

The background of the slide is a map of Tucson, Arizona, with a blue background and red lines representing the street grid and major roads. The text is overlaid on this map.

University of Arizona

Tucson, Arizona

Community Outreach Partnership Planning & Design Center

Supported by funding from

**U.S. Department of Housing and Urban
Development, Office of University Partnerships**

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Description of Project

Professional Advisory Group

Community Advisory Groups

Aerial Photo of Project Target Area

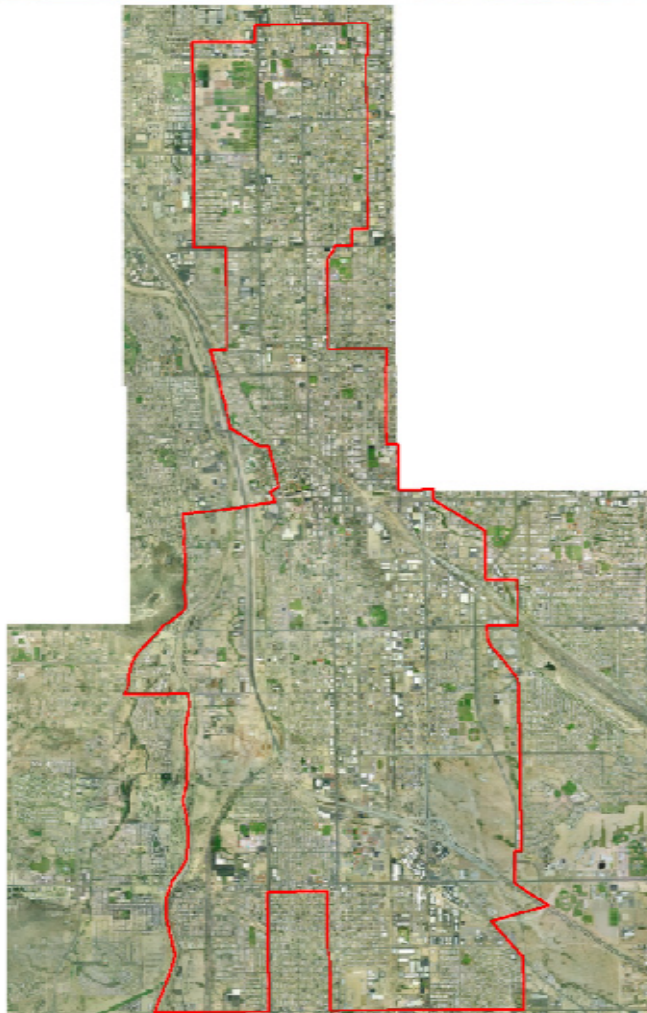
Target Area: Tucson Empowerment Zone

Housing Needs & Market Assessment

Neighborhood Information

Project Area Maps

Home



BARRIO SAN ANTONIO

Tucson, Arizona

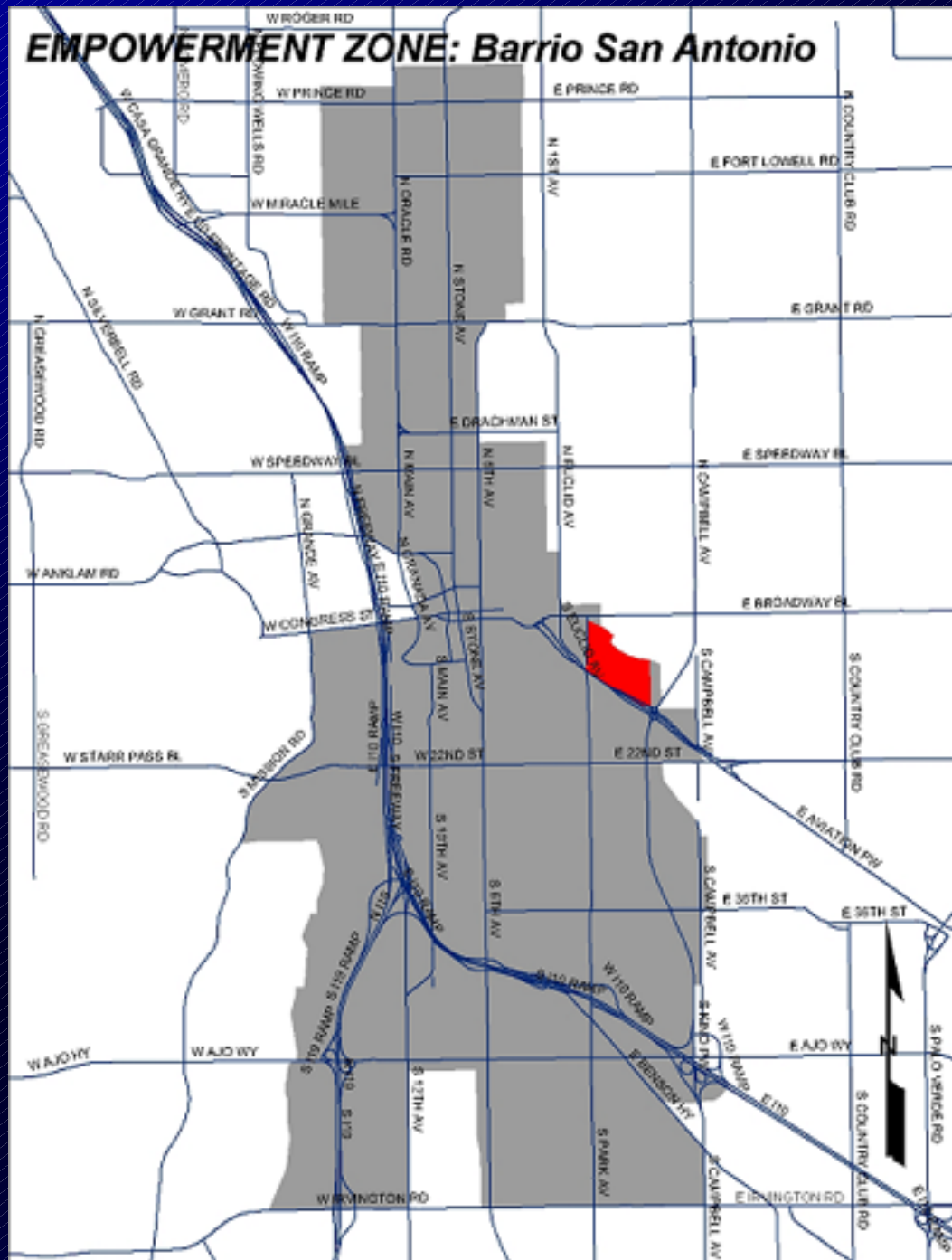
Community Futures Demonstration Project

Drachman Institute ~ University of Arizona

2005



EMPOWERMENT ZONE: Barrio San Antonio



Barrio San Antonio

SITE FEATURES

- Residential
- Parks
- Washes
- Schools
- Commercial
- Railroad
- Points of Interest



Demographics: Population Characteristics

Source: 2000 U.S. Census Bureau

			BARRIO SAN ANTONIO	EMPOWERMENT ZONE	CITY OF TUCSON
	Total Population		272	52,256	486,699
RACE	White		68.01%	52.59%	70.20%
*Hispanics may self-identify under any racial category	Black		2.57%	4.55%	4.30%
	Native American		2.57%	4.48%	2.30%
	Asian		2.57%	2.11%	2.50%
	Hawaiian/Pacific Islander		.37%	0.18%	0.20%
	Other		18.01%	31.63%	16.80%
	Multiple Races		5.88%	4.45%	3.80%
ETHNICITY	Hispanic*		52.57%	59.39%	35.70%
SEX	Males		49.26%	49.90%	49.00%
	Females		50.74%	50.10%	51.00%
AGE	Under 18		23.90%	26.88%	28.66%
	Over 65		7.72%	8.54%	11.90%

Land Use

- Residential
- Commercial
- Heavy Commercial/Industrial/Railroad/Bus Parking
- Public/Institutional
- Vacant/Parking
- Park/Washes/Open Space



Source: Windshield survey by the
Drachman Institute, 2004

Housing Conditions

\$ = Estimated repairs to bring
to excellent condition

 **Excellent: \$0**

New construction, everything is kept up

 **Good: Up to \$10,000**

Needs minor cosmetic touch ups, part of
normal maintenance

 **Fair: \$10,000-\$20,000**

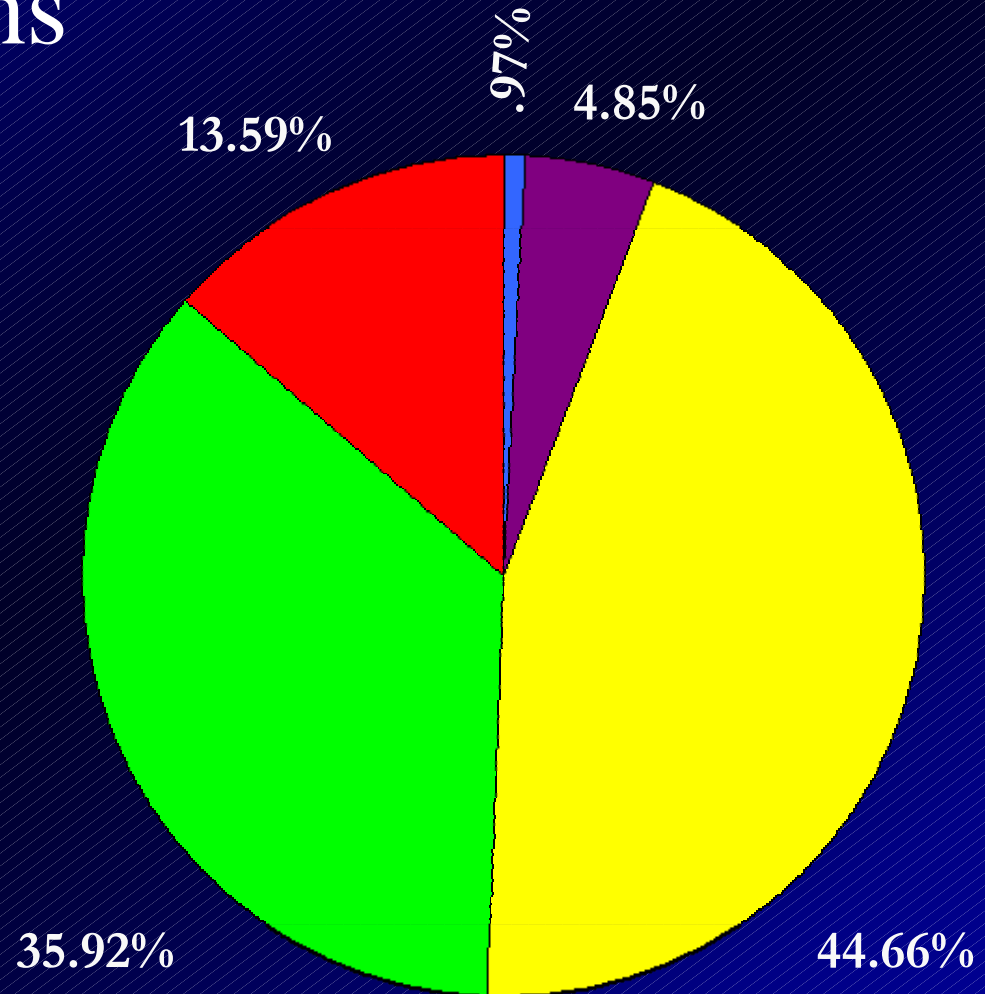
Fixer-upper, general condition is good but
needs some work

