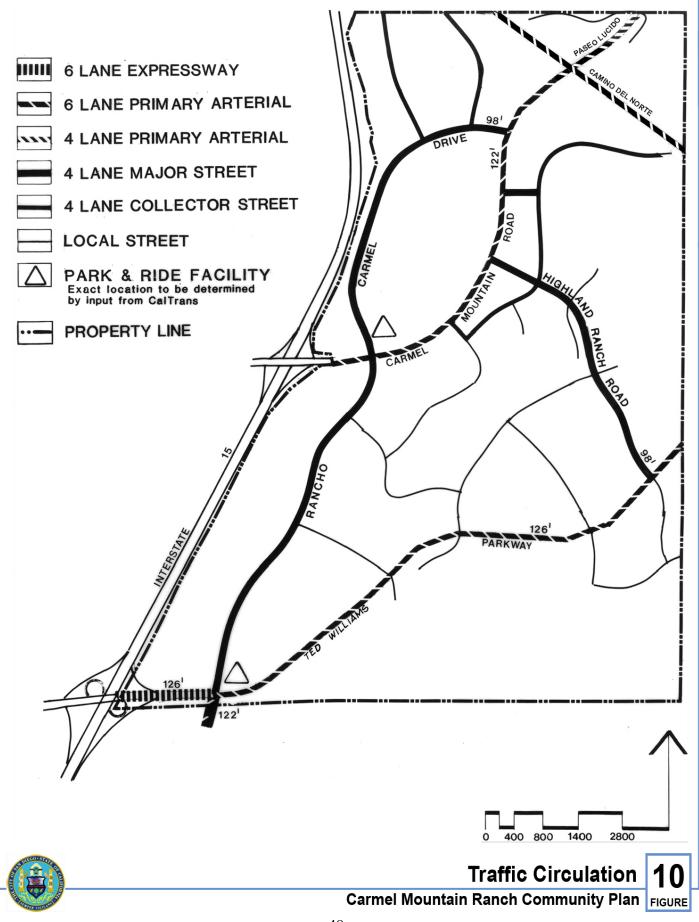


Transportation Element



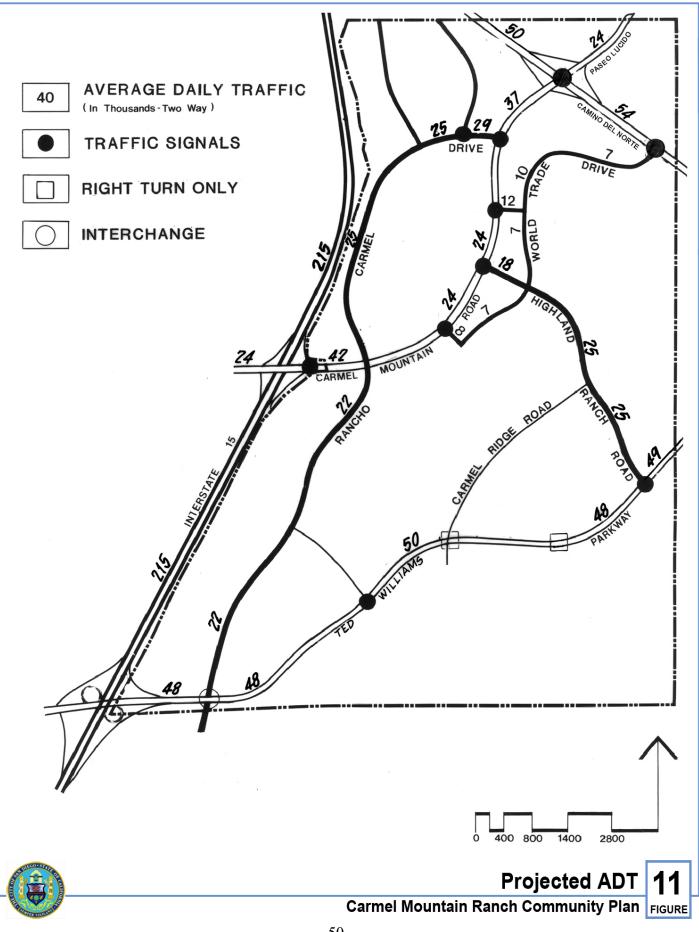
TRANSPORTATION ELEMENT

OBJECTIVE

TO INCORPORATE ADEQUATE MEANS FOR MULTI-MODAL CIRCULATION WITHIN THE COMMUNITY INTEGRATED WITH CITY AND REGIONAL CIRCULATION AND TRANSPORTATION PLANNING.

