

General Plan

# Peripheral Areas C and D

City of Phoenix Planning Department  
October 1987

RESOLUTION

NO. 17151

A RESOLUTION AMENDING THE GENERAL PLAN FOR  
PHOENIX 1985-2000.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF PHOENIX as  
follows:

SECTION 1. The General Plan for Phoenix 1985-2000,  
which was adopting Official General Plan Map Change No. 2 signed by  
the Mayor and City Clerk, which accompanies and is annexed to  
this Resolution and declared a part hereof.

SECTION 2. The text of the General Plan for Phoenix  
1985-2000 is hereby amended as shown in the document titled  
"General Plan for Phoenix 1985-2000 1987 Text Amendments  
General Plan" Peripheral Areas C and D" which accompanies and  
is annexed to this Resolution and declared a part thereof.

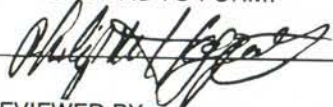
PASSED by the Council of the City of Phoenix this  
18 day of NOVEMBER, 1987.

  
MAYOR

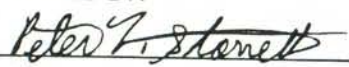
ATTEST:

  
City Clerk

APPROVED AS TO FORM:

  
Acting  
City Attorney

REVIEWED BY:

  
City Manager

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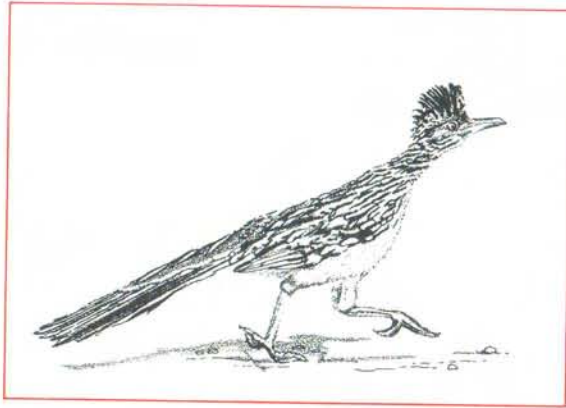
Maria Salaiz, Secretary II

October, 1987



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# Introduction

In the *General Plan for Phoenix (1985-2000)* four peripheral planning areas were identified and designated for special study independent of the process that led to the development of the *General Plan*. Two of these areas, consisting of approximately 111 largely undeveloped square miles, are in the far north and are generally referred to as the land above the Central Arizona Project Canal (CAP). These areas have been designated Peripheral Areas C and D. Map 1 shows their location in the metropolitan Phoenix area. The specific boundaries of the planning area, depicted on Map 2, are Carefree Highway on the north, the Scottsdale corporate boundary on the east, the CAP and Jomax Road on the south and 67th Avenue on the west. Jomax Road is the dividing line between Area C on the south and Area D on the north.

The City of Phoenix has prepared this General Plan for Areas C and D with extensive informal and organized community assistance. The Plan is an amendment to the *Phoenix General Plan* that provides recommendations regarding land use and development characteristics to build-out of the planning area. The Plan is intended to be consistent with and to build on the goals and policies identified in the *General Plan*.

The Plan portrays, in general terms, the direction in which the City wants to grow. It's purpose is to serve as a guide for community growth and as a directive to the City as to devel-

opment opportunities in the area. The Plan sets guidelines to assist in the decision making process about the course and the nature of area development. The implementation time frame is an important element of the Plan. Given the sheer size of the planning area and its location on the fringe of urbanized Phoenix, its physical development will take many years. Thus the long term concept of the Plan is an important consideration.

Following adoption of the Plan, more detailed planning for Areas C and D will be an ongoing process. The Plan must be monitored and refined regularly to ensure that it is kept current and responsive to changing conditions and community needs.

Normally, the City is placed in a reactive role with respect to guiding growth of a developing area. These northern areas; however, are largely undeveloped and provide the City with a unique opportunity to anticipate growth and to establish an overall framework to guide physical development. The challenge is to develop a plan that will achieve a sensible balance between the desired land use pattern and the preservation of the sensitive environmental characteristics of the area.

## Physical Features and Existing Conditions

The physical features and existing conditions in Areas C and D were outlined in the report: *Background Report: Areas C and D*, December

1985 (revised May 1987). The report is briefly summarized here.

Table 1 provides a profile of Areas C and D, separately and combined, regarding size, jurisdictional control and major ownership.

**Table 1**

Planning Area Profile

	Area C	Area D	Total
Size (sq.mi.)	36	75	111
Jurisdictional control (sq.mi.)			
City (Phoenix)	29.5	28	57.5
County	6.5	47	53.5
State/Federal			
Ownership (sq.mi.)	30.6	48	78.6
% of total land area	85%	64%	70.8%

As the table indicates, the planning area contains both land in the City and in unincorporated areas. The State of Arizona owns approximately 67 percent of the total land area in State Trust lands.

Areas C and D consist largely of undeveloped Sonoran desert and mountainous lands featuring principal natural drainageways in the north, less defined drainage patterns in the northeast and south and large manmade stormwater retention basins in the central portion of the planning area and just north of the CAP in Area C. The Sonoran desert is

composed of small trees, bushes, shrubs and flowering ground cover on a decomposed granite floor. Tall saguaro cacti form a significant vertical landmark element. The topography includes low, undulating hillsides, distant mountains, wide open spaces, vista corridors, wide major washes, and innumerable deep, narrow arroyos causing a rolling terrain.

Little development currently exists. Only a few portions of the northeast study area have established residential development patterns. Few major roads traverse the planning area although both I-17 and Cave Creek Road provide access from urbanized areas to the south. A square mile Veterans Memorial Cemetery is located east of Cave Creek Road between the Pinnacle Peak and Deer Valley Roads alignments. Numerous power transmission line rights-of-way cross the planning area, and a one-quarter square mile power receiving station is located at Pinnacle Peak Road and 64th Street.

Maricopa County operates an 80 acre landfill located approximately one-quarter mile south of Carefree Highway at 40th Street. Based on current dumping rates, the site, which is leased from the Federal government and the Arizona State Trust, has a projected useful life of approximately 15-17 years. Regulations regarding the reuse of landfill sites require this site to be replanted to be compatible with the natural character of the surrounding area or be utilized for recreational activities. No future landfills are presently planned for the planning area.

## Plan Development Process

As outlined below, many factors have been considered in developing the Plan. At every step in the process the input of the individuals, organizations and other interests that would be impacted by the Plan was actively solicited. Their ideas and recommendations have been invaluable in shaping the recommendations contained in the Plan.

Planning for the area was initiated in 1985. The *Background Report* was prepared to provide information regarding existing conditions, environmental characteristics and current practices. A *Conceptual Plan for Eastern Area D* was completed in December 1985, to assist the City Council in its consideration of a rezoning case in the northeast portion of the planning area. The *Conceptual Plan* served as the framework for subsequent planning in Areas C and D, and many of its recommendations are included in this document.

In late 1985, the Phoenix City Council appointed a Citizen's Advisory Committee to assist in the planning effort for Areas C and D. The Committee met on a nearly monthly basis, providing an additional forum for citizen input. The Committee was a partner with the City in development of the Plan. The State, as a significant landowner in the planning area, together with major State lands leaseholders were represented on the Committee and were active in and highly supportive of Committee discussions and decisions.

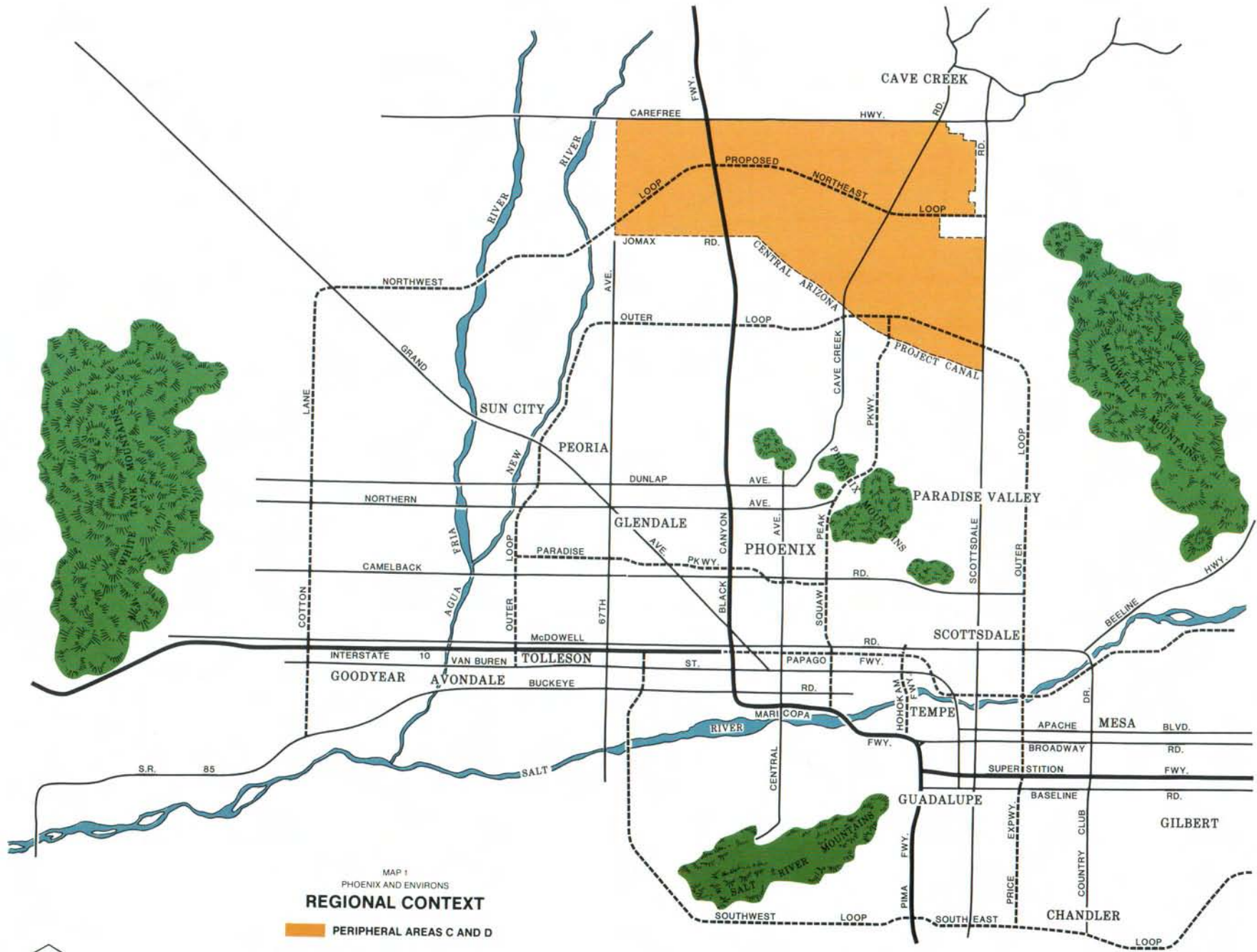
Several consultant studies\* were prepared to assist the planning effort. Information and recommendations provided through these studies form an integral part of the Plan.

The planning area overlaps the boundaries of three school districts. Each district has been apprised of the Plan recommendations and has worked with staff to identify future school facility needs.

Ongoing and completed planning studies by other communities such as: Scottsdale's *Tonto Foothills General Plan* (February 1986) and *Scottsdale Foothills General Plan* (December 1984), Peoria's *Comprehensive Master Plan* (February 1987) and the County's *Desert Foothills* (April 1982), for areas adjacent to Areas C and D were also reviewed. Every effort was made to be consistent with and build on the recommendations contained in these reports, while reflecting the future needs and specific goals and objectives Phoenix desires to achieve.

The City departments that are responsible for providing services and implementing the Plan recommendations were involved substantially in its development.

\* Consultant studies include: *Peripheral Areas Market and Economic Development Study*, April 1986, prepared by Mountain West; *Peripheral Planning Areas C and D Transportation Study*, May 1987, prepared by Wilbur Smith and Associates; *Drainage, Soils and Subsidence Studies in Peripheral Planning Areas B, C and D*, September 1985, prepared by Anderson-Nichols; and *Water and Wastewater Master Plans for Peripheral Planning Areas C and D*, July 1987, prepared by Harza.

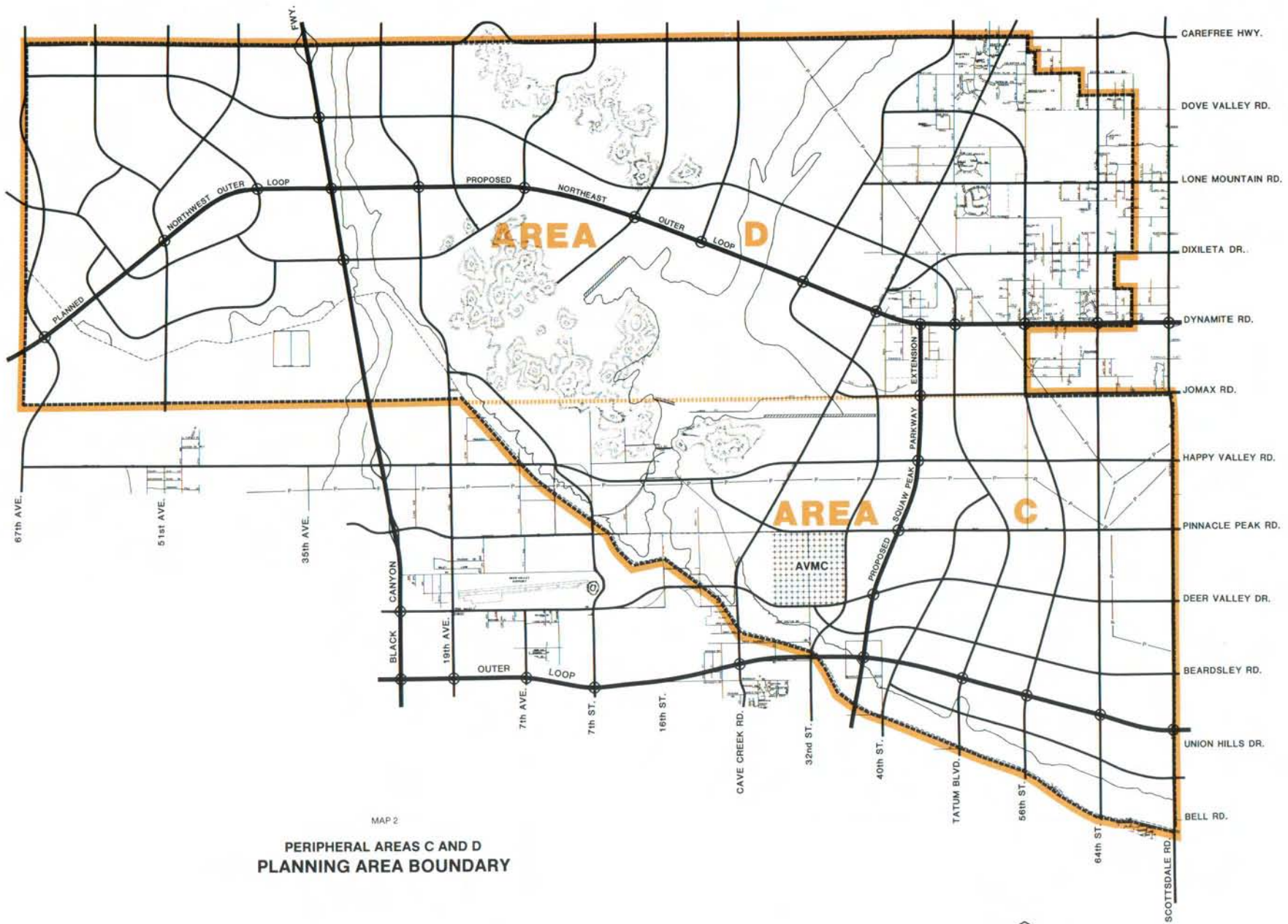


MAP 1  
PHOENIX AND ENVIRONS  
**REGIONAL CONTEXT**

PERIPHERAL AREAS C AND D



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MAP 2  
**PERIPHERAL AREAS C AND D  
 PLANNING AREA BOUNDARY**

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## Planning Goals

The goals that the City desires to achieve provide the guiding framework

for the preparation and implementation of the Plan. The several goals reflect the multiple facets of the broad public interest in providing for development of these sensitive lands in an orderly and efficient manner while respecting their unique and special characteristics.

The goals of the Phoenix *General Plan* apply to Areas C and D, and in addition the following specific goals apply:

### *Goal 1. Continue the Urban Village pattern*

The urban village concept has been accepted in Phoenix as a desired land use pattern. It follows that this concept should be extended to guide land use planning and development in Areas C and D. Land use densities in the planning area, however, are not projected to be as intense as those in villages in more central locations of Phoenix due to the unique characteristics and peripheral location the planning area possesses.

### *Goal 2. Preserve environmental amenities*

Areas C and D contain some of the most attractive Sonoran desert in the Valley. The natural flora, mountainous areas, wildlife and dramatic vistas of near and distant mountains represent amenities that should be capitalized on to attract development and other activity and to create attractive and satisfying communities. Strategies such as cluster developments, large

lot zoning, scenic corridors along selective thoroughfares and minimal disturbance of particularly sensitive and/or attractive areas should all be employed to achieve the Goal. In addition, development and transportation corridors should be oriented to take advantage of vistas and mountain views while respecting the development limitations of floodplains and hillsides.

### *Goal 3. Provide supporting infrastructure in an orderly manner*

The planning area's large size, lack of existing infrastructure\* and fringe location dictate that it will be difficult and costly to extend infrastructure to support development. Strategies to be formulated need to ensure that infrastructure will be provided in a timely and cost effective manner and in a fashion which will encourage and facilitate private developmental activity. This Goal is best achieved by establishing measures to yield an orderly transition to desired future land use patterns. It is necessary to focus infrastructure investments at a particular time (in small areas) to achieve maximum benefit. Remote (leap frog) patterns are discouraged. Developments in more remote sections will be required to pay the full, extraordinary costs of extending infrastructure to non-contiguous areas.

### *Goal 4. Assure a fiscally sound land use mix*

A mix of land uses, supported by market demand, that will achieve a positive fiscal situation for the City in the long term is

encouraged. An overreliance on one or only a few types of uses can result in a deficit situation when the public costs of providing services to the development are compared to the revenue generated by that development. Areas will be opened up for development only after a market for the use or use mix has been demonstrated.

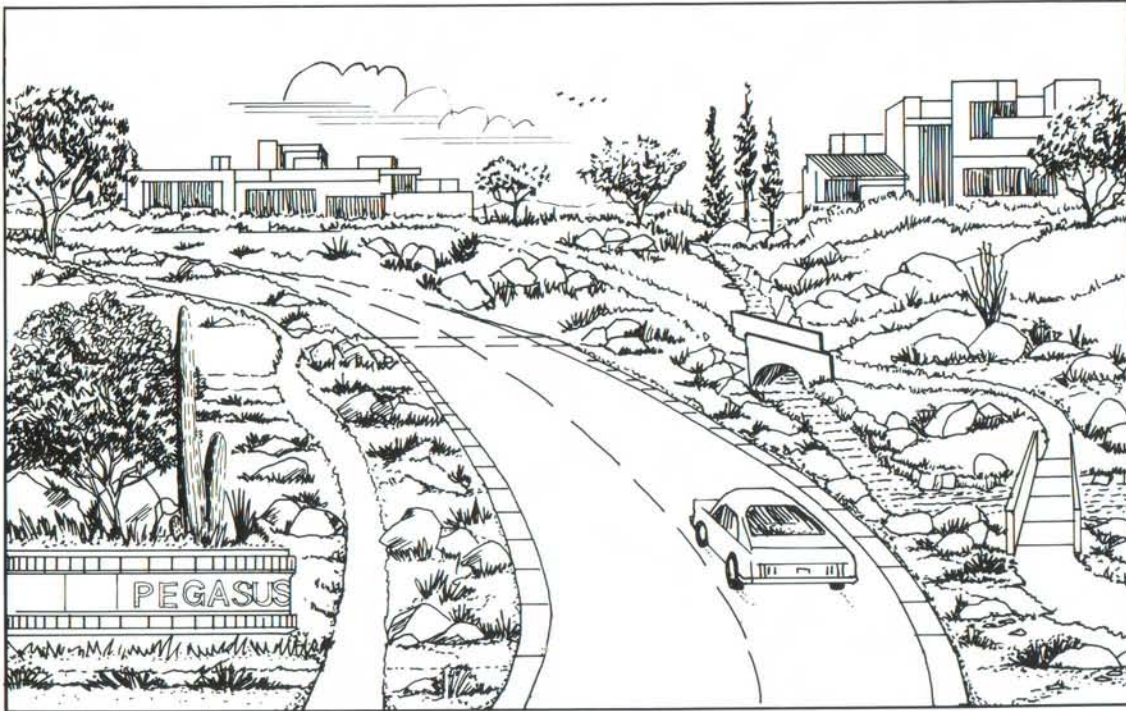
### *Goal 5. Achieve a balance of residential and employment opportunities*

One of the attractive features of the urban village concept is that it facilitates the evolution of a land use pattern with an appropriate balance of residential and employment opportunities. This allows individuals to live and work close by, resulting in public and private benefits of reduced commuting distance. This objective is attainable by providing that large projects include a mix of uses, when appropriate, together with employment opportunities in core areas sufficient to support surrounding residential densities. It must be recognized that a portion of the areas' employment needs will necessarily be satisfied outside the planning area.

### *Goal 6. Conserve water*

Water is a precious commodity throughout the region. Although densities and types of land use will largely influence the amount of water required, all development proposals will include a comprehensive strategy for minimizing water

\* Infrastructure is a general term that encompasses streets, water and wastewater lines and facilities, parks, police and fire stations, drainage facilities, libraries and other public works facilities, among others.



## ARCHITECTURAL GUIDELINES DESERT ENVIRONMENT

use through conservation measures. Public areas will be designed to minimize water demand. The City will continue to refine and implement the water conservation program.

*Goal 7. Assure development under environmentally conscious design standards*

Site design and architectural guidelines are essential to attain a range of development characters which are compatible with and complementary to the surrounding desert environment. Suitable criteria must address considerations of color, materials, design elements, scale, landscaping, signage and similar factors to achieve developments in harmony with the natural area. These criteria must be conceived as guidelines which will meet the objectives and will stimulate creativity and responsible innovation.

As a part of the plan implementation program, the City will continue to prepare, enact and employ a system of development design guidelines.



# General Plan Elements

This General Plan represents a composite and a balancing of numerous

elements: planning and development policies, land use, transportation, open space and trails, public facilities, water resources and facilities and wastewater facilities and drainage. An understanding of the rationale behind this General Plan requires an appreciation of all elements and how they fit together and interact.

The General Plan describes current thinking regarding the development patterns and desired character of Areas C and D. Based on these land use patterns and the densities recommended, a build-out population is estimated at between 335-350,000. Approximately 80-90,000 employment opportunities will be created. Build-out is projected to occur around the year 2040.

Table 2 shows the allocation of land by land use type for Areas C and D separately and combined. Indicated percentages will change slightly as streets and other public facility sites are deleted.

**Table 2**  
Land Use Allocation

Land Use	Area C	Area D	Areas Combined
Residential acres	14,782	31,785	46,567
% of total	64	66	66
Commercial & Mixed Use acres	2,297	4,589	6,886
% of total	10	10	9
Open Space acres <sup>1</sup>	6,001	11,486	17,487
% of total	26	24	25
TOTAL (averages)	23,080	47,860	70,940

<sup>1</sup> Includes hillsides, major washes, regional retention sites and the cemetery.

## Planning and Development Policies

A philosophy has been devised as a means of blending people, structures, and the existing desert into a harmonious and aesthetically pleasing community.

To implement the goals that are associated with preserving the unique character of the area while providing for desired growth and quality development, a series of planning and development policies were prepared to serve as guidelines for developing and carrying out the General Plan. The City will prepare and adopt a set of design and character elements appropriate to the C and D Area and this Plan. These policies are as follows:

### Policy 1.

Wherever appropriate and feasible, the existing environment is to be maintained by preserving and protecting desert washes, mountain slopes and native Sonoran vegetation and wildlife.

### Policy 2.

At every opportunity developments will offer views of the surrounding desert and mountains, and avoid obstructing the views from neighboring developments and transportation corridors.

### Policy 3.

To ensure the preservation of the natural desert, two development concepts will be employed: 1) Wherever desirable and feasible, cluster developments (ie. townhouses, condominiums, etc.) will be utilized to preserve the maximum amount of available open space. 2) Each development will have an established building envelope within which all improvements are to be built and alterations to the existing landscape may be permitted. Areas outside of the envelope are to remain natural.

### Policy 4.

Selected major roadway corridors should be designed as scenic desert parkways.

### Policy 5.

Development site plans and designs are to be completed and approved according to the adopted design and character elements prior to the issuance of any site modification permits.

*Policy 6.*

The design and development elements will include provision that selected natural desert areas be designated and protected before grading and development begins in order to prevent inadvertent destruction of protected areas.

*Policy 7.*

All development in the planning area will use innovative concepts to respond to the special characteristics of the area. Color and texture will be chosen to blend with the natural desert terrain. All developments, residences, structures or improvements of any kind will be designed and constructed so as to be harmonious with the overall environment and appearance of the area.

*Policy 8.*

Water conservation measures will be essential at every level of development. Plant materials that have low water demands and are drought resistant will be encouraged. Further, to the extent feasible, developers will be encouraged to utilize reclaimed water for landscape irrigation in common areas and for irrigation purposes in commercial and industrial developments. Public areas will be designed to minimize water demand. The City will continue to refine and implement the water conservation program.

