



# ACKNOWLEDGMENTS

The Southwest Community General Plan is the result of a cooperative effort of the Southwest Community Council and Salt Lake County. Members of the council are elected and volunteer their time to improve the community and assist in increasing awareness of community issues. Members of the Southwest Community Council were:

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The Salt Lake County Board of County Commissioners and Planning Commission provided support during the planning effort, worked to resolve differences during the adoption process, and gave the Southwest Community General Plan official status as the comprehensive plan for the area.

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The Salt Lake County Public Works Department, Planning Division was the lead agency in the creation of the Plan and provided information, analysis, and

facilitation. The staff members were instrumental in managing the planning process and producing this document.

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# UNIVERSITY OF UTAH COMMUNITY PLANNING WORKSHOP, 1995

Each year the University of Utah Geography Department provides an opportunity for students participate in a community-planning workshop for a selected area. The workshop is conducted during the winter and spring quarters, allowing over six months for the participants to conduct research and analyze many elements and characteristics of the particular study area. Conclusions and recommendations are developed by the group to provide useful insights information to the client.

This year, the southwest quadrant was chosen. The study was undertaken with the direction from the Board of County Commissioners of Salt Lake County and the Salt Lake County Council of Governments. The Council of Governments participated as the client. The primary purpose of the project was to produce not a plan for the southwest quadrant of Salt Lake County, but a review of the current growth and development in the area, and the extent of interaction and coordination among the local jurisdictions in planning for the future. The motivation for the study is the frenetic growthtaking place in Salt Lake County and the perceived need for planning

of a metropolitan scope that transcends competition between jurisdictions. The project was also chosen because it was believed that it would provide an excellent learning experience for undergraduate students seeking a degree in urban planning.

The report, "Regional Growth and Development Analysis of Southwest Salt Lake County" is available for review at the Salt Lake County Planning Division office and University of Utah Geography Department.

Participants in the study, included:

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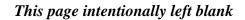
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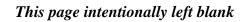
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# PLAN SUMMARY

This Community General Plan contains policies, which will be used by the Board of County Commissioners of Salt Lake County, the Planning Commission and Planning Staff as a guide in making land use decisions in the Southwest area. The goal of the Plan is to direct the orderly, sensitive growth of the Community while retaining and protecting its natural beauty, rural character and existing quality of the foothill and mountain environment.

The plans intent is to achieve a proper balance between the man-made environments and natural ones by ensuring that development is sensitive to natural resources and constraints.

This Plan will serve as a guide and its policies are a reflection of community vision understanding that change in the area will happen. The plan encourages imaginative development so that the environment, wildlife, relationship to existing development and the investment in homes and property is protected. Care has been taken to respect both large and small property owners' rights while promoting the public interest and the overall interest of the community in the present and for the future.

The community is experiencing increasing pressure for new subdivisions, homes and public services. In response to these pressures and many changes the Board of County Commissioners of Salt Lake County directed the Planning Staff to prepare a Community General Plan to provide guidance for Southwest's future.

# **Community Location**

The Southwest Community General Plan encompasses a very large area located in the extreme southwest portion of Salt Lake County. The geographic study area is bounded on the north by 11800 South extending west from 7200 West to the Salt Lake County and Tooele County border, and 13400 South extending east from 7200 West to 4800 West, on the east by 4800 West and the Bluffdale City limits, and to the south and west by the Salt Lake County boundary line.

# **The Planning Process**

The Southwest Community General Plan is part of an on-going Salt Lake County planning effort that began more than 25 years ago. In 1965, the county adopted a General Master Plan for the entire Salt Lake Valley. The Plan divided the county into seven large planning districts, including the South Jordan District. The Planning Division is now preparing detailed plans for smaller areas or "communities" within the various districts. This General Plan is in effect an addition to the Salt Lake County General Plan for the South Jordan Planning District. It is intended to be the key resource and policy guide for elected officials, developers and interested citizens.

The planning process has involved the Planning Division Staff, the Southwest Community Council, area residents and concerned citizens, and property owners. Including diverse representation and differing viewpoints has created broad public support and will insure the plans success. Community Council members are elected representatives of the different neighborhoods within the community. This group has expended many unpaid volunteer hours in the process of developing the policies for the Southwest Community General Plan.

As this plan is carried out the final responsibility for accomplishing the goals is placed on the elected officials who develop and implement the public policies that will guide the Community's physical development. These officials must ensure that the day-to-day decisions relating to the community are not made without due consideration given to long-term effects.

The groups involved, state and federal agencies and the departments of Salt Lake County Government have carefully researched the existing characteristics of the community. This information provides an accurate picture of the community, its problems and attributes. The base information provided a starting point from which the goals, planning policies, plan and implementation were formed.

All development proposed in the Southwest area should conform to the maps, policies and recommendations in this Plan. To determine which of the policies apply, all sections and maps of this Plan should be reviewed.

The Plan does not dictate final authority on every individual land use question. However, it represents a comprehensive study and should be followed unless compelling reasons for exceptions are presented. Additional data that has not been considered in this plan would need to be reviewed before an exception is approved.

Flexibility in the Plan can accommodate the changing trends within the community. The General Plan contains policies, which have been deemed appropriate at a point in time, but cannot provide for all future changes and demands. For this reason, the Plan should be reviewed and updated every five years to assess and consider unforeseen circumstances.

If the Southwest Community is to grow and progress in a positive direction, the residents must show that they will not accept any undesirable situations as a permanent condition in the community. Citizens are encouraged to participate in the public hearings and on plans growing out of this document.

The unique identity and cohesiveness of the community should be maintained. The residents of the Southwest Community prefer to remain as an unincorporated "Community" within Salt Lake County. Riverton and Bluffdale Cities should not extend their boundaries into the area defined by this plan.

# **Summary of Goals and Key Policies**

# **Residential Development**

# Goals

- Maintain the unique rural and mountain residential character to enhance the quality of life in the area.
- Provide areas that are oriented to the keeping of animals and agricultural uses associated with a residence.
- ➤ Provide a variety of lot sizes and densities for single family housing consistent with the unique resources and constraints of the Southwest area.

- ➤ Permit well-planned and well-executed developments providing for different life-styles and different levels of income.
- ➤ Encourage lower density residential development that is enhanced by open space.
- Create and provide incentives to developers that propose innovative subdivision designs that preserve open space.
- Balance the amount of residential development with the provision of appropriate and timely public services.
- ➤ Encourage homeowners to maintain and improve their properties and comply with the established ordinances and codes for residential areas.

# **Key Policies**

In the higher mountainous areas and areas outside of the proposed expanding water and sanitation districts, the average density for single family residential should range from 1 dwelling unit per 5 to 20 acres, based on environmental conditions, compatibility with adjacent development, proper access, and quality of site design.

Quality of site design should be based on conformance with the **Rural and Mountain Site Design Criteria** section suggestions.

In areas within the proposed expansion of water and sanitation districts, the average density for residential should range from 1 dwelling unit per ½ to 10 acres, depending on zoning and platting, environmental conditions, compatibility with adjacent development, adequate access, and compliance with the **Rural and Mountain Site Design Criteria** section suggestions.

The open space and rural character should be maintained in the mountainous areas as well as the lower valley. However, growth and development will likely occur in this valley area in the future and begin to threaten the open feeling that exists today. Therefore, development that considers and creates different and innovative planning approaches to subdivision and residential development, preserving open space and agricultural lands will be allowed a density increase in the following land use classifications; Low density Rural Residential, and Rural / Agricultural Residential.

By siting developments in clusters or groups at the more desirable locations within a property and dedicating the remaining areas as public or private open space would contribute to open space preservation. Additional benefits include; protecting stream corridors, flood plains and aesthetic attributes, reducing services and minimizing infrastructure costs. A wide variety of housing styles and development flexibility should be allowed.

Areas in the Low Density Rural Residential designation with open space subdivision design could yield up to 1.8 dwelling units per acre, provided that 25 percent



of the total acreage remains in open space and is improved for the benefit of the residents of the project or dedicated for a needed public use.

Rural / Agricultural Residential provides a density increase of up to but not to exceed 1.25 dwelling units per acre when the cluster option is used. Again, open space preservation is required to achieve this density.

The residential densities shown in this plan should not be construed as guarantees of the number of residential units, which may be built on a site. The eventual number of units is determined by applying the recommendations of each section of the Plan and by the degree of compliance with the **Rural and Mountain Site Design Criteria** section.

All development should follow zoning regulations and building code requirements. Strict enforcement may be necessary to bring properties that are in violation into compliance.

# Parks, Open Space and Recreational Trails

# Goals

- ➤ Maintain the rural and open character of the Community through a network of public and possibly private open spaces, including recreational trail corridors where possible.
- ➤ Initiate a program that will help to enlarge the Yellow Fork Regional Park acreage. Land trades, dedications and acquisitions should be pursued to improve this important County facility.
- ➤ Provide facilities for active and passive recreation in appropriate areas.
- ➤ Initiate a program that will help to provide locations for neighborhood parks as development and population increase. Development of parks should be keyed by the progression of residential development.
- ➤ Provide areas that will function as neighborhood parks within planned residential projects.
- Preserve and enhance the productive agricultural properties and agricultural heritage.
- ➤ Discourage development in natural hazard areas to reduce the threat of danger to life and property.

# **Key Policies**

There should be increased coordination and cooperation among the various governmental entities responsible for public open space, parks, and recreational areas.

Additional public open space properties should be identified and immediately acquired, set aside and developed when funding becomes available.

Critical private open space areas should be identified and protected to safeguard the rural mountain character, maintain visual and scenic qualities, protect wildlife habitats, buffer existing and future development, and to provide open land or park experiences within future developments.

Large tracts of private land should be kept as open space by using a variety of conservation and preservation techniques. Open space development will produce the same number of building lots as traditional "checkerboard" subdivisions but are proven to be less wasteful, pleasant, and environmentally sound.

An integrated trails network should be developed that provides pathways for pedestrians, biking and equestrian use.

# **Environmental Quality**

# Goals

- Protect and improve the community's important groundwater supply from supply depletion or contamination.
- Protect and improve the air quality of the community.
- ➤ Protect the productive agricultural areas located in the community.
- ➤ Preserve the quality landscapes from unnecessary visual disruption by ensuring that all development makes maximum use of natural screening of the existing terrain and landscape.
- ➤ Maintain the important view corridors and open areas in the Southwest Community through sensitive site and building design.
- Maintain and enhance wildlife and wildlife habitats to ensure the continued environmental and aesthetic value of this natural resource.
- ➤ Protect and enhance riparian habitats by limiting development in these areas.
- ➤ Protect residential areas from intrusions of unacceptable noise levels from automobile traffic or other damaging land uses.

# **Key Policies**

Wetlands, riparian habitat, deer fawning areas and wildlife movement corridors are designated critical wildlife habitats. These areas should be identified in the development process and preserved.

The impacts of the pollution from fireplaces, wood stoves and dust associated with construction or agricultural production should be minimized.

The significant visual resources that should be protected and enhanced include: meadows, ridges, hillsides, waterways, vista areas, unique vegetation and productive agricultural areas.

Developments that utilize wells for culinary or irrigation purposes should not deplete existing groundwater beyond the ability of the local area to recharge naturally.

The minimum residential density outside of the proposed expansion of water and sanitation districts should be an average of 1 dwelling unit per 5 to 20 acres.

Land uses that are compatible with the visual resources are encouraged. When development is proposed in a visually sensitive area, the **Rural and Mountain Site Design Criteria** section should be followed to ensure the compatibility of man-made and natural environments.

Productive agricultural / farming land is encouraged and must be preserved and protected. Large farm tracts and smaller home gardens are an important element that creates the rural character of the community. Tax assessment policies and administration should reflect the agricultural use and maintain the assessment at the lowest level possible.

There are several families and individuals that wish to continue farming in the Southwest Community. By working together and utilizing the land in a sensitive and efficient manner, they can provide needed crops to the local and regional markets.

# **Transportation**

# Goals

- Provide a safe transportation system that satisfies the demands of local residents and is appropriate for the type of development pattern proposed.
- ▶ Balance the extent of the transportation system with new development.
- Create local road links that foster a sense of community that include the facilities and programs needed to support pedestrians, bicycles and equestrians, park-n-ride locations, and ride sharing opportunities.
- ➤ Improve and construct the identified existing and proposed roads in the area to county standards and maintenance.
- ➤ Improve the primary roadways throughout the community with hard surface asphalt materials to increase safety and convenience while maintaining a rural character.

➤ Provide a UTA public transit route into the area when area growth is found to be sufficient to support the service.

# **Key Policies**

All new development within the planning area should only be approved with proper access following all county standards.

Planned road improvements should be made only when the community character can be maintained, the environmental impacts are acceptable and public costs for the improvements do not exceed the potential benefit derived.

All new roads, including private roads and drives, should be reviewed and approved by the County Engineering Division prior to construction. Proper review will ensure safety, protect natural drainage patterns, minimize cuts and fills, prevent visual scarring of hillsides, etc.

Arterial and collector roads in the Community should have sufficient width for the function they serve, including any appropriate turning, acceleration, climbing lanes and other safety improvements needed. High traffic arterial roads that involve multiple lanes should be designed to protect the integrity of adjacent residential uses and preserve the rural and mountain appearance as much as possible.

Future road improvements and dedications by developers should include sufficient width to accommodate multiple-use paths and trails, where appropriate.

# **Public Facilities and Utility Services**

# Goals

- ➤ Provide services needed for a rural and mountain community at the appropriate time and at a level that is sensitive to the areas fragile environment.
- ➤ Require new development to bear the primary burden for capital improvements, including road improvements, and the water and sanitation facilities required as a result of new growth.
- ➤ Initiate a schools planning program with the Jordan School District to reduce overcrowding in existing schools and to reduce the lengthy commutes for students.
- Ensure that all development in the area can be served by the Salt Lake County Sheriff and Fire Department.



- ➤ Increase the level of fire protection as new development occurs. A fully staffed fire station will be needed in the near future.
- Require public water and sanitation services for all new residential development for lot sizes less than 2.5 acres per dwelling unit.
- ➤ Encourage existing development to attach to the public water and sanitation systems when service is provided to the area.
- ➤ Plan for storm drainage facilities needed to adequately contain runoff from all existing and future development.

# **Key Policies**

Utility facilities should be planned and designed in conformance with the Southwest Community General Plan policies, including the **Rural and Mountain Site Design Criteria** section.

The utility companies serving the area should work with all county agencies and the residents of the community in site selection and design of facilities.

The demand for public schools will increase as the area grows. When the need for facilities has been determined, the selected sites should be easily and safely accessible by school children, and provide a multiple use role. Shared use of facilities would minimize the need for additional public structures.

The present level of law enforcement services and fire protection in the southwest part of Salt Lake County should be maintained and expanded as new growth occurs.

# **Natural Constraints**

# Goals

- Protect life and property from the dangerous impacts of natural and man-made hazards.
- Ensure that land use activities do not aggravate geologic hazards, and ensure that grading and excavation do not accelerate erosion.
- ➤ Fit development to the existing terrain to ensure that development does not increase the potential for adverse impacts in identified hazard areas.
- Protect life and property from the increased risk of flooding.
- Ensure that all land use activities do not increase the risk of wildfire.

# **Key Policies**

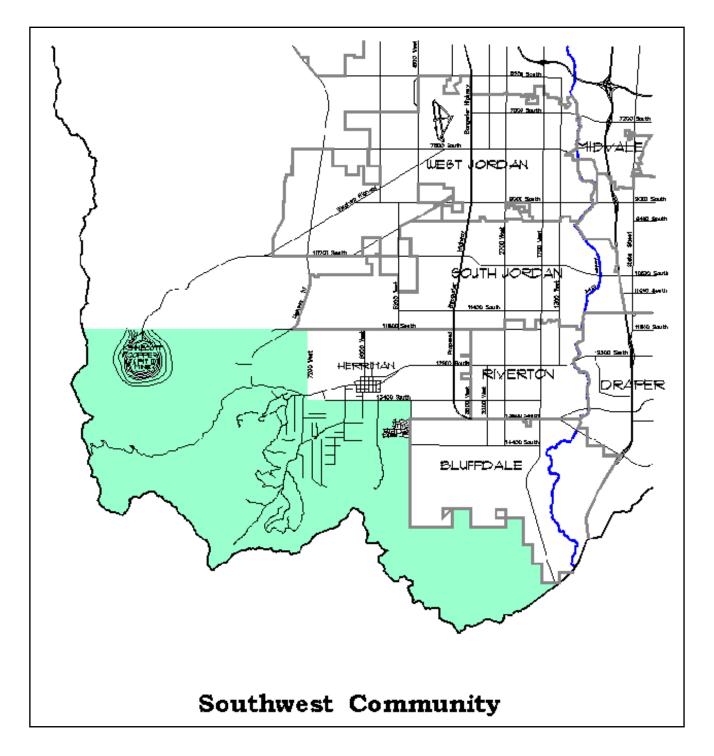
There are various combinations of geologic conditions found throughout the study area. No development should be allowed in the high hazard areas, including; steep slopes, landslides, poor soils and flood plains.

Areas identified as either low or moderate hazard should be reviewed and the appropriate site development guidelines followed.

Hazards related to development should be evaluated during approval review. Such hazards might include the disruption of soil and rocks, including erosion and changes in drainage patterns caused by road cuts, extension of utility lines, etc. Existing structures and the natural environment should be protected and enhanced.

Highly erodible soils are easily disturbed soils, having certain characteristics that can cause destruction of aquatic life and increase the risk of flooding. Disturbed areas should be stabilized as quickly as possible to reduce the erosion potential.

Follow all methods of forestland management in reducing all potential wildfire hazards, including the identification of severe hazard areas, mitigation techniques and educational programs for residents and private landowners.



<u>Figure 1</u>
The Southwest Community is located in the extreme southwest part of the Salt Lake Valley. The study area is a very large geographical area that totals more than 46 square miles or approximately 30,000 acres.



# **COMMUNITY SETTING**

The Southwest Community will have the opportunity for considerable control over development into the future. Homes will be constructed in an attractive and uncrowded fashion utilizing the unique topography and environmental attributes of the area. Following the development guidelines and policies will ensure the accomplishment of community goals.

The Southwest Community is located in the extreme southwest portion of the Salt Lake Valley at the mouth of Rose Canyon and Butterfield Canyon. The council area includes the lower valley at the canyon mouths and extensive mountainous areas that extend south and west to the Salt Lake County border. A majority of this mountainous area is privately owned with the largest single owner being Kennecott Utah Copper Corporation. The community area boundaries are defined as 11800 South extending west from 7200 West to the Salt Lake County and Tooele County border, and 13400 South extending east from 7200 West to 4800 West, as the northern boundary, 4800 West and the Bluffdale City limits as the eastern boundary, and the Salt Lake County border defining the southern and western boundaries. The community is a very large geographical area that totals more than 46 square miles or 30,000 acres. (See Fig. 1, page 6.)

# **Area History**

The southwest part of Salt Lake County was first settled in 1851, some four years after the first pioneers entered Salt Lake Valley. Records show that while hunting in the mountains west of the Jordan River, two pioneers, Thomas Butterfield and Samuel Egbert, discovered a small stream flowing out of the mouth of what is now known as Butterfield Canyon. Thomas Butterfield felt that the needs of his family would be better served living near this stream. He proceeded to move his

family to the newly found location accompanied by Henry Herriman and John Stocking in the spring of 1852.

The three men built log cabins, diverted water from the creek to the land they intended to cultivate and fenced part of the land around them. They named their new home Butterfield's Settlement, later renamed to Herriman. A road was established up Butterfield Canyon where timber was cut and hauled by ox teams for the construction of their small but adequate shelters.

As Pioneers began settling in the Salt Lake Valley, encounters with Indians were common and frequent. The Ute Indian Tribes had settled over the better part of the Great Basin region and were most feared. Other Indians that inhabited the Great Basin region were mostly of the Shoshone and the Goshute nations. The settlers of the southwest area, among other things, endured the difficulties associated with their stock being frequently stolen by the Indians.

Brigham Young, the leader of the Mormon pioneers, felt that the pioneer settlers needed more people to strengthen the community and provide protection for those living in the area. Brigham Young gave orders in 1853, to protect the outlying settlement by constructing a fort. Twenty families relocated to the area supplying adequate numbers to build and successfully establish the town called Herriman. There were a total of 24 families living in Herriman at the beginning of 1853.

The construction of the Herriman fort was paid for by assessing the residents a poll and property tax. Stockowners who did not reside in the area were also assessed a tax for grazing their animals in the community and outlying foothill areas. The fort was constructed by

using a mixture of mud, grass, hay, straw and gravel. The fort walls were built by digging a ditch around the perimeter of the compound, filling it with water and mixing the aforementioned materials to erect a wall. The bases of the walls were three feet thick, which tapered to eighteen inches at the top, and extended to a height of over seven feet. The exact dimension of the fort is not well known but it has been estimated to take in between three to five acres.

The only evidence remaining of this fort is the two black locust trees believed to have been planted at the west entrance. The fort's location, if it were still standing, would be near Third North on the east side of Pioneer Street, in the town of Herriman.

As conflicts with the Indians subsided, Herriman and the Rose Canyon basin began to grow. During the early years, farming and stock raising were the main industry of the residents. In 1875, ore hauling became the chief occupation for the people living in Herriman, Lark and Copperton. Ore was loaded on wagons and pulled

As the Pioneers began settling in the Salt Lake Valley, encounters with Indians were common and frequent.

by a six span mule team to a smelter in Sandy.

The same year a pioneer by the name of James Walker built a sawmill in Butterfield Canyon and lumber became another source of economic support. The ore industry as well as the sawmill attracted other settlers to this area, and by 1880, the population had grown to 342 people.

Soon after the Bingham Canyon copper mine opened in the early 1900's the population in Lark and Herriman Towns increased dramatically. Today, the town of Lark is deserted and will soon be engulfed by the mine overburden.

In recent years the Southwest area has separated from the Herriman Community and is now recognized as a functioning independent council of Salt Lake County. The residents of Southwest Community enjoy the uncrowded rural and mountain environment and are committed to preserve this lifestyle into the future.

Sources for historical information include:

<u>Tales of a Triumphant People, History of Salt Lake County, Utah, 1847-1900,</u> compiled and published by Daughters of the Pioneers, 1947, pgs. 170-268. <u>History of Herriman Utah, 1935,</u> compiled by Colleen Smith 1982.

# **Population**

Past population trends specific to the Southwest Community are difficult to show. Prior to 1980 the outlying areas in the southwest portion of Salt Lake County were grouped together for each census of population. The present communities of Copperton, Bingham Canyon, Herriman and Southwest were presented in census reports as one figure. The planning staff has estimated population figures for the Southwest Community listed in Figure 2, page 9.

Characteristics of a community population are very important in determining future needs and in making decisions concerning future land use decisions. Since

> 1980, the area population has grown at a fairly steady rate, mainly in the Rose Canyon basin, located south of 13400 South and west of 6400 West. The Community population taken from the 1990 census report was 910 persons. The striking amount of community growth during this period has been accomplished because of the

establishment of the local private water systems, and wastewater sanitation from septic tanks allowing the development of new homes.

Population of the Community in 1995 is estimated at 1,110 persons. The Southwest Community population for 1995 was estimated using the 1990 census count as a base and projecting the average number of occupants for the new homes built in the area.

The average age of 27 years for community residents from the 1990 Census is very similar to the County average of 27.8 years. School age children dominate the population composition in the area with 40 percent under nineteen years of age. The composition of males to females is very similar, with males totaling 520 and females 470.

Census figures also indicate that there are approximately 265 family households and 28 non family (unrelated) households in the area producing an average of 3.5 persons per household. This average is slightly higher than the county average of 3.2 persons per household and helps substantiate that the community is composed of families with young children.

The evident ramifications of population projections in the Southwest area are important when considering the unique rural character desired by residents and the recent amount of interest for residential development. Uncontrolled population growth and housing development is a major concern to the community residents. The



population projections could be substantial when considering the size of the community and will relate to the potential build out of the community, how quickly the development will take place and the overall density of development allowed.

It is anticipated that the Southwest Community population will continue to grow. Projections are difficult to determine at this time and will be dependant on future developments accessibility to culinary water, sanitation services, access, and conformance to all zoning and site regulations. The ability of Salt Lake County to provide the many public facilities, roads and other improvements will also affect the growth rate. The population may reach 2,700 persons by the year 2000, and possibly 5,500 persons by the year 2010. These projection are based on an average of 80 homes built a year and the current average family size of 3.2 persons. It should be noted that the

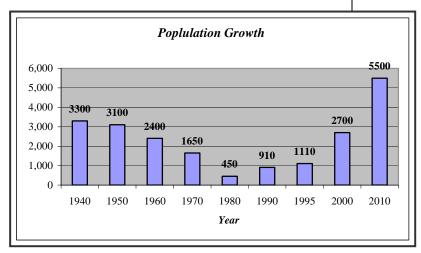


Figure 2 The population for 1995 is estimated to be 1,110 persons. Community population could grow to 5,500 persons by the year 2010.

projections do not include the development of the Foothills Subdivision located in the extreme eastern section of the community. The population projections are considered low to moderate and may be much higher if construction proceeds at a fast rate. However, the community is limited in its development capacity because of the many hazards to development within the area.

# **General Land Use**

The Southwest Community study area contains approximately 30,000 acres. Today, this large area remains virtually undeveloped. A very small percentage of the area has been developed into a variety of residential lot sizes and differing housing types. A majority of the 290 + residential units are single-family homes. There are also

several mobile homes that have been placed on properties. The balance of the Community area contains a large county regional park, state and federal open lands, mining operations, agricultural dry farming, and several thousand acres of undeveloped mountainous terrain, most of which is privately owned.

Several large privately owned properties located in the higher mountainous areas are currently undeveloped. However, any development potential for these areas is severely restricted because of steep slopes and very limited access. Virtually all of this acreage is located with zone designations subjected to the requirements in the Hillside Protection Overlay Zone. The Hillside Protection Overlay Zone establishes specific site and development standards for the Southwest Community mountain areas that will preserve the character of the hillsides minimize soil and slope instability, erosion, and stream siltation. The

Hillside Protection Zone is discussed in Appendix C, page 89, or refer to Chapter 19.72 of the Salt Lake County Zoning Ordinance.

Kennecott Utah Copper Corporation is the largest single property owner, operating the Bingham Canyon Mine. This open pit mine, located in the northwest part of the community is the largest in the world. The facility and its associated properties total over 11,000 acres or about one third of the community acreage.

Public lands include the Yellow Fork Regional Park that is operated and maintained by Salt Lake County Parks and Recreation Division. The park property is over 800 acres in size. Present facilities are limited to small picnic facilities and unmaintained hiking trails that are accessible to all residents of Salt Lake County. Also, the Bureau of Land Management has recently acquired approximately 3,000 acres in the lower Butterfield Canyon area, north of Yellow Fork Recreation Area. The agency now

operates a wild horse range, corrals and staging area, and wildlife rehabilitation facility on the property. Periodically the Bureau holds adoption auctions of the horses open to private citizens and horse lovers throughout the Wasatch Front. (The Existing Land Use Map is located on page 11.)

No public schools are located in the area. The Jordan District schools are located in Riverton and Bluffdale Cities. School age children are currently bussed to the various locations. There are presently no formal parks, recreation center or other community facilities located in the area.

The Community does not have any commercial and service developments. Residents must travel to Riverton City or other surrounding areas for commercial facilities and amenities.

# **Existing Zoning**

The Salt Lake County Zoning Ordinance and associated maps identify various zone classifications that distribute and separate various land uses in the community. Zoning designations were originally applied to the southwest part of the County in 1975.

Today, the areas predominant zoning classifications include; A-2, A-5, F-1, FA-2.5, FR-5, FR-20 and M-2 zones.

