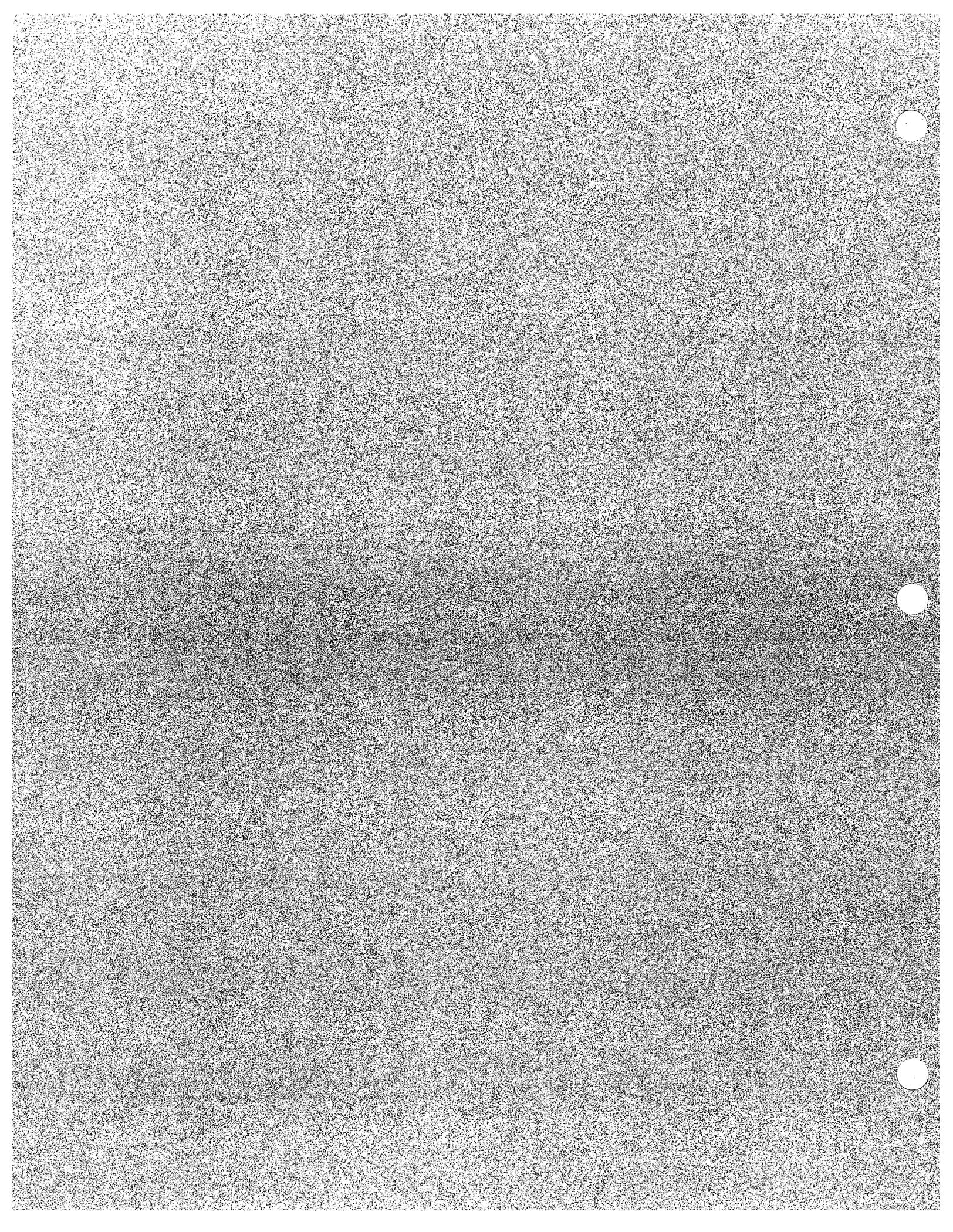


4.0 LAND USE ELEMENT
REDLANDS GENERAL PLAN



4.0 LAND USE ELEMENT

Land use, narrowly defined, refers to how a particular site is being utilized, whether residential, commercial, industrial, institutional or open space. The Land Use Element is the core of the General Plan. It consists of text, policies, and a land use plan referred to as the General Plan Diagram, that designates proposed general location and extent of each land use category. It is intended that this section serve as the basis for establishing compatible land use relationships and orderly growth.

4.10 Land Use Issues

Much of the General Plan Citizens' Committee meeting time was spent determining discussion of the appropriate amount and intensity of development. Major issues included:

- Population holding capacity
- Amount and location of park and open space land (See Open Space and Conservation Element)
- Medium density share of housing
- Location of additional medium-density housing
- Nonresidential intrusion in historic neighborhoods
- Sensitive development of hillside areas (Live Oak and San Timoteo Canyon)
- Effect of employment concentration in *East Valley Corridor Specific Plan* on traffic.

Population and Job Holding Capacity

The Planning Area at General Plan buildout will accommodate approximately 90,000 residents and enough nonresidential floor area for more than 100,000 jobs. Table 4.1 shows the Existing Development and General Plan Holding Capacity. The General Plan buildout represents a 62 percent increase in the planning area's 1994 population of 66,000 residents and a 320 percent increase to the estimated 26,000 existing jobs.

4.30 Land Use Classifications

The General Plan Diagram, GP Figure 4.1, depicts 15 16 categories of land use: rural living; very low density; low density; low medium density; medium density; high density; office; commercial; commercial/industrial; light industrial; public/institutional; parks/golf courses; agriculture; flood control/construction aggregates/ conservation/habitat preservation; resource preservation; and resource conservation. A Housing Conservation Overlay is also used. All land within the planning area has been mapped to reflect the proposed use of land when the City is built out or fully developed.

The General Plan Diagram reflects a variety of considerations in determining the most likely future development patterns. These considerations are:

1. Existing land use
2. General Plan policies
3. Existing zoning and approved development plans
4. Existing specific plans and general plan amendments
5. Environmental constraints
6. Existing and proposed transportation systems
7. Availability of utilities (i.e., water, sewer, gas and power)

The General Plan Diagram also reflects the proposed street network.

GP TABLE 4.1
EXISTING DEVELOPMENT AND GENERAL PLAN HOLDING CAPACITY

	RESIDENTIAL HOUSING (dwelling units)			NON-RESIDENTIAL FLOOR AREA (thousand square feet)			SCHOOL ENROLLMENT (students)		
	LOW DENSITY	MED/HIGH DENSITY	MOBILE HOMES	COMMERCIAL	OFFICE	INDUSTRIAL	ELEMENTARY	SECONDARY	UNIVERSITY
Existing 1994 Development (by Planning Sector)									
Northwest Redlands	221	72	5	194.84	371.19	715.74	168	143	0
North Redlands	6,082	2,570	961	235.84	164.44	85.03	3,029	1,267	1,508
South Redlands	7,602	2,582	49	952.41	1,381.68	0.00	3,612	5,556	0
West Redlands	166	2,442	35	1,540.93	361.99	1,492.51	279	931	0
San Timoteo Live Oak Canyon	1,244	16	21	0.00	144.18	0.00	0	0	0
Crafton	565	111	272	18.73	14.27	42.69	0	0	0
Mentone	1,295	593	2	156.56	0.00	951.66	605	0	0
TOTAL	17,175	8,386	1,345	3,099.31	2,437.75	3,287.63	7,593	7,897	1,508
General Plan Buildout (by Planning Sector)									
Northwest Redlands	189	235	5	4,752.83	6,931.42	15,259.74	168	143	0
North Redlands	7,372	3,390	961	335.34	164.44	1,140.23	3,411	1,267	2,000
South Redlands	8,368	3,628	18	1,082.23	1,758.44	174.18	4,529	5,556	0
West Redlands	75	3,389	3	2,161.22	1,035.65	3,741.82	279	931	0
San Timoteo Live Oak Canyon	3,050	16	21	0.00	144.18	0.00	770	0	0
Crafton	2,030	111	272	18.73	14.27	42.69	770	0	0
Mentone	2,509	593	179	295.85	0.00	1,283.33	800	2,687	0
TOTAL	23,593	11,362	1,459	8,646.20	10,048.40	21,641.99	10,727	10,584	2,000

Sources:

1. Residential housing based on 1990 Census, Assessor's Data, and ESRI acreage figures.
2. Nonresidential floor area based on ESRI acreage figures, City of Redlands Building Department information, and field reviews.
3. School enrollment figures based on information from Redlands Unified School District, University of Redlands, and private schools.

Buildout Population

- Number of Households @ 2% vacancy 35,686
- Household Population @ 2.76 persons/household 98,493
- Group Quarter Population @ 3.2% of household pop. 3,152
- Total Buildout Population 101,644

For REDLANDS GENERAL PLAN
Figure GP FIG. 4.1
SEE SEPARATE PDF

The following descriptions apply to land uses indicated on the General Plan Diagram. The legend on the Plan Diagram is an abbreviated version of the descriptions. The land use classifications are adopted as General Plan policy and are intentionally broad enough to avoid duplicating the City's zoning regulations. The General Plan Diagram, which is a graphic representation of City policies regarding growth and development, is to be utilized in conjunction with the policies contained in the General Plan as a guide to decision making. The General Plan Diagram should not be confused with a zoning map which delineates districts of the zoning ordinance wherein specific uses of the land and associated development regulations are prescribed. More than one zoning district may be consistent with a single General Plan land use category, and some revisions to the zoning regulations will be necessary to implement the General Plan.

State law requires the General Plan to establish standards of population density and building intensity for each land use classification. For nonresidential uses a maximum permitted ratio of gross floor area to site area is specified. The Floor Area Ratio (FAR) is a broad measure of building bulk that controls both visual prominence and traffic generated. Residential population density is expressed as housing units per gross acre (See Glossary definition) instead of units per net acre, the measure used by the 1972 General Plan. The net densities are higher than equivalent gross densities because street area is omitted from the calculation.

The density/intensity standards do not require the City to approve development projects at the top of the density or intensity range for each classification. Zoning regulations consistent with General Plan policies and/or site conditions may reduce development potential. Gross density standards and assumed averages for residential categories are listed below. Table 4.2 shows maximum FAR standards for nonresidential uses.

Table 4.2 - FLOOR AREA RATIOS			
	COMMERCIAL	OFFICE	INDUSTRIAL
General Plan except as specified below	.30	.40	.45
Downtown Redlands (standards)	2.00	2.00	---
East Valley Corridor Specific Plan Area (standards)	.25-.60	.60-.90	.80-1.20

Maximum residential densities are per gross acre of developable land under 15 percent slope, provided that at least one housing unit may be built on each existing legal parcel designated for residential use. Second units are permitted by local regulation and State-mandated density bonuses are in addition to densities otherwise permitted. Hillside Overlay provisions of the Redlands Municipal Code are applied in calculating population holding capacity of the General Plan.

Assumptions used to calculate probable office, commercial, industrial, housing unit and population holding capacity at buildout are lower than the maximum theoretically possible under the General Plan. Experience has shown that projects, due to physical constraints (street ROW, easements, fault zones, flood control facilities, etc.), do not build to the maximum intensity or density as permitted by the General Plan or zoning code. To develop a master plan based upon the theoretical maximum allowed by a General Plan designation or zoning code classification would overstate the ultimate buildout of the City of Redlands and not portray an accurate picture of anticipated development. Therefore, specific assumptions to replicate actual conditions have been applied to develop a "credible worst case scenario" at buildout. Assumptions are specified in MEA Appendix A, Buildout Land Use Assumptions.

A number of development options are available in the City of Redlands. These options are discretionary and include: Planned Residential Developments (PRD) and Specific Plans. Specific details on appropriate use, requirements and guidelines for these development options are found in the Zoning Regulations of the Redlands Municipal code.

Planned Residential Developments (PRD) - The General Plan recognizes that greater flexibility may be allowed in the design and arrangements of housing by permitting a project containing a mixture of housing types. The principles established for Planned Residential Development (PRD) in addition to the applicable General Plan policies consist of:

- The overall density of housing units within a project shall not exceed the density established by the General plan.
- The design of the project will not adversely affect adjacent residential uses or other sensitive land use areas.
- The arrangement of structures and circulation system will provide usable, efficient, and aesthetically desirable open areas for recreation and outdoor living.
- Planned residential areas shall provide usable open space for the residents on individual sites and in public open space.
- Conservation of existing citrus groves and the encouragement of new groves by allowing PRD's in agricultural areas.

Planned Unit Developments (PUD) - Planned Unit Developments or mixed land uses functionally integrate a variety of residential, commercial, and light industrial uses within a physically compact area. In a time of escalating costs, mixed use development offers benefits in energy use, reduced costs associated with construction and provision of community support facilities, and the conversion of land within the City. By bringing shopping, employment and residential uses physically closer, travel costs and air pollution in terms of fuel consumption and travel can be reduced. Utilizing Planned Unit Development is one method of accommodating projected increase in population and commerce on a finite amount of land, while still maintaining the high quality of living found in the City of Redlands. The Municipal Code does not presently have provisions for PUD's and therefore an amendment to the code would be necessary to implement this tool.

Specific Plan - Specific Plans are a tool to implement the General Plan. Specific Plans are sub-area plans which provide the opportunity to master plan an area by including financial, environmental and development procedures. Specific Plans are regulatory documents adopted by the City which refine general plan policies for specific areas. Specific Plans allow the community to package a set of land use specifications and implementation programs tailored to the unique characteristics of a particular site. Such plans are extremely useful for sites with environmental and/or fiscal constraints.

