

TRIANGLE PARK:
ADDRESSING RESIDUAL URBAN SPACE

by

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A REPORT

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Abstract

In the 2009-2010 academic year at the Kansas City Design Center, four students undertook a design project seeking to transform an underutilized traffic median into a usable urban public space. The space, known as “Triangle Park,” is located at Avenida Cesar E. Chavez (West 23rd Street), West Pennsylvania Avenue, and Southwest Boulevard in Kansas City, Missouri. This report describes the existing site conditions and challenges to creating an inviting public space. The report explains how the students arrived at the finalized design using precedent studies, multiple design iterations, and community input from the Westside and Crossroads neighborhood stakeholders. The finalized design focuses on providing connectivity between people, the site, and the city as a whole. Opportunities for connection are offered by improved pedestrian circulation and a comfortable, well-defined outdoor space. Three major structural interventions are proposed: an illuminated overhead canopy beneath the Interstate-35 overpass provides shelter for pedestrians; a raised walking path enhances an already prominent pedestrian route; and a wooden deck provides opportunities for sitting and lingering. The ability of the design to meet the community’s stated needs and to serve as a social public space is evaluated to determine the likelihood of positive and worthwhile project outcomes.

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Chapter 1 - Introduction

The Kansas City Design Center first imagined the possibilities for a community-focused urban design intervention, “Triangle Park,” in the fall semester of 2009. The project had the potential not only to address a number of design challenges at the intersection of Southwest Boulevard and Avenida Cesar E. Chavez (West 23rd Street) in Kansas City, Missouri, but also to create a stronger connection and mutually beneficial partnership between the students and faculty at the Design Center and the downtown community. The students sought to gain first-hand experience investigating a local site and applying design principles; the community sought to gain academic and professional attention for a site in need of intervention. The possibilities were thus pursued for the duration of the academic year, resulting in a final design proposal in late April 2010.

Background

The Kansas City Design Center is a partnership between the University of Kansas School of Architecture, Design, and Planning and Kansas State University College of Architecture, Planning, and Design. The Center is located at 1018 Baltimore Avenue in Kansas City, Missouri. The intent of the Kansas City Design Center is to facilitate professional education in design and planning, to address urban design possibilities to strengthen Kansas City's public realm, and to provide outreach to the community (Kansas City Design Center, 2009).

In the fall semester of 2009, the students at the Center began analyses of Kansas City utilizing a conceptual framework that recognized the fractured condition of the American city, Kansas City specifically. Students first researched the growth and changes that occurred in American cities over time and the conditions of the American city today. Students reviewed historical and recent planning documents, including the George Kessler Parks and Boulevards System, the 1997 FOCUS Kansas City Plan, the 2005 Sasaki Associates Downtown Corridor Strategy, and the June 2009 Draft of the Greater Downtown Area Plan. Students then developed specific projects at locations in downtown Kansas City and proposed design interventions to make a positive impact on the city. Students proposed designs for housing, schools, public open spaces, civic centers, parking lots, and more.

The project site considered in this report is located at the intersection of Avenida Cesar Chavez (West 23rd Street), West Pennsylvania Avenue, and Southwest Blvd. It is a triangular median of unused space directly east of the Interstate-35 highway overpass (Figure 1.1). The site is located at a split between different neighborhoods and traffic patterns. It is located north of the Kansas City's major rail lines and historic Union Station, and south of the downtown loop created by I-35, 670 and I-70. The map shown in Figure 1.2 conveys the site's location in relation to the Kansas City downtown area.

The students working on the Triangle Park project were Rachel Duncan, Kansas State Architecture; Allison Gould, Kansas State Interior Architecture and Product Design; Janelle Heideman Kimsey, Kansas State Interior Architecture and Product Design; and Shannon Williams, Kansas State Regional and Community Planning. The course instructor at the Design Center was Kansas State Professor Vladimir Krstic. A major professional mentor and proponent of the project development was Doug Stockman, El Dorado Architects.

Following numerous site studies and community meetings, the site was perceived by the student designers as a location at which the fracturing of a walkable, connected urban fabric was especially pronounced. The design invention sought to define this fragment of space and connect it to the surrounding neighborhoods to create a functional public space within the existing constraints of community capabilities, while acknowledging changing and promoting future development.

Purpose

The purpose of this report is to describe the process of the design development and provide an evaluation of the design outcomes. The report will describe the Triangle Park site, the surrounding communities, the design process undertaken by the students, and the finalized design. The report ends with conclusions and a reflection on the writer's personal experiences over the course of the academic year at the Kansas City Design Center.



Figure 1.1. Photo taken standing southeast of the site facing northwest toward I-35.

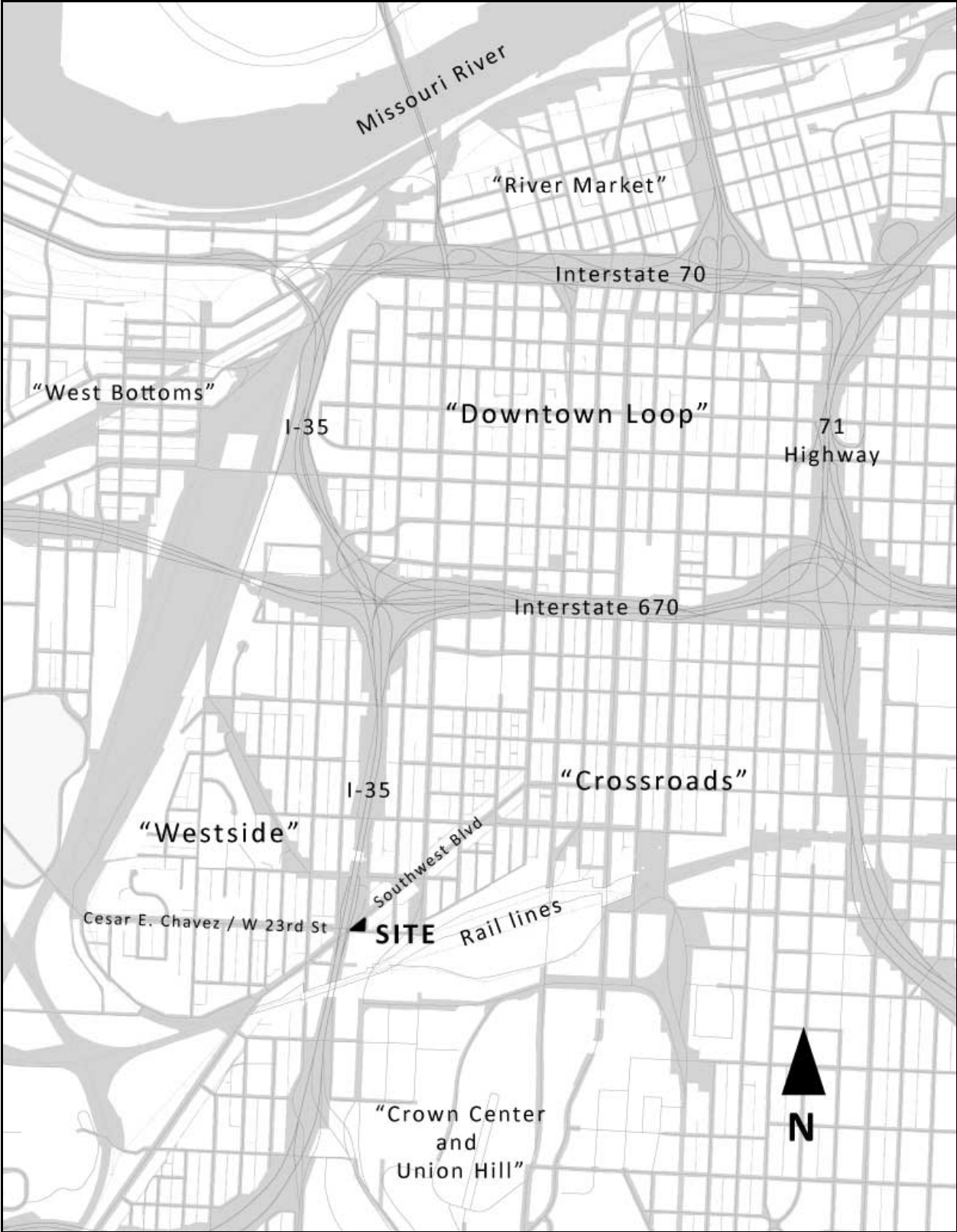


Figure 1.2. Triangle Park project location map in Kansas City, Missouri.

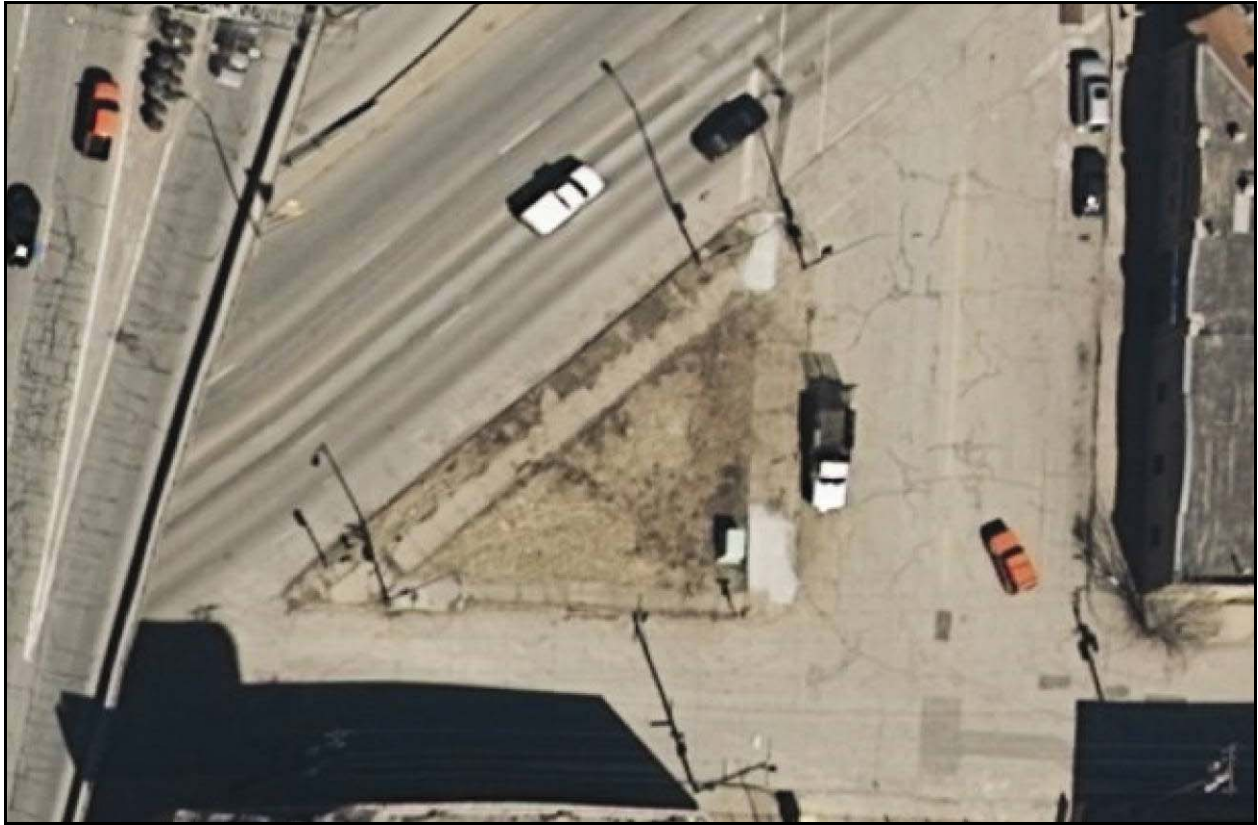


Figure 1.3. Triangle Park aerial photo.

Chapter 2 - The Site

To understand the possibilities of the project and achieve an effective design, the students began by analyzing the existing project site. This chapter discusses the existing conditions on the Triangle Park site, the history of the site, and its importance.

Existing Conditions

The students began by conducting an inventory of the existing conditions on the site. On this first visit to the site proper, a small triangular grass median at the center of an intersection, the site seemed small, mostly empty, and lacking potential. However, the students found the site to provide a number of complex design challenges to overcome, including the unique size and conditions of the traffic median, the surrounding streets and traffic, nearby buildings and their uses, and the important impacts of the highway overpass and the adjacent billboard.

The Traffic Median

The size of the triangular median was small in comparison with the project sites being developed by other student groups at the Design Center. The median is approximately 120' long on its longest side. However, as the research and design development continued, the students incorporated more of the surrounding areas into the design, including adjacent streets and areas underneath the highway overpass. The extent of the design will be discussed further in Chapter 4, Design Process.

The median consists of sidewalks along each of the three edges and a grassy space in the middle. The sidewalks along the edges of the site are crumbling and in need of replacement. The topography of the site appears deceptively flat, but actually features a 6' drop in height from the east side to the west side of the triangular median along the southern edge. Volunteer community members provide a basic level of maintenance by mowing the grass and removing trash. The lone structure existing on the site is a large green electrical transformer in the southeast corner. The transformer would later pose a design challenge for the students.

Streets and Traffic

The triangular shape of the potential park space is a direct result of the intersecting streets surrounding it. Figure 2.1 highlights the major thoroughfares that pass by the triangle space: I-35 (which passes approximately 15 feet overhead to the west of the space), Southwest Boulevard, which passes along the longest edge of the triangle, and Avenida Cesar E. Chavez (West 23rd Street), which heads directly east towards the triangle. West Pennsylvania Avenue (unmarked on Figure 2.1), a dead-end street not considered a major traffic thoroughfare, runs from north to south along the east edge of the triangle.

The site lies at an important juncture in Kansas City's street system. The presence of Southwest Boulevard creates the triangular space at the intersection, a deviation from the standard street grid that dominates the majority of downtown Kansas City. Southwest Boulevard creates a number of triangular spaces along its length which are utilized in various ways. The condition of these similar triangular spaces is shown in Figure 2.2.

