
CHAPTER THREE: CIRCULATION

GOAL:

Ensure a safe and efficient transportation system that integrates within the existing regional system and minimizes impacts to residential neighborhoods and environmentally sensitive areas.

3.1 IMPLEMENTING PRINCIPLES

- Provide for a transit center which will encourage the use of alternative forms of transportation such as public transit, car/van pools and other transportation demand management measures to reduce both roadway congestion and pollution.
- Provide a system of trails, bikeways and pedestrian facilities that is the focal point of the community, links community activity centers and encourages alternatives to automobile use.
- Ensure timely provision of a local circulation system to accommodate planned growth at acceptable levels of service.
- Provide a land use pattern and circulation system that optimizes potential opportunities for transit use.
- Provide for future transit use along Carmel Valley Road and SR-56.

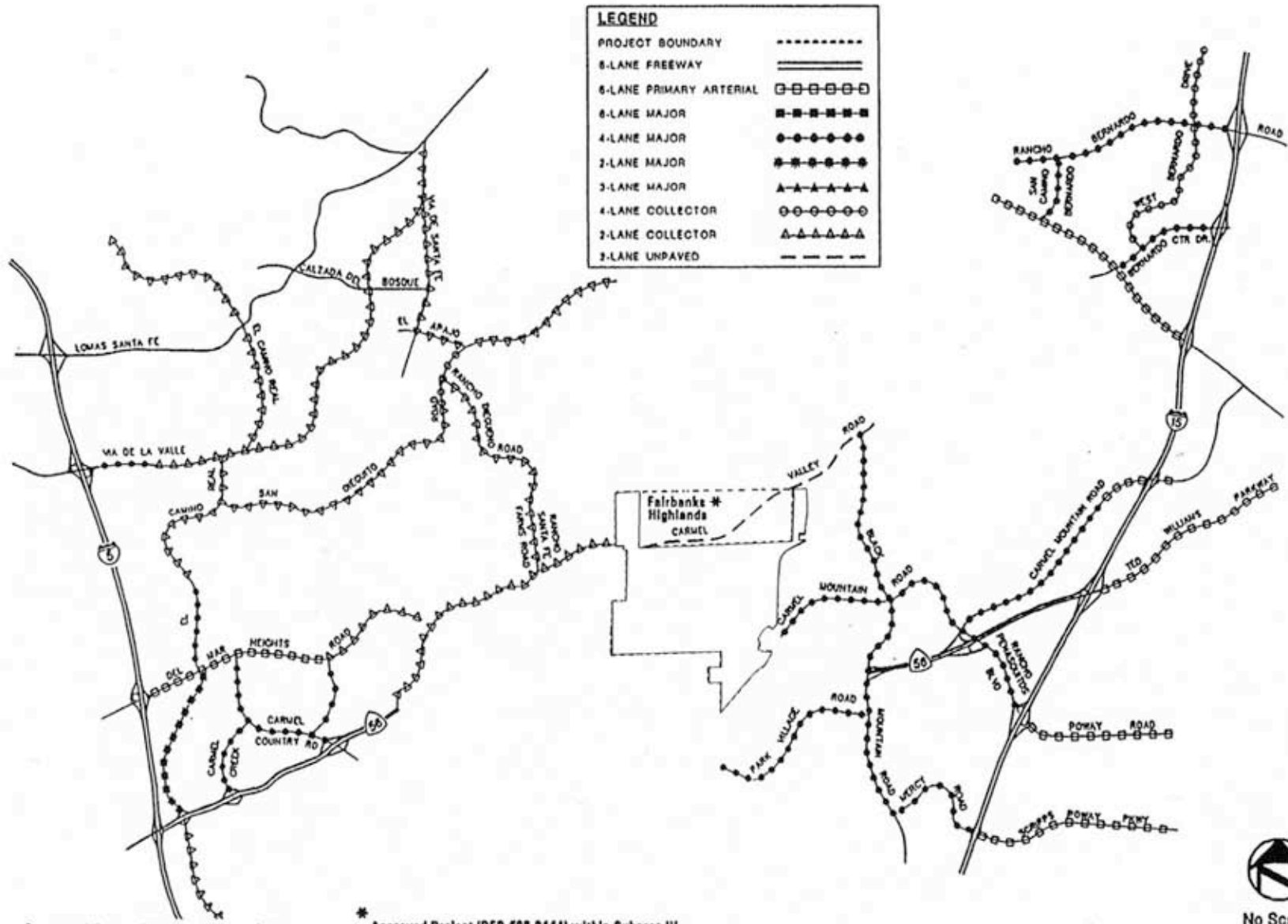
3.2 REGIONAL CIRCULATION

Freeways: Torrey Highlands is centrally located between Interstate 5 (I-5), four miles to the west, and Interstate 15 (I-15), 2.5 miles to the east (**Figure 3-1**). The freeways are part of the major north/south circulation system in San Diego County and accommodate more than 500,000 average daily trips (ADT). State Route 56 is ultimately planned as a six-lane freeway connecting I-5 and I-15 through the NCFUA. Segments of SR-56 to the west (in Carmel Valley) and to the east (in Rancho Peñasquitos) are completed. Through Torrey Highlands, SR-56 is estimated to carry between 69,000 and 95,000 ADT under cumulative buildout conditions (2012).

Major Roads: Circulation roads within Torrey Highlands which provide connections to adjacent communities include Carmel Mountain Road, Camino Ruiz and Carmel Valley Road.

3.3 TORREY HIGHLANDS CIRCULATION

As illustrated in **Figure 3-2**, the Torrey Highlands Circulation Plan identifies an alignment for SR-56, as well as alignments for major roadways and collectors.



Source: Kimley-Horn and Associates

* Approved Project (DEP #88-0141) within Subarea IV.



No Scale

Existing Regional Circulation 3-1

Torrey Highlands Subarea Plan FIGURE



3.3.1 Circulation Roads

State Route 56 Freeway

The approved alignment for SR-56 bisects Torrey Highlands in a northwesterly direction. This freeway will ultimately accommodate six travel lanes, with interchanges located at Camino Ruiz and at Camino Santa Fe in Pacific Highlands Ranch (Subarea III). Initially, SR-56 will be constructed as a four-lane freeway and will include the completion of the interchange at Black Mountain Road and a bike path running adjacent to the south side of the freeway.