The A-2 and A-5 zone classifications allow singlefamily homes on one acre and five-acre lots, respectively. This zoning is located from 13400 South to 14200 South

The zoning ordinance and

associated maps identify various

classifications that distribute and

separate land use in the

community.

and east of 7600 West. Most the existing of built residential lots subdivisions have developed within this area. (Figure 4, page 13.)

Near the eastern edge of the study area is a platted subdivision that has not been completed and currently has no homes built on any of the The subdivision is zoned R-1-7, however the lots

are an average of approximately 9,000 square feet in size. The future of the subdivisions 550+ lots is uncertain at this time. Salt Lake County Development Services Division must closely monitor any development that may occur at this location and insure that all infrastructure and site improvements are brought up to current standards.

The Foothill Agricultural Zone (FA-2.5) permits single family residential on a minimum of 2.5 acres. A majority of Hi-Country Estates II Subdivision is zoned FA-2.5.

The properties currently zoned M-2 allow for heavy manufacturing or industrial uses. The Kennecott Copper

Bingham Canyon mine is the primary user of this large area. A small area remains zoned R-2-6.5, located at a site where the town of Lark once existed. A single lot in this same area is zoned C-1 for neighborhood commercial use. However, the parcels once comprising the town of Lark are presently in Kennecott Copper Corporation ownership. The present zoning will most likely be changed in the future to M-2, which allows the mining operations.

A substantial amount of acreage in the study area is currently zoned FR-20 and F-1. These parcels are located in the mountainous areas of Butterfield Canyon, Rose Canyon and the extreme southeast section of the Community. The zones provide a forest reserve and forest recreation development in canyon areas of the county to

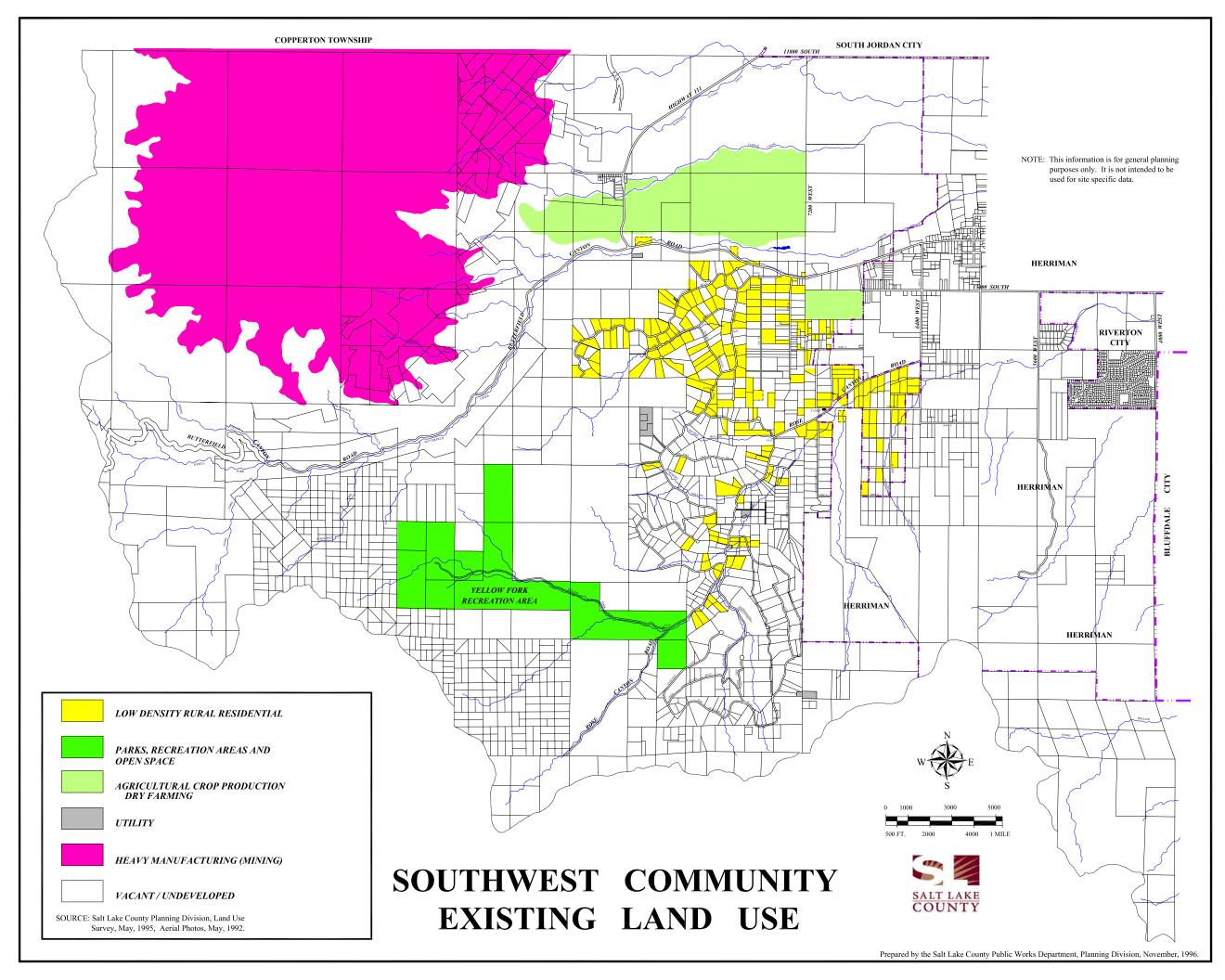
> the extent such development compatible with

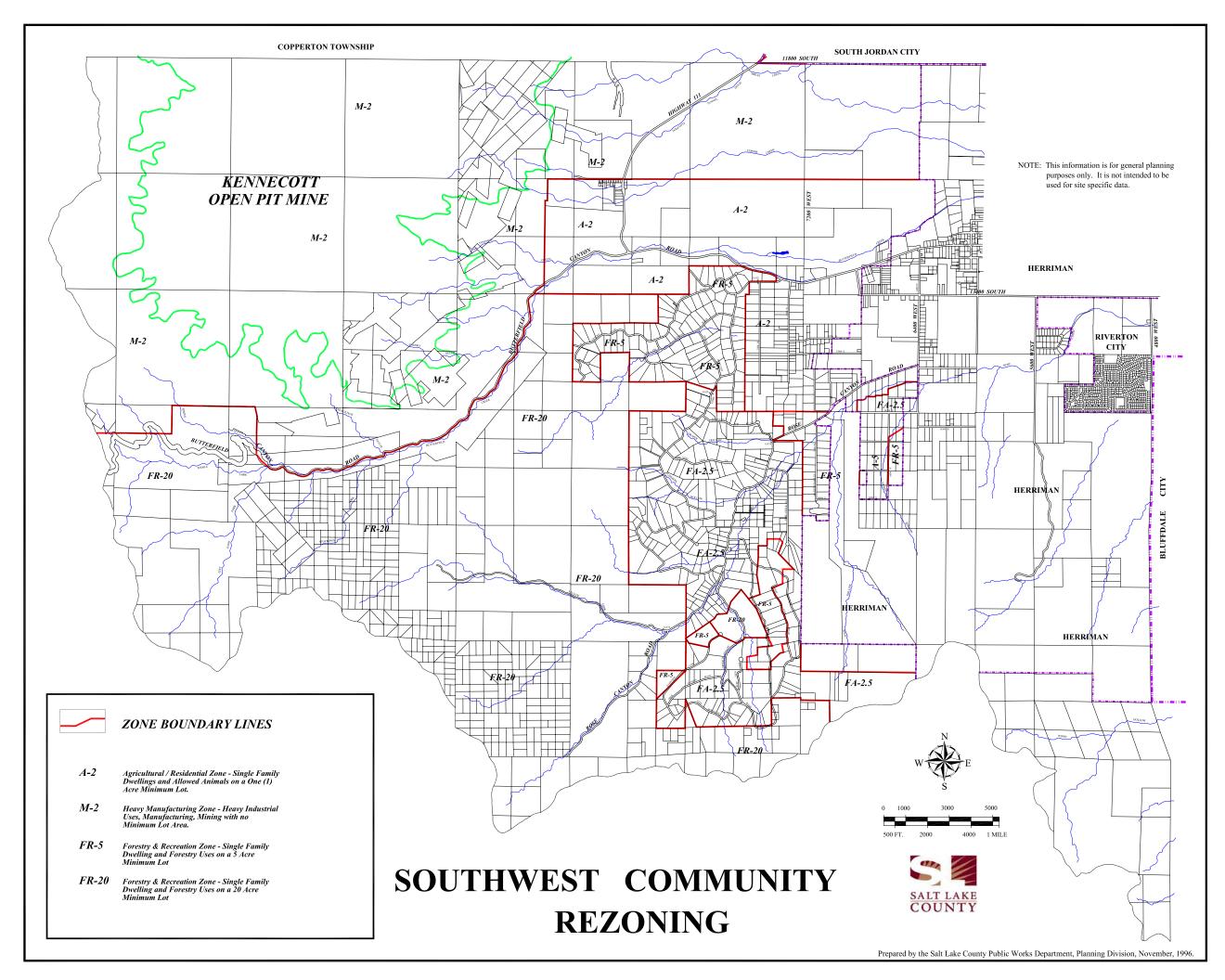
> protection of natural and scenic resources.

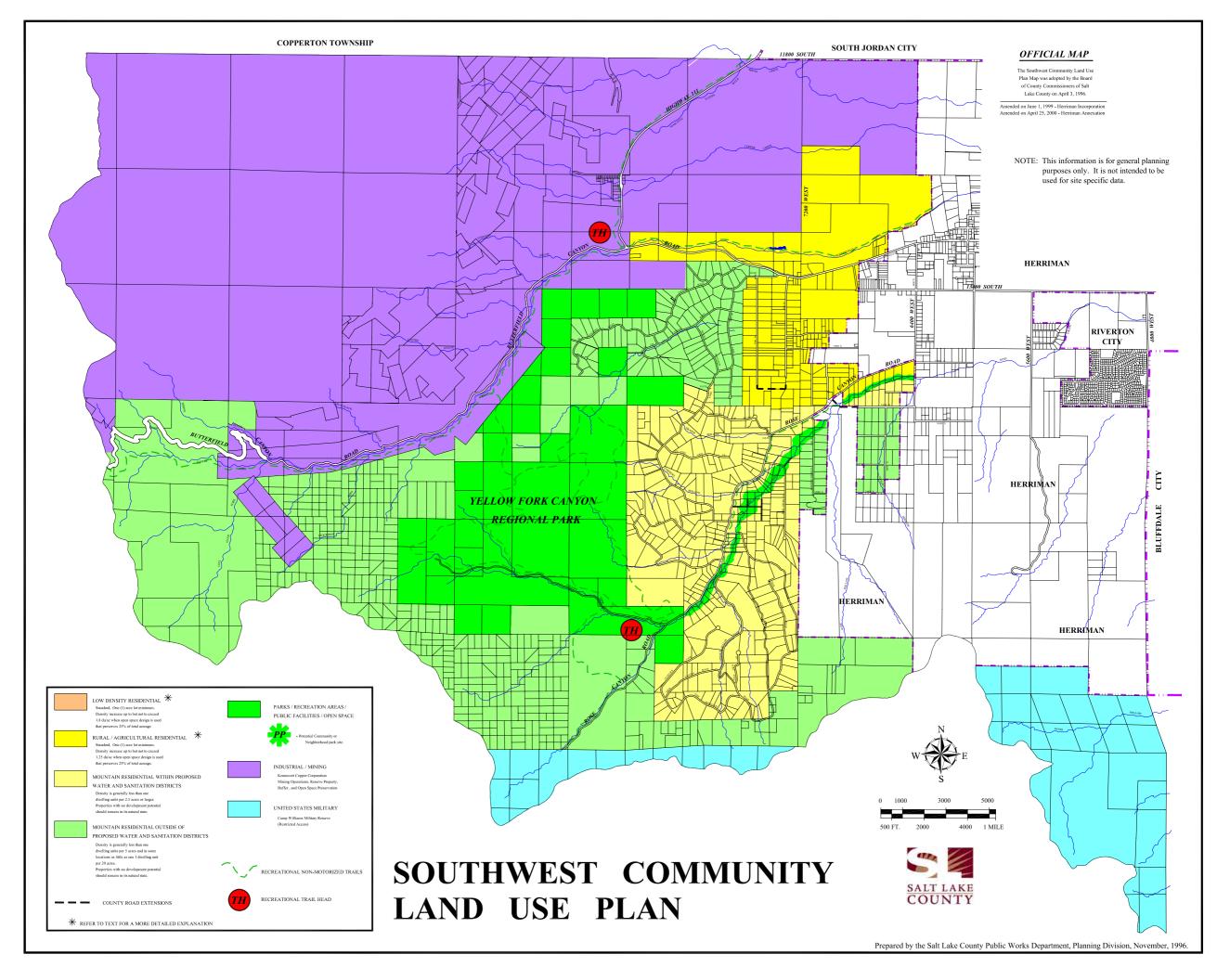
# **Holding Capacity**

There are several factors that should be considered in establishing residential densities in the Southwest

area. These include the physical and environmental factors along with consideration of existing roads, infrastructure availability, community facilities, and the existing land use pattern. The holding capacity approach to density, applies density adjustments factors to a section of land based on the presence or absence of these constraints and the ability of government to provide the needed services and facilities. The mere fact that a tract of land can be developed at a given density does not mean that it should be. Appropriate densities have been established based on all of the plans recommendations and are discussed on pages 17-19.









# RESIDENTIAL HOLDING CAPACITY

The preparation and observations that can be made from the holding capacity, sometimes called "build-out" of a community or defined area is a highly effective method of communicating to local residents and officials the long-term results of implementing proposed land use recommendations.

The holding capacity of the Southwest Community is best illustrated and understood by referring to the build-out map on page 19. Briefly stated, the build-out map plots the probable number of new houses that could legally be constructed on the vacant and build able land remaining in the community before it actually occurs, (which is a significant amount).

The build-out technique used does not project future growth rates. They will vary for many reasons and are not as important, in the long run, as the ultimate pattern of development that will result through the application of the plans land use policies and zoning.

To ensure credibility and accuracy, the staff did not project development into areas where natural, man-made, or regulatory constraints would prevent it. The build-out pattern reflects reduced density where factors would limit actual development. These include; floodplains, already developed areas, publicly owned lands, and parcels protected by easements.

In the areas where the provisions would allow the legal maximum densities to be achieved, a hypothetical but

realistic acreage percentage was deducted for new roads. Also deducted from the residential useable area is appropriate acreage that would accommodate public facilities, and parks needed to serve the neighborhoods and projected population.

A second product of this analysis is a projection of future dwelling units, together with estimates of future community population and number of school children.

This study has been carefully prepared and would be difficult to argue against. It is an objective illustration of the realities under the plan's policies and recommendations. Its greatest contribution lies in helping people identify what it will be like to live in the Southwest Community when development is fully implemented and in getting their attention focused on the community's prospects and type of future by allowing development to occur.

The estimated numbers represented in Figures 6 and 7 are based from the Land Use Plan and each residential use classification.

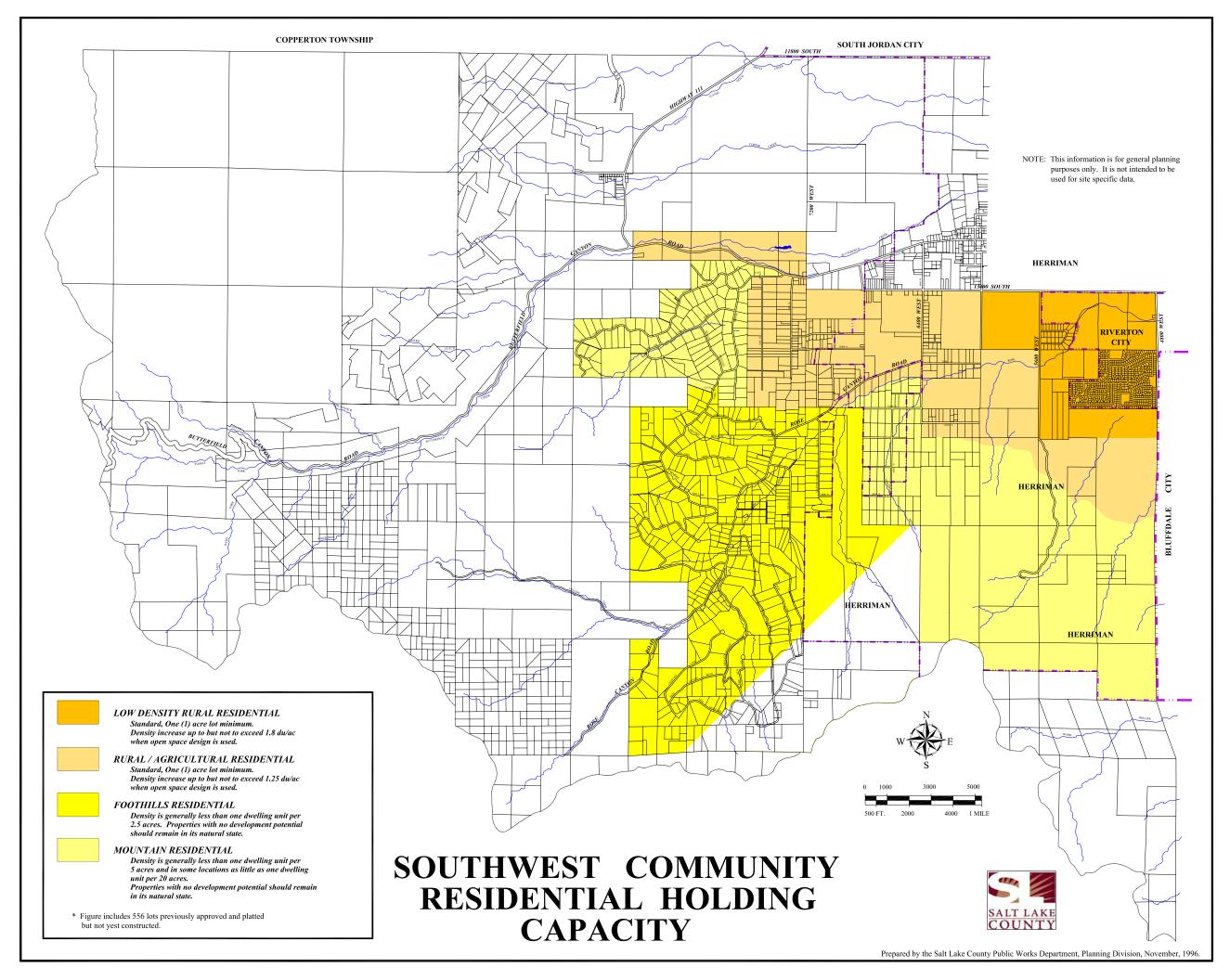
# Residential Holding Capacity

# Figures represent estimates at build-out following the land use recommendations of the plan

	Low Density Rural Residential	Rural/ Agricultural Residential	Foothills Residential	Mountain Residential	Total
Acres available for Development	560	1,010	1,649	3,470	7,480
Density per acre following land use recommendations	1.8	1.25	0.35	0.15	0.5 du/ac Average
Potential number of building lots	1,030 +556 *	2,310	570	320	4,790
Population at 3.3 persons per dwelling unit	5,100	7,000	1,740	1,050	15,770
Open space retained w/ Open Space Development at 25%	140 ac.	450 ac.	n/a	n/a	590 ac.

<sup>\*</sup> Calculations for residential holding capacity include the 556 lots approved and platted in this area.

**Figure 6** The amount of land available for residential development is over 8,000 acres. Each land use designation suggests the appropriate residential density for that area of the community. The potential number of building lots was then calculated using the density and acreage for each area. A population projection was calculated using the average number of persons per household for the County. A significant amount of land could be retained in open space or agricultural use if cluster development concepts are applied, preserving only 25 percent of each development site.





# RURAL AND MOUNTAIN SITE DESIGN CRITERIA

The purpose of the design criteria is to assist and encourage landowners in creating high quality development, which respects the environment, and encourage creative and flexible approaches to each site location and design.

Scenic or high quality elements of

the natural landscape need to be

maintained or enhanced.

By using the criteria described below, it is anticipated that more sensitive and quality development will occur in the Community.

The dramatic beauty of the surrounding natural landscape is a major asset. Scenic or high quality elements of the natural landscape need to be maintained or enhanced when development is allowed. Preventing the continuation of unattractive man-made environments by enforcing zoning and building codes, encouraging properties to be rehabilitated and maintained is encouraged.

development should be integrated through location and design, with the areas natural character.

The development of a residential subdivision or a single lot home is determined by the property's private owners. Although the public

sector does not construct these projects, land use planning and design criteria play an important role in establishing a pattern for their location and appearance

Visual quality of an area is the impression created by the landforms, vegetation, color, adjacent scenery, and modifications within the view of a site. Generally, the more visual variety in a landscape, the more aesthetically pleasing. Variety without harmony, however, is unattractive, particularly when modifications are made without care.

Wildlife and unique vegetation are aesthetic and environmental assets to the Southwest Community. Deer and other wildlife are abundant in the areas mountains and valleys. They contribute to the physical and psychological

well-being of the residents and are a major part of the quality of life in the area.

To create a program to preserve rural character, one must define the specific qualities, patterns and spatial relationships that give the area its unique rural character. For example, residents characterize the rural area as a mixture of farms, undeveloped open spaces, mountainous and forested areas, wildlife / farm animals, distance from the city, low density housing, small population, and the absence of suburban amenities, such as streetlights and

sidewalks, etc.

The relationship between vegetation animals, human activities needs to be respected and consciously For excellent development design to occur, it must begin early in the process. Each element, from

existing site features and site improvements to be made, to the infrastructure improvements and structure design should consider how each relates and affects the other. Several important suggestions are discussed in this section.

The varying characteristics of individual sites will determine which of the following criteria may be applicable. In some cases, all criteria may be applicable, while others, only some may apply.

# **General Elements**

# Views

- Maximize views of significant features on and off site as amenities of site design.
- 2. Place structures in a manner to avoid obscuring significant views from the local roads. New construction should not dominate views or obscure the views of other properties.

### В. **Ridgelines**

Locate homes or other structures to avoid a dominant silhouette on the top of ridges. The ridgeline silhouette should be composed of natural features, trees and landforms.

# **Site Features**

- Maintain site features in their natural state or enhance all significant features on a site including streams, ponds, and wetlands.
- Maintain and/or enhance other significant features, e.g., rock outcroppings, trees and other significant

vegetation. New construction should respect and be compatible natural with vegetive patterns.

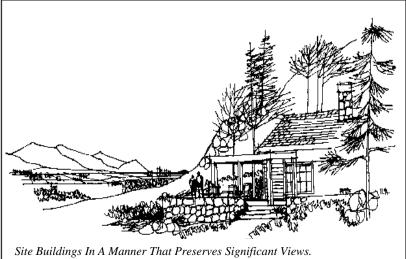
### **Treeless Areas** D.

In areas where little natural buffering occurs, e.g., treeless clearings, development into vegetation along the edge of the open area is preferred. Encroachment into open areas or clearings may occur

only if additional features are provided which enhances the existing buffering. This recommendation may not apply to the large treeless parcels located in the valley areas of the Community.

# **Site Improvements**

Site modifications should be integrated into a landscape to minimize visual scars, erosion and create an impression that the structure belongs on the site.



# **Buffering**

- Blend the man-made features with the surrounding environment so that the structure is not the dominant feature in the landscape.
- Soften or interrupt all unsightly views from offsite to developed areas on-site, e.g., homes, other structures, public and private roads, accessory buildings,

utilities, antenna, by the use landforms, rocks, vegetation or other natural methods.

# **Transition Areas**

Create buffer between two adjacent areas of different uses, providing a clear transition from one use to the other, and provide an enlarged buffer between incompatible where uses

appropriate.

Site design should be compatible

with the foothill and mountain

environment. Building materials

should reflect the character of the

community as well, emphasizing

natural looking materials.

Use similar density or intensity where two projects of the same use abut, or other mitigating techniques at the common edges.

### Landscaping

New construction should maximize the use of existing vegetation and natural landforms wherever All development should preserve and be possible. compatible with the natural vegetive patterns.



- 2. Landscape projects in an appropriate manner to sufficiently enhance the aesthetics and functional qualities of the site and project.
- 3. Recommend that all introduced landscaping consist primarily of native or naturalized materials, placed in groups that emulate the natural environment. Select and group plants to minimize consumption of water.

# D. Grading and Erosion Control

- 1. Design site development to minimize disturbances (cut, fill, excessive excavation, tree clearing) caused by the introduction of structures, roads and driveways.
- 2. Revegetate or enhance all disturbances regardless of magnitude with staining and/or planting with native or naturalized materials within one growing season.
- 3. Roll regraded slopes back into the surrounding topography to a grade that, when revegetated, will be stable and create a natural look.
- 4. Retain natural drainages and wetland areas in their natural state, or emulate the natural environment, whenever possible.

# Site Structures So Their Form Does Not Break Prominent Skylines.

# **Open Space Subdivision Development**

By preserving a percentage of open space in each development while maintaining relatively low densities, open space subdivision design is one option for preserving many of the elements described above as "rural". However, it is important that the open space in a cluster development be preserved for a specific purpose, and not a static vacant lot. By separating lot size from density (i.e., by placing homes on smaller lots than provided for by the allowed density of the zone), cluster development can preserve a certain percentage of a property as open space or farm land, create a recreation amenity, or protect a hazardous area. (See Figure 8, page 24.)

There are a number of different open space techniques, some offering incentives that have been successfully utilized in subdivision design. Some are presented in this section, along with conceptual example ordinances described in Appendix F, page 101. Recommendations of this plan require open space subdivision design as a basic requirement for increased density to be achieved. Salt Lake County, in association with this plan, must also create the regulatory mechanisms and development standards to implement the planning policies, giving options (other than traditional "cookiecutter development") to developers.

One highly effective and simple exercise is to have a developer prepare an inexpensive sketch plan showing how their proposed subdivision could be laid out following the open space standards. Participating in such an exercise

may help open minds to some new possibilities for more sensitive residential design.

### A. Advantages

- 1. Preserves activities characteristic of the rural landscape while allowing for limited housing development.
- 2. Contributes to the preservation of rural resources by clustering homes away from floodplains, wetlands, geologic hazards, wildlife habitats, and farmland.
- 3. Benefits developers by reducing costs for infrastructure and services over conventional development.
- 4. Benefit to developers because they are more likely to be able to build all their allowed units. Many times conventional subdivisions contain acreage that is determined unbuildable.

5. Reduces the county and state responsibility for providing facilities, services and capital improvements, such as new road construction.

# B. Characteristics

The term "subdivision" emphasizes the fragmentation of land, rather than the creation of a proper neighborhood of homes and relationships. Development based on the principles of traditional streets, informal recreational amenities, open space preservation, and pedestrian scale is often criticized by developers as having very little market appeal. Underlying this criticism is the biased assumption that people will not be willing to pay as much for a home located on a more compact lot. Many times this thinking misses the point: high quality design and the provision of amenities can many times out-weigh the effect of lesser quantity. Although the size relationships will change with local market conditions, there will be a point where clustering will produce and equal or greater return to the developer than a conventional subdivision.

