

GRAIN BELT PARK: URBAN INTEGRATION THROUGH DOWNTOWN BALLPARK DEVELOPMENT

by

AARON THOMAS HIROTA

A Practicum Submitted to the Faculty of Graduate Studies In Partial Fulfillment of the Requirements for the Degree of

MASTER OF LANDSCAPE ARCHITECTURE

Department of Landscape Architecture University of Manitoba Winnipeg, Manitoba, Canada

© Aaron Hirota, January 2005

OUTLINE

1.0 Executive Summary...5

- 1.1 Site Selection...6
- 1.2 Site Analysis...6
- 1.3 Urban Design Framework...6
 - 1.4 Illustrative Site Design...7

2.0 Introduction...8

3.0 Conceptual Framework...12

- 3.1 Baseball...12
- 3.2 Placemaking...16
- 3.3 Urban Design Elements...20
- 3.4 Learning from Present Ballparks...23

4.0 Site Selection...37

- 4.1 H.H.H. Metrodome Site...38
- 4.2 Mississippi River Waterfront Site...39
 - 4.3 Rapid Park Site...40
 - 4.4 Conclusion...41

5.0 Site Analysis ... 42

- 5.1 Districts...42
- 5.2 Built Framework...43
- 5.3 Vehicular Movement...44
- 5.4 Pedestrian Movement...46
 - 5.5 Climate...47
 - 5.6 Synthesis...48

6.0 Urban Design Framework...**51**

- 6.1 Concept...51
- 6.2 Districts...52
- 6.3 Paths and Nodes...54
- 6.4 Vehicular / Pedestrian Interface...55
 - 6.5 Landmarks...56
 - 6.6 Masterplan...57



7.0 Illustrative Site Design...59

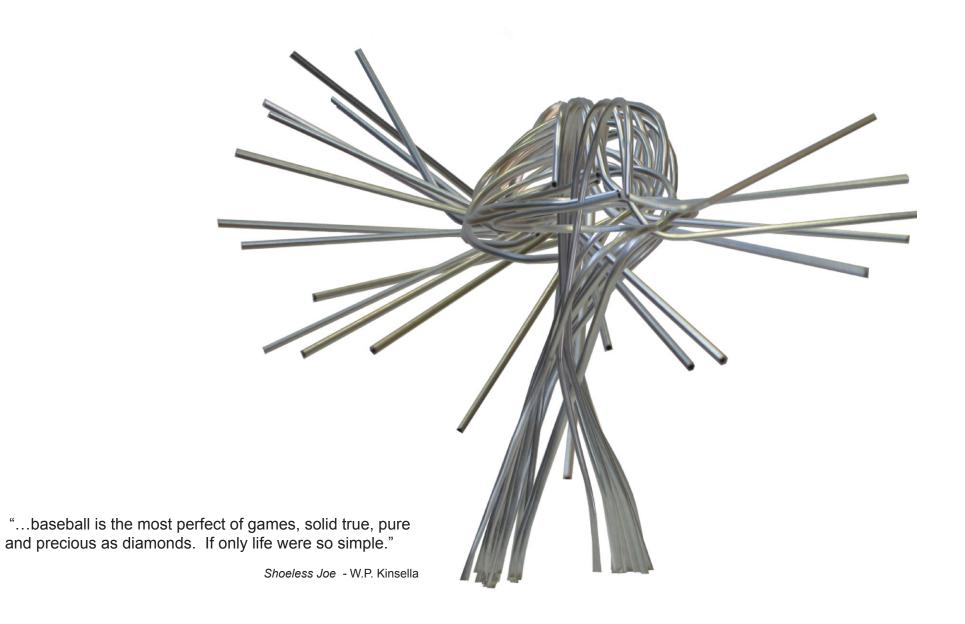
7.1 Grain Belt Park...59
7.2 Grain Belt Square...63

7.3 Detailed Design: SWINGlight...69

8.0 Final Remarks...73

8.1 Summary...73 8.2 Critical Assessment...74





1.0 Executive Summary

The goal of this practicum is to promote urban integration through the design of a ballpark development in downtown Minneapolis, Minnesota. The project focuses on baseball's wide appeal and status in American culture as a catalyst to provide new development and meaningful places in the downtown. The new ballpark and supporting new development are then tested in an urban and site design scheme.

The methodology for this project takes place in two stages: creating a conceptual framework followed by planning and design. The conceptual framework looks at the city and its corresponding spatial components to derive the key tools needed to promote urban integration. These include continuous built form, mixed and intensive land use and sustained and diversified activity. The conceptual framework also seeks to understand the game's stature in America and its influence in American culture. The next phase is to look at the characteristics of the game and at how they could influence the design and development of a downtown through urban and site design. The design uses these characteristics to generate meaningful places in the downtown.

The planning and design section of the practicum takes place in three stages. The first is the selection of the site and to pursue an inventory and analysis of its immediate context. The second stage is to create an urban design masterplan that addresses the opportunities and constraints revealed in the analysis. The masterplan uses a new ballpark together with new built form, land uses and activity to strengthen the urban integration of downtown Minneapolis. The final stage is an illustrative site design of the ballpark, public open space and a lighting element that displays the influence of baseball upon making new places in the downtown.



1.1 Site Selection

The site selection examines actual potential ballpark sites identified by the Minnesota Twins. The objective is to choose a site where a ballpark would have the greatest positive impact on the downtown. The site selection process evaluates three sites in Minneapolis. The sites are judged based on their proximity to the downtown core, their surrounding building densities, and the pedestrian and vehicular activity. The process leads to the selection of a site on the northwest edge of the downtown in an area with high built density.

1.2 Site Analysis

The project uses a framework based on Lynch's (1960) spatial components (districts, paths, nodes, landmarks and edges) to reveal and understand the spatial fabric of downtown Minneapolis. The major obstacle that is addressed in the design is the lack of connectivity between the ballpark site and the downtown. The study area is composed of 4 different districts; each with their own set of land uses, building densities, and character. The 3 major paths in the downtown with the heaviest pedestrian and vehicular traffic do not connect to the site of the new ballpark. The transit systems (bus and light rail) are extensive but do not run to the new ballpark site.

1.3 Urban Design Framework

Baseball laid the conceptual framework for an urban design concept that promoted urban integration. First the design identifies and reinforces the character of the ballpark district through infill development, new built form and supporting land uses. The second step was to create linkages through the strengthening of pedestrian and vehicular movement and the use of appropriate landmarks. The last stage was to create appropriate transitions from the ballpark district and the rest of the downtown.

1.4 Illustrative Site Design

The ballpark and the game of baseball is the focal point for the Entertainment district. Grain Belt Park became the new state of the art home for the Minnesota Twins. Ballpark serves as a major node where the game of baseball originates in the downtown. The design of Grain Belt Park and the adjoining public square are most unique for the ability to open up and allow the game of baseball and its sights, sounds and smells to flow out into the downtown. Lighting elements, called 'SWINGlights', are shaped in a manner to pay homage to the swing of a baseball player. The lights flow out into the downtown and the rhythm of each series of SWINGlights climaxes at the edge of the ballpark.

2.0 Introduction

This practicum focuses on promoting urban integration through downtown ballpark development. The urban integration occurs through the development of a new Major League ballpark set into an existing site in downtown Minneapolis, Minnesota. Baseball is the theme used to promote urban integration. Its popularity and importance as an icon in American culture are used to influence the creation of meaningful places and new development. The creation of a ballpark becomes a catalyst for new built form and development in the downtown.

The approach to this project consists of a site selection, site analysis, urban design and site design. The methodology for this project begins with creating a conceptual framework. The framework begins with exploring baseball's cultural importance in America. This is followed by looking at place theory and how baseball culture can be applied in this context. The spatial components that are used to analyze the city are introduced as tools to conduct the site analysis and urban design. The framework concludes with building strategies, opportunities and constraints using recently built major league ballparks in other downtowns in North America as working examples.

The methodology continues with the selection of a site in downtown Minneapolis that is best suited for promoting urban integration. The site is selected using criteria developed from the conceptual framework. This is followed by a site analysis using the spatial component tools to highlight the opportunities and constraints of the study area. The end result of the project leads first to the creation of an urban design. The urban design is a framework and masterplan influenced by baseball and the new ballpark as well as the opportunities and constraints from the analysis and the conceptual framework. This is followed by an illustrative site design. The design reveals small scale design interventions that reflect the project's emphasis on the game of baseball. The site design creates images of the places that whose creation is influenced by the game of baseball.



Historically ballparks were an integral component to downtown. Entertainment venues such as ballparks were an essential part of an exciting and vibrant city. During this period ballparks supported the greater city as part of the entertainment district. These ballparks also spawned their own supporting land uses. Surrounding ballparks were often restaurants, pubs and public transportation hubs. Public transportation was especially important for downtown ballparks making getting to and leaving games convenient for the masses.

From the 1990's to the present, new ballparks returned to the downtown landscape. These new stadiums were built on vacant or unused lands. The original strategy for building new ballparks downtown was that they would be catalysts for downtown revitalization: "...the trend will definitely continue of integrating sports, retail, entertainment, office, and residential uses to create destination attractions that act as a catalyst for downtown revitalization." (Braun, 1999) However ballparks were revealed not to be the keystones of a downtown that they were promised to be. This would hold most true with the example of the Hubert H Humphrey Metrodome. Minnesota stadium organizers argued that a downtown stadium would be an economic benefit to the businesses in the area and would generate activity downtown (Klobuchar, 1982). It was assumed that the stadium would draw new development to a largely barren part of the downtown and spark revitalization to the rest of the downtown. Yet today, 20 years later, there is little to no activity in the immediate area of the Metrodome, even during gamedays. Much of the land surrounding the stadium still remains as surface parking.

Present day ballpark projects, such as those discussed in section 3.4, are planned with the historical approach of supporting an established downtown core. They are also part of a larger network of destinations. These destinations are created by new infill development. This infill development also creates continuity in the built form of the downtown. The new construction uses complementary land uses to support the new ballpark. The supporting development helps proliferate activity in the downtown.

Urban integration is the unified relationship between the built environment and the activity that supports it. It is supported by continuous built form, diverse land use and sustained activity within the downtown. Trancik (1986) supports this idea remarking that the process of urban integration: "...combine the spatial definition of the figure-ground theory with the connective qualities of the linkage theory and the social responsiveness of the place theory." These three theories form the method that will serve to promote urban integration here.

When activity is supported by built form, it creates identity in the downtown. Hough (1990) remarks that:

"Identity in the urban center is based on the continuity of the built environment – a matrix of built form. Urban spaces, squares, parks, streets, and the ways these are linked is the organizing framework. The life and activity of this fabric is nourished at its edges by shops, cafes, cultural and commercial activities."

The key to this framework of built form is its continuity. Urban integration cannot be achieved without the matrix of built form alone however. The built form is only a framework and must be supported by land use.

Also crucial to urban integration is the prevention of a monoculture of land use occurring within one area. For instance the land use surrounding the Metrodome in Minneapolis is surface parking, which does little to generate activity. Promoting mixed-use development would help prevent this singular use activity from happening. Mixed-use development is a land use strategy that would help to strengthen integration in the downtown:

"The traditional separation of land uses must now give way to new types of mixed-use districts, which will encourage retailing in office buildings, for example, or manage the transition from industrial to residential use." (Barnett, 1982)

Mixed-use development could be part of the solution to create activity in the areas surrounding the ballpark and in the downtown in general. Lozano (1990) notes that: "Land uses must be designed to increase linkages: One activity produces what another needs; the grouping of some activities generates still others." This would suggest that mixing land uses would generate activity in surrounding areas when the ballpark is not in use and generates activity without having to rely on one particular land use. Further to the idea, the ballpark could generate new land use and activities that may not have been present before in the area, and may also help generate increased activity to the existing businesses, shops, restaurants and open spaces already close to the ballpark.

The key tools to promote urban integration will include continuous built form, mixed and intensive land use and sustained and diversified activity. The addition of built form in an existing downtown will create infill. The infill will help bring continuity to the downtown and create added activity from increased land use. A new ballpark would have a large impact on urban integration by influencing the creation of new built form, supporting land use and activity.

Finally, the promotion of urban integration is also dependent on place theory. Sustained and diversified activity is generated by meaningful places. This practicum addresses baseball as having the ability to provide meaning to a place. Baseball is America's past time, an American cultural experience that belongs in the heart of the American city. This practicum reveals baseball as an integral part of the downtown experience. Baseball is the common element working between the urban and site design.

3.0 Conceptual Framework

3.1 Baseball

This project uses the game of baseball as the critical element to achieve urban integration. The game links the urban design, built form, activities and users together in a meaningful way. The meaning of baseball expands beyond the game itself to include everything from the players on the field, to the sight of the mascot, to the smell of hot dogs in the air. In other words, the experience of baseball is made up of both the game and the peripheral activities occurring inside and around the ballpark. Equally important to baseball is its connection with the fans. The fans are responsible for making a ballpark into a part of the city. Understanding who will most frequently be experiencing the game and why they appreciate the game indicates the type of influence baseball has on American culture.

This section is separated into 3 parts: the Ballpark, the Experience, and the Game. The three together sound like the something out of the classic baseball poem entitled "Baseball's Sad Lexicon" about the once famed Chicago Cubs infield: Tinker to Evers to Chance - Ballpark to Experience to Game. Like the famous double play combination of the Cubs, each section represents a unique yet equally important aspect of the game of baseball that is covered by the literature. The ballpark portion describes baseball's relationship with the city. Its literature describes why the city and baseball should work together to promote urban integration. The game portion demonstrates how the fan views baseball and how the game itself is only part of what makes the experience of baseball so appealing. The experience portion discusses the fans draw to the event of baseball and the literature explores the broader appeal of baseball in American culture.

The Ballpark

Baseball has long been considered America's pastime. The game was created in America and seemed to follow in the country's footsteps. The game had its humble beginnings around the time of the Civil War (Neilson, 1995). As cities grew, so did the game



of baseball. At the height of city growth in the early 20th century, baseball too, reached new heights as ballparks developed into modern palaces in the heart of the city. Today as cities try to revitalize their downtowns, ballparks too have made their return to the downtown:

"...they have reopened the box with its emerald center to the surrounding city, which is the historical locus of the professional game. The dialogue between the life within the ballpark and the life without, that dialogue so rich in the metaphors of our national identity, has been rejoined." (Neilson, 1995)

Building a new ballpark in downtown Minneapolis would be a return of baseball to the core. Not since the days of Willy Mays and Ted Williams playing for the minor league Minneapolis Millers has there been baseball in downtown Minneapolis. Ballparks integrating into the community are not a new idea as early professional ballparks in the early 20th century have shown:

"Each of these ballparks, rather than being conceived as a free-standing object in its own space, is part of a continuous web of facades of similar materials, forming blocks, linked by streets, woven into neighbourhoods. These new parks were not only urban but urbane acknowledging the pre-modernist principle that cities are (or should be) a continuous fabric of harmonies and resonances, not an assemblage of isolated monuments." (Neilson, 1995)

Ballparks were part of the everyday environment of the downtown. They blended into the mixture shops, offices, and living spaces of the urban centre.

The Game

Further to the idea that Baseball should be appreciated as an overall experience, literature also reveals that the game itself should be looked upon in a similar manner. Baseball is a game filled of short episodes. The game is not one continuous play; it is split up by innings, half innings, batters, and even each individual pitch. Each story or episode has its own background, build up and climax, only to end with each new batter stepping up to bat. It is in between these episodes that baseball gives the fans opportunity to converse, or look around and take in the imagery of the game or its environs.