Attainment of this objective can be achieved by recognition of existing and projected circulation patterns and identification of Carmel Mountain Ranch needs. The specifics are:

- Provide employment opportunities in Carmel Mountain Ranch to reduce commuter traffic.
- Coordinate completion of proposed interchange expansions with Caltrans for relief of future I-15 access congestion.
- Provide circulation routes consistent with long-range City circulation plans.
- Provide full right-of-way widths on the land use plan in accordance with projected buildout traffic volumes. (See Figures 10 and 11.)
- Interchange design will give priority treatment to buses and high-occupancy vehicles.
- Design transportation facilities sensitive to topographic and aesthetic characteristics.
- Support construction of Ted Williams Parkway and SA-680 with the necessary intersections and interchanges east of I-15.
- Design circulation patterns which separate externally generated traffic from residential areas and provide driveway access onto local residential streets and major streets where feasible.
- Offer pedestrian and bicycle systems which connect development elements, access open space areas and public transportation facilities to minimize conflict with vehicular traffic patterns (see Figure 15).
- Support development of public transportation, carpools and bikeways within and without Carmel Mountain Ranch in adherence with citywide programs.
- Provide parking to meet ordinance requirements.
- Support designation of park-and-ride facilities within the community, adjacent to high-capacity public transit routes.
- Cooperation with public and private groups for the implementation of a light rail transit system in the I-15 corridor with stationing at Carmel Mountain Road near the Regional Center.
- Provide adequate traffic control devices and street illumination to ensure safety.



COMMUNITY CIRCULATION NEEDS

1. Freeway Access

Interstate 15 provides access from metropolitan San Diego (see Proposal 1 below). The Carmel Mountain Road, Camino Del Norte and Ted Williams Parkway interchanges each provide direct access to Carmel Mountain Ranch. Improvements made to the I-15 corridor will be necessary for long-term growth; in September, 1998, the San Diego Metropolitan Transit Development Board, North San Diego County Transit Development Board, California Department of Transportation District 11, and the San Diego Association of Governments issued their joint I-15 Corridor Major Investment Study Draft Phase 2 Report which discusses the development of additional freeway auxiliary lane improvements, HOV lanes, priority treatment for buses and car pools and a potential bus rapid transit system for the I-15. A two-lane reversible High-Occupancy Vehicle (HOV) express lane for buses and carpools in the I-15 median as far north as Ted Williams Parkway, has been constructed.

San Diego Transit Corporation, North County Transit and County Transit provide both regular and express bus service along I-15.

2. Trip Generation

Using other development areas as a guide, Carmel Mountain Ranch may be expected to generate 176,642 average daily trips (Figure 11) upon total projected community buildout, distributed as follows:

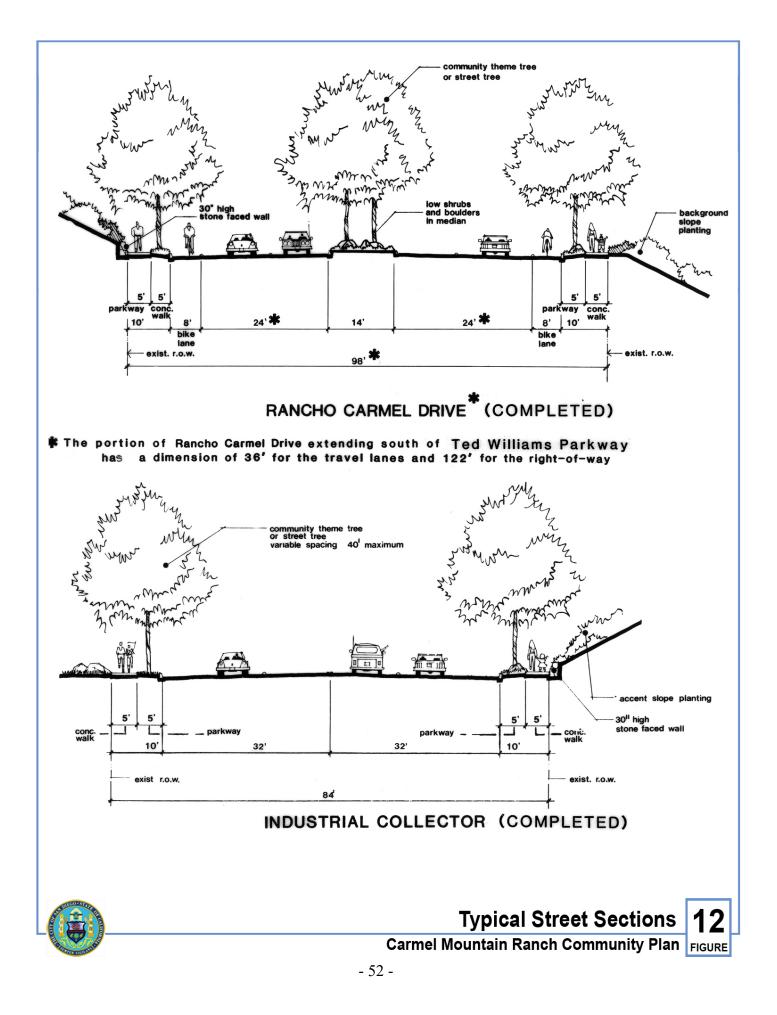
- 32,600 average daily trips (ADT) from proposed industrial development;
- 56,600 ADT from the regional shopping center;
- 6,000 ADT from tourist commercial;
- 28,276 ADT from neighborhood and service commercial;
- 6,400 ADT from office commercial; and
- 45,322 ADT from residential development.
- 2,620 ADT from recreation and community facilities (parks, schools, fire, library and golf course).

3. Trip Distribution

Carmel Mountain Ranch's impact on the existing I-15 would be substantially less than a wholly residential development of similar magnitude and will be accommodated with the recent improvement of the freeway to eight-lane standards.

4. Capacity Requirements

An analysis of capacity requirements has been prepared using traffic volumes from the 1984 computer study. The following proposals are a result of this analysis:



- Right-of-ways of sufficient flexibility to permit dual left- or right-turn capability at critical intersections and interchanges.
- Appropriate installation of traffic control devices.
- Widening of SA-680 to six lanes to Pomerado Road.
- Dedication, as required, of a 126-foot right-of-way and interchange for the portion of Ted Williams Parkway within Carmel Mountain Ranch and through to Pomerado Road.

5. Other Needs

Projected needs of pedestrians and bicyclists will be accommodated (See **Figures 14** and **15**.) Convenient public transit service to key employment, commercial and recreational areas in the San Diego region is discussed in item 7 below.

PROPOSALS

Transportation plans for Carmel Mountain Ranch will be integrated with community and public agency plans. Improvement costs will be funded in accordance with the Amended Financing Plan or, where appropriate, from Caltrans funds.

