SN22

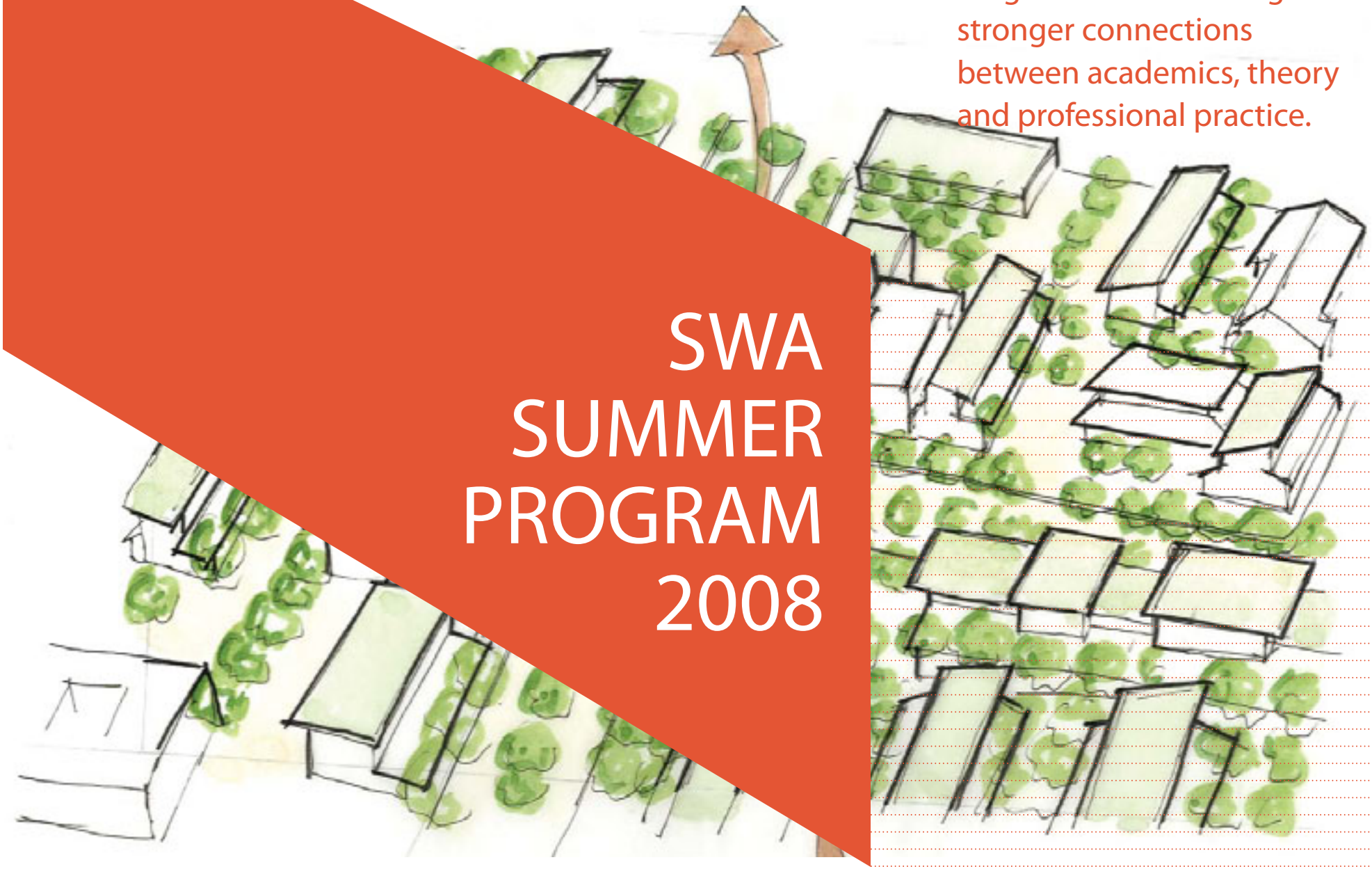
BETWEEN THE BAYOUS

SWA SUMMER PROGRAM 2008

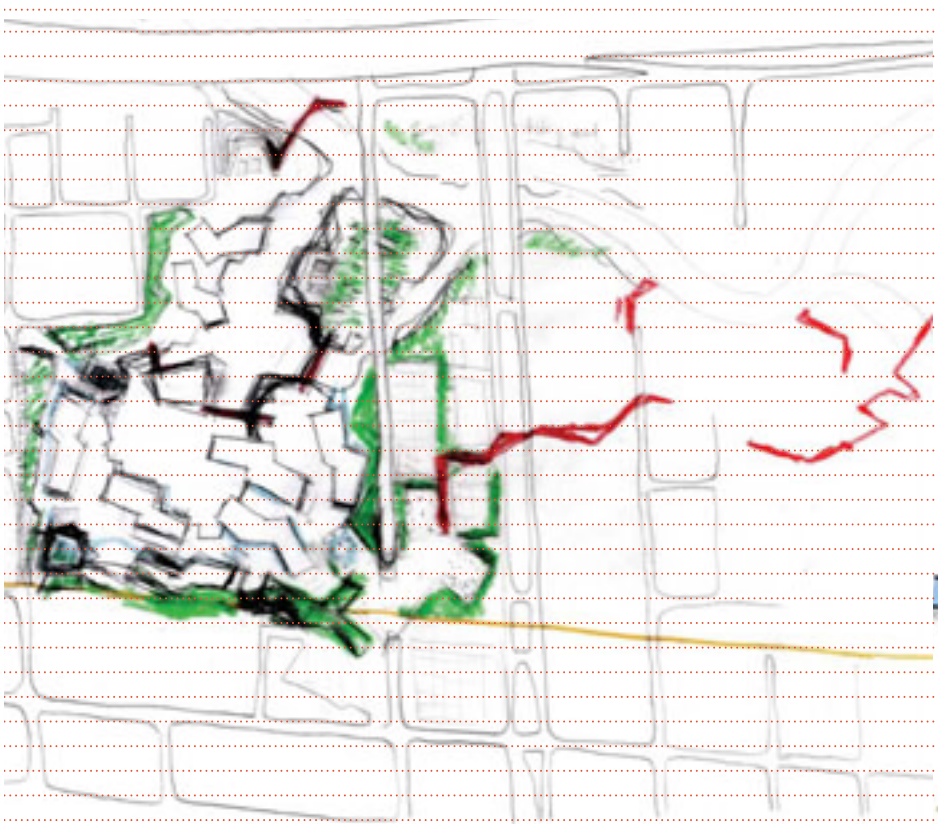
CONTENTS

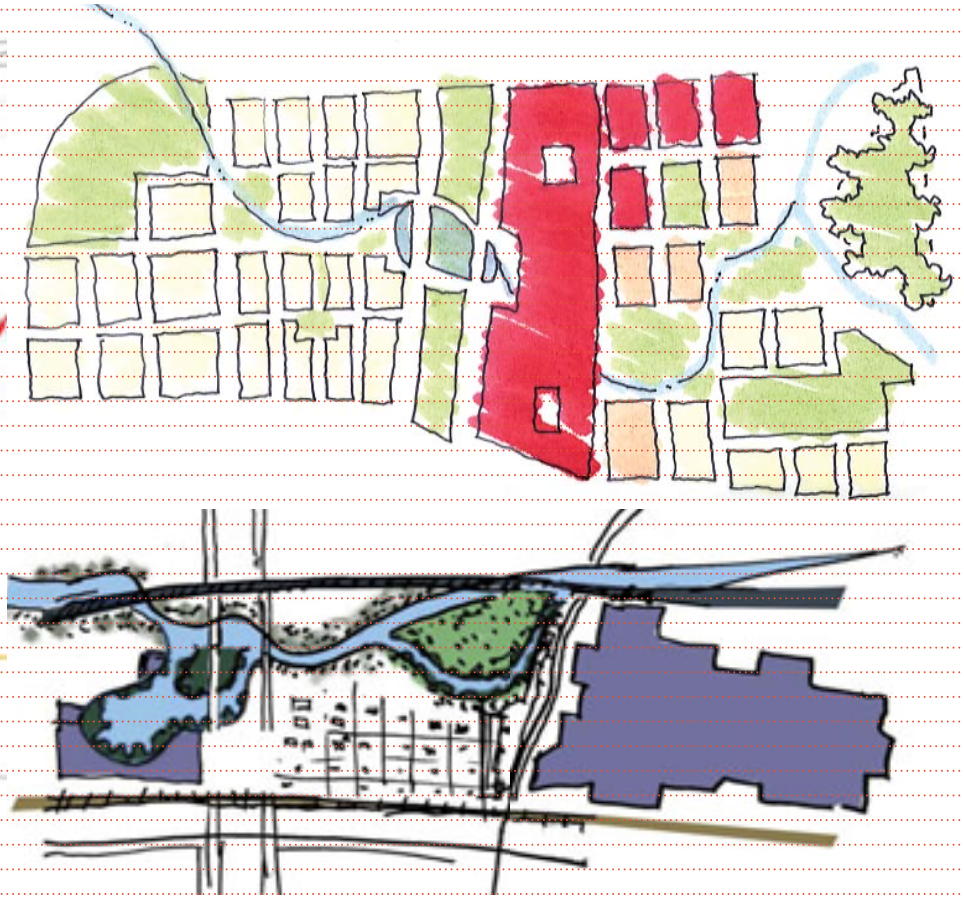
SWA SUMMER PROGRAM 2008

SWA started its Summer Program in 1972 to forge stronger connections between academics, theory and professional practice.



Consisting of four, one-week design studios in one of SWA's six offices and followed by an internship in one of our offices, the studios explore issues-oriented design themes that are reinforced by field trips and critiques. SWA Principals direct the studios, and distinguished academics and professionals serve on review juries. Because SWA is a group practice, students learn how a wide range of individuals can contribute to a variety of project types and scales. SWA selects its summer interns in a manner that reflects our belief in the group practice. Our staff members review the student portfolios and select their top choices. In 2008, SWA received over 75 portfolios. A tally of the results provides the list of eight finalists. In recent years, the program has attracted students from diverse locations including Egypt, Slovenia, Taiwan, Korea, China, Scotland and Canada, in addition to individuals from leading U.S. universities. Students leave with a strong attachment to the projects they've worked on and a greater understanding of their own potential as design professionals.









LOCATEDINTHEHEARTOFTHECITYOFHOUSTON,SUPERNEIGHBORHOOD22(SN22)ISANEVOLVINGRESIDENTIAL,RETAIL,ENTERTAINMENT,

SN22

Student participants of SWA's 2008 Summer Program were tasked with analyzing and understanding the complex issues of SN22 in order to recommend appropriate urban planning, urban design and landscape architectural solutions that can be added to the current discourse on the future of SN22. The students engaged with a neighborhood stakeholder group, regional and local leaders from multiple professional disciplines, and principles and associates representing each SWA office within the United States. The program consisted of a total of eight students currently seeking undergraduate and graduate degrees from national or international universities, and spanned a four week studio period. Participants received a new design topic at the beginning of each week, developed a set of design ideas, and concluded the week with a group presentation to the stakeholders.

Super Neighborhood 22 is located west of downtown Houston, with its edges being I-10 to the north, Memorial Drive (Buffalo Bayou) to the south, I-45 to the east, and Memorial Park to the west. Washington Avenue dissects this area, offering east-west access to the area's eleven neighborhoods, along with commercial uses for its residents. Buffalo Bayou, one of the city's most significant natural systems, forms the southern boundary of the site. Memorial Park, the site's western boundary, is one of America's largest urban park expanses, encompassing over 1500 wooded acres, and offering facilities for jogging, tennis, hiking, biking, picnicking, golfing, and wildlife-watching. The corridor consists of a complex assemblage of mixed-income residents, ethnic groups, small businesses, industrial uses, and large and small open space areas all conveniently located within close proximity to various employment centers and regional transportation networks. Once a thriving district with important ties to Houston's history and industrial enterprises, today SN22 is a corridor that lacks an overall planning vision, is subjected to massive development pressures, and is represented by the conflicting interests of stratified economic classes. As the rise of urban redevelopment within the urban core of Houston moves westward into SN22, the neighborhood faces the challenge of preserving its culture and history, while also creating a new urban fabric that can evolve concurrently with changing uses.





AND OPEN SPACE CORRIDOR THAT ENCOMPASSES AND CONNECTS MANY OF THE CENTRAL CITY'S DIVERSE REGIONS AND NEIGHBORHOODS.

WEEK 01 URBAN PLANNING

Working as a group, the interns examined the neighborhood's larger systems, both natural and man-made, to understand the dynamic forces that have and will continue to shape SN22. Some of these systems include: socioeconomic/cultural, transportation, land use, regulatory, hydrologic, ecological, and macro/micro climate. The end result was an analytical study that considers the stakeholders concerns, documents systemic forces, produces a master plan that illustrates a long-range vision for the neighborhood, and provides strategies for achieving the overall vision.

WEEK 02 URBAN DESIGN

Narrowing the project focus from week one, four systems were chosen for an urban design study. Four teams of two were created and each team studied a separate system within the project area.

Team1: Transportation
Team 2: Natural Systems and Open Space
Team 3: Land Use
Team 4: Connections

The goal of the week was to produce an urban design plan for each system that builds on the broad design gestures from week one and responds to the specific needs and challenges of the site. By the end of the week, a plan for future development was created.

WEEK 03 PLACES DESIGN

Ultimately, Super Neighborhood 22's future will be decided by individual projects within or adjacent to its boundaries. At the beginning of week three, each intern chose a site specific project and produced a detailed site design that was presented at the end of the week. The project could be a streetscape, a park, a waterfront, or any other approved site of interest. The resulting design considered the challenges facing SN22 and was built on concepts outlined in weeks one and two.

WEEK 04 OBJECT DESIGN

The character of a designed space can often be attributed to the design and arrangement of individual objects within a project. These innumerable objects could include kiosks, sculptures, water features, lighting fixtures, seating, shelters, or wall features. During the final week each member chose an object and created design details that consider both aesthetic and functional concerns relative to the overall project goals.

NATHANIEL BEHRENDS
University of California - Berkeley

To start from the beginning, I was born on September Fourth in 1972 in Minneapolis, Minnesota. I spent my childhood in the small agricultural town of Litchfield, Minnesota. When I graduated from high school I moved to Bozeman, Montana, and began to attend Montana State University. Eventually I settled into majoring in horticulture, which offered a good mix of natural science and creative exploration. After five years in the rural environment of Montana I was ready to explore the diversity and opportunities of a major city. Upon graduating in 1996, I took an internship at a historical garden in the San Francisco Bay Area. Pursuing my love of the plants and the outdoors, I continued working as a gardener, eventually forming my own business which specialized in the maintenance, development and design of residential gardens. I am presently pursuing a masters degree in landscape architecture at University of California at Berkeley. My wife, Kirsten, my daughter Selma (3yrs) and I live in San Francisco.

CHIA-CHI CHEN
University of Pennsylvania

I am a person who does not like to be bound by traditional ways of thinking. I don't settle for the status quo easily. The same designs have been around for so long, and we have so many of the same kind. Is it possible for me to find something to replace them? In reality, it hasn't been easy for me to reach this goal. Even though I am studying landscape architecture at the University of Pennsylvania and have worked as an architecture designer for five years, thus far I have been afforded few opportunities to display this personal trait and meet the approval of others. That's why I want to become more deeply involved in the summer program at SWA.

STEPHANIE GAUTAMA
Cornell University

My name is Stephanie, and I am a fourth year undergraduate student majoring in landscape architecture at Cornell University in New York. This is my first professional experience working in the landscape architecture industry, and I am excited to be working with SWA. Previously, I have been studying abroad in Melbourne, Australia and Rome, Italy. In my travels, I have been particularly fascinated by the way different cultural and ideological systems inform the way we design and organize our urban space. Many people would not have guessed it, but after all the traveling across the globe I have done, Jakarta, Indonesia, is the place where I grew up and still call home!

TAIZO HORIKAWA
Louisiana State University

I am a second-year graduate student in the MLA program at Louisiana State University. I am originally from Japan. I lived in Tokyo for six years while I was in a Japanese university. My background is in coastal engineering and park studies. I studied how sea waves break on a shoreline, conducting a series of experiments. I also studied how people use recreational lawns in an urban park.

FANGFANG OUYANG
University of Virginia

I will be a second year graduate student at the University of Virginia. My five year undergraduate study in architecture school gave me a rich design background in architecture, landscape architecture, interior design, industrial design, visual art and other design fields. Now I am interested in urban landscape design, especially how to consider the ecological factors during the design progress. In addition, I like all kinds of design, literature, music, sports and travel.

JULIANNE RADER
Kansas State University

This is Julianne Rader. She hails from Kansas where she is also a landscape architecture student at Kansas State University. Recently, she concluded her fourth year at KSU with a semester abroad in the quaint hill town of Orvieto, Italy. Stateside once again, she is eager to participate in the Summer Intern Program. In addition, she looks forward to the opportunities to collaborate with landscape architecture students from around the globe. When not immersed in Photoshop or AutoCad, Julianne enjoys reading the short stories of David Sedaris, skateboarding, and watching movies.

BEGUM TARAKCI
Yeditepe University - Turkey

She was born May 8, 1985 in Istanbul, Turkey, which is a city with a great architectural history. She has been interested in the term "architecture" since primary school. After high school, the Turkish University Entering Exam placed her in the Landscape Architecture Department. So far, she has graduated from the Landscape Architecture Department and, because of being a double major program student, she's still studying in her second major program of architecture. She has worked on six design studios in landscape architecture and two design studios in architecture, and is expecting to graduate from the Architecture Department next year. She has been told by the professors that she's a creative designer and has a strong character which gives her courage to undertake challenging responsibilities. Finally, her favorite quote is,

"A form that's neither geometric nor organic would be a great discovery."
Donald Judd, 1967

JI HYUN YOO
Harvard University

Ji Hyun Yoo is in the MLA Program at Harvard's GSD. She did her undergraduate studies at Seoul National University, majoring in sculpture, and graduating in 2004. She also did her graduate studies at the same college, majoring in landscape architecture. Ji Hyun has about three and a half years of professional experience at CA Landscape Design Office in Seoul, South Korea. She worked on the landscape planning of newly developed cities, landscape design for small offices, urban parks and residential areas.

internship schedule

Project Introduction
Tom Dornbusch
Board Member, SN22

LUNCH CONVERSATION
Peter Brown, FAIA
City of Houston Council Member
TOPIC: Urban Planning in Houston

Reid Wilson
Land Use Attorney, Wilson, Cribbs & Goren, P.C.
TOPIC: Land Use Regulation in Houston

WEEKEND FIELD TRIP
San Antonio Riverwalk
Austin Smart Growth
Pliny Fisk, Professor TAMU
Ladybird Johnson Wildflower Center

WEEK 01 : URBAN PLANNING

STUDIO 01
URBAN PLANNING
Bob Jacob, Dallas Principal
James Vick, Houston Associate

STAKEHOLDER JURY
SN22
COH
BBP
METRO
Private Interests

STUDIO 02
URBAN DESIGN
Sean O'Malley,
Laguna Beach Principal
Lee Stickles,
San Francisco Associate

WEEKEND FIELD TRIP
The Houston Transect Tour
Kevin Shanley, SWA President

Houston Tour
Scott Slaney, Houston Principal

WEEK 02 : URBAN DESIGN

LUNCH CONVERSATION
Anne Olson
President, Buffalo Bayou Partnership
TOPIC: Buffalo Bayou Master Plan

STAKEHOLDER JURY
SN22
COH
BBP
METRO
Private Interests

WEEK 03 : PLACES DESIGN

STUDIO 03
PLACES DESIGN
Hui-Li Lee, Sausalito Principal
Kathy Sun, Sausalito Associate

WEEKEND FIELD TRIP
Baton Rouge / New Orleans, LA
St. Francisville
French Quarter
Urban Redevelopment

LUNCH CONVERSATION
Steve Costello
President, Memorial Park Conservancy
TOPIC: Memorial Park in SN22

STAKEHOLDER JURY
SN22
COH
BBP
METRO
Private Interests

WEEK 04 : OBJECT DESIGN

STUDIO 03
OBJECT DESIGN
Chih-Wei Lin, Sausalito Associate

WEEKEND TRIP
Travel to SWA Internship Offices

LUNCH CONVERSATION
Andrew Vrana
Partner, MetaLab Studio
TOPIC: Object Design

STAKEHOLDER JURY
West End Multi Service Center
Public Exhibition & Open House

WEEK 01

URBAN PLANNING

The first week of the Summer Intern Program focused on inventory, analysis, and visioning for Super Neighborhood 22. The week began with a tour of the entire neighborhood, as well as the adjacent central business district. During this visit, the interns familiarized themselves with the character of each neighborhood within SN22, as well as major roads and intersections. Based on their initial site visit, the students determined four key areas of focus: history and demographics, transportation, land use, and natural systems. In two person teams, the interns gathered information on these four topics. They then used this knowledge to formulate summary maps. Each map delineated the potentials from which they could build upon, including the existing parks and bayous, the adjacency to downtown, and the historic First Ward.

Finally, the student interns used the three summary maps to create a comprehensive vision plan for the entire Neighborhood. This outlined four primary ideas:

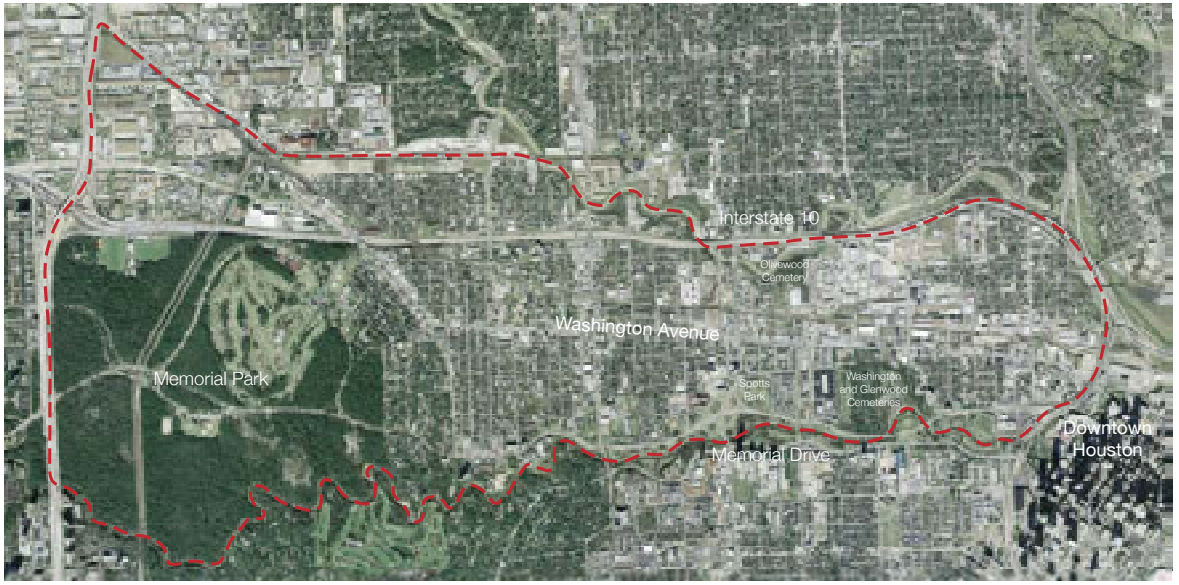
1. Utilize the existing green spaces and bayous, in conjunction with proposed parks, to create green connections both around and through the neighborhood.

2. Establish Washington Avenue as a major commercial and transit corridor.

3. Maintain the existing residential fabric and address the poor neighborhood conditions created by newly constructed town homes.

4. Redevelop the low-value industrial land within the First Ward.

These points were then used as a basis for design decisions in the subsequent three weeks of the Summer Intern Program.



Project Location and Boundary

Nathaniel and Taizo Speak with Tom Dornbusch

Fangfang and Chia-Chi at Memorial Park

Student Interns Work on the Vision Plan

White Oak Bayou and Downtown Houston

Vacant Industrial Land in the First Ward

The Beer Can House

Commercial Business on Washington Avenue

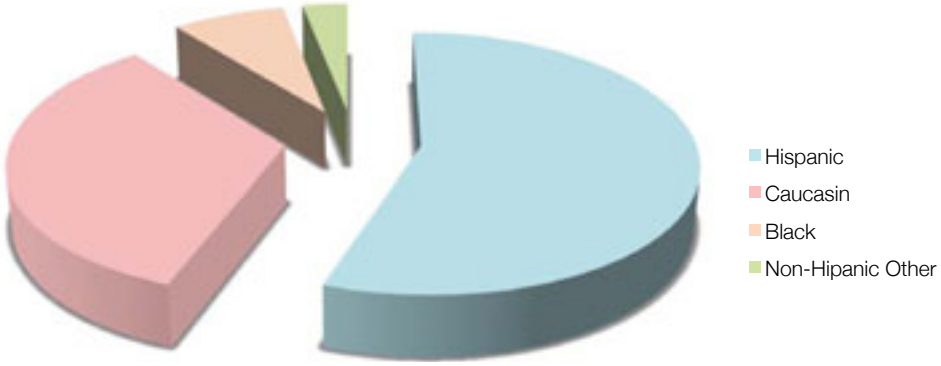
A Historic Home in the Sixth Ward

A Running Trail in Memorial Park

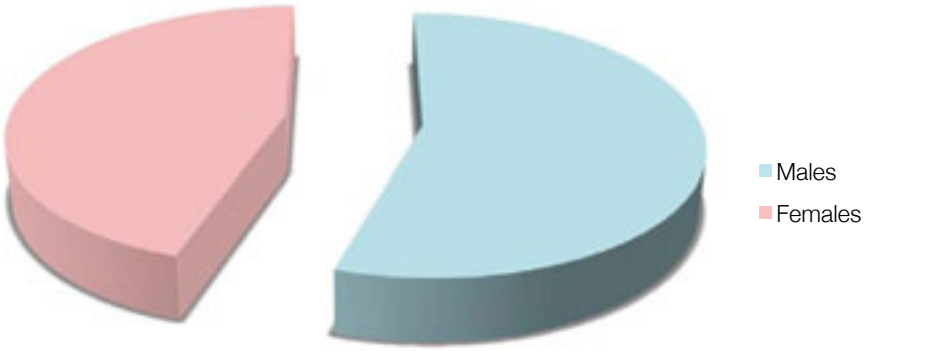
History

The first team, composed of Chia-Chi and Julianne, researched the history of Houston, Super Neighborhood 22 and Washington Avenue. From this study, they learned that the birthplace of Houston, known as Allen's Landing, is located adjacent to Super Neighborhood 22 at the intersection of White Oak Bayou and Buffalo Bayou. They also found several historic areas that lie within the project site. Sixth Ward, for example, is the oldest intact neighborhood in Houston and still contains roughly eighty percent of its original Victorian homes. Adjacent to the Sixth Ward is Glenwood Cemetery, which is the final resting place of Howard Hughes. In addition, Memorial Park was once a World War I training camp. Today, it is one of America's largest urban parks.