Immediately northwest of the site, an exit ramp from northbound I-35 allows drivers to leave the interstate. Following a curving ramp drivers turn south to face the triangle

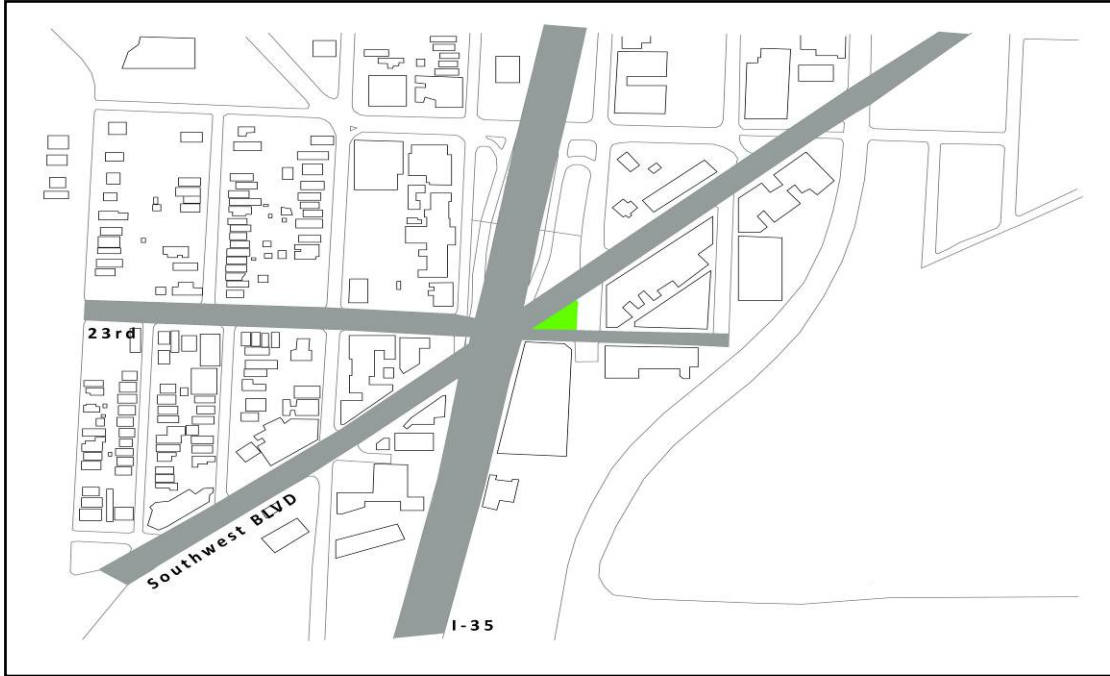


Figure 2.1. Major thoroughfares near Triangle Park.

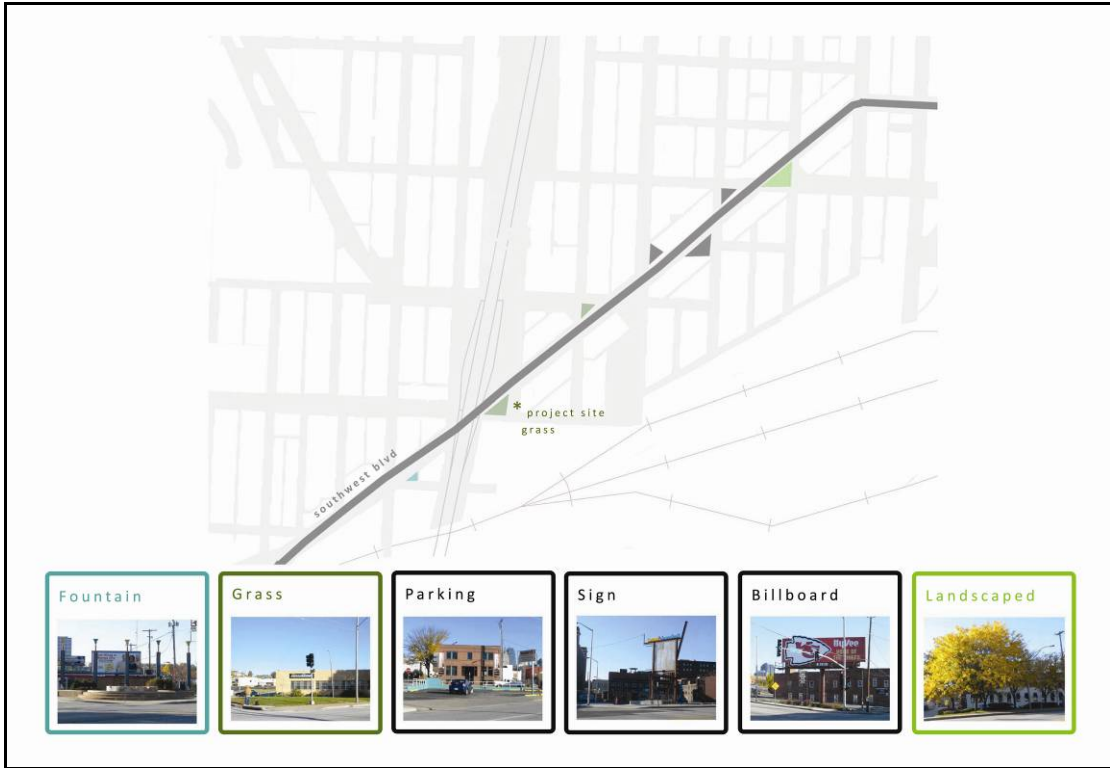


Figure 2.2. Triangle spaces along Southwest Boulevard.

space directly. This provides the opportunity for the site to be glimpsed and used by local and visiting traffic.

The project location is mentioned in the September 2005 “22nd/23rd Street Replacement and Crosstown Circle Plan,” prepared for the City of Kansas City, Missouri by TranSystems Corporation, Gould Evans Goodman, Jane Mobley Associates, Taliaferro & Browne, Inc., and International Architects Atelier. The plan provides design solutions to improve the east-west street connection in Kansas City from I-35 on the west to McGee Street on the east. As part of a restructuring of the street systems in the project area, the plan includes several maps that show the project site. The plan includes the project site as a possible site for future open space (Figure 2.3), shows Southwest Boulevard as a future bike route (Figure 2.4), and shows the boulevard as a future “Great Street”—a multi-modal street concept developed in the 1997 FOCUS Kansas City Plan (Figure 2.5).



Figure 2.3. The site as future open space in the 22nd/23rd Street Plan.



Figure 2.4. Southwest Boulevard as a bike route in the 22nd/23rd Street Plan.

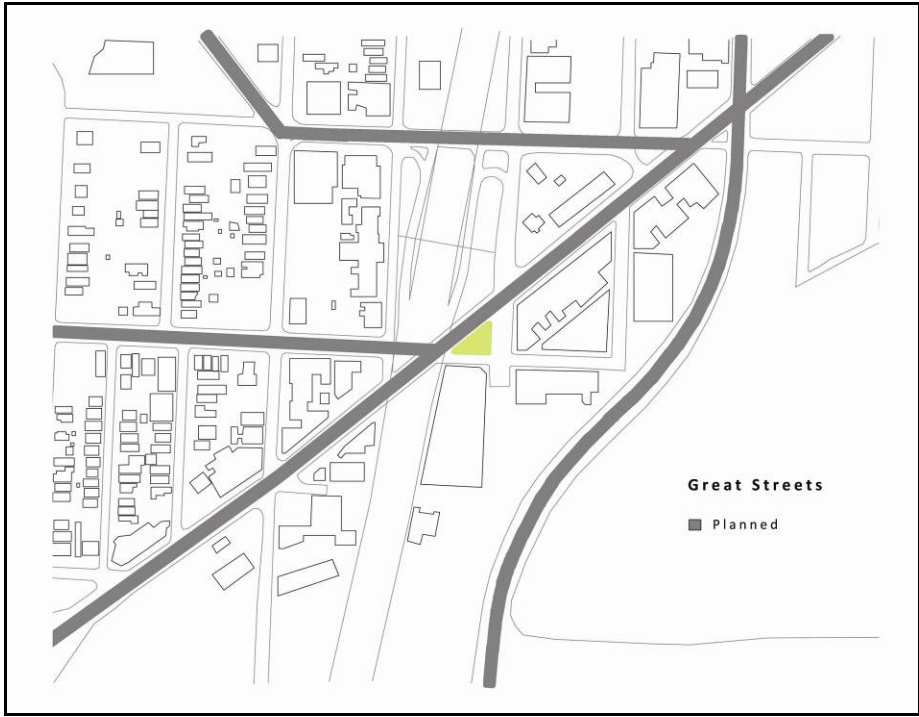


Figure 2.5. Southwest Boulevard as a Great Street in the 22nd/23rd Street Plan.

The traffic speeds and intersection configuration surrounding the site are not ideal for drivers. Drivers surpass the speed limit along Southwest Boulevard, which has two traffic lanes in each direction and parking on both sides. The intersections at the southwest and northeast corners of the site require stoplights to control the intersections, forcing motorists to stop and wait at timed lights or attempt to speed through. Another stop light under I-35 very close to the site further complicates the traffic in the area. Avenida Chavez (23rd Street) is a one-way street along the southern edge of the site, only permitting traffic to move west to east, but drivers frequently misunderstand or purposefully disobey these traffic signs. Stoplights, stop signs, and traffic lanes and directions are shown in Figure 2.6. The arrows represent one lane of traffic and depict the direction of traffic. A group of red, yellow, and green dots indicate a stoplight and a single red dot indicates a stop sign.

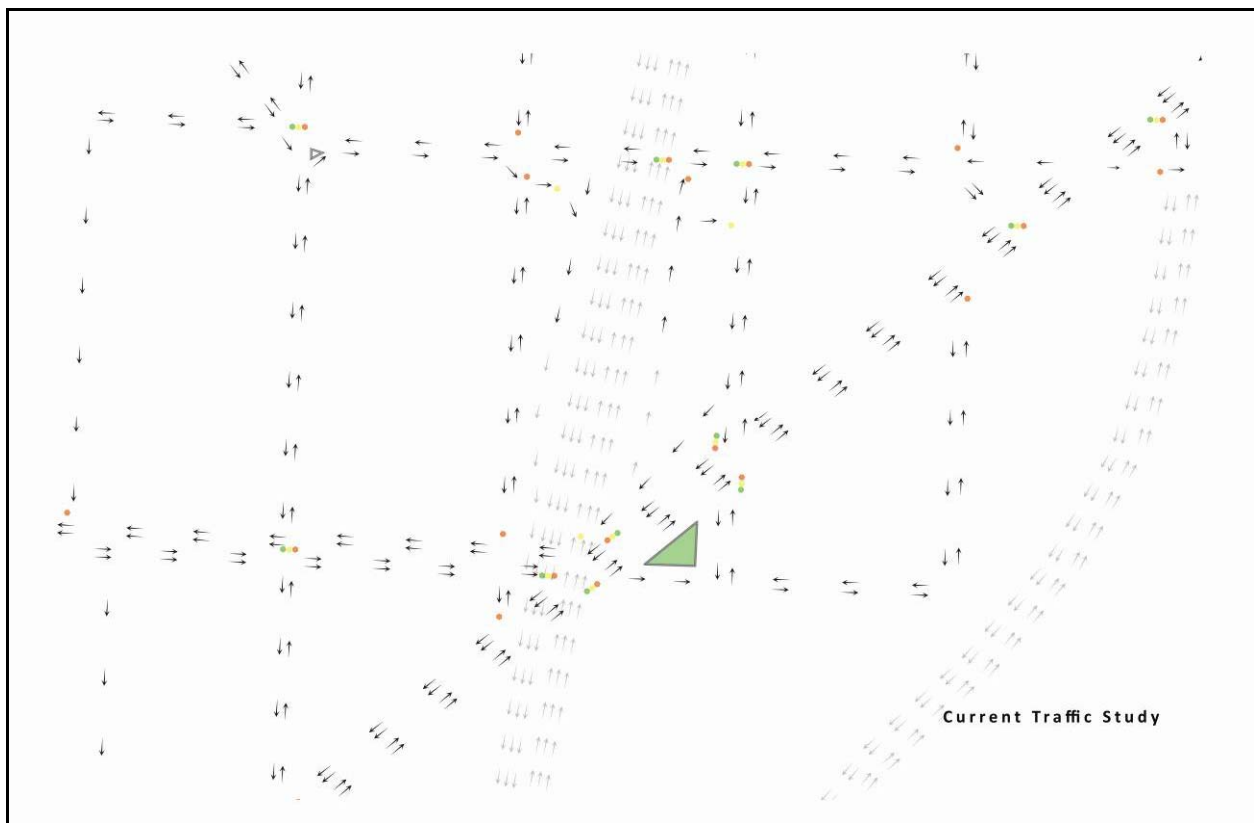


Figure 2.6. Current Traffic.

Surrounding Buildings and Uses

The space is also defined by the buildings around it and their uses. Figure 2.7 is a figure ground depiction of the buildings surrounding the site, shown in black; the highway overpass is shown in gray. The figure ground's white space conveys the empty, wide streets immediately surrounding the site and the sizes and shapes of buildings surrounding the site. To the south and east, larger buildings are immediately present, creating a more defined "edge" to the site. To the west and north, there are fewer buildings in close proximity to the site, and the highway overpass serves as a major defining "edge."



Figure 2.7. Figure Ground.

Figure 2.8 shows the use of each building near the site. The larger groups of buildings along Southwest Boulevard, shown in dark gray and medium gray, are used for industrial and commercial purposes, respectively. To the west, the majority of land use that is not along Southwest Boulevard is residential (shown in light gray) and also includes several institutional uses such as churches and community centers (shown in blue).



Figure 2.8. Land Use.

Highway Overpass and Billboard

Two major physical structures near the site have an important impact on how the land is used and perceived. The highway overpass immediately west of the site allows for Interstate-35 to run north-south through Kansas City without obstructing traffic on the ground but has a major impact on the neighborhood below nonetheless. The large billboard located on the top of the warehouse building directly south of the site, facing highway traffic, similarly affects the land below. The overpass and the billboard directly impact the neighborhoods below by creating increased shadows and darkness, noise, and pigeon inhabitation.

Shadows

Shadows created from the highway overpass and the billboard have a major impact on the site, especially in the winter. The highway overpass is structured to allow 15' vehicles to pass underneath. The billboard is located on an approximately 20' tall building and rises another approximately 40' in the air in order to be fully visible to southbound I-35 traffic (Figure 2.9). The combination of the highway overpass and the billboard create distinct shadows, especially in the southwest corner of the site. Figure 2.10 shows shadows created at the summer solstice. The dark blue areas show where the shadows are present for the longest time and lighter blue areas



Figure 2.9. Facing southwest on the site: a view of the billboard and highway overpass.

show where light is more available. Figure 2.11 shows shadows created at the winter solstice. These figures illustrate the greater shadow coverage that occurs during the winter. These shadows inhibit the potential for plants to thrive, for pedestrians to linger in the cold winter months, and for ice and snow build-up to melt. Conversely, the shadows can also provide shade in the hot summer months.

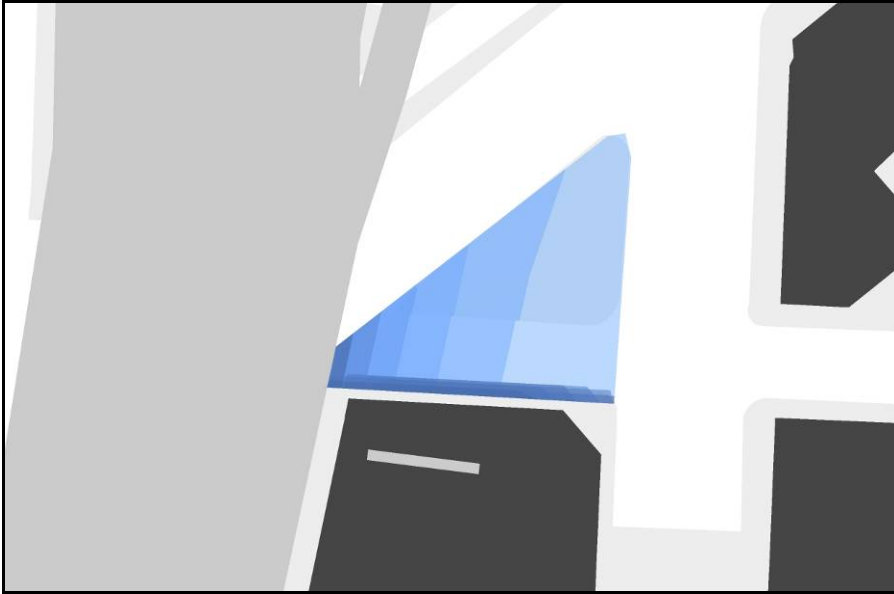


Figure 2.10. Summer solstice.