4.40 Residential Land Use Classifications

Rural Living - The Rural Living category designates up to .4 unit per gross acre (1 unit per 2.5 gross acres) on slopes 0 to 15 percent and .2 unit per gross acre (1 unit per 5 gross acres) on slopes greater than 15 percent. The intent of this land use category is to retain sufficient open area to preserve natural features of the area and/or encourage agricultural use of the majority of each parcel.

Very Low Density - The Very Low Density category designates from 0 to 2.7 units per gross acre on slopes 0 to 15 percent. On slopes greater than 15 percent to 30 percent the maximum density is .4 unit per gross acre (one unit per 2.5 acres). On slopes greater than 30 percent the maximum density is .2 unit per gross acre (one unit per 5 acres). Smaller infill lots which are consistent with the prevailing development pattern may be approved. The intent of this land use category is to encourage limited, low-density residential development. General Plan policies encourage the retention of natural hillside areas, and minimize grading and vegetation removal.

Low Density - The Low Density category designates from 0 to 6.0 units per gross acre. This category is not intended to be applied in areas where slopes exceed 15 percent. The intent of this land use category is to provide for areas of single family residential developments. The General Plan provides a wide range of densities to encourage development appropriate to the site. Consistent lot sizes include 7,200 square feet (6.0 units per gross acre) and 10,000 square feet (4.3 units per gross acre).

Low Medium Density - The Low Medium Density category designates from 0 to 8 units per gross acre. The intent of this land use category is to provide for a continuation of the land uses at densities compatible with existing development in the Mentone area and in the vicinity of the University of Redlands.

Medium Density - The Medium Density category designates from 0 to 15.0 units per gross acre. The intent of the Medium Density land use category is to provide areas for the development of attached, detached and/or mixed residential uses with a range of densities and housing types. Areas designated Medium Density are generally more suitable for development in the low-to mid-level of the permitted density range for this category.

High Density - The High Density category designates from 0 to 27 units per gross acre. The intent of the High Density land use category is to provide for the development of attached, detached and/or mixed residential uses with a range of densities and housing types. Areas designated High Density are generally more suitable for development at the mid- to high-level of the density range for this category. No proposed development project with density levels in excess of 18 dwelling units to the acre or a structure in excess of two stories or greater than 35 feet in height shall be approved unless the following mandatory findings are made and the development project is approved by four-fifths (4/5) vote of the total authorized membership of the City Council:

1. There are substantial and overriding economic or social benefits to the City and its residents and its residents and taxpayers from the proposed density or height increase.
2. The proposed density or height increase will not cause adverse environmental impacts, either individually or cumulatively, directly or indirectly.
3. The proposed density or height increase will not have a growth-inducing effect on other property.
4. The resulting use will be compatible with uses on adjacent land.
5. The proposed density or height increase will not require substantial expansion of public infrastructure, facilities or services.

In all residential land use categories, density bonuses may be applied (as required by State law), when a percentage of the units are reserved for low income households and/or senior citizens.

Housing Conservation - The Housing Conservation designation functions as an overlay to the underlying General Plan land use category with special provisions allowing certain types of existing nonconforming land uses. The intent of the Housing Conservation overlay is to provide for the retention and maintenance of existing higher density residential development while restricting construction of new higher density development in key areas of historic value where lower densities predominate. Two areas have received this overlay designation, one low density residential area north of the I-10 freeway and east of Orange Street and one medium density residential area south of the downtown.

The City's residential neighborhoods are diverse in age, lot size, house size, dwelling type, and site design. The General Plan calls for conservation of mature neighborhoods and proposes new standards for developing neighborhoods in North Redlands. Review the City Design and Preservation Element, Chapter 3 for policies related to Design and Historic and Scenic Preservation. See the Housing Element Summary, Section 6, for policies relating to housing needs.

Guiding Policies: Residential Areas

- 4.40a** Maintain the predominant single-family residential character of Redlands.

The Plan maintains the dominant share of Low-Density and Very-Low-Density housing.

- 4.40b** Conserve older neighborhoods because they provide an essential component of the housing stock and are the primary component of Redlands' urban character.
Related policies are in Section 3, City Design and Preservation, and Section 6, Housing Element Summary.
Older homes constitute most of the housing supply affordable by families of moderate or lower income.

- 4.40c** Conserve existing citrus groves and encourage planting new ones along street frontages to be developed.

The result can be a significant presence of citrus, no loss of housing units, cleaner air, and a quieter living environment near arterial streets. See also policies in Section 7.41, Agriculture.

- 4.40d** Encourage a variety of housing types to serve all economic segments of the community.

See also Section 6, Housing Element Summary.

- 4.40e** Increase the variety of lot sizes in North Redlands.

- 4.40f** Improve density and grading standards designed to preserve the natural appearance of steep hillsides and ridges.

- 4.40g** Locate High and Medium-Density development near regional access routes, employment centers, shopping areas, and public services.

- 4.40h** Encourage construction of small single-family homes on small lots as an affordable housing solution.

- 4.40i** Encourage incorporation of residential units in Downtown mixed-use projects.

This is consistent with the Master Action Plan (1989) and the Downtown Redlands Specific Plan (Specific Plan No. 45) adopted in June, 1994.

- 4.40j** Plan for continued operation of mobile home parks.

Redlands' mobile home parks are a major source of affordable housing and are generally well-integrated with their residential neighborhoods.

- 4.40k** Take advantage of the desirable residential environment that can be provided among citrus groves to preserve agricultural land that otherwise would be subject to strong development pressures.

Crafton exemplifies a prime environment for homes in citrus groves.

- 4.40l** Consider approval of Medium-Density residential development proposals at appropriate locations within the East Valley Corridor (EVC) Special Development District.

The General Plan does not project residential development within the EVC, nor does it include schools or parks to serve residential areas. However, substitution of residential development for business park would reduce projected traffic congestion. Peak hour traffic generated by each acre of Medium-Density residential development would be about 25 percent of that resulting from the alternative combination of office, retail, and industrial uses. About 10 to 20 percent of employed residents would be likely to work within the EVC.

- 4.40m** Establish a range of residential densities and development standards which encourage a mix of housing types.
- 4.40n** Protect residential neighborhoods by establishing policies and standards which discourage incompatible uses.
- 4.40o** Establish guidelines which will encourage better neighborhood design.
- 4.40p** Encourage underground utilities in all new residential development.

Implementing Policies: Residential Areas

- 4.40q** Plan for a housing mix at buildout consisting of 75 percent single family dwelling units and 25 percent multi-family dwelling units.
- 4.40r** Consider amending the Zoning Ordinance and East Valley Corridor Specific Plan to eliminate or modify amortization provision of uses, particularly residential uses, and to allow reconstruction at the same density or intensity in the event of destruction by fire or natural disaster.
- Zoning consistent with the General Plan will create nonconformity affecting the insurability of some properties unless the Ordinance is amended. The guiding policies of the General Plan do not preclude maintenance of these uses at their present density or intensity.*
- 4.40s** No land undeveloped as of March 1, 1997 and designated in whole or in part as Urban Reserve or Urban Reserve (Agricultural) in the Redlands General Plan in effect as of June 1, 1987, and/or any land parcel that was in active agricultural production on November 3, 1986 regardless of zoning, shall be re-designated or rezoned to permit residential density greater than the Estate Residential (R-E) classification, as the same existed on June 1, 1987, in the Redlands City Zoning Ordinance, unless the following mandatory findings are made and the re-designation or rezoning is approved by four-fifths (4/5) vote of the total authorized membership of the City Council.
1. There are substantial and overriding economic or social benefits to the City and its residents and taxpayers from the proposed density increase.
 2. The proposed density increase will not cause adverse environmental impacts, either individually or cumulatively, directly or indirectly.
 3. The proposed density increase will not convert viable agricultural land to non-agricultural uses.
 4. The proposed density increase will not have a growth-inducing effect on other property.
 5. The resulting use will be compatible with uses on adjacent land.

6. The proposed density increase will not require substantial expansion of public infrastructure, facilities or services.

The R-E zone specifies the minimum size of lots is 14,000 square feet and for a PRD within an R-E zone a maximum density of 3 units per acre.

- 4.40t** On slopes 15 percent or greater, buildings should be designed to accommodate the topography and minimize grading.

Stepped footings, multiple floor levels, and limited usable outdoor area may be essential to maintaining natural appearing hillsides. See also Policy 8.50i in Section 8.50, Seismicity, Geology, and Soils and Policy 3.10e, City Design.

- 4.40u** Devise urban service standards that are financially feasible and suitable for Rural Living areas.

Current City standards are appropriate for lots smaller than the 2.5-acre minimum for sites under 15 percent slope in Rural Living areas. With an expected average of one house per 5 acres, it is possible to retain existing narrow roads and stone curbs in Crafton, and to substitute on-site water storage and sprinklers for a complete urban fire suppression system.

- 4.40v** Devise and adopt standards for preservation of existing citrus frontages and for creating new ones.

- 4.40w** Develop a Planned Unit Development (PUD) Ordinance which develops standards for the use of a PUD development option.

- 4.40x** Review and comment on new development proposals when routed by adjacent jurisdictions through the environmental review process to identify and avoid potential land use conflicts.

4.41 Southern Area Hills and Canyons (Live Oak and San Timoteo Canyons)

The southern area of the City of Redlands is mainly rural, hilly and undeveloped. In the mid-1980's, the City adopted the Southeast Area Plan (General Plan Amendment No. 38) to ensure development consistent with the natural environment. The plan, described in 4.42, provides a background for the site analysis issues to be considered for development in the Live Oak and San Timoteo Canyon areas.

Implementing Policies: Southern Hills and Canyons

- 4.41a** Encourage the use of Planned Residential Developments (PRD's) and Specific Plans in San Timoteo and Live Oak Canyon areas.

- 4.41b** The policies, plans and requirements of the Southeast Area Plan (Section 4.42) apply to portions of Live Oak Canyon and San Timoteo Canyon as delineated in the General Plan.

These policies pertain to the geographic area generally identified as Sunset Drive on the North, Alessandro Drive on the West, Live Oak Canyon Road on the South, and South Lane on the East.

- 4.41c** Permit the transfer of densities within a specific parcel of property and clustering of residential development to areas under 15 percent slope through the use of Planned Residential Developments (PRDs), Conservation Easements, and Specific Plans.

- 4.41d** Major topographic features within the San Timoteo and Live Oak Canyon areas shall be preserved, maintained and where possible, enhanced. Major ridgelines should not be modified although development on a ridgeline may be allowed where there is offsetting need demonstrated.

For more detailed discussion of this policy refer to Section 4.42.

- 4.41e** Within the Live Oak Canyon and San Timoteo Canyon areas, the canyon walls immediately below major ridges and vegetation thereon shall be preserved and enhanced where appropriate. Slopes that are in excess of 50% shall be preserved intact except for public safety needs.
- 4.41f** Within the Live Oak Canyon and San Timoteo Canyon areas, where proposed development abuts an area of significant natural vegetation it shall be separated by a fuel modification zone which contains an all weather access roadway and water supply system having fire flow capacity. The Fire Department may modify these standards based on specific site considerations and use of alternative fire protective measures.
- 4.41g** Preserve natural vegetation and wildlife areas to create wildlife corridors extending throughout the Live Oak Canyon and San Timoteo Canyon areas.
- 4.41h** The San Timoteo watercourse should be preserved and enhanced as the backbone of a lineal parkway/activity corridor extending throughout the canyon.
- 4.41i** That portion of San Timoteo Creek, as defined by its floodway easements or flood control fee title, lying within the corporate boundary of the City is hereby declared to be Resource Preservation land and shall be preserved for the purposes of promoting wildlife preservation, open space recreation and water conservation. No fencing or other barriers shall be permitted in this Resource Preservation area that impede or limit access to the free crossing or use of the area by wildlife or its use for open space recreational purposes.
- 4.41j** All parcels of land encompassed within the area identified on GP Figure 4.5 are subject to the residential density limitations set forth in Section 4.42m and are hereby designated as Resource Preservation as defined in Section 4.96.

4.42 Southeast Area

In 1988, the City Council approved the Southeast Area Plan, which covered the southeastern portion of the City. That Plan is now contained in this section of the Land Use Element, and in the section of the Circulation Element dealing specifically with the Southeast Area. The previous stand-alone Area Plan was repealed at the time of the adoption of the 1995 update of the General Plan and replaced by this section.

The area covered by the Southeast Area Plan is bounded by Sunset Drive on the north, Alessandro Drive on the west, Live Oak Canyon Road on the south, and South Lane on the east, as shown in GP Figure 4.2. The following section of the Land Use Element contains background information and policies for the Southeast Area.

