

CLARIFYING THE RELATIONSHIP BETWEEN
HISTORICAL BUILDINGS AND URBAN OPEN-SPACE DESIGN:
AN EVALUATIVE TECHNIQUE AND THREE CASE STUDIES

by

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1985

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CHAPTER 1

Clarifying the Relationship Between Historically Significant Buildings and Urban Open Space Design

American cities are experiencing a renaissance and design professionals can play a vital role in contributing to this rebirth. These two facts form the basis for this study which developed out of a deep interest in both the American city and the impact which urban designers may have towards improving the urban environment. This study deals generally with the small urban open spaces of the city which Heckscher (1977) has termed the life of the American cities. This study also gives attention to important urban, historic architecture, the value of which involves historic and artistic importance as well as economic, visual, and sentimental significance (Fitch, 1982). Specifically, this study focuses on the functional design of new urban open spaces surrounding historical buildings. The problem addressed is twofold: first, a supportive context for the historical building; and second, a successful open space used by people.

Most of the terminology used in this study commonly is used by environmental designers and requires no special definition. A few terms, however, warrant detailed clarification to establish precision throughout the study. These terms are as follows:

Urban open space. A general term describing an area within the city devoted to either greenspace or public plaza. The size of such an open space for this study is small, or less than a square block in area (three acres or less). The space may be publicly accessible and introduce natural elements into the site.

Urban plaza or plaza. A continuous open area adjacent to the street or sidewalk. This space is accessible for the use and enjoyment of large numbers of people and acts as a public outdoor room (Ramati, 1981, p.12). A plaza can be distinguished from an open space by the fact that the plaza is more fully articulated in its function as people-space.

Historical building. An important civic building which has been preserved or rehabilitated; which is still in active use and in good repair; which is considered architecturally and historically significant to the area or region; and which has received listing on the National Register of Historic Places as validation of its significance.

An extensive review of the literature on urban open spaces and historic preservation of buildings justifies the importance of the present study. The contextual issue of the new urban open space and historical buildings has not been specifically addressed in the design literature, although there is much research which bears on and lends support to the issue. This literature reveals the crucial importance of public open spaces in the city. We are advised that the "problem of improving our environment, the physical surroundings that we live with every day, is the central design issue of our time" (Carpenter, 1976, p.5). This thesis argues that public open space is crucial to the habitability of our cities.

The literature also reveals the importance of historical buildings and their preservation. We are advised that the city is a continuum of historic artifacts, represented by architectural styles from various eras. The importance of maintaining this continuum stems from our need to have associational linkages from our past to our future (Fitch, 1982; Halprin, 1972; Huxtable, 1970; Lynch, 1972; Simonds, 1983). Beyond this emotional need for a sense of the past, historic buildings also are important for their aesthetic qualities and for lending variety and interest to the urban scene (Fitch, 1982; Simonds, 1983; Wiedenhoef, 1981).

Through a thorough investigation of the literature, it became apparent

that discussion of open spaces and historical buildings could be organized within a framework of three broad categories or themes: first, positive image of place; second, orientation for people; and third, introduction of natural elements. I argue that this framework provides one means for analyzing and rating the complex of the open space/historical building. In sum, the structure of this analytic framework can be outlined as follows:

Positive Image of Place

1. building/space relationship
2. reinforcement of past
3. recognition as a place to be
4. perception of cleanliness and maintenance
5. organized event programming and promotions

Orientation for People

1. places to congregate
2. barrier-free accessibility
3. provision of food
4. provision of site fixtures and furniture
5. existence of focal points

Introduction of Natural Elements

1. inclusion of plant material
2. utilization of the design functions of plants
3. improvement of microclimate
4. enhancement of urban setting
5. inclusion of water features
6. maintenance of landscape features

Once the three themes and their respective criteria of analysis were established, the next step became the identification of a site or sites on which to examine these themes and criteria concretely. Three sites were selected which met the specific requirements of the study: first, the Indianapolis City Market and plazas; second, the Peoria City Hall and adjacent open spaces; third, the Wichita Sedgewick County Historical Museum and Heritage Square Park (Figures 1.2, 1.3, and 1.4).



Figure 1.1

Location Map of Case-Study Cities



Figure 1.2

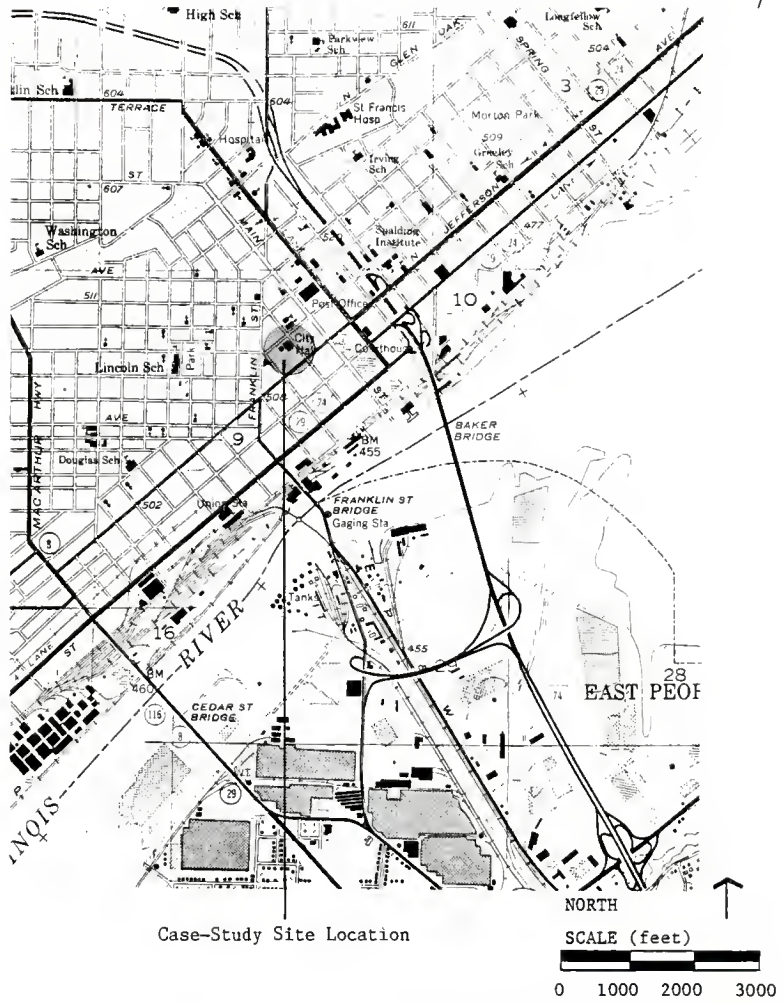
Indianapolis: Area Map Showing Vicinity of Case-Study Site



Case-Study Site Location

Figure 1.3

Wichita: Area Map Showing Vicinity of Case-Study Site



Case-Study Site Location

Figure 1.4

Peoria: Area Map Showing Vicinity of Case-Study Site

These three sites, familiar to the author prior to the study, were a major impetus for undertaking this study. Each of the three sites includes both an historical building listed on the National Register and a major public urban open space as a context to the historic building. The three sites are located within a region commonly referred to as the Midwest (Figure 1.1). There are certain similarities in the historic development of the three cities. Each experienced rapid growth as a result of the advent of the railroad and became an important rail center. Each has become an important manufacturing node within its particular region. The scale of the three historical buildings is very similar, and all three buildings were built within a twelve-year period, thus representing similar periods of urban growth.

One also finds that there are similarities in the reasons for creating the open spaces surrounding these three historical buildings. A fire destroyed the building adjacent to the Indianapolis City Market--an event which instituted a drive to create a new setting for the City Market building itself. In Wichita, the neighboring building to the Historic Museum was deemed outdated: a drive was begun to create a setting for the Museum Building as well as the old City Library building, now the city planetarium. In Peoria, the neighboring buildings were demolished to allow the construction of a new civic center complex, of which the City Hall building was to become a focal point, and the spaces were a part of creating a setting for both new civic center buildings and City Hall. In all three cases, the reason for creating open spaces surrounding these historic buildings was the recognized necessity for providing an open setting which surrounded the historic buildings, while accommodating changes in the downtown.

Besides similarities, the three sites also involve several contrasts. First, the population of the three cities varies considerably. Indianapolis, with a city population over 700,000, is over twice the population of Wichita, (approximately 290,000) and nearly five times the population of Peoria (approximately 125,000). Second, the three historical buildings are quite different in their architectural styles. The Indianapolis market building has been identified as an eclectic Romanesque Revival (Historic American Building Survey, 1974); the Historical Museum building in Wichita is described as Richardsonian Romanesque (Davis & McCarthy, 1979); yet again, the Peoria City Hall is classified as German Renaissance (Kenyon, 1979) (Figures 1.5, 1.6, and 1.7). Third, and most important to this study, is the differences in the designs of each open space site and its relationship to its surroundings. The Indianapolis site represents an open space which not only addresses the context of the historic building but relates well to the larger context of the surrounding city. The Wichita site represents an open space which relates well to the historic building, but is withdrawn from the context of the surrounding city. The Peoria site represents an open space which provides a green setting, but does not relate well to either the historic building or the surrounding city context. The analysis allows one to look critically at the open space/historic building complex, and helps to answer two important questions. First, how was the relationship addressed by professional designers? Second, how has the design worked once implemented?

As we attempt to breathe fresh life into our cities and deal with the myriad problems which the city faces, such a study as this can offer assistance in dealing with the issue of the historic building/open space marriage and to lay the groundwork for success. We recognize the importance of the historic building in the fabric of our cities. We also are

aware of the importance of attractive, functional, and successful open spaces within our urban centers. The complementarity of these two vital urban features is paramount to the health of our cities. This study attempts to look at this issue and answer some of the resultant design questions.

The Three Case-Study Sites: Historical Background

The name "Peoria" is the French derivation of the name of an Indian tribe which inhabited the area where present-day Peoria is situated. The French, exploring the Illinois River valley during the seventeenth century, had established a mission and trading post with the native Indians at the site by 1763. A French village occupied the site until 1813, when the French were expelled, the village burned, and Ft. Clark was established as a military outpost to the Virginia colonies (Rennick, 1935). The townsite did not officially become the village of Peoria until 1835, when it was chartered as the County Seat of Peoria County (Rennick, 1935).

Growth of the city was enhanced by the navigable river and the rich agricultural land which surrounded it. The success of corn as a grain crop as well as a good supply of fresh water helped to establish the city as one of the centers of corn-distilled liquor production. The city also became an important rail center, which furthered the growth of industry and manufacturing. By 1890 the population of the town had grown to 41,000 (Rennick, 1935).

The current plan of the original townsite dates to the survey by William S. Hamilton, descendant of Alexander Hamilton. This plan, drawn in 1825-26, constitutes (with a few exceptions) the same configuration of streets which now exist (Figure 1.8). The city's second municipal building



Figure 1.5

Indianapolis: City Market Building

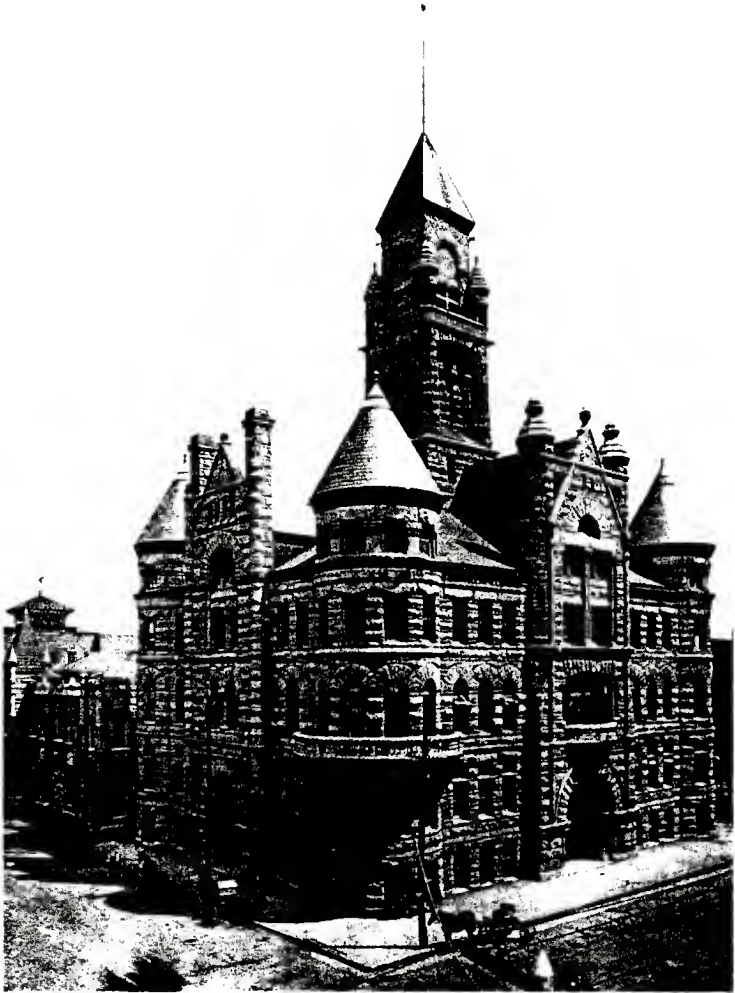


Figure 1.6

Wichita City Building, circa 1908

Note: From A Souvenir History of the City Building, 1888-1980 (p. 1)
by C. Miner, 1978, Wichita: Wichita-Sedgewick County Historical
Museum Association

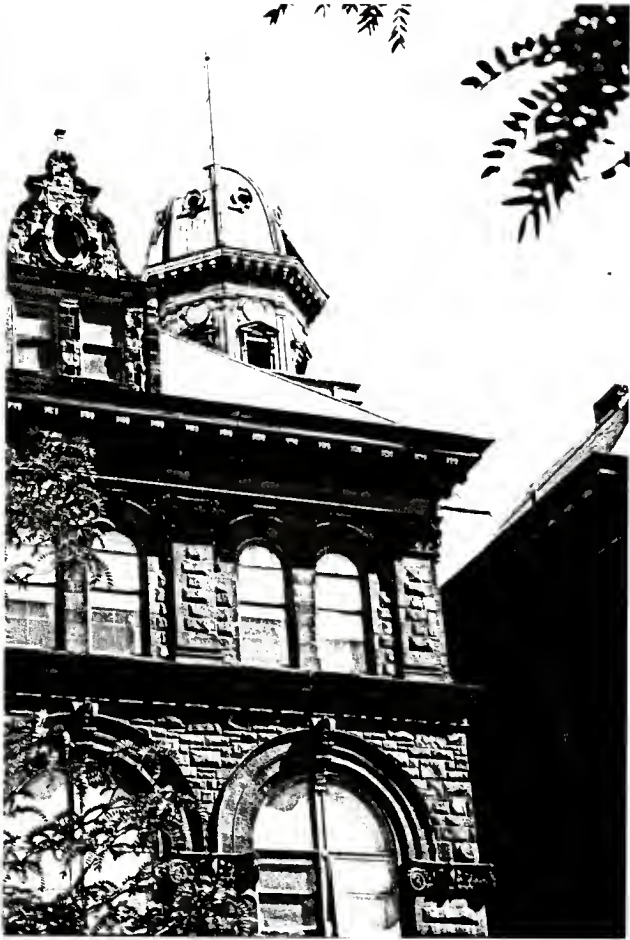


Figure 1.7

Peoria City Hall Building, 1984

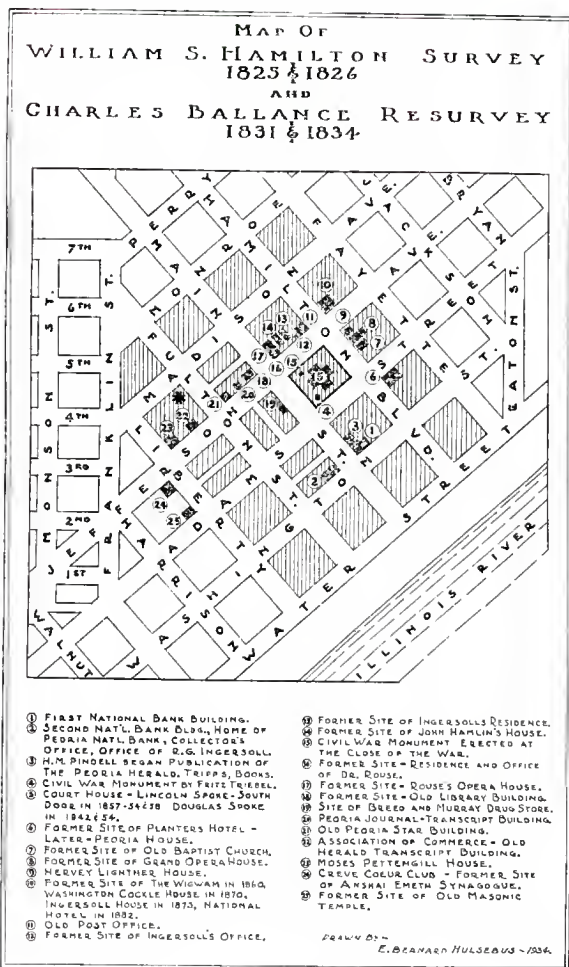


Figure 1.8

Peoria: Original Town Plan, circa 1834
* Indicating Location of Present City Hall

was built in 1859, and occupied the site near the southwest corner of Madison and Fulton Streets, the current case study site. Originally a market building was located where the current city hall stands (Figure 1.9).

The present City Hall was built in 1896-98 at a cost of \$234,592 (McCullough, 1902). A local architectural partnership, Reeves and Bailee, designed the structure. At the time the building represented the finest of details and craftsmanship with local craftsmen providing all the building skills. Constructed of masonry and steel, the building was faced with Lake Superior brown sandstone. Hallways were wainscoted in Italian marble and floors were American marble. Rooms and offices were finished in red oak. Both electric and gas lighting was provided. A four story central atrium allowed natural light to enter the building through a skylight, and lighting reached interior rooms without windows through the use of borrowed light windows on the atrium (Figure 1.10). There was a great deal of local pride in the building since, at the time of its construction, it represented the finest in public facilities.

In the 1950s the functions of city government had outgrown the space of the City Hall and there was an initiative to replace the structure. The issue remained a controversy until the fate of the building had been decided in 1971. In that year the City Council voted to protect the building as an historic site. The building was listed in the National Register of Historic Places in 1978. Piecemeal repairs had been made to the City Hall through the years. Currently, the building is undergoing a million-dollar renovation program. This program includes restoration of stone and other exterior features; roof, dormer, skylight, and cornice repairs; bell and bell tower repairs; window replacement; heating and cooling improvements; safety code improvements; and exterior lighting and site improvements.

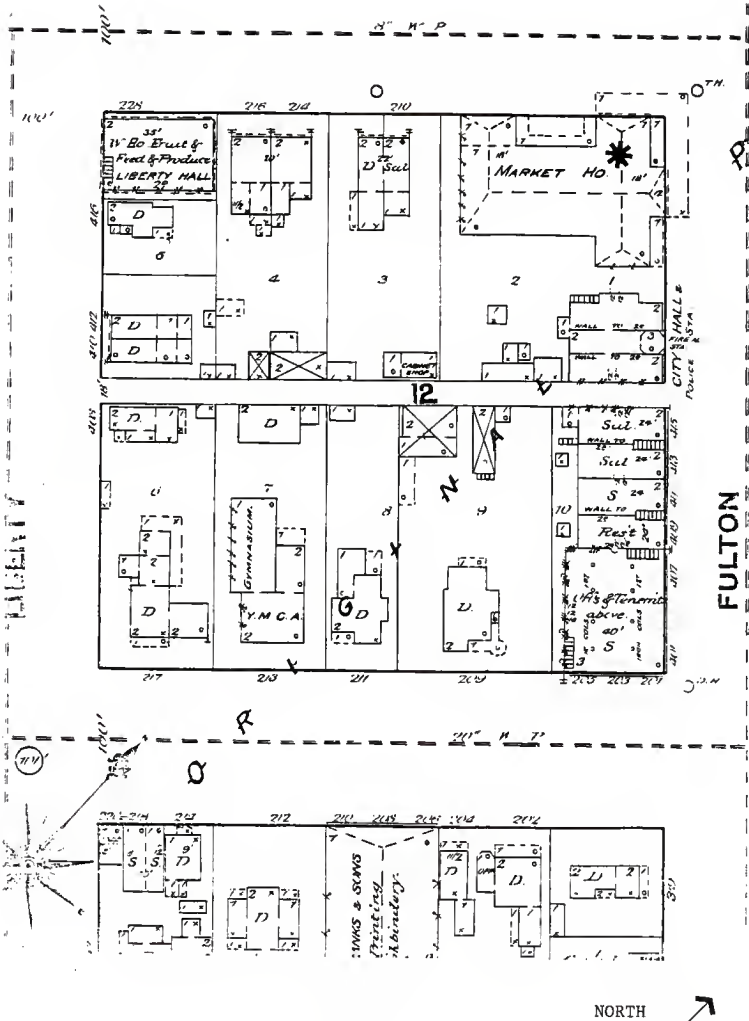


Figure 1.9

Peoria: Sanborn Map, 1890, Location of Present City Hall,*
Where Market Once Existed



Figure 1.10

Peoria: City Hall Atrium Showing Ornamental Ironwork
and Stained Glass Skylight

The City Hall has become a focal point of the Civic Center Complex, built in 1980. The complex—including an arena, convention center, theater, offices, and parking—has greatly altered not only the context of the City Hall, but approximately fifteen acres of the downtown (Figure 1.11). The City Hall, which originally occupied the southwest corner of Madison and Fulton Street, now faces Fulton Street, and fronts an open space opposite the theater to the northwest and an open space and parking lot toward Jefferson Street to the southeast. These two open spaces form the basis of the Peoria case study (Figures 1.12, 1.13, and 1.14).

The designer of the Peoria Civic Center, architect Phillip Johnson, recommended the open spaces be sodded with grass and that street trees be aligned along the sidewalk perimeters. No other significant activity was to occupy these spaces according to Johnson's concept (Wilson, personal interview, 1984). A large public sculpture was to be included somewhere within the open spaces. Although originally planned for the Jefferson and Fulton Street corner, both sculpture design and location were changed. The sculpture—designed by Richard Bladen and entitled "Sonar Tide"—now occupies a site between the City Hall and Theater. With the exception of this sculpture, the open spaces are expanses of grass which adjoin the glass arcade of the civic center (Figure 1.12). Street trees are planted along the sidewalk perimeters.

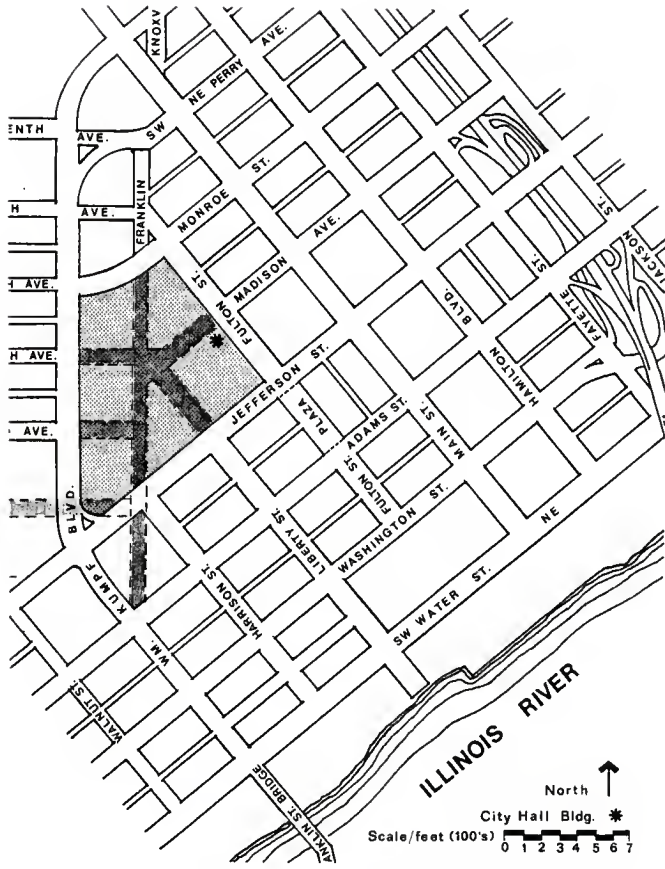


Figure 1.11

Peoria: Street Plan 1985 Showing Original Street Pattern (Shaded) at Case-Study Site

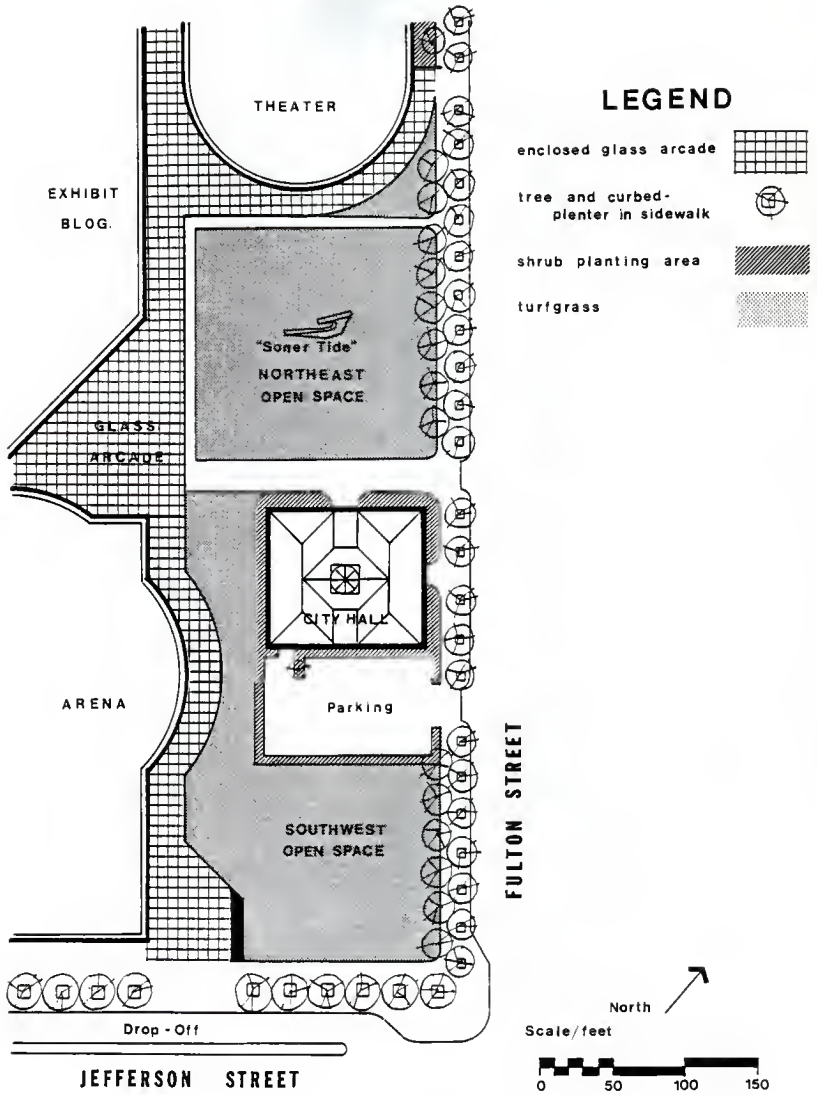


Figure 1.12

Peoria: City Hall Open Spaces Site Plan



Figure 1.13

Peoria: Northeast Open Space View



Figure 1.14

Peoria: Southwest Open Space View

The name "Wichita" was a derivation of the name of an Indian tribe which inhabited the region near present-day Wichita (Wood, 1969). The area had been visited by many of the early western explorers by the 1820's but was not considered an ideal location for a town. Legend has it that Jesse Chisholm was influenced by a rumor alleging there was gold buried near the junction of the Big and Little Arkansas Rivers (Miner, 1982). He visited the area in 1836, and later built a cabin and established a fur and hide trading post (Wood, 1969). Soon there were other fur-trading families who moved to the area to make a livelihood from the hides of buffalo (Wood, 1969).

The early growth of the town was influenced by the routing of a military road through the area to the Indian Territory, now Oklahoma (Wood, 1969). In the 1870s the cattle drives from Texas to the railroad lines at Abilene and Ellsworth were another cause for growth. The enthusiasm of the local businessmen--boosters for their new town--was perhaps the strongest factor for the growth of Wichita, referred to during that period as the "Peerless Princess of the Southwest" (Bentley, 1910). Soon railroads were serving the area and, as a result, commerce, agriculture, and population expanded rapidly. In spite of some disastrous economic years in the late 1880's, the population continued to grow to nearly 24,000 by the end of the decade (Kirkman, 1981).

The City Building, built in 1890-92, was designed by the architectural firm of Proudfoot and Bird which had offices in Wichita. The building was constructed of rusticated native limestone in a style described as Richardsonian Romanesque. The four story building featured turreted corner towers and a central clock tower which rose to 170 feet (Figures 1.15 and 1.16). The cost of the building was just under \$80,000 by the time of its completion (Miner, 1978). The building served the function of municipal

building until 1975 when it was vacated for a new facility. In 1971 the structure was placed on the National Register of Historic Places. A lease was agreed upon between the city and the Wichita Historical Museum for a nominal one dollar per year plus guaranteed maintenance of the building (Miner, 1978). Extensive repair and renovation work began on the building to bring it within code requirements and to make the building suitable for the needs of the Historical Museum.

A lesser building in size south of the museum and also of historical importance is the neo-classical revival style planetarium building--officially called the "Omnisphere" (Figure 1.16). This building was the result of a \$75,000 gift by the Andrew Carnegie Foundation in 1913 for the construction of a city library (Davis & McCarthy, 1979). The building is built of terra cotta with stone columns and ballustrades (Davis & McCarthy, 1979). It served as the main library until 1967 when a new facility was built across Main Street. The Omnisphere building serves as one of the enclosure structures to the case study site. To the east of the City Building and on William Street was the Central Fire Station (Figure 1.17). The fire Station, built in 1907, was converted to a police station facility in 1934. It was demolished in 1975 during the renovation of the City Building.

The Wichita case-study site is indicated in Figure 1.18. The site, Heritage Square Park, was created out of an interest by city administrators and civic groups to establish a setting for the historic buildings, as well as to provide a pleasant downtown park for Wichitans. The Junior League of Wichita adopted the park as their fiftieth anniversary project and, together with the city Urban Renewal Agency and City Capital Improvement Program funds, raised the \$257,000 for the park's construction (Smith,



Figure 1.15

Wichita: Museum Building View from
Heritage Square Park, 1984



Figure 1.16

Wichita: View of Historical Museum and Omnisphere
from West of Main Street

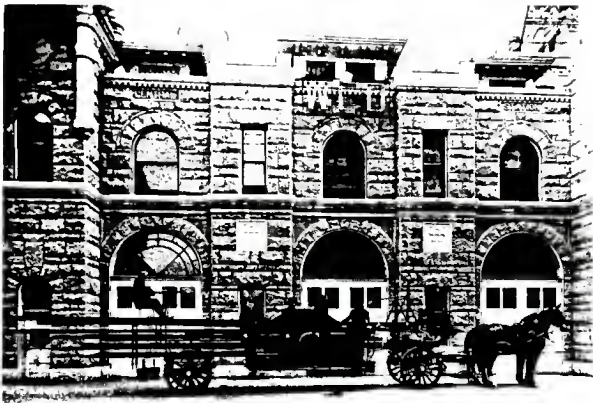


Figure 1.17

Wichita: Central Fire Station, circa 1910

Note: From Souvenir History of the Wichita Fire Dept., in the Archives of the Kansas State Historical Society, Topeka, KS.

