

A scenic view of a tree-lined path with a field of colorful wildflowers in the foreground. The path is lined with large, leafy trees that create a canopy effect. The foreground is filled with a dense field of small, colorful wildflowers in shades of purple, blue, and orange. The overall atmosphere is peaceful and natural.

Camino Real

# Trails and Parks Development Standards

City of Niederwald, Hays County, Texas

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## ***Trail Standards***

A goal of Walton Development and Management is to create communities that incorporate principles of sustainability. Chief among these is to provide mobility options. Communities that are conducive to walking or bicycling reduce a family's reliance on automobiles for meeting their daily mobility needs. Designing a community that encourages transportation alternatives is the best path toward meeting this goal.

The ability to walk around the community, be it for purpose, for pleasure, or for exercise, is based on the choice of the individual and the infrastructure to make that choice an easier option. This leads to greater health and connectivity within the community.

Like the roadways for vehicles, the network of trails threads together the community, neighborhood by neighborhood, connecting origins with destinations. Origins consist of the single-family and multifamily neighborhoods of varying densities and home-types within the community. Destinations include the existing elementary school at Las Brisas Boulevard and Rohde Road, the proposed elementary school, combination elementary and middle school, high school, commercial/mixed-use area, neighborhood commercial, open space and parks.

The types of trails vary with the intent of their purpose and in the hierarchy of their importance. Trails adjacent to roadways serve primarily as expedient routes to meet daily needs, such as waking to school, to the store, to a community meeting, or even to work. Trails within open space serve as the "scenic route", for a less urbanized experience for the primary purposes of enjoyment of the country setting and for exercise.

More specifically, there are four types of pedestrian routes within the community:

### **1. Trails Adjacent to Major Streets**

These are the primary pedestrian routes within the community and vary in character based on their location. They provides the main linkages and most direct routes from the trip origins within the residential neighborhoods to the destinations of the schools, commercial, and civic uses. They are located parallel to the major roads in the community on one or both sides of the travel lanes, but are enhanced to provide a safer and more enjoyable experience. Instead of a concrete sidewalk adjacent to the curb of a busy road they are separated from the street, surfaced with either concrete or decomposed granite. The trails lie within parkways of varying widths, as well as varying gradient and varying elevation relative to the street. Connections are provided to the adjacent residential neighborhoods at intermittent points along the routes.

### **2. Trails Within Open Space**

This network of trails is the secondary level of pedestrian routes, intended to provide a different experience from those along the major streets. Instead, these provide the opportunity to enjoy the natural open space amenities and are more for exercise and

enjoyment than getting between the origins and destinations within the community. These may be surfaced in decomposed granite and link together the access points from the neighborhoods to the open space at trailheads. They also provide connections to activity destinations within the open space.