 **Poor: \$20,000-\$40,000**

Needs a lot of work/money but is not bad
enough to tear down

 **Replacement:**

Cost of repairs is greater than the cost of
replacement



DUNBAR SPRING NEIGHBORHOOD

Tucson, Arizona

Community Futures Demonstration Project

Drachman Institute ~ University of Arizona
2005





SOUTH PARK NEIGHBORHOOD

**Community Futures Demonstration Project
Drachman Institute ~ University of Arizona**

2005

Community Outreach Partnership Planning & Design Center
The University of Arizona

Site Analysis

Parcel 118-22-3680



Melissa Tom
Arc 326
October 22, 2004

Table of Contents

Created October 24, 2004

Site parcel: 118-22-3680

Description of Project and Site

Location

1. Location of Site in Arizona and Tucson
2. Location of Site in Empowerment Zone and Neighborhood

Neighborhood Context

3. Figure Ground Area
4. Zoning and Land Use around Site
5. Circulation of Traffic, Pedestrians, Bikes, and Buses around Site

Size and Zoning

6. Dimensions and Size of Lot and Rights of Way
7. Zoning of Site and Legal Descriptions

Sensory

8. Views from Site
9. Views into site
10. Air, Ground and Noise Pollution

Utilities

11. Water and Sewage Locations
12. Power, Telephone, and Gas Locations

Natural and Man Made Features

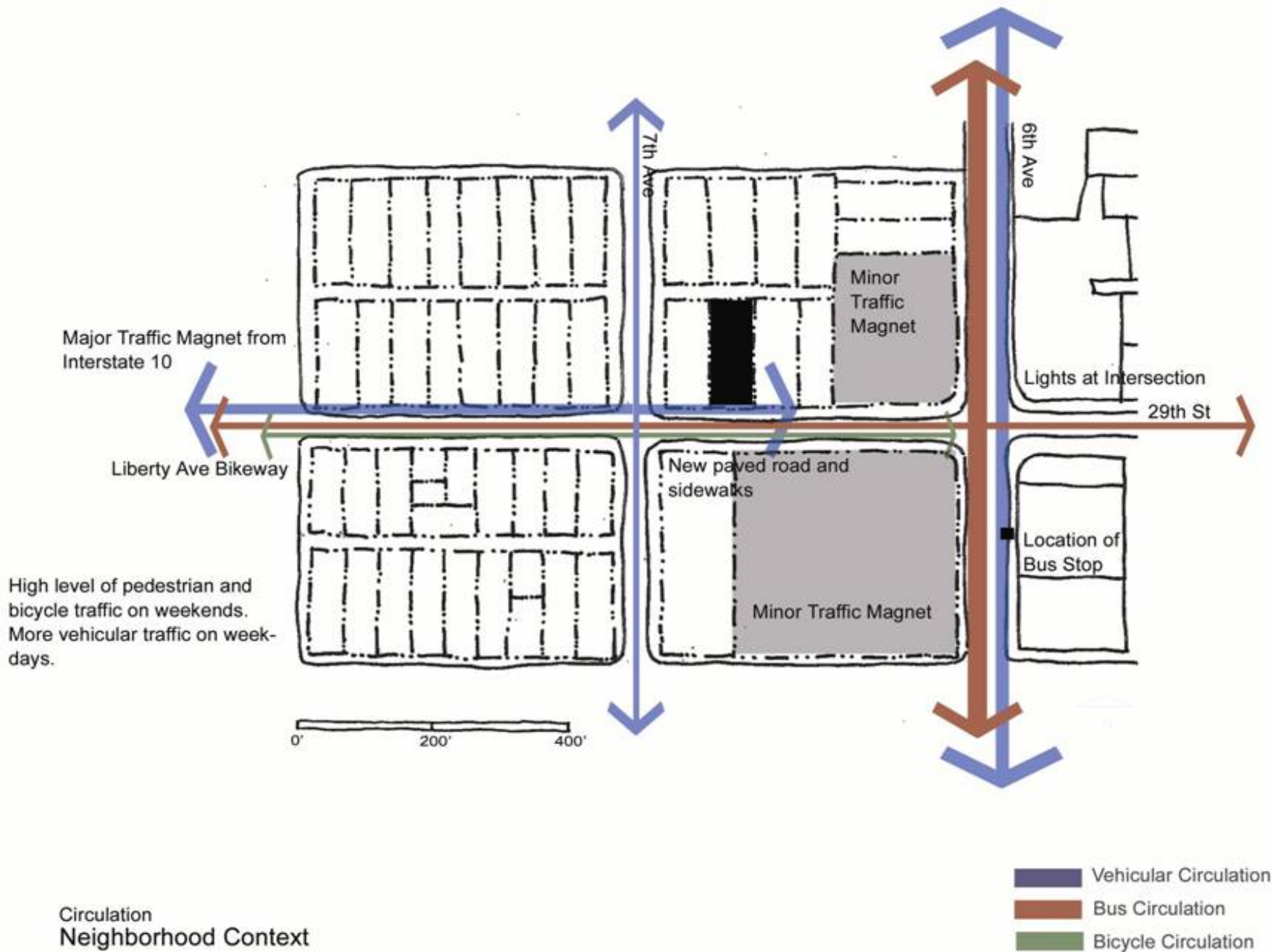
13. Vegetation and Built Features
14. Water Drainage around Site

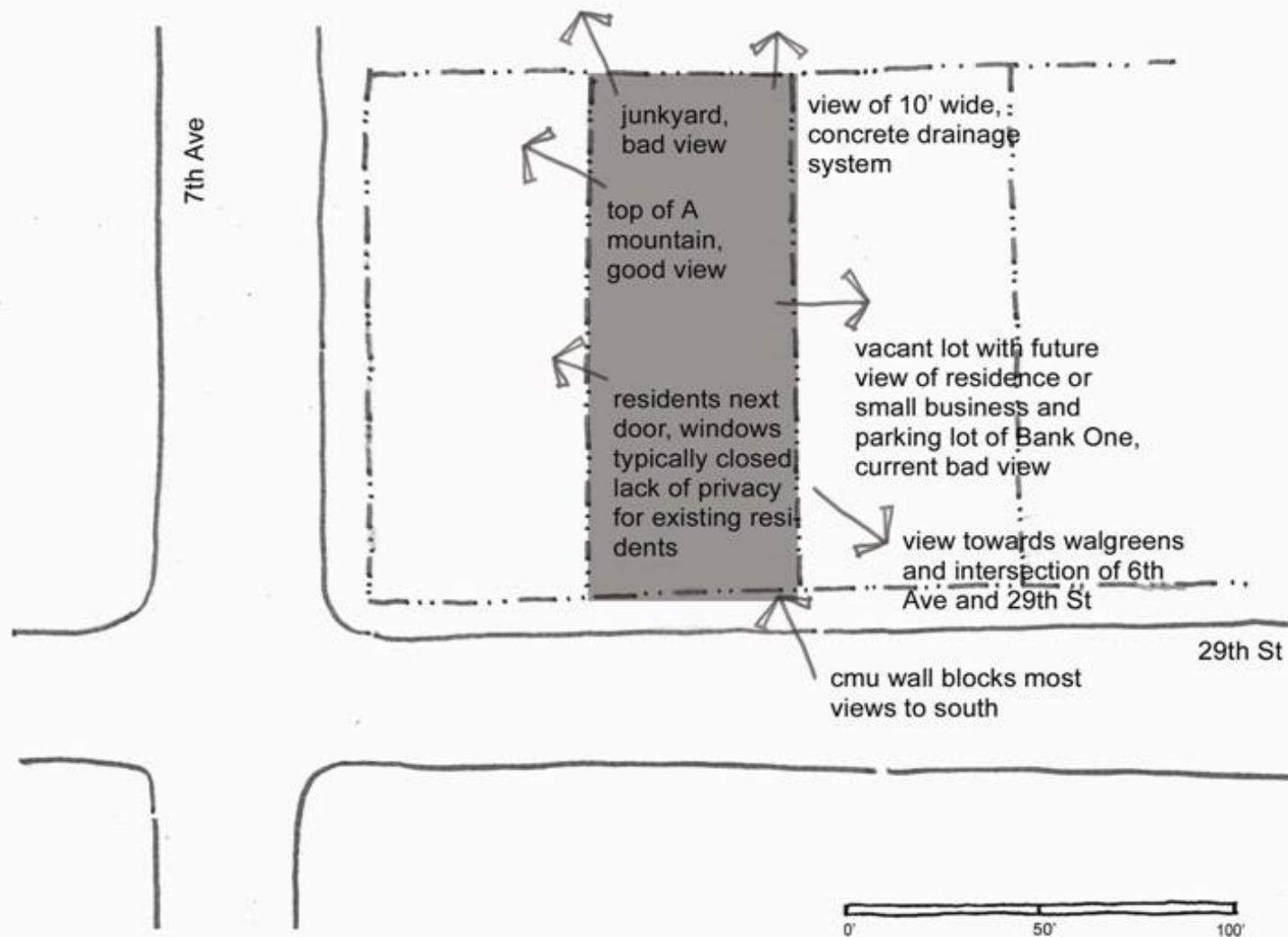
Human and Cultural

15. Negative Activity
16. Census Information of South Tucson

Climate

17. Rainfall and Temperature





Views from Site
Sensor

Primavera Foundation

- A non-profit organization created to assist the homeless
 - » “grass roots, volunteer and advocacy-oriented base”
- St Martin’s Center Soup Kitchen
 - » Lawsuit
 - » Primavera Foundation
- Founded in 1982



