D. CIRCULATION

1. Introduction

This element addresses the circulation system in Del Mar Mesa. It assumes for the plan area 685 dwelling units, a 300-room resort hotel and a golf course. The recommendations in this Circulation Element are drawn from the Del Mar Mesa Transportation Study, performed by the City of San Diego Transportation Planning Section in November of 1995, and updated in March 1996.

The major issues related to the street system are proposed improvements to Del Mar Mesa Road and whether the Camino Santa Fe connection from SR-56 to Carmel Mountain Road should be constructed. Other subjects addressed in the Circulation Element are internal streets, driveways, public access, equestrian trails, hiking and pedestrian trails, bicycle circulation, public transit, park-and-ride, parking, street lights and off-road vehicles. The phasing of the recommended transportation improvements is also included in the **Implementation Element** of the Plan.

In order to maintain the rural character of the Del Mar Mesa community, the provision of standard urban street widths and improvements is discouraged. The absence of urban improvements like curbs, gutters, sidewalks and streetlights, help to maintain the rural character of the community. All subdivisions shall incorporate asphaltic berms or rolled curbs, in lieu of concrete curbs and gutters, unless concrete curbs and gutters are required due to drainage considerations. Additionally, graded walkways shall be provided rather than concrete sidewalks. Standard street lighting will not be provided and streetlights shall be provided only in areas in which it is determined by the City Engineer that they are necessary for safety.

2. Guiding Principles

The general guiding principles are those of the North City Future Urbanizing Area Framework Plan. Specific guiding principles are:

- A vehicular and non-vehicular circulation system that meets the needs of Del Mar Mesa residents and visitors at an acceptable level of service.
- An efficient and environmentally sensitive transportation system that maintains the Del Mar Mesa's rural character.
- Hiking and equestrian trails, with access to adjacent trails that provide walking and horseback riding opportunities to the general public and Del Mar Mesa residents.



3. Implementing Principles

The general implementing principles are those of the NCFUA Framework Plan. Specific implementing principles are:

- Street improvements shall be compatible with the rural character of the subarea. Consideration should be given to minimize impacts to the landform, where safety permits and as determined by the City Engineer.
- In order to maintain the rural character of Del Mar Mesa, streets shall be designed with pedestrian and equestrian facilities and rolled curbs.
- Transportation facilities shall be regarded as an integral part of the landscape in which they are located.

4. Existing Conditions

Del Mar Mesa is located in the North City Future Urbanizing Area, east of Carmel Valley Neighborhood 10 and south of SR-56 and Carmel Valley Neighborhood 8. Since Del Mar Mesa is not yet developed, the area is without a paved street system. As shown on **Figure 12**, currently the only roadway that provides access to the existing residences is Shaw Ridge Road, which is an unpaved local road that connects Carmel Country Road to the eastern part of the study area.

In 1998, the name of Shaw Ridge Road was changed to Del Mar Mesa Road to more closely associate the name of this primary artery with the community.

Direct freeway access to the subarea is possible via SR-56 ramps at Carmel Country Road. State Route 56 in this area includes a two-mile stretch of a fourlane freeway from a few hundred feet east of Carmel Country Road to Carmel Valley Road at El Camino Real. Carmel Valley Road has an existing diamond interchange which provides full access to I-5. The construction of a southbound link from SR-56 to I-5 was completed in 1999.

5. Relationships to Other Community Plans

The North City Future Urbanizing Area Framework Plan provides the major guidelines for development of this and other FUA subareas. Carmel Valley Neighborhood 8 is located on the north side and Neighborhood 10 is located on the west side of Del Mar Mesa. Carmel Valley Neighborhood 8A is located west of Neighborhood 10.

The planned street system for Carmel Valley Neighborhoods 8A and 10 directly impacts Del Mar Mesa, as these neighborhoods and Del Mar Mesa would utilize Carmel Country Road for freeway access. The developments on the western side of Del Mar Mesa will access the freeway system from Carmel Country Road



which is located in Carmel Valley Neighborhood 10. Construction of this road is included in the Neighborhoods 8A and 10 combined transportation phasing plan. Therefore, the first phase of Del Mar Mesa developments is closely related to developments of this transportation improvement in Carmel Valley Neighborhood 10.

6. Traffic Generation

As shown on **Table 7**, the transportation study for Del Mar Mesa assumed a total of 685 residential dwelling units (DUs), a 300-room resort hotel and a golf course that are expected to generate 9,880 daily trips. The resort hotel project includes a golf course and 134 of the 685 dwelling units. The transportation study also assumed two public projects: a nine-acre neighborhood park that generates 450 daily trips and a four-acre school that generates 240 daily trips for a grand total of 10,570 daily trips. Since the publication of the Del Mar Mesa Transportation Study, the number of dwelling units and distribution of park vs. school acreage have been revised slightly. This does not affect the recommendations presented below or the transportation phasing plan presented in the **Implementation Element** of the Plan.