When you read the work of W.P. Kinsella there is a poetic beauty in how he describes an individual episode of a game:"The bat cracks and a ball soars up, glints across the moon's eye, and disappears over the right-field wall." (Kinsella, 1982)

This passage appreciates a single moment of a game, a 5 second instance that is part of the greater whole. The same can be said about the game as a whole as Farrell (1957) describes:

"We like the atmosphere of a ball park, the practice sessions, the warming up of the pitchers, the moment when the home team runs out onto the field for the first inning, the sound of the crack of the bat, the alternating moments of rest and action, the ball arching out to a fielder, or else lifting, rising and disappearing from sight as it goes out of the park, the thrill when a catcher receives a fast ball - briefly, we like baseball."

Here baseball extends beyond the 9 innings of play. It demonstrates how fans also choose to celebrate events before the game, instances that occur in between innings and even the events after the game. In both cases, the game of baseball is celebrated through a series of moments. As quickly as a ball leaves the outfield for a home run, the moment is gone. These are short moments that are assembled together to create an entire game. With each short episode or moment there is a period or rest, when a pitcher will walk back to the mound, or a batter will slowly make his way to home plate, and with these breaks we anticipate the next moment to occur at the game. In the upcoming design sections, there should be exploration of how we can design to emphasize the expressions of these individual moments that make up the game.

The Experience

Millions of fans pass through the turnstiles to attend major league baseball games every year as an act of leisure, or more appropriately a pastime. They love the game of baseball. Yet some would believe that the fans love of baseball transcends the game itself and is part of a larger experience. Souster, a Canadian poet, looks at the experience in one of his works:

"But believe it or not all of this didn't really matter to the two of us dyed-in-the-wool baseball nuts. It was more than enough just to be there in that place, to hear the crowd hum, crowd roar, the cheers, the boos of the twenty thousand fans...." (Souster, 2002)

What Souster suggests here is that the experience of attending a game is greater than watching the game itself. Nowhere in his poem does he mention who won or lost the game nor does he talk about one individual's efforts from the game. The poem emphasizes the baseball fans love of attending baseball games, enjoying the experience as a whole.

We can expand further into the experience of the game again through Kinsella's character Ray's own ideas of baseball in *Shoeless Joe*:

"I'll tell him of the warm-ups, of the home team in their white uniforms doing calisthenics and wind sprints like fast-flying sailboats on a green sea. I'll make him smell the frying onions and hear the sizzle of the hot dogs, and I'll tell him of baseballs scattered like white oranges on the outfield grass. I'll walk beside him as if I am a bottle of blood swinging from a gray enamel standard. I'll pierce a vein and feed him the sounds, smells, and sights of baseball until he tingles with the same magic that enchants me." (Kinsella, 1982)

Kinsella describes the game transcending the visual elements and equally celebrates the sounds and smells of the game.

Can all three senses: sounds, smells and sights of baseball somehow be incorporated into the strategy for urban integration?

Certainly by expanding the idea of baseball beyond that of a visual experience there should be plenty of opportunities to extend the game and its sensory experiences into other areas of the city.

Conclusion

A downtown ballpark development needs to channel baseball's influence on American culture to promote urban integration. The literature reveals three manners which baseball can be used. The first is the ballpark becoming part of the continuous fabric of the community which they reside in. The ballpark should not be an isolated object; it is best served being a part of the everyday life of the downtown much like the past. Second, baseball can influence the city by emphasizing the unique rhythms and episodes of the game into the urban and site design. Lastly the design should look to explore opportunities to expand the experience of the game well beyond the ballpark. The experience of baseball is not limited to the playing field and can be looked at as a tool to expand the game's influences further into the city.

3.2 Placemaking

In this project, the term 'placemaking' refers to the creation of meaningful user experiences through the expression of baseball culture in the build form.

Placemaking generates meaning, a critical link between built form, experience and culture:

"Place-making derives meaning from the qualities of a location and its surroundings as it envisions capitalizing upon the potential of their attributes...Meaning is given through comprehending our human condition as expressed by the drama of our actions performed upon the stage of these places." (Robinson, 2003)

In this practicum, placemaking is not driven by the active participation of users in the design process but rather created from the interaction between baseball and design. The game's cultural significance in America is a catalyst that drives the promotion of urban integration. Since baseball is an important element in American culture, it can



Conceptual Character Collage

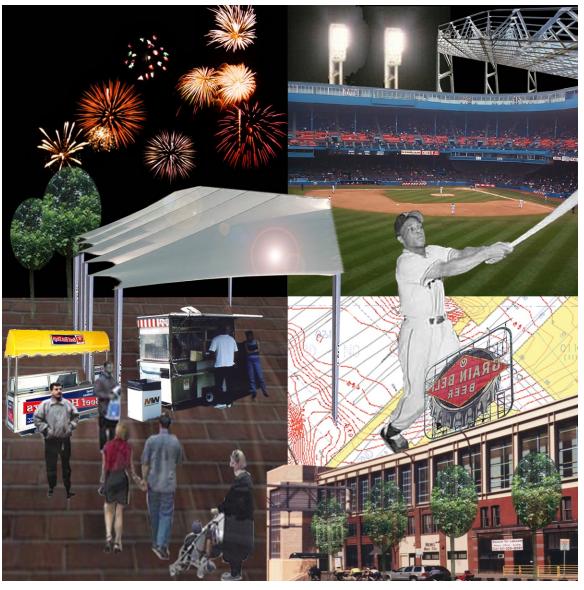
be assumed that people will be attracted to these new spaces.

Using the game to drive placemaking is possible due to baseball's importance in American culture. Baseball generates high levels of activity from pre and post game activity around the ballpark including vehicular and pedestrian

traffic, entertainment, vendors, and ticket sales. The game also has its own unique aesthetic qualities that provide baseball with its identity. These are the elements that provide significant meaning to the game for the fans, who make frequent visits to the ballpark and its surroundings. The combination of baseball, the new design and the participation in these spaces by baseball fans is what promotes integration.

Aesthetics

The aesthetics of baseball provide a framework to introduce meaning in the project. The aesthetics can be comprised of the characteristics of the game, both physical and emotional (as described in the previous chapter) and apply them towards detailed design. The aesthetics of baseball applied to the site design can further promote urban integration. For instance, applying aesthetic details relating to the game to places in and outside of the ballpark begins to unify the entire area through the theme of baseball.



Conceptual Character Collage

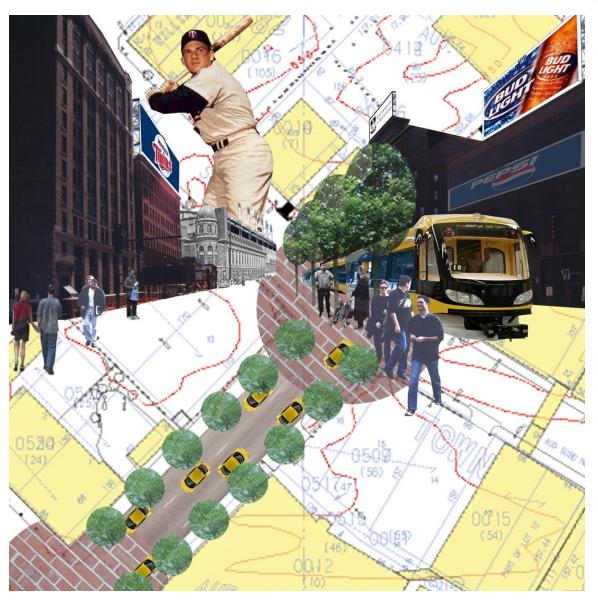
Unfortunately the aesthetics of stadiums are often compromised by the massive costs of construction. A book written by the John and Sheard, principals of HOK sport, one of the largest architectural firms dedicated to the design of sports facilities, does not give a flattering description of stadiums themselves:

"...sports stadia tend to be lumpy agglomerations of elements that are out of scale with their surroundings and in conflict with each other, and often harshly detailed and finished." (John and Sheard, 2000)

These stadiums lack aesthetics in the design that would have made a difference in their ability to become better places. A new ballpark could look to match predominate materials, forms and orders of its surrounding context to give added meaning to the building. The new ballpark would be promoting urban integration by adding meaning through caring about the existing context.

Open Space

Open spaces allow for interaction to occur between built form and users. The influence of baseball on the built form generated through site design and aesthetics transmits meaning by its interaction with the users. Ballparks are gathering spaces for thousands, and as such is an opportunity for

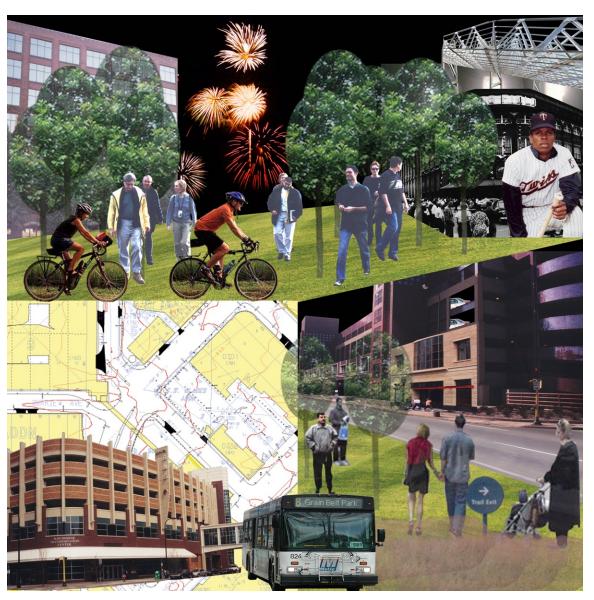


Conceptual Character Collage

public interaction. The downtown is Public open space can become a wonderful addition as a meeting place for ballpark patrons as well as multi purpose space when there are no activities at the ballpark.

Marcus and Francis (1990) further suggest that the successful urban open spaces such as squares have a wide range of uses: "Indeed, according to observation studies of modern plaza use, sitting, standing, walking, and their combination with eating, reading, watching, and listening account for more than 90 percent of all use." The wide range of uses in the open space only provides a base for activity to occur. The game of baseball influences the use of the open space. However, the users that interact with the open space are drawn to the open space more from the game's influence on the space rather than its wide range of uses.

The location of the open space will also be a key consideration. In order to design for specific uses any open space, an investigation must uncover how the location might affect how the square is even used. In a study of urban open space in Minneapolis, Chidister shifted focus away from the design of squares and placed the attention upon the land uses surrounding the open space as the reason for the success or failure of such open spaces:



Conceptual Character Collage

"...the best used plaza was in the area of greatest land-use diversity. This suggests that future plazas have the greatest chance of being used when they are in the midst of areas with large worker populations, many places to eat lunch, and places to shop." (Chidister, 1986)

Having a square linked to the ballpark provides effective open space before and after games. However the integration of the ballpark with its surroundings as well as the land use of those surroundings will be a major determining factor as to if any open space will have a larger effect upon a ballpark district other than the localized use by the ballpark itself.

Conclusion

Baseball's importance in American culture can provide a meaningful bond between the urban design and the detailed site design in this project. It is through this bond that the game can provide meaningful places for the fans that will come downtown to attend ballgames. The identity of the game and the high levels of activity generated by it justifies baseball's role in placemaking.

Placemaking also uses the aesthetics of baseball to further introduce meaning. The site design can benefit from using characteristics of the game of baseball and apply them through aesthetic interventions throughout the study area. The public interaction generated by the new open space is another act of placemaking. The new open space allows for the users to interact with the built form. Its introduction provides another place whose design is influenced by the game of baseball.

3.3 Urban Design Elements

The following section will explore the main urban design methodological framework used in this project. Lynch's (1960) spatial components of Paths, Edges, Districts, Nodes and Landmarks are used to analyze, understand and improve the built form and urban fabric of the study area. Lynch's 'Image of the City' serves to help understand the fabric of the city by breaking it down into basic components. They can also be combined together to both reveal relationships and conflicts. The result is an image that is created by clarifying the urban built form through these 5 components.

Paths

Paths are described by Lynch (1960) as: "...the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, sidewalks, transit lines, canals, railroads. For many people, these are the predominant elements in their image." The paths channel movement in a city. Images of the city are created by the experiences of moving along these paths. Bacon (1976) describes the connected relationship between paths and the city as follows: "Movement through space creates a continuity of experiences derived from the nature and form of the spaces through which the movement occurs." The experience of movement from an area will be affected by the nature of the area itself. If the paths to the ballpark run through areas of the city that are disconnected then the path itself and the experience of walking along it will also feel disconnected. Urban integration would stitch areas together, which in turn would make traveling along paths within these areas as a continuous experience.

One inevitable issue that occurs with the construction of a new ballpark is an increase of pedestrian and vehicular traffic before and after events. Congestion on the existing downtown grid of streets could be cause for concern. The question is whether pedestrian and vehicular traffic should be segregated to ease the problem. How would the segregation of traffic types affect the city on days without events at the ballpark? Marcus and Francis (1990) remark: "Unfortunately, in all too many instances the expulsion of traffic did not lead to an influx of happy pedestrians, and the resulting sparsely populated expanses of paving only fueled the impression of an abandoned downtown." One solution to the traffic congestion are to have ballparks placed near a major highway or freeway to help ease traffic in and out of the downtown before and after games.

Another issue to deal with in Minneapolis is a long standing argument about its skywalks also known as above ground indoor walkways. A new ballpark with a retractable roof would benefit from having skywalk connections for poor weather days when ordinarily games would be cancelled in an outdoor stadium. Fans can conveniently move from the stadium to the

downtown or to the parking garages without having to experience the poor weather first hand. One half of the argument suggests that Skywalks are a product of severe climate. The other half of the argument suggests that skywalks help to further segregate vehicular traffic and pedestrian traffic and eliminate street life.

Districts

Districts are the largest spatial component as part of Lynch's "Image of the City". Lynch defines districts as the following:

"...the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters "inside of," and which are recognizable as having some common, identifying character. Always identifiable from the inside, they are also used for exterior reference if visible from the outside." (Lynch, 1960)

An important question that arises from the urban design of this project is what will be the unifying character that helps to bind together the ballpark and its surroundings into a cohesive district. What are the characteristics that can make up a district? Lynch identifies "texture, space, form, detail, symbol, building type, use, activity, inhabitants, degree of maintenance, topography" as a few examples of characteristics that are used. Certainly for a new ballpark to have a role in urban integration, it should also be a part of a greater district, where the identifying characteristics become part of how the ballpark and the rest of the area integrate together.

Nodes

Lynch defines nodes as smaller areas of equal importance that may appear:

"Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is travelling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simply concentrations, which gain their importance from being the condensation of some use or physical character, as a street-corner hangout or an enclosed square." (Lynch, 1960)

The ballpark would be the most important node in this project. It would serve as the focal point for the entire district. Therefore

the major concern would be to have other nodes in the area become more prominent than the ballpark itself thus taking away the focal point of the entire district away. Also paths and breaks in transportation would also play an important role in this project by identifying the existing the transit / pedestrian interface nodes in the district and their proximity to the ballpark.

Landmarks

Landmarks are important wayfinding elements in a city. These elements would help to define a place and help set it apart from other areas of the city:

"Landmarks are another type of point-reference, but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object: building, sign, store, or mountain. Their use involves the singling out of one element from a host of possibilities." (Lynch, 1960)

Lynch continues to discuss landmarks as unique elements within a common setting that must stand out from their context in order to be effective:

"Landmarks become more easily identifiable, more likely to be chosen as significant, if they have a clear form; if they contrast with their background; and if there is some prominence of spatial location." (Lynch, 1960)

Contrast serves as the key tool to make landmarks effective. Without the contrast between the landmark and its setting, the landmark would become lost within the greater context. Another key to a successful landmark would be the need to have a strong unified context, such as a district or node. Promoting urban integration in this project would help to strengthen the contrast between context and its landmarks.

Edges

The final urban design elements to explore are edges. Lynch (1960) explains:

"Edges are the linear elements not used or considered as paths by the observer. They are the boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. They are lateral references rather

than coordinate axes. Such edges may be barriers, more or less penetrable, which close one region off from another; or they may be seams, lines along which two regions are related and joined together."

