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INTRODUCTION

"Even if you're on the right track, you'll get run over if you just sit there."

Will Rogers

Rio Montaña is a community south of downtown Phoenix. In many ways, Rio Montaña is a community within a community within a community; each independent of the other but an integral part of the whole. There is the farming community growing cotton, alfalfa, sorghum, citrus and other crops. There is the equestrian community with large lots dedicated to horses, stables and paddocks. There is the residential community bringing families and building a sense of neighborhood. The development patterns created by each of these communities have left an indelible mark on Rio Montaña. These development patterns make Rio Montaña the community it is today, and provide guidance for the future of the area.

Crop farming has diminished from previous years, and food crops are being replaced with tree and plant nurseries producing ornamental crops. Equestrians remain an important component of the community, active in the preservation of trails. As developers recognize the advantages of Rio Montaña, the number of new homes is increasing, and the residential community is growing.

The availability of land in Rio Montaña provides an extraordinary opportunity for both new development and redevelopment. A key component of successful development is an understanding of the character and assets of a place and the influences on the resident population and infrastructure.

The Rio Montaña Growth Study (the Growth Study) is a summary of the existing physical, social and economic conditions of the Rio Montaña community and a plan for the future.

STUDY BOUNDARY AND AREA DESCRIPTION

Rio Montaña is bound by the Salt River to the north, the South Mountain Park Preserve to the south, South Central Avenue to the east, and 27th Avenue to the west as shown in Figure 1. The area is 6,655 acres of predominantly single-family residential and agricultural land.

![Looking towards Downtown from South Central Avenue](image1)

Figure 1

**RIO MONTAÑA PLANNING AREA**

Agricultural uses include croplands, citrus orchards, tree farms, and nurseries. Vacant land is found throughout the study area and includes areas surrounded by urban development and desert foothills. Along the northern (Salt River) portion of the study area, the existing development pattern includes higher density residential and industrial uses. Neighborhoods in this more densely developed area are typically smaller lots with smaller homes. Many of these neighborhoods have sidewalks and curbs, as well as alleys for refuse pickup. Within this higher density urban fabric, there are larger lots with horses or farm animals including goats, cows, chickens and roosters.

Moving south and west to the areas along Dobbins Road and 27th Avenue, the intensity of development diminishes. These areas include one acre or larger single-family home sites and multiple acres of farmland. The areas adjacent to South Mountain Park Preserve include smaller lot subdivisions, custom acre lots, and mobile-home parks.

The historic heart of the Rio Montaña community is located at 15th Avenue and the Western Canal. There are several historic homes that exist in this general area.

There are two canals that cross through the study area, the Western and the Highline Canals.
There are three bridges over the Salt River in Rio Montaña: at South Central Avenue, 7th Avenue and 19th Avenue. Twenty-Seventh Avenue marks the boundary between South Mountain Village and the newly formed Lavee Village.

**South Mountain Village**

Rio Montaña is also a part of a larger community: South Mountain Village. The village has grown at an amazing pace in recent years. An advantage of living in South Mountain Village is the proximity to downtown Phoenix, South Mountain Park Preserve, and valley freeways. The Raven Golf Resort at 36th Street and Baseline Road opened in November 1995 when land prices rarely exceeded $10,000 per acre. Since that time land prices have quadrupled. The Raven and other projects have brought an increased interest in residential development to the village. New homes are reasonably priced, ranging from $120,000 - $200,000.²

South Central Avenue, the eastern boundary of the study area, is the dominant commercial spine of South Mountain Village. The Central Avenue Bridge, built in 1911, provided residents, business owners, and farmers the first direct connection to downtown Phoenix. South Central Avenue is similar to a small town 'Main Street' with numerous restaurants, markets, boutiques, music stores, business offices, and public community services. South Central Avenue is also the location of the village core, public facilities, the Rio Salado Gateway project, and a future transit facility.

**PLANNING PROCESS**

The planning process for Rio Montaña began at the request of City Council in January 1998. Generally, monthly meetings were held throughout the planning process. The initial notification letter alerting area residents of the planning process went to property owners, businesses, churches, registered neighborhood and block watch groups, and community organizations.

Residents chose the name, Rio Montaña, from a list of suggestions. The list included names of historic significance such as Hidalgo and Ma-Ha-Taak, and names of wildlife known in the area such as rock wren. After a vote by the residents, the name Rio Montaña, Spanish for river and mountain, was chosen. The name aptly applies for this area as it lies between the Salt River and South Mountain.

The public meetings were conducted throughout the Rio Montaña area, with local schools typically serving as the meeting locations. More than 20 public meetings were held, and staff maintained an active mailing list of over 600 names.

City staff contacted local radio stations and newspapers and put large bilingual posters in neighborhood stores informing residents of the planning activity in their community. Topics covered at the public meetings were not limited to land use issues. Presentations to the community were made by a variety of city and county staff. Meeting dates, topics covered, and the number of participants are listed in Figure 2.

---

2. Ibid
More than 6,000 letters were sent to alert property owners, residents and interested parties of the land use discussion and the public meeting process for the initial meeting in January 1998 and again in May 1999. A bilingual (Spanish/English) mailing was addressed to all residents inviting their participation in one of two design workshops in November 1999. Property owners affected by a change in land use designation from the existing General Plan to the proposed land use were notified prior to the December 14, 1999 presentation to the South Mountain Village Planning Committee. The Committee initiated the General Plan Amendment at that time.

In addition to Rio Montaña meetings, staff met with representatives from the Roosevelt Elementary and the Phoenix Union High School Districts, which serve the area's student population. Staff encouraged their active participation in the process. Staff also met with a representative from Espiritu, a private community development organization, to seek their input and participation in the planning process.

The land use portion of the Rio Montaña Growth Study was presented to the Beyond the Banks Committee specifically addressing the land use impact of Rio Montaña on the Rio Salado Project. The Transit Department received an executive summary of the Growth Study to encourage the location of a new transit facility within Rio Montaña and a graphic representation of a “mercado” style of architecture as the concept for the design of the facility.

COMMUNITY VISION

“Preserving our desert heritage while creating a great desert city are two sides of an inseparable quest. The choice before us is to excel in both or to end up with neither.”

Vernon D. Swaback

Early in the planning process the city proposed a series of goals to direct future development in the community. Three broad goals - preservation of rural character, preservation of open space, and low density development - were supported by the community and discussed throughout the planning process. The three goals were included as the Vision Statement for the community. From this vision, the city crafted specific goals and action steps.

Vision Statement

Rio Montaña is an area of both natural desert and an agricultural heritage. Rio Montaña strives to be a community that maintains and enhances its current quality of life by:

- Preserving rural character
- Preserving natural desert areas through the development of transition zones that protect desert and open space
- Encouraging pedestrian and equestrian activity through a network of trails
- Encouraging a sense of community
- Encouraging economic development and investment in the community

“Never doubt that a small group of committed citizens can change the world; indeed, it is the only thing that ever has.”

Margaret Mead

Fulfilling the Vision

The Goals and Action steps have been identified by the community as the means to fulfill their vision for Rio Montaña. An important element of the growth study is the Rio Montaña Land Use Plan. The Rio Montaña Land Use Plan incorporates the goals of the community and considers the existing conditions, the current General Plan, development trends within Rio Montaña, and activity in adjacent communities such as Laveen to the west and the Baseline area to the east.

A land use plan does not change existing zoning. A land use plan is a policy document that guides growth and development in a community. Components of a land use plan include:

- Residential
- Commercial (retail and office)
- Warehouse/Industrial/Commerce Park
- Education
- Parks and Open Space

Goals and Action Steps

The following seven goals will help the community achieve its vision.

Goal 1: Rio Montaña is a community that promotes balanced, high quality development.

A. Develop criteria for the appropriate mix and location of land uses such as commercial, industrial, residential, agricultural, public facilities and institutions, and open space.
   (1) Create a comprehensive master plan that provides for a range of housing densities, a variety of neighborhood and community level stores, shops, restaurants, and entertainment.
   (2) Create a density transition that allows higher density residential development in the northern portion of the area and decreasing density towards the southern portion of the area at the South Mountain foothills.

New Development in Rio Montaña
(3) Create a land use redevelopment strategy for Beyond the Banks (the area from 19th Avenue to Central Avenue and the Rio Salado to Broadway Road) in accord with the Beyond the Banks Advisory Committee’s mission to revitalize the Salt River corridor.

B. Strengthen South Central Avenue as the commercial core for the area.

(1) Increase opportunities to improve the appearance of stores on South Central Avenue by providing information about the Storefront Improvement Program.

(2) Assess traffic and parking needs.

**Goal 2:** Rio Montaña is a community that protects and improves neighborhoods through maintenance, rehabilitation and infill projects.

A. Develop a community-wide network to work with the Neighborhood Services Department to address building safety concerns.

B. Provide information about home improvement and neighborhood ‘clean-up’ assistance offered through the Neighborhood Services Department.

C. Encourage infill development by promoting existing infrastructure, cultural amenities, employment centers, mature and historic neighborhoods and public transit.

**Goal 3:** Rio Montaña has a distinctive character that reflects the diversity in its equestrian heritage, culture, history and architecture.

A. Create design guidelines and special zoning districts to encourage development, which recognizes, enhances, and preserves the natural features, environment, history and character of the community.

B. Encourage owners of property eligible for historic designation status to register for that distinction.

**Goal 4:** Rio Montaña is an area that reflects and protects rural character, the Sonoran Desert and the riparian potential of the Rio Salado Habitat Restoration Project.

A. Develop criteria for evaluating environmental transition zones between the Sonoran Desert areas of South Mountain Park Preserve and urban development.

(1) Identify areas for preservation that are environmentally, culturally or historically significant.

(2) Identify areas of a predominant vegetation type such as natural desert, agriculture, and urban ornamental vegetation.

(3) Preserve and restore desert habitat by limiting development in sensitive areas such as hillside areas and drainage corridors and washes.

B. Prepare design guidelines and special zoning districts to encourage development that respects and protects the Sonoran Desert vegetation, the natural features of the area, and the agricultural heritage of the community.

**Goal 5:** Rio Montaña is a stable, attractive community with a potential for future business development and economic growth.

A. Create programs and financial incentives for the development of new businesses.

B. Develop a business retention program to support existing businesses.

(1) Provide financial assistance to help support and retain existing business owners.

(2) Improve the appearance of businesses.
(3) Develop basic job training programs to provide a workforce ready to accommodate new growth.

C. Identify the need for services and facilities related to commercial development such as infrastructure and utilities.

(1) Improve the public transportation system to better serve the area.

(2) Increase code enforcement of existing commercial structures to promote aesthetic quality and safe and sound structures, particularly along South Central Avenue.

D. Identify areas for potential new commercial development.

TARGET AREA B REDEVELOPMENT PLAN

Target Area B is a redevelopment area that includes a portion of Rio Montaña. The Target Area B Redevelopment Plan is intended to provide residents, businesses, neighborhood organizations and government agencies with an overall policy direction for revitalizing and stabilizing the area. The Redevelopment Plan focuses on the elimination of blight and the improvement of social and economic conditions. The Target Area B Assessment is a progress report of the Redevelopment Area Plan.

SOUTH CENTRAL AVENUE CORRIDOR STUDY

The South Central Avenue Corridor Study is an inventory report for the area from 3rd Avenue to 8th Street and from the Salt River to the Highline Canal. The study identified strategies for enhancing the economic environment and developing and improving the physical environment along South Central Avenue.

MOUNTAIN PARK NEIGHBORHOOD

On July 11, 1978, the City Council adopted an ordinance allowing the establishment of Special Planning Districts (SPD). The SPD allows residents of a small geographic area to conserve, revitalize, or upgrade their neighborhoods. The Mountain Park neighborhood consists of single-family homes on large lots, many with equestrian facilities. The overall character, including the lush desert landscaping, is of a rural lifestyle. In 1985, the Planning Commission heard the request of the Mountain Park Neighborhood to establish a SPD to:

- protect the rural character and integrity of the neighborhood
- minimize negative traffic impacts on the neighborhood
- promote quality development that is sensitive to the existing scale and natural conditions of the neighborhood

Goal 6: Rio Montaña offers a range of opportunities for the development of the tourism industry.

A. Develop an economic strategy to include an inventory of existing tourist attractions and identify potential new attractions.