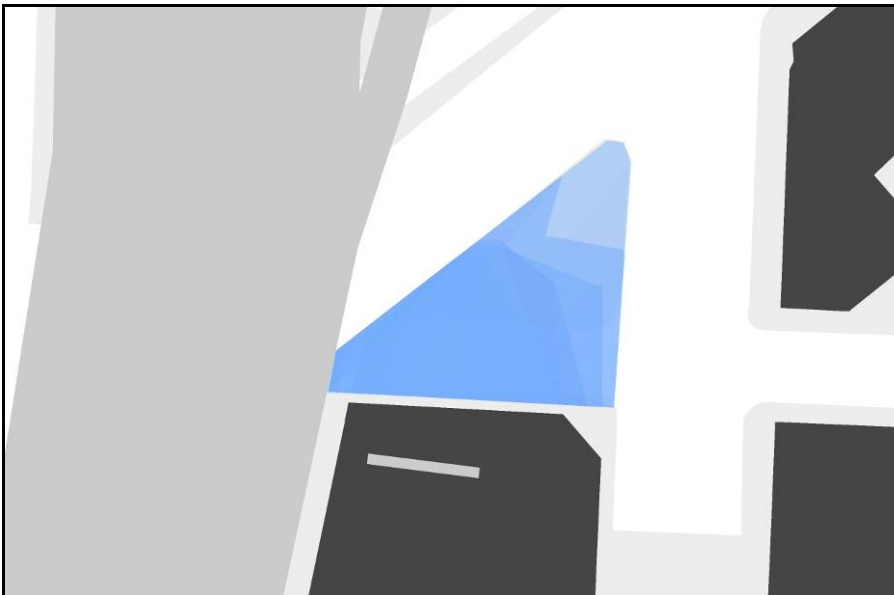


Figure 2.11. Winter solstice.

Noise

Noise on the site is generated from vehicle traffic passing overhead on I-35. Noise is greatest directly underneath the highway overpass and near the overpass, but is readily apparent on all areas of the site.

Pigeons

The community perceives pigeons to be one of the major problems at the site. Pigeons roost in the niches created by steel beams under the highway overpass. The smell, droppings, and feathers left by pigeons make walking under the overpass a very unpleasant experience. Figure 2.12 shows the typical condition of pigeon droppings collected under the overpass. The impact of the pigeons and the community's interest in creating a walkable environment under the overpass will be further discussed in Chapter 3, The Community.



Figure 2.12. Conditions created by pigeons under I-35 overpass.

History

The unique triangular shape of the site has existed for over 110 years. Historic Kansas City Sanborn Fire Insurance maps, obtained through the Missouri Valley Special Collections at the Kansas City Public Library, show the area through time. The site is shown on maps from 1896, 1906, and 1939 (Figure 2.13, 2.14, and 2.15, respectively). In each of these years, the site appears in its triangular shape surrounded by three streets. In the earliest map, the site is shown as a 2-story building divided into a three storefronts that face Southwest Boulevard, the easternmost store labeled “Drugs,” likely a drugstore. Surrounding areas are shown divided into many similar-sized lots and storefronts. By 1906, more of the lots are filled with information indicating more buildings appear to have been constructed. By 1939, the series of small storefronts south of the site appear to have been combined into one building, and the site itself is blank—indicating that the former 2-story building had since been demolished.

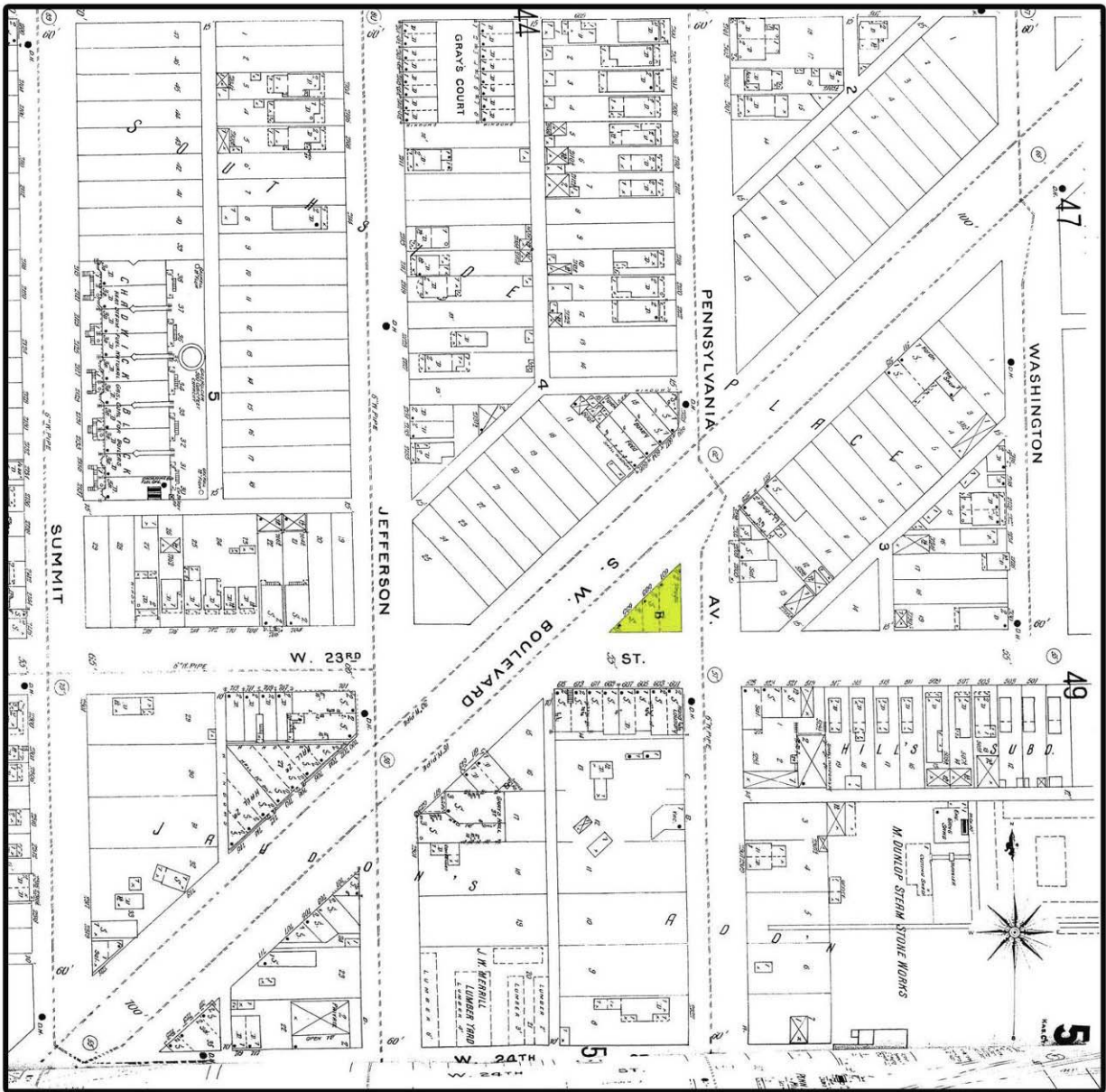


Figure 2.13. 1896 Sanborn Fire Insurance Map.

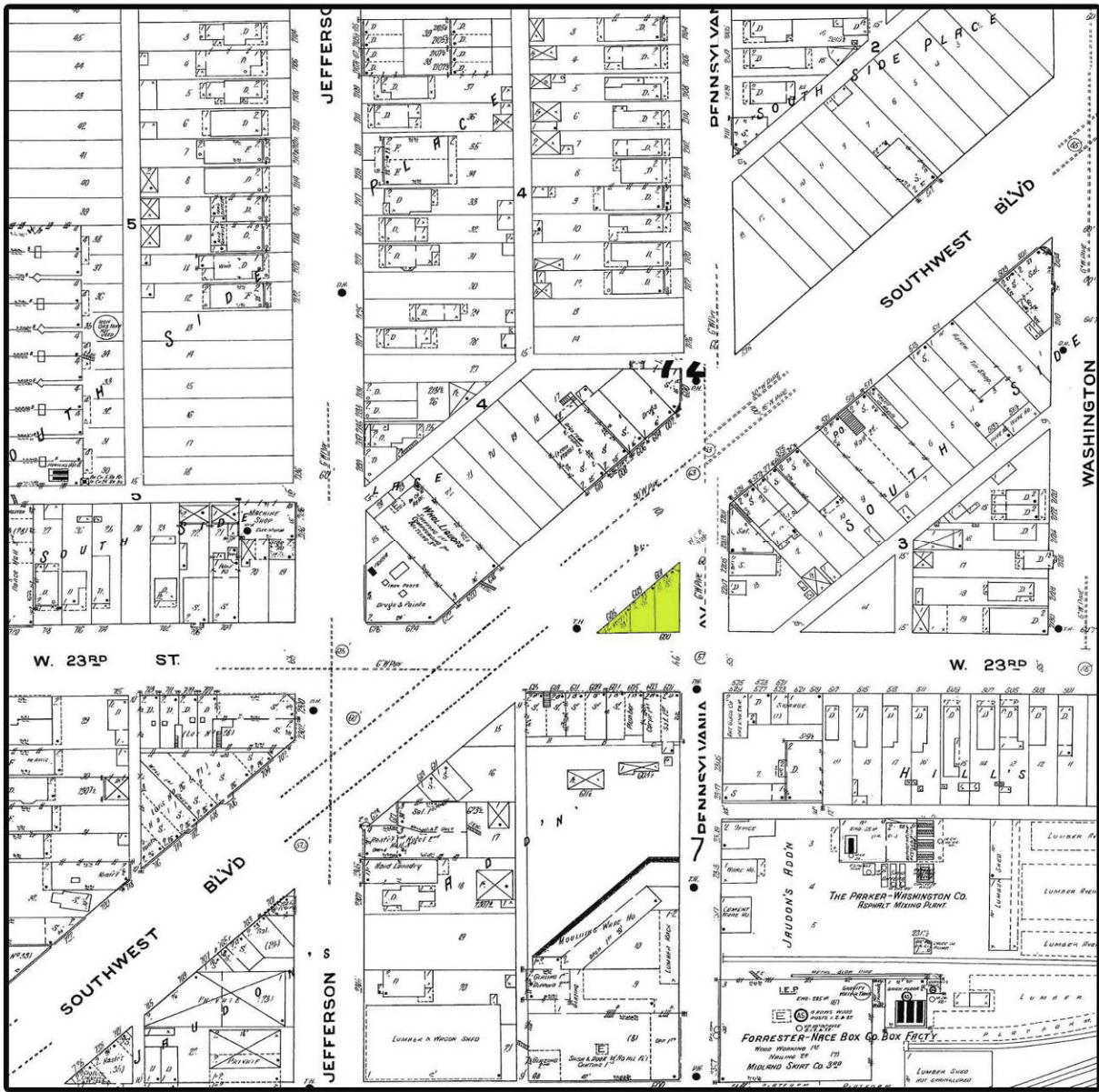


Figure 2.14. 1906 Sanborn Fire Insurance Map.

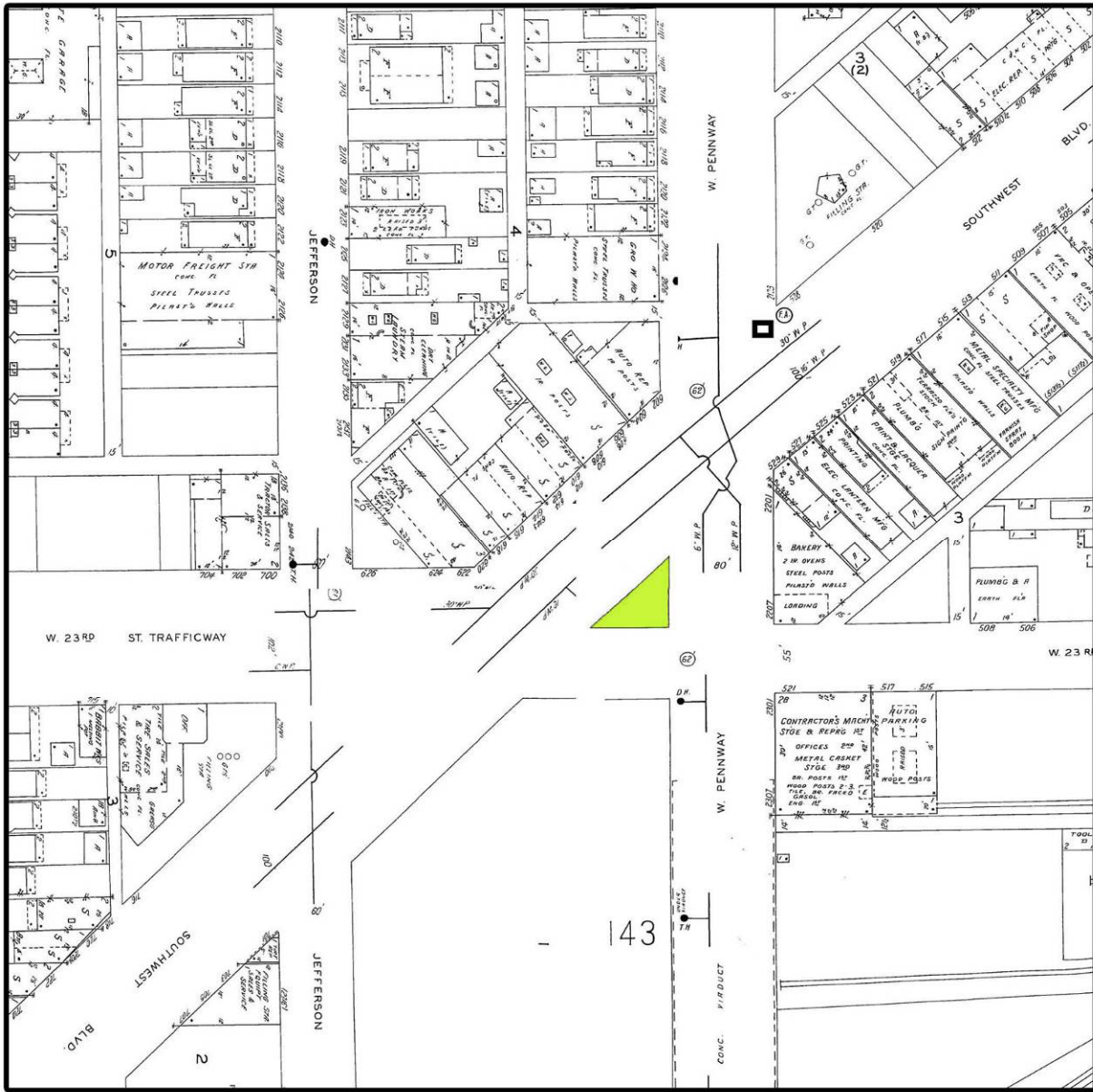


Figure 2.15. 1939 Sanborn Fire Insurance Map.