Edges serve as defining elements that help contain the other urban design elements as part of a cohesive whole. To this extent Lynch suggests that: "...edges seem to play a secondary role: they may set limits to a district, and may reinforce its identity, but they apparently have less to do with constituting it." As a minor element, edges can best serve as transition areas or points between districts.

3.4 Learning from Present Ballparks

Presently the Minnesota Twins play out of the Hubert H. Humphrey Metrodome. Completed in 1982, it is considered by fans and players alike to be one of the worst ballparks ever used by a Major League team. The field has an odd awkward shape and the off-white dome roof which is the same color as a baseball makes it difficult for fans and players to see the ball. Minneapolis can learn from other cities to produce its own "instant classic" ballpark. Each of the five ballparks reviewed in this section produce a number of important lessons in both ballpark and urban design. These five ballparks were all constructed during the "Ballpark Boom", the most recent high point in new ballpark construction.

Oriole Park at Camden Yards – Baltimore, Maryland

Oriole Park at Camden Yards changed the way modern ballparks were designed. This 48,000 seat ballpark is home to the Baltimore Orioles of the American League. First opened in 1993, Camden Yards' intimate, retro-styled ballpark immediately became the standard to which all new ballparks are judged by.

From the beginning the Baltimore management wanted to have a traditional ballpark. The Orioles hired sport venue architects HOK Sport to design the park and its surroundings. HOK's last stadium design was the now infamous New Comiskey Park (now US Cellular Field) in Chicago. The stadium is a stark contrast from what Camden Yards turned out to be with its massive concrete structure and lack of an urban design plan. Orioles then President Larry Lucchino did not want to build another Comiskey and pushed for a new concept for his own ballpark. What Lucchino wanted was "...an "old-fashioned" baseball-only park with irregular dimensions, exposed steel structure, and intimate seating that hugged a real grass field." (Prowler, 1992)

The Orioles looked to the past in order to build a modern ballpark.

Gone are the mass amounts of concrete creating the overall structure and the grandstands that are all too predominant in other new ballparks built in the same era such as Comiskey Park and Skydome. In its place are the exposed steel

This item has been removed due to copyright issues. To view it, refer to its source.

Camden Yards open space adjacent to the ballpark

columns that both pay homage to ballparks of the past and give a structural lightness to the ballpark that helps to bring the massive structure to a more human scale and make it much more aesthetically pleasing. Inside the park fans are treated to improved sightlines with seating closer to the field. Even the field of play is reminiscent of the past as players run out onto an asymmetrical field and score is kept on an old fashioned manual scoreboard. Orioles management, in particular then President

better concessions, club seats and luxury suites.

The design for Camden Yards sought to change the perception of the modern ballpark. One key element of the design combined public open space with the ballpark design:

"The warehouse led to the creation of the Eutaw Street corridor, the walkway between the warehouse that houses Boog's Barbecue and other stands and places where people like to congregate." (Loverro, 1999)

This new plaza is a wonderful new space that integrates views into the ballpark with pedestrian movement. However this space poses a major problem for the ballclub as it provides more than just a glimpse into the ballpark. Though it provides a wonderful opportunity to view the ballpark, the design of the plaza also prevents the casual pedestrian from getting even a glimpse of the experience of a ballgame by closing the corridor to the public during games. (Loverro, 1999)

Unfortunately the limitations of this scheme produces a semi-public place that could never be part of a larger open space system, nor could it be a major pedestrian artery, except for those users of the ballpark proper who would use this route to enter and exit games. Although from the perspective of a fan sitting in the stands, the design gives the appearance of trying to open up and reveal the neighbourhood in much the same way that ballparks from the past would do:

"By happy accident, an old brick warehouse adjoins the site, enabling a spatial and material relationship between old and new." (Pastier, 1995)

tris item has been removed due to copyright issues. To view it, refer to its source.

Fencing preventing entry to ballpark and open space

Past ballparks such as Crosley Field in Cincinnati and Griffith Stadium in Washington D.C. had odd shapes and provided views outside of the ballpark only because there was no more room available to expand outwards. Camden Yards is very much a modern ballpark with new amenities that in the end produce a footprint much larger than those former stadiums. Items such as the B&O Warehouse provide more of a visual interest for those attending the game and only appear to be a physical constraint to the ballpark.

It is not appropriate to say that the warehouse is only a visual element for the ballpark. It is also part of a larger urban plan prepared as part of the ballpark design. While still looking to the past, the ballpark looked to emulate traditional ballparks that fit nicely within existing neighbourhoods. The team used urban design in an attempt to create a ballpark neighbourhood like the historic Fenway Park in Boston and Wrigley Field in Chicago. The ballpark would be the cornerstone of a neighbourhood at the edge of downtown Baltimore:

This item has been removed due to copyright issues. To view it, refer to its source.

The form and materials of the ballpark fit in with the surrounding neighbourhood.

"It□

of the ballpark by forcing architects to come up with a ballpark that would fit inside a tight urban area, particularly after the decision was made to save the B&O Warehouse." (Loverro, 1999)

Fitting a ballpark in an urban context was certainly against the grain of modern ballparks. This plan however did not have to

the request of Major League Baseball. (Loverro, 1999) Certainly having a new ballpark in an urban environment provided a large concern to traffic planners and to Major League Baseball to have the ballpark built with additional parking. What occurred when Camden Yards opened surprised many as "...the Baltimore Sun reported that approximately 35 percent of Camden Yard's customers took public transportation to the first game held at the park...This is nearly twice as many as traffic planners had expected..." (Prowler, 1992) In the end the ballpark and its urban design provided a spark to the neighbourhood moulding it into an entertainment district supported by the ballpark:

"Located an easily negotiable ten minute walk from the heart of Baltimore's Inner Harbor and downtown, the park is embedded in the city, drawing from and adding to its mercantile vitality." (Prowler)

The large amounts of pedestrian traffic being produced from the public transit and the draw from the downtown and harbour, the design of the ballpark reflected the need for human scale:

"Using steel framing to give the ballpark a lightness that could not be achieved with a concrete upper deck. Also the use of brick and stone in the facades are a clear attempt to work within the context of the site, with similarities to the warehouse in right field and the nearby train station. This attention to detail helps to give the ballpark human scale" (Gunts, 1992)

Along with the detailing of the ballpark, the simple fact that the field level of the ballpark is sunken, allows fans to enter the park at concourse level. The architects also had some of the upper deck seating pushed back from the street that again gives the impression that the ballpark is smaller and shorter than it is in reality.

Jacobs Field - Cleveland, Ohio

The city of Cleveland is undergoing a renaissance in the downtown. At the helm of this renaissance is the development of two new stadiums, one for the Indians baseball club and the other for the Cavaliers basketball club. Jacob's Field and the Gund Arena were built together upon a 28-acre piece of land. Gund Arena is a 20,000-seat complex that houses NBA basketball games, AHL hockey and other special events. Jacob's field is a spacious 42,000-seat outdoor ballpark oriented to look onto the city skyline. First opened in 1996, the two facilities form a large sports and entertainment complex:

"The ballpark and arena, along with two parking structures totalling 3,200 cars and 8.5 acres of public open space, form Cleveland's Gateway, a 28-acre, \$392 million multipurpose complex. Planned to accommodate 81 major league baseball games and 41 NBA basketball games annually, Gateway also will host other sports events, concerts, and family entertainment or convention events for a total of more than 250 activities each year." (Hirzel, 1993)

Behind the success of the Cleveland Gateway are the owners, developers and city officials who had the foresight to hire the SWA group to make the Gateway a cohesive whole. The firm developed an urban design masterplan for the entire Gateway

complex that formed a vision of the site and the city working together. Although the SWA group did not design the Gund Arena and Jacob's Field, they ensured that the development of the two stadiums held true to the master plan.

Perhaps the most important part of what makes the urban plan for the Cleveland Gateway a success is that it does not rely on any one singular activity or structure to thrive. This is despite the fact that the Gund Arena and Jacob's field together take up the vast majority of the site. What the urban design does is identify both the existing uses of the surrounding neighbourhood and the new opportunities that come for the addition of stadiums. The new opportunities created by the addition of two new sports facilities would include new parking structures, restaurants, nightclubs and other entertainment venues, and other mixed use developments.

This item has been removed due to copyright issues. To view it, refer to its source.

At present date the remainder of the site has been developed to accommodate a variety of usages. There are parking structures on site that can provide for 3200 vehicles. The site also provides a walkway for commuters to the transit hub only two blocks away. One of the keys to the success of this urban design plan has been a system of routes

р□

Cleveland Gateway masterplan

parking areas are all located within a short 5 to 10 minute walk. The pedestrian traffic is kept separated from the vehicular traffic by closed corridors and interconnected public open space.

for transit, vehicular and pedestrian transportation systems. The pedestrians benefit the most from this master plan. The tight

The public open space was actually part of the SWA Group's guidelines that were created as part of the overall design to accommodate the need for human scale that also included "...hundreds of small urban design ideas about views, materials, dimensions, entrances and exits." (Dillon, 1997) Jacob's Field and the Gund Arena both have their playing surfaces sunk into the ground. The shear size of the two stadiums has been diminished for human scale. This also allows the main concourses of each stadium to be at ground level for easy access. Other buildings on site had to conform to building height guidelines. Buildings of a certain height were required to produce setbacks to bring the buildings down to a more human scale and allow natural light into neighbouring pedestrian corridors.

The Gateway's narrow pedestrian corridors serve as transitory areas while the open spaces that connect these passageways become destinations or nodes. Then again, the type of forms that the SWA Group has created for the Cleveland Gateway follows suit with their own image for the city that as Simo explains:

"The city is still viewed as a place in need of structure, patterns, contrasts, and a powerful, memorable image. The city is still a place where one tries to create sequences of spaces and views, to be experienced at human scale, on foot, as well as on the road or from the air." (Simo, 1997)

The Gateway is located at the edge of the downtown. It serves as a major entry point and visual landmark for motorists entering into Cleveland's downtown. The urban design allows for the easy entry and departure of crowds coming to major events preventing any major traffic congestion in the downtown core. New parkades are also placed near exits to the freeway.

This item has been removed due to copyright issues. To view it, refer to its source.

Pedestrian corridor adjacent to the ballpark

Also incorporated into SWA's urban design plan is Cleveland's existing high speed transit. The SWA plan focused on with the nearest station being a short 10 minute walk from the Gateway. SWA recognized the need to have transit closely associated with major sporting facilities to easily transport fans to and from the Gateway. Major pedestrian routes were organized with access to the Transit system in mind.

Although the Cleveland Gateway is a great example of the marriage between sports facility design and urban design, it is not without its difficulties.

Despite the convenience of public transportation nearby, there are still large contingents of people who drive to the gateway. The demand for parking at the gateway has increased greatly and the land slated for infill development has become more valuable as surface parking.

Skydome - Toronto, Ontario

Skydome, located in Toronto, Ontario is a multi-functional stadium that is home to Major League Baseball's Blue Jays and the Canadian Football League's Argonauts. The stadium has also been the short term home of the National Basketball Association's Raptors for 4 seasons until the team moved into their current home, the Air Canada Centre. The stadium, designed by Canadian architects Rod Robbie and Michael Allen, opened in 1989 and holds approximately 50,500 for baseball.

Skydome was the first in a wave of new major league ballparks to be built in the last 15 years. It was the first new stadium built for a Major League Baseball team since the HHH Metrodome opened in Minneapolis in 1983. The Skydome is an important precedent in ballpark design for two reasons. The first is the location of the stadium. Skydome is located in downtown Toronto, a move to bring back stadiums to the city core instead of wide open tracts of land with massive surrounding paved parking. Skydome is also located in a major tourist

This item has been removed due to copyright issues. To view it, refer to its source.

Aerial view of Skydome and the CN Tower

area with several key attractions nearby including Roy Thomson Hall, CN Tower, the harbour front and the convention center. All together, these elements provide a formidable urban entertainment district all within walking districts. The stadium help spur on more development. In fact Freedman explains that "Skydome has spawned an entire district of bars and restaurants around it…" (Freedman, 1989)

It is more probable that it was the combination of all the attractions in the area that helped lead to the successful creation of new bars and restaurants.

Skydome is also known for its famous (or infamous) retractable roof. Prior to the construction of Skydome, new stadiums were built either as open-air facilities like Kansas City's Kaufmann Stadium or fully enclosed domed facilities like the HHH Metrodome or the former Kingdome in Seattle. Skydome provides the pleasures of an open-air stadium on warm, sunny days or a closed roof for games during periods of cold or poor weather. Skydome is also equipped with heating and air conditioning to keep people in the dome comfortable. This allows the Toronto Blue Jays organization the luxury of not cancelling games due to poor weather.

Skydome is not without its share of faults. In photos the Skydome looks quite small, however in those photos the Skydome is also next to the world's tallest freestanding structure in the CN tower. In reality the Skydome is a massive structure and lacks many small design details that would have helped bring the dome down in scale. (Diamond and Pearce, 1987) It could be argued that the design of the Skydome focused more on its unique engineering problems and less on human scale and its value as a major gathering place. Freedman (1989) aptly describes Skydome as "a crude eruption of concrete and curtain wall on the Toronto skyline..."

Parking is also an interesting issue with Skydome. Toronto dealt with its parking situation for the Skydome in a very different way from the massive surface parking lots created by suburban stadiums:

"Because the site is constrained by existing and planned development, it was decided not to provide the amount of parking that stadiums in other cities offer. It's anticipated (perhaps "hoped" is more accurate) that public transit will accommodate the great surges of spectators to the stadium." (Diamond and Pearce, 1987)

This was written prior to the opening of Skydome. The Skydome was situated to take advantage of the public transit stations located nearby. Yet the lack of parking continues to be a concern.

Coors Field - Denver, Colorado

In 1988, the lower downtown of Denver was designated as a historic district. It was in this district that the city began construction on a new ballpark for its new Major League Baseball expansion team, the Colorado Rockies. The Rockies began play in 1991 out of Denver's Mile High Stadium, a stadium designed for football. Coors Field, the Rockies 50,250 seat new home, opened on time for the 1995 season which started late due to the Major League strike. The ballpark was also designed by HOK Sport with help from local firms RNL and BRW, Inc for the Urban Design. Other plazas and promenades surrounding the ballpark were the creations of EDAW/HRV.

This item has been removed due to copyright issues. To view it, refer to its source.

Coors Field was situated in the Lower Downtown or LoDo area of

Coors Field masterplan

Denver. The ballpark should be recognized as part of a separate district within the LoDo, unique in its characteristics as described by Leccese (1995):

"The ballpark occupies four city blocks, but the project was wisely conceived as a 13-block district unified by street improvements that include similar trees, paving and lighting standards."

As a whole the ballpark is considered the keystone of a larger system referred to by Takesuye (2000) as an Urban Entertainment District, or UED. The great idea behind linking ballparks with UEDs is that they become part of a larger system; the ballpark is part of the community instead of just simply being located in one. For instance Takesuye (2000) notes that "...on game days the adjacent area teems with activity as fans patronize nearby restaurants before and after the game." And Loverro (1999) continues this line of thinking noting that Coors Field as part of a UED helped to create positive growth in the UED as "More than twenty-five restaurants have opened since 1993, and sixty-one liquor licenses have been granted within seven blocks of Coors Field between 1991 and 1997."

It should be of no surprise that the success of the ballparks of the early 1990's such as Coors Field, Jacob's Field and Camden Yards have led to newer ballparks such as PNC Park in Pittsburgh, Comerica Park in Detroit, and the newly planned ballpark for the St. Louis Cardinals to follow the same strategies of locating ballparks within existing UEDs or trying to spark the creation of their own.

