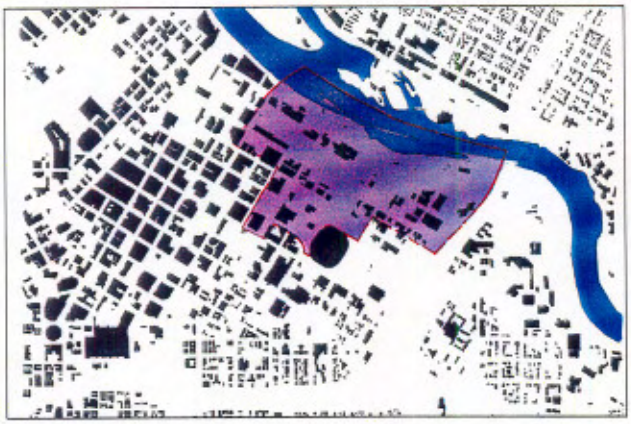
The Central Business District's street is a regular pattern of 330 foot square blocks, cranked clockwise slightly to parallel the river. The street grid has historically been cut off from the riverfront by industrial buildings and former railroad yards along the river. Washington Avenue, a wide street designed to carry large volumes of east/west traffic, reinforces this division by favoring vehicular movements over north/south pedestrian movements.



Grand Round Park System



UDA X-RAY™: Downtown Parks/Cultural Resources



UDA X-RAY™: Building Coverage

UDA X-RAY™: Streets/Highways

Building Coverage

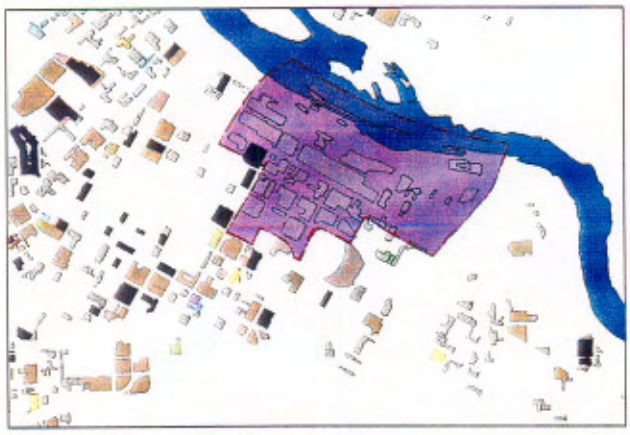
The figure ground drawing shows three primary scales of downtown development—the Central Business District, industrial riverfront development and residential neighborhoods. The large amount of vacant land in the Master Plan area is also evident.

Parks/Cultural Resources

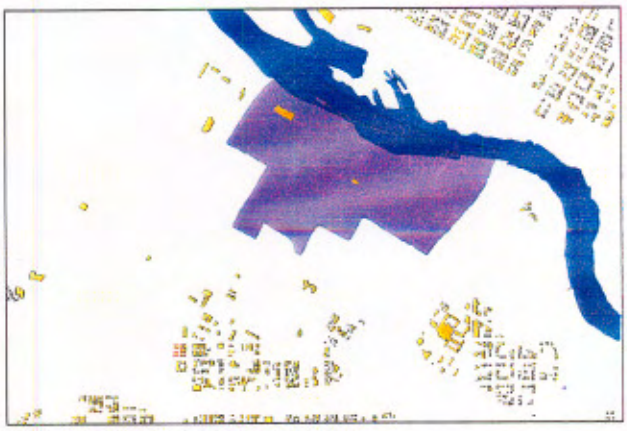
The parks x-ray shows the lack of green space connections between downtown and the riverfront. Almost void of park land, The Historic Mills District is at the heart of this problem. It is also one of the last unfinished links in the Grand Round park system.

Streets/Highways

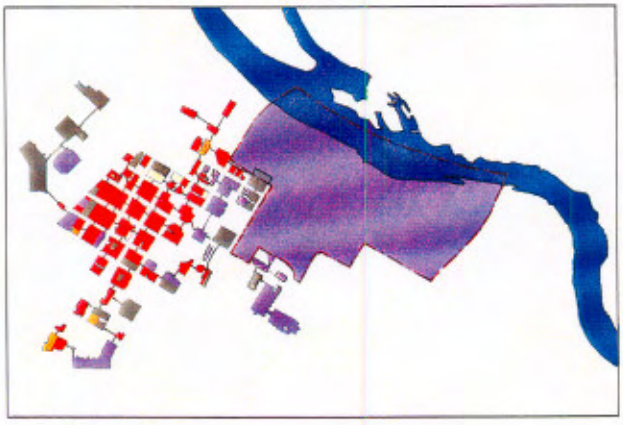
The Master Plan area is well served by the existing surface street network to the east, north and south, especially 35W at the site's eastern edge. North of Washington Avenue is a different matter, with the historic downtown street grid giving way to a disconnected street pattern.



UDA X-RAY™: Parking Lots



UDA X-RAY™: Residential Land Use



UDA X-RAY™: Skyways

Parking Lots

Approximately a third of downtown Minneapolis is covered by surface parking lots, including about half of the land in the Historic Mills District. The City's successful 'parking ring' and 'parking fringe' policy has resulted in a horseshoe of lots around the downtown core. Since development in the Historic Mills District will reduce the pool of surface spaces, a strategy for accommodating parking needs must accompany all development alternatives.

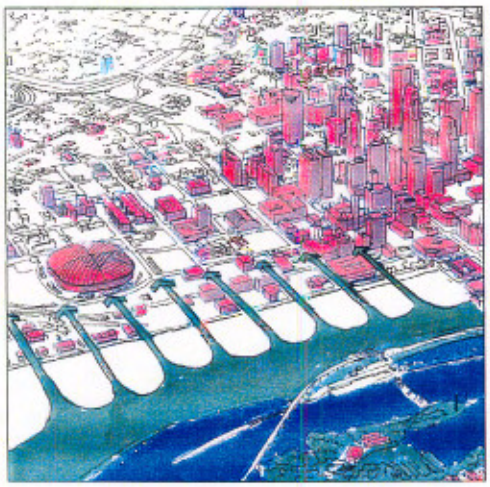
Residential Land Use

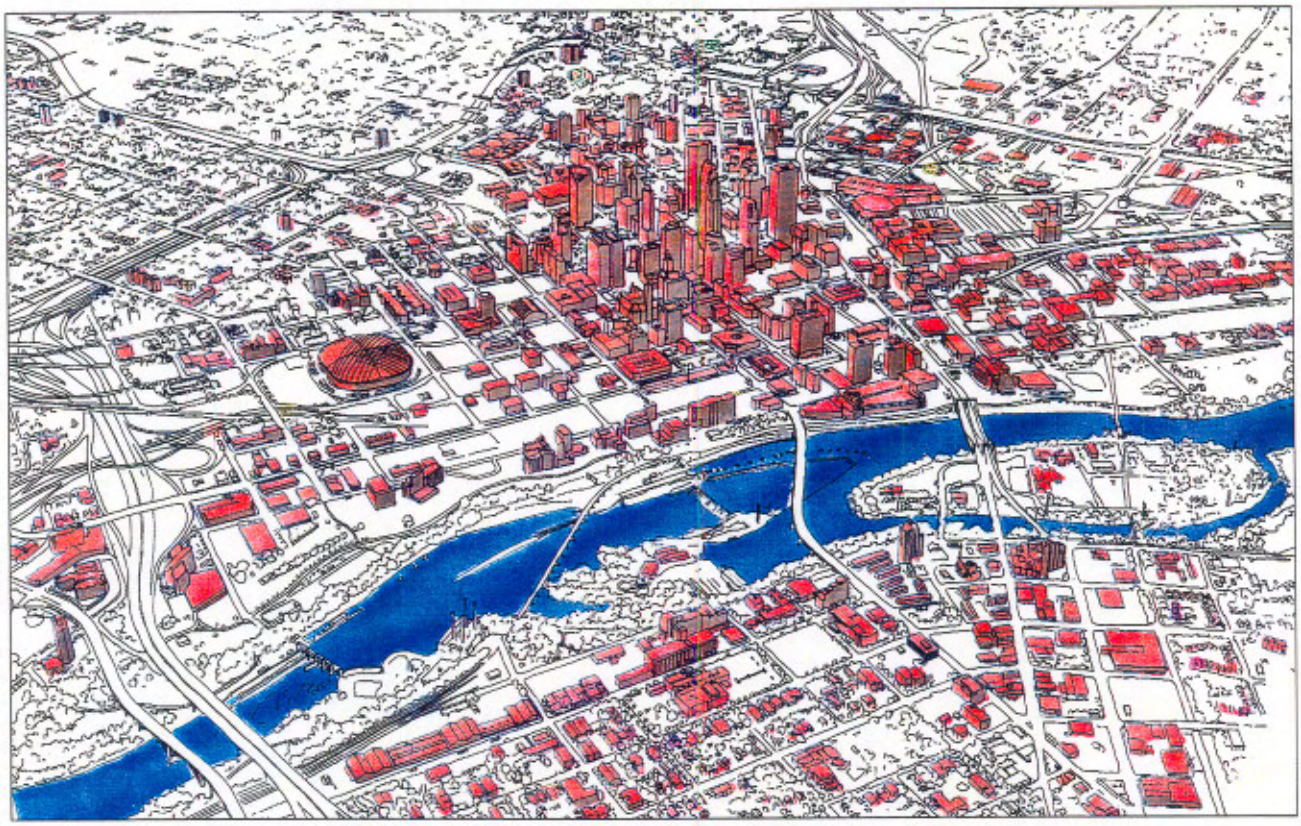
A fine-grained scale of residential neighborhoods rings three sides of downtown with ongoing development in the North Loop Riverfront District beginning to define the west edge of the Historic Mills District. With a strong consistent street grid, the Marcy Homes neighborhood to the north of the river is the most easily identifiable area.

Skyways

Finally, the skyway network provides a graphic illustration of the office and parking core. Although the network connects to a few high-rise residential buildings, it typically stops at low rise and residential areas.

IV SEVEN OVERALL URBAN DESIGN CONCEPTS





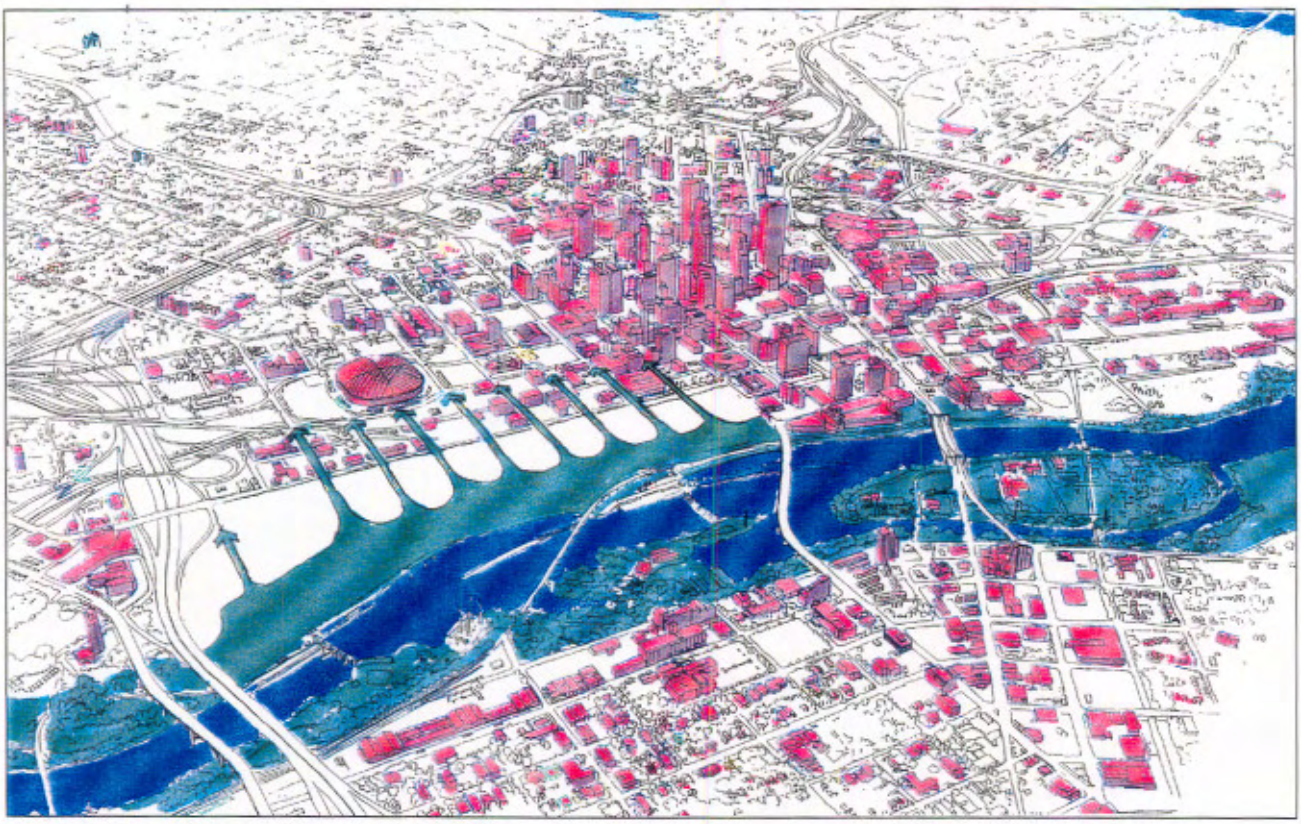
Minneapolis Today: A strong core surrounded by surface parking, a ring of freeways and varied neighborhoods

1 Historic Mills District Planning Objectives

Several objectives clearly emerged from the Phase 1 data gathering, focus groups and analytical processes:

- Reconnect Downtown to the riverfront.
- Develop a new urban form derived from the proposed changes in land use.
- Use the existing buildings and proposed riverfront park to anchor and inform future development.
- Create centrally located multi-user parking.
- Provide public transportation that links the district strategically within the region.

Based on these community-derived objectives, seven overall urban design concepts were developed for the Historic Mills District predicated on best practices principles of urban design. These seven concepts are described on the pages which follow.



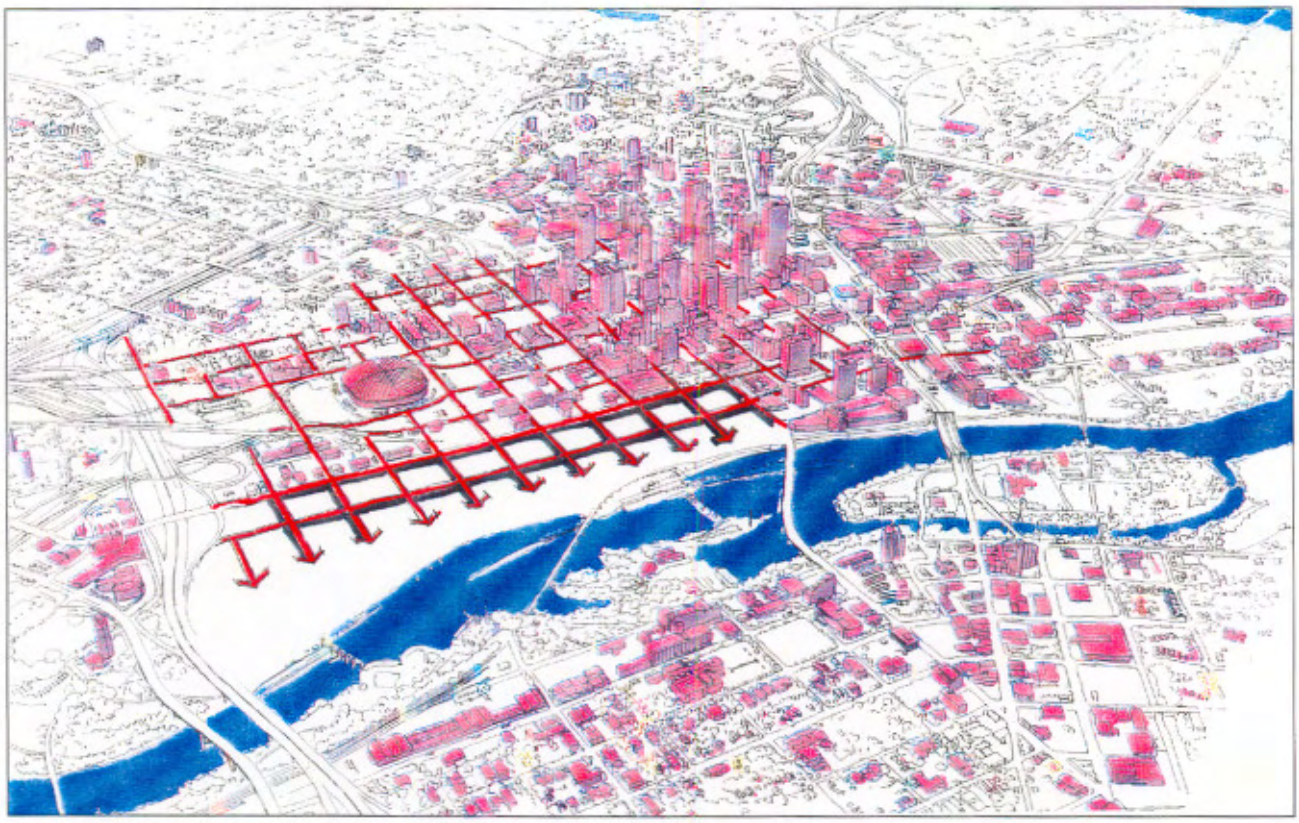
Riverfront Park will provide a link between the revitalized neighborhood and Downtown

Design Concept 1: Riverfront Park

Complete the riverfront park, trail and parkway system and connect it to Downtown

The construction of the West River Parkway and Mill Ruins Park will continue the completion of the Grand Round, one of the most ambitious and successful combination of parks, open space, trail and bikeway networks in the country. This final piece is a framework for development in the Historic Mills District. The challenge now is to link this public amenity to the proposed revitalization effort and Downtown.

To accomplish this objective, a definable new parks and open space network should extend from the riverfront, through the Historic Mills District, into the heart of the city. This approach has the benefit of not only connecting Downtown to the riverfront, but also creating new addresses for development. Reclaiming the riverfront for public use will give the city the opportunity to establish the proper urban relationship at the river.



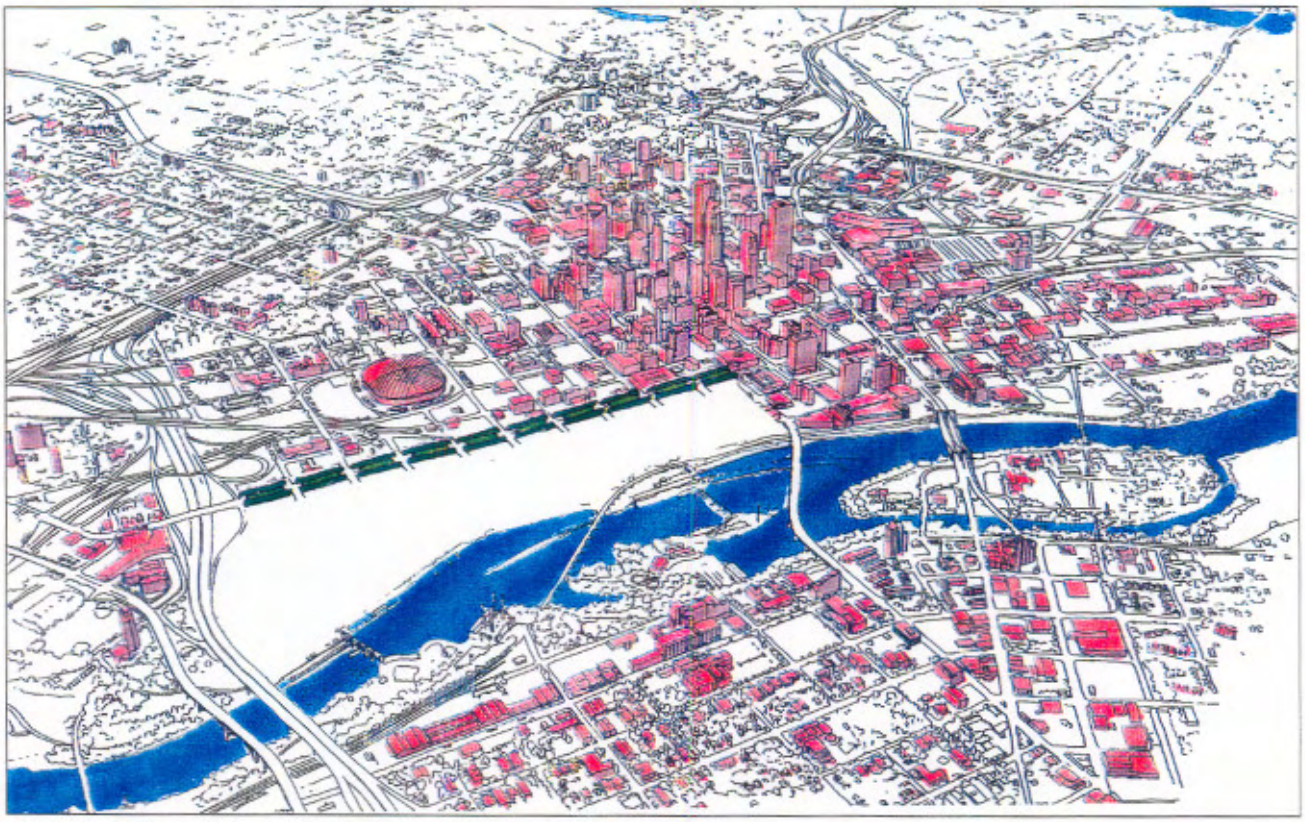
An enhanced street system will reconnect many of the district's streets with surrounding neighborhoods in ways that are both pedestrian and vehicle friendly.

Design Concept 2: Streets

Extend the downtown street grid to the river

The existing riverfront street system is a fragmented network leftover from the area's industrial past. Although this original network probably served the mills and railroad well, it effectively cut off the waterfront from Downtown. One of the most often heard complaints is that 'you can't get there from here.' Washington Avenue, although reconstructed with additional landscaping, still favors vehicles. The pending redevelopment of the area will necessitate more pedestrian-friendly solutions.

In order to connect the city to its Mississippi River address, a limited number of north/south street connections to the river must be established. Portland, Chicago, and 11th Avenues should all be extended to the West River Parkway to complement the lone existing connection at Portland Avenue, and 5th Avenue should be extended to 2nd Street. Pedestrian-friendly streetscapes must accompany the new street connections to invite residents back to the water's edge. An additional opportunity exists at 5th and Portland Avenues to create a green way connection between the river and Downtown. Extending the street grid will not only link Downtown to its waterfront heritage, but will also create a coherent framework for impending riverfront development.



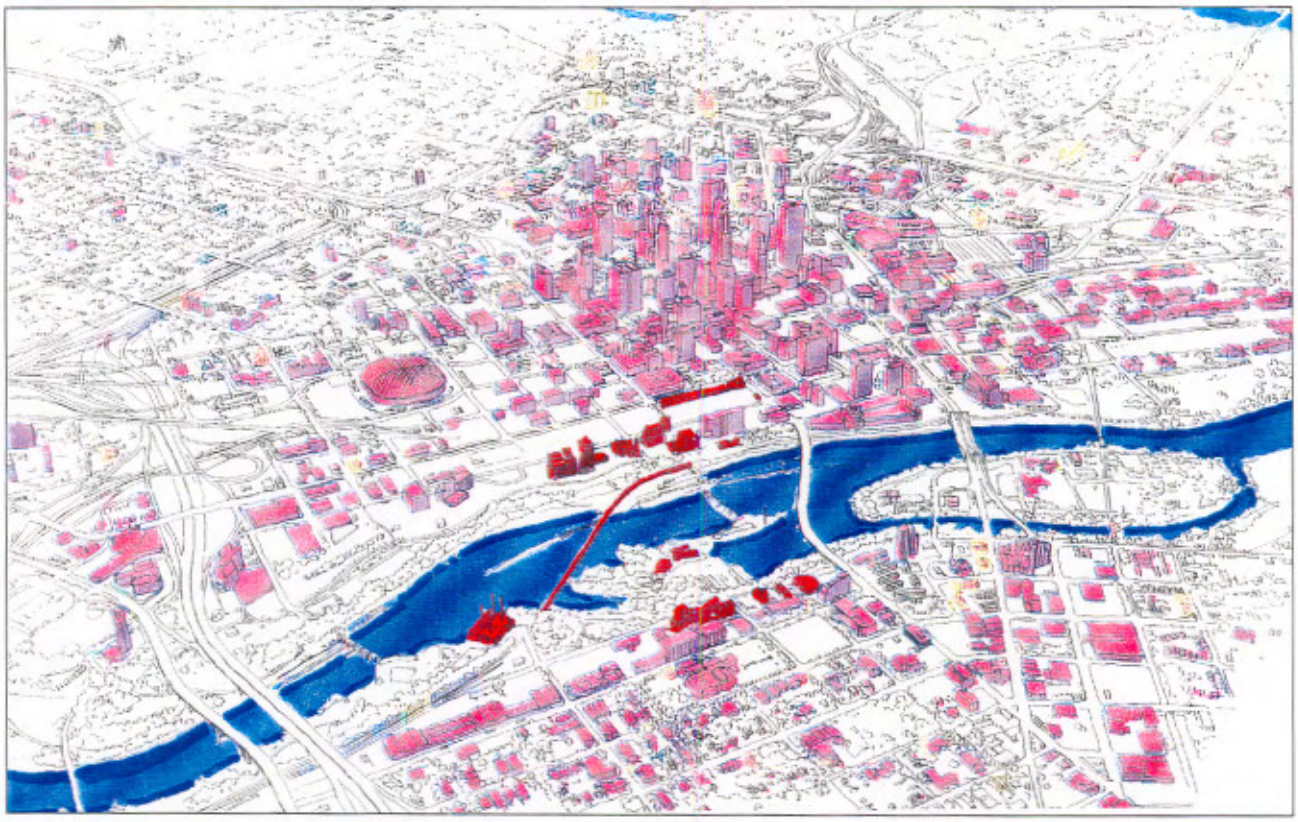
Removing traffic barriers to safe pedestrian movement will enhance successful redevelopment of the district.

Design Concept 3: Traffic Barriers

Remove Washington Avenue as a barrier to pedestrian traffic to the riverfront

Washington Avenue has evolved into a high-volume connection between 3rd Avenue, 35W and the University of Minnesota campus. However, it had the unplanned effect of cutting off Downtown from the river. When crossing this street's five very wide lanes, pedestrians feel like they take their lives in their hands.

With the possible conntection of 3rd and 4th Streets to I-35W and the possibility of a new baseball park and light rail system, an opportunity exists to remove the elements of Washington Avenue's design which make it a barrier to pedestrian movement. Street trees, pedestrian-scale street lighting, a landscaped median, and better signalization will all help to encourage north/south pedestrian movements. Removing Washington Avenue as a barrier is a key factor in successful redevelopment of the Historic Mills District and the central riverfront.



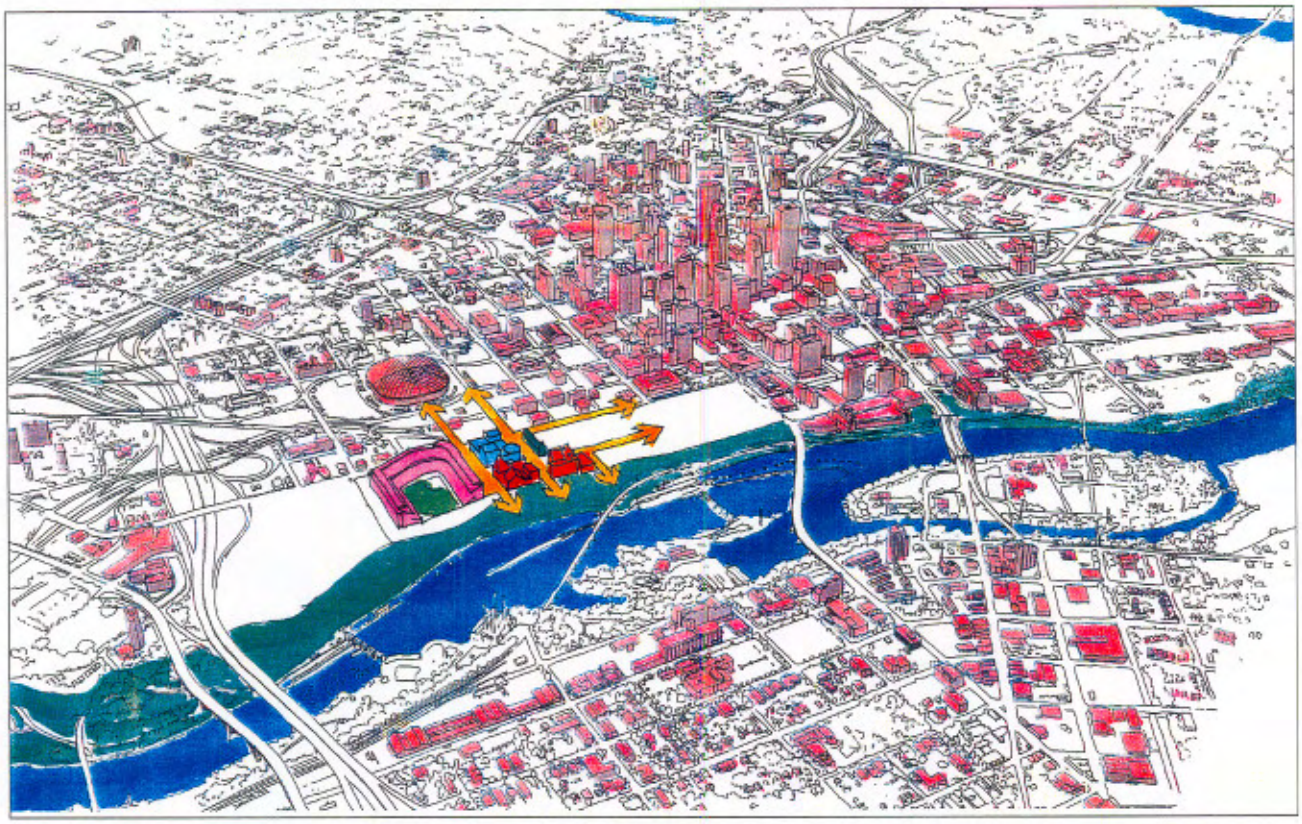
Respecting the architectural traditions already in place will be key to creating visual integrity and character for the revitalized district.

Design Concept 4: Historic Resources

Preserve and celebrate riverfront historic sites and buildings

One of the most important aspects of any master plan is determining what will define the unique image and character of a place. The area contains a core group of historic buildings and sites that document Minneapolis' industrial heritage. Reminders of the origins of hydroelectric power, milling and the railroad can all be found within the revitalization plan's boundaries.

Because they are priceless, irreplaceable and a critical part of the region's history, the mill buildings and archeological sites set the image and character of the new neighborhood. High priority should be given to the adaptive reuse of existing vacant buildings and new buildings must be respectful of the scale, architecture and materials of their historic context. Even the architecture of the ballpark, if it is built, should be understated to allow the mills to continue to be the area's central feature.



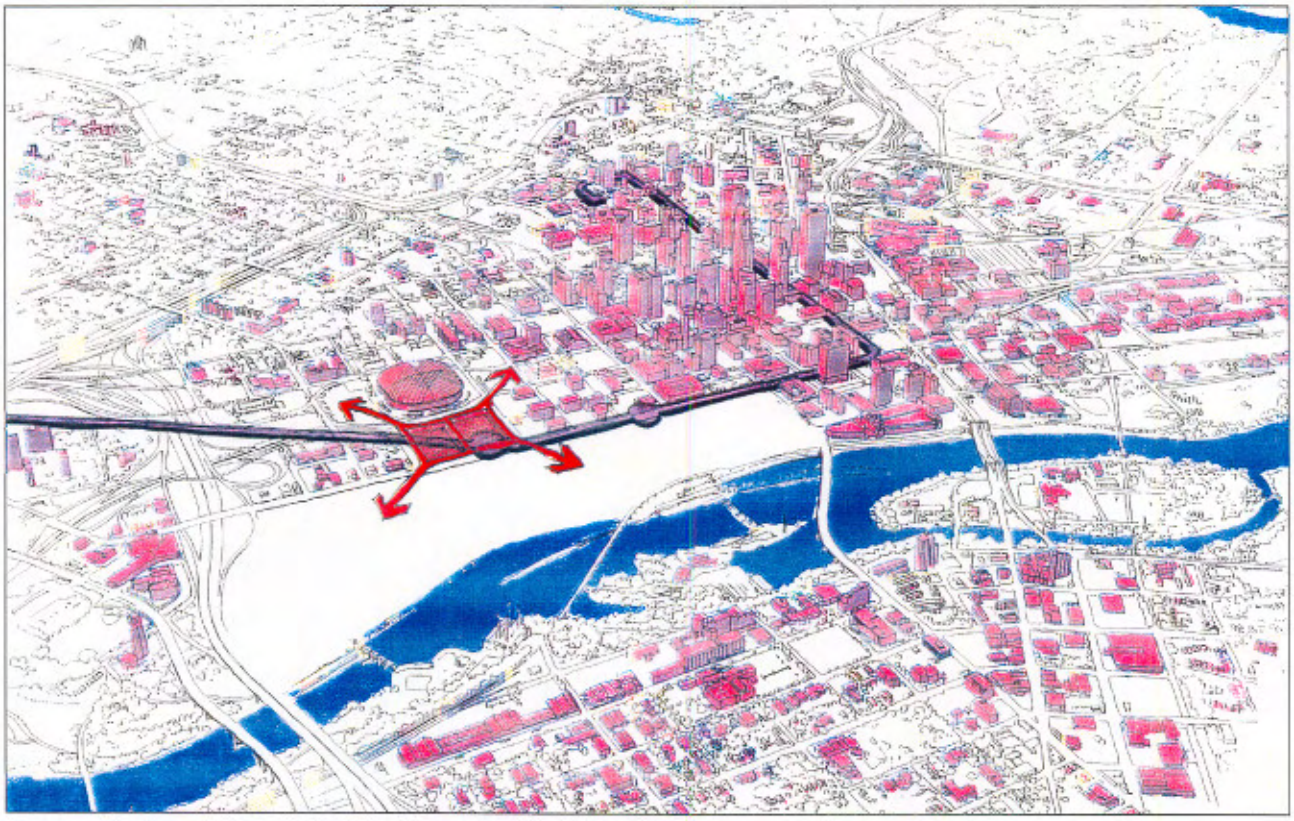
Planned redevelopment will stitch new residential, cultural and recreational uses of the district back into the broader fabric of the surrounding area.