Major Roads

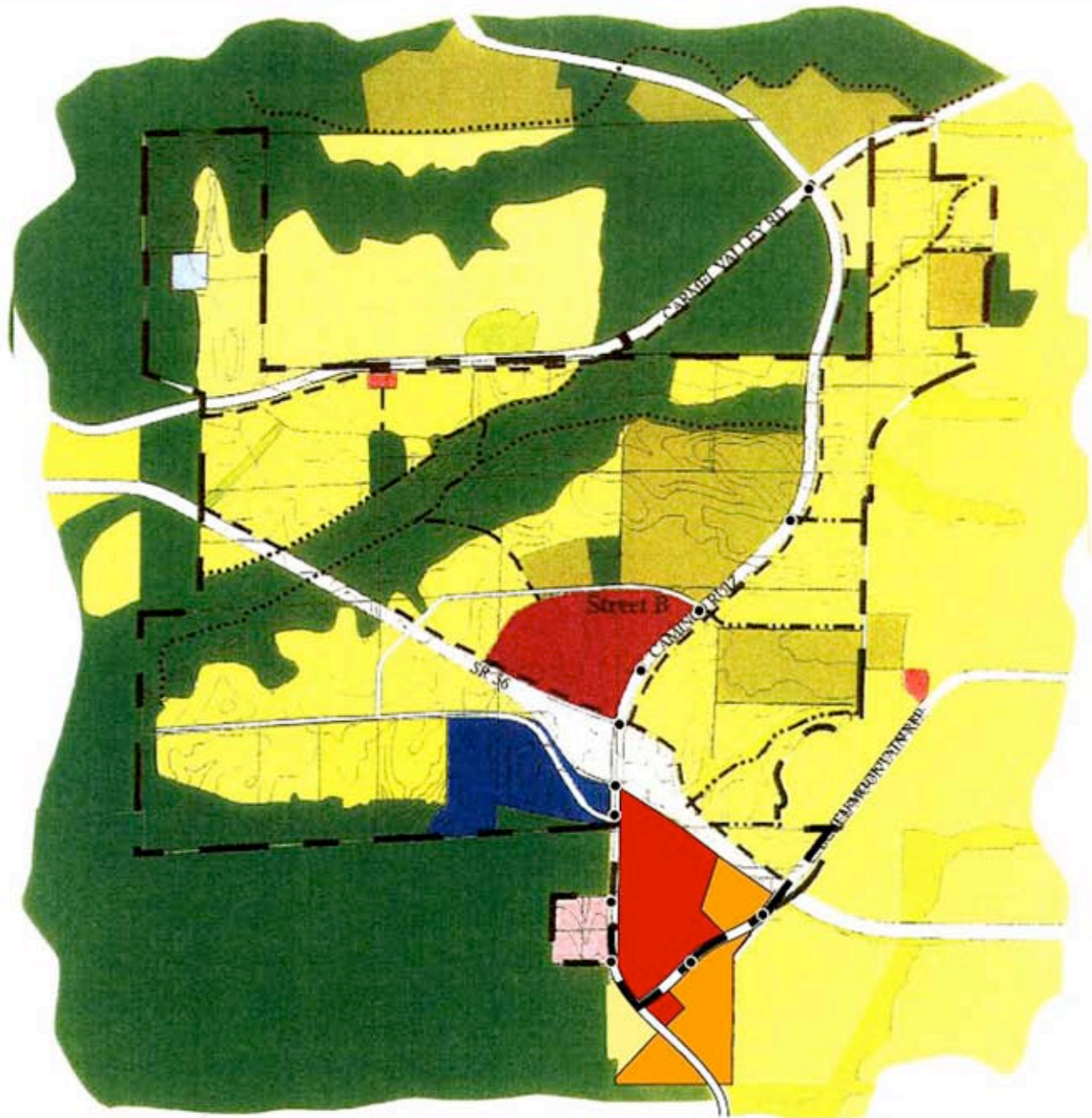
Camino Ruiz is a north/south road located in the eastern third of Torrey Highlands, serving both local and regional demands. The road will continue north of Torrey Highlands to serve as one of the major north/south arterials between I-5 and I-15 serving the mid-county area. An interchange is proposed at SR-56. Within Torrey Highlands, Camino Ruiz is planned as a six-lane major road from Carmel Valley Road to the southernmost project access road (i.e. “B” Street south). * Between the southernmost project access road and the primary Regional Commercial access, Camino Ruiz will be planned as a six-lane primary arterial. North of Carmel Valley Road and south of SR-56, the road transitions from Carmel Valley Road to a four-lane major road. Camino Ruiz will provide access to SR-56 for the southwest portion of Rancho Peñasquitos. Estimated ADT ranges from 22,000 to 41,000 north of SR-56, and 10,000 to 27,000 south of SR-56.

Carmel Valley Road is designated as a four-lane, east/west major roadway within the northern half of Torrey Highlands, which will ultimately extend from Del Mar Heights Road and Camino Santa Fe on the west to Camino del Norte in the east. Several Torrey Highlands neighborhoods will take direct access from Carmel Valley Road. While the road will be constructed for four lanes, right-of-way sufficient for six lanes will be reserved to include two lanes for future transit use. Estimated ADT through Torrey Highlands is approximately 22,000.

Del Mar Heights Road is the western extension of Carmel Valley Road that occurs off-site within the western portion of Subarea III and the community of Carmel Valley. The road ultimately provides a connection with I-5 and the City of Del Mar to the west. Estimated ADT on Del Mar Heights Road east of El Camino Real is between 24,000 and 33,000 ADT. West of El Camino Real and east of I-5, ADT reaches 41,000 to 43,000.

Carmel Mountain Road is designated as a four-lane major roadway that connects Rancho Peñasquitos in the east to Camino Ruiz, south of SR-56.

* Camino Ruiz will initially be constructed to a maximum of four lanes, with two additional lanes of ROW provided in the median should traffic counts require future road expansion to six lanes.



- Improved Multi-Purpose Trail
 - Un-Paved Trail
 - Paved Trail
 - Traffic Signal
- For Land Use Designations see Figure 4-3*



Trails and Circulation Map 3-2
Torrey Highlands Subarea Plan **FIGURE**

Collectors (as illustrated in Figure 3-2)

Collector streets are required to accommodate projected traffic volumes within Torrey Highlands to carry traffic onto the major circulation streets.