Breaking down the UED, from the site plan the Ballpark appears in the middle of two very different sections or zones. The first zone is very urban. The warehouse/industrial style brick buildings that are part of the LoDo district surround the ballpark and its main entrances. The second zone sits behind the outfield of Coors field. This zone is a long narrow strip of surface parking that extends for approximately 12 city blocks and houses 4,600 surface parking spaces.

This item has been removed due to copyright issues. To view it, refer to its source.

What the two separate zones does is allow for a very efficient circulation

Pedestrian corridor leading from Coors Field into the LoDo

for both pedestrians and vehicles. The pedestrian movement was designed to work with the ballpark as "Three entrances are aligned with major streets, a move that sets up vistas for people walking to the park and also makes for sensible circulation." (Leccese, 2000) The pedestrian traffic put in an urban area with the vehicular traffic being threading in and out of connecting freeways and into the massive section of surface parking lots located on the other side of the ballpark. The plan tries to prevent an abundance of interaction between pedestrians and cars. It diverts traffic away from the heavier pedestrian routes.

Certainly the excitement, noise and interaction between pedestrians and vehicles may not be as present in this example; however it has led to the success of other opportunities. With this neighbourhood becoming filled with pedestrian friendly route, the emergence of housing in the LoDo has become more and more apparent. In fact Loverro (2000) notes that the LoDo saw "...housing units in the surrounding area rising from 270 when the park opened to nearly 1,100, with more in the works."



Surface parking behind the ballpark

In a similar situation as has been noted in the example of the Cleveland Gateway, there is a concern in Denver that the new ballpark will spark the development of new parking lots by tearing down old warehouse buildings:

"[Preservationists and urbanists] hope that BRW's traffic study, which documented 44,000 existing parking spaces within a 15-minute walk, will discourage owners from razing buildings." (Leccese, 2000)

With the large amounts of surface parking behind the ballpark, along with the large demand for property in the LoDo with the ongoing development of entertainment spots and housing, the success of this neighbourhood must rely on the discouragement of creating new surface parking in the neighbourhood. This is a fine balance that must be both planned for carefully in Minneapolis and then monitored carefully once the ballpark has been constructed. The worst thing that can happen is for developers to start tearing buildings down right in the heart of the downtown to make room for extra parking spaces.

Safeco Field, Seattle Washington

Safeco Field in Seattle is a 47,000 seat ballpark baseball-only facility. It was designed by NBBJ along with Weinstein Copeland Architects who dealt with the urban planning, opened in 1999 for use primarily by the Seattle Mariners Major League baseball club.

Seattle is another city that previously used a multi-purpose stadium that housed both Major League Baseball and the National Football League. The King County Domed Stadium, better known as the Kingdome, was built in time for the 1976 baseball season. The Kingdome was only 23 years old when the last Mariners game was played there. The ballpark was one of the smallest in the Majors and due to its odd shape it was also ill-suited for baseball.

The new ballpark features a retractable roof that protects the crowds from rain, snow, and some winds however unlike re \sqcap

The ballpark is not climate controlled making it more like a traditional outdoor ballpark than a domed stadium. This is an idea that would be welcomed by many Minnesota fans already long for the days when games were played at old Metropolitan Stadium in the suburb of Bloomington while still enjoying the comforts a roof would provide on those poor weather days. It is an interesting way to compromise those wishing for a climate controlled indoor/domed stadium and those wishing for a traditional outdoor stadium.

Safeco Field was built in the waterfront district south of the Kingdome. The ballpark was the first step in creating a larger entertainment district that also included a new home for the NFL's Seattle Seahawks, an exhibition center and parking to accommodate 4,000 vehicles. (Graham, 2002)

The site selection for Safeco Field dealt more with semantics than with urban design:

"The choice of site for Safeco Field was driven largely by the break-neck construction schedule and the need to stage construction materials, according to NBBJ design architect Richard Ziewe." (Enlow, 1999)

This item has been removed due to copyright issues. To view it, refer to its source.

View of the retractable roof inside Safeco Field

There should have been more consideration over site selection than simply the needs of the construction crew and its timetable especially when situated in a historic neighbourhood. If the site selection process was done differently it might have had led to a different site for Safeco Field, or to an even larger scale, the entire new entertainment complex.

Conclusion

This project can look to these case studies for ideas that can be emulated in the urban and site design stages. In terms of urban design, there are examples in Baltimore, Toronto and Denver where an entertainment district strategy was put in place. Existing land uses from the surrounding neighbourhood along with new development as a result of the new stadium helped to strengthen these entertainment districts. Supporting land uses to the ballpark are also created such as in Toronto where a crop of new bars and restaurants opened close by to capitalize on the Skydome's crowds. The ballpark is then part of an existing community and strengthens existing businesses on gamedays with the influx of fans arriving to the neighbourhood. Places such as Cleveland Gateway worked as a massive block of infill development fitting in with the existing buildings and land uses in the immediate area.

The case studies also provide examples on individual transportation and mass transit. Denver's Coors Field and Cleveland's Jacobs Field are both located close to freeway entrances to help ease traffic congestion before and after games. New parking provisions varied for all of the cities (Baltimore: 5,000 spaces, Denver: 4,600 spaces, Seattle: 4,000 spaces, Cleveland: 3,200 spaces and unknown in Toronto). Toronto relied on mass transit to alleviate the need for massive amounts of parking. Other cities such as Baltimore and Cleveland also provided for transit stations near the ballpark. In fact, public transportation proved to be an important and well used element that helped to ease the traffic burdens near the downtown ballparks in Baltimore and Cleveland.

In terms of the ballpark itself, case studies in both Toronto and Seattle provide insight as to methods for cities on days of poor weather to provide a comfortable setting for the games to take place. Skydome is the first retractable roof ballpark in Major League Baseball and it eliminated virtually any threat of game cancellations due to poor weather, as well as provide a comfortable climate controlled environment for the spectators. Seattle took a different approach by providing a retractable roof without having the stadium be fully enclosed. Camden Yards in Baltimore was built with a historic look to fit into existing context as well as created public open space to allow the ballpark to flow into the downtown.

4.0 Site Selection

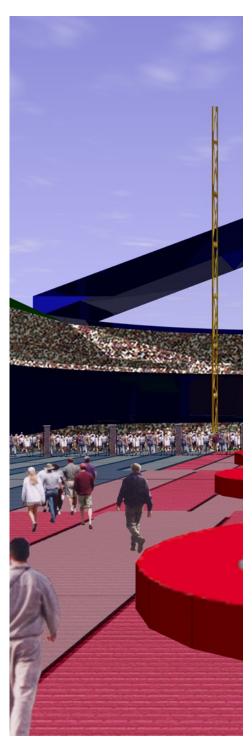
The construction of new stadiums and ballparks requires a large amount of land for their development. Often in a downtown setting, available land is sparse. In 2000, the Twins started a search in both Minneapolis and St. Paul for potential ballpark sites. As part of this project, 3 of those sites under consideration by the Twins are chosen, compared and contrasted to find one that is best suited to promote urban integration. Key considerations include the location of the site relative to the downtown, the building density surrounding the site, and the existing activity in the area including vehicular and pedestrian movement. These sites are the Metrodome site, the Mississippi Riverfront site and the Rapid Park parking lot site.



Site 1 - Metrodome Site

Site 2 - Waterfront Site

Site 3 - Rapid Park Site



4.1 H.H.H. Metrodome Site

The Metrodome is the current stadium for the Minnesota Twins, Minnesota Vikings NFL team, and several University of Minnesota team sports. The new ballpark would be constructed once the Metrodome is demolished. Perhaps the biggest advantage this site would have is that the infrastructure for a large stadium is already in place. There is already an abundance of surface parking as well as several parking garages within a short walking distance. Major traffic arteries already surround the stadium with exits to freeways only a few blocks away. There is a new Hiawatha Line light rail transit (LRT) station built across the street from the Metrodome making public transit very accessible for a new ballpark.

The most important factor against using this site is its lack of potential for urban integration. The site is at the southeast edge of the downtown, five blocks away from the downtown core. The sites directly adjacent from the ballpark are mainly vacant, making urban integration difficult to achieve. The Metrodome also lies on a site that is 5-6 blocks from downtown. With the large amounts of surface parking surrounding the dome, there is very little room given to building mass. The site lacks an urban environment that this project needs to achieve its goals; therefore the site is not particularly attractive as a potential selection.





4.2 Mississippi River Waterfront Site

The Mississippi River Waterfront site is located a couple of blocks north of downtown Minneapolis. At present this area is undergoing massive redevelopment that includes promenades, new office and residential properties in converted warehouses and restored historic mills. The ballpark would be situated on lands that were once used by the railways for access to the mills.

Advantages of this particular site include the fantastic view of the Mississippi River and St. Anthony Falls. The nearest light rail station, located next to the Metrodome, is only a couple of blocks away from the site. The streets surrounding the site connect up with Washington Avenue, a main street that leads to entrances of several freeways which should help rid of some of the traffic congestion that occurs before and after events at the stadium.

There are some major problems with the site. With the current boom of restoration and construction activity in the area, the cost of land acquisition would certainly be astronomical. Certainly with the amount of new residential activity in the area there would be a backlash towards a stadium and its bright lights, loud noise, crowds, and traffic congestion being constructed in the neighbourhood.

In September 2003, the site was officially off the market as a viable location for a new stadium when the groundbreaking ceremonies kicked off construction on the new Guthrie Theatre, a "national center for theater arts and theater education." (http://www.guthrietheater.org/act_ii/groundbreaking.htm, accessed Dec 28, 2003)





4.3 Rapid Park Site

The Rapid Park site is located at the northwest edge of downtown Minneapolis. The site is situated on a lower parcel of land (in terms of grading) that is currently used as a surface parking lot. The site is bounded by bridges on 5th Street North and 7th Street North, a trash burning complex to the northwest and a section of freeway on a depressed area of land to the southeast.

The site has many positive aspects to it, the first being its benefits for pedestrians and vehicular traffic. There are entrances to freeways nearby that make traffic congestion less of an issue. The parcel of land is situated close to entrances into the skyway system, giving pedestrians access to indoor walkways during days of poor weather. With one side facing 5th St. N., the site would run along the new Hiawatha light rail transit line. The LRT line as it stands ends at the Warehouse District site which is located along 5th St. N. between Hennepin Ave. and 1st Ave. N. Patrons of a Rapid Park site Ballpark would only have to walk 2-3 blocks to reach the station.

The site is not without its potential problems. The ballpark would have to fit into an odd shaped piece of land where there is little opportunity for expansion. However there is an opportunity to explore notions of traditional ballparks that were often situated in tight urban settings with odd-shaped fields of play (Bess, 1999). The site is in an area of the downtown where the existing grid shifts and impairs potentially important visual connections to the ballpark. There would also be a lack of surface parking in the area with a new ballpark built over the remaining lots. There are a number of parking garages in the area but are there enough spaces to accommodate the necessary amount of influx for a 45,000 seat stadium?





4.4 Conclusion

The Rapid Park Site was chosen as the area of study for a new ballpark for several reasons. First, the ballpark would sit in a high density neighbourhood close in the downtown core. The other two sites were surrounded by many vacant lots used as surface parking to service the downtown and events at the Metrodome. The lack of density and urban activity at the Metrodome and Waterfront sites creates an undesirable situation for urban integration. Second, the Rapid Park site has an advantage is in its proximity to the downtown core as opposed to the other two sites. The Rapid Park site is only 3 blocks away from the core while the Metrodome and Waterfront sites are 5-6 blocks away. Though the Rapid Park site is on the edge of the downtown, its location in the downtown core surrounded by high density buildings nearby, gives the site a greater potential to stimulate urban integration

5.0 Site Analysis

5.1 Districts

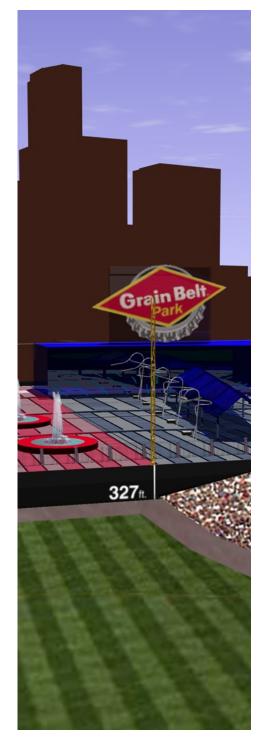
There are four separate districts within the study site. They include; the parking district, the entertainment district, the retail district, and the Gateway district.

The parking district is directly linked to several freeway entrances and exits. It is located at the north-west edge of the downtown. The district is devoted almost entirely to parking as emphasized by three massive multi-level parking garages built overtop of the freeway. There also is a large amount of surface parking in the district, something that is slowly disappearing as downtown Minneapolis grows through urban infill.

The entertainment district is located within the historic warehouse district. The district serves a dual purpose. During the day, its buildings provide office space and at night its street level restaurants, lounges and nightclubs create a cultural hotspot in Minneapolis. The district also houses some theatres and the Target Center, a multipurpose arena.

The retail district, located along Nicollet Mall serves as a major destination for both city residents and tourists. The mall is closed to regular vehicular traffic but is open to bus transit, taxis, bicycles and emergency vehicles. The buildings in this district soar up and dominate the city skyline. Major retail outlets are the cornerstone to this street. The shops and restaurants are situated on the first two levels of the buildings along the mall, while office space and hotels exist on the upper levels.

The Gateway district is a historic district that once served as the Gateway into downtown Minneapolis. During the 1950's and 60's, under the direction of urban renewal, the city cleared several blocks of old buildings to make way for large commercial and corporate headquarters, surrounded by large amounts of semi-private open space, creating a new image of the gateway district.



A new ballpark can benefit from the different types of districts. The parking, retail, and entertainment districts can benefit from their supporting land uses to a ballpark. The gateway district is the most difficult district to work with. It lacks the building density and infill opportunities in the other districts. It is also the furthest away from the new ballpark and would have the least amount of impact. For these reasons it serves better as an edge and will not be used as a district in the urban design framework.

The ballpark is to be located in an area bordering the entertainment district and also would be within the existing parking district. Keeping the parking at the edge of downtown encourages drivers to leave their cars and walk into downtown, creating much needed pedestrian life. The challenge for a new ballpark is to find a way to balance the large amounts of parking needed while promoting integration with other districts and land uses.

Districts

Retail/Office District

Parking District

5.2 Built Framework

Figure Ground studies show a relationship between the building mass

and the districts. The parking district features very large and bulky building footprints coming from the large number of parking garages. The density of buildings is low, largely due to the freeways that cut through this district.

The entertainment district has a high density building mass. Most of the building footprints are small, usually having 4-5 buildings within a single block. More recent buildings such as the Target Center and Block E have larger footprints taking up the entire block on which they are situated.

The Retail District shows some interesting geometries as part of the figure ground study. Hennepin Ave and Nicollet Mall do not run parallel to each other; they angle away from each other as they head south-west. As the streets move further apart, the blocks elongate, creating larger building masses. Some of these longer blocks have solid building footprints. Most of the building mass in this district have larger footprints that occupy entire blocks.

The Gateway district is very uniform as being a product of the urban renewal movement of the 1950's and 60's. The buildings in this district are large but the area does not possess the urban density that is associated with the other districts that make up the study site. This change in figure ground suggests the Gateway district serves more as an edge that is outside of the site proper and better serves as a defining visual boundary for the northeast side of downtown Minneapolis.

The building heights in the different districts vary greatly and are impossible to work with as a tool for integration without serious consequences to the character and quality of the Minneapolis skyline.

5.3 Vehicular Movement

Vehicular activity in the entertainment district near the ballpark can be characterized in three manners. The first is constituted by the major arteries consisting of freeways and highways with entrances and exits in the warehouse district. The freeways enter the city from the west below grade of the city streets

Built Framework

Built Framework
Parking District
Retail/Office District
Entertainment District
Gateway District

and also from above grade structures coming from the north. The routes carry large amounts of vehicular traffic both in and out of the downtown. These streets are located at the edge of the ballpark site, which is also the edge of the downtown proper.