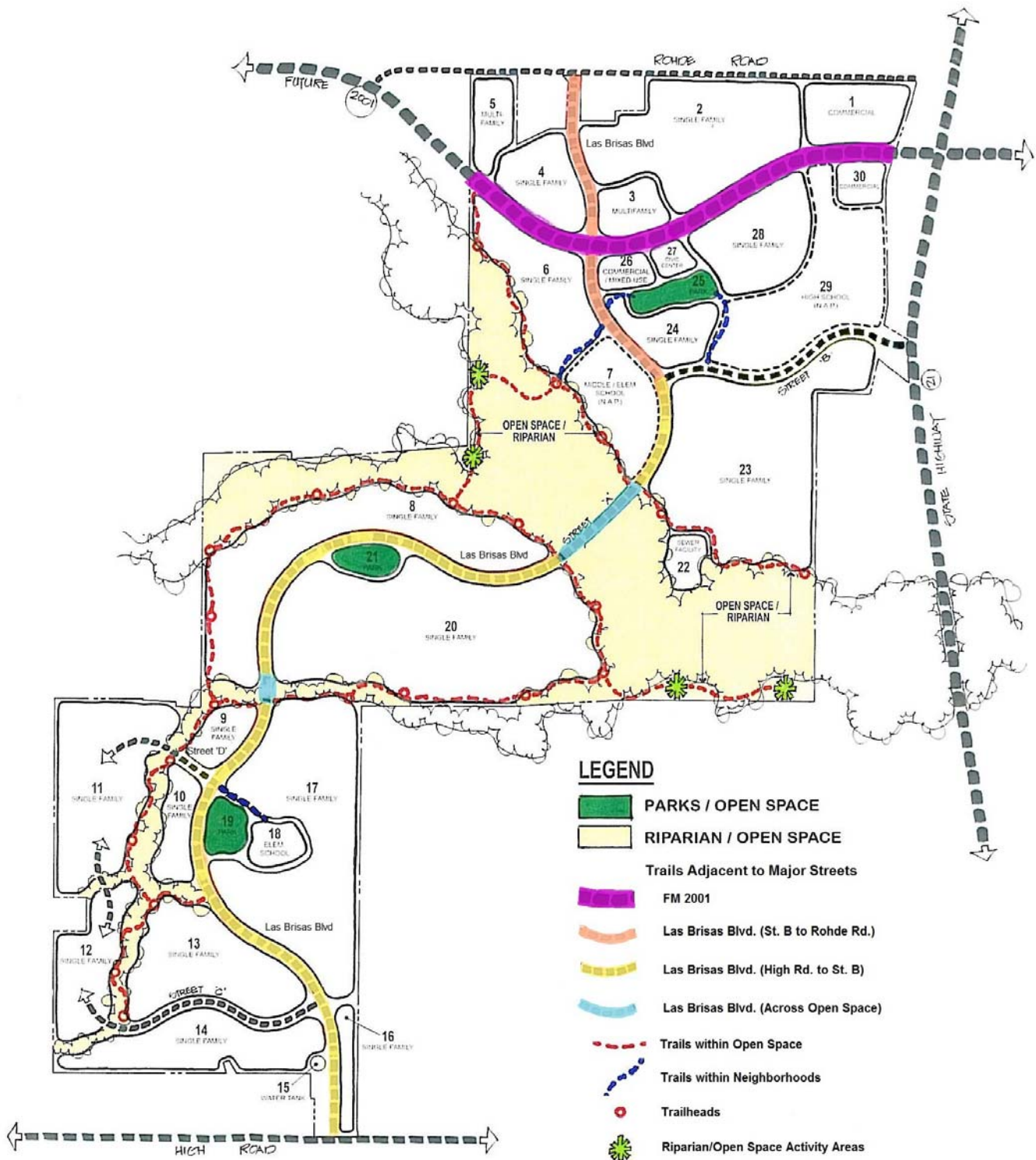
### **3. Trails Within Neighborhoods**

These trails are the tertiary level of pedestrian routes. They are adjunct to those within open space and adjacent to major streets in that they provide missing links or shortcuts in the pedestrian network to ensure direct linkages and connections between open space and destinations within the community. These trails may be surfaced either in concrete or decomposed granite and may be aligned adjacent to interior residential streets or between or behind homes.

### **4. Sidewalks Adjacent to Streets**

This is the most prevalent, but lowest level of pedestrian routes in the community. All residential streets will have non-contiguous concrete sidewalks to provide the initial connection between the individual homes within neighborhoods to the primary, secondary, and tertiary levels of the pedestrian routes.

Trail locations are depicted in **Figure 1 – Trails and Parks Master Plan**. Two of these types of trails, Trails Adjacent to Major Streets and Trails Within Open Space, will be described in greater detail herein. Trails Within Neighborhoods and Sidewalks Adjacent to Streets will be determined during final design and are dependent on the ultimate plan for each neighborhood.



**Figure 1 – Trails and Parks Master Plan**

# 1. Trails Adjacent to Major Streets

## 1. A. FM 2001

FM 2001 is the primary route connecting traffic from Interstate 35 through the community to Niederwald and State Route 21. The standard parkway width will be augmented by an additional variable width adjacent to the right-of-way. The street right-of-way must include 10-foot minimum landscape easements on both sides. Standards for this segment are illustrated by **Figure 2** and shall include:

**Trail Location:** Both sides of street

**Purpose:** Provide connections from the residential in Planning Areas 2, 3, 4, 5, 6, and 28 to the Commercial in Planning Areas 1 and 30, the High School in Planning Area 29, the Commercial/Mixed-Use in Planning Area 26, and the Civic Center in Planning Area 27.

**Trail width:** six (6) feet, each side

**Surface material:** Concrete

**Uses:** Primarily pedestrian. May be utilized as bike path by school children, but bike lanes to be provided adjacent to travel lanes for most bike use.