Street “A” is a two-lane collector which will serve the Employment Center and the surrounding residential areas. Full access is available at Camino Ruiz.

Street “B” is a four-lane collector located along the northern edge of the Local Mixed Use Center. It serves the Local Mixed Use Center, neighborhood park, elementary school and the surrounding residential areas. Street “B” will be extended over SR-56 as a two-lane collector road to provide a direct connection between the residential uses planned south of SR-56 and the public facilities planned north of SR-56.

Local Streets

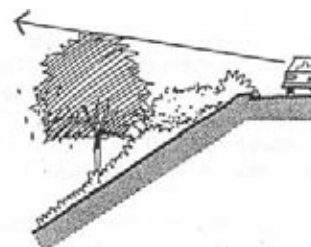
Street patterns within each area or neighborhood of Torrey Highlands will vary in response to site features, topography, and land use types and organizations.

Chapter 4, Land Use and **Chapter 5, Community Design Guidelines** provide guidance that will integrate sufficient density levels and varied housing types to arrive at a fine grain mix of residential development. Based on the projected traffic volumes, future residential streets will be local streets and will be part of an integrated system comprising roads, bike paths and pedestrian ways. Where possible, single-loaded streets adjacent to the proposed MSCP Preserve will provide additional buffer to the open spaces and provide view opportunities from the public right-of-ways. Although precise locations and layout of local streets will be determined as part of subsequent site-specific development proposals, a grid pattern or modified-grid pattern will be used where topography allows to promote alternate routes to each destination (see illustrations in **Chapter 5, Community Design Guidelines**). Major residential collectors are limited to those discussed above and shall not bisect neighborhoods. Cul-de-sacs are encouraged.

When the very low-density area adjacent to the proposed MSCP Preserve on the western edge of the Northern Neighborhood is developed, local circulation should be designed to provide access to four

existing residences on Mira Zanja Corte. This would allow the possible vacation of the east/west portion of Mira Zanja Corte that currently crosses the proposed MSCP system if at some point in the future the present nursery uses that utilize that east/west road are abandoned.