The second traffic pattern is created by the major arterial streets: 1st Avenue North and Hennepin Avenue. These two east-west one-way avenues link up with north-south running minor streets of the downtown. These two arteries run through 2 avenues deemed as destination areas. Major entertainment and theatre outlets run along these two avenues.

The third pattern of vehicular activity is created by the minor collector streets of the downtown. Most of these streets also run one way. The streets are not as prominent due largely to the absence of major destinations or activities. These streets best serve as feeder routes to the major streets in downtown Minneapolis.

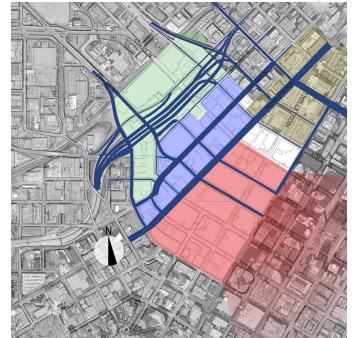
The new ballpark site will benefit vehicular activity. The site of the new ballpark is already linked to streets with freeway

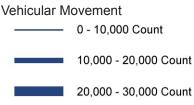
entrances and exits. The freeways will help ease traffic congestion that will occur before and after ballgames.

There are three large parking garages built at the edge of the downtown and connecting to several thoroughfares. All three cap over one of the major freeways leading into the downtown. There are also several smaller parking structures in the downtown located as part of larger buildings or as separate entities. There are also some surface parking lots that exist on sites that are considered as opportunities for urban infill.

The State of the City report from 1993 for the city of Minneapolis lists a total of 58,698 off street parking spaces and over 4,500 on-street parking meter spaces in the downtown.

(http://www.ci.minneapolis.mn.us/planning/soc03/TransPark.pdf, accessed August 2, 2004). The report does not produce an accurate projection for the number of users or a breakdown of the time of use for the city's parking lots. However it does show the number of municipal parking spaces available as 25,864 yet the average daily usage for special events (concerts, arena events, NBA basketball) as only 2,703. The literature review shows that Major League





Baseball required Camden Yards in Baltimore to provide 5,000 new parking spaces with their new ballpark. Although it is a quick calculation, the 5,000 spaces needed by Major League Baseball could easily be absorbed in the existing Municipal parking lots alone. However further studies should be made to the see if there are sufficient amounts of parking already in place for a new ballpark.

There are two major transit systems in Minneapolis. The first is the Metro bus transit system that services all of Minneapolis and St. Paul and has several stops all over the downtown. There are two Metro Transit stations located within two of the massive parking complexes in the parking district. The second transit system is the Hiawatha Light Rail Transit line running from 5th street N in downtown Minneapolis southeast to the Mall of America in Bloomington. The Hiawatha Line's current end of line in the downtown is on 5th Street North between Hennepin Avenue and 1st Avenue North, a few blocks away from the Rapid Park Ballpark.

Other transportation systems in the downtown include the Hiawatha Bus Depot for long distance travel which is part of the 7th St. N Parking Garage complex. Also a proposed transportation system in the downtown in the works is a heavy rail line for transit out to St. Cloud. The proposed Northstar line would travel along existing rail lines located immediately behind the ballpark site. The heavy rail transit would travel daily between St. Cloud and downtown Minneapolis, the proposed end of the line.

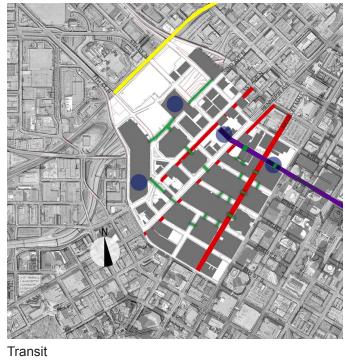
5.4 Pedestrian Movement

The major pedestrian street movement in the downtown study site occurs on Nicollet Mall, Hennepin Avenue and First Avenue North. These streets are considered major paths due to their value as destinations. Nicollet Mall is the heart of the retail district. First Avenue North is a major street in the entertainment district. Hennepin Avenue serves as a transitional street with both retail and entertainment activities.

Minor pedestrian movement occurs on collector streets: 5th Street

through to 9th Street, which, connect up to all three major pedestrian routes. These streets run parallel from each other as part of the overall grid of downtown Minneapolis. These streets have fewer shops, restaurants and nightclubs lining the streets that would draw attention away from Nicollet Mall, Hennepin Avenue and First Avenue North. All of the collector paths carry the same volume of pedestrian traffic.

Minneapolis is also connected through a series of parkways. There are two sections of the Minneapolis Park System near the ballpark site. The first is a corridor that leads from Loring Park, the central urban park of downtown Minneapolis. The Paul Friedberg design of Loring Greenway, as it is known, runs through a high density series of residential towers leading up to Nicollet Mall and Friedberg's Peavey Plaza. The second section of the Minneapolis Park System within the study area is the Cedar Lake Trail:

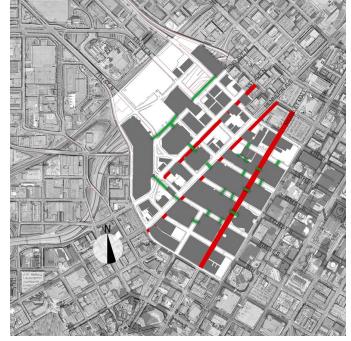




"Development between 1991 and 1997 of the link from Cedar Lake westward to the suburb of St. Louis Park and eastward to the Mississippi riverfront along the Cedar Lake Trail has created a significant addition to the park system." (Tate, 2001)

The trail leads up to the northwest edge of the ballpark, running parallel with rail lines. The parkways are major pedestrian and cyclist routes that run from major suburbs to the downtown. They serve as an alternate route that can bypass the busy streets of the downtown. Consequently the Park System at the present time only serves at best as a secondary system of movement that would lead into the downtown towards primary paths to the new ballpark.

Downtown Minneapolis has an extensive system of above-ground skywalks that can allow for comfortable pedestrian movement year round. The skywalks connect to most buildings downtown and lead as far away north as to 3 major parking garages on 2nd Avenue North. There are fewer skywalks in the older warehouse district. Skywalks only appear on the newer buildings such as



Pedestrian Movement

Major Pedestrian Path

Skywalk

the Target Center and the Block E complex. The downtown skywalks are open daily to the public but do close at different hours depending on the building owner. The skywalks are not to be considered as true public space as each passage belongs to the owner of the buildings to which they are connected. As such it is the building owner who sets the hours which their skywalks are open to the public. Regardless of ownership, the skywalks serve as a convenient method to pedestrian movement on days with poor weather.

5.5 Climate

Minnesota is a northern state with cold, snowy winters. The weather is still very cold and snowy at the beginning of the major league season in April. Temperature will impact weather to build an indoor or outdoor ballpark. The Twins' first ballpark, Metropolitan Stadium in Bloomington, Minnesota, was outdoors. However one of the major reasons why the Metrodome was built as an indoor stadium was due in part to the harsh weather that made watching games at the Metropolitan Stadium uncomfortable.

Solar gain in the summer months is a big issue in a downtown where there are so many large towers casting shadows. The rapid park site is not located around the tallest buildings in the heart of the downtown; however the site is on a depressed piece of land that may be subject to shadows coming from the surrounding parking complexes. Sunlight will also determine how the playing field orientation at the new ballpark. The field's orientation reduces the effect of shadows that make it difficult for players to see the baseball. Typically playing fields are oriented to avoid direct sunlight shining into player's eyes. Major League ballparks use one of four different orientations for their playing fields. These orientations include home plate facing center field looking north, northeast, southeast, and east (http://www.ballparks.org/baseball/general/facts/diamonds/index.htm, accessed March 14, 2003).

The predominant winds in Minneapolis come from the northwest and the southeast. During the winter months, cold winds occur mainly from the northwest. As the warmer months approach, the predominant winds shift from the northwest to the warmer southeast winds. Both predominant winds affect ballgames over the course of the baseball season (April to October). Wind can have a dramatic effect on the flight of a baseball. Fielding the baseball is most affected by wind's ability to push the baseball around in flight. More importantly, wind can affect the comfort of those fans watching the games. The summer breeze can provide fans with relief from the heat. The cold winds in the spring and fall make watching games an uncomfortable experience. The stadium and outdoor spaces surrounding the ballpark should try to shield patrons from the cold northern winds yet take advantage of the pleasant southern summer breezes.

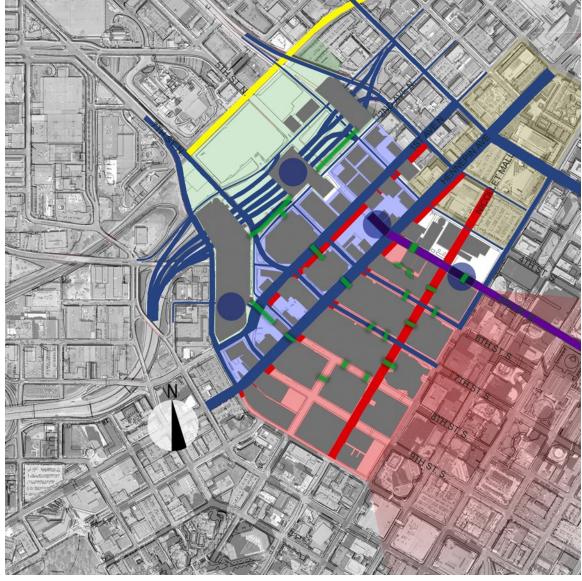
Precipitation is a major concern because baseball games are often delayed and sometimes postponed due to poor weather. In Minneapolis, the majority of rainfall occurs in the months of May to August. There will be some consideration made to how a late spring snow storm would affect the activities at a ballpark and its surroundings. Snow removal and drainage are minor issues with a new ballpark and its surroundings with less activity occurring at the ballpark in the winter months. Minnesota averages 2.8 inches of snowfall during the month of April, the first month of the baseball season.

5.6 Synthesis

The synthesis of key site characteristics reveals some patterns and draws a final conclusion that will play a large role moving into the design portions of the project.

Vehicular movement before and after games will benefit from the nearby locations of freeway entrances and exits. Some existing parking garages have entrances and exits connected directly to the freeways further benefiting vehicular movement in the downtown. The different vehicular traffic routes in combination with parking garages located throughout the downtown will also help to prevent traffic congestion. Ballgames are played mainly in the evenings and weekends, which is the period of time when the parking lots at not heavily used. However some surface parking lots may be lost to urban infill. Two varieties of transit exist downtown. Transit stops are convenient stops close to the ballpark will help encourage drivers to leave their cars at home and use the Light Rail and Bus systems. With the ongoing construction and expansion of the Hiawatha line, there is an opportunity to expand the line to create a new convenient station at the new ballpark

The parking district can provide the bulk of parking to the ballpark. However all



Synthesis

the surface parking breaks up the continuous fabric of built form that is consistent with the rest of downtown. The district is also dominated by vehicular movement and not friendly for pedestrians. The freeways cutting into the district is a huge constraint to its development. The entertainment district's existing land use can help support the new ballpark. Unfortunately the existing Target Center arena and Block E entertainment complex are giant developments that do not fit in well with the character or

scale of the district. A new ballpark is another large element that could have a negative effect on the districts rhythm, scale and character. The retail district's land use can also help support a new ballpark. However the presence of Nicollet Mall as a powerful and unique icon in the downtown and could hinder urban integration. The district's geometry shifts away from the entertainment and parking districts and disconnects itself from the new ballpark. The gateway district as a whole is also unique to the downtown. Its lack of building density and infill opportunities suggests that it be excluded from the final design solution.

In terms of the pedestrian movement in the study area, the major paths do not relate well with the new ballpark. All 3 major pedestrian paths do not link to the new ballpark site. However they still serve as major arteries in the pedestrian system. Some of the connector paths lead directly to the ballpark. These paths can be strengthened to be more prominent as part a pedestrian system. There is an opportunity to use sections of Minneapolis park system as part of the pedestrian movement strategy that links the ballpark with the downtown. This is an opportunity to tie the new ballpark into the existing prominent city pedestrian system. In regards to the skywalk system, there is a section of the system that runs close to the ballpark that could potentially be tied into. Unfortunately due to the older buildings and overall character of the neighbouring entertainment district there are few existing skywalks to work with.

The cold Minneapolis temperatures can make attending an early spring or late fall game uncomfortable. The city's existing stadium, the Metrodome is indoors mainly for this reason. However baseball fans in Minnesota long for outdoor games. Solar gain impacts the game itself. The playing field of a new ballpark should be oriented so that the sun does not affect play. A benefit to this ballpark site is that the stadium's solar gain is not affected by the towering skyscrapers. The new ballpark and open space should both avoid the cold northwest winds yet take advantage, where possible, of the warm summer southeast winds. Snow and rain can halt play at a ballgame. With the majority of precipitation occurring during the baseball season the ballpark must consider looking at a roof, either permanent or retractable, for shelter.

6.0 Urban Design Framework

6.1 Concept

The urban design framework is developed around a new ballpark in downtown Minneapolis. There are 3 main objectives as part of the overall concept for the urban design. The first is identifying and reinforcing the character of the study area. The second creates linkages within the study area. And the last objective creates transitions between the study area and the remaining parts of downtown.

The new ballpark is situated within an existing entertainment district and helps to strengthen its character. First Avenue North provides a unique presence in Minneapolis. The street is filled with office workers during the day then transforms into a major destination in the evening as part of a larger entertainment district. At the opposite end, Nicollet Mall will continue to act as a key retail district. It is the cornerstone of another district that already exists independently from the neighbouring entertainment district. The mall has a very strong presence within downtown Minneapolis and has its own unique identity that is not altered in any way.

The proposed linkages connect the ballpark and entertainment district together with Nicollet Mall and its retail district. Key linkages include strengthening two existing streets to serve as gateways into the ballpark district and the ballpark itself. Fifth Street is the first gateway that is a crucial pedestrian and vehicular street. The new Hiawatha Light Rail Transit line on Fifth Street provides mass transit to the crowds at the ballpark. The other gateway is Ninth Street which serves as a pedestrian route. The street moves from the heart of the retail district of Nicollet Mall, to the existing theatre section of Hennepin Avenue, leading finally to the ballpark. Ninth Street also serves as a proposed extension of the Minneapolis Park System attaching Nicollet Mall to the Cedar Lake Trail.

Hennepin Avenue serves as the key transition strip. The land uses change from entertainment to retail and offices. The physical architecture changes reflect the land use

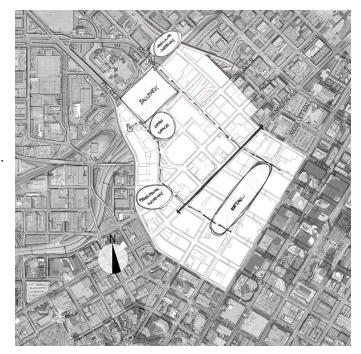


transitions from brick warehouse style buildings in the entertainment district to the steel and glass contemporary towers that appear south of Hennepin Avenue.

6.2 Districts

The urban design concept redefines the study area into two new districts. These districts absorb those previously described in the site analysis. These districts are strengthened through additional land use and built form. The new land use and built form will be influenced by common unifying characteristics. Combined together, along with the generation of new activity in the study area will successfully create the new districts.

