Mountain View Neighborhood:
A Neighborhood Assessment, Analysis, and Plan
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Prepared for:
Mountain View Neighborhood Association

Funded by:
Cooperative Extension

May, 2007

The Drachman Institute
College of Architecture and Landscape Architecture
University of Arizona

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 the environmentally sensitive and resource-conscious development of neighborhoods and communities. The Drachman Institute dedicates its research and outreach activities to the proposition that housing is the building-block of neighborhoods, and neighborhoods are the building-blocks of communities. Support funding for this project was provided in part by the Cooperative Extension Program of the College of Agriculture and Life Sciences.
Context - The Mountain View Neighborhood is located in mid-town Tucson. It enjoys a central location with convenient access to the many cultural and natural amenities that the city of Tucson and surrounding region offers. Although the neighborhood itself is not new by any means its neighborhood association is one of the youngest in Ward III, having been formed in 2004. Its formation was in response to many frustrations that the neighborhood residents faced including crime, speeding, absentee landlords, and an overall lack of neighborliness. This report represents the proactive attitude towards positive change that its neighborhood association has demonstrated by asking the Drachman Institute to complete a thorough analysis and feasibility study of a variety of changes that the neighborhood has identified as priorities.
Neighborhood Boundaries -
The Mountain View Neighborhood is bounded by major streets within mid-town Tucson. The boundary forming streets are: Prince Rd. (north), Mountain Ave. (east), Fort Lowell Rd. (south), and First Ave. (west). Some of the primary interior streets within the neighborhood are Freeman Pl., Halcyon Rd., and Navajo Rd. The neighborhood is approximately one-half mile by one-half mile square. Below are listed some daily traffic counts from 2006 for the major boundary forming streets listed prior:
- First Ave. - 39700
- Fort Lowell Rd. - 26800
- Prince Rd. - 22000
- Mountain Ave. - 8900

Cut through traffic is also another major problem identified by the neighborhood residents and certainly these high traffic counts aide that claim. Some degree of traffic mitigation is of high priority for the neighborhood.
Mountain View

Neighborhood

Background Analysis
- Neighborhood Context
- Neighborhood Boundaries
  - Visual Analysis
  - Neighborhood Zoning
  - Stress Index
  - Topography + Washes
  - Floodplain Analysis
  - Soil Analysis
  - Bus Routes/Stops
  - Bike Routes
  - Alleyways
  - Site Analysis

Concept Development
- Neighborhood Concept

Neighborhood Plan
- Traffic Mitigation
- Pathway
- Pocket Parks/Open Space

Native Vegetation
- Trees
- Shrubs
- Annuals/Forbs
- Grasses

Visual Analysis - The following two pages show a variety of photos taken on walking tour of the Mountain View Neighborhood.

- looking east down Halcyon Rd.
- looking west down Navajo Rd.
- site where Navajo Wash meets 1st Ave.
- commercial business along 1st Ave.
- commercial center @ Ft. Lowell and 1st Ave.
- commercial center @ 1st Ave and Prince Rd.
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Visual Analysis Cont.

example of service orientated alleyway

Woods Library across 1st Ave. from neighborhood

utility easement that creates pedestrian alleyway

another example of alleyway

small space activated by residents

Greek church off of Fort Lowell Rd.
Zoning - Knowing how the neighborhood has been zoned by the city of Tucson is important information to have before proposing any changes. These zoning designations have guidelines for the appropriate types of structures and activities that may take place on any given piece of private property within the neighborhood. Within the Mountain View Neighborhood there are four types of zoning codes represented:

- **C2** - general commercial uses that serve community and region; residential permitted.
- **C1** - low intensity commercial, compatible with adjacent residential uses.
- **O3** - mid-rise office development and reasonable compatibility with adjoining residential uses.
- **R2** - medium density single family and multi-family residential development.

Although no recommended improvements in this report face any zoning issues, again this is useful information for the future.
Stress Index - The stress index is a rating given by the city of Tucson to areas within the city jurisdiction. It uses thirty-one different indicators, each given equal weight, to generate a final score or rating. These indicators are a compilation of general social and environmental factors which when examined together can help indicate an overall level of stress existing within an area. Some of these indicators include: economic status, shelter costs, housing age/condition, and social dependency. The map to the left shows that the Mountain View Neighborhood has two different levels of stress ratings, with the southern half receiving a medium stress rating and the northern half receiving a medium-low stress rating. While neither of these ratings is cause for alarm it starts to validate some of the concerns that the neighborhood residents have voiced frustrations with.
There are two washes which run either through or border the Mountain View Neighborhood. The Navajo Wash enters the neighborhood from the south and within the neighborhood makes a ninety degree turn, following the road alignment, and starts to head west. The North Mountain Ave. Wash parallels Mountain Ave. heading in a northern fashion.

