

Community Environment, Conservation and Design Element



COMMUNITY ENVIRONMENT, CONSERVATION AND DESIGN ELEMENT

This element establishes a community identity for Carmel Mountain Ranch through a consistent focus on topographic character and landscaping. The guidelines presented in this chapter address the implementation of the community theme, the treatment of environmental resources, the grading design for urbanized areas, design compatibility within the community and with adjacent developments, streetscape design and site planning considerations.

OBJECTIVE

TO ENSURE A HEALTHY, SAFE ENVIRONMENT THAT BALANCES DEVELOPMENT WITH PRESERVATION OF ENVIRONMENTAL ELEMENTS AND NATURAL RESOURCES AND ASSURES HIGH DESIGN STANDARDS FOR EACH DEVELOPMENT ZONE which will be achieved through the following:

- Preservation of unique natural environments in accordance with relevant EIR mitigation measures.
- Employment of aesthetic and appropriately functional signs, fences, street lighting and street furniture which reinforce defensible spaces.
- Incorporation of passive and active solar technology where appropriate to achieve energy efficient developments.
- Landscaping choices employing indigenous species and low water demand flora to reduce the irrigation demands of the community while minimizing water run-off and erosion.

PROPOSALS

1. Community Theme

A community theme has been developed for Carmel Mountain Ranch to establish a distinctive identity for this new community along the I-15 corridor. The theme incorporates the extensive use of boulders, stone material, topographic relief and landscaping throughout the community to create an attractive image that will integrate the existing character of the site with the planned urban development. Additionally, the theme will provide a sense of community for Carmel Mountain Ranch residents, employees and visitors, and differentiate the community from surrounding developments in a distinct yet complementary manner.

Carmel Mountain Ranch will be an urban community of variable topography set against a backdrop of steep terrain. The landscape concept developed for Carmel Mountain Ranch (**Figure 16**) will enhance the character of the community. The concept proposes the use of a specific palette of trees and understory plant material (**Appendix, Table 1**) in designated areas (**Figure 17**) to reinforce the topographic relief between development areas, to accentuate the visual character of Chicarita Creek and to complement the urban uses within the community. Upon ultimate development of the site a progressive view of







the community will show the ridgelines punctuated with pines and other evergreen conifers, transitioning into the native oaks as one moves toward lower ground.

Groves of sycamore and cottonwoods will dominate in low-lying areas and valleys, providing a dramatic contrast to the conifer. Riparian vegetation including willows and sycamores will intersperse the banks of Chicarita Creek. Broad, lawn-edged avenues lined with London Plane trees will create a "campus-like" setting for the regional shopping mall and town center. Colorful plantings will be used to accent focal areas. The community tree patterns and understory vegetation will define neighborhood units that will blend into a total unified community theme.

Guidelines to establish the community theme include:

- The community theme trees listed in **Table 1**, (**Appendix**) will represent a significant portion of the trees used in the designated landscape zone and can be used on slopes, building lots and along streets.
- A minor understory of trees should be used in conjunction with the major community trees to create a neighborhood theme, accentuate focal areas and relate to residential scale and street patterns (Figure 18).
- Natural boulders and stone material should be used in the landscape on slopes, parkways and street medians as a component of the community theme. Fieldstone walls, cobblestone paving and other stone materials should be used to the extent feasible to carry the theme into the built environment.
- Landforms along parkways and medians should be contoured and modulated to reflect the theme of topographic variety within the community.

2. Environmental Resources

Environmental resources will be sensitively handled in the design planning for the community. The dominant resources within Carmel Mountain Ranch include topography, boulders and rock outcroppings, geologic concerns, biological resources (vegetation, Chicarita Creek, vernal pools), archaeological and paleontological resources and views.

a. Landform/Topography. The topographic character of the site will be retained by preserving the more scenic areas on site as natural open space and by incorporating special grading and landscaping design guidelines within the urbanized area of the community.

Approximately 101.3 acres of the site will be preserved as open space in a natural condition. The majority of this acreage, located in the southern half of the site (**Figure 19**), is comprised of rugged, chaparral covered hills. In addition to preserving the land, retention of this area as open space will conserve native vegetation, wildlife habitat and scenic resources. Guidelines addressing the interface of urban development and natural open space are provided in item **4. Design Compatibility**, below.