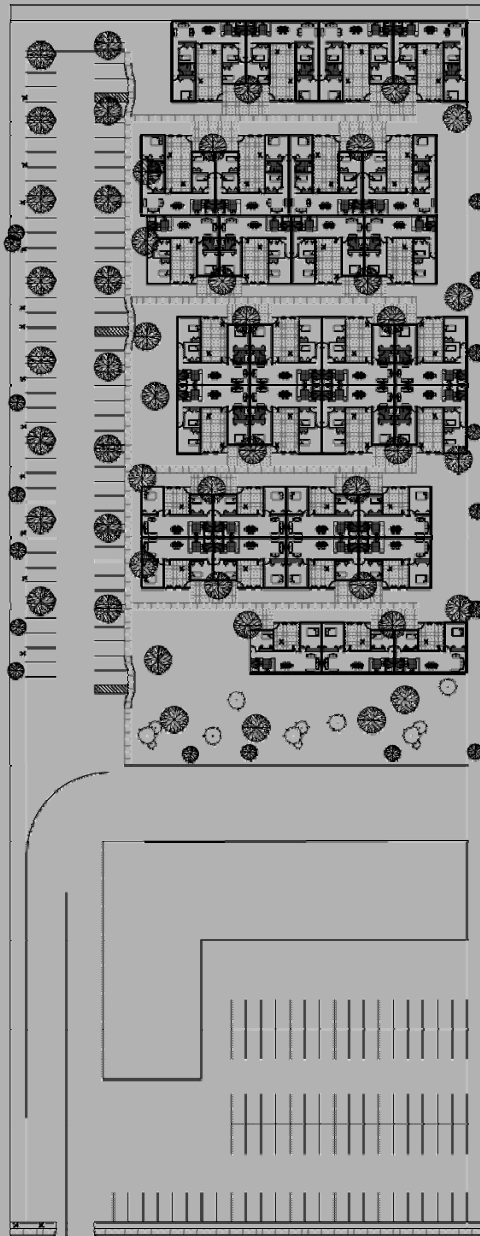
Site Plan Options

31 units with
commercial

11 2-bedroom units

12 3-bedroom units

8 4-bedroom units

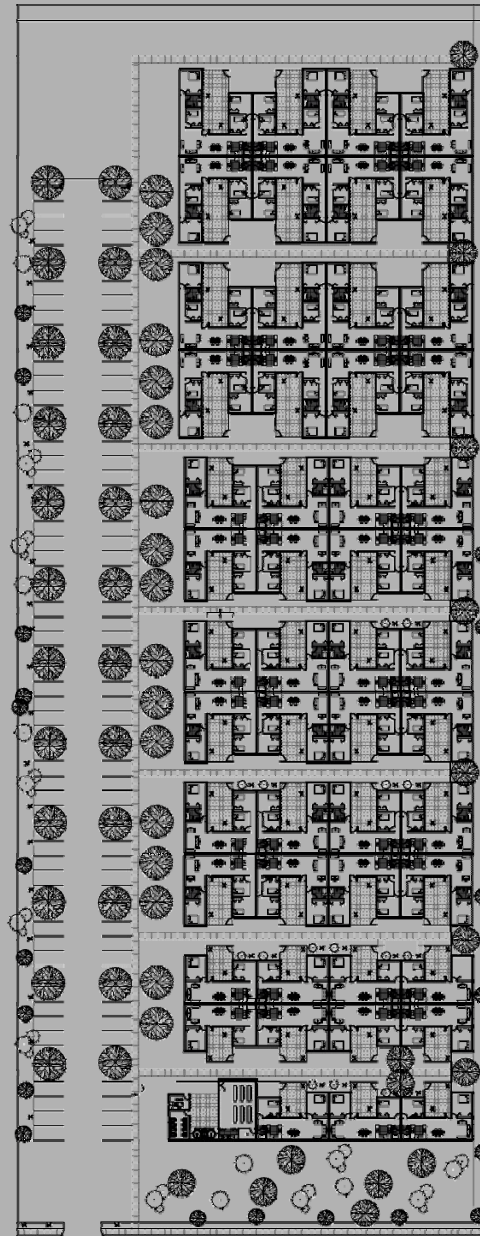


51 units

11 2-bedroom units

24 3-bedroom units

16 4-bedroom units



Cluster Context



South Tucson Infill

Charles Calloway, Daniel Tylutki

- Working with South Tucson
- Working with builder, Fernando Loya
- Working with Mikey Block material supplier

This project is a continuation of existing conceptual design work done earlier in the semester. This began as a collaboration with myself and local builder Fernando Lopez. Originally, Fernando Lopez was really interested in exploring new ideas of construction, midway through the semester Fernando Lopez seemed disconnected from the work we were producing for the Colombian family, whom are in need of a new home.

As an alternative solution to not only seeing this project all the way to a finished product, and a local builder was consulted. One of the materials investigated early on in this process was the innovative product of Wiley Klock. The founder of Wiley Klock (Dave Loggert) showed extreme interest in building this home as well as providing interesting feedback that would open for me the process of design.

This project has been further developed through section drawings and refinement of square foot ages while keeping the existing context in mind. At this point in development these drawings have been key for Dave Loggert to begin construction. Hopefully, construction will begin in the summer of 2015 and provide a continuation of this educational process that began in the 2006 spring semester.



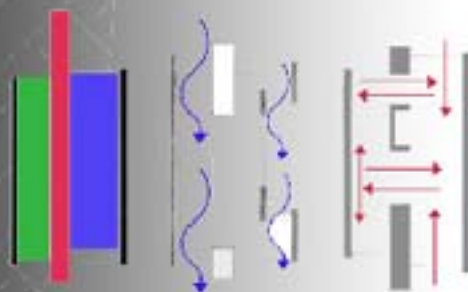
2 Bedroom unit 1200 sq ft
1/8" = 1'



2 Bedroom unit 1168 sq ft
1/8" = 1'



3-story section
3/8" = 1'



3-story section



3-story section



Exterior perspective



Interior perspective



Section view
1/4" = 1'-0"



Exterior elevation



Interior perspective



Question:

Can infill development take place within the Empowerment Zone to maximize the allowed density of existing zoning yet, improve the land use efficiency and the quality of outdoor space while protecting the privacy of neighbors?

Problem:

The City of Tucson's Land Use Code requires setbacks in R-2 and R-3 zoned areas that keeps 25 to 30% of a parcels total area as open space. This setback essentially puts the development at the core of the parcel leaving a remnant of space that does not benefit the community. When infill development occurs on vacant R-2 or R-3 lots, the development results in a product that is reduced to a "box" style development.

Solutions:

1. Lot Development Option (LDO) / Design Development Option (DDO).
2. Find blocks that are "undeveloped"

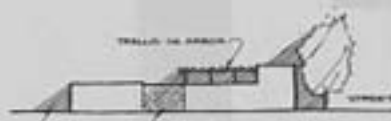
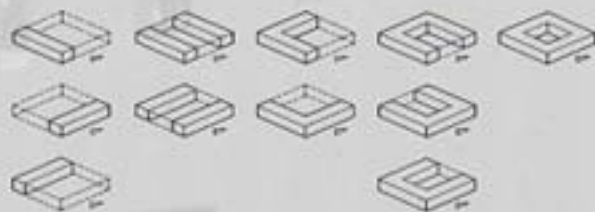


FIGURE 10-12: CROSS SECTION OF BUILDING



FIGURE 10-13: VARIATION OF THE BUILDING, NORTH, SOUTH, AND EAST

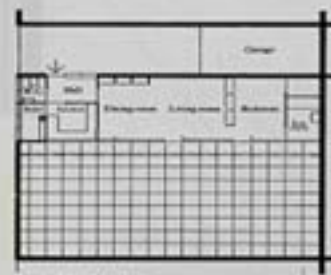


FIGURE 10-14: Floor Plan



FIGURE 10-15: Philip Johnson, Johnson House in Cambridge, Massachusetts, 1949-50



SOLUTIONS TOWARDS CREATING A MORE RESPONSIVE INFILL DESIGN

1. Design Development Option (DDO) [formerly known as a Lot Development Option]

An DDO is the zoning process adopted by the City of Tucson that provides the ability to modify setbacks on new construction. An DDO can also be used to increase the height of a perimeter wall or fence over six feet. More information on the DDO process is located in Section 5.3.4 of the Tucson Land Use Code.

The city created the DDO in order to:

- Encourage the efficient use of land through design innovation.
- Provide administrative relief to zoning requirements that do not affect the adjacent properties and the surrounding neighborhood and community.
- Provide the ability to modify design requirements in instances where the strict application of the requirement may not be practical due to topography, existing development, whether on site or on adjacent properties; or life safety issues.
- Provide for energy conservation through flexible site and building design.
- Provide for consideration and implementation of alternative design solutions within the intent of the regulation in a timely and efficient manner.

The DDO process takes approximately four weeks to complete. Once staff has accepted the application, notification is mailed to adjacent property owners. They have two weeks to comment on the request. The Planning Director then makes a decision based on the specifics of the request and any comments received. Notification of the decision is then mailed to the applicant and the adjacent property owners. They have two additional weeks to appeal if they disagree with the decision. If no appeal is filed, the Planning Director's decision becomes final.

Prior to applying for the DDO the developer would be wise to communicate with neighbors on the project and make modifications to the plan so that consensus can be reached and the project ultimately succeeds.

Key facts with DDO's:

- An DDO is not available if a developer is doing a residential cluster project (RCP), as a RCP already provides less stringent standards.
- An DDO is unlikely to be passed if it adversely affects the privacy of neighbors.
- An DDO is unlikely to be passed if it blocks pedestrian or vehicular visibility.
- An DDO will not increase the number of units or square footage of a parcel zoning still dictates this.
- The modification does not reduce the setback from a street to less than is allowed under the provisions of Sec. 3.2.6.5.B.
- The modification is not for an increase in height of more than two (2) feet to an accessory wall or fence, except that an increase of up to four (4) feet may be considered for entry features on walls and fences.

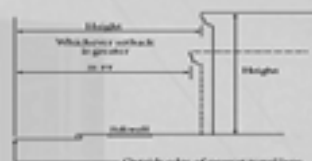
Lot Development Option with the City of South Tucson

The City of South Tucson also has a Lot Development Option written into their land use code (Sec. 24-536.). The purpose of their LDO is to "permit modifications in setback requirements which encourage original and efficient site design." An LDO application is likely to be denied if the design is considered to be extreme by the Planning staff or if neighboring property owners protest.



2. Find areas that are deemed "developing"

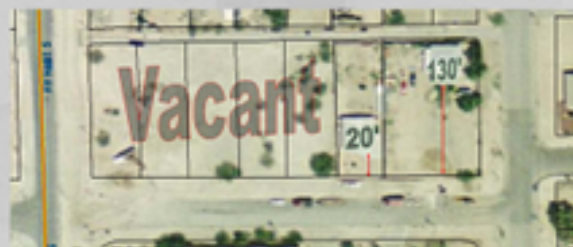
Another way to avoid the standard setback or perimeter yard requirement in the City of Tucson is to locate the future infill development in an area that is "developing". If an area is developing the front setback of the development can be 21 feet or the height of the building (the greater of the two) from the edge of the nearest adjacent travel lane. This is advantageous from the standard setback which is measured from the curb or from the parcel line. The street however cannot be a collector, an arterial or a street with a daily traffic count of less than 140 vehicles. The diagram below illustrates this measurement.



"Developing areas" is defined as a block where more than 50 percent of the lots do not conform to the required front setback. If a block has a high prevalence of vacancy, meaning no structures exist, that counts in favour of nonconformity. Contrary to this are "developed areas".

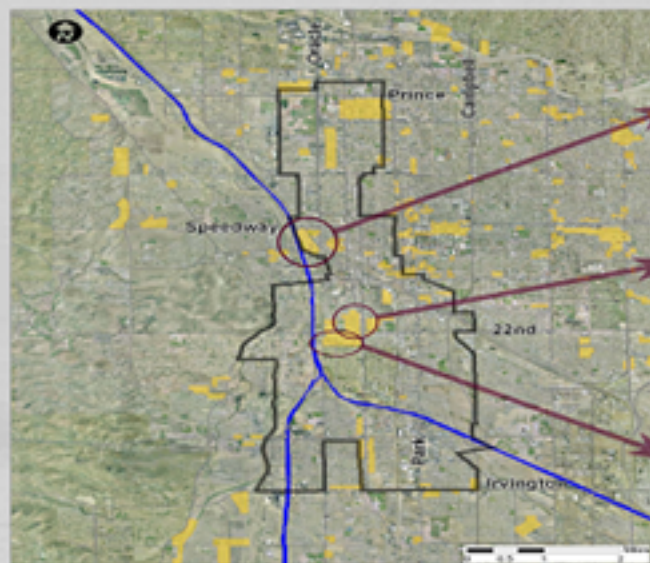


Above is an example of a "developed area". This location in the West Ochoa Neighborhood is zoned R-3 and requires a 10 feet setback for 1 story homes. A majority of the parcels have a setback of 10 feet or greater (actual setback is in green). Only two lots have a setback less than 10 feet (actual setback is in red).



Above is an example of a "developing area" in the same neighborhood. Here only two of the seven parcels conform to the setback requirement. The other lots are vacant and therefore do not conform to the setback requirement. In this case a developer has a prime opportunity to develop an infill product that is 21 feet from the nearest travel lane which puts front of the unit 1 or 2 feet behind the property line.