Both of these washes are surface flow washes and are subject to flooding during main rain events. The natural topography of the neighborhood goes from a high point in the southeast to a low point in the northwest portion of the neighborhood. The elevation change is minimal, less than 20 feet, and slopes are within the one to two percent range. Any changes or improvements made need to take into consideration how they might affect the natural drainage of surface water and what sort of ramifications, if any, might arise on their account.
Mountain View Neighborhood

- **Floodplain Analysis** - The Navajo Wash is the most prominent of all washes running through the Mountain View Neighborhood. This graphic depicts the scope of area encompassed by its floodplain. At any given point it is approximately one-quarter mile wide. Navajo Rd., which the wash takes its name after, is a city designated surface flow corridor which often bears the brunt of any flooding that occurs during major rain events. Any improvements that occur within this surface channel must be at or below grade. Additionally improvements must not hinder, disrupt, or divert the flow in any way. The wash carries water across First Ave. and at Oracle Road it joins the Flowing Wells Wash. The water ultimately ends up in the Santa Cruz River. One must keep in mind these larger systems when examining secondary washes and any proposed changes.
Soil Conditions - The soil conditions within the Mountain View Neighborhood are very similar to those that exist across the Tucson Valley. There exists little to no organic materials that generally make up the O and P soil horizons. What is seen at the surface are typically A horizon soils. In a representative profile these soils are pale-brown gravelly loam at a depth of 11 inches. Below this is a layer of white indurated hardpan that is approximately 31 inches thick. The soil is moderately alkaline and calcareous throughout. Permeability is moderate to moderately rapid through the gravelly loam but once it reaches the hardpan it is slow. Planting root depth ranges from 4-20 inches. It is suggested that any vegetation that is added be native vegetation that is well adapted to the unique soil conditions present in the Tucson Basin.
Bus Routes/Stops - There are three main bus routes which run along the perimeter of Mountain View: route 6 runs north-south along First Ave., route 34 runs east-west along Fort Lowell Rd., and route 17 runs east-west along Prince Rd. The map to the left also indicates where the bus stops are and whether a shelter is present or not (green = shelter, red = no shelter). This information is useful when establishing walking routes from within the neighborhood to perimeter destinations and vice versa. Many people depend upon the Sun Tran as a means for travel and certainly we all could benefit from less reliance upon our automobile. Making access to and from public transportation sites is one step towards making that a reality. In addition the bus stops are an opportunity for displaying some of the neighborhood's creativity, not to mention those without shelter should be enhanced with native vegetation.
Bike Routes - Bicycling is a relatively easy and efficient way to get around the city of Tucson. The city has established set bike routes throughout the city which aides in bicycle travel. Some bike routes happen to share lanes and space with motor vehicles, as is the case on First Ave. These bike routes should only be used by the most experienced riders. Fortunately there exist many other bike routes where bicyclists are given their own bike lane free of vehicular travel. Mountain Ave. is a good example of this and provides opportunities for cyclists of all ages and experience. Within the neighborhood the residents are encouraged to be more aware of cyclists and be recognized as a bike friendly community. Providing bike lanes on streets and signage for drivers alerting them of bike routes are two ways that can aide in this process. Additionally establishing connections between neighborhood bike routes and existing routes is recommended.
Alleyways - The map to the left depicts the city of Tucson recognized alleyways. Some of these alleyways are paved (green) and used on an infrequent basis by vehicles, for example trash service. Others are unpaved (red) and represent utility easements which must be kept clear. Regardless of their nature they can be extremely valuable spaces should the neighborhood choose to activate them. In most cases the alleyways have been shunned, neighbors have turned their back on them, and are viewed as areas of negative activity. But through simple measures such as cleaning them up of debris and adding vegetation alleyways can become integral, pedestrian friendly corridors of movement and activity.
Site Analysis - The map to the left represents a combination of some of the analysis maps and information presented earlier plus some additional information not yet covered. As of now there exists no park or community orientated open space for the neighborhood to enjoy. There are a number of privately held open lots and one city owned parcel which hold potential for hosting such an opportunity. Additionally noted are some of the main interior streets within the neighborhood. In most cases these are the streets that connect the major perimeter streets like Halycon Rd. for example. It has been mentioned that the residents are concerned with cut through traffic on these streets. There are some excellent views to the north of the Santa Catalina Mountains and these views should be highlighted and maximized when possible. Lastly noted are opportunities where some neighborhood signage could go, helping establish a sense of pride in their neighborhood for residents, and alerting others that they are passing through one.
The preceding maps and analysis information were presented to the neighborhood of Mountain View during one of their monthly meetings. At the conclusion of the meeting, it was decided by the neighborhood that the continuing work would focus on four specific areas. Three areas dealt specifically with Halcyon Rd. those being implementation of traffic mitigation measures, an off street walking path, and addition of street vegetation. The last area of concern was focused on developing concepts or ideas for areas of community open space. The map to the left graphically depicts the four areas of concern. The red stars are areas where traffic mitigation improvements will be made. The yellow filled lines represent where street vegetation will be added. The blue dotted line represents the walking pathway. And lastly the shaded green areas are two recommended areas for community open space.
bumpout - an extension of the road towards the center of the roadway; narrows this section of the road and forces cars to slow; can be used to harvest storm water run off