The first district is defined by identifying characteristics influenced by the game of baseball and the new ballpark. The district's main land use is entertainment which will help to support a new ballpark. The district is split up



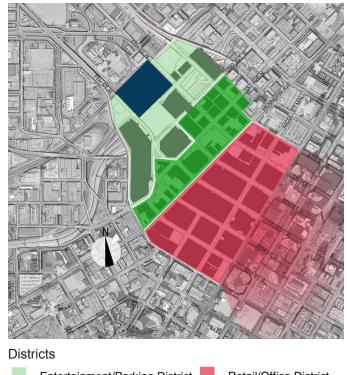
Concept sketch

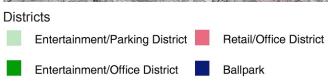
into two subdistricts: entertainment / offices and entertainment / parking. The entertainment district brings new development to strengthen the existing nightclubs, bars and restaurants in the area in addition to the new ballpark. The entertainment / offices subdistrict concentrates entertainment land use on the street level, leaving the upper levels of buildings for use as office space. Building massing in this subdistrict is at a much smaller scale that that of the retail / office district. The buildings in this area are much older and smaller, often with at least 4 or 5 buildings built on a single block. There are more opportunities in this area for urban infill. New buildings use the red brick that is common in the existing warehouse buildings and use narrow vertical forms to keep with existing architectural forms. New buildings also occupy a smaller footprint matching the other buildings in the area. An exception to this rule is an extension to the Target Center, an arena whose footprint is already larger than a normal block in the area. Gaps and alleys, which are common in this subdistrict, are very important to maintaining the character of the area and are featured in new infill projects. Building heights in this subdistrict as the existing range are much narrower than the retail/office district. The height of new buildings ranges between 2 and 8 storeys tall.

The second subdistrict serves as entertainment and parking. This is the subdistrict where the new ballpark is located. This area addresses the need for a large amount of parking for events at the new ballpark as well as other venues in the

Entertainment district. The large existing parking is transformed using mixed use development and ground level retail opportunities to both break up the large building mass and create spaces that are more pedestrian friendly. New parking garages are also mixed use development opportunities. These new parking structures fill the parking requirements for the new ballpark with 5,000 new spaces in the subdistrict. The amount of new parking proposed is consistent with the amount of parking added at the request of Major League Baseball to Oriole Park at Camden Yards in Baltimore. The new parking structures proposed to be built on vacant properties are part of the urban infill strategy for the downtown.

This subdistrict is unique with its attention to public open space and recreational space. The new public open space attached to the ballpark and the connections into the Cedar Lake Trail call attention to the recreational part of this urban design. Building massing is dominated by the massive footprints such as the new ballpark and the nearby parking structures. Unlike the other districts and subdistricts, no limits are set for the size of building footprints. However, building height limits are set so no new buildings are taller than Grain





Belt Park to give prominence to the new ballpark. Architectural styles already vary greatly in this subdistrict. To help integrate this subdistrict into the larger Entertainment district, infill buildings followed the same style guidelines as rest of the district, using red brick in its facades and pushing the narrow vertical forms already predominant in the district.

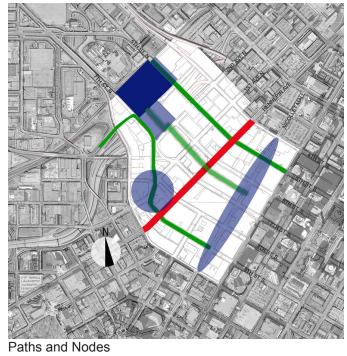
The second district is retail/office located south of Hennepin Avenue. This district begins at Hennepin Avenue and flows down to Nicollet Mall and continues past the study area into the remainder of downtown Minneapolis. These buildings generally have retail space, shops and restaurants occupying the ground and skywalk levels with office space taking up the rest of the floors. New developments also maintain retail space in the first two storeys. The architecture for new development, including any urban infill projects, must work with the existing forms, styles and materials of the district. The architecture is primarily steel and glass with varying contemporary forms. New infill tries to also reflect the superblock nature of the district, where single buildings occupy entire blocks or new buildings tie into existing structures. Buildings meet height requirements between 2 and 15 storeys tall, which are the ranges of heights of buildings in the district (not including the unique landmark buildings

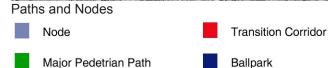
of downtown such as the IDS Center). Emphasis is placed on the construction of taller buildings over the short 2 storey structures such as the existing City Center retail complex on Hennepin Avenue.

6.3 Paths and Nodes

The urban design concept defines three major paths to strengthen the linkages within the study area. The first path is on 5th St. N. running along side the Hiawatha LRT line. The path has pedestrians mixing with some vehicular traffic and the light rail transit. The main idea is to strengthen the light rail line through added pedestrian traffic and the addition of mixed use development along the street. Strengthening 5th St. N. also creates a new link across downtown Minneapolis through to the new ballpark.

The second path, the Cedar Lake Trail, is already a part of the greater Minneapolis Park System and ends very close to the 7th St. N. ballpark entrance. On its own it is a very effective pedestrian route to Grain Belt Park. The trail is extended south on 7th St. N. and 9th St. N. connecting with Nicollet Mall, another





leg of the park system. Connecting the two trails is part of the making better connections within the larger Minneapolis Park System. The trails link key areas of the site together including the new ballpark, the existing theatre district and Nicollet Mall. Adding the Minneapolis Park System into the urban design may at first seem to be contradictory to the idea of being part of a downtown, but large consideration was made towards the already existing nature of the trails. The trails in the downtown still have a very urban quality to them, as hard surfaced trails lead to plazas, squares and other parks.

The last major path is the skywalk extension from the new ballpark to Nicollet Mall. Following the urban design strategy, new importance of the skywalk path is given leading from Nicollet Mall to the recently constructed skywalks crossing Block E into the Target Center and new skywalks leading into buildings in the new Square and into he ballpark. This skywalk will be used heavily during periods of poor weather and has the advantage of linking directly into the existing skywalks along 2nd Ave N. that run to the 3 existing major parking garages.

There are 4 key pedestrian nodes in the urban design concept. The first node is located at the ballpark along 5th Street North. This node is part of the transit strategy that extends the light rail transit to the new ballpark. The node includes the entrance to the ballpark, the final stop for the Hiawatha line, and the transit station linking the LRT with the heavy rail Northstar line. The second node is Grain Belt Square. The square is the grand entrance to the ballpark and is the major gathering space before and after ballgames. Another node is along Hennepin Avenue with a stretch of new and existing theatres all within a short walking distance. The final node is Nicollet Mall. The mall, already identified as a node in the site analysis, will continue to exist as a unique gathering space. Each new major path connects with one major node and leads southeast to Nicollet Mall.

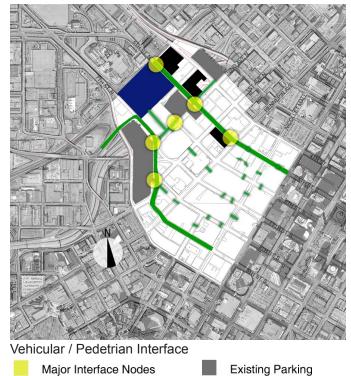
Hennepin Avenue as a whole serves a special purpose in this concept. This avenue serves both as a node and as a path. Hennepin Avenue is the key node that links the entertainment/ballpark district to the retail/downtown district. The avenue is a long strip of constant activity using several different concentrations of activities and different activity types combined together to create this node. With all the different activities available on Hennepin, the avenue also serves as a path for pedestrians also

leads to out of the downtown to the bridge on the Northeast and towards the Walker Art Centre to the Southwest.

6.4 Vehicle / Pedestrian Interface

Pedestrian/vehicular interface identifies areas of concentration where the convergence of pedestrian and vehicular activity is strongest. These areas identify and emphasize nodes of activity in the study area. There are several major pedestrian/vehicular interfaces that occur within the study area. There are 6 primary areas for interface that serve as access points to skywalks, transit stations, and parkades. They are all located north of Hennepin Avenue.

The vehicular/pedestrian interface adds importance to the minor collector paths described in the previous section at 5th Street North and 7th Street North. On 5th Street North, pedestrians mix with traffic on a street now dominated by the Hiawatha line and a limited amount of vehicular traffic. A new Hiawatha light rail station is located at the ballpark on 5th Street North. It is a key interface area where pedestrians will make their way between



Ballpark

Major Paths

Proposed Parking

the ballpark, the street and the new station as well as connect to the Northstar heavy rail transit line.

On 7th Street North /9th Street North, the new cedar lake trail expansion where the recreational trail converges with the urban setting on its way to Nicollet Mall finds pedestrians moving along side the busy vehicular streets. Also both paths link to multiple concentrated vehicular/pedestrian interface areas, connecting the paths to key amenities including transit and parking.

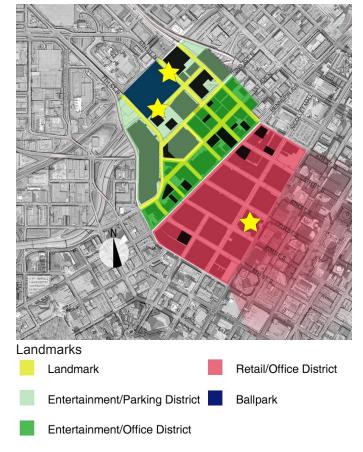
Two of the skywalk and parkade access points are located on 5th St. N. in conjunction with LRT stations. Also points occur on 6th Street North leading into the new plaza and two on 9th St. N.

Adding mixed-use parkades with pedestrian level commercial use creates added activity to support 5th Street Hiawatha Line. The location of new parkades follows the existing trend at edge of downtown, near the major freeway entrances. New parkades connect to 4th Street North which is one of the major freeway entry points into the downtown and also along 5th

Street North. Mixed-use activity faces 5th Street North as previously mentioned to add activity to support both the ballpark and the LRT line. The addition of mixed-use development also occurs through the renovation of existing parkade structures. The combination of the mixed-use activity with the added traffic entering and exiting the parkades creates an exciting environment, especially during gamedays at the new ballpark.

6.5 Landmarks

Landmarks are used in this project to give meaning to a place. The proposed landmarks in the entertainment district reflect baseball's influence on the district. The new landmarks are fulfilled by the creation of the Swinglights, the new lighting element described in the illustrated site design section of this project. The lights run throughout the entire entertainment district and serve as a wayfinding element. Other new landmarks include the new ballpark and the Light Rail Terminal on 5th St. N. Both have a significant visual impact on the site. Their baseball-influenced physical designs also strengthen the character of the district. The retail/office district use existing visual landmarks

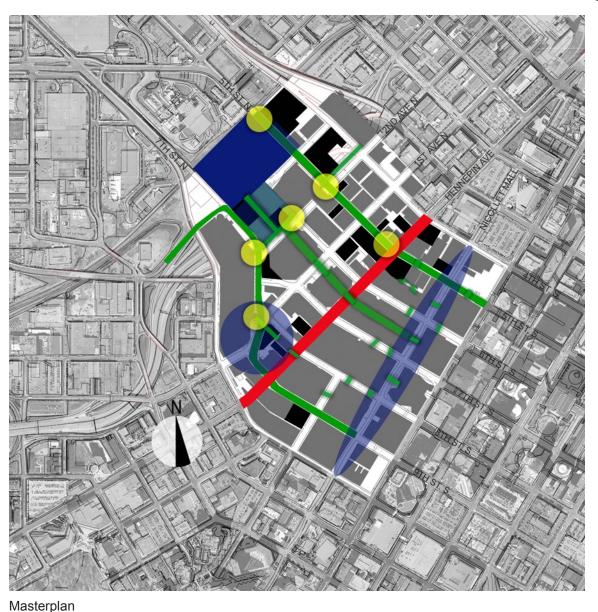


including the existing IDS Center and the unique streetscaping along Nicollet Mall.

6.6 Masterplan

The final master plan combines all the spatial components together to create a final comprehensive image of a new integrated downtown. The plan highlights the introduction of two new districts, each with its own unique set of built form and land uses. Each district is reinforced by a unifying group of characteristics. The entertainment district uses a new ballpark and baseball (described in the illustrative site design section) as its unifying characteristics. The retail/office district relies on the strength of its existing characteristics.

The plan impacts the downtown through an increase of built form creating urban infill. New building mass replaces infill sites increase the study area's density. The new buildings follow building height and footprint guidelines set in earlier in this section. The final result is a site with increased density that creates a continuous built form and reinforces the rhythm of each district.



Major Interface Node

Key Transition Node

Major Node

Major Path

Ballpark

Proposed Buildings

Existing Buildings

One of the key instances of urban integration occurs at the ballpark. This is an area with many gaps and holes created by a lack of building mass, large amounts of surface parking lots and the massive stretch of freeway. It is now part of a massive redevelopment including new infill buildings including new parkades to handle the extra parking requirements of a new ballpark. The impact of the freeway has also been minimized by the addition of the new public open space placed on top of it. Baseball provides the unifying characteristics that integrate the entertainment district together.

The plan also uses improved pedestrian and vehicular movement to create new linkages within the study area. New strengthened pedestrian paths run from the ballpark along the entertainment district through to Nicollet Mall and the retail /office district. These paths also meet with vehicular traffic at key interface areas. They serve as areas of concentrated activity in the study area.

The master plan creates transitions between the study area and the remaining parts of downtown. The design designates Hennepin Avenue as a crucial transition area. The transition reflects a shift from the entertainment district to the retail/office district. Hennepin exists with the unifying characteristics of baseball from the entertainment district and the contemporary steel and glass architecture and commercial street level shops from the retail/office district.

7.0 Illustrative Site Design

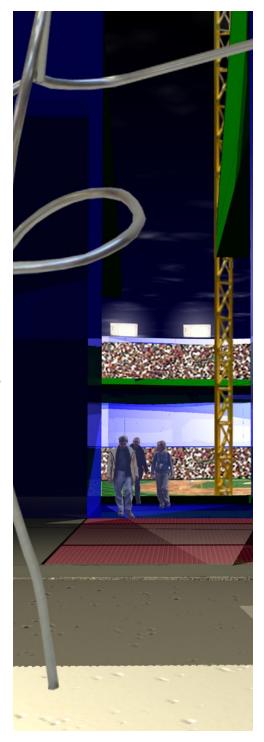
7.1 Grain Belt Park

Grain Belt Park is the new state of the art ballpark for the Minnesota Twins. It seats 40,000-45,000 people, including luxury boxes, all under a retractable roof. It becomes a new model for major league stadiums as a modern version of a traditional ballpark. The ballpark matches the surrounding context of the entertainment district, through architectural massing, form, and materiality.

The ballpark sits in the depressed area of the former Rapid Park surface parking lot. It fits into the site with some constraints that affect the shape of the playing field. Some of the constraints include two bridges on Fifth and Seventh Street North. However the bridges will link to the ballpark entrances. The crowds walk into the ballpark's main concourses on the same level as its entrances. The design avoids having entrances lead directly to ramps and staircases. One of the first experiences for fans as they enter the ballpark is to see the playing field from the concourses. Having the ballpark built in the depressed area also allows the building's height to fit in with the buildings of the surrounding Entertainment district.

Grain Belt Park accommodates the latest amenities of other major league baseball parks. These amenities include private luxury boxes, club seats, restaurants and bars, gift shops, and plenty of concession stands. The ballpark also houses the clubhouse, training and medical facilities for the Twins organization. The offices and ticket windows for the new ballpark are located in a new building that is part of Grain Belt Square, the public open space adjacent to the right field fence of the ballpark. Team access to the park, including truck access, player and staff parking is located under the existing bridges at field level.

The ballpark also serves as a major transit station. The station is last stop for the Hiawatha LRT line and the main downtown station for the proposed Northstar heavy rail transit as well as a transfer point linking the two together. The transit station also helps the ballpark transcend its role as an entertainment only facility. It also is an important destination



for the downtown community as a transit hub on an everyday basis.

