Richland Heights West Neighborhood

Traffic Barrier Improvements
MISSION STATEMENT

The Drachman Institute is the research and public service unit of the College of Architecture and Landscape Architecture at the University of Arizona dedicated to environmentally sensitive and resource-conscious development of neighborhoods and communities. The Drachman Institute focuses its research and outreach activities on the proposition that housing is the building block of neighborhoods and neighborhoods are the building blocks of communities. The work of the Drachman Institute therefore targets the development of demographically diverse neighborhoods, rich in environmental amenities and built from good-quality, well-designed, regionally-appropriate housing that conserves land, energy, and water. It is our contention that good quality and innovative architectural design and technology, sensible community planning, and a landscape architecture that fosters beautiful and healthy private and public space is the cornerstone of this work. We engage our students, our staff, our faculty, and our citizens in a collaborative, research-based outreach enterprise to make our communities healthier, safer, more ecologically and more beautiful places to live.

COMMUNITY OUTREACH PARTNERSHIP PLANNING AND DESIGN CENTER

The Community Planning and Design Workshop (CPDW) has functioned as a public service/community outreach arm of the Drachman Institute since 1989. It brings the skills and knowledge of the students, faculty, and staff of the College to communities in need throughout Arizona. CPDW accomplishes this by applying its expertise and knowledge in architecture, planning, landscape architecture, and urban design to community service and outreach projects. CPDW accepts projects requested by Arizona communities and various organizations with funding from the Drachman endowment and the College of Agriculture and Life Science’s Cooperative Extension or by special contract.

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Cooperative Extension, the outreach arm of The University of Arizona, is “taking the university to the people.” Extension serves as a statewide network of knowledgeable faculty and staff that provides lifelong educational programs for all Arizonans. Cooperative Extension is a nationwide educational network of scientists and educators who help people solve problems and put knowledge to use. Arizona Cooperative Extension provides a link between the university and the citizens of this state. Cooperative Extension is a statewide, nonformal, education network bringing research-based information into communities to help people improve their lives. For 85 years Cooperative Extension has delivered educational programs to the people of Arizona. The efforts of the Cooperative Extension are made possible by a cooperative effort between the Federal Government, the University of Arizona’s College of Agriculture and Life Sciences and each of the counties we serve.
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Introduction

Richland Heights West is a unique inner city neighborhood containing mostly older homes on 1 acre lots. The neighborhood has a distinctive rural character with unpaved roads and extensive native vegetation. The residents have worked hard to maintain the character of the neighborhood under pressures from development and modernization. The welcoming streets provide a strong pedestrian environment that invites people from their homes and from surrounding areas. Cut through vehicular traffic is an issue that the neighborhood is battling as it reduces pedestrian safety and increases dust from the roads. Attempts have been made to divert, redirect and block access points at the edges and within the neighborhood.

Richland Heights West neighborhood approached the Drachman Institute in 2005-2006 requesting assistance with the redesign of three traffic barrier installations at the southern border of their neighborhood. Several alternative design solutions were presented and synthesized for the final designs.
Client Needs

This traffic barrier redesign project aims to reduce, redirect and slow traffic into and from Richland Heights West neighborhood. Traffic calming and diversion techniques became important issues as the project developed. With limited funds and low maintainance requirements, the neighborhood sought to improve the appearance of the entries without inviting undue attention from non-residents. The character of the designed had to fit into the rural neighborhood identity and utilize low water use, native plants.
Richland Heights West is bounded by Mountain Ave. on the West, Campbell Ave. on the East, Ft. Lowell Rd. on the south and Prince Ave. on the North. The residential portion of the neighborhood is located within the interior, surrounded on three sides by commercial development. This interior location reduces visibility into the neighborhood and allows for a rural neighborhood character to exist in midtown Tucson.
A variety of natural and manmade materials exist throughout the neighborhood. These existing elements should be drawn upon to give the entries unity and connect them to the greater neighborhood character.
The existing plant palette within Richland Heights West consists primarily of native and desert adapted plants. This landscape theme is recommended to reduce maintenance and water needs.

Existing signage within Richland Heights is severe and lacking aesthetic appeal. Alternative entry signage is recommended.
A similar character now exists between the three traffic barrier sites. Warning signs signal entry and exit to the neighborhood. Brightly colored posts direct traffic and narrow the road to single lane access. These cautionary elements are working to reduce unwanted traffic and keep traffic speed to a minimum. Minimal vegetation is located within these areas, with watering schedules a concern. Road erosion, dust control and pedestrian access must be addressed.
Alternative Exits

Expression of Neighborhood Identity
- Signage in keeping with neighborhood character
- Low stucco walls
- Native vegetation

Traffic Calming
- Change of surface to reduce speed
- Visual narrowing to reduce speed

Traffic Direction and Reduction
- Discourage entry through signage
- Discourage entry through color
- Reduced views into neighborhood
- Reduced entry through “gated” feeling

Expression of Neighborhood Identity
- Signage in keeping with neighborhood character
- Rock boulders and sculptural elements
- Native vegetation

Traffic Calming
- Change of surface to reduce speed
- Visual narrowing through vegetation

Traffic Direction and Reduction
- Discourage entry through signage
- Discourage entry through “Driveway Character”
- Reduced views shield cut-through options
Alternative Entries

Preliminary Concepts

Expression of Neighborhood Identity
- Signage in keeping with neighborhood character
- Split rail fencing
- Native vegetation

Traffic Calming
- “Choke point” to reduce speed at entry (visual and physical)
- Signage indicating speed reduction

Traffic Direction and Reduction
- Welcoming entry through signage
- Welcoming through flowering vegetation
- Long view into the neighborhood

Expression of Neighborhood Identity
- Signage in keeping with neighborhood character
- Split rail fencing and low walls
- Native vegetation

Traffic Calming
- “Choke point” to reduce speed at entry (visual and physical)
- Change of surface to reduce speed at entry
- Signage indicating speed reduction

Traffic Direction and Reduction
- Indication of semi-private through scale and materials
- Welcoming entry through signage
- Welcoming through flowering vegetation
- Long view into the neighborhood
View Looking North into Richland Heights West at Cherry Entrance

Primary Elements at Entry Only
- Color
- Longer views into neighborhood
- Less visual narrowing
Primary Elements at Entry Only

- Strong visual narrowing
- Limited views into neighborhood
- Low wall to give “private residence” feeling
- “No Entry” signs to reinforce city signs
Traffic Calming

Traffic calming strategies can result in active or passive design solutions. This research suggests combining natural and built elements to achieve the desired results. Materials chosen should reflect the neighborhood character while effectively reducing speed. Site lines should be kept open as much as possible to maintain pedestrian safety. Signage that graphically illustrates the need for reduced speed is encouraged.
Traffic Direction and Reduction

The current strategy adopted by Richland Heights West towards traffic direction and reduction is working but with minor drawbacks. The importance of this issue cannot be undersold; it is recommended to modify these attempts by elevating the aesthetic and pedestrian appeal of the entry and exit sites. Included are examples of alternative solutions to traffic direction and reduction.

Design Guidelines

Discouraging

Signage

Welcoming