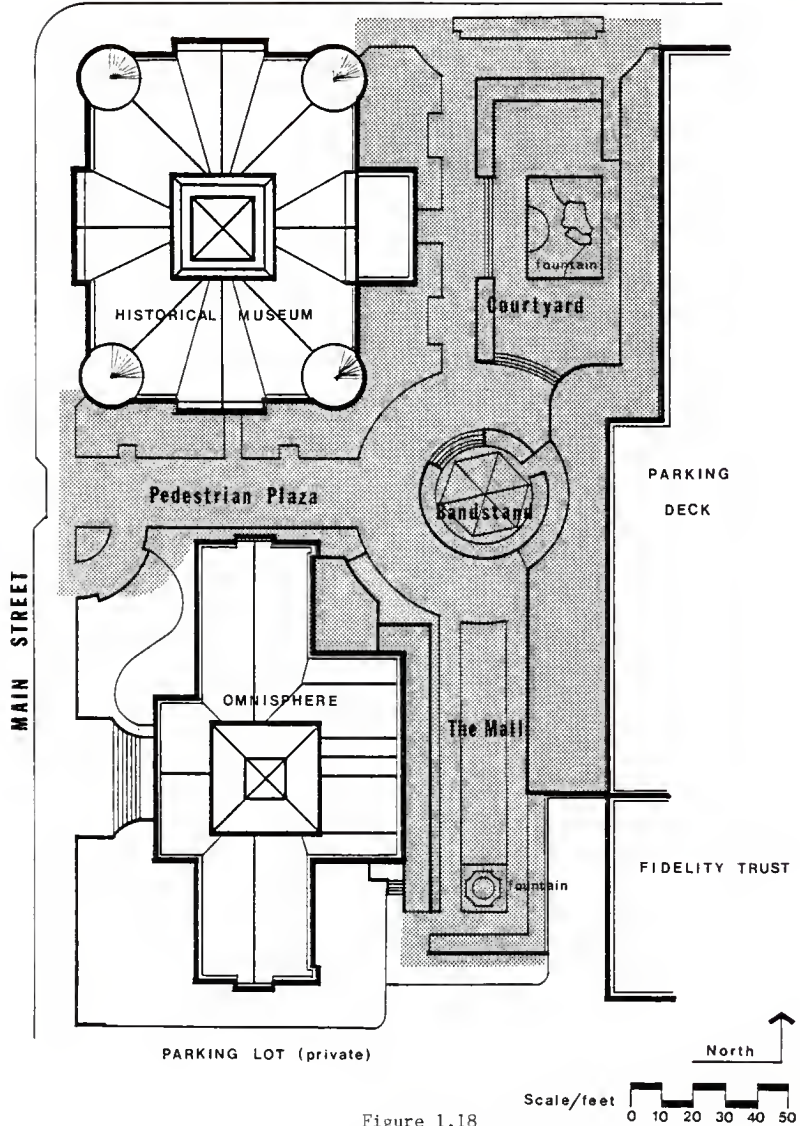


Figure 1.18

Wichita: Heritage Square Site Plan

personal interview, 1984). The park, dedicated in 1976, is administered by the Wichita Park Board. The park is heavily planted with trees and shrubs. Part of the reason for the profuse planting was to soften the harsh surroundings of the site--specifically the parking deck which forms the eastern boundary. Because of the many trees and plants, the park has become a cool, shady haven on hot summer days.

The site for Indianapolis was chosen for the new capital city because of its central location in the state. The town plan (Figure 1.19) was drawn in 1821 and is thought to be the work of Alexander Ralston, a surveyor who had assisted L'Enfant in the planning of Washington, D.C. The plan represents a regular grid pattern superimposed with diagonal streets converging on a circle. The one mile square plan contained a half-block section two blocks east of the circle designated as a market. This location was intended to be an open air market for farmers to sell their stock and produce.

As the town of Indianapolis grew, business and agriculture flourished. The local business leaders were successful in promoting their town and were able to attract the routing of several railroads and highways through their city. The idea of Indianapolis becoming a hub was a promotion of the 1840s and '50s. The nation's first union station found a home in Indianapolis where all train traffic was consolidated into a central station. Commerce and industry were an important part of the city's growth. Meat packing became an important business in Indianapolis due to the invention in the city of an artificial cooling process (Leary, 1971). Machinery manufacturing, agricultural related business, and pharmaceuticals were early industries which helped to expand the city's growth. By 1890 the city's population had grown to 105,000 (Leary, 1971).

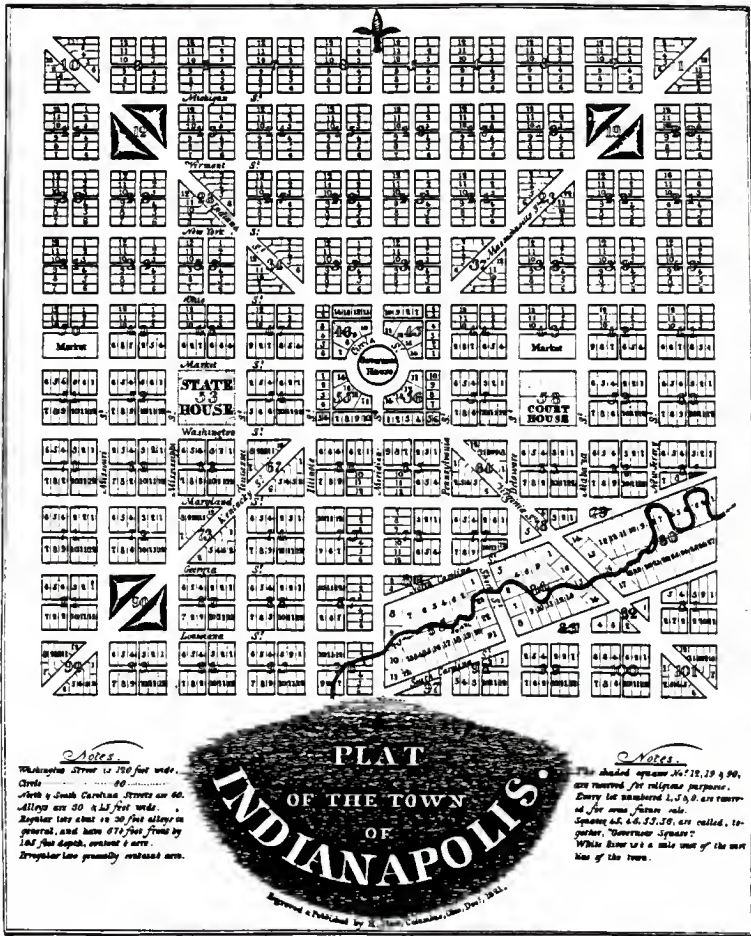


Figure 1.19

Indianapolis: 1821 Ralston Plan



THE CONVENTION HALL.

Figure 1.20

Indianapolis: Drawing of Tomlinson Hall, circa 1886

Note: From Indianapolis Illustrated: The Capital City of Indiana
by E. P. Bicknell, 1893, Indianapolis: Consolidated Publ. Co.

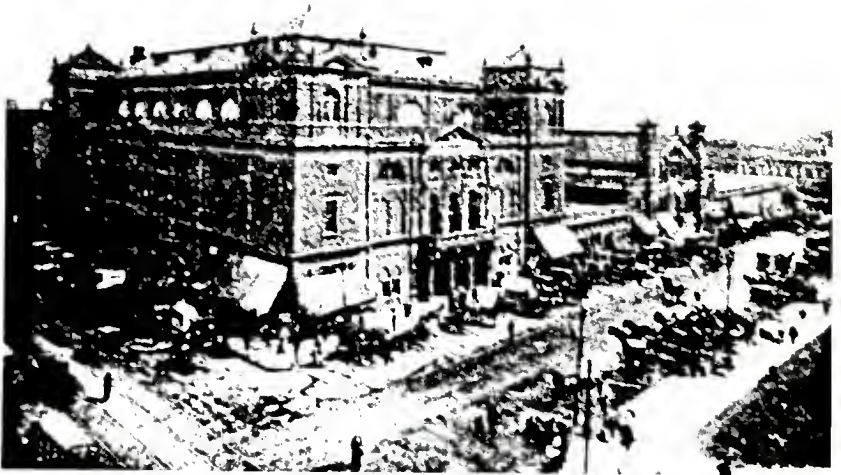


Figure 1.21

Indianapolis: Photograph of Tomlinson Hall and
Market House, circa 1888

Note: From Indianapolis Illustrated: The Capital City of Indiana
(p.71) by E.P. Bicknell, 1893, Indianapolis: Consolidated Publ.

During this growth, several market-related buildings had occupied the market site. The most notable of these buildings--Tomlinson Hall (Figure 1.20)--was the result of a gift by a local businessman, who willed half the building's \$200,000 cost to the city for the purpose of a convention hall with market functions on the lower level (Leary, 1971). This building, located on the Market and Delaware Street corner, was completed in 1886. Before its completion it was decided that the market functions needed more building space than Tomlinson Hall offered so \$30,000 was designated for the construction of a separate "Market House" to be erected adjacent to Tomlinson Hall (Figure 1.21). Both buildings were completed in 1886 and designed by the local architect D.A. Bohlen. Tomlinson Hall was grand in proportion with exquisite detailing and craftsmanship (Leary, 1971). The smaller market building was more utilitarian in nature. The market building is the one which occupies the present case-study site. Tomlinson Hall burned to the ground in 1958. Only the basement and a portal to the east entrance survive.

Although the market activities continued to take place in the old Market House, the building slowly became outdated. The 1976 renovation of the building and the redesign of the site were an outgrowth of ideas initiated by the Market Master and Mayor Richard Lugar (Welch, personal interview, 1984). The scheme finally grew into a project which included renovating the Market House, increasing its rentable floor space with the addition of two wing buildings, and converting the open spaces on either side of the market building into major public plazas. The Market House received National Register listing in March, 1974. The architectural firm of James and Associates was commissioned to design the complex and to renovate the Market House. The \$4.7 million cost of the project was underwritten by the Eli Lilly Foundation (Corn, personal interview, 1984).

The bidding sheets supplied by the contractor indicate that most of the cost covered the new buildings, renovation of the Market House, and stabilizing the site (the Tomlinson Hall "catacombs" required structural reinforcement to support an above-ground plaza). The cost of the plaza improvements and construction totaled approximately \$267,000. This figure includes the earthwork, concrete, masonry, and waterproofing. The plant material was supplied by the city. It is not known if the electrical fixtures cost for the plaza was included with the contractor's figures (Corn, personal interview, 1984).

The site is indicated in Figure 1.22. An alley, Wabash Steet, has been pedestrianized and contains seating, planters, and lighting but is not specifically a part of this study. Wabash Street forms the northern boundary of the half-block market site.

The next chapter reviews the design literature on the relationship between new urban open spaces and historically significant buildings. Using the literature review as a base, the chapter develops a method for analyzing the open space/historic building complex, focusing on the three themes of (1) positive image of place, (2) orientation for people, and (3) introduction of natural elements. Then, using these three themes, chapters three through five present a critical analysis of the three case-study sites. Chapter six articulates conclusions of the study, giving particular attention to design implications.

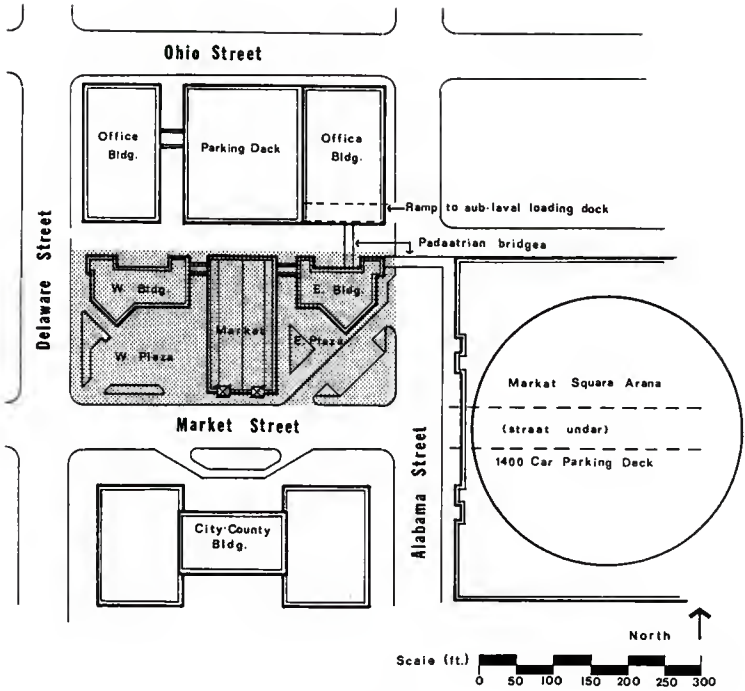


Figure 1.22

Indianapolis: City Market Vacinity Map

CHAPTER 2

Developing Criteria for Analysis: A Review of the
Literature on Historical Building/Open Space Design

The literature which deals with urban open spaces is vast, although sources dealing explicitly with design issues and historic building/open space relationships are fewer. A review of the literature reveals that issues of design of urban open spaces and the historic building relationship can be grouped into three broad categories, or themes: first, Positive Image of Place; second, Orientation for People; and third, Introduction of Natural Elements. In the three analysis chapters which follow, these themes are used to critique the three case study sites. Before this analysis is conducted, however, these themes must be more thoroughly developed, particularly in relation to the literature. The first section of this chapter examines the design implications of each of the three themes. These design implications articulate methods of analyzing the urban open space/historic building relationship. Once these three themes and their corresponding design criteria have been identified, one can more critically evaluate the three case study sites.

1. POSITIVE IMAGE OF PLACE

The first of these themes revealed by a review of the literature is Positive Image of Place. What is meant here is: "Does the perception of the place evoke the thoughts and meanings of attractiveness, pleasantness, environmental agreeability, and historical significance?" In order for the

new open space and the historic building to interact successfully they must be a visual and functional unit. One way of accomplishing this unity and compatibility is to establish a strong image of place for the open space/historic building. Lynch (1960) uses the term "imageability" or "that quality in a physical object which gives it a high probability of evoking a strong image in any given observer" (p. 9). For the purpose of this study, Lynch's definition will be amended so that a "strong positive image of place" is the objective of designers.

Other authors refer to sites as having a strong sense or spirit of place. Gussow (1972) describes his interpretation of this idea as being so strong an experience as to be almost a religious experience. Gussow explains that man is not only a place-maker but he actually becomes a product of the places which have become most meaningful to him. He further offers the idea that "the catalyst that converts any physical location into a place, is the process of experiencing deeply" (p. 27). Place, then, becomes a piece of the greater environment which has been adopted through emotion.

Steele (1981) elaborates that "...place can be an object of people's interest, concern, influence, attention, alteration and enjoyment--and the cause of people's moods, responses, constraints, achievement, survival and pleasure" (p. 9). Of particular interest are the questions which Steele suggests one ask about the place:

1. What kind of mood is this place stimulating in me?
2. What are the messages that this particular place holds about what happened here in the past?
3. Can I get more out of this setting by changing the way I'm using it?
4. Am I allowing myself really to experience what this setting has to offer?
5. Can I change the setting in some positive way?
6. Do I want to stay here or move on? (p. 10).

There are numerous ways in which people perceive place. Steele (1981)

suggests that the sense of place is determined on an individual level dependent upon feelings and, primarily, experiences. The quality of our experiences are directly affected by our environments. Rich, interesting, exciting environments are likely to provide rich place experiences. Steele relates that we unfortunately have become comfortable with less stimulating settings.

New open space settings for historic buildings should not be static but capable of creating rich place experiences. The open space needs to function as a setting for the historic building but also as a place of experience, action, events, and even repose. Likewise, the historic building plays a part in adding visual interest to the setting. It helps to maintain a "richness of texture, pattern, and contribute to local character" (Wiedenhoeft, 1981, p.151).

The historic building also plays an important role in visual aesthetics. Wiedenhoeft (1981) states that the historic building:

...makes an aesthetic contribution to the quality of the visual experience, even beyond whatever emotional associations they may evoke...there is a great variety of materials, textures, colors, and sculptural relief of surfaces. Such variety and interest in visual stimuli would inevitably be either neglected, or self-consciously mannered in new construction (p. 170).

Legions of architects and designers have gifted us with the blank cornice line, the faceless curtain wall, and the glaring reflective rectangle. Our eyes and minds need the enrichment and stimulation offered by the presence of priceless detail, of irreplaceable masonry, stone, and iron craftsmanship.

What then are the steps which can be taken to affect a positive image of place? First, not necessarily foremost, among the steps would be the good design of open spaces surrounding historic buildings. Where the design of the open space is considered in conjunction with the character of

the building, guidelines have tended to be variable and dependent upon a number of external factors. The primary consideration would be that the open space be in harmony with the building and the local environment. The open space should be an enhancement to the building and provide a setting which would allow for good visual and functional relationships between open space and building. The design elements of the open space should be selected and arranged with care. The open space should be thought of as a setting for the historic building, where the design elements complement the building.

Another step to be considered in affecting the positive image is that the open space/building complex must be well maintained. Indeed, older buildings seem to lose favor with people as a result of neglect. Like buildings, parks and squares become derelict as a result of physical neglect. Maintenance seems to be linked to the image of good environmental quality. This idea is stated by Rapoport (1982) when he writes that "good maintenance and upkeep, cleanliness, underground wires, greenery, and the like all communicate positive messages and result in perceptions of high environmental quality, desirability, and satisfaction" (p. 98). In all three of the case studies investigated, interviews with various design professionals revealed that routine maintenance and periodic repair and replacement is an important aspect of maintaining the good image of the urban spaces.

The final step to consider in creating a positive image of place is to promote the place. There are many ways to achieve this. Positive press coverage of the place and its events is one way. In most cases there should be a professional or public agency which would administer programming, advertising and promotions. Raquel Ramati (1981) suggests the impor-

tance of community groups, service associations, chambers of commerce, and other civic organizations in promoting public space and its activities. The more groups which have some kind of involvement in a place, the more likely it will be successful.

Steele (1981) has concluded that there are certain characteristics of place which determine the quality of our place experiences and our emotional liaison with the settings. These characteristics are: identity, history, fantasy, mystery, joy, surprise, security, vitality, and memory Any place imbued with any combination of these characteristics is likely to contribute to the richness of our experience and, therefore, to our positive image of the place. Designers, public administrators, and involved citizens should take advantage of these characteristics of a place and find ways of promoting and accentuating them. In this way, latent characteristics of a place can become positive imagemakers. Perhaps the final word on the issue of image is best stated by Wiedenhoeft (1981) in speaking of developing public pride in a place:

...care must be taken with details if people are to develop strong bonds of identity and affection for their urban environments. Details must reveal genuine care, educated tastes, and quality if the critical ingredient, pride of place, is to be present (p. 212).

2. ORIENTATION FOR PEOPLE

Beyond creating a positive image of a place in order to attract people, the physical design of an open space must be accomplished with people's needs in mind. People generally like to be with, near, and among other people (Whyte, 1980). Nan Fairbrother (1970) illustrates this idea when she tells us that:

Man is gregarious...we congregate from choice, and do not even spend our leisure recovering in solitude as we could, but gregariously with friends and at clubs and pubs and parties and meetings and celebrations and demonstrations and every kind of communal gathering (p. 194).

Similarly, Whyte (1980) tells us that what attracts people to a place is usually other people.

An historical antecedent of cities has been the need for people to be with other people (Mumford, 1961). Today the city is needed for its diversity, services, entertainment, and for the livelihoods it offers to many. The public space or square is a vital part of the city's offerings. As cities continue to experience a renaissance and resident populations are lured back into the boundaries of the central cities, designers must look for ways to encourage use of the public spaces in the downtowns. Specter (1974) has extolled the merits of looking at historical precedents in order to perceive what the needs of people might be. He asserts that the same spatial experiences that pleased a citizen in first-century Rome may have the same effect upon a twenty-first century citizen. This idea validates the need for being attuned to historical precedents in planning our cities today. Designers must know what it is that makes cities attractive and viable and thereby initiate the return of people into the cities. Fran

Hosken (1972) tells us that the "proof of the success of the urban world is in its use: a city well used is the happy sight of people enjoying themselves" (p. 20).

Another issue which deals with the problem of attracting people into and using the urban open spaces is the evident lack of resident populations in many American cities. Although this is a very pertinent malady of which most civic leaders are aware, addressing this situation would be beyond the scope of this investigation. One should, however, be aware of this fact and that attracting people to the urban open spaces and having a sizable close-in resident population in the cities are interconnected. Hall (1966) recognizes this fact when he states:

...the American city is extraordinarily wasteful, emptying itself each night and every weekend. One would think that the efficiency-minded Americans could do better. The result of the suburbanization of our cities is that the remaining residents are now predominantly the overcrowded impoverished and the very rich, with a sprinkling of holdouts from the middle class. As a result, the city is very unstable (p. 167).

Since Hall wrote The Hidden Dimension, the situation has worsened. Wiedenhoft (1981) describes the situation as the "disaffection of people for their own urban environments" (p. 188) and cites the problem as being that cities have become unattractive to people.

The automobile has played a major role in the status and condition of cities. In many cities the pedestrian is confronted with treacherous walking conditions on every front. Hall (1966) laments that "parks, sidewalks, everything goes to the automobile" (p. 164). Rudofsky (1969) also addresses the idea of pedestrian accessibility. He advocates transforming streets to all pedestrian uses and cites many European examples of streets for people. Stewart Udall (quoted in Seymour, 1969) admonishes city planners to put people first. He further states that "autos, freeways,

airports, and buildings should not be allowed to dominate a city; each must take its own place in a balanced environment along with trees and parks, playgrounds and fountains" (p. 8). Rudofsky (1969) also rails against the automobile, suggesting that pedestrianized streets are a way to humanize and dignify our cities. Elizabeth Beazley (1960), in referring to the automobile, feels that the Americans have "created some of the most soul-destroying cities yet created" (p. 195). The automobile has become an entrenched reality of American life. Changing the attitudes of Americans, especially those in small and intermediate sized cities, to embrace alternative forms of personal transportation seems an impossible task. Providing adequate public transportation to meet people's needs seems all the more impossible. A resolution of this problem is paramount to improving the condition and quality of our central cities. Re-urbanization of our cities in the form of resident populations might be a step. Educating Americans to the advantages and benefits to be derived from walking more, and providing the security for an evening promenade, should be the goal of every city administration (Wiedenhoeft, 1981).

In addition to freeing the pedestrian from the grip of autos and traffic, there are several more site-specific needs of people in the open space. People love festivals and celebrations (Ramati, 1981). Once people are attracted to a place, basic provisions must be offered: there must be food (Whyte, 1980); there must be comfortable places to sit, and to watch other people (Whyte, 1980); there must be logical, accessible ingress, egress, and barrier-free circulation within the site (Whyte, 1980); there must be ornament, interest, and focal points (Ramati, 1981). One of the most thorough studies involving people and their affinities regarding urban spaces was written by William H. Whyte (1980) involving small plazas in New York. Whyte contends that what attracts people to urban plazas is the

presence of other people. Other findings of the study include what constitutes the best location for plazas, what type of seating works best, where and why undesirables "hang out," and Whyte stresses the importance of food, water, and trees in the design of urban spaces. There are lessons to be learned from Whyte's study which apply to urban plazas in cities which are smaller in scale than New York. Plaza/street corner relationship and stores and retailing are critical ingredients for successful plazas or urban open spaces. Entertainment is another critical element and this can lead to what Whyte describes as "triangulation" or the spontaneous interaction between viewers and the focus of action.

3. INTRODUCTION OF NATURAL ELEMENTS

The last of the issues to be dealt with is the introduction of nature into the urban setting. In this study these natural features will include trees, shrubs, groundcovers, and water. There are two reasons for designing open space with nature as a part of it: first, aesthetics; second, microclimate. In regards to aesthetics, nature is used in urban plazas to create a setting, enhance an environment, and to soften the texture of the city. There are several design techniques which accomplish these ideas. Among them are the following: create a canopy, a baffle, a screen, or a barrier; enframe a view; modify direction; vary color, texture, and form; and introduce focal points or accents.

The purposeful inclusion of green spaces within the American city was an outgrowth of the City Beautiful Movement of the 1890's. The effect which this movement had upon the smaller cities of the Midwest was the comprehensive planning of large park systems. The smaller urban plazas and open spaces, with which this study deals, are a result of the decline of

the central urban complex occurring in the post-World War II period through the 1970's. This period encompasses the time of decentralization of cities and the growth of suburbanization. In the late part of this time span, and through the present, efforts to effect an urban renaissance have been taking place. Devices such as street tree planting, flower planters along sidewalks, and pedestrianized shopping malls have been used to accomplish a rebirth to downtowns. Often these efforts have succeeded--often they have not. More than mere greenery is necessary to undo the complex effects of changing modes of transportation, suburbanization, and urban deterioration. The effects of these events will not be dealt with in this study although they have played an important role in the complexion of our urban environments.

Urban greenery by itself cannot spell success for a city and its urban spaces but it is a powerful device without which success may not be achieved. This idea was realized by Sylvester Judd, a nineteenth-century urban reformer, who stated "there should be trees in every street, without exception--trees about the markets, trees in front of the shops, and on the docks, and shading the manufactories" (quoted in Stilgoe, 1982, pp.207-08). In our own day we are admonished by many disciplines to improve our urban environments with the inclusion of inner-city greenery. This has been called "one of the most appreciated amenities" offering not only the general appeal of nature, but "the welcome contrast of soft and rustling shapes as a relief from the oppressively hard, cold, and unresponsive forms of modern commercial architecture" (Wiedenhoeft, 1981, p.212). John Simonds (1983) makes the point of urban greenery and the role it plays in not only improving a city's attractiveness but as an inducement for urban vitality. He states that urban greenery offers relief from the coldness of

the hard texture of the city and that the open spaces must offer "foliage, shade, splashing water, flowers, and bright color" (p. 281). He further claims that the open spaces "like oases, will transform the city into a refreshing environment for vibrant urban life" (p. 281). Rapuano (1964) tells us that aesthetically pleasant urban open space is one way of humanizing our urban environments. Simonds (1983) advises us that open spaces in our cities must be "sources of inspiration, stimulation, refreshment, beauty, and delight" and that we need in our cities "a salubrious, pollution-free urban environment conducive to the living of the whole, full life" (p. 285).

In reference to trees specifically, Clouston and Stansfield (1981) posit that "of all the elements in our landscape, surely the tree has the greatest capacity to bring the presence of nature into the built environment" (p. 1). They also assert that trees can help to soften the texture of modern buildings and to lessen the effects of unseemly contrast between architectural neighbors. Along the same theme of trees, Nan Fairbrother (1974) tells us that eighteenth-century towns did not need trees as a humanizing element. This is not the case in twentieth-century American cities. The tree can help to introduce an element which is more human-scale, as well as to provide other pleasing benefits (Fairbrother, 1974).

The role of water in the open space design may not be as primary in importance as greenery but can play a strong role nonetheless. Water can be a feature which would attract people even if no trees were present in the space. Water features can intrigue, fascinate, invigorate and at the same time lend a restful spirit to the scene. Successful water features can have a magnetic effect upon people. We know that water has been utilized for its aesthetic qualities since the early civilizations of Egypt

and Mesopotamia (Campbell, 1978). The same design qualities which the early civilizations recognized are effective today.

A few words should be said about the cultural requirements of trees. The city environment is an unnatural and inhospitable place for trees and other types of plant material (Clouston & Stansfield, 1981). Some varieties have adapted reasonably well to the abuse of air pollution, human mutilation, vehicular contact, and insect problems. Plant types which have been proven to be adaptable to this type of environment should be utilized when possible. Types less adaptable should be accorded the best possible protection and growing conditions which city-life can offer. Some important things to remember which are crucial to the long life of a tree in the urban space include the following:

Tree Roots: Allow an adequate root area--best when the rooting takes place in the ground. Above ground pots and planters do not allow for root expansion, and are subject to root dry-out, and freezing. Roots should be provided with sufficient moisture and nutrients. It is highly recommended that urban plazas be provided with installed irrigation systems and an acceptable, regular maintenance program to include proper care to trees and other plant materials.

Tree Skeletal Protection: Protection must be provided for the above ground framework of trees. Upon initial installation, smaller trees (less than four inch caliper) may have to be secured in place with guy wires or staking according to acceptable nursery practice. This is primarily a safeguard to allow the tree roots to establish themselves in order to give the tree support. It is generally recommended that staking be in place for one growing season. Trees should be located where they will be the least subjected to traffic conditions. This would ideally be eight to ten feet away from the curbing of a street. The street tree must also not conflict with pedestrian movement.

Moreover, one must consider the protection of the tree from street salts which are used in temperate climates to melt snow and ice. Again, the tree must be planted far enough away from the curbing so as to receive the least saline exposure. A good way of assuring some protection for trees is to provide an eight to ten inch curbing around the tree as a planting area--large enough to allow air and moisture to permeate the root-zone. Tree grates allow air and moisture to reach the roots but often do little to protect the trunk from impacts (unless a vertical impact guard is a part of the grate design) nor to impede the filtration of melting salts into the root zone.

Low branching must not interfere with traffic, vehicular or pedestrian. Where tree branching is intended to arch over a vehicular or pedestrian way, branching height must be taken into consideration. As far as the protection of the leafy part of the tree is concerned, species should be selected which are proven to be disease and pest resistant. The maintenance program should provide for insecticide or fungicide application if this is necessary.

Trees, shrubs, groundcovers, and water can have a moderating effect upon the microclimates of urban spaces. A tree-lined street in the heat of the summer, for example, reduces solar radiation and can significantly reduce the ambient temperature of the area. The massive urbanization of American cities since World War II has witnessed more buildings, pavement, and less greenery in our inner cities. Little attention was paid to the necessity for open space and greenery. As we watched the demise of many of our urban centers, the motivating criteria in planning our cities has been profit, tax base, and vehicular circulation (Rudofsky, 1969). Our thinking needs to include among the list of planning criteria beauty, comfort, and environmental quality. Without these three maxims playing an important role in our planning strategies, our cities face an uncertain future. Spirn (1984) advises us to treat these environmental issues as an inter-related whole instead of separately. Profit motives should be considered concurrently with the environmental issues. Sooner or later we pay the price for mistakes of insensitivity to our environment. Spirn, again, addresses the issue in the following words:

The realization that nature is ubiquitous, a whole that embraces the city, has powerful implications for how the city is built and maintained and for the health, safety, and welfare of every resident. Unfortunately, tradition has set the city against nature, and nature against the city. The belief that the city is an entity apart from nature and even antithetical to it has dominated the way in which the city is perceived and continues to affect how it is built. This attitude has aggravated and even created many of the city's environmental problems: poisoned air and water; depleted or irretrievable resources; energy demands and higher construction and maintenance costs than existed prior to urbanization; and, in many cities, a pervasive ugliness (p.5).

Urban designers should welcome the opportunity of utilizing trees, shrubs, groundcovers, vines, and water features not only for their visual appeal but for the capacity of modifying the otherwise harsh microclimates which exist in the city. Whyte (1980) suggests that for climatic reasons alone we should plant many more trees, including large ones along streets and walks, in the open spaces of the city, and as a protective canopy under which people can view the passing scene.

Beyond the condition of prevailing air masses, temperatures in a city environment are affected by a number of other climatic variables. These variables--amount and intensity of solar radiation, wind, and atmospheric pollution--directly affect the temperature of the air in the city. The solar radiation directly experienced by people in the city falls into one of three categories: first, direct radiation from the sun; second, reflected radiation from particles in the atmosphere; and third, reflected radiation from objects on the earth (Robinette, 1972). Due to the composition of urban centers, the last type of reflected radiation helps to contribute to a condition known as the urban heat island (Landsberg, 1981; and Spirn, 1984). The heat island effect is caused by calm, clear conditions--a stationary high pressure system where buildings, pavements, and other smooth man-made surfaces release their stored reflected radiation through the night (Landsberg, 1981). It can also be caused by inversions which do not allow the escape of heated, stale air (Landsberg, 1981). The breezes which we might feel under such conditions are simply eddies of the heated stale air (Landsberg, 1981). We are told by Spirn (1984) that landscaped parks and river valleys are cool zones within a heat island. Landscaped plazas, where there is a preponderance of greenery, can also become a cool pocket within a heat island (Spirn, 1984).

One of the best ways in which trees and plant material help to modify the urban microclimates is through obstruction of solar radiation. They absorb the solar radiation before it has a chance of reaching the pavement and that which is reflected from pavement and building walls is further absorbed (Landsberg, 1981). Trees and shrubs can also be used to create a dead air space next to a building wall. This will help to insulate the building in both winter and summer months (Robinette, 1972). Evapotranspiration and evaporation of water surfaces is another way in which the air temperature seems to be modified in a microclimate (Landsberg, 1981).

Studies have shown that the wind which blows over the earth's surface is greater in rural open spaces than in the city (Landsberg, 1981). This is caused primarily by the rougher texture of the urban surface which slows the wind. Winds, however, can do some uncanny things when they are buffeted about amidst tall buildings and street canyons. The venturi effect--the elevated intensity of wind when forced through a narrow opening--and the turbulence and eddies created when a wind is obstructed by a tall building are two of these problems. Plants can help control or modify this urban wind by obstruction, guidance, deflection, and filtration (Robinette, 1972). The effect of these methods can be greatest when approached on a larger scale than the small urban plaza. Wind study tests, through the use of wind tunnels and scale models, demonstrate where tree planting can be most effective in modifying wind intensity within the central business district (Spirn, 1984).