Design Concept 5: Redevelopment Sites

Link new residential, cultural and recreational development to Downtown and the riverfront

With its close proximity to the central business district, Warehouse District, St. Anthony Falls and the University of Minnesota, the Historic Mills District sits within a unique and exciting context. With the exception of the river, the industrial uses that once dominated this area had little or no reason to be connected to these adjacent amenities. The proposed change in land use requires rethinking the lack of connections.

If housing, a ballpark and/or cultural and recreation attractions are developed on the central riverfront, they should be linked to Downtown, the Warehouse District, the river, and the University by continuous development, sidewalks lined with street trees and bike paths. This approach promotes stitching together neighborhoods into a connected urban fabric. Thus, the Historic Mills District becomes another identifiable neighborhood in a vibrant downtown, one with a variety of uses including stadiums, cultural attractions, retail, hotels, entertainment, housing, offices and parks—a true round-the-clock city.



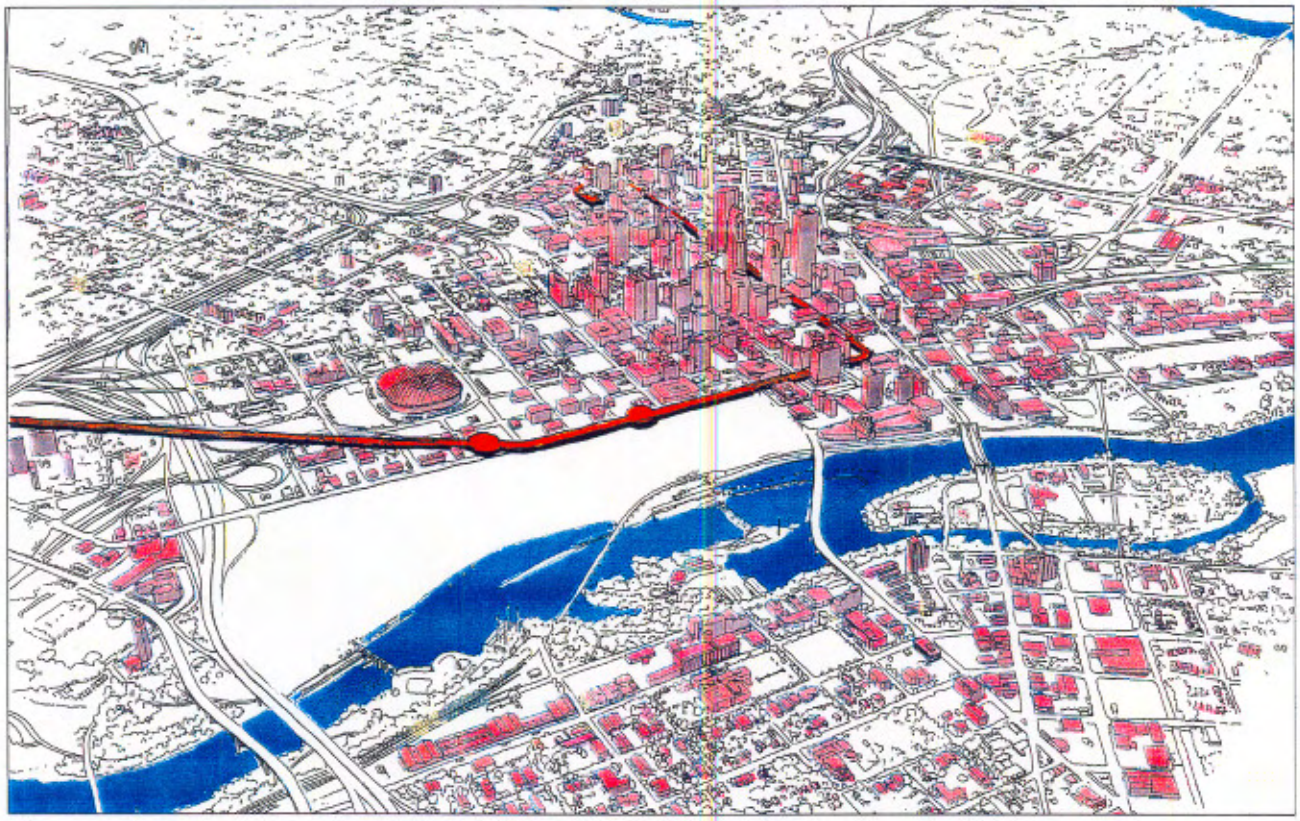
Structured parking, strategically located, will serve the District as well as Downtown and the riverfront.

Design Concept 6: Parking

Create centrally located multi-user parking

For years Minneapolis has pursued a very successful parking strategy of creating a ring of parking garages around the Central Business District. Less expensive surface spaces exist beyond this ring providing an additional resource for workers and sports fans who are willing to walk. The Historic Mills District, with its 3,000 surface spaces, falls into this remote parking category and is an essential part of Downtown's parking capacity.

To preserve the balanced supply of parking spaces, new structured parking must be built to serve new riverfront uses and existing downtown office and stadium uses. Since office workers will typically only walk a quarter of a mile or less and stadium users only a half mile or less, structured replacement parking must be centrally located to both needs and linked to a new transitway. The expansion of the existing shared parking reservoir is the best insurance against downtown parking shortages.



The proposed transitway along Washington Avenue will provide an important link among the diverse resources and uses along this access corridor.

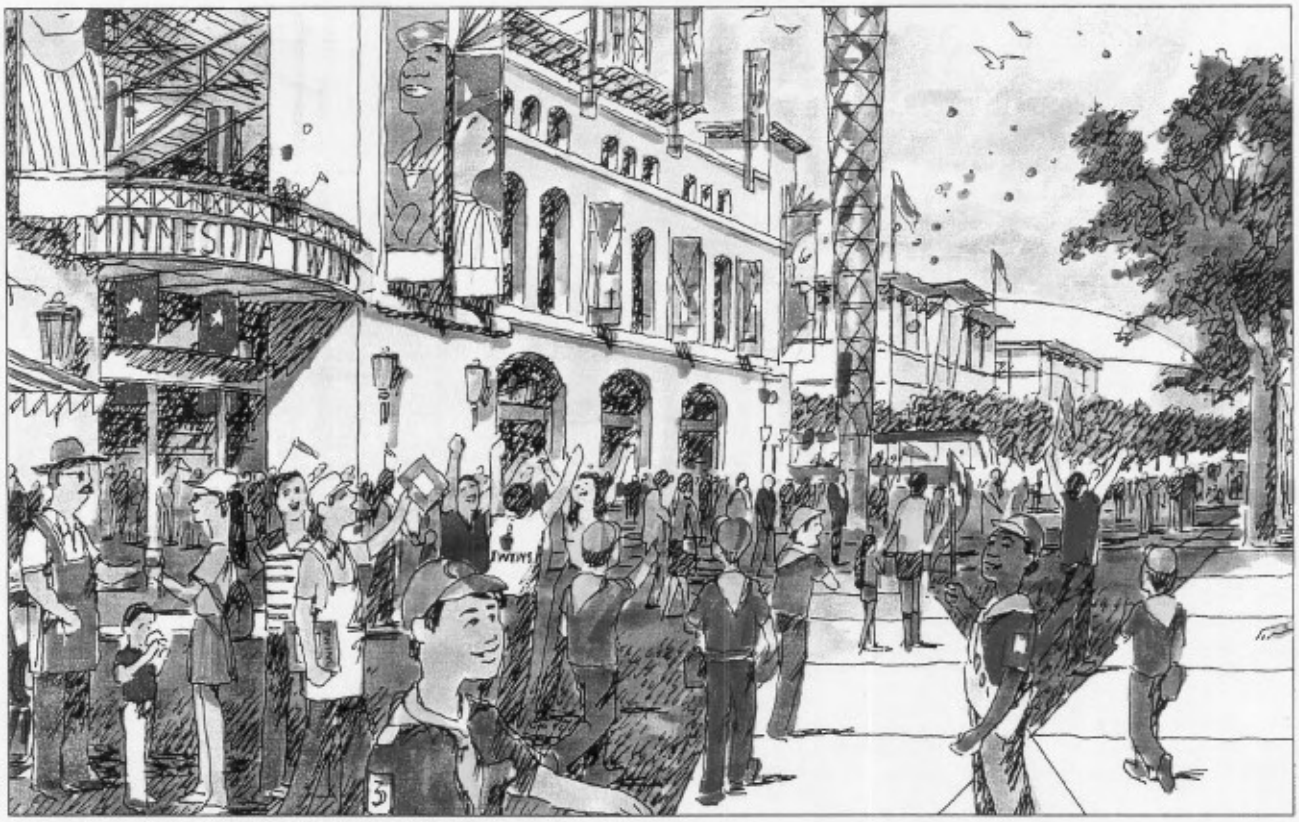
Design Concept 7: Public Transportation

Build a transitway to link the Airport, neighborhoods and parking with Downtown and the central riverfront

A new transitway to link the airport, Mall of America, close-in neighborhoods, and Downtown has been studied for some time. The proposed alignment would follow the Hiawatha corridor to either Washington Avenue or a comparable east/west downtown street. Downtown stops will be located close to major employment, stadiums and parking reservoirs.

Although the region's transportation plan has many other important projects, the option of light rail (or an equivalent parking shuttle system) should be part of the revitalization of the Historic Mills District. One key argument for the transitway along Washington Avenue is that it would link proposed hotels, cultural and recreational activities, residences, the ball park, and Mill Ruins Park to existing parking reservoirs and the Central Business District needs, thereby reducing the requirement for new downtown structured parking spaces. Not only would the city have to build fewer parking garages, but riverfront land currently used for parking could be developed to its full potential.

V TWO URBAN DESIGN ALTERNATIVES



A transformed Historic Mills District will invite Minneapolis residents back to the central riverfront.

1 Introduction

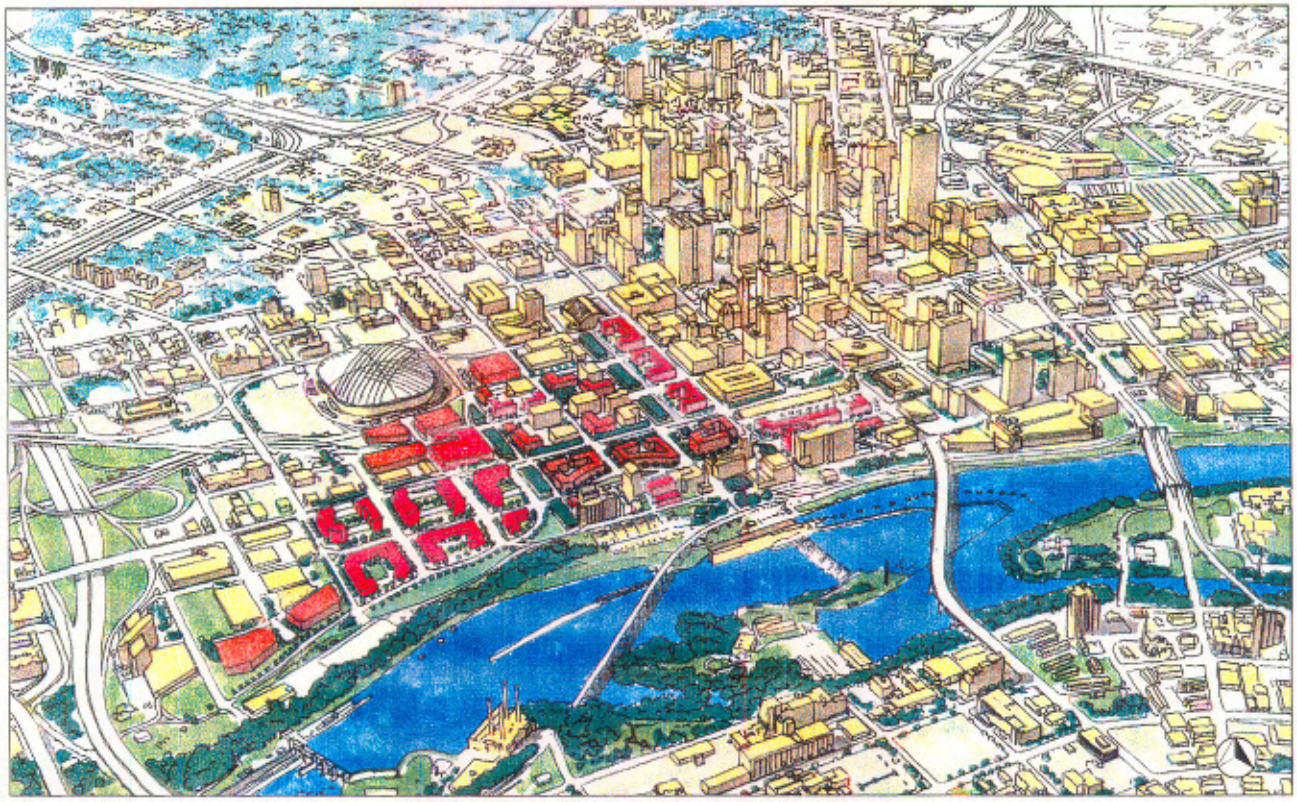
Public input, the market study, the urban design analysis, and best practices principles of urban design were used to develop two distinct urban design alternatives: one features a predominantly residential solution; the other is anchored by a major league stadium. Since both of these schemes are compatible with the urban design concepts proposed in the previous chapter, a preferred alternative was not identified. Each alternative is equally strong.

On the following pages, a series of perspective and master plan drawings are shown for both design alternatives, along with a detailed explanation of their unique features. The residential alternative explores the creation of a new residential district as a complement to the Warehouse District. The stadium alternative explores the unique opportunities presented by locating a stadium north of the Metrodome.

The thrust of these proposals and recommendations is to provide an overall framework for development efforts that will strengthen the relationships between separate efforts that have important commonalities, such as the various residential initiatives which all have a need for a greenway close by. If the various efforts can begin to coalesce around these areas of common interest and need, then the available resources will be able to leverage far more than any one or two projects now competing for the same resources could achieve.

Therefore, the two design alternatives should be thought of as a way to connect the dots—actions that combine separate pieces into a more cohesive, more synergistic whole. Both approaches—residential or stadium— satisfy five fundamental strategies for successfully redeveloping the area:

- Create the amenities necessary to attract new investment,
- Diversify the market for Downtown,
- Celebrate the area's history,
- Create a city place, and
- Link communities.



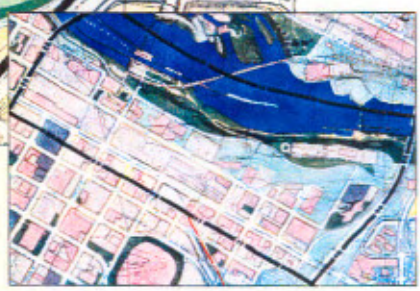
Tomorrow: A new residential community

2 Residential Development Alternative

The residential alternative, illustrated above and on the following pages, seizes the opportunity to create a new landmark downtown neighborhood. The initial boundaries will be 3rd Avenue to the west, Mill Ruins Park to the north, 35W to the east and Washington Avenue to the south. A possible future expansion of the neighborhood to the south is shown in the nine city blocks bordered by 5th, Washington and Chicago Avenues, and 5th Street.

The framework for new development is based on two of the key urban design concepts presented in the previous chapter of this plan: connecting the river and Mill Ruins Park to Downtown and extending the downtown street grid to the river. **The first design concept creates a series of finger-like green spaces which extend from the riverfront park, up Portland and Chicago Avenues, to the Armory and Metrodome respectively.** The new park along Portland Avenue creates a residential address for three blocks of proposed courtyard housing. The proposed residential buildings will provide a transition between existing parking uses on 5th Avenue South and the proposed Portland Avenue Park. In connecting the Elliott Park

Vacant industrial sites will be transformed into a downtown residential district



Existing Conditions

neighborhood and the Metrodome to the riverfront, the park along Chicago Avenue establishes a grand civic address. Smaller secondary parks build on the primary open space framework by creating more intimate neighborhood places. Streetscape improvements should extend south along Chicago Avenue beyond the project boundary to better link Elliott Park to the revitalization effort on the riverfront.

The second overall design concept that is key to the residential alternative is the creation of a street network that complements the park system by linking Downtown to the riverfront and clearly defining the public realm. New street connections to complete the grid include links to Mill Ruins Park and the West River Parkway at Chicago and 11th Avenues. A connection should also be made at 5th Avenue between Washington Avenue and 2nd Street. These initiatives will be complemented by the further improvement of Washington Avenue into a landscaped pedestrian-friendly boulevard. Specific design changes for Washington Avenue include new street trees, street lighting, a planted median, and a transitway. Other

interventions include new streets parallel to Portland and Chicago Avenues. These new streets function to define the new parks, set the address for development and buffer the new uses from high volumes of traffic. Revitalizing Washington Avenue into a civic street and completing and enhancing the street grid are critical to the success, image and character of this new district.

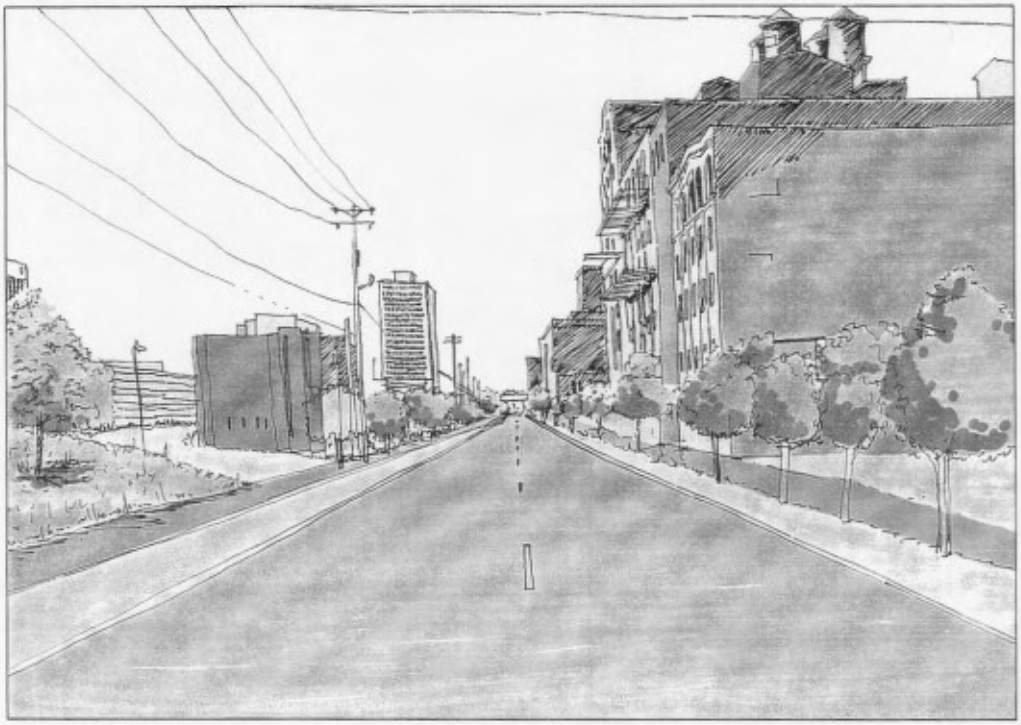
By building on the area's historic industrial heritage, such as the mill ruins, Ceresota, Crown Roller Mill, 1st Street Station, Mill Place, Milwaukee Road Depot, Freight Head House, and Whitney Hotel, the image and character of the neighborhood will be unique and contextual. Mills and ruins will be retained and/or adapted for re-use or interpretation. New buildings will be constructed to Pattern Book guidelines which control, among other things, height, massing, view corridors, and materials. These controls will ensure that the heritage of the district will be respected and celebrated.

The primary land-use recommendation is multi-story housing, providing a variety of house types that maximizes the market and provides options to the residents in terms of rental or home ownership at a variety of price points. This new housing will allow for the expansion of the downtown housing market now well established in the area adjacent to the riverfront in North Loop. Parking will be accommodated on street, at grade, and in underground ramps. The rule of thumb is that each block must support at a minimum its own parking requirements. Some blocks will be required to provide additional parking to offset surface parking which will be lost adjacent to existing historic and commercial buildings. As the City's reservoir of inexpensive surface riverfront parking is absorbed by development, additional parking for downtown office workers and stadium uses will be constructed within the 'parking ring' and at the southeast corner of Washington and Chicago Avenues. Evening and weekend parking for the cultural and recreational attractions in the Mills District will be off-peak from the daily commuter parking.

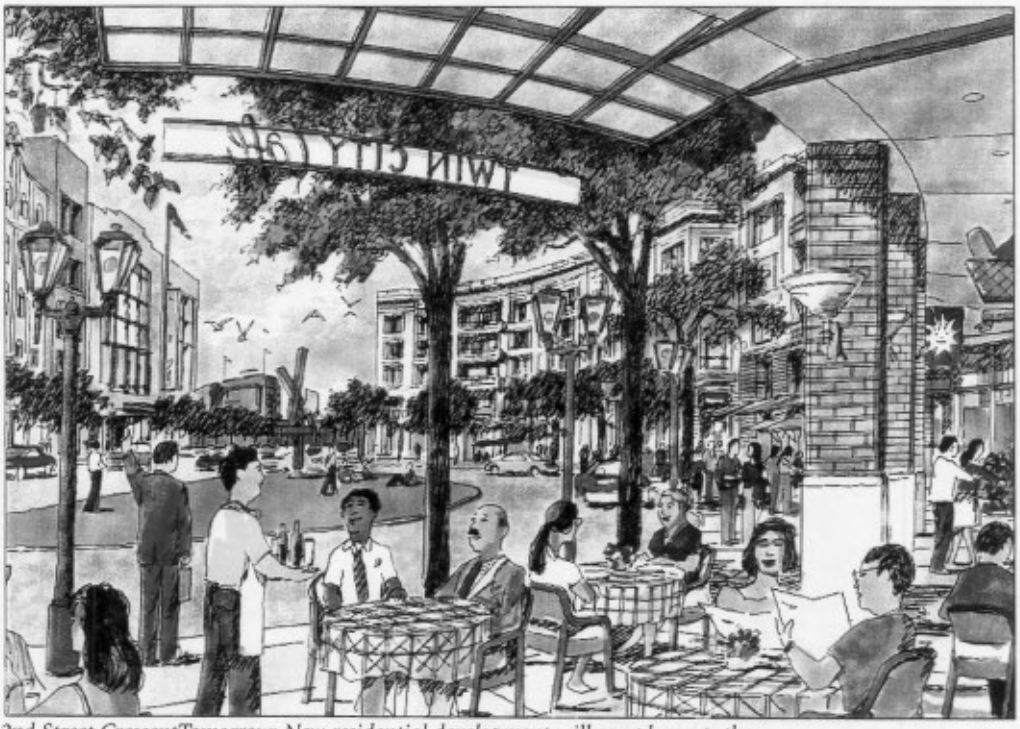
The proposed new transitway on Washington Avenue is key to linking the proposed Chicago Avenue parking garages with the central business district, thus relieving the need for the riverfront parking reservoir (see Appendix Section 1: Transportation Recommendations).

The Downtown pedestrian skyway system is valued by workers, shoppers and residents. The system currently leads to the front door of Industry Square at the corner of 5th and Washington Avenues. Although there is some suggestion for extending the network throughout the riverfront, the plan recommends that the system extend across Washington Avenue to the depot site and no further. There are a number of reasons for this recommendation. First, the future success of the new neighborhood will be based in large part on the security which comes with pedestrian street life. Traditional on-street pedestrian circulation networks, such as in the area adjacent to the riverfront in North Loop, encourage this type of activity. Second, extending the network will be redundant with the transitway connections to Downtown. Third, extending the skyway system across major boulevards, such as Portland and Chicago Avenues will amputate view corridors to Downtown and the river. Finally, integrating the network through historic Industry Square buildings will detract from their image and character. In short, the skyway system, although an integral part of the Central Business District, would have a negative impact if extended into the new residential district.

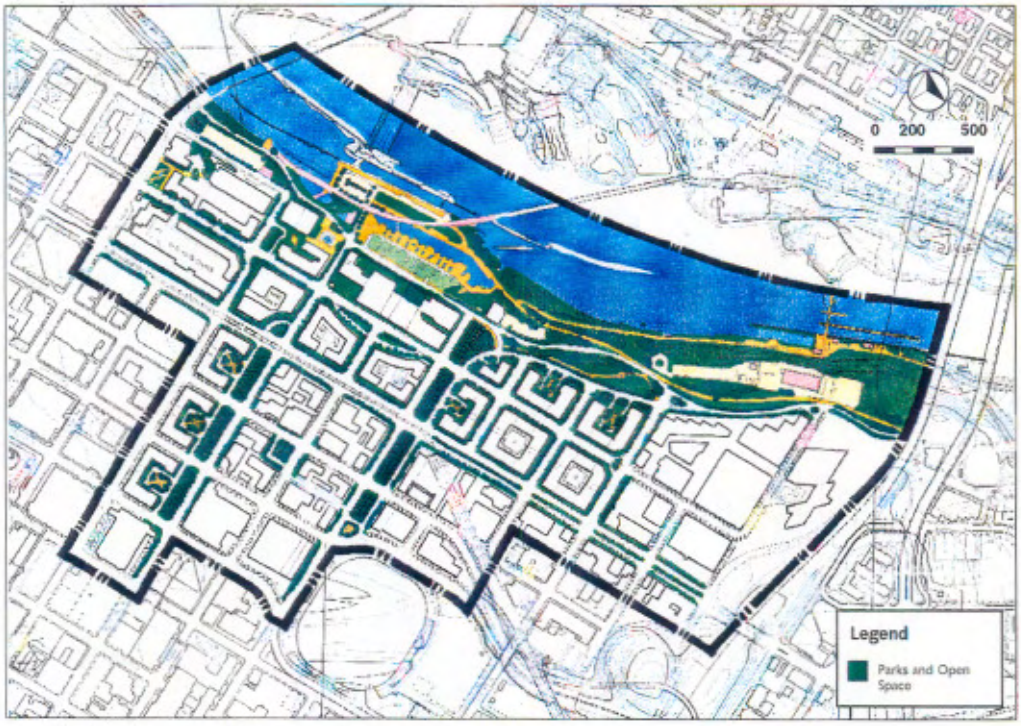
Finally, amenities must be in place to attract and serve new residents and visitors to the area. The park system, street network, historic buildings, skating rink, coffee shop, underground parking, Whitney Hotel, the proximity to downtown employment centers, the Mississippi River, the Warehouse District, the University of Minnesota, and St. Anthony's Main are already in place. New suggested amenities include convenience retail, restaurants and cultural and recreational activities, such as a museum, a theater, and other family-oriented attractions. A new 10,000 square foot grocery store, integrated into the first floor of a residential building, would also be a tremendous asset to the neighborhood.