Importance

Although the area around the site is highly complex and any design will be challenged to work with a number of existing conditions, the site has the potential to positively impact the surrounding area and Kansas City as a whole. There is a strong need for intervention due to the poor layout of the surrounding streets, traffic, and the negative impact of the I-35 overpass.

Developing the location as a green open space and better incorporating it into the city's traffic and streetscape plans fits well within the 22nd/23rd Street Replacement and Crosstown Circle Plan. As discussed in the next chapter, Community, the area around the site is also undergoing a transition as new land uses, businesses, and people move into the area. Developing the site as a community asset could encourage further community involvement and reinvestment.

Chapter 3 - The Community

The site has the potential to be viewed by a number of travelers that pass by on Southwest Boulevard or exit I-35 at a nearby exit ramp. However, it is the people that work and live in the communities around the site that have the greatest potential to impact, interact with, and enjoy the site on a daily basis. Businesses, industry, and homes have existed near the site for over a century, but the composition of these uses has changed over time. This chapter examines the neighborhood boundaries, demographics, and activity levels currently surrounding the site to determine a picture of the community.

Neighborhoods

The site is surrounded by two Kansas City neighborhoods—the Westside neighborhood to the west, and the Crossroads neighborhood to the east. The students spoke with John DeBauche, Lead Planner in Kansas City's Citywide Planning Division, to get a better understanding of the neighborhoods. Currently, the Westside Neighborhood Association boundaries are 12th Street to the north, 31st Street to the south, Kansas City city limits to the west, and Southwest Trafficway/I-35 to the east (Neighborhood Groups, kcmo.org, 2010). Historically, the Westside neighborhood extended toward the east as far as Broadway Boulevard, which would include the project site within its boundaries. The development of the I-35 overpass through Kansas City cut off the approximately three blocks between the overpass and Broadway Boulevard from the rest of the Westside neighborhood, altering the neighborhood's boundaries. I-35 became the new western boundary line for the Crossroads Community Association, whose boundaries extend north to Truman Road, south to the railroad tracks that enter Union Station, west to I-35, and east to Troost Avenue. However, both the Westside and Crossroads neighborhoods have interest in the area between I-35 and Broadway Boulevard, and

the issue of which neighborhood the area really “belongs to” can be contentious. Figure 3.1 shows the Westside neighborhood in blue, the Crossroads neighborhood in yellow, and the altered area in green.

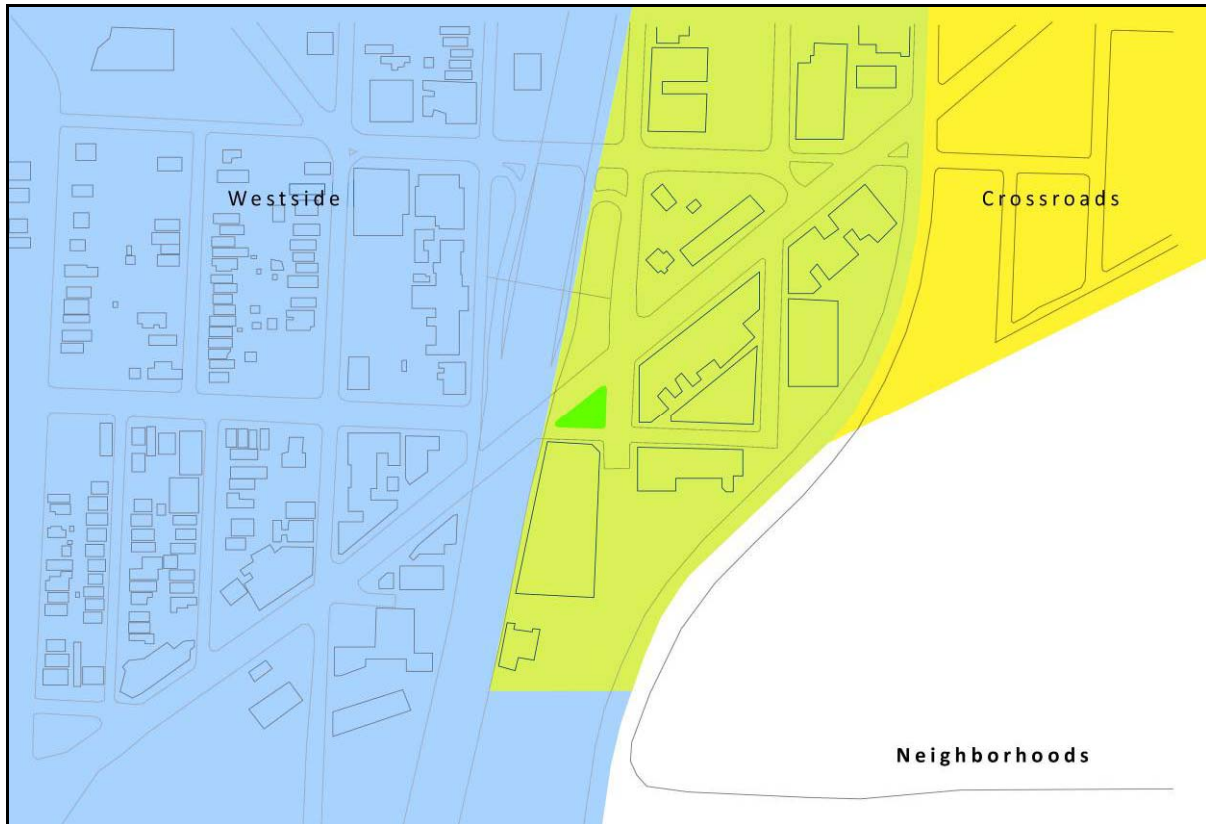


Figure 3.1. The Crossroads and Westside neighborhood boundaries.

Demographics

One of the major differences between the Westside and Crossroads neighborhoods is revealed through demographics. The Westside neighborhood is well-known as a center of Hispanic culture in Kansas City. According to the 2001 Westside Neighborhood Assessment Report from the FOCUS Kansas City Comprehensive Plan, in 2000, 69.5% of residents living in Westside identified themselves as Hispanic through the U.S. Census. This percentage is much higher than the adjacent neighborhoods. Figure 3.2 shows the concentration of Hispanic population in the Westside neighborhood and the lack of Hispanic population to the east in the Crossroads neighborhood.

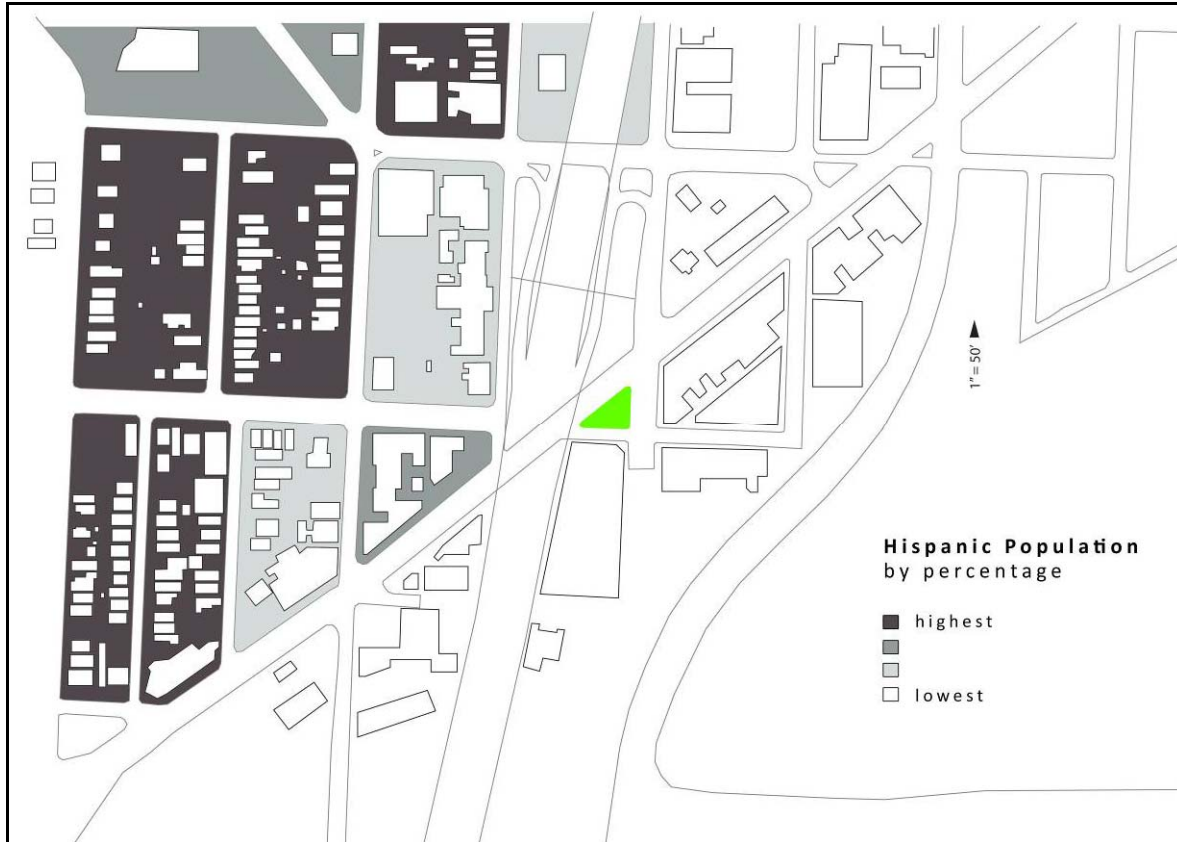


Figure 3.2. 2000 Westside Neighborhood Hispanic population.

Activity

Not only is the proportion of the Hispanic population larger in Westside, but the entire population of residents is larger in Westside than in the Crossroads. The students decided to use information about land uses (residential, commercial, industrial, and so on) and the level of traffic typically generated at each, to determine how much activity could be expected in different parts of the neighborhoods. As seen on the Degrees of Activity map in Figure 3.3, the majority of the Westside neighborhood is made up of residential uses (shown in blue), giving it a higher overall population than the Crossroads. However, a low degree of activity occurs where only residents of a dwelling are coming and going at a property.

Westside is also home to many notable Hispanic resources such as the Dos Mundos bilingual newspaper, the Westside Community Action Center (Westside CAN), the Tony Aguirre Community Center, and a cluster of Mexican and Spanish restaurants located on

Southwest Boulevard. These community centers and restaurants (shown in orange) were considered to generate a high degree of activity.

The small businesses located along Southwest Boulevard and on both sides of I-35 were determined to have the next highest degree of activity. Crossroads is home to a variety of businesses, including architecture firms, photography studios, repair shops, retail, and more.

After residential uses, vacant properties (shown in white), had the lowest degree of activity. Figure 3.3 shows that the high levels of activity occurring at small businesses in the Crossroads are distanced from the activities occurring at the restaurants in Westside by the I-35 overpass, the vacant land of the site, and a large vacant building.



Figure 3.3. Degrees of activity.

Chapter 4 - Design Process

The process to arrive at a finalized design for the site in late April 2010 included a great deal of research, community meetings, and design iterations over the fall and spring semesters. The research specific to the existing site was described above in Chapter 2, The Site. Research was also conducted to identify design interventions that responded to similar sites and issues, which could serve as a precedent to this project. Community input was sought through meetings and design presentations with members of the Westside and Crossroads neighborhoods. As feedback was received from design professionals at studio critiques and from the community members, several iterations of the design took place to arrive at the final result.

Precedent Studies

Precedent studies are often used in design development to determine how other designers have approached a similar problem. In this case, several challenging issues about the site were examined through precedent studies, including how to utilize residual spaces such as traffic medians, how the site can reduce the burden on the storm water system, and how to create a positive space under or near a highway overpass.

Islands of L.A.

“Islands of L.A.” is a social and artistic movement in Los Angeles which seeks to claim residual spaces for community use (Joliet, 2009). Traffic islands are used as gathering places for events such as concerts, tetherball games, picnics, birthday parties, and public discussions. The movement increases awareness of public ownership of the numerous neglected spaces in the city and redefines the islands from “no man’s land” to functional community space. Islands of L.A. inspired the students by demonstrating that a space does not need physical intervention to create opportunities for gathering and community use.

10,000 Rain Gardens

Kansas City is part of a regional “10,000 Rain Gardens” effort to improve storm water management and water quality. Currently, the City of Kansas City, Missouri has a combined storm water and sanitary sewer system in many areas of the city. When a large rain event occurs, storm water can flood the system, causing untreated overflow to be dumped into local

waterways. Kansas City is in the process of studying and updating its sewer systems to meet overflow regulations by the Environmental Protection Agency (EPA), but rain gardens are one tool that can help reduce the amount of storm water flowing into the system (10,000 Rain Gardens, 2010). Rain gardens along streets and in traffic medians can be designed to allow recessed planters to capture rainwater as it runs off sidewalks and roads, filtering the water, cleaning it, and diverting it from the storm sewer system. Rain gardens improve aesthetics and allow for better soil infiltration of storm water runoff. The students felt that the site could be an excellent location for a rain garden based on its topography, existing infrastructure, and the need to reduce impacts on Kansas City's storm sewer system.

Chicano Park

Chicano Park is located in Barrio Logan, a Chicano neighborhood in San Diego, California. The neighborhood was disregarded by city leaders in the 1950s and 1960s when zoning was changed to allow industrial uses to enter the neighborhood and when an eight-lane elevated interstate was routed through the neighborhood. In April 1970, residents discovered bulldozers in the process of building a parking lot for a new Highway Patrol station in an area long planned for a park. Residents staged a 12 day long protest, blocking the bulldozers and planting the beginnings of the park. An agreement was eventually reached with the city to develop the area as a park, and subsequently, neighborhood residents and artists established their cultural heritage through the creation of over 70 murals on the interstate's support beams and structures (San Diego State University, 2010).

The students felt that the story of the overpass built through a Hispanic neighborhood in San Diego had similarities to the development of the I-35 overpass in Kansas City. Although the design developed by the students did incorporate a unique, attention-getting element underneath the overpass, the students chose not to replicate the idea of murals.

Community Input

Input from the community was a crucial part of the design development. The students felt that in order to be considered a success, any design would need to serve community members today and in years to come. The design should address existing problems and encourage positive changes to take place in the future.

The students first met with interested community members in January 2010. Participants at the meeting included Rick Usher, City of Kansas City Downtown Projects Coordinator; Lynda Callon, Director of the Westside CAN Center; Doug Stockman, Crossroads business owner and Westside resident; Suzie Aron, Crossroads business owner; David Morris, Crossroads business owner; Bob Jones, Crossroads business owner; and Chris O'Connor, Crossroads business owner.

The issues described by the community members at the meeting, and subsequent meetings, are described below.