B. Develop a land use plan that identifies locations that would be suitable for tourism-oriented development.

RELATD PLANS, PROGRAMS, AND PROJECTS

Rio Montaña is at the crossroads of several major planning efforts (See Figure 3 on the following page.) These planning efforts, to varying degrees, will positively impact the Rio Montaña community.
**RIO SALADO HABITAT RESTORATION PROJECT**

Between 1905 and 1911, the US Bureau of Reclamation built the Roosevelt Dam. The dam construction led to a flourishing agriculture industry and a growth in the economy and population of Maricopa County. The negative result of the Roosevelt Dam was the loss of a lush riparian habitat along the Salt River.

In 1960, students at Arizona State University envisioned the restoration of the Salt River as a series of lakes and water features*. Today, Tempe Town Lake is a reality, and the Rio Salado Habitat Restoration Project is underway.

The project is located within the banks of the Salt River from 32nd Street on the east to 19th Avenue on the west


as shown in Figure 4. This 550-acre project will have as its primary goal, the restoration of the Salt River riparian habitat. The project will also include recreational opportunities such as picnicking, hiking, biking, horseback riding, bird watching and habitat exploration. One million visitors are expected per year.


A component of the habitat restoration project is the Rio Salado Gateway Project. The Gateway will be the entry into the heart of the Rio Salado Habitat area. The Gateway includes interpretive gardens, walk ways, ramadas, trails, a bike lane, and links to public transit.

---

**Figure 4**

**RIO SALADO HABITAT RESTORATION PROJECT**

<table>
<thead>
<tr>
<th>Legend</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Boundary</td>
<td>Brown</td>
</tr>
<tr>
<td>Low Flow Channel</td>
<td>Yellow</td>
</tr>
<tr>
<td>Channel Drop Structure</td>
<td>Red</td>
</tr>
<tr>
<td>Channel Island</td>
<td>Orange</td>
</tr>
<tr>
<td>Open Water</td>
<td>Blue</td>
</tr>
<tr>
<td>Wetland Habitat</td>
<td>Green</td>
</tr>
<tr>
<td>Braided Stream</td>
<td>Gray</td>
</tr>
<tr>
<td>Cottonwood/Willow Zone</td>
<td>Light Green</td>
</tr>
<tr>
<td>Mesquite Zone</td>
<td>Green</td>
</tr>
</tbody>
</table>

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Existing gateway on Central Avenue
**Beyond the Banks Advisory Committee**

In November 1998, the City Manager created a citizens advisory committee to explore potential community revitalization opportunities for the areas beyond the banks of the Rio Salado. The area known as Beyond the Banks is bounded by I-17 Maricopa Freeway to the north, Broadway Road to the south, 32nd Street to the east and 19th Avenue to the west.

The vision of the Beyond the Banks Advisory Committee is that the Habitat Restoration Project will be a catalyst for transforming the adjacent area into places where people live, work and visit. The Beyond the Banks Committee developed goals for the following categories: access, ambience, education, employment and economic development, history, housing, public participation, recreation, safety and transportation.

**Rio Salado Land Use Plan**

The purpose of the Rio Salado Land Use Plan is to build on the work of the Beyond the Banks Advisory Committee. The Committee met for a year to discuss the potential changes that might take place as a result of the Habitat Restoration Project. Although the Committee addressed a broad range of issues, land use required greater attention.

The land use planning process included a series of community meetings. Neighbors, businesses, and property owners were involved in determining the most appropriate land uses for future development along the revitalized Rio Salado. Included in the land use discussion was a proposal for the Rio Salado Scenic Parkway.

**Neighborhood Fight Back Program**

The Neighborhood Fight Back Program gives designated neighborhoods city support for a limited time to assist with resident-based neighborhood improvements. The Fight Back Program typically focuses on revitalization, sustainability, crime, blight reduction and community building. There have been three Neighborhood Fight Back Programs in Rio Montaña as shown in Figure 5.

**South Central Transit Center**

A transit center is a facility where several transit routes meet. It is both a transfer station and a final destination. The City of Phoenix Public Transit Department chose the northwest corner of South Central Avenue and Broadway Road for the location of a new transit center.

There is a building on the corner of the site that is a candidate for the National Historic Register. The transit center will incorporate this building into the final design for the site. The transit center will also include public art and a space for police.

The long-term vision for this center would be a "mercado" style of architecture with the potential for outdoor cafés and coffee shops. The redevelopment of this corner has the potential to spur additional development along South Central Avenue including commercial, retail, and office space.

**Existing Conditions**

To create a sense of place, it is important to understand a community's past and present. This understanding includes the area's history from ancient to current times and its physical conditions such as the vegetation and climate. Development that is sensitive to the attributes of an area will fit into, rather than dominate a community. (Refer to Appendix A for existing infrastructure, demographic and crime information.)

**The Natural Environment**

Prehistory/History

The Hohokam built settlements along the Salt River and created a network of irrigation canals to provide water for crops. The river, prior to containment and control by dams up stream, meandered in great sweeping swaths across the valley. Evidence of Hohokam settlements and canals remains in some parts of the Valley along the Salt River.

Soils

Historically, the soils in the area have been ideal for cultivating crops. Nutrient rich sediments have been deposited in the area over time by intermittent flooding of the Salt River and erosion of the South Mountain foothills during a rainstorm. Repeated events of saturation and evaporation increase the salts in these soils, eventually making them unsuitable for crops. Areas with a concentration of sandy soil are unstable and not suitable for all uses, including residential development.

Climate

The Sonoran Desert has one important trait in common with all deserts - low amounts of annual precipitation. The climate in the area can best be described as hot and dry. The average daily temperature is 85°F Fahrenheit. There are, on average, 91 days of the year with temperatures above 100°F Fahrenheit. A typical year will have nine days of freezing temperatures.
The two rain events during a typical year occur in winter and late summer. The average annual precipitation is less than 8 inches. Summer storms are local, high-intensity thunderstorms and generally occur July to September. Summer storms have been recorded to drop over 5 inches of rain in a 24-hour period. Winter storms are wide-spread, long in duration and low in intensity.

Climatic conditions of low rainfall and high temperatures result in the typical desert vegetation seen in the South Mountain foothill area. Agricultural crops, such as sorghum, cotton, and alfalfa, would not survive without supplemental water. The same is true for many ornamental and non-native plants grown in the area.

Exotic vs. Native Vegetation

Many of the residential neighborhoods in the area are landscaped with a mix of native and exotic (non-native) plant species. Some exotic plants are invasive. Invasive plants can crowd out native plants, replacing the typical Sonoran Desert vegetation with non-native vegetation over time.

Native plants tolerate drought in a variety of ways. Following rainfall they grow rapidly and flower before drought sets in. Some plants have small leaves to reduce evaporation and their flowers blossom only at night, therefore conserving water.

The saguaro is the signature plant of the Sonoran Desert and is found in the southern portion of the study area on the steep rocky slopes and foothills of the South Mountain Park Preserve.

Washes

Washes, springs and seeps are natural drainage ways, as well as areas of wildlife activity. The series of washes in the southern/upper portions of Rio Montaña are important wildlife habitats. A wash typically supports multiple layers of vegetation, from short ground hugging plants to trees, creating a variety of foraging and nesting opportunities.

Preserving and protecting washes reduces flooding and provides movement corridors for people and wildlife.

Wildlife

Wildlife in Rio Montaña includes lizards, rodents, rabbits, birds, bats, and foxes. Prime habitat areas have thick, multiple-level vegetation. A wash for example, contains a mix of desert vegetation and a variety of nesting and burrowing opportunities for animals. The shrubs and small trees attract insects that in turn attract birds, such as Say’s Phoebe, and lizards such, as the Gila monster.

The saguaro is also a hub of activity. Spiders and silverfish live in the pleats of the saguaro. The saguaro blossoms attract the Mexican long-nosed bat. Gila woodpeckers and gilded flickers live in the holes of the saguaro. When these nests are vacated, elf owls, flycatchers, and purple martins move in.

Studies across the country have demonstrated the importance people place on wildlife and "wild" places. Protecting wildlife promotes many passive forms of recreation such as hiking, walking, and animal watching. Residential developments adjacent to open space that includes wildlife have been shown to increase in value.

EXISTING LAND USE

Rio Montaña is an area of 6,655 acres or approximately 10.4 square miles. Figure 6 to the right and Figure 7 on the following page detail the land uses in the area. The largest single use of the land is for residential at (34%) for all types of housing combined.

Agriculture (28%) is the second largest use followed by vacant land (22%). Combined, 50% of the land in Rio Montaña is either agricultural or vacant. This explains the "rural" and "open" character that dominates the area. There is relatively little commercial (2%) in the area. Excluding South Mountain Park Preserve, less than 2% of the land is used for public park/open space. This would include El Prado Community Park and several small neighborhood parks.

Figure 6
EXISTING LAND USE 1998

<table>
<thead>
<tr>
<th>Description</th>
<th>Acres*</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural (1 du/ac)</td>
<td>582</td>
<td>8.7%</td>
</tr>
<tr>
<td>Large Lot Residential (1-2 du/ac)</td>
<td>276</td>
<td>4.1%</td>
</tr>
<tr>
<td>Small Lot Residential (2-5 du/ac)</td>
<td>1,220</td>
<td>18.3%</td>
</tr>
<tr>
<td>Medium Density Residential (5-15 du/ac)</td>
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<td>3.0%</td>
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<tr>
<td>High Density Residential (15 du/ac)</td>
<td>4</td>
<td>0.1%</td>
</tr>
<tr>
<td>Neighborhood Retail</td>
<td>110</td>
<td>1.7%</td>
</tr>
<tr>
<td>Community Retail</td>
<td>28</td>
<td>0.4%</td>
</tr>
<tr>
<td>Warehouse/Distribution</td>
<td>227</td>
<td>3.4%</td>
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<tr>
<td>Industrial</td>
<td>171</td>
<td>2.6%</td>
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<tr>
<td>Business Park</td>
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<td>0.1%</td>
</tr>
<tr>
<td>Educational</td>
<td>96</td>
<td>1.4%</td>
</tr>
<tr>
<td>Institutional</td>
<td>91</td>
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<tr>
<td>Public Facility</td>
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<td>0.5%</td>
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<tr>
<td>Recreational Open Space</td>
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</tr>
<tr>
<td>Dedicated or Non-developed Open Space</td>
<td>156</td>
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<tr>
<td>Agriculture</td>
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<td>28.1%</td>
</tr>
<tr>
<td>Vacant</td>
<td>1,442</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

* Numbers have been rounded

5 Beyer, Jeannie.
6 Arendt, Randall. Rural by Design.
Figure 7
Rio Montaña Existing Land Use

Legend
- Rio Montaña Boundary
- Rural (1 du/ac)
- Large Lot Residential (1-2 du/ac)
- Small Lot Residential (2-5 du/ac)
- Medium Density Residential (5-15 du/ac)
- High Density Residential (15 du/ac)
- Neighborhood Retail Center (<100,000 sq. ft.)
- Community Retail Center (100,000 - 500,000 sq. ft.)
- Regional Retail Center (<500,000 sq. ft.)
- Hotel, Motel or Resort
- Warehouse Distribution Center
- Industrial
- Business Park
- Office
- Educational
- Institutional
- Public Facility
- Large Assembly Area
- Transportation
- Recreational Open Space
- Dedicated or Non-developable Open Space
- Water
- Agriculture
- Vacant

Prepared by the City of Phoenix Planning Department May 17, 2000
PUBLIC AND QUASI-PUBLIC FACILITIES

Public and quasi-public facilities serve the health, safety, welfare, and social needs of the community, as shown in Figure 8, Public Facilities Map.

Recreation and Park Facilities

South Mountain Park Preserve is a 16,000-acre regional park preserve with hiking, biking, and education opportunities. Rio Montaña has six additional parks ranging in size from .3 acres to .39 acres as shown in Figure 9.

Figure 9
EXISTING PARKS - RIO MONTAÑA

<table>
<thead>
<tr>
<th>Type of Park</th>
<th>Name of Park</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>El Prado</td>
<td>39.0</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>Hayden</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>Lindo</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td>Ma-Ha-Tauk</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Roesley</td>
<td>2.6</td>
</tr>
<tr>
<td>Mini</td>
<td>Kipok</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Ho-E</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>67.5</td>
</tr>
</tbody>
</table>

The nearest district park to residents in Rio Montaña is Cesar Chavez Park at 35th Avenue and Baseline Road.
South Mountain Village Trails Plan - The Western and Highline Canals provide a trail system for walking, hiking, biking and horseback riding. In 1999, the South Mountain Village Planning Committee initiated an amendment to the General Plan for trails within the village. This amendment to the General Plan provides a total of 26.7 miles of public trails and private trails with public access.

Library

The Ocotillo Branch of the Phoenix Public Library, at 201 W. Southern Avenue, serves the entire South Mountain Village. The Ocotillo Branch is one of 13 libraries in the Phoenix Library system.