Neighborhoods within Super Neighborhood 22

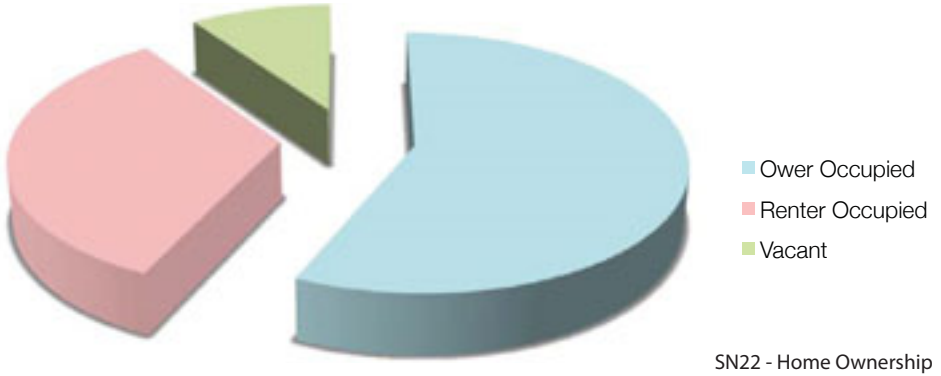


SN22 - Ethnic Make-Up



SN22 - Sex Make-Up

SN22 - Age Make-Up



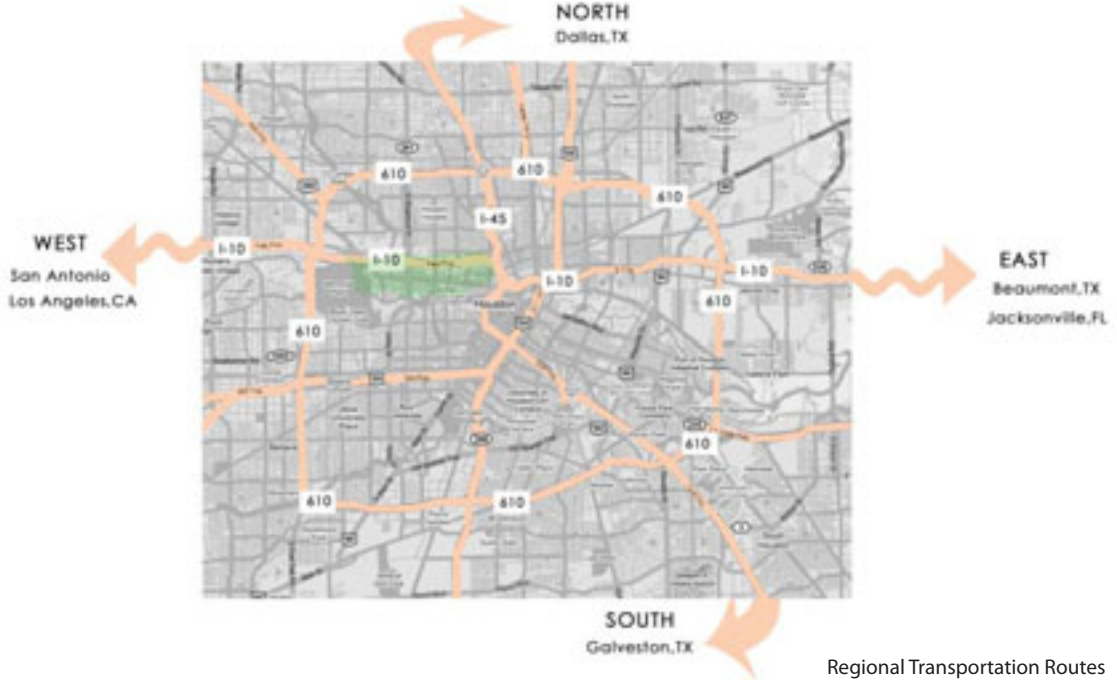
SN22 - Home Ownership

In addition to researching the history, Julianne and Chia-Chi also gathered census data for Super Neighborhood 22. This data indicated that of the 18,552 SN22 residents, majority are males and Hispanic. The information also revealed that majority of the residents are home owners. However, the data regarding age was inconclusive due to the unbalanced census categories.

Super Neighborhood 22 Transportation Routes

Transportation

The second group, Begum and Taizo, inventoried the various modes and routes of transportation within and surrounding Super Neighborhood 22. They identified I-10, I-45 and 610 as major regional routes, Memorial Park and Allen Drive as major neighborhood connectors, and Washington Avenue, T.C. Jester Drive, Shepherd and Durham Drive, Yale Street and Heights Boulevard, and Sawyer Street as major streets within Super Neighborhood 22. They also noted the importance of the Washington on Wescott roundabout, as well as Houston Avenue for it's connection to downtown. Perhaps one of the most important discoveries they made was that I-10 was only designed to carry 79,000 cars per day, but now supports over 200,000 vehicles daily.



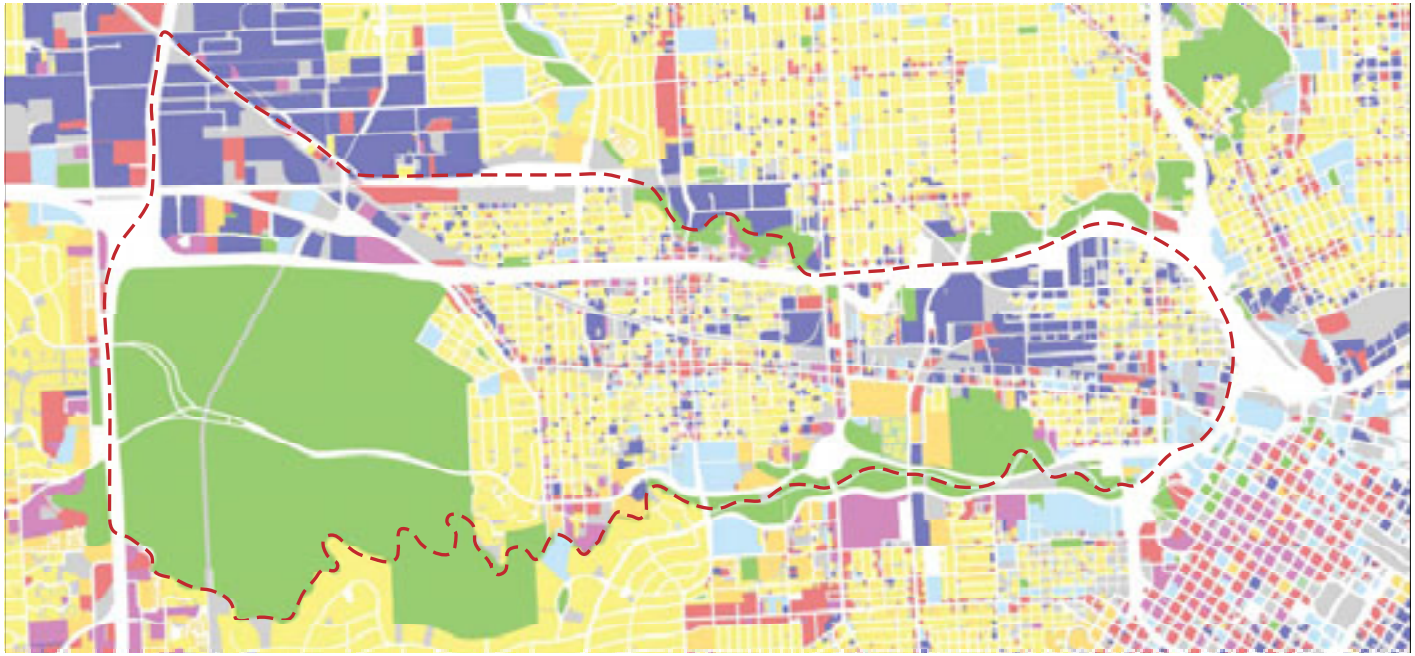
Regional Transportation Routes

Proposed and Existing Bike Paths

Walking Distances to Existing Bus Routes

Proposed and Existing Light Rail and Commuter Rail Lines

The transportation group also looked at bike paths, and bus and light rail lines. There are two proposed bike routes, one to the south of Washington Avenue on Heights Boulevard and one which would utilize an abandoned railroad right-of-way. These still do not address the lack in connections to Memorial Park, particularly along Buffalo Bayou, though. Their inventory of bus routes showed that there is a fairly dense coverage of stops. However, the buses only stop every thirty to forty minutes. Finally, there is an existing light rail line downtown, with the potential for additional lines along 610, Washington Avenue, and on one of the existing railroads. In order to support such a system, they found that the population density would need to be at least twenty-three residents per acre.

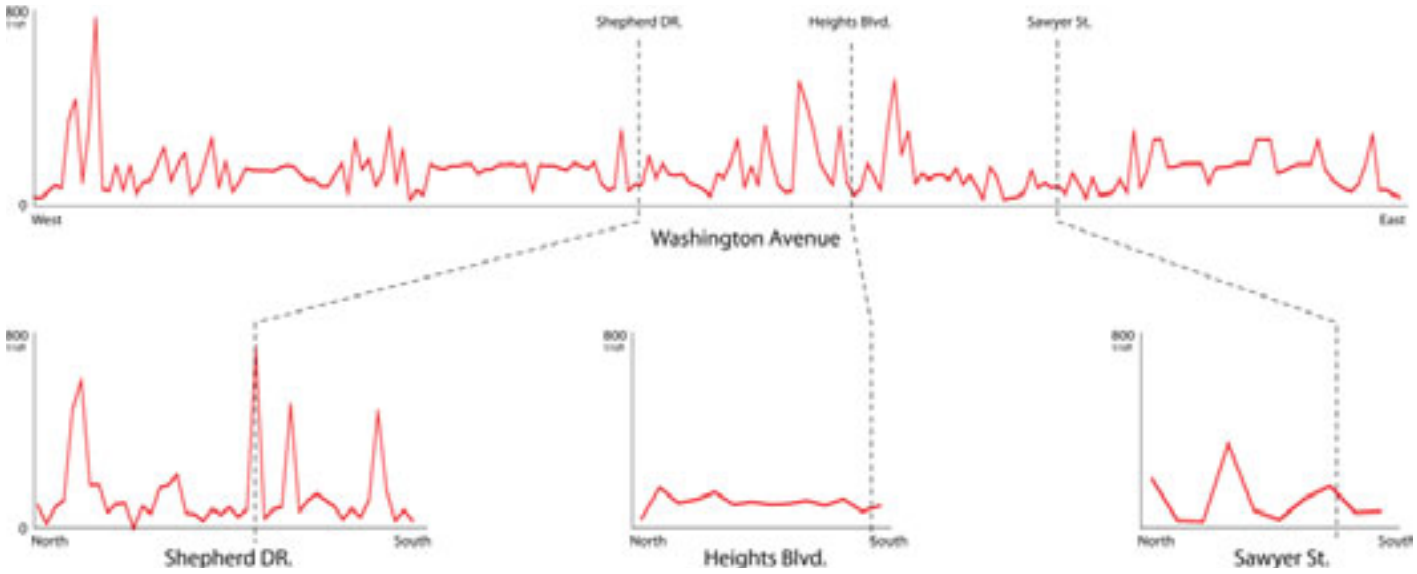


Land Use Plan

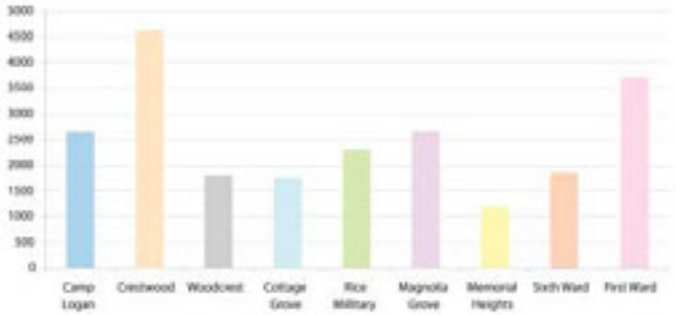
Land Use and Land Value

The Land Use group, comprised of Ji-Hyun and Stephanie, inventoried not only land uses within SN22, but also densities, lot sizes and property values. The overall land use map shows a unique composite of land uses due, in part, to Houston's lack of zoning. For the most part, though, the west and east ends of SN22 are dense with residential uses, Washington Avenue and the area between Shepherd and Durham contain majority of the commercial uses, and the north-northeast portion of the area is industrial. Major park and passive uses are Memorial Park, Buffalo and White Oak Bayou, and Glenwood and Olivewood Cemeteries. These last two categories - industrial and park uses - were placed into a map along with civic uses in order to identify potential locations for green connections.

Industrial, Public, and Recreational Land Uses



Property Value Along Washington Avenue and Major North-South Streets



Average Lot Size in Each Neighborhood

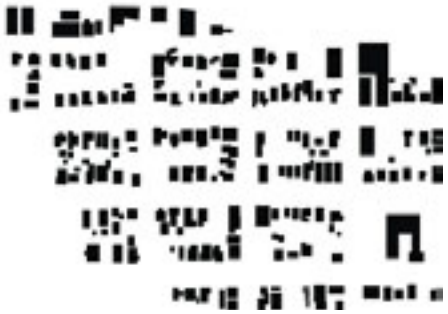
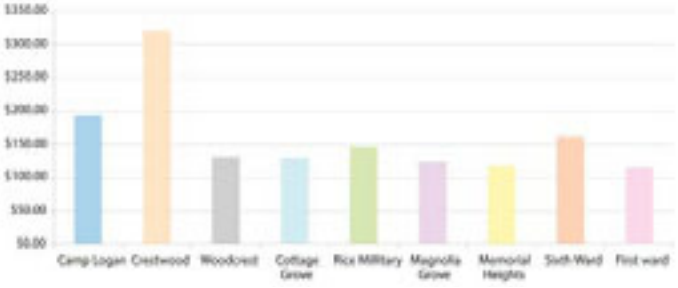


Figure-Ground Diagram of the Sixth Ward



Average Land Value in Each Neighborhood

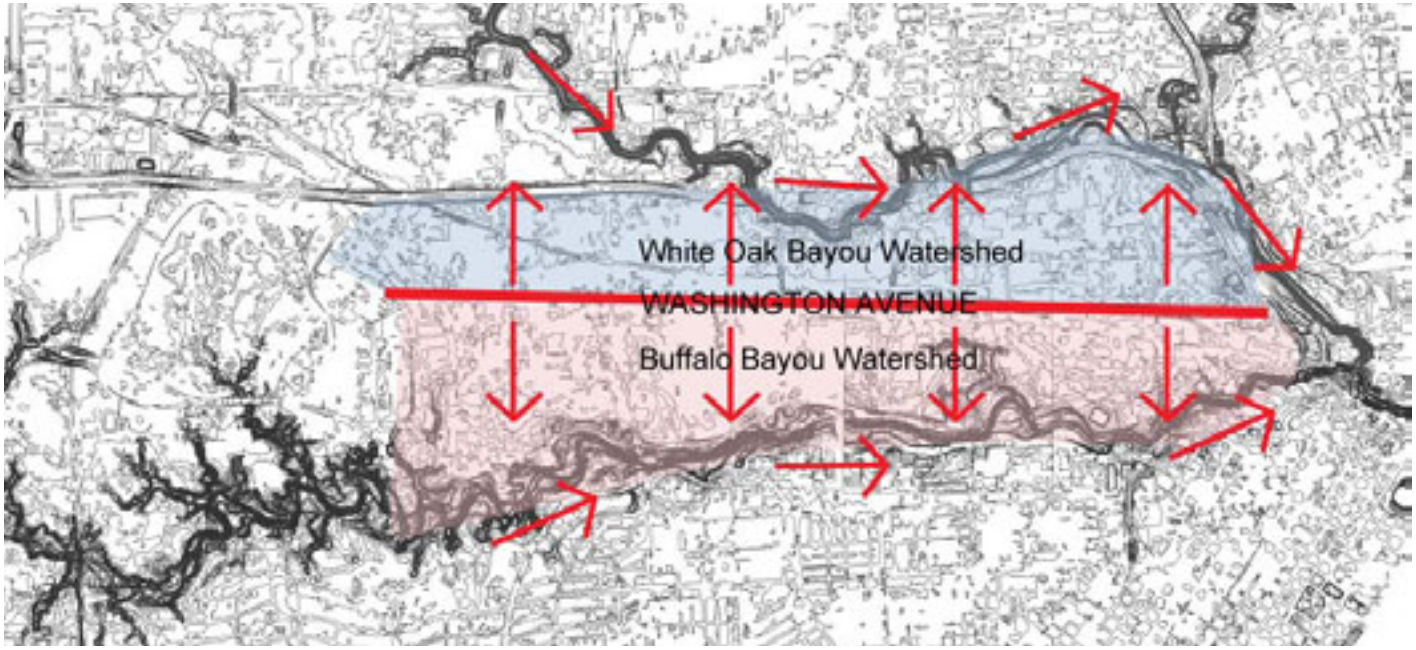
Figure-Ground Diagram of Wood Crest

In terms of land value, Stephanie and Ji-Hyun found that values along Washington Avenue, Shepherd Drive, Heights Boulevard, and Sawyer Street are low except at the street intersections. This led the group to believe that development or in-fill should occur at these locations. They also found that the industrial area of the First Ward has the largest average lot sizes, but the lowest average lot values, making it a prime redevelopment location. Finally, they compared the densities of various neighborhoods using figure-ground diagrams. These illustrate the difference between the historic residential pattern of the Sixth Ward and the increasing town home development in neighborhoods such as Magnolia Grove and Wood Crest.

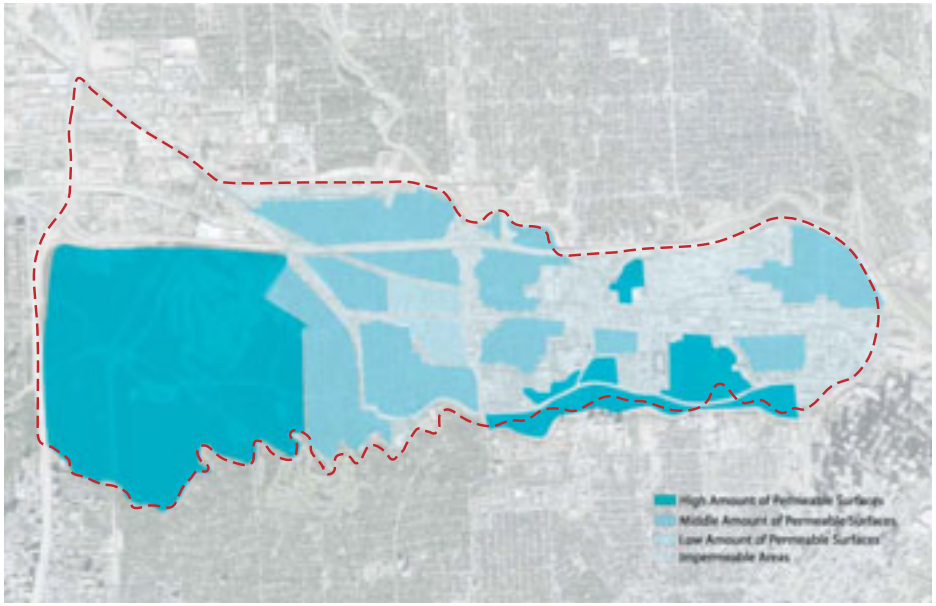
100 and 500 Year Floodplain Map

Natural Systems

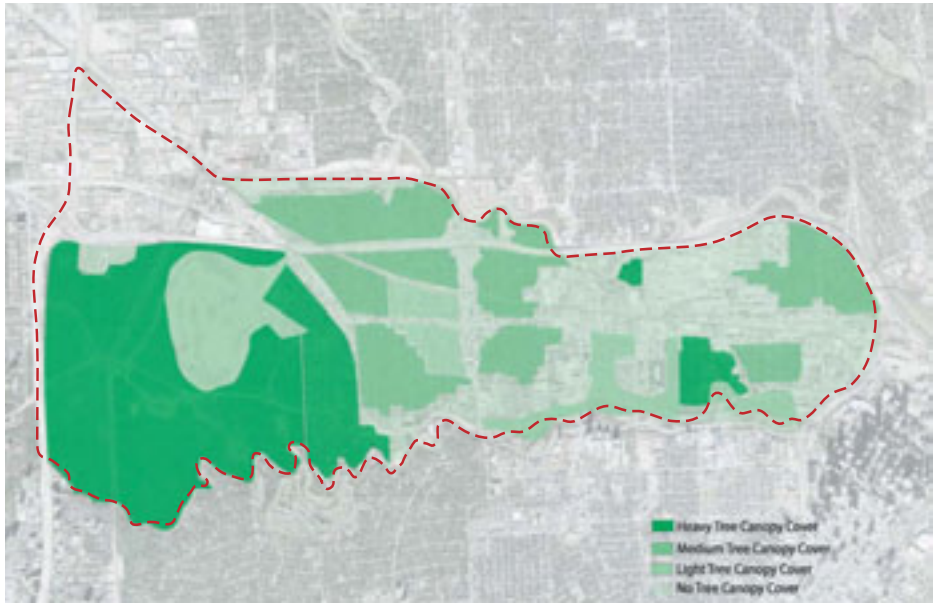
The final group of Nathaniel and Fangfang looked at the various natural systems of Super Neighborhood 22. They began by providing general information regarding hydrology. Within the neighborhood, the 100 and 500 year floodplains occur along both of the bayous, as well in the northern portion of Cottage Grove. This drainage pattern is primarily due to the demarcation of the neighborhood's watersheds by Washington Avenue. Because Washington Avenue is the neighborhood's high point, water eventually makes its way to one of the bayous. The neighborhood has seen a decrease in permeable surfaces and tree coverage, though. Therefore, the water moves much faster than it historically did, resulting in a greater chance of flooding.



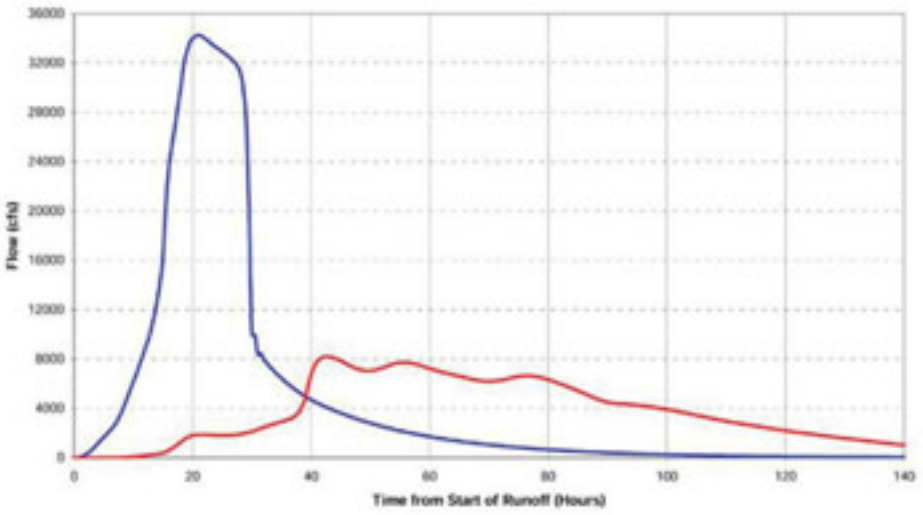
Watershed Boundaries for Super Neighborhood 22