The playing field has a southeast orientation. This field orientation is acceptable for play by Major League Baseball. Seven other ballparks (US Cellular Field in Chicago, PNC Park in Pittsburgh, Miller Park in Milwaukee, the Great American Ballpark in Cincinnati, Comerica Park in Detroit, Busch Stadium in St. Louis, and Ameriquest Field in Arlington) also have the same orientation. This allows games to be played without blinding players from the afternoon sun. The orientation will also help against the wind. The bulk of the structure of the park blocks the cold northeast winds that occur during the spring and fall, while the park is wide open on the southwest side allowing warm summer breezes to enter the ballpark. The field is oriented toward the downtown Minneapolis skyline to enhance the experience of watching the game of baseball for fans.



Looking south to Grain Belt Square from inside the ballpark. (proposed buildings in Blue)

The distances to the outfield fences pay

homage to those once at the Metrodome and Metropolitan stadium: 343 ft. in left field, 408 ft. in center and 327 ft. in right. The right field fence is taller than the other outfield fences to serve as a reminder of the Metrodome and Griffith Stadium (Washington D.C.), home to the Washington Senators (the original city and team name of the Twins). As was the case with the Metrodome and Griffith Stadium, Grain Belt Park's field dimensions are also a product of the space constraints

of the Rapid Park Site.

Grain Belt Park has several entry points. The major entrance is located in the new square at right field. Other minor entrances are located towards home plate at the north west corner of the ballpark running along 7th St. N, at center field at the south east corner of the ballpark on 5th St. North, and at the "gap" at left field on 5th St. N. The "gap" at left field is an idea used at the Great American Ballpark in Cincinnati where a separation occurs between two sections of the ballpark that provides a small view into the ballpark from the street. This gap allows the sounds and smells of baseball to seep out onto 5th St. N.

The retractable roof is in response to the harsh climatic conditions experienced in Minnesota. The roof addresses a number of issues. First the baseball season is played from April to October. Minnesota's climate still has snow in April and occasionally in October. There is also rain occurring in the spring with some occurrences in the summer and fall.



Looking into Grain Belt Park from the main entrance inside the square.

The retractable roof prevents game cancellations from poor weather. The roof closes only during periods of rain or snow. Secondly the sport fans in Minnesota have longed to experience outdoor games like those at the old Metropolitan Stadium, the Twins first home in Minnesota (1961-1981). This idea is identical to Safeco Field in Seattle where the stadium has a retractable roof but is not climate controlled or completely enclosed. The retractable roof, as

opposed to a fully enclosed domed stadium, gives a ballpark the ability to grow natural grass by allowing the necessary amounts of precipitation and sunlight onto the field of play.

There is a tremendous amount of character that exists in the entertainment district. There are many historical warehouse buildings in this area that share similar architectural characteristics including form, details, materials and height. Grain Belt Park's aesthetics are contemporary yet follow some of the patterns and materials that are so predominant with the neighbouring warehouse style buildings. The new ballpark blends in with the neighbouring warehouse style buildings using red brick facades and an emphasis on vertical lines through the use of tall windows and columns. Grain Belt Park's steel structure follows a trend used by many of the new retro ballparks to provide a historic look and a lighter appearance by limiting the use heavy concrete. The aesthetic detailing of the new stadium brings the architecture down to a human scale, another initiative to enhance the experience of baseball.



Looking west into the 'Gap' at Grain Belt Park from 5th St. N.



7.2 Grain Belt Square

A public square is the space designed with the ballpark. Marcus and Francis (1998) define this space as:

"A centrally located often historic place where major thoroughfares intersect.

Unlike many other kinds of squares, it is not attached to a particular building; rather, it often encompasses one or more complete city blocks and is usually bounded by streets on all four sides.

Hardscape and planting are often finely balanced, so that this place could be considered midway between a square and a park. Sometimes it contains a major monument, statue, or fountain. It attracts a variety of users and activities."

The result is Grain Belt Square, a space that opens up into the ballpark and creates a dialogue between the activities that occur in the square and those that occur inside the ballpark.



Looking onto Grain Belt Square from the upper deck of the ballpark. (proposed buildings in Blue)

The square creates a meaningful place

for baseball outside of the ballpark. The location of the square provides an opportunity for the activities in the square to interact with the ballpark. Its direct connection with the ballpark allows for the experience of baseball including the sights, sounds and smells of the game to spread out into the square. It provides an opportunity for downtown to experience a heightened experience of baseball as the game is no longer contained inside



the ballpark. The square connects to several major thoroughfares allowing many outlets for the sensory components of baseball to expand further out into the downtown. The square intersects with the major paths on 7th St. N. and the skywalk system. There is also an indirect connection to the square and ballpark from 3rd St. N. intersecting the other major path on 5th St. N.

The square bridges 2nd Avenue North over the freeway to 3rd Avenue North and leads directly into the ballpark. The square bridges the ballpark and its surroundings to the downtown without disrupting existing traffic coming from the freeways. The square has several entrances that are visible from many points. There are 4 entrances: down 7th St. N. at the ballpark entrance, at the corner of 7th St. N. and 3rd Ave. N., at the end of 6th St. N., and at the corner of 5th St. N. and 3rd Ave. N. Each entrance is narrow leading into the large plaza. These entrance corridors, give a similar experience to walking through a portal at the ballpark itself, leading through a dark narrow path to be greeted by a wide open



Looking north towards the ballpark. The Minnesota Twins office is on the left.

view of the playing field. The square is terraced to guide fans down to the ballpark. The views of the playing field are the most important and predominant feature of the plaza. The sights and sounds of the game of baseball will fill the plaza during gamedays. The activities in the square change from the large gathering space full of movement during gamedays more of a reflective space on non-gamedays for office workers to go eat lunch, or baseball fans catch a glimpse of

a team practice.

The form of the square is derived from the game of baseball. Large circular paved bands extend from home plate. Both the terraces and the bands are derived from 50ft intervals from home place. Inscribed in the paved bands is the distance from home plate. These bands are interactive elements as fans from both inside and outside the ballpark watch and experience home run balls and have the ability to judge how far each ball flies. The "Swinglights", a lighting element introduced in the next section, are incorporated into the square as well as used in a large portion of the study site. The lights would be spaced using the 50 ft. paving bands. The lights are the main lighting source for the plaza with the glow from the ballpark lights becoming an important secondary source during gamedays.

The remaining paving pattern for the square is derived from a technique known as striping, which is done with lawn mowers passing along the grass playing fields bending



Looking north, the SWINGlights and the Target fountains are in view.

the grass creating a pattern. In recent years, groundskeepers have also incorporated the use of special weighted rollers to create artistic patterns on the playing fields. Generally the infield stripe is very narrow, while the outfield stripe is wider. The paving in the square stripes alternated from lighter paving to darker paving to play off the striping on the new playing field of Grain Belt Park. Also at each 50 ft. band, the paving stripes become wider, much in the same

manner that the outfield stripes are wider than the infield stripes. The paving color on these stripes changes from red tones in fair territory to blue tones in foul territory. The colors were chosen to match the primary colors of the Minnesota Twins. These patterns are experienced both from fans inside the ballpark as well as the casual onlooker passing by the plaza during an off-day.

The fountains are another interactive element in the square. The fountains operate normally during off days however the fountains 'dance' on game days after big plays, home runs or after winning games. The original concept of the fountains incorporated the realities of using corporate sponsorship in baseball by making the fountains in the shape and colors of the Target Store logo, a company whose headquarters are based in downtown Minneapolis. These massive fountains play a very important part in enhancing the experience of being in and around the ballpark. The dancing ability of the fountains actually makes them a part of the game itself as they interact with what occurs on



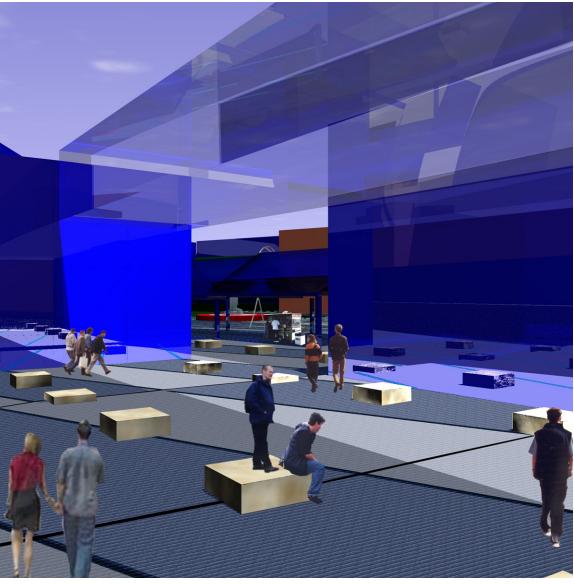
Looking north into Grain Belt Park from the Target fountains.

the playing field. The square also features simple stationary seating that is spaced out to accommodate the movement of large crowds arriving and leaving the ballpark.

The canopy structure is an element that becomes a marketplace on gamedays. It is a space allocated

to a variety of vendors: hot dogs, kettle corn, souvenirs stands, programs, and the well known local "Famous Dave's" rib shack. Vendors have long been a part of pre and post game activities around sporting events. It is very appropriate to introduce the smells of baseball to go with the sites and sounds of baseball which are predominant from the plaza. Vendors are a traditional part of the game of baseball that cannot be forgotten. Having a canopy creates increased business for these vendors as well as increased pedestrian activity in the square during those gamedays with poor weather when the canopy can provide shelter. The canopies also lead to an entrance to the skywalk system.

Two new two storey buildings surround the square. The first on the southwest side houses the Minnesota Twins offices and ticket outlets. The location of the building provides an ideal location for fans to pick up tickets on the way to the ballgame. The second building located at the southeast end of the square is a mixed-use development with a restaurant and



Looking into Grain Belt Square from the entrance off 7th St. N. (proposed buildings in Blue)

bar on the main floor that serves office crowds at lunch hours and sports fans before and after ballgames. The restaurant opens up onto the square to increase activity in and around the area. The second floor of the building serves a variety of commercial outlets as well as some office space. The second floor of both buildings is also connected to the __ already extensive skyway system in downtown Minneapolis and connects into Grain Belt Park providing an alternate

way of getting to the ballpark during periods of bad weather.

The design of the square works with the local climate. Although Grain Belt Square is a wide open space, it is protected from the harsh northeast winds by the massive structure and roof of the ballpark and also by the other surrounding buildings. In terms of sunlight, the plaza is in a mix of both sun and shade, giving patrons an option when lingering in the square. The square is surrounded by buildings along all sides that cast shadows at various points during the day. The buildings that are casting the shadows range from 2 storeys up to but no taller than 8 storeys, which is the height of the Target Center and Butler Square, the two tallest buildings in the immediate area.



Looking north on 7th St. N. towards the ballpark at Hawthorne Ave. (proposed buildings in Blue)



7.3 Detailed Design: SWINGlight

Creating a lighting element is a detail design exercise. The lights, nicknamed "Swinglights", are individual elements that are part of the urban design strategy of urban integration. Their form reinforces the concept of baseball and the motion inherent in the game. The lights are located throughout the Entertainment district serve as a constant reminder of the influence of baseball.

The inspiration of the Swinglights is from the instructional book "The Art of Hitting .300" by Charlie Lau that breaks down the swing of Hall of Fame baseball player George Brett using time lapse photos. Each light represents one stage in the motion of a player's swing. The form of the lights takes on a flowing shape that reflects the gracefulness and the motion of the baseball

This item has been removed due to copyright issues. To view it, refer to its source.

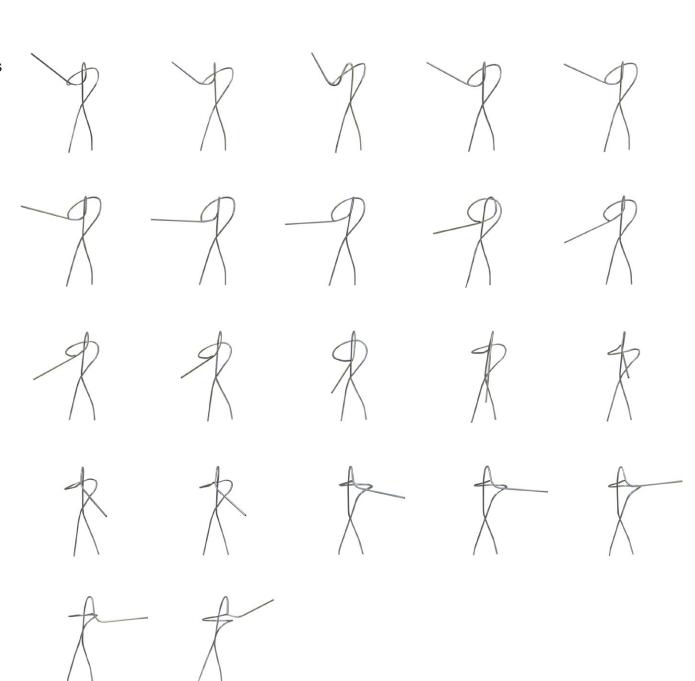
Swing sequence of George Brett from "The Art of Hitting .300" by Charlie Lau (1986)



swing. The form of the lights remains abstract yet still serves as a constant reminder in the downtown of the game of baseball and the nearby Grain Belt Park.

The basic design of the lights incorporates both pedestrian level lighting and vehicular lighting into one element:

"Two different kinds of lighting fixture are required. For the street itself, we need a fixture that gives a directed beam of light with the source "cut off," that is, hidden from view unless you are looking directly up at the light fixture... For the sidewalk, a lower, more decorative light fixture is needed, closer in spirit to those Edwardian street lamps." (Barnett, 1982)



Sequence of SWINGlights



The design includes two separate lights within each individual Swinglight. The first light is located at the top of the 'bat' and would illuminate roadways and vehicular traffic. The second light is located at the joint between the 'bat' and the 'hands'. This light is at pedestrian scale and directed at sidewalks. The first light is set at a height of approximately 30' to illuminate the streets. The second light is set at a height of approximately 20' and placed closer to the sidewalks for pedestrian level lighting. Although each Swinglight has a unique shape, each is able to illuminate both the street and the sidewalks.

The lights follow through the motions of a swing from the set up down to the follow through. Each Swinglight is also part of a linear series. Beginning at the edge of the Entertainment district at Hennepin Ave, each street displays a series of Swinglights. The closer the Swinglights are to the ballpark, the further along they are in the stages of the baseball swing. The lights are placed at the intersection of the sidewalks and the paving



Looking north at sequence of SWINGlights along 7th St. N. at Hennepin Avenue.

bands that radiate every 50ft. from home plate of Grain Belt Park. The lights serve as a wayfinding element as the form of each individual Swinglight can inform the pedestrian as to how far they are located from the ballpark or from the edge of the ballpark district.

The lights are experienced at a couple of different levels. The first is at a vehicular level. Experiencing the lights at the speed of travelling vehicles including light rail transit would be similar to watching a baseball swing in motion. Each light passes by at greater speeds giving them a fluid and graceful look. At the pedestrian level the lights are experiences in a different fashion. A pedestrian would view each light as an episode, similar to how a fan watches a baseball game. Every time a pedestrian crosses the path of the light they can look down at the paving band and read the engraving telling them the distance to home plate.

The Swinglights define the boundaries of ballpark district. Seen from a distance, the lights also serve as a landmark or beacon to the ballpark and the Entertainment district. The lights serve as landmarks signify the beginning of the Entertainment district. They are visible from the collector streets that lead into the district.



Looking west towards the ballpark and square along 3rd Ave. N. at 5th St. N.

The material chosen for the Swinglights is polished steel. The finish of the lights contrasts with the red brick warehouse buildings in the Entertainment district. The steel has a contemporary aesthetic, a flowing and plastic material that enhances the interesting form of the lights.