The atmospheric pollution of our urban areas is another factor which justifies the presence of greenery in cities. The effect of greenery in small parks and plazas and the use of street tree planting can have a noticeable effect. Trees can filter out the hydrocarbons of exhaust emissions as well as the many other dusts present in the city (Landsberg,

1981). James Marston Fitch (1972) recommends the use of plant material to help purify the air in cities. Spirn (1984) also cites the use of trees, especially those with rough bark, twigs, and leaves, to filter out particulate matter from urban air. Urban greenery can help to lessen the condition of the poor quality of the air along our streets which, Spirn says, are the most contaminated environments of the city.

Plant material can also have a moderating effect upon noise which is generated by traffic and industry in the city and then magnified by the hard surface texture (Robinette, 1972). Trees and shrubs can intercept noise. It is known that the structure of plant material can aid in deflecting and refracting noise and thus in reducing it. The effectiveness of this is dependent upon the type of planting, the surrounding conditions, the temperature and humidity (Robinette, 1972). What is known is that plant material physically softens the texture of the city and can have an acoustic effect. How much of an effect warrants additional study.

The last climatological benefit to be mentioned of plant material in the city is that of rainfall and runoff. The primary cause of natural disaster in cities is flooding (Landsberg, 1981). This has been aggravated by the condition of rapid runoff from roofs, pavement, and other impenetrable surfaces (Landsberg, 1981). Trees, shrubs, groundcovers, and turf can all contribute to the slowing of the rate of runoff. Small urban plazas which contain these features can contribute, in a small way, to slowing the rate of runoff. A partial solution to urban runoff problems would be to provide our urban areas with more plantings of this type.

Landsberg (1981) summarizes the microclimatic considerations of this discussion when he states that:

...in general, the green surfaces mitigate the less desirable aspects of the urban climate...reduce stress produced by the heat island...decrease the noise levels and filter out certain pollutants...improve water balance and reduce runoff (p. 259).

4. DESIGN IMPLICATIONS

In summarizing the preceding discussion, certain design implications become evident. These design implications have been developed as a result of citations within the related literature and through observations of the three case-study sites. In all cases these design implications (henceforth referred to as criteria) are documented and referenced in the literature consulted. Insights into the criteria have been supplied by professionals affiliated in some way with the respective case study sites. Each of the three case study sites will be analyzed according to these criteria.

Judgments concerning aesthetics are difficult to qualify and quantify in design disciplines. Every design situation contains a different set of requirements and needs. To say that every urban open space adjacent to an historic building requires the same set of design criteria or approach is not good design advocacy. Each of the design criteria to be considered, however, are basic guidelines, predicated upon extensive research. These guidelines can be used to help insure more thorough, relevant design decisions which can lead to a more successful relationship between the open space and historic building.

Positive Image of Place Criteria

1. Building/Space Relationship. Does the open space design complement, enhance, and harmonize with the design of the historic building? Is there a meaningful relationship, and interaction between the two?

2. Reinforcement of Past. Does the open space design credit the building's past through the use of signs, symbols, or other appropriate means? Are the materials used in the open space complimentary to those of the historic building?

3. Recognition as Place to Be. Is it a place that evokes excitement, enjoyment, pleasure, or interest in the minds of people? Are people attracted to the place?

4. Perception of Cleanliness and Maintenance. Is the space well maintained? Are the necessary periodic repairs made which insure that the quality and safety of the space remain unquestioned?

5. Organized Event Programming and Promotions. Is there planned programming of events during all seasons? Are events/programs well-publicized and professionally advertised?

Orientation for People Criteria

1. Places to Congregate. Is the space a place where people can gather in groups or individually for active or passive participation in events or as observers?

2. Barrier-Free Accessibility. Is there pedestrian circulation throughout, with ramps and other necessary features to insure accessibility to all? Is it free of any intrusion of autos, but with vehicular drop-off/pick-up within close proximity?

3. Provision of Food. Are there close-by locations where food can be obtained. or better, vendors on the site during those times when lunch crowds predominate?

4. Provision of Site Fixtures and Furniture. Are there comfortable, practical, attractive seating areas; well designed furniture; interesting, meaningful site sculpture; attractive water features; and well-designed, functional lighting which insure nighttime safety as well as daytime attractiveness?

5. Existence of Focal Points. Is there ornamentation or focal points, such as sculpture or other ornamentation, which provides interest, scale, and which is harmonious with and enhancing to the historic building?

Introduction of Natural Elements Criteria

1. Inclusion of Plant Material. Are trees, shrubs, groundcovers and turf used in sufficient quantity to noticeably create an 'emerald' in a setting of concrete and stone? Does plant material help to humanize the space?

2. Utilization of the Design Functions of Plants. Are the design functions of canopy, baffle, screen, barrier, enframement, color, texture, and form utilized and manipulated within the design? Are they used in a meaningful way which strengthens the design concept?

3. Improvement of Microclimate. Are the harsh climatic elements of the city modified within the space? Is a cool summertime haven created for people?

4. Enhancement of Urban Setting. Is greenery used in such a way as to enhance the setting of the historic building? Does greenery help to visually soften the texture of the city?

5. Inclusion of Water Features. Are water features used in such a way as to display the natural vitality, fluidity, and serenity which they can introduce? Does water add interest and beauty to the space?

6. Maintenance of Landscape Features. Is there an evidence of caring for the natural features (i.e. greenery and water features)? Is there an adequate maintenance program for all the features of the space?

The preceding criteria as they are identified within the three major themes of this study represent some of the major questions and concerns which will be dealt with in regards to the three case study sites. The analysis of the sites which follows attempts to be objective and thorough. Where some of the specific criteria are not manifest in one or more of the study sites, this weakness is mentioned within the analysis.

CHAPTER 3

Positive Image of Place and the Three Case-Study Sites

A strong positive image is an important element of successful urban open spaces. Researchers provide several ways to identify and create strong images at the city scale. Lynch (1960), for example, asserts that a city's image can be reinforced through strong recognition of edges, paths, nodes, landmarks and districts. Steel (1981) states that strong images can be established as a result of the richness or quality of a place. Similarly, Saarinen (1976) argues that lasting images are often established through the use of symbols or "icons," which persist in the memories of people. These icons often become the primary symbol of a city--for example, the Gateway Arch in St. Louis. I argue here that qualities which affect the city-wide image also have application to the scale of urban plazas.

In my review of the literature, I articulated five criteria which express ways in which the image of an urban open space complex can be strengthened. Each of the three case study sites are analyzed according to these five principles. These are: (1) building/space relationship (2) reinforcement of past, (3) recognition as a place to be, (4) perception of maintenance and cleanliness, and (5) organized event programming and promotions.

1. Building /Space Relationship

The introduction of an open space into the context of an historic building has some important design implications. One of these implications is that of a complementary spatial relationship of building to space and space to building. A positive, harmonious interplay of the two features is paramount in the groundwork of influencing a good image. Brolin (1980) advises us that historic buildings and their surrounding spaces must harmonize as a unit and not as separate entities.

Where a strong commitment has been made to preserve a monumental historic building, a serious commitment should also be made toward the design sensitivity of the new space which surrounds it. This idea can be expressed in several ways. One of the bywords used by preservation advocates is that of respect. This term implies that the design be sensitive to the period of the artifact, the materials, the construction methods, and that it be in harmony with the overall design of the artifact. Casson suggests that design intervention requires the highest level of skill and imagination (cited in Fawcett, 1976). Congruent with this idea, Simonds (1983) expresses fitness as a descriptor of meshing the old with the new. He states that "fitness implies the use of the right material, the right shape, the right size, and the right volumetric enframement" (p.315). Clay (1961) reinforces the idea of appropriateness of building/space relationship suggesting that designers learn the importance of this relationship in order to affect the quality of urban environments. He contends that a city's open spaces are important elements in the "psychogeography of cities, representing emotional as well as financial values" (p. 45).

The keys, then, to understanding the relationship of the new space to the historic building are found in several qualities--namely harmony, respect, fitness, and scale. The need is to consider these qualities in

relation to this study's three urban spaces: the Peoria City Hall open spaces, Wichita's Heritage Square Park, and the City Market Plazas in Indianapolis.

The relationship of space and building in the Peoria case study is weak. There is little in the present design of the spaces which unify them with the building. The northwest plaza (Figure 3.1) which contains the "Sonar Tide" sculpture is the more successful of the two open spaces. This space not only suggests a feeling of intimacy and enclosure with the surrounding buildings but is also more within the scale of its urban surroundings. The sculpture, although not without its critics, serves as an important focal point for the space and relates well to the space in terms of scale. This space, however, appears bleak and unapproachable. This austerity could be easily remedied, an idea which will be discussed further in chapter four.

The space between the Civic Center arcade and the City Hall which connects the northeast and southwest spaces (Figures 3.1 and 3.2) also functions weakly. Although the opening allows a visual sightline, there should be an allowance for pedestrian linkage--a walkway through the space--which there is not. This adjustment could also be easily accomplished and would improve the function of the space. This pedestrian linkage would also help to unify the northwest and southeast open spaces.

The parking lot which separates the southeast open space from the City Hall building is an unfortunate intrusion--the antithesis of fitness. The parking lot was not in the original design but became a trade-off to provide adjacent parking for Mayor, Manager, and City Council Members who may work late occasionally and would be spared a long walk to their cars

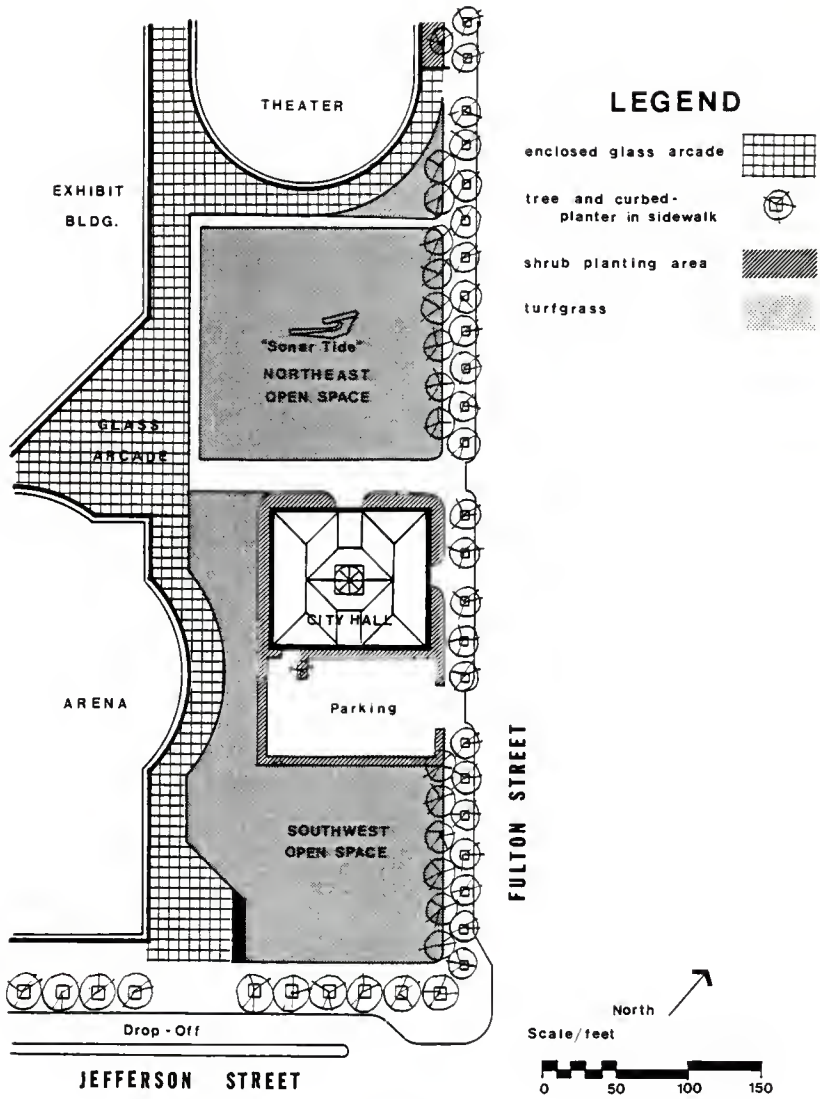


Figure 3.1

Peoria: Site Plan of City Hall Open Spaces



Figure 3.2

Peoria: View Showing Space between City Hall
and Civic Center Building

(Wilson, personal interview, 1984). The southeast open space is located on the street corner southeast of the City Hall (Figure 3.1). In its present design this open space is weak in its functional performance. The space offers little in the form of urban amenities other than aesthetics. It consists of a slightly depressed grassy area similar in size to the northwest space. Sidewalks are in place along the street perimeters, but no pedestrian ways have been included within the space. Pedestrian activity across the southeast corner of the site has worn a pathway across the grass. The space contributes a grassy green space to the urban core but nothing else. The latency of the space in performing any useful functions does nothing to improve the image of the complex. There is a great deal of potential for the space to contribute in more meaningful ways. Although the Park District personnel have kept a healthy stand of bluegrass in the space, and the litter is kept at a minimum, the space addresses only scale of the particular keys: namely harmony, respect, fitness, and scale. These keys are ways to provide a positive relationship of space to building.

Whereas the open spaces tend to dominate the building/space relationship in Peoria's City Hall spaces, the buildings tend to dominate the space in Wichita's Heritage Square Park. The space almost becomes a surprise, mysteriously tucked behind the massive buildings. The saving grace at Heritage Square Park is that the design of the space is so skillfully accomplished, that the best is made of a poor situation.

It is unfortunate that the space occurs to the rear of the buildings, instead of at the fronts of the buildings (Figure 3.3). Although the rear facades of the Historical Museum and the Omnisphere are not unattractive, there might be a slight tendency by the user to forget the physical

connection of the space with the buildings because the space functions so successfully on its own. The scale of the space appears to be somewhat small in relation to the mass and scale of the buildings. Again, the design details of the space minimize this fact. One of the initial purposes of the creation of the park was specifically to provide a setting for the Historical Museum and Omnisphere (Smith, personal interview, 1984). The rich architectural detailing of the Museum Building extends to the side and rear of the building and helps to achieve the physical connection of space and building. The visual prominence of the turrets and towers of the building accentuate this harmony. The use of period furniture and fixtures further strengthens the connection (Figure 3.4).

Heritage Square Park is a rich oasis of plant material and carefully designed pavement areas. The tight fit between buildings is somewhat regrettable although design within the open space has been the salvation for this problem. The parking garage, the worst possible constraint of the space, has been dealt with thoughtfully by minimizing its hulking presence through the use of plant material. Even with this noticeable problem, the space still succeeds in the other ways of relating respectfully and harmoniously with the historic buildings.

A stronger linkage of the space with the open space complex across Main Street would strengthen the park's relationship with the rest of the urban environment. This might be achieved best through the use of street plantings. In turn, this would help to provide a more positive visual statement for the downtown pedestrian as to the park's location and existence.

At the City Market Plazas in Indianapolis the relationship of buildings and spaces, in terms of harmony, respect, fitness, and scale seems to be the best of the three case studies (Figure 3.5). There is also a strong

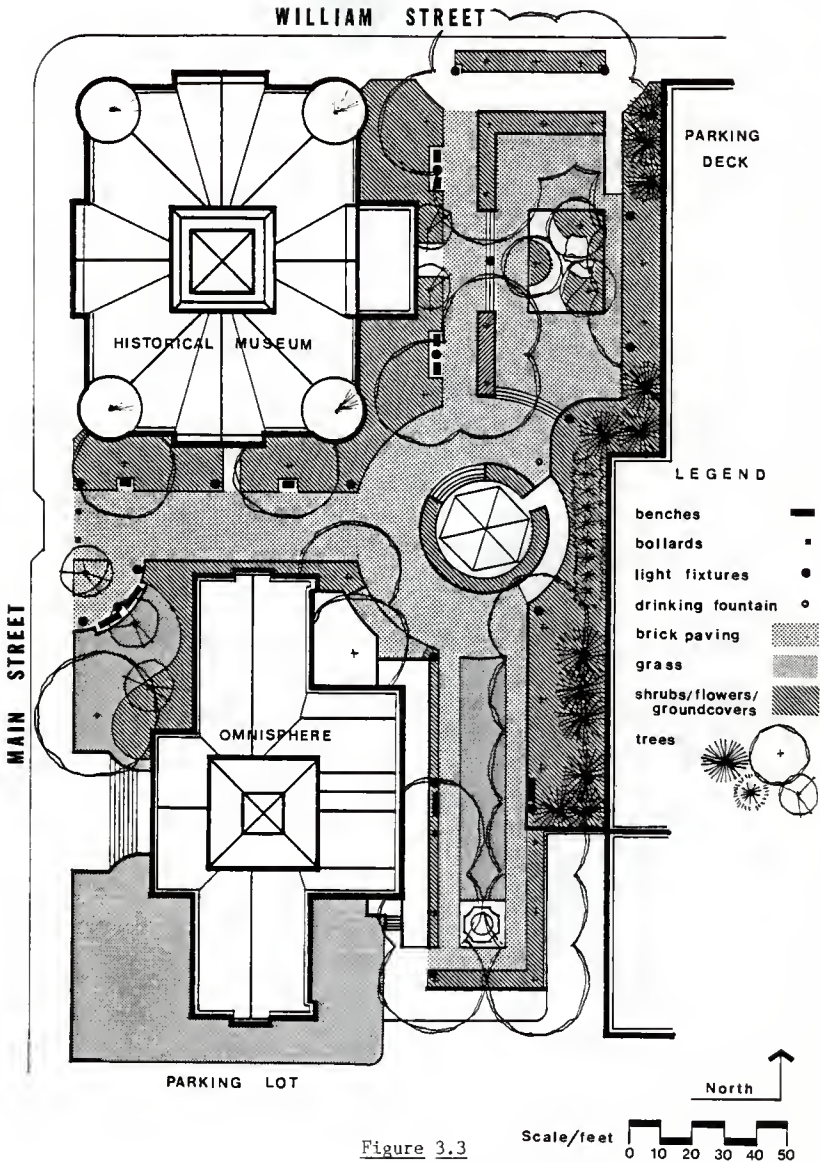


Figure 3.3

Wichita: Site Plan of Heritage Square Park



Figure 3.4

Wichita: 19th Century Site Details at Heritage Square Park



Figure 3.5 Indianapolis: Aerial View Showing Relationship of Market Buildings to Plazas and Streetscape Improvements

relationship of buildings and spaces to the streets and the neighboring urban environment. The Peoria site possesses the same potential although the adaptation of the spaces in Peoria has not been successful at fulfilling basic human needs. The Indianapolis site meets these human needs successfully as discussed in chapter four.

The relative harshness of the tall buildings which surround the City Market area is minimized by the strength of the open space. The reflective glass tower to the northwest of the space poses the most formidable intrusion with unpleasant bronze reflections on the West Plaza. In spite of these weaknesses, the market complex functions well visually and physically with the larger urban context. This has been especially well illustrated since the streetscape improvements of Market Street have been completed (Figure 3.5). The City Market Plazas have become an important node in the four-block axis which has unified the Statehouse (west visual terminus of Market Street), the Monument Circle, City Market and City County Building, and the Market Square Arena (east visual terminus of Market Street). This unification is accomplished through tree plantings the entire length, brick paving with inlaid stone patterns, and a unified system of decorative lighting and street furniture (Figure 3.5).

The design detailing of the plaza areas satisfies to varying degrees the requirements of fitness, harmony, and respect. The design is simple and straightforward. Materials used are complimentary with those of the historic market building. Although the plazas as well as the wing additions are of a contemporary design, both are simply and unobtrusively designed, resulting in an harmonious relationship. Although the plaza furniture is not as refined as that which is used in the Wichita site, it is functional, durable, and not distracting.



Figure 3.6

Indianapolis: East Plaza Showing Disruption Caused by
Diagonal Service Drive and Parking Area

The most disturbing feature of the plaza area tends to be the mixed use of the East Plaza between being pedestrian space and parking lot (Figure 3.6). The service drive and parking spaces were a trade-off to satisfy vendors' wishes in providing a few short-term parking spaces. The result is that the space is divided and weakened in terms of design coherence. This may be one of the reasons that the East Plaza appears seldom to be used as a gathering place. This fact will be further discussed in the following chapter.

The preceding analysis has shown that the harmonious relationship of the space and building cannot only improve the place's visual appeal but can be important to providing a positive image of the open space to the users. Because of this building/space relationship, the Indianapolis site succeeds best while the Peoria site succeeds the least. In the case of the Wichita site, the problems of the size and parking deck intrusion are minimized by other factors although the building/space relationship is less successful than the Indianapolis site.

2. Reinforcement of Past

One of the ways to improve the image of the historic building and open space complex is through the reinforcement of the past. In achieving an harmonious blend of the old building and the new space, there are obvious pitfalls of which the most troublesome often are said to be tokenism and triteness (Fitch, 1982). The argument here stems largely from the idea of continuity of the urban fabric with the past. Since great care and consideration have been given to the preservation of the architecturally significant buildings, and since the surrounding context--once similar-period buildings--has been altered, the same care and consideration should be given to the design of the open space. In this way the open space can

help to act as a bridge toward achieving continuity with the building and the past. The space also can function as an appropriate setting for the building and, at the same time, strengthen the delicate relationship of building and surrounding context.

The methods of attaining an historic harmony between the new open space and the historic building have not been specifically addressed in the literature. Allusions to this idea are frequently made, however, and practitioners often illustrate the idea in their designs. Simonds (1983) urges us to honor and cherish our historic landmarks and to create an order in the city which is sympathetic to the historic architecture. Wiedenhoef (1981) similarly states that the quality of materials, textures, and architectural ornament found in our historic buildings provide a unique and intimate human scale which should be recognized and be dealt with sensitively.

The ways which designers often use in providing an essence of the past without trying to recreate it, include the following techniques: using the same or similar materials; using a formalized design schema; incorporating commemorative plaques into the design; incorporating other artifacts from the history of the site or area; and using period fixtures and furniture. There is a very high risk of tokenism or triteness in using any of these approaches. The problem ensues when the past is tastelessly caricatured by one of the techniques. Huxtable (1970) cautions that appropriate historic continuity through new design is difficult to achieve. Again, the watchwords of "respect" and "design sensitivity" reappear. We shall see that the three case-study sites address this problem in widely differing ways.

There is very little evidence at the Peoria site which suggests continuity with the past. In fact, of the three sites, the Peoria site exhibits the weakest adaptation of reinforcement of a sense of past. Perhaps the greatest achievement of the site is the continued existence of the City Hall building itself, after having experienced a history of schemes for removal. The current design of the open spaces does not address the issue of reinforcement of past in any way. There are, however, adjacent structures to the site which help to reinforce a sense of past. The early 1900's Sacred Heart Church, an example of Neo-Gothic church architecture with simple detailing (Figure 3.7), and the 1920's Peoria Savings Building, a twelve-story brick and stone commercial structure which has recently undergone extensive renovation and retrofitting (Figure 3.7), are two examples. The remainder of the surrounding structures are of contemporary construction and design.

The opportunity for careful detailing in the design of the two plaza spaces certainly exists. In order for the design to exhibit any meaningful relationships with not only the City Hall Building but also with the remaining older built environment and with some sense of the area's history, the design could implement some forms of the techniques previously mentioned (ie. signs, plaques, street furniture, complimentary materials, shapes, or other types of site detailing). As has been mentioned earlier, the use of any of these techniques should be carefully tempered with wisdom, in order that the end result is not only meaningful but sensitive. Since the urban cityscape is a continuum of historical artifacts from various periods, open spaces such as the City Hall spaces can help to bridge the relationship of old and new. Those who will be responsible for the subsequent design improvements to the Peoria City Hall spaces should



Figure 3.7 Peoria: View Showing Surrounding Buildings, Sacred Heart Church on Left, Savings Building Back/Center, City Hall and Civic Center Buildings Right Foreground

avoid the inclination simply to insert theater-set type solutions but should strive to develop meaningful relationships between old and new. Huxtable (1970) expresses this idea clearly when she advises us to "work with the assets of the old....new building should form strong relationships with the old" (p. 117).

The Indianapolis plazas design falls in the midground between the extreme sensitivity to historic reinforcement of the Wichita site, and the lack of sensitivity at the Peoria site. Like the Peoria site, the most successful allusion to history at Indianapolis is the 1886 Market Building. This building also faced many movements to demolish it but finally experienced extensive renovation in 1975. Old materials and finishes plus new materials and design were considered carefully to replicate the 19th century techniques and appurtenances. The interior light fixtures are an example of new design which harmonizes with the period of the building (Figure 3.8).

Two site features are in place at the plazas which help to address the issue of reinforcing the past. One of the east portals which was a part of the Tomlinson Hall structure (Figure 1.20) is extant in the west plaza (Figure 3.5). This portal stands where it was originally a part of the building's east wall. On the east plaza stands a clock which is an example of the types which were used on city sidewalks in the late 19th century (Figure 3.9). The clock was a gift to the city and was placed in the east plaza although its effect would be more appreciated in the busier west plaza.

The materials used in the plaza design, as well as the materials used in the addition buildings, are complementary to those used in the original market building--red brick, stone/concrete, and copper trim and roofing. The overall site design is stated in a way which allows it to not only

function well but to complement the Market Building. The City Market Plazas are a good example of contemporary site design which harmonizes with the historic fabric in its site detailing, harmonizes with the diverse architectural offerings of the surrounding cityscape, and provides a contemporary adaptation of the historic functions of marketing.

Of the three sites, the adaptation of design features which reinforce a sense of the past is best achieved at Heritage Square Park. Throughout the site there are strong indicators which lend a sense of the late 19th century period of which the Museum Building was a central feature. The building still tends to be a feature of the complex, although not playing as strong a role in the overall urban complex as when it was initially built. The park, however, helps to reinforce the part the architecture of the building plays in the 20th century city.

The design of Heritage Square Park utilizes 19th century period gaslight-style fixtures. Complementing the gaslight fixtures are cast iron and oak park benches and cast iron decorative fencing (Figure 3.4). A bronze entry sign identifies the park and signals the idea of importance (Figure 3.10). The central feature of the park is the octagonal bandstand which has been designed to allude to the 19th century style bandstands. It is a contemporary interpretation, however, constructed of steel posts, cast iron grillwork, copper roofing, and wooden internal roofing (Figure 3.11). Planting areas within the park are alligned along formal axes which lead into the park toward the bandstand from each of the street entries. The plantings have the sense of formality which was utilized in 19th century plantings.

The period-style site details set within a contemporary site design have been manipulated skillfully at Heritage Square. Not only does the



Figure 3.8

Indianapolis: Interior View of Historic Market Building, 1984



Figure 3.9

Indianapolis: East Plaza with Fountain in Foreground,
Antique Street Clock in Center

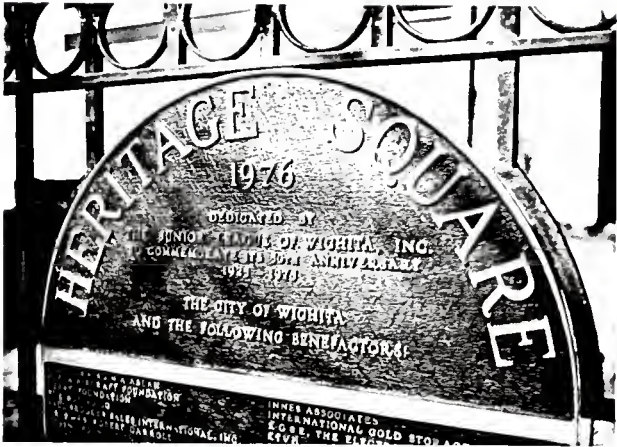


Figure 3.10

Wichita: Bronze Entry Sign at William Street Sidewalk



Figure 3.11

Wichita: Aerial View of Bandstand in Heritage Square Park

overall design harmonize with the principal historic buildings (Museum and Omnisphere) but the site provides a 19th century inspired setting with a great deal of charm. Because of the isolated setting of the park, there is little attempt, nor should there be, to link or bridge this reinforcement of past to the surrounding cityscape. There are no similar period buildings adjacent to the site or either of the principal historic buildings. The park offers downtown Wichitans a sheltered, human-scaled 19th century inspired retreat within the context of two architecturally significant historic buildings.

The foregoing analysis has shown how the three case study sites address the issue of strengthening the space within its context through the reinforcement of the past. The importance of strengthening the sense of the past is vital if the image of the building/space complex is to be strong. Reinforcement of past is also important if the space/building complex is to be perceived as a unit. The degree of success with which the space reinforces the past of the building directly affects the next criterion to be considered: Recognition as a place to be.

3. Recognition As A Place To Be

A part of the successful image of any urban space is the awareness by people that the space is a significant place to be. This quality involves significant things to see and the opportunity to be seen by others. Specter (1974) illustrates this idea when he states "the 'place to go' is where the people think the action is, (p.14) ...where they can watch and be watched" (p.19). The idea of an urban space evoking strong emotional feelings with users as the place to be takes on even deeper meanings. The place can become one which creates a strong sense of emotional security (Lynch, 1960). The ways which cause an urban space to be identified with

emotional security are dependent upon other variables which would include heavy use of the space--vibrant activity--which demonstrates that the space is free from crime or danger to users (Jacobs, 1961).

Another issue which helps to develop recognition of the space as the place to be would be a high element of pride of the space. This can be achieved only when the space has been planned and designed in concert with the other issues of this study. Wiedenhoeft (1981) posits that:

Care must be taken with details if people are to develop strong bonds of identity and affection for their urban environments. Details must reveal genuine care, educated tastes, and quality if the critical ingredient, pride of place, is to be present. Whatever else may be required in a living environment, achieving a sense of pride of place is perhaps most crucial (p.212).

In this study, determination of how an urban space meets this criterion of image has been achieved through using the methods of participant observation and interviews with key persons responsible for the management of the urban space. The functions and programs which take place in the urban spaces as well as available attendance figures and media accounts have also been utilized as determinants for place to be.

Of the three case study sites, the Peoria City Hall open spaces do not function successfully as a place to be, in stark contrast to the basic purpose of the Civic Center complex of which the City Hall Building and spaces are a part. The complex was conceived as an entertainment and convention focus of activities, a node in Lynch's terms (1960). Similar models of civic center facilities across the country were studied by city officials and the designers in order to gain an understanding of the successes and mistakes that should be known. Professional management people were sought to fill the key management positions. A well-trained staff was desired in order to insure a successful facility. The longrange purpose was

to attract people and boost the city's economy, especially through conventions and new business investment. The venture has succeeded in bringing to Peoria major concerts, theatrical attractions, state and regional conventions and exhibitions, and major athletic events. New jobs and revenues have been generated. Since the opening of the complex in 1981 (Arena, Exhibition Hall, Meeting Rooms, and Theater) annual attendance figures have totaled nearly a million people. The point is that a great many people have come to recognize the complex as a place to be, especially for large indoor events (see Appendix A).

The City Hall Building is beginning to gain widespread recognition as an historic structure. This can be attributable to the recent rehabilitation program and favorable recognition by the local press. The adjacent open spaces to the City Hall do not enjoy the same recognition. Presently, the two adjacent spaces function as spaces to view through. The "Sonar Tide" sculpture in the northeast space might be recognized for its size, mass, form, rhythm, or other artistic qualities. Unfortunately, the viewer must appreciate this large piece of sculpture from a great distance. The viewer is unable to gain a full understanding of the scale of the piece or any of its other qualities. The sculpture might best be appreciated if viewers were allowed to experience it from close range as well as at a distance. This space beckons to be used by people although people are kept away by an expanse of irrigated turf which does not invite entry. The southwest open space to the City Hall Building functions much the same way, only without the advantage of a focal point--sculpture. The spaces are only to see through not to move through and experience.

There might be some aesthetic strength to a blank open space such as those at the Peoria Civic Center complex. There is, however, very little usefulness beyond visual aesthetics. Without being useful, the space

cannot function to evoke in the minds of people the image of a place to be. The spaces cannot possibly function as a cohesive part of the complex without addressing this issue. In this respect the Peoria site fails to be recognized as a place to be, thus diminishing the positive image of the open space/building complex.

Unlike the Peoria site, the Wichita site functions as a very recognizable place to be although not as strongly as the Peoria site might. This is attributable to the size and configuration of the Wichita site. Nonetheless, Heritage Square Park is the most intensively used park space in Wichita and enjoys great popularity throughout the spring, summer, and autumn months (Holmes, personal interview, 1984). The park is heavily used by downtown store and office workers who use the space as an outdoor lunch mecca. In addition, a variety of formal public programs and activities are regularly planned for the space. The park is also available for privately organized functions, at a nominal cost. Events such as weddings or private parties are relatively easy to accommodate, due to the park's enclosed nature and easily controlled entry points.