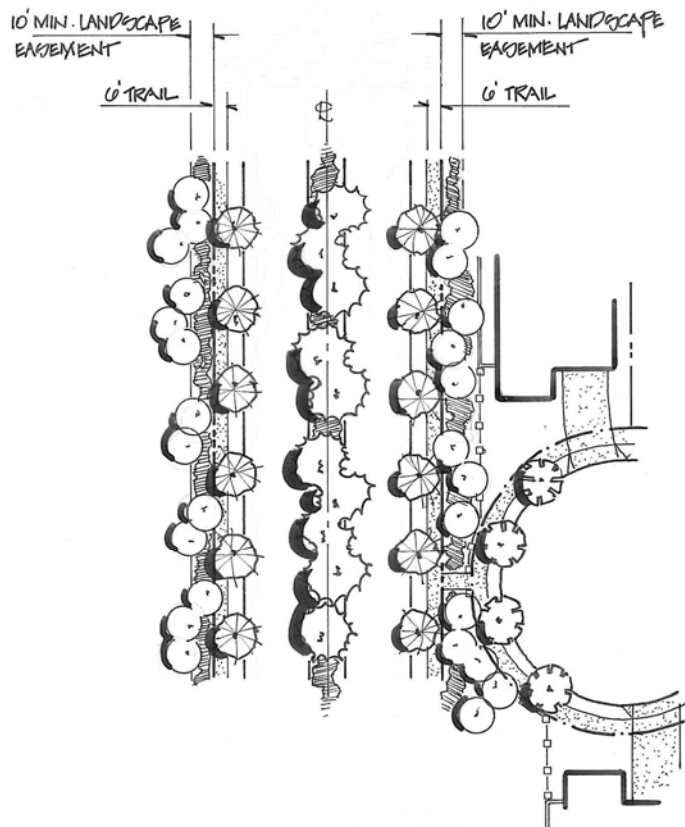
**Character:** More urban

**Trail alignment:** Parallel to curb line

**Trail longitudinal gradient:** match street gradient

**Street Trees:** More formal spacing

**Fencing and Walls:** The most substantial materials, such as brick, stone, and/or block for privacy and sound attenuation, and wrought iron or other metal in areas of visual and pedestrian connections to adjacent planning areas.



**Figure 2 – Trails along FM 2001**

**Connections/Trailheads:** Provide one or more connections to all adjacent planning areas and other trails.

**Signage:** Provide trail name and distance to destinations on signage at connections to all residential areas.

**Miscellaneous:** Subject to state regulations, given FM status



### **1. B. Las Brisas Boulevard (From Street B to Rohde Road)**

Las Brisas Blvd. is the primary street that connects the community together, running from Rohde Road, past the future alignment of FM 2001, across the primary open space, and south to High Road. This primary thoroughfare varies in character as it traverses the community. An existing segment exists by Camino Real Elementary School. The street right-of-way must include 10-foot minimum landscape easements on both sides. Other standards include:

**Trail Location:** Both sides of street

**Purpose:** Provide connections from the residential in Planning Areas 2, 3, 4, 6, 24, and 23 to the Commercial/Mixed-Use in Planning Area 26, the existing Elementary School at Las Brisas Blvd. and Rohde Rd., and the Middle/Elementary School in Planning Area 7.

**Trail width:** six (6) feet, each side

**Surface material:** Concrete

**Uses:** Primarily pedestrian. May be utilized as bike path by school children.

**Character:** This segment connects the most urban elements of the community and shall have a more urban character than other segments of Las Brisas Blvd.

**Trail alignment:** Parallel to curb line

**Trail longitudinal gradient:** match street gradient

**Street Trees:** More formal spacing

**Fencing and Walls:** Brick, stone, and/or block for columns; board-on-board fencing between columns; and wrought iron or other metal in areas of visual and pedestrian connections to adjacent planning areas.

**Connections/Trailheads:** Provide one or more connections to all adjacent planning areas and other trails.

**Signage:** Provide trail name and distance to destinations on signage at connections to all residential areas.

### **1. C. Las Brisas Boulevard (From High Road to Street B)**

Las Brisas Blvd. is the primary street that connects the community together, running from Rohde Road, past the future alignment of FM 2001, across the primary open space, and south to High Road. This primary thoroughfare varies in character as it traverses the community. The street right-of-way must include 15-foot minimum landscape easements on both sides. Other standards include:

**Trail Location:** Both sides of street

**Purpose:** Provide connections from the residential in Planning Areas 23, 8, 9, 10, 13, 14, 16, 17, and 20 to the Parks in Planning Areas 19 and 21, to the Open Space/Riparian areas, and to the Middle/Elementary School in Planning Area 7.

**Trail width:** six (6) feet, each side

**Surface material:** Decomposed Granite



**Uses:** Primarily pedestrian. May be utilized as bike path by school children.

**Character:** This segment connects the more suburban elements of the community and shall have a more relaxed character than other segments of Las Brisas Blvd.

**Trail alignment:** Meandering

**Parkway cross gradient:** Variable from 2 percent to 10 percent. Berms may be incorporated.

**Trail longitudinal gradient:** match street gradient

**Street Trees:** Random spacing with clumps of trees, shrubs and groundcover

**Fencing and Walls:** Brick, stone, and/or block utilized for accent walls and as columns with wood fencing for privacy between columns. Split rail or other open fencing is utilized in areas for visual and pedestrian connections to adjacent planning areas.

**Connections/Trailheads:** Provide one or more connections to all adjacent planning areas and other trails.

**Signage:** Provide trail name and distance to destinations on signage at connections to all residential areas.

#### **1. D. Las Brisas Boulevard (Across Open Space)**

Las Brisas Blvd. is the primary street that connects the community together, running from Rohde Road, past the future alignment of FM 2001, across the primary open space, and south to High Road. This primary thoroughfare varies in character as it traverses the community. Crossing of the open space will consist of embankments, culverts, and/or bridges. Standards for the trails in this segment are illustrated by **Figure 3** and shall consist of the following:

**Trail Location:** Both sides of street

**Purpose:** Provide crossing of open space areas adjacent to Las Brisas Blvd. and provide at-grade and/or grade separated connections to Open Space trails

**Trail width:** six (6) feet, each side

**Surface material:** Decomposed Granite on embankment areas, concrete on bridge or culvert areas.

**Uses:** Primarily pedestrian. May be utilized as bike path by school children.

**Character:** This segment connects the more suburban elements of the community and shall have a more relaxed character than other segments of Las Brisas Blvd.