The Ocotillo Branch Library specializes in African American and Spanish-language materials. The collection consists of 30,000 volumes. The library has the second lowest circulation citywide at 158,027 annually. This low circulation may be attributed to several factors including the lack of facility space (6,000 ft²), the location off of South Central Avenue, and the limited parking.

Post Office

The South Mountain Post Office, located at 6825 S. 7th Street, serves the Rio Montaña community. This facility was constructed in April 1997.

Travis L. Williams Family Services Center

The Travis L. Williams Family Services Center is located at 4732 S. Central Avenue. It operates in partnership with public and private agencies to provide comprehensive services to meet the emergency needs of low-income Phoenix residences. The services provided by the center include budgeting, education and job training referrals, counseling and emergency financial assistance for eligible clients.

South Mountain Youth Center

The South Mountain Youth Center, at 7th Street and Baseline Road is outside Rio Montaña but within the area of influence. This facility, operated by the Parks, Recreation, and Library Department, offers programs for children and young adults ages 10 to 21. Job training, prevention programs, self-esteem and communication courses are offered.

Phoenix Police Academy

The Phoenix Police Academy is a regional training facility located at approximately 15th Avenue and the South Mountain Park Preserve boundary. The academy offers courses on criminal law, traffic control, domestic policing, and wellness training. The facility includes a firing range for candidates. The academy is evaluating a facility expansion.

Fire Protection

Although there is only one fire station within Rio Montaña, Fire Station #39, the area is served by two additional stations, Fire Station #22 and Fire Station #28, outside the study boundary. The average response time for Rio Montaña is four minutes and 15 seconds; the citywide average response time is four minutes and 19 seconds. The citywide goal is three minutes. Vehicle accidents, heart-related emergencies, and outside fires that include brush fires and dumpster fires comprise the majority of fire service calls.

Fire stations are equipped as shown in Figure 10.

The existing fire suppression lines and hydrants are sufficient to meet current demands. Additional infrastructure and an additional fire station will be required within the study area as development occurs.

Health Services

Health services are available from the South Valley Medical Center and the Jessie Owens Health Care Center east of Rio Montaña in the vicinity of 3rd Street and Baseline Road. There is no hospital in South Mountain Village.

Public Transit

Access to public transit is important to community residents. The majority of the bus routes are located in the northeast portion of the community. Although most buses provide service six days a week, residents are concerned with the number of runs for each bus route. There are six bus routes in the community as shown in Figures 11 and 12 (on the following page).

Figure 10

| Fire Station #39: 2276 W. Southern Avenue | Advanced Life Support (ALS) Paramedic, Engine Company, Brush Truck, and a staff of four. |
| Fire Station #22: 230 E. Roerse Road | ALS, Ladder Company, Chief Officer, and a staff of 10. |
| Fire Station #28: 7409 S. 16th Street | Basic Life Support System, Paramedic Ambulance, Engine Company and a staff of six. |

Figure 11

Rio Montaña Bus Routes

Prepared by the City of Phoenix Planning Department May 17, 2000
Figure 12
RIOMONTAÑA EXISTING BUS ROUTES

Blue Line: Runs along Central Avenue from Lynn Avenue to the Mayo Clinic Monday through Saturday

The 0 Line: Runs along Central Avenue from Dobbs Road to Dunlap Avenue Monday through Friday

The 8 Line: Runs along 7th Avenue from Baseline Road to Washington Street Monday through Saturday

The 45 Line: Runs along Broadway Road from 15th Avenue to the Price Freeway (101) daily

The 52 Line: Runs along Roesser Road from 15th Avenue to Dobson Road (Chandler) Monday through Saturday

The 61 Line: Runs along Southern Avenue from 43rd Avenue to Arizona Avenue (Chandler) daily

The 35 Line is outside the study area but significant to north/south travel. The 35 Line runs along 35th Avenue from Baseline Road to Union Hills Road, Monday through Saturday.

Schools

Quality schools are one of the determining factors in moving into a particular community. This assumes, however, there is the ability to afford a choice. School quality is also a primary determining factor developers consider when building in an area.

Private, parochial, and charter schools are alternatives to the traditional public school system. Parochial schools are associated with a specific religious organization. Operating expenses and facility development are supported by the religious community and the student tuition. Charter schools are state-funded alternative schools that can be focused on a specific curriculum, such as fine arts or science, or offer general education. Private schools function similarly to parochial schools in providing a general curriculum.


Roosevelt Elementary School District - The Roosevelt Elementary School District serves students from kindergarten through eighth grade. The current school district boundaries are shown in Figure 13. The Roosevelt Elementary School District currently has eight schools within the Rio Montaña area, including the new Ed Pastor Elementary School that opened in January 2000 with a capacity for 800 students. The 1998 student population was approximately 4,731 students. This represented 43% of the district's enrollment for 1998.

School Capacity - Seven of the Roosevelt Elementary School District schools are over capacity, as shown in Figure 14. Further development of the community will increase problems of overcrowding. Based on the current General Plan, the area can anticipate a total elementary student population of 12,087; however, based on the Rio Montaña Land Use Plan the student population would be 11,057 as shown in Figure 14.

Figure 13
ROOSEVELT SCHOOL DISTRICT

Legend
- Rio Montaña Boundary
- Roosevelt School District

Figure 14
RESIDENT STUDENT ENROLLMENT/CAPACITY

<table>
<thead>
<tr>
<th>School</th>
<th>1998-99 Enrollment</th>
<th>Capacity</th>
<th>School</th>
<th>1998-99 Enrollment</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunland</td>
<td>748</td>
<td>676</td>
<td>Davis</td>
<td>753</td>
<td>681</td>
</tr>
<tr>
<td>Valley View</td>
<td>619</td>
<td>583</td>
<td>Southwest</td>
<td>669</td>
<td>638</td>
</tr>
<tr>
<td>Jorgensen</td>
<td>732</td>
<td>687</td>
<td>Pastor</td>
<td>-</td>
<td>750</td>
</tr>
<tr>
<td>Lassen</td>
<td>570</td>
<td>562</td>
<td>Totals</td>
<td>4,762</td>
<td>5,177</td>
</tr>
<tr>
<td>Conchos</td>
<td>671</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Needs - Student 'at risk' factors are a measure of the potential for students to fail or drop out. Measures of 'at risk' levels include higher absenteeism, limited proficiency in English, low test scores, high mobility, and free and reduced lunch program eligibility (associated with lower household income). Roosevelt Elementary School District has responded to 'at risk' concerns by providing year-round kindergarten, federally funded breakfast and lunch programs, teacher aides in the classrooms, and tutoring in math and English.

Challenges - The Roosevelt Elementary School District faces many challenges for the future. Quality education is a primary consideration for many homebuyers and will be essential to drawing new residents to the community. There are three critical funding challenges facing the district:
Funding for new facilities to reduce overcrowding and accommodate future growth.

Funding for facility improvements to include maintenance and repair of classrooms and equipment.

Funding for support of at-risk students.

Phoenix Union High School District - South Mountain High School is the only high school serving Rio Montaña. South Mountain High School has several notable programs including magnet programs in aerospace, performing and visual arts, law, and communication. South Mountain High School has a current enrollment of 3,223 students. Overcrowding at South Mountain has decreased with the opening of the Cesar Chavez High School in the fall of 1999. Cesar Chavez High School is located at 35th Avenue and Baseline Road in the Laveen Village. Chavez High School cost $38.5 million for construction and has an enrollment capacity of 3,356 students. This high school is expected to be at full enrollment for all four grades in 2002-2003.

Market Information

South Central Avenue is the commercial spine of the village with a variety of retail and commercial opportunities. The South Central Avenue Corridor Study (Planning Dept., 1992) provides an inventory of the existing land uses along South Central Avenue, outlines the opportunities and constraints, and details the community demographics. The area of influence, the radius from which customers are drawn, reaches beyond the Rio Montaña area and includes the Baseline area east of the South Central Avenue.

Existing Retail/Shopping Centers

Rio Montaña has many existing retail businesses located in old residential and strip commercial buildings. However, future retail development will most likely occur in shopping centers. Shopping centers are defined by the area of influence and the type and size of the anchor store. Currently, there are two shopping centers within the Rio Montaña area, South Plaza and South Mountain Plaza. These two shopping centers have a total of 109,600 sq. ft of space.

A neighborhood shopping center has a single small anchor store, such as a small grocery store, and an area of influence of one to two miles. Neighborhood commercial sites are typically less than 100,000 sq. feet of gross leasable area located on about 10 acres.

A community shopping center is a larger facility with two or more anchor stores, such as a grocery store and a department store. Community shopping centers have an area of influence of two to five miles. Community commercial sites are typically 100,000 to 500,000 sq. feet of gross leasable area located on 20 to 40 acres.

There are no existing community level shopping centers within the Rio Montaña area. There are five additional centers outside of the Rio Montaña area that are in the Rio Montaña area of influence as shown Figure 15. These shopping centers are all located in the area of South Central Avenue to 7th Street between Roesser and Baseline Roads and total 650,000 sq. feet of retail space.

In looking at the vacancy rates for those shopping centers that currently exist within the area of influence, it would appear that the area is under served by retail shopping space and has an insufficient variety of shopping available. This conclusion is supported by the fact that there are currently no community or regional level shopping centers in the area.

However, retail developers look for areas with a specific population and income level. As Rio Montaña grows in population, it will also need to attract a broad range of income levels if these deficiencies are to be corrected.

Office

There is very little office space in Rio Montaña. The majority of office space in the community is for service-oriented small businesses such as tax preparation, insurance or travel. Front-office space, associated with retail or industrial businesses, is also found in the community.

Industrial Use

The largest area of industrial land use in Rio Montaña is along Broadway Road and the Salt River and includes sand and gravel extraction, lumber and milling, concrete pre-cast and auto parts salvage.

Currently, 2.3% of the area in Rio Montaña has an industrial use. The majority of this use is zoned A-1 or A-2 and has mostly developed with open storage uses. These industrial uses are concentrated along the south bank of the Salt River.
The following is a summary of information on industrial uses in Rio Montaña. Data is limited to buildings of 10,000 square feet or greater.

**Figure 16**

**INDUSTRIAL USES IN RIO MONTAÑA**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Number</th>
<th>Square Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly &amp;</td>
<td>Places where the primary use of the building is making a product.</td>
<td>7</td>
<td>120,501</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse</td>
<td>A building or group of buildings where the primary use is bulk storage.</td>
<td>13</td>
<td>239,948</td>
</tr>
<tr>
<td>Office Warehouse</td>
<td>Properties with one or two users that combine office and storage facilities.</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Valley wide, the industrial space in square feet is a similar percentage of mix of uses. However, the Rio Montaña area has a higher percentage of warehouse use. Based on available data price per square foot, warehouse space in the Rio Montaña area sells from approximately $24 per square foot to $35 per square foot or more. The price per square foot for industrial space valley-wide (1998) is $46.45.\(^7\)

**THE GENERAL PLAN TODAY**

"The future ain't what it used to be."
Anonymous

In 1985, the city adopted the General Plan for Phoenix: 1985-2000. The General Plan is used by City Council, Planning Commission, city staff and the public regarding development in the community. The objective of the General Plan is balanced growth and the preservation of the character of a community. One element of the Phoenix General Plan is the Land Use Map. The current General Plan Land Use Map for Rio Montaña is depicted in Figure 19 on the following page.

\(^7\) Kamrath & Assoc., Trend - Phoenix Commercial Real Estate, 2000.

The **Baseline Area Master Plan**, from Central Avenue to 40th Street and from Southern Avenue to South Mountain Park Preserve, was the first comprehensive review of land use in South Mountain Village since the adoption of the General Plan in 1985. In 1998, the Southwest Growth Study/Laveen was approved for the area from 27th Avenue to the Gila River Community and from the Salt River to South Mountain Park Preserve. The Rio Montaña area is the latest area to be reviewed.

In projecting dwelling unit counts, the following numbers of units, as shown in Figure 17, were used for the residential categories, based on existing development in the area.

**Figure 17**

**NUMBER OF UNITS USED TO PROJECT DWELLING UNIT COUNTS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of du/ac</th>
<th>Category</th>
<th>Number of du/ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 du/ac</td>
<td>1.5</td>
<td>5-15 cap 10</td>
<td>8.</td>
</tr>
<tr>
<td>2-5 du/ac</td>
<td>4.5</td>
<td>5-15 du/ac</td>
<td>10.</td>
</tr>
<tr>
<td>2-5 cap 3</td>
<td>2.5</td>
<td>15+ du/ac</td>
<td>20.</td>
</tr>
<tr>
<td>2-5 cap 3.5</td>
<td>2.7</td>
<td>Mixed Use Agricultural</td>
<td>0.5</td>
</tr>
<tr>
<td>2-5 cap 4</td>
<td>3.5</td>
<td>Residential Transition</td>
<td>10.</td>
</tr>
</tbody>
</table>

In projecting new students per dwelling unit, as shown in Figure 18, the following multipliers were used.