Access

Pedestrian access under the I-35 overpass was the major issue raised at the meetings. Currently the unfriendly atmosphere under the overpass deters pedestrians from venturing back and forth from the Crossroads and Westside neighborhoods. Similarly, the poor conditions of the sidewalks and the lack of marked crosswalks indicate that pedestrian access around the site is not a priority. Finally, during the winter months, ice buildup occurs on the park site and on West 23rd Street due to shadows created by the billboard and overpass, which present further deterrents to accessibility. The community suggested that the design create safe, well-marked sidewalks and walkways across and around the site to encourage walking. The community expressed that the area under the overpass was the most important to address, and would need lighting, shelter, or some other design solution to make walking underneath a more positive experience.

Pigeons

As discussed in Chapter 2, The Site, pigeons present a major problem because they roost under the overpass and leave droppings on the sidewalks, streets, and unlucky pedestrians below. The community relayed the history of attempts that had been made to deal with the pigeons, including investigations into various pigeon-detering devices. In 2009, two air treatment systems had been installed under the overpass that release a “non-toxic mist, fog or scent that irritates birds' trigeminal nerve and mucous membranes through entry in the eyes, nose or mouth” (Bird B Gone, 2010). The mist is unpleasant to the birds and they leave the area. Although limited success had been achieved using the misting systems, the pigeons and their feathers and droppings continued to cause sanitary and aesthetic concerns. The majority of the community members suggested that a more permanent solution be devised for the space under the overpass, although at least one member did not mind the pigeons. The community also

suggested that any structures placed on the park site be designed so as to prevent birds from landing or roosting.

Maintenance

The community representatives discussed how maintenance is currently conducted on the site. Although it is owned by the City, it is not maintained by the City's Parks and Recreation Department. Volunteers mow the grass and pick up trash periodically. For this reason, the community suggested that the design reduce the amount of maintenance that would be required.

Safety

Creating a safe area on the site and under the highway overpass was a concern. Although crime was not perceived as a major issue, some members of the community were concerned about the possibility of undesirable persons, such as the unemployed, homeless, and day laborers, loitering in the park and creating an unsafe feeling.

Some day laborers currently congregate under the overpass across the street from the site. Homeless men can be seen walking along Southwest Boulevard to visit a liquor store southwest of the site. Panhandlers often hold signs asking for money on nearby street corners. Members of community were concerned that these types of people would "take over" the site, preventing others from enjoying the site. Some community representatives were concerned that these persons might sleep on the site if benches or sheltered areas were provided.

Other community representatives expressed the viewpoint that the site should be made available and comfortable to all people. Even less "desirable" persons are members of the community and should have equal access to public spaces.

Parking

Members of the business community discussed the lack of parking in the Crossroads for their workers. Although large parking lots are available under the I-35 overpass, most drivers choose to avoid these lots due to the pigeon droppings that accumulate on parked cars. Community members suggested that additional parking could be added on the site or adjacent to the site on the street.

Enhancing the business environment

The business members felt that the site should be designed to accommodate use at lunch times and work breaks by workers who don't have access to much green space during the day. They suggested the site include places to sit, relax, and eat lunch in the shade in the warmer months of the year. They stated that the site should be easily traversed by business people in dress clothes and dress shoes attempting to cross under the I-35 overpass to visit restaurants on Southwest Boulevard. They felt that the site should enhance nearby storefronts by increasing business visibility, ease of customer access, and general attractiveness of the neighborhood.

Creating a recognizable community "marker"

Throughout the first community meeting, the participants discussed the concept of creating a recognizable, attractive "marker" or symbol of the community on the site. Although no specifics were determined, the participants were interested in a unique design element that would attract the attention of passers-by and that visitors could use to identify the area. The designers discussed different elements that could achieve such an effect, such as community art, a sculptural structure, a unique lighting element, or a design that could serve as an example for other projects throughout the city.

Design Iterations

The students developed the design through multiple iterations and adapted it in response to criticisms from professionals and the community. The students presented major design iterations in December 2009, February 2010, and March 2010; the final design was presented in late April 2010. Each iteration included plans, elevations, sections, diagrams, and perspective views to show the reviewers how the design would work and receive feedback. Selected drawings from iteration are explained below.

December 2009

In December 2009, the students presented the first design iteration at end-of-semester critiques. This design was created prior to meeting with the community representatives in January 2010 and was an attempt to combine the initial research gathered about the site into a conceptual design.

The students used SketchUp modeling software to build the site and the surrounding buildings, streets, highway overpass, and billboard in a three-dimensional computer model. As shown in Figure 4.1, the students used the software to investigate a variety of conceptual divisions of space.

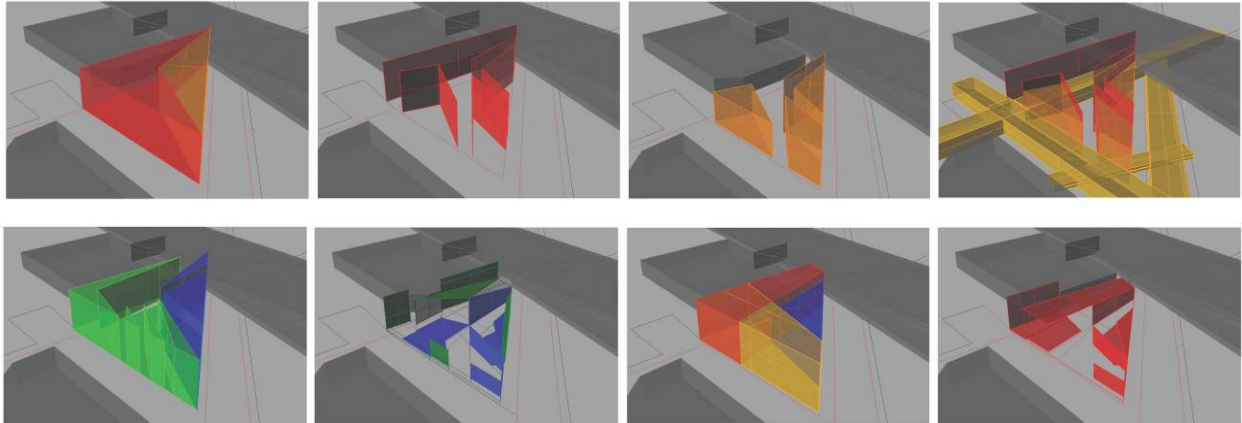


Figure 4.1. Conceptual three-dimensional divisions of space.

The students used these investigations to choose certain pathways and views through the site to keep open and emphasize to drivers passing by on Southwest Boulevard. They also identified certain areas of the site to close off to improve the site’s spatial definition and create a more sheltered space for pedestrians to linger.

During these initial spatial investigations, the students decided that the small section of West 23rd Street directly south of the site, between the median and the large southern building, should be closed to vehicular traffic and incorporated into the site. This change was suggested in the City’s “22nd/23rd Street Replacement and Crosstown Circle Plan” to simplify the traffic in the area. This change would increase the size of the site and provide more space for safe, comfortable pedestrian movement away from traffic on the southern edge of the site.

The site plan for the December 2009 iteration is shown in Figure 4.2. The light gray and dark gray areas represent raised seating areas and paved walkways, respectively. Grass is shown in green. Thin white lines represent walls. The translucent gray area at the south side of the site represents an overhead plane.



Figure 4.2. December 2009 Site Plan.

Figure 4.3 is a perspective view of the site from underneath the I-35 overpass facing east. This view shows the overhead plane and the series of thin vertical structures along Southwest Boulevard. The overhead plane is intended to emphasize the protection of the pedestrian as one moves east-west across the site and under the overpass. The vertical structures are intended to function like louvers, or blinds, that create a unique experience for drivers passing along the edge of the space as they catch glimpses of the activity within. Figure 4.4 is an elevation facing south from Southwest Boulevard which shows the louvers running along the north edge of the site. Figure 4.5 is a rendering of similar perspective as shown in Figure 4.3 which shows possible materials such as vertical green walls, grass, and other conceptually solid or transparent materials.

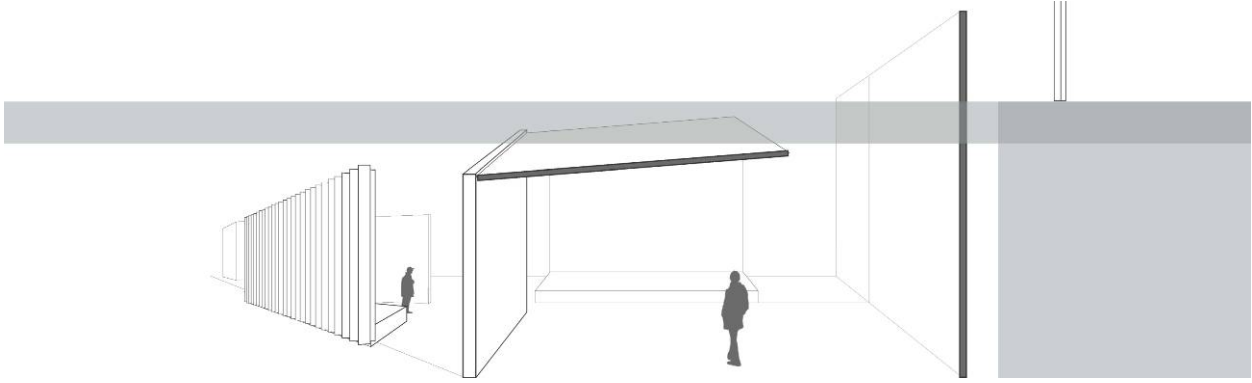


Figure 4.3. December 2009 perspective facing east from under I-35 overpass.

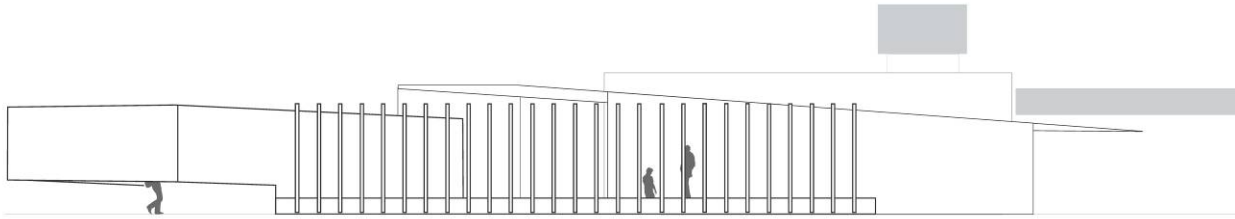


Figure 4.4. December 2009 elevation facing south from Southwest Boulevard.



Figure 4.5. December 2009 rendering facing east from under I-35 overpass.

February 2010

The next presentation and design critique took place in February 2010. Having received largely positive feedback about the concepts and analysis employed in the first iteration of the design, the students attempted to combine the previously disparate elements of that design—louvers along the front of the site, raised areas for seating, and an overhead plane—into a more connected, simplified structure that encompassed the entire site.

This design iteration also focused on responding to community's statements at the January 2010 meeting. The community had expressed interest in highly-visible "marker" for the site. The community's focus on the pedestrian experience also led the students to focus more on protecting and defining the space for pedestrians and reduced the focus on providing a changeable "pass-by" experience for drivers.

Figure 4.6 shows the February 2010 site plan. The design combined the previously separate structural elements into one folding "ribbon-like" structure that twists, turns, and changes heights. The structure begins under the overpass as an overhead plane to protect pedestrians from the pigeon droppings in that area. The structure folds down to provide a wall-like shelter between the site and the traffic on Southwest Boulevard. At the northeast corner of the site, the structure turns upward to capture the attention of drivers along the Boulevard, arches toward the south over the site, and returns to the ground plane. Figures 4.7 and 4.8 illustrate two views of the structure's twists and turns.

The students felt that the structure need not be any one material, but could transform to serve different needs in different areas of the site, such as a solid plane in areas that need protection, a transparent or permeable plane in areas where visibility is important, or a wire or mesh structure that could be a framework for vegetation or art. Figure 4.9, a rendering from the perspective of a pedestrian on the site, shows the conceptual arching ribbon defining the space while the rest of the site is left open for flexible use by individuals, group gatherings, or art displays.

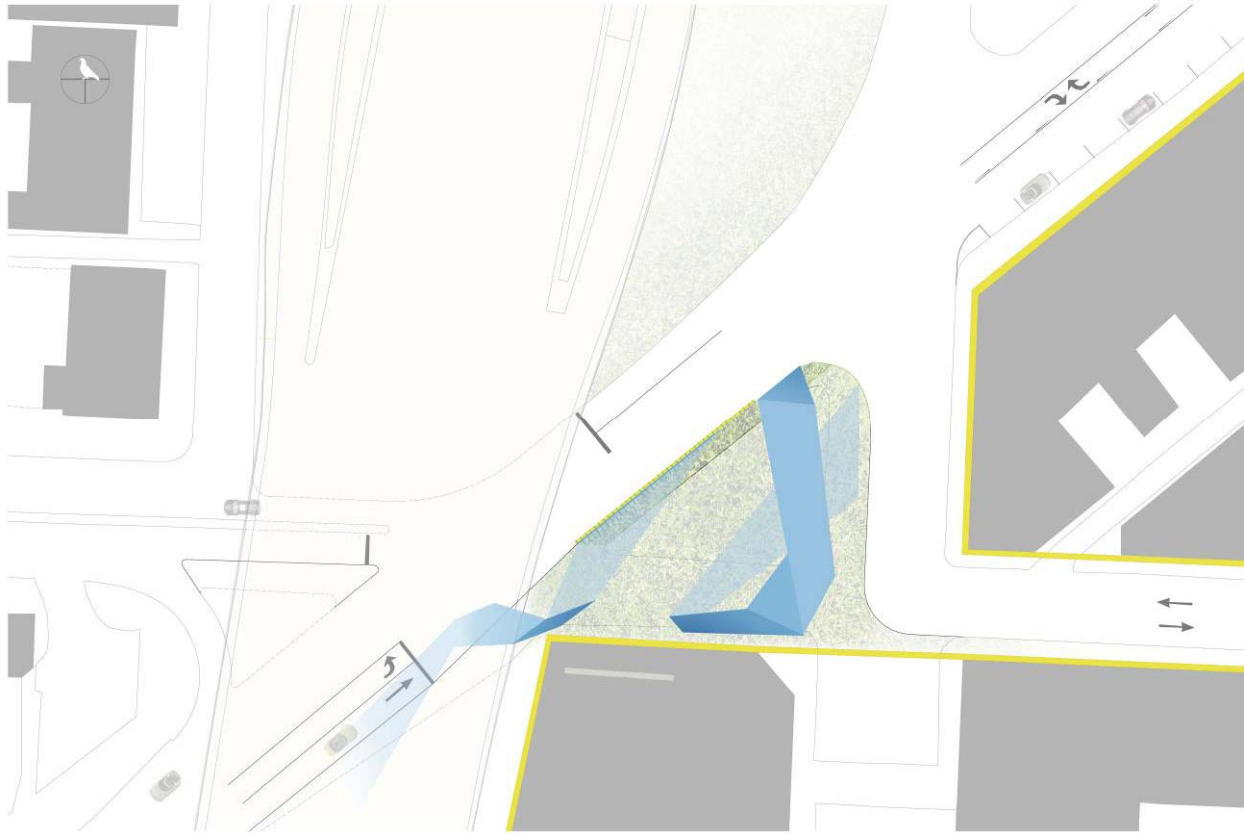


Figure 4.6. February 2010 Site Plan.