The Heritage Square Park does enjoy recognition as a "place to be." People who work downtown and lunch in the space would recognize it as a pleasant outdoor lunch retreat, a place to meet and see other people, and to observe and enjoy concerts. Sunday afternoon concerts attract many users, as do annual events such as the Wichita River Festival, a major ten day festival held in late May. There is a duality as to how the space is considered: first as a quiet greenspace and, secondly, as a major activity node. The space functions successfully for both of these intended purposes.

Of the three study sites, the City Market Plazas in Indianapolis are the most successful in realizing strong recognition as a place to be. As a validation to this, a study has been done by the Department of Metropolitan Development in Indianapolis to determine the sites and places in the central city which enjoyed the greatest recognition as places where residents would take out-of-town visitors. The City Market obtained the second highest ranking in the study (Welch, personal interview, 1984).

The size and orientation of the plazas to the street help to reinforce the place's popularity as a place to be. Whyte (1980) has suggested that the most popularly used urban plazas are those which are oriented on a lively street corner. The Market Street and Delaware Street corner on which the West Plaza is located clearly meets this criterion, and the plaza itself is designed to draw and invite the pedestrian into the space. Once there, the user has a full view of the west plaza and also a panorama of the city scene along Market and Delaware Streets.

Like the Wichita site, the City Market Plazas function as a popular lunchtime gathering spot. The many food dispensing shops inside the market buildings help to reinforce this activity (Table 4.1). When weather is inclement the Market shops and cafes continue to draw users for indoor lunchtime activities. The unique interior of the old Market House provides a lively, colorful respite for the downtown office worker (Figure 3.8). The City Market has the most diverse and sophisticated operation of the three sites. The Market plazas are highly recognizable as a "place to be" due to the size, location, event programming, attractions, services offered, and the overall design of the facility.

The preceeding analysis has examined several methods which help to insure that an open space is recognized as the place to be. We have seen that strong recognition as a place to be is a critical aspect in the success of the open space/building complex. The following criterion--perception of maintenance and cleanliness--is tied very closely to recognition as a place to be. Both not only affect the positive image of the place but are tangible evidences of how the space can be more desirable.

4. Perception of Maintenance and Cleanliness

Another critical aspect which can spell long term success for the urban open space is whether the space is adequately maintained. The question becomes how the condition of the space promotes the image of good maintenance and cleanliness. According to Rapoport (1982), people will be inclined to use the space if they perceive it to be of high quality, not only of design but also of maintenance and cleanliness. Rapoport also maintains that the "sensory cues for positive environmental quality include newness, appearance of expensiveness, high level of maintenance with no determination of disorder, and harmony with nature" (p. 172). French (1978) suggests that the public spaces of the city which are maintained "with pride" will exemplify the best of urban life (p. 11).

There seems to be a strong correlation between quality and maintenance. The literature seems to indicate even the very best materials do not last forever and therefore when we design and equip public open spaces, maintenance and quality of materials should be considered concurrently. Simonds (1983) argues that the design must consider quality materials as well as replacement parts, assuming that every attempt is made at standardization of fixtures and materials. Simonds also advocates that maintenance be a consideration from the earliest design stages including the

programming of maintenance responsibilities, storage of maintenance equipment, easy accessibility of equipment to the space, and design which includes adequate outlets and fixtures with maintenance needs considered. Ramati (1981) contends that maintenance needs usually exceed what are the normal municipal responsibilities so that durability of materials and extensive knowledge of upkeep requirements be known and programmed into the long-term operation of the space. What is recommended is community project groups and activities to augment the official public responsibilities of maintenance.

The needs of maintenance, cleanliness, and care of the open space were readily recognized by the designers and management people interviewed relative to the three study sites. Maintenance was considered one of the most important aspects of the post-construction period of the space (Galloway, personal interview, 1984). Of the three case study sites, the Peoria open spaces require the least amount of maintenance attention due to the simple design of the spaces. This is not to say that the Peoria City Hall spaces suffer from neglect. On the contrary, what exists in these spaces is carefully maintained. The spaces, however, consist primarily of irrigated turfgrass with trees and walks being along the street perimeters. The extent of maintenance involves turfgrass management, arboriculture, and maintenance of the irrigation system. The Peoria Park District provides the maintenance for these areas which are only a small part of the overall Civic Center grounds maintained. During the summer months some brown areas are apparent within the grassy areas, the possible result of inadequate water coverage (Figure 1.13). Another apparent problem is that

there is some pedestrian traffic which crosses the south space diagonally at the Fulton and Jefferson Street corner. This has caused a minor pathway to be evident across the grass.

Although the quality of maintenance provided at the Peoria City Hall spaces is high, few comparisons are possible with the other two sites because of the lack of complexity in the design of the Peoria spaces. The Peoria site is also much newer (1982) than the other two sites (1975). There could be some wisdom in the way the Peoria site has been phased insofar as maintenance is concerned. It may have been recognized that in the initial operation of the Civic Center there would not be a great deal of revenue available for costly maintenance. For that reason, the design approach of the spaces was implemented in simplest form. Now that the city is entertaining new design implementation for the southwest space, realizing the critical importance of long term maintenance/repair costs as well as initial installation costs, more concern may be directed toward a high quality, well-designed solution to the space. There is much to be said for this type of phasing of such projects. At any rate, it reflects a degree of conservative fiscal responsibility, a reality for most municipalities.

Fiscal conservation was less of a concern for the planners of City Market plazas in Indianapolis. The private donation by the Lilly Endowment Fund should have insured the least troublesome design possible although this has not necessarily been the case. The city, which operates the complex, has experienced major maintenance problems due to design oversights of the spaces. No irrigation system was implemented in the original design. Watering of the plant material must be undertaken with hoses strung out across the plazas and attachment sprinklers. The efficiency of such a system as opposed to an in-place irrigation system on a timer clock bears no comparison. Several methods have been employed by the city to

accomplish the proper maintenance and care of the plant material but none has been extremely successful (Galloway, personal interview, 1984). Currently, the city bids the work out to private contractors and has recently rewritten the work specifications (see Appendix B) so that there is more assurance of better performance on the part of the contractor. An irrigation system from the outset would have solved some of the recurrent problems of sustaining the plant material in the plazas according to Galloway.

The fountain in the East Plaza has also been fraught with problems, not functioning properly since the year it was installed. Repair needs require a near-total reconstruction of the fountain; costs have been estimated at \$50,000 (Highland, personal interview, 1984). The operation of the market is to help supply the needed revenues for such maintenance needs and, currently, there are not sufficient funds available for this costly repair. Methods of raising the funds from private donations are being considered since it is recognized that the fountain is an important site feature for the space (Welch, personal interview, 1984). The Indianapolis site is heavily used throughout the day. A custodial staff which is a part of the overall market operation keeps the plazas clean of refuse. There are a number of trash receptacles on the site and they are routinely emptied. Although in the wintertime the plazas may be devoid of people and lacking the color added by plant material, the general cleanliness of the plazas appears to be well maintained.

Unlike the Peoria site, which has little to maintain, or the Indianapolis site, where major maintenance problems have been experienced, the Wichita site has benefited from a strong program of maintenance and cleanliness. The Heritage Square Park contains the greatest number of site

furnishings and fixtures of the three sites. This has not only enhanced the overall quality of the space, but caused additional maintenance requirements. The Parks Department, whose responsibility it is to maintain the space, is committed to providing the best maintenance possible (Holmes, personal interview, 1984). Although there have been some unusual and costly modifications to be made in the space, the budget has been extended to accommodate the needs and repair has been undertaken as quickly as possible.

Like the Indianapolis site, the planting beds in Heritage Square Park were not designed with an in-place irrigation system. A drip-irrigation system has recently been installed, however, to facilitate more efficient watering techniques. The site contains two fountain features which require regular and time-consuming maintenance needs. Although vandalism has not been an unmanageable problem, the smaller of the two fountains was damaged by vandals. This has necessitated the modification of the fountain installation. The fountain, which has been out of service for most of the year, is expected to receive the necessary repairs by the beginning of the 1985 season (Holmes, personal interview, 1984).

The Wichita site has been designed to supply the users with a great number of well-designed trash recepticals (Figure 4.3). These are placed at critical intervals, and appear to answer the needs of trash disposal. The maintenance staff keeps the space in a good state of upkeep and cleanliness. Until the drip-irrigation system is operational, hoses must be hand located and moved to accommodate watering requirements. This will continue to be necessary for the open turf areas.

The Heritage Square Park is recognized by the Board of Park Commissioners as a vital part of the total park system and one of the most intensively used public outdoor spaces in the city. The result is that the Parks Department has been responsive to the maintenance needs of the space.

The Junior League of Wichita, the principal fund-raising organization in the park's creation, has expressed great satisfaction with the way the city cares for the space (Wallace, personal interview, 1984). Quality design and materials in addition to appropriate and timely maintenance have been an important part of this success.

The preceding criterion has considered the physical condition of the open space and whether its general condition of cleanliness and maintenance are kept at a level which, as perceived by people, is an invitation to be in the space. The next criterion focuses upon a vital aspect of any public meeting place--whether there is some event or attraction at the space to give people a reason to be there. Without a reason to be there, a positive image of the place would be difficult to achieve even if all the preceding criteria were adequately addressed.

5. Organized Event Programming and Promotions

There are many ways in which the design of an urban space can succeed but if people are not an integral part of the life of the space it can be a total failure. Many of the issues which have been raised in this study relate to ways in which the space can be responsive to the needs and enrichment of people's lives. An important method of involving people in the life of the space is through the process of organized promotions and event programming. In reference to the First National Bank Plaza in Chicago, Carpenter (1976) states that the overall design is important, but the planned entertainment is what initially draws people to the space.

As we have previously seen, public events can help to establish a recognition by people that a particular place is the "place to be." Halprin suggests that public events "fulfill the important role of expressing people's togetherness through common experience" (quoted in Taylor, 1972, p.44). We live in an era of rapid communication and fast-paced living. People, therefore, can benefit if the activities and festivals of their public places are not only well-planned but promoted in a manner which meets their lifestyles. McNulty echoes this idea, suggesting than "an effectively managed open space...can be even more effective if it is programmed carefully" (quoted in Taylor, 1972, p. 41). He further illustrates the extended benefits to the city in promoting organized plaza activities as a way to strengthen the tourist potential of the city.

The three case study sites address this issue to differing degrees although programming and promotions are a recognized element contributing to the success of each of the sites. The Peoria spaces, inasmuch as they are not explicitly active or participatory spaces, receive no special programming or promotional considerations. The Peoria Civic Center maintains a professional management staff whose responsibility is to book and organize events for the complex. Since the grounds are also a part of the responsibility of the Civic Center, it is expected that, in the event the open spaces are made suitable for public use, programming and promotions would also be the responsibility of the Civic Center. Since the Civic Center has initiated a recent design competition for the southwest space at the Jefferson/Fulton Street corner, there is a good chance that this space may actually become a useful public-event space.

Like the southwest space at Peoria, the northeast open space, which contains the "Sonar Tide" sculpture, does not function as an event space.

The probability exists that this space will be redesigned also to facilitate its use in a more active manner. There is a great potential for such active uses, with over a million visitors having attended events in the adjoining Civic Center since its opening. The spaces could be effective use-areas for events not related to those which take place in the Civic Center facilities, such as the annual food festival. In short, the full potential of the Peoria spaces is not presently realized.

Unlike the Peoria spaces, Wichita's Heritage Square Park was specifically designed to be an active space and has served this function successfully since its inception. Programming and promotions are channeled through a city agency--the Director's Office of the Wichita Park Board. Although we have seen that the size and shape of the space limit the possibilities of some uses, the space has been regularly programmed with activities which are appropriate for the space. Events scheduled by the Park Board include Sunday evening concerts, June through August, and Friday noon concerts. Other events include the ten-day Wichita River Festival which includes the Junior League's Flower Festival and noon hour band concerts. Beyond these scheduled events, the Historical Museum and private groups may schedule various events such as outdoor exhibits, weddings, and receptions.

The Heritage Square Park is a public amenity, and as such it is regularly used by Wichitans and visitors as a resftul, attractive setting in the downtown. Its most regular use is typically lunch-time patrons who take their lunches to the park for a midday retreat. The Wichita Park Board considers the space their most intensively used space for its area (Holmes, personal interview, 1984). Promotions of events held there are generally the responsibility of the sponsoring agency. Some posters are distributed by the Parks Department to advertise the concerts. Free radio

spots are also used as public service messages while newspaper reports and television news information rounds out the methods of media promotion. Few of the promotions are budgeted directly through the Parks Department (Holmes, personal interview, 1984).

The City Market Plazas in Indianapolis differ considerably from the other two sites in the sense that they are seen by the management as a drawing card to the market. The market is a quasi-commercial enterprise, meant to be self-sustaining on a budget which includes city fee assessment, parking ticket revenues, and rent receipts. The management of the market considers the programming of events and attractions in the plaza areas as a critical factor in drawing people--potential customers--to the plazas as well as the market. In this way, successful plaza events mean success for the whole market operation (Highland, personal interview, 1984). Publicity promotions are also the responsibility of the market manager's office. This expense is a part of the overall operating budget. A strong commitment toward the success of the market operation exists not only in the market manager's office but among other public officials who have strongly promoted the facility.

Like the Wichita site, the market plazas are popular outdoor lunch spots for downtown employees (Figures 4.4 and 4.9). In addition to a regular Friday noon music program, there are a variety of other events programmed for the plazas. Some of the events scheduled are full day attractions, such as the "Art Affair" which draws over 15,000 visitors. Recurring events throughout the spring and summer months, in addition to the Friday music, include a radio broadcast on Thursdays at noontime, the Bookmobile on Mondays and Thursdays, and a mobile post office Wednesdays through Fridays at the noon hour. Other special events which were a part

of the 1984 schedule include the following: Agriculture Day, 4-H Day, Fitness Festival, Alpha Romeo Day, Indianapolis Symphony Orchestra, Carmel String Orchestra, Fashion Makeovers, and the Market Ball (Highland, personal interview, 1984).

Successful public events can spell success for the public plaza or open space. The involvement of people participating actively or passively in a programmed event can create what Whyte (1980) terms "triangulation." This is best described when an outside stimulus--a plaza event--induces strangers to interact with one another. Successful programs and activities which bring people together can implant a solid perceptual awareness of the positive image of an urban plaza or open space. A positive image and a varied, desirable schedule of programs and activities can spell a long life for the historic building/open space complex.

We have seen the importance the preceeding criteria play in providing the historical building/open space complex with a positive image of place. Chapter four examines the criteria which relate to those issues that address more specifically the needs of people and the design considerations which are necessary for orienting the plaza for the use of people.

CHAPTER 4

Orientation for People and the Three Case-Study Sites

The previous chapter discussed the importance of establishing a positive mental perception of the urban open space. Closely linked to this perceived image are those conditions which are designed to complement the space and directly provide for peoples' needs. These conditions are concrete design considerations and site amenities. The five criteria which form the backbone of these site conditions as developed in this study are: (1) places to congregate; (2) barrier-free accessibility; (3) provision of food; (4) site fixtures and furniture; and (5) existence of focal points. The inclusion of these site conditions play a multifaceted role in the spaces' success. Not only will these conditions improve the image of the space but such features respond directly to the needs, comfort, safety, and welfare of people. We need spaces which are "vessels for human activity" (Wiedenhoeft, 1981, p. 164); spaces which improve the environment and respond to peoples' needs (Ramati, 1981); and spaces which offer "facility, accommodation, and delight" (Simonds, 1983, p. 314).

1. Places to Congregate.

The first consideration to be examined is that of providing people with places to congregate in the city. This element is the most basic criterion, the roots of which date to the Greeks and the Agora (French, 1978). There are strong reasons why modern cities need open spaces where people have a place to gather. We are gregarious creatures with deep needs to have contact with others and cities in the past offered their citizens

meeting places. Post-industrialism and the auto-age have played a negative role in providing meeting places in city centers as well as diminishing our recognition of the need for places to congregate. Some researchers have argued that the existence of meeting places in the city is vital to the future of our cities (Wiedenhoeft, 1981).

In Whyte's (1980) study of small urban spaces in New York, the best-used plazas are social places and people gather there by choice. Similarly, Seymour (1969) suggests that the primary social function of urban spaces in the city is to bring people in contact with one another. Whyte (1980) contends that what attracts people to plazas is other people. Plaza design, then, should recognize this need for people to gather and provide spaces and places where people can be accommodated comfortably with a variety of spaces which allow them to partake of the historic urban ritual of gathering.

The Peoria site does not answer this need of gathering place well. As we have previously seen, the spaces surrounding the Peoria City Hall are places to look through rather than to gather at. The preservation architect of the City Hall renovation remarked that the idea of gathering spaces surrounding the City Hall was completely in context with the style of the structure. He described the style as "German Renaissance" and believed that one of the traditions of the Renaissance Period was that of civic gatherings (Kenyon, personal interview, 1984).

The Civic Center facilities accommodate large gatherings of people for indoor events. The outdoor spaces could also serve as places for events, festivals, and activities as well, but do not function this way. For example, a popular festival which occurs in Peoria in early August is a food festival called "A Taste of Peoria," modelled after a similar event held in Chicago. Peoria restaurateurs offer mini-courses of their notable

fares for nominal fees. The space for the event had to be enlarged due to the great popularity of the festival. Most recently this event has been held on Jefferson Street adjacent to the Civic Center (Figure 4.1). The open space in the picture is the City Hall southwest space. The space nearly begs to be more a part of the festival although design does not facilitate this. The potential for the space to address the needs of people to congregate are immense. The quality of the festival as well as the space would be greatly enhanced if the space would answer the need.

The northeast open space to the City Hall also does not answer the need as being a place to congregate. This space contains a central focal point, the "Sonar Tide" sculpture, which is an encouragement for people to gather in the space although design does not permit this to happen. A great many people circulate about the space due to the nature of the Civic Center functions which occur but the space does not allow the inclusion of people as a part of its function. The space functions only as a visual setting and not a place where people can gather and become active participants in the setting.

The Wichita site, on the other hand, functions well as a gathering place. One limitation to this fact, however, might be that the site is of such an introverted nature. The buildings surrounding the park tend to cut the park off from the rest of the city. This is especially true of the effect of the parking deck. The park tends to be oriented away from the streets, a fact not without some merit, although stronger visual linkages between the park and the rest of the city setting would improve visual accessibility. Although the space functions as a gathering place, it tends to be a reserved one, not easily recognized by all. The semi-private nature of the space as well as the narrow configuration tends to limit the

size and nature of gathering. This condition, however, helps to make the park a quiet, restful spot away from the noisy streets and possibly equips the space more effectively as a concert spot for performing groups using the bandstand.

There are a variety of places and spaces within the Heritage Square Park. As mentioned, the bandstand is the central feature and visible from all points within the park, although not necessarily visible from points outside the park (Figure 4.2). The informal dining area (Figure 4.3) which surrounds the "Heritage Woman" statue and pool is another gathering spot which offers seating and tables. This is the only place where any sizable number of people can gather. There are perimeter seating benches throughout the park as well as some low retaining walls along the east planting beds. The park tends to function best as a mini-concert park and versatility of the space for other larger gatherings is somewhat sacrificed.

Of the three sites, the Indianapolis City Market Plazas answer the issue of gathering place most successfully. Throughout the city's history, the market has been a place where people could gather to buy and sell market produce and wares. The Tomlinson Hall structure also was an important gathering arena. Today the plazas function as spacious outdoor gathering places, heavily utilized as such for formal events and informal lunchtimes.

The west plaza is open and spacious, thereby allowing it to perform a great many uses. Most of the scheduled events take place in this space by virtue of its large size. This space also tends to be the most popular with the lunchtime crowds (Figure 4.4). This might also be attributable to its size but also doubtlessly because of its busy street corner orientation (Whyte, 1980). The east plaza, in contrast, tends to be



Figure 4.1

Peoria: "A Taste of Peoria" Food Festival
with Southwest Space and City Hall in Background



Figure 4.2

Wichita: Aerial View of Bandstand
in Heritage Square Park



Figure 4.3

Wichita: Two Views Showing Courtyard, Furniture,
and Lunchtime Patrons in Heritage Square Park

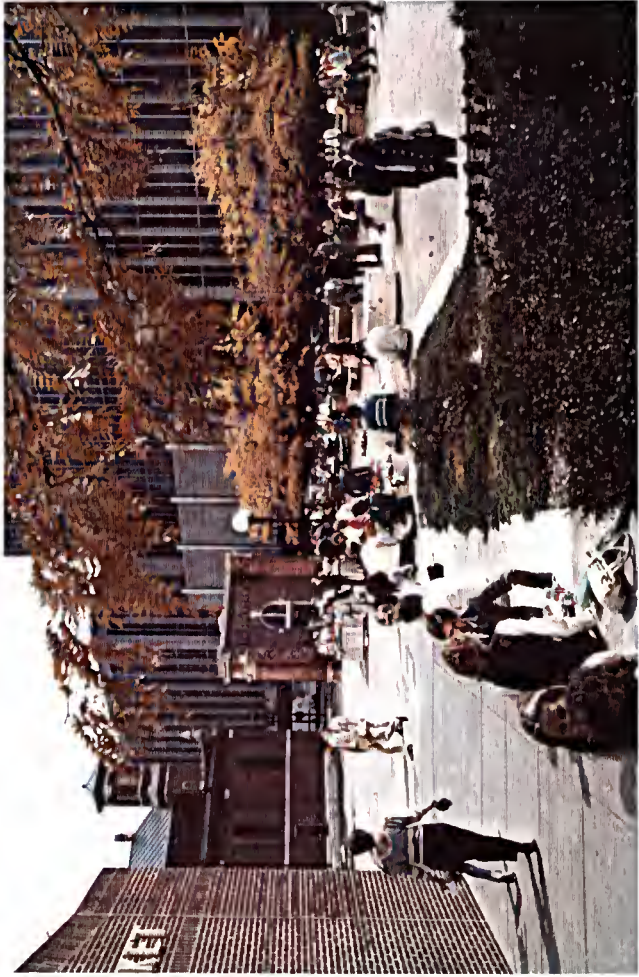


Figure 4.4 Indianapolis: West Plaza Lunchtime Gathering at City Market

the quieter space and persons observed using it have been singles, or perhaps couples engaging in quiet conversations. The fact that the fountain does not work could also be a reason for this plaza's lesser popularity. This plaza does not face upon a heavily pedestrianized street corner and also is diagonally crossed by a service drive (Figure 3.4). A criticism voiced by the market manager suggested that this side of the building would perform better as either all plaza or all parking (Highland, personal interview, 1984). At any rate, the City Market Plazas are spacially oriented towards the purpose of providing people with a place to congregate in the city and they perform this function with style and variety.

We have seen the importance of the urban open space to answer the need of people having a place to congregate: a place to gather for lunching, festivals, or other civic gatherings. The following criterion examines the needs for the outdoor space to be one which is easily accessible and a space in which there are no barriers to hinder the use of the space by handicapped persons.

2. Barrier-Free Accessibility.

Another mandatory consideration when designing public open spaces responsive to peoples' needs is the issue of barrier-free accessibility for handicapped persons and easy accessibility for all. With regard to the handicapped, the number of persons who have physical disabilities has steadily increased. One source estimates as many as sixty-seven million Americans have physically limiting conditions (Hopf & Raeber, 1984, p.1). The U.S. Census Bureau reports that approximately ten percent of our popu-

lation between the ages of sixteen and sixty-five is disabled (p. 1). It is apparent that barrier-free design must be a consideration for all public spaces. Moreover, public spaces designed for the handicapped work even better for all users (Whyte, 1980, p. 33).

Minimum standards have been developed which form the basis of our present legislation requiring barrier-free access to public open space. The most widely accepted of these standards has been developed by the American National Standards Institute, Inc. These standards, originally published in 1961 and amended in 1980, are known as ANSI-A117.1, 1980. They address the issues of accessibility for both interior and exterior spaces and are found in the publication American Standard Specifications for Making Buildings and Facilities Accessible To, and Usable By, the Physically Handicapped. The physical disabilities which are most pertinent to this study include those which involve wheelchair patrons, those persons who are using crutches or canes, older persons, and blind persons. A variety of site-specific details must be considered when designing for barrier-free accessibility. The ones which apply to this study are the following: (1) ramps and curb ramps; (2) railings/handrails; (3) stairs and steps; (4) parking spaces; (5) protruding obstructions; (6) maximum reaching heights; and (7) minimum passage widths.

The states in which the three case study sites are located all have legislation in effect which meets or exceeds the ANSI standards (Hopf & Raeber, 1981). This does not mean, however, that every site addresses this critical issue adequately. The Peoria City Hall spaces, in view of the fact that they are not designed to be used as a gathering place, do very little with regard to barrier-free access. There is no access to the internal portion of the City Hall open spaces. The streetside sidewalks and the sidewalk approaches to both the City Hall Building and Civic Center

Buildings do provide access for disabled patrons. Curb ramps exist at the Jefferson/Fulton Street corner. Grade-level entrance drives exist at the parking lot southwest of the City Hall Building and at the walkway at the northeast side of the City Hall Building (Figure 4.5). There is a wheelchair ramp at the northwest main entry to the City Hall Building, and all the Civic Center entrances are grade-level and wheelchair accessible. There are no grade changes in the walks which are adjacent to the two open spaces. All walks meet the minimum widths for two-way wheelchair movement (i.e. sixty inches). Designated handicapped parking spaces which meet the minimum standards are located along Fulton Street immediately in front of the City Hall Building.

There are no protruding obstructions that would interfere with blind pedestrians along any of the walkways at the site. At the Jefferson and Fulton Street intersection there are sound warnings which signal pedestrian crossing intervals. Although the Peoria site does not function as a gathering place, adjacent walkways and entries have been designed to be sensitive to handicapped accessibility.

Both the Wichita and the Indianapolis sites also address the needs of handicapped users. Both sites provide ramped access into raised or lowered public areas. In Wichita both the bandstand and the courtyard areas introduce grade changes (Figure 4.6). The courtyard area is approximately eighteen inches lower than the principal walkways. Steps are located at the west and south entrances in the courtyard, while a wheelchair ramp is located at the northeast corner of the courtyard (Figure 4.3). The ramp slope is approximately seven and a half percent, which is within the minimum standards. The width meets minimum standards for one-way passage (thirty-six inches). The ramp at the southeast side of the bandstand is

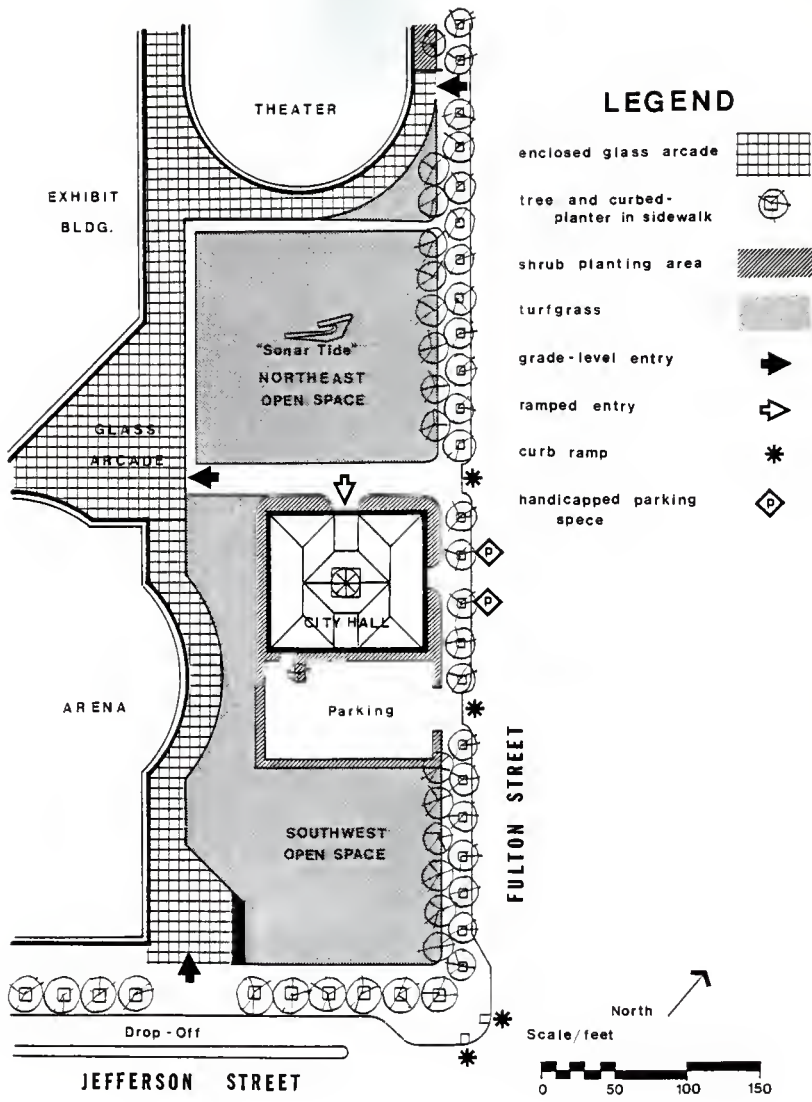


Figure 4.5

Peoria: Site Plan Showing Handicapped Accessibility

also less than the maximum slope requirement. All steps at Heritage Square Park meet the minimum standards for tread width (eleven inches) and riser height (four and a half to six and one half inches). The major discrepancy of both stairs and ramps at Heritage Square Park is that there are no handrails. The ANSI specifications require handrails in both instances. There is a railing encircling the bandstand but no handrails at stairways or ramp. Stairs and ramp at the courtyard are also without handrails.

No protruding objects conflict with the safe passage of blind persons at the Heritage Square Park. Walks are also within the guidelines for two-way wheelchair traffic. The courtyard seating and tables are accessible to wheelchair patrons. Although the chairs are connected to the pavement with chains, there is enough chain so that the chairs can be moved sufficiently to accommodate a wheelchair at the tables. One drinking fountain is located at the northeast corner of the bandstand area, although it would not be accessible to a wheelchair patron (Figure 4.6). Curb ramps are located at the intersection of Main and William Streets, and at the William Street entrance to the site (Figure 4.6). Both the Museum Building and the Omnisphere Building have ramped entrances. The nearest designated handicapped parking spaces are located in the library parking lot across Main Street and opposite the Omnisphere Building.