**Figure 18**

**MULTIPLERS FOR PROJECTING NEW STUDENTS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Multiplier</th>
<th>Category</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 du/ac</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>2-5 du/ac</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>2-5 cap 3</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>2-5 cap 3.5</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>2-5 cap 4</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>5-15 cap 10</td>
<td>.33 Elem.</td>
<td>14 High School</td>
<td></td>
</tr>
<tr>
<td>5-15 du/ac</td>
<td>.12 Elem.</td>
<td>.07 High School</td>
<td></td>
</tr>
<tr>
<td>15+ du/ac</td>
<td>.12 Elem.</td>
<td>.07 High School</td>
<td></td>
</tr>
<tr>
<td>Mixed Use Agr.</td>
<td>.65 Elem.</td>
<td>.37 High School</td>
<td></td>
</tr>
<tr>
<td>Res. Trans.</td>
<td>.12 Elem.</td>
<td>.07 High School</td>
<td></td>
</tr>
</tbody>
</table>

The population multiplier employed was 2.65 persons per dwelling unit, the citywide average, for both single and multi-family. Staff used this number based on the assumption that household size in Rio Montaña will more closely resemble other parts of Phoenix as it develops.

There are 6,655 acres of land in the Rio Montaña study area. Current uses such as existing residential, commercial, schools, and parks will remain, while other land uses will change. Based on the current General Plan, residential uses would occupy 90% of Rio Montaña's area: 47% as 2-5 du/ac and 36% as 0-2 du/ac. The General Plan also suggests that 190 acres of additional multi-family high density is appropriate for the area along with a significant increase in commercial and commerce park uses.

The General Plan is consistent with the goals of some community residents preferring to see large areas of single family development above 3 du/ac. This is in contrast, however, with the goals of the general community to provide transition in densities from more dense developments in the northern portion of Rio Montaña to the less dense developments at the southern end.

**VISION FOR THE FUTURE - LAND USE AND DESIGN**

"When you come to a fork in the road, take it!"
Yogi Berra

Based on the Existing Land Use 3,308 acres or approximately 50% of the acres in Rio Montaña are either agricultural or vacant, which represents the majority of developable land in Rio Montaña. Other underutilized areas have the potential to redevelop based on current conditions and/or market trends.

The land use plan and design policies support the goals and action steps identified on page three of this plan and will guide new development in a manner acceptable to the community.
THE RIO MONTAÑA LAND USE PLAN

The Rio Montaña Proposed Land Use Plan is presented in Figure 20 on the following page, and the land use classifications are summarized in Figure 21 on page 19.

At build-out, Rio Montaña is projected to have a population of approximately 62,000 residents. Residential densities should transition from north to south in decreasing intensity. To achieve this, the Growth Study uses three new density categories. These categories create gradual density "steps" of .5 du/ac. These "steps" are:

- 0-2 du/ac
- 3-3.5 with a cap of 3 du/ac
- 2-3.5 du/ac
- 2-5 with a cap of 4 du/ac
- 2-5 du/ac
- 5-10 du/ac
- 5-15 du/ac and
- 15+ du/ac

The commercial heart of South Mountain Village is South Central Avenue. This will not change with the implementation of this plan. There is very little existing commercial development in Rio Montaña. The Growth Study provides for major commercial development at the intersection of Baseline Road and 19th Avenue.

The Growth Study cites many attributes of the community such as the canals, the agricultural character, and the Sonoran Desert vegetation as the foundation for land use policies. The Rio Montaña Land Use Plan proposes a linear park along the Western Canal connecting to the 26.7 miles of recreational trails. Property owners south of Baseline Road have been sent information regarding the Mixed-Use Agricultural designation that allows for some commercial development of a property while retaining the rural or agricultural character.

Residential Densities

The land use plan utilizes a range of residential densities from 0-2 up to 15 or more dwelling units per acre. Density caps have been used at 3, 3.5, and 4 du/ac to provide gradual steps between densities. Lower densities are located at the southern portion of the study area adjacent to existing low-density residential. Along the west side of 27th Avenue, in the Laveen Village, are existing 0-1 du/ac uses. Therefore, the east side of 27th Avenue in Rio Montaña has been designated 0-2 du/ac.

The historic core of the community is at 15th and South Mountain avenues. Though older homes are found throughout Rio Montaña, many of the historic homes are located here, and the early settlement pattern is most evident. The roads in this area do not include curbs and sidewalks thus enhancing the rural character. This area has been designated as an area of 0-2 du/ac to reflect the existing development. Also included in this area are parcels identified as Mixed Use Agriculture District.

Mixed Use Agriculture District

The Mixed Use Agriculture designation is intended to preserve rural and agricultural uses while providing greater flexibility in uses than the existing agricultural zoning categories. Uses allowed in the Mixed Use Agriculture Zoning District include:

- Agriculture Related Schools
- Agriculture Related Retail
- Rural Residential Development

Those properties identified as Mixed Use Agriculture on the Rio Montaña Land Use Plan represent property owners who have expressed an interest in the designation.

Residential Transition

The Residential Transition is a new land use category. Residential Transition is an area of underutilized land with a mix of obsolete residential, commercial and industrial uses. These areas have existing residential areas in either good or blighted conditions, adjacent to an industrial use that is not compatible with residential development. This includes machine tool, dye and recycling of materials. In Rio Montaña this designation has been applied to areas north of Broadway Road.

Incompatible Land Uses within the Transition Area - note piles of construction debris behind residential neighborhood

With the development of the Rio Salado Habitat Restoration Project, the Rio Salado Parkway, and the transit facility, it is anticipated that land values in these residential transition areas will become more attractive for residential development averaging 10-15 dwelling units per acre.

Commercial

The Rio Montaña Land Use Plan includes the addition of 23 acres of Mixed Use Commercial south of the Salt River and 226 acres of Community and Neighborhood Commercial. The Mixed Use Commercial area is intended to integrate a variety of uses that may include residential, commercial, general office, entertainment and cultural functions, if compatible. The proposed Rio Salado Parkway will increase traffic through the area, which will help future retail and recreation facilities succeed.
Figure 20
RIO MONTAÑA PROPOSED LAND USE PLAN

Legend
- Rio Montaña Boundary
- Mixed Use Commercial/Industrial
- Mixed Use Commercial/Residential 2-5
- Mixed Use Agricultural
- Residential Transition
- Foodway
- Canal/Watercourse
- Rio Salado Parkway
- Trails
- Major Streets
- School Site
- Park Site
- Village Core

Prepared by the City of Phoenix Planning Department May 17, 2000
### Figure 21

**PROPOSED LAND USE CLASSIFICATIONS**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Proposed Acres</th>
<th>New Dwelling Units</th>
<th>New Residents</th>
<th>New Elem. Students</th>
<th>New High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 du/ac</td>
<td>1871</td>
<td>2807</td>
<td>7439</td>
<td>1825</td>
<td>1039</td>
</tr>
<tr>
<td>2-3.5 du/ac</td>
<td>544</td>
<td>1430</td>
<td>3790</td>
<td>930</td>
<td>530</td>
</tr>
<tr>
<td>2-5 du/ac</td>
<td>2421</td>
<td>10,703</td>
<td>8363</td>
<td>6957</td>
<td>3960</td>
</tr>
<tr>
<td>5-10 du/ac</td>
<td>177</td>
<td>1416</td>
<td>3752</td>
<td>467</td>
<td>198</td>
</tr>
<tr>
<td>5-15 du/ac</td>
<td>122</td>
<td>1220</td>
<td>3233</td>
<td>146</td>
<td>85</td>
</tr>
<tr>
<td>15+</td>
<td>224</td>
<td>224</td>
<td>11872</td>
<td>538</td>
<td>313</td>
</tr>
<tr>
<td>Residential Transition</td>
<td>141</td>
<td>1410</td>
<td>3737</td>
<td>169</td>
<td>99</td>
</tr>
<tr>
<td>MUA</td>
<td>74</td>
<td>37</td>
<td>98</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>Commercial</td>
<td>226</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce Park</td>
<td>363</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed Use Commercial/Industrial</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public/Quasi Public</td>
<td>197</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parks/Open Space</td>
<td>272</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>6,655</strong></td>
<td><strong>23,503</strong></td>
<td><strong>42,284</strong></td>
<td><strong>11,056</strong></td>
<td><strong>6,238</strong></td>
</tr>
</tbody>
</table>

*Education and Parks/Open Space will increase as sites are better defined.

Additional commercial has been provided at 19th Avenue and Baseline Road; the intersection of two arterial streets. Community commercial shopping centers typically develop at 100,000 to 500,000 sq. ft. per 20 to 40 acres. This would provide an additional 1,113,000-sq. ft. to 2,825,000-sq. ft. of commercial space in Rio Montaña.

To be successful, shopping centers must be supported by the community and function in a safe and accessible manner. The criteria for locating shopping centers in the Rio Montaña area are based on the current philosophy towards shopping centers supported by the City of Phoenix and the recommendations by residents within the study area.

Criteria for locating commercial development are:

- new shopping centers should be located on sites with existing commercial zoning
- shopping centers should be located in areas of mixed use such as residential, office and retail space
- shopping centers should be located in areas that can absorb the increase in traffic volume
- development of centers that supply a need for the community should be encouraged
- site locations should be easy to enter and safe to leave
- sites should have visual exposure
- access roads should have adequate unused traffic capacity
- development should be compatible with adjacent land in size, scale, and character
- development should be compatible with adjacent land uses such as restaurants, offices and apartments
- development should be discouraged on all four corners of a major intersection or at mid-block
- development should strengthen the retail development on South Central Ave

**Commerce Park**

The Plan designates 363 acres for Commerce Park. The Commerce Park designation is intended to provide a location for commerce, service and employment activity in a setting that is compatible with adjacent land uses. The Commerce Park designation allows for a wide variety of uses including: offices, research labs warehousing, restaurants, banks, motels and hotels, gas stations, churches, and the manufacturing of finished products.
Due to existing zoning and land uses, Commerce Park has been designated for areas both north and south of Broadway Road and from 15\textsuperscript{th} to 27\textsuperscript{th} Avenues and west of 7\textsuperscript{th} Avenue. Designating these areas already used for industrial purposes as Commerce Park will encourage new development, or expansion of an existing use, to conform to the zoning ordinance standards for Commerce Park. This area could also, in the event of favorable market conditions, redevelop in the long term as residential development at a variety of densities. Community residents and staff developed a list of criteria for locating Commerce Park.

**Commerce Park should follow these criteria:**

- should be located next to or near an existing or proposed freeway system
- have access to an airport
- should be located on streets with the capacity to carry increased traffic
- should be near commercial facilities such as office supplies, restaurants, and hotels
- should be located so that height of buildings, noise, truck traffic, and other negative externalities do not impact residential neighborhoods

**Public Facilities**

The City owns property at 15\textsuperscript{th} Avenue between South Mountain Avenue and Dobbins Road. This site has been chosen for a potable (drinkable) water treatment facility.

**Educational**

The population projections for Rio Montaña are for 11,056 elementary school children and 6,238 high school students. The desired elementary school population is 850 students per school. High schools are typically built to accommodate 2,500 students. Additional elementary and high school sites will be needed to accommodate growth. The Rio Montaña Land Use Plan indicates school sites with a flag icon. This does not imply a school site for any particular property, but is a reminder that a school site is needed within the square mile.

**Parks/Open Space**

The City of Phoenix Parks, Recreation and Library Department has public parks development standards based on population and facility considerations. There are four levels of park development: neighborhood, community, district, and regional. Neighborhood parks serve a population of 4,000 to 7,000 people living within one-half mile of the park.

Neighborhood parks are typically 15-20 acres and are “within walking distance” from the neighborhoods they serve. A subset of the neighborhood park is the mini park. Mini parks may or may not include recreational amenities. True to its name, the mini park is small and typically tucked into a neighborhood.

Community parks serve a population of 20,000-50,000 people living within a radius of approximately one and one-half miles from the park. Community parks are typically 40-acre parks with passive and active recreational amenities. District parks have the highest degree of recreational amenities and serve a population that draws from several communities. Typically, district parks are 100-acre parks and serve a population of 100,000 people.