## Land Use Plan

The Land Use Plan and Circulation Plan, Map 3, follow the philosophy of the urban village concept. The most intense uses are located in and around the cores. Densities decrease with distance from the core. The recommended residential plan and densities for the specific areas are described first as residential is the primary land use. The uses recommended in the core and mixed use areas are then outlined. The last two sections discuss desired objectives with respect to commercial area development and design, and resort development potential, respectively.

### Residential Plan and Densities

The residential categories on the Residential Plan and Densities, Map 4, separate the planning area into desired density ranges. The density categories are similar to those used in the Phoenix *General Plan* with some modification. The density range of each category is broad to encourage flexibility in planning and adaptation to different physical and/or economic conditions. As the Areas C and D planning area is large and extremely diverse in natural characteristics, desired land use patterns and planning objectives, the identification of a narrower density range within categories is established. The density range indicated on Map 4 is a parameter that establishes an average density for the delineated area. Some portions of the area will develop at a higher density while others will develop at a somewhat lower density. The combined

densities of all developments in the area, however, are intended to attain the average.

Based upon the average densities indicated on Map 4, the gross and residential densities for the planning area are shown in Table 3.

**Table 3**  
Densities by Sub-area

Area	Densities	
	Gross <sup>1</sup>	Residential <sup>2</sup>
Area C	2.35	3.48
West Area D	1.96	2.80
East Area D*	1.62	2.05
Overall	2.01	2.85

<sup>1</sup> Gross density compares projected dwelling units to the total land area.

<sup>2</sup> Residential density compares projected dwelling units to residential land only (major nonresidential areas, major washes, hillsides, the cemetery and transmission receiving station are deleted). It is estimated that the average residential density for the entire city planning area other than the peripheral areas is between 4 and 5.

The actual residential density achieved will be slightly higher than indicated on Table 3 when land for freeways and other facilities (e.g. neighborhood retail, parks, donated school sites) are deleted. Densities will also increase whenever density is transferred from hillsides to developable portions of a site as outlined

\* For planning purposes Area D is divided into two sections: 1) the area west of Cave Creek Wash and, 2) the area east of Cave Creek Wash.

in the *Phoenix Development Guide*. Increases in density through transfers, however, should not result in a development pattern of intensity that is out of character with residential densities shown in the Plan, with other projects in the area or the natural, environmental surroundings. Density transfer will be evaluated on a case-by-case basis. It is anticipated that in most developments a density transfer less than the maximum will be appropriate.

Establishing a more narrowly defined density range than that in the *General Plan* categories is also necessary so that a more precise population can be projected. This is essential for determining the demands for and sizing of infrastructure with more accuracy and with greater economy.

#### Core and Mixed Use Areas

Before approval is given to a project in an area designated for mixed use, a specific plan shall be prepared and adopted for the area in which the project is located. This plan shall cover an area large enough to ensure compatibility among uses and with supporting infrastructure, a balanced and appropriate use mix and firm boundaries such as major streets, drainageways, other physical boundaries and/or areas with specific use designations.

Table 4 lists the predominant and the supporting or minor uses that are planned in each area. The mix of uses in a particular area is based on the location and characteristics of the area and on the desire to create a synergistic development pattern by encouraging uses that are

complementary to and compatible with each other.

Development intensities in core and mixed use areas will not be as significant as in urbanized sections of Phoenix given the desired development pattern and planning objectives in the planning area. Specific upper limits are not established for Floor Area Ratios (FARs) in particular areas as creative building design and site layout are encouraged to overcome and respond to specific site characteristics and constraints. The maximum FAR in the planning area; however, will be in the .55 - .65 range. Development at this intensity will be limited to sites with no significant developmental constraints.

#### • Area C

##### Area C Core:

The Area C core is located on the north side of the Outer Loop, south of Beardsley Road, near Tatum Boulevard. The core is positioned to take advantage of the accessibility provided by the Outer Loop and Tatum Boulevard (which crosses the CAP) and to be a sufficient distance from the Paradise Valley Village core and the planned Scottsdale mixed use project on the east side of Scottsdale Road (where the Outer Loop will cross).

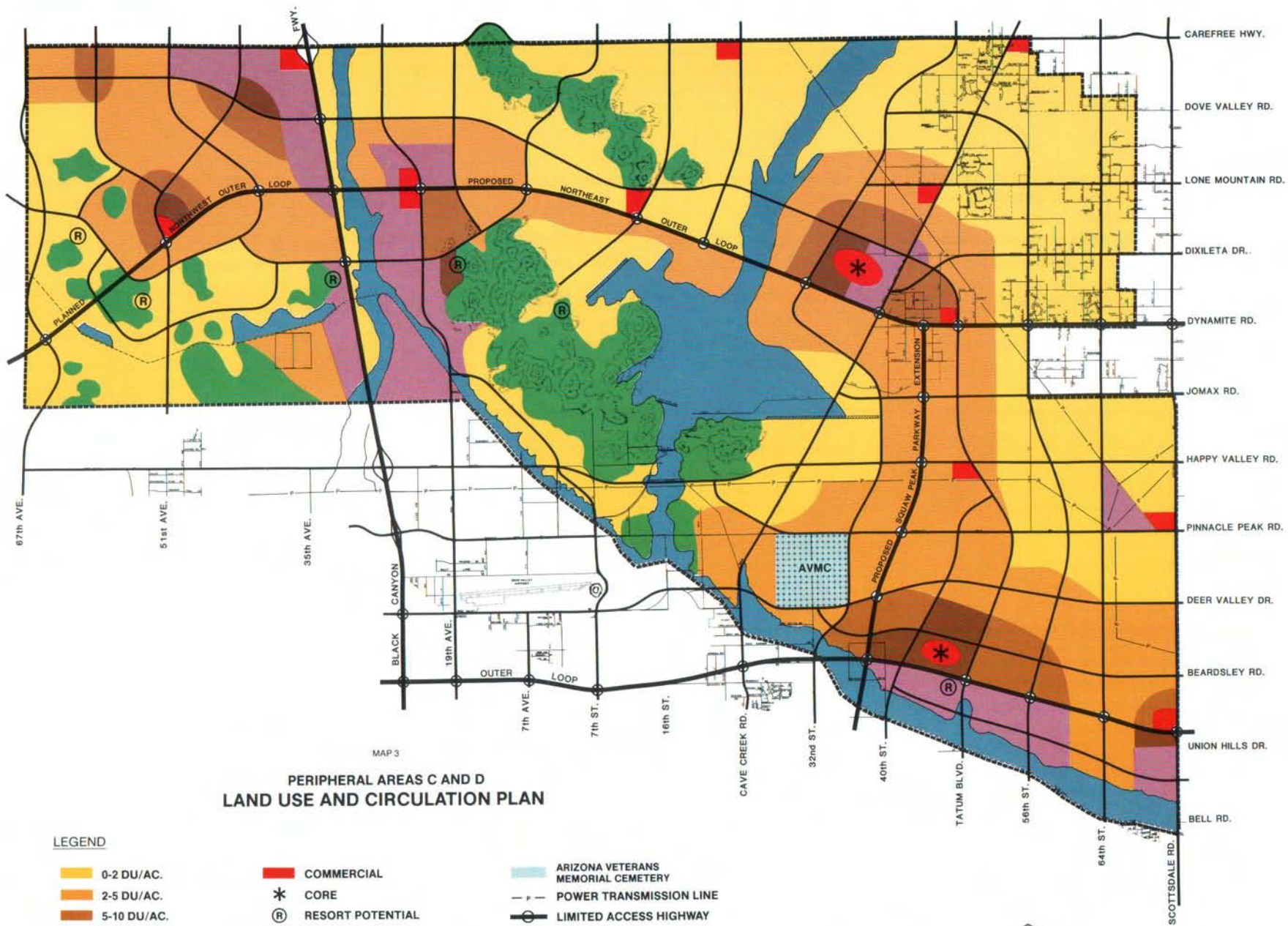
The Area C core is projected as a significant retail commercial center to serve the population anticipated in Area C and east Area D and the currently expanding market area

just south of the CAP. A modest amount of office and service uses should also locate here. Little residential development is anticipated in this core as it and the surrounding mixed use area are reserved to capture a significant portion of the non-residential uses north of the CAP and east of Cave Creek Wash.

#### Outer Loop Mixed Use Area

An area of mixed use consisting of approximately 700 acres is located along the south side of the Outer Loop from the Squaw Peak Parkway Extension to 60th Street. This area is designated as a high amenity employment center; uses that have high employment generation rates are encouraged. The area is well located to serve this function given its accessibility, visibility from the Outer Loop, proximity to existing and anticipated residential areas and the Deer Valley Airport. This area could be expanded to include additional land north of the Outer Loop adjacent to the core near Tatum Boulevard if there is sufficient demand.

A resort is a potential use south of the Outer Loop. This location will capitalize on both the Reach 11 area - where major recreational facilities are planned, and the Cave Buttes open space, mountain recreation and scenic area. A resort here will complement the high amenity office uses projected in the employment center.



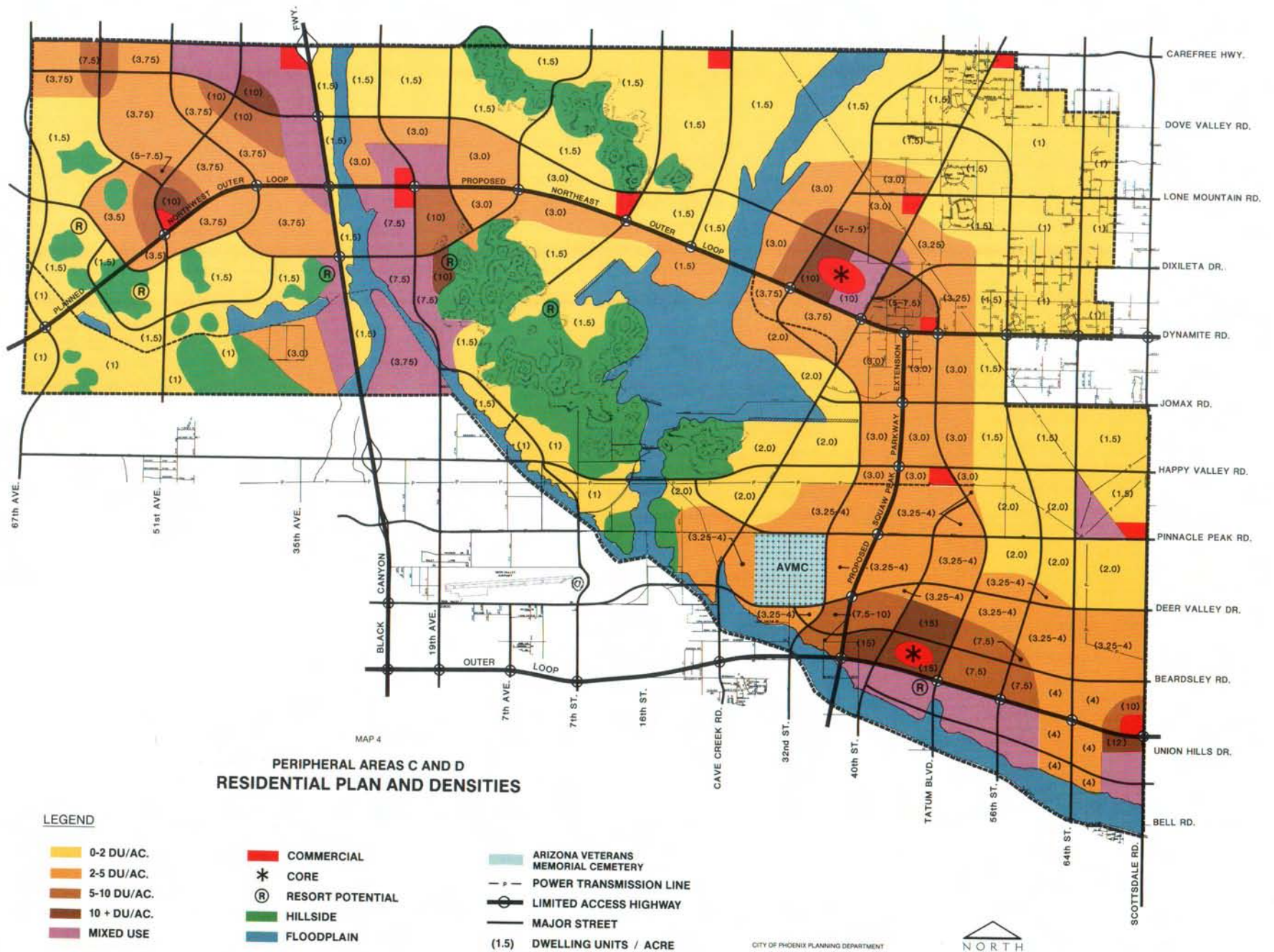
MAP 3  
**PERIPHERAL AREAS C AND D  
 LAND USE AND CIRCULATION PLAN**

**LEGEND**

- |   |  |  |
|---|--|--|
|  0-2 DU/AC.  |  COMMERCIAL       |  ARIZONA VETERANS MEMORIAL CEMETERY |
|  2-5 DU/AC.  |  CORE             |  POWER TRANSMISSION LINE           |
|  5-10 DU/AC. |  RESORT POTENTIAL |  LIMITED ACCESS HIGHWAY             |
|  10 + DU/AC. |  HILLSIDE         |  MAJOR STREET                       |
|  MIXED USE   |  FLOODPLAIN       |  |

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Commercial and service uses are projected to support the employment center and resort and to complement the predominant uses identified above. Only a modest amount of residential uses, developed in conjunction with a resort, are encouraged south of the planned Outer Loop as the emphasis is on developing employment uses in this area and on the availability of more suitable residential sites north of the planned Outer Loop.

#### Receiving Station Mixed Use Area

The mixed use area at Pinnacle Peak Road and 64th Street surrounds the 160 acre transmission line receiving station. Designated uses serve as a buffer between the receiving station and surrounding uses. Although this area is designated a mixed use area, it should remain primarily as open space (residential yards extending into the mixed use area and public uses east of the receiving station on Pinnacle Peak Road would be appropriate) and should provide access points for pedestrian and equestrian users to the lineal trails in appropriate nearby washes and along the transmission line corridors.

- East Area D

#### East Area D Core

A core is located in east Area D north of the proposed Northeast Outer Loop and west of Cave Creek Road. The location of this core is influenced by existing and approved development. It is strategically situated approximately six miles north of the

Area C core to assure mutually appropriate trade areas. (The Area C core will, however, serve the regional shopping needs of residents in east Area D.). Further, this location was selected to capitalize on the principal north-south thoroughfares planned to provide access to the north sections of the planning area from the Area C core and from the areas of Phoenix below the CAP. Overall, densities in east Area D will not be as intense as in villages to the south given its fringe location and sensitive environmental characteristics. The core, therefore, is not anticipated to capture many basic employment uses. The more remote location provides the opportunity to establish this core as a service node for the surrounding residential community.

The emphasis in the east Area D core is on developing a pedestrian-oriented core that is compatible with and complementary to the outdoor-oriented Southwestern lifestyle and the desired characteristics of developments in the surrounding village. The core is the focus of activity in the village: a gathering place. Services, cultural and entertainment uses and activities and residential uses are particularly desirable and encouraged in the core. With respect to services, the east Area D core is an appropriate location for business as well as for professional services and governmental uses. Professional services may include a hospital and medical center uses. Retail uses to accommodate the community shopping needs of the projected

population in the east Area D village are also appropriate.

#### Cave Creek Road Mixed Use Area

Mixed use activities are designated adjacent to the core along Cave Creek Road. These areas are considered as extensions of the core for use purposes. A resort is planned in the area east of Cave Creek Road. A resort here capitalizes on its natural environmental setting and a golf course as amenities for attracting guests. In addition to services, limited, low-rise office uses are appropriate. A community college close to the core is desirable, particularly if linked to other uses in the core.

Retail commercial uses in this mixed use area, particularly along Cave Creek Road, are not encouraged. In addition to the retail commercial uses projected in the core, numerous sites are currently zoned for commercial use along Cave Creek Road.

- West Area D

West of the Cave Creek Wash two intensive use areas are delineated in the I-17 corridor. Although neither is designated a core, both contain a commercial area of approximately 30-50 acres surrounded by large mixed use areas. A specific core site is not identified in order to maintain flexibility in the master planning of these State lands and due to the uncertainty regarding the alignment of the planned Northwest and potential Northeast Outer Loops. (See section on Transportation).



**Table 4**

**Recommended Uses in Cores and Mixed Use Areas**

Area	Residential	Retail Commercial	Business & Personal Services	Office	Clean Industrial	Warehousing	Resort	Recreation Open Space	Public** Facilities Cultural
Area C Core		■	★	★					★
Outer Loop Mixed Use Area		★	★	■	■		★		
Receiving Station Mixed Use Area	★							■	★
East Area D Core	★	■	■	★			★		■
Cave Creek Road Mixed Use Area	★		■	■			★		★
Mixed Use Area East of I-17:									
South of CAP	■		★	★	■	★		★	★
19th Avenue - Skunk Creek				★	■	■			
Union Hills	★	★	★	■	★		★	★	
Commercial Area: 19th Ave./ Lone Mountain		■	★	★					
Mixed Use Area West of I-17		★	■	■	★		★	★	★
Commercial Area: I-17/Carefree Highway		■	★	★					

■ predominant use(s)

★ supporting or minor use(s)\*

\* Supporting or minor uses will comprise up to 25% of the uses in a designated area.

\*\* When located near cores, space should be provided for community centers, group homes and other similar facilities.

### Commercial Area East of I-17: 19th Avenue and Lone Mountain

At the intersection of 19th Avenue and Lone Mountain, a large commercial site of approximately 30-50 acres will support the surrounding residential population and service needs of nearby employment uses. The supportable amount of commercial space and size of the site in this location is to be based largely on the size of the market area that can be captured, the composition of the market area and the availability of competing space in other locations.

### Mixed Use Area East of I-17

The mixed use area east of I-17 is relatively large. Given the manner in which the area is divided by natural and manmade features, a number of subareas can be defined.

The section south of the CAP is more an extension of the area south of Jomax Road than a part of the mixed use area to the north. Residential uses along with some light industrial uses are envisioned in this area. The orientation and site planning of these uses will be important to minimize the impacts of industrial uses on residential areas. An opportunity also exists to establish cultural and entertainment uses that complement the use and theme patterns desired in the potential core at the Happy Valley Road/I-17 interchange in Deer Valley Village.

Light industrial uses and warehousing activities are projected along 19th Avenue and along Skunk Creek south of the planned Northwest Loop.

The hillsides, views and attractive desert environment along the western slopes of the Union Hills represent an amenity to be capitalized on for attracting development to this area. A range of uses, all compatible with and complementary of the sensitive desert environment are appropriate in this location. Low density, campus-style office and residential uses, both clustered and on large lots are envisioned as the principal uses. Resort development is also appropriate as are hotel facilities to accommodate business uses. Viewed together, these uses offer the potential for creating a synergistic development pattern. With the outstanding natural and manmade amenities offered, this area has the potential for becoming highly competitive with other emerging employment locations in the Valley.

### Commercial Area: I-17/Carefree Highway

A commercial site of approximately 30-50 acres is located at the I-17/Carefree Highway interchange. This site has outstanding accessibility and visibility from I-17 and Carefree Highway. The amount of supportable commercial space and size of the site in this area is to be based largely on the size of the market area that can be captured, the composition of the market area and the availability of

competing space in other locations. The site will be the principal commercial area for the planned development west of I-17.

### Mixed Use Area West of I-17

The mixed use area west of I-17 affords a range of uses both to support the residential population that is anticipated in the area and to provide major employment opportunities. The area will possess excellent accessibility when recommended transportation improvements are complete. Given the objective to achieve a self-contained community, the establishment of uses such as hospital, higher educational facilities, entertainment and professional services to support the resident population will be critical to the success of the overall planning concept.

The area also has the potential for attracting significant employment uses. It offers outstanding visibility from I-17.

### Commercial Areas

The Land Use and Circulation Plan, Map 3, identifies the location of a number of commercial areas throughout the planning area. These sites are locations for major commercial activities outside of core areas. Table 5 identifies the selection criteria for the locations designated. No attempt has been made to locate on the map the smaller neighborhood commercial areas that will be required to serve the basic needs of residential areas. The desired objective, however, is to concentrate commercial

activities and discourage their proliferation at major street intersections and along major streets in strip developments. By establishing large sites of perhaps 20-30 acres in strategic locations, concentrations of needed community and neighborhood commercial uses in specific locations are encouraged. The Floor Area Ratio for commercial sites will be a maximum of .25. Large sites and the establishment of maximum FARs will provide flexibility through design and site plan layout to minimize the potential negative impacts commercial uses have on surrounding areas. The goal is to make commercial areas in Areas C and D destinations in and of themselves.

Smaller, neighborhood commercial sites should be centrally located in residential areas so as to minimize travel distance from market areas. Neighborhood commercial sites will serve a population of between 5-25,000 depending on the surrounding residential densities and the proximity of other commercial sites.

Two 20-30 acre commercial areas are surrounded by higher density residential development. These areas serve as secondary locations for higher density residential uses in the portion of the planning area in which they are located. One is located near the 51st Avenue/planned Northwest Outer Loop interchange. It is positioned to capitalize on the accessibility provided by the surrounding major street network and its location in the center of the area west of I-17. The second is located on Scottsdale Road just north of the planned

Outer Loop. This area capitalizes on the planned Outer Loop/Scottsdale Road interchange and the high intensity uses proposed in Scottsdale on the east side of Scottsdale Road.

#### Resort Development

The superb weather, relaxed, outdoor-oriented Southwestern lifestyle and the scenic beauty combine to make Areas C and D appealing locations for resort developments. Resorts will fit well with the natural quality of the area and with the specific kinds of uses projected.

In assessing the resort development potential of the planning area, it is first necessary to define what the word "resort" encompasses. The term "resort" is often used as a catchall to include a variety of facilities that are substantially different. The traditional resort was a place where people went to relax and to escape from the rigors of everyday life. Location in a remote area was desired where a tranquil, man-made environment could be created in a pleasant, natural setting. Contemporary resorts, however, vary with respect to location and purpose and they appeal to a more diversified clientele. For purposes of this analysis, resorts are divided into three categories as described below:

**Business Resort** — This resort generally has small site size requirements and is generally dependent on the surrounding area facilities to attract guests and for supporting services. A location in an urban setting close to entertainment and major employment

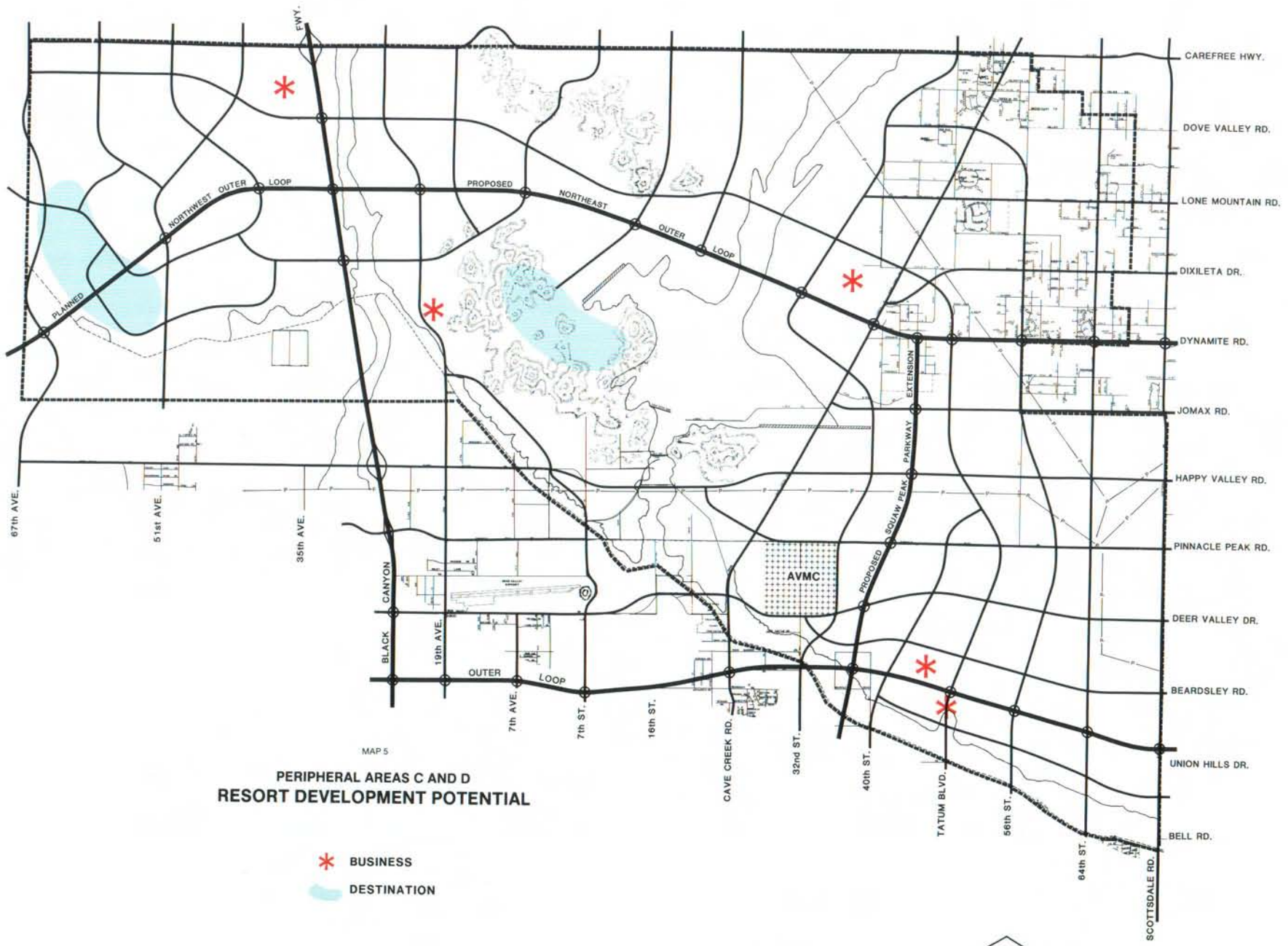
uses is preferred. The focal point of the business resort is usually a hotel which caters to seminars, conventions and other business-related activities. Limited recreational and guest services are located on-site.