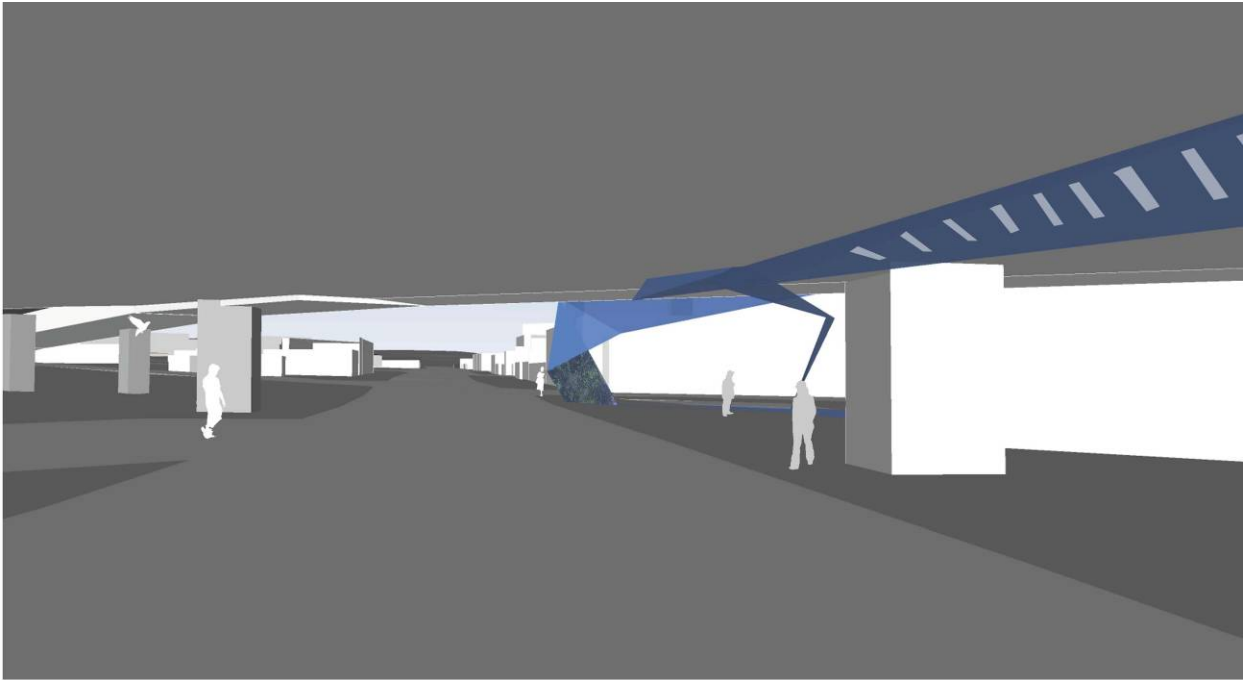


Figure 4.7. February 2010 rendering facing east from under I-35 overpass.

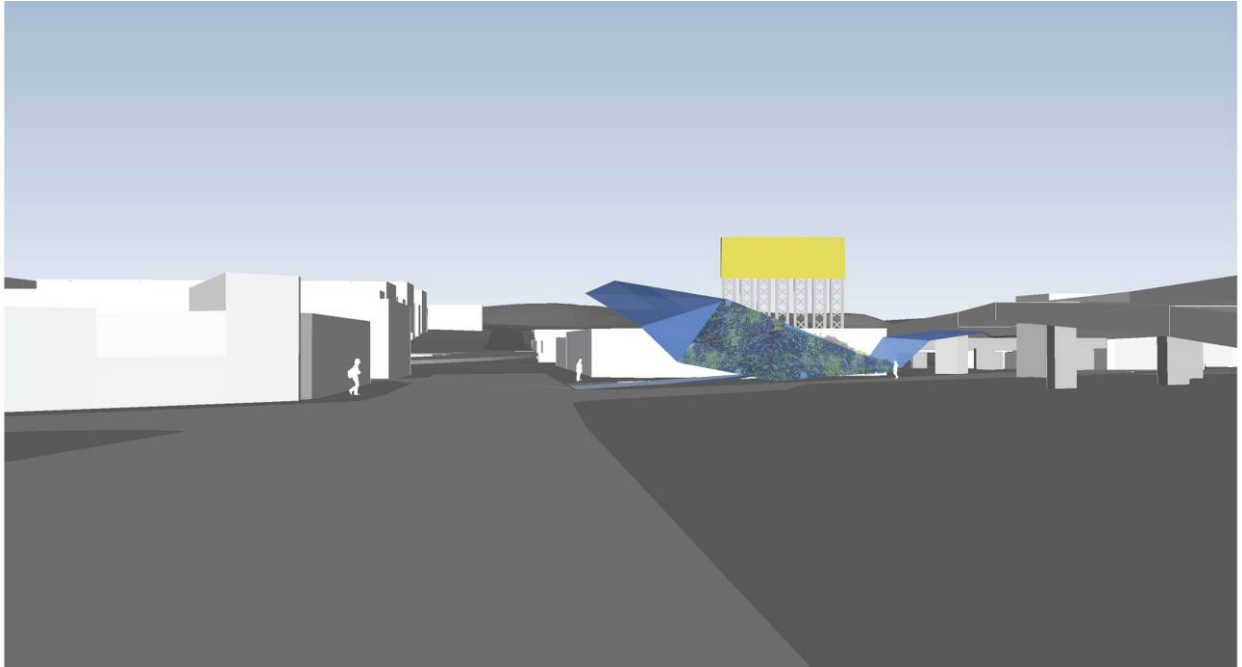


Figure 4.8. February 2010 rendering facing south from Southwest Boulevard.



Figure 4.9. February 2010 rendering on site facing east.

March 2010

The March 2010 design iteration was a response to the feedback received at the February 2010 critique. In February, reviewers had stated that the structure seemed overdone and could be simplified to serve the purposes of protection under the overpass and protection from traffic on Southwest Boulevard. The February 2010 reviewers also asked the students to reconsider what types of uses they planned for site, as the ideas of art displays and group gatherings were not well-defined in the presentation.

The March 2010 site plan, shown in Figure 4.10, is an attempt to reduce the scale of the structures and remove extraneous elements, while focusing on maintaining a protected, defined space. The structures maintained on the site in this iteration are the overhead plane under the highway overpass, referred to as the “canopy,” and the protective structure along Southwest Boulevard, referred to as the “wall.” The students decided that these elements would be simplified to create one long, defining line across the front of the site to recognize and encourage the linear pedestrian movement already taking place along Southwest Boulevard.

The concept for the “wall” structure is shown in Figure 4.11. Similar to the “ribbon” structure in the previous iteration, the students envisioned that the wall’s materiality would respond to different conditions along Southwest Boulevard.

Figure 4.12 illustrates the entire extent of the canopy and wall along Southwest Boulevard. This design attempts to provide additional details about the design of the canopy and how it would interact with the structure of the overpass.

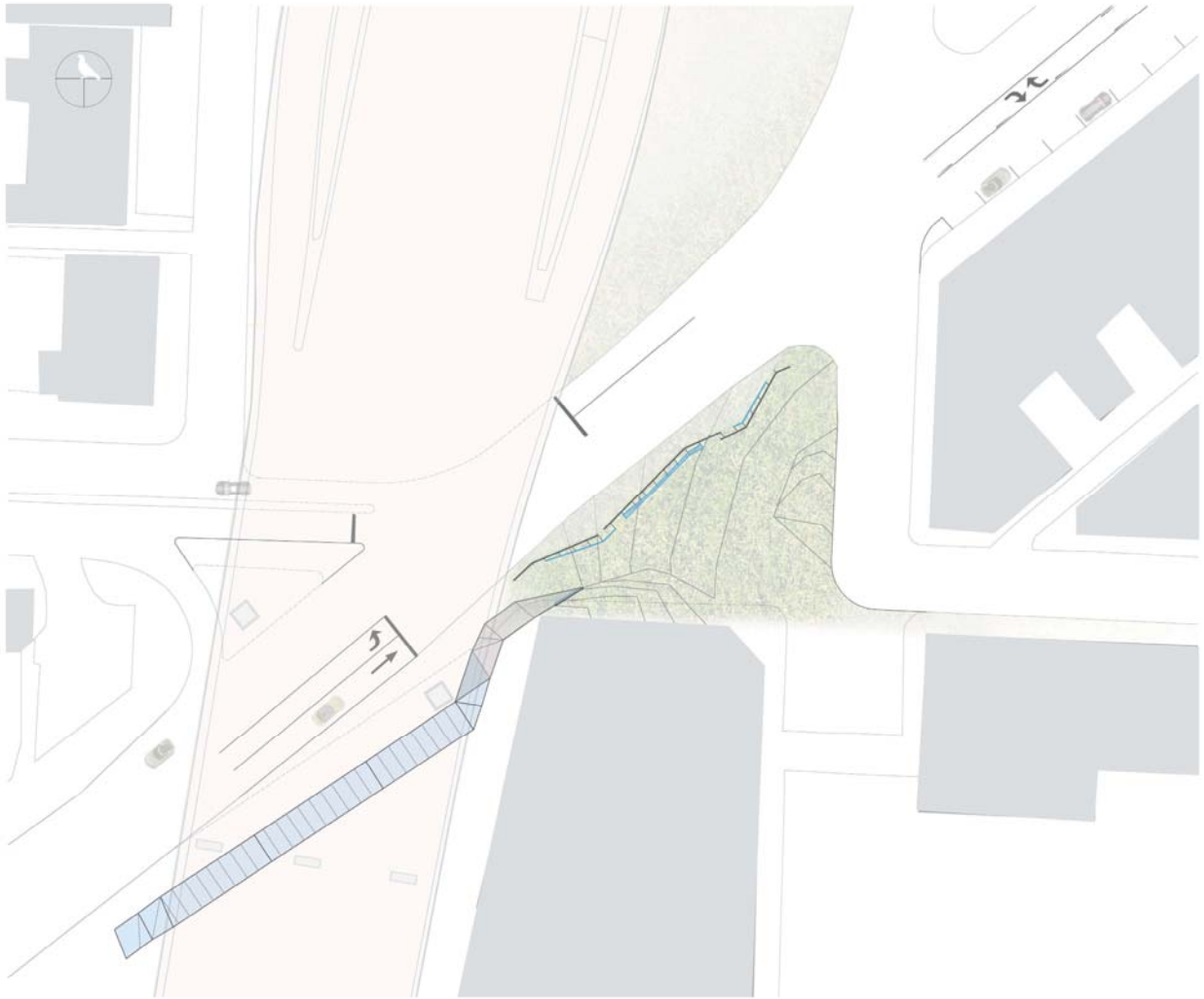


Figure 4.10. March 2010 Site Plan.

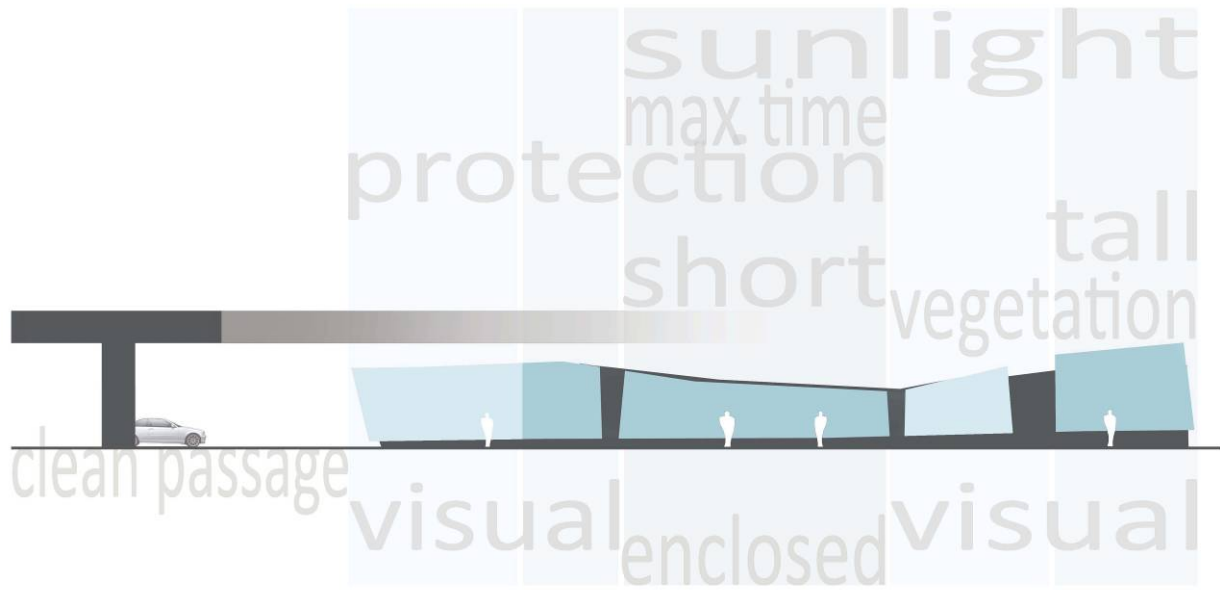


Figure 4.11. March 2010 protective “wall” structure.

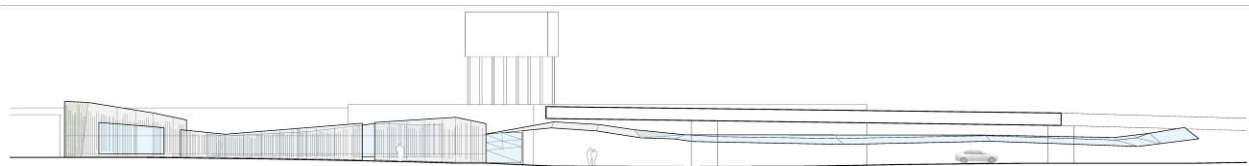


Figure 4.12. March 2010 elevation on wall and canopy structure facing south.

Chapter 5 - Finalized Design

The final design was presented in late April 2010. The students prepared a presentation, new drawings and renderings, and a large-scale model. This chapter discusses the final efforts made to solidify the concept guiding the design and the structural elements that were created to fulfill that concept.

Concept

Following the March 2010 critiques, the students had approximately five weeks to finalize a design concept and create models and drawings to convey their ideas. The feedback received at the March was crucial to developing this final design. At that time, the reviewers did not feel that the “wall” proposed for the front edge of the site was appropriate because it created an additional physical and psychological barrier between the site and potential users. They felt that the wall merely provided additional landing spots for pigeons, places for a dangerous person to hide and perpetrate attacks on passers-by, and an invitation for graffiti. They also felt that the rest of the site was lacking development, as it had been depicted as a simple open, grassy space.

After working through several iterations and gaining this crucial feedback, the students identified the major concept that would guide the overall design—Connection.

The students loosely defined “connection” as the ability of persons to interact with the city, with the site, and with one another. The students felt that the existing site discouraged connection by reducing the ability and desire of persons to cross the site or linger in the space. Although the students had realized since the first iteration that possibilities for connection were lacking, many of the initial design attempts actually reduced the chances of connection rather than encouraging it. The students struggled to balance the need for unobstructed sightlines for safety and also provide space-defining structures and protection for pedestrians from the unfriendly traffic passing by on the street.