**Projected Park Need** - The current population for the study area is 25,750. The park development standard for existing conditions is 3 acres per 1,000 population. Based on this calculation, Rio Montaña should have 77.25 acres of park, or 9.47 additional acres. If considering parks outside the area, but close enough to be used by Rio Montaña residents, the community at its current population is adequately served.

The long-term park development standard is 6.25 acres per 1,000 population. Based on the projected population of 70,500 and the minimum park standard of 3 acres per 1,000 population, Rio Montaña should have 211 acres. The long-term park standard of 6.25 acres per 1,000 population would require a total of 440 acres of park.

The Rio Montaña Land Use Plan identifies areas needing parks with a tree symbol. This is not intended to indicate a preference for a parcel or location. This symbol is intended to serve as a reminder to staff, developers, community representatives and others of the need for a park in a general area. The Parks, Recreation, and Library Department will make the determination of park size and location.

A forty-acre park site has been identified in a future Flood Control District detention basin on the northeast corner of South Mountain and 27\textsuperscript{th} Avenues. The Rio Montaña Land Use Plan also includes a linear park along the banks of the Western Canal.
Canals
There are two Salt River Project (SRP) canals in Rio Montaña: the Highline and the Western. The canals deliver irrigation water to public and private areas. The canals are also recreation features, attracting hikers, bicyclists, and equestrians. Fishing, swimming, and wading are not permitted in the canals.

In 1989, the SRP Board of Governors approved multiple uses for the canals citywide. The guidelines constitute the policies regarding operation, maintenance, environmental impact, public safety and SRP safety concerns as well as state and local regulations.

Canal Design Guidelines
City zoning ordinances specify permitted development along canal banks. The Canal Design Guidelines were developed to provide access, visibility, and landscaping along the canal right-of-way. The type of canal treatment is based on the adjacent land use such as multi-family, single-family, parks, industrial, and mixed use. The purpose of design treatment along canals is to ensure the canals are viewed as an asset to the community and that design continuity is maintained.

Canal Banks
Canal banks are a recreational amenity for many area residents. To enhance this use, the Growth Study proposes a narrow linear park strip along both sides of the Western Canal from the area of Baseline Road and 7th Avenue to the area north of Olney Drive at 27th Avenue. This portion of the Western Canal traverses the historic core of Rio Montaña and includes areas currently under cultivation and properties where the owners have expressed an interest in the Mixed Use Agricultural designation.

The Western Canal linear park will provide connections to several trails in Rio Montaña including the trail along South Mountain Avenue and 19th Avenue. Design for the Western Canal linear park has not begun. This process would begin with community wide public meetings. The possible features may include:

- tree lined paths
- park benches
- picnic and ramada areas

The amount of private land adjacent to the canal bank that might be required for the linear park is not known.

Multiple Use Trails
Many communities across the country are realizing the economic and health benefits to trails and open space. Trails that form an integrated network can also provide a safe, off-street alternative mode of transportation such as bicycling to work versus driving a car.

A subcommittee of the South Mountain Village Planning Committee spent several months evaluating the current General Plan trails map for the village. The recommendations of the subcommittee were presented to the full committee. As a result, the process to amend the General Plan was initiated by the South Mountain Village Planning Committee. The General Plan amendment for the Recreational Trails map was adopted by City Council in May 2000, as shown in Figure 22. The recommendations for trails within the Rio Montaña community would result in:

- Planned Public: 14.9 miles
- Existing Private/Public: 4.5 miles
- Planned Private/Public Access Trail: 7.3 miles

Resorts
The Baseline Area, east of South Central Avenue, includes several existing and planned resorts and luxury rental accommodations. These resorts have provided the financial leverage to spur additional residential development to the area. The Baseline Area includes several golf courses and is the location for the proposed Rio Salado Golf Course.

Figure 22
Rio Montaña Trails

Legend
- Rio Montaña Boundary
- Planned Public Trail
- Existing Public Trail
- Tunnel Designed for MURT
- Planned Private/Public Access Trail
- Bike Lane
- Trail Head
- Signalized Crossing

Prepared by the City of Phoenix Planning Department May 17, 2000
There are no golf courses in Rio Montaña. Though a resort land use has not been proposed, it is possible for the Rio Montaña community to capture a portion of the tourism market with the development of the Rio Salado Habitat Restoration Project. The most likely location for such a development would be near the Salt River and South Central Avenue. As the Rio Salado Project develops and the market and economics of the community changes, the Plan may be amended to include resort locations.

**Bed and Breakfast**

The foothills area of South Mountain, near South Central Avenue, has the potential for small bed and breakfast accommodations and/or small resorts. The area has access to South Mountain Park Preserve, the riding stables within the park area, and proximity to tourist attractions such as the Mystery Castle.

A rezoning request for a bed and breakfast has been approved for a property abutting the South Mountain Park Preserve at approximately McNeil and 1st Avenue.

**Dude Ranches**

Dude Ranches have been suggested as a land use compatible with the community goals. Dude ranches typically include hotel accommodations, stables, riding areas, and common eating facilities. Though the use would be compatible with the area, especially if adjacent to South Mountain Park Preserve and the many trails within the park, dude ranches typically require large parcels of land.

**DESIGN**

**Site Plan Design**

The goal of any site plan should be sensitive to the surrounding area. This should include sensitivity to the environment, to the existing development, to the history of a place and to the dreams of the community for the future.

A site plan for new development should consider not only the site and its attributes but also the larger context in which the site is located. New development should benefit the community on the whole and impact the built and the natural environment, to the least degree possible.

Development of any site within the Rio Montaña community should include knowledge of regulations and ordinances, a working knowledge of native versus exotic plant species, and consideration for the following:

- the City of Phoenix General Plan, specifically the policy and goals of the Housing and Conservation elements
- the zoning districts and development standards of the Zoning Ordinance specifically as they relate to the section on canal design guidelines and the section on hillside development
- Federal requirements and guidelines under section 404
- State of Arizona Department of Water Resources Approved Plant List
- State of Arizona Protected Plant Species
- State of Arizona Threatened and Endangered Wildlife Species

**Topography** - Topography, the slopes and contours on the surface of the land, reflects the natural conditions of the land and should be preserved by:

- integrating projects with the topography and existing vegetation
- transitioning the property edge gradually so that the edge appears natural
- preserving washes and vegetation associated with washes

**Soil** - Soils that drain poorly or that "shrink and swell" may be problematic for development in Rio Montaña. To assure quality development, it is important to know the soil type and its limitations.

**Drainage** - The area drains from the southeast to the northwest and development should respond to the natural drainage pattern. Projects should be coordinated with the design standards identified by the Maricopa County Flood Control District.

**Climate** - Climate is a dominant feature in the desert southwest. Site plan and design can mitigate the harsh impacts of the environment by:

- minimizing the amount of reflective material used such as glass, and light/white gravel
- orienting buildings to take advantage of favorable sun angles
- providing deep overhangs and covered porches on residential buildings
- planting trees on the east and west side of buildings
- providing shade for pedestrian comfort with covered walkways and loggia

**Views** - The Rio Montaña study area has views of both the South Mountain Park Preserve, the Estrella Mountains, and downtown Phoenix. These views are positive attributes and should be preserved by:

- limiting the use of two story buildings
- break up the mass of buildings to create views through the buildings
- create "terminal vistas", or views at the end of a street or corridor that are pleasing to look at
Access - The ability to move through a community or neighborhood is critical to its success. Any development in Rio Montaña should consider:

- who is using the area
- how will the area be used
- can connections to existing or proposed trails be made
- will pedestrian use of the area be encouraged by the design

History - To enhance the character of Rio Montaña it is important to consider historic settlement patterns and architectural detail. Projects in Rio Montaña should consider:

- site layout and architecture that is compatible with existing development
- architectural details consistent with existing development
- preservation of buildings of historic interest
- preservation of existing vegetation and clusters of vegetation
- varying the roofline to include gables and cross gables
- providing low (1.5 feet high) fencing adjacent to the property line to delineate private and semi-private areas
- providing narrow streets with detached sidewalks and ribbon or rolled curbs
- planting tress with deep green, broad leaves such as the pistachio
- imitating the use of trees as a windbreak by surrounding developments such as subdivision, with a single row of a "signature" tree

Character Areas

Agriculture - In those areas of Rio Montaña that are currently under cultivation or have recently been under cultivation, development can preserve the rural/agricultural character by:

- including porches on buildings
- include applicable standards identified in the History section above

Sonoran Desert - The foothills areas of Rio Montaña are important areas of habitat. The many washes and associated wash vegetation are important to the "desert" character of the area. Preserving this character can be accomplished by:

- preserving all washes and wash vegetation
- using only native vegetation in desert areas
- planting new vegetation that reflects the density of the existing surrounding desert vegetation
- limiting development to a single story that emphasizes the horizontal vs. the vertical look of buildings

Mercado - The area adjacent to the Rio Salado and its associated projects should develop with a "Mercado" or Mediterranean style of architecture and vegetation. This should include:

- covered walkways
- emphasize pedestrian activities and outdoor cafes
- use of brick or brick-type paving
- use of planters and potted plants
- have a variety in building height
- provide architectural detail on buildings
- include public art and/or fountains

See Appendix B for Design Guidelines
APPENDIX A: INFRASTRUCTURE AND DEMOGRAPHICS

A component of the Rio Montaña planning process included an inventory of existing infrastructure, demographic, and crime information.

INFRASTRUCTURE

The existing infrastructure in Rio Montaña is in good condition. However, some local streets are below city standards, and some standing water may occur after a heavy rain. These conditions are the exception. The city has paved the 8.13 miles of roads in Rio Montaña that were previously unpaved. Infrastructure is summarized below.

Streets

The dominant street system in Rio Montaña is the grid. The major streets, east/west and north/south, are one-mile streets. The major east/west streets are:

- Broadway Road
- Baseline Road
- Southern Avenue
- Dobbins Road

The major north/south streets, except for 27th Avenue, have a bridge crossing over the Salt River. These are as follows:

- South Central Avenue
- 7th Avenue
- 19th Avenue

All the east/west streets connect the Rio Montaña community to the Baseline Area to the east and the newly created Laveen Village to the west. The north/south streets terminate at South Mountain Park Preserve to the south and, except for 27th Avenue, continue through the downtown core and Government Mall area to the north.

Traffic Volume - The average daily trips (ADT) are an indication of weekday traffic volume. Of the east/west streets, Broadway Road from South Central Avenue to 7th Avenue has the greatest number of ADTs (27,000). Baseline Road from South Central Avenue to 7th Avenue has the second highest ADTs for east/west streets at 16,500. Figures 23 and 24 show the busiest segments of road in the Rio Montaña community. Irrespective of orientation, the four busiest segments of road in the community in descending order are:

- Broadway Road from South Central Avenue to 7th Avenue
- South Central Avenue from Broadway Road to Southern Avenue
- South Central Avenue from Southern Avenue to Baseline Road
- Baseline Road from South Central Avenue to 7th Avenue

Figure 23

<table>
<thead>
<tr>
<th>Traffic Volumes on North/South Arterial Streets</th>
<th>Central Ave. ADT</th>
<th>7th Ave. ADT</th>
<th>19th Ave. ADT</th>
<th>27th Ave. ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadway Rd. to Southern Ave.</td>
<td>23,919</td>
<td>14,400</td>
<td>11,400</td>
<td>3,500</td>
</tr>
<tr>
<td>Southern Ave. to Baseline Rd.</td>
<td>23,000</td>
<td>12,700</td>
<td>9,500</td>
<td>No count</td>
</tr>
<tr>
<td>Baseline Rd. to Dobbins Rd.</td>
<td>12,369</td>
<td>2,636</td>
<td>1,700</td>
<td>1,300</td>
</tr>
</tbody>
</table>

Source: City of Phoenix 1997

Figure 24

<table>
<thead>
<tr>
<th>Traffic Volumes on East/West Arterial Streets</th>
<th>Broadcast Ave. ADT</th>
<th>Southern Ave. ADT</th>
<th>Baseline Ave. ADT</th>
<th>Dobbins Ave. ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Central Ave. to 7th Ave.</td>
<td>27,000</td>
<td>13,000</td>
<td>16,500</td>
<td>7,000</td>
</tr>
<tr>
<td>7th Ave. to 19th Ave.</td>
<td>16,300</td>
<td>6,100</td>
<td>12,200</td>
<td>5,715</td>
</tr>
<tr>
<td>19th Ave. to 27th Ave.</td>
<td>14,000</td>
<td>8,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19th Ave. to 23rd Ave.</td>
<td>7,524</td>
<td>3,337</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23rd Ave. to 27th Ave.</td>
<td>5,775</td>
<td>3,100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: City of Phoenix 1997

Street Standards - The Street Classification Map, as shown in Figure 25 on the following page, provides street cross-section configurations. Cross-sections include the following details: amount of right-of-way; amount of paving; center medians if applicable; sidewalks if applicable; left and/or right turn lanes if applicable and; landscape setback from curb to sidewalk if applicable. The Street Classification Map also indicates streets of unusual distinction such as scenic drives and parkways. Street classification is based on existing and projected traffic volumes and existing and anticipated changes in the surrounding land use.

