

9. Rural Zone

The Rural Zone includes areas within the College District where the topography and vegetation are not suitable for a concentrated center and neighborhood development. The intent is that the Rural Zone be developed with the following characteristics:

- Due to the topography and vegetation and the distance to centers the density of the Rural Zone will be low, averaging 1 unit per 5 acres.
- 2) Like other areas of the District, the Rural Zone is to be clustered, to the extent possible, in a low-density area. Where possible, dwelling units will be clustered loosely around central amenities like equestrian facilities, dude ranches, retreats or a country store.
- Homes that are not in clusters will be at lower densities with the size of lots determined by the characteristics of the land.



View of Vista Ocasa neighborhood with Santa Maria de la Paz and the Community College in the distance

10. Existing Neighborhoods

There are several existing neighborhoods in the District which are shown on the Land Use Zoning Map, including the Valle Lindo/Vista del Monte neighborhood, the Vista Ocasa neighborhood and the west Arroyo Hondo neighborhood. Over 425 lots with 290 residences exist in these areas, platted either as conventional subdivisions or small land divisions. There are also a number of small parcels, most less than 40 acres in size, which could be developed in the future. The relationship of these neighborhoods to the planned new development and further development within these neighborhoods are concerns of the Plan.

THE INTENT OF THE PLAN IS THAT THESE AREAS DEVELOP OR EVOLVE WITH THE FOLLOWING CHARACTERISTICS:

- 1) The existing hydrologic zoning and residential options will continue to apply within existing neighborhoods; existing development approvals will be honored.
- 2) New development and redevelopment will incorporate connections to New Community and Neighborhood Centers and neighborhoods. These connections will include open space corridors, parks and trails and road locations in conformance with the District Plan, with local or connector roads to improve service or emergency access.
- Detailed neighborhood planning will continue to provide for the specific needs and opportunities of each area, especially delivery of public services, access issues, buffers and trails.
- 4) Infrastructure and service planning for the District—schools, fire, police, water and sewer, parks and recreation—will consider the needs and access issues of each existing neighborhood.
- 5) Village development may be applied in these areas in the future. An 18 month grace period for proposed amendments to the Land Use Zoning Map to include these neighborhoods into village area zones is proposed.

11. Open Space and Buffers

The open space areas delineated on the Land Use Zoning Map include Arroyos and Mountains as established on the Land Systems Map, as well as parks and fringe open space areas that have already been designated on preliminary master plans and plats. The description of the Open Space Elements and Intent are included in the Open Space Plan.

Buffers are areas of open space or land use and density transition that separate or transition between existing residential neighborhoods and future village development areas. Buffers and setbacks also occur along I-25, SR 14 and Richards Avenue. Buffers are illustrated on the Land Use Zoning Map and described in the Open Space Plan section.

12. Ranching Uses

Currently much of the land in the District is used for agriculture and ranching. It is the intent of the Plan to use the following methods to protect the Rancho Viejo ranch and other ranches within the District until such lands are proposed for development:

- Phase development of Village Zones, neighborhoods, rural areas, roads, trails and railroad extensions within the District to preserve and facilitate the efficient operation of existing ranches in and adjacent to the District.
- 2) Allow development of rural home sites and accessory structures for ranch uses on large lots of not less than 500 acres, developed on domestic and agricultural wells.

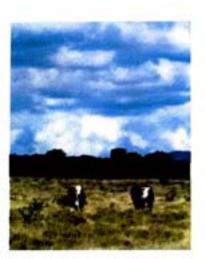
13. School Sites

Sites for 16 schools have been identified on the Land Use Zoning Map. These sites have been evenly spaced across the District to place school in close proximity to all of the higher density Village Zones. The exact location and phasing of schools will be determined as individual neighborhood plans are developed. The first school site has been identified and reserved in Windmill Ridge at Rancho Viejo. A more detailed description of school issues is in the Schools section of the Community Services and Facilities Plan.

2. THE OPEN SPACE PLAN

A. OPEN SPACE LAND USE

Open space within the District is to be a continuous system of natural and developed spaces that include arroyo corridors, mountains, natural hillsides, buffers between development areas, open corridors along roads, parks, play fields and plazas. New development within the District will generally provide 50% of the development area in open space. It is estimated that when all of the natural and developed open space elements are combined the District open space system will include over 50% of the total land area and exceed 8,500 acres.