The Indianapolis City Market Plazas, like the Wichita site, have ramped access into the raised portion of the site. The west plaza is raised approximately twelve inches above the surrounding sidewalks. Steps are located at the northwest entry on Delaware, the southwest entry on Market, and at both sides of the old portal near the Market Building on Market Street (Figure 4.7). A ramp of less than five percent is located on the east side of the west plaza alongside the Market Building. There are

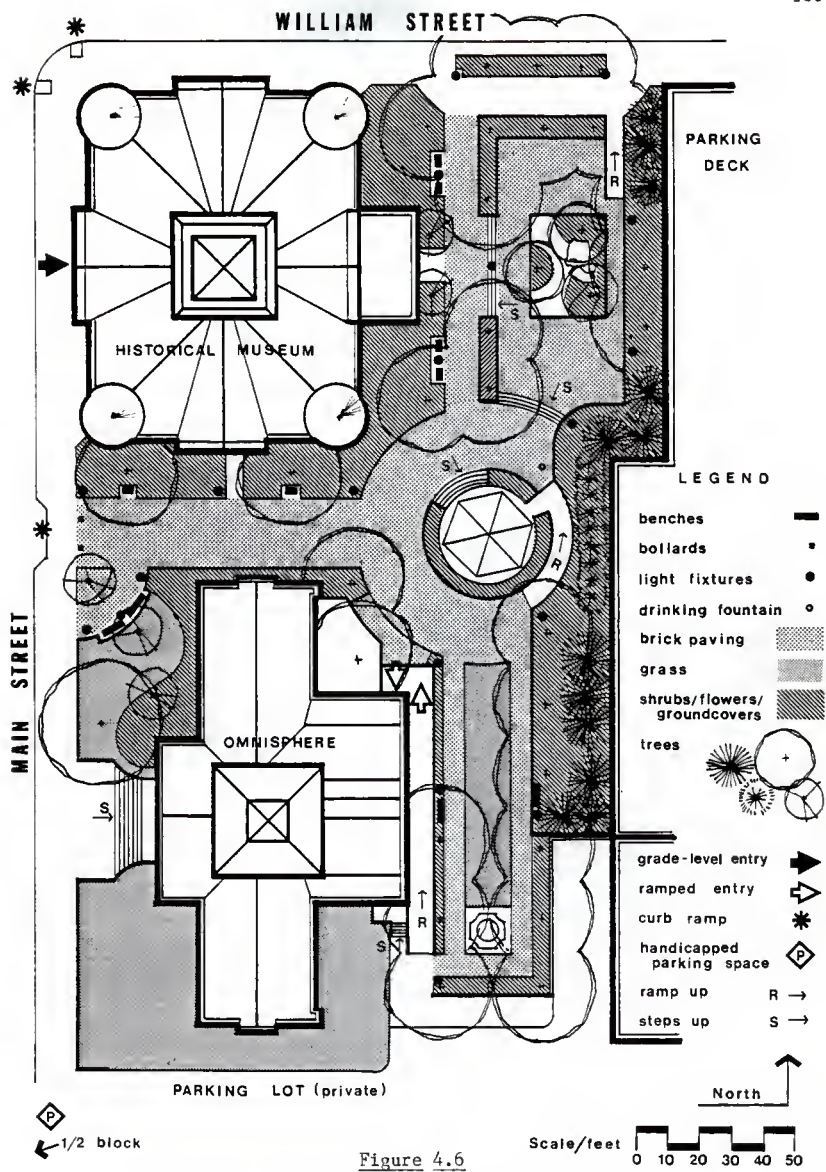


Figure 4.6

Wichita: Site Plan with Handicapped Accessibility

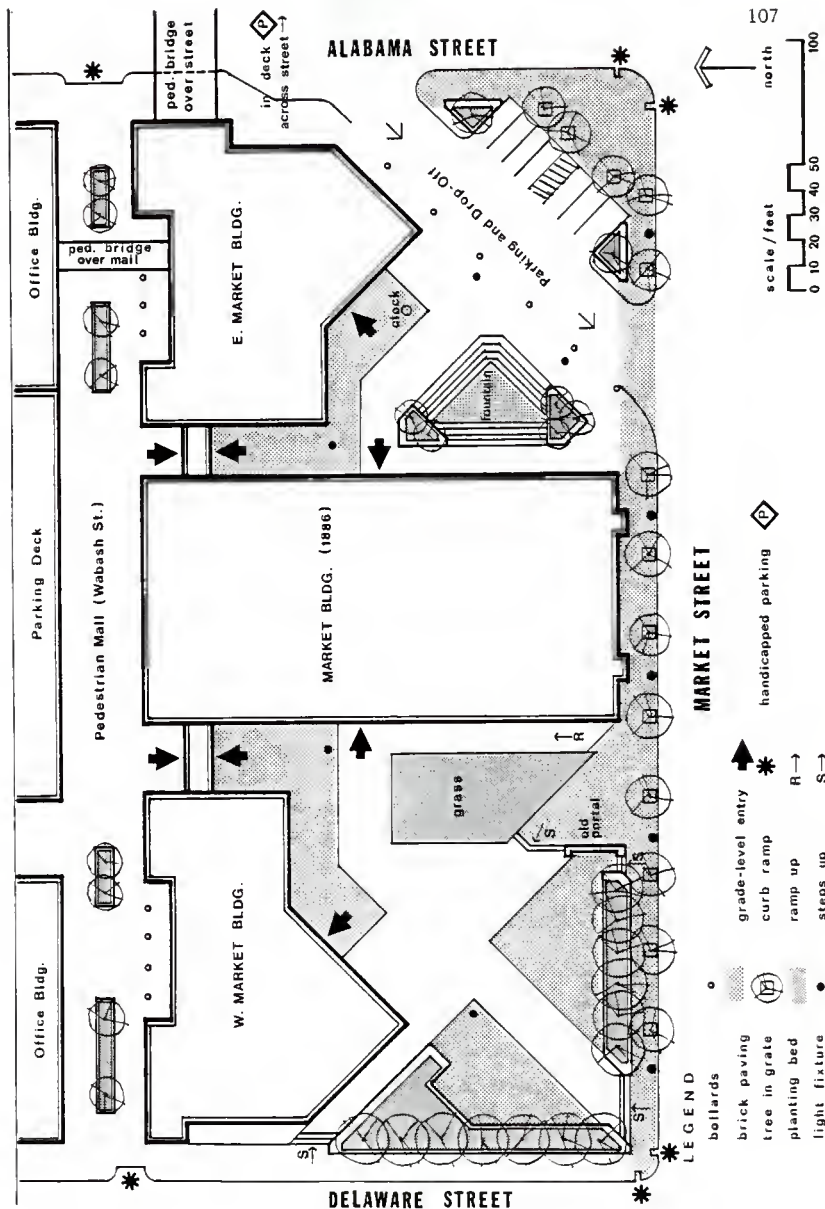


Figure 4.7 Indianapolis: Site Plan with Handicapped Accessibility

no handrails at either steps or ramp but there are low retaining walls (planters) at three of the step locations. Although the ANSI standards specify handrails on both sides of ramps with a rise greater than six inches or with a length greater than seventy-two inches (both apply to the west plaza ramp), the slope on the City Market ramp is so slight as to make one question the necessity of handrails. There are no steps or ramps at the east plaza area. There are also no curbs along the service drive which diagonally separates the space. Curb ramps exist at both the Market and Alabama Street intersection and the Market and Delaware Street intersection (Figure 4.7).

There are no protruding obstructions at the site which would impair handicapped use. All walkways are within the minimum standards for two-way wheelchair passage. The east and west market additions are accessible with doors at grade-level. All the other entrances, except the south Market Street entrance, are grade-level and accessible to wheelchairs. There are no outside drinking fountains at either the east or west plazas. Designated handicapped parking spaces are located at the Market Square Arena parking deck on the east side of Alabama Street. Two stalls are provided at each of the eight levels and these are adjacent to the elevators. The third level of the deck connects via a pedestrian bridge over Alabama Street connecting to the second level of the east market building. An elevator is immediately inside the building.

Both the Wichita and Indianapolis sites have been fairly well designed for handicapped accessibility, considering they were built in the early years of consciousness on this issue. Although both sites have three to four stepped grade changes, neither one has handrails in place which is a

shortcoming of the sites. Neither are there handrails at the ramps which may be more critical an omission at Wichita than Indianapolis. Other than the omitted handrails, the Wichita and Indianapolis sites address the primary considerations of handicapped accessibility.

The inclusion of facilities which permit the use by, and safety of, handicapped patrons is critical in the design of the urban open space. As we have seen, the three case study sites have addressed this important issue in varying ways. Where certain considerations have been omitted (i.e. handrails) serious thought should be given to rectifying the shortcomings. It should be remembered that spaces designed for use by handicapped patrons are virtually better designed for all patrons (Whyte, 1980).

3. Provision of Food.

Food and drink do much to enliven an urban plaza. Whyte (1980) suggests that "if you want to seed a place with activity, put out food" (p. 50). He states further that the presence of food at a plaza attracts people who in turn attract more people. Downtown plazas have become popular places for lunchtime gatherings. People appear to enjoy gathering for food and drink, no matter what the occasion (Lennard, 1984). Having provided a place for gathering, one must then consider the provision of food for the site. Sidewalk vendors, snack bars, carry-outs, outdoor cafes on the site, or restaurants adjacent to the site are all effective means of attracting people to an urban open space through food (Whyte, 1980). Food helps to add a dimension to a place which reinforces the place's special

image. As we have seen from previous examination, the image of the urban space and the historical building are closely related in the three case studies. Attracting people to the space through the presence of food strengthens this relationship.

As we have already seen, the relationship between the space and building is the weakest at the Peoria site. The Peoria City Hall spaces do not lend themselves presently as gathering places. Redesign of the spaces would be necessary for them to fulfill this role. There is, however, a strong potential for the spaces to succeed as gathering places and the proximity of many types of food dispensing outlets would allow the spaces to succeed in the criterion of providing food. There are several restaurants and carry-out food places within a block of the Peoria site. In addition, the city permits sidewalk food vendors, which are a popular amenity at the Court House Plaza approximately two blocks away. The Jefferson and Fulton Street space has come close to performing as a gathering place where food was available. The occasion was the popular "Taste of Peoria" food festival, where area restaurants provide mini-courses of their best offerings in the format of a street market (Figure 4.1). The popularity of the event has been so overwhelming that it has become a multi-day affair. As the figure attests, however, the open space only comes close as a gathering place for this event, inasmuch as the gathering has taken place in the street, the sidewalks, and the adjacent glass arcade, but not in the open space. Redesign of the open space to accommodate people is crucial.

In contrast to the Peoria site, the Wichita site functions primarily as a gathering place. With the exception of a few food-oriented events, however, the space tends to be mostly a "brown-bag" lunch spot. No food vendors are present at the park and the closest carry-outs are more than a

block away. Even with these limitations, the Heritage Square Park is an important lunch spot among downtown Wichitans. There are comfortable places for people to sit, eat, and people-watch. The courtyard area captures the majority of lunchtime patrons by virtue of the tables and chairs (Figure 4.3). The benches around the park would be a second choice for those lunching in the space. Sunny places and shady places are in ample supply and receive priority depending upon the weather and time of year.

Although the Heritage Square Park functions as an active noontime spot, there are a few other occasions when there are other foodtime events (see Appendix C). There is a great potential for either food vendors near the site or a snack bar/carry-out to be located nearer the site. Need alone will not necessarily spell success for an entrepreneur. People demand quality, value, taste, and creativity when satisfying their palates. Whether a pushcart vendor, or a small snack bar, one near the Heritage Square Park could be a popular amenity.

Unlike both the Peoria and Wichita sites, the Indianapolis City Market plazas function as a gathering and eating spot. The primary historical purpose of the central market building has always centered around food. Whether as fresh produce and meat or as a deli or ethnic prepared foods, the market can satisfy almost every lunchtime palate. Today, the central market building and wing additions include thirty-six different food vendors. Many of the food vendors are geared towards fast and carry-out service and this fact is easily recognized on a pleasant day in the plazas (Figure 4.4, and Table 4.1).

In addition to the market buildings, the basement of Tomlinson Hall has been earmarked for a future rathskeller-type restaurant. Concrete floors, roughed-in plumbing and electrical lines, and preservation of the

unique archways and vaults were undertaken by the city in anticipation of future tenancy. Although the present high cost to both city and tenant to prepare the space for such a use has curtailed such a project, the idea still is alive in City Hall (Welch, personal interview, 1984).

TYPE OF VENDOR	QUANTITY	SPECIALTIES
Grocery	2	Convenience grocery
Fresh produce	3	In-seasons and exotic fruits
Meat and dairy	8	Seafood, beef, pork, poultry, rabbit, German deli, dairy products
Beverage	2	Coffee, strawberry specialties
Ethnic fast foods	6	Greek, English, Yugoslavian, French Italian, Chinese, Philippino
American fast foods	7	Chicken, hamburgers/hot dogs, ice-cream, stews/salads, baked potatoes
Delicatessen	4	Diet and health foods, sandwiches, yogurts
Bakery	3	Cookies, pastries, day-old items
Restaurant	1	Full-line restaurant

Table 4.1

Types, Quantities, and Specialties of Food Vendors at City Market in Indianapolis

The City Market Plazas have become very popular lunchtime spots for the downtown working population. The on-site food facilities as well as the large daytime working population are two reasons for the plazas' success. In addition, the spaces generally meet the other critical criteria for lunchtime gathering. There are both a variety and quantity of places

to sit as well as some circular picnic tables with benches. The quality of the seating does not compare to the type used at Wichita, although the Indianapolis fixtures seem to perform adequately. Planter walls and circular seating platforms are designed for the purpose although they lack some elements of choice and autonomy which can be achieved by movable chairs (Whyte, 1980). Even with this inadequacy, the City Market plazas are heavily used as outdoor eating areas.

The provision of food is a vital element to be included in any public urban open space. Success with the space, however, does not end with the inclusion of this criterion alone. In the following section we will examine the spaces according to the site fixtures and furnishings provided: important amenities which insure comfort and safety to users.

4. Site Fixtures and Furniture.

The provision of well designed, carefully selected, intelligently placed site fixtures and furniture can make an urban space not only more comfortable for people but can create a special meaning for users. Items to be considered in this section include seating, lighting, drinking fountains, litter receptacles, and public telephones. Foremost among these site fixtures and furniture is seating (Whyte, 1980). After extensive analysis of what attracted people to one New York City plaza over others, Whyte concluded that the key factor was availability of sittable space. A rule of thumb was developed as to a procedure for calculating minimum seating space. Whyte (1980) suggests that a minimum standard can be attained by providing one linear foot of sitting space for every thirty square feet of plaza (d. 39). Another observation made by Whyte is that choices in seating are more amenable to users than "forced choice" where

single chairs are prearranged and immovable (Whyte, 1980). The best seating tends to be any kind of sitting ledge, movable chairs, and benches which face the action, usually the streets and sidewalks. Sitting ledges must be within a particular height range, and ledges two backsides deep, according to Whyte, provide the best seating.

The three case study sites in this discussion do not always address the seating issues suggested by Whyte. In the Peoria City Hall spaces there is no seating whatsoever. The fact that the spaces were not designed as a gathering place for people explains this lack, although whether this design plan was the right choice for the spaces is questionable. People also do not use the grass on the spaces for sitting or gathering. There are other nearby plazas in Peoria where design of the spaces includes not only seating but all of the other site features to be discussed in this section. There does exist, however, a very great potential for the City Hall spaces to address the issue of outdoor seating as well as the other fixture elements to be considered here. Since the Peoria site lacks most of the site elements to be discussed in this section, the analysis which follows, with few exceptions, will deal with the Wichita and Indianapolis sites.

Both the Wichita and Indianapolis sites were designed as gathering places for people, and both address the need for seating. As was mentioned in the earlier section on "Places to Congregate," the Wichita Heritage Square Park contains the greatest variety of seating types of the two sites. It does not, however, provide the versatility of the seating found in the Indianapolis site. The seating at Heritage Square Park can be discussed according to the four principal areas of the site (Figure 1.18). The courtyard area contains individual chairs and tables. These chairs are attached to the pavement with a length of chain which allows the chairs to

be repositioned but not removed from the site. The courtyard contains twelve tables, six each at north and south sides of the pool with four chairs at each table. In addition to this wrought-iron patio furniture, the planter wall along the east walkway through the courtyard is also designed for sitting, being about two and a half feet high and eight inches wide. Along the west walkway of the courtyard and near the Historical Museum, there are two bench areas with four turn-of-the-century style benches with backs and armrests. These benches are well suited for handicapped or older persons. There are two sets of steps which are potential sitting areas, although they appear to be seldom used this way. The ratio of linear feet of sitting space to square feet of plaza without including the steps would fall within the 1:30 guidelines (Whyte, 1980).

The next area of the Heritage Square Park is the bandstand area (Figure 1.18). The bandstand is a central focus of the park where mini-concerts are often held during spring, summer and fall months. Most sitting areas of the park have visibility of the bandstand. Within the bandstand area itself there are some low sitting ledges, encircling the bandstand. This ledge is about a foot in height and width, somewhat low for adults but acceptable for children (Figure 4.8). To the southwest of the bandstand is amphitheater seating. This area consists of two low, wide platforms which lend themselves to being used with folding chairs although one could sit upon the surface without a chair.

The pedestrian plaza and the mall area both contain period-style benches. The benches in these areas do not face the bandstand. In the pedestrian plaza, which tends to be an entry corridor, two benches face Main Street and another two face south along the walkway. In the mall area there are two benches each on the east and west sides of the mall, facing

inward. Persons using these benches can see the bandstand. The ledge around the small fountain at the south end of the mall area could also be used as a sitting surface. Moreover, the grass in the mall area could also accommodate sitting, if necessary. During the summer when Sunday evening concerts are held in the bandstand, persons often bring their own folding chairs into this area where there is ample room to accommodate them. Chairs may also be brought into this space for other functions.

The City Market Plazas in Indianapolis do not contain the variety of seating types which are found at Heritage Square Park in Wichita although seating at City Market Plazas is more versatile as well as more plentiful. There are three types of seating available at City Market Plazas consisting of ledges, circular seating platforms, and circular picnic tables with attached benches (Figures 4.4 and 4.9). The west plaza, where most activity occurs, contains approximately 230 linear feet of sitting ledges along the interior of the west and south planters. In addition, there are no less than a dozen four foot diameter sitting platforms--preformed concrete manhole sections with concrete tops--and at least ten circular picnic tables which easily accommodate four persons (Figures 4.9 and 4.10). The circular seating platforms comfortably accommodate two persons for sitting, generally more, and are also used as stand-up snack tables (Figure 4.9). The same type of seating is available in the east plaza with the addition of sitting steps which surround the fountain (Figure 3.9). Although the seating at Indianapolis tends to be much simpler in design than the period-style furniture used in Wichita, it appears to be functional and heavily used. Seating at the City Market Plazas easily falls within the 1:30 guidelines suggested by Whyte (1980).



Figure 4.8

Wichita: Bandstand with Children at Heritage Square Park,
Wheelchair Ramp at Right



Figure 4.9

Indianapolis: Lunchtime Gathering and Site Furniture
in West Plaza



Figure 4.10

Indianapolis: Aerial View of West Plaza
Showing Site Fixtures and Furniture

The remainder of the site fixtures and furniture to be discussed in this study include lighting, drinking fountains, litter receptacles, and public telephones. The Peoria site addresses some of these items in a peripheral way. Litter receptacles are found along the sidewalks near the City Hall Building and near the Civic Center Buildings. Lighting at the Peoria City Hall spaces consists of nighttime effect lighting which lights one side of the "Sonar Tide" sculpture (the side away from the City Hall Building), and some multi-globed luminaires which are located on the Jefferson Street side of the southeast space (bottom of Figure 1.14). These fixtures help to light the pedestrian walkway and drop-off zone which fronts the southeast side of the Civic Center Arena. There is also a plan to implement effect lighting on the City Hall Building itself as one phase of the rehabilitation of the building which is presently underway. There are no outdoor drinking fountains or public telephones incorporated into either of the City Hall spaces although these facilities are in the adjacent Civic Center complex.

Wichita's Heritage Square Park has utilized turn-of-the-century gaslight fixtures throughout the park (Figure 3.4). The fixtures utilize a low wattage mercury vapor bulb bright enough for safety lighting at night. The fixtures also add a harmonizing sculptural effect to the period theme of the park during daylight hours. One drinking fountain is located just north of the bandstand near the east planting area (Figure 1.18). Litter receptacles also have been designed to complement the period theme of Heritage Square. They are found throughout the space and are integrated with the design of the wrought-iron fencing (Figure 4.3). There are no public telephones within the park or on sidewalks adjacent to the park.

Site fixtures which are located at City Market again tend to be more simple in design than those at Wichita. Lighting in the plazas consists of

a two-globed fixture, three in the east plaza and two in the west plaza. The light fixtures harmonize with the Market Street fixtures although they were installed at an earlier date. The planters at the plazas also have up-lighting for the purpose of illuminating trees although they are seldom used (Welch, personal interview, 1984). Little activity occurs in the plazas at night so lighting is primarily intended to be for safety reasons (Welch, personal interview, 1984). There are no drinking fountains or telephones in either of the plazas although these fixtures are located within the Market Building.

The literature on plaza design mentions several other site fixtures, and the New York City zoning guidelines contain several other site amenity requirements (Whyte, 1908). Some of these amenities such as tree, shrub, and flower plantings, and water features are discussed in chapter five, which discusses natural elements of plazas. Sculpture and artwork are discussed in the next section of this chapter, Focal Points. Several of the other fixtures mentioned in the New York City guidelines, namely, bicycle parking, flag poles, and bollards, are found in one or more of the three case study sites but have not been considered as primary elements for this study.

The preceding discussion has examined the importance of various site fixtures and furnishings which are found at the three open space sites. The following section deals with an extension of these fixtures although they should be considered as more than simply utilitarian. Focal points, no less important in contributing to a space's success than other fixtures, might be considered by many to be ancillary although I argue that focal points are critical, especially in contributing to the image of the space.

5. Existence of Focal Points

The final criterion to be considered when developing people-oriented spaces is the inclusion of focal points in the space. A focal point is defined as an element within the open space toward which people are drawn; which creates interest; which is dynamic in form, color, or motion; and which, by its nature, becomes a strong exclamation of the image held by people of the space. A focal point can be primary, for example the Arc de Triomphe, or secondary, for example the "eternal flame" beneath the arch. The primary focal point often serves as a landmark within the larger city context. The three historical buildings in this study are focal points as well as landmarks. Examples of focal points of a smaller scale which relate to open spaces would include such things as a central plot of flowers upon which walkways converge, an outdoor podium, a significant piece of sculpture or artwork, an obelisk, a pool or fountain, a clock tower, a gazebo, and a flagpole or group of flagpoles. In short, a focal point would be any tangible feature which draws interest and punctuates the open space.

Focal points can help to define a place. People like to gather in well-defined places such as near focal points (Whyte, 1980). Focal points can give special meaning to places. They can become common meeting grounds (Ramati, 1981). Focal points can have particularly strong significance in the history or background of a place. The stronger the significance, the more important the place becomes to people. In short, place experience becomes enriched (Steele, 1981). The inclusion of focal points in the urban open space can be a strong impetus for attracting people to the space.

The three case-study sites exhibit focal points of varying scales and

types. The Peoria City Hall spaces address the least attention to focal points of the three sites. The only focal point within the two adjoining spaces is the "Sonar Tide" sculpture which occupies the center of the northeast space (Figure 1.13). This black painted steel sculpture, twenty-six feet high and fifty-two feet long, was designed by New York sculptor Ronald Bladen. The sculpture is a three dimensional slab of steel with a prominent acute angle pointing towards the Fulton Street direction. The slab is incised with a broad curve which terminates in a continuous smooth arc of steel lifting upwards and pointing towards the Theater. This side, according to the artist, contains the more dramatic lines, and is lighted at night. The \$100,000 cost of the sculpture was met by a matching grant from the National Endowment for the Arts with Junior League solicited contributions. Dedication of the piece ended a three year controversy over the appropriate design. Richard Serra had originally been commissioned but his design for the sculpture was rejected. The "Sonar Tide" sculpture addresses the scale of the space as well as the adjoining buildings. Its clean lines and simple form have been said by most local art critics to complement the space and buildings.

Both the Indianapolis site and Wichita site include more focal points although the scale of these is smaller than the "Sonar Tide" sculpture. The two primary focal points at the Indianapolis City Market plazas are both located in the east plaza, the side which is least used by people. This would appear to be a contradiction of the purpose of focal points which is emphasis, interest, and ultimately to attract people. The fountain, as previously mentioned, does not function successfully as a focal point since it is non-functioning. The intrusion of a diagonal service drive and parking into the southeast corner of the space is another

deterrent to users. The clock, which is located near the east market wing building, would also function as a focal point more successfully if it were in a location more accessible to the view of people. A location in the west plaza for the clock would have been more effective.

In the west plaza the Tomlinson-Hall portal near the market building on the east side of the plaza could be considered a focal point. Although it is in place where the wall to Tomlinson Hall once stood, the effect as a focal point is weakened by the fact that the finished facade faces away from the view of the users. The strongest inference of focal points in the west plaza is furnished by the two towers of the market building itself. These are visible from anywhere in the plaza as well as from approaching the space along Market Street or Delaware Street. Because the space is surrounded by taller buildings, the towers to the market building tend to be focal points within their context rather than landmarks although the building itself is considered a landmark.

At Wichita's Heritage Square Park, the City Building clock tower, which rises approximately 170 feet, still tends to punctuate the skyline, although competition from new construction continues to encroach upon it. For the space, the clock tower is an everpresent focal point. Within the park itself, the bandstand structure is the central focal point. The north, south, and west axes of the space radiate from the bandstand which is the dominant visual element within the space. There are lesser focal points at Heritage Square Park. The "Heritage Woman" sculpture in the courtyard area, designed by Richard Bergan, is an important focal point softened by the profuse plant material which surrounds it (Figure 4.11). The small fountain at the south end of the mall area (Figure 5.5) provides a focal point and anchor for that part of the park. One unfortunate aspect of the park is that its eastern boundary, the parking deck, serves as an

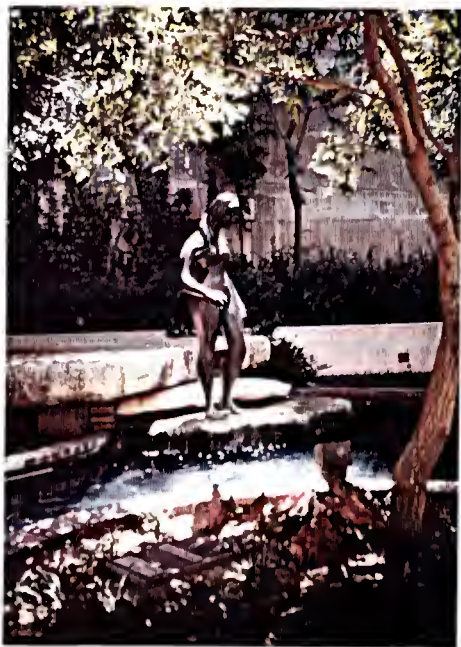


Figure 4.11

Wichita: "Heritage Woman" Sculpture and Pool
in Courtyard of Heritage Square Park

unwelcome focal point, always noticeable, glaring, and basically unattractive (Figure 4.12). Little can be done that has not already been done to ameliorate this problem. The plant material which helps to mitigate this problem will be discussed in chapter five. It is doubtful, however, if this attempt to soften the harshness of the concrete and cinderblock facade will ever be completely successful. Besides this problem, the other foci within the park work well.



Figure 4.12

Wichita: View from Main Street Showing Museum (Left),
Omnisphere (Right), Bandstand (Center), and Parking Deck
Wall (Background)

This chapter has examined several of the effects necessary in an urban open space to make the space more desirable for people. The next chapter deals with an issue which can also accomplish this end: namely, the Introduction of Natural Features.

CHAPTER 5

The Introduction of Natural Elements Into the Open Space and the
Three Case-Study Sites

The final category by which the three study sites are analyzed involves the theme of nature. In this study, the term nature includes the natural elements of trees, shrubs, groundcovers, and water with respect to how these elements have been introduced into the context of the three urban open spaces. This chapter is particularly concerned with the natural-design characteristics of these elements.

The introduction of nature into the urban environment has two primary functions. The first function relates to the use of natural elements for their aesthetic qualities. The second function relates to the use of natural elements for their microclimatic effects. The six corresponding criteria associated with nature, introduced in chapter one, are: (1) inclusion of plant material; (2) utilization of the design functions of plants; (3) improvement of microclimate; (4) enhancement of urban setting; (5) inclusion of water features; and (6) maintenance of natural elements.

1. Inclusion of Plant Material

The first of the criteria to be discussed is trees, shrubs, groundcovers, and turf. By virtue of their size and impact, trees tend to be the most important of the greenery features. Although trees are an important feature at the City Market plazas in Indianapolis, their effect is somewhat less than that of the Wichita or Peoria sites. At Indianapolis, trees are used in two basic locations: first, as street trees along Market Street; and second, as greenery in the plaza planters. The trees along Market Street were a part of the streetscape improvements which also included

decorative light fixtures, benches, brick paving, and circular planters. The trees are planted at grade-level within tree grates and they are all of the Thornless Honeylocust species, possibly variety 'Moraine' (Figures 1.5 and 5.1).

Both the east and west plazas have trees in the raised planting beds. In the west plaza, trees are planted parallel to the sidewalks on Market Street and Delaware Street. These are also Thornless Honeylocusts. In the east plaza where the space has been interrupted because of the diagonal service drive and parking, trees (Thornless Honeylocusts) have been planted diagonally across the southeast corner of the plaza. Two small raised planters are located at either end of the parking area on the east plaza. These are planted with single specimens, possibly Thornless Honeylocusts. At the north and south apexes of the fountain are two triangularly shaped raised planters in which there are multiple plantings of Shadblow Service-berry. The Wabash Street pedestrian mall to the rear of the market buildings contains raised planters, each containing two Washington Hawthornes.

Low level shrubs, groundcovers, and annual flowers complete the planting space in the raised planters at City Market. Blue Rug Junipers and Cranberry Cotoneaster have been used extensively. Where shady conditions have caused die-back of the junipers, the space has been replanted with Wintercreeper 'Coloratus'. Some Mugho Pines have been used for a low evergreen effect. These appear to be pruned back so as not to achieve their growth potential. Some Mugho Pines have been planted in the circular planting pots located around the plazas. Wintercreeper 'Coloratus', a very hardy broadleaf evergreen groundcover, has found a place in most of the planters. Remaining space is occupied by a variety of blooming annuals

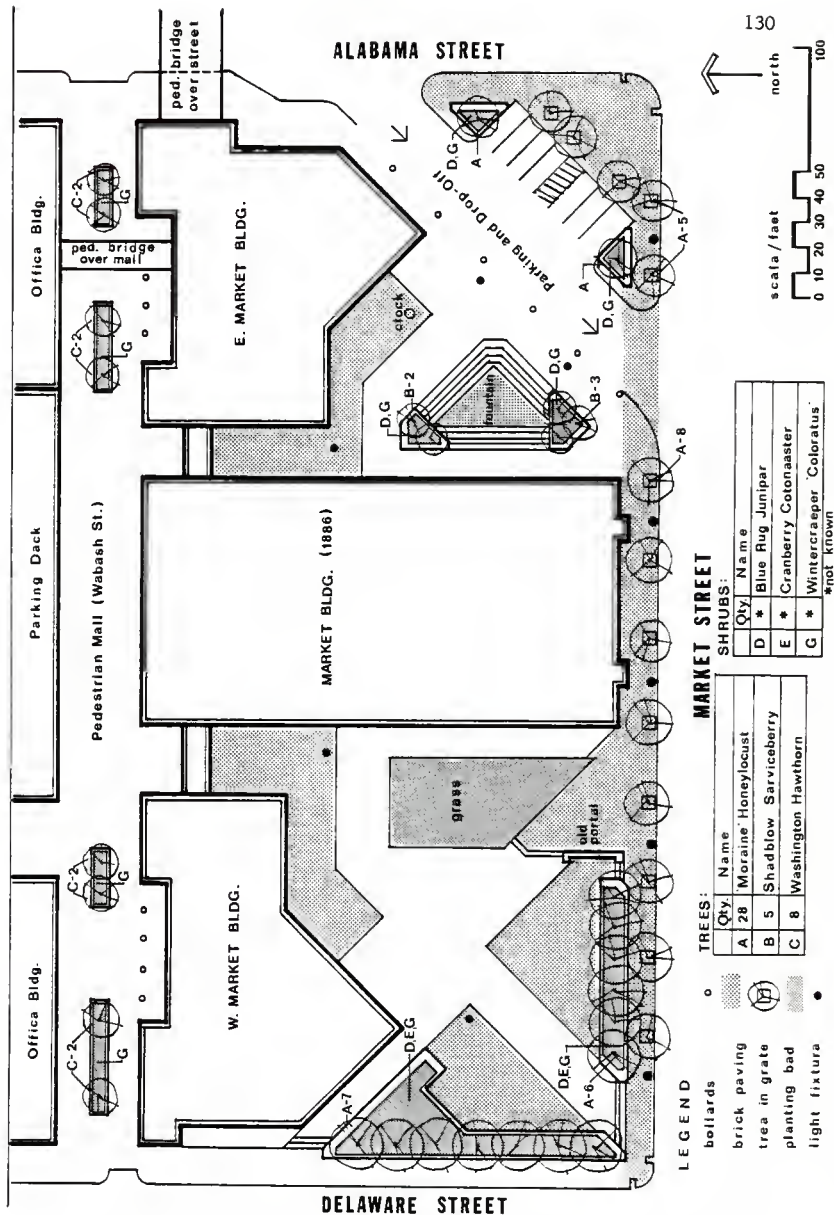


Figure 5.1 Indianapolis: Planting Plan of City Market Plazas

which are also planted in the circular pots around the plazas. Plant types and locations are illustrated in Figure 5.1, and the plant list can be found in Appendix D.

One small area of the west plaza is planted in turfgrass (Figure 5.1). This area was part of the original plan to eventually permit access to the Tomlinson Hall basement as well as a landing for a proposed skywalk to connect with the City/County Building across Market Street. It is not known when this skywalk will be implemented so the space has been maintained in turfgrass since the plaza was constructed. At intervals, the space has had to be resodded due to die-back conditions.

The planted areas in the west plaza, including the grassy area, constitute about twenty-four percent of the total plaza space. With the inclusion of the street tree planting along Market Street, the west plaza offers a good supply of summertime shade and greenery. If it were not for the street trees along Market Street, the east plaza would be scant of greenery. The east plaza north of the diagonal service road contains very little greenery, only what is found in the two small planting beds at the fountain and in the circular planting pots around the plaza. Less than four percent of the plaza space north of the service drive contains plant material. There are two criticisms of the east plaza: first, the fountain, a principal feature of the plaza, must function again; and second, the space would be more effective and could introduce more plant material if it were redesigned to exclude parking. The initial design prior to the inclusion of the service drive and parking was to include two raised planters similar to the west plaza. This would have been a more coherent solution (Figure 5.2).