Special Street Sections - There are four distinctive street cross sections in Rio Montaña. These cross sections are for:

- Baseline Road
- Baseline Road
- Dobbins Road
- Rio Salado Parkway

Baseline Scenic Drive - Baseline Road was designated as a scenic drive through the *South of the Rio Salado Area Plan* in 1976. The Baseline Scenic Drive has been incorporated into the *Baseline Area Master Plan*, adopted in 1997, and the *Southwest Growth Study/Laveen*, adopted in 1998. The cross section for Baseline Road has been applied to the Baseline area from 48th Street, through Laveen Village, to the Gila River Community west of Rio Montaña. By extending the Baseline cross section through Rio Montaña, the entire length of Baseline Road, within the city limits, will be built to the same scenic drive standards. The Baseline Scenic Drive is intended to promote the rural character of the area and includes a multi-use trail, double rows of trees, and bike lanes.

The Development Services and Planning departments are implementing this cross section through the rezoning and site plan review process. The Baseline Scenic Drive cross section is included in the proposed Baseline Overlay Zoning District.
South Central Avenue - South Central Avenue is a designated scenic drive from Baseline Road to Dobbins Road. This cross section includes a raised landscape median. South Central Avenue, between Dobbins Road and the curve into the South Mountain Park Preserve, has also been improved. This area includes a cobbled median, detached sidewalks with a landscape strip, and a trail on the west side of the street.

The Rio Salado Parkway - The Rio Salado Habitat Restoration Project is expected to draw an estimated one million visitors annually. The Rio Salado Parkway alignment is a proposal for a scenic route adjacent to the restoration project to accommodate this influx of visitors. The design, location and other attributes of the parkway will be determined after input from the community.

The Rio Montaña Land Use Plan places the parkway alignment at South Central Avenue and Elwood Road continuing southwest and exiting the community at 27th Avenue and Broadway Road. The alignment has not been officially designated nor has the cross section been determined. These issues will be determined through the land use planning process for Beyond the Banks of the Rio Salado, a public participation effort.

Substandard Right-of-Way and Paving - The Street Classification Map defines the optimal level of street improvement. Not all streets in Rio Montaña are currently built to their ultimate configuration. These streets are "substandard" because the amount of paving or the amount of existing right-of-way does not match the Street Classification Map. This is not indicative of the safety or quality of street construction or maintenance.

With the exception of South Central Avenue, all arterial streets in Rio Montaña have some portion of their street length that is not fully improved. Right-of-way for these roads may or may not be dedicated.

Portions of Southern and 27th Avenues have substandard paving. Portions of Broadway Road, Southern Avenue, Baseline Road, and Dobbins Road have both substandard paving and right-of-way.
Right-of-way can also be acquired through exaction; that is, as vacant property develops, additional right-of-way is dedicated to meet the city standard. As property along Baseline Road is rezoned, right-of-way will be required to develop Baseline Road to the scenic drive cross section.

**Street Improvements** - The north/south arterial streets, except for South Central Avenue, are offset at Baseline Road. With the exception of the intersection at 7th Avenue, the offsets will be realigned at the southeast corner. Other planned street improvements are:

- Baseline Road - 7th to 27th Avenue
- 7th Avenue - Baseline Road to Southern Avenue
- 7th Avenue - Salt River to Southern Avenue
- 7th Avenue Bridge

Some local streets within Rio Montaña have insufficient paving and no curb and/or sidewalk. In the more rural areas this is not necessarily undesirable. In the more densely populated residential areas, however, this lack of curb and sidewalk adds to an overall unkempt appearance.

At the time the study was initiated, there were 8.15 miles of unpaved roads in Rio Montaña. The Federal Implementation Plan for non-compliance in airborne particulate matter requires remediation of three sources of particulate matter: vacant lots, unpaved roads, and unpaved parking lots. The city initiated a program to pave all unpaved streets. This paving project was completed in January 2000.

**Alleys**

There are many alleys in the older residential areas of Rio Montaña. Alleys are often unclean, unsafe areas where dumping occurs and graffiti is common. Though alleys were once a common component of residential development, the alleys in Rio Montaña do not serve the residents; rather, the alleys serve only as places for refuse storage and collection. This lack of use has led to little pride of ownership or upkeep of the alleys.

There may be opportunities to create "safe" alleys in new developments. New Urbanism design includes landscaped alleys with garage access. A rear access garage ensures frequent use by residents and informal surveillance of alleys. A rear access garage also reserves the front of the home for porches and windows providing eyes on the street.

**Water Distribution**

The water distribution system for Rio Montaña conforms to the current city standard. There are 12-inch mains along arterial streets; and eight-inch mains along most of the collector streets. See Figure 26. New development is responsible for on-site water mains.

There are two zones of water transmission in the area. A pump station services Zone 1. Zone 2 is gravity fed from a reservoir. The City of Phoenix currently owns property at 15th Avenue and South Mountain Avenue south of the Western Canal. This parcel will be the location for a potable water treatment plant in the near future. The Water Services Department does not anticipate any problems with water delivery to new development in Rio Montaña.

**Sanitary Sewer**

The major components of the sanitary sewer system are the wastewater treatment plants at 23rd and 91st avenues. There are sewer mains, ranging from 12" to 54" in diameter, on segments of every north/south and east/west mile street. (See Figure 27 on the following page.)

Some older residences currently use septic systems. Septic systems were permissible in Maricopa County prior to the annexation of the area, in 1960. The existing septic systems are permitted as a preexisting condition. These properties should be connected to the city sewer service through improvement districts.
Figure 27

**RIO MONTAÑA WASTEWATER CIRCULATION**

The Rio Montaña area has a two-year storm drainage system, which is the city standard. The system is designed to drain rainwater from streets during a two-year storm event leaving two passable traffic lanes. There may be some misunderstanding as to what the storm drainage system attempts to correct. The storm drainage system is not intended to drain all water off of streets. More intense rains cannot be accommodated with the two-year system, resulting in standing water and impassable conditions.

**Electric Service**

The Salt River Project (SRP) provides power to the Rio Montaña community. Facilities are adequate to meet current demand. SRP may construct an additional sub-station and transmission station to accommodate the growing Rio Montaña and Laveen communities.

**Employment**

The current General Plan for Phoenix states that "The opportunity for residents to live and work in the same village is a fundamental goal of the urban village concept. To achieve it requires a balance of jobs and the resident work force". According to the most recent MAG Employment data available, there are slightly less than 400 employers in Rio Montaña employing 3,797 people.

The largest area employer is the City of Phoenix, which employs 310 people in both the South Mountain Police Precinct and the Police Training Academy. Manufacturing, which includes lumber and wood products, machinery, and fabricated products, employ 833 people while 229 are employed in non-manufacturing jobs such as heavy construction contractors, special trade contractors, agriculture and agricultural products and services.

**DEMOGRAPHICS**

**Population and Household Characteristics**

Demographic information, such as population size, growth rates, income, employment, and length of residency are used to determine the demand, location, and type of development for a community. Social and economic information provides a basis for future public policy and decision making. The primary source for this type of information is the 1990 U.S. Census and the 1995 Maricopa County Special Census.

Demographic information can describe the character of a community and provide insight into the potential for growth. Comparing a community's information to the city as a whole identifies that community's particular assets and limitations.

In 1995 there were 25,750 residents living in Rio Montaña. Although the population has increased over the years, the rate of increase is slower than the rate of increase citywide. Compared to the city as a whole, the Rio Montaña community has a higher population of school age children (age 5-17 years) and a lower young adult population (age 25-44 years). Rio Montaña is ethnically more diverse than the city. (See Figure 28.) Minority populations make up 82% of the Rio Montaña community compared to 35% of the city population.

**Figure 28**

**RIO MONTAÑA AND CITYWIDE ETHNICITY 1995**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Rio Montaña %</th>
<th>Citywide %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>63%</td>
<td>70%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18%</td>
<td>12%</td>
</tr>
<tr>
<td>Black</td>
<td>17%</td>
<td>6%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Indian</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*SOURCE: 1995 Special U.S. Census
* U.S. Census Bureau. 1995 Special Census.
* Ibid.
**Educational** - Educational attainment is the highest level of schooling or education a person has achieved. Rio Montaña has a larger percent of the population with a 9th grade or less education than the city as a whole. The percentage of high school graduates increased between 1980 to 1990. In 1990, the percentage of high school graduates in Rio Montaña (24.9%) was similar to that of the city (25.5%) as shown in Figure 29.

**Household Income** - The average household income for Rio Montaña was $30,600 in 1989. The average household income citywide at that time was $37,159. The US Census Bureau defines poverty levels as a threshold based on annual income and family size, the number of children and, the age of the head of household. Based on the 1990 threshold, 24% of the Rio Montaña community was at or below the poverty level compared to 14% in the city. Twice as many people in Rio Montaña than citywide had an income of $9,999 or less in 1990. Sixty-three percent of residents in Rio Montaña had an average annual income of $30,000 or less. Citywide, 51% of the population earned $30,000 or less.

**Length of Residency** - The length of time a person has lived in a community is an indicator of stability. Based on the 1990 US Census, more than half of the homeowners in Rio Montaña have lived in their present house for ten or more years as shown in Figure 30.

In 1995, 75% of the housing in Rio Montaña was owner occupied compared to 60% for the city.

**Housing** - Aging housing, reduced housing values, and overcrowding are indicators of deteriorating housing conditions for a community. These conditions are more likely to be associated with areas of lower household income and educational attainment.

The majority of housing in Rio Montaña is single-family detached housing (70%). Multi-family housing makes up 12% of Rio Montaña’s housing versus 33% of housing citywide.

Housing in Rio Montaña is older than housing citywide. (See Figure 31.) In 1990, 82% of the homes in Rio Montaña were built before 1979, whereas 69% of all homes in the city were built before that time.

The average value of owner occupied housing in Rio Montaña increased by $24,931 from 1980 to 1990. The 1990 value, however, lagged behind the city average value of $89,678 by 20%. The number of individuals per room and persons per occupied housing unit determines overcrowding. The amount of overcrowded housing in Rio Montaña was 21.5% or three times higher than the city at 6% in 1990.

**Housing Conditions** - In 1994, Arizona State University documented housing conditions. (See Figures 32 and 33 on the following page.) The report focused on housing condition improvements using a random sample. Housing conditions were evaluated based on four key indicators: electrical service, plumbing, natural light and ventilation, and structural appearance. Home and yard conditions were also noted separately. Overall, 19% of those randomly selected homes included in the survey within Rio Montaña needed no repair.
Figure 32
**RIO MONTAÑA HOUSING CONDITIONS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Good - No Repair Needed</th>
<th>Minor Repair - &lt;$500</th>
<th>Major Repair - $500-$4,000</th>
<th>Not Feasible - &gt;$4,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>43.7%</td>
<td>53.8%</td>
<td>2.5%</td>
<td>0</td>
</tr>
<tr>
<td>Plumbing</td>
<td>32.2%</td>
<td>62.2%</td>
<td>5.6%</td>
<td>0</td>
</tr>
<tr>
<td>Natural Light &amp; Ventilation</td>
<td>49.0%</td>
<td>50.0%</td>
<td>1.0%</td>
<td>0</td>
</tr>
<tr>
<td>Structural Appearance</td>
<td>30.0%</td>
<td>66.0%</td>
<td>3.9%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Summary Conditions</td>
<td>19.0%</td>
<td>79.0%</td>
<td>1.1%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Seventy-nine percent needed minor repair of up to an estimated $500.00. Those needing major repair ($500.00 to $4,000.00) or not feasible for repair ($4000.00 or more) were 1.3%. Similarly, yard conditions were also evaluated. The report indicated that the majority, 57%, was in good condition as shown in Figure 33.