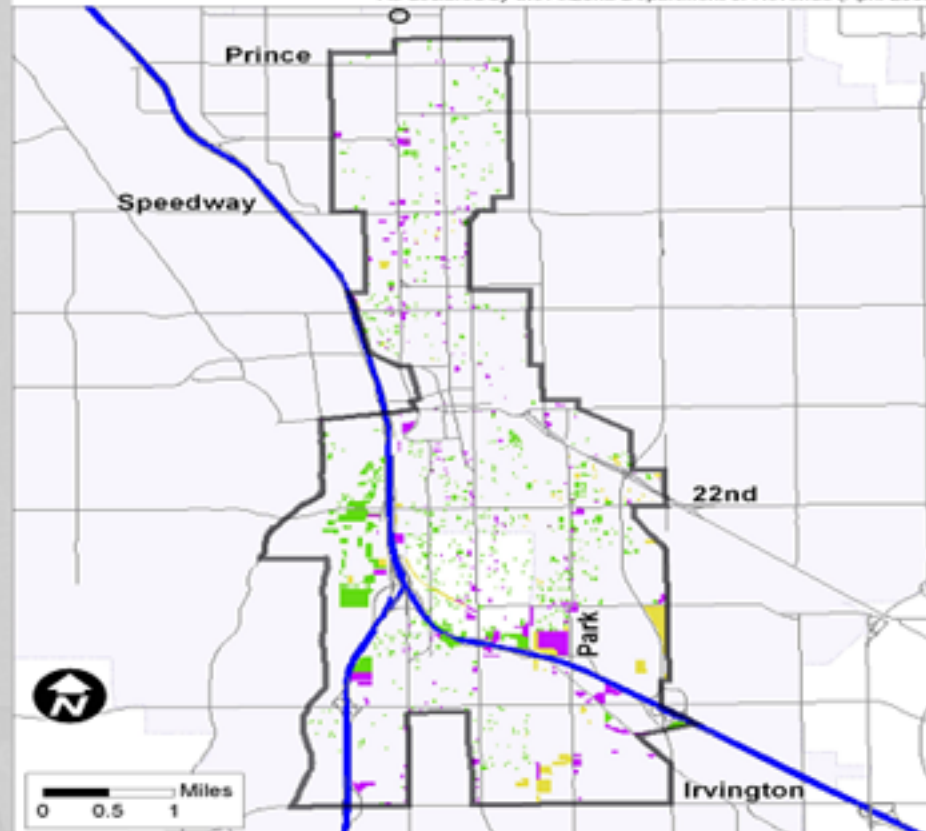
Narrowing Down Eligible Parcels in R-2 for Doucette Infill within the City of Tucson Empowerment Zone



Vacant Areas within the Empowerment Zone*

Vacant Residential (green), Vacant Commercial (purple), Vacant Industrial (yellow)

*As declared by the Arizona Department of Revenue (April 2005)





The Drachman Institute
College of Architecture & Landscape Architecture

THE UNIVERSITY OF ARIZONA

Cross Disciplinary Project by

Architecture: Jared Humphries

Planning: Thomas Thivener

Louette
COMMUNITIES

SENTINEL PARK



PROJECT GOALS

- To create a mixed-income site plan that complies with the “A” Mountain Neighborhood Plan
- To explore rezoning possibilities and new site designs

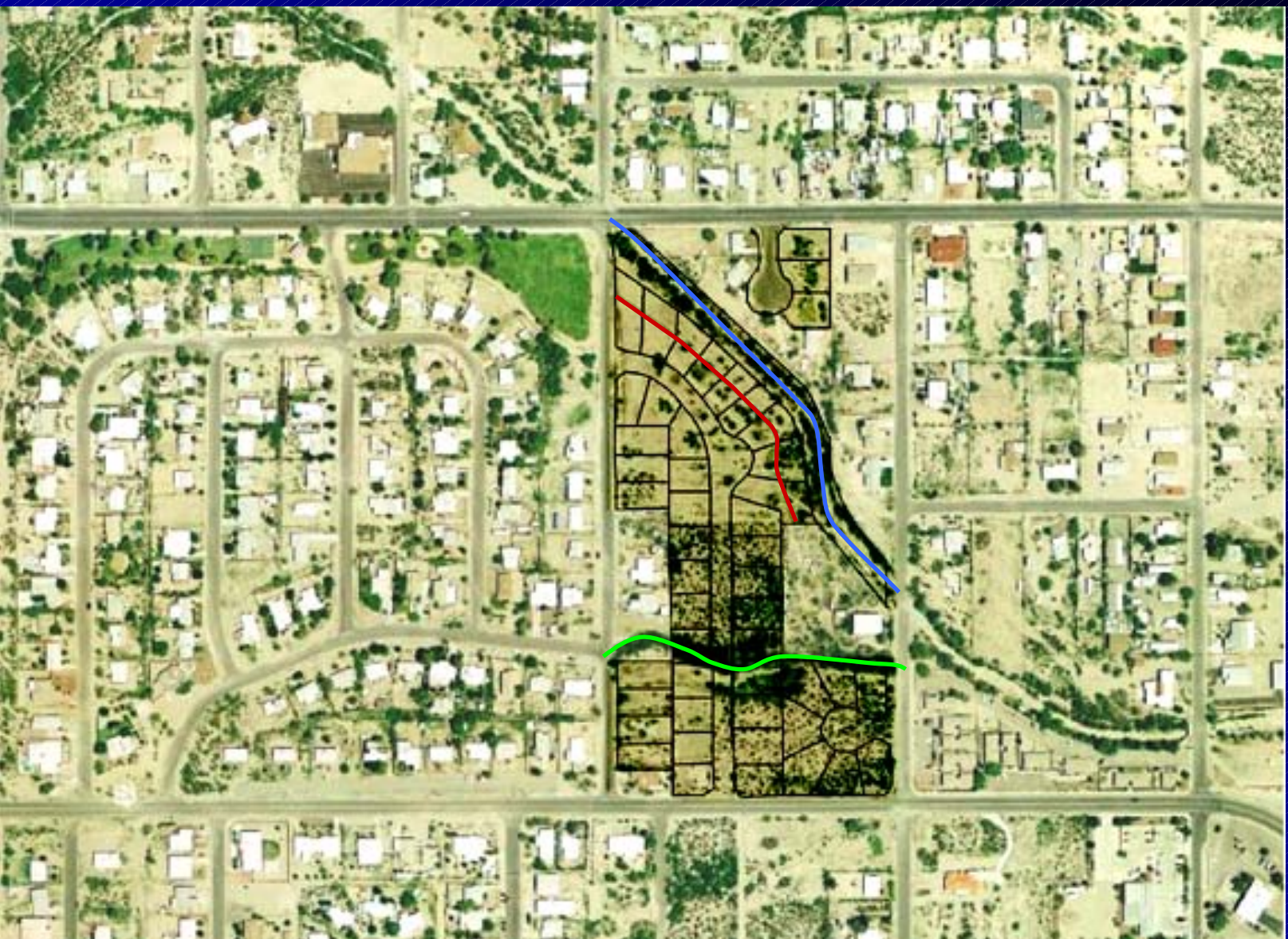
SITE EXISTING CONDITIONS

Sentinel Park

- **Zoned R-1 (Urban, low density, single-family residential)**
Except for a section of lots 31-32 which are zoned R-2
- **48 lots**
- **9.89 gross acres**
- **Individual Lot size: 7,000 Sq.Ft.**
- **Allowable Coverage: 70%**



EXISTING PLAN



PROPOSED PLAN



FOOT PLAN





A Partnership:

- The University of Arizona

The College of Architecture & Landscape Architecture

Drachman Institute (HUD-Community Outreach Partnership Center),

Drachman Design/Build Coalition

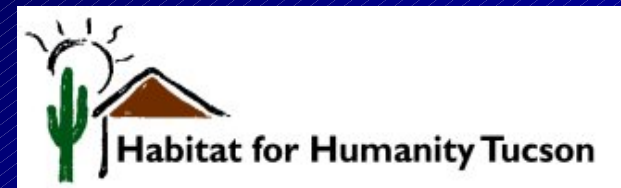
Architecture 402 Design Studio

452 Design/Build Studio

Landscape Architecture



- Habitat for Humanity Tucson
- Tucson Urban League





- The University of Arizona

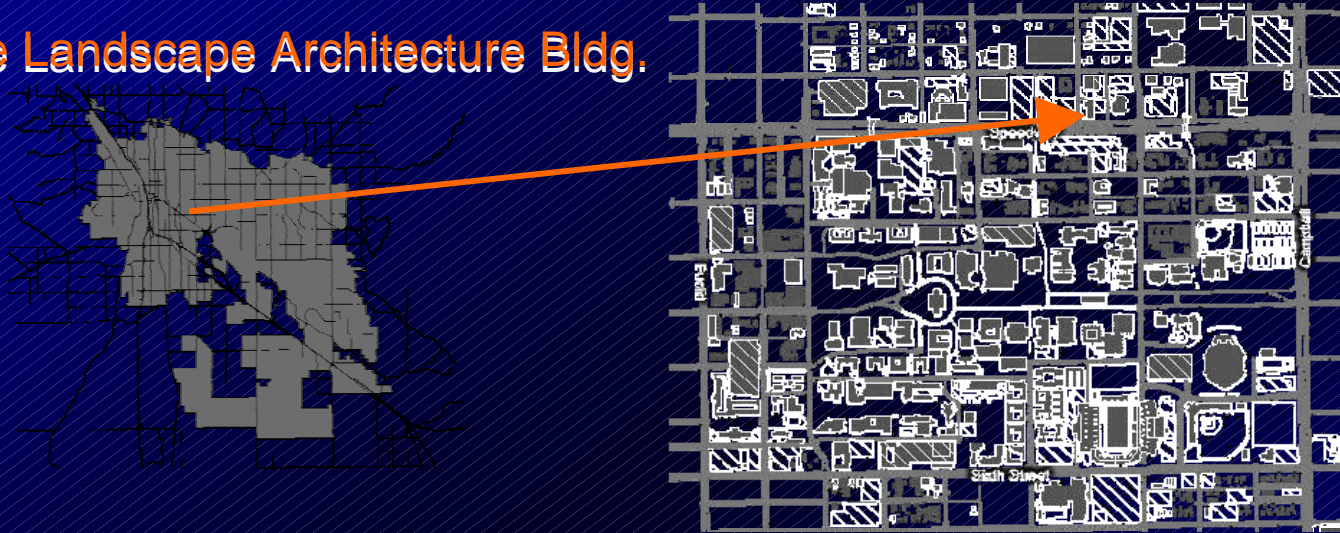
- Students, Faculty, Staff, Administration, Alumni, Departments, Schools, & Organizations

- \$65,000 - Fundraising
 - Temporary site for construction of 65% of the house
 - Lectures, Educational Opportunities, Information to the Public
 - Advertising
 - Labor