The phasing of transportation improvements assumes the proposed network (Alternative 3) that includes the Camino Santa Fe connection with the western alignment and Del Mar Mesa Road as a two-lane residential local street.

The transportation network assumes Del Mar Mesa Road as a two-lane residential local street; a Camino Santa Fe connection, between SR-56 and Carmel Mountain Road constructed as a two-lane collector street; and a four-lane major road (as an interim improvement prior to Caltrans' completion of SR-56), from the existing eastern terminus of SR-56 to Camino Santa Fe.

TABLE 7

Land Use Assumptions	Daily Trips
685 Dwelling Units	6,850
300-Room Resort Hotel	2,400
1 Golf Course	600
Neighborhood Park (nine acres)	450
Elementary School (four acres)	240
Total	10,540

LAND USE ASSUMPTIONS AND TRIP GENERATION

Figure 13 shows the proposed street classifications and future traffic volumes.



7. Proposed Circulation System

With the proposed network, Carmel Mountain Road's traffic, east of Carmel Country Road, is projected to be 3,000 daily trips. The projected traffic on Carmel Country Road, north of Carmel Mountain Road, is 5,000 daily trips. The Camino Santa Fe connection is projected to have a future traffic volume of 5,000 daily trips. Based on an ultimate future forecast of 1,200 daily trips, Del Mar Mesa Road will be a two-lane residential local street. Upon construction of the Camino Santa Fe connection to Del Mar Mesa Road, consideration may be given to closing Del Mar Mesa Road to through traffic either by placing a gate or two opposing cul-de-sacs along the roadway. This would maintain the traffic along Del Mar Mesa Road at the level appropriate for a two-lane residential local street. It should be noted that if the Camino Santa Fe connection is not constructed, the projected traffic volume on Del Mar Mesa Road would be about 7,000 daily trips. This will result in Del Mar Mesa Road becoming a defacto collector street. Without the Camino Santa Fe connection, Del Mar Mesa Road could not be closed to through traffic.

A summary of intersection levels of service and lane configuration for key intersections is shown on **Figure 14**. As can be seen in this figure, all the ramps would operate at Level of Service "C" and all the signalized intersections would operate at Level of Service "B."

8. Proposed Future Street Classifications

As noted earlier, the proposed street classifications and traffic forecast for Del Mar Mesa are shown on **Figure 13** and are described below. The general alignments of the proposed street network and classifications are shown on **Figure 15**.

Camino Santa Fe:	Two-Lane Collector street from SR-56 to Carmel Mountain Road.
Del Mar Mesa Road:	Two-Lane Residential Local street.
Carmel Mountain Road:	
Segment 1:	Two-Lane Modified Collector (one lane in each direction with a center left-turn lane where needed) from the plan area boundary to the open space.
Segment 2:	Two-Lane Collector street through the open space.
Segment 3:	Two-Lane Modified Collector street north of the open space to Camino Santa Fe.
Carmel Country Road:	Four-Lane Major street from SR-56 to south of Neighborhood 10's northern boundary.



- a. **Del Mar Mesa Road** As discussed earlier, to prevent Del Mar Mesa Road from becoming a defacto two-lane collector street (i.e., one that is constructed as a two-lane residential local street, however, due to excessive traffic demand would operate as a two-lane collector street), it is recommended that both Del Mar Mesa Road and the Camino Santa Fe connection be constructed. With the Camino Santa Fe connection constructed, the ultimate future traffic volume on Del Mar Mesa Road will be about 1,200 daily trips, which can easily be accommodated by a two-lane residential local street. Due to the proposed alignment of the Camino Santa Fe connection (**Figure 15**), the length of Del Mar Mesa Road will be approximately 1.7 miles. Construction cost for Del Mar Mesa Road is estimated at \$4.4 million, including an eight to ten-foot multiuse trail. **Figure 16** shows the cross section for Del Mar Mesa Road as a two-lane residential local street.
- b. Camino Santa Fe Construction of a Camino Santa Fe connection, between SR-56 and Carmel Mountain Road, was examined as part of alternative analysis for the subarea. Figure 17 shows the cross section for Camino Santa Fe as a two-lane collector street.
 - The western alignment of Camino Santa Fe is the recommended alignment. This alignment is approximately 1,200 feet west of the eastern alignment. It avoids intrusion into the wildlife corridor and allows larger uninterrupted wildlife habitat. This connection allows another access point to Del Mar Mesa and therefore reduces the subarea's dependence on transportation improvements in Carmel Valley Neighborhoods 8A and 10 which may allow development in Del Mar Mesa to proceed earlier. The cost of the Camino Santa Fe connection between SR-56 and Del Mar Mesa Road is estimated at \$2.8 million.
 - Additional cost associated with the Camino Santa Fe connection includes the bridge over SR-56, estimated at \$1.5 million (to be paid for by the City as part of the SR-56 arterial road construction between Black Mountain Road and Carmel Country Road), and the associated ramps estimated at \$2.5 million to be paid for by the FUA/Del Mar Mesa on a fair share basis.
- c. Carmel Mountain Road As shown on Figure 15, the Carmel Mountain Road alignment would begin at the south end of Carmel Country Road and go through the community of Del Mar Mesa. It consists of three segments estimated at a cost of \$5.7 million. All segments will be built with a six-foot parkway and a ten-foot graded but unpaved multiuse trail on one side of the roadway. Figures 17 and 18 include cross sections for Carmel Mountain Road:



- Segment 1: Will proceed east from the plan area boundary to the open space. This segment will be a two-lane modified collector street which has one lane in each direction and a center turn lane (50-foot curb-to-curb/72-foot right-of-way), as shown on **Figure 18**.
- Segment 2: Will proceed north-northeast through a primarily open space designated area. The roadway through this area is recommended to be a two-lane collector street (40-foot curb-to-curb/62-foot right-of-way), as shown on **Figure 17**.
- Segment 3: Will proceed northerly from Segment 2 to the Camino Santa Fe connection. This segment is recommended to be a two-lane modified collector street (50-foot curb-to-curb/72-foot right-of-way) which will include one traffic lane in each direction with a center turn lane as shown on **Figure 18**.

9. Internal Streets

The location of internal local roads will be identified by the individual developers of specific projects at the time of tentative map submittal. These internal roads should be designed to follow the natural contours of the land and minimize the disruption of the existing topography and resources. All proposed internal circulation streets will be subject to the general provisions and guidelines of the Plan, the provisions of the City's Street Design Manual and approval of the City Engineer. Where the provisions of the Plan conflict with the City's Street Design Manual, the Plan standards apply. In order to deviate from the City's Street Design Manual, a deviation request must be made to the City Engineer. Provided that the request conforms to the Plan and the design is determined to be based upon sound engineering and provides for the safety and welfare of the community, the deviation shall be granted through a ministerial procedure. The cross-section for internal local roads is depicted on **Figure 16**.

10. Pedestrian Circulation

In an effort to preserve the rural qualities of the Del Mar Mesa community, standard sidewalks shall not be provided along the circulation element roadways or the internal local roadways within the subdivisions. Pedestrian circulation shall be accommodated in the community through the provision of multiuse unpaved trails that are required adjacent to all circulation element roadways and internal local roadways and through a series of hiking and equestrian trails (see **Figure 20**). Examples of appropriate surface treatments are decomposed granite and/or grasscrete or similar materials.



11. Hiking/Equestrian Trails

In order to provide a linkage to the open space system, connect Del Mar Mesa to the surrounding communities and provide the residents in the area with recreational opportunities, the Plan includes two trail systems. The multiuse trail shall be located adjacent to all circulation element roadways and shall be designed to accommodate walking, jogging, bicycling and horse riding activities. The trail shall be ten feet in width and separated from the roadway by a six-foot landscaped parkway. In order to direct trail users and provide for safety, the ten-foot trail shall be separated from the six-foot parkway by a three-foot high split rail type fence (see Figure 19). In addition to the multipurpose trail, a hiking/equestrian trail system is proposed. This system is intended to complement the roadside multiuse trail system by providing public hiking and riding opportunities away from vehicular traffic (see Figure 20). This system includes a trail on the northwestern edge of Del Mar Mesa connecting to Carmel Valley Neighborhood 8 and provides a link to existing and planned trails in Carmel Valley Neighborhood 10. In addition, trails are identified through the Lorenz Parcel (Area No. 70 on Figure 30) and farther to the east extending from Street Z, following the existing SDG&E easement and linking to Peñasquitos Canyon. The far eastern trail is designated for multiuse and will accommodate mountain bikes.

In general, existing equestrian/hiking trails designated for inclusion in the nonvehicular circulation system will be left in their present condition. Limited improvements may be made to address any existing hazards to safe passage. Roadside multiuse trails and new equestrian/hiking trails shall be improved to achieve City trail standards unless the trail is located in the MHPA or in an area with steep topography. Where topographic conditions allow, new trails shall be eight feet in width, constructed of decomposed granite to a depth of six inches and should be no steeper than ten percent grade. Within the MHPA, wildlife corridors and/or in areas of steep topography, trail widths should not exceed four feet in width. The width of the trail shall be ten feet where the multiuse trail and equestrian/hiking trail share the same alignment. Clear signage should be provided to direct users to designated trail areas.