**Limited Destination Resort** — This is a medium-sized resort that appeals to a broader clientele than the business resort and is more self-sufficient. The facility is apt to be developed on a spacious site away from but with good accessibility to major activity and population centers. The range of services provided is based on the size of the resort, the activities offered and the proximity of supportive uses.

**Destination Resort** — This is the type of facility most generally associated with the term "resort." The destination resort has as a foundation the natural setting in which it is located. Most often a unique and particularly interesting and picturesque location is selected. The natural setting is capitalized on for attracting and entertaining guests. Sites are expansive and include a broad spectrum of recreational and entertainment opportunities. Stays are longer. Most needs of the guest can be satisfied on the resort site. Many guests arrive by scheduled airline and once shuttled to the resort remain on site for all or most of their stay. Destination resorts are often seasonal.

**Table 5**  
**Commercial Sites - Locational Criteria**

<b>Location</b>	<b>Locational Criteria</b>	<b>Location</b>	<b>Locational Criteria</b>
Northwest Loop/51st Avenue	<ul style="list-style-type: none"> <li>• Central location in the area west of I-17.</li> <li>• Capitalizes on the accessibility provided by the surrounding major street system.</li> <li>• A single 20-30 acre site at this intersection is recommended.</li> <li>• The specific location to be determined through a specific development proposal.</li> </ul>	Cave Creek Road/Lone Mountain Road	<ul style="list-style-type: none"> <li>• Existing commercial zoning on a portion of the site.</li> <li>• Serves the community shopping needs of the northeast portion of the planning area.</li> <li>• Site should remain fixed as identified in the Plan.</li> </ul>
I-17/Carefree Highway	<ul style="list-style-type: none"> <li>• Existing commercial zoning on a portion of this site.</li> <li>• Site's accessibility and visibility.</li> <li>• Site location is fixed as indicated in the Plan.</li> </ul>	Tatum Boulevard/Happy Valley Road	<ul style="list-style-type: none"> <li>• Site selected to serve community shopping needs for the periphery of both east Area D and Area C.</li> <li>• Tatum Boulevard will be the major north-south roadway in the area.</li> <li>• Happy Valley Road will be on important east-west route (Happy Valley Road is one of only two arterial streets that cross the CAP to link Area C and Deer Valley Village.)</li> <li>• A single 20-30 acre site at this new location is recommended.</li> <li>• The specific location at the intersection to be determined through a specific development proposal.</li> </ul>
19th Avenue/ Lone Mountain Road	<ul style="list-style-type: none"> <li>• Entrance to major activity center on and near the west slopes of the Union Hills.</li> <li>• Accessibility to/from I-17 and 19th Avenue.</li> <li>• A single site at this intersection is recommended.</li> <li>• The specific location on the west side of 19th Avenue to be determined.</li> </ul>	Scottsdale Road/Pinnacle Peak Road	<ul style="list-style-type: none"> <li>• Accessibility/visibility provided by Scottsdale Road.</li> <li>• Together with the commercial area recommended near Scottsdale Road at the Outer Loop, the site serves to consolidate commercial activities along Scottsdale Road.</li> <li>• Commercial use is compatible with the transmission receiving station to the west along Pinnacle Peak Road.</li> <li>• Site should remain fixed as identified in the Plan.</li> </ul>
Carefree Highway/24th Street	<ul style="list-style-type: none"> <li>• Positioned to accommodate needs of the area between the hills on the west and Cave Creek Wash (both south of Carefree Highway and the area north of Carefree Highway). (Existing commercial site at 7th Street not as well positioned to serve this capacity.)</li> <li>• Accessibility/visibility provided by Carefree Highway and 24th Street.</li> <li>• A single 20-30 acre site at this location is recommended.</li> <li>• The specific location to be determined through a specific development proposal.</li> </ul>	Scottsdale Road/Outer Loop	<ul style="list-style-type: none"> <li>• Accessibility/visibility provided by Scottsdale Road and the Outer Loop.</li> <li>• Located to be a focal point for the higher density residential uses designated in this Plan in this area and across Scottsdale Road in the Scottsdale <i>Foothills Plan</i>.</li> <li>• Together with the commercial area recommended at Scottsdale Road/Pinnacle Peak Road, the site serves to consolidate commercial activities along Scottsdale Road.</li> <li>• Site should remain fixed as identified in the Plan.</li> </ul>
Carefree Highway/ Cave Creek Road	<ul style="list-style-type: none"> <li>• Existing commercial zoning on a portion of the site.</li> <li>• Accessibility/visibility provided by Carefree Highway and Cave Creek Road.</li> <li>• Site should remain fixed as identified in the Plan.</li> </ul>		



MAP 5  
**PERIPHERAL AREAS C AND D  
 RESORT DEVELOPMENT POTENTIAL**

- \* BUSINESS
- DESTINATION

From the above descriptions four locational criteria: site size, transportation accessibility, location and activities/services provided, can be identified as the locational requirements and facility characteristics of the three resort types. Table 6 depicts the relationship of each resort type to the four criteria. These criteria provide the framework to identify areas and specific sites that are appropriate for a particular resort development.

Map 5 shows the general area locations that offer resort development potentials in Areas C and D to which the facility type criteria are applicable.

The strongest potential for business resort development is in the mixed use areas where significant high amenity offices and business park uses are projected. Locations near the cores or other commercial areas are particularly attractive given the broad range of ancillary services available in these areas. Such use mixes are mutually supportive.

**Table 6**  
Resorts-Location Criteria

Criteria	Facility Type		
	Business	Limited Destination*	Destination
Site Size	small	medium	extensive
Location	urbanized	urbanized/ suburban	remote
Activities/Services Provided	limited	mid-range	full range
Accessibility	superior	adequate	limited

\* Facility requirements vary depending on the specific characteristics of the limited destination resort.

The opportunities for limited destination resort developments are broader within the planning area. Locations are not shown on Map 5 because given the proper circumstances and master development plan, a limited destination resort could be developed in many areas of Areas C and D in satisfaction of the locational criteria. The number of limited destination resorts actually developed will be based on demand and developers' ability to offer unique and highly competitive products. Sites adjacent to or with good accessibility to the mountains and/or distinctive recreational areas will be particularly desirable as these amenities can be capitalized on for recreational activities, creating a sense of remoteness and sense of place.

Destination resort development potential is limited. Only the more remote and scenic areas, where very low density development is projected, provide a suitable environment for this type of resort. Two areas, the low lying mountains north of the CAP west of 51st Avenue and the north valley of the Union Hills, offer opportunities.

A limited amount of higher density residential development would be appropriate in conjunction with limited destination and destination resort developments. Density will not exceed 10 dwelling units per acre and in no case should this residential development be out of character with or negatively impact (e.g. traffic generation) surrounding residential neighborhoods.

## Transportation Plan

The Transportation Plan developed for Areas C and D is designed to move people and goods as efficiently as possible. It consists of streets, both limited access and major arterials some of which could be designated scenic corridors, transit and bikeways.

The lack of existing developments and an established street system provides maximum flexibility to design and provide a transportation system that:

- capitalizes on and is compatible with the attractive natural environment,
- responds to and efficiently serves areas of planned higher intensity uses, and
- strengthens the economic development potential of the planning area.

The City was assisted by a consultant in the analysis of long-term transportation needs and in the development of a recommended program of improvements to accommodate future demands. The *Peripheral Areas C and D Transportation Study* previously referenced, illustrates a recommended transportation system plan to serve existing and projected development. The plan provides only a basic framework for growth. It responds to conditions and influences that are currently known. It is anticipated that as future development occurs, the plan will be refined accordingly. The secondary street network has not yet been defined.

The plan shows general corridors for components of the transportation system. Further study will be performed to identify specific alignments and locations for transportation system facilities. Every effort will be made when siting transportation system facilities to minimize their impact on existing structures and uses and on the attractive natural features of the planning area.

As previously designated, the build-out level of development is projected to be approximately 335-350,000 people. Most of this development is not expected to occur until well after the year 2000. Based upon City projections (see Appendix A), a street development phasing schedule has been prepared in ten-year increments. According to the schedule, most of the roadways would be constructed by the year 2015. Many of these roadways, however, will not be widened to their ultimate configuration until after year 2015. The recommended transportation system, therefore, will take many years to complete.

Design requirements for the transportation systems depend upon the intended function of the facility and the magnitude and character of the projected traffic volume. Design guidelines have been developed for the recommended roadways and are described in more detail in the consultant study.

Major components of the transportation system are shown on Map 6 and described below:

## Streets

### Limited access highways:

- Planned Northwest Outer Loop:

The Arizona Department of Transportation (ADOT) has initiated a study to determine the alignment of the planned Northwest Outer Loop from southwest of the planning area to I-17. The general alignment indicated on Map 6 is preferred by the City of the alignments studied by ADOT based on analysis by the consultant, City staff, the State Land Department and their leaseholders and the Citizens Advisory Committee.

- Proposed Northeast Outer Loop:

The system includes the extension of the planned Northwest Loop eastward from I-17 along the north side of the Union Hills and Cave Buttes Recreation Area to connect with Dynamite Boulevard continuing east to Scottsdale. East of I-17 the Loop is named the Northeast Loop for study purposes. This Loop should be designed as an at-grade parkway with a broad median and ample right-of-way for it will traverse primarily low-density residential areas and provide residents of east Area D access to employment opportunities along the I-17 corridor. The parkway should be designed to capitalize on the area's natural amenities for design and visual effects.

- Planned Squaw Peak Parkway Extension:

The planned Squaw Peak Parkway is extended north to connect the planned Outer Loop with the proposed Northeast Outer Loop.

### Major arterial streets:

- Extensions of 51st and possibly 67th Avenues from the planning area south through the Deem Hills area to connect to the established/planned circulation system.
- A major east-west street south of Carefree Highway to connect the area of high intensity development projected just west of I-17 to the village core in east Area D.
- Extension of 19th Avenue from Jomax Road to Carefree Highway is included to link the high intensity use areas in west Area D to existing/planned employment centers south of the planning area and Deer Valley Airport.
- Four north-south connectors are provided between Carefree Highway and the proposed Northeast Outer Loop. Roadways would follow the general alignments of 19th Avenue, 7th Street, 16th Street and 24th Street.
- Roadways in east Area D north of Jomax Road would generally follow the existing street configuration as established.
- Area C will be served by a modified grid/curvilinear system (approximately one mile spacing). The north-south streets with the exception of 64th Street are off the section line and are placed to provide maximum accessibility to the Area C core, to focus circulation and development to the two Phoenix cores, to facilitate drainage and to aid in securing the economic viability of the area.
- Extensions of 40th, 56th and 64th Streets across the CAP are provided to enhance the economic potential and viability of the Area C core.

- The link between Deer Valley Airport and Area C is strengthened through improvement and extensions of Deer Valley Road and Happy Valley Road to the east.
- Tatum Boulevard north of the CAP is developed to serve Reach 11 and the Area C Core and the mixed use areas as quickly as is feasible.

#### Transit

Presently, public transit is not available in Areas C and D. Low population densities and widely dispersed activity centers severely limit the efficiency and feasibility of transit service. However, with continuing growth of residential areas and expansion of the employment base, increasing levels of service may be justified. The recommended land use pattern facilitates future transit service development along corridors as activity is concentrated in and around cores and mixed use areas. While express bus service and HOV (high-occupancy vehicle) lanes will be the most likely form of transit serving the area, the potentially large master-planned communities in the planning area provide the opportunity to develop project-specific community circulator (shuttle) systems that link to a regional system. The designation of additional right-of-way for the Tatum Boulevard and Squaw Peak Parkway Extension alignments to allow for possible development of a fixed guideway facility in the future between the cores provide the elements of a linkage to the regional system. Other rapid transit opportunities may be identified as development progresses.

As shown on Map 6, a number of park and ride lot locations have been identified. These strategically-located general areas are designed to intercept vehicles in central staging areas near major roads that lead to employment concentrations.

#### Scenic Corridors

Cave Creek Road between just south of Jomax Road and Carefree Highway and Scottsdale Road between Jomax Road and Pinnacle Peak Road are portions of the existing Desert Foothills Scenic Drive, established by the County in 1963, that traverse the planning area. The Phoenix City Council designated the portion of Cave Creek Road in the City a scenic corridor in August of 1986. Standards and regulations need to be formulated for this corridor as the existing County established 105 foot setback from centerline will not be adequate when Cave Creek Road is developed to its full right-of-way. An informal 205 foot setback is recommended and is actively being pursued. The existing objective is to preserve the scenic corridor in its natural state with only reasonably necessary street and driveway access from Cave Creek Road to adjoining parcels. The major washes will be maintained or restored in as natural a state as possible. Additional intersections along Cave Creek Road should be minimized. It is recognized that it may not be feasible for owners of small parcels to provide the full recommended scenic corridor. These parcels should be reviewed on a case-by-case basis to determine the extent that the landowner can comply with the recommended scenic corridor.

Several roadway segments have been identified in the consultant study as candidates for scenic corridor status. Selections were based upon the following criteria:

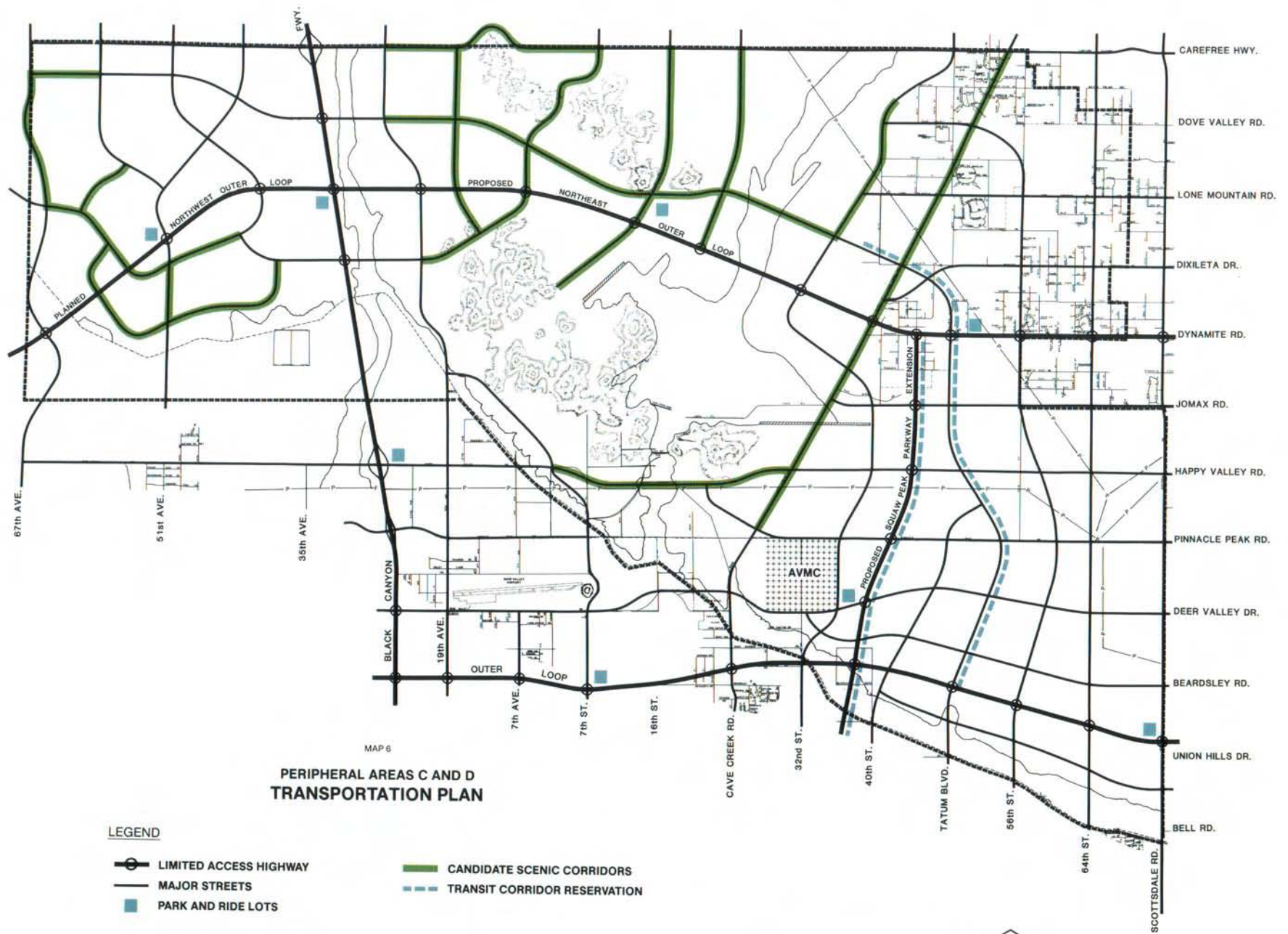
- The natural quality and unique characteristics of adjacent desert vegetation;
- Vistas of nearby mountains and valley areas;
- The opportunities of scenic roadways generally traversing planned low density areas.

Following further study, street segments designated as scenic corridors should incorporate design standards and acquisition of appropriate rights-of-way or easements to preserve the natural desert environment and maintain a natural vista quality. In addition to those major streets identified in the Plan, destination-type scenic drives should also be considered to provide low-volume roadways with turnouts incorporated at designated areas suitable for picnics, hiking and general sight-seeing.

#### Bikeways

Given the scenic beauty of the planning area, the character of the development proposed and the lifestyle anticipated, bicycling will be a popular form of recreational activity. To a lesser extent, bikeways will offer access routes to recreational, educational, employment, commercial and other uses. The establishment of a bikeway system is an evolving process. Developers are encouraged to create bicycle paths and to link them with bicycle paths established by adjacent developers and the City. The street system will provide regional (long distance) bicycling opportunities and serve to fill gaps in





MAP 6  
**PERIPHERAL AREAS C AND D  
 TRANSPORTATION PLAN**

**LEGEND**

-  LIMITED ACCESS HIGHWAY
-  MAJOR STREETS
-  PARK AND RIDE LOTS
-  CANDIDATE SCENIC CORRIDORS
-  TRANSIT CORRIDOR RESERVATION

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the privately provided bikeway systems. Scenic highways will be particularly attractive street segments to encourage the establishment of bikeways.

Future bikeway system development in Areas C and D will build on and be consistent with the bikeway plan currently under development by the City.

### **Open Space and Trails Plan**

The unique combination of natural and man-made features of the area offer an unsurpassed opportunity to create an integrated and highly diverse network of distinctive recreational opportunities, open space and trails. The open space resources are a key element in creating the environmentally compatible development pattern and the outdoor-oriented lifestyle that are desired in Areas C and D.

The major components of the open space system are depicted on the Open Space and Trails Plan, Map 7, and outlined below:

**Mountains** - The Union Hills, a cluster of low lying mountains located in the south-central portion of the planning area, are a visual amenity that frame and provide a dramatic visual background for views from the remainder of the planning area. This area should be established as a mountain park that would be kept in its natural state for all to use and enjoy. These mountains are the focal point of open space in Areas C and D.

The mountains along Carefree Highway and the mountains west of I-17 also deserve consideration for addition to the City's mountain lands. These mountains offer significant visual and open space benefits and are easily linked to a trail network to serve as destinations for hikers and equestrian users.

A City program is required to pursue an aggressive policy of ensuring that particularly attractive and strategically located portions of the mountains in Areas C and D are maintained for public use and community benefit. This will involve: 1) early identification and prioritization of mountain areas that are desired for public recreational activities and preservation for their scenic qualities; 2) development of an Action Plan that fully articulates the City's desire and intent with respect to specific mountain areas; and 3) purchase or other means of preservation such as developer dedication, transfer of development rights or other trade offs. Since most of the mountains within the planning area are owned by the State, the City should work with the State Land Department in the development of strategies that are mutually beneficial.

**Regional storm water retention sites** - Two major retention sites are located in the planning area. Reach 11 is a Bureau of Reclamation retention site that the City will manage for recreational use. It is a lineal site situated along the north side of the CAP, south of the Area C core. The City plans a major multi-purpose facility (district park)

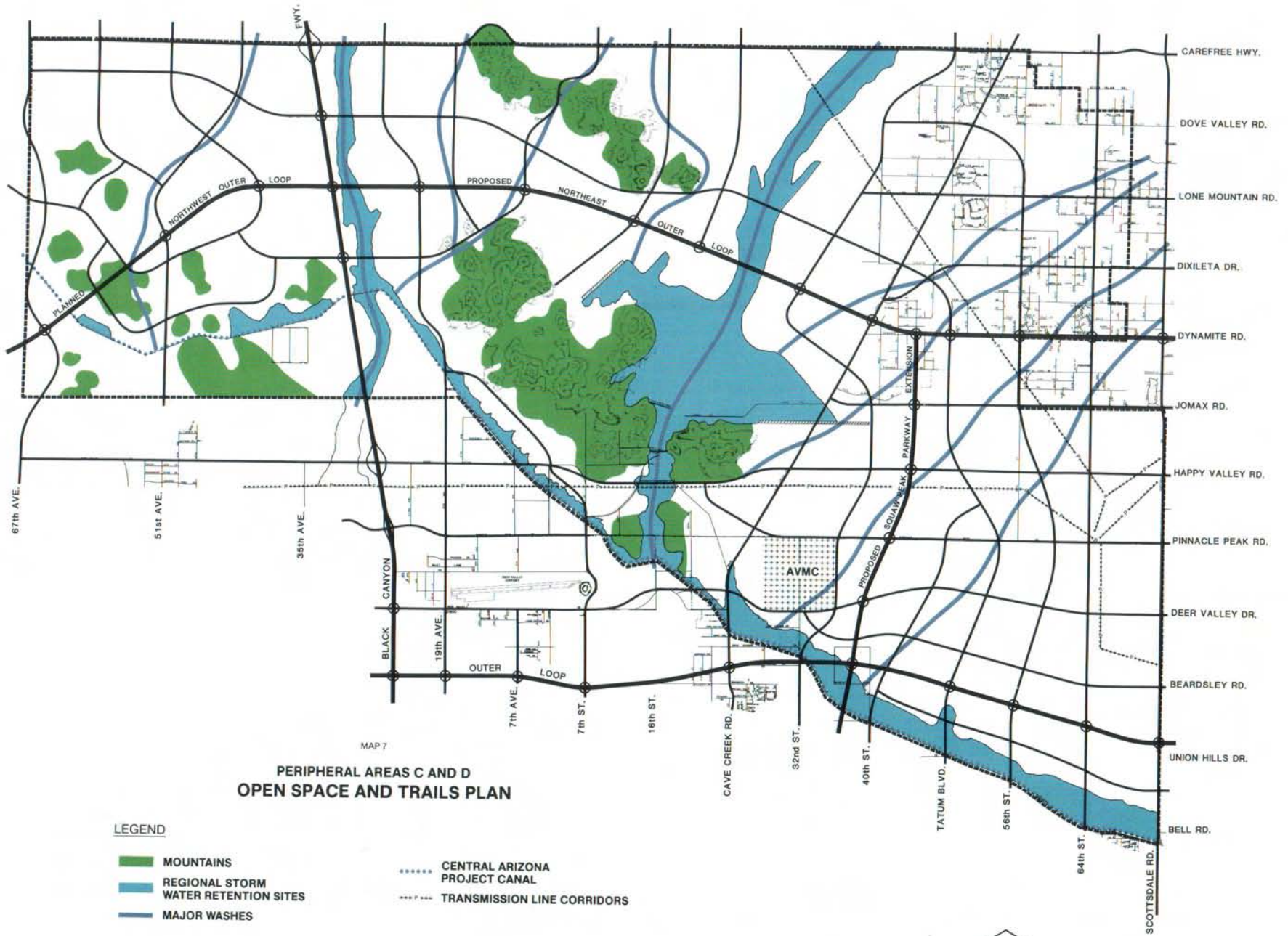
on this site. In addition to the many recreational activities this area will offer, it will provide hikers, bicyclists and equestrian users access to the Union Hills mountain area and to other destinations in the planning area and beyond.

The Cave Buttes Dam retention area is located adjacent to the northeast portion of the Union Hills. The retention area is a Maricopa County Flood Control facility that the City of Phoenix anticipates managing for recreational purposes. It provides a convenient staging area for recreational pursuits into the Union Hills mountain area. This is a particularly desirable location for equestrian facilities.

**Major washes, paths and trails and transmission line corridors** - Major washes that are maintained for drainage purposes and developer provided pedestrian and equestrian trails and bicycle paths, provide the opportunity to create an extensive, interconnected trail system leading to major destinations in the planning area. Cave Creek Wash and Skunk Creek Wash provide the backbone of the system. Other corridors will be designed to feed into these areas.

The transmission line rights-of-way which cross the planning area are opportunities to easily extend into the overall trail system.