Proposed Temporary Construction Site

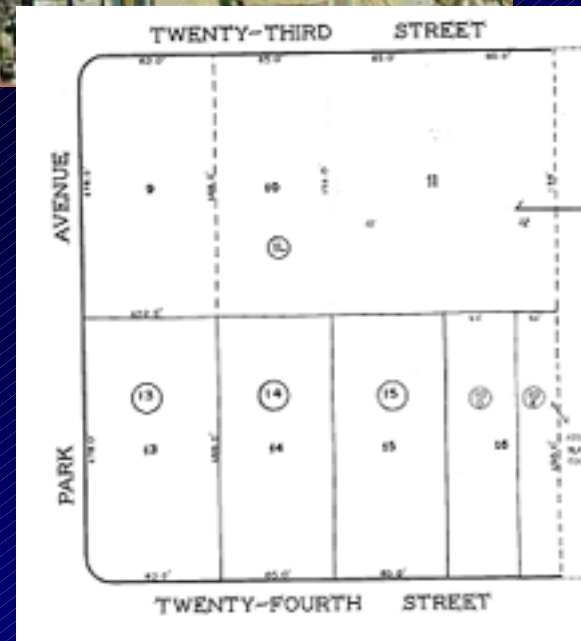
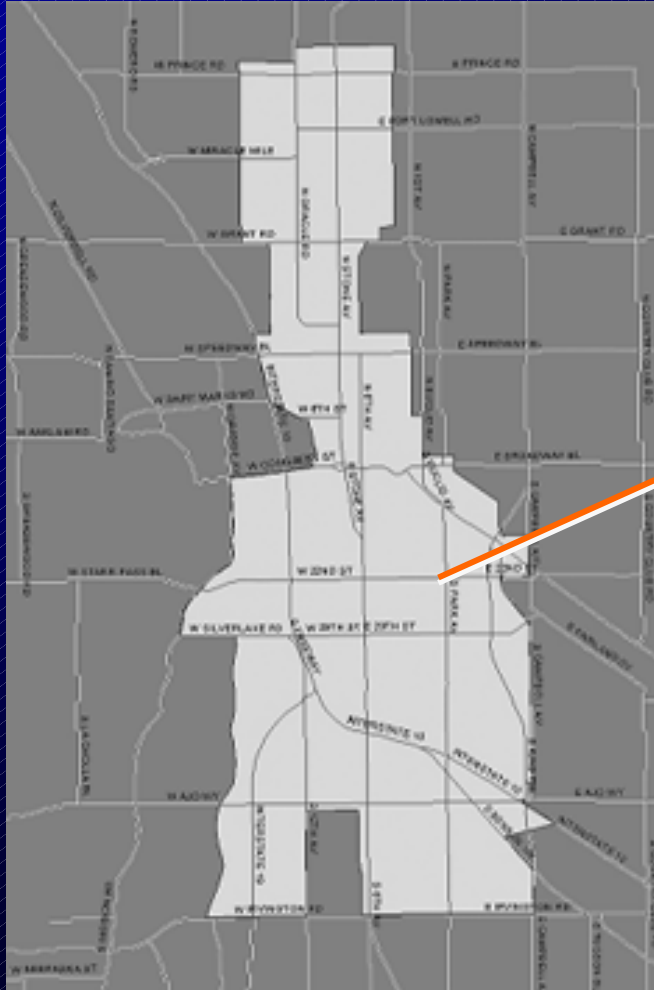
On the U of A Campus @ the Northwest Corner of Speedway Blvd. & Rincon Ave.

Next to the Landscape Architecture Bldg.



Proposed Permanent Home Site

On the Northeast Corner of 24th St. & South Park Ave. (R-2 Zoning)

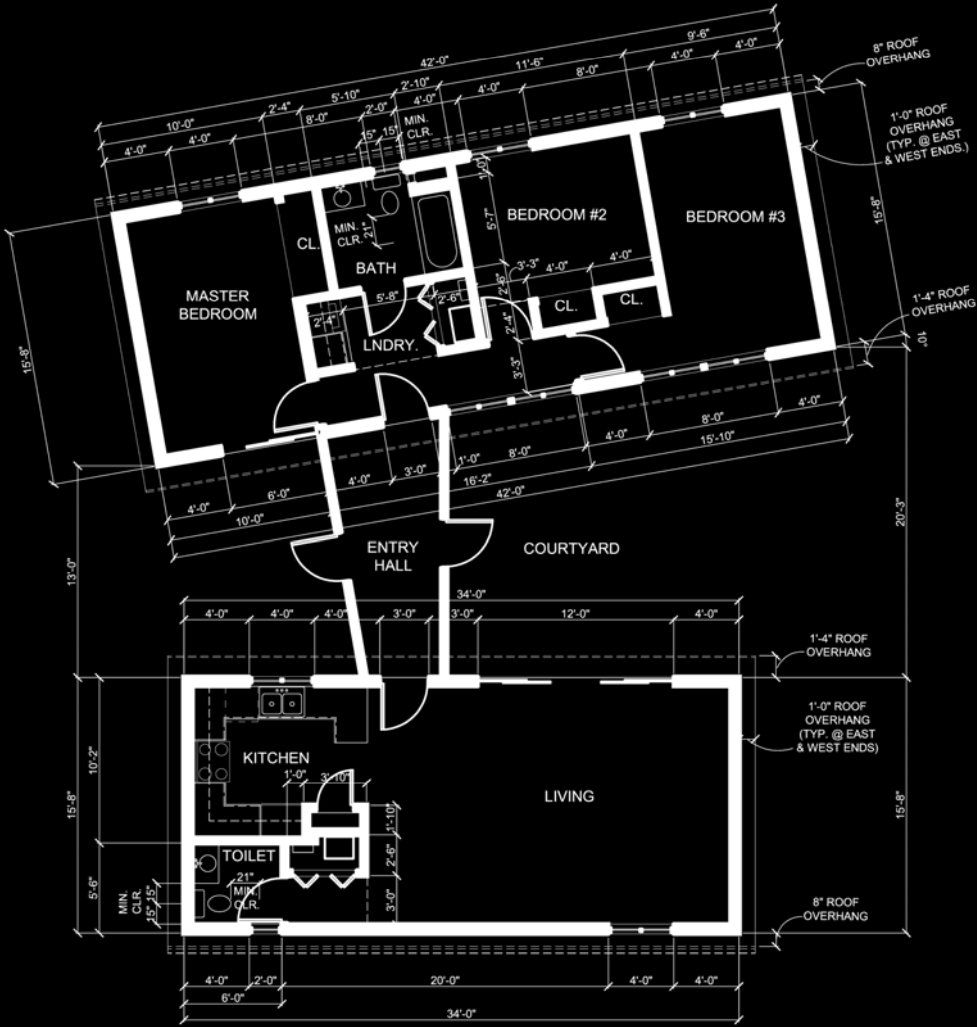


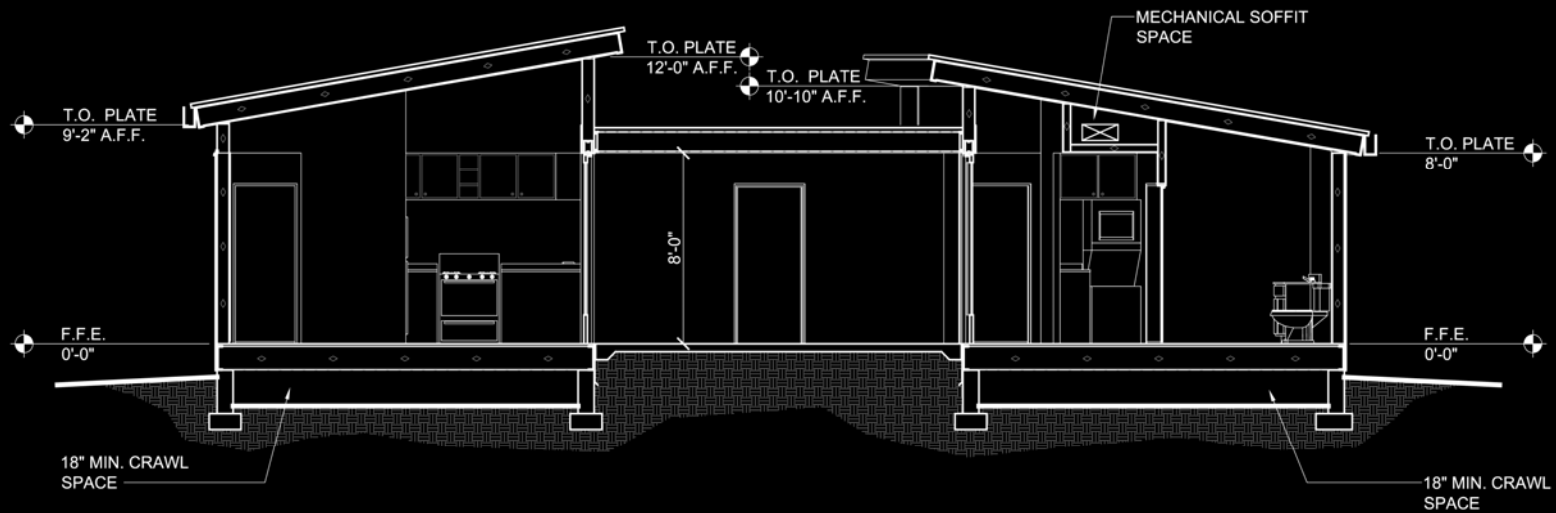
Proposed Permanent Home Site

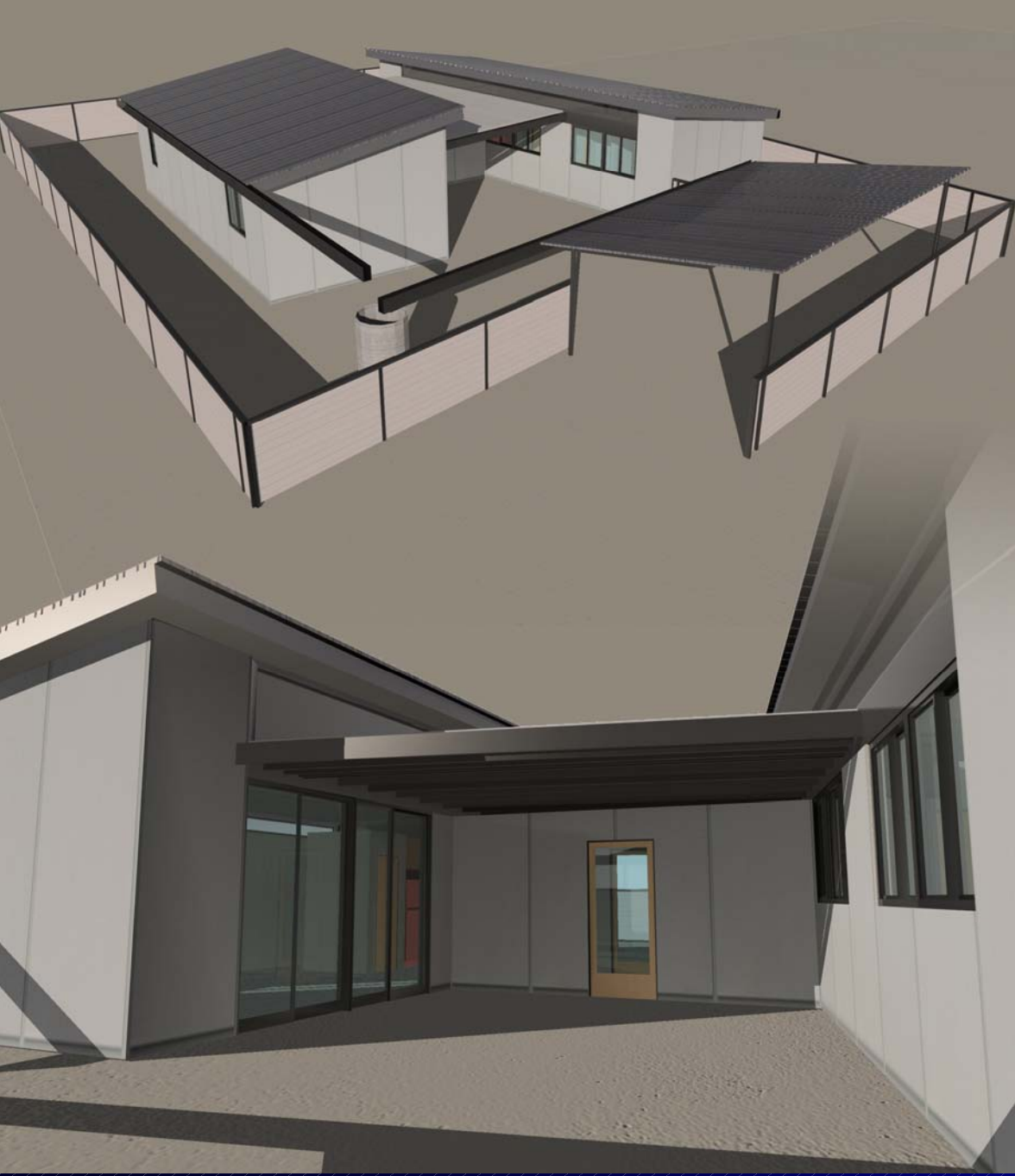
On the Northeast Corner of 24th St. & South Park Ave.