Guidelines provided in item **3. Landform and Grading**, below, outline methods to retain the natural site character within the built environment.







b. Geological Features. Beautiful boulders and rock outcrops are scattered across the southern half of the site (Figure 19). A substantial amount of this resource will be preserved as part of the natural open space within the community. Much of the rock material that will be removed for urbanization should be reused within the landscaping for Carmel Mountain Ranch whenever possible (Figures 20 and 21).

Identified geologic concerns will be mitigated for the safety and enrichment of the community environment.

c. Biological and Hydrological Resources. Chicarita Creek flows along the southwest perimeter of Carmel Mountain Ranch. Although the creek is a naturally intermittent drainage way, it contains water year round due to urban run-off from Rancho Peñasquitos. The creek is presently comprised of scrub and freshwater marsh habitat and has a low visual profile.

This Plan proposes to maintain and enhance Chicarita Creek in conjunction with golf course and public parkland uses. As shown in **Figure 22**, Chicarita Creek meanders along the edge of the golf course and public park to a point where it will flow under Ted Williams Parkway and into Sabre Springs. Riparian vegetation including willows, cottonwoods, sycamores and understory plantings will be grouped along the stream course in an informal, naturalistic pattern. Areas of freshwater marsh habitat and concentrations of Aldolphia californica will intersperse the riparian plantings. A variety of birds and wildlife species are anticipated to proliferate within the enhanced creek habitat.

A supplemental study addressing the revegetation and enhancement of Chicarita Creek has been approved by the City and is on file with the City. The Plan imposes the following guidelines for Chicarita Creek:

- Use only appropriate plants native to coastal Southern California for revegetation (recommended plant palette included in the Plan).
- Create vertical and horizontal plant diversity.
- Incorporate both mixed and pure stands of trees.
- Create an irregular edge rather than straight shoreline or border between habitat types to maximize the interface between habitat types.
- Create wildlife nodes or areas of concentration where vegetation is especially dense and extensive.
- Use specialized plantings to serve as barriers to human access in wildlife nodes, or in areas with little or no buffer between the wetlands and development. Specialized plantings should consist of brambly species or those with a thicket-like growth from that will discourage human access. This should occur at the interface of the marsh with Units 1 and 2 (Residential Development) and Unit 50 (Public Park).



- Implementation of the enhancement plan for Chicarita Creek should result in the preservation of sensitive resources, accentuation of the visual prominence of the creek, as well as, enrichment and diversification of the wildlife habitat.
- The developer has complied with the City's vernal pool preservation program through the donation of funds for off-site mitigation for the impact to on-site vernal pools.
- **d.** Archaeological Resources. In-field survey of Carmel Mountain Ranch has indicated the presence of 23 archaeological sites within the property and the potential for paleontologic resources. A mitigation program has been developed for the sensitive resources within Carmel Mountain Ranch and is discussed in the Cultural Resources Element.

e. Visual Resources.

Portions of Carmel Mountain Ranch are highly visible to motorists along I-15. Views of the property currently expose previously graded commercial and industrial areas in the northern portion of the property, with gently rolling hills ascending to rugged, rock covered terrain in the south. Panoramic views of off-site areas are visible from the upper elevations of the property (**Figure 19**).

Ultimately, the view of Carmel Mountain Ranch will be predominantly urban in appearance. Views from the freeway and major interior roads will converge on a variety of focal points throughout the community. Representative views will include the architecture of development arranged upon a varying topography, landscaped areas, the golf course and rugged natural terrain. Distinctive architecture and attractive landscaping should be used in these areas to ensure interesting and aesthetic views. Guidelines for highly visible areas are included below in item **4**. **Design Compatibility**.

3. Landforms and Grading

The intent of the community grading concept will be to relate the proposed development to topography and natural features in order to retain the character of the landform as much as is feasible. Thus, even in a graded state, the proposed development will maintain the major topographic character of valley floors, hillsides and hilltops.

The following measures should be employed to reduce the impact of necessary grading and to produce a more aesthetically pleasing development.