Individual units seldom create a neighborhood. The developments physical design creates a potential "sense of neighborhood and community." The following are some organizing principles and site planning elements that create a sense of community:

- a. <u>Walking</u>, replaces auto travel as the prime means of movement in and around the cluster.
- b. <u>Amenity</u>, natural or man-made, should be available for neighborhood use and enjoyment, rather than individual lots.
- c. <u>Sharing of resources</u>, many facilities have become too expensive for people to own individually or are used too infrequently to justify ownership. Such facilities may include tennis courts, swimming pool, and multi-use fields and play areas.
- d. <u>Focus</u>, is identity, something which makes a neighborhood different from others. Clustering creates group-focusing units whereas sprawl develops individual focusing units, not allowing the bonding together of neighbors.
- e. <u>A range of residents</u>, A variety of house and lot dimensions allows people to remain in their neighborhood as their housing needs change with family sizes.
- f. <u>Order rather than repetition</u>, the neat ordering of design elements creates a sense of cohesion even when the individual elements themselves are far from identical.

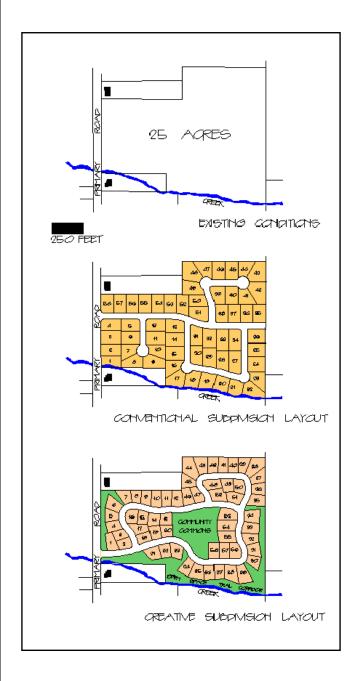


Figure 8 Creative subdivision design can not only provide the same number of building lots in a project, but also create an open space amenity that can be utilized by all residents of the development.



Privacy is essential in any neighborhood even though contacts with neighbors may be pleasant. Every household must have privacy at entrance and inside the

Other elements may include:

- Residential subdivision design should consist of smaller, understandable neighborhood segments rather than a single, large suburban theme.
- Development should reflect a more unordered, organic pattern and avoid the cookie cutter standard sameness of subdivisions.
- family sizes. Strong provision should be made for walking as opposed to vehicular connections both within adjacent neighborhoods.
- Street widths and alignments should be carefully scaled to neighborhood size and reflect the rural character of the community.
- The types of private open space provided within a development should reflect the intended active or passive use, be sufficient in size and have a program to insure improvement and maintenance.
- The streetscape created by new development should be designed in general detail to avoid repetitious driveways, building setbacks, elevations, and styles.
- Single-family residential development should be responsive to and provide the physical diversity that is needed in regard to the mixture of housing types, styles, lot size and selling price.

# **Incentives**

Density increase is another type of incentive to offer developers if they utilize open space development design. However, unless the financial incentive is substantial. most developers will not be willing to change from their conventional approach. And when the incentives are too generous,

the preservation of open space is lessened and difficult to achieve. In addition, there tends too be a resistance to "giving" developers any extra units at all.

Developers, government officials and the public must realize that the provision of open space is more important to the community in the long run than a marginal increase in the number of residents living in the new subdivisions. Once the land is developed, it is nearly impossible to regain lost productive farmlands, plan for, or provide for

> open space, greenways,

> trails, and parks into the development pattern.

# **Structure Design**

The relationship between structures and the surrounding landscape is extremely important. This relationship can be defined in terms of scale, form,

massing, orientation and construction materials.

A variety of house and lot

dimensions allow people to

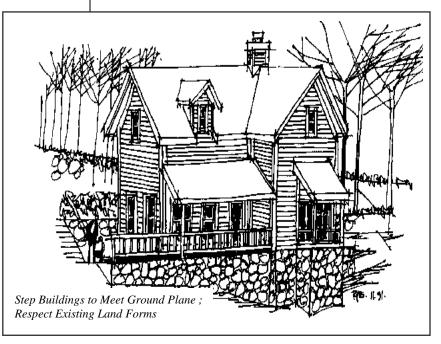
remain in their neighborhood, as

their housing needs change with

The perceived mass of structures and their overall form should convey differing styles, forms and images creating visual variety.

Building materials should create and reflect the rural and mountain character of the community as well, emphasizing natural looking materials.

The placement of structures should not be dictated by the roads, which can create a row house development pattern, but by landforms and vegetation, views, and open spaces.



Roofs and other architectural components should blend with the landscape.

Accessory uses are often afterthoughts in a project. Because these elements are also important, they need similar architectural treatment to the primary structure.

# A. Building Orientation

- 1. Orient buildings with a preferred southern exposure to increase solar radiant heat effectiveness. Use natural vegetation for shading and protection when possible.
- 2. Group and design structures in a way that will ensure privacy among parcels.

# B. Architecture / Scale / Massing

- 1. Encourage the building scale of a development to be in proportion to the size of the lot, to the surrounding landforms and natural vegetation and to existing buildings in the area, rather than appearing monumental in scale.
- 2. Place all structures sensitively within a site, rather than to dominate or overpower a site. Integrate buildings into the site through the use of landscaping, earthwork, or natural materials.
- 3. Design buildings so they solidly meet the ground plane. Buildings that firmly meet the ground will convey an appearance of greater permanence.
- 4. Utilize an architectural design emphasizing natural materials, the use of light, shadow, depth and texture in all exterior building surfaces. Vary facades and roofs to minimize large expanses of flat roof planes.
- New Structures are
  Screened By
  Existing Land
  Forms and
  Vegetation

  Natural Features
  Undisturbed

  Canyon Foothill Continues To Serve As Visual Amenity
  To The Site And Surrounding Areas.

- 5. Minimize large planes of exposed building foundations. Screen all mechanical equipment including rooftops, with materials similar to or compatible with the building facade.
- 6. Proposed development designs in all areas of the Community should consider and work with existing topography, vegetation and views.

# **Infrastructure Improvements**

Infrastructure improvements should not detract from the careful planning efforts taken elsewhere on the site for the primary use.

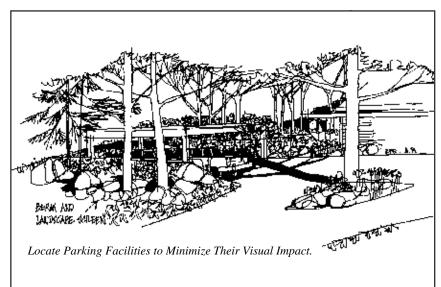
# A. Utilities

1. All utility lines should be placed at appropriate underground locations to reduce the number of unattractive overhead lines and power poles. Install utilities in a manner that will minimize visible structures, tree removal, and other site disturbances. Landscape materials should blend with the existing natural materials.

### **B.** Circulation System

- 1. Construct and locate roads in a manner that will blend with the topography, eliminate unnecessary cuts and fills, provide year around access and minimize visual disruption of the landscape.
- 2. Prohibit the construction of roads across slopes with a grade of greater than 30 percent to reduce cuts and fills.
  - Design all public and private roads to comply with County requirements of road grades not exceeding 10 percent.
  - 4. Coordinate circulation to allow access among development, and to limit the number of access points to collector and higher volume roads.
  - 5. Design circulation systems to minimize non-neighborhood vehicular trips.
  - 6. Require road dedication for all development with frontage along streets identified for improvements or construction.
  - 7. Provide adequate off-street parking with year around access.





# C. Recreational Trails

- 1. Provide recreational trails to connect residential areas and provide access to open space uses creating a variety of trail opportunities.
- 2. Extend trails to connect with the identified Salt Lake County Regional Trails System.
- 3. Locate recreational trails in a manner that allows easy access but do not intrude into residential areas.

# **Fire Prevention and Safety**

- 1. Stress the importance of proper fire prevention and Community fire preparedness to all residents of the Community.
- 2. Maintain all natural foliage at a safe distance from homes and structures.
- 3. Discourage the use of wood shingle roof materials in mountain-forested areas. These materials are considered a high risk in the event of a fire. Homeowners should consider replacing wood shingles where present with a more fire resistant material.
- 4. Educate landowners and residents on wildfire hazards and mitigation techniques.

# **Accessory Uses**

Accessory uses should not detract from the valuable visual attributes of the area.

# A. Accessory Facilities

- 1. Screen satellite dishes from off-site view, or select design and color that will blend with the surrounding environment.
- 2. Screen propane tanks and trash containers from adjacent off-site views.
- 3. Enforce all County regulations to prevent the illegal storage of cars and trailer homes, and the dumping of trash and other materials on properties.

# B. Fences and Walls

- 1. Avoid perimeter fences except as needed for livestock.
- 2. Use privacy (opaque) fences only to provide private areas immediately around buildings or for noise attenuation.
- 3. Use fences and walls constructed with natural materials, e.g., wood or stone.

# C. Lighting/Glare

1. Light properties only to provide for safety and security, and to highlight architectural and landscape features. Eliminate unnecessary lighting and the spread of light/glare off-site.



# RESIDENTIAL

This rural, agricultural and mountain area is characterized by expansive views of natural terrain, abundant wildlife, and high levels of privacy. These features, plus the close proximity to metropolitan Salt Lake City, are reasons the Southwest Community is becoming a desirable choice for many new residents. The natural environment should be respected and

Balancing natural and man-made

environments can be achieved

when development is sensitive to

natural resources and constraints.

The residential recommendations in this section are intended to accommodate future housing needs in a way that is compatible with the unique rural and mountain environment. The balance between natural and man-made environments can be achieved when development is sensitive to existing natural resources and constraints. To achieve this balance, the residential requirements stress the relationship to the natural features of this environment, e.g., geology, topography and slope, potential flood hazards, wetlands, wildlife, significant vegetation and scenic views.

When development is proposed, the characteristics of the site are identified and development impacts are evaluated. It is during the development review process that sensitive and hazardous areas are identified, the availability of essential services identified, etc.

Each of the sections in this plan contains specific and more definitive recommendations, which should be applied during the review process.

The density recommendations for residential development are a synthesis of all the issues contained in the Plan. These recommendations are based on and reflect a desire to maintain a rural and mountain character while allowing new

development to occur in appropriate areas, preserve the diverse environmental resources, and to protect and enhance the quality of life for the entire area.

# Goal

Provide for diverse and varying single-family lot sizes and housing styles in appropriate locations, i.e., open space subdivision design, larger homes, smaller homes, and ranchettes consistent with the unique resources and constraints within the Community.

# **Objectives**

- 1. Keep the amount and location of future residential development in balance with the provision of appropriate and timely public services and necessary infrastructure.
- 2. Preserve and maintain the rural and mountain residential character of the area.
  - 3. Maintain and enhance the high level of privacy for existing and future residents.
  - 4. Encourage subdivision design that promotes interaction between neighbors and a community identity.
- 5. Permit and accommodate well-planned and well-executed development providing single family housing opportunities for different life-styles and levels of income.

- 6. Encourage lower density residential development that is enhanced by open space.
- 7. Provide incentives to developers that propose innovative and sensitive site designs, which cluster the development and preserve open space.

#### **Policies**

#### **General**

The Land Use Plan identifies four residential categories.

#### LOW DENSITY RURAL RESIDENTIAL

#### RURAL/AGRICULTURAL RESIDENTIAL

#### FOOTHILLS RESIDENTIAL

#### **MOUNTAIN RESIDENTIAL**

- 1. As a standard the following densities are allowed for each of the land use categories.
  - a. If a developer /
    property owner chooses to
    subdivide following
    traditional procedures,
    residential density is as
    follows:
  - Low Density Rural
    Residential
     One-acre
    minimum lot, gross
    density of 0.8 dwelling
    units per acre.
  - Rural / Agricultural
     Residential
     - One acre
     minimum lot, gross
     density of 0.8 dwelling
     units per acre.
  - <u>Foothills Residential</u> Density is generally less than one (1) dwelling unit per 2.5 acres. Properties with no development potential should remain in its natural state.

- <u>Mountain Residential</u> Density is generally less than one (1) dwelling unit per 5 acres and in some locations as little as one (1) dwelling unit per 20 acres. Properties with no development potential should remain in its natural state.
- b. When innovative and creative open space subdivision design is proposed for a development site, and a total of 25 percent of the acreage is retained in open space, the following densities are allowed to the developer / property owner; for these land use categories.
- <u>Low Density Rural Residential</u> Increase in residential density up to but not to exceed 1.8 dwelling units per acre.
- <u>Rural / Agricultural Residential</u> Increase in residential density up to but not to exceed 1.25 dwelling units per acre.
- 2. Housing densities shown in this Plan should not be construed as guarantees of the number of residential units, which may be built on a site. The eventual number of units will be determined by applying the recommendations of this section and after review of the policies and limitations described in other sections of the plan.

#### Density Allowances For Residential

	Minimum Lot Size		Maximum Residential Density		
Low Density Rural Residential	1 acre	varies	0.8 du.ac	1.8 du/ac	
Rural / Agricultural Residential	1 acre	varies	0.8 du.ac	1.25 du/ac	
Foothills Residential	2.5 acres	n/a	0.35 du/ac	n/a	
Mountain Residential	5 acres	n/a	0.15 du/ac	n/a	

**Figure 9** Density allowances for residential development.



- 3. The recommended density allowances for all residential development are shown in Figure 9, and are identified on the Land Use Plan, Figure, 5, page 15. The numbers suggest the maximum gross density averages for a site to be developed. Individual lot sizes may vary throughout the development but the average density for the entire parcel should not exceed the recommended density, and in many cases will be much less than the maximum. Once the maximum number of housing units allowed on a parcel has been determined, structures may be required to locate in the more desirable areas on the parcel. This is subject to conformance with the **Rural and Mountain Site Design Criteria** suggestions.
- 4. In each land use classification allowing open space subdivision design the lot size may be reduced from the general lot size of that zone district to a specific minimum lot size. The increased density and all such lot reductions shall be compensated by an equivalent amount of land in open space to be preserved and maintained for a recreational amenity or conservation purpose.
- 5. The availability of culinary water and sanitary sewer service from the expanding water and sanitation

districts should not change any land use designation or increase the residential density recommendations of this section.

6. Where natural resource and hazard areas have been identified, the policies developed for each constraint or sensitive area must be considered and may reduce the maximum

residential density recommendations stated in this section of the plan. When more than one constraint or sensitive resource area exists, the more restrictive policy applies.

#### a. Geologic Hazard Areas

As a policy, no development should occur in geologic hazard areas and other natural hazard area unless adequate mitigation or elimination of the potential hazard can be demonstrated.

#### b. Flood Hazard Areas

No development should occur within the 100-year floodplain. Development in adjacent areas should follow all floodplain regulations.

#### c. Soils Hazards

Careful planning and engineering should take place before development in areas with moderate and severe soil constraints. Soil characteristics to be considered are slope, drainage patterns, and depth to water table, texture, presence of shrinking and swelling clays, erosion potential and bearing capacity.

#### d. Slope Hazards

Slope standards should be used to determine the total number of homes allowed on a parcel. In keeping with the purposes of the Hillside Protection Ordinance, and excluding all property with slopes greater than 30 percent.

- 7. Proposed residential development with lots having frontage along the major arterial streets should situate the structure having 50 foot to 75-foot front yard setbacks, that will create a buffer from the road.
- 8. Traffic generated by new development should not exceed the capacity of the roadways and recommended "Level of Service".
  - Roads and other vehicular routes shall not cross a slope of greater than 30 percent unless. review by the County Commission, it is determined that appropriate engineering measures can be taken to minimize the impact of the and fills and environment and aesthetics of will the area not be

significantly affected.

Lot size may be reduced from the

required size of that zone district

in each land use classification

allowing open space subdivision

design.

- 10. The applicable zoning provisions for both new development and existing properties must be followed. Properties and structures in violation of zone requirements, building codes or other conditions must be immediately brought into compliance. Every effort by Salt Lake County Development Services Division and other agencies must be used to solve the isolated problems in the area.
- 11. Within significant view areas, development should make maximum use of the site's existing vegetation to screen development.
- 12. The lines identified on the land use plan that separate each residential classification and recommended densities should not be considered definite boundaries. Rather, flexibility along these transition areas must be

provided so that consideration can be given to development proposals that are compatible with the intent of the plan and would maintain the desired rural character of the community.

#### **Density and Location Policies**

#### **Low Density Rural Residential**

Residential densities can be increased when creative open space subdivision design is used. A gross density of up to 1.8 dwelling units per acre is possible when 25 percent of the total acreage is preserved in open space, depending on the platting of lots, compatibility with adjacent development, adequate access, environmental conditions and quality of site design.

This residential development pattern is proposed in the eastern section of the community with 13400 South as the northern boundary. The eastern boundary is defined as 4800 West; the southern limits are 14800 South and the west boundary extending to 6000 West. However, the previously platted subdivision that is located in the area is excluded and will be able to develop as approved.

Development proposals that would create a planned residential community, many times involving large parcels should be allowed some flexibility in these boundaries by the Planning Commission and County Commission.

Much of the land is currently used as agricultural and farms producing a variety of crops. It is hoped that in the future a significant amount of the agricultural areas remain. However, when residential developments are proposed, the policies of this section and other sections of the plan must be considered. Residential neighborhoods and productive agricultural areas can exist together and insure compatibility with proper planning and appropriate densities.

As development in this area proceeds special steps should be taken to insure that an appropriate amount of land is reserved for park sites, recreational trail easements and future school locations to serve the anticipated population. Transition and buffering is important in the areas immediately surrounding the previously approved subdivision that could eventually contain over 550 homes.

#### Rural / Agricultural Residential

In the Rural / Agricultural Residential area the required minimum lot size for single family residential will be 1 dwelling unit per 1 acre if standard subdividing and platting is proposed in a development plan. When open space subdivision design is proposed the density allowed may increase up to 1.25 dwelling units per acre. This can

be accomplished by retaining the current A-2 zoning of the area.

This designation and ultimate development pattern produced will provide and help maintain the desired rural qualities in the community by creating low-density residential clusters and open space areas between developments.

The zoning provisions should allow the use of property for limited agricultural production and limited keeping of animals to the extent such use is compatible with the natural environment of the area and the surrounding uses.

#### **Foothills Residential**

The foothill and mountain properties that are adjacent to current water and sanitation districts or will soon be provided these services has the potential for additional development when the services are extended. The average lot size should a minimum of one (1) dwelling unit per 2.5 acres. In some area the constraints of the site may require larger lots for development to be approved. The intent of this land use designation is to create a transition zone between the more level areas of the community with higher density residential development and the very low density areas located in the higher mountain areas.

All other development restrictions that take precedence over the average densities allowed including geologic constraints, severe slopes, flood potential, or soil hazards policies when they are more restrictive.

#### **Mountain Residential**

The average lot size should be between 1 dwelling unit per 5 acres and 1 dwelling unit per 20 acres, depending on hazardous conditions, ability to provide proper access, and ability to provide water and septic facilities.

There may be several parcels of the High Country Estates II development, and other presently undeveloped mountain regions that will not have the opportunity to connect to the services extending to other areas of the community and therefore should not allow smaller lot residential development.

The mountain terrain and foothill areas located south and east of the Hi-Country II development are covered with this use designation. The eventual development that occurs in the mountainous areas of the Southwest Community should and must follow the same development requirements and restrictions as are applied to the foothill and mountain areas along the east benches and canyons in Salt Lake County.



All other development restrictions that take precedence over the average density allowed include all geologic considerations, including slopes, access, flood hazard potential, and soil hazards policies when they are more restrictive.

There may be a situation in which a proposal for residential development on private property is submitted where a land use classification other than a residential designation is indicated on the Land Use Plan. If this should occur, and the parcel is found to be suitable for development, the suggested density should be similar to the surrounding development.

#### **Open Space Development**

The cluster-housing environment is the most fundamental and enduring form of human settlement. Clustering may simply be described as housing that is joined together so that individual units share common facilities and common open spaces. The scale and organization of cluster development not only creates a physical setting but creates a social setting as well.

There are many reasons why cluster housing is a desirable alternative in the Southwest Community and many other areas of Salt Lake County. Society has discovered the need to understand what scales and densities of housing will enhance individual privacy and safety while providing a sense of community.

Traditional suburban development is far too wasteful of land while the areas characterized as rural show minimal impacts to the land. Between these extremes is cluster housing which affords a reasonable amount of development, privacy, and public / private outdoor space. It is becoming apparent that much more social benefit can be gained by aggregating shared open space. Finally, the cost reductions in infrastructure and services, both private and public are beneficial.

By its very y nature, cluster housing suggests a greater sense of neighborhood than a typical single family suburb, demonstrated when the two are contrasted: cluster versus linear, compact versus sprawl, public versus private, pedestrian versus auto, and community versus individual.

This General Plan and the zoning ordinance requirements address and can answer the questions of "how much" and "where". However, the most difficult issue of "how" must be addressed. While it is relatively easy to agree on the number of units permissible on a tract, the traditional physical arrangement of the units dictated by the present zoning ordinance and subdivision ordinance often runs counter to the basic objective of preserving rural character, agricultural areas and open spaces. Since the zoning ordinance and subdivision ordinance are the legal

tools through which community goals are implemented, there must be a direct relationship between this General Plan and Salt Lake County's land development ordinances.

Salt Lake County should provide the opportunity for innovative subdivision design to mitigate the undesirable impacts of standard subdivisions by creating and adopting cluster option ordinances that allow individual lots to be smaller than the minimum allowed under conventional subdivision requirements; however, the total number of lots remain the same. For example, in the one-half acre zone, individual lots may be permitted to be 12,000 square feet or less, yielding common open space for amenities or retaining agricultural areas and mountainous areas.

#### **Implementation Recommendations**

- 1. Salt Lake County should develop and implement a land development ordinance for cluster residential. Relatively few, but key, development parameters should be included within the ordinance's zoning section, including: density, floor area ratio, coverage, and setbacks. Appendix F, page 99, provides examples of cluster subdivision ordinance requirements that should be considered in its creation. Cluster provisions should be implemented following the adoption of this plan, and staff can further review and refine the contents of the requirements.
- 2. Salt Lake County Development Services Division should develop a system to evaluate development site design. This guide should be easy to use in determining the quality of development site design.
- 3. All projects should demonstrate excellent site design achieved through a high degree of conformance with the **Mountain Site Design Criteria** section.
- 4. The guide should ensure enforcement of the design elements of a development plan.
- 5. All mapped constraints should be verified by the applicant, Development Services Division, Planning Commission and appropriate agencies during the review process, and the problems considered in the development design.
- 6. All land that is zoned but not subdivided should be brought into conformance with this Plan. Property that is zoned and subdivided should be encouraged to comply with the Plan recommendations and design guidelines at the time of applying for a building permit.



## **COMMERCIAL**

The amount and location of all supportive retail commercial services should be introduced at a time when the population and residential development will support the land use. While these land uses may be needed as the community grows, the current goods and services provided in Riverton and Bluffdale Cities are preferred by area residents.

The amount and location of retail commercial and commercial services have not been considered to be within the scope and time frame of this General Plan. The commercial policies in this Plan reflect the belief that the current balance of population with services in the neighboring communities is appropriate. However, this situation may change in the near future.

The Plan does not identify any specific locations for the possibility of low intensity neighborhood commercial, but also, it does not exclude a proposal from being considered.

This General Plan accommodates the potential for limited commercial growth. Allowing a reasonable amount of commercial growth will assure convenience for the residents. However, the Southwest Community should not be expected to provide or allow the full range of commercial uses typically found in urban or suburban areas. In time the Community may have some basic services but will depend on the established commercial areas located to the east for more intense commercial land uses, such as large grocery stores, entertainment facilities and business centers.

#### Goal

Accommodate the future needs and demand for commercial that is reasonable, maintaining a balance of population with retail development. Sensitively designed commercial development, appropriately scaled and compatible with the rural and mountain Community, is encouraged.

#### **Policies**

- 1. It is anticipated that a majority of the limited neighborhood commercial uses will locate in Herriman. Commercial development along 12600 South and near the proposed Bangerter Highway would be the most desirable locations, being the main routes into the Herriman and Southwest area.
- 2. A future commercial development along 13400 South near 4800 West could be considered, and evaluated on a case-by-case basis. Guidelines for any commercial development are subject to the **Rural and Mountain Site Design Criteria** section.
- 3. Present zoning allows and should continue to allow home occupations for a limited range of businesses.

## PARKS, RECREATIONAL TRAILS AND OPEN SPACE

The feeling of openness created by the public and private undeveloped open lands are enjoyed by the area residents and help foster the rural and mountain character. There is also a need to create an appropriate amount of parks and recreation space to meet the increasing demands.

Public and private undeveloped land is essential to maintaining the rural and mountain community character. They are comprised of public lands in different ownership and control, as well as private lands. Most of this undeveloped land is privately owned and could be developed. The maintenance of the areas character depends on having key open spaces developments.

Throughout this section and the entire Plan, the terms open space and open lands are used in different ways. Open space can be lands owned and managed by a public or quasi-public agency, such as the Salt Lake County Parks and Recreation Division. generally have a more liberal public access policy, and

offer a wide range recreational opportunities. Other lands considered open space maybe held privately individuals by organizations. Public access to private open space is usually restricted.

Securing the land necessary to keep the "open feeling" characteristic of the

Southwest Community will require increased coordination among public agencies, property owners, and private citizens. This may require the creation of new forums, management agreements, or other mechanisms. Some specific benefits other than enhancing the quality of life, include:

Public open space lands

- keeping a significant amount of natural open space;
- protecting important wildlife habitats, and movement corridors;
- dispersing recreational opportunities throughout the study area;
- connecting the parks and recreational areas with planned linear pathways and open space corridors;
- protecting view corridors and visual amenities;
- maintaining the productive agricultural areas of the community; and,
- reducing the threat of danger to life and property by avoiding development in natural hazard areas.

Public and private undeveloped land is essential to maintaining the rural and mountain community character.

#### Goal

Maintain the rural and open character of the Southwest Community development occurs through a network of public and private open space, trail corridors, and facilities for active and passive recreation.

#### **Objectives**

Keep a significant amount of natural open space, not only in the higher mountainous areas but also the foothill and valley floor areas in the community.

- 2. Pursue an aggressive land acquisition program to secure properties for future open space development.
- 3. Identify and implement innovative funding mechanisms for property acquisition, development and maintenance of parks, facilities and programs.
- 4. Disperse recreational opportunities throughout the community.
- 5. Provide open land or active park experiences within future residential developments.
- 6. Enhance, conserve and preserve the natural systems and landscapes in all park development, relative to the individual themes they convey.
- 7. Improve park operations efficiency; expand, develop and upgrade open space and trails areas.
- 8. Solicit Southwest Community residents' understanding and support for future parks and recreation programs.

#### **Parks and Recreation Master Plan**

The Salt Lake County Parks and Recreation Master Plan - 1993, serves in partnership with other county department and division plans. It offers county decision makers a tool to assist in providing direction for development of parks and recreation facilities. The Parks and Recreation Division are responsible for the administration of the Master Plan. Furthermore, they establish park site development plans, direct golf course planning and development and oversee recreation facility development, programs, maintenance and operations.

The Southwest Community is included as part of the Southwest Community Planning Area. The Community Planning areas were determined by major geographic features and transportation arteries that transect the county.

Park and recreation facility needs for the Southwest Community are based on standards and guidelines used by the Parks and Recreation Division and were, in part, adopted from the *Recreation, Parks and Open Space Standards*, issued by the National Recreation and Parks Association (NRPA). These standards helped discern the needs and deficiencies in the Southwest planning area based on the current and forecasted population.