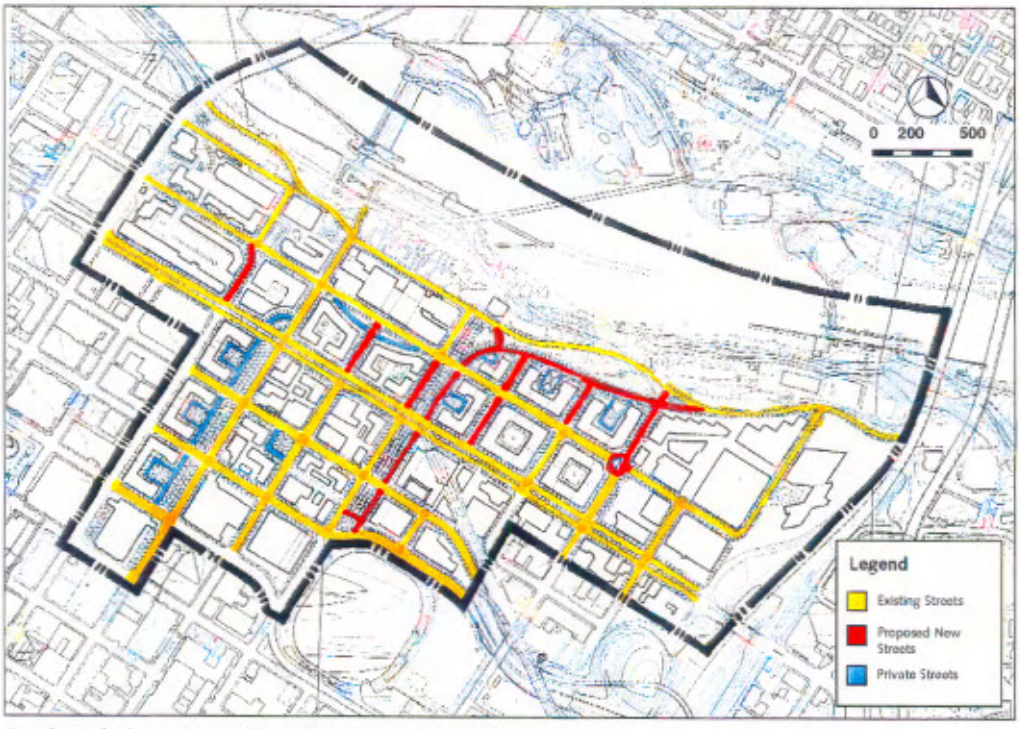
2nd Street Today: A wide cartway fronted by parking lots and the Mill Ruins



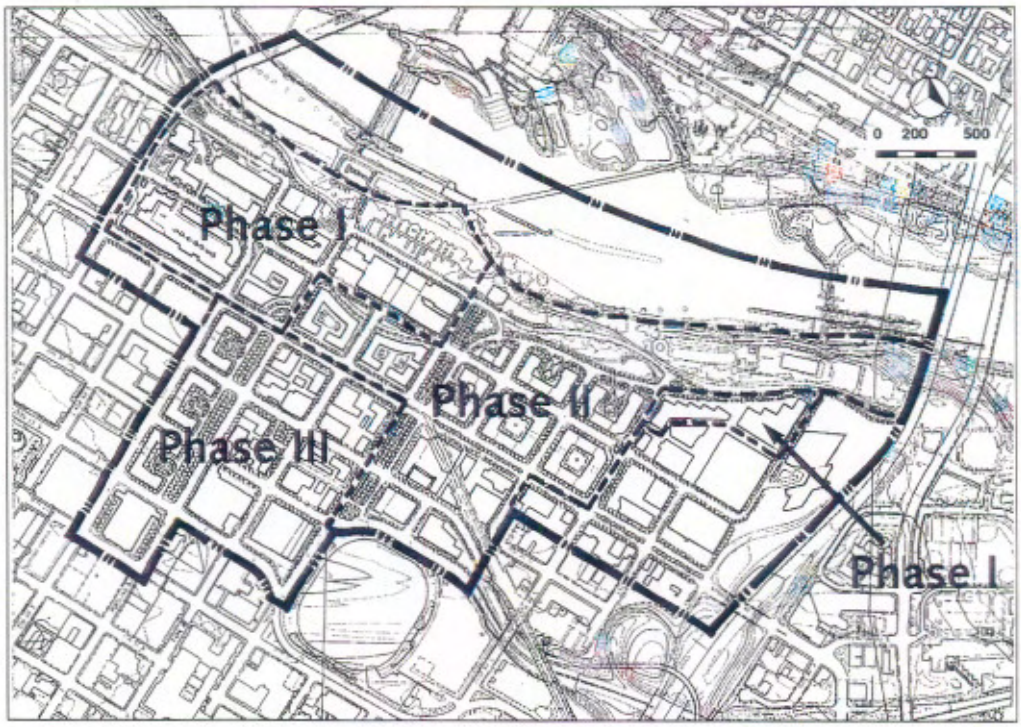
2nd Street CrescentTomorrow: New residential development will complements the restoration of the historic mill buildings



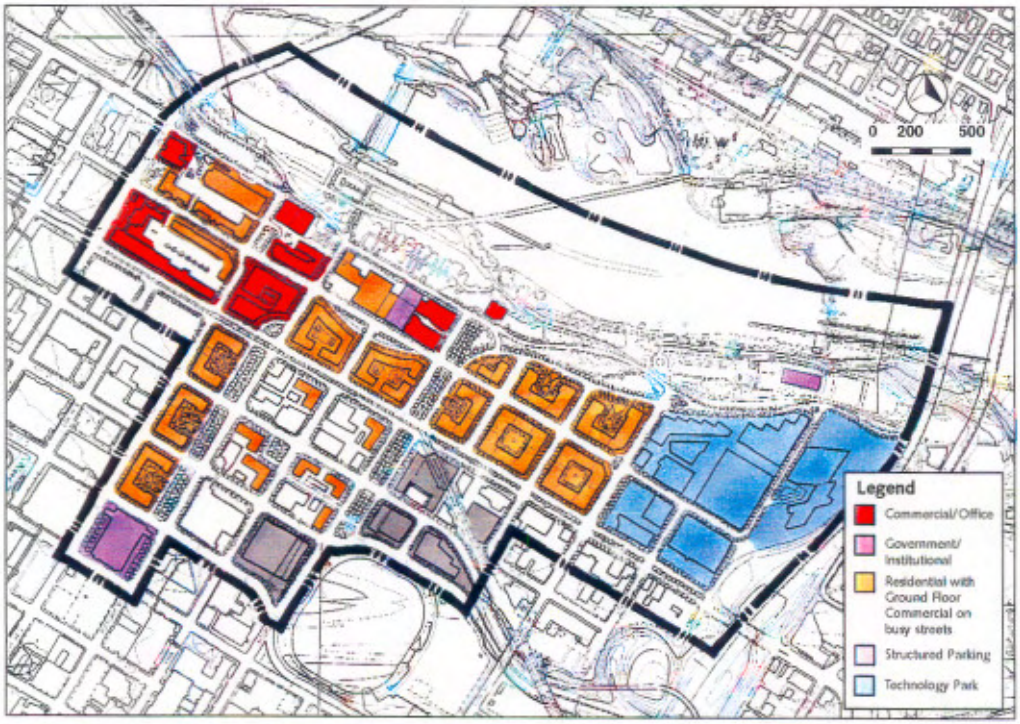
Residential Alternative Streetscapes/Parks and Open Space Plan: Fingers of green space will connect the riverfront park to Downtown



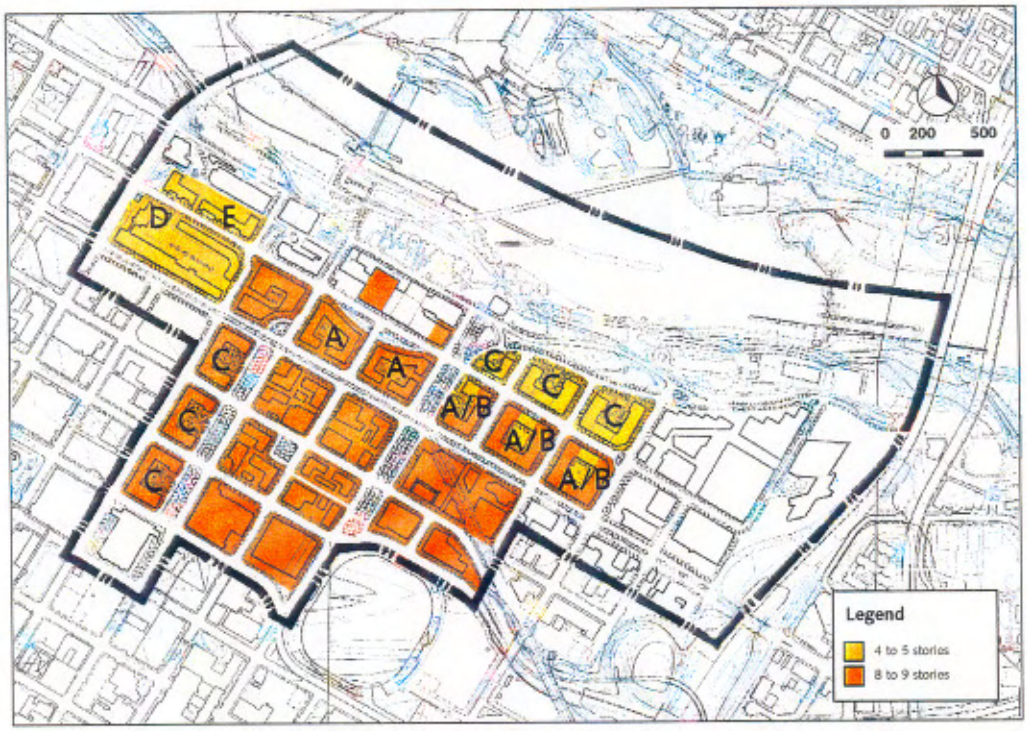
Residential Alternative Public Improvements Plan: Downtown street grid will extend to the river



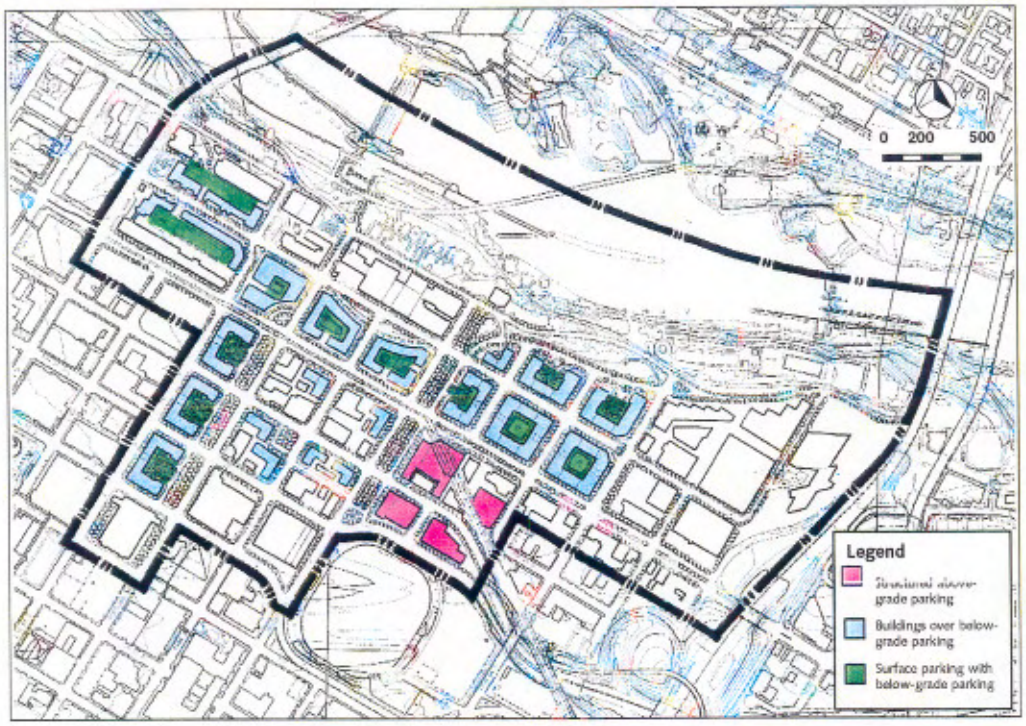
Residential Alternative Phasing Plan: Build on existing strengths



Residential Alternative Land Use



Residential Alternative Proposed Building Heights (Letters reference block prototypes)



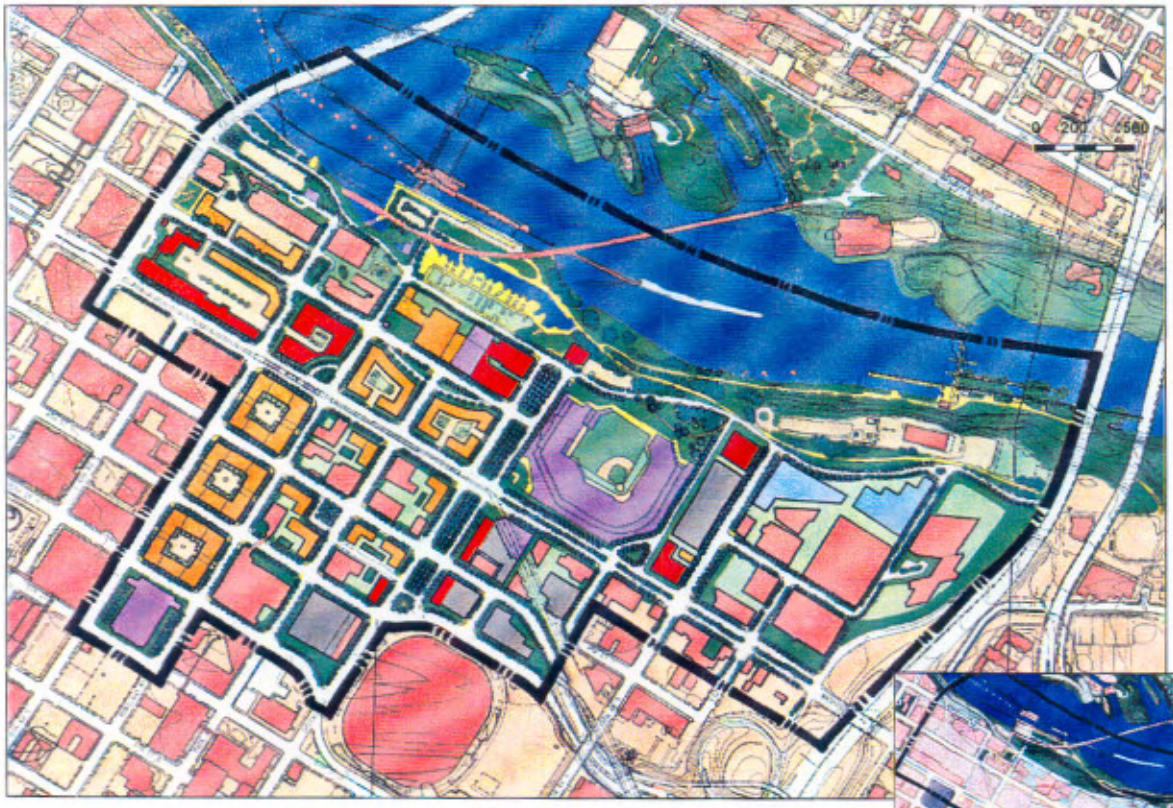
Residential Alternative Parking: Each block's parking will be self-contained

Tomorrow: A Traditional stadium will capture views of Downtown and the Stone Arch Bridge

3 Stadium Development Alternative

In June 1997, Mayor Sayles Belton announced the City's support for a Twins baseball stadium on the six riverfront blocks bounded by Chicago, 11th and Washington Avenues and the Parkway. This urban design alternative explores the implications of locating a baseball stadium in this emerging residential district. The stadium alternative differs from the all-residential land use proposal in that it will significantly increase and diversify the type of activity in Industry Square. However, the recommended variety of house types that maximizes the market and provides options to the residents in terms of rental or home ownership at a variety of price points that was made for the residential alternative still applies to this alternative. 2nd Street, near the stadium, will be characterized by restaurants and cultural and recreational activity sites with apartments above those venues rather than residential front doors. Residents living near to the stadium will have to be buffered from frequent crowds, stadium noise, fireworks, and pressure on parking.

As in the residential alternative, the stadium, if designed and sited properly, can be consistent with the overall urban design concepts set forth



The stadium will anchor the new cultural, recreational activities and residential district

Existing Conditions

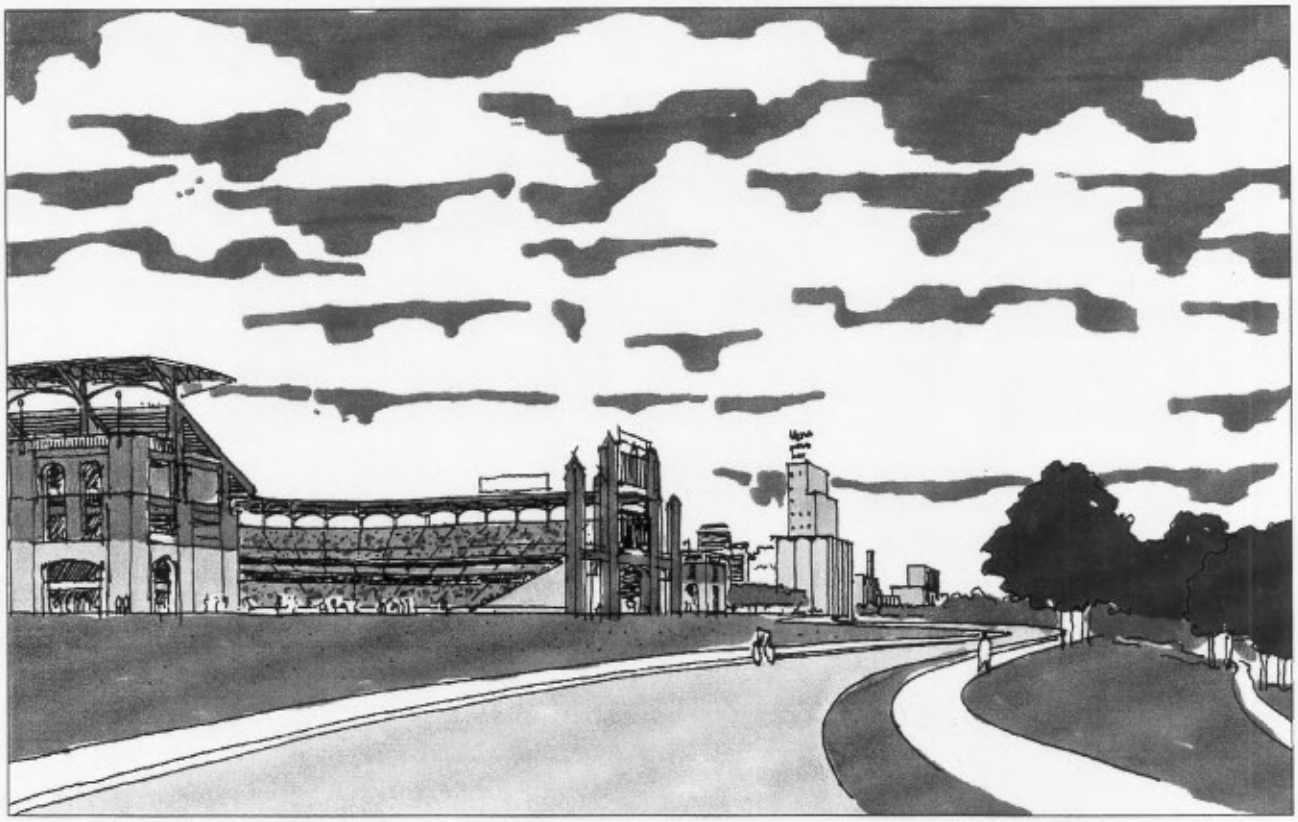
Legend

- Park
- Residential Development
- Commercial Development
- Institutional Development
- Structured Parking
- Industrial

previously in this plan, including residential, retail, recreational, and cultural uses. The challenge is to design the stadium to be in context with its existing and proposed residential surroundings. The structure must be sympathetic to the scale and masonry architecture of the adjacent mill ruins. It also should incorporate the visual extension of Mill Ruins Park to and into the stadium.

Although the stadium requires the consolidation of six blocks, it is sited on blocks where north/south streets have already been severed by the Metrodome. The creation of a main entrance at the intersection of 2nd Street and Chicago Avenue will be an important urban design feature to help mitigate the interruption of 2nd Street. In addition, a linear park along Chicago Avenue will buffer adjacent residential buildings from stadium noise and activity. A continuous street network around the stadium will also be essential to facilitating required traffic movements and the continuity of the West River Parkway.

The plan recommends that the stadium be built as a traditional open air stadium, oriented to views of the

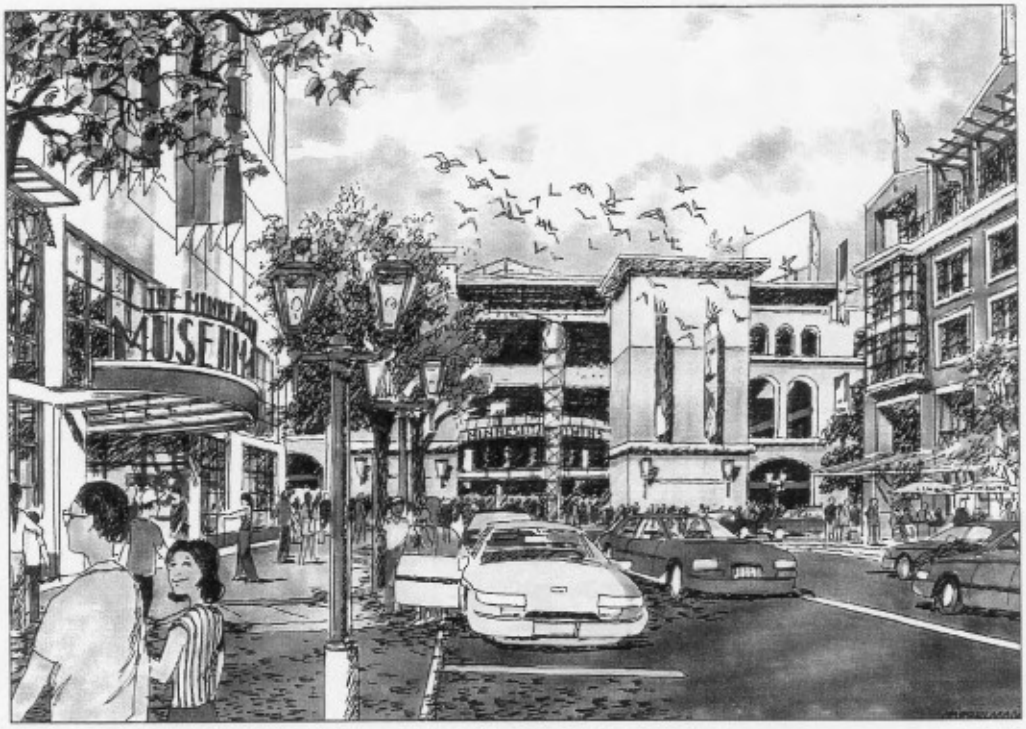


The stadium will become an extension of the riverfront park system

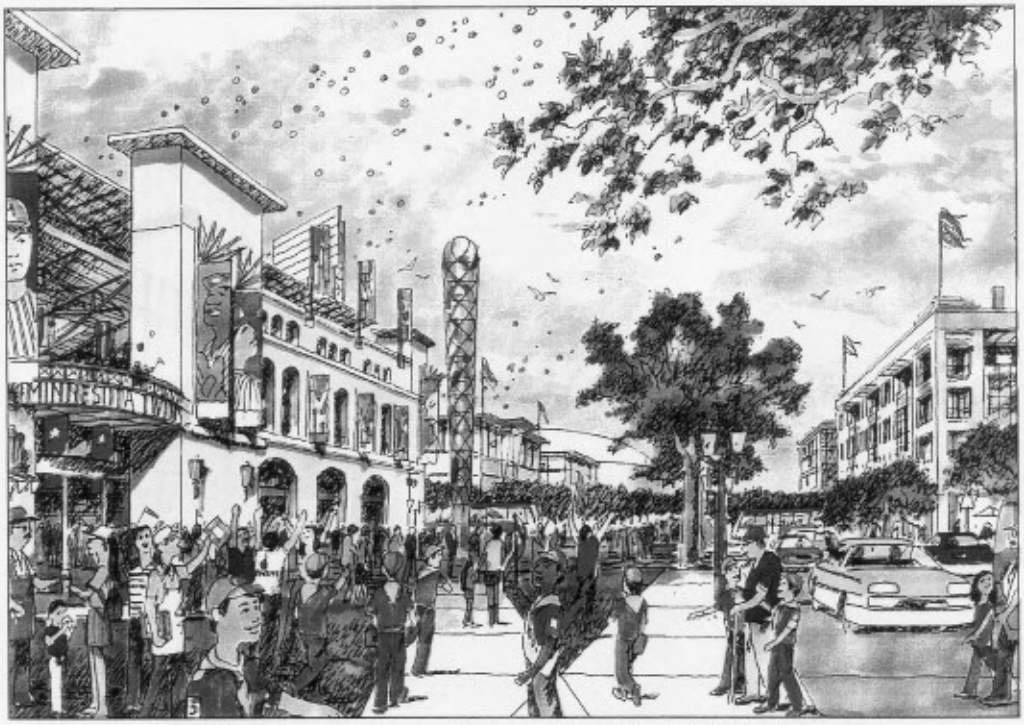
Stone Arch Bridge, St. Anthony Falls and the Downtown skyline. The facades should be solid and civic in nature along Chicago and Washington Avenues to reflect the formal character of these two streets and open and irregular on the side facing the Parkway to reflect the bend of the Mississippi River. The playing field should be open to Mill Ruins Park.

Some structured parking is required adjacent to the stadium. Possible locations include east of the stadium between 10th and 11th Avenues, under the Chicago Avenue linear park, and south of the stadium at the southeast corner of Chicago and Washington Avenues. Each of these sites meets the objective of creating centrally located multipurpose parking. The site at Chicago and Washington Avenues has the added advantage of being close to Downtown and along the proposed transitway route (for additional stadium parking recommendations see Appendix Section 1: Transportation Recommendations).

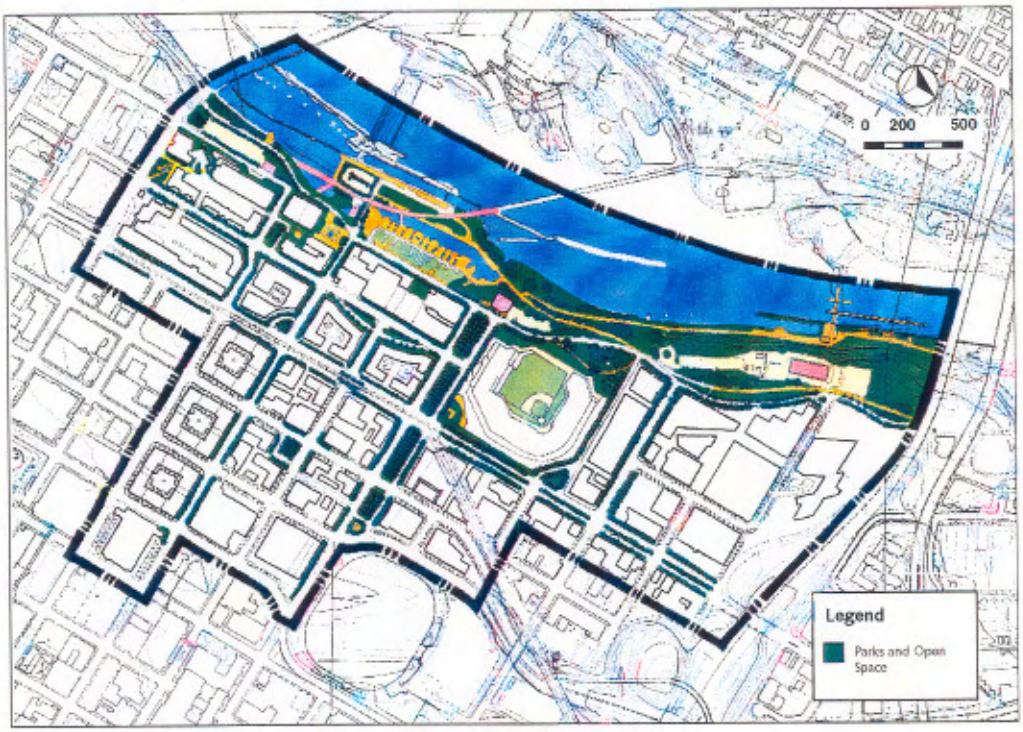
Although less expansive than the design shown in the residential alternative, a second approach to revitalizing Portland Avenue (between Washington Avenue and 6th Street South) is illustrated here. Full block apartment buildings are substituted for three-quarter block buildings and the linear park. The advantage of this scheme is that it allows for more development with less infrastructure. The disadvantage is that it establishes a less convincing residential address.



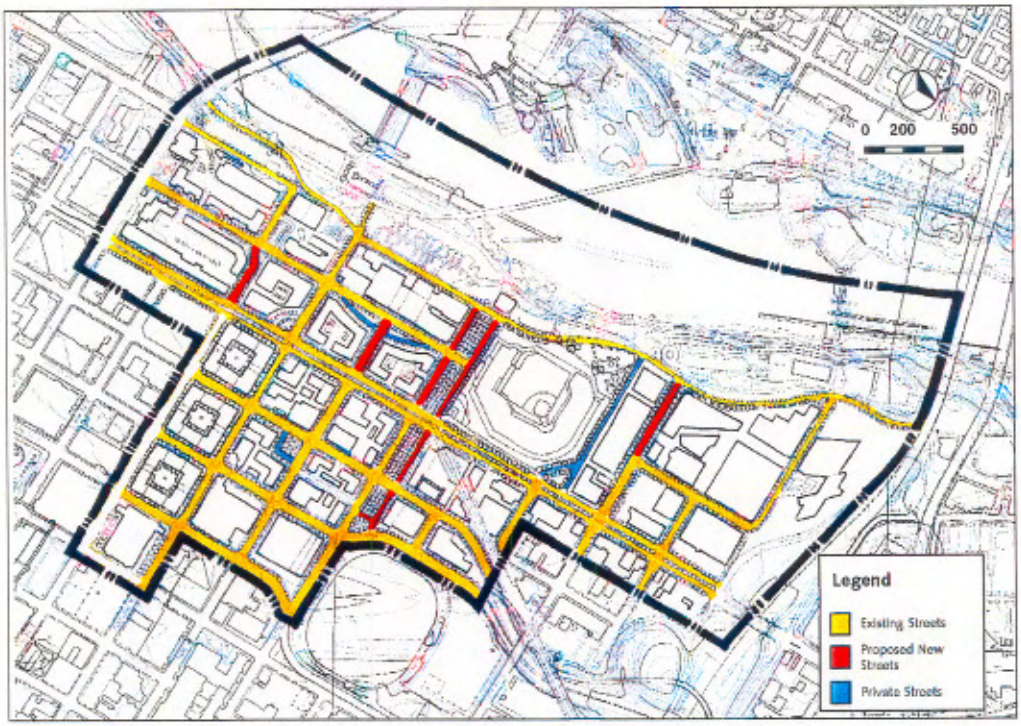
Stadium, restored mills and housing will give the district a new life and identity



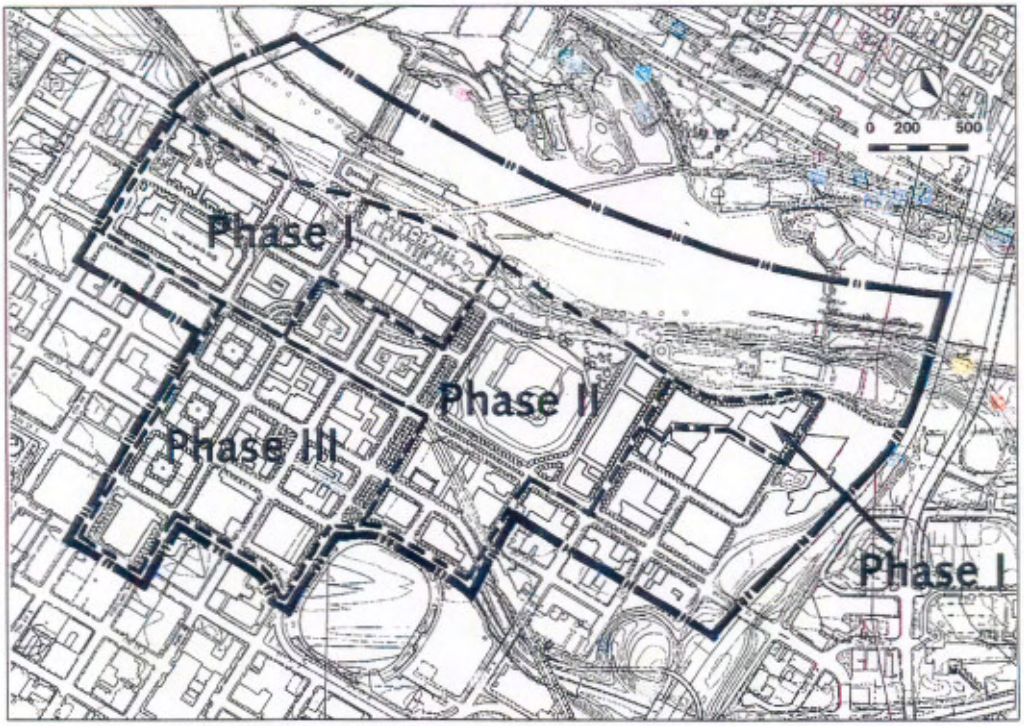
The new park along Chicago Avenue will create the appropriate address for institutional uses



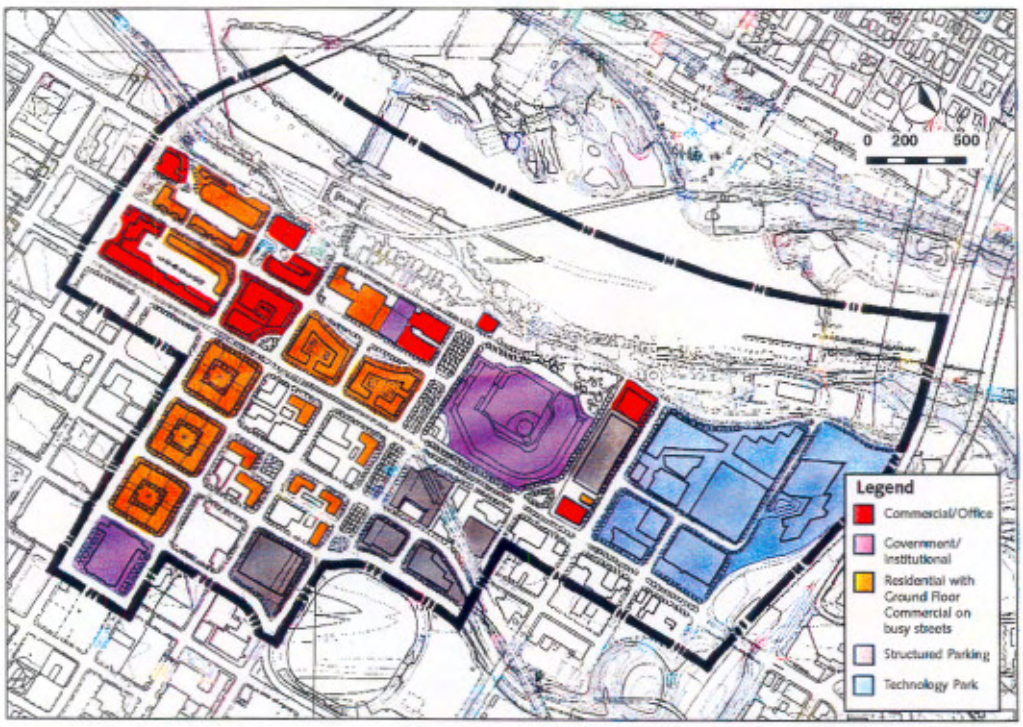
Stadium Alternative Streetscapes/Parks and Open Space Plan: A new park along Chicago links the Metrodome and the new stadium