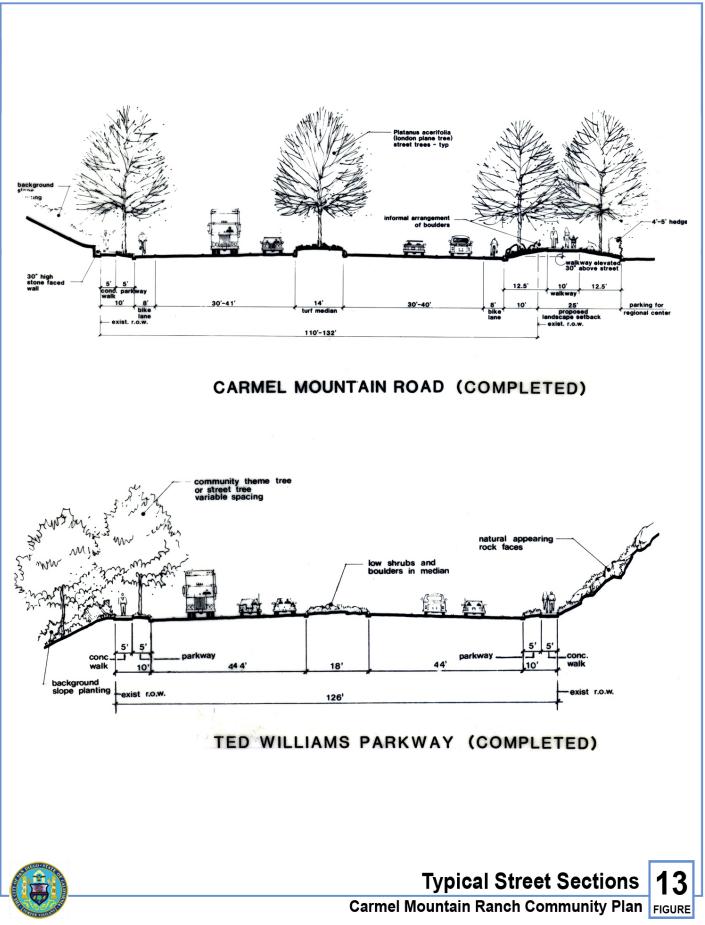
Figure 10 shows approximate roadway locations; **Figures 12** and **13** show typical crosssections. Circulation is designed to offer streets of sufficient flexibility to accommodate special intersection design, dual left- and right-turn capacity and appropriate traffic control devices. Intersections will be constructed to accommodate projected volumes from development of regional commercial facilities.

1. Interstate 15

Interstate 15 (I-15) is a major link between North City development and the Central City. Its effective use as a transportation link between the North and the Central City depends on all interchange traffic flowing freely and efficiently. Based on projected ADT for the planning area, two interchanges and one high-occupancy vehicle (HOV) connection have been planned in Carmel Mountain Ranch to efficiently meet the traffic flow requirements. The interchanges at the crossing of I-15 with SA-680 and with Carmel Mountain Road have been constructed. The HOV connection is at Ted Williams Parkway and I-15.

2. Ted Williams Parkway

This route has undergone several proposed changes. The San Diego Association of Governments (SANDAG) is updating the Regional Transportation Plan (draft plan dated October 1983). The proposed draft plan designates Ted Williams Parkway between I-5 and Route 125 as a regional connector and proposes construction sometime between 1996-2005. At present, Caltrans shows it being funded after 1995.



Traffic projections call for a 126-foot right-of-way and an interchange at the intersection of Ted Williams Parkway and I-15. The full right-of-way has been provided, where required, for Carmel Mountain Ranch. Construction of Ted Williams Parkway is essential for an efficient regional highway network and for efficient external access to Carmel Mountain Ranch. Ted Williams Parkway was built as a primary arterial along the same corridor and with the same road profile called for by Caltrans' proposed route.

In connection with the approval of the tentative map(s) for Unit 14, the location of the eastern terminus on the Carmel Mountain Ranch property of Ted Williams Parkway (SR-56) was determined with consideration given to the location of the alignment desired by the City of Poway, Caltrans, and the then owner of the adjacent property within the city of Poway.

3. Camino del Norte

In April 1964, the county of San Diego adopted a plan to develop a six-lane expressway (SA-680) that would serve the north county area. Portions of the expressway were to be developed along Camino del Norte, with a diamond interchange at the intersection of Camino Del Norte and Carmel Mountain Road/Paseo Lucido. In December 1996, the county deleted this expressway from their General Plan under General Plan Amendment #96-CE1. In 1999, the City of San Diego amended the Carmel Mountain Ranch Community Plan to redesignate excess right-of-way once reserved for an interchange and to identify Camino del Norte as a six-lane primary arterial.

A 126-foot right-of-way has been dedicated along Camino del Norte which is improved to six lanes as it crosses Carmel Mountain Ranch.

