
CHAPTER 12. RESOURCES MANAGEMENT ELEMENT

12.1 Goal and Objectives

The overall goal in regard to resources management is to ENCOURAGE CAREFUL MANAGEMENT OF COMMUNITY ENVIRONMENTAL RESOURCES THROUGH PRESERVATION OF THE CREEKS AND A NATURAL OPEN SPACE NETWORK AND SUPPORT OF ENVIRONMENTALLY SENSITIVE DEVELOPMENT. This goal is further detailed by the following objectives:

- Preserve environmentally sensitive portions of the community in as natural state as possible while permitting relatively intense development on the remaining buildable acreage.
- Preserve or mitigate the significant impacts to cultural resources in the planning area.
- Protect biological resources to the extent possible through open space and creek habitat preservation.
- Permit reasonable grading for development while ensuring the overall landform is retained and the graded areas are blended into the natural terrain.
- Preserve the overall drainage patterns of the planning area while maintaining the water quality of the creek drainage basins.
- Conserve water in the design, construction and maintenance of buildings and landscaping.
- Practice energy conservation in the design, building and use of structures and developments.
- Mitigate traffic noise to levels appropriate to each land use.

12.2 Cultural Resources Management

As described in the Environmental Impact Report accompanying this Plan, 12 principal prehistoric sites are known to exist within the planning area. Of these there are two major sites as shown in **Figure 20**; one which straddles Chicarita Creek in the northern portion of the community and another which lies south of Peñasquitos Creek in the vicinity of the neighborhood park. **Section 2.1** provides historical background information concerning Indian habitation in the Plan area.

A phased program of mitigation should be undertaken prior to development of the community. The overall mitigation program for all archaeological sites in the planning area is described in the Environmental Impact Report.



LEGEND:

-  Important Archaeological Site
-  Creek Open Space & Habitat Area
-  Hillside Open Space
-  Neighborhood Park
-  Wildlife Corridor Between Creek and Open Space



12.3 Biological Resources Management

The Environmental Impact Report lists a number of plant and animal species currently inhabiting the Plan area. A series of measures are proposed to help preserve biological resources while permitting development in selected areas. These measures include the following:

- Preservation of over half of the Plan area in natural open space including the creeks and steep or unstable hillsides.
- Provision of access corridors to the creeks for fauna including the power easement corridor and the neighborhood park in Sabre Springs North and the neighborhood park and an extensive area in open space along Peñasquitos Creek in Sabre Springs South.
- Management of the areas adjacent to the creeks to selectively provide visual access and enhance the aesthetic quality of the community while preserving significant wildlife habitat areas. See **Chapter 13**.
- Protection of natural hillside open space areas by prohibiting off-road vehicles, channeling foot traffic, regulating dumping and grading and limiting landscaping.

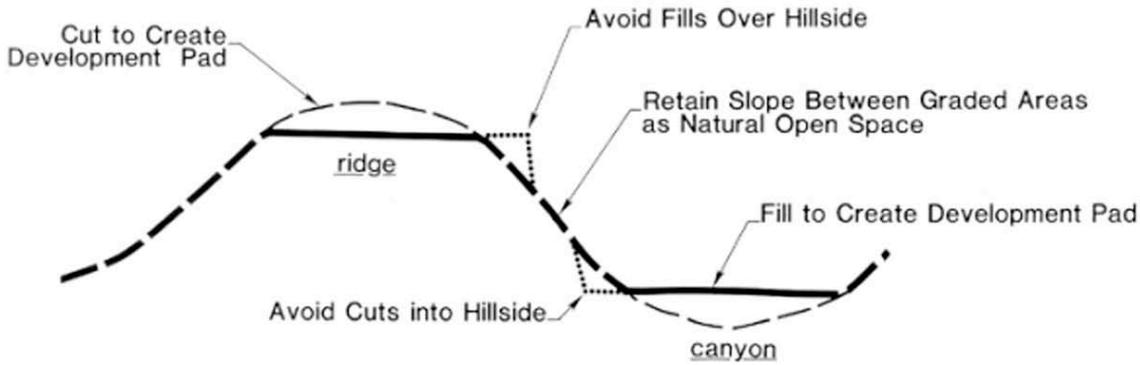
Figure 20 illustrates the resource management proposals for the planning area.