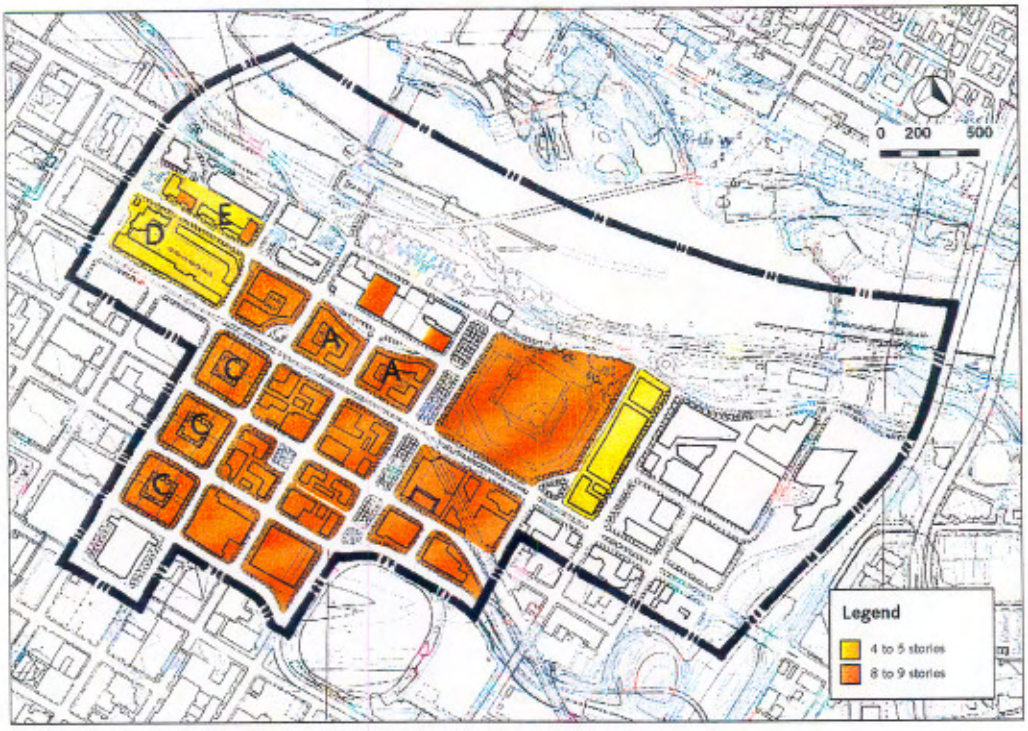
Stadium Alternative Public Improvements: The stadium will be absorbed in a superblock similar to the Metrodome



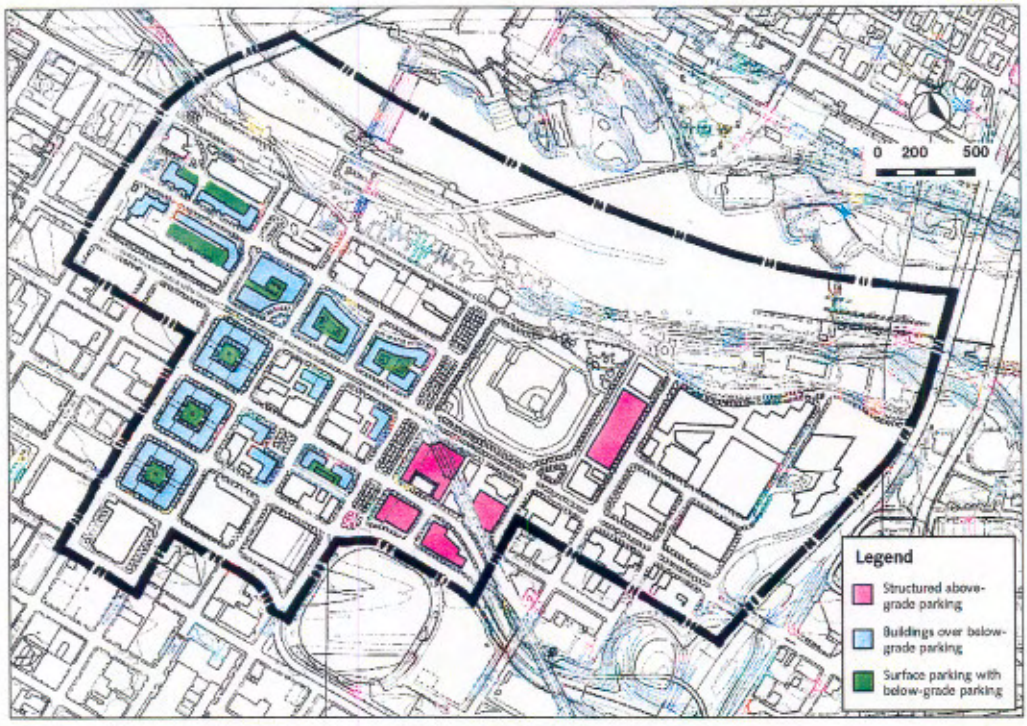
Stadium Alternative Phasing Plan: Build the anchors, then build from the river to Downtown



Stadium Alternative Land Use



Stadium Alternative Building Heights (Letters reference block prototypes)



Stadium Alternative Parking: A new parking reservoir for both stadium and Downtown use will be created south of Washington Avenue

VI UDA PATTERN BOOK™ GUIDELINES

Typical architectural character of the Historic Mills District

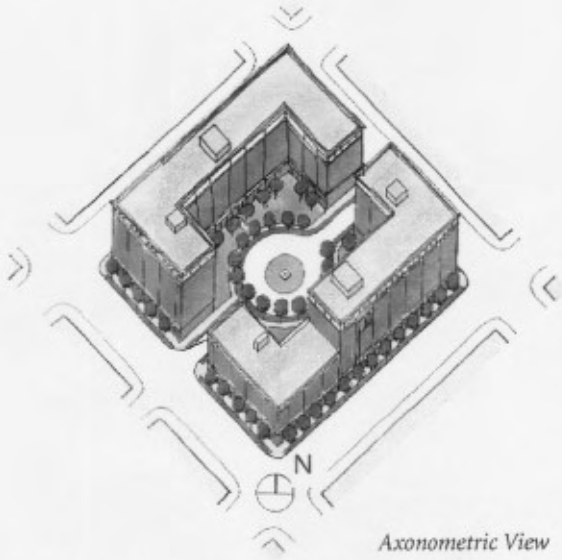
1 Introduction

Urban Design Guidelines are an integral part of any urban revitalization master plan. The guidelines provide a framework for a wide range of use types, within which developers , builders and architects can create a whole that is greater than the sum of its parts. This chapter contains an initial set of guidelines that should be further refined in a collaborative process with developers, land owners, designers, public officials and real estate professionals. By uniting behind a common vision for the study area, detailed guidelines can be developed that have a broad base of support.

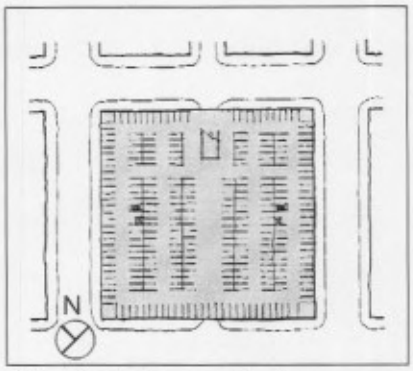
Industry Square has a rich collection of warehouses and industrial buildings, some reused as office and retail space. The focus groups identified these resources as important elements of any future redevelopment and the primary source of inspiration for defining the character of a new multi-use district. The Urban Design Guidelines which follow are intended to reinforce the character of the existing buildings with infill buildings, landscaped streets and park spaces.

2 Prototype Blocks

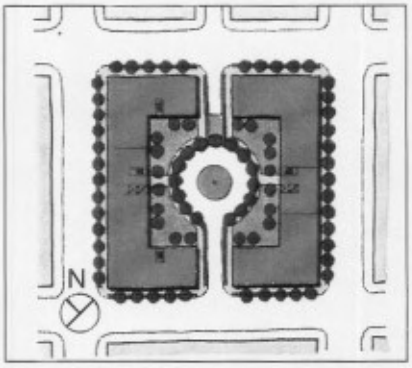
Block Type A: High Density



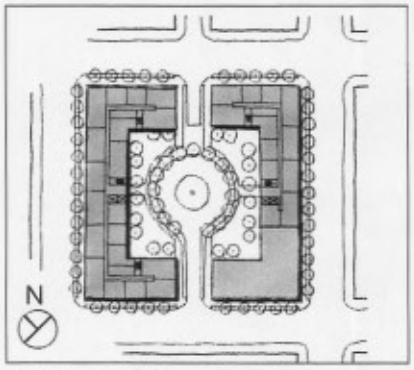
Axonometric View



Below-Grade Structured Parking



Ground Floor Plan

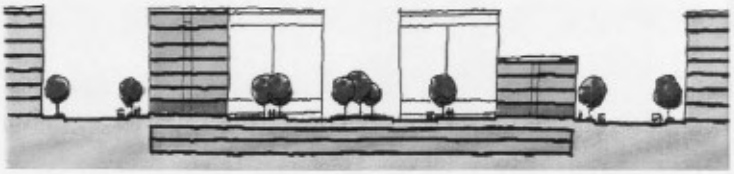


Upper Floor Plan

New buildings in Industry Square should be stylistically compatible with the existing commercial warehouse buildings of the late 19th and early 20th century. These existing buildings are imposing masonry buildings with broad elevations punctuated with regularly spaced windows and capped with heavy cornices and flat roofs. Most are situated on corners of blocks with half block long elevations facing each street. They give the appearance of huge volumes but often are L-shaped plans.

This prototype block illustrates ground floor commercial uses with apartments above. The building heights vary in a manner similar to the existing warehouse buildings with seven-story buildings on three of the corners and four-story buildings on the other corner. The buildings line the streets, providing active commercial uses on the ground floor and a regular pattern of windows above. The southern corner is low to allow sunlight to penetrate into the courtyard. The northwest corner is high to block prevailing winter winds. Parking is accommodated underground on two levels with additional parking on-street. Service loading would occur either in the central courtyard or along the curb of perimeter streets.

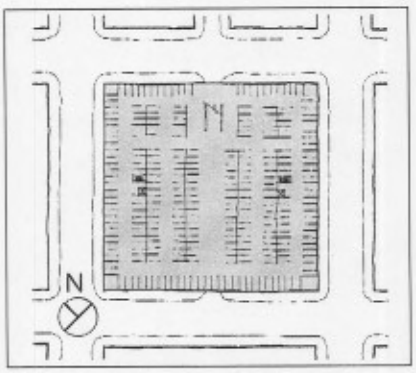
Building	Building Footprint SF	Residential		Commercial		Additional Parking On-street
		Units	Pkg @ 1.5/unit	SF	Pkg @ 4/1000sf	
New residential building with commercial on busy street	48,000 sf	256-216	384-324	0 sf-48,000 sf	0-192	50



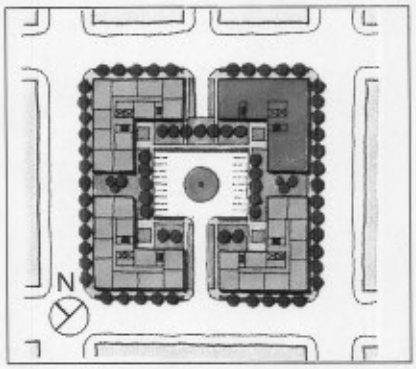
Site Section

Block Type B: Lower Density

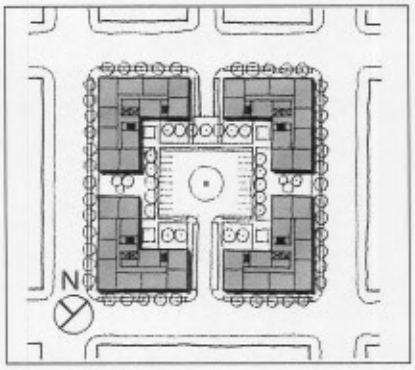
Axonometric View



Below-Grade Structured Parking



Ground Floor Plan

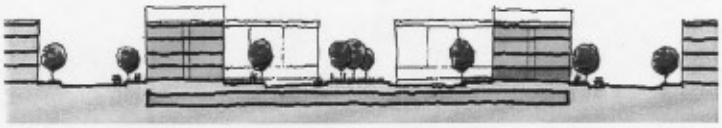


Upper Floor Plan

This lower density prototype block features one level of below-grade parking with four-story residential buildings above. A neighborhood retail space of 12,600 s.f. can occupy one corner of the block at street level with on-site parking. Additional parking is available on the street. Service loading would occur either in the central courtyard or along the curb of perimeter streets. This lower density and building height allows for Type 5 Construction with full fire suppression and fire separation from the lower level parking.

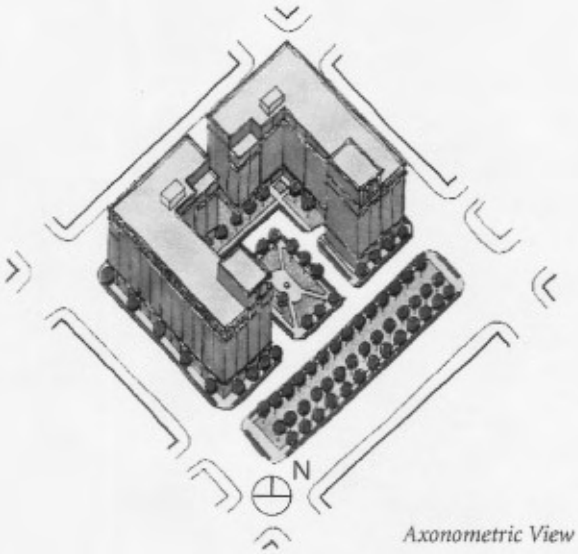
The courtyard can accommodate guest and/or retail parking and an entrance drive. Like Block Type A, the buildings should be flat roofed and resemble the historic commercial buildings in Industry Square.

Building	Building Footprint SF	Residential		Commercial		Additional Parking On-street
		Units	Pkg @ 1.5/unit	SF	Pkg @ 4/1000sf	
New residential building with commercial on busy street	50,400	176-165	264-248	0 sf-12,600 sf	0-50	50 (+ 20 in courtyard)

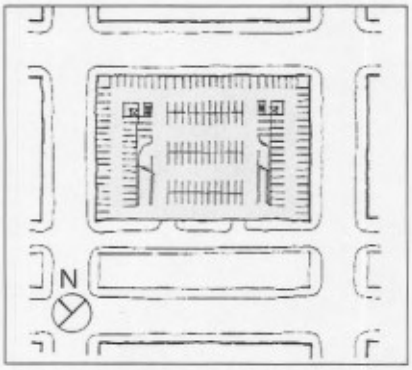


Site Section

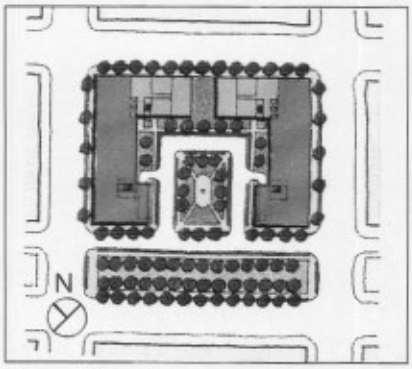
Block Type C: Portland Avenue



Axonometric View



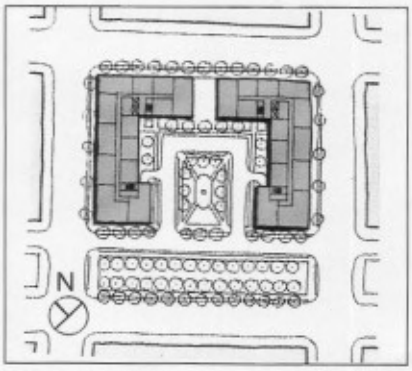
Below-Grade Structured Parking



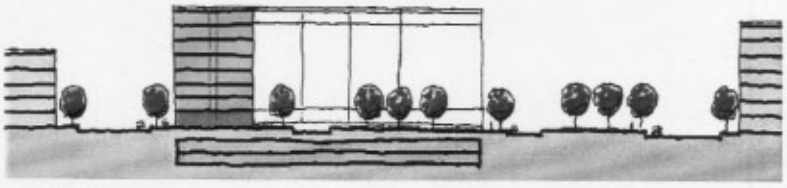
Ground Floor Plan

The new linear park and frontage road along the western side of Portland Avenue will create opportunities for prime residential addresses. This typical block features mixed-use buildings with ground floor commercial along the east/west streets heading into Downtown and courtyard entrances along Portland to the residential units above. Service loading will occur either in the central courtyard or along the curb of perimeter streets. The courts face southeast and are protected from winter winds. This prototype assumes two levels of underground parking to achieve seven floors of residential units above the commercial ground floor.

Building	Building Footprint SF	Residential		Commercial		Additional Parking On-street
		Units	Pkg @ 1.5/unit	SF	Pkg @ 4/1000sf	
New residential building with commercial on busy street	26,000	208-190	312-285	0 sf-18,000 sf	0-72	50

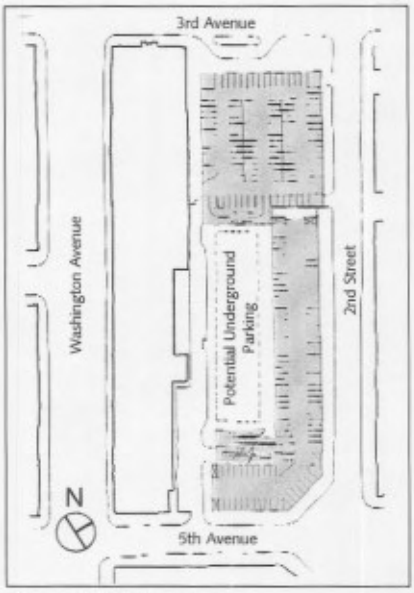


Upper Floor Plan

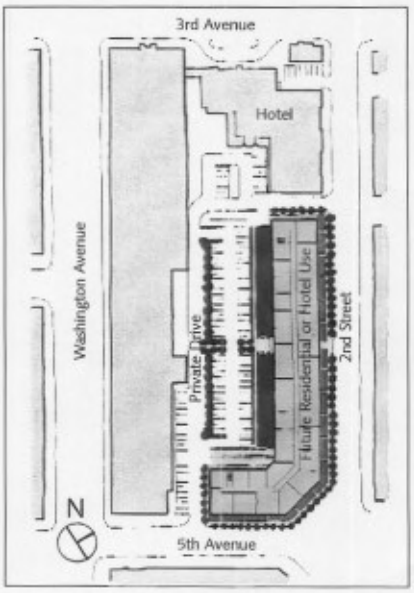


Site Section

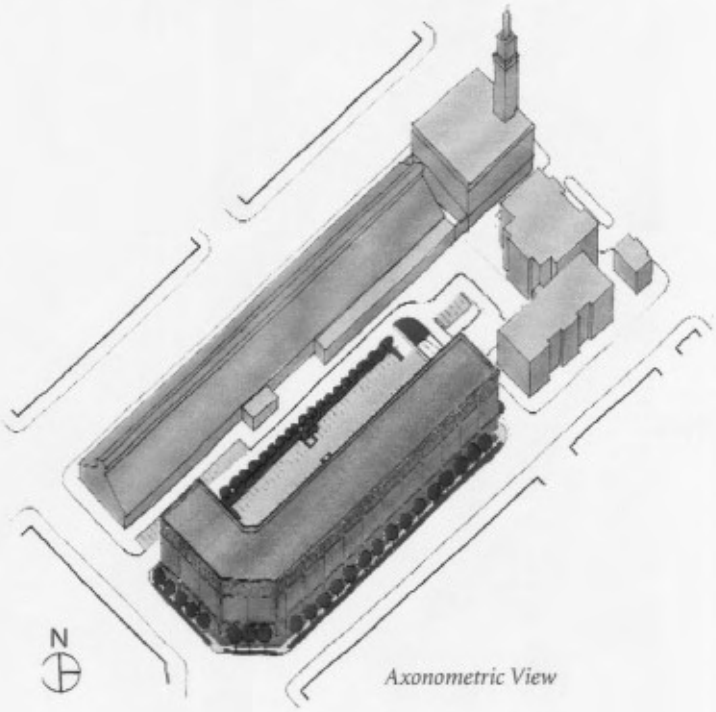
Prototype Block D: Milwaukee Road Depot Preferred Alternative



Below-Grade Parking Plan



Upper Floor Plan



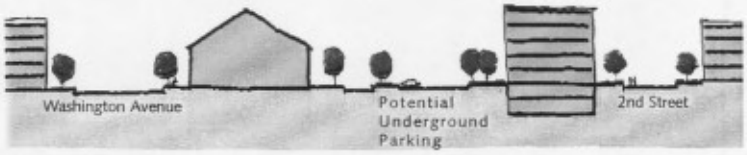
Axonometric View

The general plan is to have an urban street with first floor commercial serving the neighborhood. This requires that underground parking be a part of the plan. As redevelopment proceeds certain blocks, especially around the depot site at the corner of 2nd Street and 3rd Avenue, may be required to structure more parking underground because of the parking needs from adjacent pre-existing uses.

New below-grade parking ramps are contained within the footprint of new construction. Surface lots encased by the buildings have the potential of covering additional underground parking ramps.

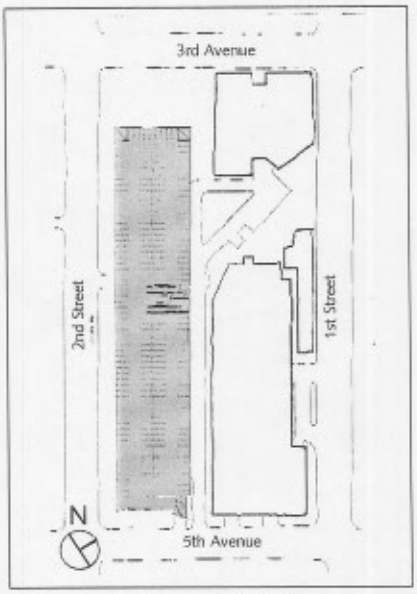
This prototype incorporates two levels of below-grade parking within the footprints of both the proposed hotel and proposed apartment or extended-stay hotel building. Potential additional below-grade parking can be built below the surface lot independently of the proposed construction.

Building/Parking Structure	Building Footprint SF	Residential		Parking	
		Units	Pkg @ 1.5/unit	Below Grade	Surface Lot
Future Residential or Hotel Use	37,100 sf	170	255	208	73
Below-grade Parking under Hotel				128	13
Potential Underground Parking				150	

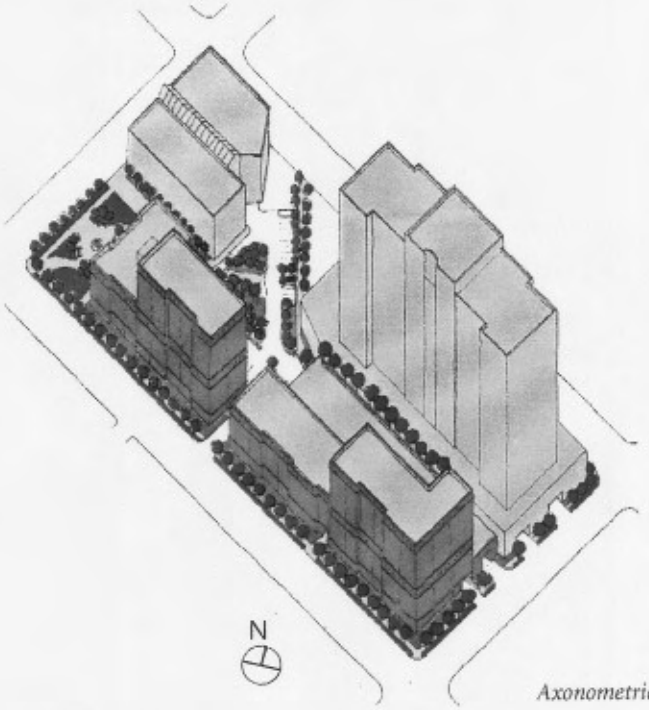


Site Section

Block Type E:
Mill Place/River West



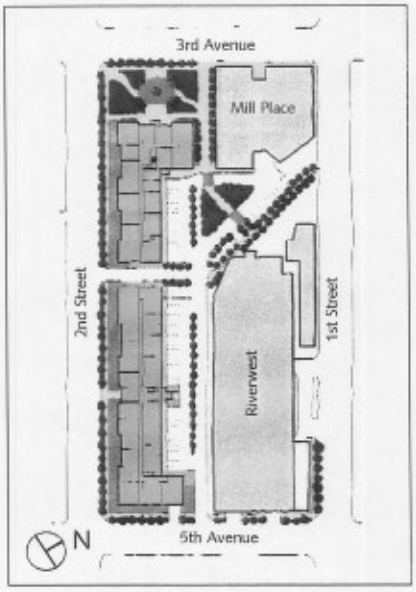
Below-Grade Structured Parking



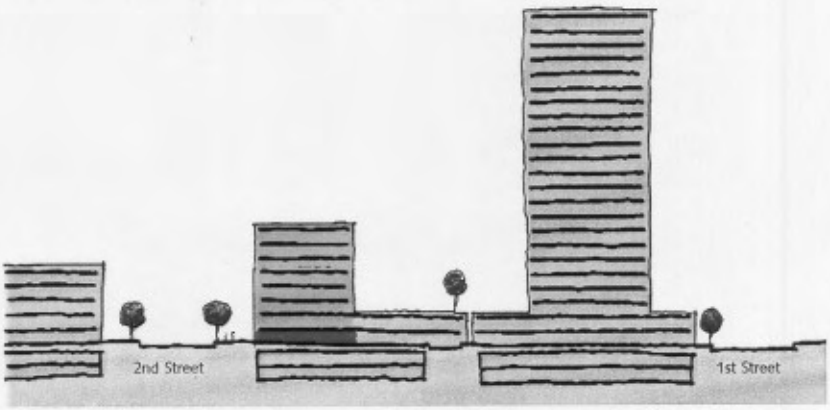
Axonometric View

This prototype block illustrates ground floor commercial uses with apartments above wrapping half of the Mill Place block. A new park is created next to Mill Place and the new apartment building. Expected commercial uses include a grocery store and smaller scale retail. Similar to the Depot block, structured parking exists under the apartment building which also provides parking for Mill Place and the commercial uses.

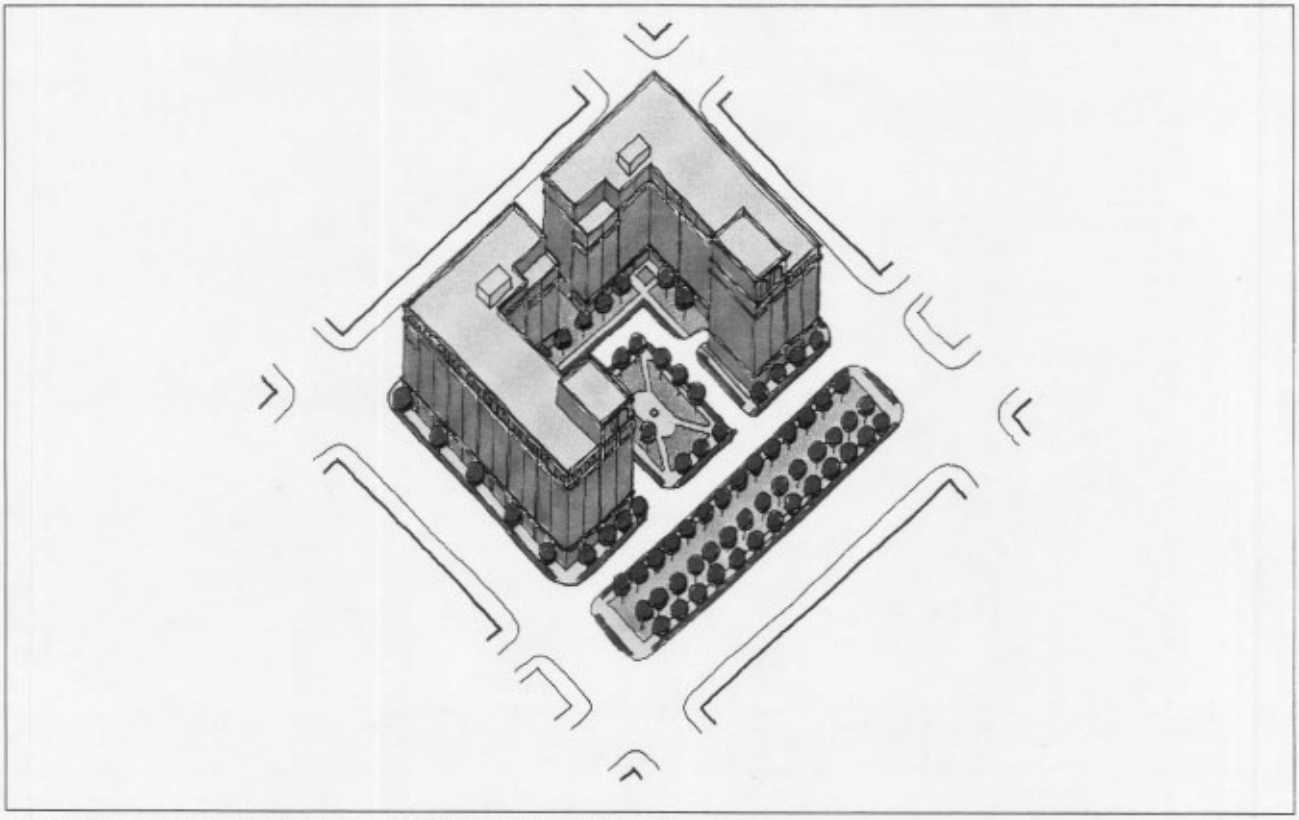
Building	Building Footprint SF	Residential		Commercial		Additional Parking On-street
		Units	Pkg @ 1.5/unit	SF	Pkg @ 4/1000 sf	
Mill Place	28,750			28,750 sf	115	
New Building	47,550	292-	438-	0 sf-	0-	
		264	396	26,150 sf	105	



Upper Floor plan



Site section



New buildings should be simple, well-proportioned volumes fronting city streets

3 Building Massing and Architectural Guidelines

Street Frontage Guidelines

Building Placement

Buildings should be oriented to front city streets and should be set back from the street right-of-way no further than 10 feet for more than 50% of the width of the parcel.

Building Configuration and Pedestrian Friendly Streets

Building frontage along streets should be lined with pedestrian oriented uses on the ground floor, and the upper floors should have a regular pattern of windows to create 'eyes on the street.' Parking should be located underground or in the middle of the block, behind the buildings.

Taller buildings south of Washington Avenue and shown in bright red are oriented along the north-south streets and take advantage of river views

Building Heights

Building heights should be a minimum of four stories. Building massing should be planned to take advantage of sunlight and views. As illustrated in the prototype blocks, tall buildings should be positioned along north/south avenues to allow sunlight to penetrate into the street spaces and courtyards and to block northwest winds. Tall buildings positioned along the north/south avenues on the riverfront will also maximize views of the river basin.

The heights of the tallest buildings should be compatible with existing commercial buildings in the Historic Mills District. Further study will be required by city planning to apply specific height controls.

Existing Historic Buildings

Window Patterns

Shop Fronts for Pedestrians

Architectural Guidelines

Massing

Buildings should be simple, well-proportioned volumes. Building walls facing public streets and parks shall be terminated at the top with a cornice or attic expression. Flat roofs shall be enclosed by parapets no less than 42 inches high or as required to conceal equipment. Cantilevered mansard roofs could be considered if they have historical precedence.

Facade Treatment: Windows, Doors, Storefronts, Awnings

Windows (other than ground-level storefront windows) shall be vertical in proportion, 1.5 to 2.5 times as tall as they are wide. The glazed area of a facade (excluding the ground-level storefront) shall not exceed 35% of the total facade area. Doors and windows should be set back a minimum of three inches from the facade.

Doors shall be vertical in proportion. Sliding glass doors are not permitted.Windows and doors should appear in a consistent and repeated pattern across the principal facades.

Ground-floor commercial uses shall have storefronts with glazed areas equal to at least 65% of the ground-level portion of the facade.

Materials

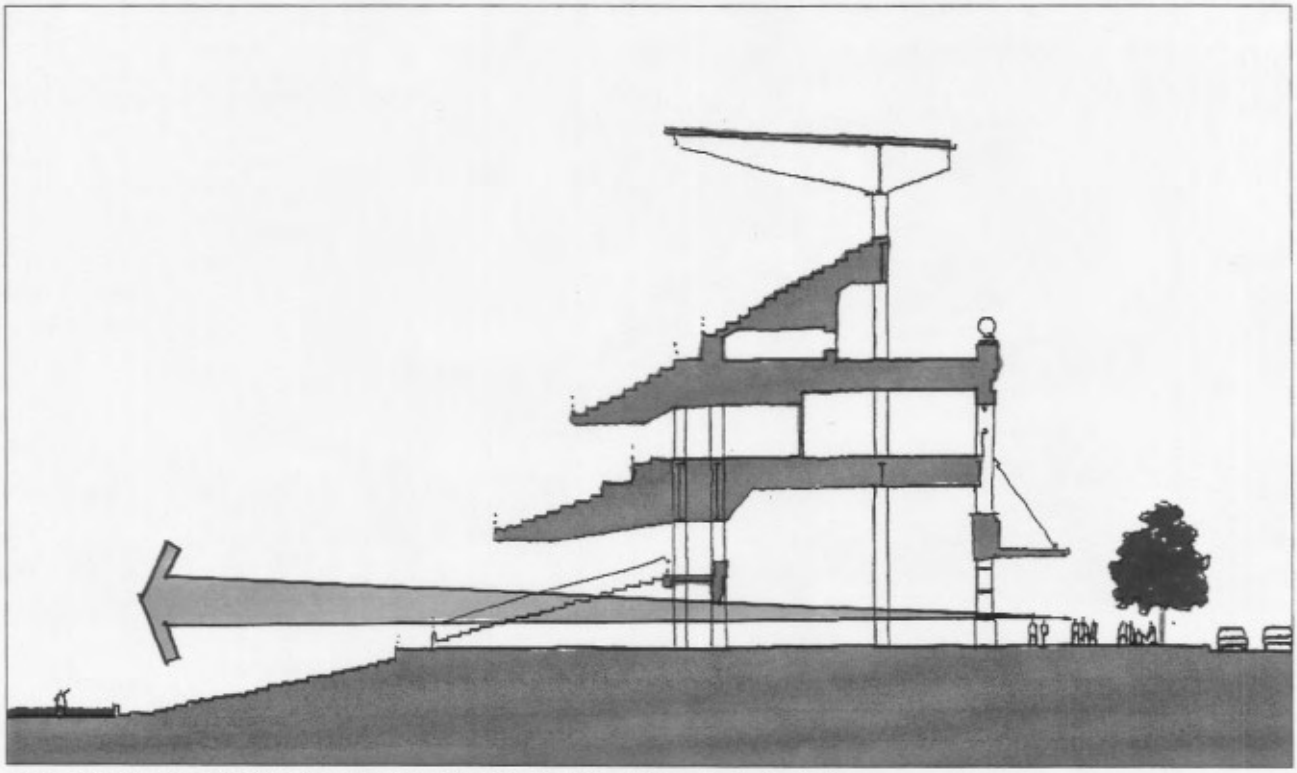
Exterior Wall Finish: The exterior wall finish material on all facades shall be limited to brick, stone or cast stone designed to resemble stone masonry construction.