Permeability Map



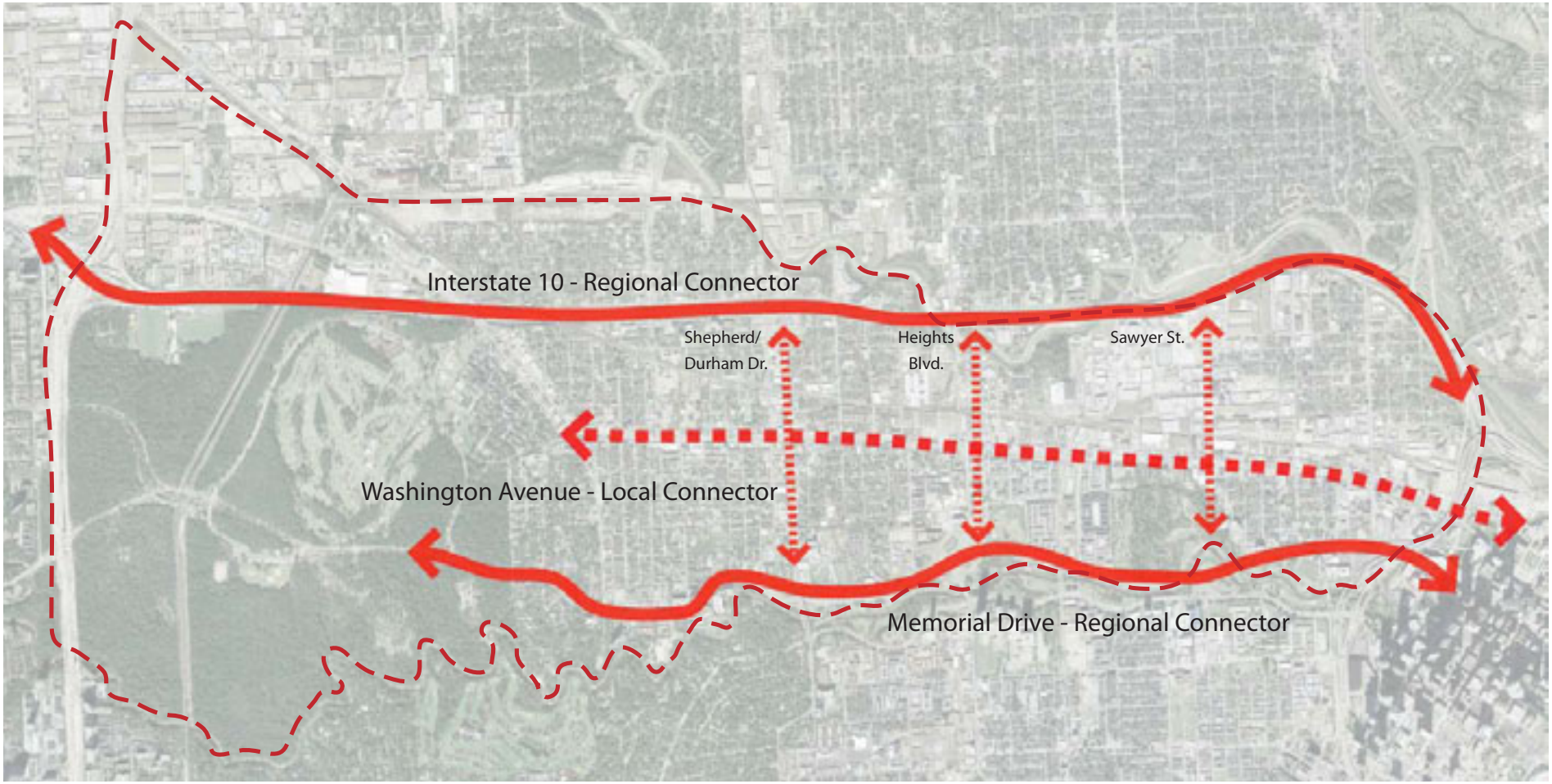
Tree Coverage Map



Time to Concentration of Stormwater Runoff

Natural Systems

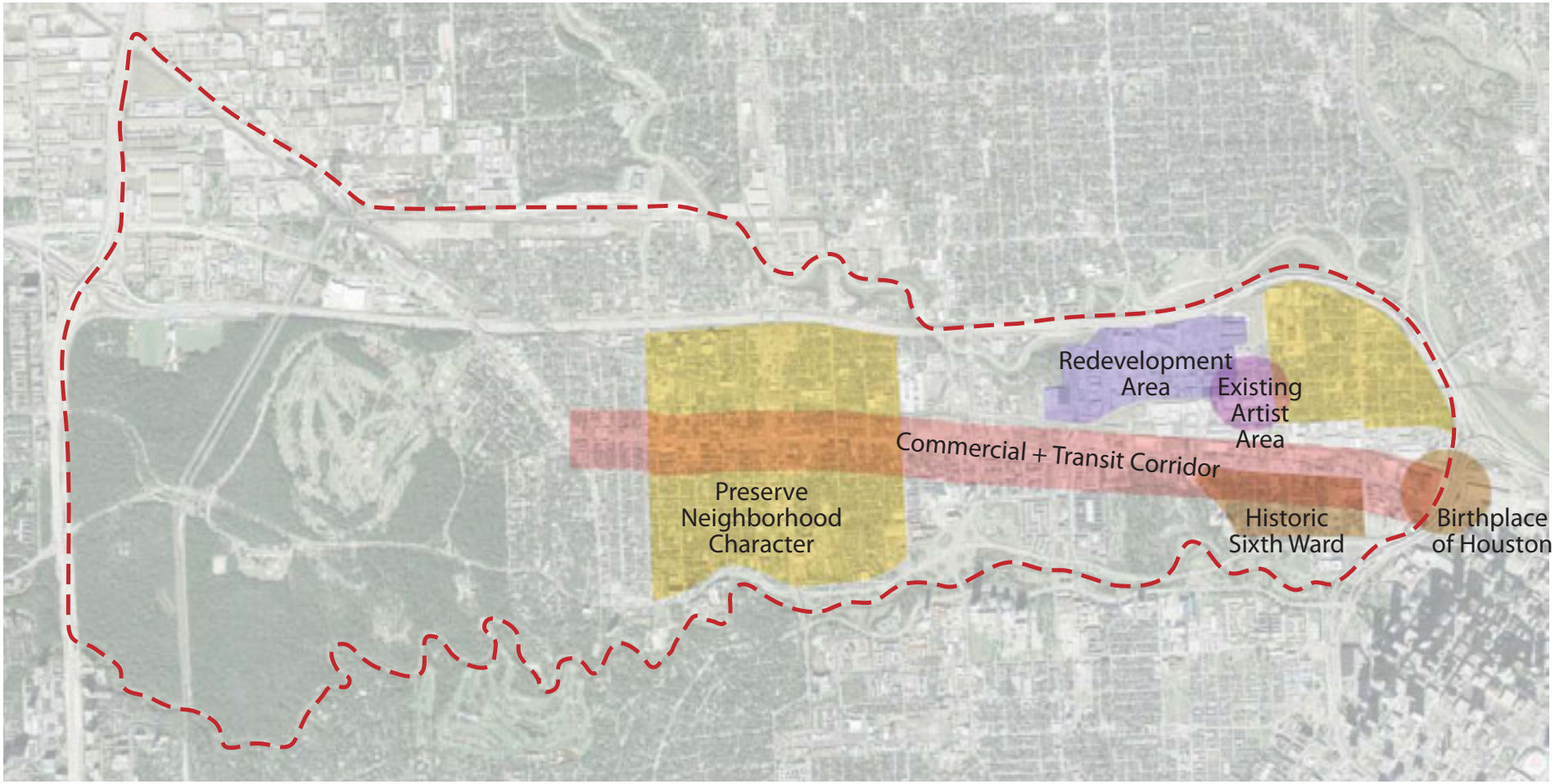
Finally, Fangfang and Nathaniel offered reasons for preserving and enhancing the habitats found along Buffalo Bayou and within Memorial Park, which included providing shelter for birds and wildlife, helping to create cooler and more comfortable outdoor spaces, establishing educational opportunities for students and residents, and increasing home values.



Circulation Potentials Map

Potentials | Circulation

After collecting data and creating supportive maps and diagrams, the interns compiled the most important information into potentials maps. The first, circulation, outlines the major transit routes: I-10 and Memorial Drive as regional connectors, and Washington Avenue, Shepherd and Durham Drive, Heights Boulevard and Sawyer, and Sawyer Street as local connectors.



Zones Potentials Map

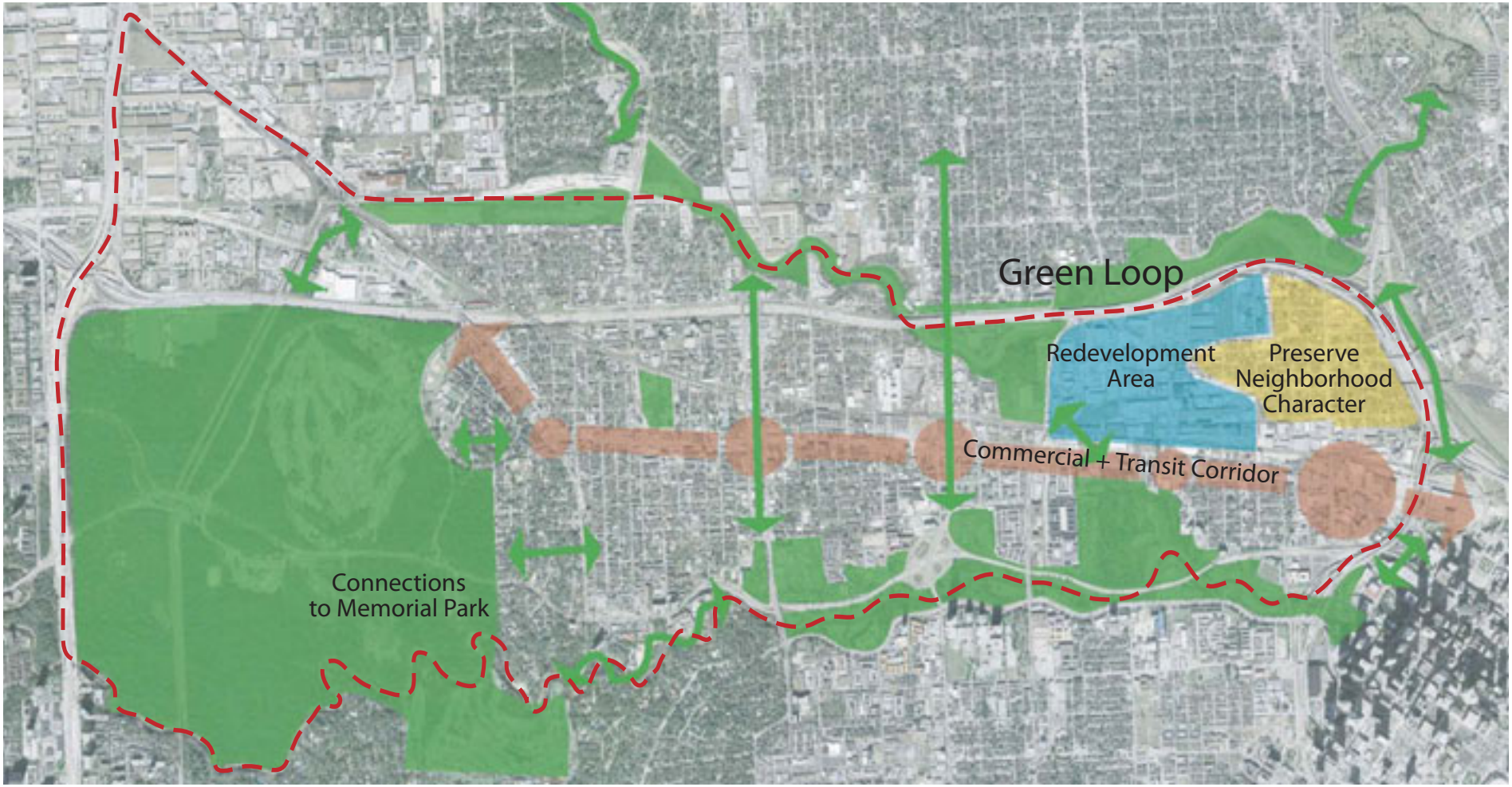
Potentials | Zones

The second potentials map, zones, defines key areas within SN22. This includes commercial areas along Washington Avenue, residential neighborhoods that should be protected from the pressures of developers, and the industrial area of the First Ward. This map also identifies the existing artists' community in the First Ward, as well as major historical areas.

Green Network Potentials Map

Potentials | Green Network

The final potentials map, green network, shows how utilizing existing trails and green spaces in conjunction with abandoned rail lines and proposed green connections can produce a network of paths and outdoor spaces both around and through Super Neighborhood 22.



Vision Map

Vision Plan

The interns concluded week one with a vision plan for SN22, outlining four major ideas:

1. Utilize existing parks and bayous, in conjunction with proposed parks, to create green connections both around and through the neighborhood.
2. Establish Washington Avenue as a major commercial and transit corridor.
3. Maintain the existing residential fabric and address the poor neighborhood conditions created by new town homes.
4. Redevelop the low-value industrial land within the First Ward.

This information was then used as a basis for design in the subsequent weeks.

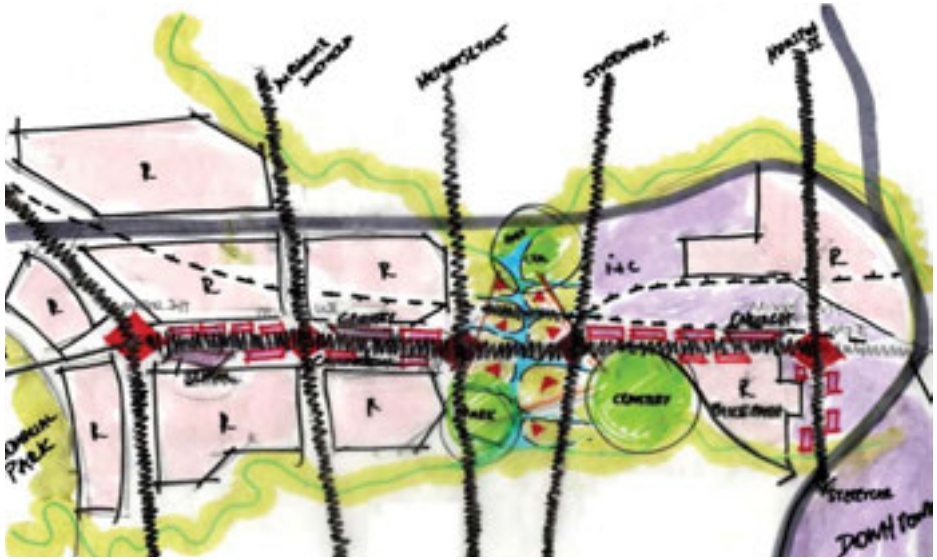
WEEK 02

URBAN DESIGN

The second week presented the interns with a chance to tackle a smaller scale urban design problem within Super Neighborhood 22. The student interns again divided into groups of two to examine systems within the neighborhood. This included transportation, natural systems and open space, land use and connections. Each group sought to build upon the vision plan created in week one through the creation of thoughtful designs and development strategies.


WASHINGTON
HOUSTON
HOGAN
2ND


White Oak Bayou
Cottage Grove
Magnolia Grove
Camp Logan
Crest Wood
West End
1st Ward
Memorial Park
Crest Wood
Rice Military
Memorial Heights
Washington & Glenwood Cemeteries
6th Ward
Spotts Park
Buffalo Bayou
Dowtown Houston
Secondary Commercial Center
Primary Commercial & Civic Center
Secondary Commercial Center
Washington/Center Parkway with Trolley
Proposed Green Connections

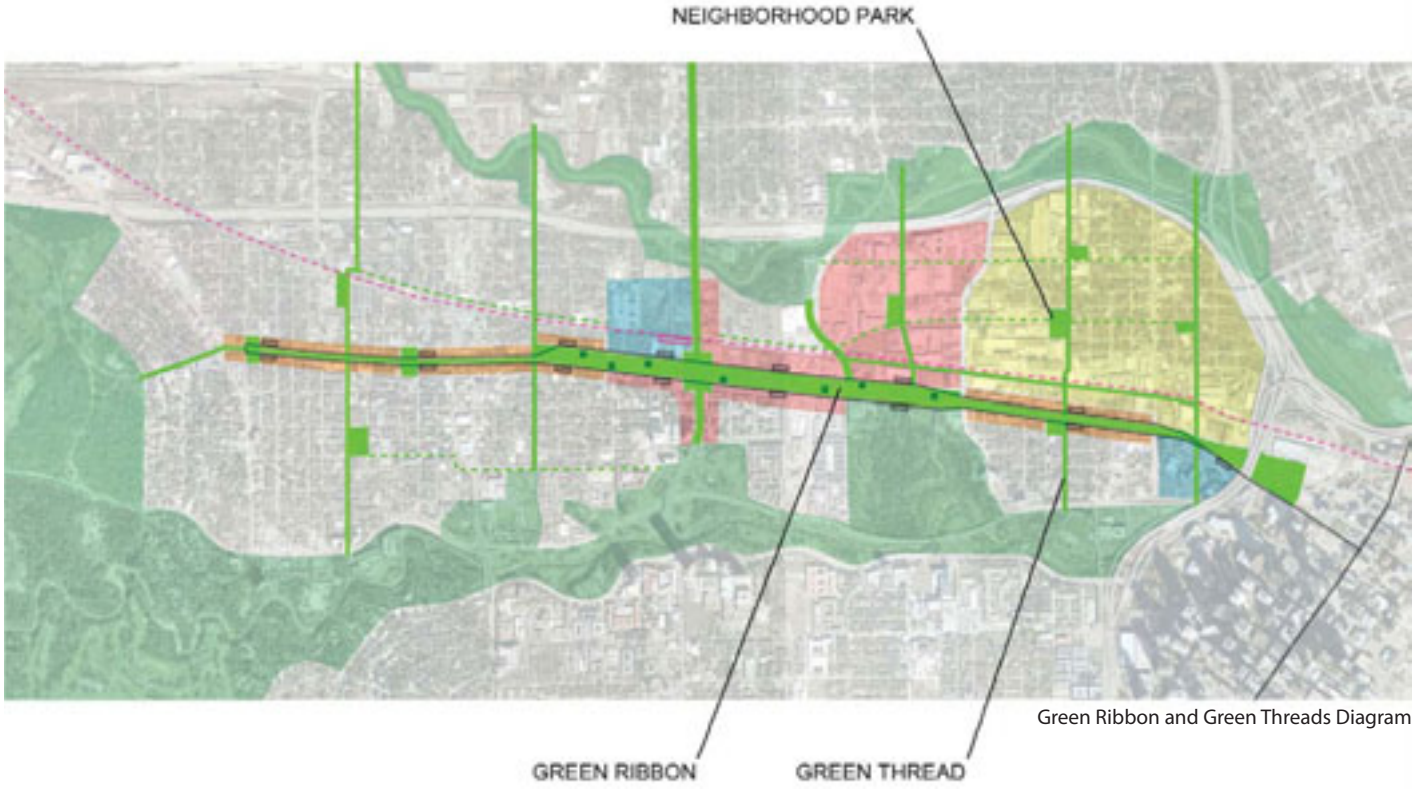


Transportation:
Green Ribbons

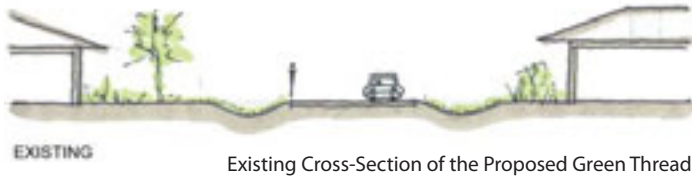
Chia-Chi Chen / Taizo Horikawa

During the second week, Chia-Chi and Taizo focused on how to improve the pedestrian circulation of Super Neighborhood 22 and provide additional green connections. Together, they worked on the idea of a Green Ribbon and Green Threads, focusing on how to improve the pedestrian circulation and provide a firm green structure for Super Neighborhood 22.

The area between Washington Avenue and Center Street is changed into a Green Ribbon, which is a continuous wide green space connecting Downtown and Memorial Park. Green Threads, which are well-planted and widened sidewalks, come out

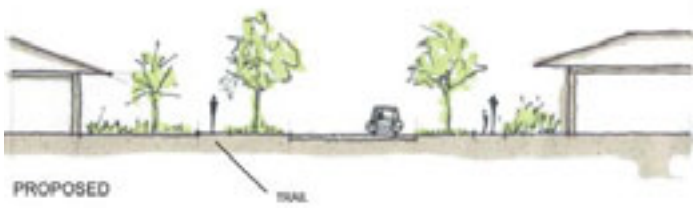


Green Ribbon and Green Threads Diagram



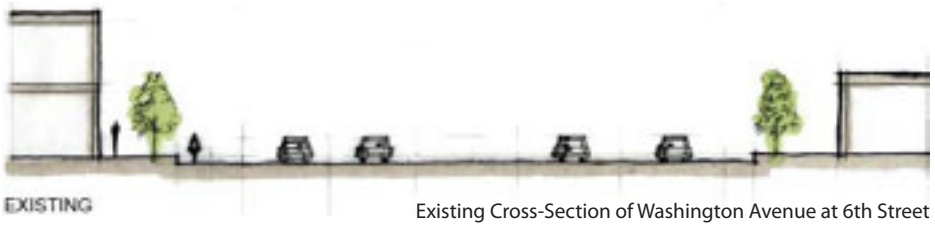
Existing Cross-Section of the Proposed Green Thread

Existing Cross-Section of Heights Boulevard

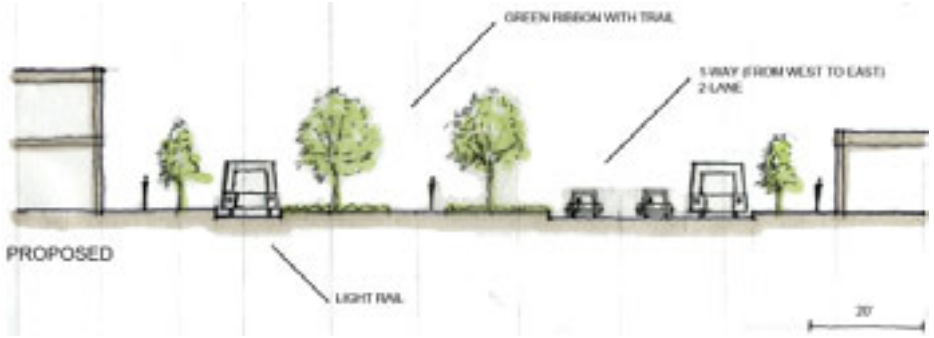


Proposed Cross-Section of the Green Thread

Proposed Cross-Section of Heights Boulevard

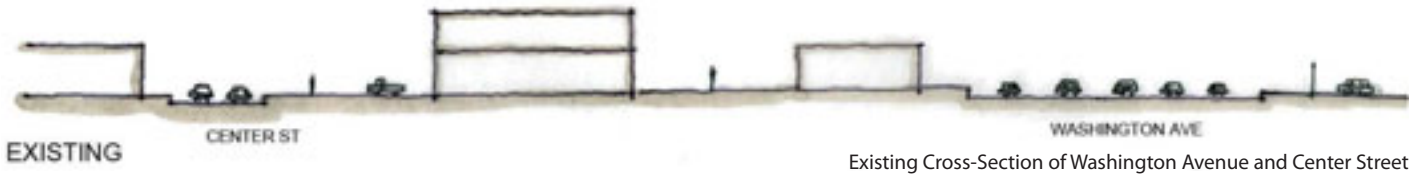


Existing Cross-Section of Washington Avenue at 6th Street

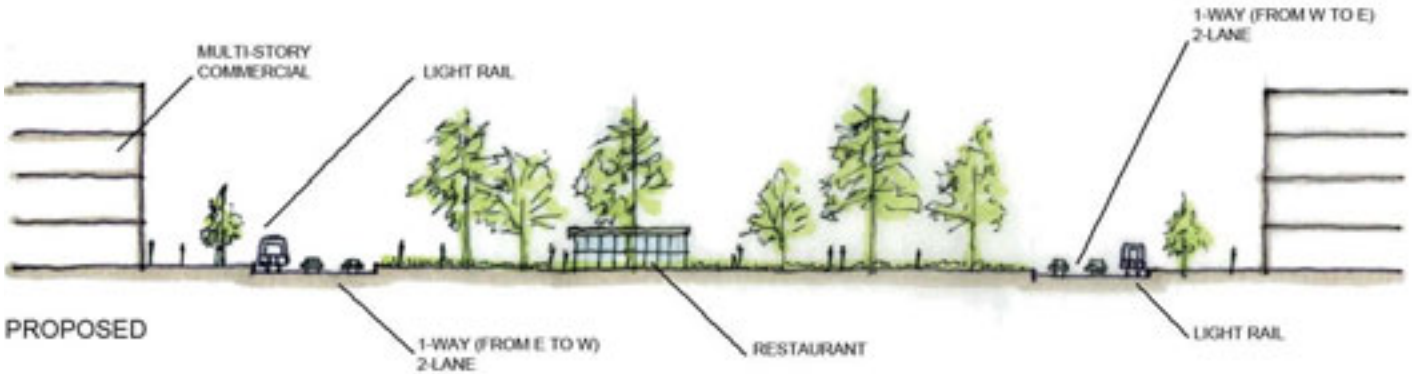


Proposed Cross-Section of Washington Avenue at 6th Street

Proposed Underground Rail Lines



Existing Cross-Section of Washington Avenue and Center Street



Proposed Cross-Section of Washington Avenue and Center Street

from the Green Ribbon in a north-south direction and connect the Neighborhood and the opposite sides of the bayous. The Green Ribbon and Green Threads provide good pedestrian circulation and connect every part of Super Neighborhood together. Washington Avenue and Center Street are changed into one-way streets and light rail is installed along the Green Ribbon. Ribbons of commercial buildings are developed along the Green Ribbon and the proposed light rail provides access to those proposed commercial buildings.

The area around the intersection of Washington Avenue and Heights Boulevard is developed as the center of SN22 with a community college and high-density commercial buildings. The areas along the eastern and western parts of Washington Avenue are developed as low-density commercial areas, considering the existing historical character of the area.

Natural Systems:
Green Fingers

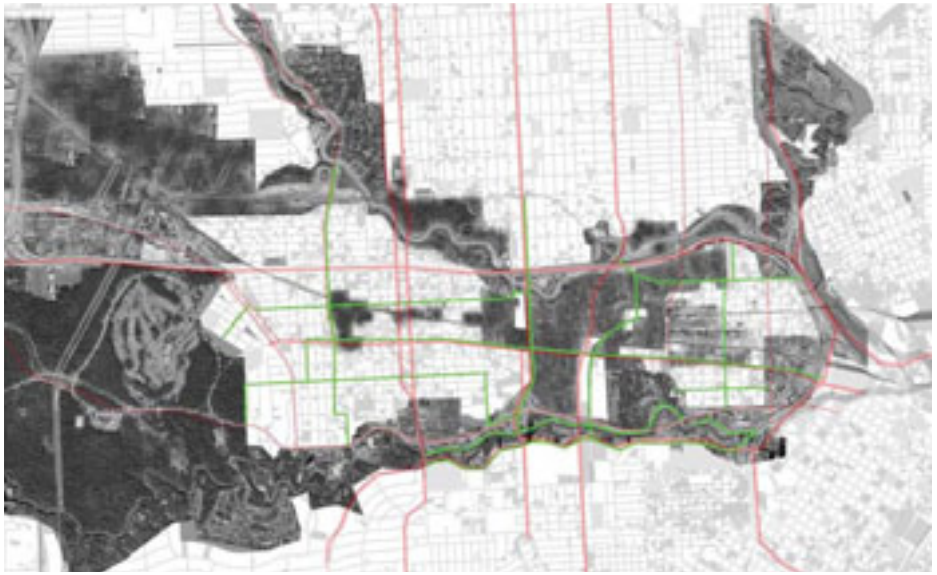
Fangfang Ouyang

When I started week two, I wanted to find the unique character of the neighborhood. After I looked at a historic map of the bayous, I noticed SN22 had lost its "Green Fingers." After I analyzed the land use, I found the potential to restore the Green Fingers in order to connect the two bayous. Therefore, I analyzed the site, and found streets that could be used for biking and pedestrians. On these streets I proposed that more trees be added. Additionally, I proposed more public green spaces, like parks and playgrounds. In the high density neighborhoods, I planned to change some streets to one-way streets in order to create more room for biking and pedestrians.