The following section of the Land Use Element contains the following components, which together comprise the Southeast Area Plan:

- Objective of the Southeast Area Plan
- Planning Sectors
- Definitions
- Site Analysis
 - Landforms
 - Development Suitability
- Issue Analysis
 - Fire Safety and Prevention
 - Watercourses
 - Soils/Geology

- Flora/Fauna
- Access
- Traffic (*Note: A complete discussion of traffic issues is contained in the Circulation Element*)
- Utilities/Public Improvements
- Community Identity
- Coordination with Other Community Plans
- The Southeast Area Plan
 - Overview
 - Land Use
 - Circulation (*Note: A complete discussion of traffic issues is contained in the Circulation Element*)
 - Recreation and Open Space
 - Fire Prevention/Public Safety
 - Watercourses/Drainage
 - Utilities
- Guiding Policies: Southeast Area

Objectives of the Southeast Area Plan - The Southeast Area Plan was developed to create a plan for future development of the Southeast Area which:

- Permits development
- Maintains the character of the area
- Minimizes grading
- Provides for orderly development of the area in a manner that mitigates the problems of circulation, drainage, sewage, disposal, fire flow and water supply
- Provides the framework of the viable implementation program to carry out the Policies contained in this section

FOR SOUTHEAST AREA GENERAL PLAN MAP
Figure 4.2
SEE SEPARATE PDF

The preparers of the Southeast Area Plan, commenting in the document on the future of the area, said, "[Put] another way, the fate of this area will no longer be left to chance."

Planning Sectors - The Southeast Area Plan identifies 10 subsectors, the Planning Sectors, as shown in GP Figure 4.3. Because of the number and complexity of the Planning Sectors, the Southeast Area Plan does not provide a detailed plan of development for each Sector. A specific plan shall be developed for each of these sectors consistent with the Guiding Policies in this section. Policy 4.42a (at the end of this section) requires the preparation of a specific plan for each of the Planning Sectors. *A specific plan shall not be a prerequisite for the approval of any residential development project within Planning Sector 2.*

Definitions - Because the Statement of Study Objectives for the Southeast Area consists of three directions Permit Development, Maintenance of the character of the area, and Minimizing grading which are subjective and relative and cannot be accurately quantified, the following definitions were developed and used to construct the Southeast Area Plan.

"Permit development" defined in the context of the Southeast Area Plan means that development is permitted, but limited in amount and in kind by the policies of this section of the General Plan. Permit development is further defined to mean that all parts of this area will hence forth be developed, maintained and/or managed to some degree.

"Maintenance of the character of the area" defined in the context of this effort means preserving the perceived character of the area by preserving and enhancing the signature features of the area.

"Minimizing grading" is defined as a general development concept in which a development project should be conceived and designed to use existing topography to the extent technically feasible, rather than designing a project in which extensive grading is used to modify the site to accommodate the project. In the Southeast Area, grading associated with the development shall minimize the modification of the perceived character of the area and shall favor individual, focused grading over mass grading. It should be noted that this does not prohibit mass grading concepts being applied in selective areas for valid reasons, so long as the grading does not significantly degrade or alter the perceived character of the area. It does dictate, however, that the necessity for any such mass grading must be real and supportable.

Area Analysis - Integral to the preparation of the Southeast Area Plan was an analysis of the Southeast Area. This consisted of an analysis of the landforms in the Southeast Area, the suitability of various slope gradients as "development sites," and the density of development which would be permitted in each slope category or area. Two issues are addressed in the following sections: 1) Landforms and 2) Development Suitability.

1. Landforms

General Discussion: The Southeast Area is generally an escarpment falling away from the northern ridgeline defined by Sunset Drive (referred to hereafter as the Sunset Ridge). The Southeast Area generally falls away to the south and west towards San Timoteo Canyon and Live Oak Canyon. The area is made up of a complex series of ridges and canyons.

Close examination of the topography of the area reveals a series of major ridges which define approximately nine major drainage basins. These ridges, their associated basins, the two boundary canyons, San Timoteo and Live Oak, and the flora and fauna thereon constitute the majority of the signature characteristic features of the Southeast Area.

If the Southeast Area is to maintain its perceived historical and natural character, the perception of these signature features must remain intact.

FOR SOUTHEAST AREA SIGNATURE RIDGES/
PLANNING SECTORS

Figure 4.3

SEE SEPARATE PDF

Policy 4.42b addresses preservation of signature features of the Southeast Area.

Signature Feature Discussion: In order to preserve and enhance the perceived character of the signature features, it is necessary to define the features which form this perception. The following analysis focuses on these features: the ridges, the canyon walls, and the canyon floors.

The easiest features to describe and quantify are the signature ridges. These ridges are those which define a significant edge, either in the foreground or at a distance. On-site observations and an examination of the topography of the Southeast Area led to the designation of five ridge formations as signature ridges. These ridges also separate the major drainage basins within the area. Signature ridges in the Southeast Area are shown in Figure 4.3.

Policy 4.42d deals with protection of ridges within the Southeast Area.

These basins between the signature ridges are designated signature basins.

The next element to be considered below the signature ridges is the canyon walls below. These walls are, with few exceptions, steep; many walls are in excess of 50% gradient. They are rugged and integral to our perception of the ridge above. Their rugged facades are, in fact, a major part of the ridge character. Thus, these walls (with few exceptions) should remain intact as landforms. Even minor intrusions into these walls would produce significant grading and would in most every case leave noticeable scars in highly visible locations.

Another feature of these walls is the vegetation growing on their faces. This vegetation forms a part of our perception of the wall and ridge since we actually see in many cases the vegetation, not the dirt beneath. Thus, the preservation and, even enhancement of this vegetation seems important to the maintenance of our perception.

Policy 4.42c deals with preservation of the canyon walls in the Southeast Area.

In addition to the signature ridges are the myriad of lesser ridges which thrust out of these major walls into the canyons below. These ridges and the canyons between are a part of the internal canyon perception, since they are perceived as being "in the canyon". As internal features they do not individually make signature statements, but collectively they do to some degree. Lesser ridges which are considered especially important due to their size or location are shown as major ridges on Figure 4.3.

Some of these ridges (a few in number) extend far enough into the canyon to become significant dividers between sub-sections within the canyon. Thus, they become second level statements within the canyon environment. Major modification of these forms will change the form of the internal canyon and should therefore be viewed as significant, and should not be permitted without valid offsetting reason.

On the other hand, most of these internal ridges are not predominant and their major visual statement is to appear as buttresses supporting the wall above. As such, their total removal would be significant, but the reforming of their lower extremities could leave their statement intact. Such reforming could in many instances increase and/or create adjacent canyon bottom area. Whether such reforming could be accomplished within the context of minimum grading would and should depend on the specifics of the given situation.

Policy 4.42d deals with the protection of ridges within the Southeast Area. These basins between the signature ridges are designated signature basins.

Policy 4.42e addresses modification of ridges which are not signature or major.

Canyon bottoms have been divided into two types: very narrow and broad.

There are two basic narrow canyon structures in the Southeast Area. First, the majority of the narrow canyon structures occur on the slopes leading down from the major and secondary ridges. These canyon bottoms are not a part of the external observer's perception because they are buried down within the canyons. The external observer sees a series of ridges close together and the narrow spaces between the ridges down in the canyon as a part of the canyon wall system, not the actual narrow canyon bottoms themselves. Thus, these bottoms are best seen from within the canyons themselves. To date, these canyon bottoms are typically seen by a very limited group of people, including mostly hikers and equestrians. As development occurs, this group will become dominated by the residents in the canyons. Because these narrow canyon bottoms are really not a part of the existing perception of the area, they can be modified to accommodate the proposed development without significantly interfering with the perceived character of the area.

Policy 4.42f deals with modifications to narrow canyon bottoms.

The second narrow canyon structure occurs primarily in one area and is highly visible. Specifically, this structure occurs in the northwest portion of the Southeast Area between Planning Sectors 1 and 2. This structure consists of a series of narrow ridges, all of about the same elevation, divided by steep narrow canyons running parallel to each other for a significant distance. The perception of this structure is of a procession of narrow ridges and steep canyons, not the narrow canyon bottoms within. This structure covers an area of some 100 to 120 acres, is readily visible from both Sunset and Alessandro, and is within the over 50% slope area previously discussed. Because of this, preservation of this characteristic feature is warranted.

Policy 4.42g addresses preservation of this specific ridge/canyon feature.

Live Oak Canyon and San Timoteo Canyon: These two canyons separately and together are signature elements of the area and therefore should receive specific attention.

Live Oak Canyon: The majority of this canyon is outside the sphere of influence of Redlands (and outside of San Bernardino County, since the county Line is approximately coterminous with the existing alignment of Live Oak Canyon Road). Nonetheless, this canyon and its character are important to this area of the city. Therefore, the City should act as a strong positive force in the planning for this area.

Policy 4.42h deals with development in the Live Oak Canyon area.

It seems clear that the existing roadway in Live Oak Canyon will be rebuilt and/or significantly improved in the near future to accommodate development to the immediate south in Riverside County. This roadway is designated as an "at-grade, 4-lane Arterial Highway" on the San Bernardino County Master Plan of Highways and as a "100-foot right of way Major Highway" on the Riverside County plan. Thus, the only questions are how soon will this upgrading and realignment occur and what form will it take. This issue should receive strong attention from the City of Redlands to ensure consistency with the Southeast Area Plan.

The form proposed is one which preserves the perception of the watercourse and the canyon character by creating a linear parkway with a watercourse forming the backbone, or centerline, of the roadway.

The mechanism to accomplish this would be to relocate Live Oak Canyon Road to border the watercourse rather than ignore and/or avoid it. Further, the watercourse itself should be preserved and enhanced by a planned right-of-way acquisition program, followed by a park improvement/tree planting program to enhance the watercourse signature characteristic statement.

The land between this linear parkway and the base of the hills and canyons to the north is relatively level and developable.

Policy 4.42i requires further, detailed study of Live Oak Canyon.

San Timoteo Canyon: This canyon is similar to Live Oak Canyon, but larger and more complex. Not only does this canyon contain an even more significant watercourse than Live Oak Canyon and a roadway of equal magnitude, it also contains one of the most significant manmade features on the Southeast Area: the mainline rail facilities.

These rail facilities are significant on an areawide basis because of the perception of the sight and sound of the passing trains. These sights and sounds are a signature characteristic of the area and, consistent with the basic premise of this study, should not be lost or hidden.

San Timoteo Canyon Road is shown on the San Bernardino Master Plan as "at grade, 4 lane Arterial Highway" and on the Riverside County Plan as a "110-foot-wide arterial highway (4 lane divided, minimum). Redlands should strongly advocate that these improvements support the signature characteristics present. If San Timoteo Road is realigned, the design should maintain and/or expand its alignment adjacent to the rail line to 1) protect the rail line, and 2) to allow greater viewing and enjoyment of the trains as they pass through the canyon.

In order to minimize traffic impact over Alessandro Road no matter how little the development in the Southeast Area San Timoteo should be structured to provide "easy access" to the I-10 Freeway. This could be accomplished by connecting San Timoteo Canyon Road to the I-10/California Interchange. Such a connection would result in only a very minor traffic load increase on San Timoteo, but could significantly reduce the loading on Alessandro and perhaps some of the other Sunset connections.

Policy 4.42j addresses the design of any future realignment of San Timoteo Canyon Road.

The San Timoteo Canyon watercourse is a graded channel throughout its length in the Southeast Area. This channel should, as in Live Oak Canyon, be the backbone of a linear parkway which includes the watercourse, an equestrian/hiking trail, bike/pedestrian paths, linear park improvements, and a parkside roadway. The parkside roadway envisioned serves the park and also the land uses to the north and west within Planning Sectors 1 and 4.

Policy 4.42k addresses the design of the San Timoteo Canyon watercourse as a backbone visual/recreational feature of the Southeast Area.

The sliver of land running between the rail line and the San Timoteo Creek watercourse presents a challenging land use opportunity which should not be lost. This area has limited land use possibilities and should, therefore, receive adequate attention to ensure a positive use if the existing citrus grove operation is ended. One use compatible with the character of the area for example, would be that of a combined retail-wholesale nursery operation fronting on Alessandro Road.

Policy 4.42l addresses land use for the land between San Timoteo Creek and the rail line.

Alessandro Road: Alessandro Road will require realignment and improvements even when applying very low density scenarios to the Southeast Area. A discussion of this roadway and its design is contained in the Circulation Element of this General Plan.

2. Development Suitability, a Gross Analysis

Traditionally, governing jurisdictions and to a large extent the developer community have viewed slopes in excess of a 25 to 30 percent gradient to be unsuitable for development in their natural condition. In most cases, unless such slopes can be mass graded into a more usable form, they are unsuitable for development, except for "custom solutions."

Thirty percent (30%) was used as the criteria for preparation of a gross analysis for the Southeast Area. This choice was made for two reasons. First, a 30% slope analysis was available at the time the Southeast Area Plan was prepared, and secondly, 30% produces a "worse case" result which is a more conservative way to analyze the issue.

The slope/development compatibility analysis was divided into slopes of 0 to 15% and 16 to 30%. The rationale for this is the recognition that as the gradient increases the grading design of the roadways more and more dictate the overall design solution. This occurs because when a roadway gradient exceeds 10 to 15% severe design constraints are required. Thus, the roadway design becomes the limiting factor and integration of the roadways into slope designs of over 20 percent necessitates significantly more and more circuitous routing and/or grading (usually both).

Coupled with this is the fact that the economics of development favor mass grading (solving the grading solution on a large scale, rather than by a series of individual site specific graded solution) as the gradient increases. Also, the economics of development favor mass grading on any given slope as the density of development increases.

Thus, "minimization of grading" dictates lesser densities on steeper slopes, even within designated development areas.

Policy 4.42m provides a slope-to-density ratio for the Southeast Area.