Exterior Color: The masonry colors of buildings can range between creamy buff colors to deep terra-cotta. Trim colors should be earth tones that complement the masonry.

Doors, shopfronts, window frames, shutters, balcony rails and awnings shall be any color, any saturation.

Glass shall be clear or lightly tinted only. Balcony Railings and Porch Structures shall be metal, stone or cast concrete.

Note: glass walls on the exterior of the Depot will be permitted.



The stadium should offer views from the sidewalks through to the stadium, to the baseball field and the river beyond

Baseball Stadium Design Guidelines

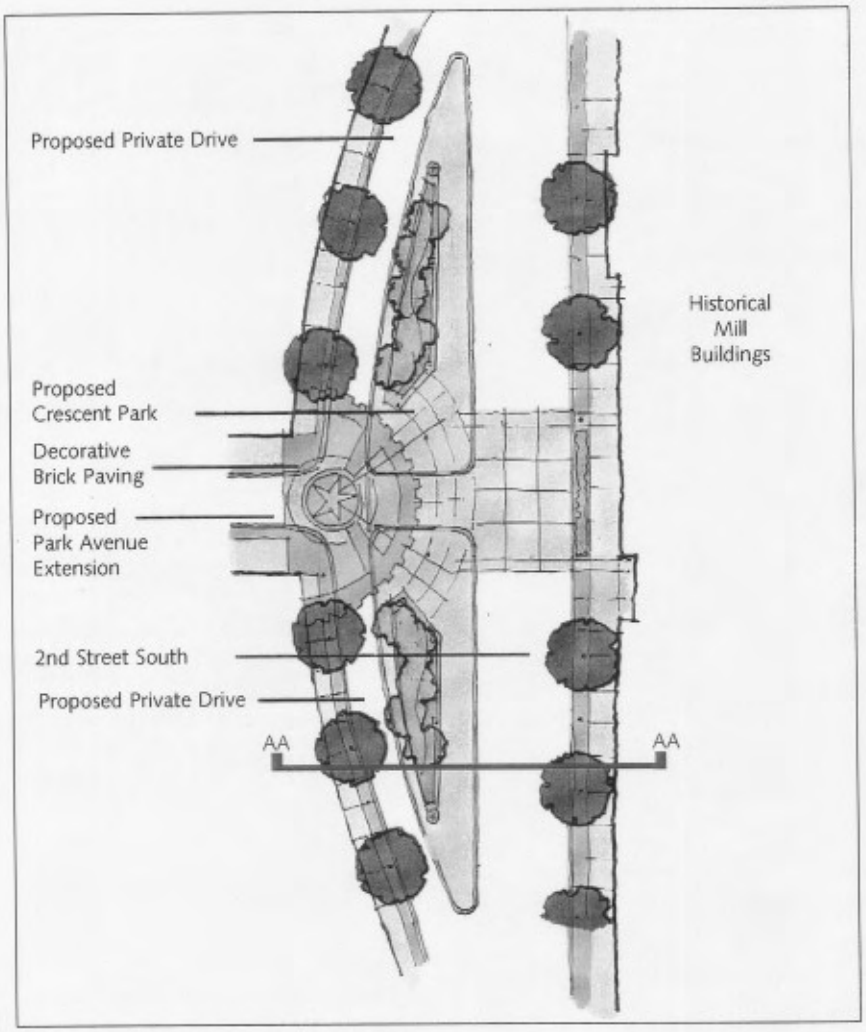
The facades of the Baseball Stadium should be governed by the Architectural Guidelines on the previous page with the realization that exposed elements of the steel-framed superstructure will add richness and variety to the stadium design.

The field of play should be positioned approximately 30 feet lower than street level with the main street level concourse serving the lowest tier of seats. The street level of the stadium should, where possible, offer views through the stadium from the street sidewalks to the baseball field and river basin beyond. This transparency will reduce the wall effect of the stadium which will consume over four city blocks of riverfront land.

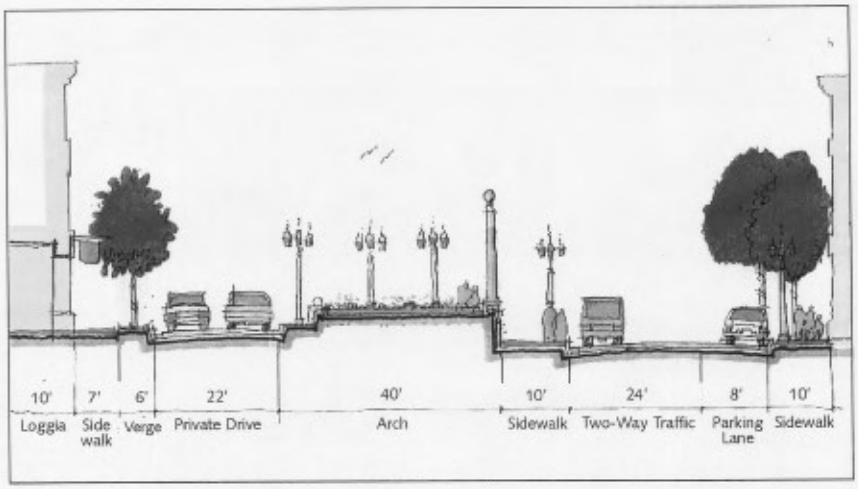
Consideration should be given to locating home plate on the Southeast corner of the site and locating the scoreboard along Chicago Avenue. The river frontage should be free of high stands and large objects that would obstruct views from the stadium of the Mississippi River basin and the historic Stone Arch Bridge.

4 Streetscape and Landscape Guidelines

The following guidelines for streetscape and landscape improvements are intended to unify the entire neighborhood of Industry Square. Each street within the neighborhood is illustrated in both section and plan to fully illustrate the character of each streetscape. In addition, a palette of paving materials, lighting, furnishings, and plantings is proposed.



Plan of Proposed 2nd Street South Crescent



2nd Street South Crescent Tomorrow (AA)

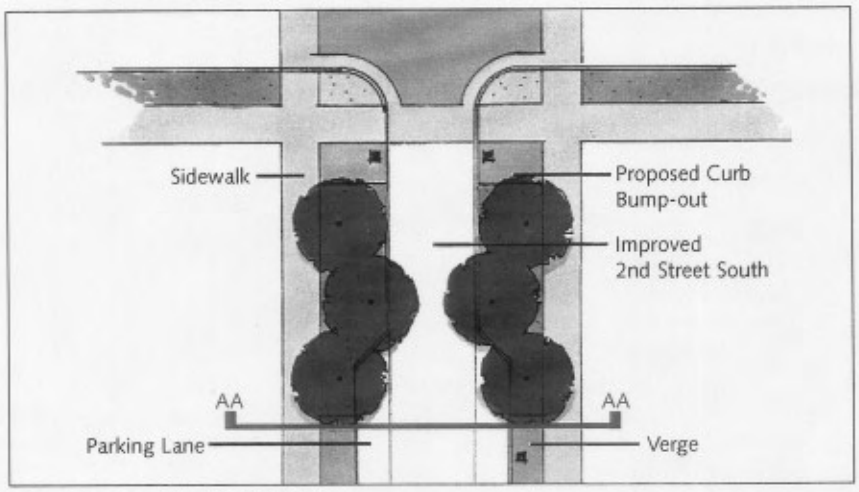
2nd Street Crescent

At the center of the Historic Mills District, an arced green is proposed to acknowledge the importance of the historic mill buildings and extend a segment of the riverfront park up to the city side of these buildings.

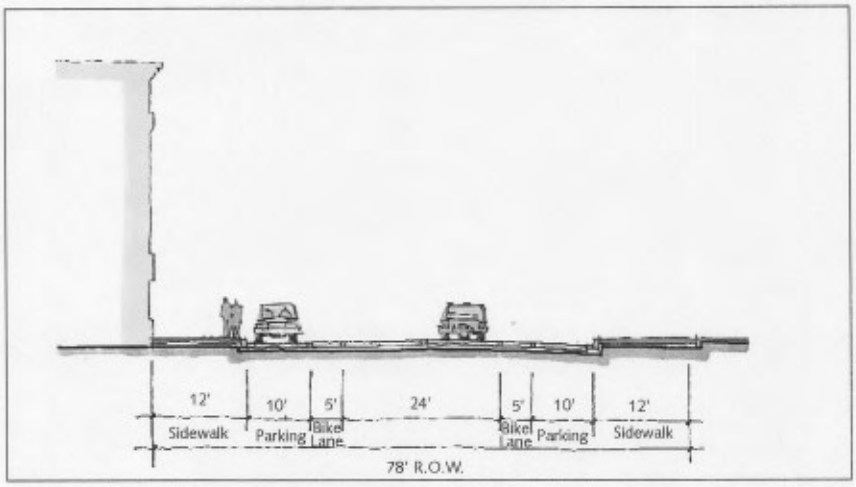
This space can be thought of as an organizing space for visitor orientation to the riverfront, setting the stage for viewing these grand buildings. The space should also present and interpret for the visitor what will unfold of this area's great history at the Mill Ruins Park. To accomplish this:

- Sidewalks become more urban and are reduced in width to ten feet.
- Street trees are optional, but recommended, on the mill building side. They will also be placed on the arc portion of the street opposite the mill buildings where new development is provided; medium or small street trees would be 40 feet on center and in decorative/porous paving bands.
- The privately-owned crescent park should be a mix of hardscape and green plantings. It should be interpretative in nature and incorporate a new plaza with decorative lighting and architectural features reminiscent of the 'City Beautiful' movement.

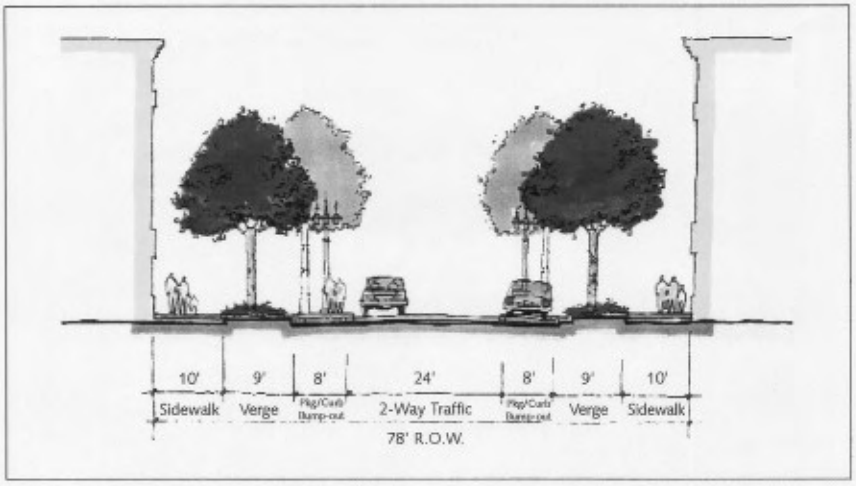
This green should define these mill buildings as special, unique spaces pulling the riverfront park into the city.



Plan of Proposed 2nd Street South



2nd Street South Today



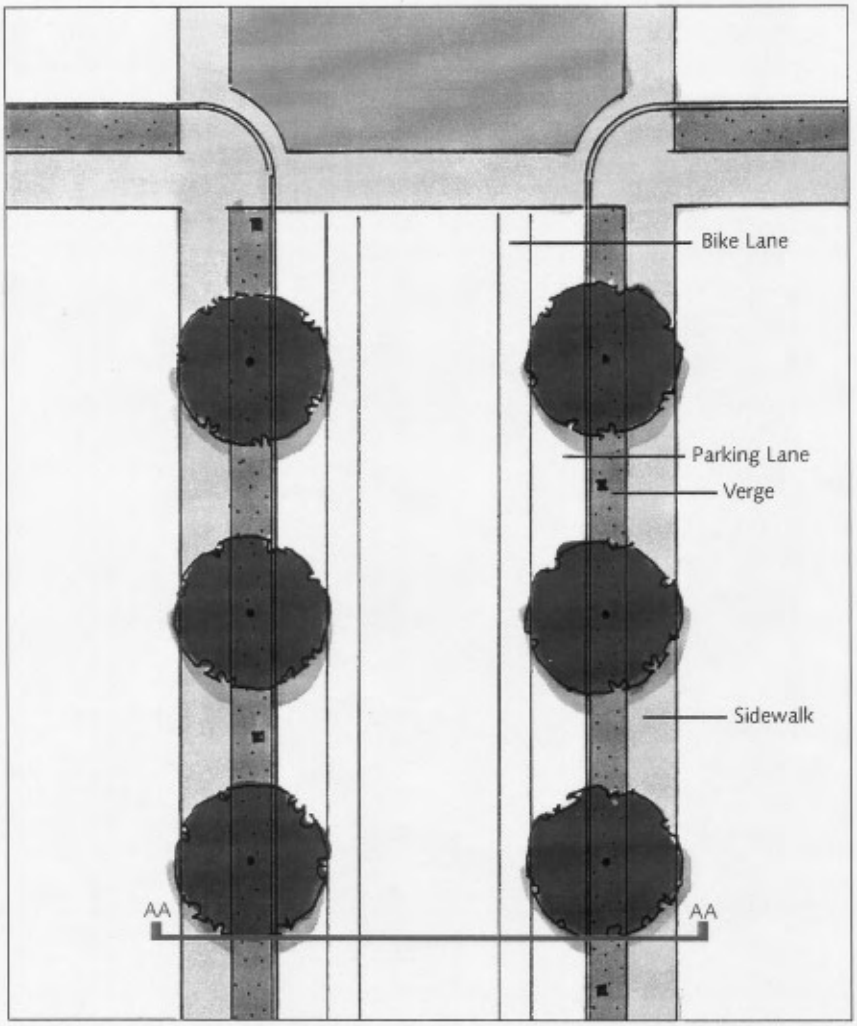
2nd Street South Tomorrow (AA)

2nd Street South

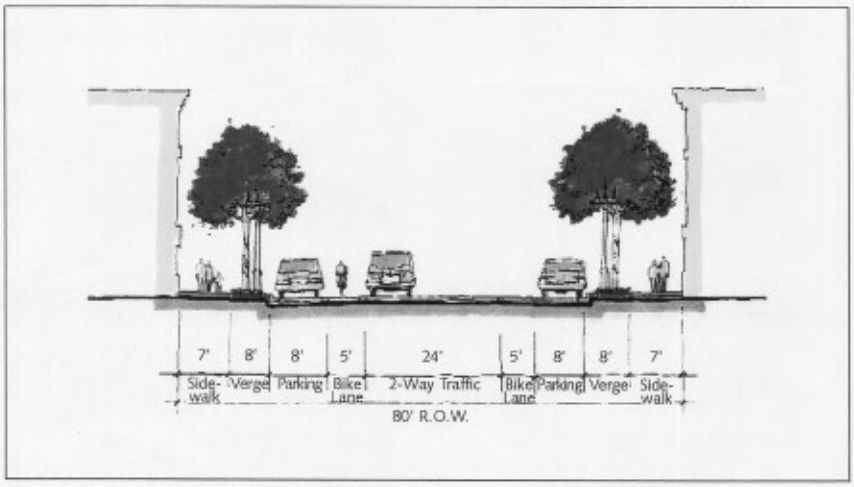
2nd Street South is a special interior street, paralleling Washington Avenue and the riverfront. This street will become the central pedestrian spine of the district. It is intended to be the organizational street of the Historic Mills District. To accomplish this, traffic calming improvements are required.

Street improvements will include:

- Two eight-foot parallel parking lanes on either side defined by curb bump-outs at the intersections.
- A 19-foot pedestrian zone, which includes a nine-foot paved or grass verge area with ten foot sidewalks.
- Pedestrian-scale street lights placed at 60- to 80-feet on center, alternately spaced.
- Medium, light foliage street trees placed 30- to 40-feet on center, surrounded by perennial grasses.
- Curb bump-outs intended to foster greater pedestrian safety in crossing the street and to slow down traffic.
- Bike traffic relocated to the bike lane in Mill Ruins Park.



Plan of Proposed 11th Avenue Extension



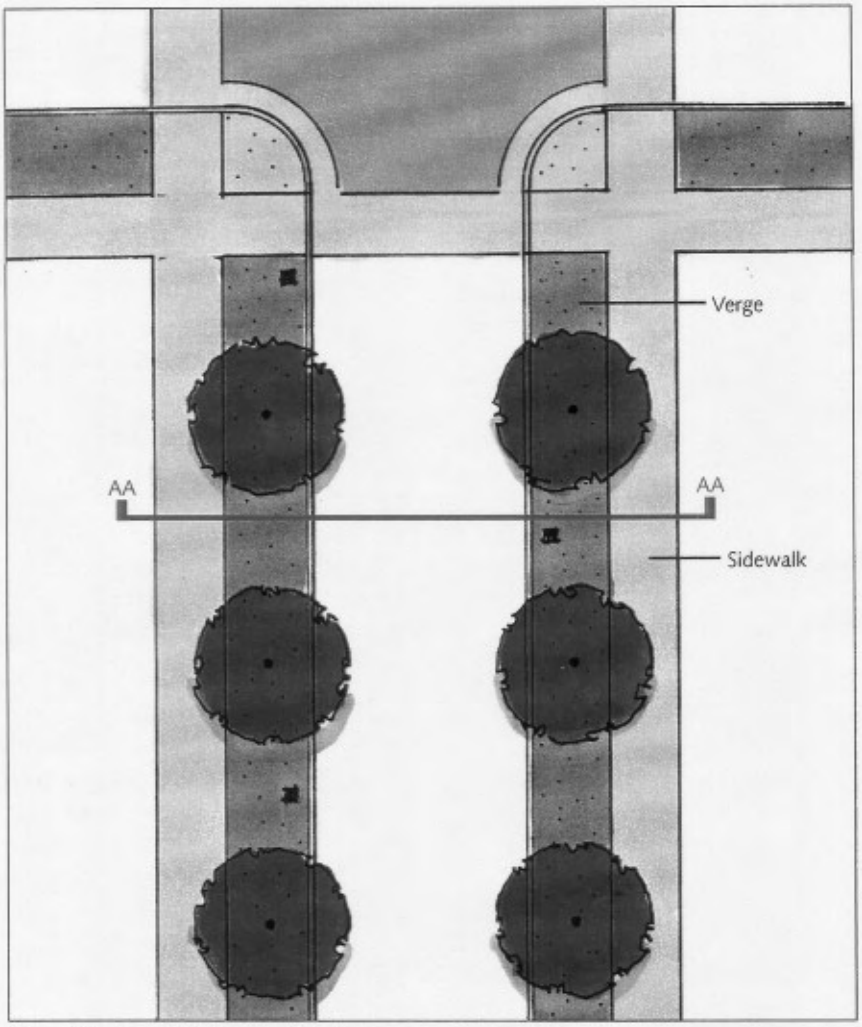
Proposed 11th Avenue Extension (AA)

11th Avenue Extension

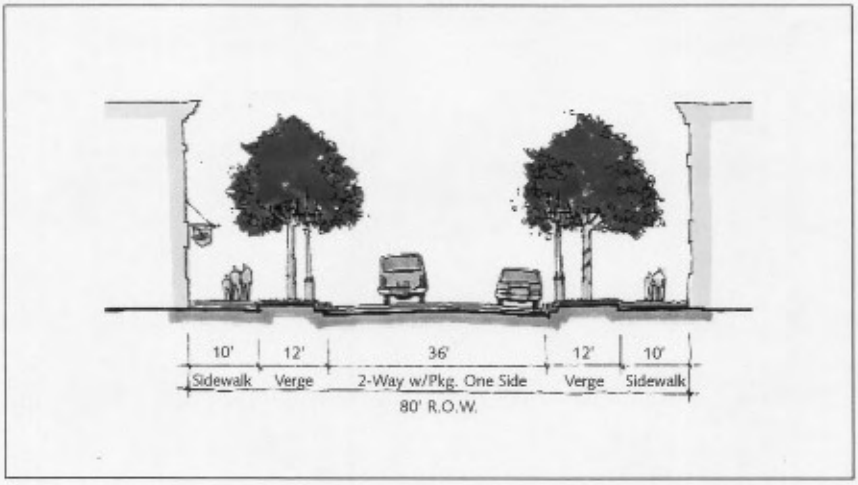
The 11th Avenue extension will be a residential-scale street, perpendicular to the riverfront, that connects the city and Elliot Park to the Historic Mills District.

Features of the 11th Avenue extension includes:

- A 24-foot street to accommodate two-way traffic with parking lanes on each side.
- Two five-foot bicycle lanes on each side, exterior to the parking lanes.
- A 15-foot pedestrian zone which includes an eight-foot paved or grass verge area with seven-foot sidewalks.
- Medium street trees at 30- to 40-feet on center, surrounded by perennial grasses.
- Pedestrian-style street lights at 60- to 80-feet on center, alternately spaced.



Plan of Proposed 5th Avenue Extension

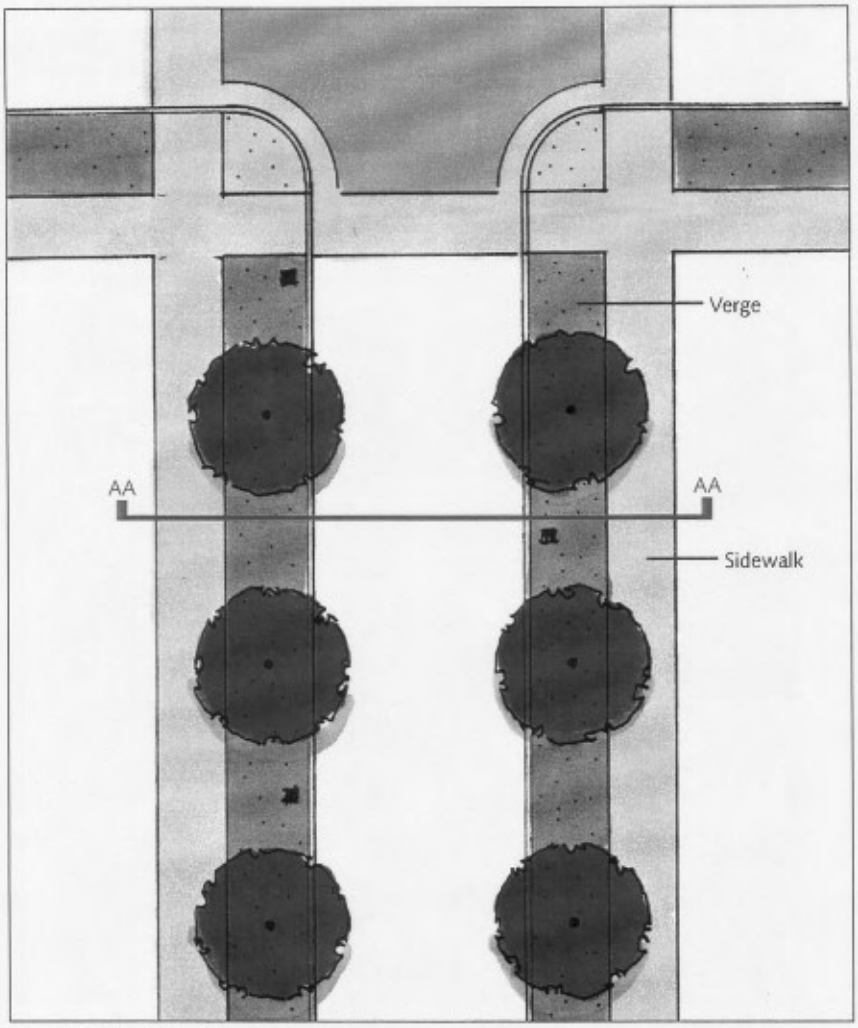


Proposed 5th Avenue Extension (AA)

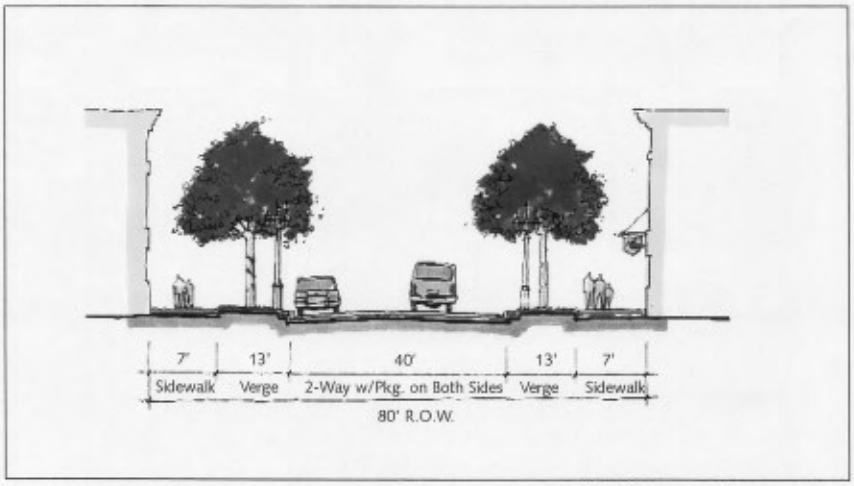
5th Avenue Extension

Features of the 5th Avenue extension include:

- New 36-foot two-way street with parking on one side.
- A pedestrian zone of 22 feet, which includes a 12-foot paved or grass verge area with ten-foot sidewalks.
- Medium street trees at 30- to 40-feet on center, surrounded by perennial grasses.
- Pedestrian-style street lights at 60- to 80-feet on center, alternately spaced.



Plan of Typical New District Streets



Typical New District Streets

New District Streets

Typical District streets will have similar elements to the 5th Avenue extension.

Features will include:

- 40-foot wide cartways with parking on both sides.
- A pedestrian zone of 20-feet which includes a 13-foot paved or grass verge area with seven-foot sidewalks.
- Medium street trees at 30- to 40-feet on center, surrounded by perennial grasses.
- Pedestrian-style street lights at 60- to 80-feet on center, alternately spaced.

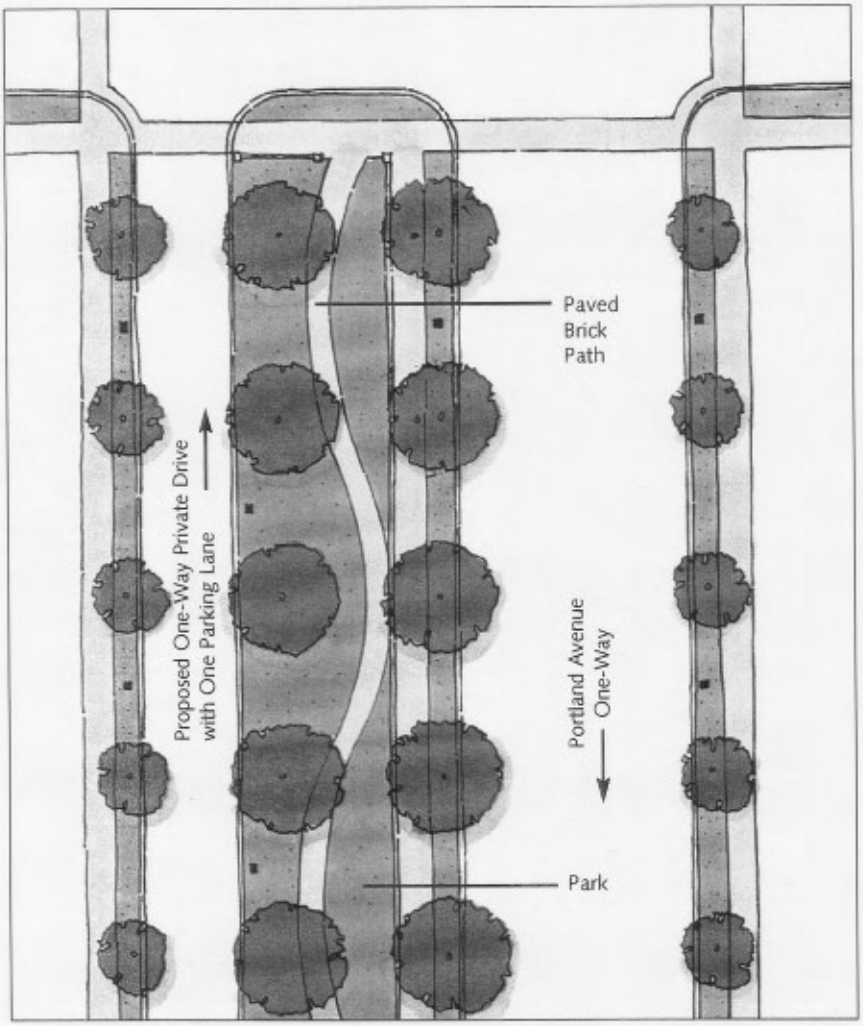
Portland Avenue

Portland Avenue is the one through street to the river, connecting the city with the center of the most historic portion of the riverfront.

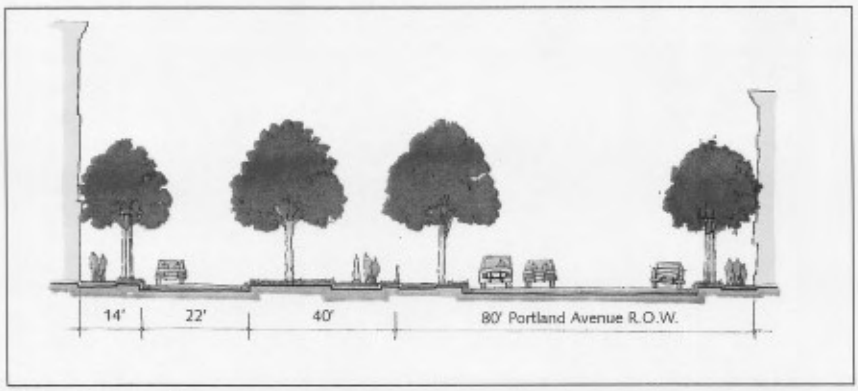
The plan redefines Portland Avenue into a public street paralleled by a private linear park. Within the corridor, a private street fronting and serving the new development parcels parallels Portland Avenue.