**Traffic Mitigation** - Curb extensions are segments of the road which are extended towards the center of the roadway, narrowing the driving lanes for both lanes of traffic. This forces vehicles to slow down as they pass through the narrowed section. This traffic mitigation measure may also be called 'bumpouts'. And while Halcyon Rd. does not have curbs this traffic mitigation measure still can be implemented with the same degree of success. These bumpouts are recommended to occur at three occasions during the length of Halcyon Rd. at the same locations as the existing speed bumps. By placing them at existing locations the thought is that not only will the cars have to slow for a narrowed road section but then also for the speed bump. The bumpouts additionally free more space for street side vegetation to be added along the length of the street. Additionally water harvesting measures can be implemented in these bumpout locations by creating small swales to catch storm water runoff.
Typical Bumpout Section

Isometric View of Bumpout

- Bumpouts cont. - Pictured top left is what a typical roadway bumpout section would look like. The 8’ vegetated section buffering the walking path from the roadway is an excellent location for a swale to catch storm water runoff. This area is recommended to be well vegetated with native trees, shrubs, and grasses to help create a nice aesthetic and shaded area for walkers along the pathway.

As it exists now Halcyon Rd. is not visually interrupted by anything and drivers have a clear view to the opposite end. By adding street vegetation it is hoped to break up that view into segments which will require driving at reduced speeds. This measure should not impair any driver to the point of danger.
Traffic Mitigation - An entry median is a vegetated island in the center of a two-way street adjacent to an intersection, typically at the perimeter of a neighborhood. It is recommended this traffic mitigation measure be placed at the eastern intersection between Halcyon Rd. and Mountain Ave. Similar to a bumpout it would narrow the driving lane in each direction for a brief period of time requiring vehicles passing through this section to slow down. This is another area which can be used to harvest storm water run off and is recommended to be well vegetated with native plants. The entry median also is ideal location for placing any neighborhood signage. Alerting drivers that they are entering Mountain View Neighborhood will hopefully help them realize they are entering a secondary street and need to reduce their speeds. Creating some sort of neighborhood signage can also start to address the need for neighborhood unity which the present lack of was a voiced compliant of current residents. For signage examples please see next page.
Traffic Mitigation - A corner bumpout is an extension of the corner(s) of a road towards the center of the roadway, which again narrows the road and acts to reduce the speeds of passing through vehicles. It is recommended that such a corner bumpout occur at the intersection of Halcyon Rd. and Freeman Pl. with the corner extensions occurring on the northeast and northwest corners of that intersection. This acts dually to narrow both roadways and also reduce the speed of cars making turns onto/from either street. This area, like the other traffic mitigation features, is an opportunity to practice rainwater harvesting and be well vegetated.