Issue Analysis - An important aspect of the creation of the Southeast Area Plan included the identification of a variety of issues specific to the area. The following issues were identified:

1. Fire Safety/Prevention
2. Watercourses/Drainage
3. Soils/Geology
4. Flora/Fauna
5. Access/Traffic
6. Utilities/Public Improvements
7. Community Identity, Internal and External
8. Coordination with Other Community Plans

These issues are discussed in the following sections.

1. Fire Safety and Prevention

The nature of the chaparral and sage vegetation in the Southeast Area is such that fires are a natural phenomenon. This reality results in the creation of a potential for disaster when development is permitted in close proximity to significant stands of this vegetation. This occurs because this vegetation not only burns, but burns fiercely. This is amplified by the fact that the longer the vegetation goes without a fire the more volatile it becomes, because the dead material collects beneath the live material. So long as fires do not occur, the amount of fuel present increases.

In response to this problem in both San Bernardino and Riverside Counties, comprehensive criteria for the design of the interface between inhabited areas and vegetational areas have been developed. Essential in all these criteria are:

- The need to develop fuel modification zones around inhabited areas,
- The need to provide access to the interface edge of the fuel areas,
- The need to, if at all possible, provide a water supply with fire flow capacity to the interface edge so defined.

Policy 4.42n addresses the provision of fire protection zones at the boundary between development and natural vegetation.

2. Watercourses

This issue contains two elements: drainage/flooding and aesthetics.

The issue of drainage and flooding is the easiest to define and understand because when isolated it is subject to an engineered solution assuming money is not a factor. The issue of aesthetics is no more difficult than drainage, but it is less easily perceived and therefore less well understood. When introduced into the drainage/watercourse discussion it becomes a constraint on the engineered solution to the quantitative flood problem. In summary, if the character of the canyon is to be preserved, then the character of the watercourse cannot be altered so as to destroy its contribution to the canyon character. Thus, the engineered solution must not only solve the flow problems. It must also ensure the character of the watercourse is protected and preserved. There are a variety of ways in which this can be accomplished, ranging from leaving the existing watercourse intact to totally relocating the watercourse alignment and creating a new "natural appearing" watercourse.

Policy 4.42o addresses the protection of the appearance of natural watercourses in the Southeast Area.

3. Soils/Geology

The soils found in the Southeast Area are primarily Hanford course sandy loam (HaC), Ramona sandy loam (RmE2), San Emigdio fine sandy loam (ScC), and Saugus sandy loam (ShF). These are all similar in character: moderately erosive in nature and suitable for moderate dry farming, pasture and citrus. In terms of agricultural productivity, these soils rank as follows, Grade 1 being most suitable and Grade 6 being least suitable:

Hanford (HaC)	Grade 1
San Emigdio (ScC)	Grade 1
Ramona (RmE2)	Grade 3
Saugus (ShF)	Grade 6

Source: Soil Survey of San Bernardino County, U.S.D.A. Storie Index Rating.

Grade 1 is described as "excellent and well suited to general intensive farming". Grade 3, "only fairly well suited". Grade 6, "soils and land types that are not suitable for farming".

Within the Southeast Area, the Hanford and San Emigdio soils (Grade 1, "excellent and well suited") are found in the San Timoteo, Live Oak, Alessandro and other large canyon bottom areas. The Ramona (RmE2, "only fairly suited") is found on several of the ridge top areas, primarily the larger rounded ridge tops such as the area adjacent to and south of the Fairmont/Edgemont area. The Saugus (Grade 6, "not suitable") is found on the steeper slope areas of the entire Southeast Area.

From the perspective of engineering compatibility or the suitability for development the U.S.D.A. report indicates the following:

Hanford (HaC) - offers only slight limitations to dwelling unit location and septic tank absorption.

Ramona (RmE2) - offers only slight limitations to dwelling unit location, but severe limitations to septic tank absorption due to moderately slow permeability.

San Emigdio (ScC) - offers only slight limitations to dwelling unit location and septic tank absorption.

Saugus (ShF) - offers severe limitations to both dwelling unit location and septic tank absorption due primarily to the inherent slopes.

With regard to geology, research indicates the existence of several minor and dormant faults running in a more or less east-west alignment within the Live Oak - San Timoteo Canyon area. To the south of and parallel to San Timoteo Canyon outside the Southeast Area is an active fault line.

In summary, it appears there are no soil or geology problems or conditions which are so severe as to preclude development of any significant portion of the Southeast Area. If the consideration of "minimal grading" is inserted, the situation changes. But, with the exception of grading, the soils and geology of the Southeast Area do not appear to present any major limitation to development. It should be noted, however, that the ridge top area adjacent to Fairmont/Edgemont appears to require an urban sewer system if developed, due to limitations on the use of septic tank/leach field systems in that area. With this note, it appears the normal soils and geology analysis done in conjunction with specific developments will be sufficient to handle localized soil and geology conditions which may exist.

On the other hand, it also appears that there exists several areas of Grade 1 agricultural soils which are of sufficient size as to perhaps warrant preservation consideration. In order of size these are:

1. San Timoteo Canyon, except for the watercourse itself, Planning Sector 3.
2. Live Oak Canyon, except the watercourse, and the southerly portion of Planning Sector 9.
3. Alessandro Canyon and the canyon bottom fingers related thereto, Planning Sector 1.
4. The canyon bottom in Planning Sector 8, and
5. The canyon bottom in Planning Sector 6.

Policy 4.42p addresses the preservation of agricultural uses in the Southeast Area.

4. Flora/Fauna

The predominant vegetation within the Southeast Area is the Chamise Chaparral and Coastal Sage Scrub communities. It has been noted that conditions in the Southeast Area could support certain sensitive plants, but to date none have been located. It has been further concluded that, due to the generally degraded and somewhat poor condition of the Southeast Area (from the standpoint of natural habitat), no sensitive plant communities are expected to be present (Expanded Initial Study, Tract 13025, March 13, 1986).

On-site examination of the vegetation indicates it is healthy but not significant as to size, variety, abundance, or vitality. The larger vegetation seems to be limited to Live oaks, eucalyptus and pepper trees. These seem to be few in numbers and individually scattered. There appear to be only two significant exceptions to this generality. In Planning Sector 10, on the Southeast Area boundary, there are numerous Live oaks located in close proximity, forming a "plain of oaks" effect. In Planning Sector 1, just below Sunset Drive, there is a stand of introduced eucalyptus in the canyon bottom.

Similarly, the animal life associated with the on-site vegetation does not appear to be particularly distinguished. It consists primarily of small reptiles and rodents and the smaller predators which prey on them. Evidence of only a very few larger animals, coyotes and deer, was found. This is not surprising, given the lack of vegetation both as food and as cover.

Policy 4.42q addresses preservation of on-site plants and animals.

5. Access

The manner in which the Southeast Area has been "historically" accessed from the surrounding areas and traversed internally is as much a part of the perceived character of the area as the signature ridges or canyons discussed earlier. Thus, the access ways, whether they be roadways or trails, follow and continue the perceived characteristic access pattern of the area.

Note: Discussion and policies related specifically to roadway access in the Southeast Area are contained in the Circulation Element of this General Plan.

Historically, in the days before mass grading was used to create developable areas, access routes were laid out in the field by someone by foot or horseback. This resulted in the selection of routes which were very sensitive to steepness of slope, and led to routes which followed the contours, moved up canyons, crossed over saddles, and traversed atop wider ridges. It is these characteristics which should be preserved as development of the Southeast Area is undertaken.

Historic access to the Southeast Area has occurred off the major surrounding roadways (San Timoteo Canyon Road, Alessandro Road, Live Oak Canyon Road), or down the ridges from Sunset Drive. This pattern is varied in some places where saddles or gentle ridges permitted easy passage up (and in some cases over) the ridge line.

Specifically, a Planning Sector by Planning Sector analysis indicates the following historic patterns:

Planning Sector 1: Primary access to the vast majority of the develop area within this sector has been up-canyon from Alessandro. There appears to have been some exception to this in that the most northerly ridge (the closest to Sunset) has been leveled off and access to this ridge top is down-ridge from a road leading off Sunset Drive.

Planning Sector 2: This is a plateau area where the finger ridges which extend to the west begin. As such, this elevated and developed area is attached to and related to Sunset ridge and takes its historic access from Sunset Drive.

Planning Sector 3: This Sector is located in San Timoteo Canyon and has historically taken access from San Timoteo Canyon Road and Alessandro Road.

Planning Sector 4 and 7: These two sectors appear very similar from an access point of view. Both are relatively steep escarpments tipping down to Live Oak Canyon. Both are characterized with several short narrow canyon fingers extending in from Live Oak. Because of the steep topography, it appears the historic pattern has been almost exclusively up-canyon from Live Oak Canyon.

Planning Sector 5: This canyon is narrow, steep and about 1/3 mile in length. Because of this it appears the historic access has been up-canyon from Live Oak Canyon.

Planning Sector 6: This canyon sector is one of the largest in the Southeast Area. Historically, this canyon appears to have been primarily accessed up-canyon from Live Oak. In more recent times it appears frequent access has also come down-canyon from Sunset Drive at Edgemont. Also, some access has been taken from Sunset Drive at approximately Vinton.

Planning Sector 7: (See Planning Sector 4, above)

Planning Sector 8: This canyon sector is smaller than Planning Sector 6, but appears to contain significant developable area. The historic access has been up-canyon from Live Oak with some access in from Sunset via several canyon heads. Recent developments in the area have left street stubs pointing down into the top of this canyon at these canyon heads. So, like 6, it seems the historical major access has come in from Live Oak with some lesser access from Sunset Drive.

Planning Sector 9: This sector consists of basically a series of rounded fingers emanating from a low peak location and spreading out towards Live Oak Canyon in a southerly direction. As such the primary historic access has been up-canyon and up-ridge to some extent from Live Oak. Because of the rounded nature of the internal ridges, some access has crisscrossed the Southeast Area. While the historic access to this sector has not been as focused as some of the others, it has been primarily in from Live Oak Canyon and primarily up-canyon.

Planning Sector 10: This sector is basically a relatively gentle sloping basin tipped towards Live Oak Canyon. Internally the canyon swings from a southerly line to a westerly line, narrows somewhat and then enters Live Oak. Given the gentle nature of the topography it is somewhat difficult to pinpoint an historic access focus. Nonetheless, it appears the primary access was up-canyon from Live Oak Canyon.

Policy 4.42r addresses access into each of the Planning Sectors in the Southeast Area.

Consistent with the discussion above, internal access within each Planning Sector should follow the natural contours as closely as safety considerations will allow. Access routes which require significant cuts and/or fills should be precluded. This will result in routings which are more curvilinear and undulating and "historic" in character, design and feel.

Policy 4.42s addresses internal access within each Planning Sector

Policy 4.42s is not intended to preclude appropriate mass grading solutions within the developable areas, rather it is intended to ensure the final product will continue to be perceived as natural and possessing an historic feel and flavor. Also, this is not intended to preclude the construction of connections necessary for safety or capacity. On the other hand, it does argue strongly against the idea of a roadway running perpendicular to the ridgelines (for example, or a roadway sliced up the canyon wall to reach the ridgeline).

6. Traffic

Traffic issues specific to the Southeast Area are addressed in the Circulation Element of this General Plan. That Element should be consulted for specific guidance on traffic and roadway issues not contained in this section.

7. Utilities/Public Improvements

Since the primary objective of the Southeast Area Plan is to preserve the perception of the historic and natural character of this area, it follows that public improvements and utilities in the area should not produce contrary results. This, in general, means these facilities should be installed in a manner either "invisible" (under ground), on "in character" with the historic character of the area (a relocated watercourse, for example.) Further, the aesthetics associated with the design of necessary "above ground" facilities should be rural and natural in flavor.

A highly visible element in this discussion will be the local roadways. Careful attention should be given to these roadways to ensure they have the design capacity determined appropriate and that they look and feel rural and natural.

A special note is appropriate here. One of the characteristics of Redlands over the years is that it has always been perceived as having higher quality than surrounding communities. A significant part of this statement has been made via the elegance of the streets within the town. As an example, streets in Redlands had curbs when

others didn't, and the city had wide avenues when others had narrow dirt roads. Carried over to the Southeast Area Plan, it seems these "rural/natural roads" should be of comfortable width and have a finished edge treatment which makes a quality impression.

Policy 4.42t requires that utilities and public facilities be designed to protect the character of the area.

8. Community Identity

The Southeast Area consists of a series of identifiable parts which together make up the whole. Each of these parts, though similar in many cases, has its own unique characteristics. This internal diversity characteristic is one of the overall perceived signature characteristics of the area. This diversity characteristic should be preserved as development of the area occurs.

Policy 4.42u addresses the preservation of signature characteristics within each Planning Sector.

9. Coordination with Other Community Plans

This issue was addressed in the creation of the Southeast Area Plan through input from other city departments, the counties of Riverside and San Bernardino, and the community (now the City) of Yucaipa. Consideration was also given for private plans in process for properties around the Southeast Area. This has been particularly true in reference to the proposed 6,250 acre mixed-land-use plan being developed for the property south across Live Oak Canyon. This plan (Oak Tree West) is proposing a major access point off of Live Oak Canyon Road and the development of approximately 12,000 dwelling units over the next 15 years.

The Southeast Area Plan - The following sections provide the details of the Southeast Area Plan. Policies applicable to the Southeast Area follow.