Single loaded streets adjacent to proposed MSCP Preserve



SIGNALIZED INTERSECTION

LOCAL MIXED USE

EMPLOYMENT CENTER

FORMAL STREET TREES

5' WIDE SIDEWALK

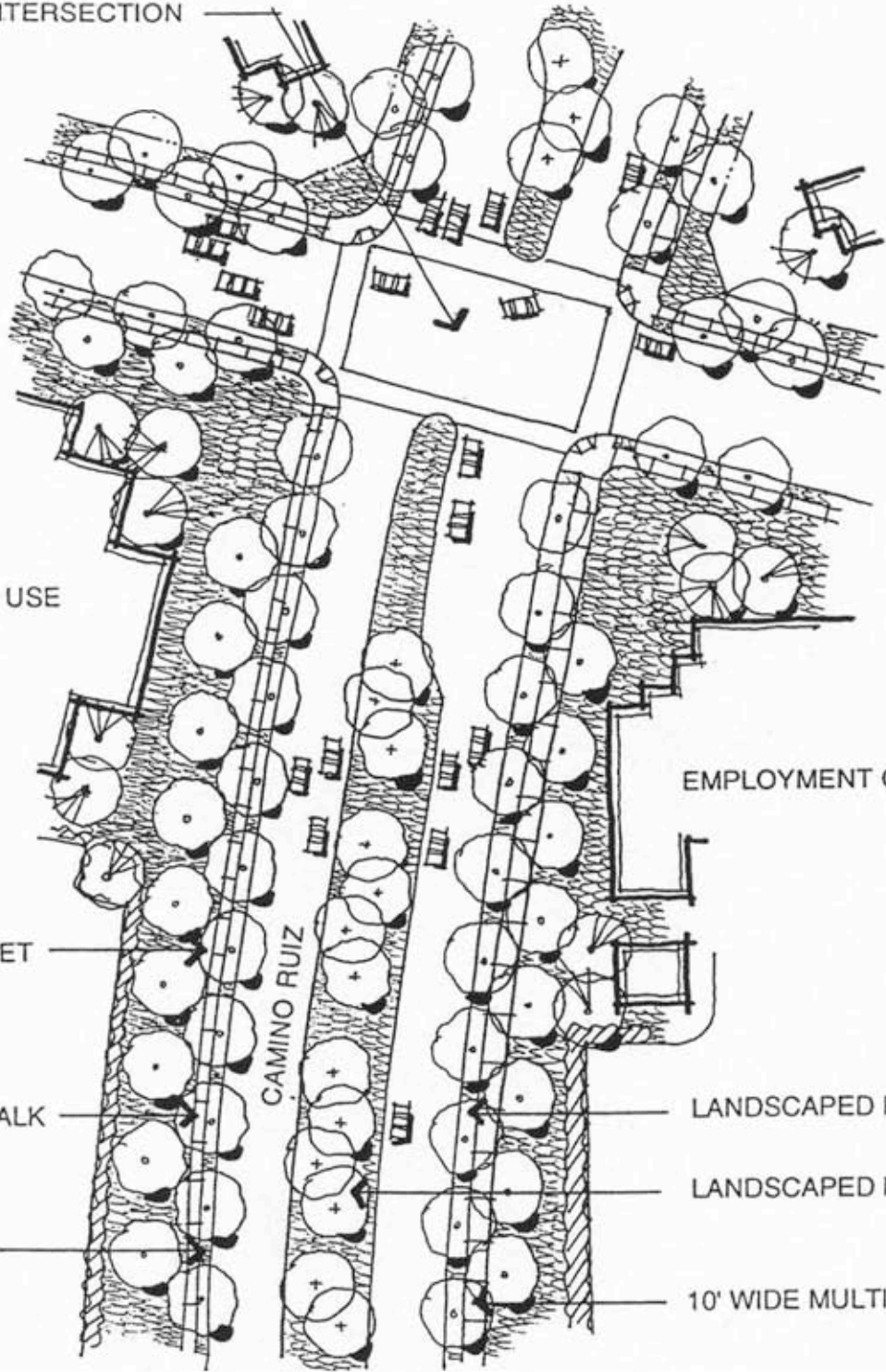
LANDSCAPED PARKWAY

CAMINO RUIZ

LANDSCAPED PARKWAY

LANDSCAPED MEDIAN

10' WIDE MULTI-USE TRAIL



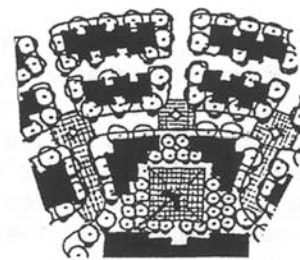
Neighborhood Circulation Concept 3-3

Torrey Highlands Subarea Plan **FIGURE**

3.3.2 Circulation Policies

- Contribute fair share financing for transportation facilities necessary to serve demand created by Torrey Highlands, as provided for in the Torrey Highlands Public Facilities Financing Plan.
- Continue discussions with Metropolitan Transit Development Board (MTDB) and enlist the agency's support to find ways to provide for transit infrastructure and operations.
- Limit points of ingress and egress to neighborhoods from Carmel Valley Road and Camino Ruiz to those designated on **Figure 3-2**, or as approved by the City Engineer, which will optimize traffic flow.
- Prohibit parking on arterial and major circulation element roads.
- Accommodate wildlife corridors and under crossings through road design and alignment considerations.
- Within the LMXU, design a neighborhood street hierarchy based on a modified grid system, that provides alternate routes and connections to schools, parks and neighborhood focal points; provides for pedestrian, bicycle (and, where appropriate) equestrian trails; and minimizes cul-de-sacs.
- Design roadways to minimize grading and the height of cut-and-fill slopes.
- Design the LMXU and neighborhood streets to be pedestrian-oriented by incorporating narrower street widths, smaller radius curbs, wider sidewalks, street furniture, and street plant species.