Figure 33
**RIO MONTAÑA YARD CONDITIONS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Percent Good</th>
<th>Percent W/Minor Neglect</th>
<th>Percent W/ Major Neglect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bungalow Residence</td>
<td>57%</td>
<td>37%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Historic Housing In RIO MONTAÑA** - The first modern-day settlers of RIO MONTAÑA arrived about 40 years after Arizona was designated a territory in 1867. The construction of Roosevelt Dam brought a steady supply of water and with that, population grew Valley wide. The crossing of the Salt River at Central Avenue in 1910-11 connected the once isolated South Mountain area to the downtown community. Three basic development patterns, subsistence farming, specialty farming, and residential neighborhoods, are visible to this day.

The majority of the historic buildings was constructed between 1911 and 1936. There are four properties currently listed on the National Register of Historic Places. Six sites have been recommended as "potentially eligible" sites, as shown in Figure 34.

Figure 34
**RIO MONTAÑA HISTORICALLY SIGNIFICANT PROPERTY**

<table>
<thead>
<tr>
<th>Property</th>
<th>Year/Style</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Del Monte Market</td>
<td>1908 Mission Revival</td>
<td>2569 Dobbins Rd.</td>
</tr>
<tr>
<td>Scorpion Gulch Building</td>
<td>1935 Mission Revival/Gothic</td>
<td>10225 S. Central Ave.</td>
</tr>
<tr>
<td>Stoughton Estate</td>
<td>1930 Spanish Colonial Revival</td>
<td>805 W. South Mountain Ave.</td>
</tr>
<tr>
<td>Mountain Park and Preserve Building</td>
<td>1935, Pueblo Revival</td>
<td>Entrance to S. Mountain Park</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Year/Style</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bungalow Residence</td>
<td>1920, Altered</td>
<td>1127 W. Baseline Rd.</td>
</tr>
<tr>
<td>English Cottage</td>
<td>1927, Altered</td>
<td>911 W. Baseline Rd.</td>
</tr>
<tr>
<td>Spanish Colonial Revival Residence</td>
<td>1930, Major Alterations</td>
<td>1200 South Mountain Ave.</td>
</tr>
<tr>
<td>Mission Revival Residence</td>
<td>1930, Altered</td>
<td>8525 S. 15th Ave.</td>
</tr>
<tr>
<td>Bungalow Residence</td>
<td>1920</td>
<td>8811 S. 19th Ave.</td>
</tr>
<tr>
<td>Tudor Revival Residence</td>
<td>1925, Minor Alterations</td>
<td>9025 S. 19th Ave.</td>
</tr>
</tbody>
</table>

**Crime and Safety**

Crime statistics are divided into two categories: crimes against property and crimes against persons. The Police Department tracks crime in quarter mile grids. This information is summarized in Figure 35. The area with the highest concentration of total crime is South Central Avenue and 7th Avenue.

Figure 35
**RIO MONTAÑA CRIME STATISTICS 1999**

<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Total</th>
<th>Crime Against Persons</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burglary</td>
<td>631</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Robbery</td>
<td>212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theft</td>
<td>544</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Auto Theft</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide</td>
<td>327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>2,228</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crime in RIO MONTAÑA has been compared to crime citywide per 1,000 persons. The estimated population for RIO MONTAÑA and for the city is divided by the number of times a particular category of crime is committed. The most frequently occurring crimes both in RIO MONTAÑA and citywide are burglary, theft, and auto theft. Burglary represents 25% of the crime in RIO MONTAÑA and 25% citywide. Theft is higher citywide at 21% compared to 16% in RIO MONTAÑA, although auto theft is higher in RIO MONTAÑA at 22% compared to 15% citywide as shown in Figure 36.

Figure 36
**RIO MONTAÑA AND CITYWIDE CRIMES PER 1000 - 1999**

- Gang
- Drug
- Arson
- Auto Theft
- Theft
- Burglary
- Robbery
- Aggravated Assault
- Homicide
- Sexual Assault
- Domestic Violence

- Citywide
- RIO MONTAÑA
Crime can be further defined as juvenile crime, crime perpetrated by someone under the age of 18, and gang-related crime, in which a gang is directly related to perpetrating a crime. Crimes are only considered 'gang-related' if the commission of the crime furthers the interests of the gang. If an individual is a member of a gang but acts independently in the commission of a crime, that crime is not gang-related as shown in Figure 37.

**Priority Calls** - Police respond to emergency calls based on severity or level of personal threat. Priority One calls receive the highest priority. Priority Two calls represent 50% of police calls in Rio Montaña. Priority Three calls are report and service calls. Priority calls are defined as follows in Figure 38.

**Figure 38
PRIORITY CALLS**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority One</td>
<td>Crimes in progress, crime committed in the previous five minutes, domestic violence with physical contact, and life threatening emergencies</td>
</tr>
<tr>
<td>Priority Two</td>
<td>Prowlers, suspicious persons, missing children, and traffic accidents</td>
</tr>
<tr>
<td>Priority Three</td>
<td>Crimes committed at an undetermined time, and domestic situations requiring an escort</td>
</tr>
</tbody>
</table>

Response times for Priority One and Two calls in Rio Montaña are faster than the city average as shown in Figure 39.

**Figure 39
POLICE RESPONSE TIME (in minutes)**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Rio Montaña</th>
<th>City-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority One</td>
<td>4.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Priority Two</td>
<td>14.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Priority Three</td>
<td>53.1</td>
<td>51.6</td>
</tr>
</tbody>
</table>

Based on information available for 1999, there is more juvenile crime per 1,000 people in Rio Montaña than in the city as a whole. There is also a higher rate of gang crime, aggravated assault, and domestic violence. Other crimes tracked, including burglary, theft, and property damage, do not vary significantly from crime citywide.

**Community Action Officer** - The Police Department assigned a Community Action Officer to act as the liaison between the community and the police. In addition to the Action Officer, the Police Department provides several levels of community based programs from self-awareness safety programs to on-the-job training programs. Community programs offered by the Police Department include:

**Figure 40
POLICE DEPARTMENT COMMUNITY PROGRAMS**

- **Jr. Block Watch:** Educates children to recognize crime and suspicious behavior and what actions to take after identifying that behavior.
- **Stranger Danger:** Teaches basic safety including pool, bicycle and home safety.
- **Self Protection:** Informs adults about how to avoid becoming a victim.
- **Home Security Checks:** Officers visit the home and offer suggestions on increasing security and reducing the chances of burglaries.
- **Business Meetings:** This program is designed to organize businesses in the community with classes and training.
- **Wake Up Club:** The Wake Up Club is a school-based program to keep school aged children out of gangs and off of drugs.

Crime Prevention through Environmental Design (CPTED) - The CPTED concept simply states that crime can be reduced by design of the built environment. By nature, we are territorial. By design, such as lighting, fencing, shrubbery and housing design, a sense of ownership can occur. Taking ownership of a public place such as a street or a park will make that place safer. CPTED, though effective, is only half the equation. Continued community policing by law enforcement and through community block watch groups is essential in deterring crime.

The building blocks of CPTED are: Access Control, Surveillance, and Territoriality. CPTED asks three basic questions:

- Does the space clearly belong to someone in the group?
- Is the intended use clearly defined?
- Does the physical design match the intended use?

Access Control - The physical design of buildings should create the perception that the occupants are not isolated and are in control. Strategies to achieve this goal are:

- using plant materials or low open fencing to achieve a clear definition of public versus private space
- planting trees and/or bushes (with thorns and prickers) in conjunction with berms, fencing, and walls to make access difficult

Surveillance - Surveillance assumes most criminals do not wish to be observed. An environment that creates plenty of opportunity to be seen should be safer. This concept has been called "eyes on the street". Surveillance can be increased by:

- positioning windows for better surveillance and to reduce blind spots
- increasing lighting levels
- making stairwells and elevators more usable
- enabling clear sight from the buildings to the streets

Territoriality - Territoriality clearly defines where private ends and public begins. The key to territoriality is that people will feel and act responsibly, encouraging safety in public spaces, if they feel they have some ownership in that public property.

CPTED design standards should be recommended for any new development within the community.

Safe Communities - The Safe Communities Program is based on the CPTED building blocks mentioned above. The focus of the Safe Neighborhoods Program is to develop and design safe neighborhoods through the planning process. In addition, the program provides the information, opportunity, and in some cases, the funding, to address safety issues in existing neighborhoods. *The Safe Communities Resource Guide, 1999* is available through the Planning Department.
APPENDIX B: DESIGN GUIDELINES

The Character Areas section discusses three general areas in Rio Montaña and how the character of those areas may be enhanced and/or preserved. The Design Guidelines section details guidelines for specific types of development. The intention of these guidelines is twofold:

* maintain or enhance the existing character or quality of the community and

* promote high quality development in the Rio Montaña community

The Design Guidelines as presented in this document are under review and may change.

GATEWAY FEATURES

Gateway features at major entrances to the Rio Montaña area can announce arrival to a unique place. Features of different scale, but consistent design, should be located at the designated intersections.

To affirm the character of the Rio Montaña area, gateway features are recommended at the intersections of major arterials along the perimeter of the study area. (See Figure 42.)

MEDIANs

If medians are used in either public or private streets, they should contain a variety of plant materials at a variety of heights for visual interest. Penstemon should be used as a theme or signature plant throughout Rio Montaña. A single row of date palms in a median is not an effective median design treatment.
**TRANSPORT STOPS**
Special design of transport stops can reflect the character of the Rio Montaña area. Within certain parameters, the city will allow shelters which differ from the standard billboard design. It is important, however, for all transport stops to protect people from the elements. A bench with no shielding from sun, wind, and rain is not acceptable.

**COMMERCIAL DEVELOPMENT**
Commercial development in Rio Montaña will fall into one of three categories:
- Commercial along South Central Avenue
- Large new commercial complexes (25,000 sq. ft. or greater)
- Small commercial development

**Commercial along South Central Avenue**
Commercial development along South Central Avenue should encourage a "main street" type of development appropriate for the character of the area. The majority of existing commercial on South Central Avenue is either commercial strip with large parking lots between the store facade and the street or individual buildings close to the street.

**Existing Strip Commercial** - Existing strip commercial is viewed from the street across an expanse of asphalt and cars. Commercial strip development can be improved by adding buildings to the site and creating an integrated space. Parking can be broken from a single large lot to several small parking areas. Adequate tree or canopy coverage should be provided to encourage pedestrian activity within the shopping area. Vegetation is preferred above man made structures to reduce the impact of heat island within the community.
COMMERCIAL DEVELOPMENT, cont.

Main Street - It is also possible to create a "main street" character by developing a double row of commercial buildings off of South Central Avenue with a pedestrian mall or walkway. Parking behind the mall or walkway could accommodate shopping on South Central Avenue as well. Outdoor cafes and restaurants with second story terraces should be encouraged.

Figure 47
MAIN STREET

- pedestrian amenities
- buildings at edge of sidewalk
- parking behind commercial area

Large New Commercial Complexes Greater than 25,000 Sq. Ft.

The purpose of these design guidelines is to avoid "big box" retail development and large retailers who build "off the shelf" products everywhere they build. To avoid the big box, architectural character should provide the following:

Provide relief for facades greater than 100' continuous by the use of recesses, projections, windows, awnings and arcades for a minimum of 60% of the entire facade. Include two or more of the following:
- parapets concealing flat roofs and mechanical equipment
- overhanging eaves
- sloped roofs
- three or more roof plains

The use of repeating patterns of color, texture and material is encouraged. Color should be subtle, appropriate to the area, and not overpowering - although accent colors may be brighter.

Figure 48
COMMERCIAL GREATER THAN 25,000 SQ. FT.
(gross)

- break parking into modules

Figure 49
COMMERCIAL GREATER THAN 25,000 SQ. FT.
(gross)

- avoid
- main buildings set back against rear of site create extensive areas of asphalt contributing to feeling of "sea" of parking lots.

Figure 50
COMMERCIAL GREATER THAN 25,000 SQ. FT.
(gross)

- encourage
- scattered commercial pads surrounded by parking lots or drive-throughs are unfriendly to pedestrians.
- absence of landscaped areas creates image of esthetic aridity on the site.

Whenever a drive-through is necessary, a 4' (min.) mound should screen the view from the perimeter street.
COMMERCIAL DEVELOPMENT, con't.

Small Commercial Development

Small commercial development, individual stores or buildings should be integrated into the community in a manner that replicates the size and the character of the surrounding community. Buildings should be of a similar or comparable scale and use a color and material palette that complements the surrounding area.

Figure 51
SMALL COMMERCIAL DEVELOPMENT

Pedestrian Circulation

Sidewalks should be provided along the facade of every building front and include landscaping, benches, and shade. Pedestrian crossings should be of a distinct material to distinguish the pedestrian areas from strictly vehicular areas. Material for crosswalks can include pavers, brickwork, scored concrete or a variety of other materials.