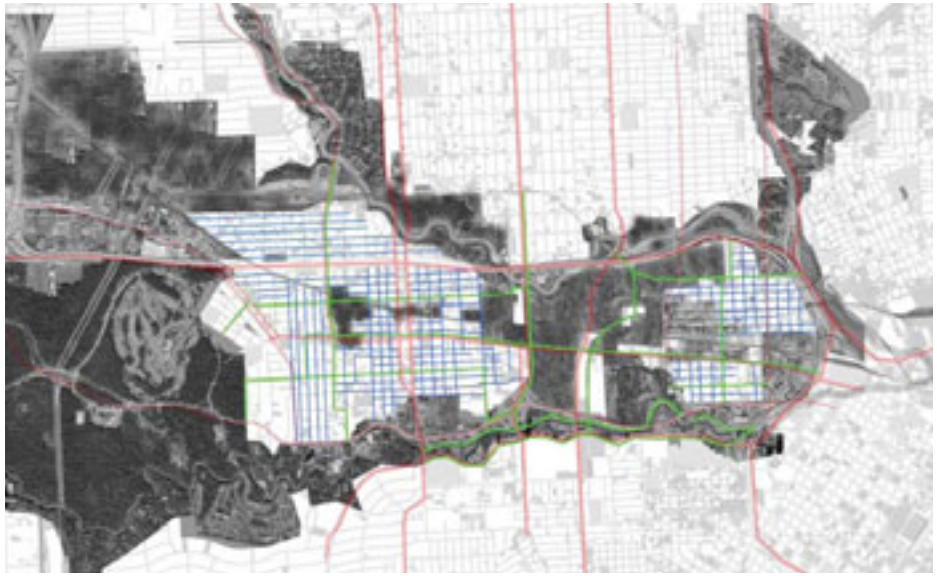
Concept Sketch

Historical Map from 1922 of the Bayous

Land Use Proposal

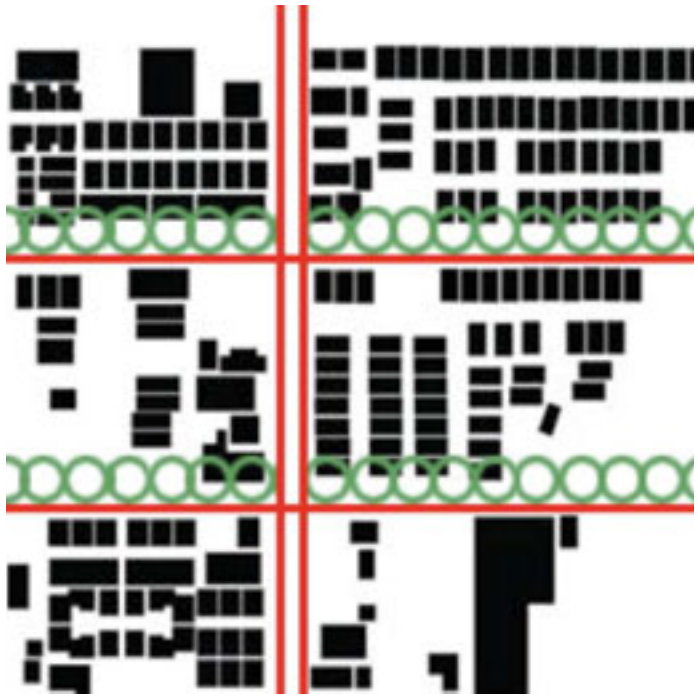


Primary Straight Fingers



Secondary Straight Fingers

Perspective of a Proposed One-Way Street



One-Way Street Vegetation Diagram

Natural Systems:
Neighborhood Tributaries

Nathaniel Behrends

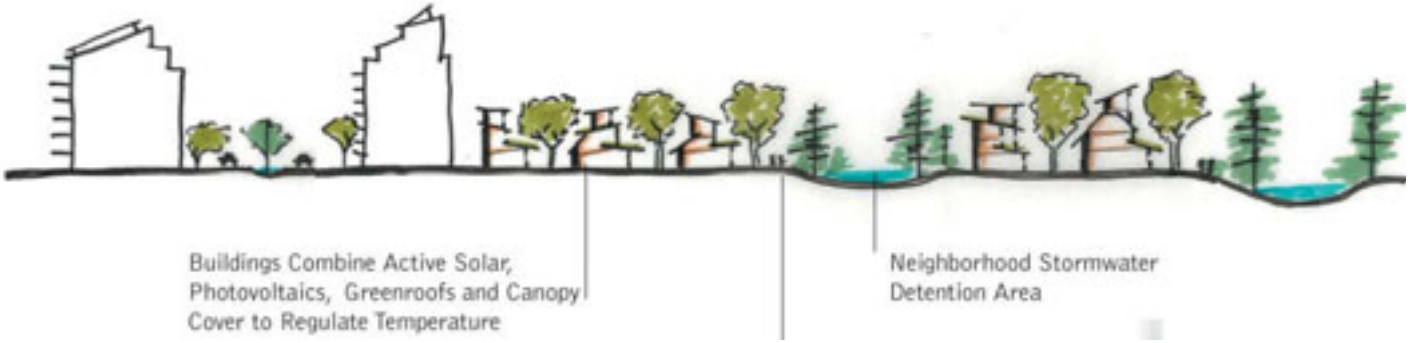
After looking at historical topographic maps I became inspired to develop a project that would recreate some of the tributaries that naturally flow into the Bayous. The opportunity is to improve the ecological and hydrological functions the bayous and to design a system that integrates them into the neighborhood.

I chose the neighborhood surrounding the intersection of Washington and Heights as my focus area. This potential of this location inspired me for several reasons. It has great promise as the site of a town center. This node would link the commercial areas along Washington Avenue

Conceptual Sketches

Master Plan

Circulation Diagram

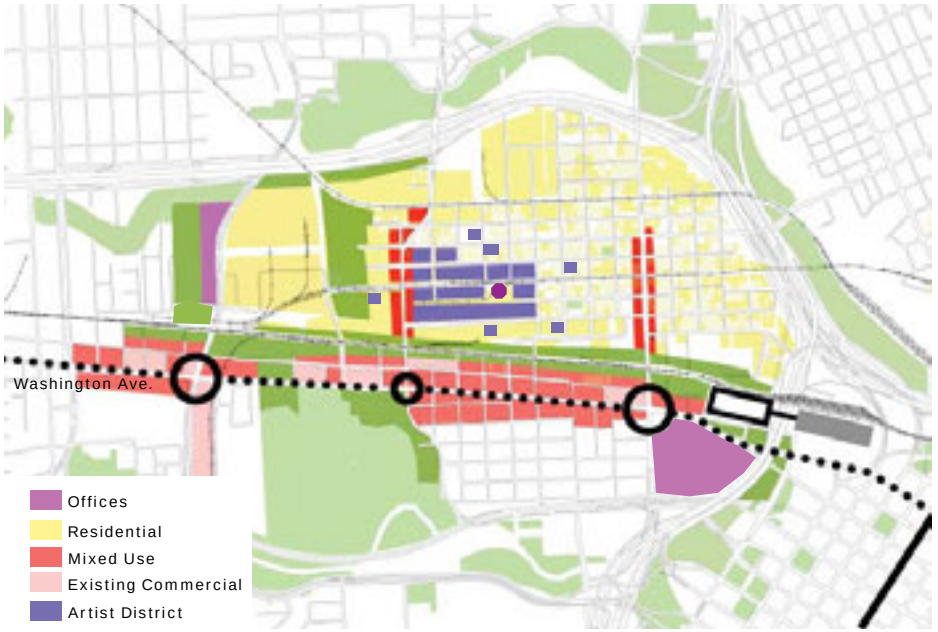


Proposed Cross-Section

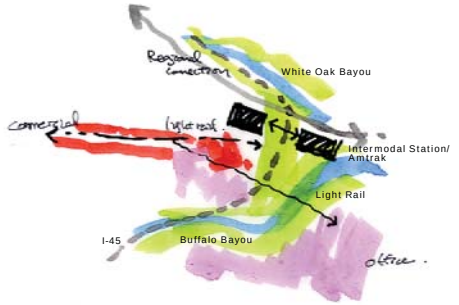
Aerial View of the Proposed Pedestrian Route

Conceptual Sketches of the Proposed "Tree House"

to the natural areas at the edges of the neighborhood. Two existing green areas, Spotts Park and the Heights Boulevard median, provide another opportunity to bring the bayous into the center of the neighborhood. The design envisions a continuous green connection from north to south through a central plaza. Additionally, this area has two large tracts of land that are likely to be redeveloped, thus providing an opportunity to envision new structures and natural systems.



Proposed Nodes and Land Uses



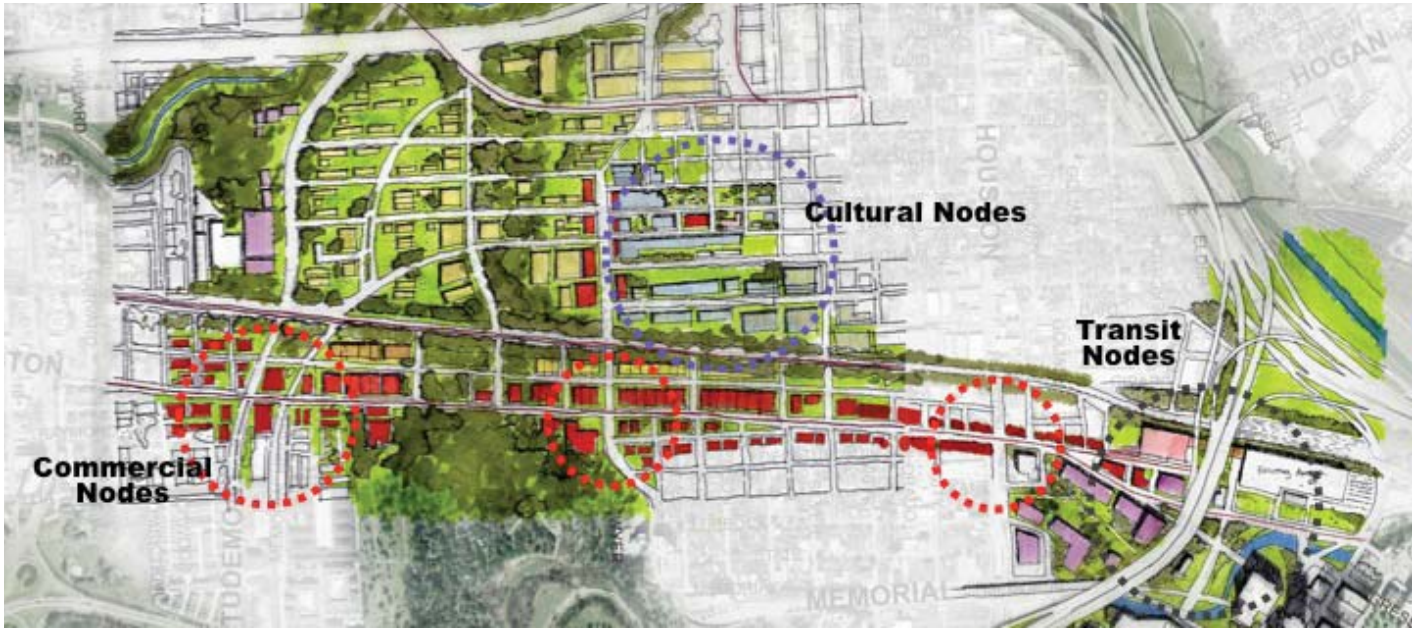
Proposed Inter-modal Transit Station Diagram

Land Use:
Nodes of Intervention

Stephanie Gautama/Ji-Hyun Yoo

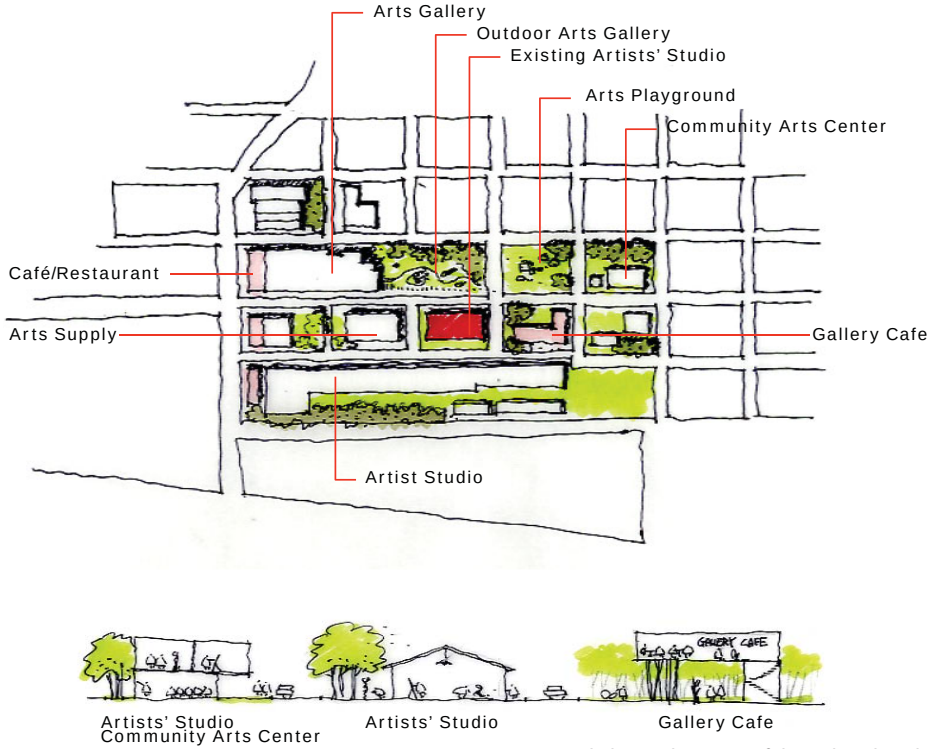
Super Neighborhood 22 is strategically placed as the location for the urban expansion of downtown Houston in the future, yet its transportation and public infrastructure is clearly disconnected from the Central Business District. The neighborhood is also uniquely defined as 'Between the Bayous,' but the connection between these green bayous is missing.

Our project looked at these opportunities and challenges, and aims to create these urban connections by focusing on specific nodes of intervention. We propose that this nodal system be implemented in phases: 1) Preservation of green space and creation

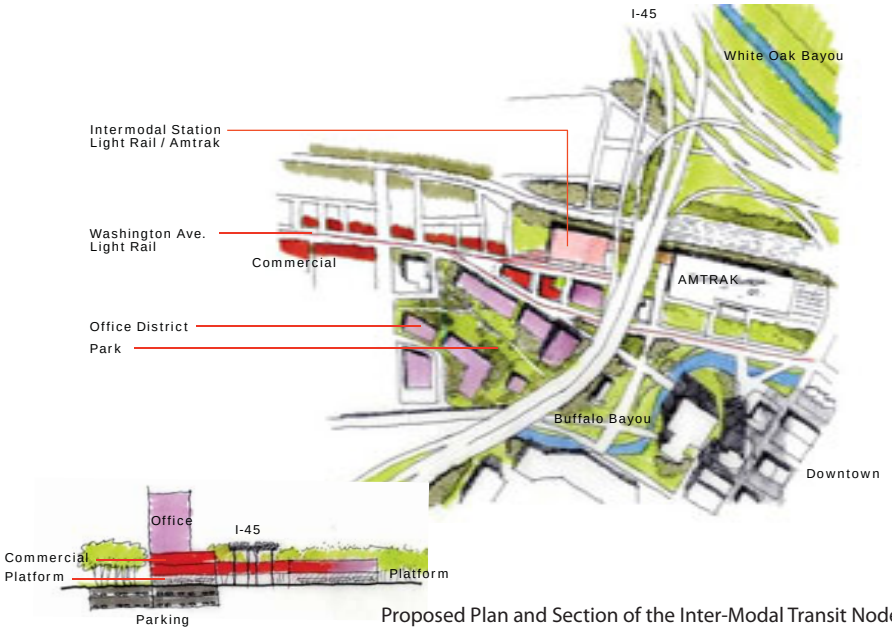


Proposed Master Plan and Nodes Diagram

Proposed Plan and Section of the Commercial Nodes



Proposed Plan and Section of the Cultural Node



Proposed Plan and Section of the Inter-Modal Transit Node

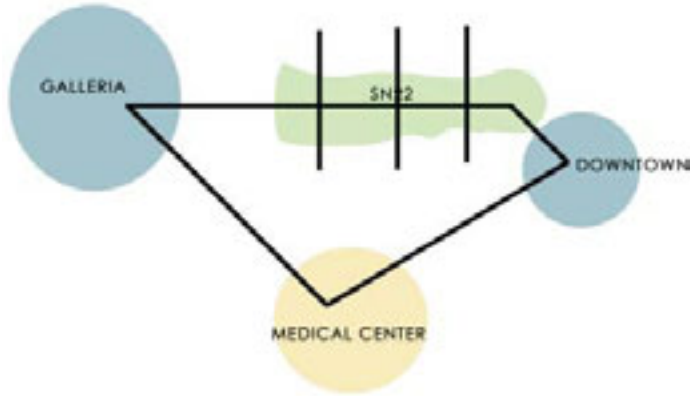
of the cultural node; 2) Establishment of a light rail system on Washington Ave; 3) Light rail network will attract higher density commercial/mixed-use properties along Washington Avenue, as well as higher density residential on adjacent streets; 4) Emergence of offices with businesses linked to downtown; 5) Further expansion of the commercial districts along the secondary roads. At the end, three distinct nodes emerge out of these phased growths: Inter-Modal Transportation Node, Commercial Node and Cultural Node.

Connections:
Major + Minor Connections

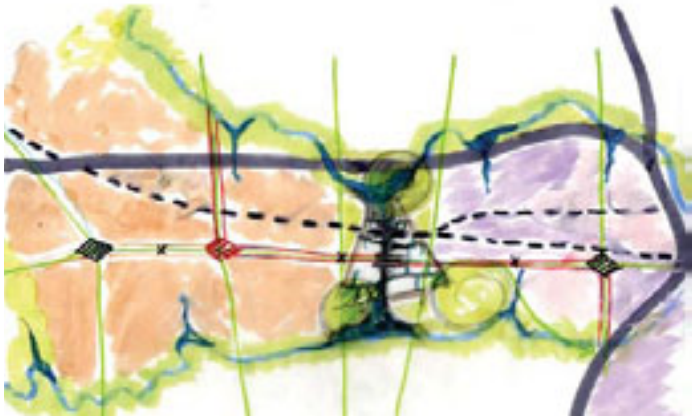
Begum Tarakci

During the second week, I chose to focus on major and minor connections throughout the neighborhood. Specifically, I examined connections to historical areas, connections between the industrial land in Ward One and the Downtown Central Business District, connections between the residential areas, and connections between existing green spaces, including the cemeteries and bayous.

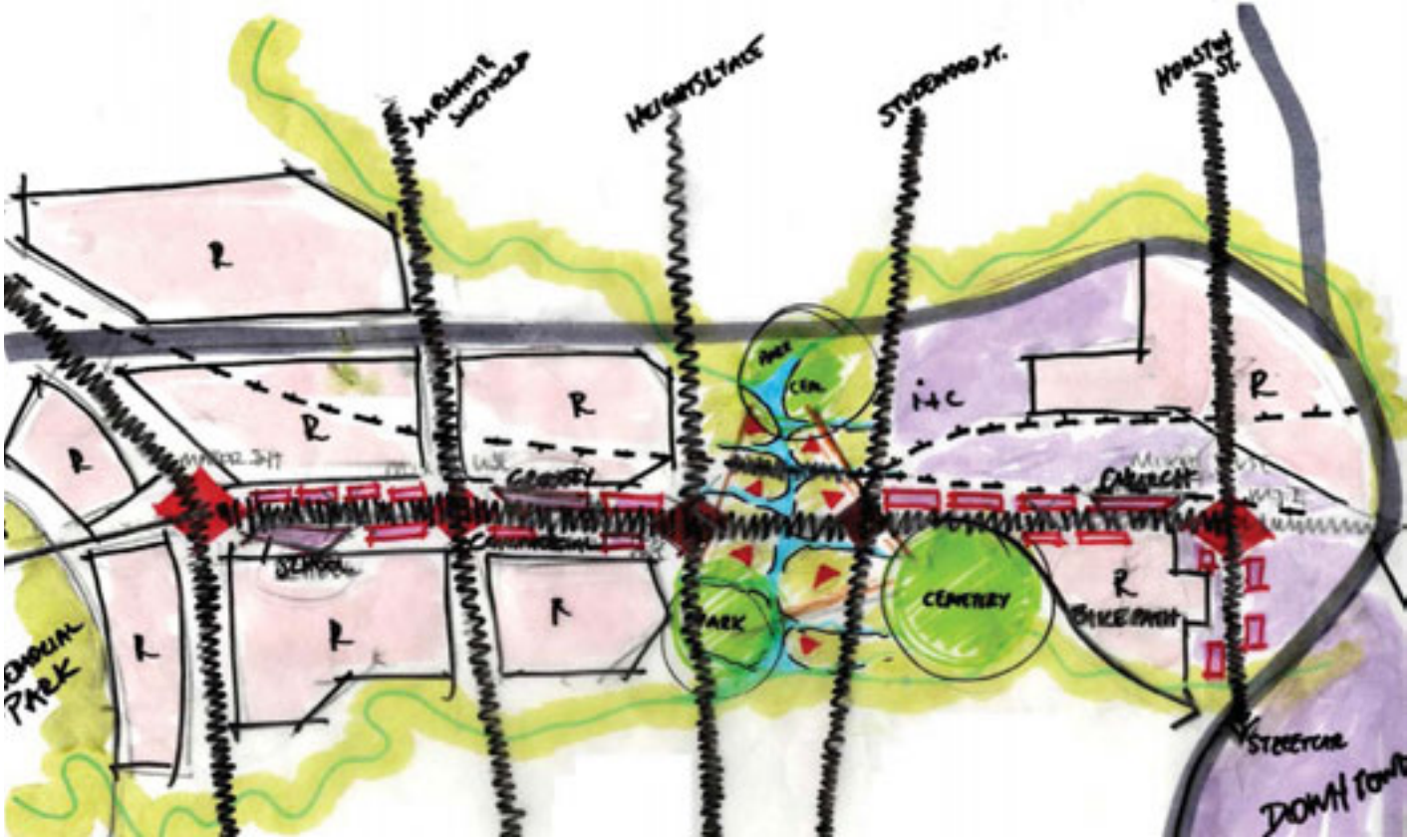
Of all these connections, I felt that the most critical was the missing link between the bayous. Therefore, I focused on ways in which to connect the bayous and surrounding park spaces. In order to



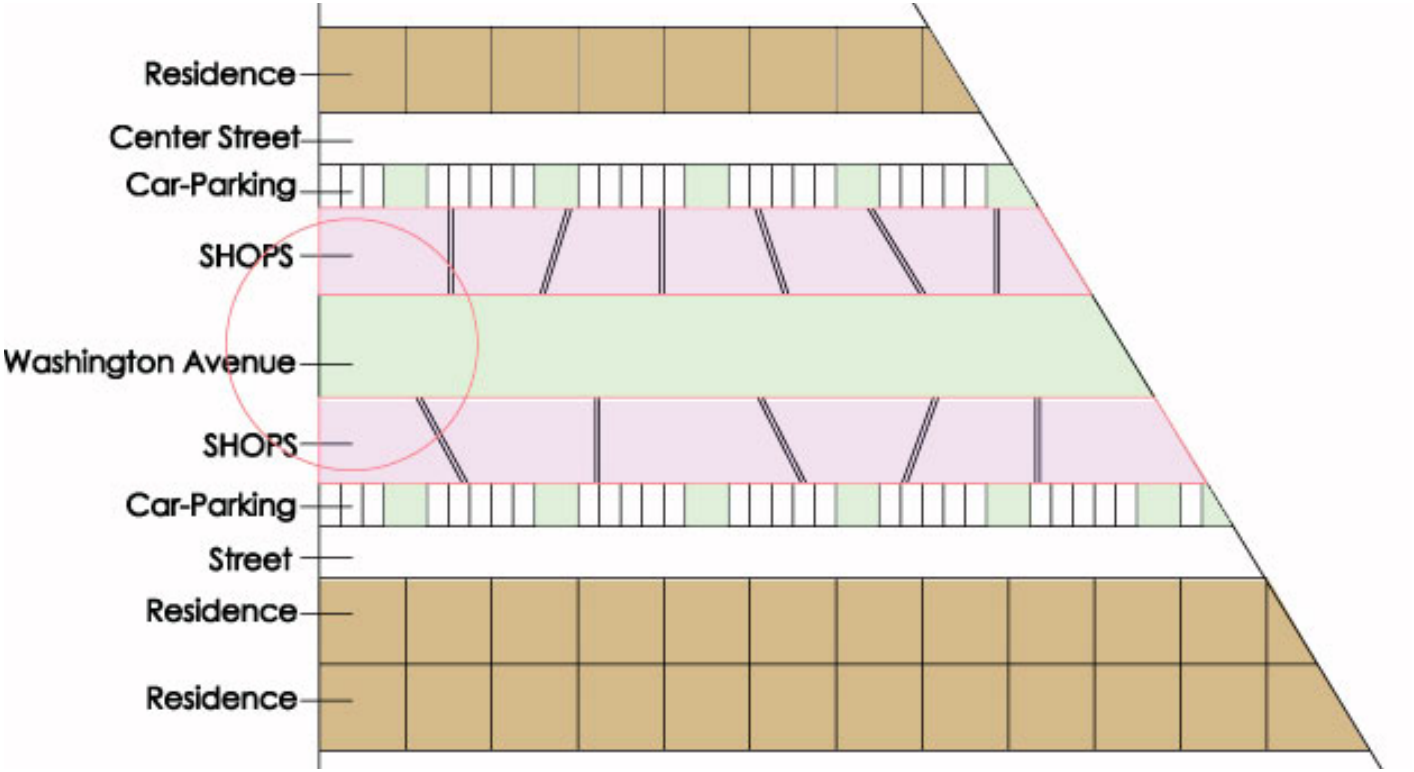
Major Connections Diagram



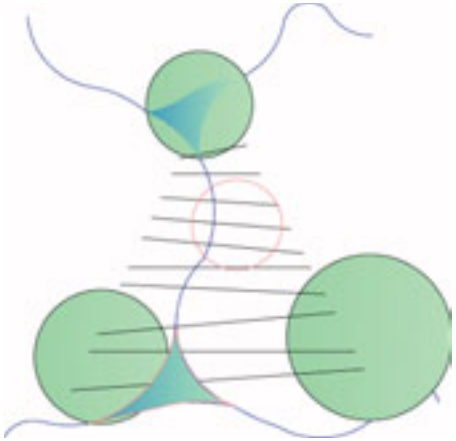
Conceptual Master Plan



Master Plan

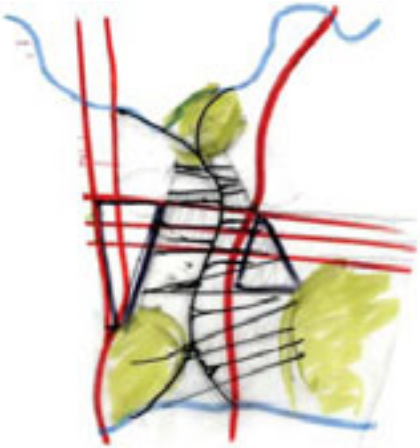


Proposed Cross-Section Through Washington Avenue



Minor Connections Diagram

Minor Connections Conceptual Diagram



Minor Connections Conceptual Diagram

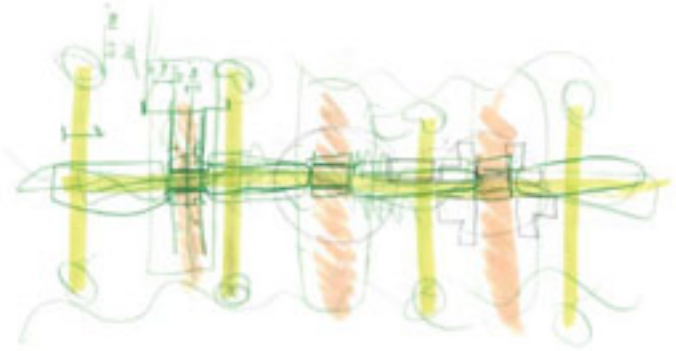
accomplish this, I utilized the Olivewood, Glenwood and Washington Cemeteries and proposed an active park space in between. Doing so would create another major recreation zone, complimenting the location of the existing Memorial Park.