THE OPEN SPACE PLAN WILL BE IMPLEMENTED USING THE FOLLOWING METHODS:

- The District ordinance will provide:
 - detailed definitions, criteria and requirements for open space elements;
 - a process as part of individual project development review to use site specific information to plan location, scale and requirements for the open space elements in accordance with the principles of the District Plan;
 - c. options for reducing open space obligations for those properties that have over 50% of their land in natural open space. Options might include acquisition of the additional open space by landowners that need open space credit or variances of open space requirements.
 - d. options to meet open space obligations for properties that should have lower open space in order to meet the higher density development objectives of the District Plan. The options may include cash-in-lieu payments or acquisition of open space credits for an equal area of open space from properties with large areas of natural open space.
- Creation of an entity within the District to manage improvements and maintenance of the District open space.
- 3) The Land Use Zoning Map does not show all of the 50% open space. In addition, to meet the 50% requirement, property owners may dedicate unfenced private open space on individual lots adjacent to mapped public open space, parks or trails; archaeological easements: trails and trailheads; parks and plazas; and buffers or setbacks from highways or roads and neighborhoods meeting the principles of the District Plan.

B. OPEN SPACE ELEMENTS



The open space system for the Santa Fe Community College District is to be comprised of the following elements.

NARROYO CORRIDORS AND NATURAL DRAINAGEWAYS are to remain in open space because of the role they play as drainage control areas, aquifer recharge areas, wildlife, view and trails corridors. Arroyo Corridors include the flat bottom areas that parallel arroyos. At a minimum arroyo corridors will include the area within the 100-year flood plain and a 50 foot setback from the 100-year flood plain, considered as aquifer recharge channels.

2) IMPORTANT WILDLIFE HABITAT AND CORRIDORS are to be protected within the District because of the role they play in the life cycle and maintenance of a diverse wildlife population within the District.

3) IMPORTANT CULTURAL RESOURCE AREAS are to be protected within the District because of the role they play in maintaining the record and evidence of human history within the District. Most of the District is shown as having high or moderate archaeological potential on the County Archaeological Districts Map. Archaeological surveys and reports will continue to be submitted by developers.

- 4) PARKS, PLAZAS AND DEVELOPED OPEN SPACE shall be provided in the District for a diverse set of recreational opportunities and as settings for the community social life of the District. Developed open space may include parks, plazas, play fields, tot lots and community gardens and other types of open space use that support community recreation or community agricultural activities.
- S) ROAD AND HIGHWAY SETBACK AREAS are provided to retain the rural open character of the District. Landscape standards for road setbacks will be defined for rural/country sections of the District road network to reduce the visual impact of development.
- 6) BUFFERS THAT SEPARATE AND DEFINE EDGES OF DEVELOPMENT are to be provided to create separation between villages and to existing development.
- 7) TRAIL CORRIDORS will provide trail connections to supplement the transportation system, provide recreational opportunities, and connect the open space system to the community.
- 8) SPECIFIC VISUAL FEATURES are to be protected to maintain the unique visual qualities of the District and the rural character of Santa Fe County.



Remains of the New Mexico Central railroad grade

C. PARKS PLAN

Parks and plazas are an important element of the open space system. They provide a variety of recreational opportunities and a setting for community social life in the District. The Plan provides for a range of parks both in size and function to meet community needs and to take advantage of the terrain opportunities:

- District parks are intended to serve the entire area with major recreational facilities. These would be developed by the County or in conjunction with other large institutions and are intended to provide multi-use play fields, ballfields, hardcourts, and other recreational facilities.
- 2) Community parks are smaller, 3 to 6 acres, and provide active recreational facilities—open play fields, walks, seating, playgrounds—for Village Zones and Existing Neighborhoods.
- 3) Neighborhood or Mini parks are quiet activity areas to be located within residential development throughout the District. These parks can be one acre or less in size and provide such amenities as tot lots, walks and seating areas.
- 4) Passive parks can be an appropriate alternative to community parks when adequate opportunities for active recreational facilities have been provided. These parks include small developed areas of walks and seating designed within natural areas.
- Plazas are small open community gathering areas developed as focal points in Neighborhood and New Community Centers.

The Plan intends that active recreational facilities and parks be shared



Community event on Village I plaza

- g. Develop a strategy to maintain and improve Dinosaur Trail.
- h. Run a transportation model analysis to show how well the proposed road network hierarchy and circulation plans will handle traffic from future development.
- Preservation/design of unique roadway corridors: State Road 14/Turquoise Trail Scenic Byway and Richards Avenue
 - a. Design special gateway-type entrances for the three key entrances into the District - Richards Avenue, the future entrance off of SR 14 near the southern boundary of the District, and the future entrance at or near the NM 599/SR 14 intersection
 - b. Give special design attention to SR 14 and Richards Avenue through wide setbacks, berms and other techniques
 - c. Provide new road construction standards as well as standards for reconstruction of roads that were in place when the District plan took effect.