Figure 52
PEDESTRIAN CIRCULATION

Plant trees on west side of buildings to protect pedestrians from direct solar exposure.

Figure 54
PEDESTRIAN CIRCULATION

Pedestrian path 10'-15' wide

Arcade

Figure 55
PEDESTRIAN CIRCULATION

Provide shaded arcades along the perimeter of commercial buildings.

Figure 53
PEDESTRIAN CIRCULATION

Pedestrian circulation on the perimeter of commercial buildings should not be obstructed with planters, columns, or other objects.

- Building out of scale with existing buildings
- Contrasting architectural character and building materials
- Broken, unusable space
COMMERCIAL DEVELOPMENT, cont.

Figure 56
PEDESTRIAN CIRCULATION

Ideal pedestrian place within a commercial area should include shade, landscaping, benches, and drinking fountains.

Figure 57
SITE DESIGN

Use variations in roof lines to reduce massive scale and mitigate visual impact.

Encourage architectural continuity by directing the use of a repeating pattern of change in color, texture, and materials.

Encourage the use of pitched roofs.

Create landscaped access way to main entrance of commercial center.

Figure 58
SITE DESIGN

Broken roof line provides visual variety and attractiveness to large commercial projects.

Figure 59
PARKING

35' minimum setback

Tree canopy for pedestrian shade

Maximum of one row of parking between public street and building facade

Landscaped berms

Figure 60
PARKING
Walkway Islands

Parking

Parking should be broken into several smaller areas versus one large parking area. This will encourage pedestrian activity within the site. Parking between the facade of a building and the street should be limited to one row of parking and should include a raised tree-lined median.

- Screen parking from street perimeter
- Provide adequate shade for pedestrian comfort
- Reduce single large lot to several small ones
- Allow only a single row of parking between the store facade and the public street

Walkway islands from parking lots to the main buildings should be shaded and raised to protect pedestrians from solar exposure and from vehicular traffic.
**COMMERCIAL DEVELOPMENT**, cont.

**Figure 61**

**PARKING**
Walkway Islands

**Good**

**Better**
Walkway islands from parking lots to the main buildings.

---

**RESIDENTIAL DEVELOPMENT**

**Entry Features**
Many single and multiple family projects are also using gated entries. If a gate is part of a development, it should be setback from the street with landscaped edges and a landscaped median to soften its appearance. Residential developments which do not have gates should have entry features to identify themselves; these features should incorporate landscaping with the entry sign. Vegetation should reflect the character of the area.

**Figure 63**

**ENTRY FEATURES**
Entry feature walls should not exceed 6'.

A mix of mature trees, shrubs, and flower beds are recommended landscape at entry areas.

Gated communities should have a landscape median to separate egress from ingress.

**Figure 57**

**FENCING**

Recommended fencing materials are wrought iron, wood, or a combination of the above with block-stucco walls.

**Figure 65**

**PERIMETER WALLS**

- 5 split-faced
- Half blocks turned to side
- Colored, painted, or stucco over Concrete Masonry Unit
- Standard brick
- Stucco
- Fluted Concrete Masonry Unit

**Figure 66**

**PERIMETER WALLS**
In areas where view over the property is not desirable for privacy reasons, the following combination of wrought iron and block walls is suggested.

---

37
**RESIDENTIAL DEVELOPMENT, cont.**

**Figure 67**

**PERIMETER WALLS**

Any segment of a perimeter wall that exceeds 50 feet should be broken down into smaller segments.

**Encourage**

**Avoid**

**Figure 68**

**PERIMETER WALLS**

Breaks and staggered walls, and the use of planters are encouraged to avoid monotony and continuity on back-up walls along arterials. Caution: avoid creating hiding spots in wall cutouts.

**Encourage**

**Figure 69**

**PERIMETER WALLS**

Solid fences create turbulence and directs wind downwards.

Upward tilted louvered fence directs wind up and over the space.

**Figure 70**

**PERIMETER WALLS - in rural/agricultural areas**

Encourage

**Figure 71**

**PERIMETER WALLS - in foothills areas**

Encourage

**Stucco wall**

Undulating stucco walls and/or multiple heights of walls in foothills area.

**Single Family**

The common objective for single family development is more variety than standard subdivisions being built throughout the Valley. Alternatives in facades and driveway orientations, and employing a more interesting street system and lot layout, including short culs de sac opposite each other and clustering attached or detached houses around a common open space, can satisfy the objective.

A common criticism of both attached and detached single family houses is the predominance of the garage in the total front facade. The width of the garage should be minimized to avoid garagescape neighborhoods which are inappropriate in an area with a rural character. Garagescape can be avoided through the use of alleys with garages in the back of the lot.

Although attached housing can contribute to the variety of housing available and preserve the open feeling in the Rio Montana area, if designed improperly it can have negative impacts. The projects must have meaningful common open space which is primarily unobstructed by buildings. The development should use landscaping to separate the internal streets system and soften the edges. A deep setback from public rights-of-way will also minimize the impact of high density single family housing in the Rio Montana corridor.
RESIDENTIAL DEVELOPMENT, cont.

Figure 71
SUBDIVISION LAYOUT -
Single Family Residential Densities
0-2, 2-5, & 5-10 Du/Ac.

Stagger the front yard setback lines to achieve a range of offset from house to house.

Promote streetscape diversity by providing a mix of driveway orientations, e.g. elbow, circular, or angled and side entry on common lots. No more than 40% of all driveways should be straight.

Figure 72
SUBDIVISION LAYOUT -
Single Family 2 -5 Du/Ac.

Provide:
- Variety in lot width
- Staggered setback line
- Rear loaded garage
- Variety in roof line
- Variety in building facades
- No privacy fencing

Avoid

Encourage

To avoid monotony and to add variety and attractiveness to neighborhood image, change facade design, facade and roof materials, building heights, and roof ridge orientation at least every third house.

Figure 73
SUBDIVISION LAYOUT -
Single Family 2 -5 Du/Ac.
Building Design

Different facade design.
Different roof materials.
Different heights.

House type A  House type B  House type C  House type D

Figure 74
SUBDIVISION LAYOUT -
Pedestrian Linkages

Pedestrian connections within and to other developments must be an integral part of their design. These pedestrian linkages must exist at all densities.

Provide a variety of lot widths in the same block. It creates opportunity for a richer mix of building configurations and staggered setbacks.
**Residential Development, cont.**

Figure 75
**Garage Doors**

Emphasize house front (not garages) as prominent architectural features. Garage access on alley.

Figure 76
**Garage Doors**
Single Family 5 -10 Du/ac.

Length of garage door should not exceed 50% of total facade length.

Figure 77
**Garage Doors - Alley Access**

Encourage

Access to garages should be provided by alleys. Garages are in the interior of the lot and not in front of the dwelling.

Figure 78
**Building Design - Single Family 2 - 5 Du/ac. Xeriscape Concepts**

Encourage xeriscape concept with native plants for all developments within the foothills areas of Rio Montaña.

Figure 79
**Variety of Cluster Layouts**

Cluster Development

A conventional subdivision is a set number of lots dispersed over a site. Cluster development is the same number of lots but the lots are dispersed over a portion of the site, not over the entire site. This preserves a greater amount of the site as open space by making the lots smaller. Typically, cluster development preserves 30% of the site as open space. For a 60 acre subdivision, the required amount of open space is three acres. A cluster development for the same site would reserve 30% or 18 acres of open space. The open space retained in a cluster development can be dispersed around the subdivision to be advantageous to both the residents and the surrounding community. It can also be centrally located. Attached or detached cluster housing can be arranged in a variety of ways to take advantage of natural features and resources of a site, to preserve views and to maximize the usability of the open space.

The advantages of cluster development are as follows:

- Same number of units, greater amount of open space.
- Lower cost to develop streets and sewers.
- Less run-off.
RESIDENTIAL DEVELOPMENT, cont.

Figure 80
COMMON OPEN SPACE
Single Family 5 -10 Du/ac.

Clustering development around a central common open space promotes a sense of openness in high density developments.

Figure 81
COMMON OPEN SPACE
Single Family 5 -10 Du/ac.

Avoid using open space along washes as the only public common space. Provide other common open spaces inside the neighborhood.

Avoid long blocks with the same setbacks and house designs. It creates a monotonous feeling in the neighborhood.

Avoid locating buildings at the center of common open space. It defeats the purpose of the open space.

Figure 82
COMMON OPEN SPACE
Single Family 5 -10 Du/ac.

Avoid internal streets with zero frontyard and narrow landscape strip.

Density: 7 Du/Ac.
Lot size: 40 x 105 = 4,200 sq. ft.

Figure 83
COMMON OPEN SPACE
Single Family 5 -10 Du/ac.

Density: 8.6 Du/AC.
Lot size: 80 x 70 = 5,600 sq. ft.
**RESIDENTIAL DEVELOPMENT, cont.**

**Figure 85**
**COMMON OPEN SPACE**
Single Family 5 -10 Du/ac.

![Diagram of common open space](image)

Density: 6 Du/Ac.
Lot size: 45 x 100 = 4,500 sq. ft.

**Figure 86**
**COMMON OPEN SPACE**
Single Family 5 -10 Du/ac.

In small parcel developments, setback second floor to create openness at street level.

![Diagram of common open space](image)

Central common open space

**Multi-Family Residential**

If more apartments are built in the Rio Montaña area, they should be at a scale which does not dominate the scenery. A successfully designed apartment complex will separate parking and buildings from the street with berming and heavy landscaping and put only low scale buildings at the property's edge. The community does not want to have any additional apartments which exceed two stories in height. Apartments should not obliterate views to South Mountain Park to the south and downtown Phoenix to the north. Varying building heights can help achieve this objective.

**Figure 87**
**COMMON OPEN SPACE**
Single Family 5 -10 Du/ac.

Avoid clustering development with no common open space or front yards.

Density: 9 Du/AC.
Avg. Lot Size: 25 x 28 = 2,000 sq. ft.

**Figure 88**
**SITE DESIGN**
Multi-family Residential 15+ Du/ac.

To preserve the view of South Mountain, any two-story development will have at least 1/3 of its height in one story.

**Figure 89**
**SITE DESIGN - PARKING LOTS**
Multi-family Residential 15+ Du/ac.

Avoid concentrating parking areas either along the perimeter of development or on one single area of the development.
RESIDENTIAL DEVELOPMENT, cont.

Figure 90
SITE DESIGN - PARKING LOTS
Multi-family Residential 15+ Du/ac.

Figure 91
SITE DESIGN
Multi-family Residential 15+ Du/ac.

Avoid

Encourage

Avoid

Encourage

Leaks occur when view extends beyond the enclosed space.

Create outdoor space by grouping 2 or more buildings.

NEW URBANISM

Residential

The Neo-traditional or New Urbanism solution to subdivision design is based on a set of principles that form the foundation of community planning. This includes:

- Walkable neighborhoods oriented to the quarter-mile or five-minute walk
- Primary orientation to public transit systems versus private cars
- Greater integration of different land uses at a neighborhood level such as housing, shops, work places and schools

Buildings, blocks and streets should be interdependent. Each one contains elements of the other and impacts the other. Neighborhoods should be compact, in an appropriate location and include interconnecting corridors to facilitate community interaction. Corridors should be functional, beautiful and integrated into the natural and man-made environment.
**NEW URBANISM, cont.**

**RESIDENTIAL**
New Urbanism - Front Loaded Housing Options

![Diagram showing different housing options](image)

- Detached garage at back of lot.
- Garage setback 7' to 20' from facade of house.
- Shared driveway

**Encourage**

Housing diversity is encouraged through different architectural design styles, retaining desert-sonoran typology and rural ambience.

**Mixed Use Agricultural**

Given the breadth of the possible uses in the mixed use agricultural classification and the district’s importance in character preservation for the Rio Montañá area, design policies applying only to this classification are needed. Special policies address signage, wide setbacks from rights-of-way, avoidance of parking between the street and any structures, clustering of buildings, and use of open fencing. Unique local street standards should also be considered; a possible model for a street cross section is St. Anne Street just west of 40th Street. All of these policies, as depicted in the illustrations, are intended to keep a very open, rural atmosphere even as uses in the area expand beyond those found in most agricultural regions near Phoenix.

**Mixed Use Agriculture**

- Encourage use of exterior porches.
- Acceptable signage
- Decomposed granite pedestrian path or multi-use trail.

**Vegetation**

Vegetation should reflect the character of the area. For example, palo verde, ironwood in foothills area and dark, broad-leaved trees such as pistachio in agricultural areas.

**To allow view of orchard, tree farm, or garden, a minimum of 60% of the frontage property should be free of buildings.**