#### **Policies**

#### General

- 1. The Salt Lake County Parks and Recreation Division should establish a land purchase program that will prioritize and target key parcels of land which will contribute to the passive and active recreation for the Southwest Community.
- 2. Immediately purchase lands for a community park and neighborhood park sites in the Southwest Community as land bank investments.
- 3. Salt Lake County Parks and Recreation Division and the Bureau of Land Management own public open space in the study area. These agencies should improve communications with regard to the management of the properties. Improved communication among these groups and the County Planning Division will result in more efficient management of the public lands and a higher level of use.
- 4. Active and passive recreational sites should be located throughout the study area to diffuse the impact of future growth on any one area. These recreational areas could be located to create greenbelt separations that will help preserve the uniqueness of the area.
- 5. Future acquisition of undeveloped land for public benefit should be related to the following planning objectives:
  - ➤ maintenance of important visual resources;
  - provision of needed active recreational opportunities;
  - protection of significant wildlife habitats and wildlife corridors:
  - protection of areas subject to significant natural hazards; and,
  - > provision of a connecting trails system.

#### **Active Recreation**

1. A community park site of 25 acres or larger should be acquired and developed in a centrally located and easily accessible area. Planning for community parks in many cases emphasize both passive and active recreation and may provide group picnicking pavilions, baseball and softball diamonds and other major facilities. Facilities included should be based on projected population growth, and the area resident's needs and desires. The service area encompasses a radius of one to two miles outward from the park boundaries.



- 2. Neighborhood parks are intended to serve local residents living within a radius of ½ mile of the park boundaries. They are designed and structured to create an informal, casual atmosphere. They may include individual picnic tables and small group facilities; play ground areas, and informal ball diamonds. The Parks and Recreational Trails Map, page 41, identifies two possible neighborhood park sites. The Parks and recreation Master Plan recommends acquisition of one site to meet the present demand. The other sites must be reserved as population and development proceeds. The standard desirable size for neighborhood parks is 7 acres or larger.
- 3. The three undeveloped mini park sites located within the Foothills subdivision should be developed and maintained by a service fee or association established by the future residents of this development and not Salt Lake County.

#### Yellow Fork Canyon Regional Park

This facility should become the focal point of the Southwest Community. The following policies are intended to achieve this goal.

1. All future use of Yellow Fork Canyon should preserve and enhance the visual quality, and encourage

visual quality, and encourage the conservation of the natural environmental features.

2. Future uses should provide for appropriate passive and limited active recreation. These design concepts have not yet been established in a park development plan.

3. Salt Lake County should continue to pursue the acquisition of adjacent property currently owned by the Bureau of Land Management, thereby enlarging the park and consolidating its boundaries.

- 4. Public access and direction to the park should be better identified by signage.
- 5. Park users must respect the rights of private property owners that surround the park and not trespass onto these properties.
- 6. The use of recreational vehicles, motorcycles, ATVs, etc., are not allowed in the park. Better enforcement of the policy is needed.

#### **Private Open Space**

- 1. Private open space should be protected, and its creation should be encouraged to safeguard the rural and mountain character, maintain visual and scenic quality, protect key wildlife habitats, buffer existing and future development, and to provide open land or park experiences within the private developments.
- 3. Private open space should be used to preserve the community's productive agricultural properties. Agriculture is supported as an important land use amenity of the community. Many of the farmers do not make their livelihood from the farms, but see themselves as stewards of the land.

#### Trails Network

For the most part, a trail is a

narrow corridor of open space

designated for public access and

use.

"What would it be like to walk out of your front door and within fifteen minutes be on trails that wind throughout Salt Lake County and lead you back to your home without retracing your steps? If the right path were followed, the trail could lead into the foothills or link up with the Jordan River Parkway. Trail users could travel across Salt Lake County on trails that connect one community with another." This quote is taken from the

> Salt Lake County Regional Trail Plan, a document that presents a proposed plan for regional non-motorized, urban, suburban, and rural pedestrian, bicycle, and equestrian trails within Salt Lake County.

> For the most part, a trail is a narrow corridor of open space designated for public

access and use. An organized trail system is an asset that can contribute to the economic vitality of a community, provide resource protection, nature education, alternative transportation means, and close to home recreation.

The demand for urban trails in Salt Lake County is very high, and includes users of all ages and abilities, individuals, families, people with disabilities and the physically fit. Therefore, Salt Lake County is aggressively pursuing regional and local trail planning and development in all areas of the County.

#### **Regional Trails**

For a regional trails system to function, it should be enjoyable to use, link communities, recreation areas and open spaces together, and provide a transportation route for pedestrians. It should create and serve as the "backbone" of a more complex system of local trails. The regional trails may be maintained by federal, state, county, or local agencies, a local trails coalition or utility companies.

#### **Local Trails**

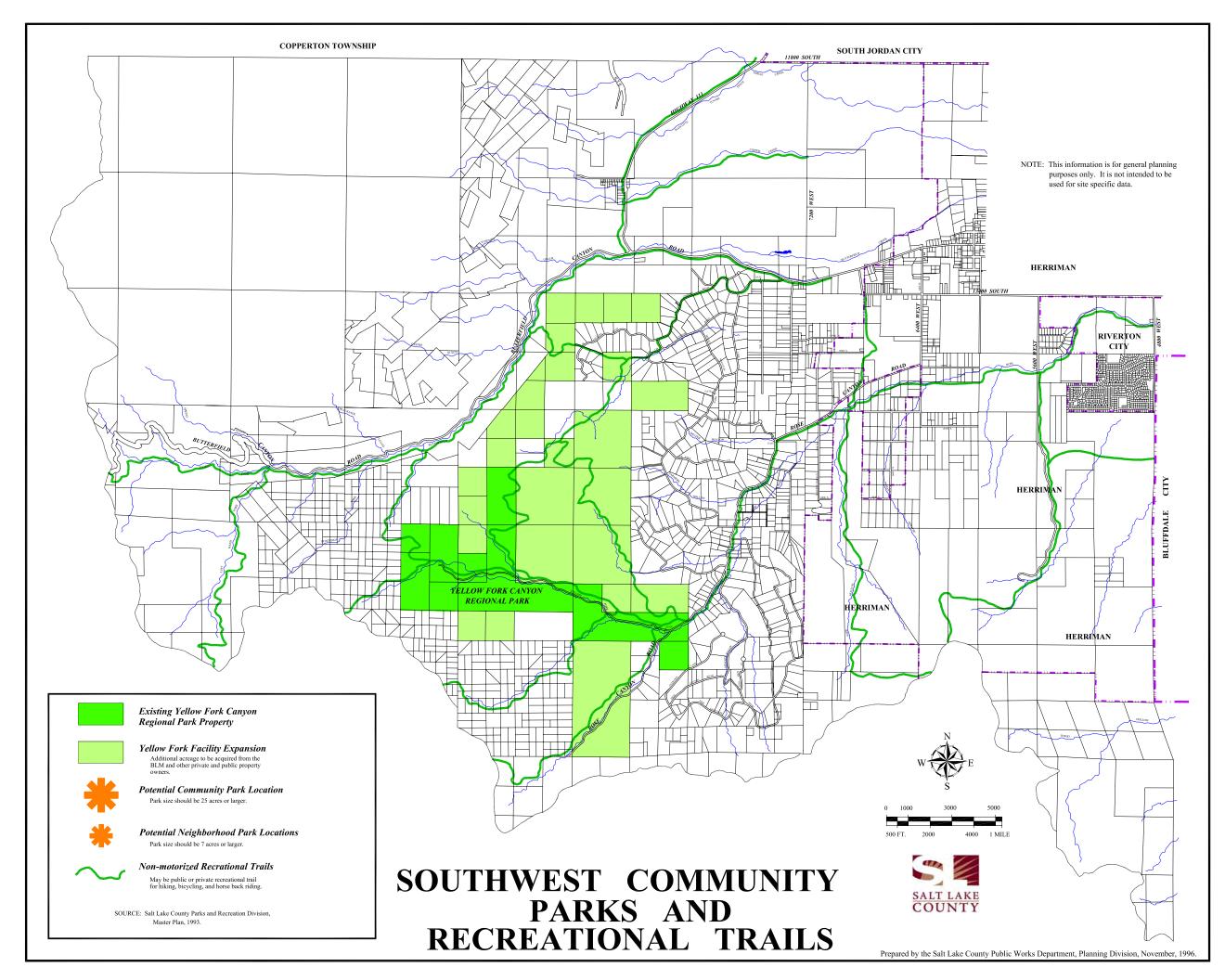
The realization of a local system of trails depends on land use decisions being made in this plan and every day. Local and regional trails must be viewed as part of our whole infrastructure and be included along highways, utility and sewer lines, and other public facilities as a necessary part of community life. Local trails should be considered along all water-base resources, connect people with community resources, and provide safe routes from home to commercial activity centers, schools, and recreation facilities. The recreational trail policies include;

- 1. A trails network should be developed that provides trails for pedestrians, biking and equestrian use, and other non-motorized trail activities. Theses trails should:
- > vary in distances and trail opportunities available;
- ➤ traverse diverse landscapes;
- link various areas of the community;
- > access views and vistas;
- intersect to allow the traveler a choice of paths to a destination; and,
- create a visual boundary between the trail and roadway.
- 2. Trail corridors should utilize floodplains, public rights-of-way, utility rights-of-way, and parkland or open space.
- 3. Trails corridors should be used to connect public and private open space parcels.
- 4 Private development and the associated open spaces should link to the public trails system or provide public trails access through their property to link the whole system.
- 5. Accessible trails should be provided for all citizens, including barrier-free trails where possible.
- 6. Appropriate funds sufficient to construct at least one trail, or significant trail section, each year, based on a prioritized improvement plan.
- 7. Establish construction standards that encourage uniformity throughout the entire trails system.

#### **Implementation Recommendations**

A full range of strategies will be required to retain the public and private open space and trail corridors throughout the Southwest Community. The strategies are suggestions to be studied and used in concert with each other.

- 1. New acquisitions of open space should be pursued in the future. The public entities responsible for open space, parks and trails should communicate regularly. Acquisition strategies include:
  - general fund allocations;
  - > state and federal grant monies;
  - general obligation bonds or revenue bonds;
  - > private land trust purchase lands or easements;
  - land trust; and,
  - ➤ corporate donation of land in exchange for appropriate tax benefits.
- 2. When full acquisition is not possible, practical or desirable, other innovative techniques should be used to preserve open space.
- 3. A master plan for the Yellow Fork Canyon Regional Park should be developed through a cooperative process involving the governmental agencies, Salt Lake County and community work.
- 4. Require future development to provide private or public open space, or provide payment for open space in lieu of land, following the parks dedication and impact requirements.
- 5. Liability releases should be instituted and used to remove this obstacle to the creation of trails in accordance with the State Landowner Liability Act of 1987.
- 6. Salt Lake County, the incorporated cities, and all other governmental agencies should cooperate to support an integrated park system that will maximize county-wide public funds spent in park and open space development and minimize unneeded duplication.
- 7. All jurisdictions should respond to the Trails Plan by securing easements and property for proposed trail corridors as soon as possible.



# ENVIRONMENTAL QUALITY AND AGRICULTURAL PRESERVATION

The preservation, development and management of environmental and open space resources are essential to growth, diversity, and quality of life in the Southwest Community. The mountains, streams, and farm fields combine to make the area unique and attractive to residents. The preservation of this diversity is crucial to the future vitality of the Community.

The protection, conservation, development, and use of natural resources, including the quality of air, forest lands, soils, waterways and other water features, fish and wildlife, minerals and other natural resources are all considered as part of the environmental element.

The Southwest Community is fortunate in that there is an abundance of wide-open and undeveloped lands present today. The Yellow Fork Canyon Regional Park is a large public open space located in the area. However, many other areas may be endangered by encroaching development, which threatens to lessen the sense of openness, replace the natural attributes with urban sprawl and forever alter the community's desirable characteristics.

One effective method of environmental protection and management is the designation and preservation of open space. The preservation of environmental / agricultural open space serves a number of important public objectives, including,

- ▶ natural resource and habitat protection;
- managed utilization of natural resources;
- outdoor recreation;
- creation of buffers between developed areas and agricultural areas; and,
- protection of public health, safety and welfare.

The provision of adequate open space and protection of sensitive areas is closely related to the perceived quality of life within the Community. While residents may derive recreational opportunities and aesthetic benefits from open space in the form of natural areas, parks, trails, etc., many

important environmental advantages are also related to this use of land. Open space designation is effective for the protection and management of critical environmental areas such as wetlands, floodplains, significant ridgelines and hillsides, watersheds and wildlife habitats. This both minimizes the potential for destruction of sensitive land and protects the public from avoidable hazards.

Environmental preservation, agricultural preservation, and open space policy statements will be described individually.

#### Visual Resources

#### Goal

Development in the Southwest Community should complement the area's visual resources.

#### **Objectives**

- 1. Preserve and maintain the significant vistas and landscapes that have special visual qualities and are seen frequently by many people.
- 2. Preserve the quality landscapes from unnecessary visual disruption by ensuring that all development makes maximum use of natural screening of the terrain.

3. Maintain the important view corridors and open areas in the Southwest Community through sensitive site and building design.

#### **Policies**

- 1. The significant visual resources that should be protected and enhanced include: meadows, ridges, hillsides, waterways, vista areas, unique vegetation and productive agricultural areas.
- 2. Land uses that are compatible with the visual resources are encouraged. When development is proposed in a visually sensitive area, the **Rural and Mountain Site Design Criteria** section should be followed to ensure the compatibility of man-made and natural environments.
- 3. Maximum use should be made of a sites capacity to screen development from view. For areas with less than adequate natural landscape screening, the visual diversity and landscape screening of the site should be enhanced.
- 4. Development on ridges should not protrude above the skyline.
- 5. All disturbed areas should be revegetated.
- 6. Unsightly aspects of existing housing and other development should be cleaned up, buffered and/or screened.
- 7. Productive agricultural land is encouraged and must be preserved and protected. Tax assessment policies and administration should reflect the agricultural use and maintain the assessment at the lowest level possible.

Development should be integrated with the natural characteristics of the site.

#### **Implementation Recommendations**

- 1. The public natural areas and undeveloped open areas should be designated and preserved. Private natural and open areas within a development should also be protected. Several techniques for preserving these areas are provided in the Parks and Recreational Trails section and in the **Rural and Mountain Site Design Criteria** section.
- 2. In the development review process, each proposal should be reviewed to confirm its potential impact to visual resources. In addition, the policies in the other sections of this Plan should be referenced.

#### Air, Odor and Noise

Air, Odor and noise are elements of the environment that contribute to the quality of community life. The quality of air is an important and cherished element of the environment. Proper planning and adherence to the established federal, state and county standards and regulations, increased ride sharing, variable work schedules, and improved control of dust pollution are measures which should be encouraged County wide. The generation of offensive odors should also be avoided.

Quietness is a component of privacy and a part of the character of this rural and mountain community. This resource should be protected from intrusions of unacceptable noise levels from automobile traffic or other damaging land uses.

#### Goal

All future development in the Southwest Community should not result in degradation of these environmental elements.

#### **Objectives**

- 1. Protect the health of people from detrimental effects of industrial, vehicular, and home heating emissions.
- 2. Minimize the fugitive dust generated by vehicular

traffic, construction and mining activities.

- 3. Limit the opportunity for airborne particulates by mitigating man-made disturbances.
- 4. Minimize the adverse impacts of odors lisposal, home occupations.

associated with waste disposal, home occupations, commercial, industrial, and agricultural operations.

- 5. Maintain septic systems to prevent offensive odors.
- 6. Minimize noise and protect privately owned areas valued for their quietness. Allow land uses that can meet the appropriate regulations for noise.



#### **Policies**

- 1. The community's impact on the Wasatch Front auto-related air pollution problem should be reduced by adjusting commuting habits. The following alternatives to drive-alone automobile use should be encouraged.
  - ➤ Car and vanpools,
  - ➤ Provide UTA bus service,
  - provide secure and convenient park-and-ride locations associated with bus service.
- 2. The County should support legislation to strengthen vehicle emissions standards, and increase enforcement of these regulations.
- 3. The Plan endorses the strict compliance with county legislation, regulating fireplaces and wood burning stoves. The State and County should encourage retrofitting existing fireplaces and stoves to bring them into compliance with standards.
- 4. Pollution from coal and oil furnaces and outdoor incinerators should be minimized.
- 5. Housing development should be planned to ensure safe and efficient septic systems where allowed. The waste disposal system should employ appropriate technology and avoid producing noxious odors.
- 6. Agricultural, industrial, and commercial development should be encouraged to use management practices and appropriate technology to minimize odor emissions.
- 7. Salt Lake County zoning regulations for the keeping of livestock in the A-1 and A-2 zones should be enforced to minimize problems of odor emissions.
- 8. Noise generated by any and all noise sources should not be allowed to exceed established standards for the permitted or zoned land uses. Noise should not be allowed to adversely affect the health of community residents nor interfere with their normal activities.

#### **Implementation Recommendations**

- 1. Federal, State and County agencies should strictly enforce the established air quality, and noise standards throughout the county.
- 2. Residences with wood burning fireplaces and stoves should voluntarily comply with no burn days when requested.

#### Wildlife

Protection and management of wildlife resources is important in maintaining the quality of life people have come to expect in the Southwest Community. Wildlife is a unique resource and one of the factors attracting residents to the area. Wildlife and available habitat should be kept in balance and managed to prevent overpopulation, disease and other problems. This should be done through consultation with the State Division of Wildlife Resources.

Wildlife needs should be considered in land use decisions. While some species of wildlife can adapt to human encroachment to a certain extent, careful planning is needed to ensure that important wildlife habitats are not destroyed and that wildlife-human conflicts are minimized.

#### Goal

Enhance, maintain, and manage a balanced wildlife habitat to ensure the continued biological and aesthetic value of this resource.

#### **Objectives**

- Accommodate wildlife needs as development occurs.
- 2. Manage wildlife in relationship to available habitat.

#### **Policies**

- 1. The following habitats are designated critical wildlife habitats.
  - ➤ Habitat of threatened or endangered species,
  - ➤ Riparian habitat,
  - Wetlands,
  - Wildlife movement corridors,
- 2. There should be a network of public and private open space to ensure the continued presence of wildlife in the Community. Identify and maintain the Yellow Fork Canyon Regional Park as a wildlife habitat sanctuary.
- 3. Where deer winter range exist, the appropriateness of development proposals should be evaluated case by case and:
  - mitigation plans and recommendations from the State Division of Wildlife Resources should be a significant factor in development review.
  - > conform to the recommendations in the Rural and Mountain Site Design Criteria section.

- 4. Salt Lake County in conjunction with the Division of Wildlife Resources, should map the critical wildlife habitats.
- 5. Some type of incentive should be provided to property owners when development minimizes disturbances in wildlife habitat areas. Sensitive site design is also a valuable tool to protect wildlife habitat. Examples include:
  - leave the wildlife habitat in a natural state;
  - ➤ avoid severe cuts and fills that would disrupt wildlife movement;
  - ➤ minimize the disturbance of areas by clustering development; and,
  - avoid fencing that would restrict wildlife movement.

- 1. During the development review process, all proposals should be referred to the Utah Division of Wildlife Resources for site review, comment, and recommendations.
- 2. The Utah Division of Wildlife Resources should research and identify any endangered species and the their habitats, significant riparian habitats, and wildlife

movement corridors along the Oquirrh Mountain foothills.

- 3. Roads should be posted with signage to alert drivers of wildlife habitat areas and game crossings.
- 4. The Parks and Recreational Trails section includes additional implementation strategies related to the acquisition of open space that apply to wildlife conservation.

#### **Groundwater Supply and Quality**

The health of the community's residents and its environment depends on an adequate and safe supply of water. At some point in time a portion of the community and new development will receive water and sanitation services from the area special districts. The main service lines and their locations are being planned. However, the Southwest residents presently rely on less certain groundwater supplies drawn from individual wells and must dispose of waste water through a septic system. Land development affects both the quantity and quality of the

groundwater. Because of this link, the impacts of existing and future development on this sensitive resource should be studied and managed effectively.

#### Goal

Protect the community's groundwater supply from significant depletion or hazardous contamination.

#### **Objectives**

- 1. Balance the availability of water and its use to ensure that water resources are not depleted.
- 2. Allow development in areas of the community outside of the proposed expansion of the water and sanitation districts at a scale consistent with available water resources.
- 3. Maintain and improve water quality as development occurs.
- 4. Protect, maintain, and where possible enhance wildlife access to water and riparian habitats.
  - 5. Industrial / mining operations should be nonpolluting, and insure that groundwater quality is not affected.

### Policies

The presence of wildlife is a

unique community resource.

- 1. To protect the water supply, new development should not deplete existing groundwater supply beyond the ability of the local area to recharge itself.
- 2. The minimum residential density outside of a public water and sanitation district should be 1 dwelling unit per 5 acres or more.
- 3. The areas within the proposed expansion of public water and sanitation districts should follow the densities recommended in the Residential section of this plan.
- 4. New wells should be discouraged within the areas proposed for water and sanitation district expansion. Existing wells should be capped or converted to provide a secondary water supply when the residence is connected to the public water supply
- 5. Creation or expansion of a public or private water company should be based on the following criteria:

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- a. The ability to ensure an adequate water supply (pressure / volume), and meet health and fire standards, etc., in the new area.
- b. There are suitable guarantees of an adequate physical and legal supply of water for all lands to be served.
- c. There is hydrologic evidence that neighboring water users pressure / volume or recharge will not be adversely affected.
- 6. The State and County should be encouraged to more strictly enforce the conditions placed on well permits and water augmentation plans.
- 7. In areas where septic constraints exist, the most suitable portion of the site, if any, should be chosen for the location of the septic system. Clustering of units may be acceptable as long as the average density does not exceed the recommendation stated in the Residential section of this Plan.

- 1. Increased enforcement of water consumption limitations should be instituted by metering and review of water usage. However, if quantity is found to be sufficient
- or in surplus, well users and crop production should be allowed to utilize this important resource.
- 2. Solutions should be explored to solve the water supply problems associated with the private water service to the Hi Country Estates I and II developments.

3. A comprehensive study of groundwater quantity and quality should be completed by the State and County for the area. The County and the affected water district should participate in ongoing studies and monitoring of water quality in the Southwest Community.

An excellent source of technical information relating to groundwater in the southwest part of Salt Lake County can be found in the document, "GROUNDWATER ASSESSMENT REPORT OF THE SOUTHWESTERN JORDAN VALLEY AREA" prepared for Kennecott Utah Copper Corporation.

4. A method should be devised, by regulation or otherwise, to require that homeowners have their septic tanks periodically pumped.

#### **Farming**

As new development occurs, the

supply and quality of groundwater

should be protected.

The agricultural heritage in the Community and Salt Lake County is at a critical crossroads. Over the last three decades, most of the agricultural land in Salt Lake County has been lost as urban growth pressures, land values and farm profitability all contribute to the demise. Many residents share the deep concerns over the adverse effects of this loss of agricultural land. They fear the decline of the rural way of life, and the economic disruption caused. Underlying these concerns is the realization that good farmland is a finite resource that is necessary for survival and should be preserved.

Many areas in and surrounding the Southwest Community are designated as "Significant Farmland of Statewide Importance". This definition comes from a report entitled, "Important Farmlands of Salt Lake County," November 1979. These lands are agriculturally significant because of their crop production. Appendix D, page 97, illustrates the existing farm properties.

Land use decisions that remove more important farmlands from agricultural production tends to increase the dependence of local farm operators upon outside sources for items necessary for production and makes the competitive agricultural position in Salt lake County more

insecure. Also, the agriculturally productive lands contribute far more than their food growing potential to the welfare of the County. Particularly when considered in combination with other open space areas, they provide the space that is

proving necessary to the physical and mental health of most County residents. In terms of long-range planning, neglect of such potentials could be costly.

There are several additional publications that address the preservation of significant agricultural lands and present many programs for implementation, including:

<u>Agricultural Preservation, Problems and Alternatives:</u> Wasatch Front Regional Council, May 1979,

National Agricultural Lands Study, The Protection of Farmlands:
Department of the Interior, January, 1981; and,

Zoning to Preserve Agricultural Lands: University of Wisconsin-Madison, March 1980.

## **TRANSPORTATION**

The transportation and circulation system includes the general location, purpose and function of existing and proposed arterial and collector streets, the potential for the inclusion of a mass transit route into the area, and any other modes of travel that are appropriate, all correlated with the future land use projected for the Southwest Community.

The mobility needs of Southwest Community residents and future residents must be met by providing a multi-modal transportation system. As a people-friendly system, it should provide accessibility for all segments of the community in an affordable manner. The future transportation system should incorporate several alternative modes, such as automobile travel, pedestrian, bicycling, equestrian and public transit. Together, they should effectively serve the present and anticipated population while being sensitive to the natural and built environments.

The system expansions must be designed to be within the fiscal means of Salt Lake County and must also maintain the flexibility to evolve as the needs and technology change. The location and design of new roads must be integrated into the fabric of the surrounding neighborhoods, protecting the rural and mountain character of the community while meeting the changing needs of its residents and future travel demands. Design of this system should occur through a planning process that is participatory, interactive, flexible, coordinated, comprehensive and continuous.

#### Goal

Construct and maintain a safe transportation system that will meet the needs of the Southwest Community residents, while minimizing the associated impacts on the environment, air quality and adjacent development.

### **Objectives**

- 1. Balance the need, extent and public funding of the transportation system with new development.
- 2. Create local road links that form a logical hierarchy of service that creates a sense of community along with facilities and programs needed to support automobiles, pedestrians, public transportation services, bicycles and equestrians.
- 3. Improve and develop the identified existing and proposed roads in the area to county standards and maintenance.
- 4. Provide public transit service into the area at a time when the areas growth will support the service by Utah Transit Authority.

#### **Transportation and Circulation Issues**

In order to facilitate the needed and desired transportation system, several issues have been identified and considered in creating its general form.

#### **The Built Form**

In general, any transportation system is strongly affected by the immediate environment in which it occurs, and conversely, a community form is strongly affected by the existing transportation system. Transportation

planning should ensure that land use and the road systems are supportive to each other.

#### **Mobility**

The function of a transportation system is to provide for the mobility of people and goods. Transportation can be an activity carried out for its own sake, or for the accomplishment of other ends.

#### **Safety**

The transportation system must meet the required safety standards for automobiles, bicyclists and pedestrians, and by its design, encourage and educate users to follow safe travel behavior.

#### Multi-Modal

An effective transportation system is composed of a variety of mobility choices ranging from pedestrian to bicycling to equestrian to automobile alternatives. Planning for transportation should encourage a multimodal system, reducing dependence on the automobile as a primary mode of travel and responding to new technologies.

#### The Residential Environment

The quality of life in the Southwest Community is associated with its natural and built environments. A properly designed and managed transportation system can

increase the opportunities for people to utilize these resources while also supporting the viability of the At the same time, area. protection of neighborhoods mitigation and transportation-related noise will reduce the negative of the roadway effects system.

Long and short-term financing mechanisms, as well as public-private partnerships, will increase the effectiveness of each transportation dollar.

## **Cost Effectiveness and Funding**

Salt Lake County financial resources must be managed so that the most benefit is achieved with the fewest dollars. The County needs creative mechanisms for accomplishing its transportation goals. Long and short-term financing mechanisms, as well as public-private partnerships, will increase the effectiveness of each transportation dollar. Highway funds collected for road

improvements in the Southwest Community should remain in and be used in the Southwest area.

#### **Transportation Corridors and Circulation**

Important to the success of the transportation system is the need for an effective and complete hierarchy of roadways with transportation corridors, which reflect access management strategies and alternatives to corridor access. Most road systems are too organized and are related directly to the dimensions of the automobile. In violation of traditional engineering standards new local streets in the Community could be far more interesting, exciting and insure safety if they created irregular alignments following topography, incorporate curves, and varying road widths. As traffic volumes and speed decreases, environmental conditions should improve and pedestrian use could be enhanced.

#### **Policies**

#### Major Roadway Network

The Existing Roadway Status is shown in Figure 11, page 53. The proposed road network will meet the Southwest Community traffic demands to the year 2010, and is based on the land use and density recommendations of the General Plans Land Use Map. The major roadway network reflects existing roads, existing roads for which realignment or upgrade is anticipated and future roads needed to serve the traffic demands in the community and

southwest sections of the County.