Specific corridors will not be appropriate for all types of uses. Use of narrow, environmentally fragile washes will be limited to hiking opportunities; whereas transmission line



MAP 7  
**PERIPHERAL AREAS C AND D  
 OPEN SPACE AND TRAILS PLAN**

**LEGEND**

- MOUNTAINS
- REGIONAL STORM WATER RETENTION SITES
- MAJOR WASHES
- CENTRAL ARIZONA PROJECT CANAL
- TRANSMISSION LINE CORRIDORS

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rights-of-way have potential for accommodating a broader range of uses.

**Central Arizona Project canal** - The CAP provides an open space corridor and trail along its full length. This will further facilitate pedestrian circulation in the planning area and to points beyond. The CAP provides access to most major destinations in Areas C and D directly or via intersecting trail corridors.

**Desert** - Portions of the planning area contain attractive Sonoran desert. The plan recommendations provide for low density development and minimal disruption of these environmentally sensitive and visually attractive areas. The desert provides an open space amenity which serves to enhance both surrounding development and the visual characteristics of the area.

An interpretative facility should be established in a desert area to educate visitors on ways man can co-exist in a harmonious manner with the desert.

**Archaeological sites** - Based on the history of the area and cursory field studies, it is anticipated that historically significant archaeological sites exist in this region. Of particular importance are identified irrigation system sites along the Cave Creek Wash. If and when significant sites are discovered, provision is to be made for maintaining them with minimal disruption as examples of the region's heritage.

**Miscellaneous** - Additional major recreational facilities opportunities include portions of the strip of land between I-17 and Skunk Creek and the planned Deem Hills recreation site which is located just south of the planning area west of I-17. Both sites relate well to the overall recreation and open space network for they serve as conduits and destinations from the trail system.

### Public Facilities Plan

Public facilities are an essential element in the planning and development of an area. Public facilities serve numerous functions such as:

- To protect the health, safety and welfare of residents and users.
- To strengthen the sense of neighborhood and/or community.
- To enhance property values and development potential through the services offered and amenities provided.

The general location and number of facilities that are required are determined in part by applicable service level standards. At the time of specific site selection, specific criteria will involve selection of a site that facilitates the provision of efficient service, is cost effective and allows the use to blend with the surroundings. Existing service level standards are listed below:

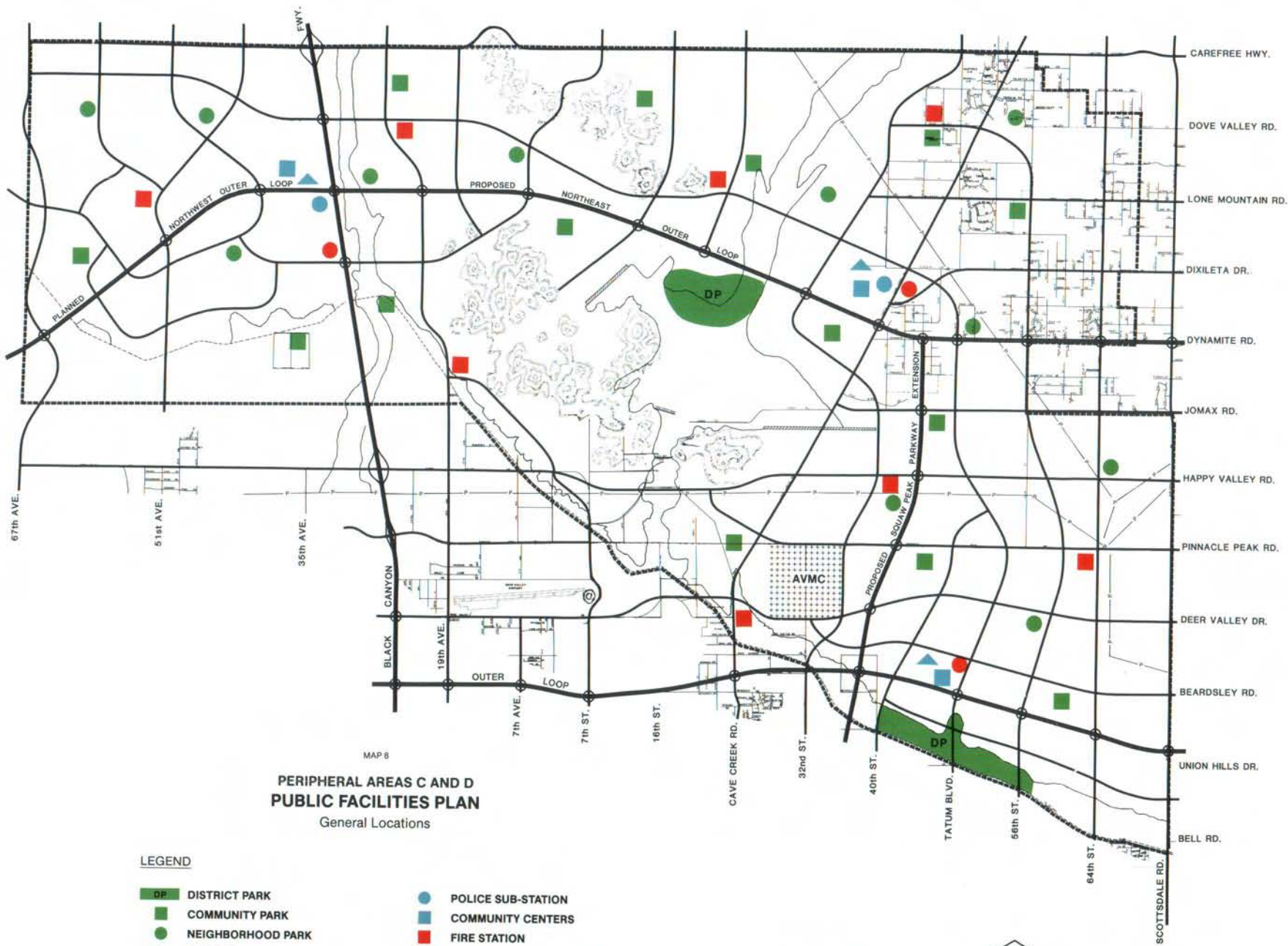
- Parks:
  - neighborhood - .52 acres/1000 population.
  - community - 1.27 acres/1000 population.
  - district - 1.19 acres/1000 population.

- Library - a library serves a population of approximately 100,000.
- Fire Station - a fire station is located so as to achieve at a minimum a response time of approximately 3 minutes.
- Police Sub-station - a police precinct serves a population of approximately 150,000.
- Community Centers - one per village on approximately 40 acres located close to the village core. An additional 10 acres could be set aside for group homes and similar facilities.

Based on these service level standards, the general locations of proposed public facilities that will be needed to serve the residents and users of Areas C and D are shown on the Public Facilities Plan, Map 8. The number and size of proposed facilities is based on existing City service levels. Additions or expansion of existing facilities would be required if an enhanced service level were desired for a particular public service. Other facilities, such as satellite administrative offices of City government, could be desired in Areas C and D. Sites have not yet been identified for these potential facilities. The above specific criteria will apply.

### Schools

Areas C and D overlap three school districts: Cave Creek, Deer Valley and Paradise Valley. Each district has evaluated its future school facility needs in a preliminary manner based on the amount and location of growth as identified in the plan. General locations for proposed school facilities are shown on Map 9.



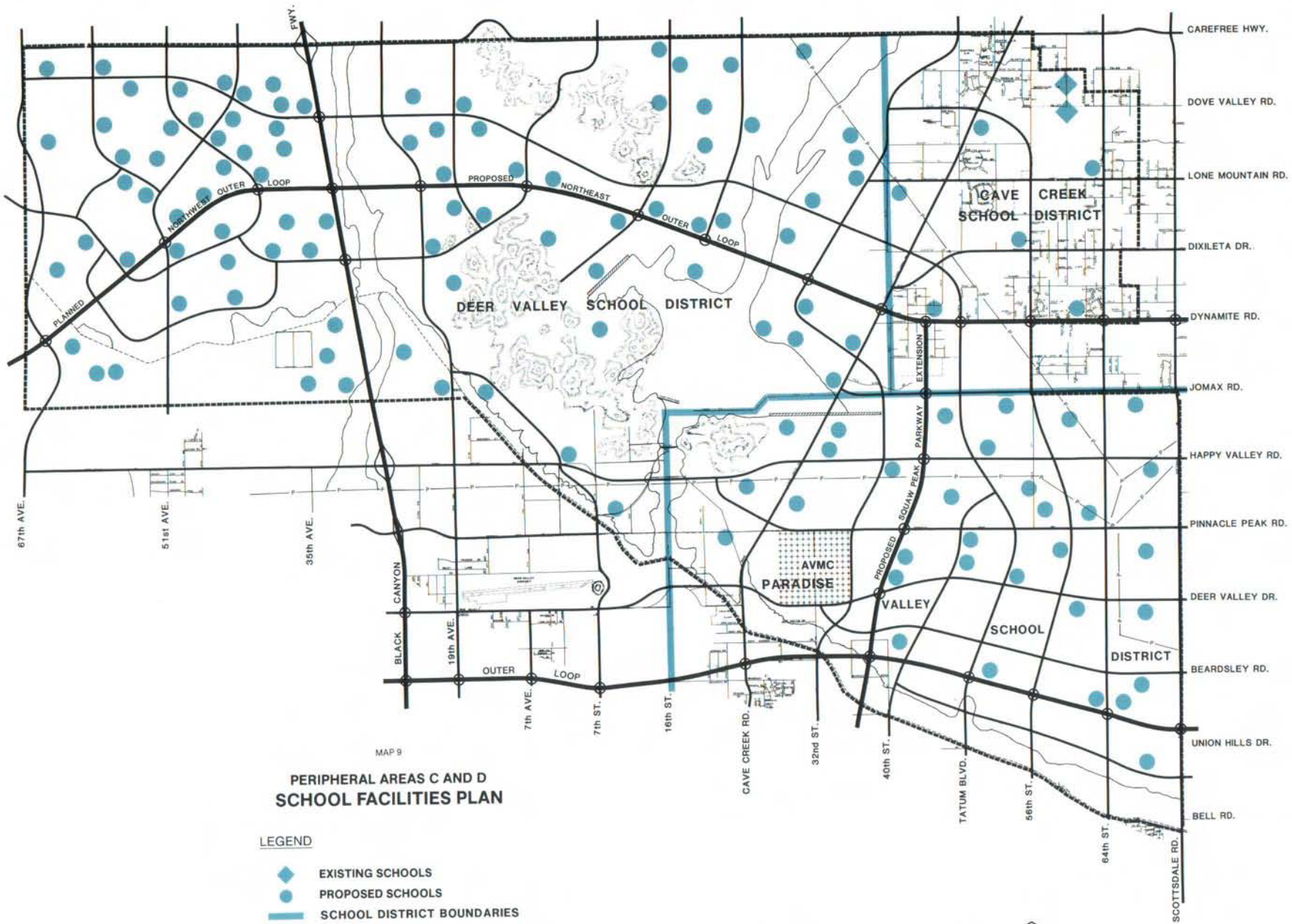
MAP 8  
**PERIPHERAL AREAS C AND D  
 PUBLIC FACILITIES PLAN**  
 General Locations

**LEGEND**

- |  |   |
|--|---|
| <span style="color: green;">■</span> DP DISTRICT PARK  | <span style="color: blue;">●</span> POLICE SUB-STATION        |
| <span style="color: green;">■</span> COMMUNITY PARK    | <span style="color: blue;">■</span> COMMUNITY CENTERS         |
| <span style="color: green;">●</span> NEIGHBORHOOD PARK | <span style="color: red;">■</span> FIRE STATION               |
| <span style="color: blue;">▲</span> LIBRARY            | <span style="color: red;">●</span> DISTRICT HQ & FIRE STATION |

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## Water Resources and Facilities and Wastewater Facilities Plan

Phoenix is located in the midst of the Upper Sonoran Desert. Thus water, both quality and quantity, is a major concern and a driving factor in any plan development. Such is certainly the case in Areas C and D.

Currently, Areas C and D are sparsely populated with no existing major water or wastewater infrastructure. At build-out, however, the areas are projected to be home to a significant population. As noted previously, most of this growth is expected to occur after the year 2000.

Most of the potable water supplied to Areas C and D is expected to come from the Union Hills Water Treatment Plant, a plant designed to treat water from the Central Arizona Project Aqueduct. Deep wells located in the Paradise Valley and Biscuit Flat aquifers will likely supplement the supply in the near term but will be phased out as required by the *Groundwater Management Act*.

Phoenix, like all entities along the CAP, applied for an allocation of water from the CAP. At the time of the initial request (late 1970's), only land in Area C was included to calculate the City's projected need. It is anticipated that a supplemental request will be made to include lands in Area D. In addition, the City is working with the Arizona State Land Department in an effort to secure use of some of the water allocated to State Trust lands in the area. It is essential that additional strategies be developed to augment available and projected

water supplies to serve the anticipated population growth in the planning area.

In 1986, the Phoenix Water and Wastewater Department commissioned a study by Harza Engineering designed to evaluate and plan the water and wastewater needs in Areas C and D. Though final recommendations are not expected until early 1988, preliminary recommendations have been made, many of which have been endorsed, directly or indirectly, by the Areas C and D Advisory Committee. The three recommendations that have the greatest impact are summarized below:

- In general, water distribution facilities should be extended only upon assurance of the development of a sewer system to capture wastewater.
- The City should make water reclamation and a nonpotable water distribution system an integral part of the water and wastewater master plans for Areas C and D.
- The City should pursue a nonpotable water distribution system to serve large turf irrigation demands using a combination of reclaimed wastewater and screened CAP canal water, as a long term target.

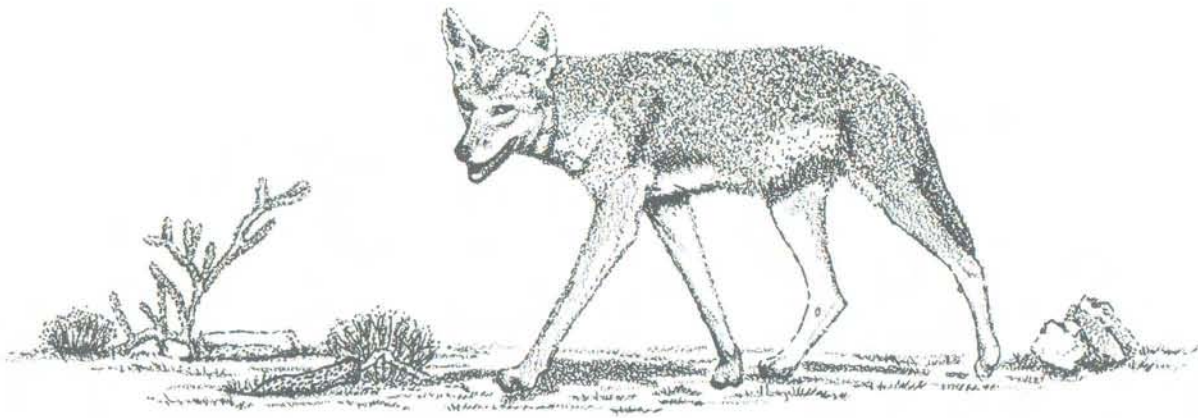
Adherence to recommendations in the City's water conservation program as currently conceived and as might be further developed in the future will be required. Each development, regardless of size, will prepare a comprehensive water conservation strategy for submittal to the Water and Wastewater Department. All developments will minimize water use.

## Drainage

In late 1985, an overview study on issues of drainage, subsidence and soils, and geologic characteristics was completed. According to that study, referred to as the Anderson-Nichols report, "...none of the physical conditions evaluated during the course of this study were found to present impacts that could prevent development in the peripheral planning areas." Drainage concerns, however, continue to be a major issue.

Two separate and distinct drainage areas can be identified in Areas C and D. The portion of the area generally located east of Cave Creek Wash is a very broad alluvial fan area typified by a dense network of shallow, braided washes. The area west of Cave Creek Wash has some alluvial fan characteristics, but has more well-defined flow paths.

Large scale development on the alluvial fan exceeding a density of one dwelling unit per acre will require improvements to or modification of existing drainage features. Improvements could take many forms from channeling to collecting, conveying and redistributing. Specific improvement recommendations need to be made on a case-by-case basis following completion of an area wide master drainage study. To the extent feasible, major washes should be retained in their natural condition. The drainage study should focus on the development of creative design solutions to the drainage problems associated with the alluvial fan, particularly as it relates to preservation and improvement of desert washes.



The alluvial fan areas existing east of Cave Creek Wash will pose the most significant drainage problems to future development. Because of the ill-defined nature of alluvial fan flooding, it is difficult to develop drainage solutions for individual developments without collecting the many individual flows. Once transported through the development to adjacent undeveloped land, these collected flows must be redistributed to maintain existing downstream flow patterns. As part of the master drainage study, a master drainage system for the area east of Cave Creek Wash is strongly recommended for it will provide for a more coordinated and efficient drainage system.

The area west of Cave Creek Wash is marked by more defined washes, all of which flow into a series of major washes. In most cases the washes do not have a 100-year channel capacity and, as development occurs, would have to be improved. Adequate detention will also be required to prevent an increase in runoff discharge.

Roadways will require improvement of drainage crossings to maintain access during and after flooding. Present road crossings consist mostly of dip section crossings. It may be necessary to provide culvert crossings or, in extreme cases, provide for structures to span major washes.

As delineated on the Land Use and Circulation Plan, Map 3, page 10, flood plain areas (100-year ponding) are shown north (upstream) of the Central Arizona Project Canal, the Cave Buttes Dam, and Skunk Creek Wash.





## Implementation Programs

The General Plan is a guide to the development of Areas C and D, describing the types, locations and characters of development the City desires. To make the Plan reality, a comprehensive implementation process that identifies how the General Plan can be brought about is necessary. In this section a Plan of Action is outlined that serves as the vehicle to guide future decision-making, developmental activity and Plan refinements.

### Plan of Action

The Plan of Action identifies strategies the City will institute, promote and encourage to maximize the development opportunities in Areas C and D.

The Plan of Action includes:

- Preservation of Unique Desert Open Areas
- Design and Character Elements
- Phasing of Development
- Development Strategy
- Infrastructure Financing
- Intergovernmental Cooperation
- Plan Updating
- Other Recommendations

Each strategy deals with a specific implementation issue. The various strategies build on one another and all are highly interactive. The strategies are described as follows.

### Preservation of Unique Desert Open Space

In addition to efforts to preserve hillsides, washes and scenic corridors along major thoroughfares, efforts will be made to secure desert open areas for permanent open space. During the next phase of refinement and implementation of this Plan, the City will work with the Committee and others as necessary to identify particularly scenic and fragile natural desert and wild life areas. Optimum size areas can then be identified for dedication as permanent public natural open space, with possible consideration for inclusion of trails only. In return for the dedication, property owners would then be allowed to transfer the density shown on the Plan onto the remainder of the site. Provision for a slight density bonus should also be considered as an incentive to encourage such dedications.

If possible, an attempt should be made to link these open space areas by natural washes or park areas to allow for movement of wildlife and water flows. Help in identifying and preserving the natural plant and wildlife habitat will be sought from the Desert Botanical Gardens, Boyce Thompson Arboretum, the Arizona Sonoran Desert Museum, the State Parks Department and the Game and Fish Department.

Studies should be undertaken to document the increased property values resulting to land located next to natural open space areas as a further incentive for set a sides.

### Design and Character Elements

A subcommittee of the Areas C and D Advisory Committee was formed to develop a set of design and character elements. The purpose of these elements is to provide guidelines for shaping the man-made environment by ensuring that man's activities in the planning area are compatible with and complementary of the unique and sensitive characteristics of the area. The design and character elements are currently general guidelines. Further work will be required to refine and make more specific these elements so they will be in a form appropriate for adoption as an ordinance(s). The subcommittee report is provided in Appendix B. Below, selected elements contained in the subcommittee report are discussed.

#### ● View Preservation:

Developments will offer views of the surrounding desert and mountains, if possible, and will avoid obstructing the views from neighboring developments and transportation corridors.

#### ● Height:

Zoning and development standards will provide that except in cores and mixed use areas, structure height shall not exceed 2 1/2 stories or 30 feet. A maximum of four stories or 56 feet is in the cores and mixed use areas unless otherwise designated. These limitations are needed to implement the density patterns and capture man-made characteristics compatible with the desert environment.

- **Lighting:**

Standards shall provide that lighting intensity be limited to that required for vehicular and pedestrian safety. Recreational lighting will be approved in designated locations only under criteria to be related to desired character and the enjoyment of residential districts.

- **Vegetation:**

The entire planning area can be characterized as Sonoran desert of varying quality. Thus, landscaping can aid in the preservation of the aesthetic and biologic integrity of the desert environment.

A master vegetation plan is to be prepared for each development describing the location of existing plants within areas of development and describing appropriate preservation or restoration techniques as applicable. All healthy saguaro and ironwood trees will be preserved.

Natural vegetation shall be maintained wherever possible. Revegetation with approved plant material shall occur in areas disturbed by construction activities. Vegetation should not be used that has the following potentially destructive characteristics: profuse and/or noxious pollen, excessive height, weed-like characteristics of excessive growth, high water demands, and other similar traits.

- **Overhead Utilities:**

Provision will assure that all electric lines 69kV and smaller are placed underground.

All pedestals, tanks, meters etc. are to be sensitively sited and screened from view.

- **Mountain Access Easements:**

In the development review process, easements will be reserved, or access provided to ensure mountain areas and recreational facilities are available for public use. To the extent possible, private developments will not back-up to public-controlled mountain land.

- **Signs:**

Standards for signage are to be prepared and adopted to encourage appropriate property identification consistent with the visual assets of the Peripheral Areas.

In order to assure the continual visual quality, new billboards will not be located in Areas C and D.

- **Fences and Walls:**

Fences and walls are to be constructed of wood, stone or masonry products and colored to match the surrounding landscape.

The City will take the necessary steps to translate the above policies into enforceable ordinances.

#### Phasing of Development

The purpose of this strategy is to establish a framework to ensure that projected growth in Areas C and D is orderly and efficient. Initially, development should be encouraged in and around cores, areas projected to contain high intensity uses, and along corridors where

infrastructure is in place or easily extended. Developmental activity should progress outward from these areas as infrastructure is extended and proven markets are demonstrated. As infrastructure reaches the planning area from the south, lower portions of Areas C and D (in Area C along the CAP and in Area D just north of Jomax Road) will be appropriate for development first.

Development at locations remote from existing infrastructure should be discouraged by not approving zoning requests due to the substantial costs that would be incurred to extend infrastructure and provide public services to areas significantly distant from existing service areas.

The State can greatly assist in carrying out this strategy by orderly disposition of Trust lands in a manner consistent with the above approach.

#### Development Strategy

The development strategy is in essence a game plan. It identifies the means the City should take to promote economic development in Areas C and D. The City was assisted by a consultant, as previously footnoted, in the assessment of the economic potential, forecasts and recommendations regarding development in the planning area. The consultant concluded "...Areas C and D provide a very attractive environment for development *but will require significant economic stimuli before development forces will be strong enough to sustain healthy rates of growth.*" (emphasis added)

Major elements of the development strategy include:

- Establish a unique and highly attractive environment in Areas C and D. This is a prerequisite for attracting desirable and significant economic development activities. This consideration is a major focus of the recommendations included in the General Plan.
- Maximize the potential for the Deer Valley Airport to serve as the economic hub of North Phoenix. Continue strong support for the growth and development of the Deer Valley core and mixed use areas along I-17. Growth in west Area D will be employment-led. Significant expansion of the business and employment base in Deer Valley will be necessary to create the critical mass and momentum for developmental activity to occur in west Area D. Employment growth here will be essential to sustaining a significant residential development pace.
- Early completion of the Outer Loop. This facility and Tatum Boulevard will provide the needed accessibility to stimulate development activities in the Area C core and mixed use areas and to strengthen their competitive stance. High quality residential development is a necessary prerequisite to the location of major retail commercial activities in the core.
- Early development of Reach 11 park as planned by the City. The park plan includes broad and diverse recreational opportunities which will strengthen the development potential in and around the Area C core.

- The development of aggressive marketing and municipal assistance programs which enlist the support and assistance of community development organizations and the City's Economic Development Department to attract and facilitate desired development.

#### Infrastructure Financing

Areas C and D contain little existing infrastructure. The costs to extend infrastructure into these areas will be substantial. Given the many competing demands placed on City bond funds, it may not be possible to provide capital facilities when desired and needed to accommodate growth and development in Areas C and D. Additional revenue sources will be needed to finance infrastructure, both to allow the City to respond to developmental opportunities in a timely fashion and to stimulate development through selective infrastructure investment.

As part of the plan development process for Areas C and D, a detailed analysis was conducted by staff, a consultant, a Citizens Task Force and Council Subcommittee to develop a fiscal impact (infrastructure financing) fee methodology for the peripheral areas. The recommended fee methodology, which has been adopted by the Council, provides for developer-support of the capital infrastructure necessary to serve development. The fee methodology is designed to charge developments in remote sections the full cost of extending infrastructure to non-contiguous areas.

The ordinance to implement the fiscal impact fee methodology and the required specific

infrastructure financing plan for Areas C and D which will set forth specific infrastructure needs and costs should be completed expeditiously to initiate the program prior to substantial development in the planning area.

Proposed infrastructure improvements for Areas C and D will be incorporated into the City's Capital Improvement Program (CIP). This will serve to indicate where and when infrastructure will be developed which provides the City with an exceptional tool for directing the location and timing of growth. In the Appendix, the magnitude and location of growth in the planning area is projected by 10-year increments to the year 2015 and for build-out. These projections, which should be monitored and updated periodically, can be utilized to incorporate planning area infrastructure needs into the CIP.