4. THE INFRASTRUCTURE PLAN

The Community College District is located where infrastructure for water, wastewater, roads and transit is already in place and can be planned for efficient service in the future. Detailed planning and capital improvements programming will be an ongoing activity in order to successfully implement the District Plan. Figure 6, the Utilities Map, shows the location of existing roads, railroad and utilities in the District.

A. WATER

Water Planning

The District Plan benefits water planning for central Santa Fe County by establishing goals for better conservation and watershed management and a sustainable water supply. It proposes to manage water supply, run-off and waste water in a manner that reduces water use, protects the aquifer and manages drainage for irrigation and erosion control. It provides that development outside of the existing neighborhoods will be built using coordinated community water and wastewater systems.

The District will be supplied with imported water and groundwater in order to provide a diversified, and thus more dependable, long range supply. The Plan limits development on domestic, commercial and industrial wells in order to protect the quality of the aquifer and its use for storage and recharge for the future. This protects an area that can accommodate much of the projected growth in the region from large lot development. It also provides the opportunity to manage the watershed to protect the District and neighboring communities such as La Cienega before development happens.

The first phases of development in the District have water through the County and City water systems. Later phases will rely on implementation of the District water principles and regional water planning. Preliminary water use records show that village development in the District averages .18 ac ft/yr per household, well below the County conservation standard of .25 ac ft/yr. With implementation of the pro-



posed additional strategies for conservation and use, the level of water use can be maintained or possibly lowered.

The County benchmark will continue to be 100 year water availability, with a goal of long term sustainability. Article III, Section 11 of the County Land Use Code allows developments which import water to have density determined by meeting criteria for traffic generation, energy consumption, provision of public facilities and services and compatibility with adjoining residences. Developments in the District will meet these criteria based on the principles of this Plan. Developments will continue to provide water budgets which will address water use and availability and demonstrate use of techniques to lower consumption.

Balancing water taken out of the aquifer with artificial recharge to lower (minimize) consumptive use of water from all sources is integral to sustainability. Strategies to lower consumption include: enforcing the County's line extension and water allocation policies, to be adjusted for actual use as conservation improves; capture and use of gray water and rain water for irrigation; and use of catchments and infiltration basins for run-off from impervious surfaces to irrigate and to protect habitat and prevent erosion. Some of these strategies are not always stable sources of supply or recharge, however, because they are dependent on rainfall. Treated waste water reuse is a more dependable long range strategy. Aquifer storage and recovery of unused imported water is another strategy to improve the efficiency of water use. Relocating large production sites and strategic placement of recharge sites within the District would protect the downstream community of La Cienega.

Treated waste water will be used for local beneficial use, surface and subsurface recharge of the aquifer to gain potential return flows and to minimize the potential long term effects of pumping on aquifers and downstream communities. Multiple waste water systems will be allowed in the District under County control in order to provide for effective use and reuse of the limited water supplies.

Water System

Within the District, water service is provided by the Santa Fe County Water Utility System, Sangre de Cristo (City of Santa Fe), Valle Vista, and domestic wells. Santa Fe County is the largest provider and utilizes imported water through a wheeling agreement with the City of Santa Fe. Main trunk lines, primarily 12° and 16° lines and storage facilities are in place to provide needed infrastructure for portions of the District which may develop over the next 20 years. The initial phase of District development is entirely within the County service area. Sangre de Cristo currently supplies Santa Fe Community College, Santa Maria de la Paz Church, The Institute of American Indian Arts (IAIA), Turquoise Trail Business park, and will serve additional Thornburg properties along SR 14. Domestic wells provide water supply to all other residences and businesses within the District.

The Valle Vista water system serves the Valle Vista subdivision west of SR 14 and south of NM 599. The County has executed an agreement to purchase the Valle Vista water system with the intent to connect and integrate that system with the County's water utility. That purchase and subsequent connection is subject to approval by the NM Public Regulatory Commission.