**Trail alignment:** Adjacent to curb to minimize embankment, culvert, or bridge width

**Trail longitudinal gradient:** match street gradient

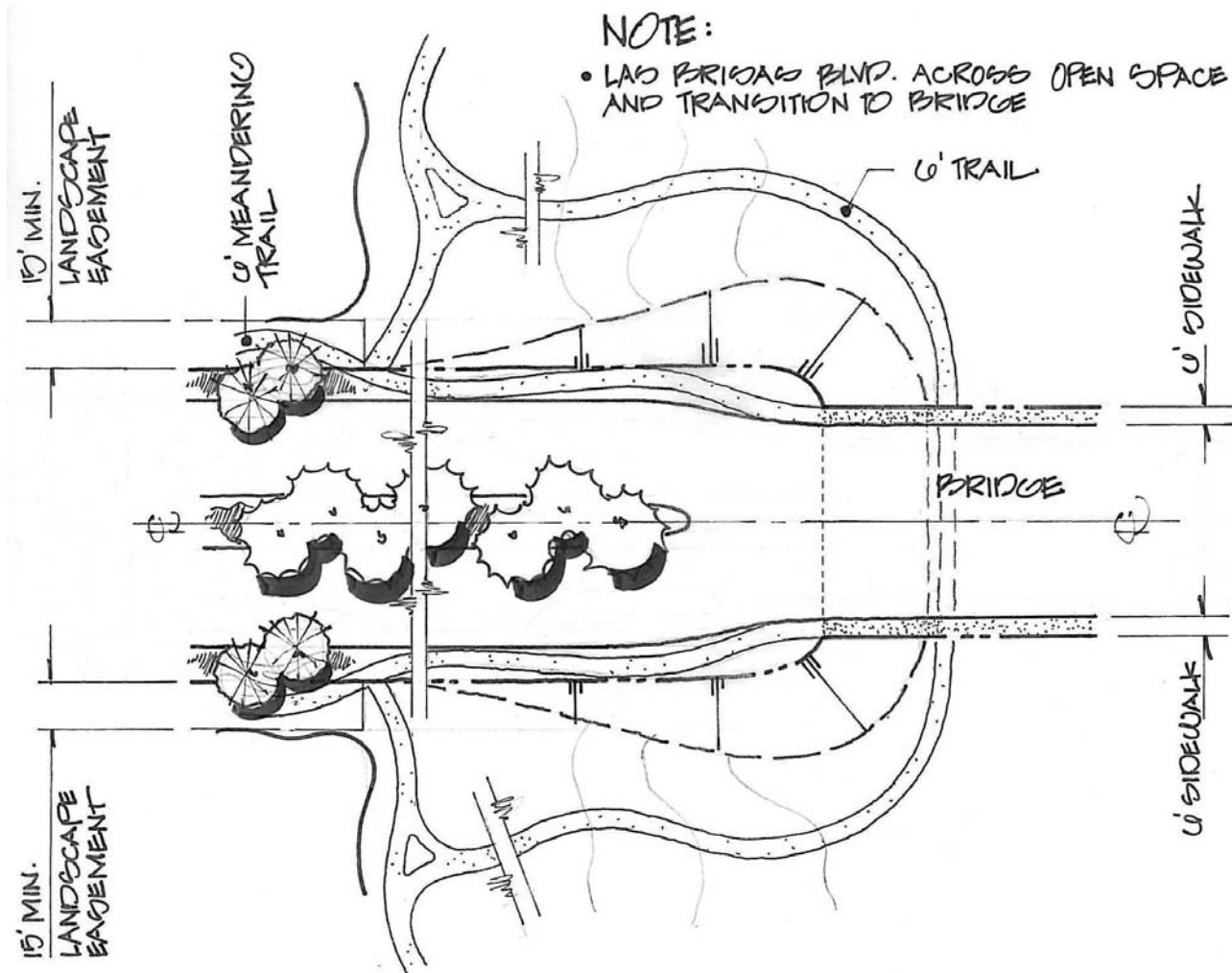
**Street Trees:** Riparian species on embankment areas only

**Fencing and Walls:** none

**Connections/Trailheads:** Provide connections to trails traversing open space areas. Provide signage and other inhibitors to discourage open space trail users from crossing of Las Brisas Blvd. at grade; encourage pedestrians to use grade-separated crossing (within open space, below bridge), or to cross at nearest traffic signal.

**Signage:** Provide trail name and distance to destinations on signage at connections to open space trails.

**Miscellaneous:** A primary goal of the Las Brisas Blvd. crossings of open space is to emphasize the riparian corridors as the dominant elements of the intersection between corridor and road. This shall be achieved by utilizing a subtle crossing of the road, versus having Las Brisas dominate the crossing. Street trees along Las Brisas shall terminate at the development edge. Riparian species of trees, shrubs, and groundcover should carry across the right-of-way.