4. Carmel Mountain Road

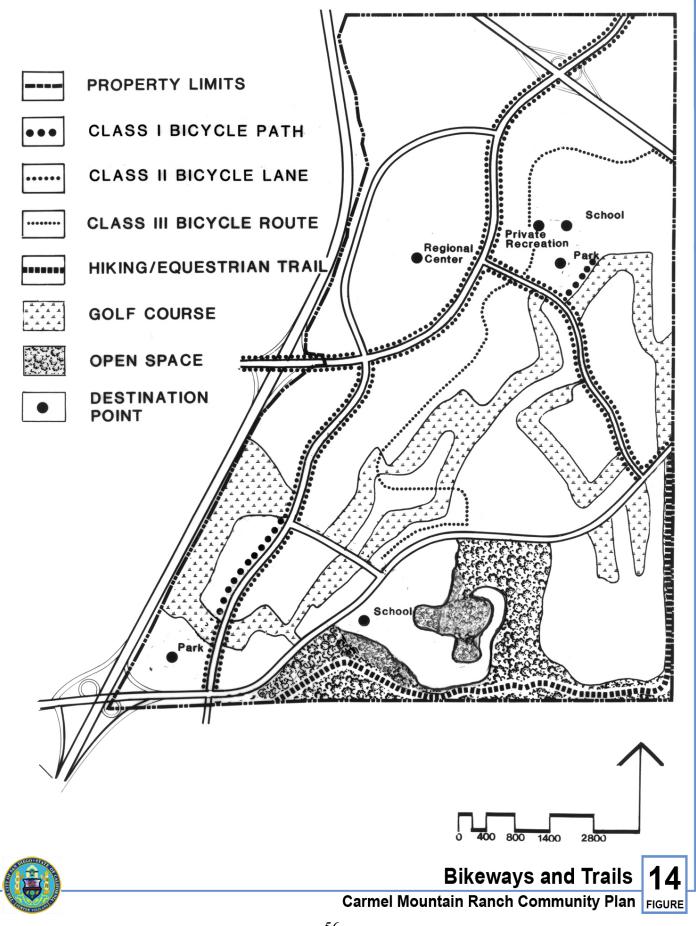
The extension of Carmel Mountain Road easterly of I-15 to north of SA-680 is a primary arterial with a 122-foot right-of-way. This facility is improved from I-15 north of SA-680. From the west, the existing Carmel Mountain Road intersects with I-15 in a Diamond interchange, which may be inadequate.

Construction of Carmel Mountain Road through Carmel Mountain Ranch is complete, including incorporation of Class II bikeway striping and signing. The bike route along Carmel Mountain Road is part of the community network.

5. Other Important Roads

Significant roadway systems have been planned to minimize the amount of grading needed to accommodate them. They are located in response to existing landforms and projected traffic volumes. Their construction will be phased with development for the land areas they serve.

a. Rancho Carmel Drive. The right-of-way (98 feet) is provided for a major street from Ted Williams Parkway to Carmel Mountain Road. It continues north around the shopping center and post office sites, separating it from the industrial parcel to the



north. This road reconnects to Carmel Mountain Road at a three-way intersection. Rancho Carmel Drive will connect to Sabre Springs Parkway to the south, providing a link between the two communities.

- b. Highland Ranch Road. A right-of-way (98 feet) is provided for this major street that intersects into Carmel Mountain Road opposite the regional shopping center (Unit 30 on Figure 5). This width extends from Carmel Mountain road across Carmel Ridge Road, easterly to an intersection with proposed Ted Williams Parkway. This street provides residential and some commercial access.
- c. World Trade Drive. An 84-foot wide right-of-way serves the industrial area (Unit 41, Figure 5) located just east of Carmel Mountain Road and south of SA-680. This collector continues on to form an intersection with Highland Ranch Road and provides access to the community commercial area of the town core.