8.0 Final Remarks

8.1 Summary

This project used baseball's wide appeal and status in American culture to promote urban integration in downtown Minneapolis. Baseball is a strong identifiable element to that is used to provide meaning to the study area. Meaning links built form, experience and culture together to achieve urban integration. The addition of a ballpark in the downtown reintroduced baseball to the urban core. The project uses the ballpark as a central hub. Elements of baseball flow out of the ballpark and are expressed throughout the study area. These elements are unifying characteristics that link the urban design together with the site design. Baseball's presence provides an additional reason for people to be drawn to downtown.

Grain Belt Park, the new ballpark downtown is the focal point for the game. The ballpark's design also reflects the need to allow the elements of the game of baseball: the sights, sounds and scents to escape and interact with the downtown. The new public open space, Grain Belt Square, is also designed with baseball in mind. The plaza design, heavily influenced by the geometries of the game, is directly attached to the ballpark. The plaza is designed to interact with the ballpark, with the game flowing out onto the plaza and into downtown. The new lighting elements, SWINGlights, are used to define the new entertainment district and reinforce the influence of baseball in the downtown. The motion from each series of SWINGlights provides an episodic rhythm, a trait that reflects the game itself.

The success of the project relies heavily on providing an opening in the ballpark allowing the game to flow out into the downtown. The result encourages new development from supporting land uses including new parking garages, souvenir shops, bars and restaurants. This development fills the remaining gaps in the existing entertainment district. Existing built form such as restaurants, nightclubs and parking garages work together with the new ballpark



supporting each other's patrons.

The other new district, the retail office district is created from the strength of Nicollet Mall and the high rises of downtown. The change in land uses, built form, character and distance away from the ballpark are enough for this area to warrant its own district. The elements of baseball: sights, sounds, and scents emanating from the ballpark lose their impact in the retail/office district. The transition strip at Hennepin Avenue, with its mixture of high rise office towers, retail space, clubs and restaurants, provides a suitable transition strip between the entertainment and the retail /office districts.

8.2 Critical Assessment

In retrospect, this practicum could spend more time addressing the creation of meaningful places and experiences by linking design and baseball culture. However, this project struggled to deal with placemaking. Placemaking is defined from a design point of view where the design creates places for activity to occur. The project did not look at other definitions of placemaking. There was no public consultation process used in the creation of place in this practicum.

The urban design component of this project deals with built form. Other theories or methods for understanding the workings of the city were not explored. Kevin Lynch's "Image of the City" only provides one method of revealing the inner workings of the city. Other urban design approaches that reveal the city in a different way and focus on issues beyond urban form could strengthen this practicum. The urban design does not address the social, environmental or economic impacts. Socially the practicum could study and address the current land use needs of downtown Minneapolis. Also the potential impacts of the ballpark such as traffic, noise, and bright lights in surrounding neighbourhoods were not within the scope of work.

There are a number of environmental impacts still left to be discussed. The effects of the trash burner located immediately north of the new ballpark on crowds both in the ballpark and the downtown remains to be addressed. Also an assessment of the existing noise levels from the vehicular traffic, particularly on the freeways could be addressed to ensure crowds in the ballpark and open space are not negatively affected.

A project of this magnitude would require a massive amount of capital investment. The economic impacts for this project are not addressed. Preliminary cost estimates for the new ballpark, open space, land acquisition



and infrastructure are not intended to be a part of the project. Also the economic viability and benefits are crucial to the implementation are not considered as part of this design scheme.

The methodology could be strengthened with additional data. The project does not quantify the amount of vacant land available for potential urban infill. There is also no data assembled to quantify the current land uses in the study area, nor does it provide projections or current trends in downtown Minneapolis. Vacant available space in existing buildings could also provide an indication on land use needs for the study area.

The project did not complete a full summary on the parking in the downtown. The data collected did not provide an actual percentage of parking used, nor did it provide any time frames on when it was used. The current data cannot clearly decipher if there is a sufficient amount of parking spaces downtown.

Finally, does the project work? In my opinion a new ballpark and the influence of baseball on the study area successfully promotes urban integration. The activity generated by the new ballpark and urban infill developments help to sustain the activity the surrounding districts. The surrounding land uses: entertainment and parking are key components to the ballpark's success. These are supporting land uses that easily connect to the functions of a new ballpark. These supporting land uses combine with urban and site design interventions with their unifying characteristics to provide a destination for baseball fans.

The project also is successful in strengthening linkages in the downtown. Key pedestrian and vehicular paths leading to the ballpark are strengthened by expanding the Light Rail Transit line and lengthening the Cedar Lake Trail. The new ballpark also influenced the creation of key vehicular/pedestrian interfaces such as new transit stops, entrances to parking garages and into the skywalk system.

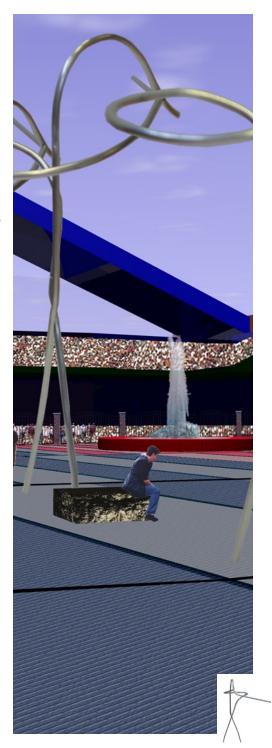
The use of baseball as a catalyst may work in other American cities such as Boston where the city passionately embraces the Red Sox. However the city should have an existing market for baseball, where the cultural appeal of the game is already present. The urban design concept could also be applied to other projects. A developer or city should look to use an existing or emerging entertainment district as the location for a new ballpark to take advantage of supporting land uses. Any new project should look to connecting into existing major vehicular and pedestrian paths. The ballpark's proximity to freeways and other major traffic arteries would also be advantageous towards the disbursement of traffic. The new ballpark should also take advantage of existing parking where possible. It should also have any existing transit lines and stations be

located close to, or extend into the ballpark. Finally opportunities to reconfigure or create new public open space should be taken advantage of as gathering spaces for the thousands of fans going to a game.



Epilogue

Since 1999, the Minnesota Twins and the State of Minnesota continue to negotiate a deal to build a new ballpark in either Minneapolis or St. Paul. The Twins remain potential candidates for contraction when the current Major League Baseball collective bargaining agreement runs out in 2006. The ballclub is also looking at building a retractable roof ballpark. I hope that the parties involved can look to a project like this and see that the construction of a new ballpark can be beneficial to both the team and to the city. As a fan of the game I will continue to follow the ongoing developments in Minnesota and hope the Twins and the State get a deal done soon. Go Twins.



Acknowledgements

First and foremost my thanks go out to my advisors: Jean Trottier, Ted McLachlan, and Augustine Wong, without your support and wealth of knowledge, the completion of this project would not have been possible.

I would also like to thank the following people:

In Winnipeg:

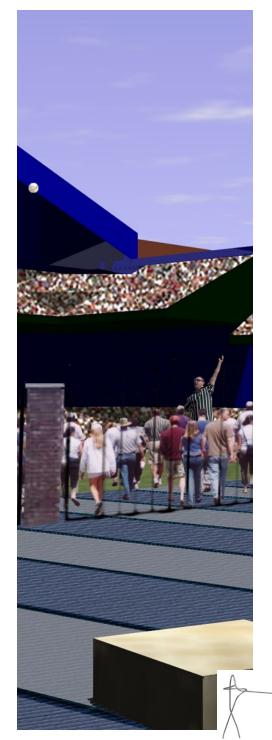
Andy "Chainsaw" Sheie; Shaun "Iceman" Finnigan; Scott Jordan; Rob Zonneveld; Ron Prociuk; Carl Nelson for your recollections of downtown Minneapolis (you will be missed Carl); Alan Tate for the Minneapolis Parks System information; Claude Cormier for the guest critique; Mark Walc for the great photos of Coors Field; and Sam Katz of the Winnipeg Goldeyes for your input and help.

In Minneapolis:

Nick Koch of HGA - the project would not be where it is without your help; Jay Weiner of the Star Tribune; Terry Minarik of DFA; Dave St. Peter of the Minnesota Twins; Pete Schmitt and the friendly staff at the International House; Greg Mathus of the City of Minneapolis Planning Department; Jim Forsyth of the Minneapolis Community Development Agency; and Mitzi Paterson of the Minneapolis Parks System.

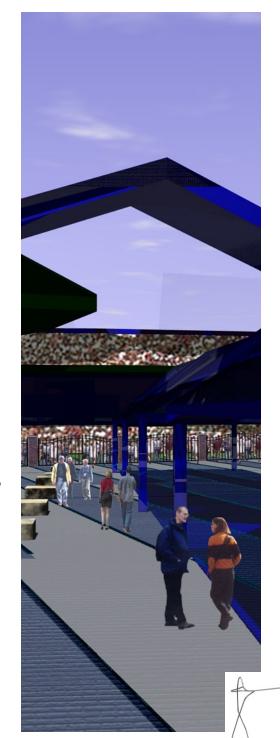
Close to Home:

I would also like to thank my office: McGowan-Russell Group - Ross, Susan, Jackie, Ida, Windy, Deb, Mark, and Cathy for all your support and daily encouragement over the last year. To my friends for always being there: Steve and Dar, Cher; Andy; Isaiah and Evan, Renelle; Todd and Everett, Michelle, Ger; Grant and Morgan, Tricia, Tanya and Steve, Jaclyn, Joyce and Brian, Nicole B, Mark, Ron and Lor, Mel; Francis; Hannah and Steven, Michelle and Mike, Mirei and Jason, Nic and Nigel, Ryan, Amanda and Dave, Kim and Rob. Last but not least to my family: Mom, Dad, Bachan and Allison for your encouragement and support over the last few years, through thick and thin you have always been there for me, and I can't thank you enough.

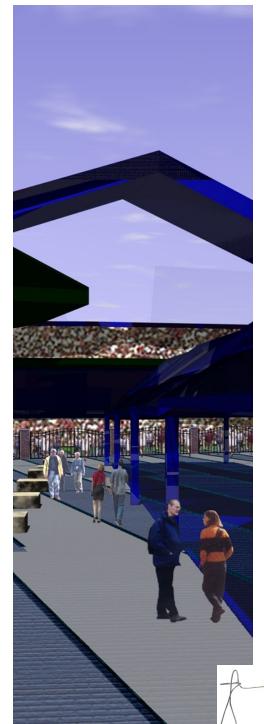


Bibliography

- Bacon, E. Design of Cities. Revised Ed. Harmondsworth: Penguin Books, 1976.
- Barnett, J. An Introduction to Urban Design. New York: Harper & Row, Publishers. 1982
- Bess, P. City Baseball Magic: Plain Talk and Uncommon sense about Cities and Baseball Parks. St. Paul, Mn: Knothole Press, 1999
- Braun, B. "Sports Stadiums Downtown: Are downtown arenas catalysts for urban revitalization?" Urban Land. v.58, n.9, (September 1999): 144.
- Broadbent, G. Emerging Concepts in Urban Space Design. New York: Van Nostrand Reinhold. 1990.
- Chidister, M. "The Effect of Context on the Use of Urban Plazas." Landscape Journal, v.5, n.2, (1986): 115-127.
- Diamond, J. and S. Pearce. "The Domed Stadium, Toronto." Canadian Architect, v.32, n.5, (May 1987): 30-37.
- Dillon, D. "Dialogues" in Sasaki Associates: Integrated Environments, Washington and Cambridge: Spacemaker Press, 1997
- Enlow, C. "Expensive Gesture." World Architecture, n.80, (October 1999): 84-85.
- Farrell, J. My Baseball Diary: a famed American author recalls the wonderful world of baseball, yesterday and today. New York: A.S. Barnes, 1957.
- Freedman, A. ""Convertible" Stadium in Downtown Toronto." Progressive Architecture, v.70, n.8, August 1989): 19, 26.
- Garvin, A. The American City: What Works, What Doesn't. New York: McGraw-Hill, 1996.
- Graham, J. "The Neighborhood-Friendly Stadium: Three neighborhoods and a local foundation work to make Seattle's new stadium complex a good fit." Planning, v.68, n.7, (July 2002): 28-31.
- Gratz, R.B. and N. Mintz. Cities Back from the Edge: New Life for Downtown. Washington, D.C.: Preservation Press; New York: J. Wiley, 1998.
- Gunts, E. "Grande Stand." Architecture, v.81, n.7, (July 1992):[65]-71.
- Harnik, P. "Cedar Lake Park and Trail" in Garvin, A. Urban Parks and Open Space. Washington, D.C.: Urban Land Institute, 1997.



- Hedman, R. and A. Jaszewski. Fundamentals of Urban Design. Chicago: Planners Press. 1984.
- Hirzel, David. "Cleveland Gateway." Urban Land, v.52, n.5, (May 1993): 34-37.
- Hough, M. Out of Place: Restoring Identity to the Regional Landscape. New Haven: Yale University Press, 1990.
- John, G. and R. Sheard. Stadia: A Design and Development Guide. 3rd ed. Oxford: Architectural Press, 2000.
- Kinsella, W.P. Shoeless Joe. Boston: Houghton-Mifflin Company, 1982.
- Klobuchar, A. Uncovering the Dome. Minneapolis: Bloger Publications Inc, 1982.
- Kostof, S. The City Assembled: The Elements of Urban Form through History. 1st North American ed. Boston: Little, Brown, 1992.
- Lau, C. "The Art of Hitting .300." New York: Penguin Books, 1986.
- Leccese, Michael. "Taking It Downtown." Landscape Architecture, v.85, n.6, (June 2000):78, 80-81.
- Litt, S. "Two-Base Hit." Landscape Architecture. v.85, n.6, (June 1995): 75-77
- Loukaitou-Sideris, A and T. Banerjee. Urban Design Downtown: Poetics and Politics of Form. Berkeley: University of California Press. 1998.
- Loverro, T. Home of the Game: The Story of Camden Yards. Dallas: Taylor Publishing, 1999.
- Lozano, E. Community Design and the Culture of Cities: The Crossroad and the Wall. Cambridge; New York: Cambridge University Press, 1990.
- Lynch, K. The Image of the City. Cambridge: The Technology Press & Harvard University Press. 1960.
- Marcus, C. and C. Francis (ed.) People Places: Design Guidelines for Urban Open Space. New York: Van Nostrand Reinhold, 1998.
- Matus, V. Design for Northern Climates: Cold-Climate Planning and Environmental Design. New York: Van Nostrand Reinhold Company, 1988.
- Miller, T.K. "Downtowns Get a Sporting Chance." Urban Land. v.58, n.5, (May 1999): 22-23
- Neilson, B. "Baseball" in Raitz, K. The Theater of Sport. Baltimore: The Johns Hopkins University Press, 1995.



- Pastier, J. "Play Ball!" Landscape Architecture. v.85, n.6, (June 1995): 71-72
- Prowler, D. "Baltimore Hits Home with New Baseball Park." Progressive Architecture, v.73, n.6, (June 1992):26.
- Robinson, M. "Place-making: the Notion of Centre: A Typological Investigation of Means and Meanings." in Menin, S. Constructing Place: Mind and Matter. London: Routledge, 2003.
- Schneekloth, L. and R. Shibley Placemaking: The Art and Practice of Building Communities. New York: John Wiley and Sons, Inc., 1995.
- Simo, Melanie. "Urban Design" in Sasaki Associates: Integrated Environments. 52-53, Washington and Cambridge: Spacemaker Press, 1997.
- Souster, R. "It Was Being There." in Take Me Out to the Ballgame. Ottawa: Oberon, 2002.
- Takesuye, David. "Coors Field: The Centrepiece of LoDo." Urban Land, v.59, n.11-12, (November/December 2000): 138-139.
- Tate, A. Great City Parks. London: Spon Press, 2001
- Trancik, R. Finding Lost Space: Theories of Urban Design. New York: Van Nostrand Reinhold, 1986.
- Weiner, J. Stadium Games. Minneapolis and London: University of Minnesota Press, 2000.