1. Overview

This planning effort for the Southeast Area focused on developing a compilation of logical and integrated general plan policy statements which provide guidance to specific planning efforts for each of the identified Planning Sectors.

The General Plan Map is intended to *conceptually* illustrate how policies could be implemented, not where specific features would be required, as in a Specific Plan. (See Exhibit 4.42.)

The following is a brief summary of how the basic General Plan Elements issues of Land Use, Circulation, Recreation and Open Space, Fire Prevention/Public Safety, Watercourses/Drainage, and Utilities, are addressed in the Southeast Area Plan.

2. Land Use

The following is a summary of land uses within the Southeast Area Plan:

Southeast Area Plan Land Use Summary

Open Space Areas	Area (Approximate)
Preserved natural open space	500 acres*
Developable Area	
Residential @ 0.1 0.2 DU per acre (1 DU per 10 acres 1 DU per 5 acres)	116 acres
Residential @ 0.4 DU per acre (1 DU per 2.5 acres)	554 acres
Residential @ 1 DU per acre	790 acres
Recreation Area	50 acres
Public Facilities**	44 acres
Parks and Structured Open Space	25 acres
Circulation (7.4% of developed areas)***	126 acres
<i>Developable subtotal</i>	<i>1,705 acres</i>
TOTAL AREA:	2,205 acres (approx.)

Notes:

All figures in the table above are approximate and subject to refinement based on detailed studies.

** These acreage figures are estimates, based on a gross analysis of topography within the Southeast Area, and do not represent a commitment by the City to provide these lands in any particular amount or location.*

*** Includes railroad and flood control right of way.*

**** In this table, Developed areas are defined as those which will not remain in open space use.*

The most significant component of this land use plan is its approach to the preservation of the historic character of the area. The plan identifies the major *perceived* characteristic features of the area as the signature characteristics. The plan approaches all development proposals and requirements from the point of view of preserving these *perceived* signature characteristics.

Policies 4.42y, 4.42z, 4.42aa, and 4.42bb address protection of the character of San Timoteo and Live Oak canyons, both within and outside the City of Redlands.

Because of this, approximately 500 acres are proposed to be preserved as natural open space. The other land uses proposed are generally traditional in nature and extent. Residential land use is proposed as exclusively low density of a rural character. Other land uses result from the need to include certain recreational/open space uses. This has all been done in the context of preserving the historic natural character of the area.

Preserved Natural Open Space: Because the plan proposes a large amount of open space it is appropriate to indicate, in general terms, how this preservation could be accomplished.

First, in terms of acquisition there are a variety of tools available to the City which could be used to accomplish ultimate acquisition of such lands. It is recommended that a specific study be undertaken to develop a definitive acquisition program. Potential acquisition methods include:

Outright purchase
Dedication in conjunction with development
Agricultural preservation
Density trading via PRD's
Gift, and
Condemnation

Second, in terms of preservation after control is obtained, preserved areas should be managed to limit their degradation and this in turn should enhance their quality. Certainly, the introduction of more people into the area suggests more usage and greater possible degradation. This does not have to be the case. A positive program of preservation should be developed and promoted by the community at large to preserve this native environment. It is this kind of community education and participation program which Redlands has been noted for over the years and it seems very appropriately applied here.

Residential Land Uses: The density figures within the planning areas are: 1 unit per acre for slopes 0 to 15%, 1 unit per 2.5 acres for slopes 15 to 30%, and 1 unit per 10 to 5 acres for slopes over 30%.

3. Circulation

Circulation issues associated with the Southeast Area are included in the Circulation Element of this General Plan.

4. Recreation and Open Space

A major feature of the Southeast Area Plan is the potential for recreational use. This is highlighted in five significant ways:

First, the large tracts of preserved open space are well suited for hiking and riding trail use. Traditionally, the area appears to have been traversed by these trails; the Plan proposes to preserve these characteristic use along with the topography and vegetation. These trails tend to traverse the ridgelines and canyon bottoms and it is proposed this be continued where no development is to take place. In those areas where development is proposed, the Southeast Area Plan calls for provision of the continuation of these trails perhaps totally rerouted, but nonetheless continued. The important concept in the development areas to remember is that the trails' *characteristic* is to be continued, not necessarily any given trail. By the same token, the Southeast Area Plan encourages the expansion of the trail system as appropriate.

Second, the equestrian facilities at the bottom of Alessandro Road appear to be a longtime, if not historic, perception to many people and a characteristic of the area. As such, its preservation is consistent with the concept of the Plan. As long as the general area remains rural in character, it would seem an equestrian facility of some size could remain viable in this location. Independently of this study, this facility has been identified by the Open Space Committee as a community asset worthy of preservation. The Southeast Area Plan shows the continuation of this facility as a land use and incorporates it into the proposed trail system.

Third, there are two significant stands of trees in the Southeast Area: one in Sector 1, just below Sunset Drive, and the other in Sector 10 at the edge of the Southeast Area. The Southeast Area Plan calls for each of these assets to be the foundation for the development of a maintained park, including parking, open spaces, picnic facilities, and so on.

Fourth, the two major abutting watercourses, San Timoteo and Live Oak creeks, are proposed to be the focus of parkway development to create a continuous scenic greenbelt parkway system all along the southwesterly edge of the city.

Finally, the plan contemplates development of traditional neighborhood type parks as appropriate within the developed areas.

5. Fire Prevention/Public Safety

Fire Prevention: The Southeast Area Plan is predicated on the concept of preserving large tracts of chaparral and sage vegetation. Given the known fire hazard related to placing development adjacent to these highly flammable areas, the plan proposes that each developed area be encircled and protected by a Perimeter Fuel Modification/Access Area (PERFUMAA) which includes the following required and desired public facilities. The PERFUMAA is illustrated in GP Figure 4.4.

The required facilities included in the PERFUMAA are:

1. A perimeter all weather roadway.
2. A fuel modification area with a minimum cross section of 100 feet.
3. A water delivery system capable of delivering "fire flows" and including appropriately spaced hydrants.

The desired facilities which could be included in the PERFUMAA are:

1. A reconstruction of the natural watercourse found within the canyon areas (discussed more fully under Watercourses, below).
2. Equestrian trails.
3. A ribbon-like parkway between the roadway and equestrian trail.
4. Whatever additional landscaping and walking trails are desired and appropriate.

In order to minimize fire danger within the developed areas, the Southeast Area Plan proposes that all natural vegetation within any developed area should be removed and/or modified (installation of irrigation, for example) prior to initial occupancy of that area.

Policies 4.42w and 4.42x address fire protection issues in the Southeast Area.

Other Public Safety Uses: The Southeast Area Plan contemplates the need for some public safety facilities, but does not provide detailed locations for these facilities. The types, numbers, and locations of these uses are a direct function of the land use and density finally approved, and will be planned and sited as development warrants.

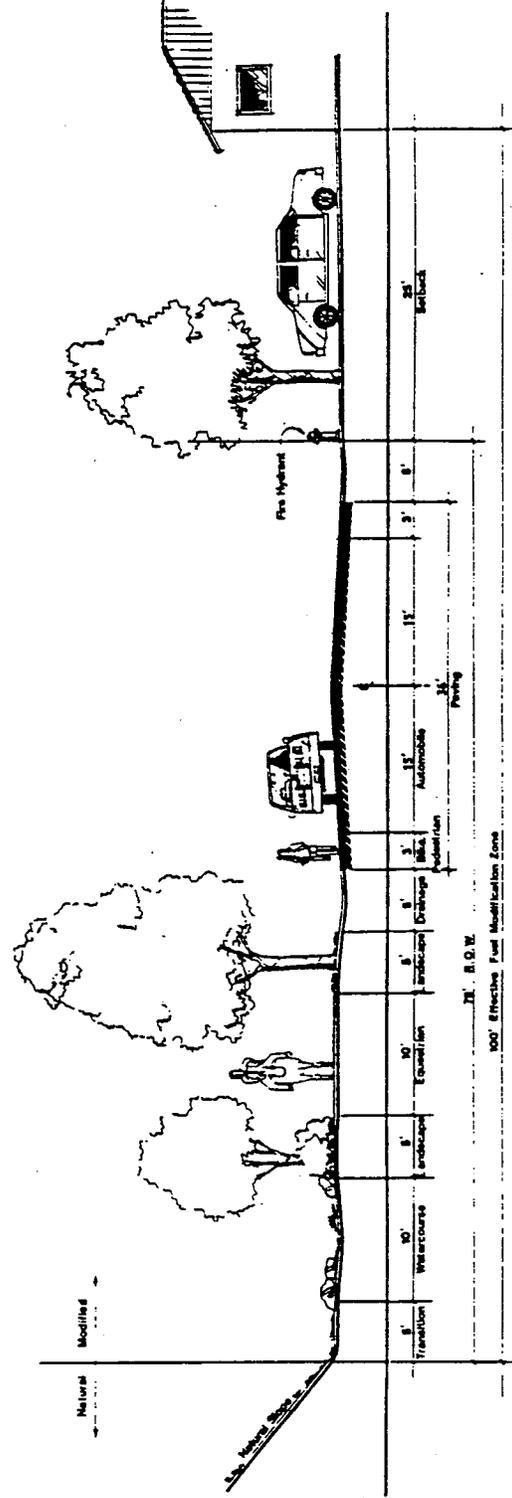
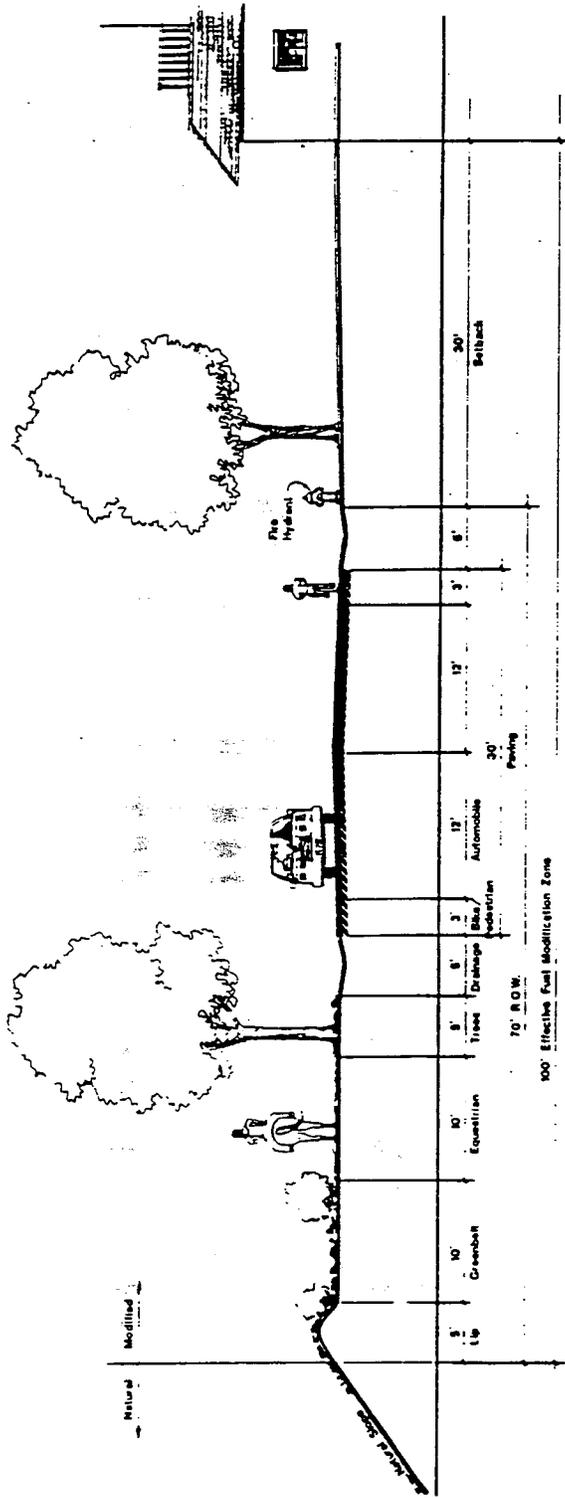
6. Watercourses/Drainage

As noted earlier in this section, two types of canyons narrow and wide are found within the Southeast Area. These two divisions also facilitate this discussion and are used here.

Narrow canyons: Because no significant development will extend into these narrow canyons, the watercourses should be left intact. The exception to this will occur where drainage structures are required to facilitate approved development, upstream or downstream.

Wide canyons: Once the canyon widens to the point of providing sufficient dimension to accommodate development or when the narrow canyon empties into a larger canyon, the watercourse should be modified and restructured.

Specifically, the Southeast Area Plan proposes to route the watercourse around the edge of the canyon rather than through the center, whether or not that is the current alignment of the watercourse. This is not as radical as it may first sound and accomplishes several positive objectives at once.



GP Figure 4.4
Roadway Cross Sections

First, it was noted in the field that most every one of the wider canyons have been recontoured by man in the past, apparently for agricultural purposes. Thus, the "natural watercourses" are in reality reconstructed already. Further, the wider canyons are more or less flat on the bottom so the watercourse therein could relatively easily go one direction as another. It therefore appears the proposed reconstruction would not be unnatural nor would it be particularly difficult.

Second, these watercourses are significant characteristic features within the canyons. Even though the watercourses in several cases are not highly visible, they are perceived to be there; they are a perceived signature characteristic of the canyon bottom environment. By routing them to the perimeter of the canyon bottom and keeping them on the surface and visible they will remain a characteristic of the canyon rather than disappearing into a pipe.