Students also struggled to decide whether the experience of “connection” was more or less important to the auto user passing by the site or the pedestrian walking through and inhabiting the site. In the final design, the students decided that the pedestrian experience would provide a more direct improvement to the daily lives of the local community members, and the pedestrian experience became a major focus of the design.

The students focused on how pedestrians would likely use the site—walking across to get to another location, and staying on the site to enjoy the space. “Walkability” was a term used to describe how pedestrian circulation routes should be enhanced across the site and under the I-35 overpass—connecting people to the site and points in the city. “Stayability” was used to describe how pedestrians should be able to enjoy a comfortable and well-defined site in what was formerly a “no man’s land”—connecting people to the site, and potentially, each other.

Elements

Following feedback, the students envisioned a design of minimal intervention to address the needs of walkability and stayability. The final design incorporates three major horizontal planar elements—the Canopy, the Walking Path, and the Deck. These elements react to one another by slipping and folding around each other, sloping up and floating above the ground plane, and creating opportunities for green spaces to flourish.

These three elements begin with the canopy suspended beneath the I-35 overpass. The canopy provides shelter and lighting for circulation across a very inhospitable area. Where the canopy emerges from under the I-35 overpass, the walking path continues its strong linear presence along the front of the site.

The walking path extends the entire length of the site along Southwest Boulevard. The path rises above street level in one area to create a protected, raised walkway that provides a safe and experiential journey for pedestrians. Rain collection is drawn underneath the walkway into the site to create a low-maintenance, visually striking rain garden at the southwest corner of the site.

The third element, a wooden deck, abuts the walking path to create a defined edge to the northeast corner of the site. The deck visually floats over the ground plane, which transitions from hard paving for on-street parking stalls to soft grass at the interior of the site. The deck provides an optimal location for seating under shade trees in the summer. The deck’s sloping design is intended to visually disappear into the ground and reemerge at the southeast corner to define that entrance to the site and create a secondary seating element.

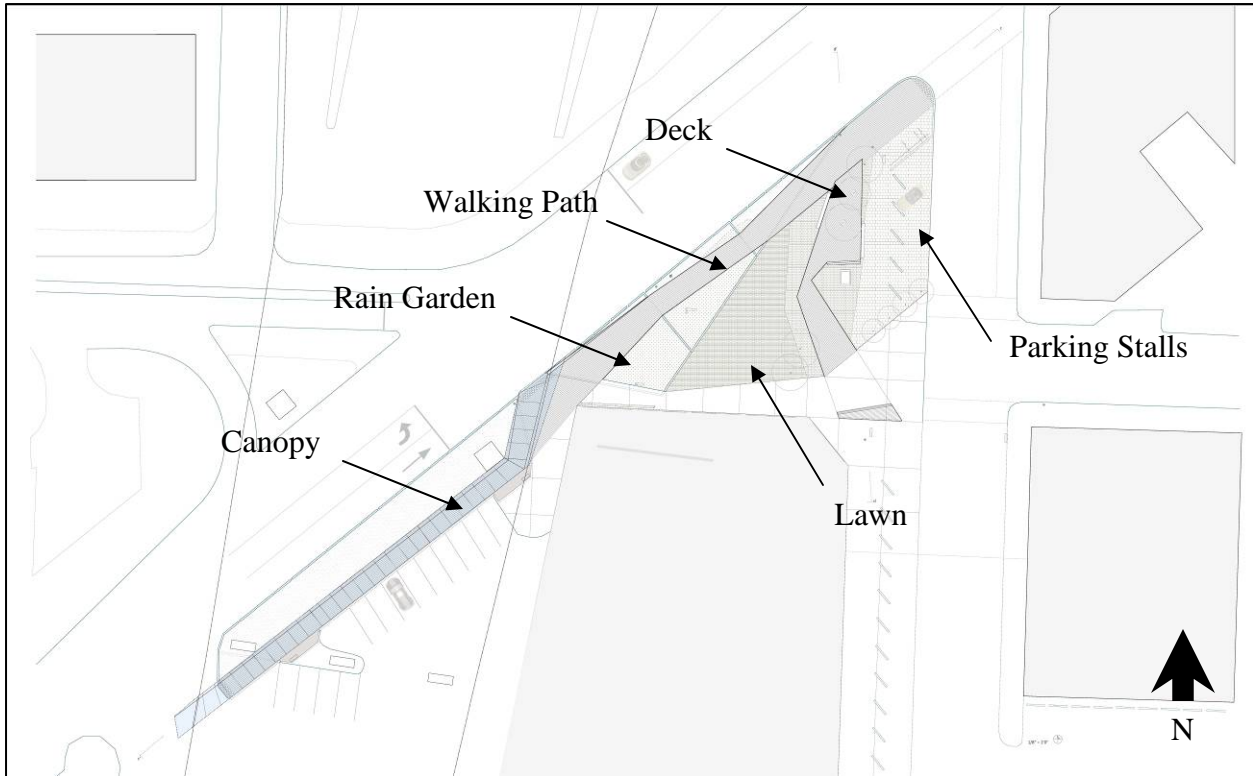


Figure 5.1. Final design site plan.

Canopy

The space beneath the I-35 overpass was the greatest community concern. As discussed earlier in this report, pigeons roosting under the overpass and leaving behind droppings has been a continuing source of sanitary and aesthetic problems in recent years.

The students decided a pedestrian passageway beneath the overpass was extremely important to the success of the project. To develop the location and design for the canopy, the students visited the site numerous times to determine areas of greatest need. The students found that the buildup of droppings is located predominately around the large concrete columns that support the overpass and under the high metal beams that run the outer length of the overpass, as shown in Figure 5.2. These locations provide the best ledges for pigeons to land.

The students wanted to provide as much shelter as possible, but knew that the best solution would minimize cost and materials. The focus for the canopy was to maintain one safe, clean pedestrian passage from east to west. As shown in Figure 5.2, the students selected the pedestrian passageway along Southwest Boulevard to install the canopy. Although this is not the shortest route underneath the overpass, the students observed that it is already one of the more

heavily trafficked east-west pedestrian routes and will not require pedestrians to cross any traffic intersections if West 23rd Street is incorporated into the park.



Figure 5.2. Pigeon droppings pattern and proposed canopy location.

The canopy is designed as a metal structure covered with a PVC Teflon-coated tensile fabric and suspended from the existing overpass with suspension cable and bolted connections. The canopy covers a nine foot wide walkway and is tilted so that birds will be challenged to land on the structure and droppings will slide off. A section of the suspended canopy is shown in Figure 5.3.

The students spoke with a representative from the Missouri Department of Transportation to discuss attaching the canopy to the underside of the overpass. Suspending the canopy from above avoids the need for additional support columns underneath. MODOT approved of the choice of tensile fabric, an extremely light and rigid material, to reduce the stress on the overpass as much as possible. The tensile fabric material was selected after meeting with a representative from a company that designs and installs a variety of tensile fabric canopies. The material is durable, antimicrobial, and able to withstand bird droppings, pollution, and rainwater. The canopy was designed so that the fabric fully encases the metal structure, preventing birds from clinging to the structure and roosting there. MODOT helped determine the installation height of the canopy at approximately ten feet above ground level, rather than closer to the overpass support beams, which will allow for regular visual inspections of the underside of the overpass. MODOT also inspired the students to divide the 180 foot length of the canopy into 24 foot segments that could be removed, repaired, or relocated when the overpass undergoes maintenance.

As shown in Figure 5.4, the canopy is intended to provide a seamless passageway under the overpass and onto the park site, encouraging use by pedestrians. Lighting is applied from below to wash the underside of the canopy with an ambient glow, as shown in Figure 5.5. The students felt that the lighting treatment would not only increase the brightness and safety under the overpass, but become an eye-catching, unique element that could serve as the neighborhood “marker” in which the community had expressed interest.

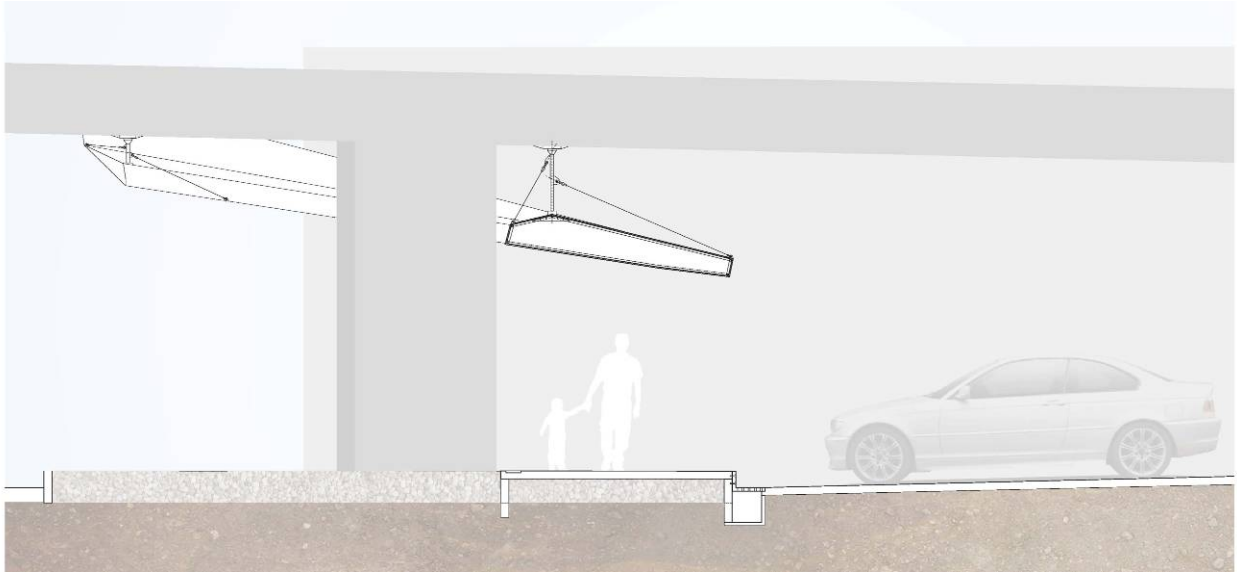


Figure 5.3. Canopy section.



Figure 5.4. Rendering of canopy facing northeast.



Figure 5.5. Rendering of illuminated canopy at night.

Walking Path

As shown in Figures 5.4 and 5.5, the walking path along Southwest Boulevard continues the pedestrian circulation route from underneath the overpass along the front of the site. The students decided that the walking path could serve to define and separate the pedestrian realm from the auto traffic on Southwest Boulevard without the need for a vertical visual barrier, as the unsuccessful “wall” in the March 2010 iteration had done. The walking path was designed to rise slightly above street level at the intersection of Southwest Boulevard and W 23rd Street, giving prominence to the presence of pedestrians, rather than vehicles, at this area of converging auto traffic. As this intersection, a low, curving wall also extends vertically to waist-height to provide a further sense of protection and separation between the pedestrian and the nearby cars. Lighting is also incorporated into the path to create a continuous glowing path underneath the canopy and along the site, as illustrated in Figure 5.5.

As shown in Figure 5.6, the raised walking path also allows storm water runoff to enter the site from the street. The site lies in a low point and adjacent land drains toward its southwest corner. By using a raised walkway and highly permeable curb, rain water can be captured to support a rain garden and water is diverted from the city's aging storm water system. Once established, a rain garden provides a low-maintenance, low cost area of vegetation. The entire site, including the walking path and rain garden, are shown in the rendering in Figure 5.7.

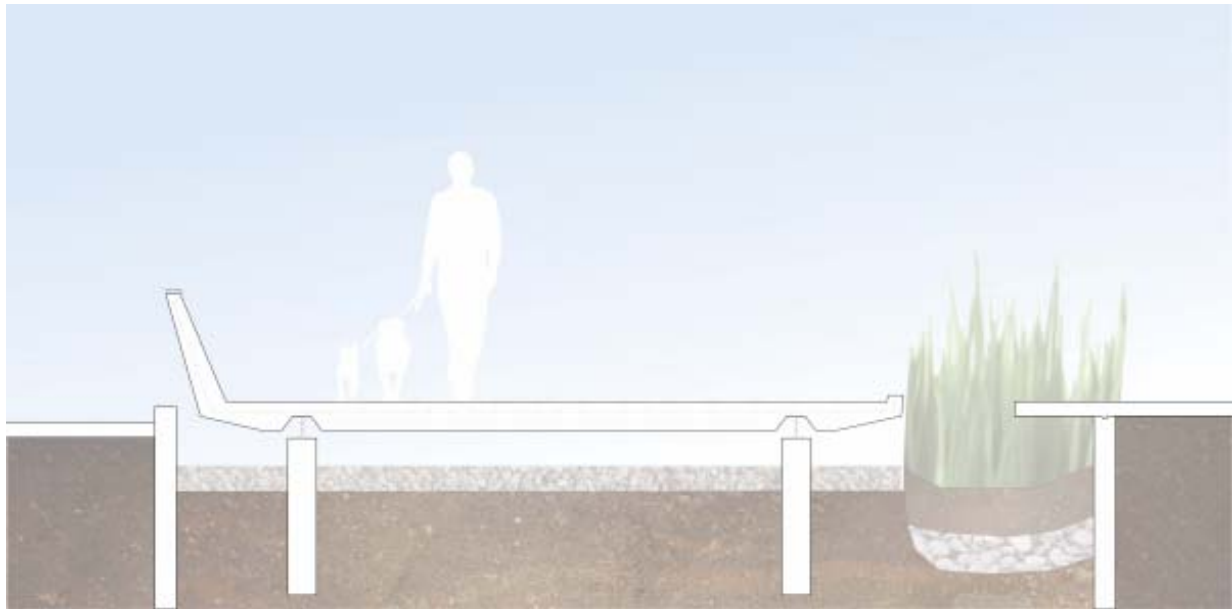


Figure 5.6. Section of the raised walking path and rain garden.



Figure 5.7. Rendering of site facing southwest.

Deck

While the canopy and the walking path work to achieve walkability, the deck and the remainder of the site focus on creating reasons for people to stay. During community stakeholder meetings, participants expressed interest in an easily accessible space that allowed them to get out of the office, eat lunch, people watch, and enjoy some sunshine.

The southeast corner of the site is the most appealing place for visitors to sit and stay. It is a good distance from the busy traffic on Southwest Boulevard and the unpleasant shadows and smells of the highway overpass. It also receives the most sunlight year round.

The students sought to build upon these assets to make the area as appealing as possible for visitors to linger. They decided to elevate this space slightly by providing a platform—a deck—for visitors to rest on while at the same time defining the east edge of the site. Like the

canopy and walking path structures, the platform was designed as a horizontal planar element that folds and changes to address different conditions on different areas of the site.

At the northeast corner of the site, the deck is raised several feet off the ground to define that edge, mark it as an entry to the park, and allow for a seating ledge. Reacting to a large existing transformer box that would be costly to relocate, the deck angles and turns to provide the required clearance around the sides of the box and screen it from view. As the deck moves from north to south, it slopes gently toward the ground, seemingly disappearing and reemerging as a seating element in the southeast corner of the site. Where the deck “disappears,” a circulation path is defined from east to west to allow pedestrians to cross through the park from businesses in the Crossroads to restaurants in Westside. The deck is illustrated in Figure 5.8.