Pedestrian-Oriented Streets

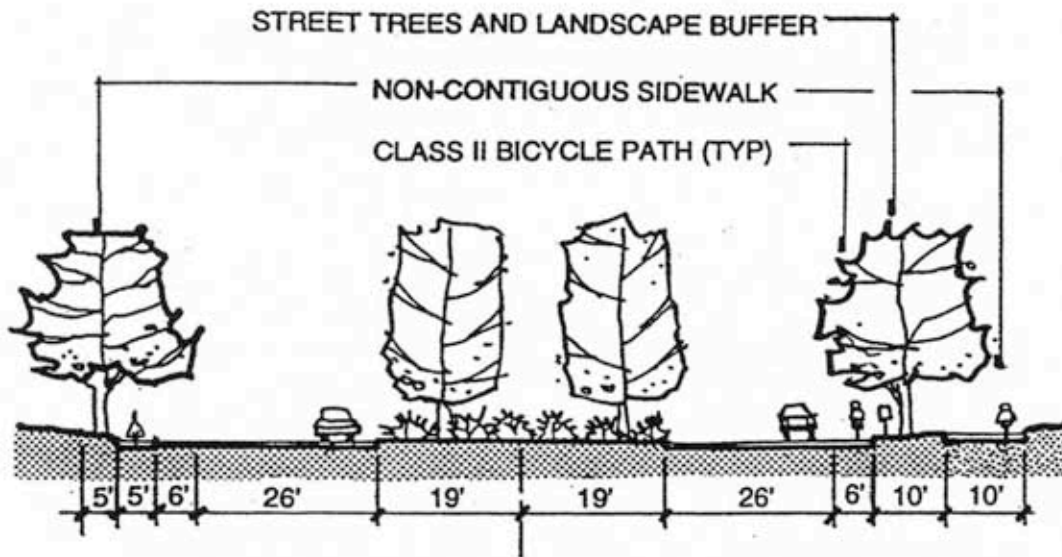


For additional design criteria, see residential and circulation design policies in **Chapter 5, Community Design Guidelines**.

3.4 TRANSPORTATION ALTERNATIVES

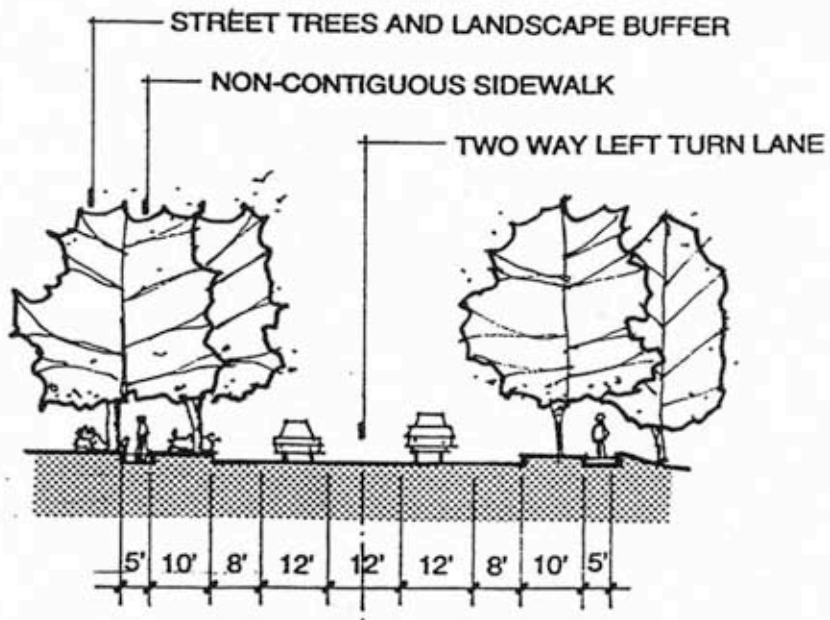
3.4.1 Trails

A system of regional and local bicycle/pedestrian/equestrian trails and paths are incorporated as a critical component of the Plan. The trail system includes paved pedestrian trails, improved multi-purpose trails (pedestrian, bike and equestrian trails), and unpaved equestrian and hiking trails.



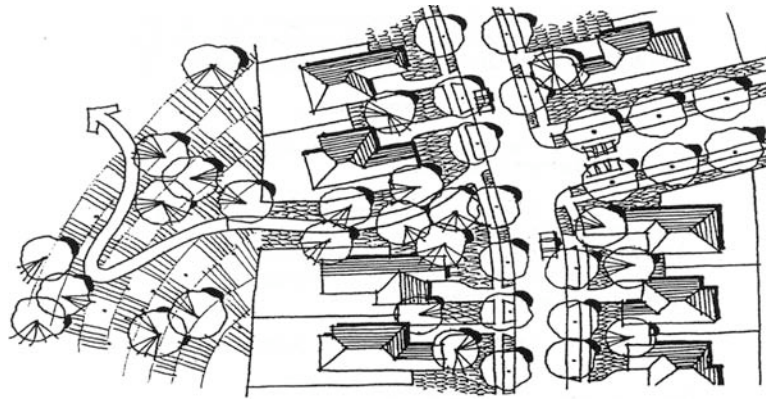
CENTER MEDIAN RESERVED FOR FUTURE TRANSIT

Carmel Valley Road (View to East)