Third, in order to enhance the whole canyon bottom perception and enhance the watercourse characteristic specifically, the Southeast Area Plan proposes that this perimeter watercourse become the backbone of a perimeter parkway/open space as detailed in the PERFUMAA discussion, above. This characteristic watercourse feature this asset should be enhanced by landscaping consistent with the rural character of the area. This landscape area could and should in time contain appropriate trails and paths. The landscaping should include the planting of significant trees which will grow to have strong vertical character. This will not only enhance the watercourse perception it will also give definition and character to the "developable area" therein. An excellent tree choice would appear to be Live Oak since it is native, is drought resistant, and is fire resistant. Other choices might be sycamore, willow, and acacia and should vary from Planning Sector to Planning Sector to enhance neighborhood identify.

Fourth, the Southeast Area Plan proposes that the canyon bottom areas be recontoured to allow for surface runoff to these realigned perimeter watercourses to handle the local drainage needs.

In summary, the drainage proposal is for a natural-like, gravity flow, surface drainage system, with a perimeter collector system in each canyon which in turn flows by gravity to the mouth of the canyon and out to either San Timoteo or Live Oak creeks.

7. Utilities

The following utilities issues are addressed in the Southeast Area Plan:

- Sewer
- Water
- Power
- Other Utilities

These issues are addressed in the following sections:

Sewer: Because City sewer service is not projected to serve this area in the near future, septic systems will be allowed according to City Municipal Code §13.44.080. That code requires installation of dry sewer systems in addition to septic systems to facilitate eventual hook-up to a city sewer system. Each development proposal shall address the optimum means of managing wastewater by providing sufficient information to the City and Water Quality Control Board to assess the viability of proposed solutions.

Water: The Southeast Area Plan proposes that as a condition precedent to occupancy of any given development area there be in existence and operational a water delivery system with sufficient fire flow storage and capacity. The land use pattern proposed related to the topography creates the opportunity to build a gravity flow system, since the majority of the development is proposed "down watershed." It would seem that this system should be master planned to reduce its overall cost and to address issues of phasing. There are two water supply tanks in the area, both located atop signature ridges in very visible locations. This ridgeline siting is economical, but very disruptive to the "historic perception" of the ridgeline in question. Future planning consistent with the

preservation concepts contained in this study should preclude such disruptive sitings in the future.

Power: The Southeast Area Plan does not address the location of power lines specifically. However, adherence to the Plan's design policies will direct power lines away from signature ridgelines. The Southeast Area Plan does not call for underground utilities necessarily, even though same may be very appropriate in certain situations. This issue should be reviewed as specific plans are developed,

Other Utilities: As specific plans of development for the area are developed, additional utility type issues will emerge. In all cases the plan concepts should be applied to ensure the ultimate result is the preservation of the identified signature characteristics impacted.

Guiding Policies: Southeast Area - The following are the Guiding Policies for the Southeast Area. Additional policies specific to this area are contained in the Circulation Element of this General Plan.

- 4.42a A Specific Plan shall be developed for each of the designated Planning Sectors consistent with the Policies contained in this section of the General Plan as the means of implementing this General Plan. A specific plan shall not be a prerequisite for the approval of any residential development project consisting of four (4) dwelling units or less within Planning Sector 2.
- 4.42b The perception of the signature features of the area shall be preserved, maintained, and, where possible, enhanced.
- 4.42c The canyon walls immediately below the signature ridges and the vegetation thereon shall be preserved and enhanced where appropriate. Canyon walls associated with the signature ridges wherein a predominance of the slopes are in excess of 50% shall be preserved intact.
- 4.42d Both signature ridges and major ridges within canyons shall be preserved and enhanced. Significant modification of these ridges shall occur only where offsetting need is demonstrated. Development on ridgelines is allowed as long as it stays within the parameters of this policy. Offsetting need is defined as a demonstration that the grade of a specific parcel requires modification of an existing ridge line to produce sufficient space to site a building pad and that the result will not eliminate the continuity of the ridge line through grading or construction of structures.
- 4.42e Ridges not identified as major ridges within a canyon may be modified to facilitate development within the canyon so long as their collective perception as canyon wall buttresses remains intact.
- 4.42f The narrow side canyon bottoms within the lower portions of the major canyons and particularly those around the edges of the major bottoms may be modified to accommodate proposed development consistent with the development criteria in this section of the Land Use Element.
- 4.42g The steep ridge and canyon system between Planning Sectors 1 & 2 shall be maintained intact and enhanced as appropriate.
- 4.42h The City of Redlands shall actively promote the development of the Live Oak Canyon area in a manner consistent with this section of the Land Use Element.
- 4.42i Live Oak Canyon shall be the subject of a specific study to establish a unified improvement plan to ensure that it will function as a scenic highway and provide a suitable "front door" for the adjacent canyon communities.
- 4.42j The City of Redlands shall work to ensure that if San Timoteo Canyon Road is realigned and upgraded it shall:

- 1) Maintain and expand its alignment adjacent to the existing rail line; and
- 2) Be routed to provide ready access to the I-10 Freeway

4.42k The San Timoteo Creek watercourse shall be preserved and enhanced as the backbone of a linear parkway/activity corridor extending throughout the canyon.

4.42l Special attention shall be given to the sliver of land located between the San Timoteo Canyon watercourse and the rail line to ensure the lineal parkway/activity/corridor character of this area is maintained.

4.42m Density within the Southeast Area Plan shall be as follows:

<u>Slope</u>	<u>Acres/Dwelling Unit</u>
0 to 15 %	1.0 acre
> 15 to 30%	2.5 acre
>30%	10.0 to 5.0 acres

Exhibit "A" , Statistical Summary, (shown below and on the following pages) presents the results of the application of these densities. These results are expressed in terms of the most commonly considered impacts resultant therefrom, acres involved, number of dwelling units, population, numbers of school age children, automobile trips per day and peak hour automobile trips. Presented are estimates for each planning sector; specific slope analysis and densities shall be determined as part of the Specific Plan for each sector.

**EXHIBIT A: SOUTHEAST AREA PLAN
STATISTICAL SUMMARY**

Planning Sector	Slope	Density	Acres	D.U.'s	Pop. @ 3.00	K-6	Junior High	Senior High	Total	ADT	Peak Hour Trips
1	0 to 15%	1.0	118	118	351	40	20	20	80	1180	118
	> 15 to 30%	2.5	35	14	42	4	2	2	9	140	14
OS		0	62	0	0						
RC	>30%	0	81	0	0						
	Min. [2]	10.0	192	19	57	6	3	3	12	190	20
	Max. [3]	5.0	192	39	141	12	6	6	24	390	39
	s.t. (Min.)		488	150	450	50	25	25	100	1500	150
2	0 to 15%	1.0	74	74	222	24	12	12	48	740	74
	> 15 to 30%	2.5	22	8	24	2	1	1	5	80	8
RC	>30%	0	118	0	0						
	Min. [2]	10.0	93	9	27	4	2	2	8	90	9
	Max. [3]	5.0	93	19	57	6	3	3	12	190	19
	s.t.		307	90	273	30	15	15	60	900	90
3	0 to 15%	1.0	23	23	69	6	3	3	15	230	23

Planning Sector	Slope	Density	Acres	D.U.'s	Pop. @ 3.00	K-6	Junior High	Senior High	Total	ADT	Peak Hour Trips
	> 15 to 30%	2.5	8	3	9	2	1	1	3	30	3
OS		0	5	0	0						
RC		0	16	0	0						
	Min. [2]	10.0	43	4	12	2	1	1	3	40	4
	Max. [3]	5.0	43	8	24	2	1	1	5	80	8
	s.t.		95	29	87	10	5	5	19	290	29
4	0 to 15%	1.0	73	73	219	24	12	12	48	730	73
	> 15 to 30%	2.5	1	1	1	0	0	0	1	10	1
OS		0	7	0	0	0	0	0	0	0	0
RC	> 30%	0	199	0	0	0	0	0	0	0	0
	Min. [2]	10.0	3	1	3	0	0	0	1	10	1
	s.t.		283	74	223	24	12	12	50	740	74
5	0 to 15%	1.0	20	20	60	6	3	3	13	200	20
	> 15 to 30%	2.5	2	1	3	0	0	0	1	10	1
RC	over 30%	0	79	0	0	0	0	0	0	0	0
	Min. [2]	10.0	19	1	3	0	0	0	1	10	1
	Max. [3]	5.0	19	3	9	0	0	0	2	30	3
	s.t.		120	22	66	6	3	3	14	220	22
6	0 to 15%	1.0	55	55	165	18	9	9	36	550	55
	16 to 30 %	2.5	4	2	6	0	0	0	2	20	2
RC	> 30%	0	163	0	0	0	0	0	0	0	0
	Min. [2]	10.0	73	7	21	2	1	1	4	70	7
	Max. [3]	5.0	73	14	42	4	2	2	9	140	14
	s.t.		295	64	192	20	10	10	42	640	64
7	0 to 15 %	1.0	18	18	54	6	3	3	12	180	18
	> 15 to 30%	2.5	3	1	3	0	0	0	1	10	1
RC	> 30%	0	88	0	0	0	0	0	0	0	0
	Min. [2]	10.0	6	1	3	0	0	0	1	10	1
	Max. [3]	5.0	6	1	3	0	0	0	1	10	1
	s.t.		115	20	60	6	3	3	13	200	20
8	0 to 15%	1.0	42	42	126	12	6	6	28	420	42

Planning Sector	Slope	Density	Acres	D.U.'s	Pop. @ 3.00	K-6	Junior High	Senior High	Total	ADT	Peak Hour Trips
	> 15 to 30%	2.5	36	14	42	4	2	2	9	140	14
		0	1	0	0	0	0	0	0	0	0
RC	>30%	0	85	0	0	0	0	0	0	0	0
	Min. [2]	10.0	57	5	15	0	0	0	3	50	5
	Max. [3]	5.0	57	11	33	4	2	2	8	110	11
	s.t.		221	61	183	20	10	10	40	610	61
9	0 to 15%	1.0	56	56	195	18	9	9	37	560	56
	> 15 to 30%	2.5	7	2	10	0	0	0	1	20	2
		0	2	0	0	0	0	0	0	0	0
RC	>30%	0	85	0	0	0	0	0	0	0	0
	Min. [2]	10.0	6	1	3	0	0	0	1	10	1
	Max. [3]	5.0	6	1	3	0	0	0	1	10	1
	s.t.		156	59	177	20	10	10	40	590	59
10	0 to 15%	1.0	43	43	129	14	7	7	28	430	43
	> 15 to 30%	2.5	2	1	3	0	0	0	1	10	1
OS		0	7	0	0	0	0	0	0	0	0
RC	>30%	0	54	0	0	0	0	0	0	0	0
	Min.[2]	10.0	3	0	0	0	0	0	0	0	0
	Max. [3]	5.0	3	0	0	0	0	0	0	1	0
	s.t.		109	44	132	14	7	7	30	440	44
TOTAL:			2189	613	1843	208	100	100	408	6130	613

Footnotes:

- [1]. Density is expressed as Acres Required / Dwelling Unit.
- [2]. Minimum is the Density permitted without a special showing.
- [3]. Maximum is the maximum Density permitted with a special showing.
- D.U. = Dwelling Unit
- s.t. = Subtotal

Definitions:

Population/household is assumed to be 3.00 persons per household.
 School system is assumed to be 6-3-3.
 Average Daily Trips per household (ADT) is assumed to be 10.0.
 Peak Hour Trips are assumed to be 10% of ADT.
 OS - Open Space = Parks/Golf Courses/Agriculture/Flood Control/Construction
 Aggregates/Conservation/Habitat Preservation
 RC - Resource Conservation

- 4.42n** Development within an area having an average slope of less than 30% or with a proposed density of 1 unit per 10 acres or greater, which abuts an area of significant natural vegetation shall be separated from same by a fuel modification zone which contains an all weather access roadway and a water supply system having fire flow capacity.
- 4.42o** Flood control and drainage facilities within the Southeast Area shall be designed in such a manner as to preserve the perception of natural watercourses flowing down the on-site canyons and into Live Oak and San Timoteo canyons.
- 4.42p** The City shall determine whether the City's historic agricultural uses are to be preserved and, if so, shall designate specific sites for preservation.
- 4.42q** The perceived character of the vegetation and wildlife within the Southeast Area shall be preserved and enhanced as appropriate.
- 4.42r** Access into the Planning Sectors shall be provided in accordance with the following requirements:
- Primary access into each of the Planning Sectors shall follow the primary historic route pattern for that sector.
- For Planning Sectors 1, 3, 4, 5, 6, 7, 8, and 9 this shall be up-canyon from Alessandro, San Timoteo Canyon and Live Oak Canyon, as applicable. For Planning Sector 2 this shall be down-ridge from Sunset Drive.
- If secondary access is required for safety reasons, such secondary access shall be limited to other identifiable historic routes accessing each individual sector and shall not be inconsistent with the perceived historic pattern.
- 4.42s** Internal access within the area, including roads, trails and paths, shall be routed so as to preserve and enhance the perception of the historic access patterns by generally conforming to the natural contours.
- 4.42t** All utilities and public facilities in the Southeast Area shall be designed and constructed to preserve and enhance the perceived natural and historic character of this area.
- 4.42u** Each Planning Sector within the Southeast Area has a series of signature characteristics, the perception of which shall be preserved. The planning for each Planning Sector shall include special consideration of the individual character of that Sector and shall include criteria to preserve and enhance the characteristics identified. Each Planning Sector shall be planned so as to result in an identifiable neighborhood within the community at large.
- 4.42v** A Specific Plan Study of Planning Sectors 1 and 2 shall be undertaken to establish the location for and resolution of:
- The widening and alignment of San Timoteo Canyon Road.
The alignment and widening or relocation of the Alessandro bridge.
- 4.42w** The Perimeter Fuel Modification/Access Area (PERFUMAA) concept shall be adopted and implemented within each of the Planning Sectors identified in the Southeast Area Plan. The Fire Chief may grant modifications from this concept if effective alternatives are provided.