Within this recreation area, I proposed several active spaces and added a water connection in between the bayous. While focusing on the recreational area, I was inspired by nature. Therefore, I applied artificial cracks and fractures to the water feature.

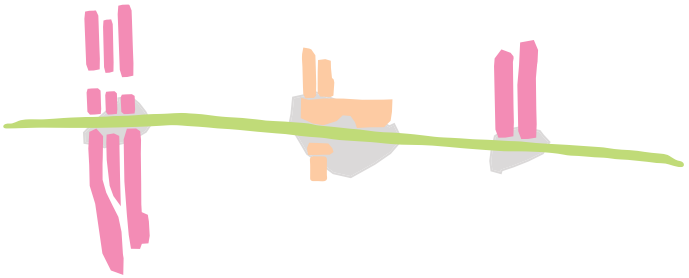
Connections:
Green Connections

Julianne Rader

During the second week of the Summer Intern Program, I chose to focus on connections throughout Super Neighborhood 22. Specifically, I examined the potential to link the eleven neighborhoods through an east-west parkway and north-south commercial centers. The proposed parkway would occur within the block between Washington Avenue and Center Street, and would serve to link the downtown area, Super Neighborhood 22 and Memorial Park. I envisioned this green space to be approximately 200 feet wide and include recreational and passive spaces. In this scheme, Washington Avenue would



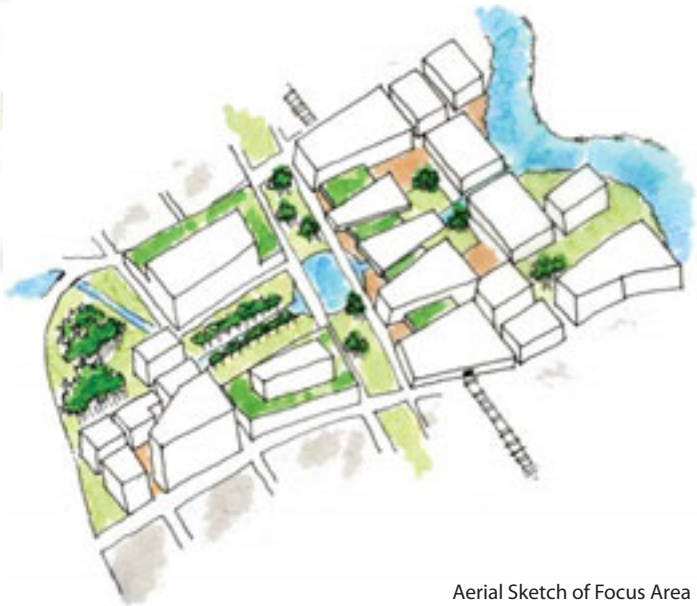
Concept Sketch



Concept Diagram Illustrating Proposed Parkway and Commercial Centers

Revised Vision Plan

Master Plan for Focus Area



Aerial Sketch of Focus Area

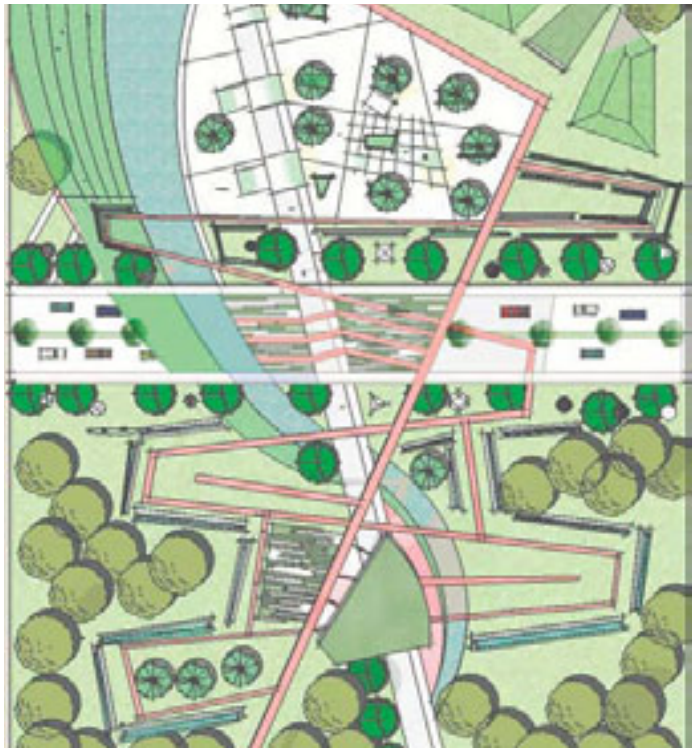
be decreased from five lanes to three eastbound lanes, while center would be increased from two lanes to three westbound lanes. These routes would both accommodate wider pedestrian areas, space for street trees, and light rail transit. The proposed north-south commercial areas would then occur at the primary intersections along the Washington/Center corridor – Shepherd/Durham, Heights, and Sawyer. This orientation would allow the Washington/Center corridor to remain a major east-west thoroughfare, by which people could access the shopping centers. Patrons could then turn onto smaller access roads behind the commercial buildings, park and walk to the front side of the building. Doing so would help to decrease the congestion along these north-south streets, and make for more pedestrian-friendly shopping experiences.

Finally, I proposed that the areas in between the commercial centers, as well as along the proposed Washington/Center corridor, become moderate to high-density residential neighborhoods, building upon the existing neighborhood fabric.

WEEK 03

PLACES DESIGN

As previously mentioned, the redevelopment of Super Neighborhood 22 lies in individual projects. Therefore, the student interns utilized week two to create site specific designs. The proposals include parks, commercial centers and streetscape designs, as well as other designs approved by that week's visiting principal and associate. The interns each conducted detailed inventories of their sites, which they used in conjunction with work from weeks two and three to create design schemes. These ideas were then presented to a group of neighborhood residents and stakeholders. In addition, the interns were asked to make a special presentation to the Planning Department and select developers.

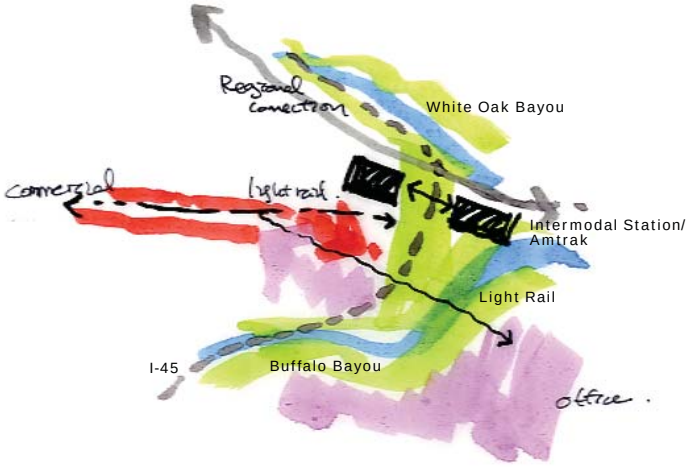



Stormwater Treatment
Ponds With Wetland
Habitat Planting
Widened Bayou Allows
For Recreational Lake
Entry Park:
With Wetland
Habitat Pond
Entry Park:
Playground, Restrooms
and Parking
Restored Railroad Bridge
Basketball Courts and
Skating Areas Along
Main Pathway

Portal to SN 22

Ji-Hyun Yoo

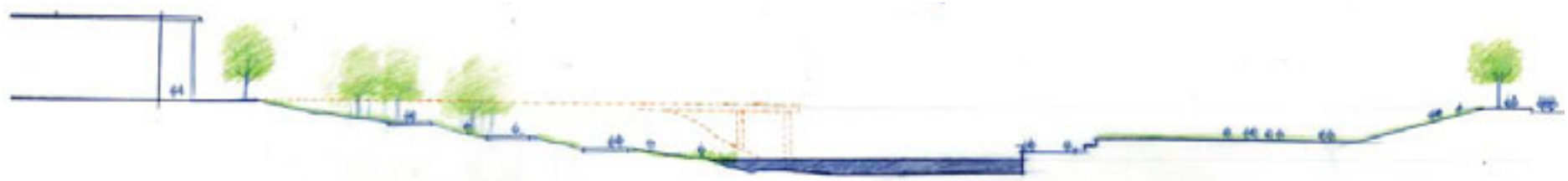
SN22 is quite disconnected from downtown because of the physical barrier of I-45 and the lack of activities. Current uses of the site are parking, vacant lands and public facilities. However, the site has several potentials to be a future node. There is an Amtrak Station, which can be developed as a Transit Node, incorporating light rail and bus routes. This site is also near the Theater District in downtown. In addition, the existing USPS office has a plan to be redeveloped as a performing arts center, which can function as a destination. These facilities can be tied together as one complex with a waterfront. Utilizing these potentials, I proposed an inter-modal transit system of bus, light rail and Amtrak, and a commercial corridor.



Concept Sketch

Site Plan

Proposed Cross-Section Through I-45, Aquarium and Water Front



Proposed Cross-Section Through Performing Arts Center and Amphitheater

Perspective of Site

Bayou Columns Park

Nathaniel Behrends

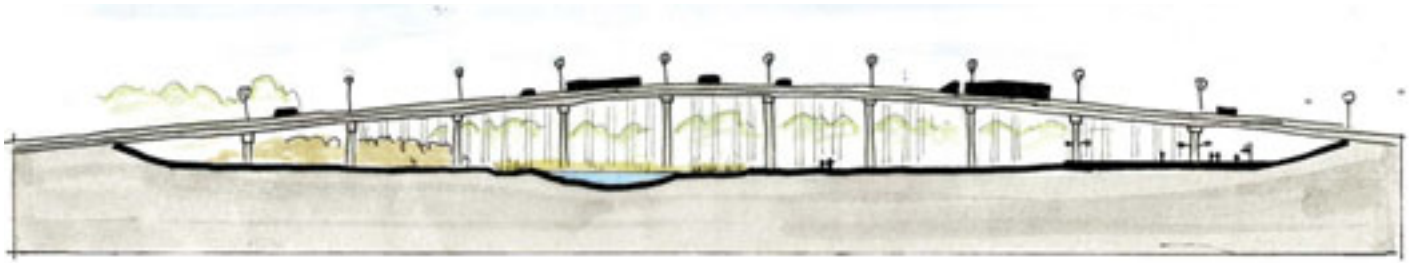
For the third week's place making project I chose to work on a site in the First Ward, as this section of Super Neighborhood 22 had not been directly addressed in our urban design studies. I began with a quick analysis of the area at a broad scale. What I found was a residential neighborhood that is separated from the rest of the city by industry, railroads and freeways. Additionally, my analysis uncovered two great opportunities—the proposed Rails to Trails bike route along the abandoned MKT rail line and the large areas of open space along White Oak Bayou. In response to these opportunities, I chose to design the site where the I-10/I-45 freeway overpass, the MKT right of way and White Oak Bayou all converge.

Comfort Analysis

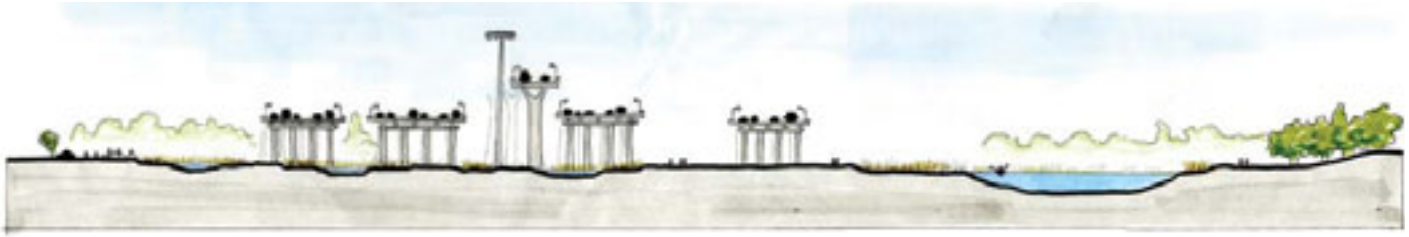
Hydrology Analysis

Site Plan

Perspective Study of Light and Shadow Under the Interstate



Elevation of the Interstate



Cross-Section of the Interstate

The dominant feature of this area is the enormous overhead freeway structure. Initially I was uncertain that it would be possible to design a usable public destination underneath such a large mass. However, upon visiting the site, I found that the space under the freeway was surprisingly pleasant. While the structure provided welcome shade on a hot day, it was high enough to allow sufficient light to maintain lush green vegetation. The pattern of light and shadow created by the supporting columns added another layer of interest to the space.

The goal of my design proposal is to create a neighborhood amenity that would connect the First Ward residents both to the surrounding neighborhoods and to the important natural bayou systems that are found in Houston. White Oak Bayou would be widened to improve its hydrological and ecological functions and neighborhood swales would be directed into a filtration wetland that would demonstrate how water quality can be improved and wildlife habitat enhanced.

Washington Green

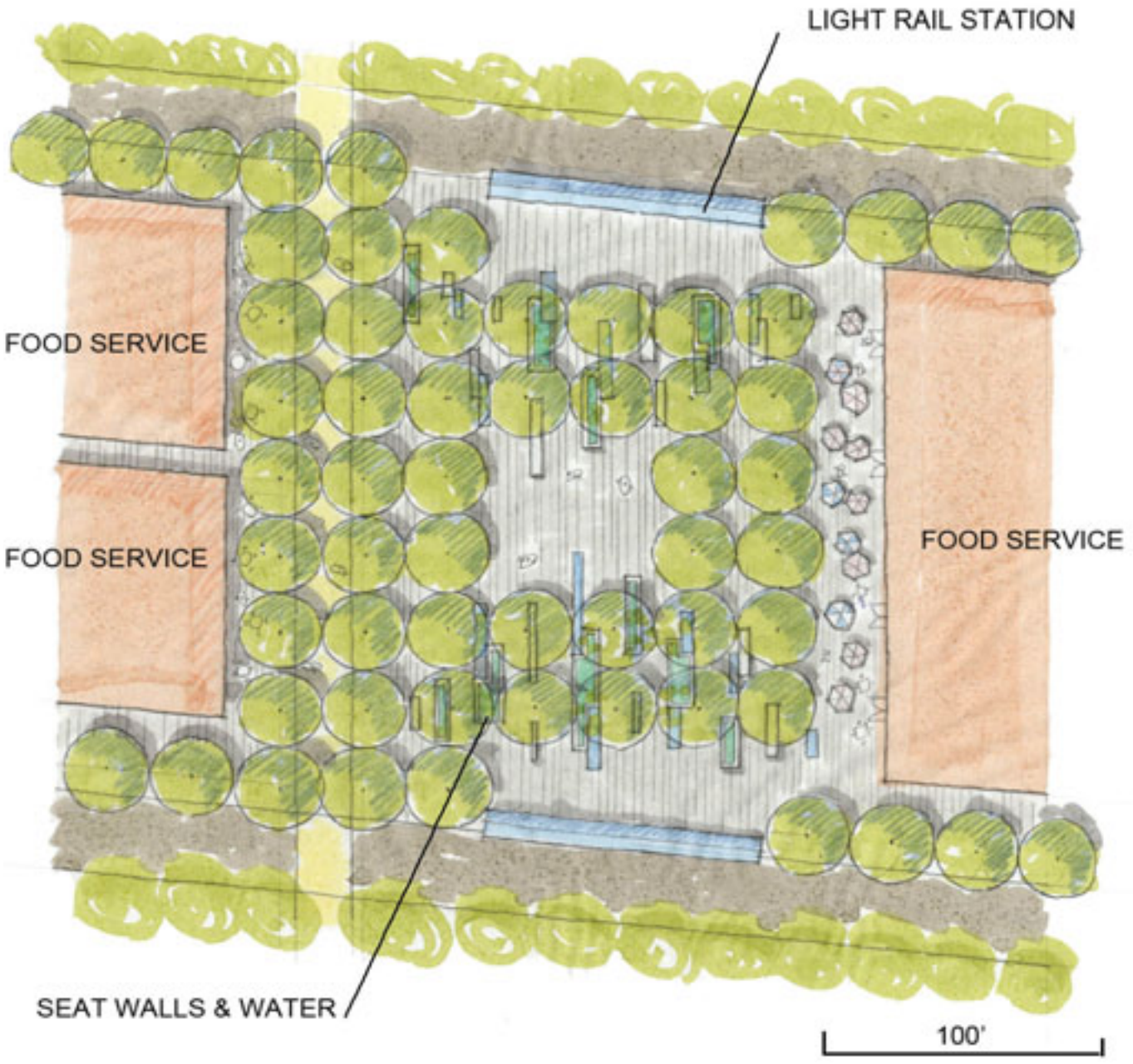
Taizo Horikawa

During Week 3 I focused on the area along Washington Avenue between Sawyer Street and Sabine Street, pushing the idea of a Green Ribbons forward.

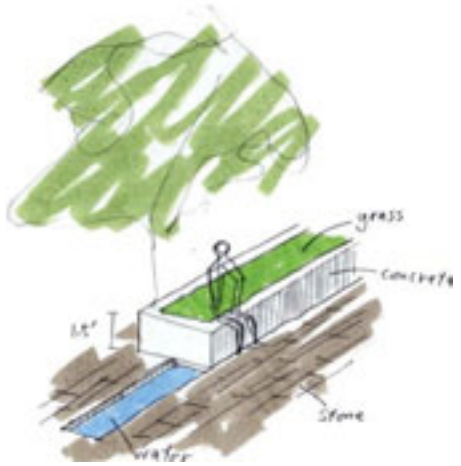
Washington Avenue and Center Street are reconfigured as a one-way couplet, and light rail is introduced. The under used area between Washington Avenue and Center Street is developed as a human-scale, vibrant commercial area with two-story commercial buildings. The north-side sidewalk of Washington Avenue is widened to be thirty feet with a row of shade trees. It works as a linear plaza where people spill out from the commercial buildings and gather. The area between Center Street and the railroad track is converted to rows

Site Master Plan

Washington Avenue



Proposed Plaza Plan



Proposed Seating

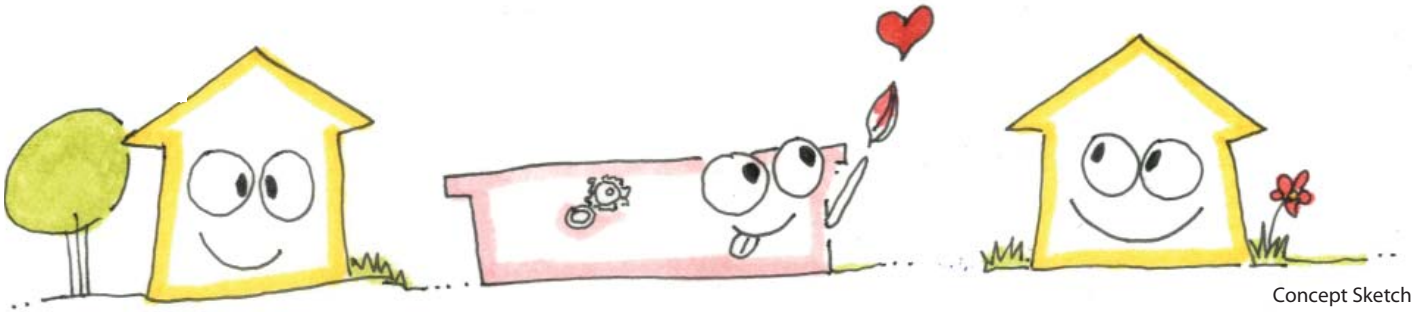
of two-story commercial buildings and green parking lots. Hemphill Street and White Street are changed to promenades, connecting the site with the opposite side of the railroad track. The existing bungalows in the site and single-story commercial buildings on the south side of Washington Avenue are preserved.

There is an existing large parking lot in the area between Washington Avenue and Center Street. This is to be developed as a gathering plaza with light rail stations. The shade trees are arranged on a grid and under the tree canopy are rows of seat walls and water. Their forms reflect the concept of Green Threads at a smaller scale.

Edward's Lane

Stephanie Gautama

Edward's Lane is located in an industrial area undergoing redevelopment into townhouses. Observing the current relatively low-land values and large lot sizes, the project departs on the assumption that there is going to be higher density residential in the area. As the density increases, often there is a lack of provisions for public open spaces where people can gather and engage with each other. The Edward's Lane project proposes that the current four lane industrial street be narrowed into a two lane street, and that the extra lanes be used for a pedestrian oriented green space. The project also suggests some of the industrial buildings be reused for artists' live/work lofts and a community center.



Concept Sketch

Site Plan

Existing Edward's Lane

Proposed Edward's Lane

Cross-Section of Proposed Artists' Studios

Cross-Section of Proposed Residential Streets

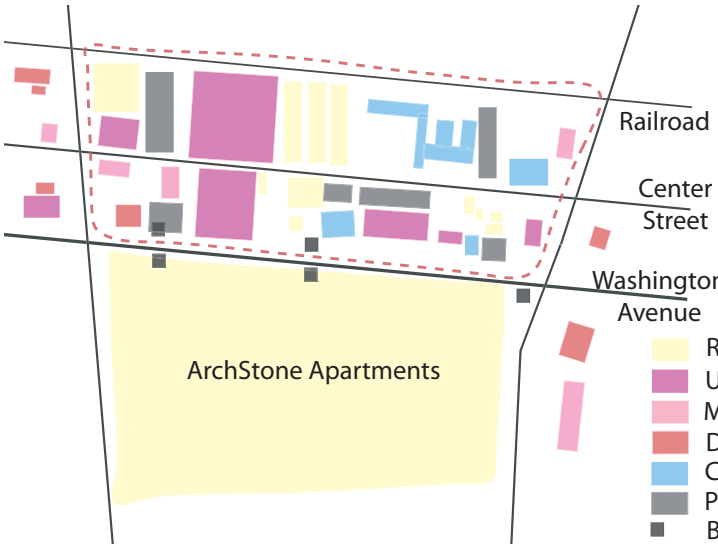
Perspective of Proposed Sidewalks

Town Square

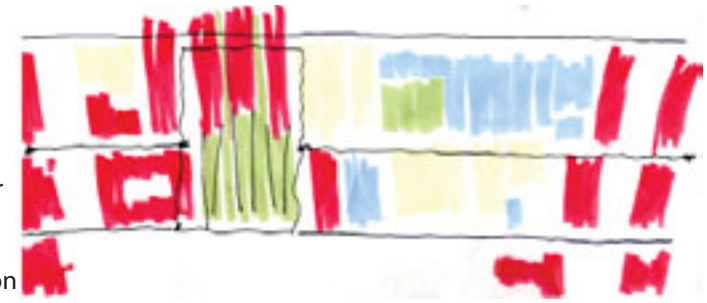
Julianne Rader

Utilizing the comments and suggestions from Super Neighborhood 22 residents and civic club members, I began week three by replacing the proposed east-west parkway with commercial and residential uses. I also opted for a more practical response to Washington Avenue. Instead of proposing that it become a one-way street, I suggested the street be decreased to four lanes – two in each direction – and that the fifth lane be distributed to the sidewalk areas to create an enhanced pedestrian realm.

I then chose to focus on one of the north-south commercial areas. I selected the area bounded by Heights Avenue to the west, Studemont Street to the east, the railroad to the north and Washington Avenue to the south. Before doing any design work, I conducted a thorough inventory of the site, noting building uses and sizes, parking lot locations, bus stops and pick-up times, sidewalk and swale



Site Inventory



Concept Sketch

Proposed Land Use Plan

Concept Sketch

Site Plan

conditions, and tree coverage. I then used this information to guide my site master plan. This diagram proposed land uses, including a major commercial and transit-oriented Town Square between Harvard Street and Wagner Street, a community park in conjunction with the Harper High School, and additional residential units.

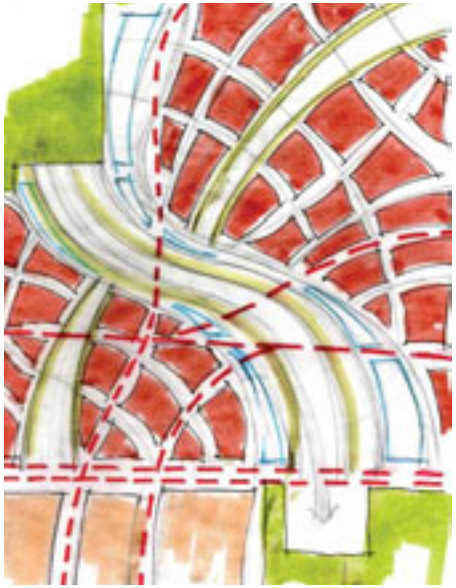
After formulating the master plan, I further focused on the Town Square and transit-stop. My concept for this site was to propose north-south running site features to lead patrons into the commercial buildings, while creating east-west oriented spaces for gathering and community events between the adjacent, existing civic structures. In addition, I wanted the overlapping of the commercial structures with the railroad to create an opportunity for a commuter rail stop. This, paired with my concept for the site, would create a confluence of transportation, civic and social uses, and commercial and retail.

Based on the concept, the site features include a series of paths that lead visitors from the street to the commercial structures. In the process, the paths are slowly raised six feet in elevation. Doing so not only introduces topographical changes, but also allows for two underground parking decks. This also allows for water features to be introduced, including a small retention facility for storm water and a water wall along the middle path. In contrast, the east-west features provide spaces for residents to gather in various sized groups under the canopy of live oaks.