Shown to the left are examples of a variety of signs and styles that the Mountain View Neighborhood could use to announce entry and exit for the neighborhood. A unique neighborhood sign can aide in the process of forming a cohesive neighborhood identity and community.
To the left is a section of what a typical roadway section along Halcyon Rd. would look like. At present there are eleven foot drive lanes in each direction accounting for twenty-two feet of roadway width. It is proposed that a five to six foot buffer area planted with native trees and plants be established on each side of the roadway. Continuing outwards next a five foot unpaved pathway would be established on each side of the road. Having a designated pathway was an expressed desire of the neighborhood. Keeping it unpaved allows for increased permeability of stormwater into the ground water table. The pathway is intended to be well shaded by the added street trees contained within the aforementioned buffer areas.
Towards the eastern end of Halcyon Rd. there is a portion of private property that is an ideal location for a small neighborhood pocket park. The land is owned by the Greek church which sits on a separate parcel of land off of Fort Lowell Rd. Currently the land lies vacant and unused. The idea is contingent upon the church allowing for a small portion of this property, approximately 100' long by 30' deep, to be transformed. The concept proposed to the left and continued on the following page is a fairly simple one calling for some revegetation of the area and a small looping pathway. Entry and exit to the pocket park would be from the primary streetside pathway on the both the eastern and western ends of the parcel. Off of the interior path there would be benches for seating opportunities underneath shaded tree canopies. In the middle of the park the path would split in two parts, reconnecting at a certain point, helping to form a small focal island within the park.
Pocket Park cont. - This focal island in the concept is a small botanical or demonstration garden. Or perhaps the church might want it to be a small garden space containing biblical plant species. Regardless one must remember that it is the church who owns the property, but demonstrating to them that it can be a win-win situation for both the church and local neighborhood will help further the discussion. A simple neighborhood pocket park can be a nice amenity for all residents to enjoy.
Navajo Wash Pocket Park -
A second ideal location for a neighborhood pocket park would be a city owned parcel of property located at the intersection of Navajo Rd. and First Ave. Presently this parcel of land is used as a wash channel to convey stormwater from Navajo Rd. across First Ave. heading west to eventually drain into the Santa Cruz River. Still this is no excuse for its blighted appearance and character which finds the site full of garbage and debris. The proposed concept would leave the main wash channel object free. This is in accordance with city officials in order that the channel perform its required drainage duties. The channel is approximately 40' wide and at its lowest is three to four feet below the grade of the surrounding areas (The channel is the area contained by the dotted-dashed lines running diagonally through the plan). The smaller area to the southwest of the channel is recommended to be planted with single trunked native trees. This area also suffers from the most blight and
Navajo Wash cont. - needs to be cleaned. For the larger area to the north and east of the channel it is proposed that a pathway cut across the length of this area. Along this longer pathway there would be a few benches for seating. Additionally off this pathway would be a secondary path which would loop around a ramada/shade structure. Underneath the ramada there would be picnic tables or some other type of seating accommodation. The entire area would be vegetated with native trees and plants.
The use of native vegetation is strongly recommended. These native plants have long adapted to the climate regime present in the Sonoran Desert. In particular they are adapted to the extreme heat and relative lack of precipitation. The planting of native vegetation is one way to help ensure the site stays lush and vegetated for years to come. Additionally these native plants are favored by native wildlife (birds and lizards), and help provide important habitat, along with food and nesting sites.

**Native Trees**

- *Acacia constricta* - Whitethorn
- *Acacia* (top)
- *Prosopis velutina* - Velvet Mesquite (middle)
- *Parkinsonia floridum* - Blue Paloverde (bottom)
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Native Shrubs
- *Lycium sp.* - Wolfberry (top left)
- *Encelia farinosa* - Brittlebush (top right)
- *Justicia californica* - Chuparosa (bottom left)
- *Eriogonum fasciculatum* - Flattop Buckwheat (bottom right)
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Native Annuals/Forbs
- Bahia absinthifolia - Bahia (top left)
- Baileya multiradiata - Desert marigold (top right)
- Eschscholzia mexicana - Mexican poppy (middle)
- Kallstroemia grandiflora - Summer poppy (bottom left)
- Lesquerella gordoni - Bladderpod (bottom right)
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Native Annuals/Forbs
- *Penstemon parryi* - Parry penstemon (top left)
- *Plantago insularis* - Indian wheat (top right)
- *Salvia columbariae* - Chia (middle)
- *Senna covesii* - Desert senna (bottom left)
- *Sphaeralcea ambigu* - Globemallow (bottom right)
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Native Grasses
- *Sporobolus cryptandrus* - Sand dropseed (top left)
- *Sporobolus contractus* - Spike dropseed (top right)
- *Enneapogon desvauxii* - Pappusgrass (middle left)
- *Aristida purpurea* - Purple threeawn (middle right)
- *Bouteloua rothrockii* - Rothrock grama (bottom left)
- *Digitaria californica* - Arizona cottontop (bottom right)