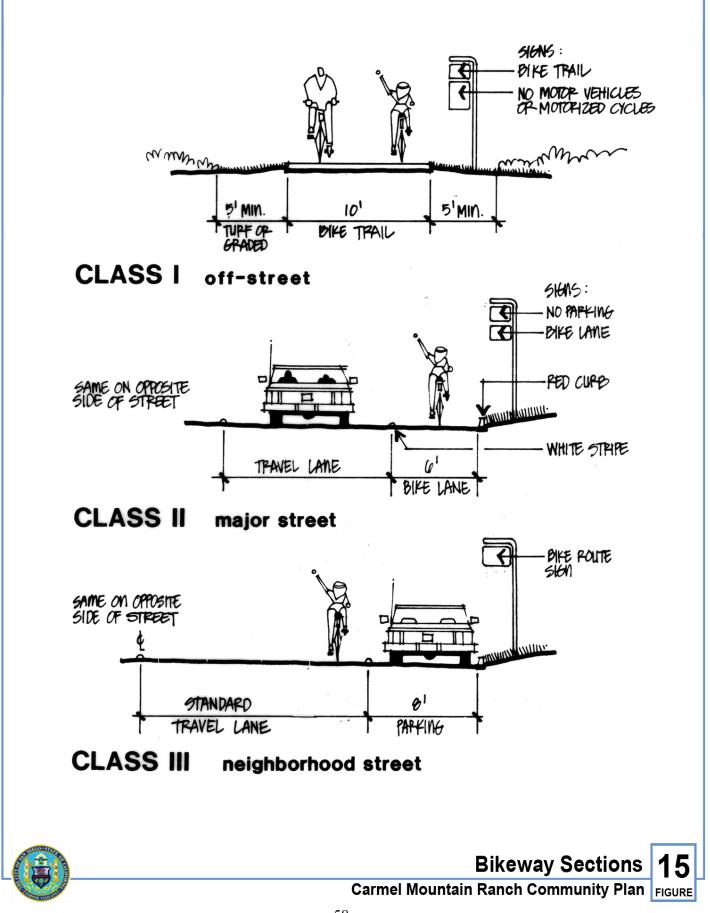
6. Residential Streets

Local collectors are presently designated with 60-foot right-of-ways and will follow the approximate alignments shown in **Figure 10**. Their design will minimize conflict between non-compatible circulation modes and provide for on-street parking as needed. Completion of these routes will correspond with residential development and occupancy phasing. Their alignments are an integral part of the concept of defensible neighborhoods.

7. Public Transportation

In support of public transportation, an integrated transit service for Carmel Mountain Ranch and the metropolitan area is proposed:

- Park-and-ride facilities are to be sensitive to shared usage with contiguous land uses. Two facilities are provided within the community. One parking lot with 125 parking spaces is located in the regional commercial area and the other lot, which includes 75 parking spaces, is located at the southern tip of Unit 4 near the intersection of Ted Williams Parkway and Rancho Carmel Drive.
- Coordination with San Diego Transit and Caltrans to ensure inclusion and expansion of fixed route service corridors for bus service into Carmel Mountain Ranch. Routes 20 and 860 provide express bus service to Carmel Mountain Ranch from downtown San Diego and Route 990 provides express bus service from Hillcrest to Carmel Mountain Ranch.
- Development of park-and-ride facilities to integrate with San Diego Transit's terminal locations.
- Support the extension of high-occupancy vehicle lanes (HOV) north of SR-56 to serve communities along the I-15 corridor.
- Support and encourage the development of a light rail or bus rapid transit system within the I-15 corridor.



8. Non-Motorized Transportation

Pedestrian and bicycle circulation has been master planned to link residences with community facilities, services and open space and to link neighborhoods to one another (see Figure 14).

The specific implementation of the objectives will be through:

- Safe, accessible pathways and/or sidewalks within neighborhoods, through open spaces, public utility easements and along roadways.
- Class II bicycle lanes on important streets, separated by striping from the motorized roadway per Figure 15.

A hiking/equestrian trail was provided in the natural open space in the southern portion of the community to provide a connection between proposed trails in the city of Poway and Peñasquitos Canyon. Both hiking and equestrian use will be provided on one trail. The trail is approximately 15 feet wide and is unpaved and minimally graded with a maximum gradient of ten percent.

9. Parking

Residential on-street vehicular parking (including recreational vehicles) will be regulated through City ordinances, agreements with the master developer and/or through appropriate homeowner association covenants, conditions and restrictions (CC&Rs). Sufficient on and off-street parking will be included in all development areas to meet City of San Diego requirements.

10. Traffic Signals

Traffic signals, signs and lighting will be provided in the normal sequence of development to assure maximum safety.

Special consideration will be given to areas frequented by children and areas where hiking and biking recreation areas are crossed by motor vehicles.