The resulting system planned for the Southwest Community includes some existing roads. with functional characteristics and capacity unchanged from the present. New roads and new road segments should be planned for construction, as development and needs

progress, possibly during the next five years. The identified roads will provide routes within the developing residential areas and connections between these developing areas and 13400 South. Some existing roads are also designated for facility expansion or redesign. Together, these changes to the existing road system will mean the addition of several miles of new roads. Key policies to be followed in all road projects include:



- 1. Improvement and construction of all roads must comply and follow Salt Lake County Road Standards.
- 2. Planned road improvements should be made only when the community character can be maintained, the associated environmental impacts are acceptable and public costs for the improvements do not exceed the potential benefit derived.
- 3. The arterial and collector roads maintained by Salt Lake County should have sufficient width for the function they serve, and include turning lanes, acceleration and climbing lanes and other safety improvements where appropriate.
- 4. The needed rights-of-way dedications, payment of fees into the highway fund or bonding for the road improvements by property owners or developers is essential for completing the entire road system.
- 5. Large development project proposals should provide traffic studies, which demonstrate that the road system can accommodate the traffic generated by the proposed development.
- 6. Stub streets and fragmented street patterns should be avoided in the future and corrected where present.
- Salt Lake County. property owners and developers should bear a proportionate financial responsibility for providing road improvements. The funds generated for road improvements to correct deficiencies and accommodate new

Several roads, or road segments, are shown on the Roadway Improvement Plan that does not physically exist today.

development should remain in the community. The funds are most needed to provide asphalt surface for several existing roads based on the prioritization and needs system established by the County Engineering Division.

8. Adequate off-street parking for residents should be provided in all developments. Trailers, boats and other recreational vehicles in front yards and streets should not be allowed.

#### **New Roads**

Several roads, or road segments, are shown on the Street Improvement Plan that does not physically exist today. They are planned to provide access and additional capacity where needed to meet future traffic demands. Most significant is the addition of collector roads at 4800

West, 5600 West and 6000 West. Figure 12, page 55, identifies the road network consisting of arterial and collector roads that will adequately move existing and future traffic, while maintaining an acceptable level of service.

- 1. All new development within the planning area should not be approved unless proper access can be provided following county standards.
- 2. The planning and development of all new roads, including private roads, should be reviewed and approved by the County Engineering Division, prior to construction, to protect natural drainage patterns, minimize cuts and fills, and prevent the unnecessary scarring of hillsides.
- 3. As new roads are proposed, the County and other agencies involved should promote community and citizen involvement in decisions regarding transportation issues.
- 4. Local transportation planning activities should be coordinated with Riverton and Bluffdale Cities and the Utah Department of Transportation.
- 5. All transportation projects should include consideration of pedestrian walkways, bicycle lanes, equestrian pathways, signage and lighting wherever these factors are applicable.
  - 6. 12600 South and 13400 South Streets should remain the primary arterial routes into the community. Consideration of alternatives for increasing road capacity before road widening is recommended on these roads.

#### **Public Transportation Facilities**

At the present time there is no bus service provided to the Southwest Community by Utah Transit Authority. Area residents can access two express routes and a limited service route for travel into the Salt Lake City from areas in Riverton City. Route 47 extends west to 3600 West, through Riverton City and Route 88 provides service to the Copperton Community.

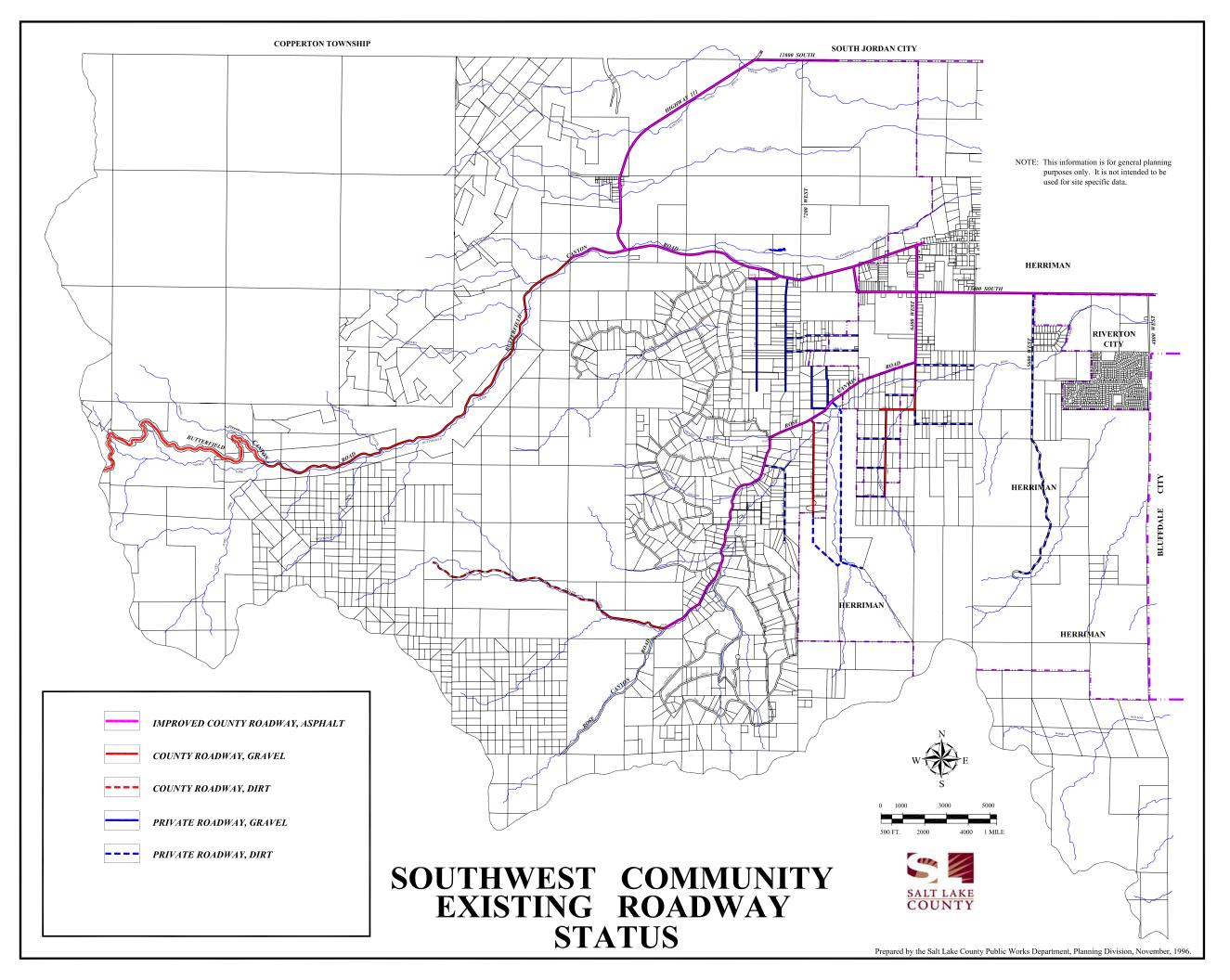
1. Public transportation should be encouraged as a viable alternative to private vehicle travel. It can reduce the number of vehicles using the roads and, in effect, extend the capacity of the roads for a longer period of time, as well as reduce the amount of air pollution. For these reasons, the following actions should be encouraged:

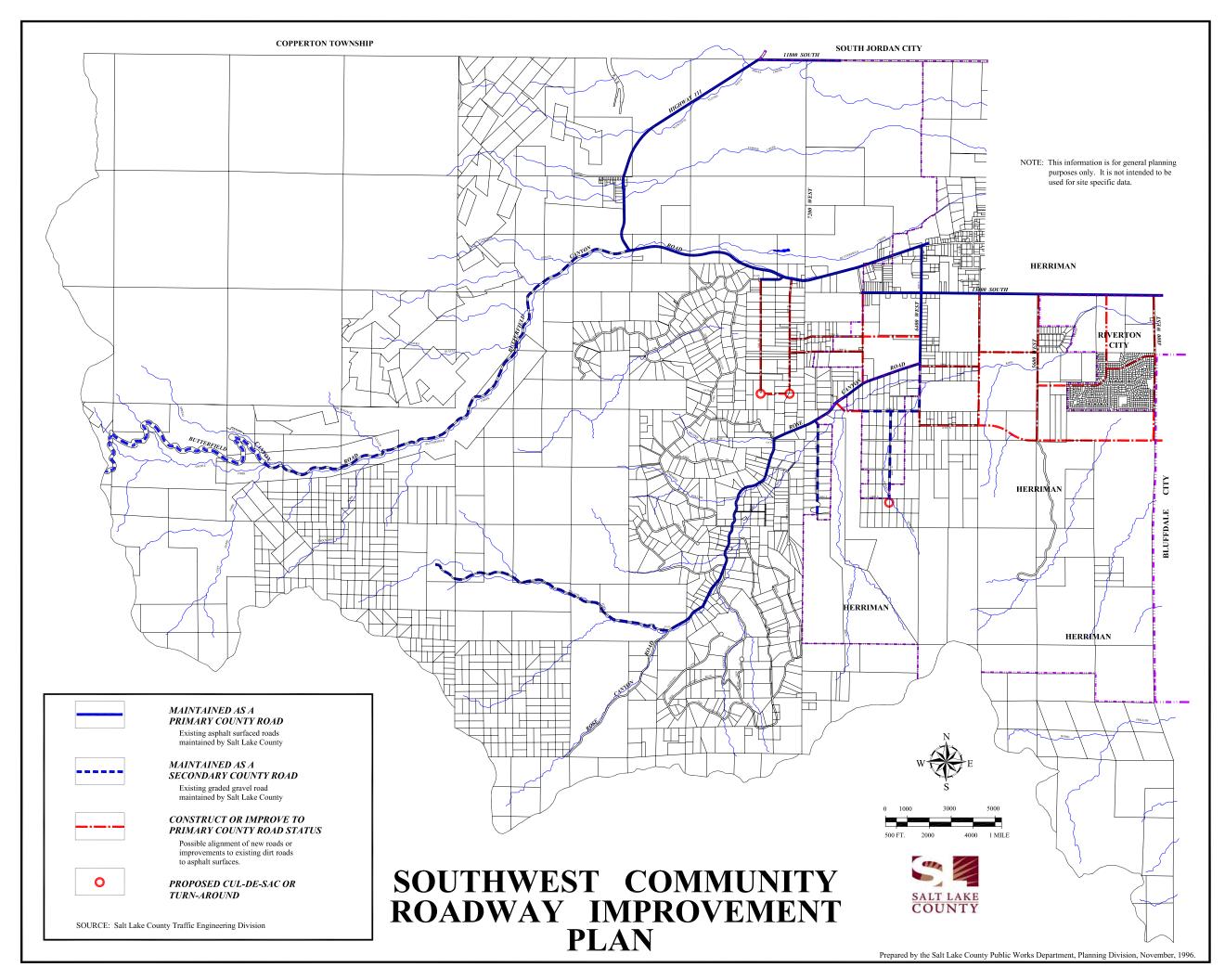
- UTA Bus service should be encouraged to serve the travel needs of the community's residents.
- b. Park-and-Ride sites should be provided as demand increases following the recommendations of the Salt Lake Valley Park-and-Ride Lots Plan.
- c. The County supports and should encourage transportation alternatives to reduce the impact of commuter travel which may include the following:
- d. Flexible workdays and variable work hours to extend the peak travel hours.
- e. Encourage the creation and use of car and vanpools for commuters.

- 1. Actively promote public involvement in the planning stages of all roadway improvements and expansions.
- 2. Follow the improvement schedule identified in the Salt Lake County Five-Year Roadway Plan to maximize the level of service on arterial and collector

roads within the confines of available county, state and federal resources.

- 3. Utilize the available federal aid programs and state highway funds to make the proposed road improvements.
- 4. A financial analysis should be completed to determine if additional road monies are required to augment federal, state and county road funds. If such a program is needed, it should include consideration of impact fees assessed to new development, creation of a special improvement district, or property taxes to spread the costs of improvements equitably among existing and future users.
- 5. Salt Lake should acquire the necessary right-ofway on roads identified for improvements and county maintenance.
- 6. A review of the Street Improvement Plan should take place at some point in the future to possibly reconsider proposed street alignments that will better accommodate the development patterns.







## COMMUNITY SERVICES AND UTILITIES

The perception of the quality of life in a community depends, in part, upon the quality of the fire, sheriff, schools, emergency services, and utilities. At the same time, the Southwest Community area has a unique character that should be preserved. Therefore, these services should be compatible with the rural and mountain environment.

#### Goal

Assure that adequate public services and utilities are provided to support the land use recommendations for the Southwest Community.

#### **Objectives**

Department.

- 1. Manage and ensure that the provision of public services and utilities is consistent, reliable and adequate for the development it serves.
- 2. Construct the needed community / service facilities appropriate in scale, and design.
- 3. Ensure that all areas of the Southwest Community can be accessed by the Salt Lake County Fire
- 4. Minimize the risk of wildfire damage and loss of life, along with expanding information programs on fire dangers in forest/urban interface areas.
- 5. Reduce the current school overcrowding situations and long bussing commutes in the Jordan School

District facilities that serve area children by planning and constructing new facilities as population grows.

- 6. Expand law enforcement in the community as population and development grow.
- 7. Allow the public water and sanitation districts to expand into the community in the most efficient and sensitive manner possible.

#### **Policies**

Public services and facilities

should keep pace with growth.

#### **Service and Community Facilities**

1. The existing community service facilities that are located outside of the area should be used to the maximum

extent before new facilities are constructed.

2. To minimize the amount of new service facility development, adaptive use of existing structures located in

surrounding areas should be used before new facilities are constructed.

#### **Implementation Recommendations**

- There are currently no community or service facilities located within the study area. A community survey should be conducted to identify the services and facilities most needed and desired.
- The Jordan School District, Salt Lake County Parks and Recreation Division, and other agencies of the county and state should jointly investigate opportunities for sharing the use of existing and future community facilities.

#### **Fire Protection**

The conditions relevant to fire protection are the location of development and wildfire hazards, the existing road network, proximity of fire stations to development, the training of personnel and type of equipment, and availability of water. It should be recognized that fire protection is provided by volunteer personnel in the Southwest and Herriman Communities.

- The fire department should continue to review 1. development proposals referred to them by the Development Services Division prior to approval and include the assessment of the:
  - adequacy of the water supply,
  - accessibility to the site for emergency vehicles,
  - capacity of the personnel and equipment to serve the development, and
  - on site wildfire potential, and the developers fire reduction efforts.
- All new development must be required to provide an adequate onsite water supply for fire fighting purposes, as required by the fire department, prior to the issuance of a building permit.
- 3. The intergovernmental and district agreements concerning joint responsibility for the Southwest Community and outlying areas of the county should be reviewed and strengthened to ensure that response time is as short as possible.
- All public thoroughfares, access roads, and driveways should be designed to meet fire department equipment and access requirements.

#### **Implementation Recommendations**

- 1. Development and building permit procedures should continue to be reviewed by the Fire Department, Development Services Division, and Planning Division. These agencies should periodically meet to discuss zoning, building permit and development review procedures, and identify any problems that exist, and implement solutions.
- 2. The intergovernmental agreements that clarify fire protection responsibilities for outlying areas of the county should be evaluated to ensure that fire emergency responses are made in the shortest possible time.
- The Fire Department and Forest Service should establish an information program, which notifies the public of fire protection techniques and limitations in the rural and mountain environment, i.e., road conditions, distance from fire stations, and water supply limitations.

#### Sheriff

Salt Lake County Fire

Department should have easy

access to all development.

Law enforcement services provided by the Salt Lake County Sheriff's Department should be maintained

and expanded as new growth

occurs.

- 2. Community concerns should be addressed, including response time. crime prevention programs, and presence in the community.
- Security for Yellow Fork Canyon Regional Park and other public lands should be maintained and improved through coordination of the agencies with security responsibilities, i.e., Salt Lake County Sheriff, Salt Lake County Parks and Recreation Division, and the Bureau of Land Management.

#### Schools

Overcrowding, lengthy time and distance commutes for students, and coordination between the community and the Jordan School District are concerns underlying the following policies.

Jordan School District and Salt Lake County should continue to monitor growth, the impacts of development proposals on school facilities, and seek alternatives to the overcrowding of schools.



- 2. Bulging school enrollments are creating overcrowding in the existing school facilities. An unacceptable level of school overcrowding would exist when one or more of the following conditions occur:
  - ➤ double sessions would be required;
  - > support facilities are inadequate; or,
  - excessive temporary facilities must be used at the school site.
- 3. Land use solutions to school problems should be considered when new development results in overcrowded schools, or Jordan School District standards couldn't be maintained Solutions may include:
  - phasing development;
  - denial of the development project;
  - modification of the project; or,
  - changing the project phasing.
- 4. New development should share a proportionate cost of providing major capital improvements and new school facilities that would be required because of the new growth impact of new development.
- 5. Planning for school locations should be coordinated with the Southwest Community General Plan to:
  - reduce commuting times and distances;
  - ensure facility design that is sensitive to the environment;
  - ensure facility design that provides for shared use of facilities by the community; and,
  - provide community involvement in decisions on school facilities.

1. Salt Lake County should work more closely with the Jordan School District to monitor growth, evaluate new development proposals in the Southwest area, and discuss alternative solutions to school overcrowding.

#### **Culinary Water System**

Culinary water is provided to area residents by the Herriman Pipe Line Company, Salt Lake County Water Conservancy District, Dansie Stock Mutual Water Company and the private water systems for Hi-Country Phase I and II. There are also many private properties that draw water from underground wells for both primary and secondary water usage.

The Salt Lake County Water Conservancy District has recently entered into the Southwest Community by constructing a 20-inch main line that follows the 5600 West alignment. (See Figure 13, page 63.) The Conservancy District is one of the largest water distributors in the county and in the future is the main provider to the study area. The District is working towards constructing a water system to serve the regional needs of the Southwest and Herriman Communities. The District has indicated that future capacity is sufficient to serve the area based on the development patterns and densities recommended in this plan.

The Herriman Pipe Line Company has been established for many years. Water is drawn from several groundwater springs located in Rose Canyon. During the summer month's additional wells outside of Rose Canyon are used to supplement the main water supply. On its own, the company can provide an adequate water supply for existing residents and for future residential growth within the area presently served by the company.

- 1. Culinary water service from one of the public water providers or private water systems should be required for all new residential development, or when proposed lot size is less than 5 acres where the service is not available. Existing residential development located within the proposed expanding water district should connect to the service when it becomes available. Public water should be required for all non-residential uses.
- 2. The Salt Lake County Water Conservancy District may allow expansion of the district in areas that are both contiguous and noncontiguous with the present district boundary.
- 3. The availability of water from the expanded district should not change the land use or increase the density recommendations of the Plan.
- 4. Any decline in the service level quality of the public water supply that would result from new growth should not be allowed.
- 5. The Conservancy District should continue to coordinate its water service with the Sewerage Improvement District to new development, providing both water and sewer service to the area, not water alone, nor sewer alone.
- 6. Continuous coordination between Salt Lake County and the water providers should take place to ensure that proposed water lines are installed before scheduled road improvements are done.

- 1. Continuous and expanded coordination should occur between the County, each of the water districts, and private water systems to share and discuss information and policy positions.
- 2. The County should communicate with all of the water providers and inform them of the Community General Plan recommendations. The Plan's recommendations can then be used when a District develops plans for construction of new service lines or expansion of service areas.

#### **Sanitary Sewer & Septic Systems**

All residents in the study area utilize septic tank systems to dispose of wastewater. Salt Lake County Sewerage Improvement District #1 has begun a series of projects that extend sewer lines and will provide service to the area in the future. Trunk lines have been constructed along 13400 South and 13800 South that extend to about 5600 West. Other sewer lines along 13400 South are in the design stages and will be constructed in the future. (Figure 13, page 63.) The District has indicated that increasing demand for service and projected growth can be accommodated.

- 1. New septic tank systems for residential uses should be properly located and installed following all building code requirements and the regulations and permits required by the Salt Lake City-County Health Department.
- 2. Sanitary sewer service from the Salt Lake County Sewerage Improvement District #1 should be required for all new residential development when the proposed average lot size is less than five (5) acres per dwelling unit.
- 3. Existing residential development located within the proposed expanding sewer District should connect to the service when it becomes available. Sewer service should be required for all non-residential uses.
- 4. The sewer District may allow expansion of the District when the area is contiguous with the present District boundary.
- 5. The availability of sewer service from the expanding District should not change the proposed land use or increase the residential density recommendations of this Plan.

- 6. The sewer District should consider the recommendations made in this plan when designing future facilities that will adequately accommodate the possible demands. Any decline in the service level quality of the sewer system that would result from new growth should not be allowed.
- 7. Continuous coordination between Salt Lake County and the sewer District should take place to ensure that proposed sewer lines are installed before scheduled road improvements are done.

#### **Implementation Recommendations**

- 1. Continuous and expanded coordination should occur between the County and the sewer District to share and discuss information and policy positions.
- 2. Salt Lake County should communicate with the sewer District and inform them of the Community General Plan recommendations. The Plan's recommendations can then be used in development plans for construction of new service lines or expansion of service areas.

#### **Storm Drainage System**

Storm water drainage currently flows out of the mountainous areas over the natural topography into drainage basins and channels located throughout the study area. The anticipated developing areas will soon require the need for storm drainage facility improvements. Once a piece of land is developed, the buildings and paved surfaces reduce the amount of water absorbed into the ground and increase runoff volumes and in some cases flooding occurs. Storm water problems should be addressed at the planning stages of new development.

The design, construction and control of these facilities will be coordinated by Salt Lake County Development Services Division through the application of County Ordinance 17.20, "Storm Drainage & Flood Control Development", and the Salt Lake County Storm Water Management Plan. These documents provide the means, rules and regulations for the control and discharge of floodwaters or excess waters caused by development.

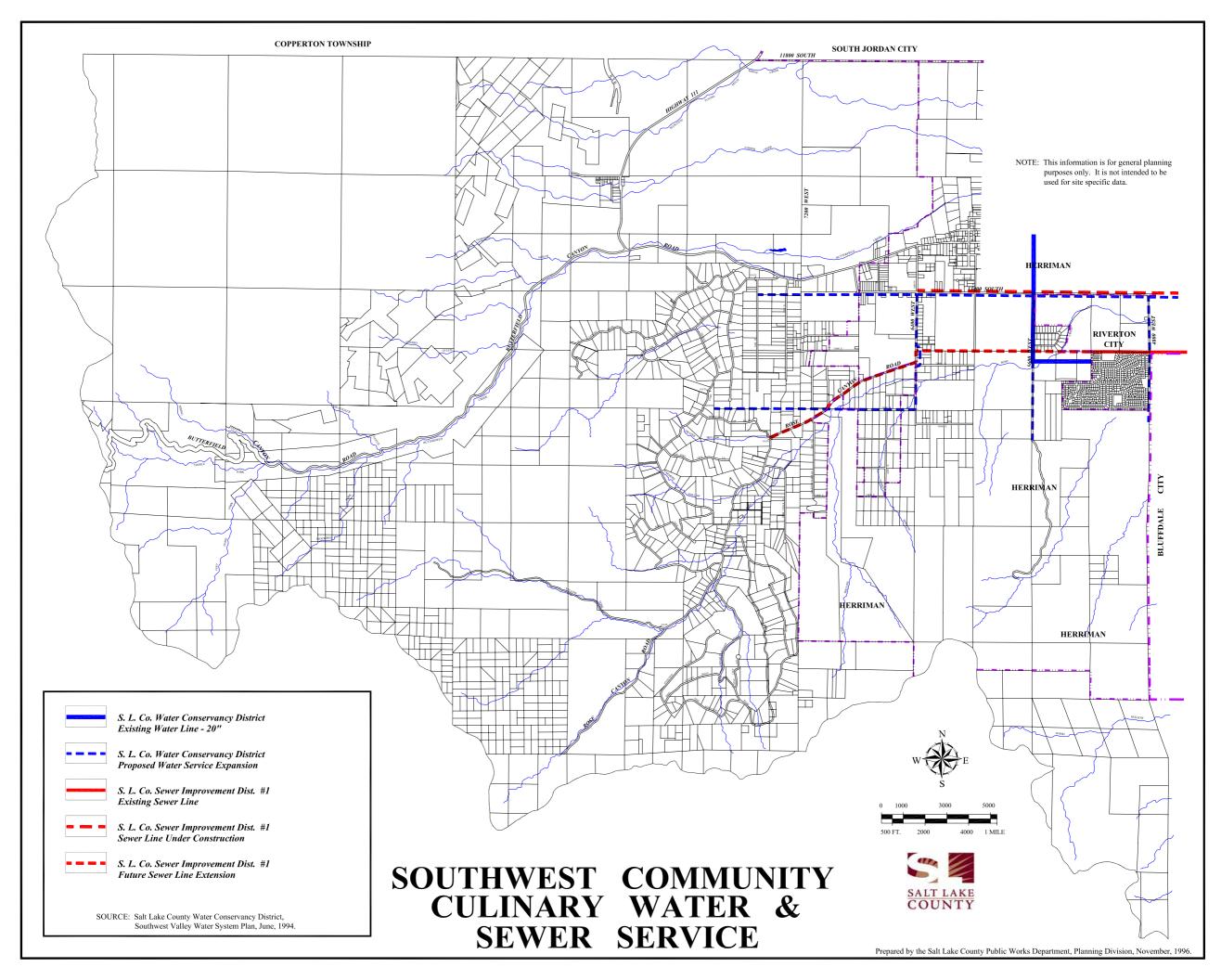
- 1. Provide the appropriate intermediate and major storm drainage facilities to meet anticipated demands and future development in the study area.
- 2. Design and construction of all drainage facilities must follow all County, State, and Federal regulations.



- 3. Ensure that stormwater drainage facilities incorporate construction methods to reduce pollutants from entering receiving waters.
- 4. Continue to require payment of fees and charges into the Storm Drainage Fund by property owners and developers appropriate to the scale of the development that will help finance the construction of needed improvements in the community.
- 5. Coordination will be necessary to ensure that proposed storm drainage lines are installed prior to or in conjunction with any scheduled road improvements in that area.

1. Continue the public educational promotion, "We All Live Downstream", that informs residents regarding storm water pollution impacts.

- 2. Salt Lake County Development Services Division in concert with County Engineering Division should periodically review the development trends that may require adjustments to the storm drainage and flood control policies and facilities that are applied to the Southwest Community.
- 3. Salt Lake County and the other jurisdictions adjacent to the Southwest Community should work together to establish the funding for the flood control infrastructure needs through development fees, property tax sources, and improvement districts. These tools will help to improve the storm drainage system, integrate the systems to maximize efficiency and public funds spent, and minimize unnecessary duplication.





## DEVELOPMENT HAZARDS

The protection of the environment, property and life should be considered in the planning and land development review process. All three factors need to be examined to properly locate development. Where potentially hazardous conditions exist, hazardous events are more apt to occur. These include geologic, topographic, slope, flooding, soil, and wildfire hazards.

The concerns and impacts of natural and man-made hazards will become more important as development progresses in the Southwest Community. Where potentially hazardous conditions exist, hazardous events are more apt to occur. The General Plan recognizes the importance of the natural environment and has incorporated the following goals, objectives, and policies into each element of the Plan and into the regulations for each land use category and the total implementation structure for all ordinances.

#### Goal

Protect life and property from the adverse effects of natural and man-made hazardous events.