Two Lane Collector





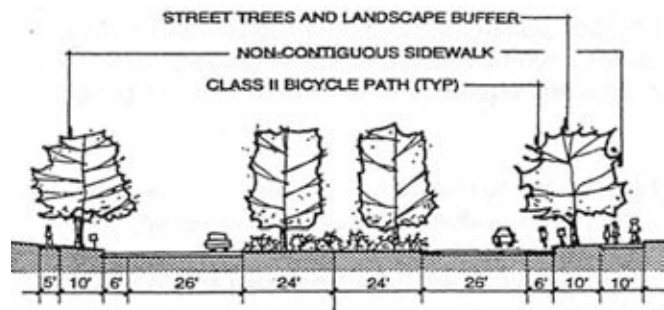
Trail connection to the proposed MSCP Preserve

Several connections will be provided to enable users to easily move from one trail system to the other. The paved system will provide linkages with Black Mountain Ranch, Rancho Peñasquitos, and developed areas including the

LMXU. The improved multi-purpose trail will follow the open space amenity areas and also connect to Rancho Peñasquitos. The unpaved trail system will generally be located along the edge of the north side of the Preserve and along utility easements within the Preserve. It will provide linkages to the proposed San Dieguito River Valley Park in La Zanja Canyon, the MSCP Preserve within Subarea III and Black Mountain Ranch, and selected neighborhood parks. **Figure 3-2** illustrates the trail system.

Paved

Class II bicycle lanes will be provided within the right-of-way of Camino Ruiz and Carmel Valley Road. Paved paths that will accommodate pedestrians and bicycles will occur along the east side of Camino Ruiz and the south side of Carmel Valley Road. These paved paths are ten feet in width, and must be within the 20-foot landscaped parkway. The trails will be



CENTER MEDIAN RESERVED FOR FUTURE LANES

Camino Ruiz (View to North)

buffered from street traffic by plant species of street trees and low-growing shrubs within the parkway. The street tree locations within the parkway and sidewalk alignment must be approved by the City Engineer to ensure that the required site distances are provided. The paved trails which are constructed with SR-56 should be located on the north side of the freeway to allow access to the community. The paved trails will connect to the sidewalks as part of the local street system, as well as the unpaved trails which are part of the open space system. By incorporating a comprehensive trail system, each neighborhood of Torrey Highlands will have access to the Local Mixed Use Center, schools, neighborhood parks and other public facilities and community focal points.

Improved Multi-Purpose

Unpaved trails which consist of compacted decomposed granite (or similar material) will be provided to accommodate pedestrians, bicycles and strollers, and will be ADA compliant. These trails will connect with the existing cul-de-sacs that are adjacent to Torrey Highlands in Rancho Peñasquitos. Compacted material trails will also be used in limited locations within the Torrey Highlands Preserve Segment to provide ADA access to portions of the Preserve.

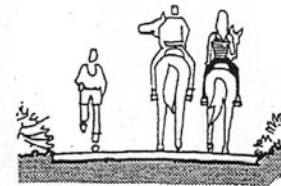
Unpaved

Unpaved, multi-purpose trails occur within the Torrey Highlands Preserve to accommodate hiking, biking and equestrian travel. The trails will generally follow the contours along the inside edge of the north side of the Preserve to avoid unnecessary grading. A trail will also follow the sewer trunk easement access road located within the Preserve and a trail connection will be provided within the SDG&E easement near the southwest edge of Torrey Highlands. Where the Torrey Highlands Preserve branches, near the high school, the trail shall follow the south edge of the

Preserve to provide access to the adjacent high school.

An unpaved trail will be allowed within the Carmel Valley Road under crossing.