ParkLine

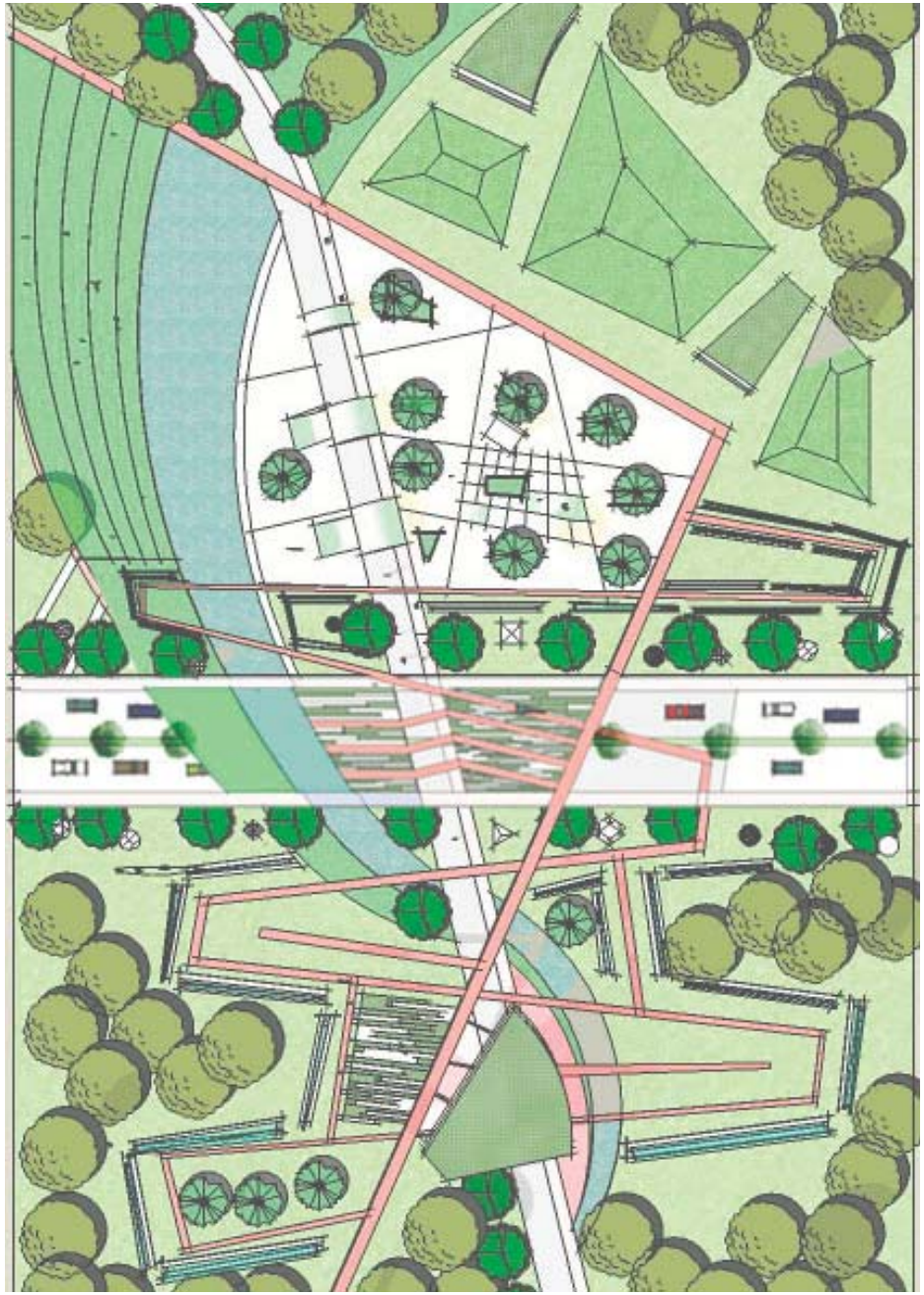
Begum Tarakci

As I was working on the idea of green connections, I tried to find the most important location for green linkages. Therefore, the space between Olivewood and Glenwood cemeteries, as well as Washington Avenue, became my week three site specific project. The reason that I chose to work on this specific site was to encourage pedestrians to use both sides of Washington Avenue. I designed a park, called ParkLine, which connects the north side of Washington Avenue to the south side.



Concept Sketch

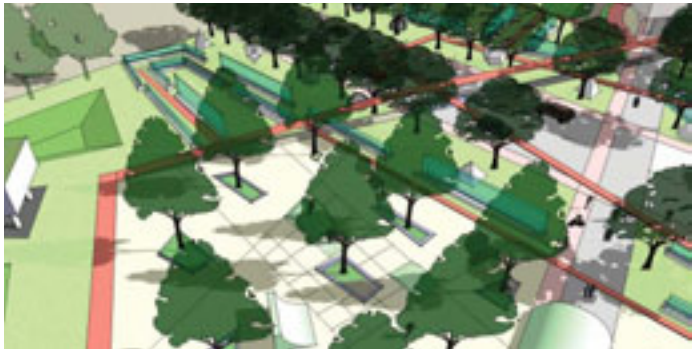
Concept Sketch



ParkLine Site Plan

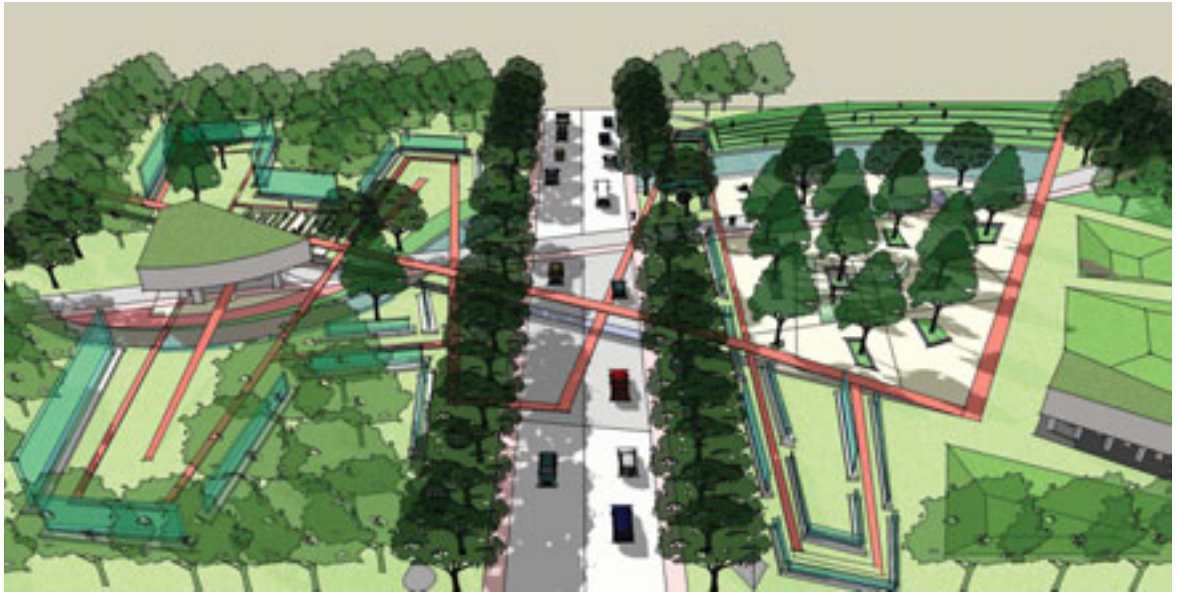
Perspective of Land Forms and the Water Feature

Perspective of Washington Avenue



Perspective of the Cultural Area

Perspective of the Amphitheater



Aerial Perspective of Washington Avenue

De-Fence the Bayou

Chia-Chi Chen

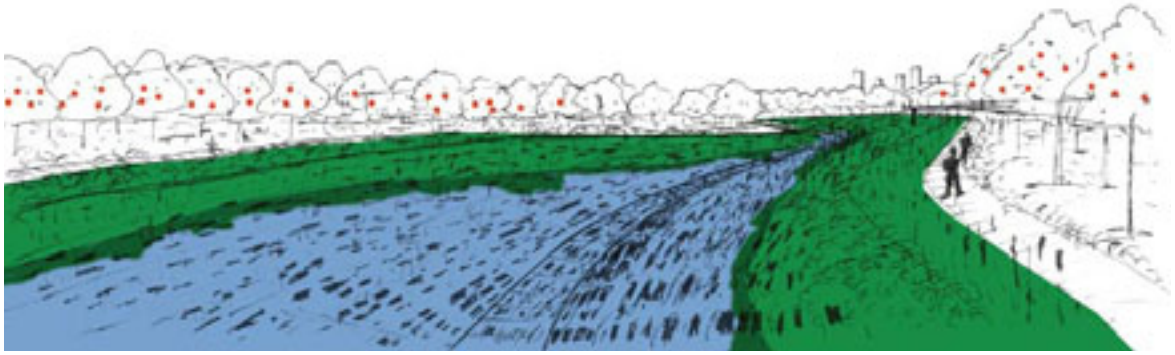
I looked for a specific site in Super Neighborhood 22 in which I could develop a project with a water front and adjacent open space. I selected an interesting site along White Oak Bayou, south of I-10. According to Taizo and my proposed urban master plan from week two, we planned to utilize isolated industrial land to build a community college close to a new community train station in this area. In order to detain stormwater and enhance the campus, I proposed an artificial lake with a wetland in the center of the community college. Also, to revive the abandoned areas along the bayou, I have chosen to promote urban agriculture. Therefore, I also designed a farmers' market with multi-use ramps for plucking fruit.

Site Diagram

Conceptual Master Plan of the Community College

Community College Master Plan

Perspective of the Proposed Community College Campus



Perspective of the Proposed Community College Campus

Proposed Cross-Section of the Overlook Points and Urban Agriculture

Proposed Cross-Section Through the Community College

Concept Sketch

A Source of Inspiration

Proposed Water System

Green Fingers

Fangfang Ouyang

To continue the green finger concept, I chose to develop a new green biking and pedestrian connection between Memorial Park and Buffalo Bayou. Then, I focused on the park design because it is an important intersection for biking and the bayou. Relating to Buffalo Bayou, I studied the existing topography and necessary slope for water cleaning swales to figure out the required earthwork changes. For the biking paths, I proposed a new bridge with room for bikers and pedestrians. Finally, I expressed the green fingers vertically in the form of a sculpture park.

Plan of the Proposed Bridge

Plan of the Proposed Bridge

View of the Proposed Bridge

The Vertical Green Fingers Supporting the Bridge

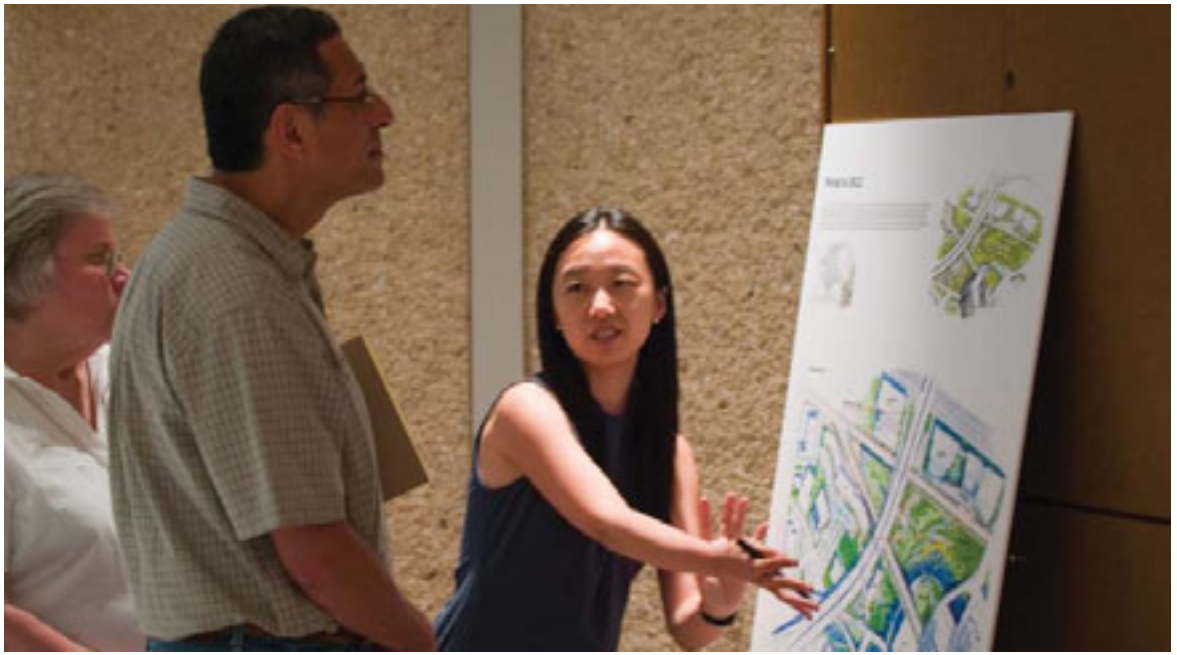
View of the Side of the Bridge

View Looking Down the Bridge

WEEK 04

OBJECT DESIGN

The final week of the Summer Intern Program was spent designing specific objects, which were aimed at creating a unique character within each of the specific sites developed in week three. These objects ranged in scale from entire plazas and parks to individual signs. Regardless of the scale, each design carefully considered the project site and existing conditions in order to improve the functionality and aesthetics.

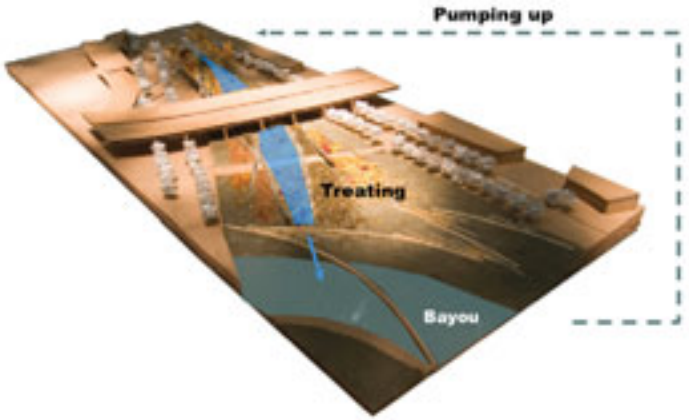


Blooming Triangle

Ji-Hyun Yoo

Blooming Triangle is a new Bayou Museum which is located near the historic site Alan's Landing. This museum will function as a landmark for the neighborhood, and is located on the transit and commercial node of Washington Avenue and Preston Street. In addition, the green weaving structure will stand as a symbol of "Between the Bayous," providing an impressive scene from I-45. This green structure will also function as a treatment wetland. The water from the bayou will be pumped up to the rooftop and cleaned as it returns to the Bayou.

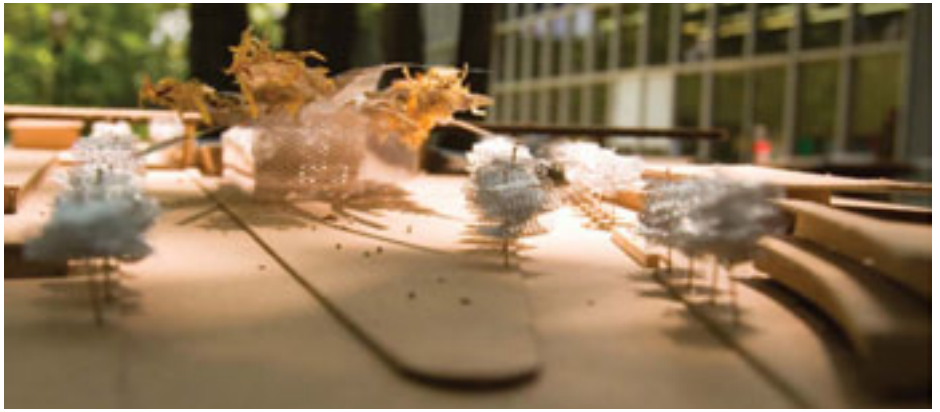
Blooming Triangle Location



Water Purification Feature

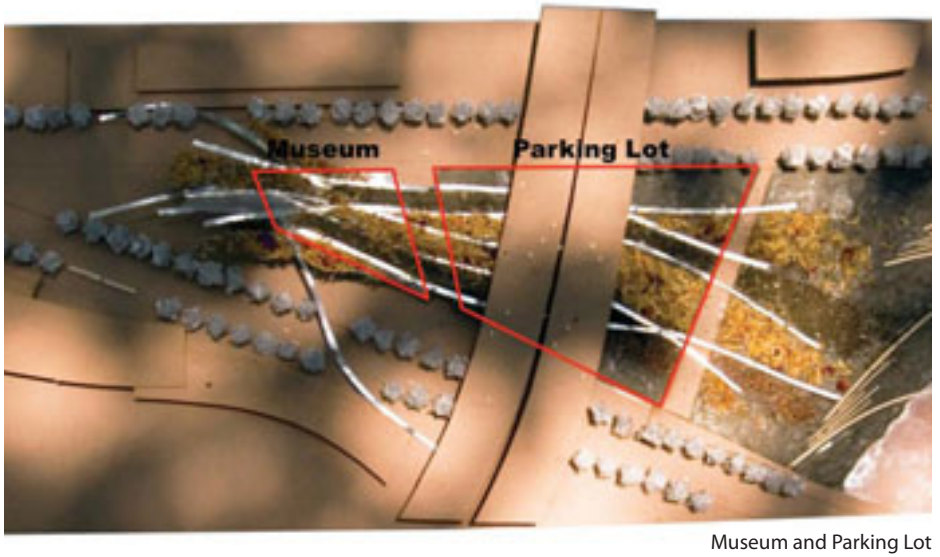
Blooming Triangle

The Extended Park from the Waterfront to Downtown



The Blooming Triangle as a Landmark from Washington Avenue

The Blooming Triangle as a Landmark from I-45



Museum and Parking Lot

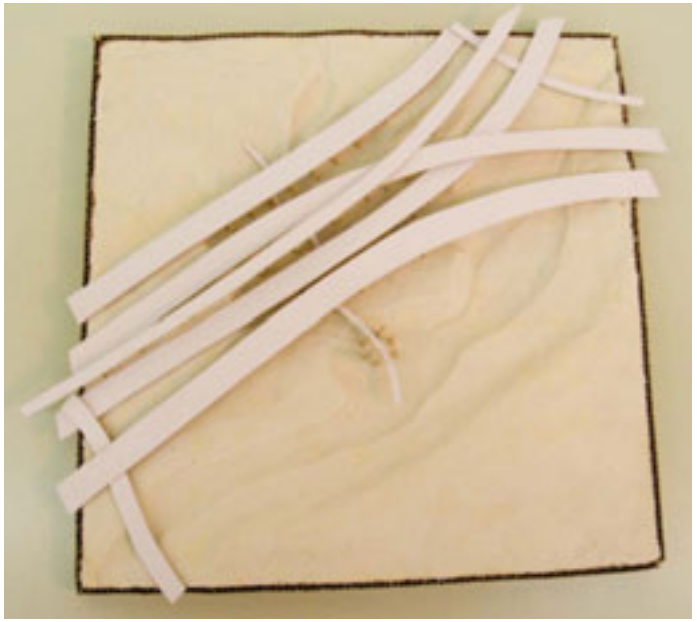
Elevation View of the Park from the Waterfront to Downtown

Bayou Columns Overlook

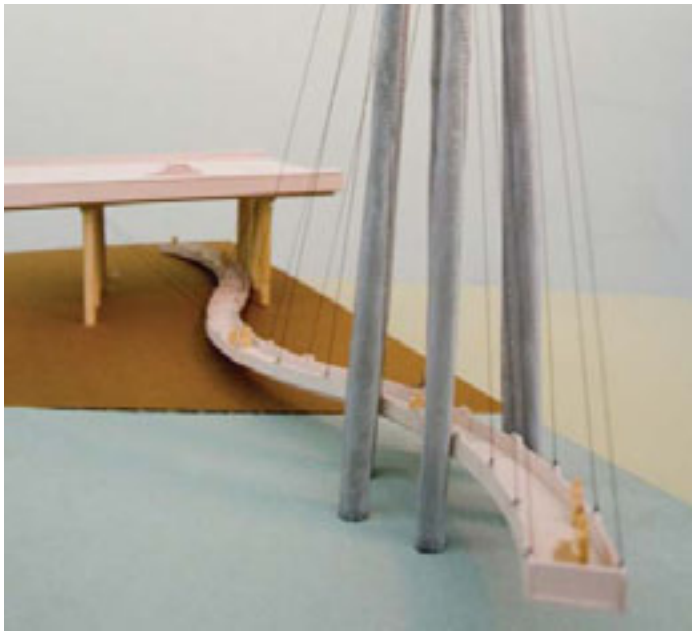
Nathaniel Behrends

The biggest challenge that I faced during the fourth week was to design an object that could adequately respond to the mass of pillars and concrete that make up the overhead freeway structure that dominates this site.

During site visits I became convinced of the need for an element that would mark a clear and safe path under this dark and potentially threatening roadway. Additionally, I saw the need to create an object to define White Oak Bayou as a destination; an object that would make an impact on those people passing by in cars on the freeway as well as the pedestrians and cyclists negotiating their way through the pillars.



Plan View of Bayou Columns Park



The Causeway and Columns

View of the "Column of Columns"

View of the Causeway and Columns

The Causeway and I-45

The Causeway and Columns

The design forms of Bayou Columns Overlook are a direct response to the forest of pillars. The primary element is a group of six columns, soaring one hundred fifty foot tall and arranged into a circle. This "column of columns" would become a landmark to highlight this site as a significant part of the linear park system along Houston's Bayous. The proposed columns are made of a stainless steel mesh, reflecting the sun during the day and are lit from within at night.

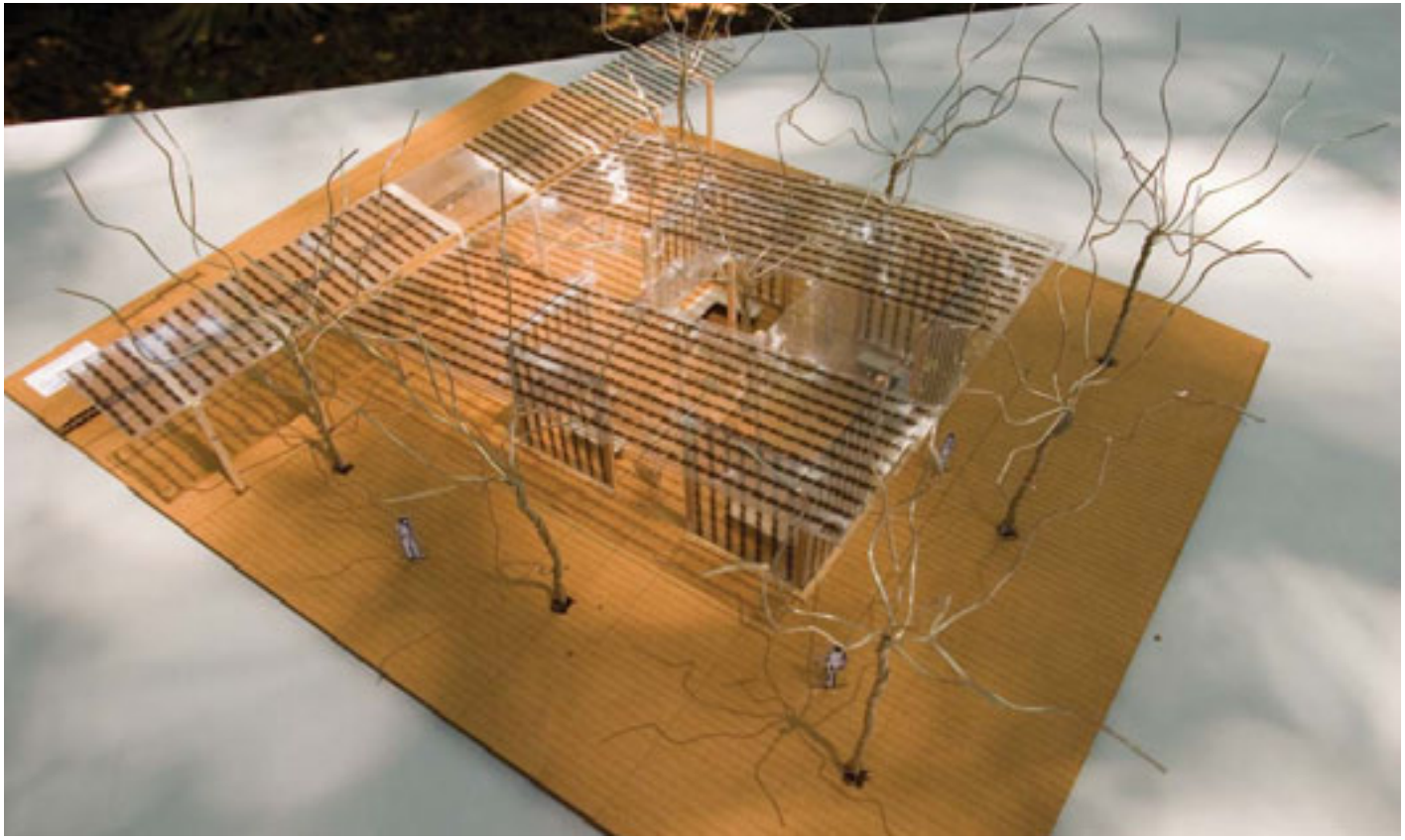
The second element of the design is a system of concrete pedestrian causeways that are attached to the freeway columns. These are elevated above the ground as the causeway weaves its way through the freeway structure and over the wetland areas. Finally, the causeway exits from beneath the structure where it joins with the six tall columns to form an overlook suspended above the waters of White Oak Bayou.

The design is a celebration of how transportation and flood control infrastructures can be readapted to serve multiple functions.