**Figure 3 – Trails along Las Brisas (Open Space Section)**

## 2. Trails within Open Space

Trails within the Riparian/Open Space areas provide the connections between the built and the natural environment. They also provide access to small open space areas outside the floodplain

that are programmed for passive activities. Standards for the trails in this segment are illustrated by **Figures 4, 5, 6, and 7** and shall consist of the following:

**Trail Location:** Within the Riparian/Open Space area adjacent to the development edge, or across the open space (see **Figure 4**).

**Purpose:** This network of trails is the secondary level of pedestrian travel, intended to provide a different experience from those along the major streets. Instead, these provide the opportunity to enjoy the natural open space amenities and are more for exercise and enjoyment than getting between the origins and destinations within the community.

**Trail width:** six (6) feet

**Surface material:** May be decomposed granite

**Uses:** Primarily pedestrian. May be utilized as bike path by school children.

**Character:** These trails are intended to be more primitive than those adjacent to the major roads, while maintaining similar surfacing.

**Trail alignment:** Meandering

**Parkway cross gradient:** Variable with terrain. Gradient across trail limited to 2 percent to minimize erosion.

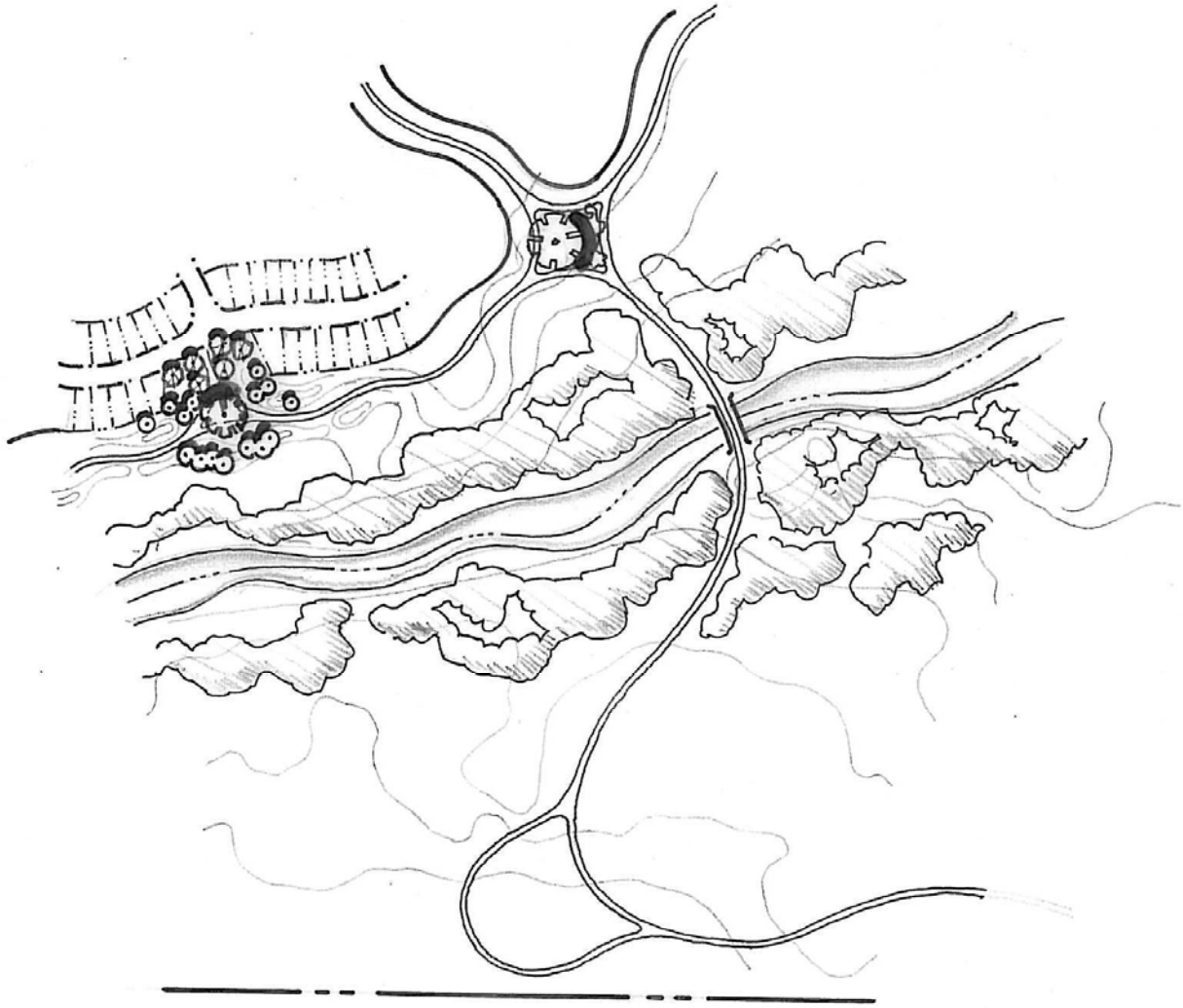
**Trail longitudinal gradient:** Varies with terrain. Steps may be incorporated to reduce erosion in steeper segments.