Although the spaces at the Peoria case-study site are less successful for most of the design criteria in this study, the quality, function, size,

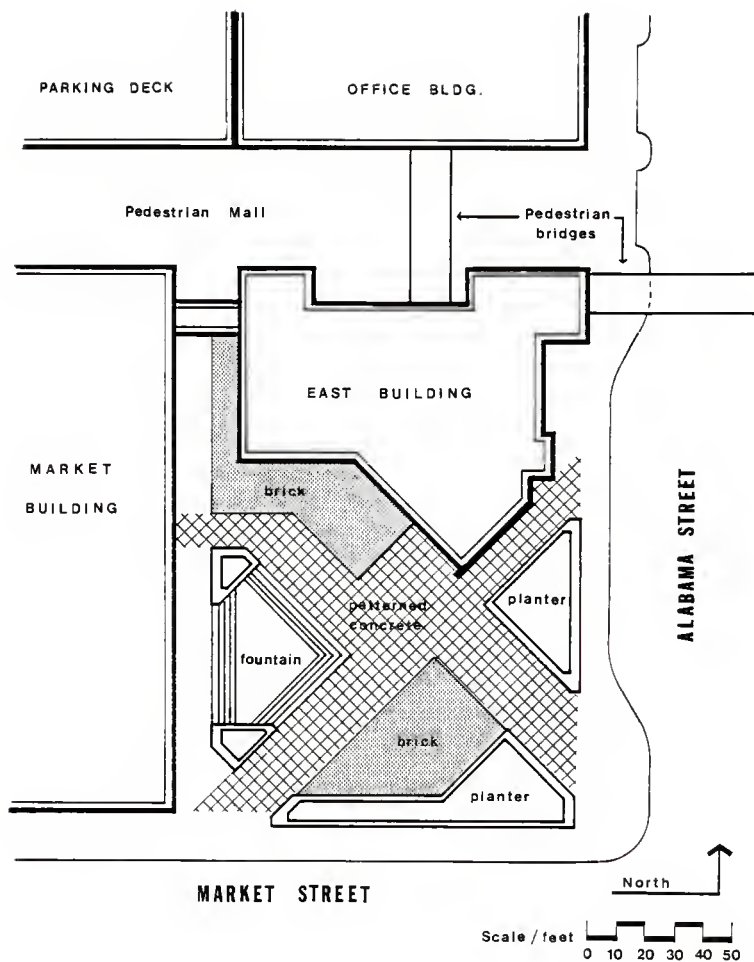


Figure 5.2

Indianapolis: Original Design of the East Plaza
without Parking and Service Drive

and overall care of the plant material (principally trees and turfgrass) help to make the site more successful than City Market in terms of the theme of nature. Double rows of trees, 'Moraine' Honeylocusts, are planted along the plaza areas which front Fulton Street. The outer row of trees are within planters in the sidewalk and the inner row of trees are within the turfgrass areas. The effect is similar to the double row of trees along Market Street in Indianapolis although, at the Peoria site, the trees are planted at the same grade. The six-foot square sidewalk planters are planted with blooming annuals and the combination of the double street trees and annuals is very successful in its visual appeal (Figure 5.3).

The trees planted along the Jefferson Street side of the southwest open space are planted in a single row within ten-foot square planters. Where the trees planted along Fulton Street are Thornless Honeylocusts, the Jefferson Street trees are Greenspire Linden. Beneath these Linden are planted Andorra Junipers, a dense trailing evergreen groundcover species which exists best in sunny locations. Their success beneath the dense shade of Greenspire Linden is questionable (Dirr, 1975).

The second landscape element at the Peoria site is that of turfgrass. Concrete walkways encircle the northeast space where the interior is planted with grass. The "Sonar Tide" sculpture is located in the center of this grassy space. The southwest plaza is also turfgrass. The parking area to the southwest of the City Hall building is separated from the grassy areas by a single row of Hatfield Yews intended as a screening device for the parking area. The space between the City Hall building and the Civic Center arcade is also planted in turfgrass. The overall effect of the spaces is that of slightly depressed grassy areas which gently slope up to the Civic Center buildings. From the standpoint of the viewer, the



Figure 5.3

Peoria: Double Row of Street Trees Provide Canopy, Define Edges to Street and Open Space, and Enframe Views of City Hall

trees are the only dynamic natural aspect of the spaces and are most successful from the sidewalk vantage point.

The simplicity of the design of the Peoria City Hall open spaces might lead one to conjecture that evolution and change are possible. This, in fact, is beginning to happen. The city's Advisory Commission on the Arts and Humanities along with the Peoria Civic Center Authority have sought preliminary design entries in a competition for the development of the open space at the Fulton and Jefferson Street corner. As of this writing, the Advisory Commission has made a preliminary selection and has instructed the winning entrant to continue the design process to include cost estimates as well as a phasing program for the implementation of the development (see Appendix E for a photo of the study model for this project).

At Heritage Square Park in Wichita, plantings are diverse, profuse, and exhibit the most successful use of plant material elements of the three case-study sites. Paramount in the plant types are the Honeylocusts, the same as Peoria and Indianapolis. The Honeylocusts (variety 'Shademaster') are planted throughout the park constituting the principal shade tree in the space. Several Sugar Maples are planted along the east side of the mall area and there are two American Planetrees located near the northeast corner of the Omnisphere building. The trees have a very measurable effect within the park. They not only add a great deal of green to the space, but provide cooling temperatures, shade, and a park-like atmosphere. Three Goldenrain trees are planted within the pool planters in the courtyard which provides greenery to that space (Figure 4.12). Other trees which are planted in the park are found within the planting bed adjacent to the parking deck wall. In this bed, Scotch Pine and Canaert Redcedars are

planted in order to screen from view some of the parking deck wall. These evergreens also help to provide the qualities of color and texture to the space during the winter months. Remaining trees not mentioned here are listed in the plant list, Appendix D.

Although the trees offer the most dynamic use of plant material, shrubs planted in the park offer the greatest number of varieties and quantities. Shrubs--including broadleaf and needleleaf, deciduous and evergreen--are planted in the perimeter beds in the park as well as the courtyard beds. The planting plan has been sensitive to providing a visually interesting collection of plant material in all seasons. The profusion of shrubs planted in the bed nearest the parking deck help to provide a green buffer in front of the concrete wall. Several of the shrub types have also been chosen for their outstanding fall color. A complete listing of the shrubs used can be found in Appendix D.

Additional types of plant materials used in the Heritage Square Park are those of vines, groundcovers, and turfgrass. Vines are an important plant material in the park, especially against the parking deck wall. Here several varieties of climbing vines have been planted and are being trained to climb the wall. Climbing guides had to be installed to assist the growth of the Wisteria, while Virginia Creeper is expected to cling to the wall without any assistance. English Ivy has also been planted against the parking deck wall as well as in a planter adjacent to the north wall of the Omnisphere. The latter location is primarily to use the plant as a ground cover. These three types of vines were chosen for their particular qualities which help to add texture, color, and year-round greenery.

In addition to the vines, three types of groundcovers have been used in the park. Pachysandra has been used as a groundcover in the two beds on the east side of the museum. This broadleaf evergreen has had more success

surviving in the northeast bed. Blue Fescue has been planted throughout the park and also adds an interesting color and textural quality in all seasons. Two small sections of grass are located in the park. These are found in the center strip in the mall area south of the bandstand and in a narrow strip which encircles the bandstand. For a more complete listing of the types and locations of groundcovers and vines, see Appendix D.

Flowers, both annuals and perennials, complete the planting scheme at Heritage Square Park. Seasonal displays help to add color within the park. Where flowers are absent during the winter months, the broadleaf and needleleaf evergreens have been used to add color and variety to the park (Figure 4.3 top). The variety and diversity of the plant material used makes the park an oasis of green with accents of color. The same visual interest is evidenced during the winter months due to the variety of evergreens used.

We have seen how the criterion of trees, shrubs, groundcovers, and turf have been used in the three case-study sites. The next section, Utilization of the Design Functions of Plants, examines how plant material can be manipulated in order to achieve various spatial and functional properties of design.

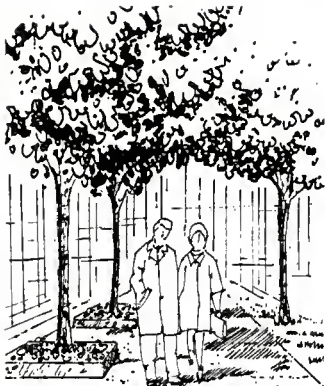
2. Utilization of the Design Functions of Plants

Among the many tools available to the landscape architect are those techniques of design and functional properties of materials which fall within the realm of planting design. These techniques and functional properties can be manipulated within a design to achieve various desired results. Several of these design techniques and functional properties, often referred to as elements, are particularly significant to this study.

The three case-study sites will be evaluated according to these elements: canopy, baffle, screen, barrier, enframent, color, form, and scale (Figure 5.4).

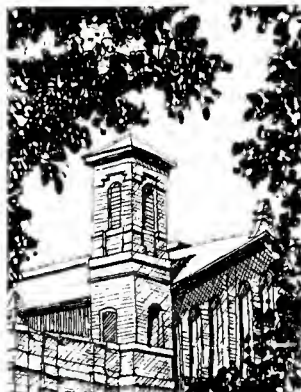
The first element, canopy, refers to the property achieved through the use of trees which form an overhead ceiling of greenery. Among the various design elements, canopy seems to be the one universally apparent among the three sites. The Honeylocusts at all three sites are the providers of canopy for users and pedestrians. The plantings at the Peoria site provide canopy to sidewalk pedestrians along Fulton Street and also along Jefferson Street. The only use of canopy at the Peoria site exists along these sidewalk perimeters (Figure 5.5). At Indianapolis's City Market, canopy is also provided for pedestrians along Market Street and for users of the west plaza occupying areas near the raised planting beds (Figure 4.4). The best example of the design element of canopy is found at Heritage Square Park. This site contains nearly a continuous canopy in the courtyard area of the park, and at different points where benches are present. Canopy was an important consideration in the park's conception and the concept is clearly in evidence since the trees have matured (Figure 4.3 bottom).

The design elements of barrier, screen and baffle will be considered jointly. All three are used to define an edge through which movement is restricted and where vision is often controlled. A barrier will restrict movement through a space but often allows vision over the top. Screening usually restricts not only movement through a space but vision as well. A baffle will often restrict movement through, but allows some vision to penetrate beyond the plant material.



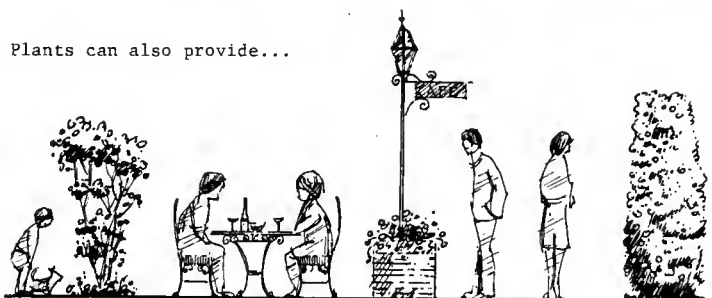
Trees can provide canopy

and...



enframement

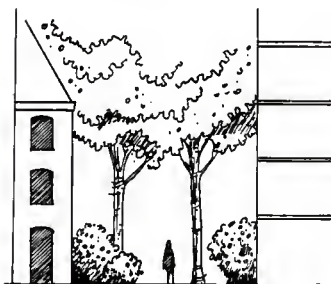
Plants can also provide...



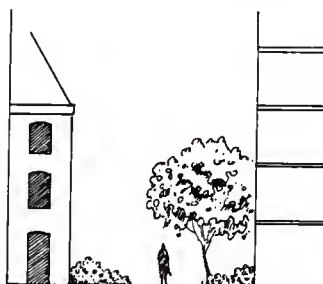
baffles

barriers

screens



Trees and shrubs may be too large for the scale of the space, buildings, and people....or



may relate better to scale

Figure 5.4

Some Elements of Planting Design

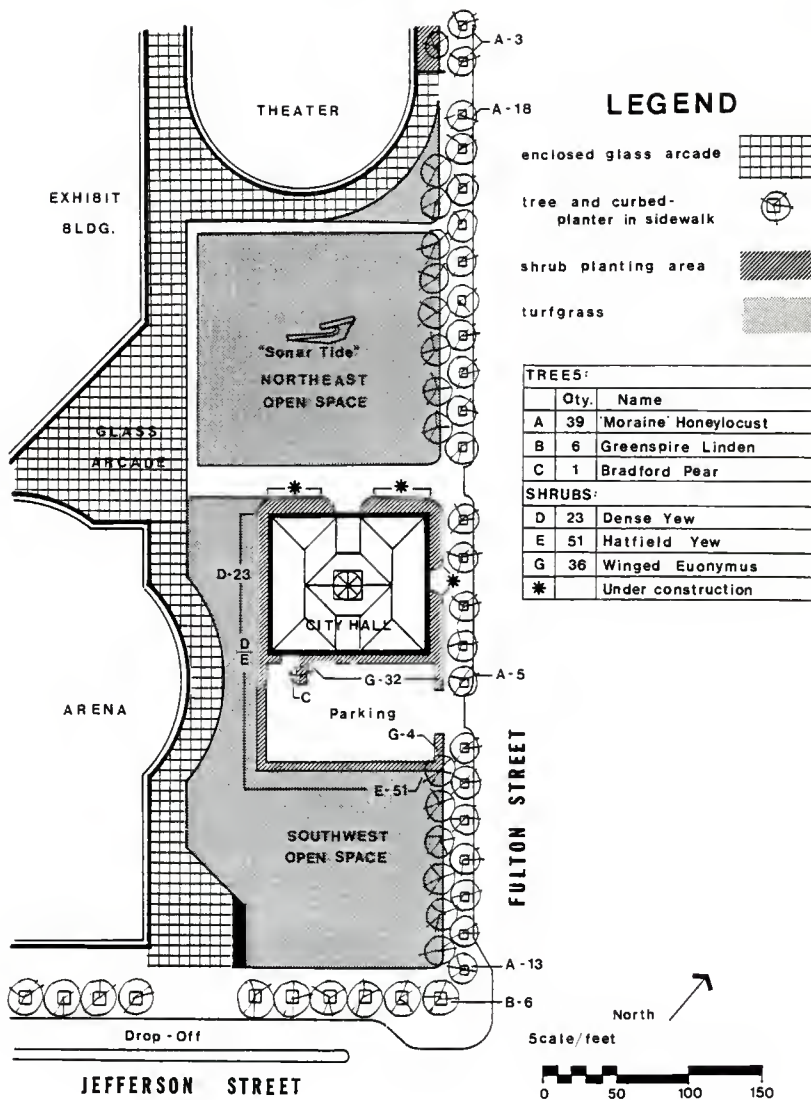


Figure 5.5

Peoria: Planting Design Plan of City Hall Open Spaces

At the Peoria site, the only use of plantings for a barrier and screen is along the parking lot adjacent to the south space. A row of Hatfield Yews is planted around the parking lot and is tall enough to screen the parking lot from view if viewed from ground level along Jefferson Street. Other than the parking lot, there are no other uses of baffle, screen, or barrier at the Peoria site. Redesign of these spaces, especially the southwest space, should consider the use of plant material for barrier, screen, and baffle.

Similarly, the Indianapolis site does not utilize plants for baffle, screen or barrier. The raised planting beds serve as the barriers and the plant material within these beds is too low to qualify for any baffle effect. Since the City Market plazas are an integral part of the urban scene and visibility into and out of it are desirable, plant material has not been used as a screen or baffle. In the case of the City Market plazas, the spaces function successfully without the inclusion of baffle, screen, or barrier.

Unlike both the Peoria and Indianapolis sites, the Wichita site contains the use of all three elements--baffle, screen, and barrier. The low plantings of Spreading Yews in the sidewalk planter along William Street as well as the planters which define the north and west edges of the courtyard are good examples of barriers (Figure 5.6). Plantings along the parking deck walls act both as baffles and screens. The intent of the planting beds along the concrete parking deck was to soften, as well as to hide, the severity of the wall. Both techniques are used with success. At some point in time if the vines completely cover the surface (in summer at least) the wall may be totally screened from view. Except where the evergreens are planted, the wintertime effect is more that of baffling the wall.



Figure 5.6

Wichita: Barrier Planting along William Street at Heritage Square Park Helps to Guide Pedestrian into the Park

Plant material can be successfully manipulated to enframe views. This is a useful design technique for enhancing views of the historic buildings which are focal points at all three sites. The opportunities for utilizing plant material to enframe urban views and vistas exist at all three sites. The Peoria and Indianapolis sites offer the best opportunities for this due to the openness of the sites. The street tree plantings in Peoria help to enframe views of the City Hall building even without the pretense of doing so (Figures 1.7 and 5.5). A similar effect of enframement can be seen at the City Market plazas. Trees help to enframe not only the market building, but other views of the city adjacent to the site. Heritage Square Park, with its sequestered location, has utilized plant material for enframing views from the street entrances inward towards the bandstand. Trees on the interior of the space also help to enframe views of the two historic buildings.

As the literature review indicated, color as a design element of plant material can have a very strong and positive impact on an urban open space. Color can be used in two ways: first, as a background wash--soft, natural, and restful: and second, as an accent or focal point (Hannebaum, 1983). In both ways the designer must be skillful and sensitive. Color used artistically can be a factor in creating a vital, lively, well-used space. Color adds interest, focus, harmony, warmth, and can enliven the human spirit (Simonds, 1983).

The Peoria site, though simple in design concept, introduces a wash of green to the cityscape. This is accented in summer months with colorful plantings in the tree beds along Fulton Street (Figure 5.5). The hues of green not only complement the earth-tones of the City Hall building and Civic Center, but help to soften the harshness of the glass arcade.

At the City Market plazas there is use of plant material as a background wash as well as accents. The effect during the growing months is overall green hues. Within the planting beds color is used as an accent. Spring perennials and summer annuals are planted within the planters and in the circular planting pots located in the plazas. The wintertime effect does not have the same verve as that of the Wichita site, but several evergreen shrubs and groundcovers add color to the spaces. The Cotoneaster shrubs hold their leaves longer than most deciduous shrubs and provide color with their bright red berries. Wintercreeper groundcover adds some purplish color to the beds and a few Mugho Pines and Blue Rug Junipers have been planted within the beds. The Autumn effect of the Honeylocusts is primarily yellow. In the Wabash Street pedestrian mall, Washington Hawthornes are planted within the planters. These color red/orange in the Fall with clusters of red berries. Wintercreeper 'Coloratus' is planted within these beds as well.

The final two elements, form and scale, are subtler in their impacts than color but require consideration in this analysis. Form is the element which relates to the shape or basic outline of the plant material. These shapes can be any of the following: round, oval, conical, upright, drooping, irregular, and horizontal (Figure 5.7). Form can be used to add variety, emphasis, or to convey a sense of space. Forms in plant materials can be used in repeated intervals to create a pattern rhythm or can be used singly for impact. When a variety of forms are used collectively, the designer must pay special attention to transition so that the composition is coherent and harmonious.

Form can be a useful tool in fitting desired functions to spaces. Upright/spreading is used to provide canopy which has been previously discussed. Conical can be used as an accent (single specimens) or for

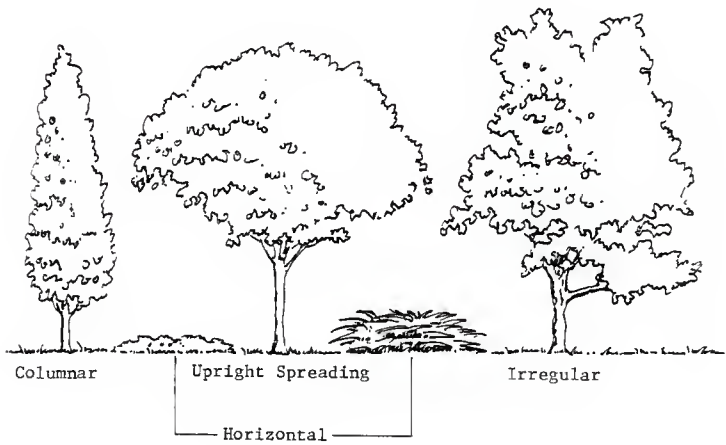
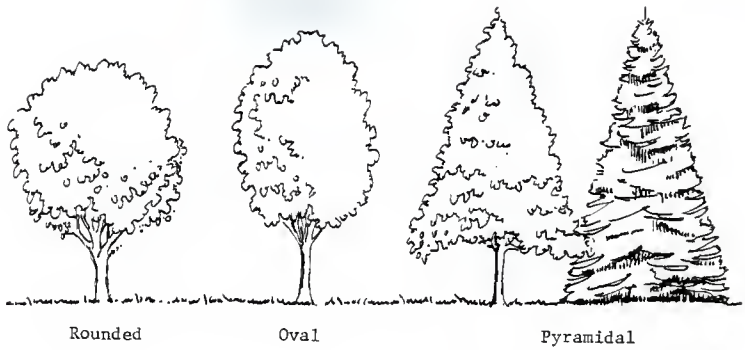


Figure 5.7

Some Basic Forms of Plant Materials

screening when used in groups (an example is the row of Canaert Redcedars for screening the parking deck wall at Wichita). Irregular shapes, such as the Planetree at Wichita, can be used for canopy where formality of shape is not desired. Rounded (Goldenraintree) can be used for canopy as well as lending a sense of formality. Horizontal forms are used to define a border, low barrier, or add texture and color to the ground plane. It is important for the designer to understand the uses of form, to know what plant material will provide each desired form, and how to utilize the correct plant forms for the location in achieving desired design requirements.

The Peoria site utilizes the least variety of plant material forms. The 'Moraine' Honeylocusts exemplify the form of upright-spreading with rounded crown (Dirr, 1975). This type of tree is planted in a double row along the Fulton Street side of the site. The other tree form is that of upright-pyramidal, represented by the Greenspire Linden, planted along the Jefferson Street side of the southwest space. Groundcovers used at the Peoria site are those of Compact Andorra Junipers, planted beneath the Lindens, and the large areas of turfgrass in both open spaces.

The City Market plazas at Indianapolis also utilize 'Moraine' Honeylocusts with an upright-spreading, rounded crown form. In addition to these trees, several low growing ground cover plants have been used. The planting beds utilize Cranberry Cotoneaster, Blue Rug Junipers, Wintercreeper 'Coloratus', and perennial and annual flowers. The one space in the west plaza is planted in grass (Figure 4.11). Planters in the east plaza have specimens of Shadblow Serviceberries which are characterized as

irregular spreading form. The Wabash Street mall north of the market buildings contain Washington Hawthornes, which are broadly-columnar in form (Dirr, 1975). Like the Peoria site, full advantage of the design properties of plant materials is not utilized at the City Market plazas.

The Wichita site utilizes a greater number of plant forms than either the Peoria or Indianapolis sites. Included are upright-rounded (Honeylocusts), spreading-irregular (Planetree), oval (Sugar Maples), pyramidal (Canaert Redcedar, Scotch Pine), horizontal (Spreading Yew, Rock Cotoneaster), plus many other different shrubs which also demonstrate various forms. The overall effect is much like a small botanical garden where plant forms are skillfully displayed and where something is always happening--blooming, budding, and color change. As has been mentioned, the diversity and number of plant types in the Wichita site are due to the necessity of modifying, if not to screen completely, the effect of the concrete wall on the eastern border. For this reason, too, three vine varieties have been heavily planted along the wall with the hope that they might soon completely obscure the concrete. This has been slow to be achieved. The Chinese Wisteria has been known to be blown off its trellises, the English Ivy finds only the ground plane to be suitable to its cultural requirements, and for some odd reason, the Virginia Creeper has been slow to overtake the wall.

The final plant design consideration is that of scale. Two important considerations are that the size of the plant material when mature does not exceed the physical size of the space or overpower the urban surroundings, and that the size of plant material be in scale with the users of the

space. The latter consideration is described as a perceptual value and often referred to as "human-scale." This means that the user would feel comfortable within the space (Austin & Law, 1975).

At the Peoria site, scale is not a critical issue due to the openness and simplicity of the space and because users are not an active part of the spaces. The trees which are planted, however, are of a medium size variety so would not conflict with the setting if it were more "humanized." In the Wichita site, the inclusion of an American Planetree could be questioned owing to the mature size which the tree could attain (according to Dirr, 1975, seventy-five to one hundred feet in height). The Honeylocusts used at all three sites may reach a mature height of forty to fifty feet. The Greenspire Linden in Peoria could reach a mature height of forty to eighty feet, probably at the lower end of the scale. The Indianapolis City Market plazas utilize small to medium sized plant material such as Honeylocusts, Washington Hawthornes, and Shadblow Serviceberries all of which are within the scale limitations of the site.

In a rather confined space such as the Wichita site, an abundance of human-scale plant material is used to offset the boldness of the buildings, specifically the parking deck. In more open spaces, such as the Peoria and Indianapolis sites, larger trees could be used. This is partly due to the users' perception of the relationship of the plant material to the space which it occupies. Perceptions can be manipulated through the use of several psychological "tricks," such as textural variation (fine textures seem more distant, coarse textures seem closer), and color (warm colors seem to advance, cool colors seem to recede) (Austin & Law, 1975).

The cognizant use of plant material for its design features offers the designer countless ways of making the design succeed given the many site

conditions and restrictions which might exist. By addressing the various design elements, and utilizing their potentials, an urban green space can not only welcome but beckon users. The potentials of these elements should not be overlooked.

The preceding discussion has looked at the ways which plant forms and the scale of plant material can help to make an urban space more usable, amenable, and attractive. The following criterion discusses the ways by which the space, through the use of plant material and water, can address the consideration of microclimatic influences in the zone of the open space.

3. Improvement of Microclimate

The central urban cores of cities possess the ingredients which can contribute to a harsher street-level climate than that of the surrounding suburban areas. Simonds (1983) suggests that the city is actually a desert of pavement and masonry. Urban design professionals must be aware that methods are available for modifying some of these discomforting climatological effects through the introduction of greenery and water. The city can be infused with urban plazas and pocket parks which address some of the needs in offering an amenable microclimate for downtown users. Each of the three case-study sites addresses, to differing degrees, the introduction of a microclimate to their particular urban zone. The micro-climate (the climatic conditions of a small zone) of each of the three case-study sites can be enhanced through the use of landscape planting (Simonds, 1983). Simonds (1983, pp. 84-85) has suggested several common denominators when designing to enhance the microclimate. Among those which apply

to this study are the following: (1) modify temperature extremes and air movement; (2) provide protection from solar radiation, wind, cold, and precipitation; (3) utilize the evaporation of moisture for cooling; and (4) introduce water, the cooling effects are physical and psychological.

At the Peoria site there are two ways in which the microclimate is affected, although primarily felt by pedestrians using the sidewalks along the streets. The street tree plantings, where the double row of trees align with the sidewalk, offer the pedestrian respite from the hot summer sun. The trees also help to shade the pedestrian from what is often a blinding reflection of the sun off the reflective glass arcade of the Civic Center buildings. Also at Peoria, the breezes which blow across the grassy areas, especially if they have been freshly irrigated, can be cooler as a result of the added moisture. This is possibly experienced by few, since the watering usually takes place in the early morning.

The City Market plazas in Indianapolis do not meet the four of the Simonds suggestions as well as the Wichita site, but better than the Peoria site. The west plaza, with its complement of trees, helps to modify the temperature along the planting beds where users are most likely to situate. Users of the space also have the option of going inside the adjacent market buildings in the event of inclement weather. This might be especially attractive to those daytime users who are shopping or lunching since the market buildings offer these types of amenities. Neither of the other two sites have this advantage.

It is doubtful if any cooling benefit is derived from moisture evaporation at the Indianapolis site. The fountain in the east plaza could offer this effect but does not since it is non-functioning. Whether or not any cooling effects can be utilized through evaporation by way of the watering procedure at the City Market plazas is not known. Plant material

in the plazas has appeared to be underwatered, and the pavement area exceeds the planting area considerably (heat vs. cool).

Heritage Square Park in Wichita addresses each of Simonds (1983) suggestions to some degree. Many trees which filter and block the sun in critical seating areas provide cool summertime retreats. Proliferous plant material helps to buffer invading winds, which mostly are directed from the south. Plant material, as well as the bandstand, offer protection from the sun and other elements of nature. The evaporation of moisture from watering can also be experienced. Initially, the plant material was irrigated by hand methods, sprinklers and hoses. A new drip irrigation system is being installed which will irrigate the tree and shrub beds. Turf areas will still be watered by hand. The water pool in the courtyard area also helps to contribute both a psychological feeling of coolness as well as a physical feeling of lowered temperatures in the courtyard area during the hot summer.

There is the potential for vast improvement in meeting the microclimatic comfort of users at both the Peoria and Indianapolis sites. Simonds (1983), again, offers this advice: "Design an oasis; make maximum use of breeze, shade, shadow patterns, sunscreens, and the refreshing qualities of water in fountain, pool, or jet spray" (p. 113).

The modification of the microclimate of the urban space has far-reaching implications toward the success of the space. The comfort of the users is a major consideration in the viability of the urban plaza. The following criterion examines the ways in which the plant material can help to enhance the aesthetic appeal of both the open space and the historical building.

4. Enhancement of Urban Setting

In each of the case-study sites, the surrounding context of the historical buildings has changed due to the new open space design. In all three cases the historical buildings have become more visible by the alteration of their context. All three buildings occupy a more prominent place in the city environment than has existed for many years. The new public open spaces create a great potential for the visual enhancement of these architectural gems. The open space also offers an element of enhancement to the urban core. The natural elements of plant material and water which have been introduced to the open space are pivotal in the role which the open space plays in enhancing the urban setting. Simonds (1983) has advised us that the "desert character" of our cities must be altered in order to "give the welcome relief of foliage, shade, splashing water, flowers, and bright color" (p. 280). The new open spaces provide the opportunity of "transforming the city into a refreshing environment for vibrant urban life" (p. 281).

The Peoria City Hall open spaces are an enhancement to the urban core although they meet this need weakly. Their failure to function in the other ways examined in this study tend to distract from the positive role which they play in the enhancement of the urban setting. The greenery and color, however, do provide a welcome relief from the hard surfaces of pavement, brick and concrete. The spaces help to enhance the City Hall by providing not only a setting for the building but a transition from the old architecture to the new. The City Hall building was originally designed with four finished, highly ornamented facades. For most of the life of this building, only two facades were visible. The new context opens up all four sides to view. The open spaces provide a field from which to view the

City Hall building.

A great deal of greenery in the form of street trees and grass surrounds the Peoria City Hall building. The open spaces, however, are designed to be observed from a distance (sidewalks) and do not meet the needs of urban users. The spaces are totally passive, merely backdrops. The potential exists to redesign the spaces for more active use by people, while the spaces continue to provide an enhancement to both city and setting.

The Heritage Square Park in Wichita addresses many critical issues which the Peoria site ignores. The original idea of the park was to provide a pleasant space for downtown users and also to enhance the setting of the Historical Museum and old library building (Omnisphere). The site for the park, however, experiences the most adverse of urban site situations. In effect, the park is an alley behind the buildings and a sideyard to a nine level parking deck. There are no great views of the urban core from inside the park, only some minute glimpses. No great plaza-to-street-corner relationship exists, as recommended by Whyte (1980). In spite of these problems, the space succeeds incredibly well. A strong visual connection with the two historic buildings has been strengthened and greatly enhanced. The distracting visual connection to the parking deck, although impossible to completely mask, is greatly ameliorated. A very amenable space for people has been created in the heart of the downtown. In short, a very mediocre urban site has been transformed into an oasis of greenery, color, water, and handsome turn-of-the-century site details.

Like both the Peoria and Wichita case studies, the market building received a new contextual setting which gave it visual prominence in the urban setting. Originally the market building was sandwiched between several other buildings, Tomlinson Hall and the Midway Market on the west

and the Haymarket to the east (Figure 1.21). The central market building became a sole-survivor after the Tomlinson Hall fire. The redesign of the market half-block created two street corner plazas, one east and one west of the historic central market building.

The plant material as well as the plaza design at the City Market help to lend to the market building a sense of importance which had not previously existed. The west plaza provides an informal but spacious gathering place surrounded by greenery. The greenery enhances not only the setting of the space itself but also the general urban vicinity as well. The east plaza allows a strong visual connection to the building from off-site, although the dissection of the space weakens the connection. The amount of greenery in the east plaza is too scant to be effective as a visual enhancement of the setting. The pool and fountain could be the space's salvation as a primary focal point and urban amenity if it functioned. Much less human activity occurs in the east plaza as compared with the west plaza. One must surmise that the lack of greenery and the inoperative fountain are two major reasons for this. Unfortunate as the weaknesses of the east plaza are, the total effect of the City Market plazas in enhancing the urban setting and building is very strong.