- **a.** General Guidelines. Utilize daylight cut and fill methods where feasible to decrease grading (Figure 23).
 - In general, manufactured slopes should be a maximum grade of 2:1, and no more than 50 feet in height. Exceptions to this standard include the manufactured slopes along Ted Williams Parkway and within Units 41, 22, 23, 20, 5, 5A, 6, 6A and 9. Special design guidelines for these slopes are discussed under separate headings in this section.



- Manufactured slopes should be rounded at top and toe of slope to simulate natural contours (**Figure 23**). Manufactured slopes should also be blended and contoured to relate to the natural terrain along the daylight line.
- Grading operations should be phased to decrease erosion potential.
- Cut slopes in highly rocky areas, to the extent feasible, should have a rough, irregular surface to provide a more naturalistic appearance.
- Cut and fill slopes will reflect the natural hillside forms as much as possible. Smooth flowing planes will be the goal.
- Level terrain areas such as parkways, medians and landscaped open space can be recontoured to create interesting forms.
- A contoured landform can be simulated through the use of landscaping techniques. In particular, the arrangement of plant materials, as well as the use of vegetation with varying heights, can create the effect of a horizontally and vertically undulating slope terrain (see **Figure 24**). In addition to landscaping techniques, slopes can be undulated by grading where feasible. This can be accomplished by varying slope ratios in areas such as at intersections and the interface of various land uses with open space. Hillside homes will be blended with the terrain utilizing these landscape techniques.
- Boulders should be incorporated into the landscaping of slopes to retain the natural character of the site (see Figure 20).
- All slopes shall be planted with a combination of groundcovers, shrubs and trees to ensure slope stability, reduce erosion potential and improve visual appearance. A recommended plant palette for slope planting is provided in **Table 2**, **Appendix**.
- Groundcovers and some shrubs should be hydroseeded to ensure a quick vegetative cover of slopes and to reduce erosion.
- Additional shrubs and trees should be planted from containers.
- The use of a variety of plant species, as well as fast and slow growing plant material, will ensure an attractive short-term and long-term landscape character.
- Graded areas adjacent to natural, ungraded terrain should be planted with native and naturalized plant species as provided in **Table 2**, **Appendix**, to provide a subtle blending to the two areas.
- Supplemental irrigation should be used on all newly planted slopes; but may be discontinued once vegetation is established if the plant material is drought tolerant.
- Development and addition of landscape materials in natural, steep hillside areas will be minimized and designed to retain natural drainage patterns.



- Grading will be performed in conformance with the Land Development Control Ordinance to ensure proper drainage, slope stability and ground cover revegetation. An extended maintenance period (length of time to be determined on an individual project basis) should occur for slope areas exceeding 50 feet and for steep slopes (1.5:1 and 1:1) to ensure successful revegetation.
- All buildings will be planned outside of areas subject to flooding.
- Maintenance of manufactured slopes is discussed in the **Implementation Element**.
- **b.** Manufactured Slopes Equal To or Greater Than 50 feet. Some of the slopes in or adjacent to Units 41, 22, 23, 5, 5A, 15 and 15A.
 - Unit 41: A 50-foot vertical separation is likely at the western perimeter of this parcel along Carmel Mountain Road.
 - Unit 22: Two cut slopes ranging from 50 to 60 feet may be necessary at selected locations along the western perimeter of the parcel.
 - Unit 23: The variable topography in this area may require two interior slopes of 50 feet and two fill slopes ranging from 70 to 100 feet.
 - Unit 5: A vertical separation ranging from 50 to 60 feet is anticipated between Units 5 and 6.
 - Units 15 & 15A: A vertical separation of 50 feet is anticipated between Units 15, 15A, and 16. In addition to the general guidelines provided above, the following measures are recommended to reduce the scale of tall manufactured slopes:
 - Slopes should be heavily planted and utilize a variety of plant species and plant heights to modulate the appearance of the slope (Figure 25).
 - Trees should be planted near the base of slopes to de-emphasize the scale of slopes.
 - If stable rock is uncovered during grading, slopes may be steepened to 1.5:1 and 1:1 to reduce the height of cut, as well as provide an interesting visual feature.
- c. Grading along Ted Williams Parkway. Ted Williams Parkway was realigned from its previously designated location to reduce the grading that was necessitated to construct the road. Although grading for the arterial has been reduced, cut slope banks averaging 50 to 70 feet in height have occurred since 2:1 slopes are required for construction. Use of the following design guidelines reduced the impact of these slopes.