**Fencing and Walls:** Encourage open fencing along open space edge at rear or side of residential lots.

**Connections/Trailheads:** Provide one or more connections to all adjacent planning areas and other trails. See **Figures 5, 6, and 7** for variations. Trailheads may occur with greater frequency than as depicted in **Figure 1**. Connections to schools shall be coordinated with the school district to meet the district's requirements for fencing and access.

**Signage:** Provide trail name, street name, and distance to destinations on signage at connections to all residential areas and Major Street trails. Provide a distinctive tree species at connections to residential planning areas to serve as a visual identifier for access points. This is to assist in landmarking the trails for users and therefore provide an extra level of safety and comfort in using the open space trails.

**Miscellaneous:** Crossings of flow lines within the Riparian/Open Space areas shall be achieved by a simple wooden bridge spanning the normal flows within the open space, or by a culvert placed within the flow line to convey normal flows under the decomposed granite trail placed above the culvert and out of the flow line.



**Figure 4 – Trails across Riparian/Open Space**

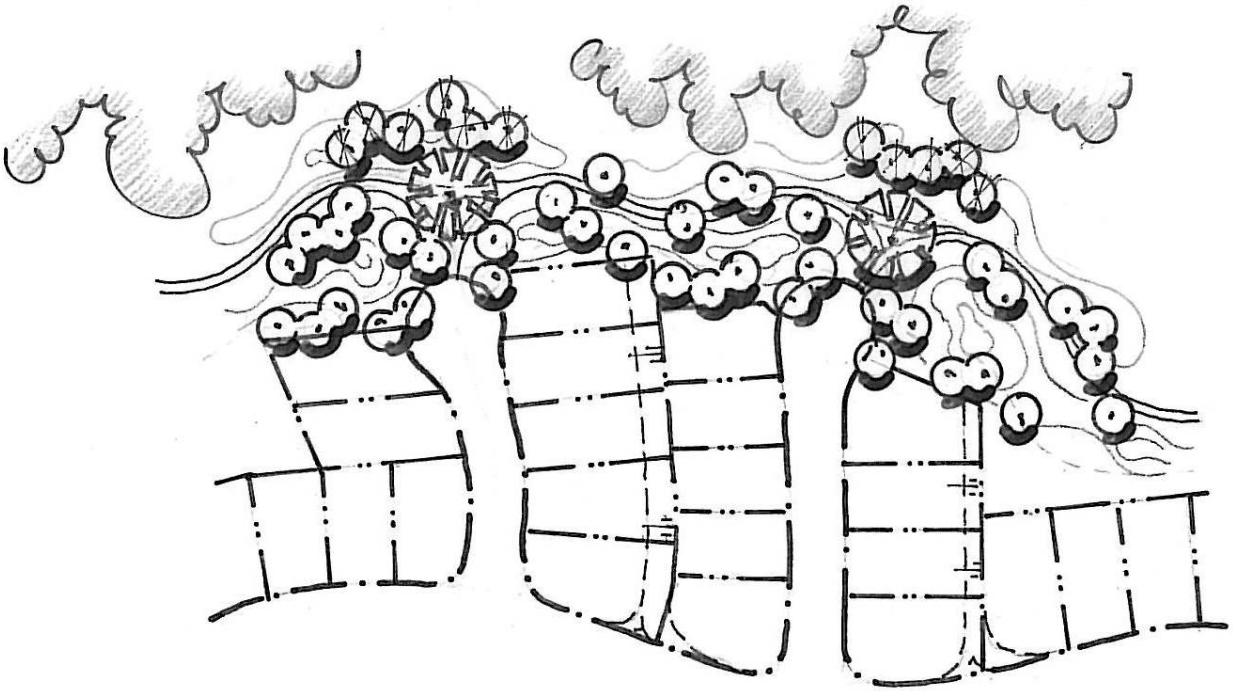


Figure 5 – Trails Connections from Cul-de-sacs

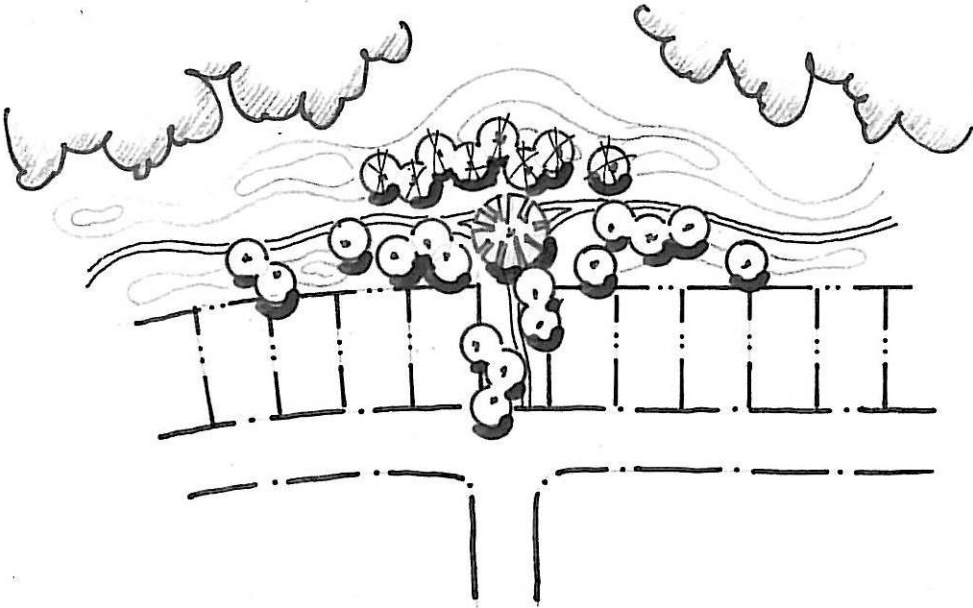
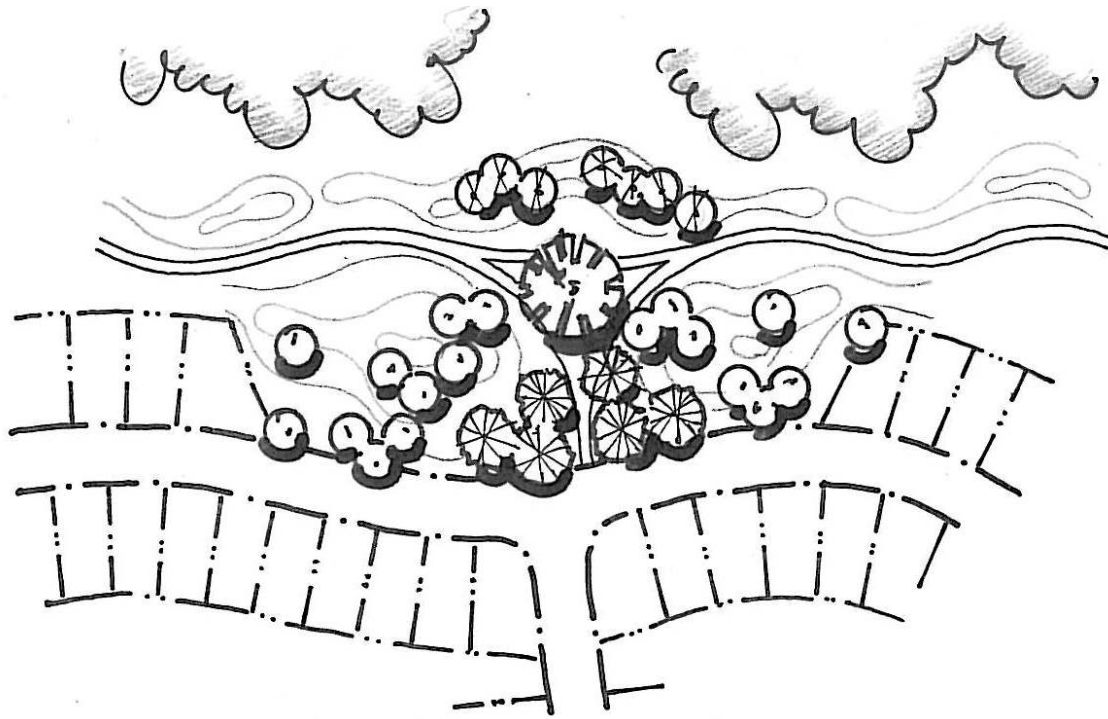


Figure 6 – Trail Connection between Lots





**Figure 7 – Trail Connection from Singly-loaded Street**

## ***Park Standards***

Adequate parkland programmed for a variety of uses in close proximity to the users is a hallmark of a successful and sustainable community.

Similar to the trails that connect them to their users, the types of parks vary with the intent of their purpose and in the location within the community.

To meet the needs of residents, there are five types of parks within the community:

### **1. Urban Park**

**Character:** This park is the most urban of the community and serves as the gathering space and recreation center for the surrounding neighborhoods. Its location adjacent to the Commercial/Mixed-Us (Planning Area 26) and the Civic Center (Planning Area 27) secure its place as part of the heart of the community. Given this location, activities involving the entire community will be programmed for this space and provide opportunities for events that spill over from adjacent uses.

**Size:** 10 acres

**Surfacing:** Turf, landscape and groundcover, and large hardscape area

**Gradient:** Flat; graded for drainage only

**Parking:** On-site parking lot provided. Parking also provided on adjacent streets.

**Facilities:** Hardscaped plaza, shade structures, restroom facilities, sports court(s), picnic tables, playground equipment

**Fencing:** None, except as required around select facilities

### **2. Hilltop Park**

**Character:** This park is located at a high point in the physically secluded area at the center of the community. Planning Areas 8 and 20 are bounded by Riparian/Open Space. This separation gives these areas a more rural character. The Hilltop Park enhances that character. The park is primarily passive open space with a park or shade structure to serve as a sheltered gathering space for area residents.