#### **Objectives**

- 1. Ensure that land use activities do not aggravate geologic hazards, and ensure that grading and excavation disturbances associated with development do not accelerate erosion.
- 2. Protect people and property from the increased risk of flooding.
- 3. Fit development to the existing terrain, to reduce or prevent the creation of additional impacts in hazardous areas.

- 4. Restrict development where soil conditions might pose problems to foundations or could impact subsurface water quality.
- 5. Ensure that land use and all outdoor activities do not increase the risk of wildfire.
- 6. Prevent loss of life and property associated with the potential seismic hazards inherent to the Wasatch Front.

#### **Policies**

#### General

- 1. There are various combinations of geologic and other hazardous conditions found throughout the study area. No development should be allowed in high hazard areas, including; steep slopes, landslides, poor soils, flood plains, and wetland areas. Seismic hazards should be considered for all development in the county.
- 2. In areas that have been identified with low or moderate hazard potential, each parcel should be reviewed and in turn, verified that the hazard is not present within the site. If a hazard potential is found, the appropriate zoning, site development, design guidelines, and ordinance recommendations should be followed in this review and steps to mitigate the hazard be prepared and submitted by a professional engineer.

3. Hazards created by development should be evaluated during approval review. Such hazards might include the disruption of soil and rocks caused by road cuts and extension of utility lines, changes in drainage patterns, and soil erosion that results in damage to property lower on a slope. Existing structures and the natural environment should be protected.

#### **Topography and Slope Hazards**

The topography of the Southwest Community varies from the level valley, to rolling foothill areas, to mountain canyons and peaks. The terrain provides spectacular views of the valley and Wasatch Mountains to the east. The elevation of the study area ranges from 4,880 feet above sea level along 13400 South at 4800 West to approximately 5,600 feet above sea level at locations in the High Country Estates II residential areas. Many of the Oquirrh Mountain Range peaks reach nearly 9,500 feet above sea level. (See Appendix E, page 99.)

- 1. No development should be allowed in areas with slopes greater than 30 percent, (Figure 14, page 71) following the Salt Lake County Hillside Protection Ordinance.
- 2. New construction allowed higher in the mountain areas will required to conform to all provisions of the Hillside Protection Zone Ordinance. Chapter 19.72, of the Salt Lake County Zoning Ordinance and sections of the FA and FR zones. (See Appendix C, page 89.) This ordinance defines an overlay zone which has been applied

to certain hillside areas located in the unincorporated areas of the county and establishes standards for development to minimize risks associated with soil and slope instability, erosion, and flooding. The ordinance is also intended to help preserve the character of the hillsides.

3. Geologic and engineering investigations should be required on hillside development to evaluate the site conditions and to make all mitigation recommendations as necessary. Specific hazards, which need to be addressed, are: stability of slopes, rockfall, flooding, avalanche, debris flows, and soil conditions pertaining to foundation design. If grading or retaining walls are required, design and construction recommendations must also be presented.

#### **Hydrology and Flooding**

Butterfield Creek and Rose Creek are the principal drainages carrying Oquirrh Mountain runoff through the community and eventually to the Jordan River. The study area contains a number of locations along these streams that are considered to be in the 100-year floodplain. Floodways and the 100-year flood plain are defined by the Federal Emergency Management Agency. The report, "Flood Insurance Study, Salt Lake County, Utah, Unincorporated Areas," has been applied and adopted by ordinance to the Salt Lake County Zoning Ordinance as a guide to development.

Both creeks have well defined channels that have experienced some flooding. Sediment collecting in the stream channels has caused some flooding problems along both creeks. There is some smaller drainage that flow continuously and some intermittently throughout the year, with potential high flows during the spring run-off period. Hydrologic features are shown in Figure 15, page, and 73.

- 1. Unnecessary expenditures both private and public should be prevented by managing the type and amount of development initially allowed in these susceptible areas.
  - 2. Floodways must be considered in development planning. Development should consider streams, flood plains, high water table, and riparian habitat areas.
  - 3. Undeveloped areas should be maintained along waterways and their flood plains. These zones provide areas where water can overflow without damaging property; facilitate access for

flood control work; provide open space for walking, jogging, bicycle riding, nature study and wildlife preservation; and can be vegetated to stabilize banks and reduce erosion and sedimentation.

4. Any mitigation of a flood hazard should use a natural design approach rather than concrete channelization or covered culverts.

#### Wetlands

Under the U.S. Clean Water Act of 1977, wetlands are defined as "those areas that are inundated by groundwater or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for saturated



soil conditions." The U.S. Army Corp of Engineers has been given the responsibility for wetlands management, study and protection. A majority of the wetlands located in the County occur along the Jordan River and Northwest Quadrant near the Great Salt Lake. However, there may be isolated Wetland areas along Butterfield Creek, Yellow Fork Creek and Rose Creek located in the planning area.

These wetlands, though small in size, are important in the urban fabric because they provide sanctuary for various forms of plant and animal life and ecological balance of an area. As development increases, further investigation of these areas in their natural state becomes more important. Development in wetland areas is sometimes undesirable because of increased construction costs and potential for flooding of basements. Federal Laws require no net loss of wetlands. No net loss of wetlands means that if a designated wetland is eliminated, another wetland site must be acquired and preserved to replace the site that is lost.

- A wetlands investigation should be conducted prior to all development near or surrounding water features.
- 2. Salt Lake County and the Army Corp of Engineers should identify and enhance wetland areas in the Community.

**Soils Hazards** 

The various soil characteristics are important factors in determining the limitations and development potential for a site. This is especially important in areas where septic systems and drainfields are present.

Characteristics to be considered are slope, drainage patterns, depth to water table, texture, presence of shrinking or swelling clays, erosion potential, alkali content and bearing capacity. (Soil characteristics are listed in Appendix B.)

The Southwest area has several soil types. Figure 16, shows soils according to their development suitability. As shown, a substantial amount of the community is identified with "severe" and "moderate" constraints for development. In areas where soils pose "moderate" constraints, development should occur only with careful planning and engineering.

The locations having "severe" soil constraints can be developed only with special engineering design to mitigate problems and make development feasible. High erosion potential identified in the mountain areas is the main

reason for the "Severe" classification. Highly erodible soils are easily disturbed soils, having characteristics that can cause destruction of aquatic life and increase the risk of flooding.

- Disturbed areas should be stabilized as quickly as possible to reduce the erosion potential.
- The potential for erosion caused by overgrazing livestock should be avoided by restricting or limiting the use in susceptible areas.
- Agricultural uses should mitigate any potential for soil erosion and prevent soils from entering streams.
- The contamination of groundwater from mining should be reduced.
- Septic tanks or drainfields should not be allowed where highly permeable soils exist unless groundwater quality is maintained.

#### Wildfire Hazards

a site.

The Southwest Community is considered as a forest/urban interface area. The threat of wildfire is a constant hazard faced by forest/urban area residents. As

development continues to increase in the Southwest area, the risk of wildfire could dramatically. risk increases through close all of and forest

Soil characteristics are important increase factors in determining what kind Wildfire whenever humans enter the of development is appropriate for forest. It can be controlled only management development access. Often, residents in forest/urban interface areas are not

prepared for the inferno that can sweep through the brush and timber and destroy their homes in minutes. Firefighters frequently find themselves protecting life and structures while the wildfire perimeter spreads rapidly out of control threatening many additional structures. There may be a time when wildfire will threaten structures within the forest/urban interface area in spite of all efforts to reduce the hazard. Therefore, it will be important to reduce the risk of wildfire through mitigation, maintenance, education, and by providing access for fire equipment and water supplies.

Accepted methods of forestland management should be used to reduce all severe wildfire hazard areas to a low or moderate rating, such as, clearing brush, no wood shingles, education and evacuation plans, etc.

- 2. Salt Lake County Fire Department should use these same standards for the measurement of wildfire hazards.
- 3. Salt Lake County Fire Department should work with the Forest Service to develop and implement a program to reduce the hazard of wildfire. This program should include:
  - a hazard overlay map showing the degree of wildfire hazards, i.e., severe, moderate and low. The general criteria are presented in the appendix.
  - b. an educational program for public and private landowners, residents in the county to inform them of wildfire hazards and mitigation techniques.
  - c. a funding mechanism to pay for the programs.
- 4. Development proposals in areas where severe or moderate wildfire hazards are present should continue to be referred to the Salt Lake County Fire Department to assess the severity of the wildfire hazard, determine the mitigation techniques, which will be needed, and fire protection measures required. General fire protection policies are in the Community Services and Utilities section of this Plan.

#### **Implementation Recommendations**

- 1. During the development review process, all development proposals should be checked to ensure that hazards shown for the area are not present on the specific site, or the appropriate measures and design guidelines have been used to mitigate the hazard.
- 2. The 100-year floodplain should be recognized along Butterfield Creek and Rose Creek. Floodplain hazard regulations should be followed.
- 3. A mitigation/ alternatives study for existing uses in the floodplains should be done to identify measures that can be used to reduce the flooding potential. The following list of issues should be studied:
  - ➤ Human safety;
  - ➤ Land use options;
  - ➤ Design options, e.g., channelization that is integrated into the natural environment;
  - ➤ Riparian habitat values;
  - County responsibilities;

4. A geologic and engineering investigation should be required on all hillside development following the provisions of the Hillside Protection Zone requirements, to evaluate the site conditions and make mitigation recommendations. If grading or retaining walls are required, design and construction recommendations must also be presented.

#### Seismic Hazards

Earthquake danger poses a great potential threat, and by ordinance seismic hazards must be considered in virtually all development in Salt Lake County. Therefore, Salt Lake County has adopted by ordinance, a Natural Hazards Area overlay zone. This information can be found in the Natural Hazards Ordinance, Chapter 19.75. Additional detailed information about natural hazards development standards and preparedness are available from the County Geologist, Utah Geological Survey, University of Utah Seismograph Stations, Utah Comprehensive Emergency Management, and United States Geological Survey.

The potential hazards related to earthquakes in the Southwest Community, and their implications, include:

#### **Ground Shaking**

Salt Lake County is located near the center of the Intermountain Seismic Belt (ISB), a broad area of seismic activity extending from near Las Vegas, Nevada north into Yellowstone National Park and Montana. Within the ISB there are many active faults, including our own Wasatch Fault that is capable of generating large magnitude earthquakes. Earthquake seismic waves radiate outward in all directions from the epicenter and damaging waves from large earthquakes are capable of traveling long distances. The average recurrence interval for a major earthquake along one of the segments of the Wasatch Fault is about 400 years. The last such seismic event occurred near Nephi about 300-500 years ago. Smaller earthquakes have also occurred, such as the Herriman event in 1993. This suggests that we are within a "seismic window" where we can expect a major seismic event in northern Utah at any

The most effective method of dealing with the groundshaking hazard is to design buildings to withstand the expected ground accelerations. Therefore,

1. All new construction in Salt Lake County is required to be designed and built in full accordance with UBC Seismic Zone III requirements, (see Chapter 23, Uniform Building Code for details).



- 2. Salt Lake County fire codes should be as strict as seismic codes because under natural conditions fires accompany earthquakes.
- 3. Older, unreinforced masonry buildings, specifically homes, commercial and public structures pose the greatest risk to damage and injury to persons during seismic events. Remodeling or renovation could provide an excellent opportunity to increase seismic survivability of older structures.
- 4. Development of any community facility should be prefaced by studies addressing site-conditions, ground shaking amplification, fire codes, and recommends increased design limits if necessary.

#### Liquefaction

Liquefaction is a seismic hazard associated with the ground shaking that accompanies an earthquake. Liquefaction occurs when fine-grained, ground water saturated, loosely compacted sands and silts are strongly shaken. During liquefaction, sediment particles lose their grain-to-grain contacts and "float" in the groundwater. The liquefied sediments temporarily behave like quicksand. Damage to buildings, buried pipelines and underground storage tanks can result when foundationsupporting soils liquefy and can no longer support the weight of the structure. Liquefaction on slightly sloping ground can also cause lateral spread landslides. Ground failure and loss of soil bearing strength beneath a structure due to earthquake induced liquefaction can result in serious structural damage and loss of life should structural collapse occur.

The liquefaction potential in the Southwest Community is considered to be very low as shown on the countywide Liquefaction Potential Special Study Area Map. The "very-low" designation indicates less than a 5 percent probability in a 100-year period that ground shaking from an earthquake would be strong enough to cause the soil to liquefy.

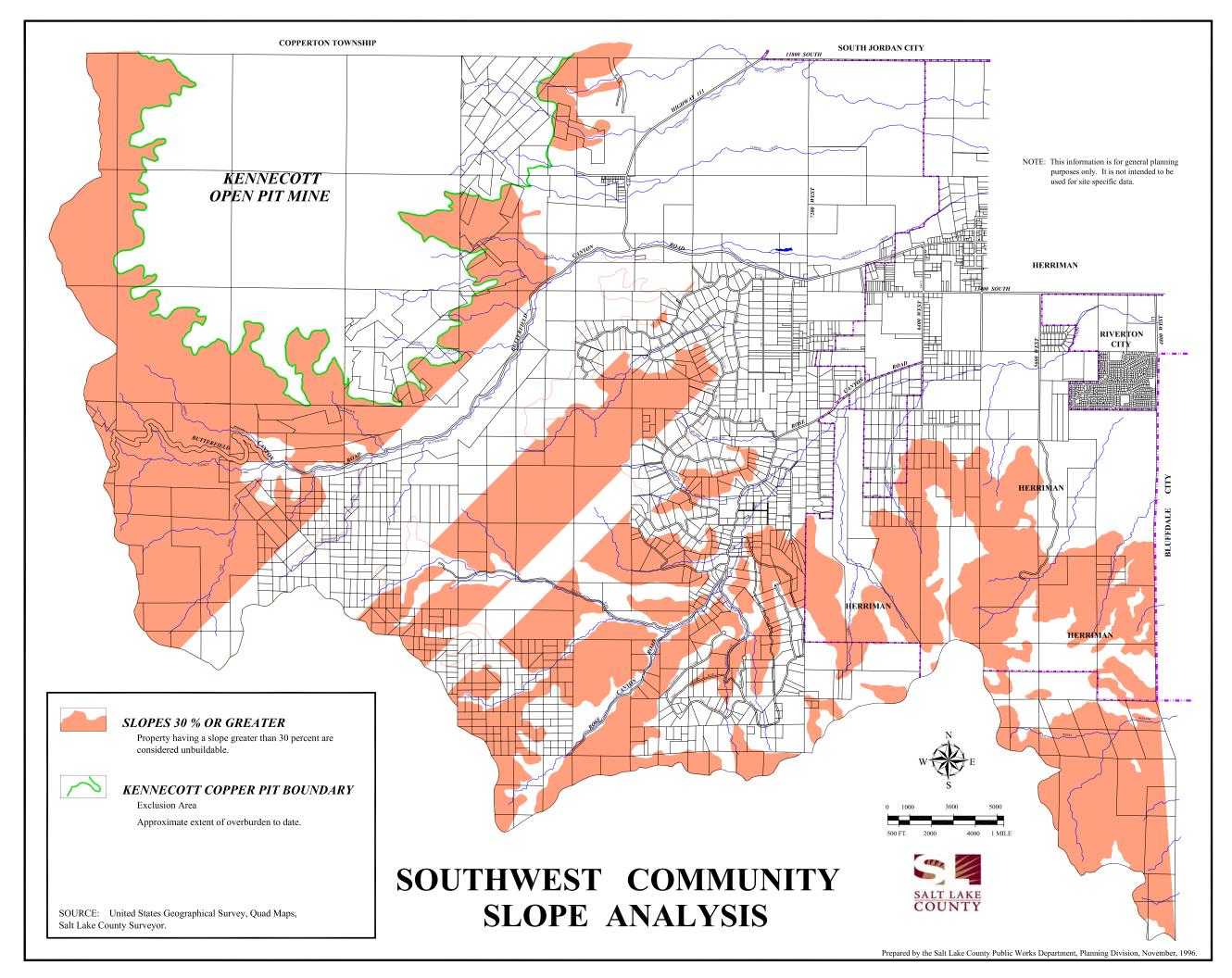
The liquefaction map is a general-scale map, created using subsurface data from selected sites. Therefore, it may be possible that the potential at some sites may be different (higher or lower) than that depicted on the map.

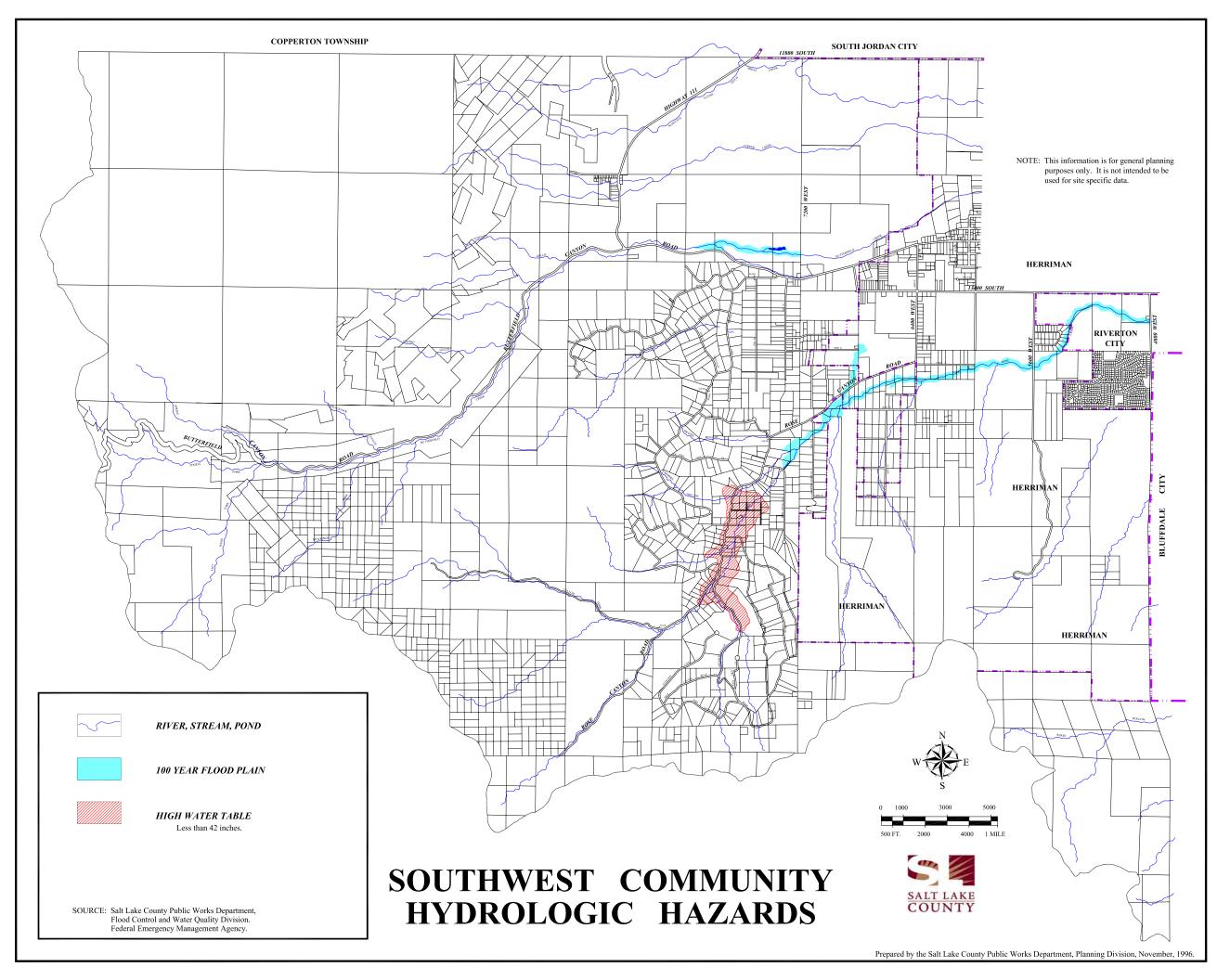
1. The Natural Hazards Ordinance requires that a site-specific study be conducted in low and very-low liquefaction potential areas prior to approval of critical facilities and special occupancy structures, such as, schools, fire stations, hospitals, and other public facilities.

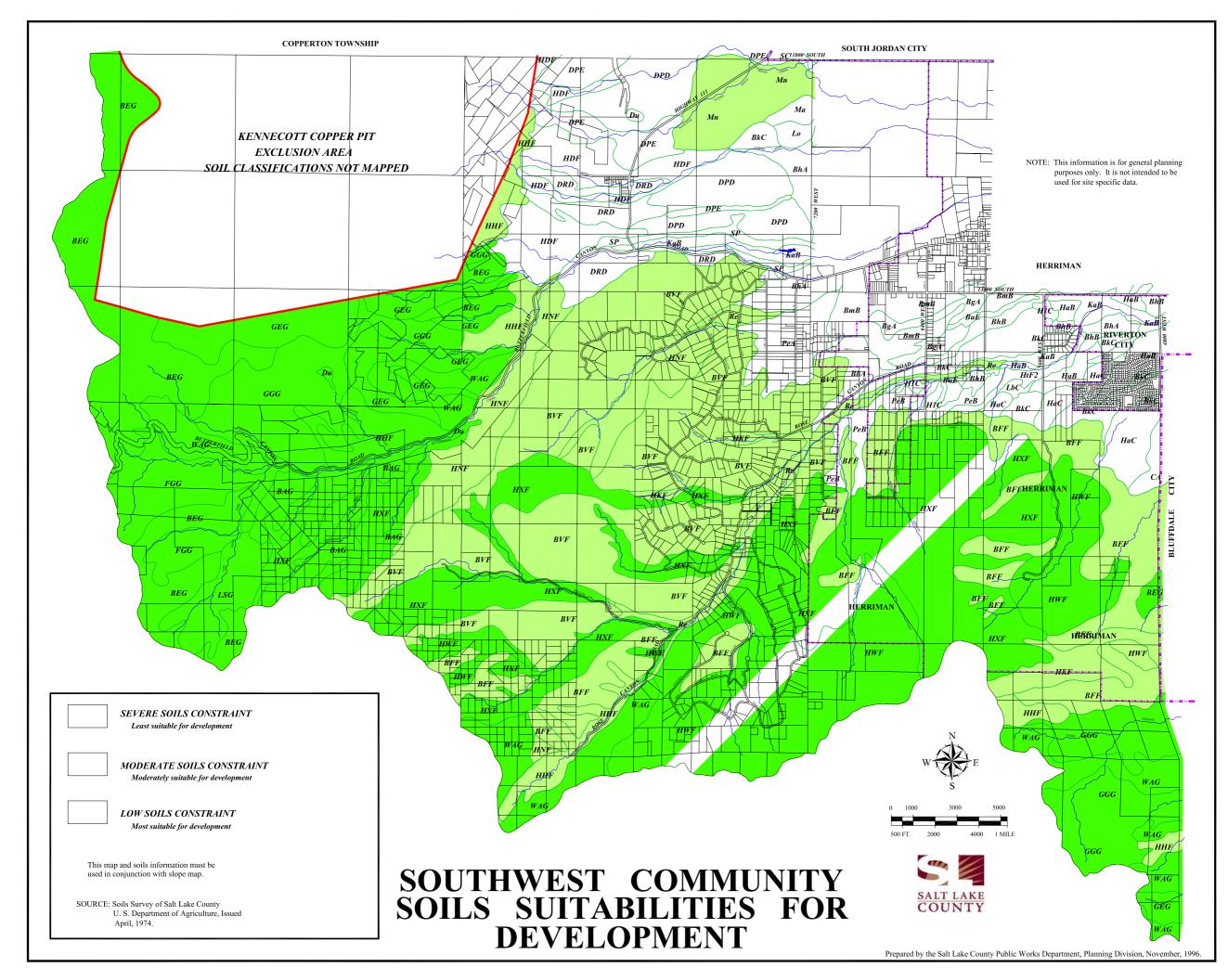
#### **Surface Fault Rupture**

Surface fault rupture presents a severe hazard to buildings or other structures (buried utility lines, roads, etc.) placed over active faults. A fault is considered active if it has ruptured the ground surface at least once in about the past 10,000 years. The Salt Lake Segment of the Wasatch Fault is considered active, experiencing several major earthquakes within the past 10,000 years.

The most effective method of dealing with the hazard from surface fault rupture is simple avoidance. Because fault rupture tends to reoccur along existing fault traces from past earthquakes, structures should be placed a safe distance from the nearest fault to prevent structural damage, possible injury or loss of life. At the present time there is no evidence indicating the presence of an active fault in the Southwest Community.









## **IMPLEMENTATION**

The planning process requires ongoing community participation to achieve the Plan's goals and objectives. Many of the recommendations in this Plan require further action by individuals, developers, the Community Council, Salt Lake County and other public agencies.

The Southwest Community Council provides the most direct and effective link to the elected and appointed policy and decision makers of Salt Lake County government. Planning and development proposals related to the community are discussed by the council and recommendations forwarded to county officials. Each council representative should work with their elected community officers under the guidelines of this plan for the good of the community without unduly restricting the rights of property owners and proposed developments.

The success of this or any General Plan is contingent on follow-through efforts by the many groups involved. All of the hard work, which went into this plan, will be of little value unless the plan is put to work. This plan is to be used as a guide for the decision-making

process, and should remain flexible enough to allow decisions to be made that are in the best interest of the Southwest Community. The plan and its policies allow and encourage growth at suitable locations and preserve the rural and mountain residential character of the community.

Community stability will require a continuous effort by the County, property owners and neighborhood residents to maintain and improve all elements of the community, especially now, by setting high standards for future development Salt Lake County must assume the responsibility for developing, maintaining and improving the public infrastructure, including the dedicated public streets, street lighting, sheriff and fire protection and other public facilities. Local utility providers should maintain and provide adequate and timely provision of services. Salt Lake County and other agencies must continue to work to improve delivery of public services to the area. And most importantly, the property owners and residents must assume responsibility for maintaining and whenever possible improving private properties. Private property maintenance and appearance is the single most important factor in preserving the areas natural setting, its rural quality and desirability. Zoning regulations, infrastructure improvements, etc. are only supportive to private property

owner's responsibilities.

Each section of this Plan suggests the specific actions that will be necessary to implement particular policies. This section outlines the actions that are needed to implement the plan.

There are many sources available to complete the

goals that are desired by the community. Volunteer efforts by the community, using all of the programs available along with the regulatory mechanisms described below, are needed to implement the plan.

The success of any General Plan is contingent on follow-through efforts by the groups involved.

#### **Monitoring and Coordination**

Salt Lake County should monitor the development taking place in the area to determine the amount of development that can be expected to occur based on current zoning and the Plan's recommendations for future zoning. This data should be reviewed and updated periodically to reflect rezoning decisions as they occur.

The Community Council should monitor the implementation of the Plan. The Council could, at times, make general recommendations to the Planning Commission and Board of County Commissioners about changes to the Plan and its administration, if necessary.

Salt Lake County Development Services Division should recommend that applicants meet with the Community Council to discuss development plans early in the County's review process.

The general communication between the Planning Commission, Board of County Commissioners and the Community Council should be enhanced. This dialogue should provide an opportunity to openly discuss general problems in the community and the philosophies of each group. In addition, it would allow the Planning

Commission and Board of County Commissioners to give feedback to the Council on how its participation in the development review process is perceived, or where improvements are needed.

**Zoning** 

The Southwest Community General Plan is a comprehensive, long-range

guide. By contrast the Salt Lake County Zoning Ordinance and accompanying maps are specific, immediate and limited primarily to the control of private land development.

Because it provides control over almost every aspect of development, the Zoning Ordinance is the single most important tool to carry out the plan. The Ordinance provisions and requirements are designed to insure high standards of land development without unduly restricting private initiative or causing unnecessary costs to the developer or to the public.