Foliage, flowers, and water provide a needed touch of nature to urban centers. Plant material can be an attraction in itself but also goes a long way in the enhancement of our urban open spaces and historical buildings. The inclusion of these natural elements into the open space setting will not only improve the environment aesthetically but will be a step towards restoring the human qualities and opportunities which have often disappeared in American cities (French, 1973).

The preceding discussion has centered around the contribution which

the elements of nature in the open space play in the enhancement of the urban setting and the historical buildings. The following criterion, Inclusion of Water Features, specifically examines the three case-study sites with regard to how water has been utilized in the open space as an amenity.

5. Inclusion of Water Features

The effective use of water in a public urban open space is an attraction in itself. In many American cities, water features have become primary focal points of their subordinate open spaces. The use of water in public places may date back thousands of years. Water was used for its aesthetic and sensory properties by the early civilizations in Egypt and Mesopotamia, and most likely by the early civilizations in China and Japan as well (Campbell, 1978). Mankind has been variously intrigued, mystified, beguiled, and entertained by the properties of water. The inclusion of water features in our city plazas is continuing the long tradition. A successfully designed water feature, according to Ada Louise Huxtable, is "a performance and a show" (quoted in Specter, 1974, p.48). Specter asserts that of all the tools available to the designer, water might be the closest to being the universal source of pleasure. Water has been previously discussed for its microclimatic effects. Beyond the purely aesthetic properties, Huxtable states about water:

...its deeper implications suggest evenescent joys, cleansing of the spirit, the transience of perfection, the insubstantiality of dreams, the flowing continuity of life, and a consummate, fleeting beauty--impermanent like all the great romantic beauties, and therefore more beautiful than the tangible and real (quoted in Specter, 1974, p.46).

The use of water features at the three case-study sites is variously represented. The Peoria City Hall spaces do not presently utilize water

features. The redesign of the southwest open space may include a large, passive-type of water feature, illustrated in the model photograph in Appendix E. Unlike the Peoria site, the Indianapolis site does contain a water feature in the east plaza. The pool is triangular in shape, approximately seventy-five feet by forty-five feet in size, and with two triangular planters at the north and south apexes. There are seating blocks and descending steps for sitting at the water's edge. Three water jets are located in the pool. This water feature has not been seen in operation by the author. The fountain became inoperative at some time in its early use and has been awaiting available funding for repairs. To date the market revenues have not allowed funding for this costly job. Alternative sources and methods of funding are being investigated.

The operation of the pool/fountain in the east plaza area would be a major draw for greater usership of that space. As it is, however, there is little to draw people to that space except as a corridor from the few parking spaces into the building. The potential exists for the east plaza to be a well-used space. The inoperation of the pool/fountain is a major concern of the market manager who was hopeful that repairs could be made, as well as redesign accomplished to facilitate less wind-blown water and greater longevity of the fountain fixtures (Highland, personal interview, 1984). Welch (personal interview, 1984) also expressed the hope that the feature could undergo repairs in the near future. The idea of soliciting tax-deductible, subscription donations was mentioned as a way to develop outside funding for the project.

Wichita, however, has two water features in Heritage Square Park. The first of these is in the courtyard area and constitutes a central focal point to that part of the park. The water feature is a passive, reflecting pool with a gentle spillway over some native limestone ledges. Atop the ledge stands Dr. Richard Bergen's statue of "Heritage Woman," a bronze, somewhat hulky but graceful interpretation of a nude woman (Figure 4.11). Two planting areas are placed in the rectangular pool which imply a naturalistic setting. The courtyard area is a popular gathering place for people as there are metal garden-style tables and chairs surrounding the pool and statue rectangle. The space offers a shady, restful retreat from the hard pavement and noisy streets of the surrounding city (Figure 4.3).

The other water feature in the park is found at the south end of the mall area. This feature was a gift to the city by the Fidelity Bank and Trust Company, one of the park's adjoining neighbors. This feature consists of a single low-level water jet centered within a cast-iron urn which is then centered in a two foot high brick enclosed pool (Figure 5.8). The small fountain balances the south end of the mall, opposite the bandstand, and introduces the element of gently spashing water to those who may sit in or walk through that part of the park. It is a small, formal, sculptural fountain which is as interesting for its sculptural qualities as it is for the water which it introduces. The fountain received some damage by vandals and has been undergoing some structural modifications before it is operational again. This problem should be rectified by the Spring of 1985 (Holmes, personal interview, 1984).

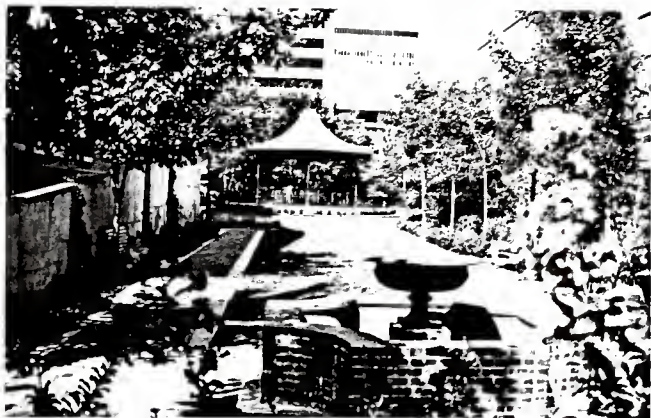


Figure 5.8

Wichita: Urn-Fountain at South End of Mall Area
in Heritage Square Park

Both of the water features at Heritage Square Park are successful as major focal points within their respective areas and lend a very strong sense of refinement to the park. The purpose of these two water features is not so much to add excitement and vigor to the space but rather to induce tranquility and introspection. They are extremely valuable amenities for the park and help to give Heritage Square Park a special charm.

The importance of water features in the urban plaza has been recognized for both aesthetic and microclimatic reasons. Water features, however, are not only costly to construct but also to maintain. A well-designed water feature is of no use if the budget does not allow for maintenance and repair of the feature. Maintenance costs are especially significant in temperate zones where winter freezing and thawing cycles occur. If a water feature is to be an attraction located within an urban plaza--and there are few superlatives to be included in a plaza which surpass a well-designed water feature--ongoing maintenance and repair costs should be a consideration from the beginning. The final section of this chapter looks in more detail at maintenance of not only the water features but also of the plant material features of the urban plaza.

6. Maintenance of Natural Features

The final criterion to be considered within the chapter on nature is that of maintenance. After all the greenery, enhancements, and water features are in place, a program must be established to insure that the space and its amenities are maintained. There are few instances where a controlled environment such as an outdoor urban plaza can be considered maintenance-free. This is particularly significant for the types of outdoor spaces dealt with in this study. Natural (weathering) and man-induced (use and abuse) deterioration will occur to every natural and man-made element within each of the study spaces. Provisions must be developed as a part of the initial design to maintain the space. This includes short-term as well as long-term maintenance. Short-term maintenance includes the on-going, daily, weekly, and monthly routine upkeep and repair which the space and its fixtures require. Long-term maintenance includes annual or longer term repair, replacement, and upkeep. The types of

activities and items which might be necessary for short and long-term maintenance are expressed in Table 5.1.

<u>SHORT-TERM MAINTENANCE (daily, weekly, or monthly)</u>		
Custodial and Horticultural		Repair and Replacement
Sweeping	Trash removal	Carpentry
Mowing	Raking	Masonry
Watering	Fertilizing	Electrical
Mulching	Cultivating	Plumbing
Trimming	Weeding	
Pruning	Edging	
Replanting		
<u>LONG-TERM MAINTENANCE (annually, or biennially)</u>		
Custodial and Horticultural		Repair and Replacement
	Pruning	Replacement supplies
	Fertilizing	Carpentry
	Raking	Masonry
	Planting	Electrical
		Plumbing

Table 5.1. Maintenance Needs of Urban Plazas

Very often maintenance programs will be within the responsibility of the administering agency for the open space. At times, involvement may go beyond the public sector. Raquel Ramati (1981) suggests that a comprehensive maintenance program covering day-to-day and long-term concerns might fall to citizen or neighborhood organizations. However maintenance is provided for, it should be no mystery but should be a consideration from the initial design stage (Simonds, 1983).

At each of the three study sites there were key individuals who reiterated the importance of maintenance programs along with adequate

funding as a part of the spaces' critical needs. At the Peoria site, the most recently constructed of the three, this idea was expressed (Elson, personal interview, 1984). The Peoria site maintenance program is administered by the Peoria Park District. The short-term horticultural upkeep is delegated to a crew specifically assigned to the three downtown plazas which includes the case-study site. Due to the newness of the Peoria site, and the fact that all plant material is provided with in-place irrigation systems, there has been very little replacement necessary (Elson, personal interview, 1984). The irrigation systems at Peoria may require periodic repairs although beyond this there are no other site amenities which would require carpentry, masonry, or electrical repair.

The Heritage Square Park in Wichita has been in place since late 1976. Most fixtures were in place at that time; the south fountain was added the next year. Some planting was done after the dedication. The park upkeep and maintenance is provided by the Landscape and Forestry Division, Wichita Park Board. There have been no extraordinary maintenance or repair expenses and the budget allocation has managed to meet the park's needs. Budget is a problem inasmuch as it is a public entity and difficult to expand although park boundaries and expenses are always expanding. New parks such as Heritage Square are deeded over to the Park Board for stewardship with no commensurate increase in budget (Holmes, personal interview, 1984). This means that the budget "pie" in effect must be sliced thinner. In the case of Heritage Square Park, the Park Board has attempted the best care possible due to the popularity and location of the park.

A couple of modifications were necessary after the park had opened. Concrete bollards, connected with a chain, had to be installed at the west

entrance of the pedestrian plaza to allow only emergency vehicles access. There also was some waterproofing which had to be done on the east basement wall of the museum. The plantings in this area had to be removed and replanted due to the excavation. The water problem was due to the additional water added next to the building and a change in runoff conditions. Generally, materials used in the park were first rate and, therefore, have held up well (Holmes, personal interview, 1984).

The fountains at Heritage Square Park require a regular maintenance schedule and park plumbers are assigned to that task. The south fountain was vandalized in 1983 and has been awaiting repairs since then. The water features are probably the single biggest maintenance problem, but not insurmountable (Holmes, personal interview, 1984). Beyond the south fountain, vandalism has not been a problem. All the fixtures in the park are tied down, including the tables and chairs. Chairs are attached to chains so that they can be moved within a limited area.

Initially it was felt that the watering needs of plant material in the park could best be accomplished by hand watering with hoses and sprinklers. More recently, however, it was decided that a drip irrigation system should be installed to water those beds and trees which are difficult to hand water. It was expressed that an irrigation system from the outset would have been more advantageous (Holmes, personal interview, 1984).

All the maintenance costs of Heritage Square Park are generated by the parks department budget. There are some flower organizations which have contributed either money or flowers to be planted within the park. There is no effort to solicit additional contributions to assist in the park's maintenance budget needs. An endowment fund which solicits tax deductible gift contributions has not been an alternative sought.

The City Market plazas, like the Wichita site, have been in place

since 1976. Although the City Market building and plazas are city-owned, the operation is heavily dependent upon the revenues received from stall rentals (Highland, personal interview, 1984). Extraordinary expense monies required are simply not available. This is the reason that the pool/fountain in the east plaza has been inoperative. Public monies, also, are not available for this costly repair. This is why outside funding is being investigated for repairing the fountain.

The horticultural upkeep of the plazas has been attempted in several different ways. One of the first methods was to contract the work to the Park Department. This method was tried after the plazas were first completed, although it proved to be unsatisfactory (Galloway, personal interview, 1984). Currently the maintenance requirements are being awarded to private contractors who submit the low bid in a public bidding. The results of this method have not always been satisfactory although the contract has been refined over the years to protect the city against poor performance on the part of the contractor. It is hoped this method will eventually succeed (see Appendix B for Contract Specifications).

All watering of plant material on the plazas must be accomplished by hand. In urban situations watering may be needed frequently due to wind and heat evaporation. This fact has been a particular problem at the City Market plazas. The contract formerly had little penalty for contractors who failed to attend to the critical water requirements. The present contract has more teeth in this regard. The landscape architect in the city planning office acknowledged that an irrigation system would have rectified this problem. Installation of such a system now is financially infeasible (Galloway, personal interview, 1984).

It was expressed that the revenues generated by about 30,000 square feet of rental space was inadequate to properly maintain buildings and grounds for a complex the size of City Market (Highland, personal interview, 1984). General agreement was conveyed concerning the importance of having adequate funding available for maintenance of the plazas but no clear solution was suggested (Galloway and Welch, personal interviews, 1984). Escalating expenses have been a problem for the insufficient maintenance budget which was provided for City Market and this budgetary deficit was a cited concern (Galloway, Highland and Welch, personal interviews, 1984). It is hoped that solutions to this problem can be resolved since the heavy use and image of the plazas has had a very positive effect upon the downtown (Welch, personal interview, 1984).

The importance of a good maintenance program which succeeds in visible ways must be of the utmost concern to not only insure the popularity of the space but also to maintain the image of the city. If user perception of the space falters because of unkempt appearance or dereliction, a crucial element of the city image is lost.

CHAPTER 6

Conclusions and Practical Applications: An Evaluation Checklist
for the Historical Building/Open Space Complex

This thesis has evaluated newly-designed urban open spaces which surround significant historical buildings. A major aim was to develop an evaluative technique for analyzing the historical building/urban open space complex. A review of the relevant design literature revealed that an analysis could be based upon evaluating the historical building/open space complex through recognition of specific criteria which fell within three main themes of investigation. These themes, first, positive image of place; second, orientation for people; and third, introduction of natural elements, embrace several specific design criteria, also suggested by the literature, and identified in chapter two.

After the structure for analysis was determined, there was a need to have some representative sites on which to test the technique of analysis. Three sites were selected that were familiar to the author: (1) the City Market and plazas in downtown Indianapolis; (2) the City Hall and open spaces in downtown Peoria; and (3) the Historical Museum and Omnisphere buildings and Heritage Square Park in downtown Wichita. These sites met the requirements of (a) the presence of an historical building, listed on the National Register of Historic Places; and (b) the recent alteration of the surrounding context providing the building with a major urban open space in a downtown setting.

Throughout the investigation of the literature and the sites themselves, it became apparent that there were several overriding issues which justified such a study. The first of these issues was that public open space is crucial to the habitability of our cities. Frederick Law

Olmsted has advised that without carefully designed parks and open spaces, a city "would be devoured by its own ugliness and rapidly experience economic decline" (quoted by Hoving, in Seymour, 1969, p.81). Urban open spaces are vital amenities for people's enjoyment (Eckbo, 1964; Fairbrother, 1970), for people's comfort (Spirn, 1984), for people's emotional well-being (Clay, 1961; Hall, 1966), and as a place for human interaction (Tanghe, Vlaeminck & Berghoef, 1984). In short, there is a strong argument in favor of the provision of downtown open spaces and plazas in our cities.

The second major issue revealed by this study is that significant historical buildings can become a viable part of successful urban plazas. We are now more attuned to the importance of recycling and preserving our architectural heritage. Sidney Hyman has declared that "a nation can be a victim of amnesia. It can lose the memories of what it was, and thereby lose the sense of what it is or wants to be" (United States Conference of Mayors, 1966, p.1). The shockwaves of the great urban renewal period of the 1960s, where great portions of our cities were leveled in the cause of progress, have subsided. Although a considerable loss of architectural heritage has occurred, a number of architectural survivors remain which can play an important role in the enrichment of our cityscape. These landmarks are often articulate reminders of our past; they help to strengthen our sense of place in the historic continuum of our cities (Halprin, 1972). The sensitive juxtaposition of old and new architecture can provide cities with new interest and offer exciting passages within the texture of the city. Such contextual design can exhibit tangible and desirable contrasts when skillfully accomplished (Fitch, 1982).

The third issue which has become evident as a result of this investigation is that the importance of quality, sensitive, and people-oriented design is paramount in the design of urban open spaces. Urban open spaces and plazas designed with the utmost skill and care will be spaces that are designed with quality materials, as well as spaces which meet the needs of people, including the elements of reinforcing the image of the place and introducing natural elements into the fabric of the city. Quality design not only means attention to the smallest details, but also means that the relationship of the open space and the historical building is compatible, and an enhancement to the locality and the city as a whole. We are at the threshold of better understanding how to evaluate and interpret this relationship. Eckbo declares that:

We are capable of producing infinitely richer relations between fine architecture and sculpture on the one hand, and fine plant, ground, and rock forms on the other, than were conceived in any historical prototypes (1964, p.158).

This thesis addresses the space/building relationship to which Eckbo refers. Understanding what determines a successful, high quality, amenable plaza/building complex is a central focus of this investigation.

The review of the design literature was instrumental in suggesting three major themes of evaluation for the historical building/plaza complex. Within each of the three themes--positive image of place, orientation for people, and introduction of natural features--several analysis considerations were determined which suggest criteria by which the building/plaza complex can be evaluated. Through the objective analysis of the three case-study sites, a device for evaluation has been developed. This device, or checklist, enables one to make a post-construction

evaluation of an historical building/plaza complex. This tool also provides the professional designer with a set of guidelines that can be useful in facilitating a more sensitive, effective plaza design.

There are some obvious strengths as well as weaknesses to this evaluation tool. First among the strengths is that the checklist provides the designer with a tool for analyzing the historical building/plaza complex. The checklist is an organized and thorough method of surveying quickly the contextual relationship of plaza and building, as well as establishing whether the open space meets the needs of people. Another strength for the checklist is that it provides a method for quantifying or ranking some of the qualitative considerations posed by the building/plaza complex.

There are also some obvious weaknesses to this checklist device. The first awkwardness is that the checklist requires the evaluator to possess a fairly high degree of design sensitivity and skill in order to make a fair evaluation. Another weakness is that some of the questions in the checklist involve a certain degree of subjectivity in ranking the plaza. An effort has been made to ameliorate this problem by wording the questions in order to elucidate the most obvious rankings, and eliminate ambiguities.

Evaluation utilizes a four-point scale: "0" represents a ranking where either the information is not known, or the plaza does not address the particular question; a ranking of "1" signifies that the plaza addresses the question weakly; a ranking of "2" signifies that the plaza addresses the question to a moderate degree; and a ranking of "3" represents a question which the plaza addresses strongly. There are some questions within the checklist which can only be answered with a "yes" or "no" response. These questions are to be given a point value of "1" for a "yes" answer, and "0" for a "no" answer. The evaluation table is included in

Appendix F. The evaluation of the three case-study sites, based upon this table, follows in Appendix G.

The Checklist Applied to the Three Case-Study Sites

The evaluation checklist was applied to the three case-study sites (Appendix G). Point scores were given to each of the sites for each of the corresponding questions. Sub-totals for each of the three main themes--positive image of place; orientation for people; and introduction of natural elements--are given first. Then, the sub-totals are combined for each site, giving a grand total.

Throughout the investigation, the three sites were reviewed in the order of weakest to strongest. In most cases this order has been the Peoria site (weakest), the Wichita site (middle), and the Indianapolis site (strongest), although in a few instances this ranking order varied. The checklist totals do not entirely support the preliminary evaluation assumed in the analysis: namely, the Peoria site, weakest; the Wichita site, stronger; and the Indianapolis site, strongest. Rather, according to the total scores, the Wichita site ranks highest (139 points), followed by Indianapolis (129 points), and Peoria weakest (46 points).

The discrepancy in the Indianapolis and Wichita totals indicates a major weakness in this ranking system: namely, that criteria have not been weighted in accordance with their relative importance. The idea of delegating a higher priority to certain criteria is strongly supported by Whyte (1980) in his study of small urban plazas in New York. Whyte suggests that of all considerations in plaza design three specific criteria are most critical to plaza success. The first criterion is what Whyte calls scale or the presence of large numbers of people in the downtown. Whyte surmises that in New York a poorly designed plaza can experience success simply as a

result of the great concentration of people. This fact is not always evident in smaller cities whose plazas lack the all-important ingredient of available users. Whyte suggests that if there are less than 1,000 passersby at noontime during nice weather, the space may have difficulty succeeding (Whyte, 1980, p. 91). This, he asserts, is a problem that would be experienced by cities in the 100,000 to 200,000 population range (for practical purposes this would include both Peoria and Wichita). The solution to this problem is for urban centers to be more compressed and compact, possessing more stores, more offices, more people in the downtown. The Indianapolis site would outscore the Wichita site in this respect. The concentration of offices, stores and shops, and people far exceed the situation in downtown Wichita. Also, these conditions in Indianapolis are within a more compressed, compact downtown core than in Wichita. The inclusion of this criterion--a presence of great numbers of people, and a vigorous downtown core filled with stores, shops, and offices--and weighting it above the others, would improve the evaluation technique.

The second criterion which Whyte mentions is plaza/street corner orientation (Whyte, 1980, p. 54). A plaza located at a busy street corner is a recipient of what Whyte labels "a great show" (p.57). The plaza must be oriented to take advantage of the busy street corner, and the action of the street must not be excluded from view. A plaza which is oriented toward a busy street corner can not only take advantage of more potential users, but can also entice those users whom Whyte refers to as impulse users. The Indianapolis site succeeds best in terms of this criterion. The Indianapolis site is oriented toward a busy street corner, surrounded by stores, shops, and offices, and contains enough interest to attract impulse users. The Peoria site is also oriented toward a street corner,

although the amount of activity in terms of people, stores, and offices is not as compressed as in Indianapolis. For this reason, the Peoria site would receive a lesser ranking than Indianapolis, but a higher ranking than Wichita. This criterion is included within the checklist ("Image," 3-a), although weighting it would also improve the efficacy of the evaluation technique.

The third criterion which Whyte suggests as critical to the success of any plaza is an adequate quantity of sittable space. Whyte's study considered the variables of plaza shape, sun orientation, design aesthetics, and the size of the plaza before reaching the following conclusion: "people tend to sit most where there are places to sit" (Whyte, 1980, p. 28). The Indianapolis site contains far more sittable space than the Wichita site. Although this criterion is included in the checklist, ("People," 4-b) weighting it in importance would not only improve the evaluation technique, but likely would rank the Indianapolis site ahead of the Wichita site.

There may be other criteria which should be weighted in order to improve the efficacy of the evaluation technique. Inclusion of the three criteria, (1) presence of large numbers of people in the downtown, (2) plaza/street corner orientation, and (3) amount of sittable space, and weighting them above the other criteria would strengthen the checklist and render more accurate results.

In spite of the present weakness of the checklist, however, the checklist technique still provides an organized, refined method of comparing and contrasting the three case-study sites. The point-scores allow one to observe more sensitively the differences in the three sites. The checklist would be equally effective in analyzing only one site, since it would indicate a point score which could be measured against the total points

possible if the site met all conditions strongly. Devices such as the checklist can assist design professionals in achieving more sympathetic design relationships which meet the aims of the three major themes of investigation: namely, (1) positive image of place; (2) orientation for people; and (3) inclusion of natural elements.

Some Final Considerations About Better Historical Building/Plaza Design

The importance of designing our cities' open spaces with skill, sensitivity, and to meet the needs of people cannot be stressed enough. The checklist which has been offered as one way of assisting in the design of historical building/plaza complexes is not meant to quantify that which is qualitative. Design experts agree that the solution to good design does not lie in quantification alone (Ramati, 1981, Schmertz, 1970). A checklist can, however, serve as a valuable tool for designers to survey and evaluate the open space or plaza. The checklist can help to inform design professionals, public officials and concerned citizens, as to how the plaza compares with other examples that have proven strengths and weaknesses.

This investigation has touched on an important issue facing cities today. This issue is one of how the design professional can provide input that directly relates to making cities more responsive to human needs. The vehicle of this investigation has been the design of recently created urban open spaces or plazas which surround historical buildings. The open space is an important amenity to the city. Cities must be turned around from the decades of experiencing inhuman alteration: traffic-glutted streets and highways, poor air quality, sidewalks unfit and unsafe for pedestrians, and little to call beautiful in the downtowns. Cities must again become

vessels of human activity (Simonds, 1983). Cities can provide stimulus, excitement, contrast, economic benefits, and a place for people to satisfy gregarious needs (Specter, 1974). We do not need to turn back the pages of history in an attempt to recreate it, but we need to learn from the past what it was that offered the inhabitants of cities comfort, safety, and urban satisfactions (Specter, 1974).

Urban spaces, plazas, and significant historical buildings are amenities which deserve, demand, our recognition. In order for cities to again enjoy our affection, these amenities must be provided. The tide of ugliness which swept across many cities has been turned, and in the wake, professional designers, public officials, and concerned citizens have an obligation to attend to all the issues which will help to make cities again vessels of diverse human activity. People must be brought back into the city (Wiedenhoeft, 1981). People must again realize the joys of walking, fresh air, and beautiful outdoor spaces. What the city may have offered in the past must be available to people once more, but without repeating the mistakes of the past. Urban open spaces, plazas, and fine architecture in the cities are a step toward providing these values to people once more. As Mumford (1961) explains, the city is the essence of many vital functions:

The magnification of all the dimensions of life, through emotional communion, rational communication, technological mastery, and above all, dramatic representation, has been the supreme office of the city in history. And it remains the chief reason for the city's continued existence (p.576).

We are coming to better understand Mumford's idea. Cities, as a result, are experiencing a renaissance. Cities are again experiencing the types of activities which cities have traditionally offered: as places to live, as

places of commercial enterprise, and as places of entertainment and enjoyment. Providing our cities with historical building/plaza complexes which are designed with an attention to promoting a postive image of place, an orientation for people, and the inclusion of natural elements is a task to be met which will help to insure the continued livability of our cities.

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APPENDIX A

Peoria Civic Center Events (9-1-83 through 8-31-84)

1. Convention & Trade Shows, Multiple-Day Events

Event	Attendance	# Days
Lady Moose	800	3
Carver Lumber	8,000	3
Accelerated Christian Education	1,600	2
Ethnic Fest	15,000	3
Designer Sale	20,000	5
Growmark	1,000	2
Arts & Crafts	20,000	3
Farm Show	26,000	3
Auto Parts Auction	1,000	3
Pork Producers	6,500	3
Office Expo	3,000	3
Custom Car Show	3,524	2
Audio Liquidators	2,000	3
Sunday School Conference	5,000	2
Illinois Reading Association	2,000	2
Mennonite Relief Show	40,000	2
Sports Show	11,025	5
River City Garden Expo	40,000	2
Contract Bridge Convention	1,200	4
Earth Moving Industry	3,700	3
Industrial Trade Show	800	2
CPA Testing	420	3
Designer Sale	7,000	5
Audio Liquidators	2,000	3
Illinois Bankers	1,000	3
CMA Exam	90	3
Audio Liquidators	2,000	3
Growmark	500	3
Illinois Square Dancers	5,000	2
Caterpillar World-Wide Dealers	1,500	10
TOTAL	231,659	95

Peoria Civic Center Events-cont.

2. Performances, Multiple-Day Events

Event	Attendance	# Days
Shrine Circus	23,518	3
Ice Capades	29,774	5
Lipizzan Stallions	2,088	2
Truck/Tractor Pull	6,885	3
"Amadeus"	2,000	2
"Joseph"	3,400	2
"Christmas Carol"	1,400	2
"Evita"	1,000	2
"Working"	1,000	2
TOTAL	74,365	24

3. Concerts, Other Performances

Event	Attendance	# Days
Houston Ballet	1,968	1
Lilly Tomlin	1,659	1
AC/DC	8,298	1
Cleveland Orchestra	1,579	1
Dan Fogelberg	10,700	1
Joffrey Ballet	1,590	1
Genesis	7,040	1
Loverboy	9,100	1
George Carlin	3,583	2
Pekin/Manual Basketball	10,722	1
Harlem Globetrotters	10,700	1
Happy Together Tour	2,000	1
Cabaret Concert	700	1
Van Halen	10,700	1
TOTAL	80,360	15
*Bradley Basketball Games, 17 Games, est. attendance	127,500	
*Peoria Prancers Hockey, 41 Games, est. attendance	143,500	
TOTAL	271,000	

*TOTAL ALL EVENTS 657,384

* The Civic Center Summary gave a total attendance of 764,472 for the period. Some events were listed in the summary as "SOLD OUT" and no attendance figure given. In these cases, an attendance of 10,700 was used. The Bradley and Prancer games were also given no attendance figures, so estimates were made. This will explain the attendance discrepancy.

APPENDIX B

City Market Landscape Maintenance Specifications

1. GENERAL NOTES

- a. The Contractor shall furnish all labor, equipment and materials necessary to complete the maintenance of the prooject area.
- b. The contract period shall begin from notice to proceed to November, 1984.
- c. All plant materials shall be watered, pruned, and sprayed, etc. through the length of the contract period by the Contractor.

2. MAINTAINING ANNUAL FLOWERS

- a. In the Spring, work cow manure and peat moss into the soil to a depth of 6". Flower beds mixture to be a ratio of 2 parts soil, 1 part cow manure and one part peat moss. Level planting bed areas. Plant annuals by May 15.
- b. Flowers shall be of the size specified on drawing and shall be full, healthy and disease free. Plants shall be watered immediately after planting.
- c. Water flowers: Contractor shall be responsible for maintaining adequate moisture at all times. Flowers which die due to dryness shall be replaced by the Contractor, at no charge to the City.
 1. Water flowers in planters at least once per week during mild and rainy weather, and three times per week in hot, dry weather.
 2. Flowers in planters shall be checked a minimum of every other day, as plants in containers are subject to drying out quickly.
 3. Continued moist soil around flowers will damage them. They must be moist for a day or two, then dry slightly to prevent fungus damage.
 4. No extra compensation will be provided for watering required during Sundays or holidays.
- d. Flowers in beds and planters shall be kept weed free. Any weed(s) brought to the Contractor's attention shall be removed within 24 hours. The Contractor's failure to remove weed(s) shall constitute a violation of the weeding policy. After notification of the third violation of weeding policy, Contractor shall be liable for liquidated damages specified in the Contractual Agreement at the rate of \$25.00 per day until the weeds are removed.

- e. Inspect flowers for all insects such as red spiders, loopers, mealy bugs, aphids, ect. and all diseases such as powdery mildew, botritis, etc., and spray accordingly.

Flowers lost because of controllable insect problems shall be replaced at no additional charge to the City.

- f. Prune petunias once mid-season if required to keep them full and blooming well.
- g. The soil in annual beds shall be tested each spring and brought to a pH range of 6.0 to 7.5 (6.5 is ideal).
- h. Fertilize annuals every two weeks with a 20-20-20 analysis, water soluble fertilizer at a rate of 450 parts per million. A liquid proportioning device shall be used.
- i. Remove all dead flowers after the winter's first totally-killing frost in a particular space and turn soil in all beds. Do not remove flowers before that time unless specifically directed by the City's representative.
- j. Flowers may be mulched at the Contractor's option. Do not use shredded bark to mulch.
- k. The Contractor shall take the City's representative on a monthly tour of the project(s) to determine work which needs to be performed.

3. MAINTAINING SHRUBS

a. Pruning

- 1. Prune all shrubs as needed in early Spring. (Follow established pruning guidelines as described in "American Standard For Nursery Stock.")
- 2. Remove all storm damaged or winter damaged branches.

b. Spraying

- 1. Inspect evergreens for mites and bagworms and spray as needed. Hand pick all bagworms from plants. Inspect plants for mites and for scale (especially Euonymus). Spray as required to control.
- 2. Apply dormant oil spray annually in Spring. Dormant oil should be applied before leaf and flower buds start to expand and when temperatures are above 45 degrees F. If scale insects have been a problem, use a summer oil on oil-sensitive plants.
- 3. Follow safety precautions when spraying.

c. Weeding

1. All shrub beds shall be kept weed free and mulched with peat moss, bark chips or wood chips.
2. Any weeds brought to the Contractor's attention shall be removed within 24 hours. The Contractor's failure to remove the weed(s) shall constitute a violation of weeding policy. After notification of the third violation of weeding policy, Contractor shall be liable for liquidated damages specified in the Contractual Agreement at the rate of \$25.00 per day until the weeds are removed.

d. Fertilizing

1. Fertilize non-ericaceous shrub beds with a 2:1:1 ratio (analysis 22-11-11) at a rate of from 2 to 3 pounds actual N per 1,000 sq. ft. (from 10 to 15 pounds of 22-11-11 analysis for 1,00 sq. ft.). Fertilize established ericaceous plants with an acid-base azalea fertilizer with 24-4-8 analysis (high nitrogen) at 1/4 lb. to 1/2 lb. (maximum) per 25 sq. ft. (If the above analysis fertilizer is unavailable, adjust the nitrogen level to equal that specified). Do not allow fertilizer to fall onto turf areas. Fertilize woody plants only after their dormancy ends.