4. Design Compatibility

Carmel Mountain Ranch has a character resulting from its topography, vegetation and visual relationship of the area to its environs. Development of Carmel Mountain Ranch will seek to perpetuate and accentuate this character. The proposed landscape concept will reinforce this objective and provide a unifying theme throughout the community by the consistent use of the community tree palette, boulders and stone material. Strong design statements will be made in major areas of the community. Chicarita Creek and the Regional Center are highly visible from I-15. They will establish a community statement melding the urban with the open setting. The rise of the land beyond them will enable internal land uses to be a backdrop for the community. The choice of building heights will be geared to the silhouette of the terrain: higher buildings are planned on lower ground, particularly within the Town Center area.

Environmental resources characteristic of hillsides—such as views of and from hillsides and natural drainage channels—will be retained to the extent possible. The rhythm of the hillside topography and profiles will be complemented by the rooflines and rhythm of building silhouettes.

- a. Transitional Elements between Community Land Uses. While the community theme will provide a unified appearance throughout Carmel Mountain Ranch, particular attention should be given to the treatment of adjoining land uses within the community, as well as the interface of Carmel Mountain Ranch with surrounding communities. Compatibility between adjoining land uses can be enhanced through architectural design, building materials and landscaping. In some situations, however, it may be more appropriate to separate adjoining land uses through transitional elements such as grade separations, berms, landscaped setbacks, screens, fences and walls, open spaces and wide streets. The following examples illustrate the use of typical transitional elements that should be used in Carmel Mountain Ranch.
 - Figure 27 depicts a transitional treatment between Unit 41 (industrial use) and Units 10 and 11 (low-medium residential use). Buffering is provided between the two parcels by a grade separation that ranges from ten to 40 feet. The embankment should be landscaped to reduce the scale of the slope and enhance the visual separation between the parcels. Because the 40-foot grade separation does not extend along the entire interface of the two parcels, buffering should be augmented by the combined use of landscaping and walls or fences. These buffering techniques can also be used to provide a transition between residential neighborhoods of contrasting density.
 - To ensure implementation of adequate buffering, a PID was processed for Unit 41. Landscape, berm and wall treatments will reflect a color palette and material choices that will have an important part in merging the common elements of adjacent areas. Their added dimension will be to environmentally buffer circulation noise from open space, parks and residential areas. These will become an integral part of the design sensitivity planned for transitional zones.









Transition from Urban Development to Open Space

29

Carmel Mountain Ranch Community Plan EXHIBIT

- The golf course that will meander through Carmel Mountain Ranch will provide a visual recreational amenity for the community, as well as an attractive separation between the various residential neighborhoods (Figure 28). The separation, coupled with the use of an internal street system, restricted circulation (cul-de-sacs) and a neighborhood landscape theme, will provide defensible neighborhood units. Landscaping should be used between the edge of the golf course and residential parcels to frame views from the dwelling units, as well as to soften the view of units from the golf course.
- **Figure 29** depicts the transition between ridgetop development and low-lying development, as well as the design methods that should be utilized to blend the interface of urban areas with natural open space. As shown, the top of slopes should be rounded and graded terrain and should be blended into the natural contours. Native and naturalized plant material should be used to soften the transition and to harmonize with the existing native plant species. Natural rock should be retained in open spaces and placed on man-made slopes, where feasible, to simulate a naturalistic appearance.
- **b. High Visibility Areas.** The following guidelines should be used to ensure interesting and aesthetic views of areas visible from the freeway and major roads:
 - Landscaping along the roads should be grouped to frame views and create view windows to specific areas of the community. The landscaping along roads and within development areas should not totally screen buildings, but rather provide intermittent views of the development.
 - In situations where land uses are located below the grade of a road, views should be directed to long-range background areas rather than foreground views which focus on roof tops.
 - Views of parking areas should be screened by landscaped berms or dense planting.
 - When major roads will be located at or below grade development, parkways and slopes should be well landscaped with diverse and colorful plant materials to enhance views. Careful attention to architectural detailing should be emphasized for buildings which will be highly visible from roads.
- c. Compatibility with Adjacent Communities. The functional relationship with the adjacent communities of Rancho Bernardo, city of Poway, Sabre Springs and Rancho Peñasquitos is important in the development of Carmel Mountain Ranch. Major roads within the community, including Carmel Mountain Road, Ted Williams Parkway, SA-680/Camino del Norte and Rancho Carmel Drive, will connect to roads in adjacent communities. Buffers between internal and external land uses will be employed when needed and blend compatible land uses when appropriate (e.g., between Carmel Mountain Ranch housing and similar housing in Poway and between Unit 40 Industrial and industrial planned for Rancho Bernardo). Transitional elements such as berms, walls and fences, open space and landscaping should be used where appropriate.