Currently Under Review for a Lot Split – Into Three (3) Parcels









Current Plan -- November 14, 2005 @ 9:00 a.m.



Overall Plan -- Optional Modifications



Habitat for Humanity & University of Arizona Residence

Landscape Plan

Drachman Design/Build Coalition
819 East First Street Tucson, AZ 85721



Current Plan -- South Park Neighborhood



UA Community builds home with Habitat for Humanity Tucson

Habitat for Humanity Tucson

Special thanks
to the
Marshall Foundation
for its
financial support
of this project.

















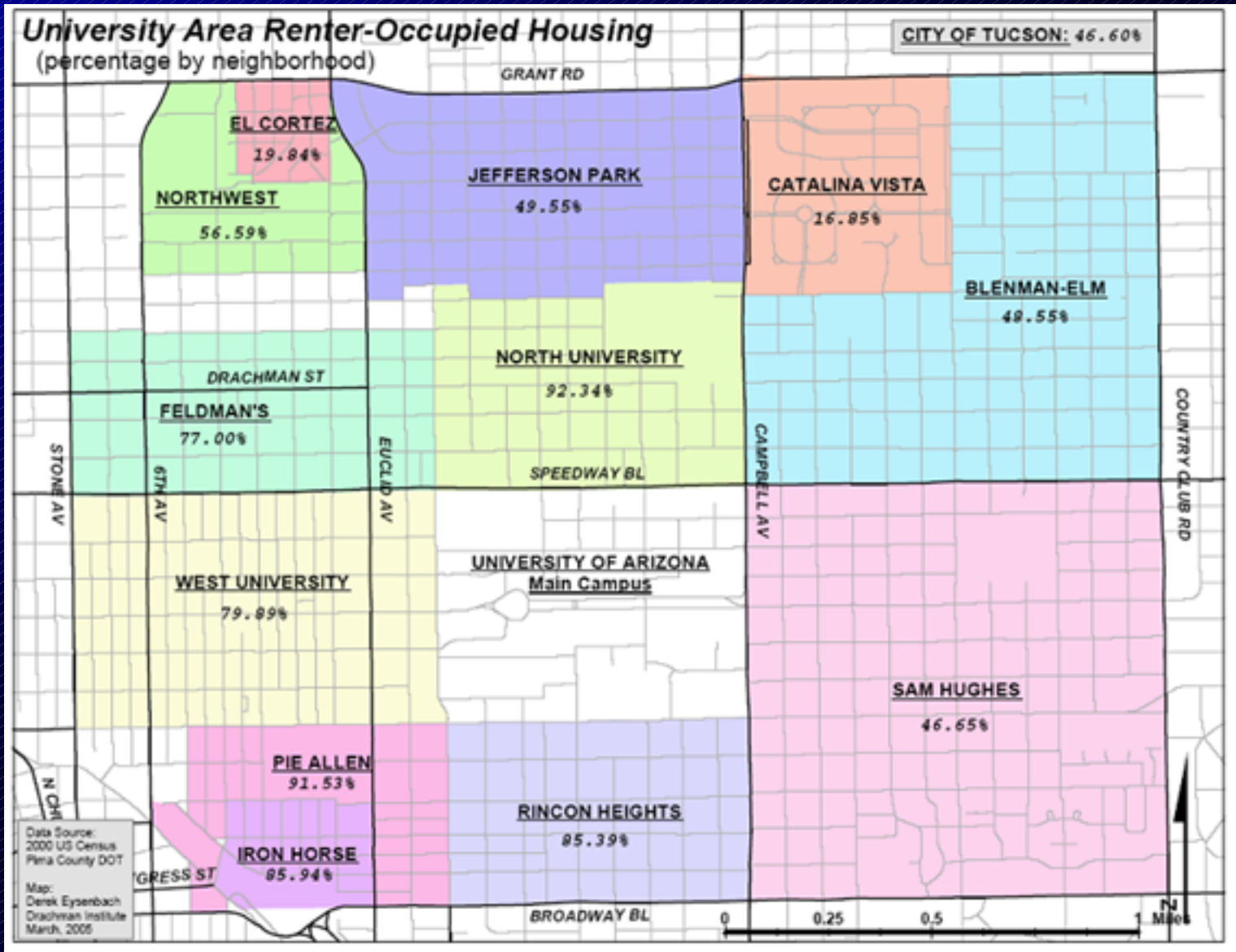
The background of the slide features a detailed architectural line drawing of a two-story house with a tiled roof, multiple windows, and a central arched doorway. This drawing is positioned on a large, light-colored sheet that is rolled up diagonally from the bottom left towards the top right, creating a sense of depth and design process.

An Exploration in Design and Ownership Models

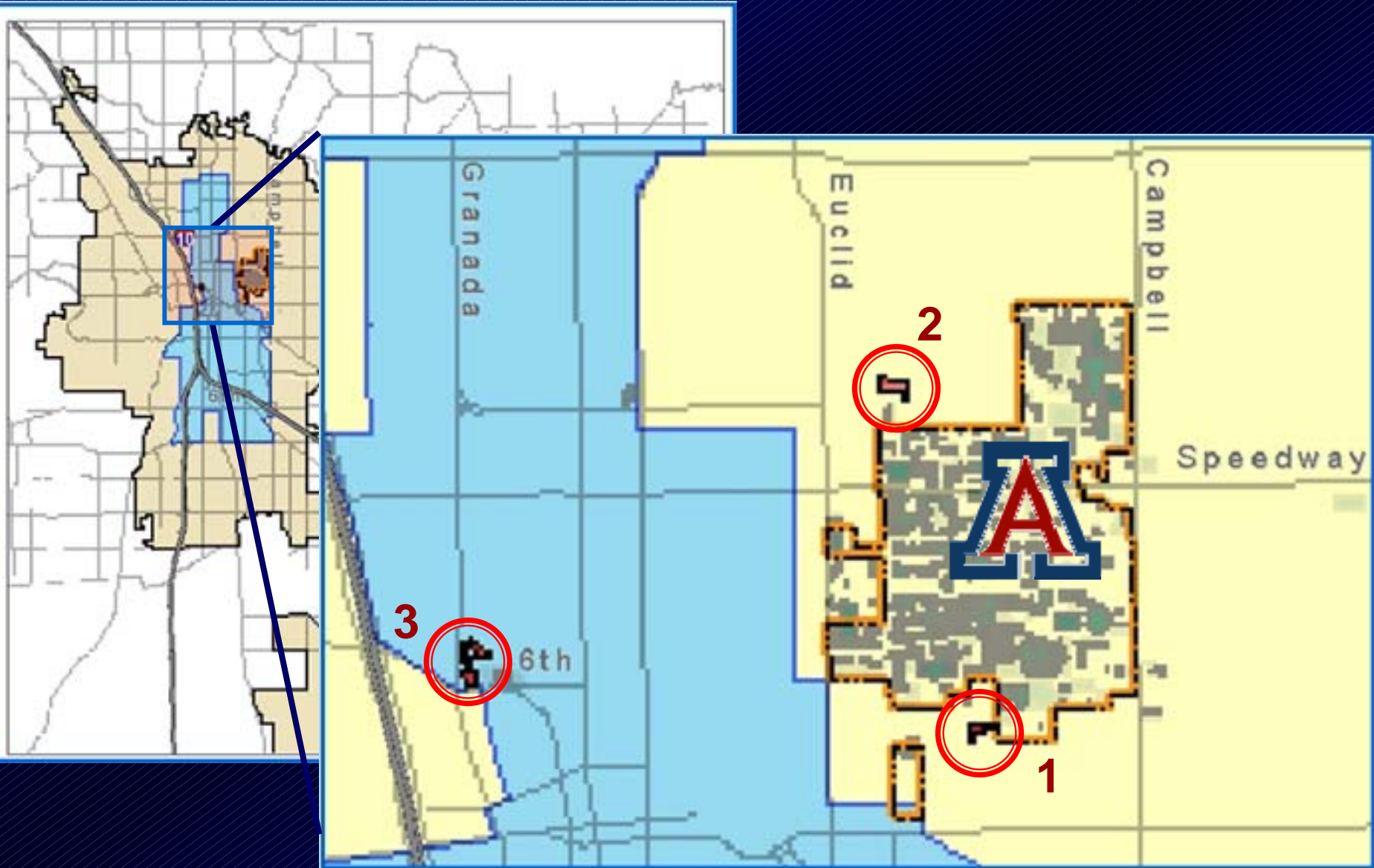
University of Arizona Employer-Assisted Housing

**University of Arizona Office of Community Relations: Jaime Gutierrez
Drachman Institute, College of Architecture and Landscape Architecture
Professor Corky Poster; Students Erika Green, Nadia Pischansky, Thomas Thivener**

Renter-Occupied Housing








3 Project Sites



Neighborhood Context

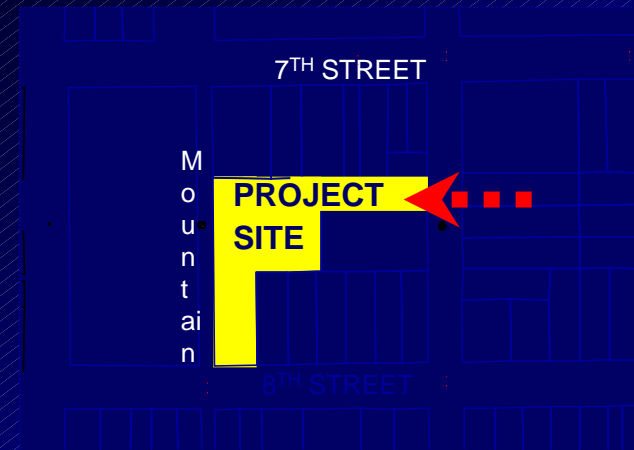


-  Residential
-  Public Land
-  University House
-  Recreational Center
-  Mansfield Middle School