Improvements include:

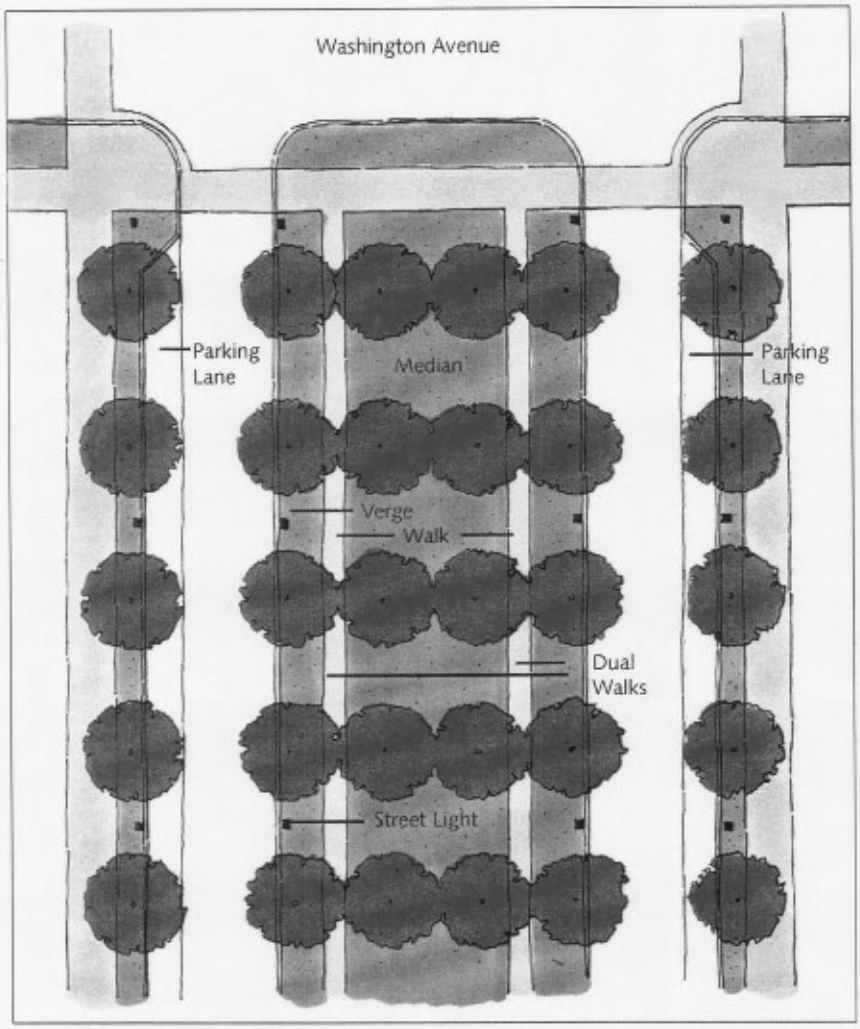
- A 40-foot wide private park will create a strong pedestrian link to the riverfront. The park will have a seven-foot wide central pathway that traverses through a double row of large shade trees planted on a grid 40-foot on center along its length and 30-foot on center across its width.
- A new 22-foot wide one-way street with one lane of parking.
- A 7-foot deep sidewalk and a 7-foot verge along the private drive.
- Medium-size street trees spaced 30- to 40-foot on center along the sidewalks in a decorative paving strip of perennial grasses.
- Pedestrian-scale street lights should be spaced uniformly 60- to 80-foot on center at the curb line along the public street and the private street.
- Benches, monuments and other parklike features in the linear park.



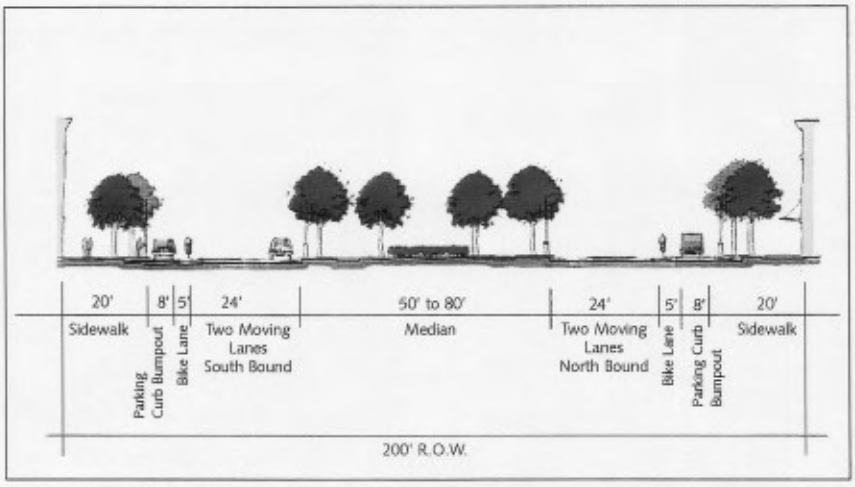
Plan of Proposed Portland Avenue



Portland Avenue Tomorrow



Plan of Proposed Chicago Avenue



Chicago Avenue Tomorrow

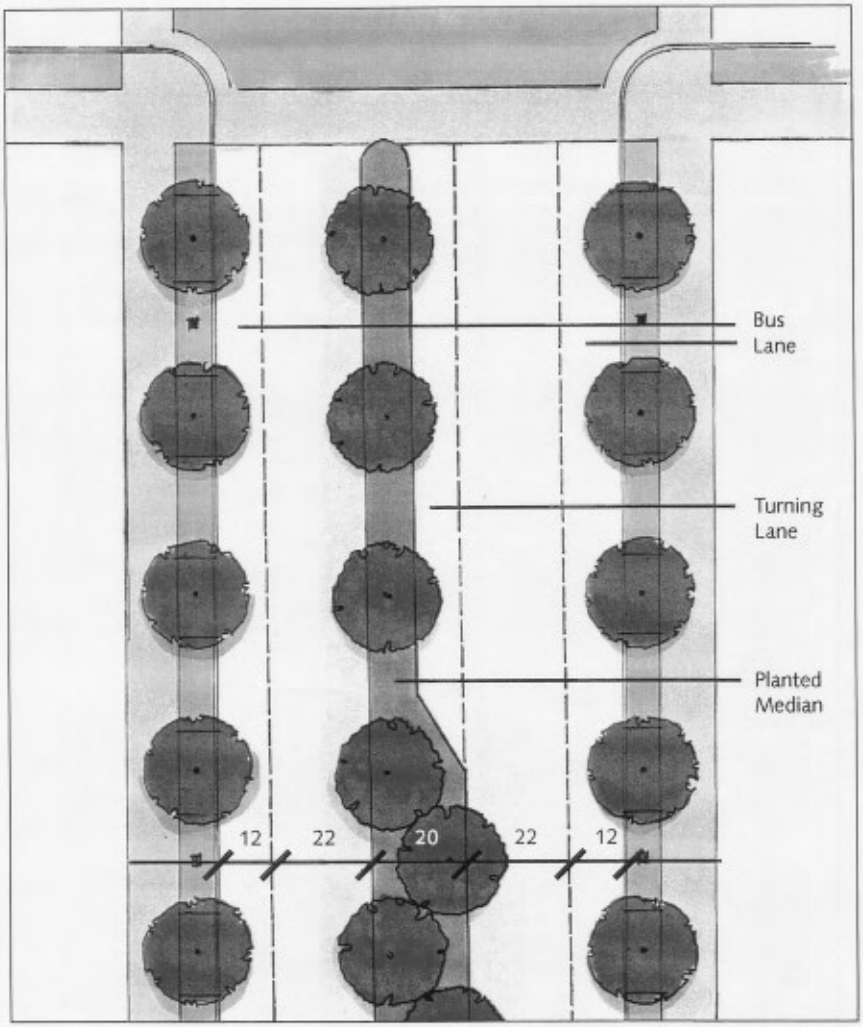
Chicago Avenue

Chicago Avenue is proposed to be modified in such a way that it will pull the riverfront park into the city. Like Portland Avenue, Chicago Avenue will also act as a major pedestrian spine connecting the Metrodome area to the Historic Mills District.

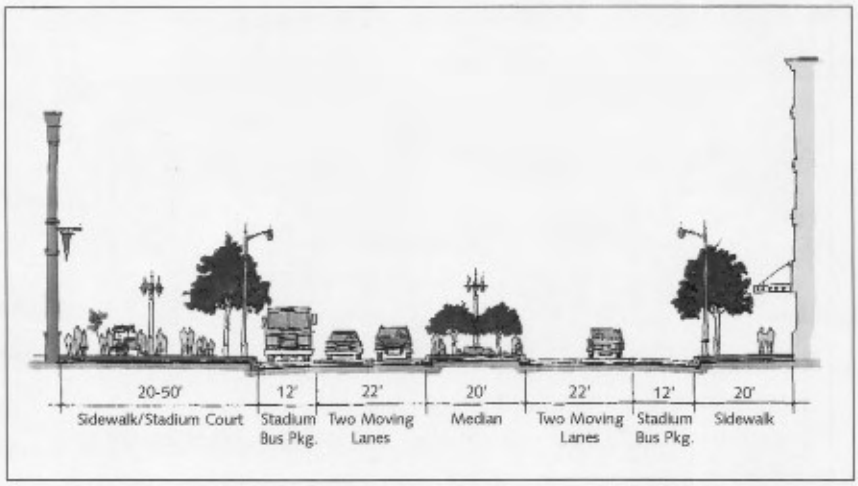
In its reconfigured state, Chicago Avenue should be thought of as a grand boulevard similar to Commonwealth Boulevard in Boston.

Improvements include:

- A central median, 50-80 feet in width, that will provide a strong pedestrian link to the riverfront. The park will have dual central pathways 6 feet in width that traverse through a bosque of large shade trees, four rows of trees.
- Dual 24-foot wide one-way streets with parking on one side.
- 20-foot wide sidewalks with a 12-foot clear sidewalk area and an 8-foot verge, planted or paved with decorative paving.
- Medium-size street trees should be spaced at 30- to 40-foot on center along the sidewalk verges, surrounded by perennial grasses.
- Pedestrian-scale street lights spaced uniformly 60- to 80-foot on center at the curb line along the street.
- The linear park should accommodate benches, monuments and other parklike features. Pedestrian-scale street lights should be spaced 60 to 80 feet along the pathways in the park.



Plan of Proposed Washington Avenue between 11th and Chicago Avenues (Stadium Alt.)



Proposed Washington Avenue between 11th and Chicago Avenues (Stadium Alt)

Washington Avenue

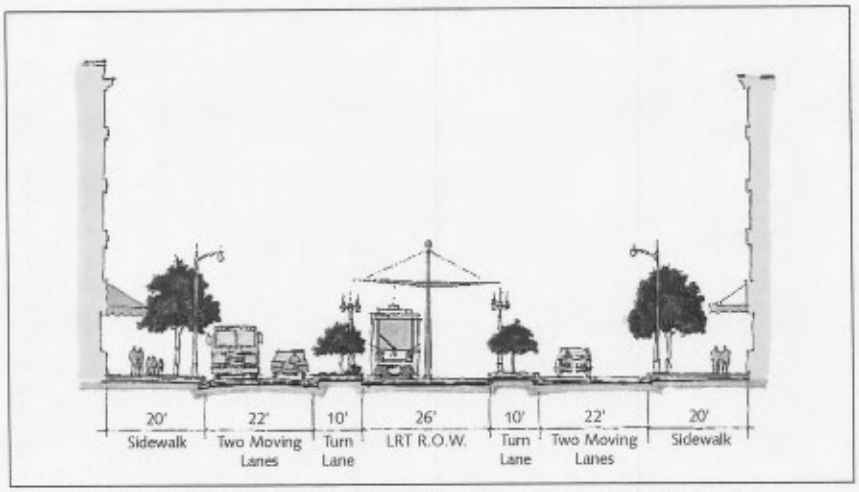
Washington Avenue is intended to be transformed from its present highway-like character into a grand boulevard. This image will enhance the pedestrian experience in crossing this wide thoroughfare.

Streetscape improvements include:

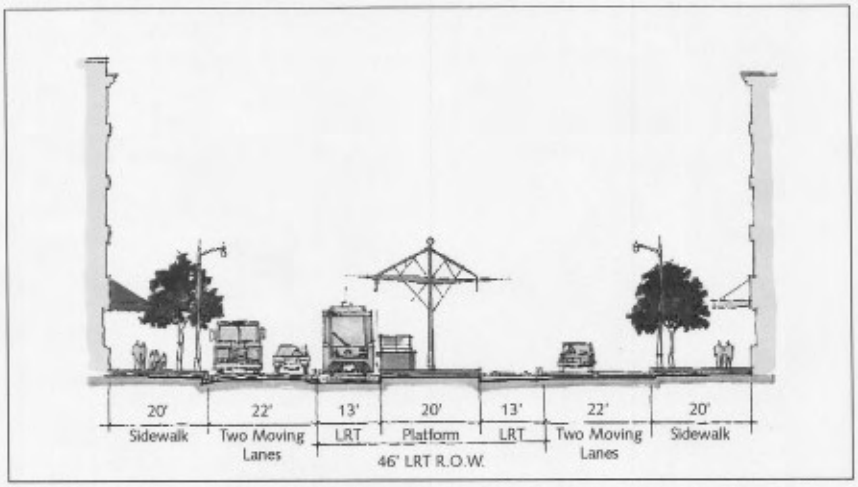
- Dual 22-foot wide one-way streets accommodating four traffic lanes with ten-foot turning lanes at intersections.
- Where left-hand turn lanes are note required, ten-foot planted buffers should be provided. Shrubs, groundcovers and perennials are proposed.
- A 20-foot wide sidewalk along the street with a 12-foot clear sidewalk zone.
- An eight-foot verge planted or paved in a decorative paving material depending on the adjacent use.
- Historic high pole street lights along the outside curb lines at 120-foot on center, to give this street a special look.
- Pedestrian-scale lights in the central median.
- Large shade trees planted in the verge at 40-foot on center.
- Bus parking lanes between Chicago and 11th Avenues in the stadium alternative.
- A center median is dimensioned to accommodate a transitway spine line in the future.

Washington Avenue LRT

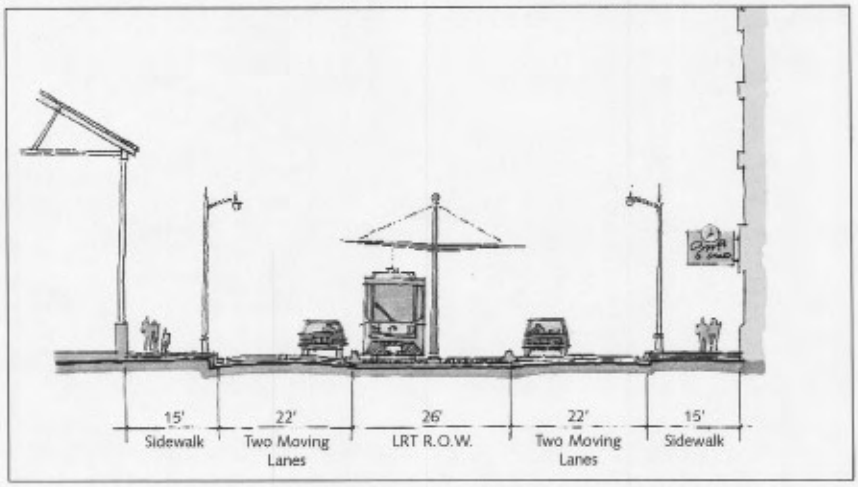
Light rail transit is one transitway option along Washington Avenue. Two alternative alignments along Washington, in the median and at the curb are possible. The two alternatives are pictured here and on the following page. Although either alternative is possible from a technical standpoint, the median alternative is the preferred alternative (see transportation recommendations).



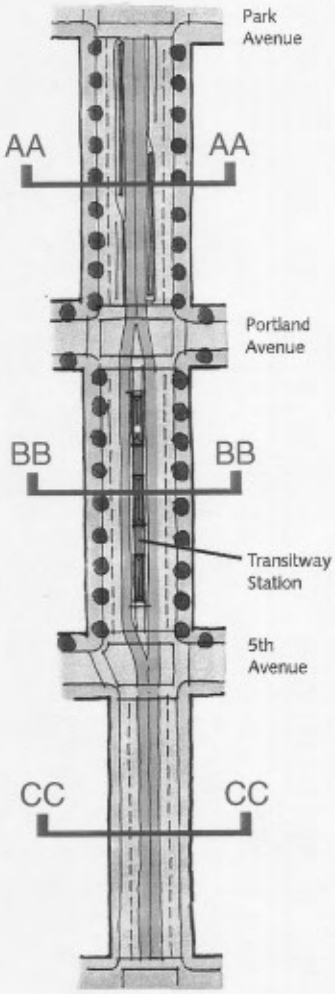
Washington Avenue Preferred LRT Alternative (median) Between Chicago and Portland Avenues (AA)



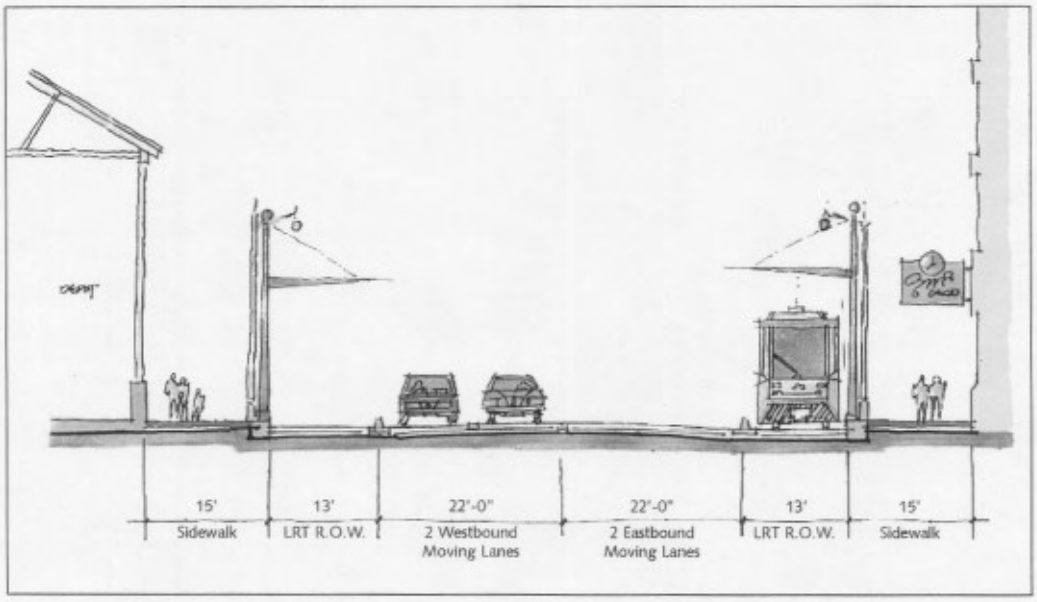
Washington Avenue Preferred LRT Alternative (median) Between Portland and 5th Avenues (BB)



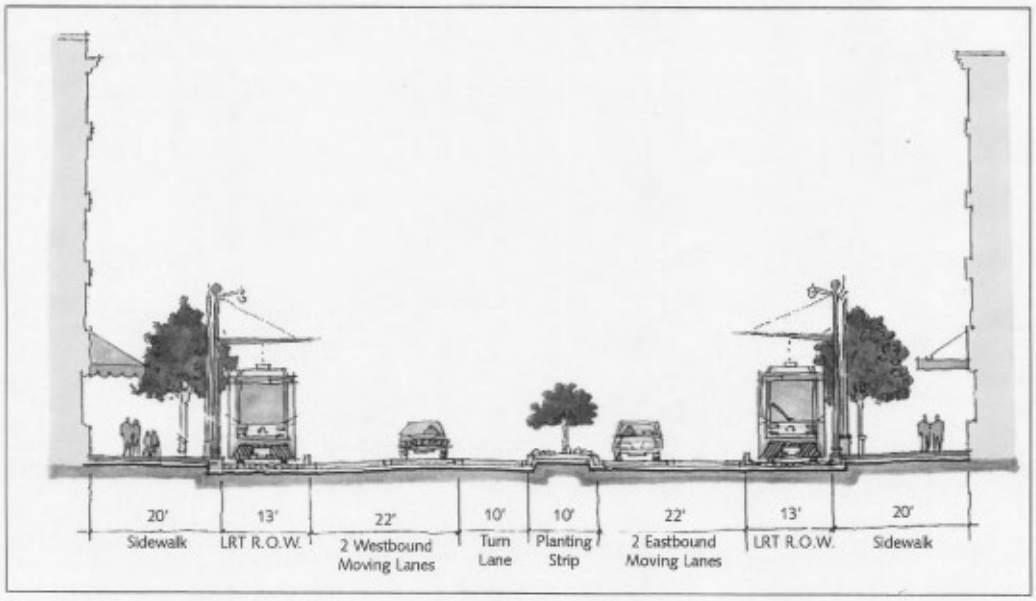
Washington Avenue Preferred LRT Alternative (median) at Milwaukee Depot (CC)



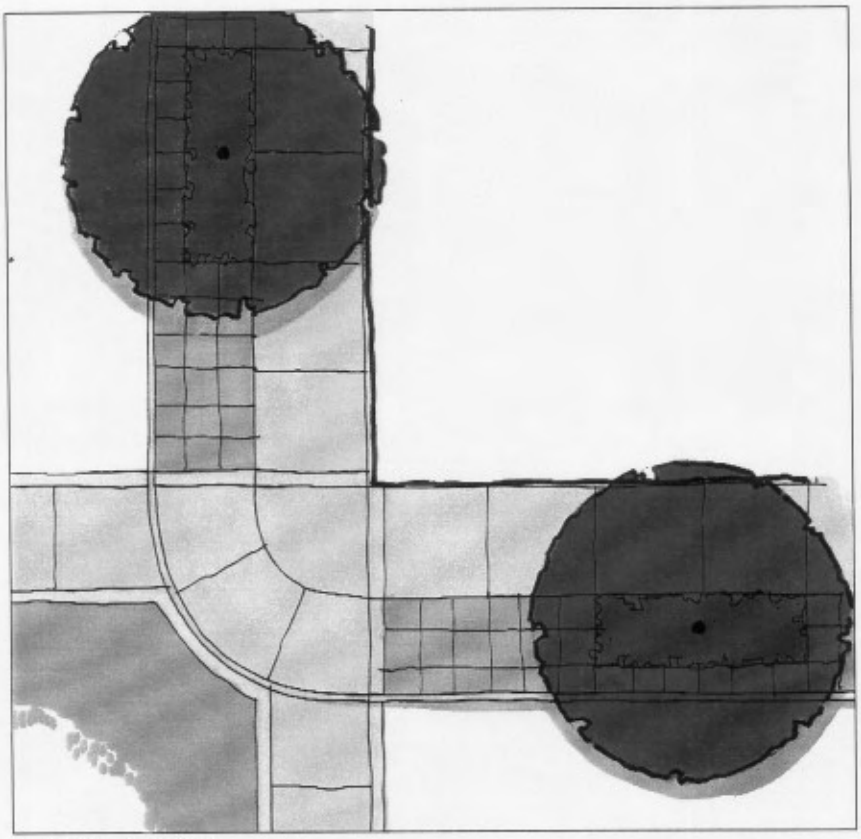
Key Plan



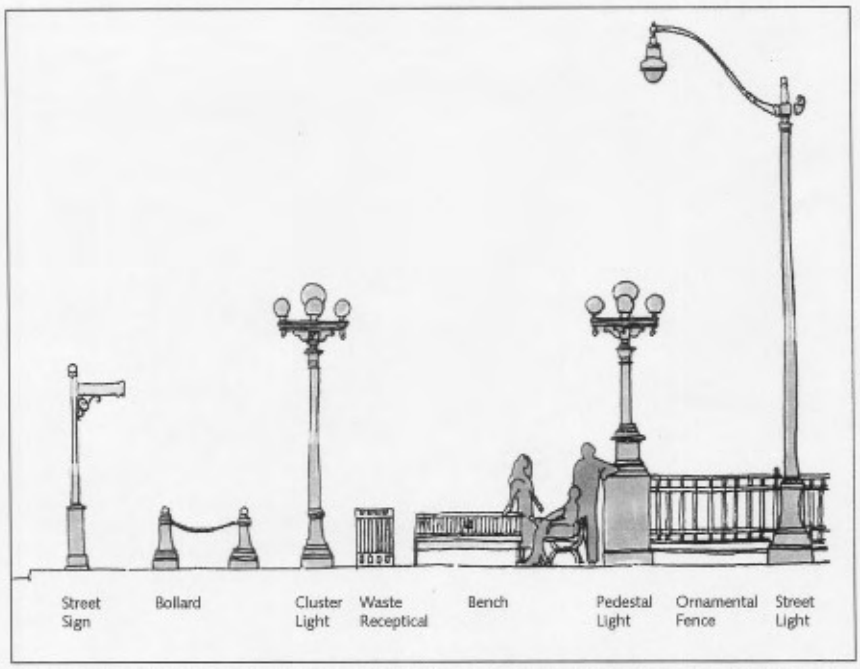
Washington Avenue with LRT Alternative 'B' (curb) between Chicago and Portland Avenues



Washington Avenue LRT Alternative 'B' (curb) at Milwaukee Depot



Typical Corner Detail



Furniture and Lighting Standards based on "Edge and Gateway Theme" Standards in the Mills District Streetscape Plan.

Streetscape Standards

A standardized streetscape palette is proposed to unify the Historic Mills District. This palette is based on the "Edge and Gateway Theme" standards in the Mills District Streetscape Plan.

Street Improvements:

- Paving shall be asphalt concrete with city standard concrete curbs.
- Crosswalks should continue the sidewalk paving materials across the cartway to visually define and enhance the pedestrian zones.

Sidewalks:

- Sidewalks shall be broom finished concrete or exposed aggregate concrete for the main walkway areas.
- Verges shall be of a decorative paving material such as granite block pavers, stone pavers or brick pavers.
- Tree grates may be used for tight areas; however, tree pits planted with groundcovers are encouraged due to the wide sidewalk dimensions proposed.

Site Furnishings:

- Historic, early 1900's cast iron street furnishings are proposed.
- 22- to 25-foot high pole street lights (250-500 watt HPS) 90- to 120-foot on center mounted on decorative fluted poles are proposed for wide streets; complementary 12- to 16-foot high pedestrian scale street lights (75-175 watt MH) are proposed for neighborhood streets and park areas .
- Iron benches, trash receptacles, street identification signs and bollards to complete the historic image of the area.

Landscape Palette

Large Street Trees:

- Elm Hybrid Cultivars trees for Portland Avenue and Chicago Avenue sidewalks and central park medians. As an alternative to planting the same tree on both streets, 'Prairie Spire' Ash Trees may be planted on one street.
- Red Maple 'Firedance', or equal varieties, for Washington Avenue and other streets. Due to the practice of salting roads in the winter, it is recommended to take active measures to protect the trees. One possibility is to increase the distance between the trees and the curb.

Medium Street Trees:

- Honeylocust 'Shademaster', or similar varieties, for neighborhood, residential and mixed-use streets.

Screen Plantings:

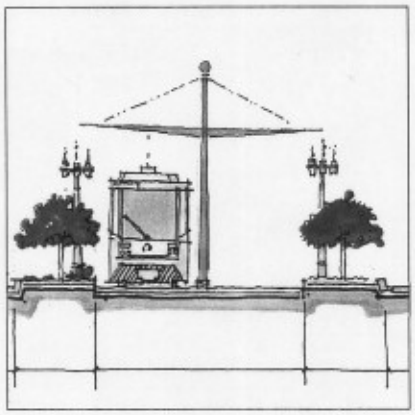
- Parking areas and other service areas should be screened from the public sidewalk areas. A minimum buffer yard of 6 feet shall be required to allow for a hedge row screen, minimum 30 inches in height and small ornamental trees 16- to 20-foot on center.
- Decorative screen walls, piers and ornamental iron fencing as extensions of buildings and other features are encouraged for screening and enclosures. These elements should be a minimum of 4 feet and a maximum of 8 feet in height.

RESIDENTIAL DEVELOPMENT ALTERNATIVE								
	Linear Footage of New Public Streets	Residential		Commercial		Acreage		
		Units	Parking	Square Footage	Parking 4/1000 sf	Infrastructure	Development	Public Open Space
Phase I	350	460	690	1,050,000	4,200	.68	11.65	.95
Phase II	700	430	645	300,000	1,200	1.29	7.73	0
Phase III	4,400	950	1,425	20,000	80	7.6	17.93	5.2
Phase IV	0	984	1,476	0	0	0	9.24	2.2
TOTAL	5,450 LF	2,824	4,246	1,370,000 SF	5,480	9.57 AC	46.55 AC	8.35 AC

BALLPARK DEVELOPMENT ALTERNATIVE								
	Linear Footage of New Public Streets	Residential		Commercial		Acreage		
		Units	Parking	Square Footage	Parking 4/1000 sf	Infrastructure	Development	Public Open Space
Phase I	2,960	460	690	1,101,500	4,406	5.19	34.54	2.8
Phase II	700	430	645	300,000	1,200	1.29	7.73	0
Phase III	0	984	1,476	0	0	0	9.24	2.2
TOTAL	3,310 LF	1,879	2,816	1,401,500 SF	5,606	5.83 AC	51.51 AC	5 AC

Note: Please refer to the master plan alternatives on page 29 and page 36 for a visual description of these items. Also, Mill Ruins Park is not included in the calculations for open space.

5 Quantitative Analysis



APPENDIX

1 Transportation Recommendations

Residential Plan Alternative

Under this urban design alternative, the primary focus for the the Historic Mills District is residential redevelopment. A secondary emphasis is on more intensive use of some existing commercial and historic sites in the Mills District with the Metrodome remaining in its current use and present location.

Street Grid

As noted in the 'Urban Design Concepts' section of this plan, the intention is to connect the downtown street grid to the waterfront. This grid was interrupted by the industrial pre-emption of the riverfront. That pre-emption has long ended, and a major initiative in restoring the waterfront must be to create a high level of street connectivity.

Connecting streets to the waterfront serves multiple urban design and redevelopment objectives. A high degree of connection to the waterfront brings the value of the redeveloped waterfront inland for a considerable distance. This ability to bring waterfront value inland is exhibited dramatically in many of the Twin Cities' neighborhoods, particularly around Lake of the Isles, Lake Calhoun and Lake Harriet. The density of street network that results from reconnecting streets to the waterfront provides a large amount of new and valuable street frontage, a prerequisite for revitalization. Further, the reintroduction of the downtown-sized city block insures against inappropriate site plans (for example, suburban campuses) being inserted into downtown and damaging its vitality.

The majority of additions to the street grid consist of extensions to the existing north/south streets: 5th Avenue from Washington to 2nd, Park Avenue from Washington to 2nd, Chicago Avenue from Washington to the Parkway, and 9th, 10th, and 11th Avenues from 2nd Street to a new frontage street.

It is essential that the West River Parkway, owned and maintained by the Park Board, be connected regularly and frequently with the street grid in the Historic Mills District. Proposed connections are with Portland Avenue, Chicago Avenue and 11th Avenue. This level of connection with the Parkway has several important benefits for both the Parkway and the Historic Mills District. A regular series of intersections along the Parkway serve as a traffic calming device in much the same manner as on any well-connected grid of streets. A frequent spacing of intersections dispels the notion of the Parkway as a freeway, discouraging freeway-like speeds on this thoroughfare.

Regular spacing of intersections on the Parkway is important for all users of the Parkway. For motorists, regular and predictable intersections reduce the vehicle miles of travel and turning movements, both on and off the Parkway. For bicyclists, a frequent and regular spacing of intersections on the Parkway is critical to inviting travel.

The value of the Parkway is greatly amplified by frequent connections to inland areas. The Parkway has ample demonstration of this effect on Parkway sections to the south of Downtown.

It is highly appropriate for Parkway access to be at a maximum through areas of the most intense activity, such as Downtown Minneapolis, where the maximum amount of population may be seeking entry to it. The Parkway should not be regarded as a 'freeway,' intended for 'through trips' having neither origin nor destination along the Parkway. Rather, the Parkway should be regarded as an intensely 'local' road, with access invited at as many points as possible.

Street Sections

Some important changes would be made to street sections in the Historic Mills District under the residential option. 2nd Street would remain a two way street with parking on both sides, but would be narrowed by eliminating the two dedicated bike lanes. Washington Avenue, prior to installation of Light Rail Transit (LRT), would have three lanes in each direction with a 20-foot median island. At later stages, when the LRT is in place on Washington Avenue, the street would retain four moving lanes of traffic and two LRT tracks in the median of the street. Chicago Avenue would be configured as a four-lane parkway, with a wide (50- to 100-foot) planted median and single-direction (one-way) traffic on each side.

Bicycle Routes

The dominant bicycle facilities in the Historic Mills District are the bicycle path crossing the Stone Arch Bridge, and the bicycle path along the entire length of the Parkway. Bridge 9 access from Dinky Town to 3rd Street will be the third primary bicycle facility when completed. The dominant bicycle circulation need for the Historic Mills District, therefore, is to join these connected bike routes. This connection will take place with bicycle lanes along 5th, Chicago and 11th Avenues. 2nd Street and 13th Avenue, given their size and intended use, are appropriate for bike route designation, in which bicyclists share the street with vehicular users.

Parking

Under the residential option, the parking for all activities north of Washington Avenue is contained in on-site facilities (parking courts or below-grade decks on individual properties) or on-street parking. There are no concentrations of parking visible from streets in this district.

It is recommended that a major concentration of parking be located in the four blocks centered around the intersection of 3rd Street and 9th Avenue, just to the north of the Metrodome. This concentration of parking serves two major functions: as the close-in 'premium' parking for stadium events, and as a fringe parking resource for the Downtown employment center. This fringe parking function will be greatly enhanced with the addition of the LRT along Washington Avenue, serving as a convenient link between the parking and Downtown Minneapolis.

Light Rail Transit

Light Rail Transit (LRT) is becoming a reality in the Twin Cities. The initial LRT corridor being developed in the region is the Hiawatha corridor. This corridor extends from the Minneapolis/St. Paul International Airport north to Downtown Minneapolis. The Hiawatha LRT corridor is an important step in the creation of a balanced transportation system for the Metropolitan Region.

A more balanced transportation system is also important to the redevelopment of the Historic Mills District. The downtown segments of the proposed Hiawatha LRT corridor extend along Fifth Avenue near the southern boundary of the redevelopment district, only partially serving the district.