After considering a number of materials for the deck, the students chose Ipe, a Brazilian walnut wood known to be strong and durable. Ipe is also low-maintenance, can be allowed to weather naturally, and does not need to be stained and sealed periodically like many woods.

Several trees were placed in and around the deck to further establish the east edge of the site and provide shade for visitors. Trees were selected with canopy sizes to shade the deck and the five diagonal parking spaces east of the deck. Trees that bloom with fragrant flowers were selected to combat the unpleasant odors of the highway overpass. Trees that produce little or no fruits or seed were specifically chosen to reduce litter and avoid attracting birds.

Future Potential

The remainder of the site is designed to provide flexible opportunities for use now and in the future. The south area of the site is left open as a paved circulation route for east-west foot traffic. This area anticipates a possible re-activation of the vacant southern warehouse building. The building has three historic storefront entrances that would face onto this paved “plaza” area if reopened. The students felt that the park space could be an amenity to a business located in this building by providing an attractive entrance and usable space for outdoor restaurant or café seating. To further encourage the development of businesses in this building, five new diagonal on-street parking spaces and a bike rack were included for greater accessibility.



Figure 5.8. Rendering of deck facing southeast.

Chapter 6 - Evaluation

After presenting the final concept and design drawings in late April 2010, the students received positive feedback from the design professionals and community members in attendance. This chapter evaluates the design for its ability to serve as a public social space as described in research by William H. Whyte. The chapter also considers to what extent the students created a design solution that met the requests of the community stakeholders.

Design as a Public Social Space

Urban public spaces are the focus of William H. Whyte's 1980 classic "The Social Life of Small Urban Spaces." Whyte and his research team began studying public spaces such as streets, shopping malls, playgrounds, and more as part of The Street Life Project in 1974. The text is the culmination of that research and describes design considerations for crafting a quality public space that can attract and retain passersby, thereby creating a public social gathering space.

Seating

Whyte discusses in Chapter 2, *Sitting Space*, that seating is a crucial part of a park design which encourages people to stay and use a space. Whyte states that choices in seating are important; a variety of seating options are better than one type and location of seating, and seating should be incorporated into necessary features like ledges, rather than tacked on as an afterthought. Seating height can vary widely, but seating depth should not be too narrow. Corners are excellent spots for groups to congregate to face one another.

In the students' design, the seating space is largely created by the deck element. Seating is available all the way around the perimeter of the main deck, and on the small portion of the deck in the southeast corner of the site. Seating is provided at a variety of heights and all seating provides sufficient depth. Unfortunately, the only inward-facing corner that would promote face-to-face conversation is the niche that surrounds the transformer box, and it was not intended to serve as such.

Whyte also discusses the benefits of moveable chairs on a plaza space. The students did not include moveable chairs in the design as there is currently no mechanism in place to stack and store the chairs at night, or otherwise ensure that the chairs are not stolen. The site was

designed to allow for a future restaurant or café to provide such moveable chairs if they so choose along the southern paved area of the site.

Sun, Wind, Trees, Water

Whyte states in Chapter 3 that access to sun is one of the most essential aspects of a successful gathering space. This is important to the proposed design, which must take into account shadows from the highway overpass and the large billboard on the southern building. The deck seating area was placed in the sunniest area of the site, and as suggested by Whyte, trees are grouped with this seating to provide a sheltered, shaded space for sitters.

Wind was not specifically addressed by the designers, but the site is sheltered on two sides by nearby buildings, and the community's desire for an open, visible site would preclude any additional windbreak structures.

Water is included on the site in the form of water collection for the rain garden; however this water would simply be infiltrated into the soil and would not likely produce the enjoyable sounds and possibilities for splashing described by Whyte. Although Whyte describes fountains and pools as an excellent addition to a public space, the students felt that a fountain would more likely pose an ongoing maintenance problem.

Undesirable Users

As discussed in the report, some members of the community were concerned that undesirable users such as day laborers and the homeless would inhabit the park and take to sleeping there. Whyte discusses in Chapter 4, The 'Undesirables', that public spaces should be designed to attract everyone, rather than designed to keep people out. Crowded spaces are the least likely to appeal to someone looking for an empty space to rest or sleep. The students sought to encourage the maximum amount of "eyes" on the space by providing inviting seating, allowing unobstructed views into the park, and encouraging the growth of existing businesses and facilitating new uses in vacant buildings. The success of the design at attracting users, and thus keeping the fears of undesirable users at bay, remains to be seen.

Design as a Community Solution

The issues expressed by the community at the initial January 2010 were addressed by the designers, but solutions to some problems were provided more successfully than others. This

section contains an overview of the community's major concerns and discusses the extent to which the design provided a solution.

Access

Pedestrian access under the I-35 overpass and across street intersections was a major community concern. The design addressed access under I-35 by creating the canopy structure to provide one passageway protected from pigeon droppings. The design simplified pedestrian crossings at the intersection of Southwest Boulevard and West 23rd Street by changing a confusing one-way street into a vehicle-free pedestrian area. Overall, these changes would likely make pedestrian travel easier, safer, and more attractive to local residents.

Community members pointed out that one downside to this design was the loss of 23rd Street as a way to quickly access certain businesses in the Crossroads by auto. The students felt that the pedestrian benefits outweighed this concern, although they recognized that vehicles traveling east on 23rd Street would need to make two extra turns to travel around the site and into the Crossroads.

Pigeons

The community members' concern regarding pigeons was the same as expressed above regarding access—safe, clean passageway under the overpass was needed. The community also stated that any structures placed on the park site should be designed so as to prevent birds from landing or roosting.

Although the design solution under the overpass does provide protection from bird droppings along a nine foot wide path, the solution will not eliminate the presence of pigeons and their droppings immediately surrounding the pathway. The design solution could have investigated additional methods of pigeon removal or worked more closely with staff from MODOT and the City of Kansas City, Missouri, to address the pigeon issue.

The design of the park space, consisting of low, horizontal elements, would not be an attractive roost for pigeons. However, the added trees, despite the selection of tree species that do not drop fruit or seeds, could attract pigeons or other types of birds.

Maintenance

The community had requested several times that the design reduce the amount of maintenance work needed on the site. The design attempts to meet that goal by reducing the amount of grass on the site that would need to be mowed. This was achieved by increasing the amount of paved space and balancing that area with a large, low maintenance rain garden and low maintenance tree species. The materials for the deck and the walking path were selected to be durable and require no ongoing upkeep. Some areas of the site would need periodic attention, however. There is an area of lawn in the center of the site that would require mowing. Reviewers stated that the rain garden and area under the walking path have the potential to collect debris and trash, and would need to be cleaned from time to time.

Safety

Safety was a concern due to the types of “undesirable” users that might inhabit the park and intimidate other users. The design was created to allow all types of people a place to sit and enjoy the space. The students did not feel that seating should be limited or removed to discourage one group of potential users at the detriment to all users.

The students did attempt to reduce the number of “hiding places” shielded from the weather elements that would encourage use of the park as a sleeping space. However, the area around the transformer box and deck does provide a niche sheltered from traffic that could be used in such a manner.

Parking

Community members requested that additional parking be added on the site due to a lack of parking for business people and their clients. The students included five diagonal parking stalls along the east edge of the site, and maintained the parallel parking stalls on the opposite side of West Pennsylvania Avenue. The net increase in parking was only two stalls because three parallel parking stalls had already existed in this area.

The students felt that the addition of the canopy and the lighting under the highway overpass might also encourage drivers to park in the large parking lots under the overpass, but this may be an overly-optimistic assumption.

Creating a recognizable community “marker”

The community participants had initially discussed the concept of creating a recognizable, attractive “marker” or symbol of the community on the site. Although the first few design iterations included large, bold structures, the students received feedback that these designs were not what the community was looking for. The students significantly reduced the size and height of the structures in favor of minimal, horizontal elements that met the basic needs of shelter, seating, and circulation. Through these changes, the site became less recognizable and attention-grabbing to passers-by.

The most unique element that remained was the illuminated canopy. The students felt that the canopy provided a good compromise between a highly necessary intervention and a recognizable, unique symbol of the area.

Chapter 7 - Conclusion

Process

As described, the students worked through a lengthy research and design process. To improve this process on other similar projects, meeting with the community as soon as possible to identify their needs and desires is of primary importance. In this case, the students did not meet with the community until after the first design iteration, which required them to discard some areas of research and refocus their efforts.

The process could have been further improved through greater contact with stakeholders such as the City, MODOT, the Parks and Recreation Department, and other government entities that already had a history with the site and plans for its future. Although such plans were largely incorporated into the final design, working more closely with these groups could have provided a more realistic picture of the site's possibilities and challenges.

Finally, more frequent, focused feedback from the community could have reduced the number of vastly different iterations the students produced and subsequently revised to meet the community's needs. Although the students received a multitude of feedback from design professionals, the variety and amount of this feedback did not always result in clear, helpful advice. Speaking directly to community members who would be working and living near the space each day offered the students the real-world perspective to scale back unnecessary and unimportant design elements.

Design

This report considered the elements of human comfort necessary to create a social urban space, as well as the community's desires for the space, in Chapter 6, Evaluation. Among the elements discussed as important to a social urban space, the design provides an adequate amount of seating and trees, capitalizes on the available sun, and avoids the addition of fountains due to maintenance concerns. Shelter from wind was not determined to be a major concern.

In terms of the community's desires, this report determined that the design did satisfy the community's desire for clean, safe pedestrian passage under the I-35 overpass and did create a recognizable community "marker" in the unique illuminated canopy element. The design did not

provide an entirely maintenance-free solution, as it is impossible to prevent litter from being left on the site and vegetation from needing care. Although parking spaces were incorporated into the design, parking was not notably improved or increased.

The presence of “undesirable” users was a conflicting issue among community members. The concern was addressed through design to mitigate the possible use of the site as a sleeping area, although areas still exist that could potentially provide for such use.

Additionally, the ability of the design to consistently attract and retain “desirable” users has not been proven. Although the site does provide human comfort amenities to encourage visitors to linger, increased activity levels near the site—through foot traffic to new and growing businesses—may be necessary to sustain activity on the site throughout the day. Although the space is designed to encourage business growth in the surrounding buildings, such developments remain uncertain. Therefore it is still a possibility that “undesirable” users could become the prominent users of the site at the expense of others.

The design offers a highly individualized approach to the unique opportunities and challenges of the Triangle Park site. It provides a solution for the major community concern of access under the I-35 overpass. The resulting use of the site by certain groups cannot be predicted or controlled. Overall, the space has the potential to become an enlivened, safe, and attractive community space with expected community involvement, but such activity cannot be ensured.

Triangle Park: An Experience

At the conclusion of the academic year in the spring of 2010, the students’ involvement in the Triangle Park project came to a close. Throughout the process, the students learned how to approach a real-world problem rather than a classroom exercise. By seeing how the design would affect daily lives, the site became that much more complex and important to the students.

The Triangle Park project was unique at the Kansas City Design Center because community contacts that had professional and personal interest in the Triangle Park location helped identify the specific project site and coordinate meetings to gather community input. In contrast to other student groups who did not work as closely with community organizations to receive feedback on their designs, the Triangle Park group felt that the community input increased their challenges yet was one of their most valuable learning opportunities. It forced the

students to address all aspects of the park rather than glossing over or minimizing difficult areas of the design. Community stakeholders and local design professionals provided feedback that kept the students accountable to realistic practicalities and conceptual design ideals.

The stakeholder process also required the Triangle Park group to improve their communication skills. Additional meetings sharpened how they described their concept and how they presented it to different audiences. This had a profound impact on how the design was perceived. The more the design group was able to define their ideas and clarify them in a well-communicated presentation, the better the result of the critique and the more helpful the feedback. The students felt that this prepared them well for futures working in fields like design and planning where communication and collaboration are essential.

As a planning student working with three design students, I learned that design requires a great deal of imagination but is also grounded in the realities of the site. I was pleased to find that the best outcomes in our group's presentations resulted from careful consideration of information gathered about the park and from the stated opinions of community members. It was gratifying to see how well the design professionals who critiqued the final project responded to concrete observations and our simplified, minimal-intervention solutions. Also as a planner, my first instinct was craft a simple, long-term solution that met the basic requests of the community. However, more consideration of the project and its possibilities encouraged me to think beyond basic needs and see how the site could be transformed into a compelling, experiential place.

This project made me realize that when designers, planners, and the community work together, they can create unique design solutions that balance basic needs and desirable amenities—but not without a great deal of time, effort, and communication. In the case of the Triangle Park collaboration, the student designers were willing to redesign as many times as necessary and did not come into the project with preconceived ideas or egos. The community was very familiar with the site but did not initially have grand aspirations for what it could become. The combination of these groups resulted in positive interaction that achieved three of the Kansas City Design Center's major goals: facilitating professional education in design and planning, addressing urban design possibilities to strengthen Kansas City's public realm, and providing outreach to the community.

I am proud to say I was a member of the 2009-2010 Kansas City Design Center class. As a planning student with a limited design background prior to the experience, and some initial

struggles with the studio projects, I felt that I learned a great deal about the design field and how to approach future design projects. I greatly enjoyed working with my group members, who were excellent design collaborators and teachers. I believe that creating a multi-disciplinary environment with students from different academic majors greatly benefitted me personally by allowing me to work with and learn from students with a strong understanding of design principles. I believe I was also able to bring the principles of planning to the project and educate my group members about how city plans, regulations, and community and government organizations all play a role in achieving a final outcome. I hope my positive experience at the Kansas City Design Center and with the Triangle Park design process supports continued multi-disciplinary work and community interaction at Kansas State University.

References

- 10,000 Rain Gardens. (2010). *Frequently asked questions*. Retrieved from <http://www.rainkc.com>
- Bird B Gone. (2010). *Air treatment systems*. Retrieved from <http://www.birdbgone.com/products/bird-misting-systems/>
- City of Kansas City, Missouri. (2005). *22nd/23rd street replacement and crosstown circle plan*. Retrieved from <http://www.kcresearch.org>.
- City of Kansas City, Missouri. (2010). *Neighborhood groups*. Retrieved from <http://webfusion.kcmo.org/coldfusionapps/neighborhood/groups/search.cfm>
- City of Kansas City, Missouri. (2001). 2001 Westside Neighborhood Assessment Report. Retrieved from <http://www.kcmo.org/idc/groups/cityplanningplanningdiv/documents/cityplanninganddevelopment/018934.pdf>
- Kansas City Design Center. (2009). *Kansas city design center – promoting excellence through civic design*. Retrieved from <http://www.kcdesigncenter.org/>
- Joliet, L. (2009). *Islands of L.A.* Retrieved from <http://www.dwell.com/articles/islands-of-la.html>
- Missouri Valley Special Collections. (2009). *Sanborn fire insurance maps, Kansas City, Missouri, 1895-1957*. Retrieved from http://www.kchistory.org/cdm4/sanborn_splash.php
- San Diego State University. (2010). *History of Chicano Park, Barrio Logan, San Diego, California*. Retrieved from <http://www.chicanoparksandiego.com/>
- Whyte, W. H. (2001). *The social life of small urban spaces*. New York, NY: Project for Public Spaces. (Original work published 1980).