Waiting Room

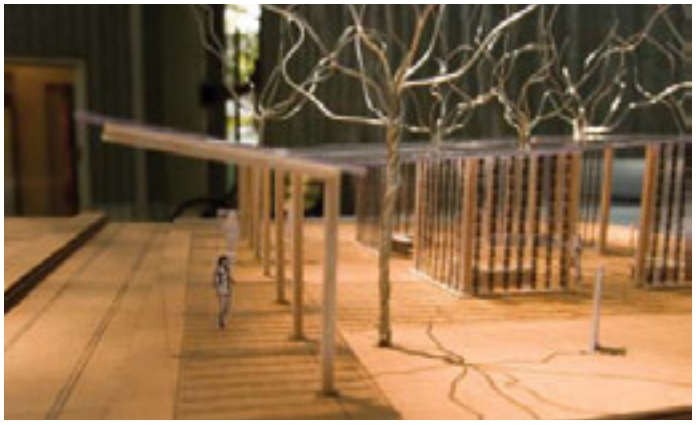
Taizo Horikawa

During Week four I designed a light rail station in the plaza I proposed in week three. The station is composed of a platform and waiting room. The station flows across the sidewalk, with a void between the platform and waiting room in order to not obstruct the flow of pedestrians. The railroad track is graded lower so that the platform and adjacent sidewalk are at the same height. The walls and ceiling of the waiting room are composed of two layers - glass panels and vines on cables. The interval between two vines is considerably wide and the walls and ceilings are semi-transparent, providing both comfortable enclosure and openness. The waiting room is placed in the plaza under a dense tree canopy. Therefore, it can be

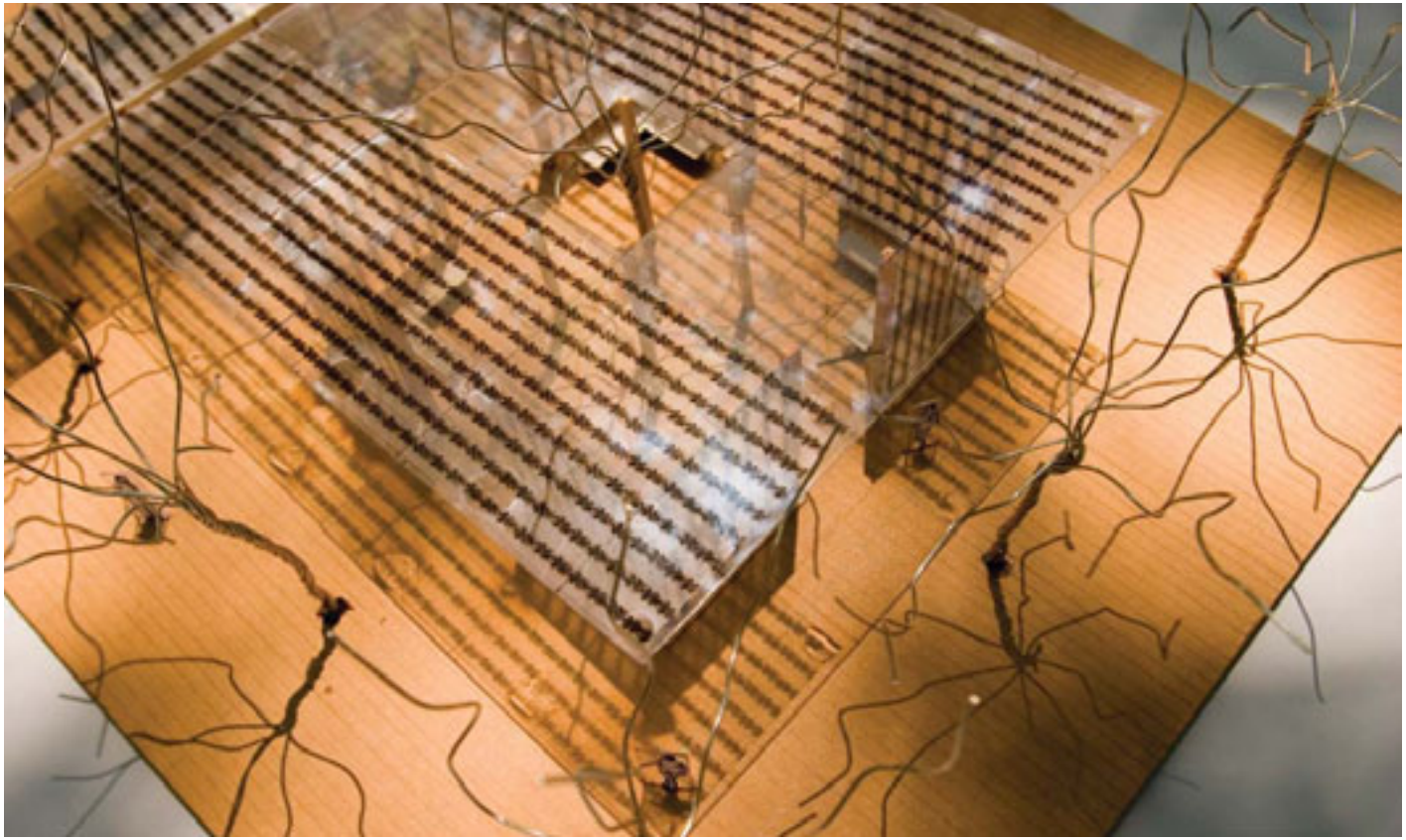


View of the Waiting Room and Light Rail Stop

Plan View of the Waiting Room



The Light Rail Stop



View of the Trellis

The Light Rail Stop

The Waiting Room

used as a light rail stop and gathering plaza. The dimensions of the station relate to the tree grid and the tree trunks work like outer columns of the station. The openings of the walls and ceiling are arranged to provide good air circulation. The center part of the ceiling does not have vines and there is a corridor of sunlight below it indicating a path from the platform to the center of the plaza.

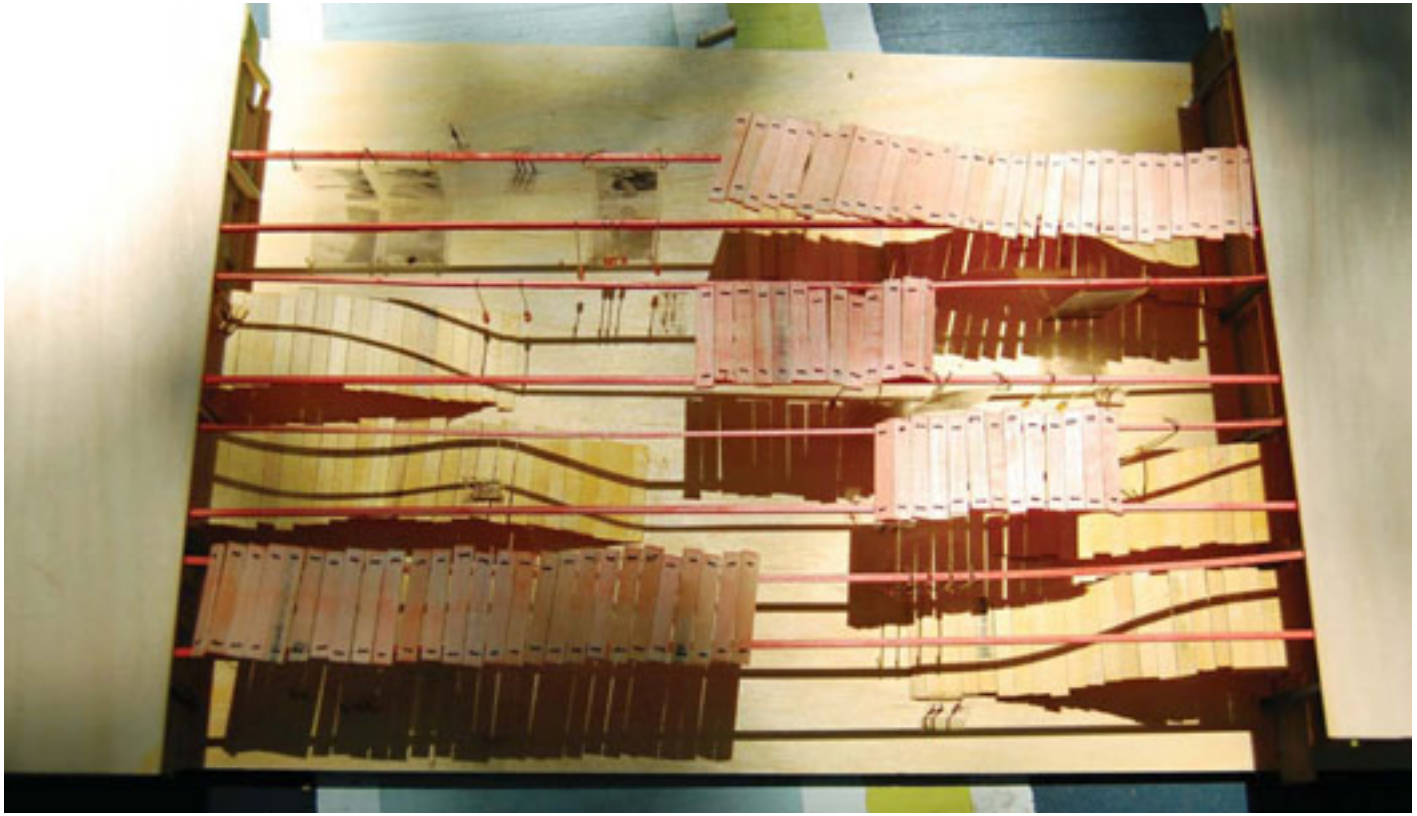
The station has two kinds of vines - Virginia Creeper on the ceiling and Trumpet Vine on the walls. Both of them have an orange fall color and Trumpet Vine has orange summer flowers. People would enjoy the seasonal change of the vines.

I used the Green Ribbon and Green Threads as design concepts in weeks two and three. In week four, the vines represented Green Threads. Thus, the designs are similar at different scales.

Sharespace

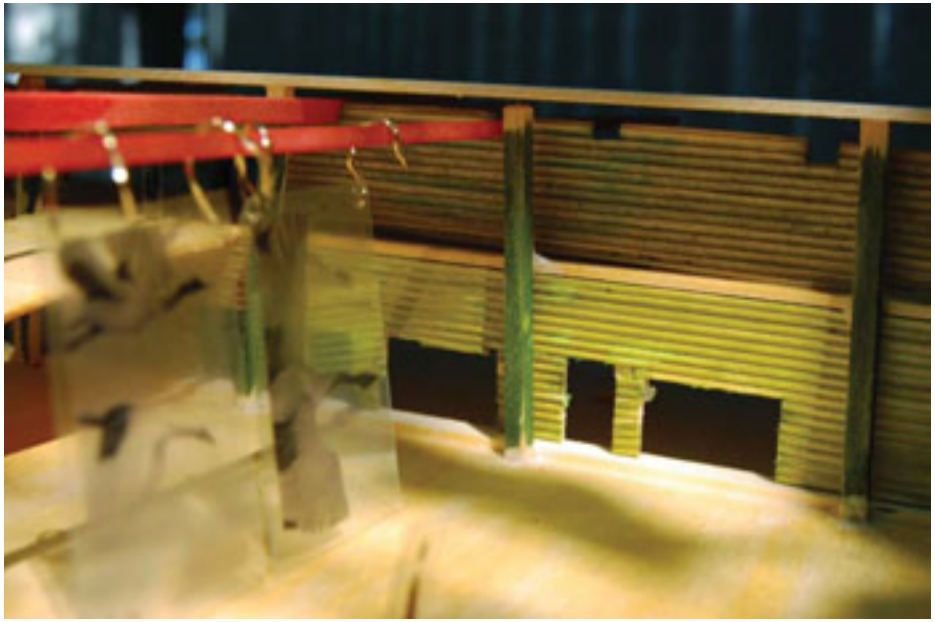
Stephanie Gautama

How do you make an open space in hot Houston be comfortably walkable at any time of the day? Sharespace is a scheme which proposes a community open-air gallery that is shaded with a multipurpose, dual-level wood trellis. The first level trellis has the shape of a hill and will become a shade canopy during the day, and a sitting structure during the night. The space will be enlivened by artwork and movie screens that are hung from a higher (second-level) trellis. The wood-trellis material is a recycled product that originates from around the site itself, as most of the older buildings of Houston currently under demolition are made out of wood block material.



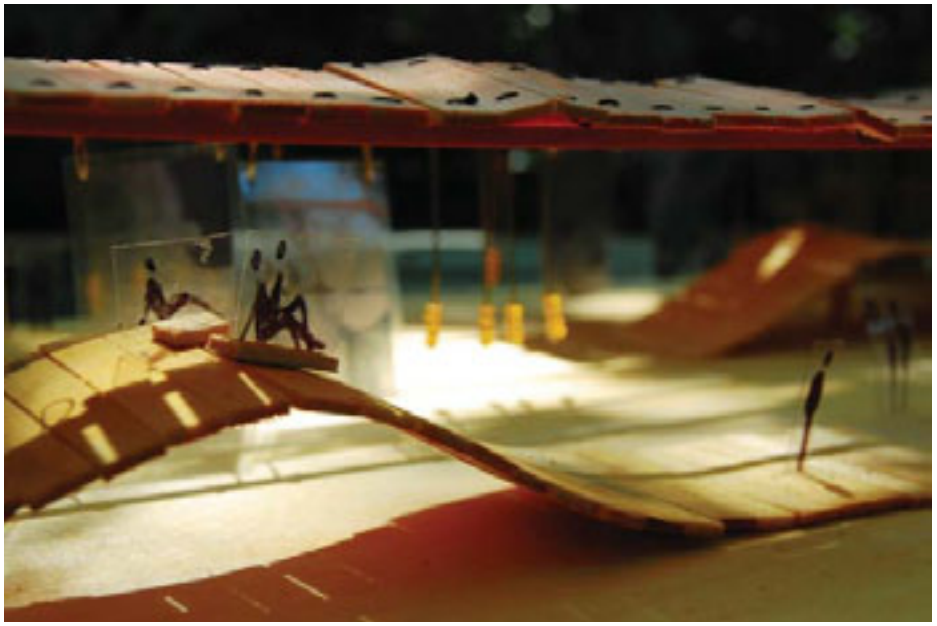
Plan View of Sharespace

Elevation View of Sharespace



Proposed Green Wall

Art Hanging from Trellis



Shade Structures Made from Recycled Wood

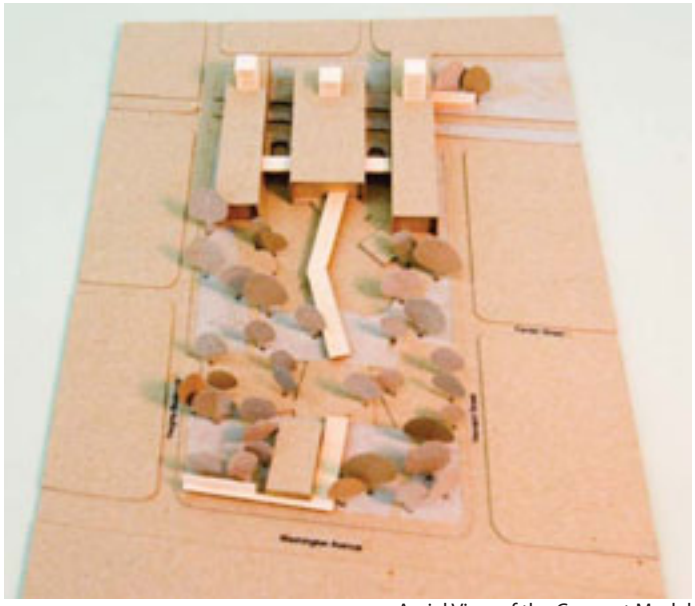
Concept Sketches

Site Lines

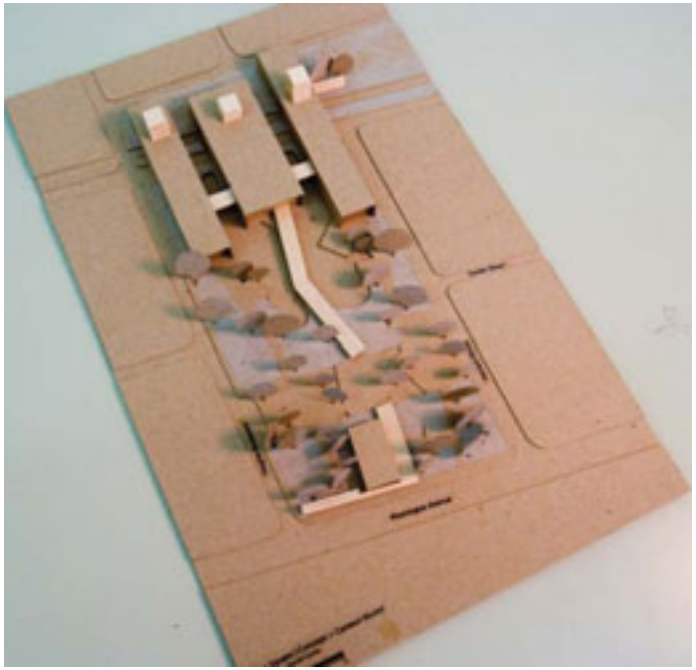
Julianne Rader

Building upon my ideas from week three, I wanted to design an object in week four that would not only unite the Town Square site and surrounding area, but would also provide shade. Just as I began week three with an inventory, I began week four by observing the various material types adjacent to my site. From this I discovered that many of the newly constructed town homes lack any consistent style or material. However, I did come to the conclusion that wood, particularly a light color, would compliment all the different units.

Knowing that I wanted to use a light colored wood, I then researched different ways in which it could both link the site and provide shade. Ultimately, I decided to create a



Aerial View of the Concept Model

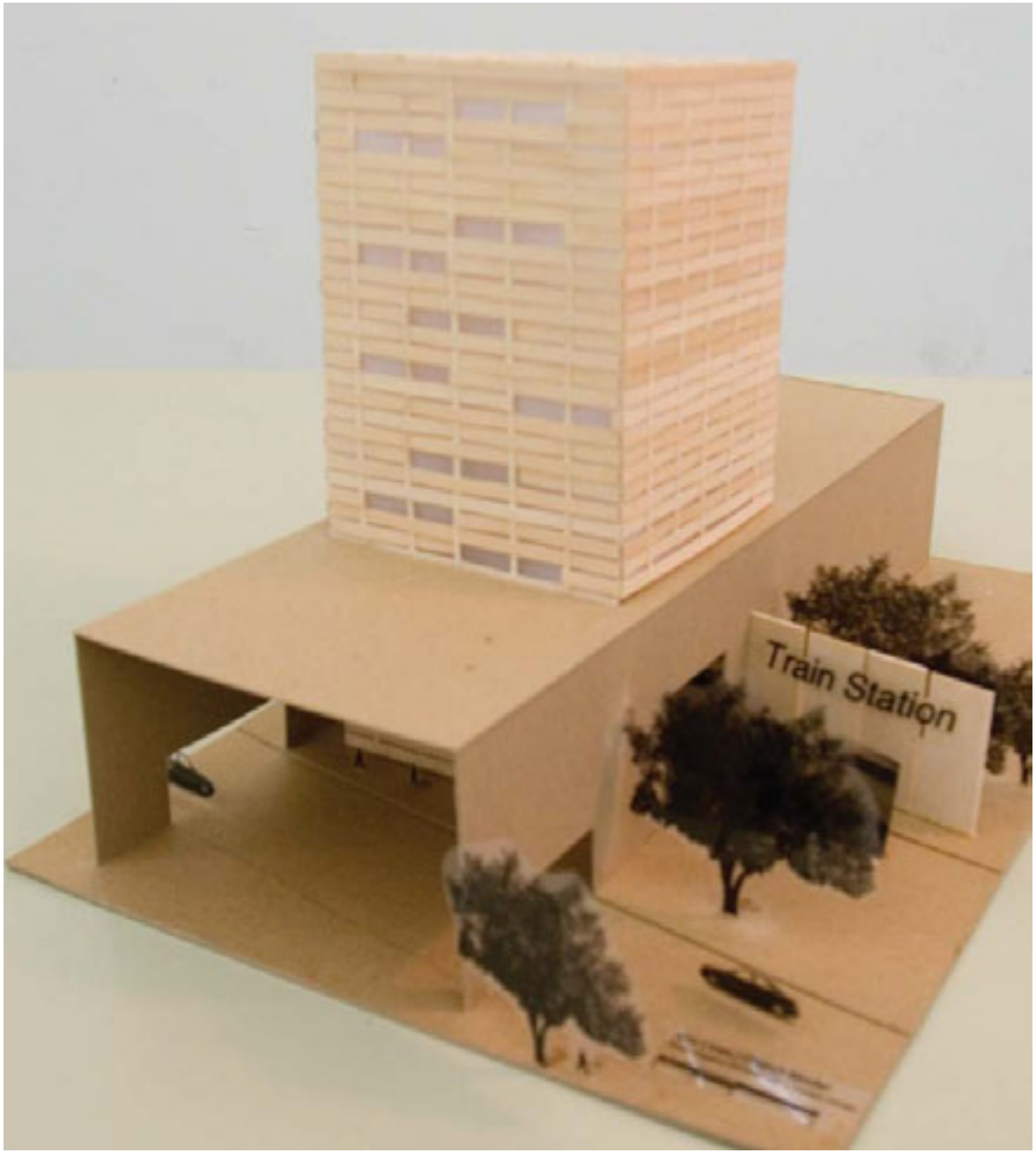


Aerial View of the Concept Model

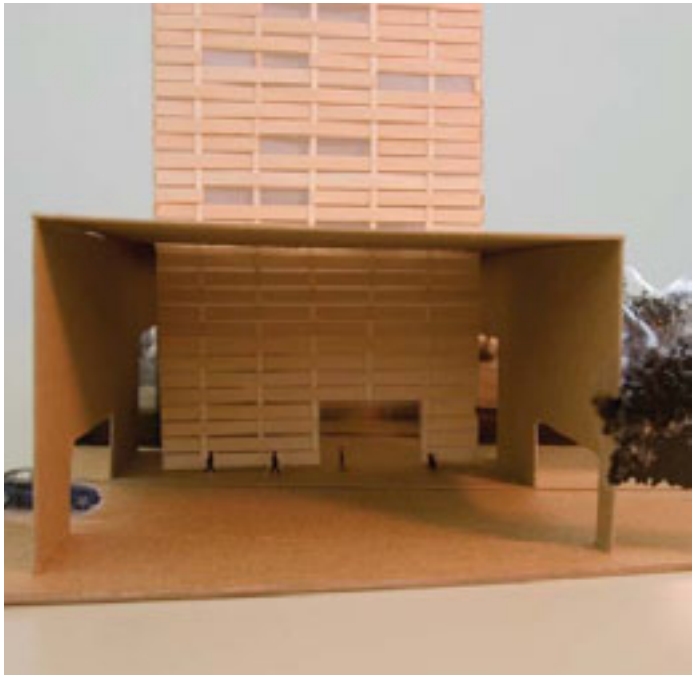
View of the Shade Structure and Bus Stop

View of the Shade Structure Entering and Exiting the Plaza

Aerial View of the Shade Structure Entering the Commercial Building



Detail Model of the Train Station and Shade Structure



View of the Train Station Backdrop

shade structure system. Specifically, I wanted to explore the notion of woven wood patterns.

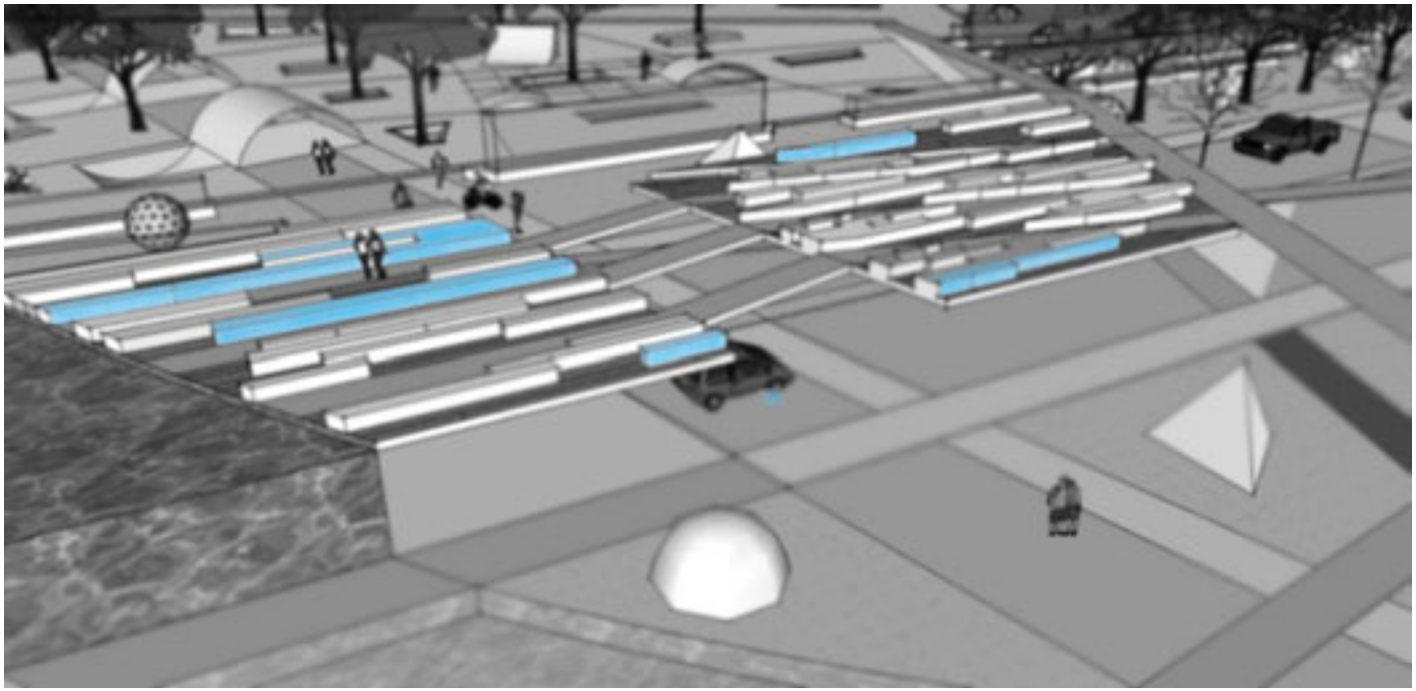
My final object begins at the corner of the Town Square site, and includes a large entry sign and cover for the bus stop. It then moves through the site and into the primary commercial building. The structure then reappears in the form a 'skin' for the proposed six-story residential towers above the commercial structures. Here, it is not only visually appealing, but also screens the sun and controls views. This woven structure also provides the backdrop for the transit stop, before finally exiting the train station in the form of another large sign.

Floating ParkLine

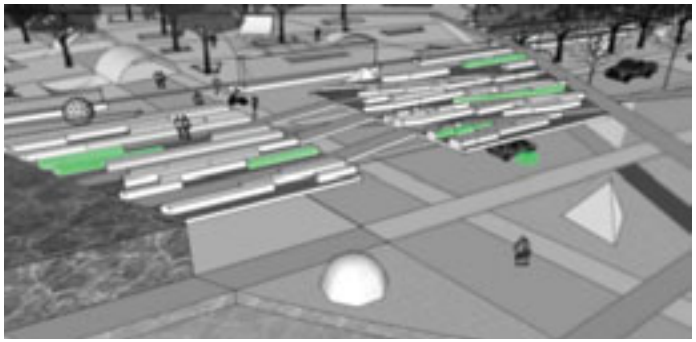
Begum Tarakci

As I was designing ParkLine in week three, I focused on connecting the north and south sides of Washington Avenue. However, I realized that Washington Avenue was still dividing my site in two, and was possibly too great of a barrier. So I elevated my park, in turn creating the Floating ParkLine. I wanted the park to be dynamic and interactive with people and cars. Therefore, I placed light sensors on Washington Avenue which are connected to benches within the park. Whenever a car passes through the light sensors they activate the connected benches and the sitting area shines. This means that if Washington Avenue is busy the Floating ParkLine is also busy, and if Washington Avenue is quiet the park is quiet.