5. Street Treatment and Urban Design

Tree-lined streets and boulevards will direct motorists, bicyclists and pedestrians through Carmel Mountain Ranch and contribute to the aesthetic appearance of the community. A variety of streetscape elements, including signage, will be used to enhance the appearance and function of the community circulation system. The streetscape design will also contribute in establishing individual identities for residential neighborhoods and the industrial and commercial centers. Representative streetscape designs are illustrated in **Figures 30**, **31** and **32**.

- a. Streetscape Design. Design guidelines for the streetscape include:
 - The street scene design elements (street character, community and neighborhood entrances, street furniture, signage and lighting) will be compatible with environmental and design objectives. Both will reinforce elements of public safety design.
 - A harmonious design should be used along all major streets in the community.
 - Community theme trees should be accented by an understory of turf, groundcover and shrubs along parkways and street medians.
 - Mounded turf and landscaped berms should be used where appropriate to reflect the topographic character of the community.
 - Boulder groupings and outcroppings should be utilized in the streetscape to the extent feasible.
 - Residential hillside streets will follow natural contours and give a sense of the predevelopment landforms to the extent feasible.
 - Landscaped pockets or parkway strips will be aesthetically and safely incorporated into lengthy streets combining design sense with wise traffic planning.
 - Any fences or walls constructed along the roadway should be uniform in design and materials for the length of each project and should harmonize with other buildings, walls and fences visible from the road. While high walls should be minimized, the use of berms is encouraged to add to the open feeling.
 - Sidewalks may vary in their relative placement to the curb and to street trees in the parkway.
 - Car, bicycle, and pedestrian travel along community streets should be safe and meet City design standards.
 - Bicycle and pedestrian markings will be incorporated at all crossings where traffic studies determine them to be necessary. Intersections will include wheelchair curb cuts.
 - Landscaping should be set back at the intersections to preserve sight distances.



- b. Community Entry Concept. The major entry to Carmel Mountain Ranch occurs on Carmel Mountain Road at the western perimeter of the community (see Figure 33). The entry concept for the community incorporates the following features:
 - Stone monument identifying the name of the community.
 - Attractive landscaping incorporating several of the community theme trees, an understory of shrubs and colorful plantings and low, grass-covered berms.
 - Boulder groupings and outcroppings.
 - Distinctive architecture for buildings within the foreground view of the entrance.
 - Framed long-range view of hillside and community development.
 - Secondary community entries have been located on Ted Williams Parkway at the eastern and western perimeter of the community (**Figure 33**). Distinctive signage and attractive landscaping reflecting the community theme has been incorporated at these entrances.
- c. Community Signage. A unified system of signs consistent with the community design character has been developed for Carmel Mountain Ranch. A hierarchy of signs and design guidelines are addressed in the Carmel Mountain Ranch Special Sign District Guidelines, (Ordinance 0-16456). These guidelines address all uses of signage within the project, including permanent and temporary signage for both the public and private use areas. Signage is designed to serve a functional, as well as aesthetic purpose, generating harmony with diverse architectural styles and complementing the public use areas of the community.