Future extensions of the LRT system, at-grade in the center of Washington Avenue designed in conjunction with the proposed I-35W fly over, would benefit the redevelopment of the Historic Mills District. Two future LRT extension options are available to utilize Washington Avenue and I-35W to serve the northern corridor of the region.

Three station locations are recommended for the Historic Mills District: 1) on Washington Avenue just east of Portland Avenue, 2) near the Metrodome on Washington Avenue just east of Chicago Avenue, and 3) on Washington Avenue just east of Twelfth Avenue South.

An LRT alignment in the center of Washington Avenue along with the proposed I-35W fly over would contribute to a reduction in travel demand on Washington Avenue. This reduction in travel demand would allow Washington avenue to be downsized from six to four lanes of travel with LRT service in a newly constructed median. This reduction in travel lanes would increase the pedestrian friendliness of the corridor, facilitating the reconnection of pedestrian traffic between the

Historic Mills District and Downtown Minneapolis.

Downtown Access to I-35W

The physical configuration and current traffic volumes on Washington Avenue provide significant barriers to reconnecting downtown to the Mill District. Currently, Washington Avenue provides the only access from I-35W to Downtown. Motorists using I-35W to access downtown must use Washington Avenue. In order to reduce the amount of traffic on Washington Avenue and improve the corridor's physical condition, the urban design plan supports the concept of improved access to I-35W via 3rd and 4th Streets into Downtown.

Current plans identify the construction of direct access ramps to/from the north along I-35W to 3rd and 4th Streets in downtown Minneapolis. The current diamond interchange at Washington Avenue and I-35W will remain. However, the large volume of motorists accessing downtown from I-35W will no longer have to utilize Washington Avenue. Additional direct access from/to 3rd and 4th Streets will more efficiently serve Downtown. The reduced travel demand on Washington Avenue will provide an opportunity to utilize the proposed LRT alignment to reconnect Downtown to the Mill District.

Stadium Plan Alternative

Under this urban design alternative, a new baseball stadium (bounded by Chicago Avenue, Washington Avenue, 10th Avenue and the Parkway) is the centerpiece for redevelopment in the Historic Mills District. A secondary emphasis is on high density residential use in the area bounded by 3rd Avenue, 5th Street, Chicago Avenue and the Parkway. The Stadium Plan Alternative also calls for more intensive use of some existing commercial and historic sites in the Mill District than currently exists.

Street Grid

The Stadium Plan Alternative provides for a nearly complete connection of the Downtown street grid to the Parkway. This principle of site design (i.e., connection of the streets) is emphasized in the Urban Design Concepts chapter of this Master Plan. The completion of the grid creates a street pattern that was pre-empted by riverfront industrial development.

Connecting streets to the waterfront serves the many urban design and redevelopment objectives noted previously in the discussion of the Residential Plan Alternative.

The connection of streets under the Stadium Plan Alternative follows a simple pattern: except when blocked by a Mills District building or the new stadium, all north/south streets will connect to the Parkway or 2nd Street. Thus, the following streets will be extended: 5th Avenue from Washington to 2nd Street, Park Avenue from Washington to 2nd Street, Chicago Avenue from Washington Avenue to the Parkway, and 9th, 10th, and 11th Avenues from 2nd Street to a new frontage street.

The new stadium terminates one street (9th Avenue) and slightly relocates another street (10th Avenue). The stadium will be bounded closely on all sides by a major public street: on the west by Chicago Avenue, on the south by Washington Avenue, on the east by 11th Avenue and on the north by the Parkway. It is absolutely essential that the stadium be closely bordered by 'real' streets. Much of the dissatisfaction with the previous generation of monumental downtown stadiums (Pittsburgh, Cincinnati, St. Louis) stems from the disruption that their design caused to local streets, and the removal of street activity from the vicinity of the stadium. Conversely, the new generation of downtown stadiums that are unanimously acclaimed as urban design successes (Baltimore, Cleveland, Denver and AAA Baseball in Buffalo) all feature the stadium 'squeezed' into the existing pattern of streets, with minimal closing or relocating of the historic street pattern.

A full set of bordering streets is vital to stadium operations. Lengthy drop-off/pick-up zones are critical to the operation of the most important mode of stadium arrival: bus and other high occupancy vehicles. By far, the most effective method for handling this traffic is the continuous curbside loading area on a public street. This pattern, typical at successful stadiums and airport arrival and departure areas throughout the country, requires a complete and continuous system of fronting streets.

Chicago Avenue extended to the Parkway and built as a divided two-lane boulevard is particularly important as a stadium access street. Not only does the divided boulevard provide a monumental fronting street for the stadium, but from a traffic perspective it provides a large number of possibilities for loading, recirculating,

and temporary bus storage.

The nearly complete pattern of connection to the Parkway has important benefits for both the Parkway, the Historic Mills District redevelopment area and the new stadium. These benefits are discussed in detail in the Residential Plan Alternative section of this appendix.

Bicycle Routes

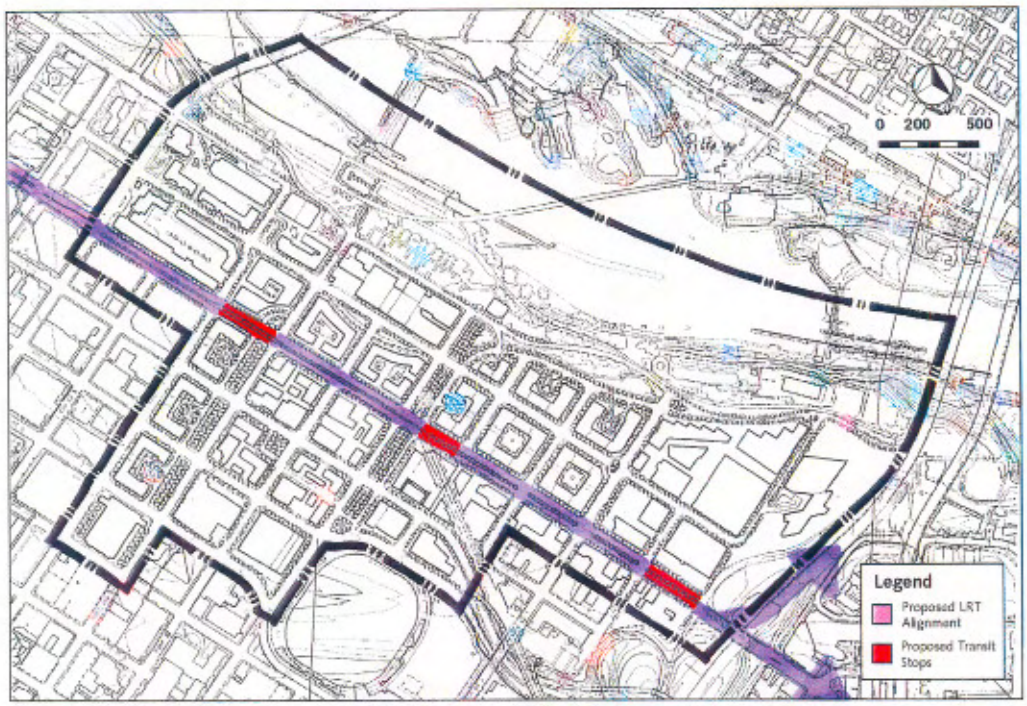
As with the Residential Plan Alternative the dominant bicycle facilities under the Stadium Plan Alternative are the bicycle path crossing the Stone Arch Bridge and the bicycle path along the entire length of the Parkway. The need for connecting to these facilities was discussed previously in this appendix in the section describing the Residential Plan Alternative.

Parking

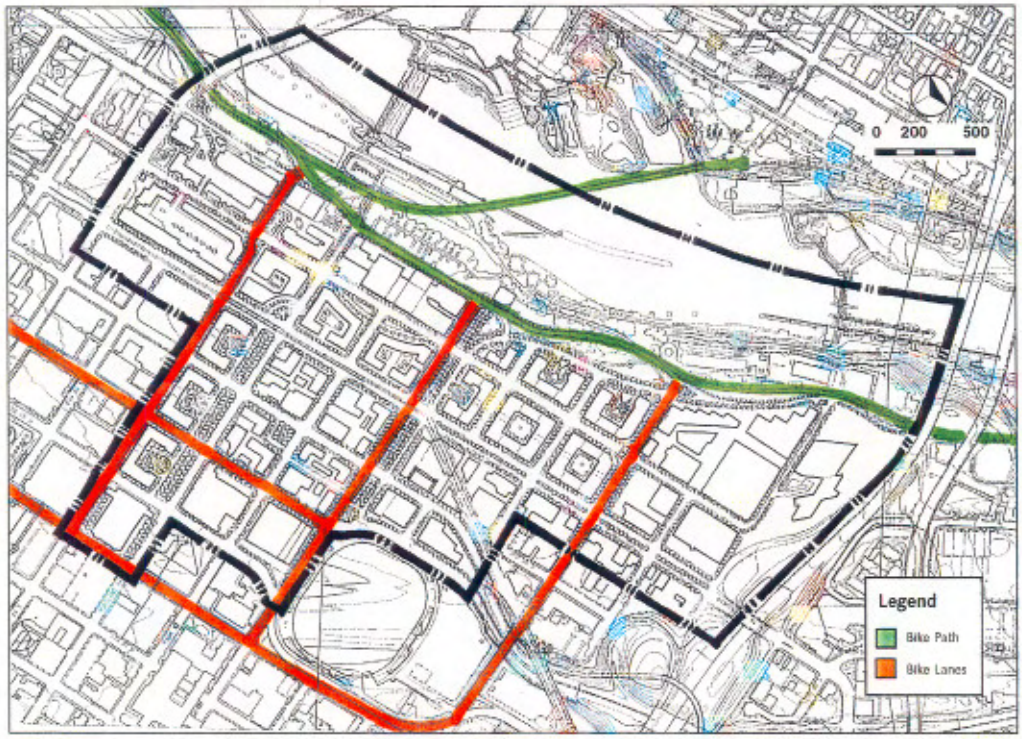
The parking recommendations for the Stadium Plan Alternative are identical to that for the Residential Plan Alternative. The parking concentration centered around 3rd Street and 9th Avenue gains even greater importance under the Stadium Plan Alternative because this concentration of parking would serve both the Metrodome and the new stadium, as well as serve as a fringe parking resource for daily use by Downtown workers.

Light Rail Transit

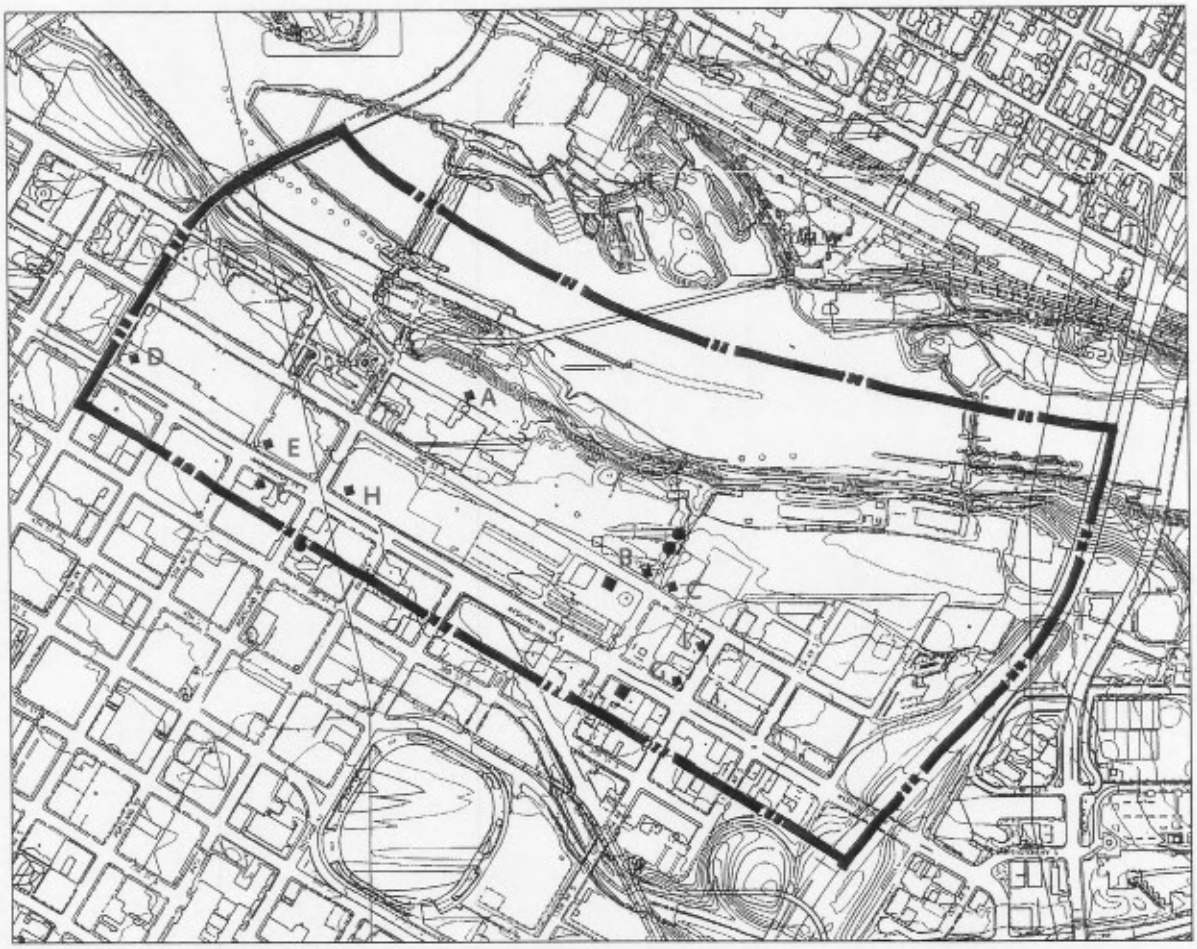
The recommended treatment of LRT in the new Stadium Plan Alternative is identical to that discussed previously under the Residential Plan Alternative, i.e., LRT vehicles operating in a two-track route in the median of Washington Avenue. Under the new Stadium Plan Alternative, LRT service to the Historic Mills District gains additional importance as a major connector between Downtown parking resources and both the Metrodome and the new stadium.



Plan of Proposed LRT Alignment



Plan of Proposed Bike Traffic



Plan of Potential Environmental Sites

2 Study of Environmental Sites

The Development Services Department of the Minneapolis Community Development Agency was asked to conduct a review of the two proposed baseball stadium sites in Downtown Minneapolis. The purpose of the site review was to identify any possible sources of pollution on the sites and surrounding area. These sites must be further tested and may need to be remediated as the blocks on which they are located are developed. The study area covered roughly 26 blocks from 5th Street South to the Mississippi River and from 4th Avenue South to 11th Avenue South .

The following is a reporting by block of any possible sources of pollution. Only sites having potential environmental issues are labeled on the map above with their corresponding letter designation:

Block 1 (A): There is an open leak file (#6930) at 701 1st Street South. This is a VIC site.

Block 2: Nothing to report.

Block 3 (B): This block contains two closed leak files. Leak file #2427 and leak file #5914 were both reported at 70 10th Avenue South.

Also, at 70 10th Avenue South, thermal treatment was installed and was expected to run for 60 days from February 10, 1997 to April 11, 1997. In the dead underground storage tank file at the Minneapolis Fire Department, a 6,000 gallon diesel fuel tank and a 10,000 gallon gasoline tank were installed at 70 10th Avenue South in 1965. Chemical storage is a permitted use at 928 2nd Street South (vacant grain elevator).

Block 4 (C): There was a bulk storage tank farm at 1018 2nd Street South.

Block 5 (D): This block contains part of the Milwaukee Road Depot. Pollution remediation is currently underway. Open and closed leak file research indicated that the Milwaukee Road Depot had an open leak file (#3820 - VIC site) and a closed leak file (#1166).

Block 6 (E): This block contains part of the Milwaukee Road Depot. Pollution remediation is currently underway. Fire Department research indicated an active tank file for a 1,000 gallon gasoline tank.

Block 7 (F): This block contains part of the Milwaukee Road Depot. Pollution remediation is currently underway. Fire Department research indicated an active tank file for two diesel tanks.

Block 8 (G): Sanborn Maps (1912-1949) indicated a 15,000 gallon butane above-ground tank.

Block 9: See Block 8.

Block 10: The City Directory listed the Thompson Hayward Chemical Company at 909 2nd Street South from 1937 to 1977.

Block 11 (G **and** I): A filling station was located at 1026 Washington Avenue South and the Fire Department research indicated that there were 5 gasoline tanks whose permits have been closed. Chemical storage and generation of industrial waste are permitted uses at 200 11th Avenue South.

Block 12: Nothing to report.

Block 13 (H): Chemical storage and generation of industrial waste are permitted uses at 500 3rd Street South. Chemical storage is a permitted use at 530 3rd Street South. 509 Washington Avenue South is a petrofund site and an open leak file site (#1544).

Block 14: Fire Department research indicated two closed gasoline tank permits at 251 Portland Avenue South.

Block 15: On August 9, 1993 a 2,000 gallon storage tank was removed at 724 3rd Street South. The Sanborn Maps (1912) shows a gasoline tank between 716 and 730 3rd Street South (could be the tank that was removed).

Block 16: 1952 City Directory listed a garage gas station at 818 3rd Street South. The Sanborn Map (1912-1949) categorizes it as a private garage.

Block 17: The Sanborn Map from 1912 shows two iron tanks in the middle of the block. The tanks were 25 feet and 20 feet high, were empty and not used.

Block 18: Inspection Department research indicated a complaint about an oil leak at 1028 3rd Street South. Chemical storage is a permitted use at that address. Fire Department research showed that a 1,000 gallon tank was removed at 1009-11 Washington Avenue South on June 28, 1957.

Block 19: The 1912 Sanborn Map indicated that there was a 250 gallon underground gasoline tank in alley closer to 5th Avenue South. The City Directory listed an auto repair shop at 423 3rd Street South and two 550 gallon tanks were removed from this site on November 30, 1951. Fire Department research indicated that a 550 gallon gasoline tank was removed on August 21, 1951.

Block 20: The Sanborn Map (1912-1949) and the City Directory showed a filling station with 5 gasoline tanks at 529 3rd Street South. The tanks were removed from this site on August 24, 1954 and June 26, 1961. Another filling station was indicated at 530 or 500 4th Street South. The tanks were removed on September 8, 1961. There is a monitoring well at 500 4th Street south because an underground storage tank was left in the ground since its removal might cause damage to an adjacent building. There are also two open petrofund leak files at this site (#7307 & #9776). An open VIC leak file (#6190) was found for 300 Portland Avenue South. A 550 gallon gasoline tank was removed at 309 5th Avenue South. Chemical storage is a permitted use at 315 5th Avenue South.

Block 21: The 1912 Sanborn Map shows a 100 gallon gas tank underground near the alley. An abandoned well is at 329 Portland Avenue South (#200399).

Block 22: Five 10,000 gallon gasoline tanks and one 10,000 gallon diesel fuel tank were removed at 728 4th Street South on June 10 and 11, 1987. Removed an underground storage tank in August, 1989 reported to be leaking at 301 Park Avenue South.

Block 23: 1912 Sanborn Map indicates a 280 gallon tank near the inter-

section of the alley and 5th Avenue South. The Sanborn Map (1912-1949) shows a filling station at the corner of 5th Avenue South and 5th Street South. Chemical storage is allowed at 411-15 4th Street South. Inspections Department research indicated an open leak VIC file (#7030) at 425-29 4th Street South and a closed leak file (#2720) at 422-26 5th Street South.

Block 24: The Sanborn Map (1912-1949) shows a filling station at the southeast corner of 5th Avenue South and 4th Street South with one tank. See detail for 501 4th Street South for data on gas tanks. A 550 gallon tank was removed at 421 5th Avenue South.

Block 25: There is a petrofund contaminated site at 425 Portland Avenue South. Chemical storage is a permitted use at this site. See detail for data on removal of tanks. Braun Intertec did an underground storage tank removal and soil boring observation for a four block area (see letter filed under 425 Portland Avenue South). A 5,000 gallon gasoline tank is located at 613 4th Street South and the permit is considered active by the Fire Department. A 10,000 gallon gasoline tank permit for 400 Park Avenue South was found in the dead files at the Fire Department.

Block 26: One 1,000 gallon gasoline tank and two 550 gallon gasoline tank permits for 701 4th Street South were found in the dead files at the Fire Department. The City Directories for 1937 and 1944 listed a filling station at 704 5th Street South (can not find any other record of this filling station).

DOWNTOWN MINNEAPOLIS HOUSING STUDY

August, 1997

Prepared For

MINNEAPOLIS COMMUNITY DEVELOPMENT AGENCY

Prepared By

Economic Research Corporation

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DOWNTOWN MINNEAPOLIS HOUSING STUDY

TABLE OF CONTENTS

	Page
Introduction	1
I. Minneapolis/St. Paul Metropolitan Area Overview	2
II. Downtown Minneapolis Economy	3
A. Downtown Economy Highlights	3
B. Downtown Minneapolis Office Space Absorption	4
C. Downtown Minneapolis Employment Trends	7
III. Downtown Minneapolis Housing Market	9
A. Rental Housing Market Trends	11
B. Condominium Market Trends	12
C. Townhouse Market Trends	13
D. Summary of Downtown Housing Market Characteristics	14
E. Projected Future Market Demand	15
IV. Housing Market in Study Area	27

LIST OF TABLES AND MAP

Map 1	Location of Downtown Residential Complexes	10
Table 1	Downtown Minneapolis Office Space Absorption	6
Table 2	Downtown Minneapolis Employment Trends & Projections	8
Table 3	Downtown Minneapolis Rental Unit Absorption	17
Table 4	Downtown Minneapolis Rental Units - Size and Rental Rates, 1997 - One Bedroom Units	18
Table 5	Downtown Minneapolis Rental Rates - Size and Rental Rates, 1997 - Two Bedroom Units	19
Table 6	Downtown Minneapolis Condominium Sales 1994-1996	20
Table 7	Downtown Minneapolis Condominiums - Number of Sales by Year	21
Table 8	Downtown Minneapolis Condominiums - Sales Price Per Square Foot	22
Table 9	Downtown Minneapolis Townhouses - Sales Prices 1994-1996	23
Table 10	Downtown Minneapolis Townhouses - Number of Sales Per Year	24
Table 11	Downtown Minneapolis Townhouses - Sales Price Per Square Foot	25
Table 12	Downtown Minneapolis Relationship Between Downtown Office Space and Number of Residential Units	26

INTRODUCTION

This study analyzes the supply and demand for new market rate housing in or near downtown Minneapolis. The study is being conducted to determine the likely demand for new residential units in the Milwaukee Depot/Riverfront study area. The goal of the study is to provide information and analysis which will assist the study team and the community in planning the future of this important part of the downtown area.

The objectives of this work program is to (1) assess the future potential for housing in or near downtown Minneapolis: (2) assess the market demand for various types of housing including rental apartments, condominiums, and townhouses in various rental or price ranges; and (3) analyze the share of the market which could be attracted to various sites within the study area which might be available for housing.

This study is an update of two prior downtown Minneapolis housing reports which were conducted by Economic Research Corporation. The first was conducted in 1990 when there were high vacancies and slow absorption of condominium units as a result of over-building in the mid 1980's. The over supply of downtown housing at that time depressed lease rates of rental housing and sales prices of "for sale" units. However, it was projected that demand for downtown housing would catch up with supply by the mid 1990's.

The update of the housing market analysis conducted in 1994 reflected a strong improvement in occupancy rates and absorption of all "for sale" units. This nearly full occupancy, however, had just recently occurred and rental rates and sales prices were similar to a decade earlier.

This study will look at current housing market conditions and the downtown economy and project future market support for housing at various sites within the study area.

I. MINNEAPOLIS/ST. PAUL METROPOLITAN AREA OVERVIEW

The Minneapolis/St. Paul Metropolitan Area has a strong and diverse economy and the area has been experiencing strong growth rates in population, employment, and income. It is this strength of the metro area economy which provides the support for the economic growth of downtown Minneapolis and the resulting demand for downtown housing.

The Minneapolis/St. Paul Metropolitan Area (13 County) is the fifteenth largest in the United States. Its population increased 8.5% from 2,539,000 in 1990 to over 2,755,000 in 1996. The amount and rate of growth exceeds most of the northern metro areas and is similar to some of the fast growing sun belt metro areas.

Employment growth has also been very strong. Total employment, by place of work, increased over 9% from 1,628,000 employees in 1988 to over 1,776,000 in 1993. It is estimated that employment has continued to grow since 1993. The unemployment rate for the Metro Area has consistently been lower than the United States and most other metropolitan areas. The Twin Cities normally ranks very high nationally in terms of new job creation.

The personal income of the residents of the Minneapolis/St. Paul Metropolitan Area has also shown strong increases. Total personal income has increased 42% from $54.5 billion in 1990 to $76.7 billion in 1996. Per capita income increased from $21,418 in 1990 to $27,854 in 1996. The 1996 per capita income for the Metro Area is 14.4% higher than the $24,347 for the United States.

Other strengths of the Minneapolis/St. Paul MSA include:

1. High retail sales per capita reflecting strong import of retail dollars from beyond the 13 county area. This includes high per capita shoppers goods sales which was high even before the opening of the Mall of America.
2. Tourism which includes over 9 million visitor annually. The Mall of America claims that it attracts 40 million visitors per year with 30% of them coming from beyond the metro area.
3. The home to 17 Fortune 500 industrial companies and 14 Fortune 500 service companies. Major companies include 3M, General Mills, Honeywell, Cargill, Dayton Hudson (Target), and Super Valu.
4. A strong financial center with Norwest and First Bank systems, two of the nation's largest commercial banking concerns, headquartered in Minneapolis.

In summary, the Minneapolis/St. Paul MSA has a strong growing economy. Downtown Minneapolis is an important part of the economic strength of the metro area and it has and will continue to benefit from the growth of the area economy.

II. DOWNTOWN MINNEAPOLIS ECONOMY

The demand for housing in or near downtown Minneapolis is driven by the economic and employment opportunities in the central business district (CBD). This section will look at some of the highlights of the downtown economy and then focus on employment and office space occupancy which are the two factors most important to the demand for market rate housing in the downtown area.

A. Downtown Economy Highlights

Minneapolis has a very strong downtown economy. It has retained retail, entertainment, convention, office, governmental and medical segments of its economy. This has occurred during a period when most similar sized major U. S. cities have lost many of these elements from their downtown areas. Some of the highlights of the economy include:

1. Occupied multi-tenant office space in the CBD has increased from seven million to nearly twenty million square feet since 1980. There is presently a low vacancy rate and two new office buildings are beginning construction and several more major projects are being planned.

2. A substantial amount of medical, governmental, and single tenant office space is located in the downtown area. The new Federal Reserve Bank Building and the new Federal Building will strengthen this element of the downtown economy.

3. The Convention Center and the nearly 4,500 supporting hotel rooms underpins a strong convention and tourism business. The proposed expansion of the Convention Center would strengthen this element.

4. The Minnesota Twins, Vikings, and Timberwolves all play in downtown Minneapolis.

5. Significant other entertainment and cultural facilities that add to the downtown draw and vitality. These include theaters, art centers, clubs, and restaurants. The proposed entertainment complex on Hennepin Avenue would strengthen this element.

6. Strong downtown employment which is estimated at 158,600 including 118,100 employed in "office" occupations. This represents an increase of 59% in total employment from 100,000 in 1980 and an increase of 74% in office employment from 68,000 in 1980.

7. A strong retail component which includes Dayton's Saks, Neiman Marcus and Wards. The proposed Target store will strengthen downtown retail. Minneapolis is about the only city of its size to retain a strong downtown retail base and downtown retail sales have been far greater than similar sized cities such a Cincinnati, Dallas, Denver, Portland, and St. Louis.

8. A good base of downtown housing options. Since 1976 , nearly 5,000 new market rate housing units, including apartments, condominiums, and townhouses, have been built in or near the downtown area. Minneapolis has a much stronger downtown housing market than any other similar sized city in the country, many of which have been struggling to attract even one or two major market rate developments to their CBD.

In summary, Minneapolis has an extremely strong downtown economy. The continued strength of the economy is very important to the future market demand for market rate downtown housing.

B. Downtown Minneapolis Office Space Absorption

Important to the strength of the downtown economy is the large amount of employment in downtown office buildings. Office space users are the largest source of employment and also provide strong market support for other segments of the downtown economy. They shop in retail stores, patronize downtown restaurants and entertainment facilities, attract business travelers to downtown hotels, and are a source of residents for downtown housing.

The absorption of multi-tenant office space in downtown Minneapolis since 1980 is shown on Table 1. The total amount of GLA (Gross Leasable Area) in the downtown area increased from 7.7 million square feet in 1980 to the current 21.7 million square feet. This represents an average of 825,000 square feet of new space annually. With the completion of the new Federal Reserve Building (615,000 sq. ft.) and the new Federal Building (525,000) there is a total of seven million square feet in government offices such as Hennepin County Government Center, City Hall, Federal Reserve Bank, and Federal Building; medical office buildings such as the Medical Arts Building; and in single tenant buildings such as Northwestern National Life Insurance.

Presently there is nearly 20 million square feet of occupied office space in the multi-tenant buildings in the CBD. The vacancy rate of 8.3 % during the second quarter of 1997 is the lowest since 1981 when the rate of office development greatly increased. The strong growth in occupied office space even during recessions is an indication of the strength of the downtown economy.

Future growth also looks good. Construction has begun on two new major office developments.

1. Opus Corporation has begun construction on the American Express building at South 7th Street and 2nd Avenue South. Completion of this 825,000 GLA (gross leasable area) building is projected for January, 2000.

2. Ryan Companies have begun on the new Target Headquarters building located at South 10th Street and the Nicollet Mall This single tenant building with 600,000 square feet GLA is scheduled for completion in November, 1998. Although a single tenant building, the development will increase housing market demand from Target office workers and from new tenants in space Target will vacate in other downtown multi-tenant buildings.

There are also a number of proposed office developments which are likely to occur as lead tenants are found. These include:

1. 250 Marquette Avenue - The redevelopment of the old Federal Reserve Building.

2. Metropolitan Centre Phase II - A 21 story, 640,000 square foot multi-tenant office building by Metropolitan Life located at 7th Street & 3rd Avenue S.

3. 444 Marquette - A 15 story, 600,000 square foot multi-tenant office building by Opus Corporation.

4. Conservatory Site - Ryan Companies has proposed a 750,000 square foot building for the Conservatory site at 8th and Nicollet Mall.

5. 900 Nicollet Mall - Ryan Companies has proposed a 14 story, 550,000 square foot office tower to be constructed over the proposed Target store at 9th & Nicollet Mall.

It is likely that at least some of these proposed projects will be developed as the market demand for additional Class A office space in downtown Minneapolis continues to increase. The completion of the two buildings under construction and the development of the proposed office buildings will provide market support for additional downtown housing units.

Table 1

DOWNTOWN MINNEAPOLIS OFFICE SPACE ABSORPTION

Year	Estimated Total Sq. Ft. Multi-Tenant Office Space (000's)	Vacancy Rate	Estimated Total Occupied OfficeSpace Square Feet (000's)	Estimated Office Space Absorption Square Feet (000's)
1980	7,748	5.8%	7,300	
1981	8,248	6.6%	7,700	400
1982	9,477	11.2%	8,418	718
1983	10,226	10.7%	9,136	718
1984	11,524	12.8%	10,054	918
1985	13,479	16.7%	11,229	1,175
1986	13,408	12.9%	11,682	453
1987	14,779	12.8%	12,891	1,209
1988	16,157	15.9%	13,581	690
1989	17,881	17.8%	14,705	1,124
1990	17,890	16.8%	14,877	172
1991	19,160	17.2%	15,857	980
1992	21,020	22.4%	16,312	455
1993	20,932	17.3%	17,308	996
1994	21,338	12.2%	18,730	1,422
1995	21,182	9.7%	19,129	399
1996	21,190	9.4%	19,188	59
1997	21,745	8.3%	19,930	742
Average Annual Increase				
1980-1985	1,146		786	786
1985-1990	1,273		965	965
1990-1995	660		885	885
1995-1997	282		401	401

Sources: Annual Towle Reports, 1984-1997; Economic Research Corportation.

The availability of a wide variety of market rate housing in or near the downtown area contributes to the strength of the downtown office market. The availability of suitable convenient housing for executives, partners, and employees contribute to decisions by office space users to locate or remain in the downtown area. Since, from a market viewpoint, there is limited housing availability in the downtown area, additional new or renovated units will be necessary to provide downtown employees with the desired range of housing options.

C. Downtown Minneapolis Employment Trends

Downtown Minneapolis employment trends and projections are shown on Table 2. Current employment is estimated at 158,600 which includes 118,100 office employees. This represents an increase of over 59% in total employment and a 74% increase in office employment since 1980. This is an addition of over 3,500 employees annually since 1980. An important component of these employment estimates is the amount of occupied office space. These estimates are about 5% higher than the Minnesota Department of Transportation employment estimates for the downtown traffic analysis zones.