#### Intergovernmental Cooperation

The City will need to build on the dialogue established during the plan development process and work in a cooperative fashion with adjacent communities, the State Land Department and the County to ensure that Areas C and D develop in a manner consistent with this Plan. Both the State and the County through their control of land within the planning area impact and are impacted by the Plan. Cooperation should take the form of sharing information, and involving each entity both in the review of development proposals at an early stage, where appropriate, and in the monitoring and updating of the Plan.

## Plan Monitoring and Updating

Physical development of Areas C and D will take many years. The Plan will be refined, monitored and updated often to ensure that it is kept current and responsive to changing conditions and community needs. Plan updating on an annual basis is recommended. Updating of the Plan should coincide with the required annual update of the Areas C and D specific infrastructure financing plan.

## Other Recommendations

1. A master drainage study, particularly for the area east of Cave Creek Wash, should be developed to provide for a more coordinated and efficient drainage system and to identify better the capital needs and costs associated with drainage. The study should focus on the development of creative design solutions to the drainage problems associated with the alluvial fan, particularly as it relates to preservation and improvement of desert washes.
2. The City should pursue an aggressive policy of acquisition by purchase or other means of the particularly attractive and strategically located mountain areas in the planning area.
3. Consideration should be given to the Areas C and D Advisory Committee recommendation for a name for each subarea: Area C - Desert Ridge Village, East Area D - Desert Shadows Village, West Area D - Pleasant Valley Village.
4. The design and character elements are currently general guidelines. Further work is recommended to refine and make more specific these elements so they will be in a form appropriate for adoption as an ordinance(s).
5. Additional water resources should be acquired to supplement existing and projected supplies to accommodate and encourage development in the planning area.
6. City staff should work with each school district in the further refinement of school facility plans. School districts should be involved in the early stage of development requests to ensure that adequate consideration is being given to the impact of proposed development on school facilities and that satisfactory school sites are reserved as defined in the school districts' facility plans.
7. The transportation consultant and staff identified candidate street segments for designation as scenic corridors in addition to the existing Cave Creek Road scenic corridor. Further study is needed to develop specific recommendations regarding the size (width) of specific corridors, uses, if any, that would be permitted in them and such items as design, and the setbacks and heights that would be appropriate adjacent to a scenic corridor.
8. Close coordination with City and Regional Transit staff is necessary as the area develops to facilitate early provision of transit service and park and ride lot development.
9. Existing planning area and sub-area boundaries should be assessed to determine whether changes are appropriate as planning for the area transitions from general to more specific and as implementation of the Plan occurs. Specific considerations include: 1) Dividing Area D along the 7th Street or the 7th Avenue alignment (alignments as shown on the transportation system plan) to consolidate into a single sub-area the portion of the planning area that possesses the most significant environmentally sensitive characteristics; 2) Incorporate the portion of the planning area in west Area D below the CAP into Deer Valley Village. This area relates more to the area south of Jomax Road given the substantial barrier the CAP creates.
10. The Areas C and D Advisory Committee should remain in its current capacity to assist staff and the City Council in the refinement of Plan recommendations and to serve in the interim to review development proposals and to assist in Plan refinement and updating. The Committee serves as an excellent mechanism to generate both formal and informal community input into the planning process. As the development pace of Areas C and D accelerates (this will occur primarily through the planning for and disposition of State Trust lands) the Advisory Committee may be replaced by a Village Planning Committee in each sub-area of the planning area: Area C, east Area D, and west Area D. These committees would have a charge similar to that of the other village committees.



## Acknowledgments

The Phoenix Planning Department is responsible for the contents of this report. Credit, though, should be widely distributed. The Peripheral Areas C and D Advisory Committee, chaired by Mr. Jones Osborn, especially deserves credit. Its diligence and insights have been invaluable in shaping the recommendations contained in the Plan. Committee meetings provided a forum for both formal

and informal community participation into the planning process. The Development and Designs Subcommittee, chaired by Ms. Tara Laman, also deserves credit. The Subcommittee worked long and hard to establish a set of environmentally sensitive standards for design and development that ensures compatibility with the unique desert character of the planning area.

The Cave Creek Improvement Association and other interested citizens were most helpful by

sharing their knowledge, experiences and concerns regarding the planning area with staff and the Advisory Committee.

Thanks is also due to the State Land Department, State lands leaseholders, surrounding jurisdictions and the school districts for their cooperation and participation in development of the Plan.

Staff of other City departments who contributed to the preparation of this Plan deserve credit also.

### PERIPHERAL AREAS C AND D PLANNING ADVISORY COMMITTEE

Mr. Jones Osborn II, Chairman  
Mr. Sam Morse, Vice Chairman  
Mr. Tom Beauchamp\*  
Mr. Bernie Cain  
Mr. Michael Cantor  
Mr. Joe Contadino  
Mr. Kimball Corson  
Mr. Murrel Crump\*  
Ms. Peggy DeMarco

Mr. Scott Ewbank  
Ms. Nicki Hansen  
Mr. Wes Harris\*  
Ms. Joni Hegel  
Ms. Penny Howe  
Mr. Ronald Junck  
Mr. Lars Lagerman  
Ms. Tara Laman  
Ms. Christin Laraway\*

Mr. Guy Leohnis  
Mr. Noel Lesniak  
Mr. David Lewis  
Mr. John F. Long  
Mr. Joseph McGarry  
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Mr. Jeff Newburg\*  
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Ms. Linda Powers  
Mr. Robert Smith  
Ms. Jan Triplett  
Ms. Linda Verges  
Mr. Don Viehmann

\*Resigned



## Appendix A

# Population and Nonresidential Square Footage

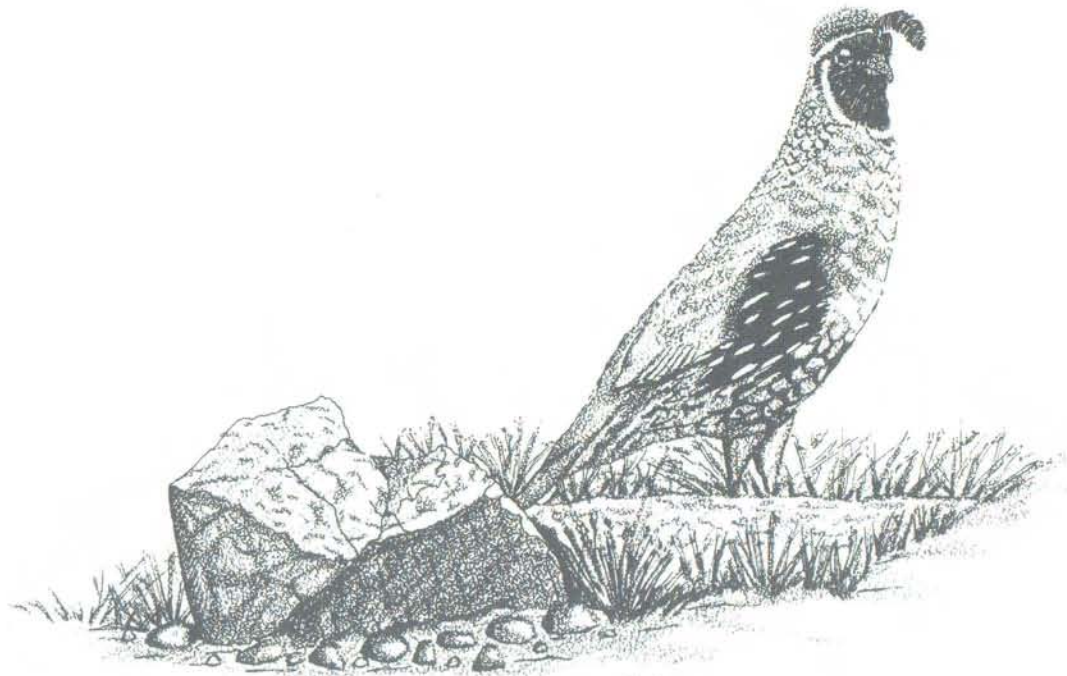
The following tables on population and nonresidential square footage projections were developed by the Phoenix Planning Department to ensure that an appropriate mix of uses was achieved in the General Plan. These projections were also important elements in development of the infrastructure financing study and in the transportation system plan for they assisted in identifying the location,

size and timing of infrastructure that would be required to accommodate growth. To develop the projections, Staff considered and utilized projections provided in the economic consultant's report, initial plans prepared by State lands leaseholders in the planning area and existing and anticipated trends in Phoenix and the Valley regarding development characteristics.

These projections are not intended to identify specific absorption rates that must be strictly

adhered to. Projections will be reviewed on an annual basis and updated as necessary to reflect actual development trends and revised projections.

The following tables provide population and nonresidential square footage projections by Traffic Analysis Zones (TAZ) in ten year increments 1995, 2005, 2015, and build-out (projected to be 2040) for Areas C and D. Map 10 shows the area covered by each TAZ.



**Population and Nonresidential Square Footage by Traffic Analysis Zones (TAZ)**

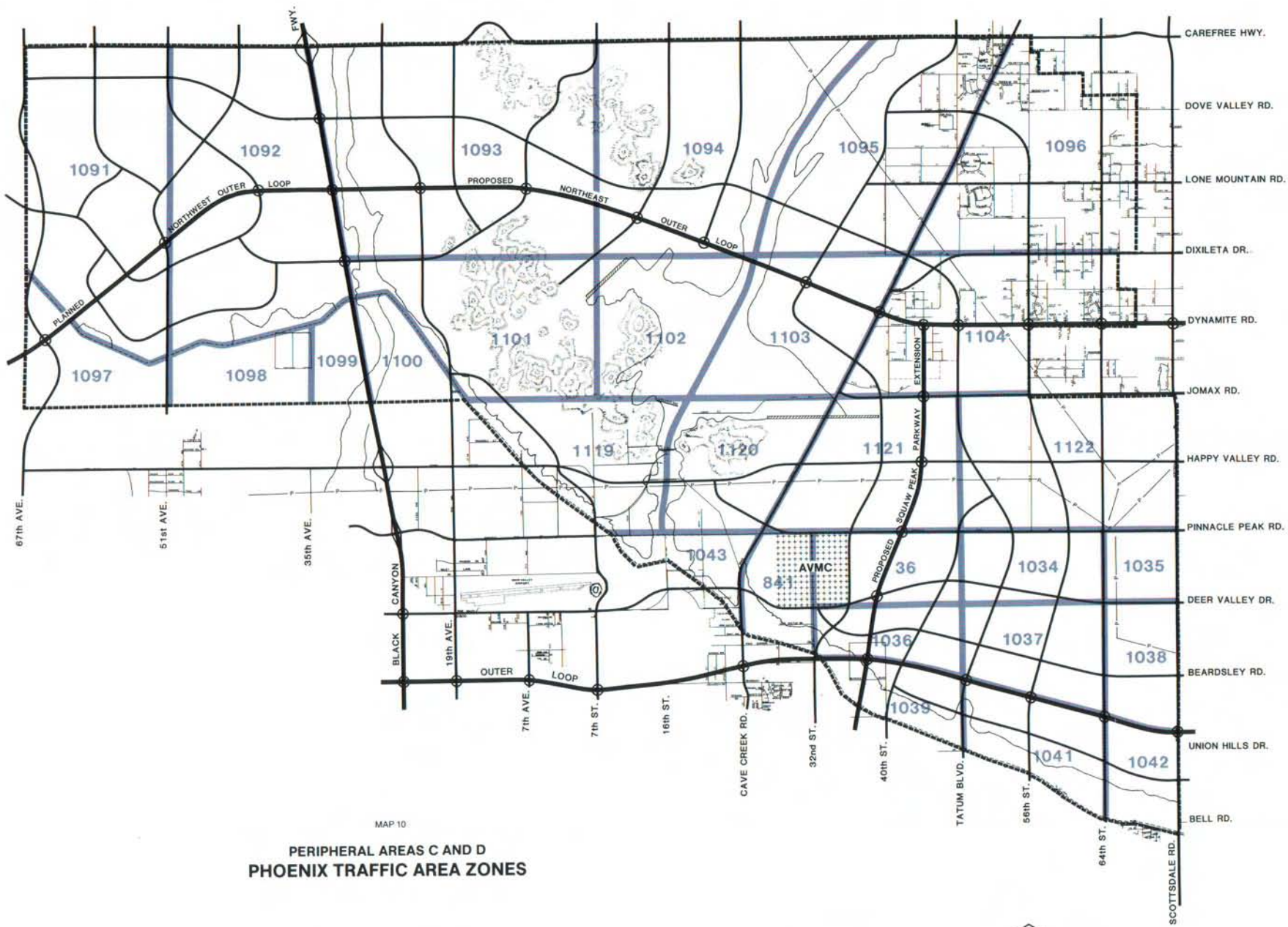
**Area C**

TAZ	Population				Nonresidential Square Footage							
	1995	2005	2015	Buildout	1995		2005		2015		Buildout	
					Retail	Other	Retail	Other	Retail	Other	Retail	Other
36	424	1,848	3,719	9,847	0	0	20,000	20,000	35,000	80,000	100,000	160,000
841	163	711	1,468	2,529	10,000	15,000	30,000	60,000	40,000	100,000	80,000	125,000
1034	367	1,600	3,230	7,333	0	0	15,000	0	25,000	75,000	90,000	125,000
1035	65	284	1,958	2,008	0	0	10,000	0	20,000	50,000	50,000	100,000
1036	2,606	11,370	19,126	21,238	70,000	80,000	350,000	275,000	1,450,000	1,000,000	1,840,000	3,250,000
1037	1,059	4,619	8,809	27,697	0	0	10,000	125,000	50,000	250,000	60,000	500,000
1038	530	2,311	6,264	11,131	0	0	10,000	40,000	25,000	80,000	150,000	140,000
1039	0	0	0	0	0	120,800	10,000	750,000	20,000	2,000,000	55,000	2,500,000
1041	204	890	1,762	1,969	0	131,000	20,000	1,000,000	30,000	3,500,000	60,000	4,000,000
1042	204	890	2,447	5,138	10,000	15,000	30,000	30,000	40,000	50,000	80,000	75,000
1043	652	2,842	3,000	3,012	25,000	30,000	40,000	120,000	60,000	140,000	70,000	150,000
1119	122	534	1,272	1,769	0	0	0	35,000	30,000	45,000	45,000	90,000
1120	204	890	2,192	8,369	0	0	15,000	35,000	25,000	50,000	75,000	100,000
1121	489	2,132	4,845	14,297	15,000	20,000	25,000	60,000	50,000	75,000	125,000	150,000
1122	130	569	3,132	9,775	0	0	15,000	0	30,000	20,000	90,000	100,000
<b>Total</b>	<b>7,219</b>	<b>31,490</b>	<b>63,224</b>	<b>126,112</b>	<b>130,000</b>	<b>411,800</b>	<b>600,000</b>	<b>2,550,000</b>	<b>1,930,000</b>	<b>7,515,000</b>	<b>2,905,000</b>	<b>11,565,000</b>
<b>Total Nonresidential</b>						<b>541,800</b>		<b>3,150,000</b>		<b>9,445,000</b>		<b>14,470,000</b>

**Population and Nonresidential Square Footage by Traffic Analysis Zones (TAZ)**

**Area D**

TAZ	Population				Nonresidential Square Footage							
	1995	2005	2015	Buildout	1995		2005		2015		Buildout	
					Retail	Other	Retail	Other	Retail	Other	Retail	Other
1095	1,548	6,750	11,492	23,144	0	30,000	10,000	60,000	25,000	103,000	175,000	350,000
1096	2,281	9,949	10,500	11,500	45,000	30,000	75,000	75,000	150,000	95,000	275,000	150,000
1103	1,222	5,329	10,325	12,727	0	0	25,000	225,000	225,000	855,000	590,000	3,000,000
1104	1,140	4,974	7,830	16,567	30,000	40,000	60,000	125,000	80,000	145,000	100,000	275,000
1094	81	355	8,809	23,104	0	0	15,000	0	75,000	60,000	125,000	325,000
1102	0	200	489	2,037	0	0	10,000	45,000	30,000	90,000	75,000	275,000
1093	390	3,146	13,113	28,254	0	0	75,000	145,000	100,000	300,000	390,000	675,000
1101	700	2,000	2,500	3,500	20,000	80,000	60,000	675,000	80,000	2,250,000	95,000	3,750,000
1100	307	750	1,200	2,345	10,000	40,000	30,000	800,000	45,000	3,250,000	90,000	4,500,000
1099	81	355	1,958	3,738	0	0	0	0	30,000	15,000	45,000	25,000
1098	123	534	2,643	3,806	0	0	15,000	0	30,000	40,000	55,000	90,000
1097	123	534	4,404	4,500	0	0	15,000	20,000	35,000	50,000	55,000	225,000
1091	0	1,224	23,491	28,428	0	0	20,000	35,000	175,000	200,000	350,000	600,000
1092	1,140	3,750	29,363	59,366	35,000	80,000	80,000	60,000	750,000	3,500,600	1,500,000	8,646,975
<b>Total</b>	<b>9,136</b>	<b>39,850</b>	<b>128,117</b>	<b>223,757</b>	<b>140,000</b>	<b>300,000</b>	<b>490,000</b>	<b>2,911,600</b>	<b>1,155,000</b>	<b>10,953,600</b>	<b>3,920,000</b>	<b>22,886,975</b>
<b>Total Nonresidential</b>						<b>440,000</b>		<b>3,401,600</b>		<b>12,108,600</b>		<b>26,806,975</b>



MAP 10  
**PERIPHERAL AREAS C AND D  
 PHOENIX TRAFFIC AREA ZONES**

CITY OF PHOENIX PLANNING DEPARTMENT







## Appendix B

# Peripheral Areas C and D Design Guidelines

Prepared by the Design Guidelines Subcommittee of the  
C/D Planning Advisory Committee

In the *General Plan for Phoenix (1985-2000)*, four peripheral planning areas were identified and designated for special study independent of the process that led to the development of the *General Plan*. Two of these areas, consisting of approximately 111 largely undeveloped square miles, lie above the Central Arizona Project Aqueduct to Carefree Highway on the north and between Scottsdale Road on the east and 67th Avenue on the west. These areas have been designated Peripheral Areas C and D.

In late 1985, the Phoenix City Council appointed a Citizen's Advisory Committee to assist in the planning effort for areas C and D. The Committee, meeting since November 1985, has developed a conceptual plan for the area. As one of many implementation methods designed to make the plan a reality, the Committee appointed a subcommittee of eight members to produce development guidelines for the area. The subcommittee's recommendations are contained herein.

### Philosophy

The objective of the design guidelines for Area C/D is to provide a set of environmentally sensitive standards for development that ensures compatibility with the unique Sonoran desert character of part of the area. Comprised of some 111 square miles, the area represents a unique development opportunity for the City.

Its location north of the Central Arizona Project Aqueduct coupled with vast amounts of State Trust land provides an opportunity not presently available in the City. The philosophy of the subcommittee has been to develop a means of blending people, structures, and the existing desert into a harmonious and aesthetically pleasing community, including the preservation of natural desert areas where justified and desired.

### Development and Planning Policies

To assist in the development of design guidelines, the subcommittee adopted a set of development and planning policies. These policies were intended to be the framework upon which the guidelines could be based; the goal of which is to preserve the unique character of the area while providing for growth and quality development.

1. Where appropriate and feasible, the existing environment should be maintained by preserving and protecting desert washes, mountain slopes and native Sonoran vegetation and wildlife. A portion of each development site plan should be set aside as natural desert preserve.
2. Developments should offer views of the surrounding desert and mountains, if possible, and should avoid obstructing the views from neighboring developments and transportation corridors.
3. "Cluster development" and "building envelope" techniques should be encouraged, when feasible and appropriate.
4. Selected major transportation corridors should be designed as scenic desert parkways.
5. Site plans and designs should be completed and approved prior to the issuance of any site modification permits.
6. Selected natural desert areas should be designed and protected before grading and development begins to prevent inadvertent destruction of protected areas.
7. Private and public developers will be expected to use innovative concepts to respond to the special characteristics of the area. Colors and textures should be chosen to blend with the natural desert terrain. All developments, residents, structures or improvements of any kind should be designed or constructed so as to be harmonious with the overall environment and appearance of the area.
8. Water conservation will be encouraged at every level of development. Plant materials that have low water demands and are drought resistant will be encouraged. Further, to the extent feasible, developers should be encouraged to utilize reclaimed water for landscape irrigation in common areas, and, to the extent possible, for irrigation purposes in commercial and industrial developments.

## Design and Character Elements

The subcommittee developed a series of issues which would cover most of all of the design guidelines. These issues, listed below, formed the basis for the individualized guidelines. The guidelines were established for the entire area, however, different criteria may apply to differing parts of the 111 square mile region.

The issues:

- A. Height
- B. Lighting
- C. Architectural Style
- D. Setbacks
- E. Vegetation
- F. Design (Streets)
- G. Utilities
- H. Drainage
- I. Siting, Parking, Entrance
- J. Paving
- K. Lot Coverage
- L. Special Use Areas
- M. Water
- N. Slope
- O. Vista
- P. Signage
- Q. Fences and Walls
- R. Trails
- S. Scenic Drives

The following guidelines were developed for each issue:

### A. Height

1. Within those areas designated as a core, building and structure height shall comply with applicable City of Phoenix codes and ordinances. The maximum height for any building or structure located outside of a designated core shall be the greater of 2 1/2 stories or 30 feet from the design base of the building or structure to the highest point at the top of the building or structure.
2. Buildings and structures located adjacent to existing or proposed roadways should be lower in height than interior buildings or structures.
3. Buildings and structures should step down in height to pedestrian courtyards, open spaces and adjacent rights-of-way.

### B. Lighting

1. Lighting must comply with all City of Phoenix laws and ordinances, including without limitation, the Phoenix Dark Sky Ordinance.
2. Lighting intensity must be limited to that required for vehicular and pedestrian safety.
3. Lighting necessary to permit evening recreational activities will be permitted in approved, designated locations.

### C. Architectural Style

1. Non-reflective materials, colors and textures appropriate to and compatible with the natural flora, climate, and character of the desert environment should be utilized. Masonry, stucco or traditional adobe should be the predominant exterior surface.
2. Accessory structures and equipment whether attached to or detached from primary buildings or structures shall be of similar or compatible design and shall be constructed of similar or compatible materials.
3. Buildings and structures should be placed individually or in groups to create focal points, view corridors and open courtyard spaces.
4. Rooftop mechanical equipment, vents and ducts shall be screened from view from any adjacent property or street. Screening must be of equal height to the height of the equipment being screened and must be in scale with the underlying building or parapet.
5. Architectural and design innovations shall be encouraged and drab uniformity discouraged.

### D. Setbacks

1. Setbacks shall, at a minimum, conform to existing ordinance standards.

2. The "building envelope" technique, a concept of maximum allowable building area, should be utilized. In accordance with this technique, each project developer shall prepare a diagram showing where on the subject project development will be allowed prior to site plan approval. The technique shall be used by project for developments having zoning of R1-10 and below and by lot for projects having zoning of R1-18 and above. No development or alterations to the existing landscape shall occur outside of the "building envelope." Cluster development will be encouraged.

3. Setbacks on roadways designated as scenic corridors shall be as prescribed on official documents establishing said scenic corridors.

#### E. Vegetation

The entire study area can be characterized as Sonoran desert of varying quality. Thus, landscaping can aid in the preservation of the aesthetic and biologic integrity of the desert environment. Generally, with the exception of lands devoted to such uses as parks and roadways, the land can be classified into three zones within which different standards apply.

- The natural area consists of undisturbed natural desert vegetation. No new plant materials shall be introduced. In addition, no water, fertilizing or other main

tenance activities shall occur in the natural area other than those required for cleanup of debris.

- The transitional area is subject to disturbance, but is an area upon which nothing will be built. Within 30 days of completion of desired construction, the transitional area shall be revegetated with indigenous plant materials. Minimal irrigation will be allowed, however, irrigation systems shall be carefully designed so as not to cause overspray into the natural area. Use of drip-type irrigation systems will be encouraged.

- The private area is located behind private walls and structures. The private area is least restrictive and may include drought resistant plants not listed as prohibited.

1. A master vegetation plan is to be prepared for each development describing the location of existing plants within areas of development and describing appropriate preservation or restoration techniques as applicable.

2. Protected plants are those desert plants which, either because of size or age and type, must be protected pursuant to State and City regulations. All existing vegetation per the vegetation plan must be preserved or relocated on site. Improvements should be sited to avoid these protected species to the extent possible.

3. Undisturbed natural vegetation shall be maintained in the natural area wherever possible. Revegetation with approved plant material shall occur in areas disturbed by construction activities. Prohibited species are potentially destructive by reason of profuse and/or noxious pollen, excessive height, weed-like characteristics of excessive growth, high water demands, and other similar traits.

#### F. Design (Streets)

A comprehensive network of roads and trails will be developed to support the underlying community structure. The major streets will be designated on an official adopted major streets plan. To the extent possible, the major streets will take into account slope, vegetation, drainage and scenic vistas.

1. The neighborhood street system should be designed to serve local traffic demands while discouraging non-neighborhood traffic.

2. A system of established parkways will be encouraged. These streets should serve as "lineal parks or preserves," with flexible width landscaped medians and landscaped setbacks on both sides. No commercial signage or land use will be allowed to front directly on the parkways.

3. To the extent possible, street designs should follow and utilize the existing natural topographic features of the area. Extensive cross cuts of washes and other drainage features should be avoided.

#### G. Utilities

1. All permanent utilities shall be installed underground. All electric lines 69 kV and smaller shall also be placed underground. Electric substations shall be enclosed by opaque masonry walls and extensively landscaped with native plant materials.
2. All utility appurtenances, including but not limited to telephone and cable pedestals, utility meters, transformers, etc., shall be screened from view subject to utility company regulations and shall be textured (e.g., stucco) in a manner compatible with adjacent development.
3. Water storage tanks must be sensitively sited, designed and landscaped to minimize the impact to the area. Disruption of the natural area should be kept to a minimum and, to the extent feasible, service roads and other construction related scars shall be restored to its original appearance.