Unpaved trails throughout the Preserve



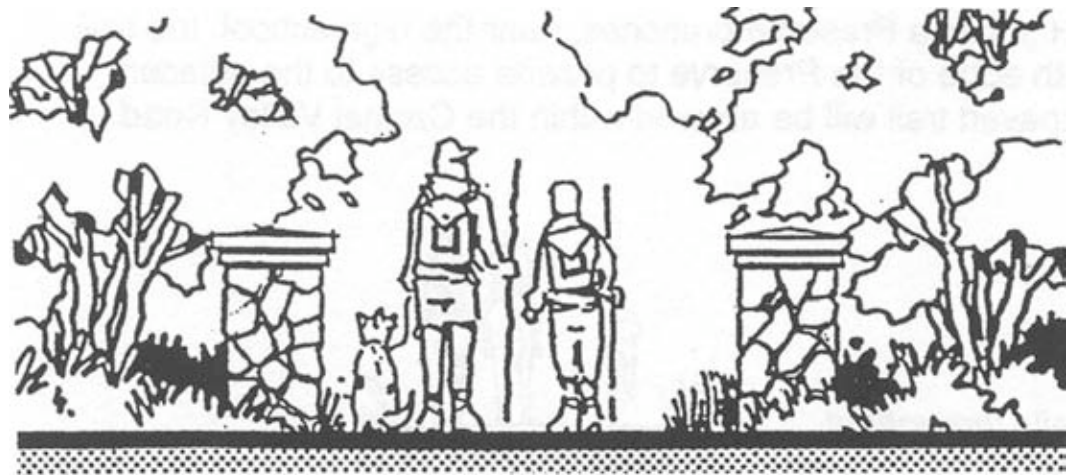
During subsequent discretionary review, all trails within the Preserve will be aligned based on the trail system adopted in this Plan to avoid impacts to existing sensitive species. The unpaved trails will provide linkages between the central, northern and eastern neighborhoods by permitting crossings of the Preserve at specific locations. A single small bridge shall be provided for a crossing in the bottom of the canyon. The bridge shall be located to avoid impacts to sensitive vegetation and its design shall require environmental review. The exact location of the crossings should also coincide with utility easements that will be required for connecting sewer pipes to the existing sewer trunk.

As recommended in the City of San Diego MSCP Subarea Plan, public education shall be a component of all preserve recreational activities. Unpaved trails within the Torrey Highlands Preserve shall include interpretive signs to inform the pedestrians about the purpose of the Preserve and also to identify the natural flora and fauna, consistent with MSCP trail policies.

Unpaved trails will also be provided in the open space amenity areas including one located north of Adobe Bluffs Elementary School (Open Space #2) and another east of Camino Ruiz near the SR-56 interchange (Open Space #3). These open spaces are discussed in more detail in **Chapter 2, Open Space**.

3.4.2 Trails Policies

- All neighborhoods will be connected by a system of trails.
- Link the trails and paths in Torrey Highlands with trails and paths located in adjacent communities and surrounding regional systems, as designated in this Plan.
- Provide paths that connect residential areas to the LMXU to encourage alternate means of travel.
- Design pathways that provide through connections and/or loops.
- Post signage at regular intervals along the trails to inform pedestrians, equestrians and bicyclists of correct trail use.
- Design trail drainage inlet grates, manhole covers, etc. to avoid injuries to trail users.
- Provide at-grade trail crossings at signalized intersections.
- Locate bicycle storage facilities within the LMXU, at transit stations and bus stops.
- Locate all paved trails in public right-of-ways and unpaved trails in open space areas.



Trail identification signage

3.4.3 Transit System

Bus transit plans for the Torrey Highlands area will be coordinated with the Metropolitan Transit Development Board (MTDB) to strongly encourage bus service at the earliest stages of development for area residents. Transit facilities such as waiting areas, shelters and commuter park-and-ride parking areas shall be provided by developments as deemed appropriate by MTDB.

3.4.4 Transit System Policies

- Provide for possible transit/bus shelters along major roads adjacent to the LMXU and near the Employment Center, and public facilities.
- Integrate transit stops into the LMXU and ensure direct connections from the station to the center of the mixed-use area.
- Design transit shelters that are user friendly and architecturally compatible with surrounding neighborhood character/theme.
- Locate bicycle storage facilities at shelter facilities.
- Provide transit stops at major cross streets along Carmel Valley Road.