**Size:** 10 acres

**Surfacing:** Turf, landscape and groundcover, and minor hardscape

**Gradient:** Utilize natural gradient to the extent possible. The goal is for the park to be perceived as a lawn crowning a hill.

**Parking:** Provided on adjacent streets; no on-site parking

**Facilities:** Lawns for passive recreational uses, shade structures, picnic tables

**Fencing:** Split-rail or other open fencing for accent and to convey character only



### 3. Suburban Park

**Character:** This park is located adjacent to the southerly Elementary School and among large residential neighborhoods. The Suburban Park is primarily for active uses to serve the individual and organized group recreation needs of area residents. Ball fields will be utilized as a shared-use facility with the adjacent school.

**Size:** 10 acres

**Surfacing:** Turf, landscape and groundcover, and minor hardscape

**Gradient:** Flat; grade for drainage and for the specific needs of active use fields.

**Parking:** On-site parking lot provided. Parking also provided on adjacent streets.

**Facilities:** Large turf areas for ballfields (soccer, football, baseball, softball, etc.), shade structures, picnic tables, playground equipment for a variety of ages, and courts for youth/adult sports. Restrooms provided.

**Fencing:** As-required for specific sports uses

### 4. Pocket Parks

**Character:** These parks are dispersed throughout the community to primarily meet the daily recreational needs of families; particularly those with small children. These parks may be located adjacent to Paseos or within other areas of individual neighborhoods to provide a meeting point for parents and children for recreation and socializing. See **Figure 8** for a Pocket Park example adjacent to a Paseo.

**Size:** 0.10 acre minimum

**Surfacing:** Turf, landscape and groundcover, minor hardscape, and softscape around play equipment

**Gradient:** May be flat or may undulate to reflect character of individual neighborhoods.

**Parking:** No on-site parking provided. Parking is provided on adjacent streets.

**Facilities:** Small turf areas for passive play, small shade structures, picnic tables, playground equipment primarily for young children. No restrooms.

**Fencing:** As-required for play equipment areas for small children.

### 5. Riparian/Open Space Activity Areas

**Character:** These parks are located within the Riparian/Open Space areas and lie generally outside the flood plain. These parks are located along the trails system to provide access. These are the most primitive and naturalistic of the parks.

**Size:** Variable; 0.10 acre minimum

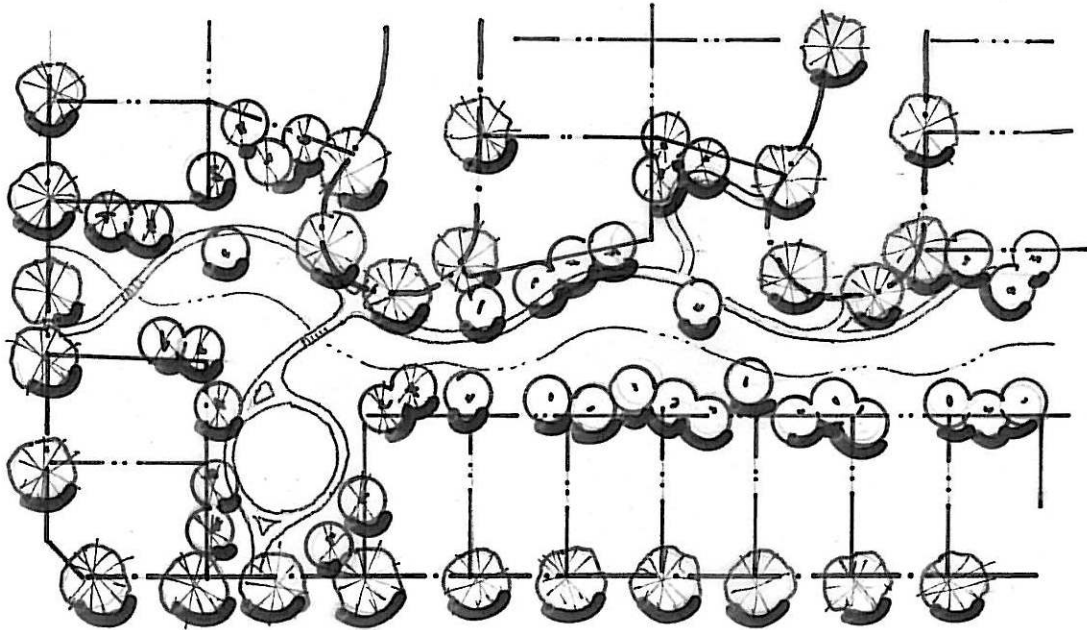
**Surfacing:** Native landscape and groundcover

**Gradient:** Natural grades.

**Parking:** No on-site parking provided. Parking is provided on streets near trailheads.

**Facilities:** Exercise par courses with stations placed along paths, community gardens, amphitheater, fire pits with rustic seating, and dog park. Because these areas are subject to occasional inundation by storm water, any structures should be located outside of the flood plain. No restrooms.

**Fencing:** As-required for specific uses, such as a dog park or a community garden.



**Figure 8 – Pocket Park Alternative (Adjacent to Trail within Paseo)**