A hierarchy of permanent Community Identification Signs are addressed in the Carmel Mountain Ranch Special Sign District for the principal, secondary and minor entries. These signs will provide transitions for people entering and passing through the development.

Community, neighborhood and special use area identification signage are also addressed to identify the use areas within the development. These areas include: Regional Center Town Center, Financial Center, and the Industrial, Residential, Park and Recreational areas. These permanent Community Identification Statements will be composed of a blend of landscape and signage elements. The Carmel Mountain Ranch Special Sign District guidelines include the consistent use of the Carmel Mountain Ranch logo and/or name.

A system of temporary signs is defined in the Carmel Mountain Ranch Special Sign District for the project. These signs include the consistent use of the Carmel Mountain Ranch identification logo and name (see **Figure 34**). Color, number, size, location, placement and illumination will be controlled and regulated by criteria which provide for a diversity of sign types serving the marketing needs of the community. Such temporary signage includes:



- Community Identification Signs
- Directional Signs
- Commercial and Industrial Marketing Signs
- Residential Subdivision Marketing Signs
- On-site Future Facility and Future Development Signs
- On-site Construction and Project Signs
- Real Estate Sales and Leasing Signs

Guidelines governing residential subdivisions sales and marketing signs should be defined. For example: Directional signs for sale of subdivisions outside of the community should be prohibited. Subdivision directional signs within the community should be incorporated into a cooperative system. These may be placed in median strips and setback areas.

6. Design Considerations

a. Site Planning. Precise site planning should consider the total context of the site: views; building pads and streets; the placement of buildings on lots; the relationships to adjoining sites; the creation of spaces; service functions; and the treatment of yards, slopes and transitions to natural open space. Siting of buildings should maximize views from industrial and commercial, as well as from residential projects. Views of projects from roadways, nearby development and adjacent communities should also be considered in site planning. Site planning will be done on the large scale to accomplish views across the community from external vantage points and assure that important community statements are visible and lesser ones become obscured in the total scene.

For residential projects, site conditions may dictate flexibility in siting units and project designs accommodating difficult terrain. The use of variable setbacks and variable lot sizes may be appropriate in best fitting residential development to the land. These measures would be particularly suitable for Units 22 and 23. Usable open spaces for common recreational usage, as well as private outdoor spaces, are encouraged in attached development that are not located adjacent to some type of open space (i.e. parks or golf course). Planning will create defensible neighborhoods by the street layouts and by land use separation of incompatible elements.

b. Noise Considerations. Design features to attenuate noise impacts from projected vehicular traffic on major roads (adjacent to and within the community) will be considered during site planning. Noise attenuation can be achieved through the proper siting of buildings, berms and walls, provisions of noise insulation in buildings, or other mitigation measures.

c. Architecture. Architecture will play an important role in creating an aesthetic visual appearance for Carmel Mountain Ranch. The building design of structures within a development should possess both similar architectural styles and visual variety. The backsides of buildings on relatively high areas facing into lower areas and along roadways should be well detailed and interesting. Buildings should be diverse in height, mass, and roofline and should have shadow relief and visual interest.

Special care should be taken in roof design and selection of roofing materials, particularly in hillside areas and in low creekside areas where roofs will be especially visible.

d. Conservation Practices. Opportunities for energy conservation, particularly the use of active and passive solar systems, should be maximized by site planning. Pertinent site factors include site size, size orientation in relation to sun and breezes, and solar access in regard to slopes, landscaping and building or roof orientation.

Building design should incorporate energy conservation practices to the extent feasible. This includes energy conservation in the design and construction of heating, ventilating and air conditioning systems; water heating; window treatments; insulation and weather stripping; and lighting. Where practical, buildings or roofs ought to be oriented according to passive solar energy concepts.

Water conservation should be considered in the selection of mechanical equipment and plumbing designs characterized by low water requirements and efficient utilization of water.

In addition, landscape design and choice of plant materials should emphasize low water requirements and minimize water runoff. Landscape watering systems should supply water efficiently, minimizing waste. An example is the use of automatic sprinklers with a soil moisture override. Utilization of drought-resistant plants and native and natural vegetation landscaping is encouraged.