Water Plan Actions

- Initiate studies to research and establish techniques to manage stormwater for flood control, water harvesting, habitat enhancement and aquifer recharge.
- Initiate studies to identify locations for aquifer storage and recovery and aquifer recharge programs.
- Work with Santa Fe County to pursue additional sources of imported water.
- Take delivery of unused San Juan Chama contract water and use for aquifer storage.
- S) Study reduction of State Penitentiary well pumping or movement of point of diversion of the associated water rights and conjunctive use with Santa Fe County Imported water.
- 6) Review and revise current County water conservation regulations as required to achieve District principles.

B. WASTEWATER

Wastewater Systems

As with the water systems, there is a mix of waste water treatment facilities plus septic systems in the District. The largest facility, treating 150,000 gallons per day and designed to treat 375,000 gallons per day, is the State Penitentiary wastewater facility. While technically just west of the District Boundary, this facility provides service to the Santa Fe County Detention Center and to the 60-acre County Economic Business Park located on state lands. Current proposals include the extension of a force main north along SR 14 to the Thornburg properties. Treated effluent is currently used for agricultural land application. The County intends to investigate and implement enhanced treatment to expand treated effluent use alternatives.

Rancho Viejo has constructed an 80,000-gallon-per-day tertiary treatment facility west of Avenida del Sur to serve development on Rancho Viejo and the IAIA campus. It is expected that this plant will expand as required to treat future flows. A wholly owned subsidiary of Rancho Viejo, Ranchland Utility Company, owns the plant and the operations and rates are regulated by the Public Regulatory Commission. Santa Fe County manages the facility under an annual contract. As the plant is in a start-up phase, effluent is disposed of by means of spray irrigation at the plant site, but the owners intend to modify the discharge permit for project irrigation and aquifer recharge.

Santa Fe Community College owns and operates a 30,000-gallon-per-day tertiary plant on the college property. Effluent is used for on-site irrigation.

Valle Vista wastewater system provides service solely to the Valle Vista subdivision located west of the District. The County has executed an agreement to purchase this wastewater system.

Turquoise Trail Business Park owns and operates a package plant, which services the park of 21 industrial lots.

Wastewater Plan Actions

- 1) Investigate recharge of State Penitentiary effluent.
- Create new programs and financing options to convert existing septic users to a wastewater collection system.
- Work with NMED to develop water quality regulations for recharge and aquifer injection wells.
- 4) Develop a District master plan for wastewater collection and treatment which includes technically proven alternative sustainable approaches which are consistent with District principles of effluent reuse and recharge.
- 5) Initiate studies to determine the feasibility of installing dry sewer lines in subdivisions initially serviced by septic systems, which may connect to a wastewater system in the future.

C. DRAINAGE PLAN

As the proposed development in the Community College District progresses, the increase in storm water runoff will impact the hydrologic regime of each water shed and arroyo within the District. In order to adequately manage storm water runoff in the Community College District both quality and quantity of runoff is to be addressed. The available management options are generally called best management practices, which can be classified into two broad categories—traditional and alternative.

Traditional management practices are highly engineered structural methods that use concrete, rip rap, soil cement and other hard channel lining or piping materials. Traditional practices often result in large-scale projects and focus on storm water management at the outfall locations. Alternative storm water management practices are often non structural, with a more creative approach that is more biologically complex and focus on storm water management at or near the source. Some structural components are still involved. This can include use of porous paving, strategic vegetative planting, contour grading, drainage across lawn areas, rain barrels, cisterns, vegetated swales, back yard depressions, infiltration trenches, shallow topographic depressions and reduced roadway and driveway drainage structures. This District Plan emphasizes alternative management practices.

Santa Fe and ultimately the College District will be required to manage water quality in surface water runoff. Under Phase II of the u.s. EPA Storm water Management Rules (Oct.29, 1999), in which Santa Fe County is identified as a designated area requiring storm water permits, storm water from construction and urbanized areas will have to be permitted for water quality control.

Drainage Plan Actions

- Develop an information and education program on the hydrologic regime in the District and alternative surface water management practices for developers, engineers, government agencies and the general public.
- Develop the varying levels of operations, maintenance and monitoring, and public and private cooperation required to implement alternative surface water management practices.

3. Convene a working group of land owners, local government representatives, public interest representatives and consultants in drainage engineering, hydrologic and hydraulic modeling, landscape architecture, urban planning and engineering and communication to prepare more specific balanced environmental, social and economics objectives for storm water management in the District.