The Salt Lake County Development Services Division enforces zoning regulations. On site inspections are performed by Development Services officials to verify that development is in conformity with all requirements pertaining to the site. Application for variance and special exception to existing zoning regulations may be made to the Salt Lake County Board of Adjustment. Zoning Amendments are made by the Salt Lake County Commission after review and recommendation by the Planning Commission.

In some areas of the community the current zoning and subdivision platting is not in conformance with the Plan. Because the established planning policies will pertain to and allow consideration of new applications only, the following are alternatives the County should consider in making existing properties and development comply to the Plan's policies.

- ➤ When changes to zoning and subdivisions are requested by a property owner, such rezoning and subdivision plats should be in conformance with this plan.
- ➤ Salt Lake County, Community Council initiated, or cooperative restructuring by the property owner of zoning classifications where necessary to better fit characteristics of the site and conform with the recommendations of this Plan.
  - Voluntary lot mergers to create an allowable parcel size or building area following the Plan's recommendations thus reducing development potential.
  - Salt Lake County Development Services Division must enforce all zoning regulations and development

requirements to ensure the health, safety, and welfare of Community residents. Complaints of violations or nuisance should be verified by enforcement officers and corrected immediately.

#### **Subdivision Review**

Because it provides control over

almost every aspect of

development, the Zoning

Ordinance is the single most

important tool to carry out the

plan.

Some areas located in the higher mountainous areas have a potential for development and possibly single lot subdivisions. The developments anticipated in the future are located in the FA-2.5, F-1, and FR-20 zones. Such developments would be subject to the Salt Lake County Subdivision Ordinance. As subdivision proposals are submitted, the ordinance will be referred to and followed to ensure that all sites posing special problems can be corrected, or not allowed to be developed. The ordinance considers many factors, such as topography, access to the site, development costs, the ability to provide efficient public services and promoting energy conservation methods of construction.



### **Development Standards**

It is very important for neighborhood preservation and preservation of the mountain areas to maintain high development standards. New development applications should be reviewed to determine the character of the terrain, the natural vegetation, drainage, and the adjacent areas to compare how they relate to one another. In many cases the new developments may have conditions applied to make them as compatible and safe as is reasonably possible. Proposed new developments, which do not relate favorably to existing uses should not be approved.

The mountain, foothill, and valley areas that have potential for limited residential development are considered a rural and canyon environment. Therefore, the recommendations made in the **Rural and Mountain Site**Design Criteria section should be applied to all residential development in these areas. The suggestions relate to site selection and planning, building scale and design, buffering, landscaping, grading, drainage, access, and fencing. Strengthening and improving development standards for residential uses will ensure the desired growth pattern and improve environmental and visual quality for the community and Salt Lake County.

Development Standards must apply to and include the existing housing that is found to be in a deteriorating condition and prevent any junk that is present on properties.

#### **Relationship to Other Plans**

The policies, recommendations and maps contained in the Southwest Community General Plan is only a part of several documents and policy guides that create the Salt Lake County General Plan. This plan along with the following special plans and studies that apply to the entire County should be reviewed in all development proposals.

- Salt Lake County Parks and Recreation Master Plan
- ➤ Salt Lake County Recreational Trails Master Plan
- Salt Lake County Roadway Master Plan
- Salt Lake County Hillside Protection Zone Ordinance
- ➤ Salt Lake County Storm Water Management Plan
- ➤ Salt Lake County Water Conservancy District, Water System Master Plan
- ➤ Salt Lake County Sewer District #1, Sewerage System Master Plan

These Plans should be used in concert with the Southwest Community General Plan. Where conflicts occur among the plans, conflicts will be resolved case by

case. However, where this Plan makes recommendations related to a special plan or study, an amendment to the special plan that reflects these changes should be considered.

#### **Citizen Participation**

If the Southwest Community is to progress in a positive direction, citizens must show they will not accept any undesirable situations or unsightly developments as a permanent condition in the community.

Citizens are encouraged to participate in hearings and provide input on this General Plan and on the plans and proposals growing out of this document. Active citizen support will be a powerful impetus for county departments and officials to act expeditiously on various recommendations.

#### Amending the Plan

As a general guide for community development, this general plan is intended to be flexible and respond to changing conditions and ideas in the Community. The plan must be adaptable to changing needs. In five years, this plan will likely require some updating, amending or revising. This should be done by the same process used in creating the original plan. Input should be received from community representatives, property owners and residents. The Planning Commission will make recommendations and the Board of County Commissioners will render final decisions.



## **APPENDIX A**

## **County Wide Goals and Policies**

The following goals and policies are to be used as a guide to development and General Plan decisions by the Planning Commission and County Commission. No goal or policy is overriding but must be weighed against other goals that also relate to a particular area, application or decision.

#### **General Policies**

- 1. The health and well-being of residents and the physical safety of property shall be protected by compliance with air and water pollution control standards and by identifying and avoiding areas of physical or geologic hazard or mitigating the hazards or development in relation to the hazard if possible based on "State of the Art" design.
- 2. The County should continue to allow a diverse range of housing in each community (price, type, size and location of dwellings) and also encourage a continuing high level of home ownership.
- Salt Lake County Governments should encourage rational and orderly economic development to provide a stable tax base and stimulate employment opportunities consistent with desired maintaining community lifestyle and environment.

- 4. Cooperation should be encouraged between the public and private sectors to obtain mutually beneficial objectives, i.e. co development, density incentives, mixed use projects, etc.
- 5. Employment centers should be concentrated in locations, which maximize use of the existing transportation, and utility systems, encourage the development of an efficient transit system, and encourage energy conservation.

# Productive agricultural areas should be conserved and protected.

- 6. The open space system should be expanded to provide varied recreational areas, natural open spaces and definition of neighborhoods.
- 7. Productive agricultural areas should be conserved and protected.

- 8. A balance between public costs for services and revenues to support these services should be promoted to protect against untimely or poorly located development.
- 9. The natural beauty and resources of the Wasatch and Oquirrh Mountains should be protected and preserved by 1) prohibiting development in hazardous or environmentally sensitive areas; 2) encouraging transfer of those areas to public ownership and 3) mitigating adverse effects of development.

#### **Residential Policies**

1. The traditional single-family neighborhood should remain as the predominant housing style. Neighborhood is defined as a primarily residential area that shares common characteristics such as housing style, dwelling density, common lifestyle, natural or manmade boundaries, etc. that distinguishes it in the minds of the

residents from other areas of the community.

- 2. Low density residential neighborhoods should be protected from incompatible uses. Amenities such as mini parks, street lighting, shade tree planting, etc. should be added as funds permit.
  - Vacant land in the interior of low-density areas should be developed with housing of similar design, mass and density.
  - b. More intense uses or traffic from more intense uses should not intrude into low-density neighborhoods.
  - c. Residential areas should be provided with complete pedestrian and vehicular circulation facilities, i.e. curb, gutter and sidewalks, as well as landscaping, underground utilities, streetlights and drainage facilities.
  - d. Adequate off street parking should be provided for all uses. Storage of recreation vehicles (including mobile homes, ORV's, travel trailers, etc.) should be discouraged in front and side yards.
  - e. Small, conveniently located open areas should be provided in residential neighborhoods where feasible especially in high-density areas and areas of lots less than 8,000 sq. ft.
  - f. Individual property owners should be encouraged to maintain and/or improve their properties through revitalization, rehabilitation and redevelopment programs, building and health code enforcement, zoning enforcement and

- neighborhood self help programs as appropriate.
- g. Schools and parks should be developed as community recreational and social centers.
- h. Neighborhood revitalization efforts should include capital improvement projects such as curb, gutter and sidewalks, storm water drainage systems, pollution stormwater control facilities, etc.
- i. Assessment policies should be changed to encourage rather than discourage home improvements.
- j. Housing should be provided for persons with special needs in residential areas subject to development and location guidelines designed to permit the residents to be successfully integrated into the neighborhood.

Property assessment policies should encourage rather than discourage home improvements.

- 3. In order to provide a wide variety of housing types and styles, medium and high density residential uses should be allowed in appropriate areas and dispersed throughout the county in a logical pattern.
  - a. Higher density residential uses should be located along major thoroughfares and transit corridors near retail and personal service establishments that supply the needs of the residents.

- Higher density residential uses must be made compatible with adjacent uses through detailed review of building mass, height and orientation, landscaping, setbacks, walls, building materials, location of parking and circulation areas, open space, recreation and other amenities which should be governed by development standards and site plan review.
- Traffic from higher density C residential areas should have direct access to major traffic arterials, which have adequate capacity accommodate traffic volumes as well as appropriate ingress and egress as determined by detailed traffic analysis.

#### **Commercial Policies**

- 1. Commercial development should generally be clustered in neighborhood, community and regional shopping or activity centers (including where appropriate a combination of retail, service commercial and professional offices) primarily at the intersection of major streets.
- 2. New commercial areas should generally not be permitted to occur in scattered or "strip" form of development but should be aggregated in attractively designed developments.
- 3. Community and regional shopping centers should incorporate or become the center of a broad range of goods and services to reduce the necessity for driving to separate destinations and to provide a social focus for communities.



- 4. In those cases where auto oriented commercial areas front on major arterials, they should present a high quality of design including sensitive signage and be adequately screened from adjacent uses. Access to these areas should be controlled and consolidated to assure safety and minimize traffic conflicts.
- 5. Any new or expanded commercial area should be planned in a manner which protects nearby low density neighborhoods through buffering with landscaped areas, transition uses, separation by streets or other barriers, and limiting operating hours.
- 6. A11 commercial areas should be sensitively designed subject to approved development standards and site plan review of parking setbacks, access, sign control, landscaping, screening building walls. scale, height, orientation and mass, directional lighting, etc. to insure that the commercial uses are compatible with land uses.

#### **Industrial Policies**

- 1. Industry should be dispersed throughout the County in planned districts to take advantage of the transportation system and promote energy conservation and convenience of the employment force.
- Industries based on extraction of mineral resources should be protected to allow full utilization of the natural resources and should utilize a rehabilitation plan to provide a second generation use compatible with the surrounding neighborhood. Where slopes and other considerations preclude second-generation use property should be protected from erosion.

- 3. Heavy industries should be located where they can be economically and practically served by rail facilities, highway transportation, and utilities.
- 4. The development of industrial parks with a full range of site amenities should be encouraged.
- 5. Exclusive industrial zones and buffer areas to provide for a transition from industrial use to other uses should be provided.
- 6. There should be an inventory of the county's industrial land. This should be updated periodically to facilitate the development of sufficient quantities of industrial land for future years.
- 7. Existing zoning ordinances should be amended to include performance requirements for new heavy commercial and industrial uses which abut or can adversely impact adjacent residential or recreational uses. There should be specific criteria for approval or enforcement relating to odor, dust, drainage, landscaping, building bulk and heights, etc.

Adverse impacts of industrial development on adjacent uses should be mitigated through landscaped buffer areas, visual screening and code enforcement.

8. Adverse impacts of industrial development on adjacent uses should be mitigated through landscaped buffer areas, visual screening, code enforcement, etc.

#### **Recreation Policies**

- 1. It is essential to balance park type development fairly and impartially within the county's jurisdictional boundaries, in order to provide a mix of recreational opportunities to the greatest number of citizens.
- 2. The county must distribute all parks and open space development, facility construction and other capital expenditures in an equitable, unbiased and reasonably practical manner.
- 3. Unless the essential needs of certain neighborhood planning areas are not being adequately served, Salt Lake County will concentrate on the development of community and regional park open space.
- 4. To the maximum extent possible, components of the regional and local park systems should be linked by rights-of-way, easements, dedications or other agreements to provide a network of greenways for hiking, biking and horseback riding.
- 5. Property acquisition for development of parks and open space is of urgent consideration and must be done expeditiously, while they are still available.
- 6. The needs of specialized recreation activities should be recognized in planning future parks and recreation areas.

#### **Transportation Policies**

1. The location and design of proposed major and minor streets should be consistent with the existing and proposed patterns of land use.

- 2. Every means to support efforts to expand transit service, frequency of service and transit usage should be pursued. Salt Lake County should support ongoing mass transit studies by W.F.R.C.
- 3. Proposed major streets, freeways and substantial improvements to existing major streets, should be designed to reduce noise levels, mitigate other hazards and improve visual quality.
- 4. The official Salt Lake County major and secondary highway plan should be regularly updated and utilized for Federal, state, local and private sector highway improvements.
- 5. Curb, gutter and sidewalks should be provided on all new and improved thoroughfares and streets, and wherever possible, exclusive bicycle lanes should also be included.
- 6. Access to the canyons should be improved. Passing lanes, bike lanes, mass transit expansion and provision of park and ride lots within a reasonable distance from the canyon mouths should be considered.
- 7. All developments, which may have significant traffic impact, should provide a traffic impact analysis prepared by a qualified and experienced traffic engineer.

#### **Agricultural Policies**

- 1. Productive land should be retained in agriculture as long as possible rather than be converted to urban uses.
- 2. Appropriate areas should be zoned for rural residential to help preserve agriculture.

3. Garden type farms should be encouraged to remain and be protected from incompatible uses.

#### **Public Facilities Policies**

- 1. Salt Lake County should encourage school officials to designate school sites in advance where possible and sites should be of the proper size to accommodate future school needs.
- 2. Schools should be designed and located to provide multiple purpose use of the facilities by school age children, older members of the population, and community wide groups without conflicting with the primary function of the school.

School buildings and grounds should be designed to provide flexibility including alternative uses of buildings, changing enrollment size, etc.

- 3. School buildings and grounds should be designed to provide flexibility including alternative uses of buildings, changing enrollment size, etc.
- 4. Libraries should be located in areas best suited to serve the residents of the County. Consideration could be given to locating public libraries in the schools where location, access, available parking and functional building design make cooperative use feasible.

#### **Ways and Means**

- 1. Community Council area master plans should be completed and updated every 5 years unless rapid or changing development requires update more often in particular areas. These plans should be adopted by the County Planning Commission and County Commission.
- 2. The Zoning ordinance should be revised, modernized and simplified by standardizing and consolidating residential zone requirements, adding performance standards to commercial and industrial zones, revising parking requirements and sign control, environmental controls, etc.
- 3. There should be strict, impartial enforcement and coordination of licensing, zoning laws and ordinances, building codes, etc.
- 4. Community Councils, representative of the people, should continue to serve as the public sounding board for development and master plan decisions.
- 5. The cities in Salt Lake County should recognize Salt Lake County's right to provide municipal services to the unincorporated area.
- 6. Salt Lake County and the cities should reach agreements on stabilized boundaries.
- 7. The county should develop and adopt an urban design element of the master plan to define the character of the communities and to ensure harmonious transition from new to existing development as the county continues to evolve within the Wasatch Front metropolitan area.



- 8. The County Planning Commission should review and comment on all redevelopment projects in the unincorporated area to insure that they are in harmony with overall development plans.
- 9. Salt Lake County should institute an orientation program for new Planning Commission, Board of Adjustment and community council members.
- 10. To the extent possible, new development should contribute to the various infrastructure funds of the county in proportion to the

- impact of the project on the respective funds.
- 11. Salt Lake County should determine to what extent some unincorporated areas (such as canyons) serve the countywide population and provide needed facilities and services for the users through countywide funds.
- 12. Salt Lake County should study the service and taxation issues concerning unincorporated areas rendered non contiguous by city boundaries.

13. The Salt Lake County Planning Commission should enact development standards and guidelines to effectuate goals and policies.

#### APPROVALS:

Planning Commission, September 9, 1986.

Board of County Commissioners, October 29, 1986.



## **APPENDIX B**

## **Soil Characteristics and Constraints**

The soil survey information used to prepare the map was taken from the U.S. Department of Agriculture, Soils Conservation Service, Soils Survey of Salt Lake area, Utah. This was published in April 1974. The fieldwork for the survey was done in the early 1960's and determined the kinds of soil, where they are located and what their uses may be in Salt Lake County.

Soil scientists traversing the fields and mountains made the survey. Steepness, length and shape of slopes were observed and hundreds of holes were dug to expose the soil profiles whose characteristics were recorded. The items recorded were type, arrangements and thickness of the soil horizons or layers, the depth to seasonal high water table and depth to bedrock or hardpan (if encountered within 60 inches of the soil surface). Other items observed and recorded were soil color, texture, amount of rock fragmentation, type of parent rock material and the kinds of native plants or crops.

Comparisons were made among the soil profiles and the similar soils were grouped together. Soils were classified and named according to nationwide, uniform procedures. Those soils that have like or similar profiles comprise a soil series. Except for different texture in the surface layer, all the soils of one series have major horizons that were similar in thickness, arrangement, and other important characteristics. Each soil series is named for a town or other geographic feature near the place where the soil was first observed and mapped. Taylorsville and Bluffdale, for example, are the names of two soil series of Salt Lake County. All of the soils in the United States that have the same name are essentially similar and behave alike under similar land use conditions.

Soil series are often divided into types. For example, Bluffdale sandy loam, one to three percent slopes, and Bluffdale silty clay loam, zero to one percent slopes is two of several types within the Bluffdale series. Therefore, soils of one series can differ in texture on the surface and in slope, stoniness, salinity, or other characteristics that affect the use of the soils. As the different soils were recognized and identified, the individual boundaries were located on aerial photographs. These photographs were used to prepare the soils maps contained in the soil survey reports. The maps in turn were used to prepare this soil map. Soils are identified on the map by symbols, or mapping units.

Some mapping units are made up of two or more soils of different series, or of different phases within one series. These are known as soil complexes or association. A soil complex consists of areas of two or more soils, so intermingled or so small in size that they cannot be shown separately on the soil map. An association is made up of adjacent soils that occur as areas large enough to be shown individually on the soil map, but are shown as one unit because the time and effort required to delineate them separately cannot be justified.

In Salt Lake County, there are places where the soil is so rocky, so shallow, or so severely eroded that it cannot be classified as a soil series. These places are delineated on the soils map, but they are called land types and are given descriptive names. "Clayey terrace escarpment" is a land type in Salt Lake County.

While a soil survey is in progress, samples of soils are taken for laboratory measurements and for engineering tests. On the basis of laboratory data, engineering tests, crop yield range yield and other data, test groups of soil are set up. These are reviewed and tested by farmers, agronomists, engineers and others. The interpretations that finally evolve reflect up-to-date knowledge of the soils and their behavior under present methods of use and

management. The soil survey report contains engineering soil interpretation tables that rate the soil for community development. These reports are available from your local Soil Conservation Service Office. These soil conditions are:

- 1. Water table, at depth of 0 to 30 inches
  - 2. Rock Outcrop
- 3. Bedrock at depths of 0 to 20 inches
- 4. Soils with high shrink-swell potential
  - 5. Very high or high erosion hazard
  - 6. Strong salt or alkali effect
  - 7. Very rapid or rapid permeability
- 8. Impermeable, very slow or slow permeability
  - 9. High water runoff potential
- 10. Susceptibility to hillside slippage

The following information discusses each of these soil conditions, why it is considered to have a negative tide impact on development and what the possible mitigation might be.

Water table 0 to 30 inches -The soils in which the seasonal high water table ranged from 0 to 30 inches, were grouped and identified. The operation and maintenance of septic tank absorption fields, sanitary land fills, excavation operations or the construction and maintenance of homes with basements would be constrained by the water table. Drainage may or may not be feasible, and location of outlets may be difficult to locate due to the relatively flat terrain. Also, drainage systems may fail and the water table may return to its natural level.

Rock Outcrop -- Areas that are 90 percent barren are considered as rock outcrop, but the landscapes may have inclusions of small pockets of soils that support good vegetive cover. Rock outcrop areas generally have value only

for wildlife or aesthetic purposes. Some soil delineations include areas of rock outcrop interspersed throughout the soils. Rock outcrop has a somewhat negative impact on development. It becomes more costly and difficult to place underground utilities, prepare roadbeds, and perform excavations in areas where outcrop is exposed. In areas where rock outcrop is interspersed throughout the soil delineation, realignment of underground utilities and roads is usually necessary.

Bedrock 0 to 20 inches -Bedrock at 0 to 20 inches was considered to present serious constraint for development. Although the shallow depth is not a constraint in regard to foundation materials for dwellings, etc., it does present problems and increase costs of excavation and placement of underground utility lines. It is a severe constraint if septic tank absorption fields are placed in the area. Also, plant growth is generally sparse in these areas. Care should be taken to maintain plant vigor and density to prevent soil erosion.

High Shrink-Swell Potential -This soil condition was considered to be
a serious constraint to development.
These soils swell upon wetting and
shrink upon drying. Sufficient volume
change occurs upon wetting and drying
to exert pressure on foundation walls
and bottoms. The pressure thus exerted
can cause cracking of the foundation
because of uneven stress on different
parts of the structure.

<u>Very High or High Erosion</u> <u>Hazard</u> -- This soil condition identifies the erodibility of the soils in the presence of running water or wind action. Soil erosion and resultant sedimentation can present serious problems. Although erosion takes place upon and affects a specific location, the sediment produced is mobile and may cause damage at locations far removed from the original source. Soil slope is probably the most important factor of soil erosion hazard. Generally, the steeper the slope, the faster the erosion. Vegetive cover or other artificial ground cover alters the amount of erosion but will not alter the erosion hazard rating.

Strong Salt or Alkali Effect -- This soil condition should be considered because it influences the kind and density of native plants or field crops. When developed, it influences the selection of plants used in landscaping, and extra cost is incurred in preparing the soil for successful plant growth. Metal pipes and concrete deteriorate rapidly when placed in soils that are strong in salt or alkali.

Very Rapid or Rapid
Permeability -- is the ability of a soil to
transmit air or water. It is an interaction
of texture, structure, porosity, organic
matter, etc. Rapid or very rapid
permeability occurs in loamy sand or
sandy soils. The rapid or very rapid
permeability groups may allow
pollutants or effluents to travel great
distances through the soil.

Impermeable, Very Slow or Slow Permeability -- The soils in this group are mainly clay, silty clay, silty clay loam or silty loam soils that have weak structure and lack appreciable amounts of pores. These soils generally are susceptible to surface water floods during periods of high rainfall or rapid

snowmelt. These soils are also areas of rapid water runoff potential.

High Water Runoff Potential - Identifies the hydrologic soils groups that influence the minimum rate of infiltration obtained from a bare soil after prolonged wetting. The soils with high water runoff potential were identified because most of the water that falls on them moves to other soils as runoff. The water must seek a lower level on another soil or in a Drainageway or stream.

Susceptibility to Hillside Slippage -- This soil condition is identified as posing a real hazard to public safety and welfare through loss of life or property. Mitigation of this constraint is most difficult, and because of the major hazard involved, these areas should not be developed. These soils generally have low values of internal friction and cohesion and occur on steep or very steep slopes. Cutting of the slopes and additional loading by structures could possibly trigger massive slides.

Mitigation techniques for these constraints, particularly for areas of high erosion hazard and runoff potential, can be reviewed in the Salt Lake County 208 Water Quality Project report on Best Management Practices for the control of surface runoff. Larger maps at a scale of 1" = 2000' are available from the Planning Department in your area.

Prepared by the 208 Project Staff,

May 1977



Soil Symbol	0 to 30" Water table Depth	Rock Outcrop	0 to 20" Bedrock Depth	High Shrink – Swell Potential	Very High or High Erosion Hazard	Strong Salt or Alkali	Very Rapid or Rapid Permeability	Impermeable, Very Slow or Slow Permeability	High Water Runoff Potential	Susceptible to Hillside Slippage	Number of Overlapping Constraints		Soil Symbol	0 to 30" Water table Depth	Rock Outcrop	0 to 20" Bedrock Depth	High Shrink – Swell Potential	Very High or High Erosion Hazard	Strong Salt or Alkali	Very Rapid or Rapid Permeability	Impermeable, Very Slow or Slow Permeability	High Water Runoff Potential	Susceptible to Hillside Slippage	Number of Overlapping Constraints
AGG* AVH* BAG BBG BCG BCH BDG BEG* BFF BgA BhA BhB BBC BIG BIG BIE BIC BIE BIC BIE BIE BIE		X X X	X X X X	X	X X X X X X X X X		X X	v	X X X X		3 4 1 1 5 5 5 1 3 1 0 0 0 0 0 1 0 0	Ko Ko Ki Ki Ki Ko Ko Ko La La La La La La	dC FA FB DB DB DC FA FE2* IA IC DC EA IA IB DE					X	X X X X	X X X X	X X X	X X X		1 0 0 0 1 1 1 1 1 1 0 0 0 3 3 3
BmB BmA BnB BrB BaA BaB Bt BuE BVF** BWH* CA CaC CaC CaE Ch Ck Cl DAG	X X X X X X X		X	X X X X	X	X X X	x x x	X X X X X X X	X X X X X X		2 2 3 2 3 2 3 2 0 2 2 3 3 2 3 3 2 3 3 2 3 3 3 3	Lee LE Lf Lk Lc LS M M M M N N N N N N N N N N N N N N N	eG EH* D C O O GG* a c g n u DE DE	X X	X		X X X	X X X X X X	X X X		x x x	x x x		1 1 2 0 3 0 1 1 1 4 4 4 2 2 1 1 0 1
DBG DBG DCG De Df DGG* DhG Dk DPD* DPE* Dr DRD* Du2 EMG FGG FHD FHG			X	X X X X X X X	X X X X	X X	x	X X X X	X	EX EX EX EX EX	2 EX 3 2 EX 2 3 EX EX EX 0 EX 0 1	NZ OJ OJ OJ OI OI Pa PE	ZD ID IE IG LG RG AA BBE BG CG* EA EB CC EB			X	X	X X X X X X		x x	X			0 0 1 1 1 1 2 0 0 1 1 1 4 0 0 0 1
FIG FOG* FZE* FZG* GEG GGG* Gp GU HaB HaC HbA HeB HDF* HeB HfC HGG* HHF* HHD		X X X	X	X X X X	X X X X X X X X	X X X	X X X	X X X X	x x	EX EX EX EX	2 4 3 3 1 2 1 1 0 0 2 2 EX 1 0 EX EX EX	Pr Pr Ps P1 PU PV Re RV Sa SG Sd	D F F B B GG* UE* UH* VW OF D	x x	x x x	x x	X	x x x x x x x x x x x x x x x x x x x	X X	x x x x	x x x	x x x x	х	2 2 2 2 3 3 3 5 0 3 2 4 1 4 2 3 3 1 1

HJD HKF* H1A H1B		X	X X				X X		EX	2 EX 0
H1C										
HmE			X	X			X		EX	
HNF*			X				X		EX	
HoG				X						
HtF2*				X			X			
HWF										
HYG				X				X		
Ir	X			X						
Jo			X		X					
KaB					X		X	X		
KaC										
KBG*										
KdA				X		X				

TaA TaB TaC TbB Te TtA TtC TuB Tv VGG VRG WAG WgD WgE WmA WmB ZWH**	X	X	X X X	X X	X X X	x x	X X	X X X X X	X X X X X	1 1 1 1 4 0 0 0 0 4 3 4 3 1 1 0 0 0 0
ZWH*	X	X		X					X	4

**SOILS: CONSTRAINTS TO DEVELOPMENT**This map and soil information must be used in conjunction with slope map.

- No soil constraints
- 1 soil constraint
- 2 2 overlapping soil constraints 3 overlapping soil constraints 4 overlapping soil constraints 3 5 overlapping soil constraints
- Exclusion area. Constraints generally cannot be mitigated.
- \* Asterisk indicates soil mapping unit is a complex or association. If the most restrictive soil makes up 50 percent or more of the soil-mapping unit, the entire soil delineation is mapped as to the restrictive value.
- A soil-mapping unit that 30 percent or more of the mapping unit consisting of rock outcrop is mapped as high runoff potential.
- "Du" may be a severe constraint area due to subsidence, insects, and methane gas generation.