4. MAINTAINING GROUND COVER

- a. All ground cover beds shall be kept within their designed boundaries by pruning or edging.
- b. *Euonymus acutus* and *coloratus* shall be maintained at a uniform height. Ascending runners shall be pruned.
- c. Fertilize at the rate of 2 to 3 pounds N per 1,000 sq. ft. (from 10 to 15 pounds of 22-11-11 analysis for 1,000 sq. ft.). Fertilize only after dormancy begins.
- d. Dormant oil spray shall be applied to all *Euonymus* ground cover prior to new leaf emergence and when the temperature is over 45 degrees F.
- e. During the growing season, ground cover shall routinely be inspected for insect and disease problems and appropriate sprays supplied as needed.
- f. Ground cover beds shall be kept weed free. Any weed(s) brought to the Contractor's attention shall be removed within 24 hours. The Contractor's failure to remove weed(s) shall constitute a violation of the weeding policy. After notification of the third violation of the weeding policy, Contractor shall be liable for liquidated damages specified in the Contractual Agreement at the rate of \$24.00 per day until the weeds are removed.

5. MAINTAINING TREES

- a. Paint any nicks or abrasions on trees with approved tree paint such as "tree coat" or equal. Wounds cleaned and scrubbed then painted.
- b. Fertilize all trees except new trees with a root liquid feeder once each spring (in April or May) with 25-20-20 fertilizer at the rate of 10 pounds fertilizer per 100 gallons of water, applied at the rate of 3 gallons per inch of tree diameter.

c. Pruning Trees

- 1. Street trees shall have their lower branches removed to a 6' height (minimum) as soon as practical. Lower limbs adjacent to walks should be high enough, when wet, not to brush the pedestrian. Other trees shall be fine pruned to a standard recommended by the Landscape Architect and the City's representative.
- 2. Trees shall be examined for cross-branching, sucker growth, and wild growth beyond the normal head shape. Trees with the above problems shall be shaped and trimmed as required but the natural growth shall be preserved.
- 3. Prune winterburn and winter damage from trees and haul away.
- 4. Prune all early flowering trees immediately after flowering.

d. Spraying Trees

- 1. Contractor shall be responsible for controlling insect problems and diseases as they occur--mimosa webworm, borers, bagworms, eastern tent caterpillars, fall webworm, aphids, scale, etc., and shall spray appropriately. Bagworms to be hand picked from tree before spring budding. Contractor shall regularly inspect trees to ascertain insect problems and notify City.
- 2. A dormant oil spray shall be applied--each spring before leaf and flower buds start to expand and when the temperature is above 45 degrees F.--to all trees where the variety is cleared for the spray's use. (Check Purdue Bulletin #41 for Plant Tolerance). If scale insects have been a problem, use a summer oil on oil sensitive plants. In no case shall spray be applied when and where there is danger of drift into pedestrians.

6. MAINTAINING LAWN AREAS

a. Fertilizing Grass

- 1. Fertilize four applications per season at a rate of four (4) lbs. nitrogen per 1,000 square feet per season.

2. In late April, July and September, fertilize with analysis 26-6-6 or equivalent.
3. In November, fertilize with 5-20-20 winterizer or an equivalent.
4. After spreading fertilizer, sweep it off all sidewalks.
5. Fertilize only at times when the Market plaza is not to be used.

b. Watering Grass

The Contractor shall be responsible for determining frequency of watering the lawn, but the grass shall be kept watered and green throughout the growing season. No watering shall be done during the hours of 10:00 to 2:00 Monday through Friday.

c. Mowing Grass

1. Pick up all trash in lawn areas before mowing grass.
2. Mow grass at a cutting height of 2". Grass shall be cut as often as necessary to maintain a neat and uniform appearance during the growing season. Mowing frequency may be as often as every 4 to 5 days during lush growth of spring and tapering off during hot, dry weather to perhaps every 10 days on non-irrigated lawns.
3. Avoid mowing grass when wet or covered with dew.
4. Sweep grass clippings from walks and gutters.
5. All grass clippings shall be picked up and hauled away.

d. Spraying Grass

1. To control broadleaf weeds, spray lawns in a first application between April 15 and May 15, and make a second application between September 15 and October 15. Use a broad spectrum broadleaf weed control such as "2, 4-D" and "Silvex" or "1, 4-D" and "MCP." Mix as per the manufacturers recommendations. "Dicamba" shall not be used as an ingredient in the general spray mixture, however, it may be used at low rates in isolated areas to control problem weeds. Extreme care must be taken not to allow spray or drift to come in contact with herbaceous plants or shrubs.
2. An approved crabgrass control such as "Balan" shall be applied to all turf areas prior to May 1. It may be applied with the first fertilizer application.

3. To control sod webworm, spray one application of "Diazinon" as per manufacturer's recommendations between June 7 and June 15 to kill larvae.
4. Inspection for fungus shall be made weekly of all grass areas. If fungus is present, the City shall be contacted immediately. If fungus treatments are required, they shall be provided under separate contract.

e. Thatching of Lawns

1. Thatch lawn areas in late August or early September.
2. Thatching blades shall be set at least 2" apart and at a depth such that the tip of the blade contacts the soil.
3. Adjust thatch machine so as not to destroy appearance of grass, when possible.
4. Vacuum or rake out all thatch and haul away.
5. Sweep all thatch from walks, drives and streets and haul away.
6. Apply September's fertilization immediately after thatching.

f. Turf Building

Where the grass has been worn down due to pedestrian traffic, Contractor shall sod that specific area and water the new sod daily until the roots are established. New sod shall be a high quality commercially grown blue grass mixture which will match existing turf in color and texture. Use root starter fertilizer when installing sod as per manufacturer's specifications.

g. Clean-up

1. Contractor shall, by raking or sweeping, maintain all lawn areas constantly free of fallen leaves in autumn. Leaves shall be removed from the site.
2. Planters and plant beds shall be kept free of debris. Contractor shall remove paper and trash from planters and planting beds at least twice per week.
3. Snow and ice removal are not the responsibility of this Contractor.

BID SUMMARY
 City Market Landscaping
 Req. No. _____

Bidder shall breakdown costs as follows:

Preparation of ground, planting of annuals	\$ _____
Maintenance of Annuals, Shrubs, Trees and Lawn	\$ _____
Other (specify)	\$ _____

This Bid Summary shall be returned in duplicate with all other Bid Documents.

The Bidder declares that he has examined the specifications for Landscaping Services and all other Bid Documents and has full knowledge of the work to be performed and the materials to be supplied and the conditions under which the work shall be performed.

Further, the Bidder agrees to comply with all provisions of these specifications, and Bid Summary.

COMPANY NAME: _____

REPRESENTATIVE'S NAME: _____

REPRESENTATIVE'S SIGNATURE: _____

DATE: _____ TELEPHONE NO. _____

ADDRESS: _____

APPENDIX C

Heritage Square Park Scheduled Events, 1984

Sunday Concerts

- June 24 - The Wichita Musicians' Association Concert Band
- July 1 - Myron Hull Orchestra ("Big Band" sound)
- July 8 - The Wichita Musicians' Association Concert Band
- July 15 - Newton Graber and His Orchestra
- July 22 - The Wichita Musicians' Association Concert Band
- July 29 - Superbones With Jerry Juhnke (10 Trombones w/Rhythm Section)
- August 5 - The Wichita Musicians' Association Concert Band
- August 12 - Tommy Mac's Big Band
- August 19 - Andy Clark and the KAKZ Orchestra (Swing Era)
- August 26 - The Bourbon Street Six (New Orleans Style Jazz)

Friday Noon Concerts

- June 22 - Bill Boggs and the Country Gentlemen (Country Swing)
- June 29 - Marin Scott Combo
- July 6 - Doris Buss Combo
- July 13 - Kevin Kastning and the Unculture Club (R & R)
- July 20 - Dennis Dusek and a Touch of Class (Polkas, waltzes, pop)
- July 27 - The Geritol Elastic Stocking Jazz Band and Grape Stompers (Dixieland Jazz)
- August 3 - The Dads of Dixieland
- August 10 - Herman Garst and His Modern Jazz Quintette
- August 17 - Bob Foley Organ Stylist
- August 24 - The Specialists with Bill Boggs and Bob Wiley
- August 31 - Bud Victory and Friends (pop and Country)

APPENDIX D

Plant Lists for Three Case-Study Sites

Peoria Site

Trees:

Moraine Honeylocust (Gleditsia triacanthos inermis 'Moraine')
 Greenspire Linden (Tilia cordata 'Greenspire')
 Bradford Callery Pear (Pyrus calleryana 'Bradford')

Shrubs:

Hatfield Yew (Taxus x media 'Hatfieldii')
 Dwarf Winged Euonymus (Euonymus alatus 'Compactus')
 Dense Yew (Taxus x media 'Densiformis')
 Dwarf Andorra Juniper (Juniperus horizontalis 'Plumosa Compacta')

Groundcover:

Bluegrass (species)

Annuals: Various annual flowers are planted in the bed surrounding the City Hall, and in the sidewalk tree planters.

Wichita Site

Trees:

Sugar Maple (Acer sacharum)
 Shademaster Honeylocust (Gleditsia triacanthos var. inermis 'Shademaster')
 American Planetree (Platanus occidentalis)
 Eastern Redbud (Cercis canadensis)
 Goldenraintree (Koelreuteria paniculata)
 Kwanzan Oriental Cherry (Prunus serrulata 'Kwanzan')
 Canaert Redcedar (Juniperus virginiana 'Canaertii')
 Scotch Pine (Pinus sylvestris)
 Washington Hawthorne (Crataegus phenopyrum)

Shrubs:

Crimson Pygmy Barberry (Berberis thunbergii 'Crimson Pygmy')
 Japanese Flowering Quince (Chenomeles japonica)
 Rock Cotoneaster (Cotoneaster horizontalis)
 Winged Euonymus (Euonymus alatus)
 Lynwood Gold Forsythia (Forsythia intermedia 'Lynwood Gold')
 Convexleaf Japanese Holly (Ilex crenata 'Convexa')

Wichita plant list, shrubs-cont.:

Winter Jasmine (Jasminum nudiflorum)
 Blue Rug Juniper (Juniperus horizontalis 'Wiltoni')
 Oregongrapeholly (Mahonia aquifolium)
 Nandina (Nandina domestica)
 Golden Sweet Mockorange (Philadelphus coranarius 'Aureus')
 Kasan Scarlet Firethorn (Pyracantha coccinea 'Kasan')
 Laland Firethorn (Pyracantha coccinea 'Lalandi')
 Cutleaf Staghorn Sumac (Rhus typhina 'Laciniata')
 Froebel Bumalda Spirea (Spirea bumalda 'Froebeli')
 Indiangrant Coralberry (Symphoricarpos orbiculatus)
 Spreading Japanese Yew (Taxus cuspidata 'Expansa')
 Anglojap Yew (Taxus media)
 Mariesi Doublefile Viburnum (Viburnum tomentosum 'Mariesi')
 Leatherleaf Viburnum (Viburnum rhytidophyllum)

Groundcovers and Vines:

Baltic English Ivy (Hedera helix 'Baltica')
 Blue Fescue (Festuca ovina glauca)
 Virginia Creeper (Parthenocissus quinquefolia)
 Chinese Wisteria (Wisteria sinensis)
 Pachysandra (Pachysandra terminalis)

Annuals and Perennials: Various annuals and perennial flowers are planted throughout the planting beds.

Indianapolis Site

Trees:

Moraine Honeylocusts (Gleditsia triacanthos var. inermis 'Moraine')
 Washington Hawthorne (Crataegus phenopyrum)
 Shadblow Serviceberry (Amelanchier canadensis)

Shrubs:

Cranberry Cotoneaster (Cotoneaster apiculata)
 Blue Rug Juniper (Juniperus horizontalis 'Wiltoni')
 Dwarf Mugho Pine (Pinus mugho var. mugho)

Groundcovers:

Wintergreen Euonymus (Euonymus fortunei 'Coloratus')
 Bluegrass (species)

Annuals: Various annuals are planted within the planting beds.

APPENDIX E

Peoria Southwest Open Space Redesign Notes

(Problem Statement submitted to consultants by the City of Peoria's Advisory Commission on the Arts and Humanities, June 20, 1984)

PROBLEM STATEMENT

The northeast corner of the Civic Center grounds has great potential as a landscaped area to attract people to our downtown area and as a place for the display of public art.

Identification of the Project Area

The attached map outlines the undeveloped area which is the general focus of this project. The consultant will evaluate possibilities for complementary development in adjacent areas.

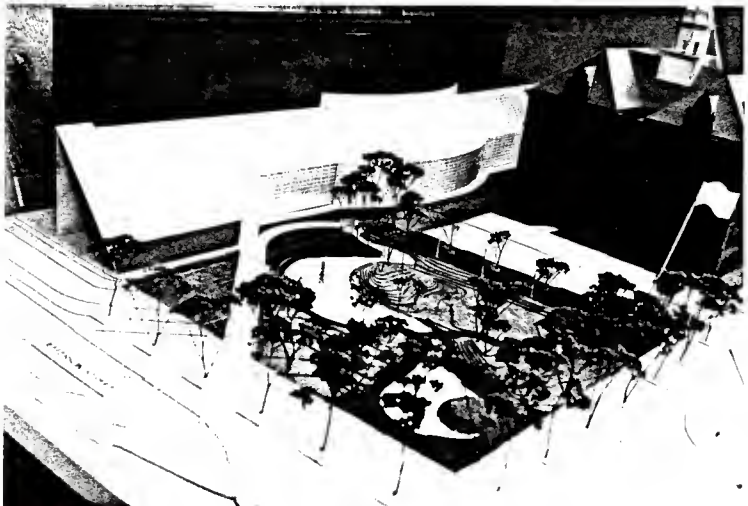
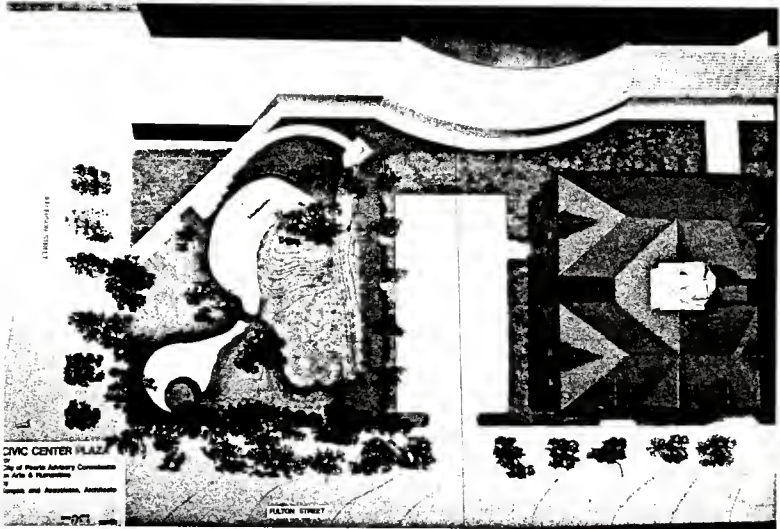
Existing Conditions

The Peoria Civic Center Authority or the City of Peoria will assist the consultant in locating relevant information related to the placement of underground utilities, including the sprinkler system presently serving the area.

Components of the Plan

- A. Walkways - Pathways across the grass area are already being established by pedestrian traffic. The plan should accommodate these patterns in addition to serving the internal features of the developed area.
- B. Plantings - With the renovation of Peoria's City Hall and the existence of the Civic Center's glass arcade, it is generally felt that plantings in this project area should be of a type and at a location which will not compete with these other structures. Generally, low profile plantings are expected to be more suitable.
- C. Seating - Seating shall be provided in the plan in such a way to invite people to enter and enjoy the area at leisure.
- D. Water - It is the strong feeling of the Commission that water, as a pond or as a fountain, should be incorporated into the plan. The consultant should consider, from an aesthetic and cost standpoint, possibilities for an art fountain in the area.
- E. Sculpture - The plan should designate locations for the placement of sculpture. These locations should be designed in such a way to allow various pieces of sculpture to be displayed on a rotating or permanent basis.
- F. Integration - The plan shall be designed in such a way to make use of opportunities to integrate the project area with its surroundings.

Two Views of the Study Model by the Winning Entrant in the Design Competition, Kenyon and Associates, Architects, Peoria



APPENDIX F

AN EVALUATION CHECKLIST FOR THE HISTORICAL BUILDING/PLAZA COMPLEX

POSITIVE IMAGE OF PLACE CRITERIA(1) Space/Building Relationship

- | | 0 | 1 | 2 | 3 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. How well does the building/plaza complex address the feeling of spatial balance? In other words, is the space too large for the building, or is the building too large for the space, or are the space and building spatially balanced? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Is there a positive visual relationship between plaza and building? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Does the plaza address the design issues of relationship to building in regards to color, scale, and design appropriateness? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. How well do the plaza and building relate to the surrounding urban context? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(2) Reinforcement of Past

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| a. How well does the plaza address the issue of using similar or complementary materials to those which are used on the building? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Have any signs or plaques been used which describe, explain, or recognize the historical nature of the building, area, or plaza? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. How has the design issue of using period fixtures or ornaments congruous with the period of the building, or with the historical background of the site, area, or building been addressed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Overall, how well do the plaza and building demonstrate a sense of historic continuity? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(3) Recognition As A Place To Be

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Is the plaza located along a busy street corner, where pedestrian traffic is heavy? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. How well does the site address the issue of multiple reasons for people to go to the plaza? In other words, rank the site in terms of the presence of restaurants, shopping, and other such events adjacent to the site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Do townspeople perceive the plaza as a place where the action is? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Is it apparent that there are organized, publicized, and well-attended events which take place in the plaza? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

(4) Perception of Maintenance and Cleanliness

0 1 2 3

- a. How does the plaza address the issue of general maintenance and cleanliness?
- b. Is there evidence of vandalism to site fixtures and furniture?
- c. What is the assessment of overall state of repair of plaza fixtures?

(5) Organized Event Programming and Promotions

- a. Is there a regular calendar of events scheduled for the plaza?
- b. Do the scheduled events appear to be well-publicized?
- c. Is there a management staff who specifically administers the programming and promotions of plaza events?
- d. Are the media--newspapers, radio, television--utilized for the promotion of events?
- e. Are attendance estimates and user reaction polls available for scheduled events which have taken place in the plaza?

ORIENTATION FOR PEOPLE CRITERIA

(1) Places To Congregate

- a. How well does the plaza address the issue of offering both large and small areas for people to gather?
- b. How well does the plaza address the issue of offering a variety of choices of places to gather? In other words, are there both places for sitting and standing; watching and participating; sunny and shady; vibrant and quiet?
- c. How well does the plaza address the need for protection from the elements of weather?

(2) Barrier-Free Accessibility

- a. How does the plaza address the issue of easily accessible and identifiable entries?
- b. How does the design address the ANSI standards for stairs/steps and handrails?
- c. How does the design of the plaza address the ANSI standards for ramps as alternatives for handicapped patrons?

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes!'; 2=moderately; 3=strongly

0 1 2 3

- d. Are there ANSI approved curb ramps along sidewalk approaches to the plaza?

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- e. How well does the site furniture address the needs of handicapped persons?

--	--	--	--
- f. How well does the plaza address the issue of no protruding obstructions to hinder blind users?

--	--	--	--
- g. How well does the site address the need of adjacent, clearly-marked handicapped parking spaces?

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(3) Provision of Food

- a. Is food and drink available on the site?

--	--	--	--
- b. Is food and drink available adjacent to or less than 400 feet from the site?

--	--	--	--
- c. Are brown-bag patrons encouraged to eat in the plaza through provision of places to sit and provision of conveniently-placed trash receptacles?

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(4) Site Fixtures and Furniture

- a. How well does the plaza address the need for site fixtures and furniture, such as seating, lighting, drinking fountains, litter receptacles, and public telephones?

--	--	--	--
- b. How well does the plaza address Whyte's recommendation of one linear foot of seating for every thirty square feet of plaza area?

--	--	--	--
- c. How well do the fixtures and furniture enhance the overall design of the plaza?

--	--	--	--
- d. How well do the fixtures and furniture meet the requirements of high quality, high durability, and low maintenance?

--	--	--	--

(5) Existence of Focal Points

- a. How well does the plaza address the need for focal points? (for example, flower beds, outdoor podium, sculpture or artwork, pool or fountain, clock tower, gazebo, or other attractions).

--	--	--	--
- b. How well are focal points integrated into the overall design of the plaza, so as to be an harmonious part?

--	--	--	--
- c. How well do focal points contribute to continuity with the past history of the building, site, or locale?

--	--	--	--

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

INTRODUCTION OF NATURAL ELEMENTS CRITERIA

(1) Inclusion Of Plant Material

- | | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| a. How have the elements of trees, shrubs, groundcovers, turf, annuals and perennials been introduced into the plaza? | | | | |
| b. How well does the plant material address the issue of being an integral part of the overall design? | | | | |
| c. How well does the plant material answer the needs of being an amenity for people? | | | | |

(2) Utilization Of The Design Functions Of Plants

- | | | | | |
|---|--|--|--|--|
| a. How well do trees address the need of providing canopy? | | | | |
| b. How well are the elements of baffle, screen, and barrier introduced into the plaza? | | | | |
| c. How does the plaza rank in terms of adding interest and variety through the use of the elements of color, form, and scale of plant material? | | | | |
| d. How well does plant material address the element of enframing, which creates interesting views and accents particular urban features? | | | | |

(3) Improvement Of Microclimate

- | | | | | |
|--|--|--|--|--|
| a. How does the design of the plaza address the issue of the positive and negative effects of the sun? | | | | |
| b. How does plant material address the needs of quantities and placement for creating a more comfortable microclimate? | | | | |
| c. How effective has water been used as a feature which physically and psychologically modifies the summertime microclimate? | | | | |
| d. How well does plant material seem to create a cooler microclimate for the plaza? | | | | |
| e. How well does the design of the plaza address the need to modify winds and breezes? | | | | |

(4) Enhancement Of Urban Setting

- | | | | | |
|--|--|--|--|--|
| a. How well does plant material create an oasis of greenery in the urban setting? | | | | |
| b. Has new life been brought to a formerly dull or under-utilized part of the city as a result of the plaza? | | | | |
| c. How well does the plaza provide an enhancement to the historical building? | | | | |
| d. How has the overall quality of the adjacent urban setting improved as a result of the plaza? | | | | |

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

(5) Inclusion Of Water Features

0 1 2 3

- a. Is there a water feature within the design? (give a point for each water feature, up to three).
- b. Does the water feature function properly?
- c. How well does the water feature succeed at being an obvious node of activity in the plaza?
- d. How well does the water feature succeed at being the major attraction of the space which it occupies?
- e. How does the water feature rank in terms of adding interest, vitality, and beauty to the plaza?

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(6) Maintenance Of Natural Features

- a. Does there appear to be a commitment to provide a high level of maintenance to the plaza?
- b. Do the natural features appear to be cared for properly?
- c. Are there indications of a great many poorly maintained, damaged, or dying trees, shrubs, or other types of plant material?
- d. Does it appear that the watering needs of the plants are efficiently and adequately provided?

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APPENDIX G

AN EVALUATION CHECKLIST FOR THE THREE CASE-STUDY SITES

	<u>POSITIVE IMAGE OF PLACE CRITERIA</u>											
	<u>PEORIA</u>			<u>WICHITA</u>			<u>INDPLS</u>					
(1) <u>Space/Building Relationship</u>	0	1	2	3	0	1	2	3	0	1	2	3
a. How well does the building/plaza complex address the feeling of spatial balance? In other words, is the space too large for the building, or is the building too large for the space, or are the space and building spatially balanced?			2			1						3
b. Is there a positive visual relationship between plaza and building?	0						2					3
c. Does the plaza address the design issues of relationship to building in regards to color, scale, and design appropriateness?	0							3				3
d. How well do the plaza and building relate to the surrounding urban context?	0					1						3
(2) <u>Reinforcement of Past</u>												
a. How well does the plaza address the issue of using similar or complementary materials as those which are used on the building?	0							3				3
b. Have any signs or plaques been used which describe, explain, or recognize the historical nature of the building, area, or plaza?	0							3				2
c. How has the design issue of using period fixtures or ornaments congruous with the period of the building, or with the historical background of the site, area, or building been addressed?	0							3				2
d. Overall, how well do the plaza and building demonstrate a sense of historic continuity?	0							3				2
(3) <u>Recognition As A Place To Be</u>												
a. Is the plaza located along a busy street corner, where pedestrian traffic is heavy?		1			0					1		
b. How well does the site address the issue of multiple reasons for people to go to the plaza? In other words, rank the site in terms of the presence of restaurants, shopping, and other such events adjacent to the site?		1				1						3
c. Do townspeople perceive the plaza as a place where the action is?	0					1				1		
d. Is it apparent that there are organized, publicized, and well-attended events which take place in the plaza?	0					1				1		
(4) <u>Perception of Maintenance and Cleanliness</u>												
a. How does the plaza address the issue of general maintenance and cleanliness?				3				3				2
b. Is there evidence of vandalism to site fixtures and furniture?	0					1				1		
c. What is the assessment of overall state of repair of plaza fixtures?		2						3				2
(5) <u>Organized Event Programming and Promotions</u>												
a. Is there a regular calendar of events scheduled for the plaza?	0					1				1		
b. Do the scheduled events appear to be well-publicized?	0					1				1		
c. Is there a management staff who specifically administers the programming and promotions of plaza events?	0					1				1		
d. Are the media--newspapers, radio, television--utilized for the promotion of events?	0					1				1		
e. Are attendance estimates and user reaction polls available for scheduled events which have taken place in the plaza?	0				0					1		
Sub totals	9				33				37			

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

ORIENTATION FOR PEOPLE CRITERIA

	PEORIA				WICHITA				INDOPLS							
	0	1	2	3	0	1	2	3	0	1	2	3				
(1) <u>Places To Congregate</u>																
a. How well does the plaza address the issue of offering both large and small areas for people to gather?		1						3				3				
b. How well does the plaza address the issue of offering a variety of choices of places to gather? In other words, are there both places for sitting and standing; watching and participating; sunny and shady; vibrant and quiet?	0							3				3				
c. How well does the plaza address the need for protection from the elements of weather?	0						2					3				
(2) <u>Barrier-Free Accessibility</u>																
a. How does the plaza address the issue of easily accessible and identifiable entries?		1					2					3				
b. How does the design address the ANSI standards for stairs/steps and handrails?		1					2					3				
c. How does the design of the plaza address the ANSI standards for ramps as alternatives for handicapped patrons?	0						2				2					
d. Are there ANSI approved curb ramps along sidewalk approaches to the plaza?				3			2					3				
e. How well does the site furniture address the needs of handicapped persons?	0						2				2					
f. How well does the plaza address the issue of no protruding obstructions to hinder blind users?				3				3				3				
g. How well does the site address the need of adjacent, clearly-marked handicapped parking spaces?				3		1					2					
(3) <u>Provision of Food</u>																
a. Is food and drink available on the site?	0				0					1						
b. Is food and drink available adjacent to or less than 400 feet from the site?		1			0					1						
c. Are brown-bag patrons encouraged to eat in the plaza through provision of places to sit and provision of conveniently-placed trash receptacles?	0					1				1						
(4) <u>Site Fixtures and Furniture</u>																
a. How well does the plaza address the need for site fixtures and furniture, such as seating, lighting, drinking fountains, litter receptacles, and public telephones?	0							3				3				
b. How well does the plaza address Whyte's recommendation of one linear foot of seating for every thirty square feet of plaza area?	0							3				3				
c. How well do the fixtures and furniture enhance the overall design of the plaza?	0							3			2					
d. How well do the fixtures and furniture meet the requirements of high quality, high durability, and low maintenance?	0							3				3				
(5) <u>Existence of Focal Points</u>																
a. How well does the plaza address the need for focal points? (for example, flower beds, outdoor podium, sculpture or artwork, pool or fountain, clock tower, gazebo, or other attractions).		1						3			2					
b. How well are focal points integrated into the overall design of the plaza, so as to be an harmonious part?		1						3			2					
c. How well do focal points contribute to continuity with the past history of the building, site, or locale?	0							3				3				
	Sub totals				15				44				47			

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

INTRODUCTION OF NATURAL ELEMENTS CRITERIA

	PEORIA				WICHITA				INDOPLS			
	0	1	2	3	0	1	2	3	0	1	2	3
<u>(1) Inclusion Of Plant Material</u>												
a. How have the elements of trees, shrubs, groundcovers, turf, annuals and perennials been introduced into the plaza?		1						3				3
b. How well does the plant material address the issue of being an integral part of the overall design?		1						3				3
c. How well does the plant material answer the needs of being an amenity for people?		1						3				3
<u>(2) Utilization Of The Design Functions Of Plants</u>												
a. How well do trees address the need of providing canopy?			2					3				3
b. How well are the elements of baffle, screen, and barrier introduced into the plaza?	0							3		1		
c. How does the plaza rank in terms of adding interest and variety through the use of the elements of color, form, and scale of plant material?		1						3				3
d. How well does plant material address the element of enfrainment which creates interesting views and accents particular urban features?			2					3				3
<u>(3) Improvement Of Microclimate</u>												
a. How does the design of the plaza address the issue of the positive and negative effects of the sun?		1						3			2	
b. How does plant material address the needs of quantities and placement for creating a more comfortable microclimate?		1						3			2	
c. How effective has water been used as a feature which physically and psychologically modifies the summertime microclimate?	0							3		1		
d. How well does plant material seem to create a cooler microclimate for the plaza?		1						3				3
e. How well does the design of the plaza address the need to modify winds and breezes?		1					2				2	
<u>(4) Enhancement Of Urban Setting</u>												
a. How well does plant material create an oasis of greenery in the urban setting?				3				3			2	
b. Has new life been brought to a formerly dull or under-utilized part of the city as a result of the plaza?		1						3				3
c. How well does the plaza provide an enhancement to the historical building?		1						3				3
d. How has the overall quality of the adjacent urban setting improved as a result of the plaza?			2					3				3
<u>(5) Inclusion Of Water Features</u>												
a. Is there a water feature within the design? (give a point for each water feature, up to three).	0						2			1		
b. Does the water feature function properly?	0						1		0			
c. How well does the water feature succeed at being an obvious node of activity in the plaza?	0							3	0			
d. How well does the water feature succeed at being the major attraction of the space which it occupies?	0							3		1		
e. How does the water feature rank in terms of adding interest, vitality, and beauty to the plaza?	0							3	0			
<u>(6) Maintenance Of Natural Features</u>												
a. Does there appear to be a commitment to provide a high level of maintenance to the plaza?		1				1				1		
b. Do the natural features appear to be cared for properly?		1				1				1		
c. Are there indications of a great many poorly maintained, damaged, or dying trees, shrubs, or other types of plant material?	0				0				0			
d. Does it appear that the watering needs of the plants are efficiently and adequately provided?		1				1				1		
	22				62				45			
Sub totals	22				62				45			
Grand totals	46				139				129			

*Ranking: 0=not known, none, 'no'; 1=weakly, 'yes'; 2=moderately; 3=strongly

CLARIFYING THE RELATIONSHIP BETWEEN
HISTORICAL BUILDINGS AND URBAN OPEN-SPACE DESIGN:
AN EVALUATIVE TECHNIQUE AND THREE CASE STUDIES

by

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B. S., Brigham Young University, 1973

AN ABSTRACT OF A MASTER'S THESIS

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ABSTRACT

Two central arguments justify this thesis: first, that public open space is crucial to the habitability of our cities; second, that major historical buildings can become a viable part of successful urban plazas. The thesis examines the physical design of new urban open spaces which surround significant historical buildings and identifies a set of criteria which can provide an objective analysis of the building/space complex. Three major themes for analysis were developed from a review of the design literature: (1) image of place; (2) orientation for people; and (3) introduction of natural elements. From these three themes, relevant criteria were established to facilitate building/plaza analysis.

Next, these criteria were tested for correctness by analyzing three sites: the City Market and plazas in downtown Indianapolis; the City Hall and open spaces in downtown Peoria; and the Historical Museum and Omnisphere buildings and Heritage Square Park in downtown Wichita. These sites were chosen on the basis of (1) the presence of an historical building listed on the National Register of Historic Places; and (2) the recent alteration of the building's surrounding context which created a major urban open space in a downtown setting.

The method of analysis developed in this thesis provides urban designers and public officials with a systematic way of evaluating historical building/open space designs. This evaluation is accomplished through development of a checklist through which the criteria within the three major themes allow the open spaces to be ranked numerically. The three case-study sites are ranked according to this checklist tool, thus facilitating a total point score for each site. The ranking system not only provides a way of post-construction evaluation, but establishes

important design guidelines for designers, public officials, and community leaders involved in planning for and preserving the livability of our cities.