#### H. Drainage

The portion of planning area C/D east of Cave Creek Wash is a very broad alluvial

fan typified by a dense network of shallow, braided washes. The area west of Cave Creek Wash has some alluvial fan characteristics, but has more well-defined flowpaths.

The alluvial fan areas will pose the most significant drainage problem to future development due to the broad and ill-defined nature of alluvial fan flooding. Therefore, a master drainage plan would be of value for this area. Until such a plan is completed, however, the following guidelines should be generally applied.

1. Major or dominant drainage channels (washes) should, to the maximum extent possible, be preserved in their natural state without alteration of their present alignment.
2. Native vegetation and wildlife is to be preserved within major channels.
3. Offsite runoff in the post-development condition shall not exceed the pre-development condition.
4. In areas where public safety necessitates the alteration of a natural wash, the new design shall match the natural appearance as closely as possible.

#### I. Entrances/Parking

1. Project entries shall provide an integrated design of landscaping, monumentation and signage which maintains compatibility with the surrounding envi-

ronment. Project entry signs should be a reflection of the architectural quality established within individual projects.

2. No on-street parking will be allowed in any area other than single family residential areas. Parking areas shall be sufficient to serve the business use conducted on each site. Shared parking facilities for businesses or institutions with different peak hour traffic are encouraged and must be reviewed and approved by the City of Phoenix.
3. Loading and servicing activities shall be designed so that the entire operation is conducted within the confines of a site. Site planning which includes alleys will not be permitted in any residential development.
4. Parking areas and loading and servicing activities must be screened from street view by means of depressed (subgrade) lots, landscaping and/or perimeter walls which integrate the overall landscape theme. Perimeter walls shall be designed to vary in height and setback and be used in combination with berms to provide visual relief. Appropriate directional devices will be allowed.
5. Parking lots adjacent to street rights-of-way should maintain 40 foot setbacks to allow for open space buffering and drainage control.

6. Project entries onto public streets should be minimized by using shared entries where feasible.

#### J. Paving

1. Generally, all paving must comply with appropriate City standards, except that where practical and approved by the City, ribbon curb may be utilized.
2. Parking lots are to use standard curb techniques with openings sufficient in number and size to localize drainage.

#### K. Lot Coverage

1. Permissive lot coverages shall not exceed those prescribed by City ordinance, however, maximum preservation of desert open space will be encouraged.
2. Permissive changes in some zoning districts may be encouraged to achieve maximum quality in land design and support facilities based on achievable or desired amenities.

#### L. Special Use Areas

1. No articles, goods, materials, machinery, equipment, vehicles, trash, or similar objects shall be stored or kept in the open or exposed to view from adjacent streets or sites. This does not apply to the temporary storage of materials, equipment and supplies needed for the construction of permanent improvements upon a site.

2. All waste materials or refuse shall be stored and maintained in closed containers, 100% screened from view of adjacent streets and sites by permanent structures, fencing or landscaping compatible with the building's design.
3. It is a common practice to use open areas for joint or special uses. Because of the delicate nature of the desert environment, such joint/special uses must be carefully designed.

#### M. Water

1. A water conservation plan has been prepared by the City of Phoenix. Builders must comply with this plan through use of plant materials that have low water demands and are drought resistant. In addition to water conserving plants, top priority is placed on using reclaimed domestic water to sustain all landscaping in the area. If feasible in residential developments, reclaimed water should be utilized for landscape irrigation in common areas. To the extent reclaimed water is available, its use for irrigation is also recommended for all commercial and industrial developments.
2. Water edges should be designed to integrate with the natural desert landscaping. Grass areas shall be kept to a minimum and shall be designed to meet specific needs.

3. In accordance with the water conservation program for the City of Phoenix, water conserving plumbing fixtures will be required. Water closets may not exceed 3.5 gallons per flush and shower heads may not exceed 3.0 gallons per minute.

#### N. Slope

1. All development will be required to address hillside building with sensitivity. Hillside development is allowed subject to controls as outlined in the City of Phoenix Development Guide (See 400 K). These are minimum standards which must be adhered to. In addition, innovative placement of the building envelope or clusters of building envelopes will be encouraged to minimize destruction of hillside views. Buildings should be designed to complement the hillside with their form. Roof decks and patios are preferred over large areas of flat roof or structures.
2. In low lying (flat) areas, design should work with the slope so as to minimally impact the natural water flow.
3. The City and all developers must at all times reserve easements or provide access to maintain parks and preserves.

#### O. Vista

1. Development in the area will be encouraged to be a subtle blending of people,

structures and the existing desert into a harmonious and aesthetically pleasing community. Primary emphasis will be placed upon the preservation of natural desert areas and the vistas created by distant land forms.

2. It is expected that the design of each area will be tailored to the uniqueness of the region, and as such, will preserve and enhance view corridors to the greatest extent practical.

#### P. Signage

1. In general, signage must conform to the rules and regulations prescribed by city of Phoenix ordinances. More stringent requirements as described in items 2 through 6 shall also apply.
2. All signs within the area shall be designed to provide visual continuity and to reinforce the visual character established by these Design Guidelines.
3. All signs should be oriented, located and designed to convey the intended message with a minimum of information. Project signage should be coordinated in design and style with the surrounding area.
4. Uses such as office buildings, hotels and industrial parks should confine signage to building name or project name and address and depend on a combination of architecture and other landscaping for further identity.

5. Only ground signs shall be allowed. The signs shall not exceed four (4) feet in height above the average finished grade of the project and shall not exceed 32 square feet in sign area.
6. No new billboards shall be allowed to be erected.

#### Q. Fences and Walls

1. Walls of stucco, stone or masonry may be used to delineate a residential private area from the rest of the building envelope. They should be a visual extension of the architecture of the residence. They may not exceed six (6) feet in height.
2. The texture and color of walls and fences shall conform to the same color standards as the main residence and the indigenous materials of the surrounding area.
3. Wall systems along major arterials shall respect the designated setback requirement and have a stepped or non-linear appearance.
4. A combination of walls, berms, and landscape materials is encouraged to relieve long expanses of walls along major streets.

#### R. Trails

1. Bicycle, pedestrian and equestrian paths should be planned in each development

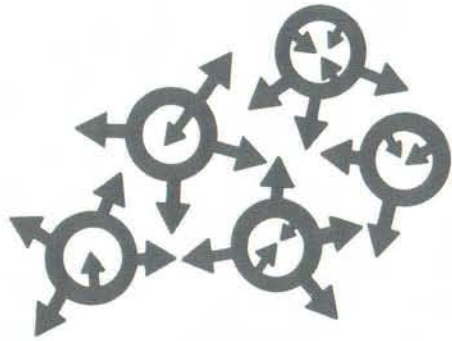
and should be planned as part of an overall trail system.

2. Care must be exhibited in the design, construction and maintenance of the trails so as to protect the safety of its users and the natural environment to the extent possible.
3. Special areas should be established for off-road vehicle recreation. Use of off-road vehicles in non-designated areas should be strictly forbidden and severely penalized.

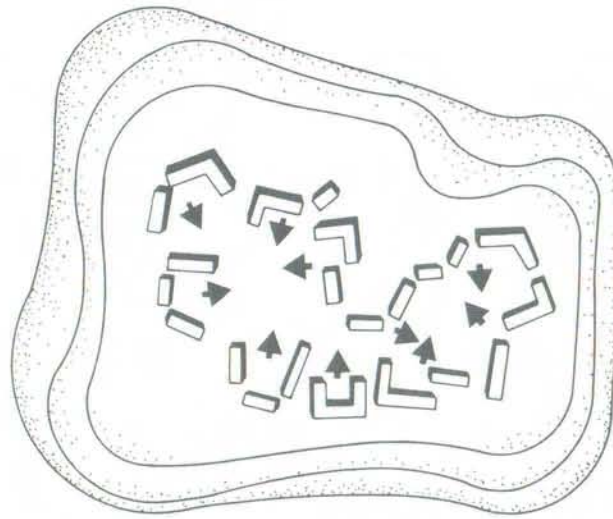
#### S. Scenic Drive

Most of the area north of the Central Arizona Project Aqueduct offers a scenic and natural resource unique to the metro valley. As such, it is incumbent upon today's user to preserve this natural heritage for future generations. Development of scenic drives or corridors is one important measure that can be undertaken to preserve this resource. The quality of an area reinforces the community's distinctive character and natural attractiveness. Roadways have the highest potential for allowing the greatest number of people to experience the native desert. It should be recognized that the scenic roadways, both existing and proposed, represent a major attraction for the out of town visitor as well as Valley residents. As such they support a higher public investment and care in design than ordinary transportation routes.

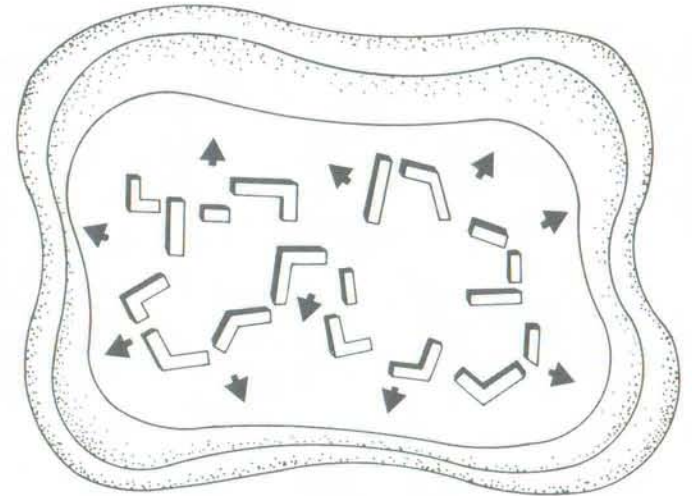
# Area C and D Guidelines Illustrations



FOCUS



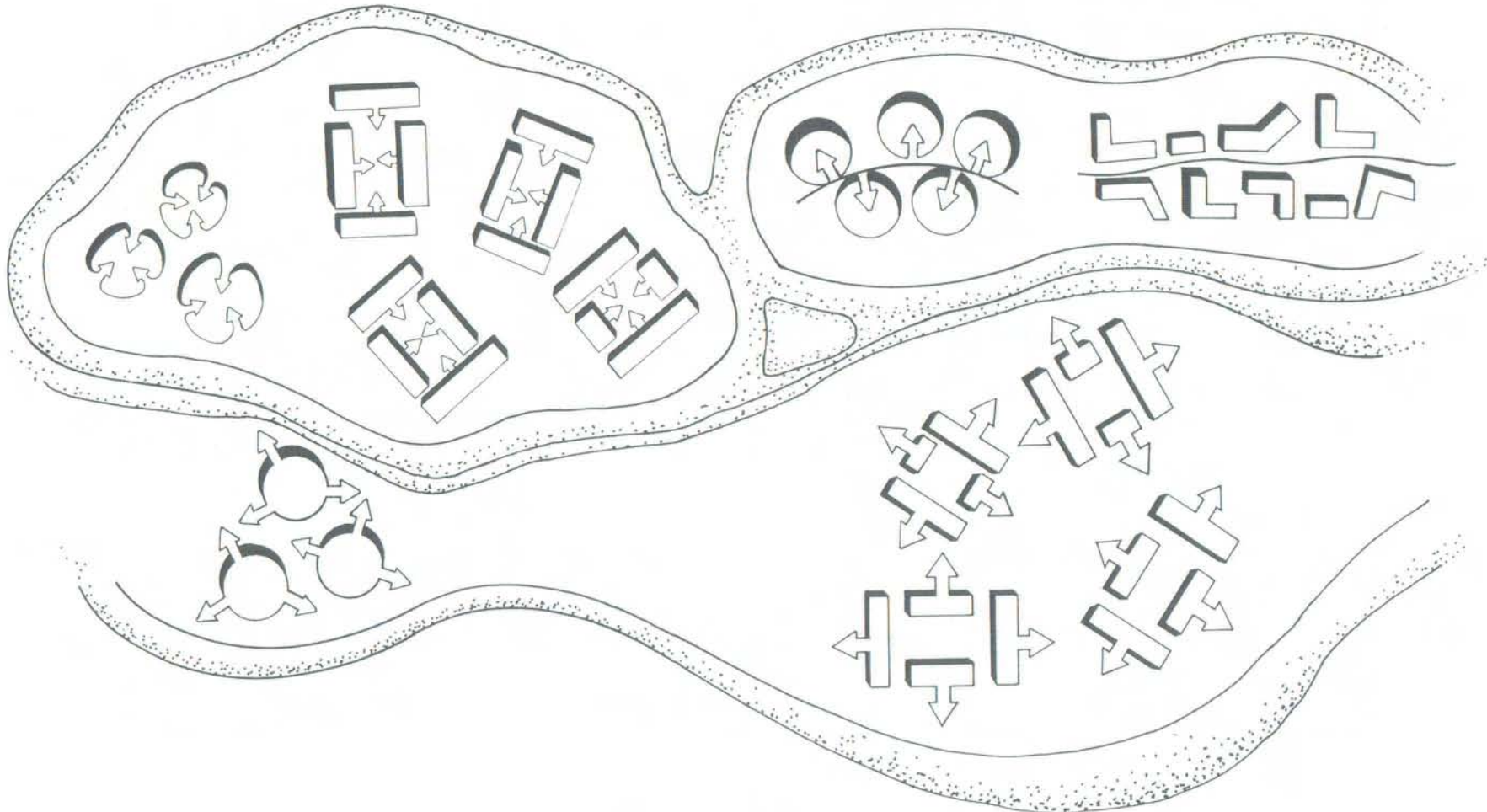
FOCUS TO INTERIOR



FOCUS TO EXTERIOR

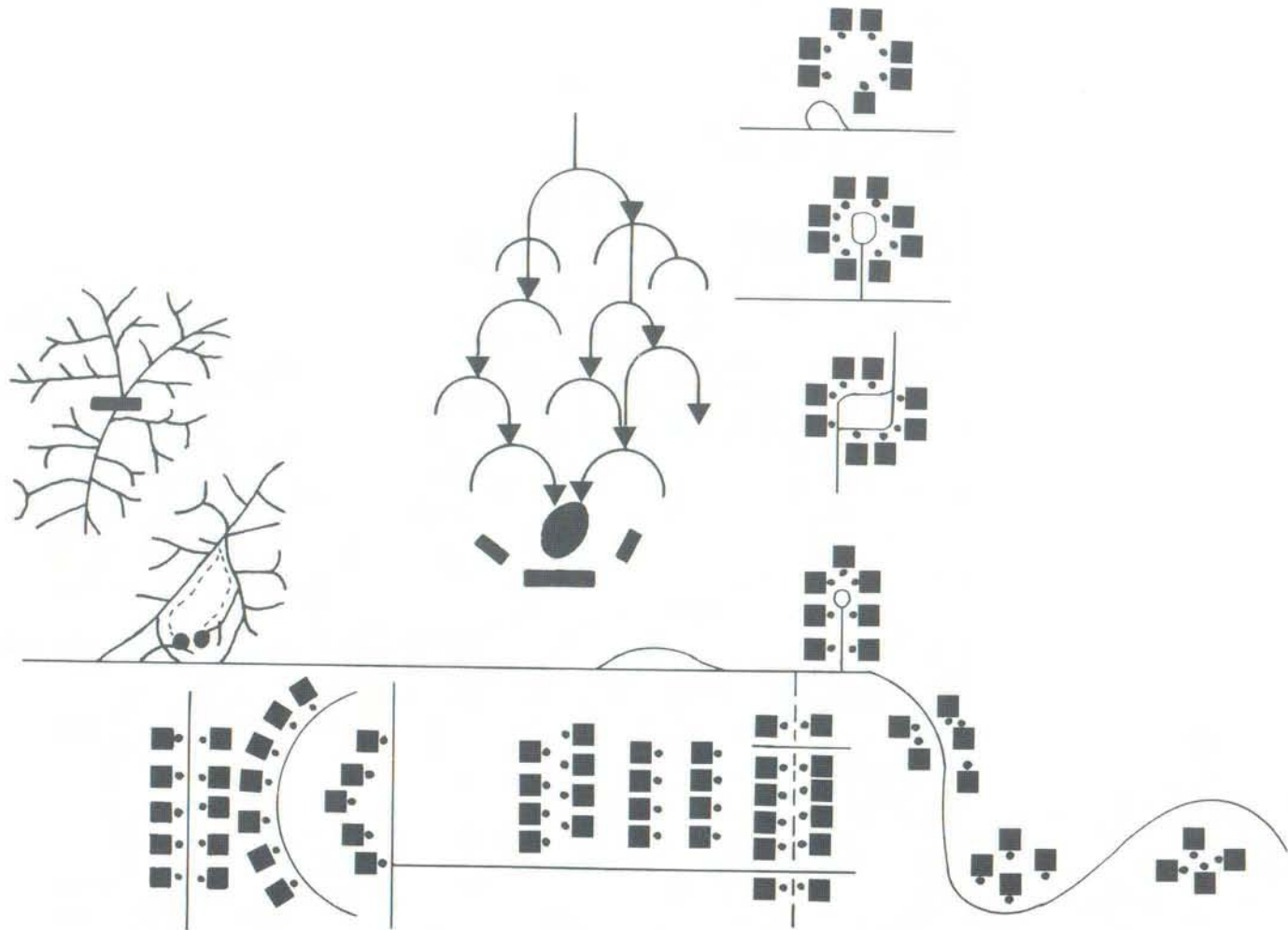
**NODAL TO INTERIOR**

**LINEAR CIRCULATION**



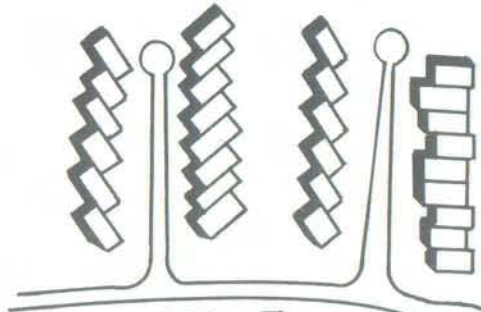
**NODAL TO EXTERIOR**



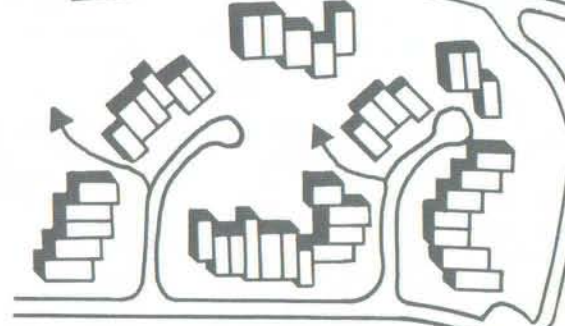
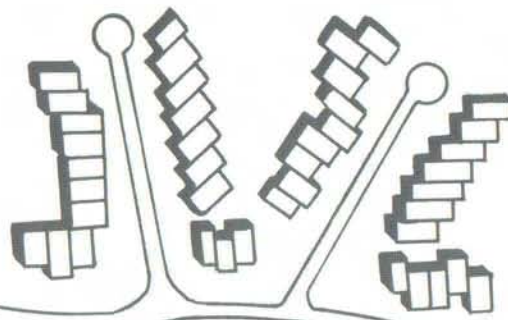