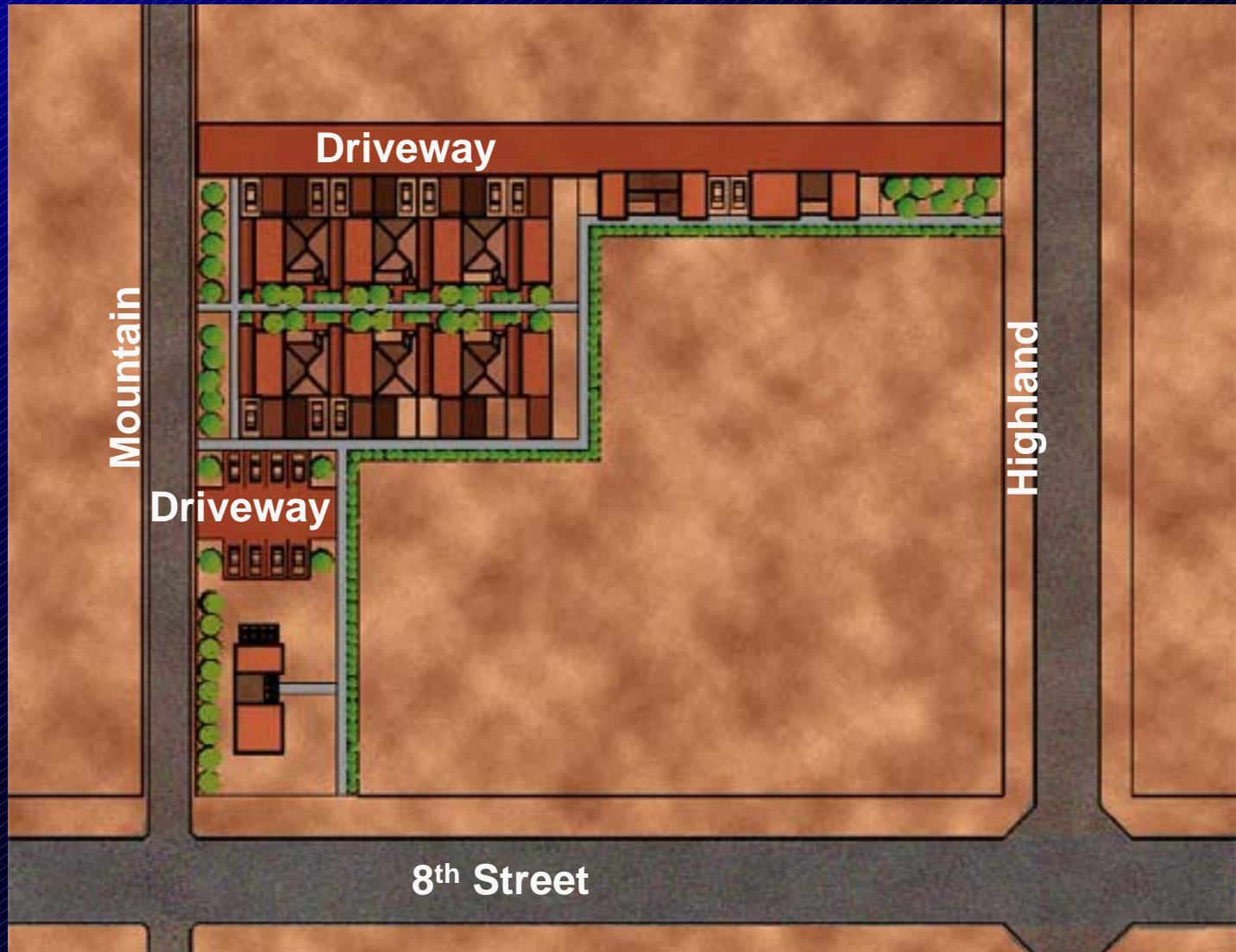
Site 1: 8th/Highland

Sensory

View looking West from East of site



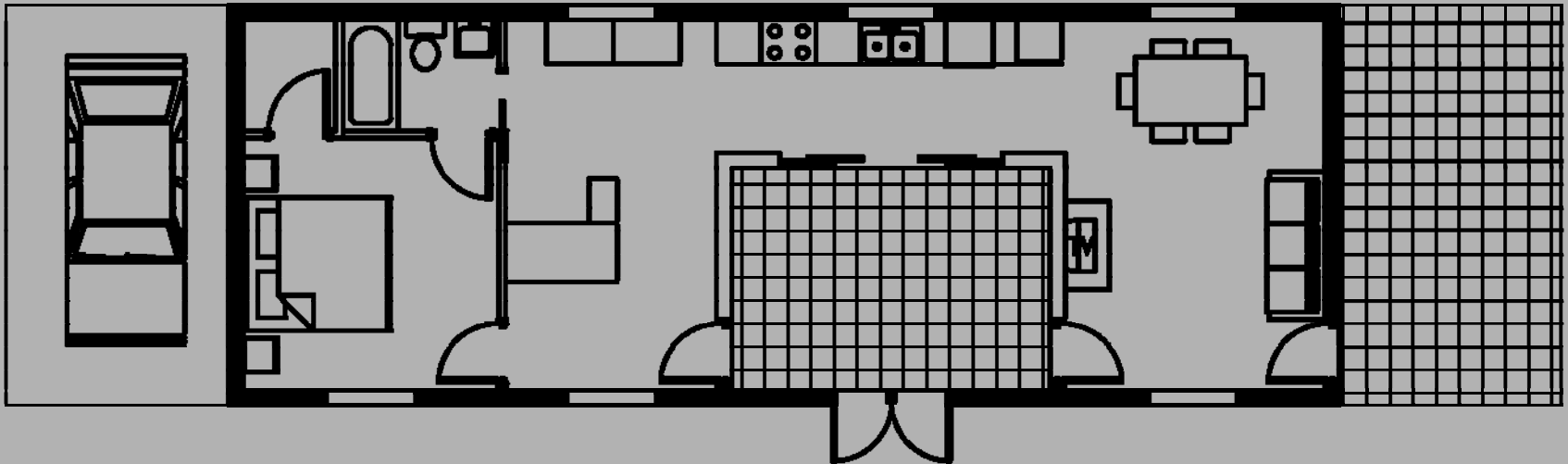
Site Plan



Final Proposal

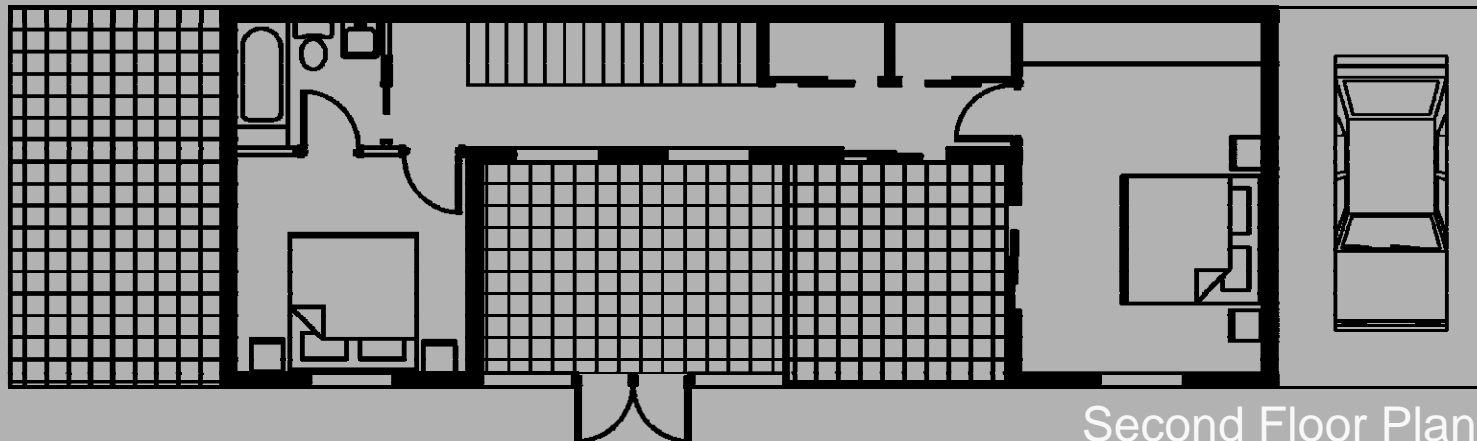
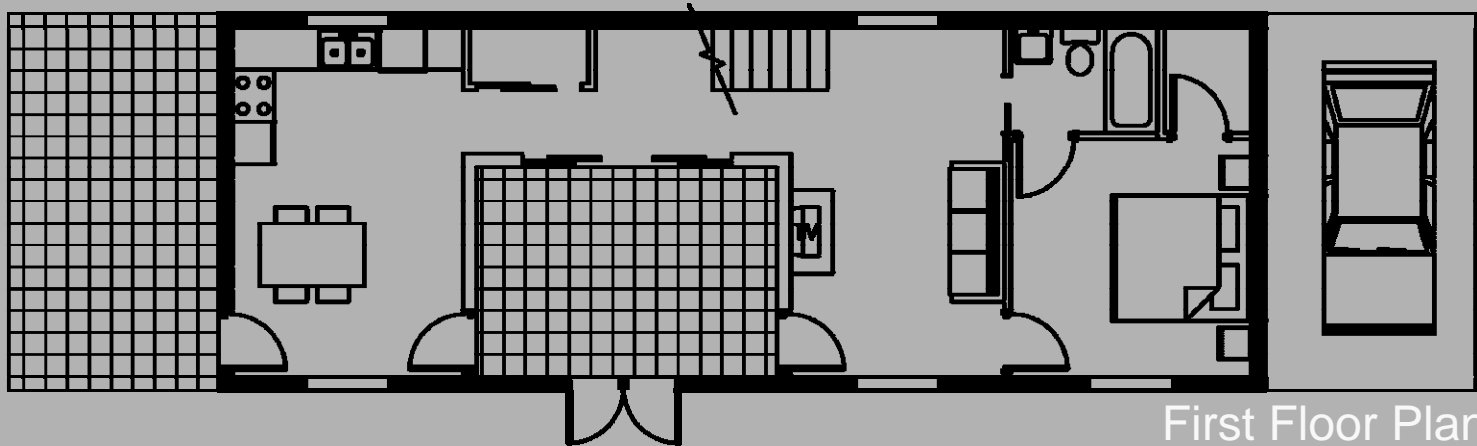
for Single Family Housing