## APPENDIX C Chapter 19.72

## **Hillside Protection Zone**

Sections:	
19.72.10	Purpose of provisions.
19.72.11	Overlay zone-Scope-Conflict resolution
19.72.12	Applicability of provisions-Maps.
19.72.13	Slope and lot size specifications.
19.72.14	Building site requirements.
19.72.15	Plans and report required.
19.72.16	Soils report.
19.72.17	Geology report.
19.72.18	Grading and drainage plan-Contents.
19.72.19	Vegetation plan.
19.72.20	Other reports and plans.
19.72.21	Vegetation preservation requirements.
19.72.22	Grading and drainage plan-Review and
	approval.
19.72.23	Access to other properties.
19.72.24	Development proposal processing.
19.72.25	Lots of record.
19.72.26	Bonds for improvements.

#### 19.72.010 Purpose of provisions.

A. The purpose of the hillside protection zone is to promote health, safety and the general public welfare of the residents of the county, by establishing standards for development of certain hillsides located in the unincorporated areas of the county to minimize soil and slope instability, erosion, downstream siltation, and to preserve the character of the hillsides.

B. The provisions herein are designed to accomplish the following:

- Encourage the location, design and development of building sites to provide maximum safety and human enjoyment while adapting the development to the natural terrain;
- Provide for safe circulation of vehicular and pedestrian traffic to public and private areas and minimize the scarring and erosion effects of cutting, filling and grading related to hillside street construction;
- 3. Prohibit activities and uses which would result in degradation of fragile soils and steep slopes;
- Encourage preservation of open space by encouraging clustering or other design techniques to preserve the natural terrain;
- 5. Minimize flooding by protecting streams, drainage channels, absorption areas and floodplains from substantial alteration of the natural functions. ((Part) of Ord. passed 9/25/80: prior code 22-35-1)

19.72.020 Overlay zone-Scope-Conflict resolution.

The hillside protection zone shall be an overlay zone of the zoning classifications set out in Section 19.06.010 of this title. In case of conflict between the provisions of the existing zoning classification, building code, subdivision ordinance and or health ordinance and the overlay zone, the most restrictive provision shall apply. ((Part) of Ord. passed 9/25/80: prior code 22-35-2)

#### 19.72.030 Applicability of provisions-Maps.

The maps showing those foothill areas which are included in the hillside protection zone are attached to the ordinance codified in this chapter and are on file with the county planning commission. Such maps are a part of this title as if fully described and detailed herein. ((Part) of Ord. passed 9/25/80: prior code 22-35-3)

#### 19.72.040 Slope and lot size specifications.

In keeping with the purposes set forth in Section 19.72.010, and after excluding all property having a slope greater than thirty percent, lots within the hillside protection zone shall comply with the following schedule:

Average Slope	Minimum Lot Size Residential Lots (Unless existing zone requires larger lots)	Maximum Residential Lots Per Acre in a Planned Unit Development (Unless existing zone requires smaller maximum)
0 - 20%	See existing zone	See existing zone
20 - 25%	15,000 square feet	2.9
25 - 30%	½ Acre	2
Over 30%	Development	not permitted.
Average slope is deterr	nined by the following:	
S =		00229 X I X L A

S=Average slope in percent,.00229 - a conversion factor, I= the contour interval (or vertical distance between adjacent contour lines of the map, in feet). The contour interval may not exceed 10 feet. L= the total length in feet of all the contour lines within the subject parcel, excluding areas of slope greater than 30%, and A= the area in acres of the subject parcel, excluding the areas of slope greater than 30%. Average slope shall be determined on an individual lot basis and/or by areas of generally uniform slope which have a maximum size of five acres.

Roads and other vehicular routes shall not cross property having a slope greater than thirty percent unless, after review by the planning commission, it is determined that:

A. Appropriate engineering measures can be taken to minimize the impact of the cuts and fills, consistent with the purpose of this chapter, and

B. The environment and aesthetics of the area will not be significantly affected. (Ord. 966 3, 1986: (part) of Ord. passed 9/25/80: prior code 23-35-4)

#### 19.72.050 Building site requirements.

- A. Each lot or parcel of land shall contain a primary building site appropriate to accommodate the primary residential structure, which building site shall be outlined on the subdivision plat.
- B. Grading of the lot or parcel which is related to creation of the primary building site or construction of the structure shall not extend more than thirty feet, horizontally, in front, to the rear or to the side of the proposed structure unless a greater distance is approved by the planning commission upon a showing by the developer that a greater distance will not be contrary to the purposes of this chapter.
- C. The primary building site shall have a natural or manmade slope of twenty percent or less.
- D. Building sites for accessory buildings or structures such as tennis courts, swimming pools, outbuildings, etc., shall be approved by the planning commission.
- E. The driveway(s) to the building site shall have a maximum slope of fifteen percent and shall have direct access to a public street or private right-of-way approved by the planning commission. (Ord. 966 4, 1986: (part) of Ord. passed 9/25/80: prior code 22-35-5)

#### 19.72.060 Plans and reports required.

The planning commission shall require the following reports and plans to be provided by the applicant. Unless the applicant is notified of deficiencies in such reports and plans within thirty days of their submission to the planning commission, the reports and plans shall be deemed adequate for the planning commission to complete the processing of the application. The planning commission may waive any reports and plans it determines are not necessary to determine whether the development meets the requirements of this chapter. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(part))

#### 19.72.070 Soils report.

The soil report shall be prepared by a qualified soils engineer, and must contain the following information:

- A. A slope analysis;
- B. An estimate of the normal highest elevation of the seasonal high-water table;
- C. The location and size of swamps, springs and seeps, which shall be shown on the site plan, and the reasons for the occurrence of these underground water sources. An analysis of the vegetative cover or other surface information may be used to show the presence of underground water;
- D. A unified soil classification for the major horizons or layers of soil profile, or of the zone of the footing foundation;
- E. Appropriate accepted soils engineering tests to determine bearing capacity, settlement potential, and shrink/swell potential of the site soils;
- F. Potential frost action, based on the depth to the water table and the Unified Soils Classification;

- G. An analysis of the soil suitabilities, constraints and proposed methods of mitigating such constraints in implementing the proposed development plan;
- H. A written statement by the person or firm preparing the soils report, identifying the means proposed to minimize hazard to life, property, adverse effects on the safety, use or stability of a public right-of-way or drainage channel, and adverse impact on the natural environment. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(1))

#### 19.72.080 Geology report.

- A. A geology report shall be prepared by a person or firm qualified by training and experience to have expert knowledge of the subject. A geologic map shall accompany the report. Mapping should reflect careful attention to the rock composition, structural elements, and surface and subsurface distribution of the earth materials exposed or inferred within both bedrock and surficial deposits. A clear distinction should be made between observed and inferred features and/or relationships.
- B. The report shall contain at least the following information:
  - Location and size of subject area and its general setting with respect to major geographic and geologic features;
  - 2. Identification (including author and date) of the geologic mapping upon which the report is based;
  - 3. Topography and drainage in the subject area;
  - 4. Abundance, distribution and general nature of exposures of earth materials within the area,
  - 5. Nature and source of available subsurface information:
  - 6. Estimated depth to bedrock;
  - 7. Bedrock: igneous, sedimentary, metamorphic types;
  - 8. Structural features, including but not limited to stratification, stability, folds, zones of contortion or crushing, joints, fractures, shear zones, faults, and any other geological limitations;
  - Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and recommendations covering the adequacy of sites to be developed;
  - 10. A written statement by the person or firm preparing the geology report identifying the means proposed to minimize hazard to life or property, adverse effects on the safety, use or stability of a public right-of-way or drainage channel, and adverse impact on the natural environment. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(2))

#### 19.72.090 Grading and drainage plan-- Contents.

- A. A grading and drainage plan shall be prepared by a professional engineer registered in the state. The plan must be sufficient to determine the erosion-control measures necessary to prevent soil loss during construction and after project completion.
- B. The plan shall include, at least, the following information:



- A map of the entire site, showing existing details and contours of the property and proposed contour modifications, using a minimum of tenfoot contour intervals at a scale of one inch equals one hundred feet:
- 2. Map(s) of area(s) to be graded, showing existing details and contours at five-foot intervals where terrain will not be modified, and proposed details and contours of two-foot intervals where terrain modification is proposed, using a scale of one inch equals twenty feet:
- 3. An investigation of the effects of high intensity rainstorm (one-hundred-year occurrence according to U.S. Department of Commerce Weather Bureau Frequency Curves), evaluating how the proposed drainage system will handle the predicted flows, including effects of drainage areas outside the development which drain through the subject area and the anticipated flow of the drainage leaving the development;
- 4. The history, including frequency and duration, of prior flooding;
- 5. The location of any existing buildings or structures on the development, and any existing buildings or structures on land of adjacent owners which are within one hundred feet of the property, or which are on the land of adjacent owners and may be affected by the proposed development;
- The direction of proposed drainage flow and the approximate grade of all streets (not to be construed as a requirement for the final street design);
- 7. Proposed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, storage reservoirs, and other protective devices to be constructed with or as part of the proposed work, together with a map showing drainage areas and the proposed drainage network, including outfall lines and natural drainageways which may be affected by the proposed project. Include the estimated runoff of the areas served by the drainage plan;
- 8. A description of the method to be used on obtaining fill for use on the site and the site of acquisition of such fill;
- A description of methods to be employed in disposing of soil and other material which is removed from the site, including the location of the disposal site;
- A plan showing temporary erosion-control measures to prevent erosion during the course of construction;
- 11. A schedule showing when each stage of the project will be completed, including the total area of soil surface which is to be disturbed during each stage and an estimate of starting and completion dates. The schedule shall be drawn to limit to the shortest possible period the time that soil is exposed and unprotected. In no event shall the existing natural vegetation or ground cover be destroyed, removed or disturbed more than fifteen

- days prior to commencing grading for development as scheduled;
- 12. A written statement by the person or firm preparing the grading and drainage plan, identifying any grading and drainage problems of the development and further stating an opinion as to the ability of the proposed plan to mitigate or eliminate such problems in a manner as to prevent hazard to life, hazard to property, adverse effects on the safety, use or stability of a public way or drainage channel, and adverse impact on the natural environment. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(3))

#### 19.72.100 Vegetation plan.

The vegetation plan and report shall be prepared by a person or firm qualified by training and experience to have expert knowledge of the subject, and shall include at least the following:

- A. A survey of existing trees, large shrubs and ground covers;
- B. A plan of the proposed revegetation of the site, detailing existing vegetation to be preserved, new vegetation to be planted, and any modifications to existing vegetation;
- C. A plan for the preservation of existing vegetation during construction activity;
- D. A vegetation maintenance program, including initial and continuing maintenance necessary;
- E. A written statement by the person or firm preparing the vegetation plan and report, identifying any vegetation problems, and further stating an opinion as to the ability of the proposed plan to mitigate or eliminate such problems in a manner as to prevent hazard to life or property, adverse effects on the safety, use or stability of a public way or drainage channel, and adverse impact on the natural environment. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(4))

#### 19.72.110 Other reports and plans.

Other reports and plans shall be prepared as deemed necessary by the planning commission. ((Part) of Ord. passed 9/25/80: prior code 22-35-6(5))

#### 19.72.120 Vegetation preservation requirements.

- A. Vegetation shall be removed only when absolutely necessary, i.e., for buildings, filled areas, roads, and firebreaks. Every effort shall be made to conserve topsoil which is removed during construction for later use on areas requiring vegetation or landscaping, i.e., cut-and-fill slopes. Vegetation sufficient to stabilize the soil shall be established on all disturbed areas. Areas not contained within lot boundaries shall be protected with adapted fire-resistant species of perennial vegetative cover after all construction is completed. The new vegetation shall be equivalent to or exceed the amount and erosion-control characteristics of the original vegetation cover.
- B. The property owner and contractor shall be fully responsible for any destruction of native vegetation proposed for retention under the approved vegetation plan, and shall be responsible for the replacement of destroyed

vegetation, including vegetation destroyed by employees and subcontractors. ((Part) of Ord. passed 9/25/80: prior code 22-35-7)

19.72.130 Grading and drainage plan--Review and approval.

- A. The drainage and grading plans shall be approved by the development services division prior to final approval by the planning commission. Approvals by said divisions shall be based upon official standards and ordinances administered by the individual divisions.
- B. It is unlawful to excavate or grade any area within the hillside protection zone prior to final approval of the grading and excavation plan by the planning commission. ((Part) of Ord. passed 9/25/80: prior code 22-35-8)

#### 19.72.140 Access to other properties.

Safe, convenient and adequate access, approved by the planning commission, shall be provided to adjacent private and public lands for vehicles, pedestrians and essential service and maintenance equipment. ((Part) of Ord. passed 9/25/80: prior code 22-35-9)

#### 19.72.150 Development proposal processing.

- A. Development proposals in the hillside protection zone shall be processed in a timely manner under established conditional use or subdivision procedures.
- B. In order to fulfill the purpose of the hillside protection zone, described in Section 19.72.010, the planning commission shall determine whether the proposed development meets the requirements of this chapter, based on the required reports and other data available to it. The planning commission shall, when it deems necessary, request recommendations from other agencies such as the board of health, Utah State Forestry, U.S. Forest Service, and the U.S. Soil Conservation Service.

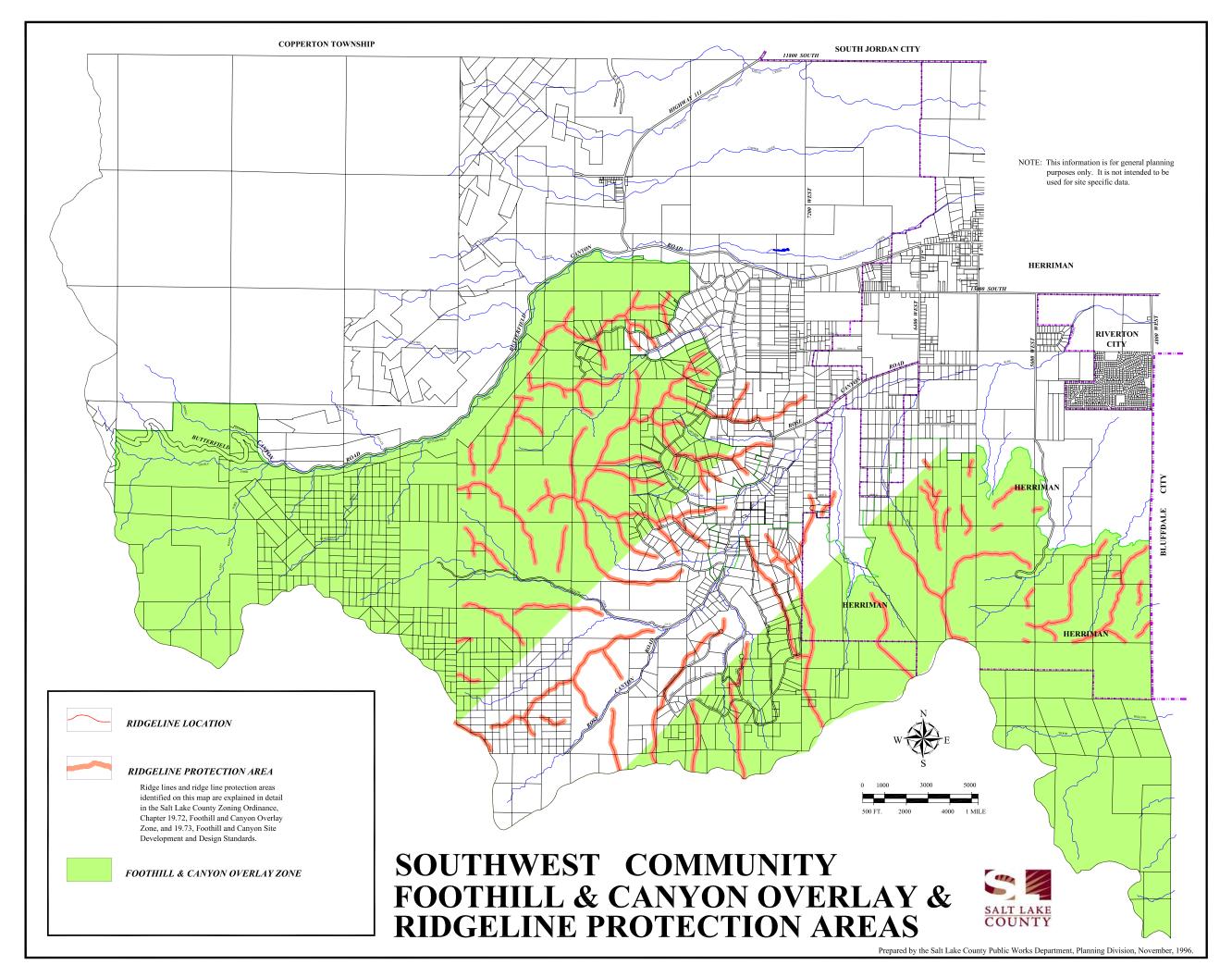
- C. Any area which is determined to contain natural hazards to life, limb or property, including but not limited to soil hazards, geologic hazards or hydrologic hazards, shall not be approved for development unless the applicant demonstrates that such identified hazards or limitations can be overcome in such a manner as to minimize hazard to life, limb or property; adverse effects on the safety, use or stability of a public way or drainage channel; and other adverse impacts on the natural environment.
- D. The planning commission may set requirements it determines are necessary to overcome any natural hazards and to ensure that the purposes of this chapter are met. These requirements may include, but not be limited to, a revegetation program, a time schedule for completion of the development, flood-control and erosion-control improvements, location of structures, and phasing of development. ((Part) of Ord. passed 9/25/80: prior code 22-35-10)

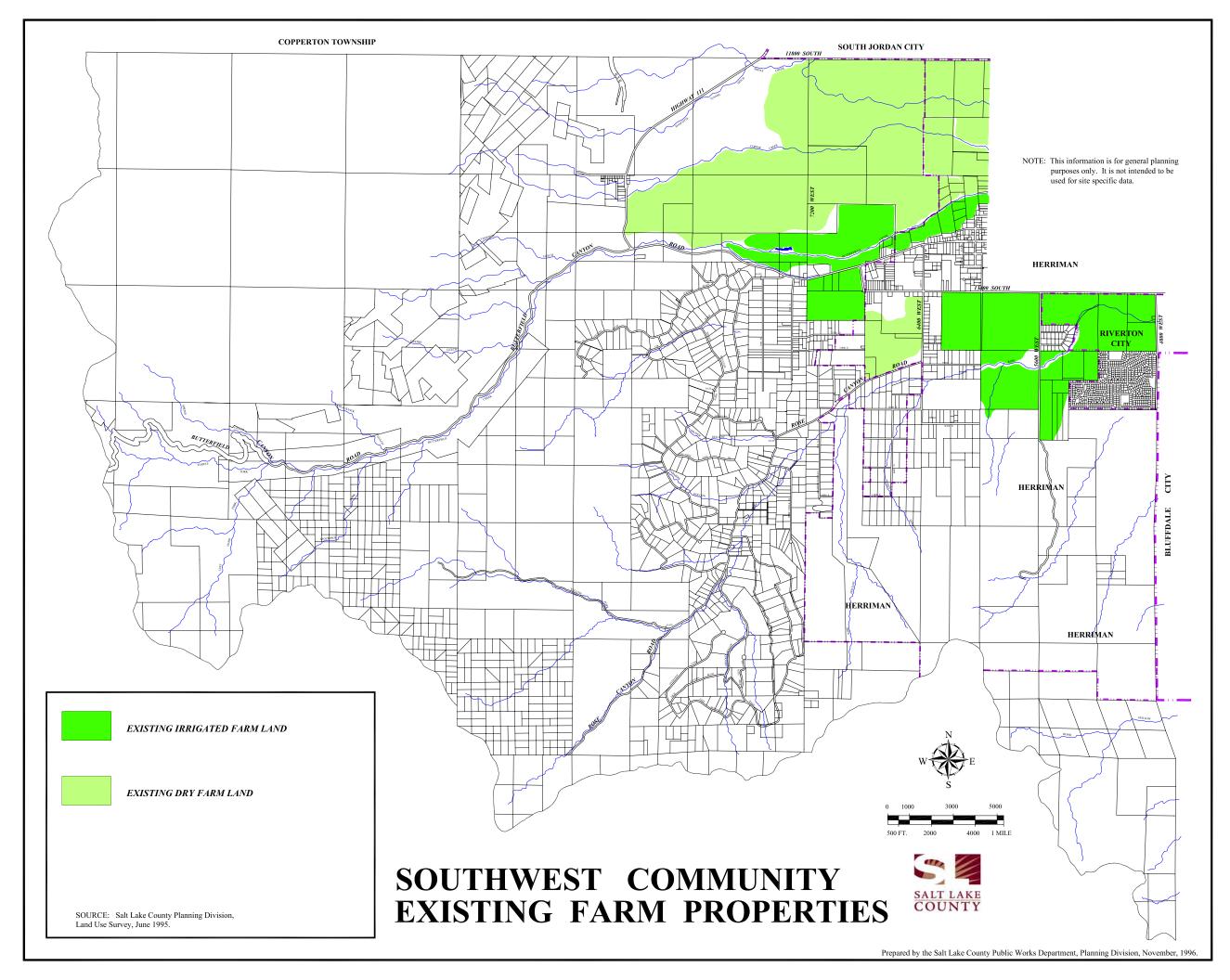
#### 19.72.160 Lots of record.

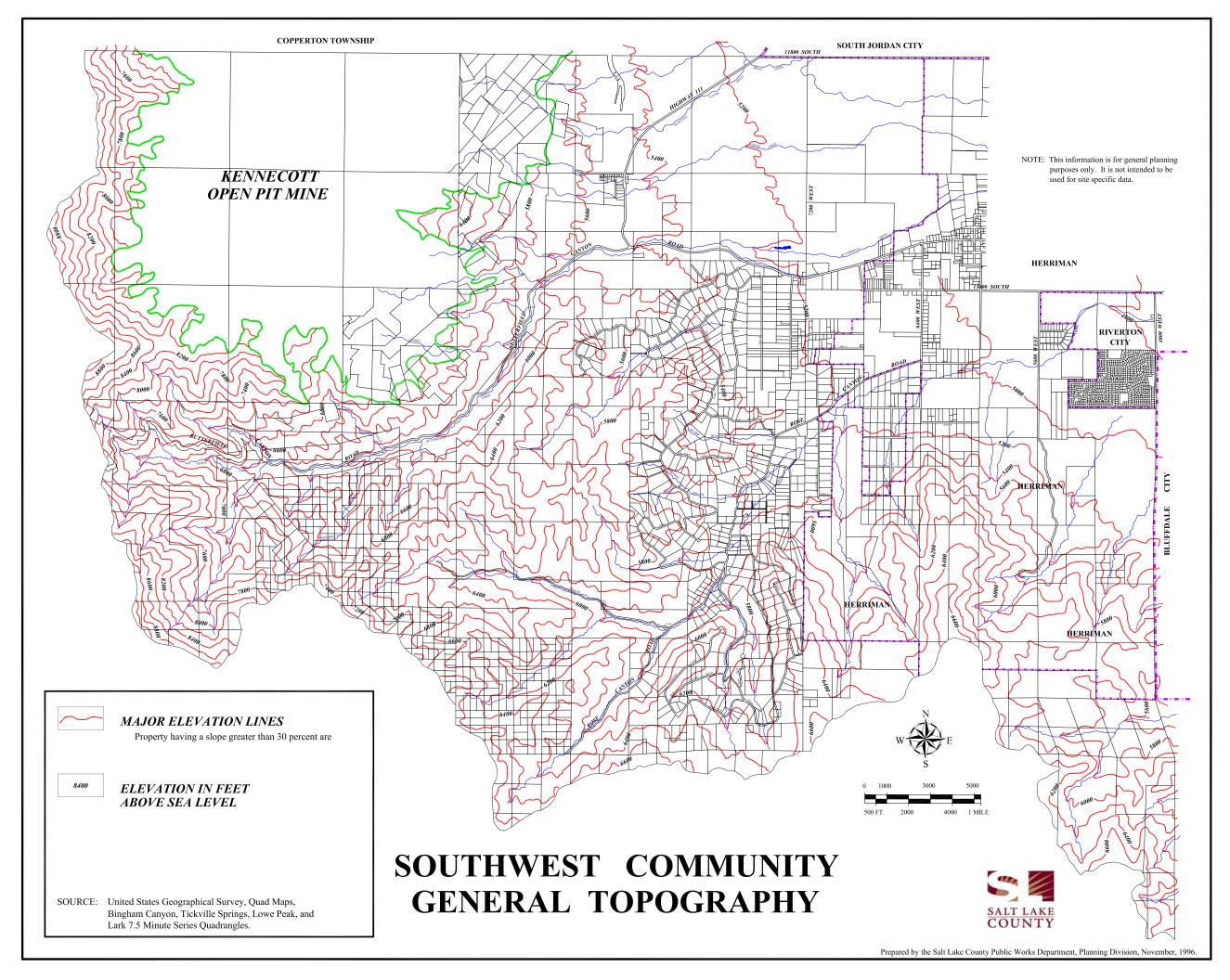
The planning commission may waive any requirements of this chapter for lots of record, lots and plans of subdivisions which were approved by the planning commission prior to the enactment of the ordinance from which this section derives, if such waiver would not be injurious to health, safety and the general public welfare of the inhabitants of the county and is consistent with the purpose of this chapter. (Ord. 966 5, 1986: (part) of Ord. passed 9/25/80: prior code 22-35-11)

#### 19.72.170 Bonds for improvements.

Bonds for improvements required under this chapter shall be subject to the provisions of the Salt Lake County subdivision ordinance set out at Title 18 of this code, and Section 19.02.110 of this title. ((Part) of Ord. passed 9/25/80: prior code 22-35-12)









## **APPENDIX F**

## **Residential Open Space Subdivision Overlay**

The following sample ordinances for single family residential is included as an appendix to illustrate how residential open space subdivision development could be incorporated into the Salt Lake County Zoning Ordinance and Subdivision Ordinance.

The contemporary approach to cluster subdivision development is quite simple. Clustering allows the developer to develop lots smaller than those specified in the zoning ordinance, provided the land saved is reserved for permanent common use, usually in the form of open space. The open space subdivision is often equated with the Planned Unit Development (PUD), which also employs a cluster site design, but PUD is a much broader concept. The PUD involves mixed uses and relaxed public improvement standards in return for better design. The open space subdivision more closely resembles conventional subdivision practice in that it complies with existing zoning in respect to overall density and use.

The cluster site design allows a more economical use of the site than the conventional subdivision would. In order to yield the total number of lots permitted per acre, the conventional subdivision would have to cover the entire site with building lots. Most of the time this is not possible, since some portion of any given parcel of land will usually be unsuited for building. Clustering, however, allows a developer the maximum effective density.

In addition to its potential as a cost effective concept, clustering is also an environmentally sound form of site design. The well-planned open space design concentrates dwelling units on the most buildable portion of the tract and preserves natural drainage systems, open space, and other significant natural features of a site. Energy is saved at the construction phase of the cluster development by the reduction of street lengths and utility installations. Later savings in energy can be realized in street maintenance, electricity, water and sewer service, and in provision of services like garbage collection.

General Provisions for open space subdivisions are usually found in the supplementary section to the district regulations, and in some cases as separate chapters in the zoning ordinance. In general, the provisions always include the following items;

- A statement of purpose;
- A provision permitting transfer of densities within the subdivision;
- Review criteria;
- Identification of districts where the cluster option is allowed;
- Minimum size requirements; and,
- Open space requirements.

Today, many communities permit cluster subdivisions. The key for successful implementation in Salt Lake County will be to make it attractive to developers, insure high standards, and create an efficient review process.