In order to assure the appropriate connections and trail design, a trail plan that implements the goals and objectives of the Plan shall be required prior to the approval of all future tentative maps. With review and approval of subsequent tentative maps within Del Mar Mesa, the precise alignment of the hiking/equestrian trails identified on **Figure 20** shall be determined and secured either through dedication or easement as a tentative map condition. Provisions for the maintenance of common trails shall be made either by defining maintenance as a responsibility of the appropriate homeowner's association in the area or through the formation of a Landscape Maintenance District.



12. Public Transit

The 1994 Regional Transportation Plan (RTP) identifies the SR-56 corridor between I-5 and I-15 as a potential transit corridor. The RTP states that if development through the North City Future Urbanizing Area is "focused on the potential station areas at sufficient intensities, guideway transit would be costeffective in this corridor." Given funding constraints and the proposed lowdensity development, the Metropolitan Transit Development Board (MTDB) has no current plans to provide transit service in this area. However, the Framework Plan for the FUA identifies SR-56 as a "Transit/HOV (high-occupancy vehicle)" emphasis facility with right-of-way reserved for HOV and possible future transit use. Residents of Del Mar Mesa could access potential future transit services through park-and-ride lots planned in Carmel Valley, Pacific Highlands Ranch and Black Mountain Ranch.

13. Bicycle Circulation

A six-foot-wide Class II bikeway is proposed along both sides of Carmel Mountain Road and Camino Santa Fe in accordance with the Street Design Manual. Bicycling opportunities would be also available along the remaining roadways of Del Mar Mesa along the ten-foot wide multiuse trail system. Typical cross sections for the Class II bikeway and the multiuse trail are illustrated on **Figures 21** and **19**. The bikeway system for the community is depicted on **Figure 22**.

14. Park-and-Ride

The California Department of Transportation (Caltrans) has a park-and-ride facility south of Carmel Valley Road and west of the I-5/SR-56 interchange. This facility has 68 spaces for commuter parking which are not fully utilized. Caltrans has identified the need for one or two park-and-ride sites as part of the development process for the middle segment of SR-56. The Pacific Highlands Ranch Subarea Plan designates a park-and-ride facility to be located within the employment center to facilitate ride sharing. A second park-and-ride facility is designated in Black Mountain Ranch within the north village.

Both Black Mountain Ranch and Pacific Highlands Ranch are planned to contain transit centers which provide shelter, bike storage and vehicle parking near the mixed-use centers of the communities.

15. Parking

Required parking facilities will be provided by the developers for their respective developments in accordance with zoning requirements.



16. Street Lights

One of the defining characteristics of Del Mar Mesa is the dark night sky. This is a unique resource in a city the size of San Diego and should be preserved. In order to preserve the rural nature of the community and protect the resources in the MHPA, this resource should be maintained in Del Mar Mesa. The Multiple Species Conservation Plan Subarea Plan states:

Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low-sodium or similar design.

In order to preserve this important resource, standard street lighting is not desirable. The only streetlights that should be provided in the community are those necessary for safety as determined by the City Engineer, such as but not limited to, intersections and sharp turns. The streetlights that are required for safety shall be efficient, avoiding spillover and lighting only necessary areas. Spillover shall be eliminated through the selection of the appropriate light standard and lighting device (bulb). The standard lighting, where necessary for safety shall be full cut-off, low-pressure sodium lights, mounted on poles with a maximum height of 16 feet. In addition to reduced street lighting, the lighting of private recreational facilities, such as tennis courts, shall not be permitted. Swimming pools may be lit for safety purposes, using ground lighting that does not project more than six feet from the lighting source. The outdoor lighting of single-family residences is permitted and may be installed for the purposes of safety and security. However, this lighting shall minimize the emission of light rays into the night sky and neighboring open spaces and properties. Carefully designed lighting plans are required when submitting for building permits in order to determine the best balance between safety, security and the preservation of the dark night sky and protection of the resources in the MHPA. This lighting plan shall indicate the locations, type and materials of all project lighting and depict the range of this lighting. Lighting is also to be provided per the following MSCP guidelines:

Artificial lighting is generally not a compatible use in preserve areas as it can be detrimental to wildlife use, particularly to nocturnal species. Artificial lighting is not to be provided in preserve areas. Streetlights are to be installed if essential for roadway, facility use and safety. Low voltage outdoor or trail lights, spotlights, or bug lights are prohibited in the preserve.

17. Off-Road Vehicles

Off-road vehicle activity is an incompatible use in the open space area, except by public agencies for maintenance, management, or emergency purposes. Trail and utility access points should include barriers to preclude off-road use.







Del Mar Mesa Specific Plan FIGURE