- 4.42x** No development within the Southeast Area Plan shall be permitted to be occupied until such time as all the fire safety measures required by the City are in place and operational.
- 4.42y** The historic character of Live Oak Canyon as a narrow fertile valley astride a gorged watercourse lined with significant trees should be preserved and enhanced. This character is important to the area and should be preserved by not only ensuring it does not disappear but by enhancing it so it can continue to be readily perceived.
- 4.42z** The perception of San Timoteo Canyon as a transportation corridor within a fertile valley bordered by a major water course should be preserved and enhanced. These characteristics are important to the area and should be preserved by not only ensuring they do not disappear, but by enhancing them to they can be readily perceived among the development which occurs in the canyon.
- 4.42aa** The City of Redlands shall take a strong position to advocate that the future development of Live Oak Canyon, both within San Bernardino County and Riverside County, be consistent with the historic character and role of this canyon.
- 4.42bb** The City of Redlands shall take a strong position to advocate that the future development of San Timoteo Canyon, both within San Bernardino County and Riverside County, be consistent with the historic character and role of this canyon.

4.50 Office Land Use

The Office Land Use category includes business and professional offices. This land use category is intended to encourage the concentration and high visibility of office uses and professional activities for the convenience of the general public and to minimize conflicts and adverse impacts on other land uses.

Offices employ an ever-increasing share of the workforce and have two to three times as many workers per acre as industrial or retail establishments. East Valley Corridor business parks will have strong appeal for region-serving offices. Downtown Redlands needs to capture a large share of local-serving offices -- lawyers, accountants, and other business and personal service providers -- and has capacity to add 400,000 square feet or more of office space. To reduce travel and support Downtown retailing, the General Plan Diagram allocates some additional space for expansion of local-serving offices outside Downtown.

Generally office land uses are located adjacent to and extending outward from the downtown business district. Cajon Street between Olive Avenue and Cypress Avenue and Brookside Avenue between Eureka and Center, has been retained as office to retain the existing historic homes through adaptive reuse of these structures.

Office land uses are located primarily along arterial and collector streets to avoid intrusion into residential areas. See Table 4.2 for FAR.

Guiding Policies: Offices

- 4.50a** Encourage development of office space in Downtown Redlands and in the East Valley Corridor.
- 4.50b** Minimize expansion of office space adjoining existing residential neighborhoods.

Implementing Policy: Offices

- 4.50c** Set the maximum ratio of floor area to site area for offices outside Downtown and the East Valley Corridor at .4.

The Administrative and Professional Office District in the Zoning Ordinance does not limit height or floor area ratio.

- 4.50d** Limit office occupancy in the vicinity of Redlands Community Hospital to health care related uses.

The purpose is to minimize impacts on the adjoining neighborhood.

4.51 Neighborhood Shopping

The General Plan recognizes the convenience of carefully controlled outlying shopping districts to provide the day to day goods and services required by people who live within a few minutes driving time from these centers. Standards must be very high since these areas are usually a part of a residential environment.

Neighborhood shopping districts are identified with an "N" on the General Plan diagram. Where a specific site location is not identified the General Plan diagram has a red circle with an "N".

Guiding Policies: Neighborhood Shopping

- 4.51a** Maintain existing neighborhood shopping centers. Do not establish new centers in areas already served.

Duplicate existing facilities would be likely to cause slow decline for the less competitive center.

- 4.51b** Preserve and encourage neighborhood stores that enable shoppers to walk or bike for everyday needs.

- 4.51c** Design neighborhood shopping centers in a manner that will provide protection to adjacent residential areas.

- 4.51d** Locate neighborhood shopping centers near the center of their respective trade area and at the intersection of major traffic arteries.

Implementing Policies: Neighborhood Shopping

- 4.51e** Locate neighborhood convenience centers where they will not result in substantial increases in traffic on local streets serving the residential areas or create a nuisance due to hours of operation.

- 4.51f** Neighborhood shopping centers shall remain relatively small and not expand into a major shopping center and thus disrupt the residential character of the neighborhood.

- 4.51g** Neighborhood shopping centers shall be designed in a manner that will provide protection to adjacent residential areas.

- 4.51h** Neighborhood shopping centers shall conform to special regulations for signage limiting their size, location, and general character so that they do not disrupt the residential character of the neighborhood.

4.60 General Commercial

An important consideration for new local businesses, expanding local firms, as well as industries moving into the area is the supply of land available.

Between 1994 and 2010 Redlands will change from a predominantly residential community that sends a majority of its employed residents to jobs elsewhere to an employment center with a daily influx of workers, mainly to the East Valley Corridor (EVC). With over 90,000 jobs at buildout (projected in 2028) and a site likely to attract San Bernardino County's largest regional shopping center east of Ontario, the East Valley Corridor Specific Plan will bring change on a scale Redlands has not experienced. EVC will reduce potential demand for retail, office, and industrial space elsewhere in the Planning Area, thereby neutralizing pressures that might otherwise change the appearance of the older city.

Future growth of commercial, retail and industrial developments will most likely occur in two areas - new development in presently vacant ground in the EVC area and as redevelopment in older, under utilized areas. This category includes most of downtown, the commercial strips, and the East Valley Corridor regional shopping center site. Uses include retail stores, hotels, motels, automobile sales and service, offices, and entertainment and cultural facilities. See Table 4.2 for FAR.

4.61 Downtown

The Downtown Redlands Specific Plan, (As amended) makes specific proposals for the preservation and development of the downtown area between Redlands Boulevard and the I-10 Freeway. It calls for two- and three-story commercial, office and residential buildings in the Town Center District and service and industrial buildings in the Service Commercial District. The downtown area, south of Redlands Boulevard, is not within the boundaries of the Downtown Redlands Specific Plan. Land use is regulated by the City's commercial zoning districts, in particular the C-3 and C-4 Districts with some limited areas zoned A-P District. The C-3 and C-4 Districts provide for commercial shopping and entertainment needs in an environment that is conducive to an economically sound central business district. Both zoning districts also allow for a mixed-use development containing commercial and residential uses. These zoning districts do not have a maximum building height, instead a floor area ratio is utilized to regulate the relationship of a building's floor area and the lot area.

In the areas of downtown that are designated Commercial, the development of a combined attraction of shopping, entertainment and office uses and high-density urban housing is encouraged. A carefully planned pedestrian-friendly environment containing walkways, enhanced streetscape improvements and public spaces will create an attractive urban environment where Redlands residents and visitors can gather to shop, work, and socialize. Development Downtown should recognize and be compatible with the historic resources and distinct character of Downtown which are valued by Redlands residents.

Guiding Policies: Downtown

The following policies are descriptive of and consistent with the Downtown Redlands Specific Plan:

- 4.61a** Develop the Specific Plan Area (between Redlands Boulevard and I-10 Freeway) as an extension of Downtown Redlands, providing a high-quality pedestrian-oriented development character consistent with the rest of the Town Center.
- 4.61b** Provide opportunities for the expansion and development of small businesses that provide local services.
- 4.61c** Provide public improvements for traffic circulation, flood control, utility services and aesthetic amenities that will attract new private investment and economic development.
- 4.61d** Preserve historic buildings and sites.
- 4.61e** Encourage mixed-use projects which integrate, retail, restaurant and/or office uses along with urban housing permitted at a density up to the High-Density Residential standard.

4.62 East Valley Corridor

The East Valley Corridor is the best, perhaps only, location capable of attracting the office, high-tech and distribution jobs the eastern portion of the San Bernardino Valley needs. Design standards and infrastructure planning and financing incorporated in the Specific Plan ensure a high-quality business park environment. The EVC also includes the most suitable site for a new regional shopping center in the East Valley during the 20-year planning period (site bounded by Alabama Street, San Bernardino Avenue, I-30 Freeway, and Lugonia Avenue).

The East Valley Corridor (EVC) Specific Plan (adopted by the City of Redlands, 1989) is consistent with the General Plan as modified by policies in this section and Section 5, Circulation. The 4,000 acres of the Planning Area included in the Specific Plan are to be developed with commercial and industrial establishments totaling 37 million square feet of floor area and providing up to 90,000 jobs. The Plan will transform Redlands from a labor exporting to a labor importing community.

An issue is the ability to create a transportation system that will support this concentration of activity which the economists on the EVC planning team, viewing the project from the robust economy of the late 1980s, projected will require 40 years to reach full development.

The East Valley Corridor Specific Plan (EVCSP) is consistent with the land use map and land use element of the General Plan; however, the standards of development established by the general provisions, community design, overlay districts, and community facility sections of the EVCSP are covered in the Specific Plan and are not expressly part of the General Plan.

Guiding Policies: East Valley Corridor

- 4.62a** Develop the *East Valley Corridor Specific Plan* so as to promote and facilitate high-quality commercial and industrial development within the Corridor area.

This is a goal stated in the Specific Plan document (EV2.0205).

- 4.62b** Provide sufficient roadway and intersection capacities to maintain a minimum Level of Service (LOS) C except as provided in policy 5.20b. In areas where the current level of service is below the LOS C standard, provide sufficient roadway and intersection capacities to maintain, at a minimum, the LOS existing as of the time an application for development is filed and to assure that the level of service is not degraded to a reduced LOS except as provided in Section 5.20b.

LOS C is an objective of the Specific Plan (EV2.0220), but it was not attained, according to the EVC EIR. Traffic studies for the General Plan demonstrate that even LOS D would not be attained during peak hours within and adjoining the Specific Plan area at full development unless travel habits, intensity of development, or the circulation network changes. Consequently, Transportation Demand Management (TDM) Measures, revisions to the mix of uses, modification of the intensity of development, and/or additional circulation improvements will be necessary before buildout occurs.

- 4.62c** Implement a Specific Plan that is responsive to physical and environmental constraints and opportunities.
- 4.62d** The Specific Plan should provide for extension of public services in a logical and functional manner to minimize impacts on service purveyors while maximizing areas that can accommodate development in a timely manner.
- 4.62e** Design a comprehensive, functional and efficient circulation system of sufficient capacity to

accommodate projected traffic demands at all phases of development, which is consistent with regional master transportation plans.

- 4.62f Adopt energy-efficient transportation strategies to implement state and county goals for reduced energy consumption and improved air quality.
- 4.62g Promote high quality development in the East Valley Corridor by protecting and enhancing existing amenities in the area, creating an identifiable community character, and adopting development standards and guidelines to ensure aesthetically pleasing design and maximum land use compatibility.
- 4.62h Create parks and open space areas which will meet the community's recreation needs in a meaningful way, and create areas which will enhance and add value to the community as a whole.

Implementing Policies: East Valley Corridor

- 4.62i Process EVC development proposals in accord with the on-site use provisions and site design standards and guidelines in the Specific Plan except where development at less intensity may be required to comply with Policies 4.62j and 5.20f.
- 4.62j Monitor traffic Level of Service at key intersections in and near the EVC as specified in Policy 5.20f and implement mitigation measures if required by the policy.
- 4.62k Consider modification of the mix of land uses to include providing for PUD's and additional medium density residential land uses in the EVC.

See policy 4.40l.
- 4.62l Maximize generation of employment opportunities in a region which has a significant imbalance of housing versus employment opportunities.
- 4.62m Facilitate location in the project area of a wide range of commercial uses to serve the region, local industry, and residential neighborhoods.
- 4.62n Support a limited amount of residential land use within the planning area.
- 4.62o Preserve existing viable agricultural activities in the East Valley Corridor as long as feasible while the area transitions to more intensive uses.
- 4.62p Identify natural hazards within the planning area and adopt development standards to mitigate these hazards.
- 4.62q Develop a comprehensive storm drain system adequately sized and designed to accommodate storm flows from all present and future development within the Plan area.
- 4.62r Identify natural resources within the planning area and adopt strategies to protect and preserve these resources.
- 4.62s Complement the land use planning for the East Valley Corridor with comprehensive plans and programs for utilities and public facilities.
- 4.62t Develop financing techniques to provide for extension of infrastructure facilities in the project area.

- 4.62u Develop opportunities for community oriented services within the Plan area.
- 4.62v Provide safe and convenient access and circulation to all development within the East Valley Corridor.
- 4.62w Design a system of major arterials to accommodate traffic volume associated with projected land uses and densities throughout the Plan area.
- 4.62x Protect the designed capacity of all arterials in the Plan area.
- 4.62y Design a circulation system consistent with regional transportation planning for the East Valley area.
- 4.62z Designate land uses so as to reduce the number and length of vehicle trips in the East Valley Corridor.
- 4.62aa Provide opportunities for alternative travel modes to supplement the private automobile.
- 4.62bb Establish development standards to implement Specific Plan goals and policies.
- 4.62cc Establish design themes to unify the Corridor area and provide a recognizable community character within the area.
- 4.62dd Create a visually aesthetic appearance for the East Valley Corridor from the freeways as well as from the planning area.
- 4.62ee Encourage effective use of landscaping within the East Valley Corridor.
- 4.62ff Ensure compatibility between adjacent land use types within the Corridor area.
- 4.62gg Enhance the beauty of the East Valley Corridor and the overall quality of life for users and residents of the area.
- 4.62hh Plan for the development of additional recreational facilities within the Plan area.