The estimate does reflect a increasing number of square feet of space per employee increasing from about 200 square feet per person in the 1980's to 230 in 1997. The number of square feet per employee is projected to increase to 240 in 2000 and to 250 square feet per person in 2005.

Total downtown employment is projected to increase to 161,400 by 2000 and to 173,000 in 2005. Office employment is projected to increase to nearly 120,000 in 2000 and to 128,500 in 2005. These employment increases will strengthen the market demand for new housing units in the downtown area.

Since 1980, office employment in downtown Minneapolis has increased an average of nearly 3,000 jobs annually. Most of these office jobs pay well above the "livable wage" minimum and include many high income positions. The downtown is the largest generator of new "livable wage" jobs within the City of Minneapolis. These jobs, moreover, are convenient for most residents of the City via public transportation, bicycles, or automobiles. The continued growth of the downtown economy is important to the economic strength of the entire City.

Table 2

DOWNTOWN MINNEAPOLIS EMPLOYMENT TRENDS AND PROJECTIONS

	Total Employment		Office Employment	
	Estimated Employment	Annual Increase	Estimated Employment	Annual Increase
Year				
1980	100,000		68,000	
1981	102,200	2,200	70,000	2,000
1982	106,200	4,000	73,600	3,600
1083	110,200	4,000	77,200	3,600
1984	115,300	5,100	81,800	4,600
1985	122,500	7,200	88,300	6,500
1986	124,000	1,500	89,700	1,400
1987	131,000	7,000	96,100	6,400
1988	134,900	3,900	99,600	3,500
1989	137,500	2,600	101,200	1,600
1990	139,200	1,700	102,200	1,000
1991	143,200	4,000	105,700	3,500
1992	144,600	1,400	106,600	900
1993	148,500	3,900	110,000	3,400
1994	154,400	5,900	115,400	5,400
1995	156,600	2,200	117,100	1,700
1996	157,000	400	117,000	-100
1997	158,600	1,600	118,100	1,100
Projections	**Total**	**Average Annual Increase**	**Total**	**Average Annual Increase**
2000	161,400	933	119,900	600
2005	173,000	2,320	128,500	1,720

NOTE: The office employment estimates include employment in government offices, medical offices, and single tenant buildings.

Sources: Economic Research Corporation

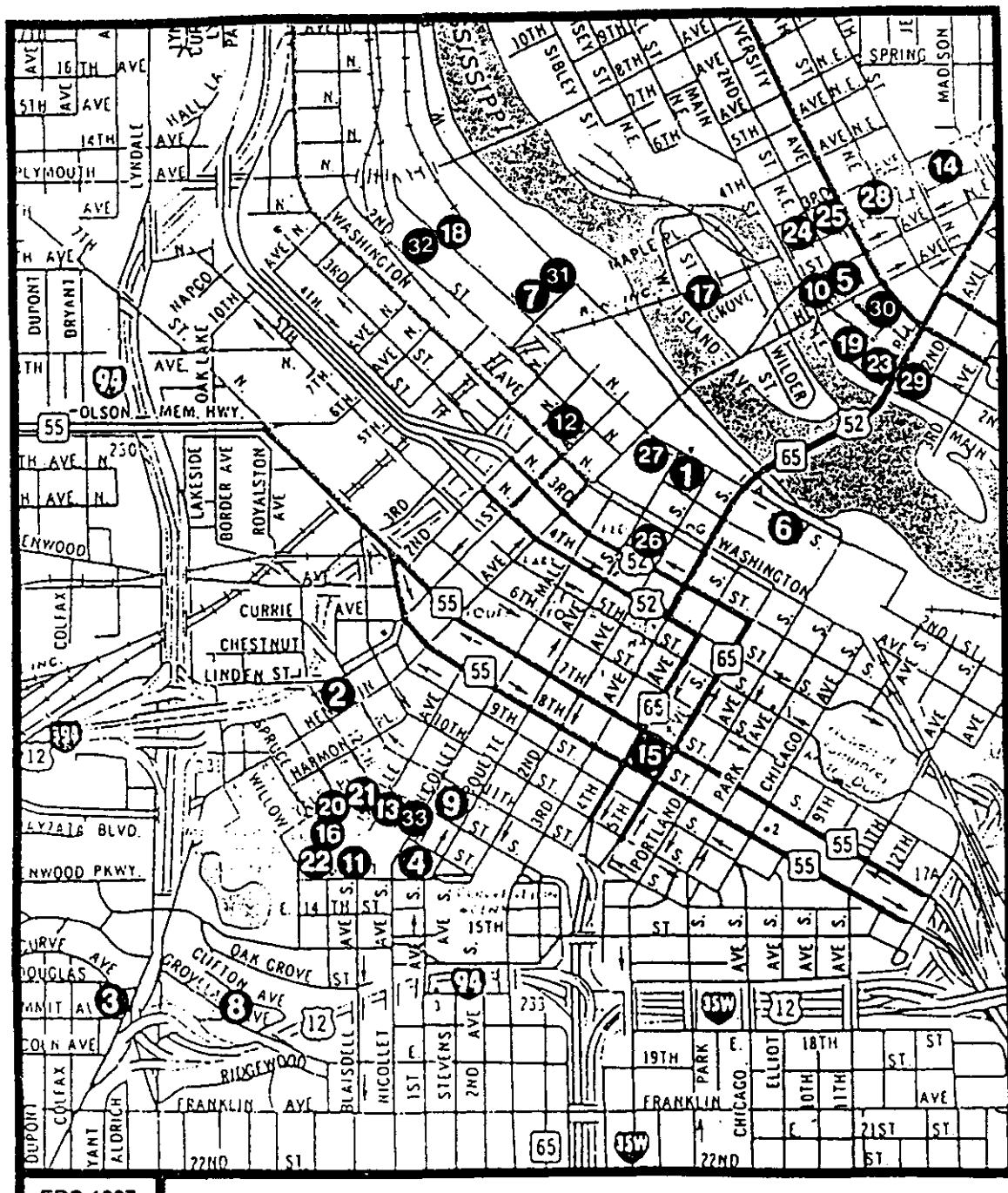
III. DOWNTOWN HOUSING MARKET

There are over 5,500 housing units in newer market rate apartment, condominium, and townhouse projects in or near downtown Minneapolis. The location of the primary market rate housing complexes in or near downtown Minneapolis are shown on Map 1. There are also a large variety of older units south of the CBD and a number of subsidized and public housing projects in the general downtown area. This analysis concentrates on those types of units that would be competitive with new or rehabilitated market rate rental or "for sale" units in or near downtown.

The absorption of new units in downtown market rate developments during the 1980's averaged 315 units annually. The rate of absorption has decreased in the 1990's due primarily to the lack of supply of new units at a variety of rental rates or sale prices. Absorption since 1990 has totaled 1,400 units or an average of 200 units annually. The average absorption since 1994 has been even lower, primarily as a result of the limited number (110) of new units and the high occupancy rates of existing buildings.

The only new units coming on the market since 1994 are the Lourdes Square and Marquette townhouse developments on the east bank of the Mississippi and The Landings townhouse development and the Tension Envelope rehabilitation rental project in the north river area. Developments currently under construction include the 2nd phase of The Landings townhouses and the 1st phase of RiverStation condominiums in the north river area. Proposed projects include the rehabilitation of the Creamette Building (rental); Mill District rehabilitation (condo's); The Rottlund Homes townhouse proposal adjacent to The Landings, and a possible townhouse development adjacent to The Falls on the east bank.

The following sections will analyze in more detail downtown Minneapolis market trends as they relate to rental housing, condominiums, and townhouses.



MAP 1
CURRENT DOWNTOWN HOUSING

Rental Complexes

1 Churchill
2 Laurel Village
- Hennepin Crossing
- DeForest
- Wilson Park
- McNair
- Laurel Curve

3 Kenwood Gambles
4 Marquette Place
5 Pinnacle
6 River West
7 Riverwalk
8 Summit House
9 Symphony Place
10 The Falls
11 110 Grant
12 Tension Envelope

Ownership Complexes

13 1225 LaSalle
14 500-600 North Third
15 Centre Village
16 Greenway Gables
17 Grove Street Flats
18 Itasca
19 La Rive
20 Loring Green East
21 Loring Green West
22 Loring Way
23 Lourdes Square
24 Riverpark Town Homes
25 St. Anthony In-Towne
26 The Crossings
27 The Towers
28 Townhomes of Cityscape
29 Winslow House
30 Marquette
31 The Landings
32 Riverstation (U.C)
33 1200 on the Mall

A. Rental Housing Market Trends

The absorption of new market rate rental units in or near the downtown area is shown on Table 3. There was a large increase in the number of available units from 1984 to 1987 which resulted in high vacancy rates in the late 1980's. The limited number of new units added to the inventory since 1989 has resulted in significant decreases in the vacancy rates.

Currently, there are virtually no vacancies in the downtown market rate rental complexes. There is reportedly, however, continued turnover in the rental units indicating that the low vacancy rate is fueled, in part, by new residents seeking downtown housing.

The sizes and rental rates (excluding parking) for the major downtown apartment projects are shown on Tables 4 and 5. Rental rates for one bedroom units ranged from a low of $675 monthly in River Walk to a high of $1,550 in The Falls. A large majority of the units are presently in the $800 to $1,000 monthly rental range. The sizes of the units ranged from 600 square feet to over 1,400 with the majority of the units in the in the 700-900 square feet range. The median rent per square foot in most of the complexes have shown significant increases since 1994. The median rental rate per square foot increased from $0.99 per square foot in 1994 to the current average of $1.12, an increase of 13%. Managers of a number of the complexes are reporting 5% annual rent increases.

The rental rates for two bedroom units ranged from a low of $736 to a high of over $2,000. The majority of the units are in the $1,100 to $1,500 rental range. The sizes of the units ranged from 800 to over 1,700 square feet with a majority of the units in the 1,100-1,200 square foot range. There have been significant rent increases since 1994 with the average rent per square foot increasing 19% from $0.95 in 1994 to $1.13 in 1997.

The higher occupancy rates have permitted building owners to raise rents to cover increased costs of operation. The increasing rental levels have and will generate more interest in new or rehabilitated rental projects in the downtown area. Rental rates, however, will need to increase further before they will support new high-rise construction.

The only announced rental project presently being planned in the downtown area is the renovation of the historic Creamette Building on North 1st Street being planned by Brighton Development. This development is planned for 92 units including 52 market rate units and 40 restricted income units. It will involve the renovation of the historic building to create 26 units and new construction (warehouse look) for the remainder. Rental rates for the market rate units are initially projected at $700 for one bedroom units and $900 to $1,200 for two bedroom units.

The market demand for new units will continue to grow with the increased employment and economic vitality in the downtown area. This demand can be met, however, only if units are available at a range of rental rates at various location with the downtown area.

B. Condominium Market Trends

The downtown Minneapolis condominium market, like the rental market, was strongly influenced by the over building of units in the 1980's. Over 1,500 units were put on the market 1980-1985 and the over supply of units forced the Marquette Place and The Falls to abandon selling their units as condominiums and to rent them as apartment.

The absorption of some of the developments was very slow. A number of them took five to seven years to sell out and the conversion of the Summit House took about ten years. The absorption of units was relatively constant during the 1980's with between 100 and 200 units annually. The initial sale of all the units was completed by 1994, and the only condominiums available since then in downtown Minneapolis have been re-sale units.

The sale of condominium units in the downtown area since 1994 are shown on Table 6. The sales prices ranged from a low of $21,577 for an efficiency in The Towers to a high of $695,000 for a unit in La Rive. The average sales price varied from $55,000 in The Towers and Centre Village to over $190,000 for Loring Green East, Loring Green West, La Rive, and Winslow House. The average sales price per square foot during the three years was $70 per square foot in The Towers, Centre Village, The Crossings, and 1200 Nicollet Mall and over $150 per square foot in the La Rive and Loring Green East buildings. This sales data indicates the wide variety of condominium units located in the downtown Minneapolis in terms of price, size, and location.

The number of sales in the downtown Minneapolis condominiums since 1992, by year, are shown on Table7. With exception of some Summit House units sold in 1992, most of these sales were re-sales. The average of 195 sales annually 1993-1996 represent a turnover rate of 8 percent of the 2,420 units in the listed projects. During the four years, only the Itasca had an average annual turnover rate of over 10 percent.

The average sale price per square foot of the condominiums sold since 1992 are shown on Table 8. As indicated, the square foot prices of the units has been increasing since 1992 in all the complexes. The average increase during the five years was 19.5% with increases of over 12% in all the complexes. The average price per square foot of units with two or more bedrooms was significantly higher than for studio or one bedroom units. The percentage increase in the price per square foot of two bedroom units (23.8%) was also higher than for the studio and one bedroom units (12.8%).

Construction has started on the planned RiverStation condominium project located in the north river area. The first phase of this 360 unit development will include 90 units in three buildings. The complex will have underground parking and will have four floors of frame construction. The units on the lower two floors will be two story units with entrances both from an interior hall and from the outside. The third and fourth floors will contain both flats and some two story units. Prices for these units will range from $95,000 to $165,000 and average about $115 per square foot.

Another planned condominium project involves the rehabilitation of the North Star and Washburn Crosby Mill property in the Mill District. About 85 units are planned in a combination of rehabilitation of the existing buildings and some new construction. The development will include a wide variety of floor plans and view. Prices are projected to range from $130,000 to $600,000 although most of the units are likely to be in the $250,000-350,000 price range.

In summary, the downtown Minneapolis condominium market has recovered from the over building during the 1980's. There are few units on the market; there is low turnover; and sales prices are growing higher. The developers of RiverStation and the Mill District project indicate that considerable buyer interest has been generated in their projects.

C. Townhouse Market Trends

The townhouse portion of the downtown housing market has been a small segment of the total market but is currently the most active. There are presently about 285 market rate townhouse units located in or near the downtown area. These include 163 units in the 3rd Avenue corridor in northeast Minneapolis; 60 units in the Lourdes Square and Marquette developments near River Place; and 37 units in the Greenway Gables development in Loring Park.

The sales prices of townhouses sold 1994-1996 in the downtown area complexes are shown on Table 9. The sales prices ranged from a low of $73,200 to a high of $576,840 indicating the wide range of market prices. The average of the 102 units sold 1994-1996 was $248,639 with an average price per square foot of $126. The four complexes located in the 3rd Avenue corridor in northeast Minneapolis are moderately priced. Most of the units in the other developments were priced over $200,000 with several units over $500,000.

The number of townhouse sales since 1992 are shown on Table 10. As indicated, there were 169 units sold during the five year period. The sales for Lourdes Square, Marquette, The Landings, and the 500 & 600 block of NE. 3rd Avenue represent primarily initial sales with the sales in the other complexes being re-sales.

The trends in the sales prices of downtown Minneapolis townhouses per square foot are shown on Table 11. As indicated, there were substantial increases in the price per square foot in the re-sale of units in the older developments indicating an increasing market demand for townhouse units in or near the downtown area.

Future townhouse development includes the 12 units presently under construction in the 2nd phase of The Landings development and the 39 additional units planned for that development. Rottlund Homes has announced plans to build 96 units on a 5.5 acre site

located between The Landings and the new Federal Reserve building in the north river area. These homes are projected to be in the $130,000 to $185,000 price range. Additional townhouse development may also occur on the site located between The Falls/Pinnacle and the 3rd Avenue corridor along the river in northeast Minneapolis.

In summary, the townhouse portion of the market has provided the most recent activity including the new higher price units and the increasing prices for re-sale properties including luxury units and the more moderately price units in the 3rd Avenue corridor in northeast Minneapolis. Assuming good market support for later phases of The Landings and for the Rottlund Homes proposed development, it is likely that developers will be looking for good sites for future townhouse developments in or near downtown Minneapolis.

D. Summary of Downtown Housing Market Characteristics

The analysis of the absorption and vacancy rates for the individual projects with the downtown area indicates a number of characteristics of the market for rental and "for sale" residential units in the downtown area. Some of the factors affect the share of the overall market which can be attracted to the downtown area and others the share of the market likely to be attracted to individual developments. These are general characteristics and there are likely to be exceptions to each of the characteristics. These characteristics include:

1. Downtown condominiums and rental units cost more than similar units at many other locations.

2. Downtown units are attractive primarily to households with at least one member of the household working in the downtown area. Few person working at other locations, or retired persons, appear willing to pay the 'downtown premium" except for some young or "young at heart" persons attracted to downtown as an activity center.

3. Downtown units are not generally attractive to families with minor children at home.

4. A location on the skyway system does not appear to provide a significant market advantage either for condominium or rental units. Absorption of The Crossings and Centre Village units, which are on the skyway, was slow. The Churchill, which had strong initial fill-up when it had little competition has not been able to charge a premium for its skyway location.

5. Condominium and townhouse units are attractive primarily to "empty nester: and single persons who do not foresee significant upcoming changes in their careers or marital status. The rental units are attractive primarily to younger persons and reflect the mobility of younger adults in terms of employment, marital status, and interests. Rental units are also attractive to persons transferred into the Twin Cities who use downtown apartments as temporary housing.

6. Much of the recent, current, and planned future residential development is located along the Mississippi River corridor. There is considerable activity presently occurring in the north river area and as that area becomes fully developed, it is anticipated that there will additional interest in possible residential sites the Mill District/Milwaukee Depot area.

In summary, the downtown Minneapolis housing market is stronger than that of other cities of similar size. The market includes a wide variety of type, size, price or rental rate, and locational characteristics. This wide variety of housing options contributes to the economic health of the downtown area.

E. Projected Future Market Demand

In the prior downtown housing studies, several economic factors were analyzed in relation to downtown housing demand including income levels, occupation, place of work and age distributions. Of the variables considered, downtown multi-tenant office occupancy was determined to have the strongest correlation with new housing absorption. There is a similar correlation with total office space, including government, single tenant, and medical, but data relating to those uses is not as readily available.

There are several reasons why downtown office space is a good variable to relate to housing demand. First, a large number of office workers are in the targeted demographic groups for downtown housing. Second, many office occupations have higher pay scales, allowing those workers to afford downtown housing and life style. This contrasts with much of the retail, restaurant, entertainment and hotel employment which includes many lower pay and part time jobs. Finally, the convenience of living near one's place of work and avoiding long rush hour commutes is a major reason for downtown living.

The historic relationship between downtown occupied office space and occupied market rate housing units is shown on Table 12. Since 1985, there has been a consistent correlation between occupied office square footage and the number of occupied market rate housing units in or near the downtown area. The number of occupied housing units per one million square feet of occupied office space rose from 262 in 1985 to a high of 290 in 1992. It has since decreased to 276 units per million square feet primarily as a result of the lack of supply of residential units.

The relationship between occupied office space and housing units remained relatively constant even though there were large increase in both the amount of occupied office space and the number of occupied housing units. During much of that period, there was an over supply of available housing which indicates that the absorption during that period approximated market demand and that the additional "product" on the market did not significantly increase absorption.

This analysis indicates that, if there were an adequate supply of housing available including a variety of types and prices or rental rates, there is currently a market demand for about 300 additional market rate units in the downtown area. If 300 more units were currently occupied it would result in a ratio of 290 units per million square feet of office space, a ratio reached previously in 1992 when there were a wide variety of housing units available.

The future market demand of additional residential units will depend upon office absorption. Assuming that an average of 500,000 to 800,000 additional square feet of office space will be occupied annually, it will generate a market demand in the downtown area for an additional 150 to 230 market rate housing units annually.

In summary, Minneapolis has a healthy downtown economy and the continued growth in office employment has generated market demand for additional office space and additional downtown housing. It is anticipated that these trends will provide good market support for downtown housing of various types, location, and price or rental ranges. The proposed study area has a number of good residential sites and, if desired, a good share of that market could be attracted to the Mill District/Milwaukee Depot area.

The strength of the downtown housing market, however, will depend upon the continued supply of new or renovated housing units including rental and "for sale" units in a variety of types, sizes, and rental rates or sales prices. To maximize market support this needs to include low and high rise rental units and townhouse, low rise, and high rise condominium units with sale prices ranging from the lowest market rate levels to super luxury.

Table 3

DOWNTOWN MINNEAPOLIS RENTAL UNIT ABSORPTION
MARKET RATE LUXURY UNITS 1/
1984-1997

Name of complex	Number of Units	Occupancy Date	Number of Units Occupied Dec. 1984	Dec. 1987	Apr. 1990	Aug. 1994	July 1997
Churchill	362	1981	358	334	327	355	362
Pinnacle	158	1984	123	151	150	150	157
Symphony Place	250	1984	250	232	216	230	250
Marquette Place	240	1985		176	220	234	240
One Ten Grant	321	1985		270	304	321	321
River Walk	172	1987		131	158	169	172
The Falls	87	1987		73	80	83	87
DeForest	72	1989			20	69	72
Hennepin Crossing	210	1989			207	202	210
Kenwood Gables	102	1989			70	102	102
RiverWest	416	1989			116	333	416
Wilson Park 2/	370	1993				355	370
Tension Envelope	39	1995					39
Total Units Occupied			731	1,367	1,868	2,603	2,798
Total Units Available			770	1,590	2,390	2,760	2,799
Vacancy Rate			5.1%	14.0%	21.8%	5.7%	0.0%
Average Annual Absorption				212	215	170	65

1/ Includes the newer market rate high rise apartments and the newer or rehabilitated low rise market rate units.

Table 4

DOWNTOWN MINNEAPOLIS RENTAL UNITS
SIZE AND RENTAL RATES - 1997
ONE BEDROOM UNITS

Name of complex	Number 1 Bedroom Units	Square Feet Small	Square Feet Large	Rental Rates Low	Rental Rates High	Median Rent Per Square Foot 1994	Median Rent Per Square Foot 1997	% Increase 1994-1997
Churchill	300	710	800	$760	$990	$1.01	$1.15	14%
Laurel Village								
DeForest	52	800	860	720	845	0.95	0.95	0%
Hennepin Crossing	147	750	920	700	950	0.95	0.95	0%
McNair	62	660	783	755	805	0.96	1.08	13%
Wilson Park	170	616	970	755	1,035	0.96	1.10	15%
Laurel Curve	62	660	783	760	875	0.96	1.14	19%
Kenwood Gables	81	711	857	815	1,040	1.02	1.46	43%
Marquette Place	30	753	753	1,017	1,178	1.16	1.46	26%
One Ten Grant	225	600	811	781	983	1.02	1.25	23%
Pinnacle	73	741	976	850	999	1.04	1.15	11%
River Walk	90	600	700	675	730	0.98	1.12	14%
RiverWest	345	860	1,046	769	1,099	0.96	0.98	2%
Symphony Place	129	691	780	810	995	1.01	1.22	21%
The Falls	47	886	1,419	930	1,550	0.89	1.05	18%
Tension Envelope	31	850	1,000	875	1,000		1.00	
Averages	1,844	720	895	773	1,004	0.99	1.12	13%

Source: Economic Research Corporation

Table 5

DOWNTOWN MINNEAPOLIS RENTAL UNITS
SIZE AND RENTAL RATES - 1997
TWO BEDROOM UNITS

Name of complex	Number 2 Bedroom Units	Square Feet Small	Square Feet Large	Rental Rates Low	Rental Rates High	Median Rent Per Square Foot 1994	Median Rent Per Square Foot 1997	% Increase 1994-1997
Churchill	62	1,150	1,200	$1,125	$1,305	$0.85	$1.03	21%
Laurel Village								
DeForest	20	1,135	1,254	1,100	1,220	0.79	0.97	23%
Hennepin Crossing	63	900	960	1,010	1,220	1.00	1.20	20%
McNair	15	1,022	1,153	1,050	1,240	0.87	1.05	21%
Wilson Park	34	965	1,010	1,020	1,130	0.87	1.09	25%
Laurel Curve	15	1,022	1,153	1,030	1,140	0.87	1.00	15%
Kenwood Gable	21	986	1,112	1,140	1,450	1.00	1.23	23%
Marquette Place	210	1,193	1,286	1,258	2,178	1.05	1.36	30%
One Ten Grant	96	1,065	1,200	1,088	1,398	0.99	1.11	12%
Pinnacle	85	1,044	1,272	1,060	1,370	1.01	1.04	3%
River Walk	82	800	1,065	736	1,035	0.82	0.94	15%
RiverWest	71	1,264	1,358	1,179	1,419	0.92	0.99	8%
Symphony Place	121	1,022	1,172	1,135	1,325	0.89	1.12	26%
The Falls	40	1,205	1,735	1,150	1,550	0.89	0.95	7%
Tension Envelope	8	1,100	1,400	1,100	1,400		1.00	
Averages	943	1,074	1,221	1,103	1,499	0.95	1.13	19%

Source: Economic Research Corporation

Table 6

Downtown Minneapolis Condominium Sales
1994-1996

Building	Number of Units in Project	Total Number Sold 3 Years	Lowest Sales Price	Highest Sales Price	Average Sales Price	Average Size Sq. Ft.	Average Price Per Sq. Ft.
The Towers	500	114	$21,577	$124,500	$54,249	804	$67.51
Centre Village	235	72	30,400	102,500	56,703	783	72.43
The Crossings	305	65	42,000	129,000	70,849	1,019	69.55
La Rive	118	33	93,700	695,000	226,043	1,478	152.97
Winslow House	57	17	139,900	416,260	215,780	2,176	99.18
Loring Way	186	51	56,500	198,000	87,201	1,018	85.68
Summit House	296	60	$30,400	$165,000	$73,162	868	$84.29
1225 LaSalle	181	42	45,500	200,000	98,862	1,208	81.87
1200 Nicollet Mall	134	26	53,800	135,000	83,823	1,170	71.66
Loring Green East	193	40	117,000	554,000	246,253	1,622	151.87
Loring Green West	144	20	91,000	284,500	193,318	1,460	132.44
Itasca	71	31	64,000	268,000	111,865	1,164	96.09
Total	2,420	571	$21,577	$695,000	$102,194	1,078	$94.83

Sources: Minneapolis City Assessor; Economic Research Corporation.

Table 7

Downtown Minneapolis Condominiums
Number of Sales by Year

Building	Number of Units in Project	Number of Sales by Year 1992	1993	1994	1995	1996	Five Year Total
The Towers	500	22	36	39	31	44	172
Centre Village	235	21	17	20	21	31	110
The Crossings	305	34	33	21	31	13	132
La Rive	118	15	9	11	13	9	57
Winslow House	57	10	4	6	6	5	31
Loring Way	186	11	15	14	18	19	77
Summit House	296	63	28	18	19	23	151
1225 LaSalle	181	15	16	20	8	14	73
1200 Nicollet Mall	134	8	10	10	10	6	44
Loring Green East	193	15	18	14	14	12	73
Loring Green West	144	13	13	8	4	8	46
Itasca	71	5	7	10	16	5	43
Total	2,420	232	206	191	191	189	1,009

Sources: Minneapolis City Assessor; Economic Research Corporation.

Table 8

Downtown Minneapolis Condominiums
Sales Price Per Square Foot

Building	1987-1989	1992	1993	1994	1995	1996	Percent Increase 1992-1996
The Towers	$67	$59	$61	$65	$67	$70	18.6%
Centre Village	79	66	68	70	73	74	12.1%
The Crossings	68	64	70	68	69	73	14.1%
La Rive	137	128	153	181	130	145	13.3%
Winslow House	84	83	79	101	98	99	19.3%
Loring Way	79	74	73	79	86	90	21.6%
Summit House	$77	$71	$68	$79	$82	$90	26.8%
1225 LaSalle	68	65	79	76	81	92	41.5%
1200 Nicollet Mall	64	65	69	70	72	73	12.3%
Loring Green East	109	128	150	141	154	162	26.6%
Loring Green West	96	105	124	120	135	144	37.1%
Itasca	85	68	69	95	94	105	54.4%
Total	$93	$82	$90	$94	$93	$98	19.5%
0 & 1 Bedrooms		78	86	82	84	88	12.8%
2 Plus Bedrooms		84	92	101	99	104	23.8%

Sources: Minneapolis City Assessor; Economic Research Corporation.

Table 9

DOWNTOWN MINNEAPOLIS TOWN HOUSES
SALES PRICES 1994-1996

	Number of Units in Development	Total Sold 3 years	Lowest Sales Price	Highest Sales Price	Average Sales Price	Average Size Sq. Ft.	Average Price Per Sq. Ft.
Loring Park							
Greenway Gables	43	9	$170,000	$405,000	$278,056	1,788	$156
St. Anthony							
River Park Townhomes	33	3	$116,000	$132,500	$126,833	1,312	$97
St. Anthony In-Towne	28	1	94,000	94,000	94,000	1,102	85
Townhomes of Citiscape	60	26	73,200	167,500	105,871	1,238	86
500 & 600 Block N. 3rd	40	2	117,000	129,000	123,000	1,332	92
Lourdes Square							
Lourdes Square	40	40	$189,583	$576,840	$318,157	2,367	$134
Marquette	20	14	205,001	344,751	261,324	2,243	$117
North River							
The Landings 1/	60	7	$304,791	$573,941	$428,670	2,763	$155
Total	324	102	$73,200	$576,840	$248,639	1,975	$126

1/ The Landings development is planned for 60 townhouses. Nine are completed and twelve are under construction.

Sources: Minneapolis City Assessor; Economic Research Corporation

Table 10

DOWNTOWN MINNEAPOLIS TOWN HOUSES
NUMBER OF SALES PER YEAR

	Number of Units in Development	1992	1993	1994	1995	1996	Five Year Total
Loring Park							
Greenway Gables	43	6	3	3	5	2	19
St. Anthony							
River Park Townhomes	33	3	8	0	1	2	14
St. Anthony In-Towne	28	1	5	3	0	1	10
Townhomes of Citiscape	60	5	9	9	9	8	40
500 & 600 Block N. 3rd	40	2	21	2	0	0	25
Lourdes Square							
Lourdes Square	40		20	9	8	3	40
Marquette	20					14	14
North River							
The Landings 1/	60					7	7
Total	324	17	66	26	23	37	169

1/ The Landings development is planned for 60 townhouses. Nine are completed and twelve are under construction. Seven of the units were sold in 1996 and two in 1997.

Sources: Minneapolis City Assessor; Economic Research Corporation

Table 11

DOWNTOWN MINNEAPOLIS TOWN HOUSES
SALES PRICE PER SQUARE FOOT

	Number of Units in Development	1992	1993	1994	1995	1996	Five Year Total	% Increase 1992-1996
Loring Park								
Greenway Gables	43	$115	$96	$116	$148	$149	$125	30%
St. Anthony								
River Park Townhomes	33	$73	$72	na	$79	$107	$78	47%
St. Anthony In-Towne	28	59	59	65	na	85	63	45%
Townhomes of Citiscape	60	78	84	79	88	90	84	16%
500 & 600 Block N. 3rd	40	95	88	92	na	na	89	na
Lourdes Square								
Lourdes Square	40		$136	$135	$130	$133	$134	na
Marquette	20					117	117	na
North River								
The Landings 1/	60					$155	$155	na

1/ The Landings development is planned for 60 townhouses. Nine are completed and twelve are under construction.

Sources: Minneapolis City Assessor; Economic Research Corporation

It is projected that the market for new and rehabilitated housing in the study area will continue to grow. Currently, the north river area is the site of much of the downtown housing activity with the RiverStation, The Landings, Creamette Building and the proposed Rottlund Homes developments. Beyond these developments there are few obvious sites for further housing in the north river area.

The study area is the only other large area with good housing sites near the downtown area. It is anticipated that the market support for housing on these sites will continue to grow, assuming the sites are not used for other types of development and that the re-development efforts find suitable uses for the Milwaukee Depot and Train Shed and the other abandoned historic buildings within the study area.

The study area is being considered as the most likely location for the proposed new Minnesota Twins baseball stadium. If built on this location it would have significant impact on the number and type of sites which may be available for new or renovated housings developments. The likely impacts of the proposed stadium on housing include:

1. The proposed stadium and support space will utilize a large area which would thus not be available for housing.

2. The stadium would tend to cut the eastern portion of the study area off from other residential areas as well as the downtown area and make any available sites in this portion of the study area less attractive for housing.

3. There will be increased market demand for available sites for non-housing uses which would take advantage of the activity generated by the stadium

4. The presence of the stadium will likely change the character of future housing in the Milwaukee Depot/Mill District portion of the study area to the types of housing conducive to a younger more active life style than may be developed if this portion of the study area were developed primarily as a residential area.

Assuming the Twins stadium is built on the study area site, there will, therefore, be fewer sites which could be used to meet the continuing market demand for downtown housing.

In summary, it is projected that over the study area will be the next "hot spot" for downtown residential development with a market demand for housing which will intensify after the north river developments are completed. It is anticipated that over the next decade the amount of new or rehabilitated housing developed in the study area will be limited more by the availability of sites and the vagaries of financing for developers or purchasers of "for sale" units, than by market demand. The strength and timing of the housing development in the study area is, however, dependent upon the success of the on going planning efforts to redevelop this important part of the downtown area with housing and other uses.