**CLUSTERS, ISLANDS, AND PENINSULAS**

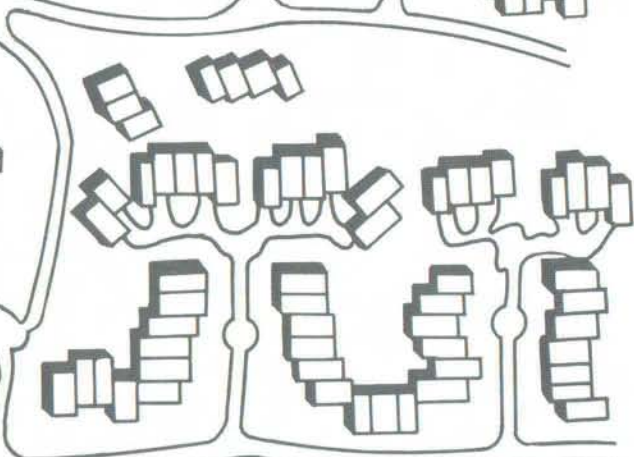
**PARALLEL ACCESS**



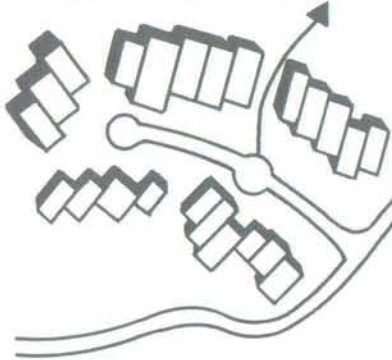
**WEDGE SHAPE (V) ACCESS**



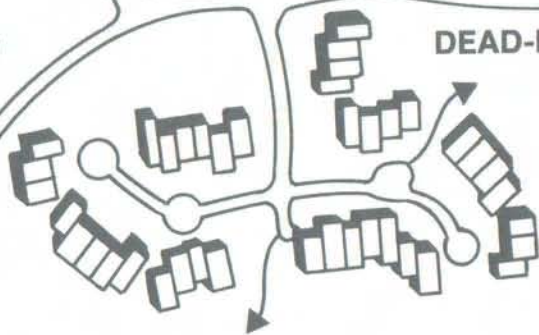
**CURVILINEAR ACCESS**

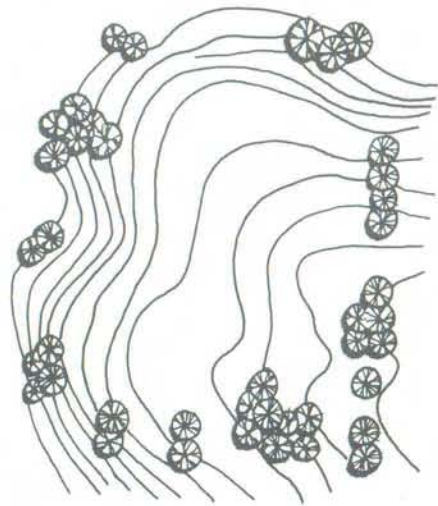


**DEAD-END ACCESS**

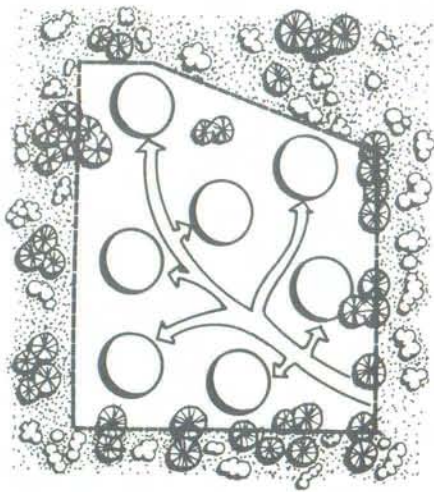


**EXTENSION BEYOND  
TURNAROUND**

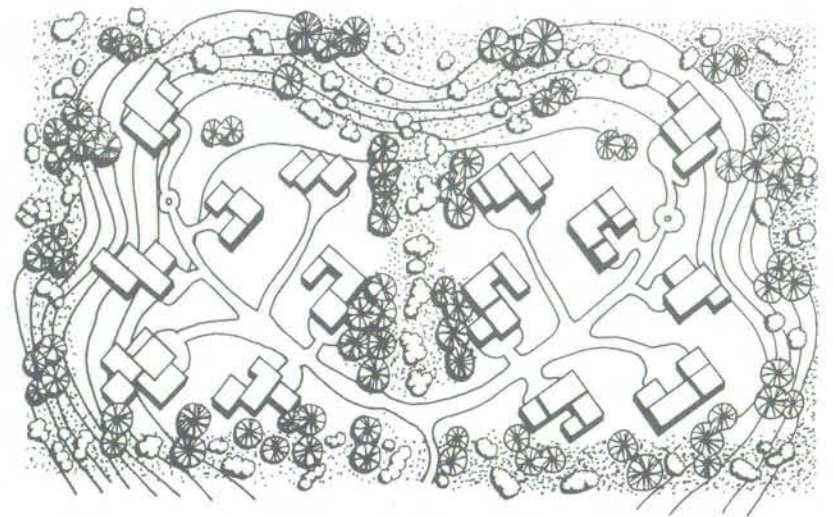




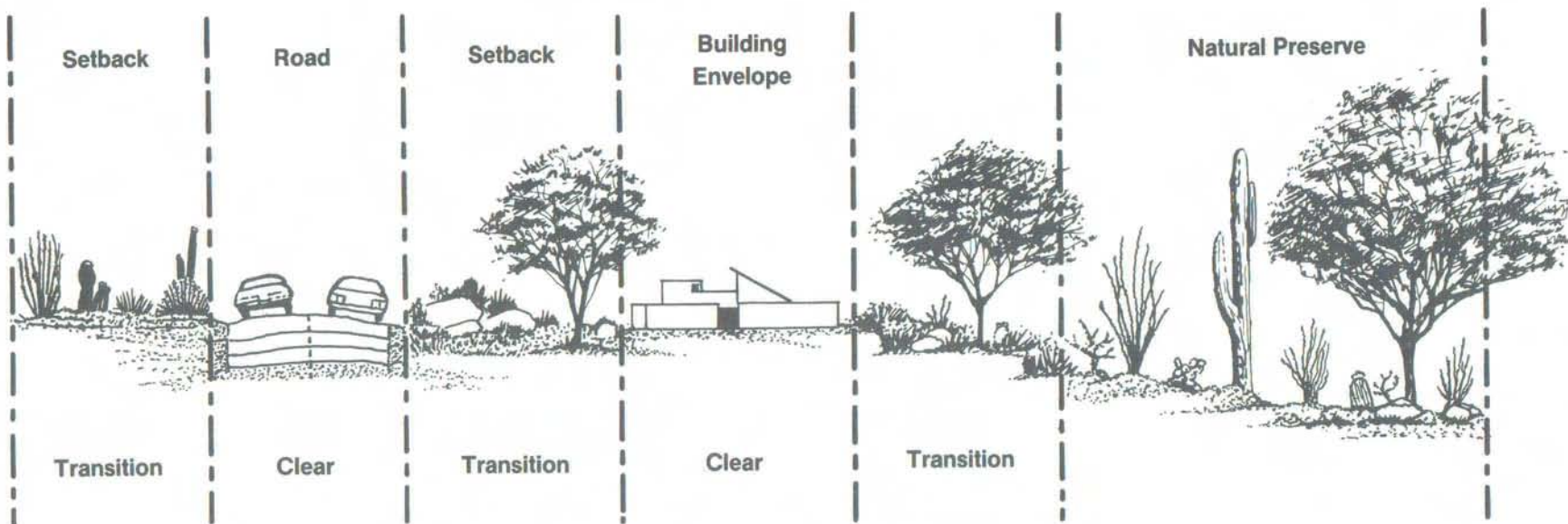
TERRAIN



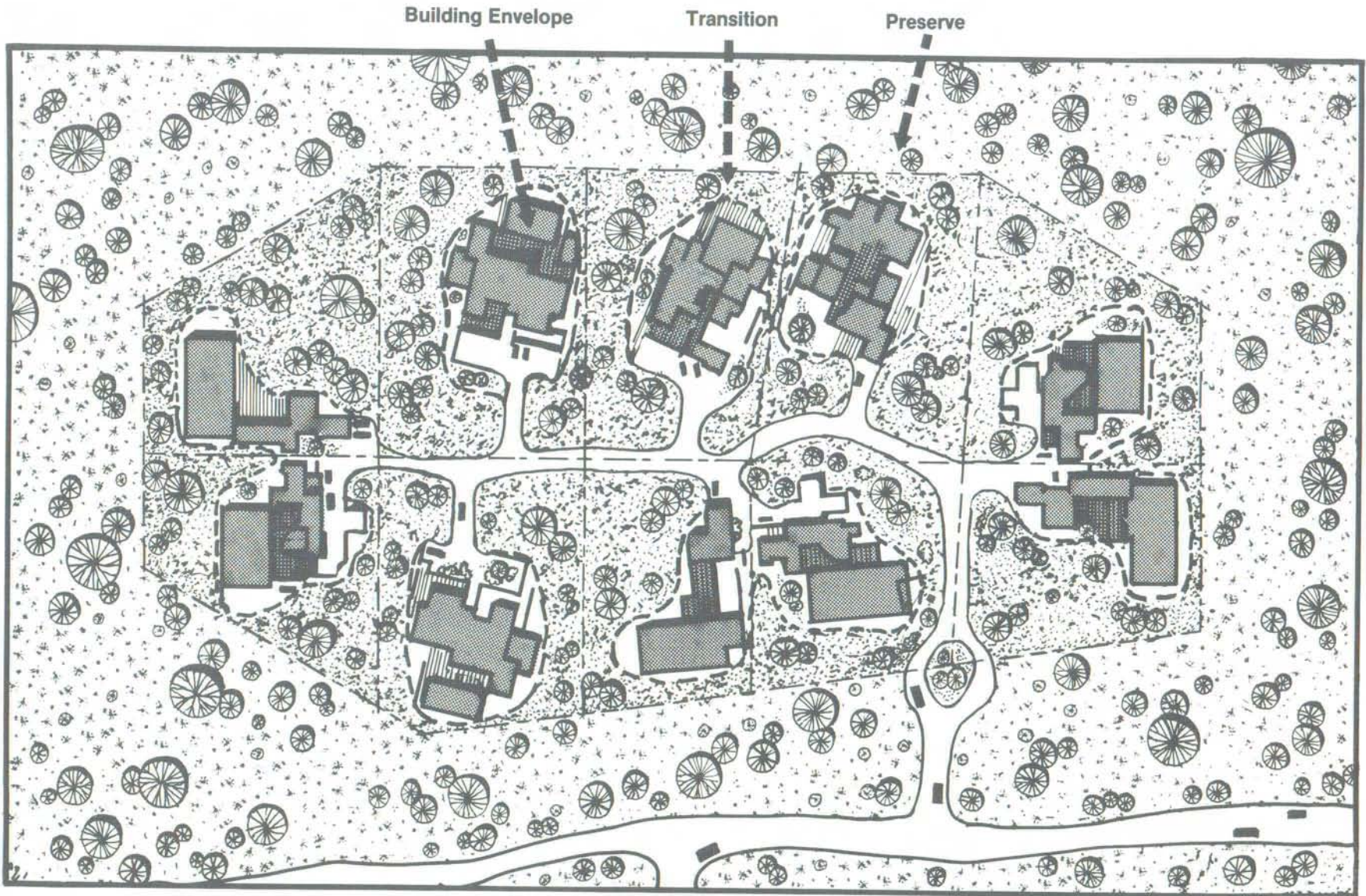
SITING



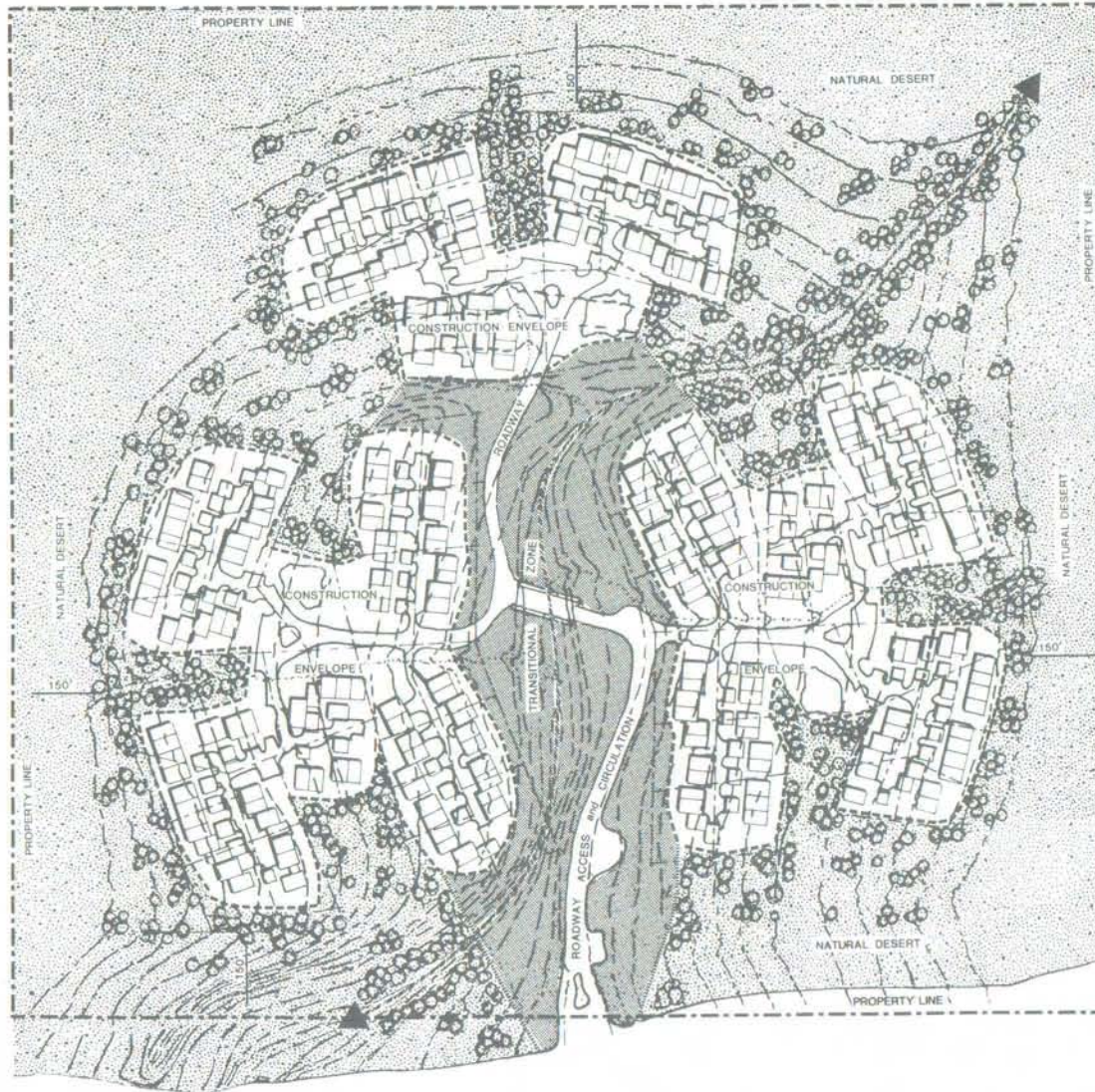
SITE



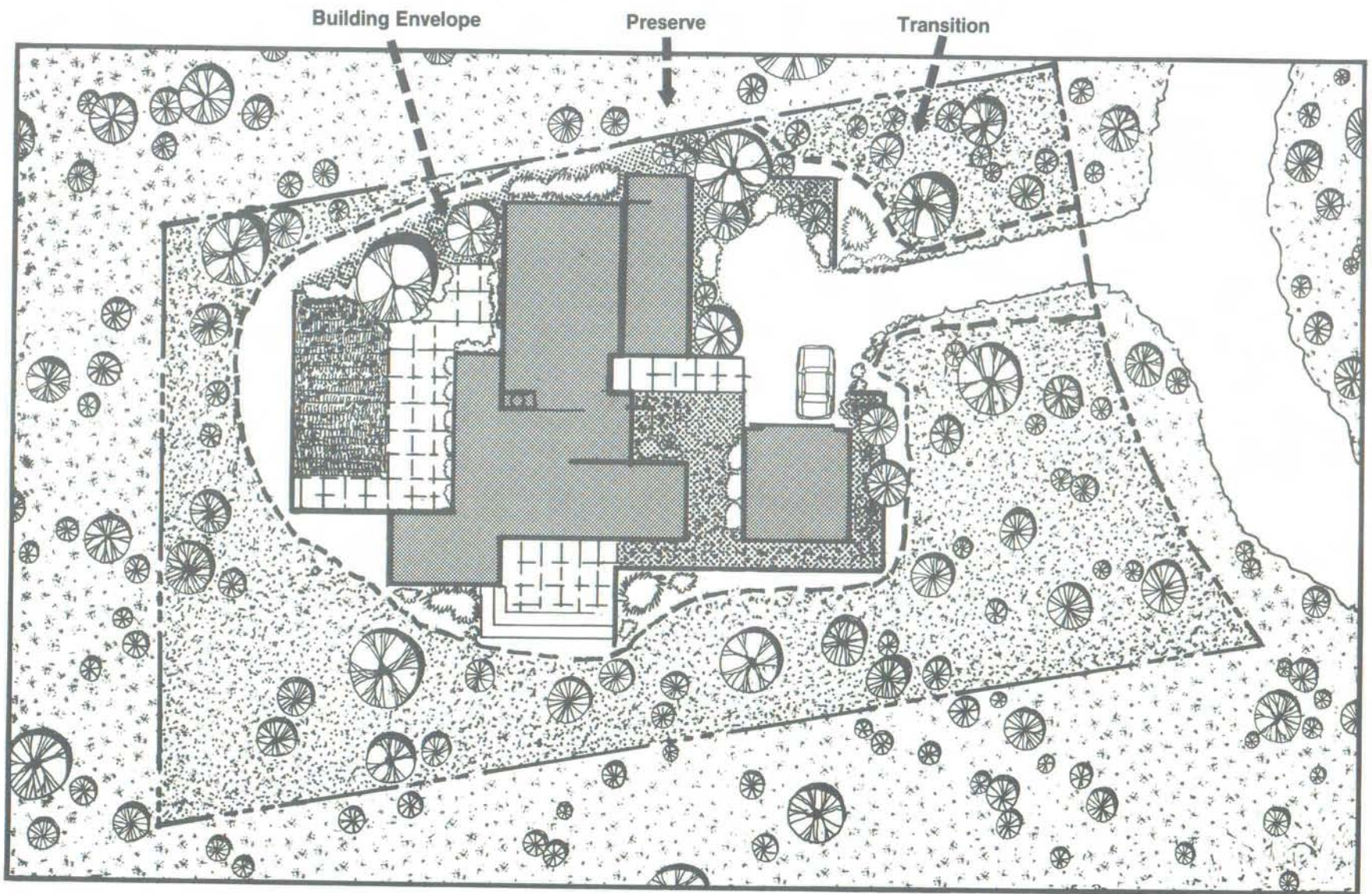
**DEVELOPMENT TRANSVERSE**



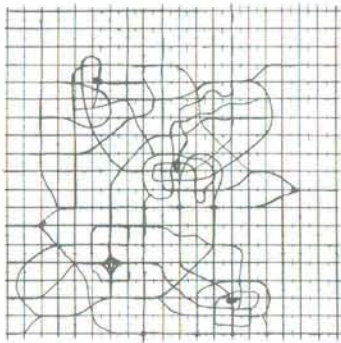
**DESERT ISLAND CLUSTERS; TEN UNITS ON 5 ACRES, WITH NATURAL PRESERVE.**



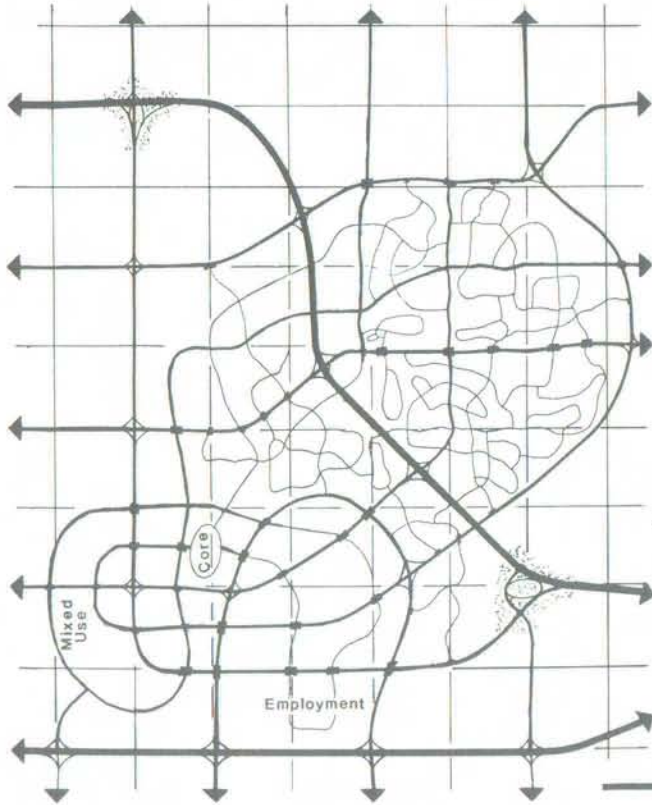
**BASIC EXAMPLE 40 ACRE SITE. SITE PLAN CLUSTER, 200 UNIT. 2-5 DU/AC.**



SITE



Village  
Conceptual  
Alternatives



One Mile  
Grid Pattern

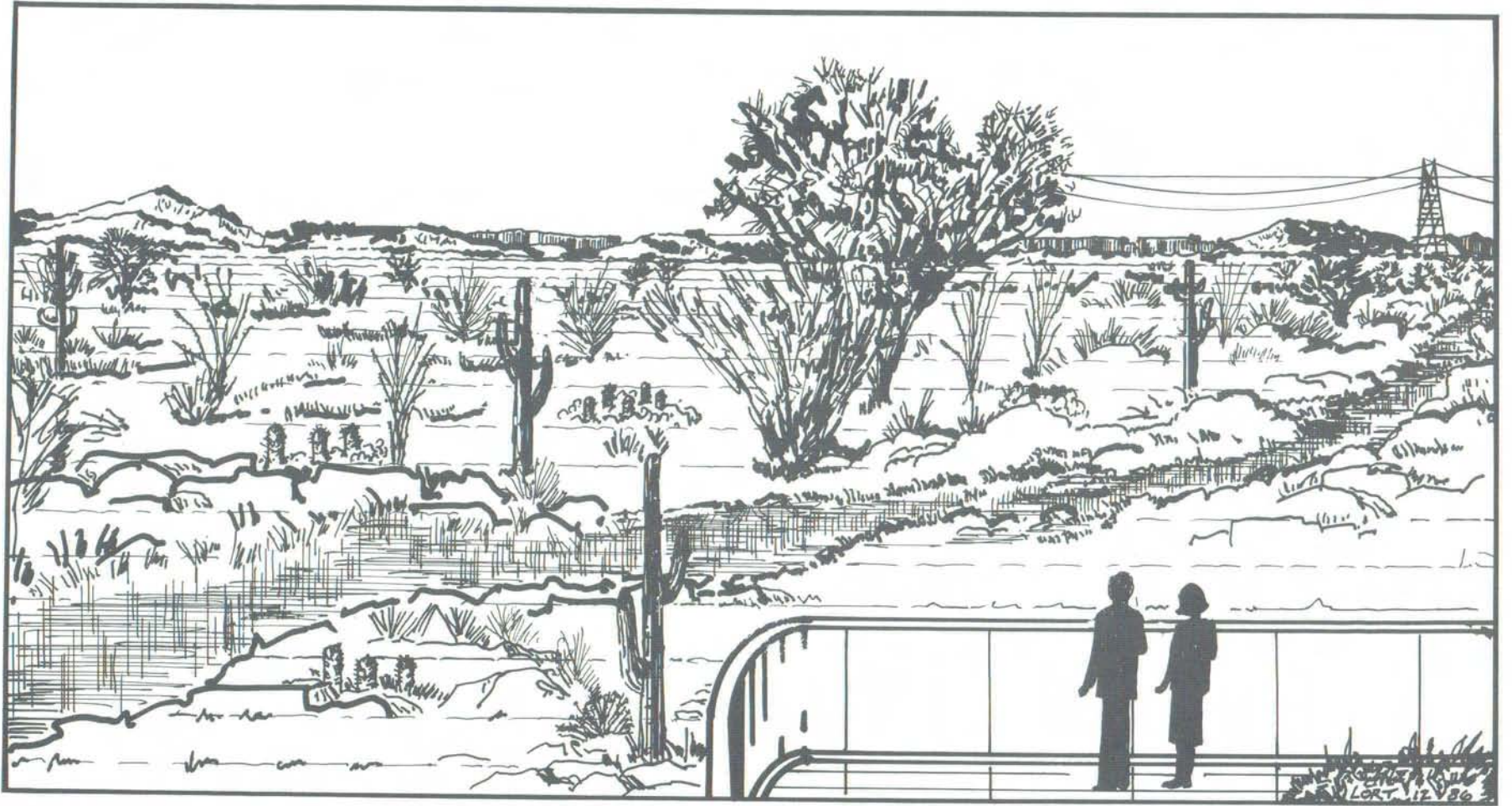
Urban Core Diminishing To  
Gradient And Periphery



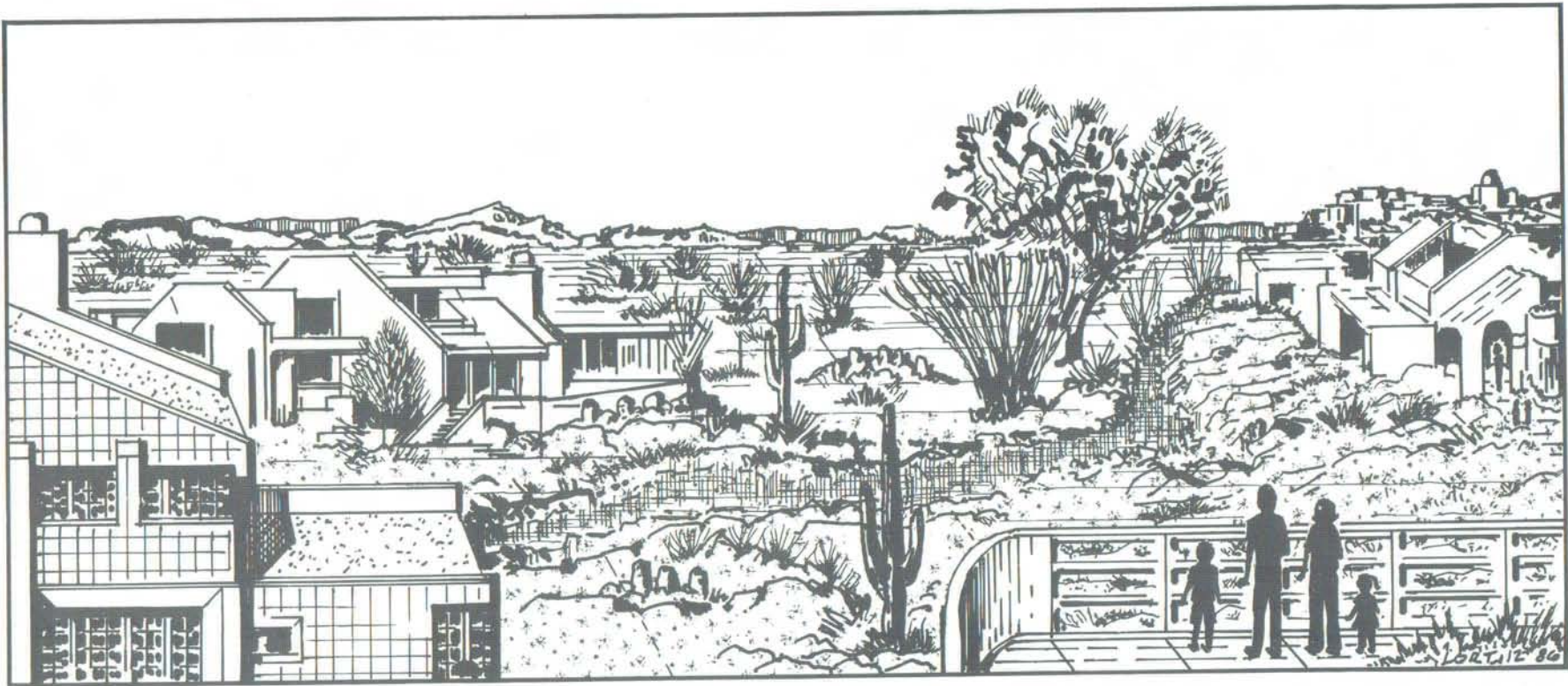
Islands And Peninsulas  
Relating To Washes