Single Story Detached Dwelling

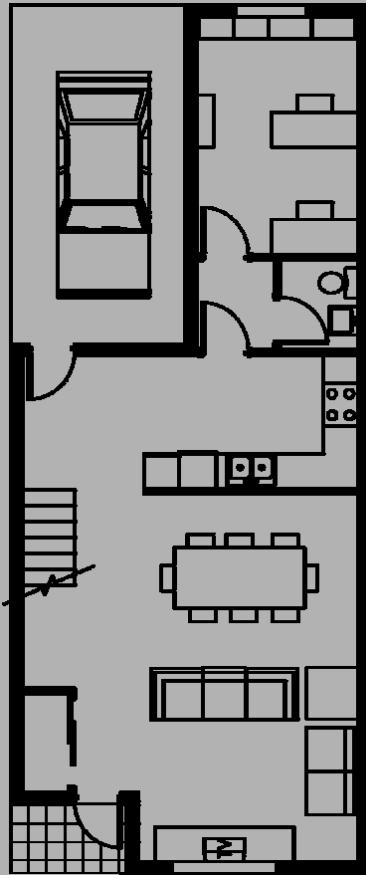


Final Proposal for Single Family Housing

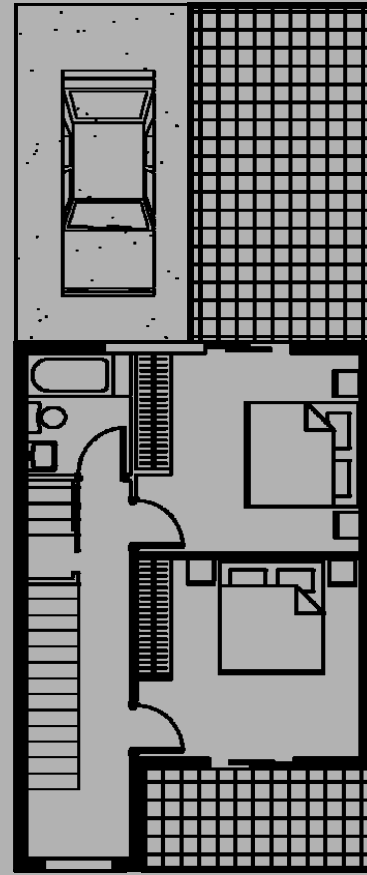
Single Story Detached Dwelling



Final Proposal for Single Family Housing Rowhouse



First Floor Plan



Second Floor Plan



Site 2: Fremont/Adams



North University Neighborhood

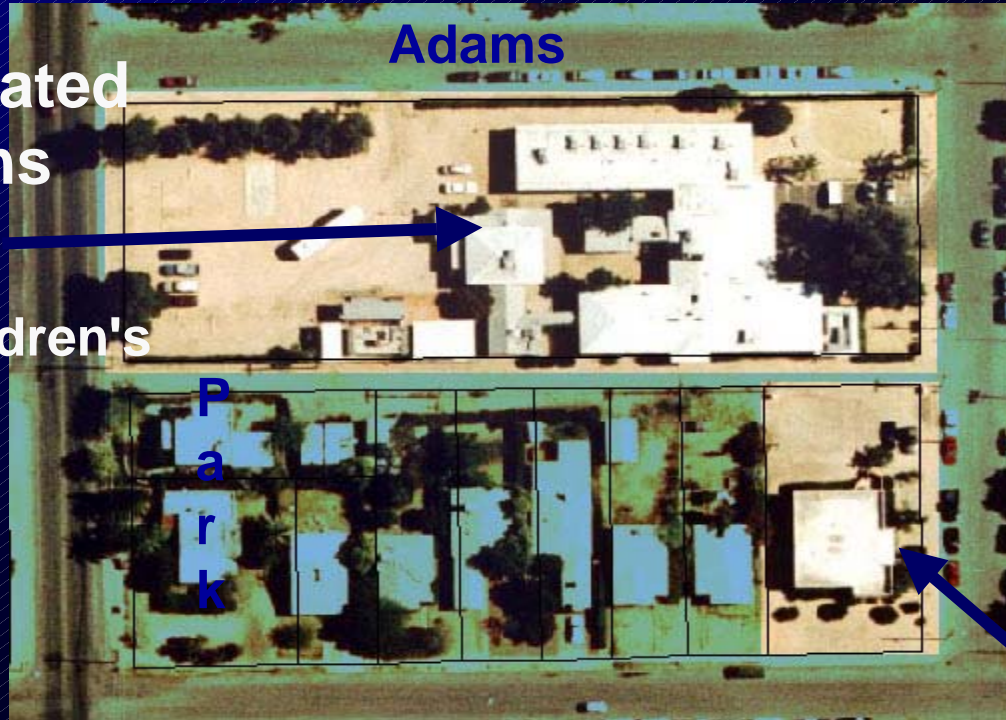


Site 2: Fremont/Adams

Current Use

**Health Related
Professions
Facility**

**(Former children's
hospital)**



**Education
Annex**

Site 2: Fremont/Adams

Site Features

View of south-east corner of site



View of south-west corner of site



Potential Site Design



Site 3: 6th Street/Granada



Neighborhood Context



Ownership Model #2



Community Land Trust

a non-profit corporation created to acquire and hold land to provide affordable housing ensuring continued access to the land

Community Land Trust



- **Separates land ownership from home ownership**
- **Keeps housing affordable by removing land from the speculative market**
- **Owner pays mortgage on the house & rent on the land**

The background of the slide features a rolled-up architectural blueprint. A section of the blueprint is unrolled, revealing a detailed line drawing of a two-story house. The house has a tiled roof, multiple windows with shutters, and a central arched doorway. The drawing is in a technical, architectural style.

Our Next Steps:

- **Elaborate Site designs for Rincon and North University**
- **Develop site designs 6th Street/Granada**
- **Further research**
 - **housing models**
 - **needs of the Tucson and University communities**

City of South Tucson Affordable Housing Preservation Plan

Drachman Institute

HUD - Community Outreach Partnership Center

College of Architecture & Landscape Architecture

University of Arizona

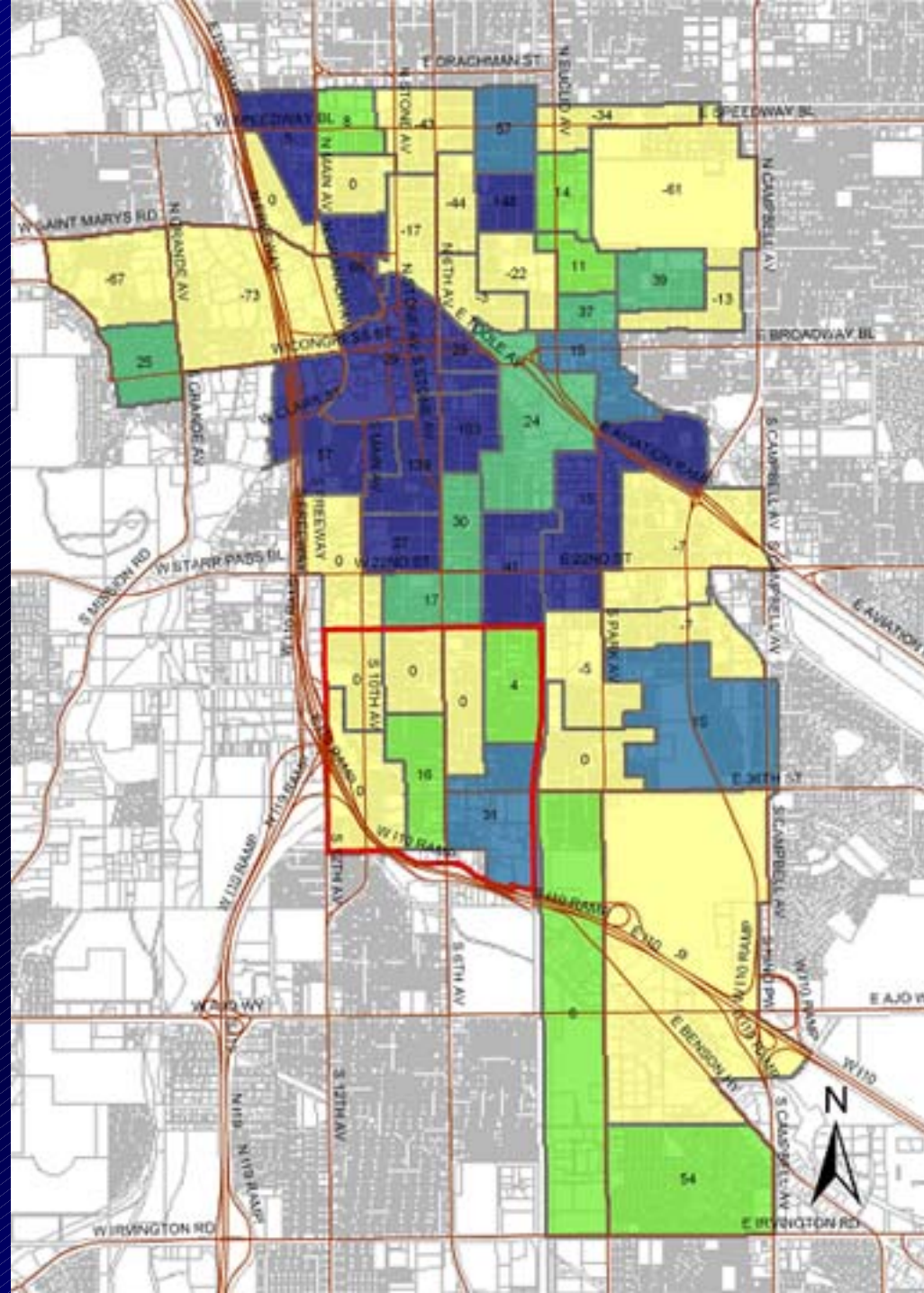
Characteristics of Gentrification

- Physical upgrading of the neighborhoods particularly of housing stock.
- Displacement of original residents.
- Change in neighborhood character.

Changes in white, College graduate, 25-35 years population 1990-2000

(Bachelor, Master o PhD)

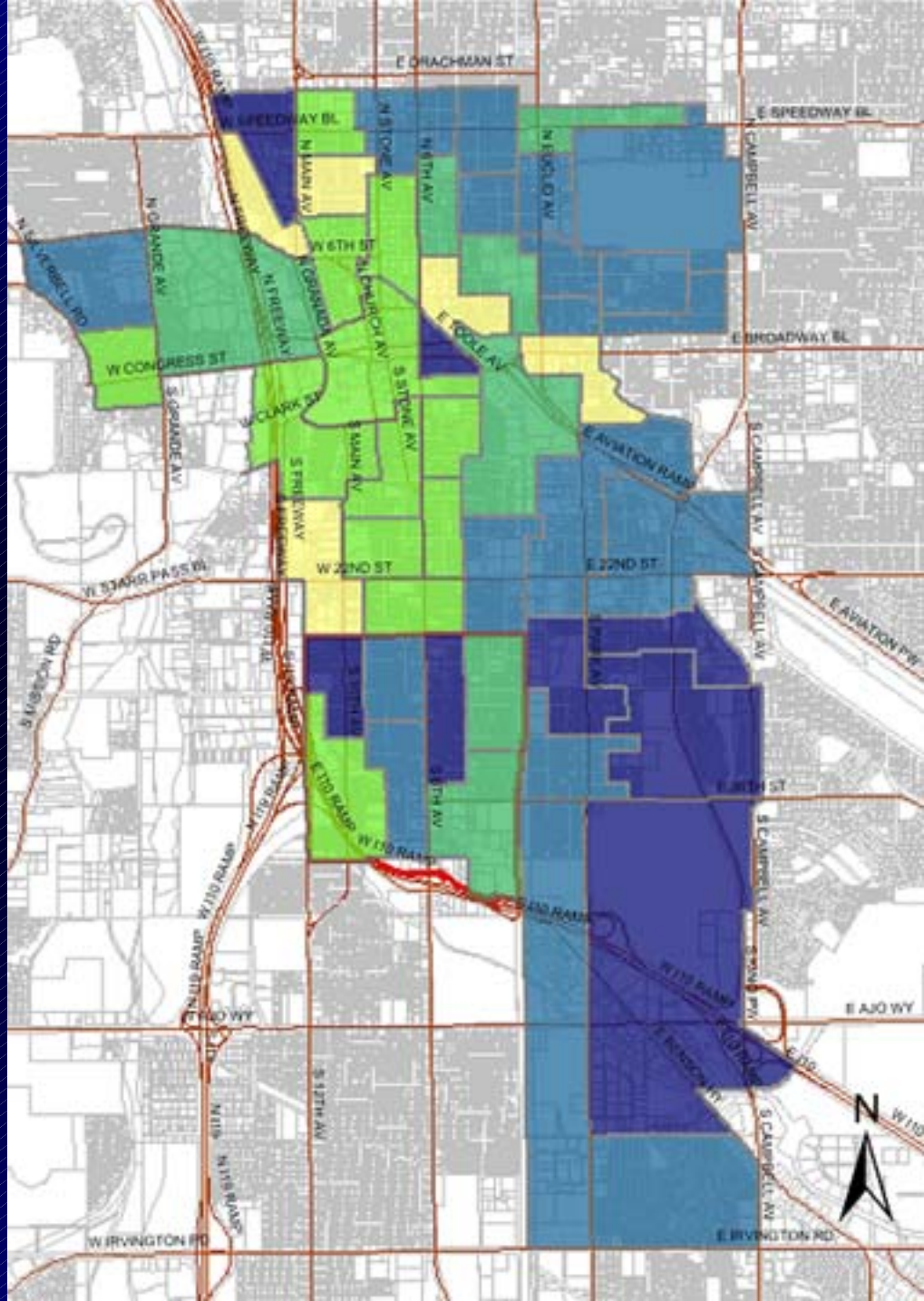
- Less than 0%
- 1-5%
- 6-10%
- 11-15%
- 15% and more



Source: 2000, 1990 US Census

Differences in Person from Hispanic Origin 1990-2000

- Less than -20%
- -20 to -5%
- -4 to 0%
- 1 to 25%
- 25% and more



Source: 2000, 1990 US Census

A stylized map of Tucson, Arizona, with a blue background and red lines representing the street grid and major roads. The map is centered on the city of Tucson.

University of Arizona

Tucson, Arizona

Community Outreach Partnership Planning & Design Center

Corky Poster - Director

Marilyn Robinson - Associate Director