D. ELECTRICAL

Electrical System

The electric system serving the District is owned and operated by the public service company of New Mexico (PNIM). PNM currently operates 2 substations near the District; the Zia substation on Richards Avenue, and the Beckner substation east of the Cerrillos / I-25 Interchange. The District is served by two 115 kv transmission lines, linking the Zia substation with Eldorado and the Beckner substation to SR 14 and south. Currently the Zia substation extends south on Richards and Avenida del Sur to SR 14. A portion of this line along Richards and Avenida del Sur has been placed underground. Additional distribution lines could originate from the Beckner substation and service 500 – 600 additional customers.

PNM indicates future substations in the District will be necessary, serviced by the 2 overhead 115 kv transmission lines. A third 115 kv line linking the existing two may be required in the southern portion of the District for full development.

Electric Plan Actions

- Develop setback standards for electrical facilities to ensure public health and safety.
- Develop design standards for substations and other electrical facilities.

E. NATURAL GAS

Natural Gas System

Natural gas service is provided by PNM. The College District is well suited for current and future service. PNM maintains main lines located in or near the District. The first, an 8' steel distribution line, begins at the Airport Regulation Station at Airport Rd. and Cerrillos Rd., extends south on Richards Avenue, then through Rancho Viejo to Eldorado. This line is currently certified for a maximum operating pressure of 60 psig and could supply an additional 200 homes before the need to uprate to a higher pressure.

If uprated to 200 psig, an additional 8000 customers could be added. The uprating would require additional regulator stations and mainline extensions.

To facilitate full buildout of the District, the existing 12° transmission line in I-25 which serves the Santa Fe and Los Alamos areas would require an 8° – 10° steel mainline (200 psig) extension from that line to the existing 8° line, plus additional distribution lines.

Other 6" plastic lines exist in SR 14 and provide current service to the



Land System Regulatory Definitions:

MOUNTAINS - Mountain open space begins at the 15% slope line at the base of the mountains and extend to the top.

FLATLAND/GRASSLANDS - Flatland/grasslands are open level areas that are elevated above arroyos and covered by grass and sparse tree cover. The edges of these areas are delineated by sharp breaks in the topography that slope down to the arroyo corridors. Tree edges often correspond to the topographic breaks. In the absence of breaks in topography the edge of Flatland/grasslands will occur along the line where slopes exceed 10%.

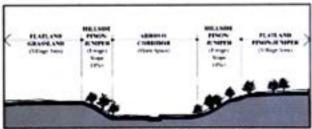
FLATLAND/PIÑON JUNIPER - Flatland/ Piñon Juniper are open level areas that are elevated above arroyos and covered by Piñon and Juniper. The

arroyos and covered by Piñon and Juniper. The edges of these areas are delineated by sharp breaks in the topography that slope down to the arroyo corridors. Tree edges often correspond to the topographic breaks. In the absence of breaks in topography the edge of Flatland/Piñon Juniper will occur along the line where slones exceed 10%.

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Land System - Grassland Prototypical Cross Section

HILLSIDE/PIÑON JUNIPER - The hillsides/piñon juniper land type includes the wooded hillsides that transition between the Flatland areas and the arroyo corridor edges. They are delineated on the uphill side by the slope break or the 10% slope line that establishes the edge of the Flatland land type. The downhill side is defined by the topographic break or 10% slope line that delineates the arroyo corridor.



Land System - Pinon/Juniper Prototypical Cross Section

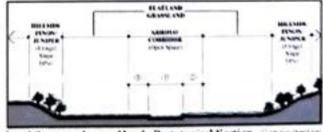
HILLSIDES/GRASSLAND - The hillsides/grass-

land land type includes the grassy hillsides that slope between the Flatland areas and the arroyo corridor edges. They are delineated on the uphill side by the slope break or the 10% slope line that establishes the edge of the Flatland. The downhill side is defined by the topographic break or the 10 % slope line that delineates the arroyo corridor.

ARROYO CORRIDORS - Arroyo corridors are arroyos and the adjacent level areas that together form the level bottoms of the major drainage ways that pass through the District. Arroyo corridors extend on both sides of arroyos to the point that there is a distinct slope break between the arroyo corridor and the adjacent hillside. If no distinct slope break exists the ar-

royo corridor shall be delineated by the 5% slope line at the base of the adjacent hillsides.

ARROYO HONDO CORRIDOR – The Arroyo Hondo is a special circumstance because of its broad width and rolling terrain without a clear slope break between the arroyo bottom and the adjacent hillsides. The arroyo corridor in this area extends a minimum of 50' out from the hundred year flood plain line.



Land System - Arroyo Hondo Prototypical Section