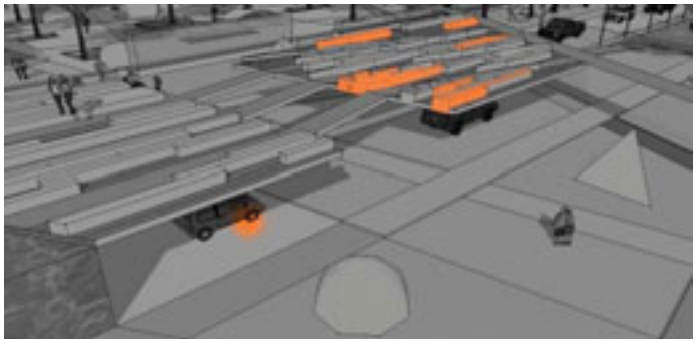
Plan of the Floating ParkLine



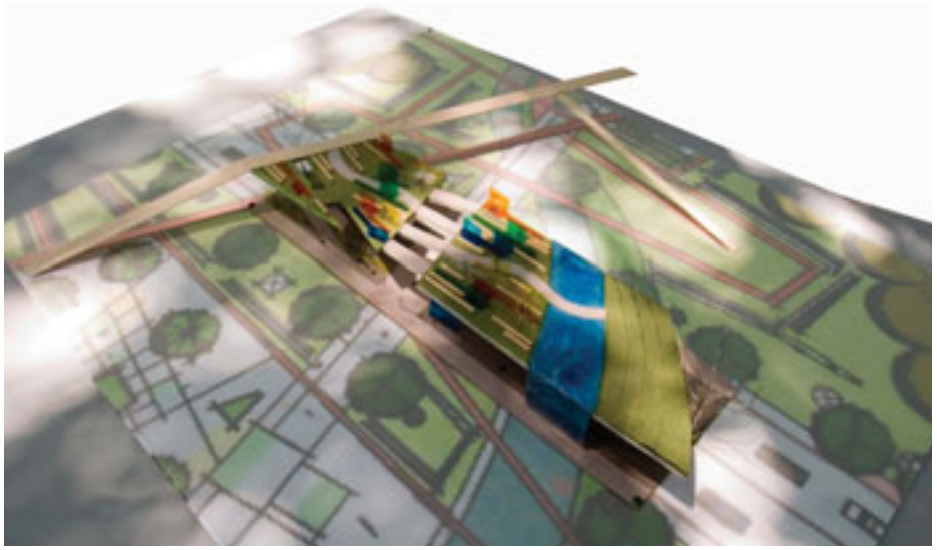
Blue Light Sensors Lighting the Benches as Cars Pass



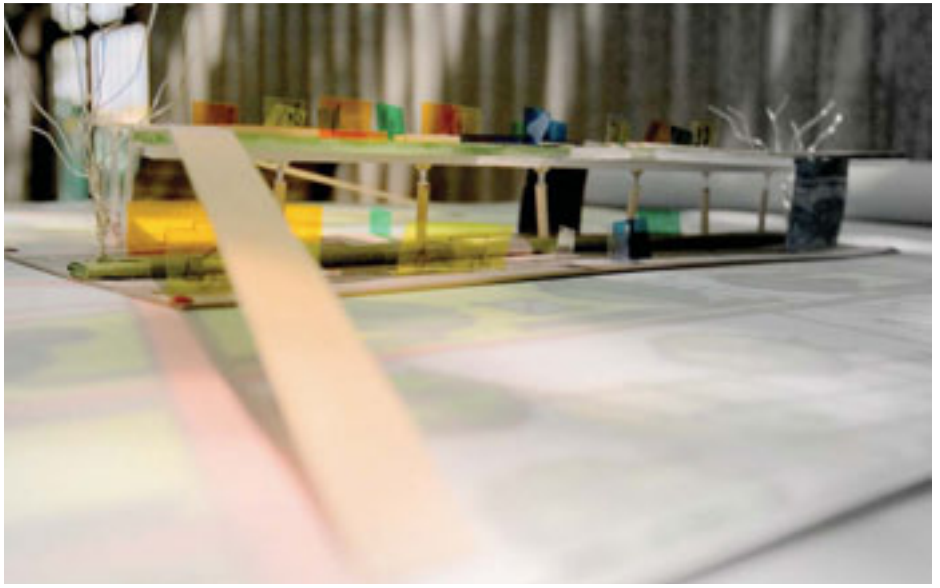
Green Light Sensors



Orange Light Sensors



Aerial View of the Floating ParkLine



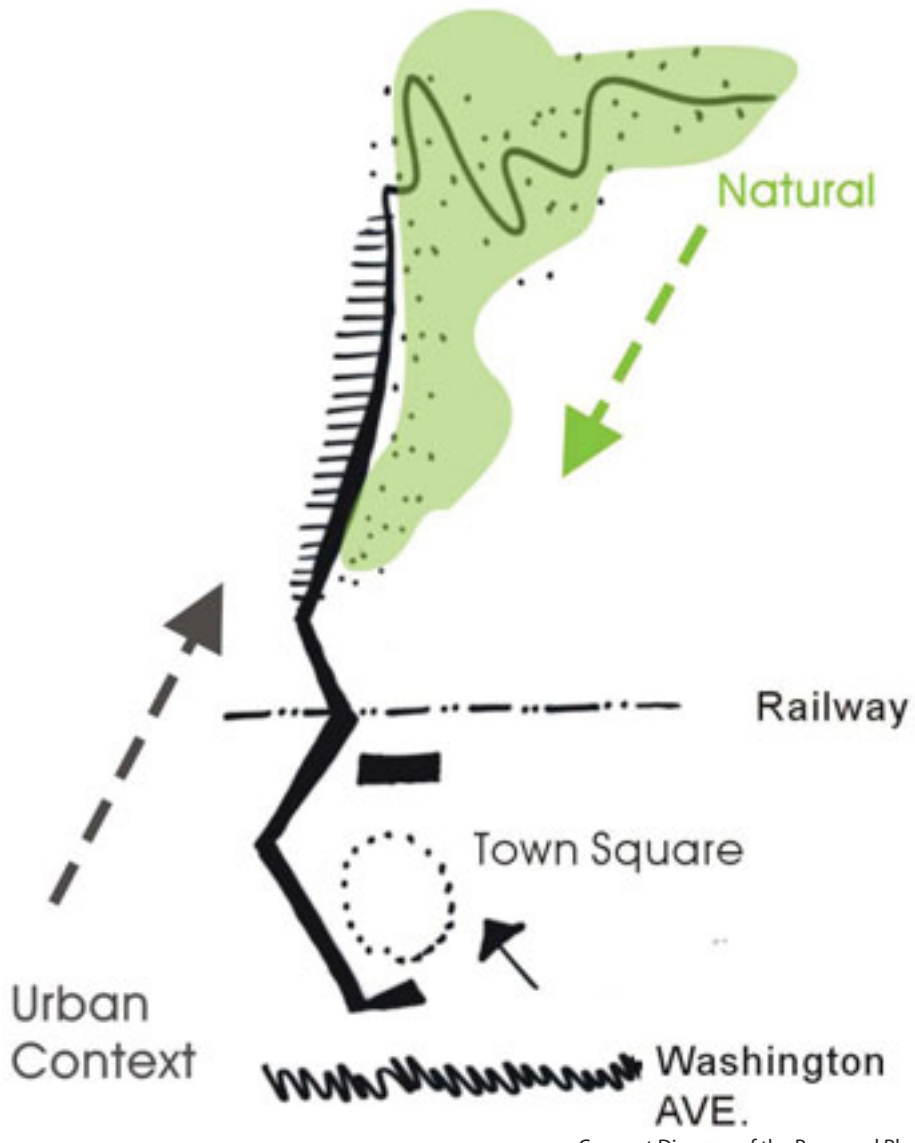
View of the North Ramp

Waterfall Feature over Washington Avenue

The Fusion Ground

Chia-Chi Chen

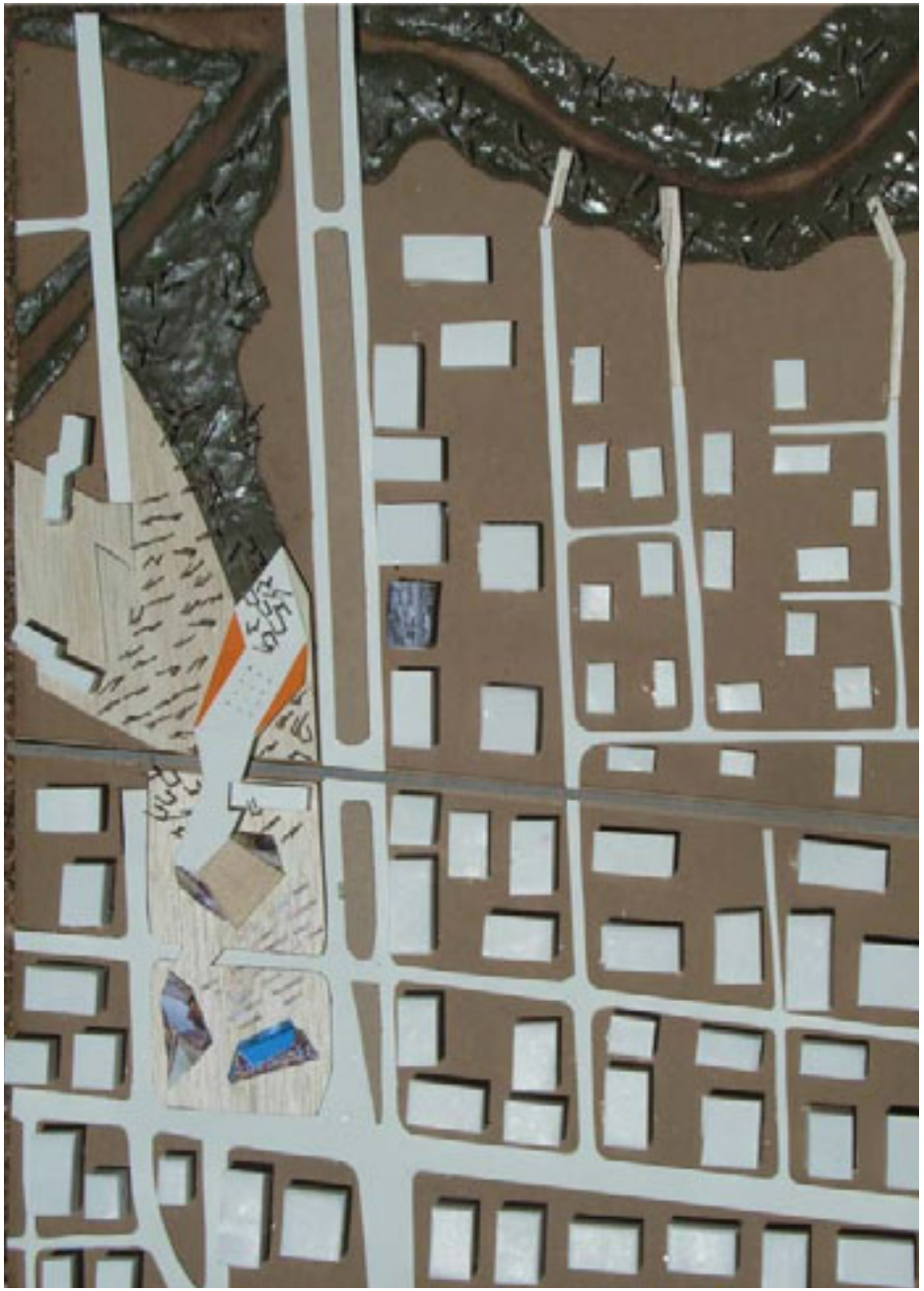
Following the issues of week three, I chose to focus on how to merge the natural and urban fabric. I proposed that the zone between Yale Street and Heights Boulevard become one linear open space from White Oak Bayou to Washington Avenue. The linear open space will link a new town square to a proposed water front. I also proposed an urban plaza with folded landforms. This space can serve as the new Houston Art Car Museum, a farmers' market, and an outdoor concert area for not only SN22, but also nearby neighborhoods. Additionally, the proposed Town Square will be the start of the Houston Art Car Parade.



Concept Diagram of the Proposed Plaza

Concept Sketch

Proposed Cross-Section Through the Fusion Ground



Plan of the Fusion Ground

View of the Proposed Art Car Museum

Aerial View of the Plaza

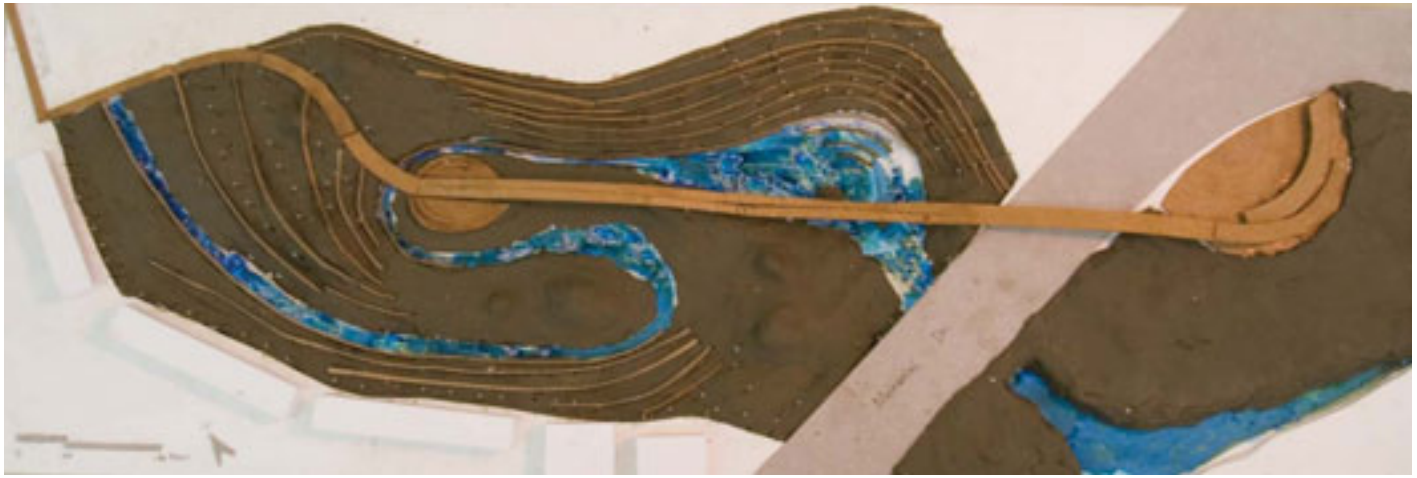
View of the Proposed Art Car Museum and Urban Plaza

The Flows

Fangfang Ouyang

The flow of people and water were the two main points of my site design. So, I developed the water edges and bridge with these two issues in mind. The amphitheater and retaining walls are the linear elements used to emphasize the flow of water. For the bridge design, I was inspired by a piece of paper I tore apart. First, I considered that the flow of people could be vertical. So I tore the paper vertically to separate biking and pedestrian lanes. Second, the flow of people could be horizontal. So I tore the paper horizontally to let people get closer to the water while keeping the biking lane flat. I tore the paper horizontally again to create gathering spaces. Finally, the details can show the flow. So I tore the paper to model the railing.

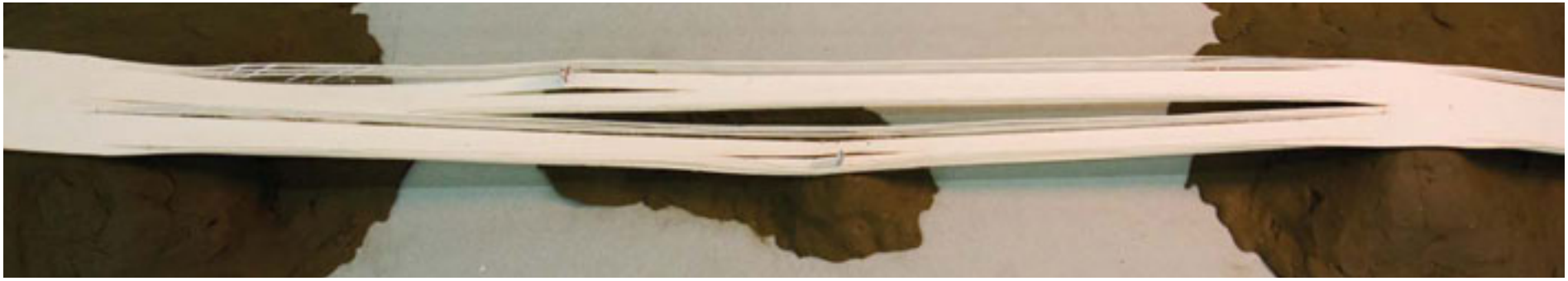
Torn Paper - The Inspiration for the Model



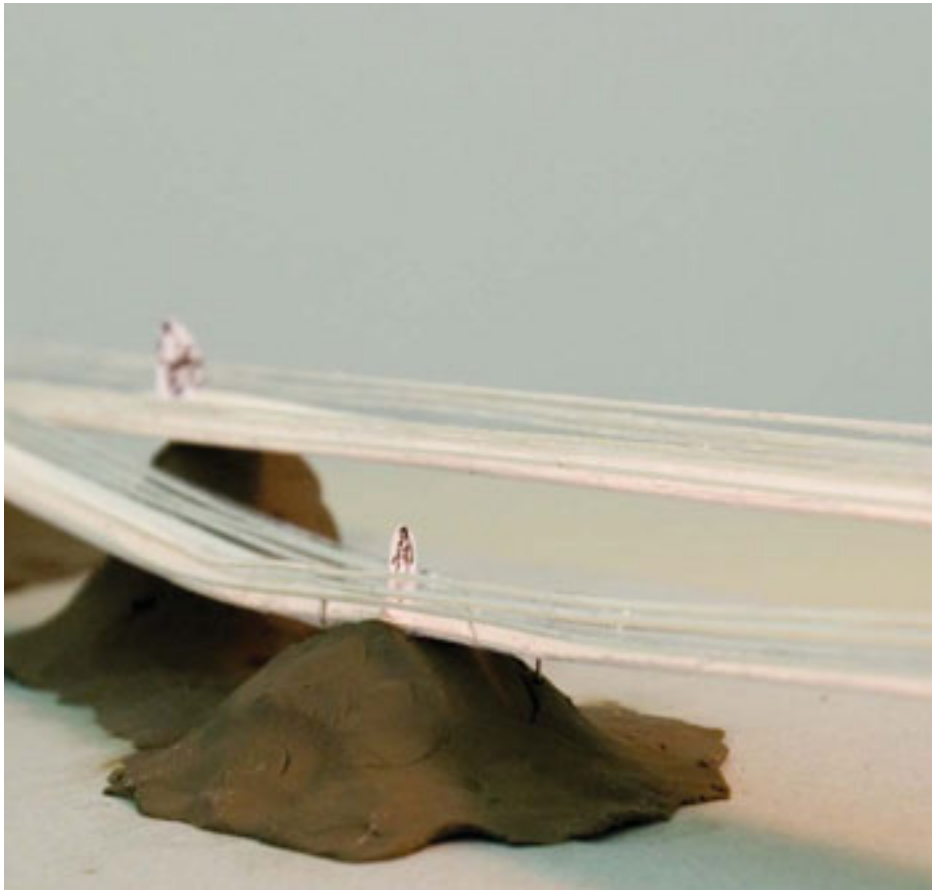
Concept Model

The Proposed Amphitheater

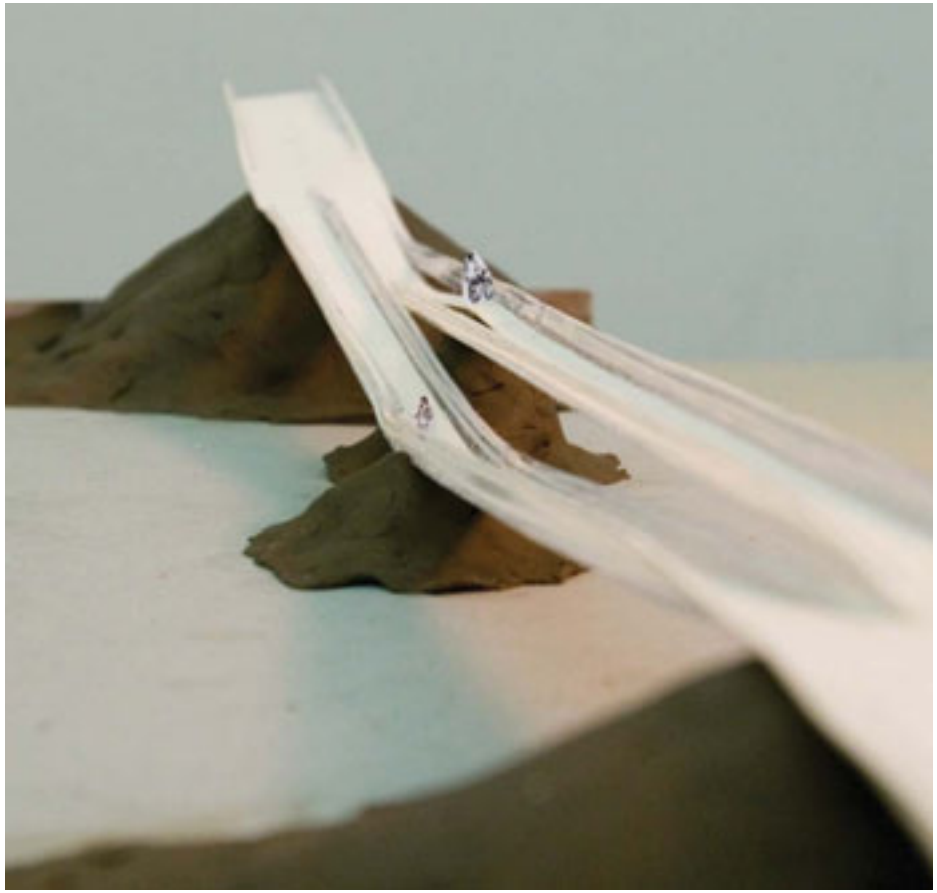
Proposed Retaining Walls



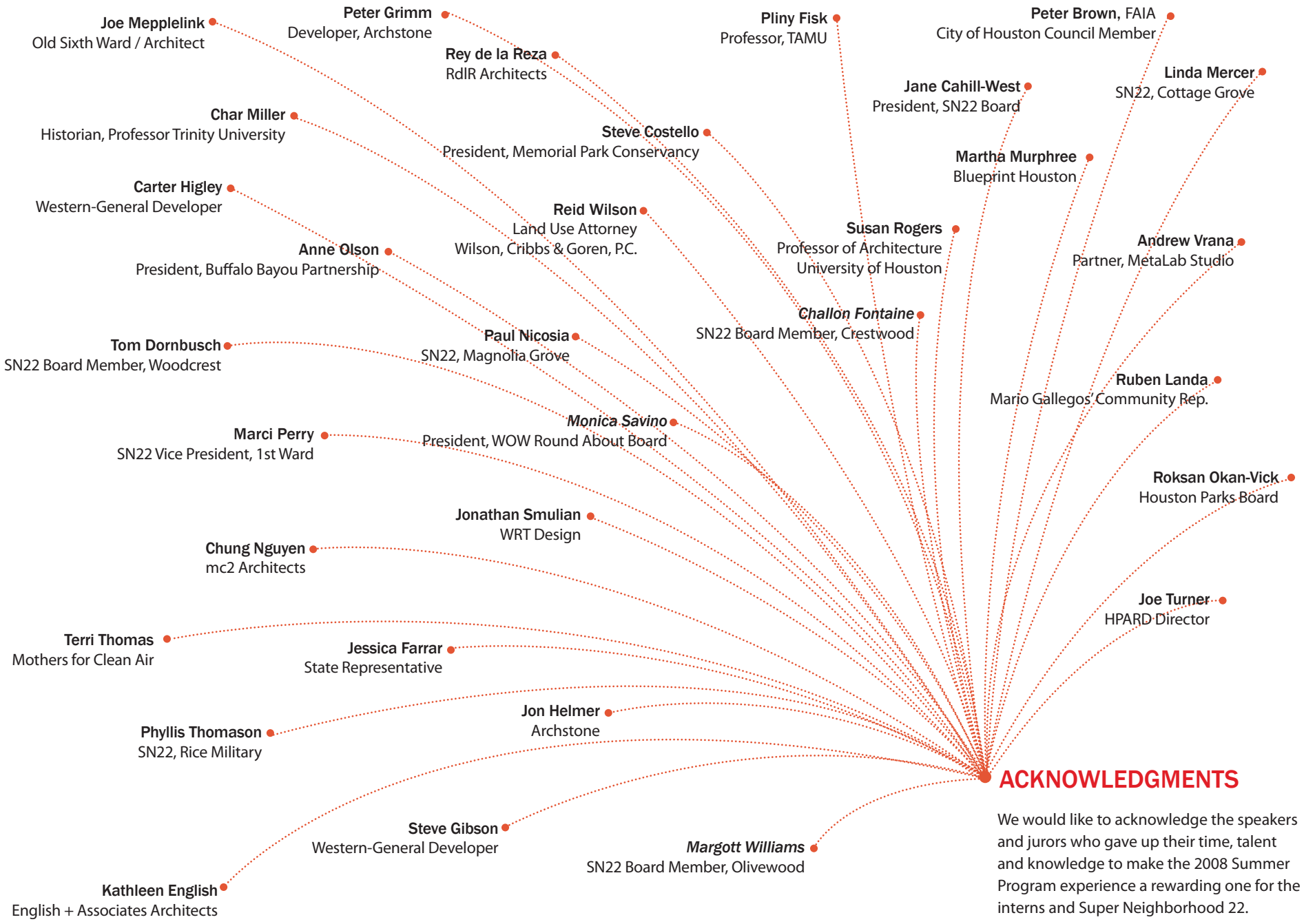
Detailed Model of the Bridge



View of the Pedestrian and Cyclist Paths



View Looking Down the Bridge



ACKNOWLEDGMENTS

We would like to acknowledge the speakers and jurors who gave up their time, talent and knowledge to make the 2008 Summer Program experience a rewarding one for the interns and Super Neighborhood 22.

SWA SUMMER PROGRAM 2008