4.63 Commercial Strips

Commercial strip development is characterized by small, single lot/single use developments in a more or less continuous alignment along a roadway frontage.

A remarkably small share of Redlands' arterial frontage is in commercial use. Given the abundance of retail and office sites provided by the East Valley Corridor (EVC) Specific Plan, there is no need to extend existing commercial strips. To do so would make the City less attractive; key arterials would become more congested, and existing and planned business districts would be weakened.

There are four commercial strips in the Planning Area:

Redlands Boulevard west of Texas Street. This is the City's only strip comparable to those that dominate the driver's view in so much of urban California. No other use could be expected along the former transcontinental highway. Many of the City's strongest sales tax generators, including auto dealers, Wal-Mart and K Mart, are located here. Trees and greenery are needed and there is room for planting in medians and potentially in former railroad right-of-way.

Colton Avenue west of Orange Street. Between Orange and Texas Street, the *Downtown Master Action Plan* calls for changes in development standards to prevent further commercial strip development and make new

development compatible with older homes. At Alabama Street is Tri-City Center, Redlands' largest shopping center.

Orange Street between Colton Avenue and Brockton Street. The small lots fronting Orange Street have attracted scattered commercial use. The street is characterized by a combination of mixed uses, older structures, and street improvements that sporadically change from 2 to 4 lane widths. This strip area does provide services to residents in the area.

Mentone Boulevard between Wabash Avenue and Crafton Avenue. This strip serves the same function as Redlands Boulevard and has plenty of room for infill as its market area grows.

Guiding Policy: Commercial Strips

4.63a Improve the appearance of commercial strips.

4.63b Improve the accessibility, traffic flow, and parking availability within commercial strips.

Implementing Policies: Commercial Strips

4.63c Limit the extent of office or retail use along commercial strips to the length of frontage already identified as Commercial and/or Office.

4.63d Limit the number of access points on the major roadways from private property and encourage joint access points from adjoining commercial uses.

4.63e Rely on strong landscape treatments, setbacks, sign controls, and where feasible underground utilities and install street improvements to prevent visual chaos where businesses are competing for attention.

4.63f Where feasible, preserve housing on arterial streets.

Demolition or conversion removes affordable housing, exacerbates traffic friction, and often eliminates a prominent architectural resource.

4.64 Remote Commercial Recreation Facilities

It is the City's intent to recognize legitimate remote commercial recreational facilities. Examples would include commercial ventures such as riding stables, recreational vehicle parks, campgrounds, health resorts and similar facilities which operate within a rural setting. Areas likely to accommodate such uses include Reche Canyon, San Timoteo Canyon, and the outlying portions of the Crafton-Mentone area.

Guiding Policy: Remote Commercial Recreation Facilities

4.64a Consider outlying existing and proposed commercial recreation enterprises operating in accord with permits issued by San Bernardino County or the City of Redlands to be consistent with the General Plan.

Implementing Policy: Remote Commercial Recreational Facilities

4.64b Prepare zoning ordinance text changes to allow for remote commercial recreational facilities.

4.70 Commercial/Industrial Areas

The Commercial/Industrial Land Use category provides for areas suitable for a mixture of commercial and light industrial uses including manufacturing. Uses permitted in this category range from shopping centers to business parks to soap and chemical fertilizer manufacturing. The 1972 General Plan classification was "urban services"; the EVC Specific Plan uses "Special Development" or "Commercial Industrial." The intent is to minimize use regulation where there is no compelling reason to segregate uses as long as development and performance standards are adequate. Development standards vary according to location. See Table 4.2 for FAR.

Guiding Policy: Commercial/Industrial Areas

4.70a Provide commercial/industrial sites appropriate for the wide range of uses encompassed by the category.

Implementing Policies: Commercial/Industrial Areas

4.70b In the East Valley Corridor north of I-10 require Planned Development projects consistent with the Special Development District of the EVC Specific Plan.

Although most standards will be set by the Planned Development approval, EVC standards require a minimum of 15 to 20 percent landscaped area and other design standards characteristic of business parks.

4.70c In the East Valley Corridor south of I-10 apply EVC Commercial Industrial District regulations.

EVC architectural and landscape standards apply and minimum lot area is 20,000 square feet.

4.70d Maintain a range of standards for Commercial/Industrial development outside the EVC to provide for economically viable commercial/industrial opportunities.

Ten-foot front yards, 5,000 square-foot lots, and limited landscaping within parking areas provide a satisfactory urban industrial environment while minimizing start-up costs for new businesses and allowing more businesses to own their facilities.

4.80 Industrial Areas

This category encompasses all manufacturing and distribution industries operating in the Planning Area except aggregate mining and processing and concrete batch plants which are heavy industries located in a portion of the Santa Ana Wash designed for conservation of construction aggregates. See Table 4.2 for FAR.

Most new industries locating in the Planning Area will be in the East Valley Corridor, however three other important industrial areas are already in existence which contain nearly all of Redlands' existing manufacturing enterprises. These are generally located in the vicinity of West Redlands, Redlands Airport, and Mentone and have been identified on the General Plan diagram. The Redlands Airport industrial area is about one-quarter occupied, while the others are three-quarters occupied.

Guiding Policies: Industrial Areas

4.80a Provide space for expansion of existing industries and protect them from encroachment by inharmonious uses, but encourage most new industries to locate in the East Valley Corridor where impacts on residential areas will be minimized.

- 4.80b** Reserve space adjoining Redlands Airport to allow for maximum development of airport-related industry.

Implementing Policy: Industrial Areas

- 4.80c** Maintain standards for industrial development and operation that prohibit creation of noise, odor, or other harmful emissions beyond the boundaries of the site.

Current (1995) City zoning regulations require the same high performance standards in all industrial districts. This is appropriate because industries in West Redlands and Mentone are in close proximity to residential areas.

- 4.80d** Encourage private development of well designed industrial park subdivisions which meet high standards of improvement.

4.90 Public/Institutional Areas

Educational, Cultural and Community Facilities

The section on Community Facilities is intended to provide policies for public services, buildings and related facilities. Included in this section are facilities not included elsewhere, public schools, the University of Redlands, and the civic center. While these areas provide for educational, cultural, and community facilities, it should be noted that residential uses at a density of up to 15 dwelling units per gross acre and agricultural uses are also allowed under this land use category.

4.91 Redlands Unified School District

Planning for the location of public schools is an important function of the General Plan. The need for new schools is closely related to community growth guided by The General Plan.

The General Plan serves as a bridge between long range development opportunities and resulting future school needs. It is the intent of the General Plan to assist the School District by providing a comprehensive long range projection of land use and circulation, including existing and proposed schools.

The District serves a 147-square-mile area including the 52-square-mile Redlands Planning Area, much of Loma Linda and Highland, and small portions of San Bernardino and Yucaipa. Nine of its 14 elementary schools (grades K-6) and all of its middle and senior high school facilities are in the Redlands Planning Area. A five-year Master Plan prepared in 1990 includes projections of enrollment and facilities needs as required for participation in the State School Building Program. To determine probable school site needs at buildout of the Redlands Planning Area, the General Plan assumes the 1994 ratio of students per household. Schools serving grades 7-12 are assumed to be within the Planning Area and growth outside the Planning Area is assumed to occur at the same rate as within. The 1994-95 year-round school program is assumed to continue. MEA Section 15.4 and EIR Section 16.4 provide details.

A new high school in the eastern portion of the city is presently under construction and an elementary school on Judson Street south of San Bernardino Avenue is in the planning stages and awaiting funding (1995). The General Plan Diagram designates general locations for the high school and two more elementary schools (Greenspot and San Timoteo Canyon). Under current RUSD policy, the two comprehensive high schools and a continuation alternative high school would house grades 9-12 and the three middle schools would serve grades 7-8.

Guiding Policies: Redlands Unified School District

- 4.91a Maintain a continuous exchange of information on school needs and candidate sites between the City and the School District.
- 4.91b Plan for adjoining school/park sites where both facilities are needed to serve the same area and space is available.
- 4.91c Locate and design schools as contributors to neighborhood identity and pride.
- 4.91d Schools should be located in a pleasing environment, free from noise, smoke, dust and traffic.
- 4.91e Joint use of school facilities for neighborhood recreation should be encouraged.

Implementing Policies: Redlands Unified School District

- 4.91f Consult with Redlands Unified School District when development is proposed in the vicinity of a potential additional school site designated on the General Plan.

4.92 University of Redlands

The University's solid academic stature and high quality of its campus are important contributors to the City's image. A Master Plan completed in 1991 is designed for expansion from the present 1,200 students to 2,000 students during the next 20 years. On-campus housing for 1,800 students would be provided. No expansion in land area of the 130-acre campus is contemplated. Gateways to announce entry on City streets and pedestrian-dominated lanes to knit the campus together are part of the Master Plan.

Guiding Policies: University of Redlands

- 4.92a Support activities that enrich the cultural life of both the City and the University.
- 4.92b Encourage development of the campus in ways that both strengthen its ties to the community and enhance its status as a major visual focal point.

Implementing Policies: University of Redlands

- 4.92c Work with the University to create needed hotel/conference facilities in Redlands.

The University would be a major generator of business for a downtown hotel or non-University business could help support an on-campus conference center.

- 4.92d Create a bike path and promenade between the University and Downtown.

4.93 Civic Center

The Civic Center represents the nucleus of the City to its residents. The overall design and function of the Civic Center creates a reservoir of community pride and identification. The Civic Center represents the City's values, aspirations, historical traditions, and associations. The General Plan proposes a Civic Center area that is closely associated with the downtown area, yet is distinctly identifiable as the center of cultural and government facilities.

The Smiley Library, the Redlands Bowl, City Hall, Joslyn Senior Center and the park wedges and Victorian houses that provide their setting are the heart of Redlands, the place that says without shouting that this is the Navel Orange Capitol of the World and the ideal Southern California city.

Most of the land, whether in civic use or not, was bought by the City with the intent of expanding the Civic Center.

Guiding Policy: Civic Center

4.93a Preserve and enhance the Civic Center as the economic, cultural and historical focal point of Redlands.

Implementing Policy: Civic Center

4.93b Prepare a long-range plan for the Civic Center that specifies the activities and facilities to be located in the Civic Center, their space needs and schematic architectural configuration.

4.94 Other Public Facilities

Additional public facilities identified on the GP Figure 4.1, Proposed Redlands General Plan, include postal offices, landfills, fire station and school locations, the Redlands Municipal Airport, the City yard, water and sewer facilities. These public facilities are anticipated to serve the additional population projected at buildout.

4.95 Open Space

Open Space describes all land and water areas, regardless of ownership, which are left open or undeveloped as an element in the planning and design process. The benefits of preserving some of the undeveloped land which remains include: the preservation of a visually pleasant landscape, ecological/environmental protection, the enhancement of community values, and the ability to guide urban form by utilizing open spaces to buffer incompatible land uses and maintain future land use options. The need to preserve open space and its benefits becomes more critical as city population increases and urban development expands to reach projected buildout.

Open Space land use designations include:

Parks, Golf Courses. This category includes both public and private facilities of park-like character.

Agriculture. Areas designated are planted in citrus or are suitable for citrus, avocados, kiwis, Christmas trees, and similar crops. Agriculture would be maintained by public ownership, by transfer of density/intensity within an ownership, or by exclusive agricultural zoning with or without provisions for transfer of development rights within a single project and dedication of a permanent agricultural easement.

Flood Control/Construction Aggregates Conservation/Habitat Preservation. Areas subject to 100-year flood after implementation of flood control measures in accord with policies in Section 8.40. Portions are designated for construction aggregates extraction, habitat preservation, and groundwater recharge.

Resource Conservation. Areas exceeding 30 percent slope are encouraged to remain as open space in accord with Policy 8.50i. The delineation of Resource Conservation areas on the General Plan Diagram is schematic and is subject to revision based on more detailed information and mapping at larger scale. The maximum density for Resource Conservation areas with 40% slope or greater is 1 unit per 10 acres. Areas with 30-40% slope may have a maximum density up to .2 units per acre (i.e., 1 unit/5 acres) dependent upon the slope and soil conditions of the property.

General Plan policies and standards for Open Space are provided in Section 7, Open Space and Conservation Element.

4.96 Resource Preservation

The Resource Preservation designation limits uses in areas which possess a unique character and fragile ecology which are prime resources for water conservation, wildlife preservation, open space recreation and agriculture. Preservation of such lands is essential to the health, safety and welfare of the community. Limited permitted uses include remote commercial recreational facilities, such as equestrian facilities, as envisioned in Section 4.64; postal offices, public safety facilities, as envisioned in Section 4.64; postal offices, public safety facilities, educational facilities and public utilities as envisioned in Section 4.94; and open space uses described in Section 4.95. Residential uses are permitted but density shall be limited to that allowed by Section 4.42m to protect the character and ecology of such lands.