**FOUR SQUARE MILES**

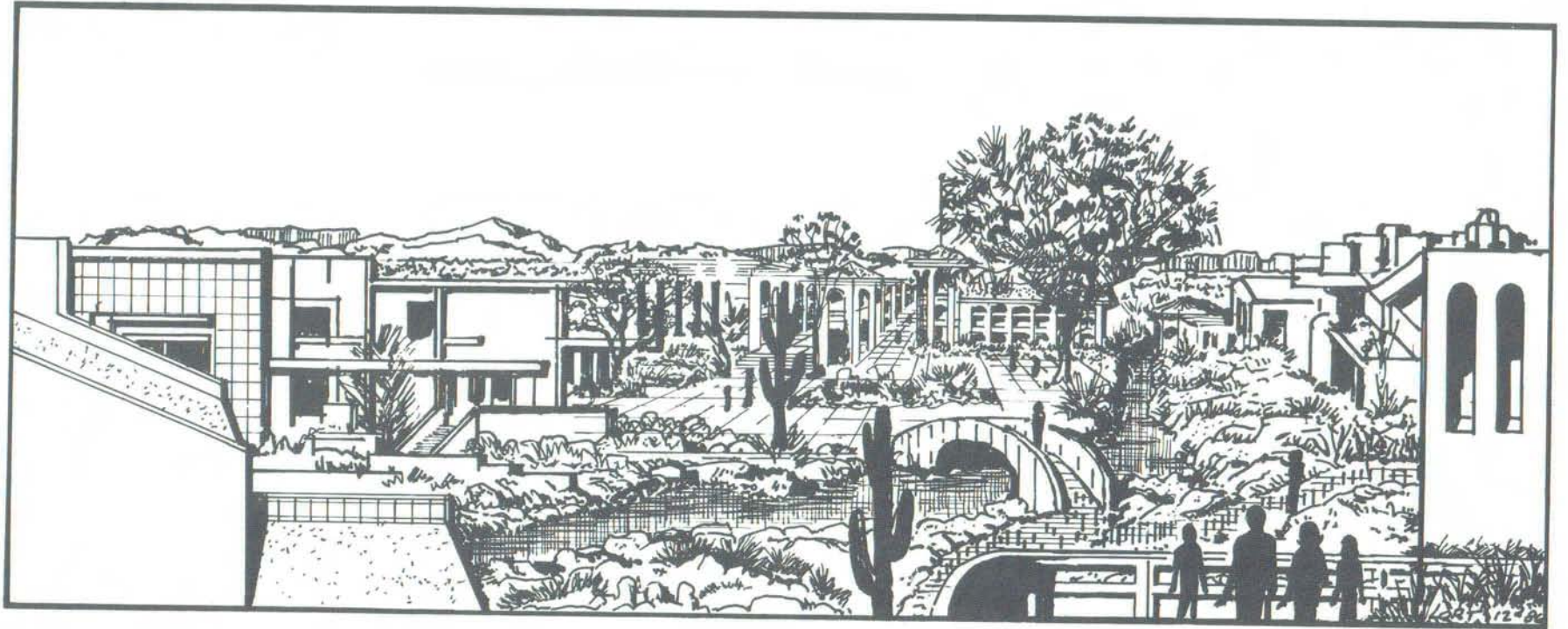




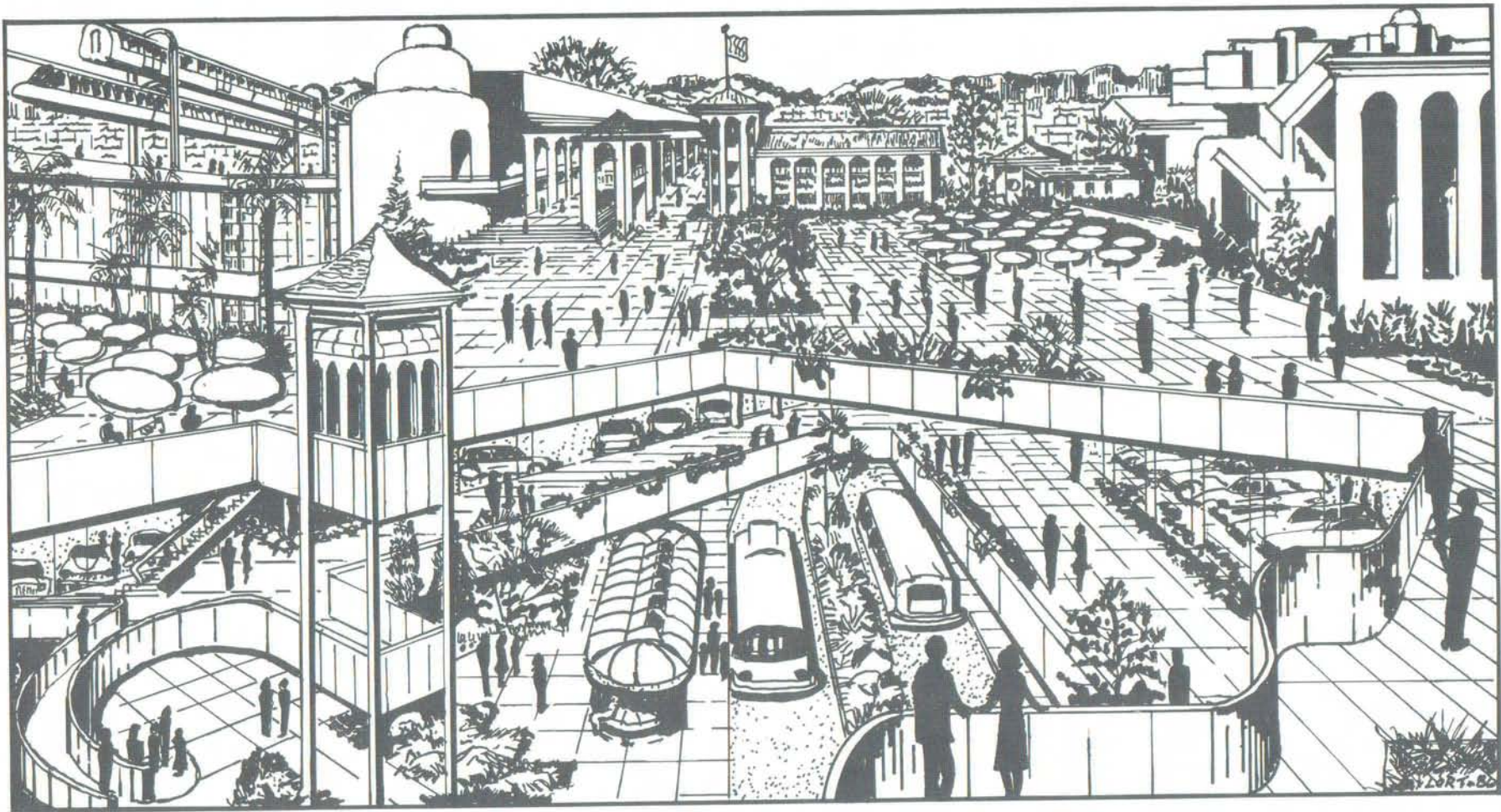
0-2 DU/ac.



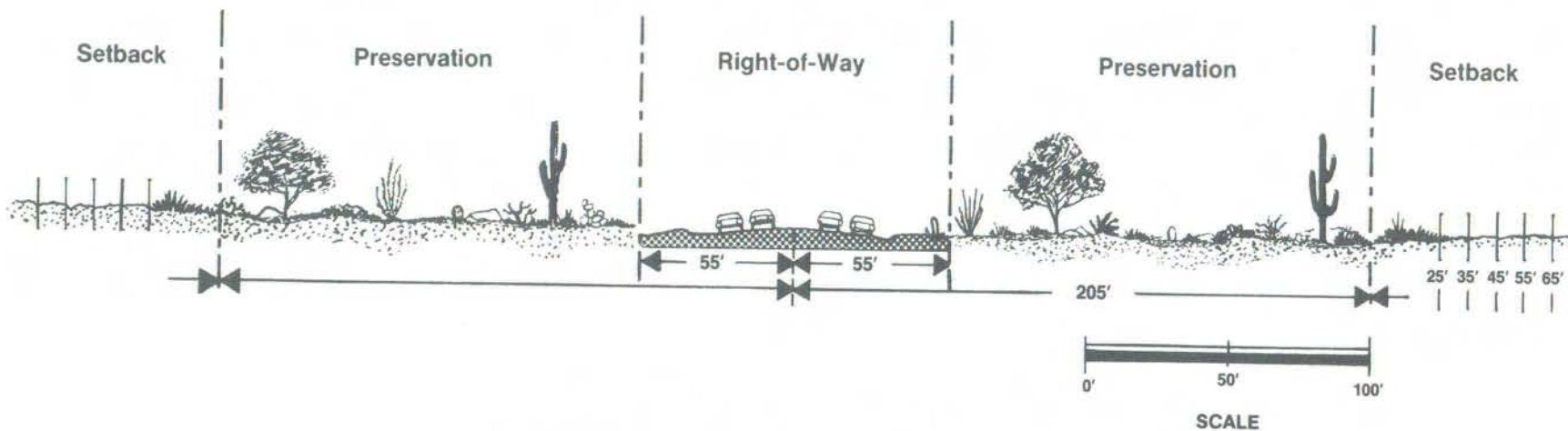
2-5 DU/ac.



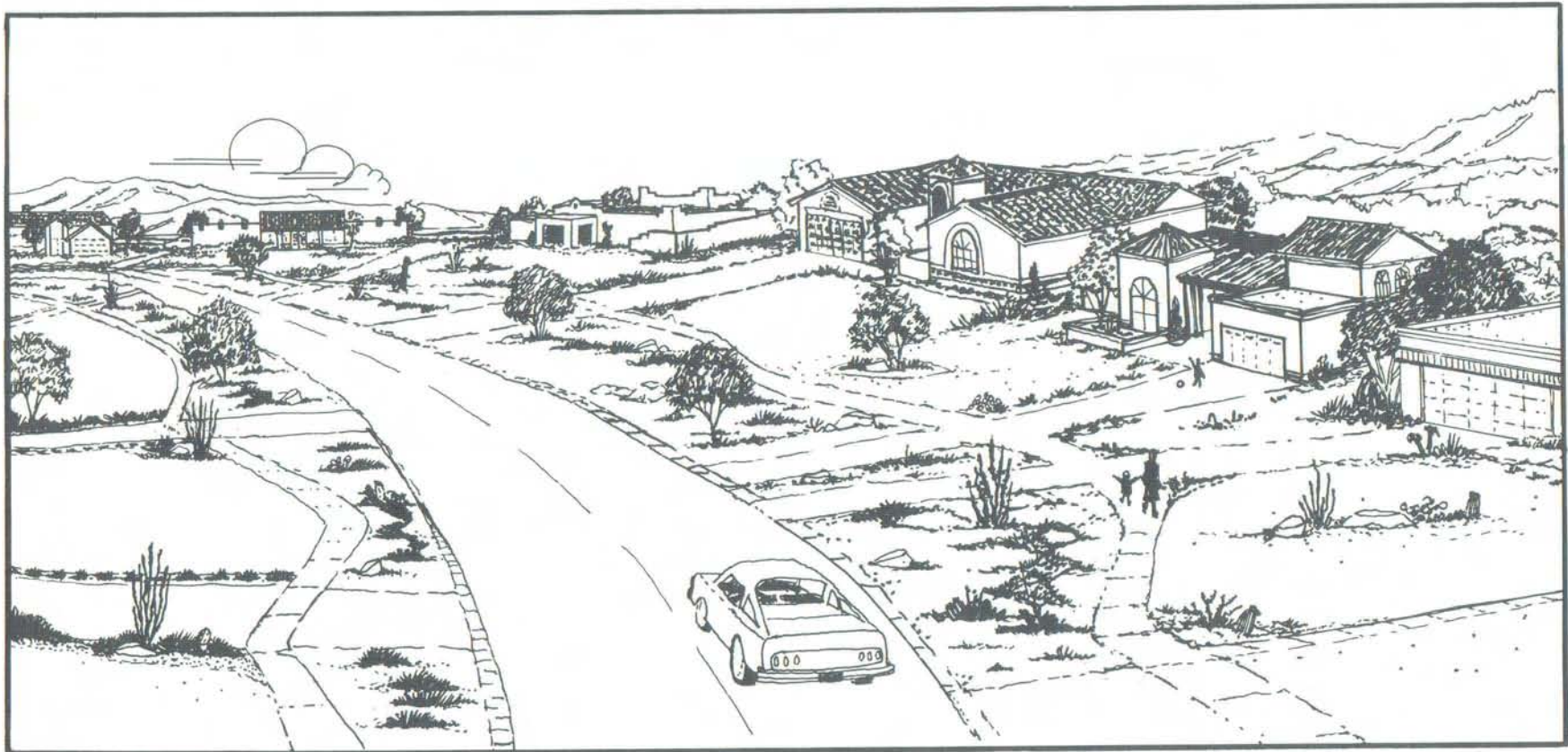
5-10 DU/ac.



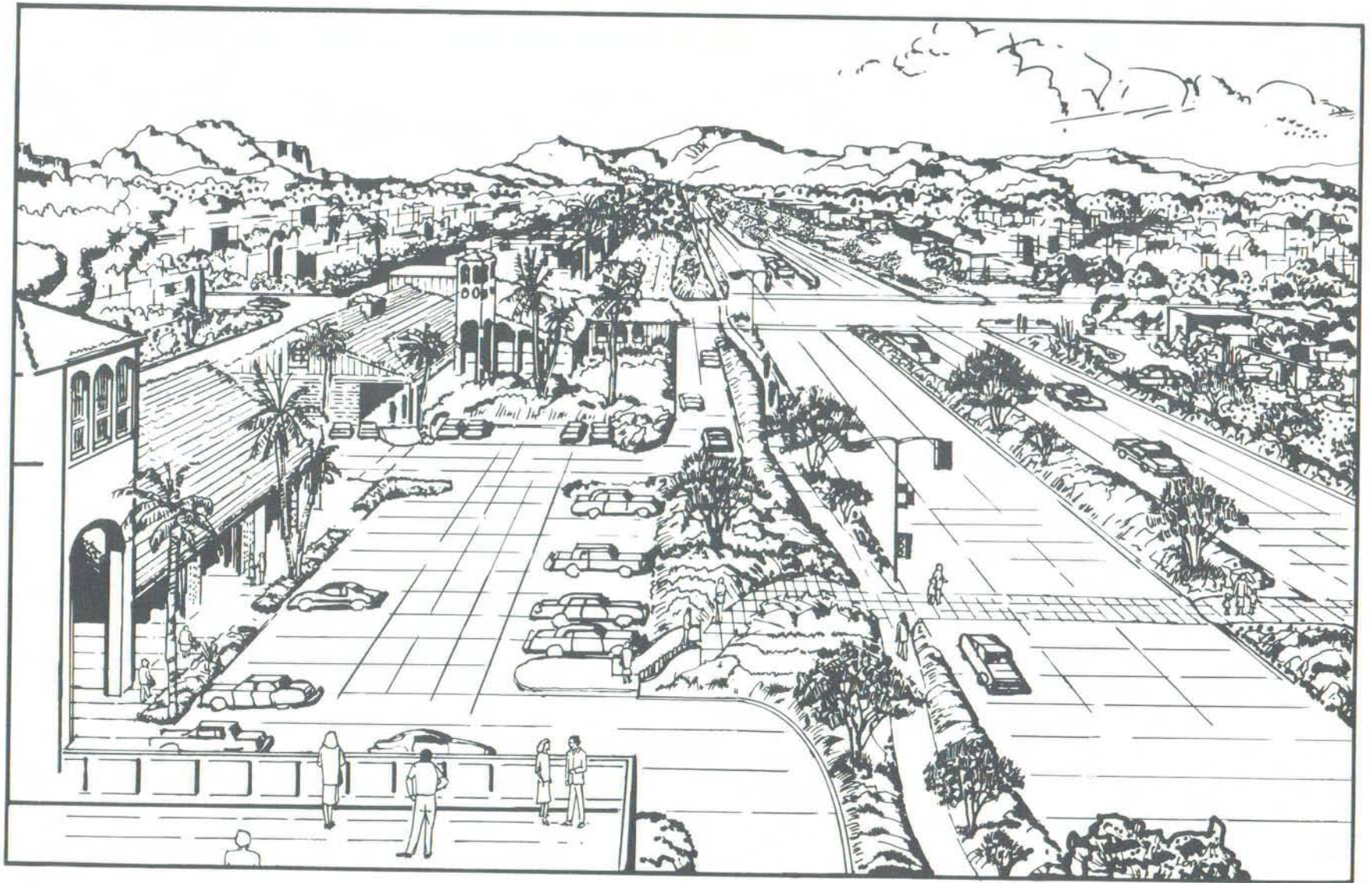
**MIXED USE, 10+ DU/ac**  
**TRANSIT AND CIRCULATION SEPARATION**



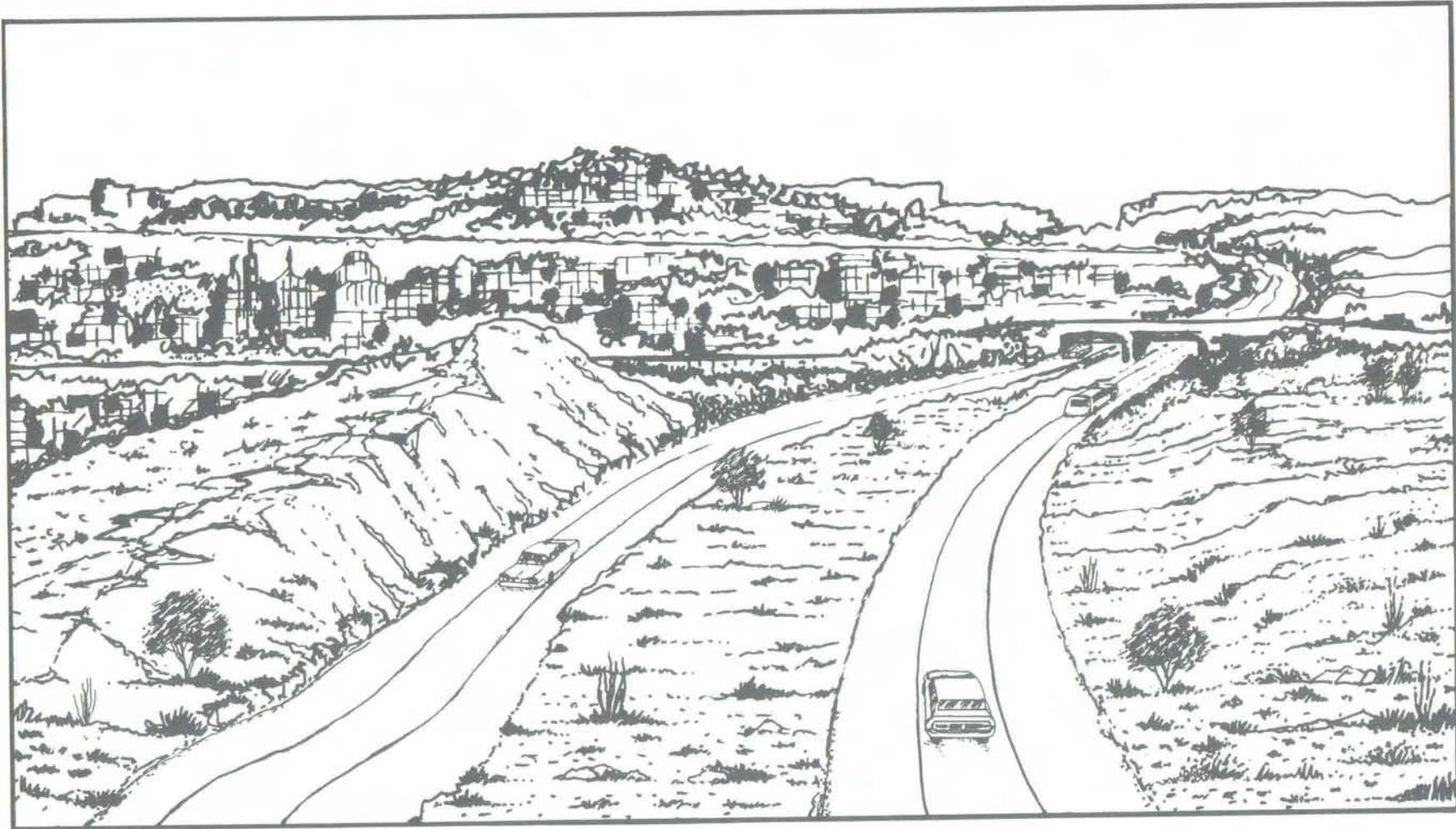
**RECOMMENDED SCENIC CORRIDOR**



**NEIGHBORHOOD STREET, WALK AND SETBACK**

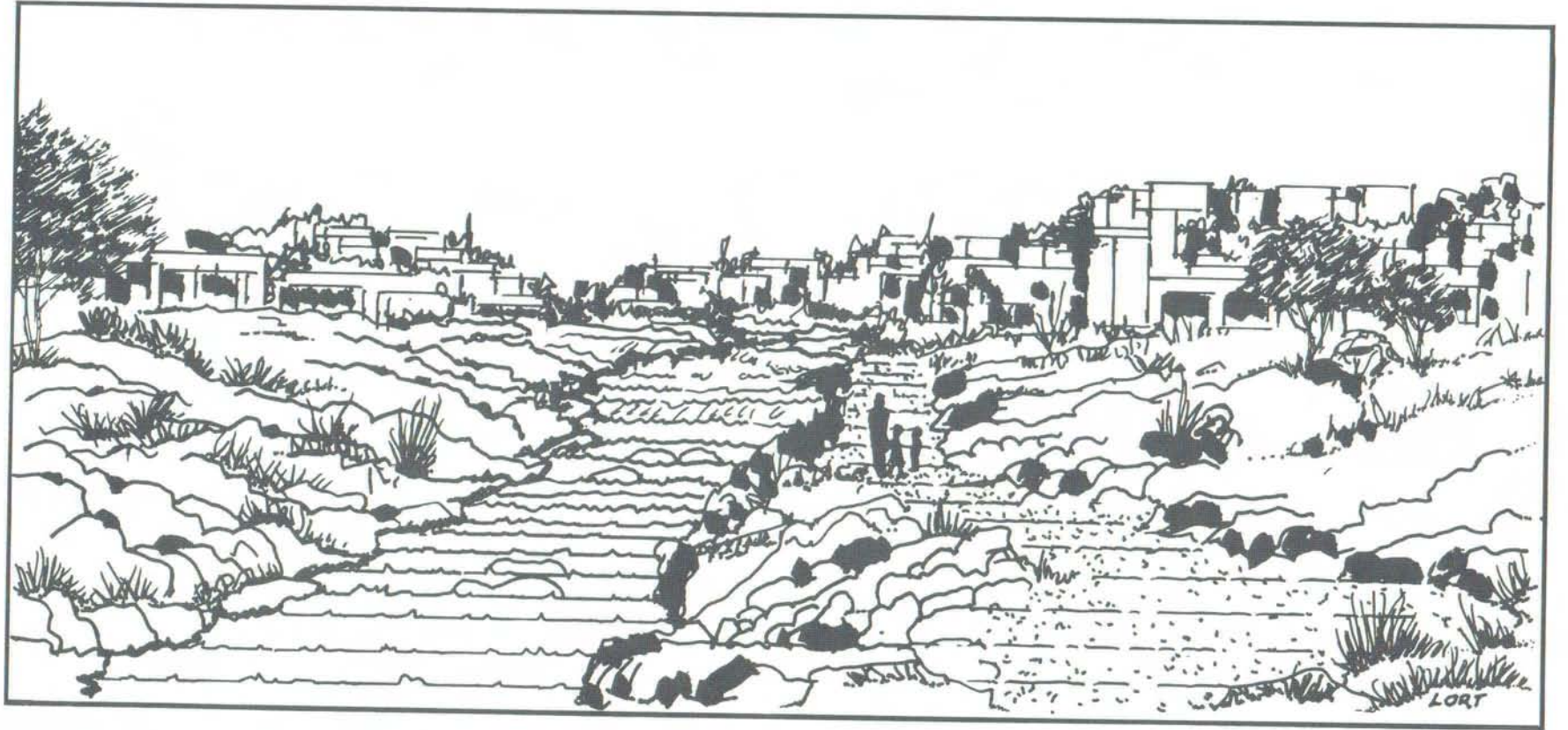


NEIGHBORHOOD COMMERCIAL OFFICE

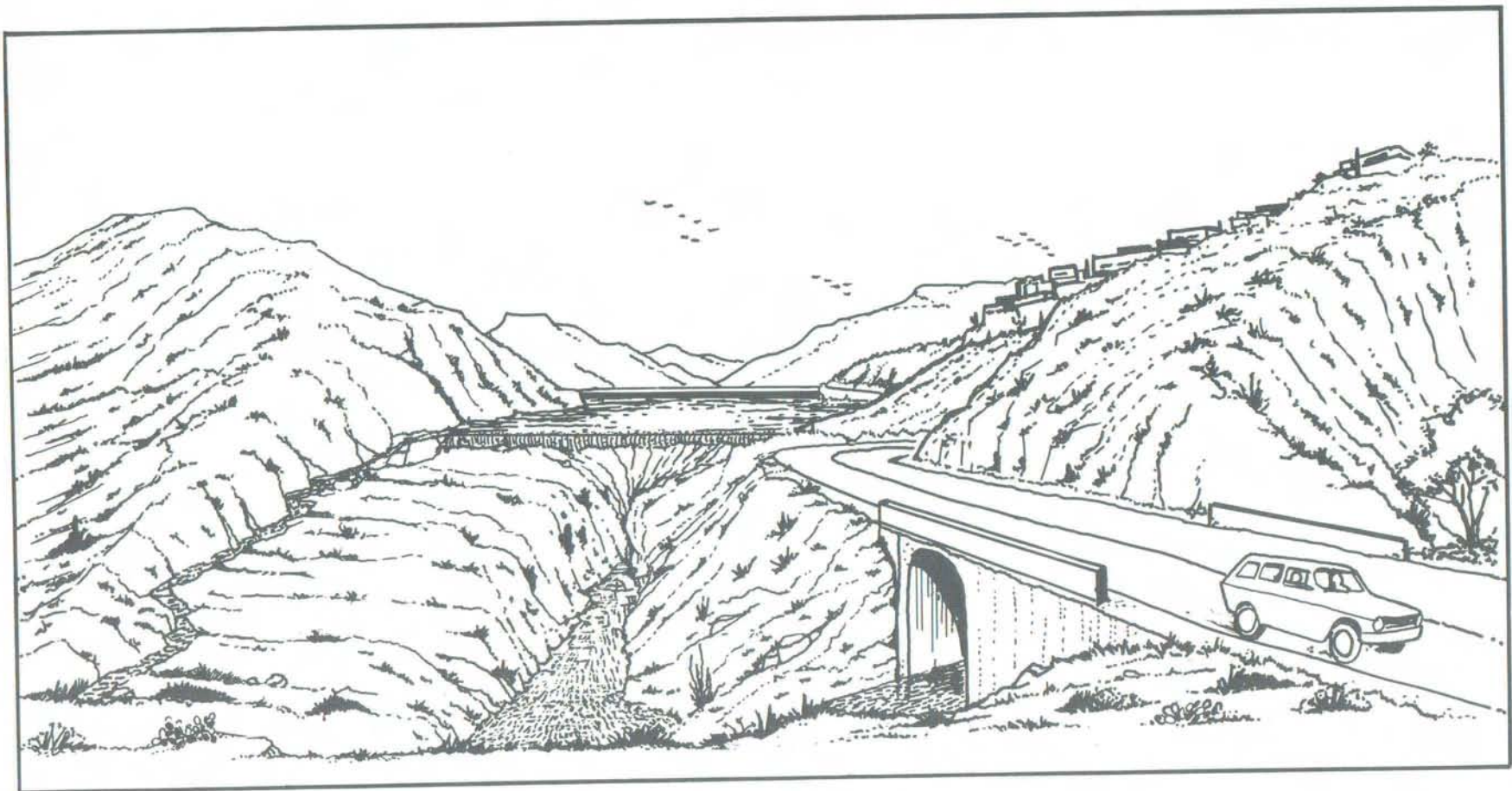


NATURAL LINEAL PARKWAY CORRIDOR





WASH AND TRAIL



SCENIC DRIVE