12.4 Landform and Grading

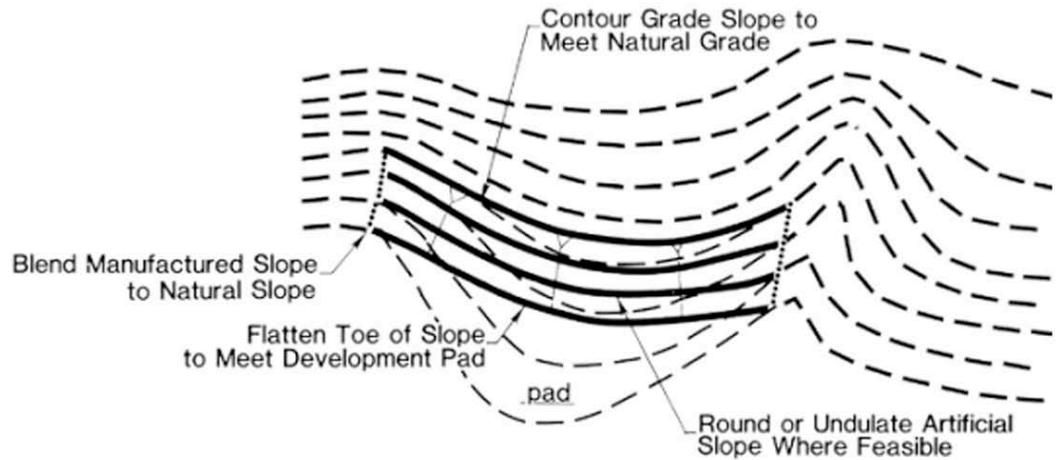
Reasonable grading for development is permitted in the areas of the Plan designated for development. However, overall landforms should be retained and the graded areas should blend into the natural terrain. Areas designated as natural open space in **Section 7.3** should be left as undisturbed as possible.

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

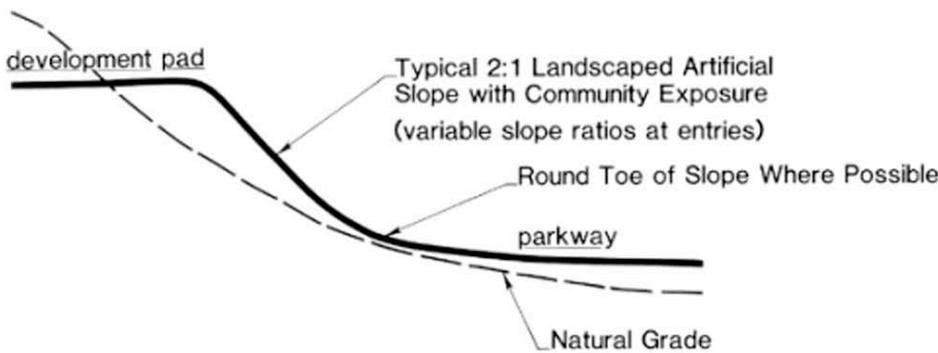
- Fill slopes should be minimized along the creek environments in order to maximize view potentials and minimize erosion from such slopes. Landscaping of such slopes should provide a “naturalized” interface with the creeks where feasible. This is particularly important along Peñasquitos Creek. Daylight cut-and-fill methods should be used to the extent feasible in grading of development areas on prominent ridges near Poway Road and 1-15 and in the southeast portion of the Plan area. Grading in these areas should result in minimal fill slopes and in retention of steep ridge slopes between ridge top and canyon housing sites in a natural state to the greatest extent feasible. This concept, labeled “Canyon-Ridge Condition,” is shown in **Figure 21**.



CANYON-RIDGE CONDITION



VISIBLE SLOPES AT OPEN SPACE TRANSITION



VISIBLE PARKWAY SLOPES



- Artificial slopes with high community visibility located in areas transitioning to natural open space should have a natural, undulating look (rather than a manufactured appearance). This is illustrated in **Figure 21**, “Visible Slopes at Open Space Transition.” The tops and toes of major slopes should be rounded and contoured where feasible. Where natural and graded areas meet, manufactured slopes should be blended and contoured to meet the natural terrain.
- The use of variable slope ratios is encouraged where feasible, particularly at collector and major street entries to development areas sitting above such entries. The toes of slopes along parkways should be flattened to the extent feasible as depicted in **Figure 21**, “Visible Parkway Slopes.”

All manufactured slopes, both temporary and permanent, should be a maximum grade of two to one, and no more than 30-50 feet in height. Slopes exceeding the height limit at the freeway interchange, along the southeast boundary and along the southwest boundary, should be specially treated as described in **Sections 13.2C, 13.3C, and 13.3D**, respectively.

All grading operations should take into account the potential for erosion and settling. Earth moving should be accomplished in phases to avoid clearing the ground cover far in advance of grading. Grading should be limited to what is necessary, such that spillovers into natural areas such as the creeks are avoided and native vegetation to be preserved is not trampled. The final earth surface of development sites should be watered and rolled to form a hardened, compacted cap of soil which will minimize dust and erosion.

Engineering and design of projects should take into account the geology and soils of the community. In the southeast and southwest portions of the planning area, the layout of this Plan considers the difficult geological conditions present on the site. The engineering for developments in these areas should protect residents and the public from potential landslides.

12.5 Drainage

In planning development and siting buildings, water flows and natural drainage patterns should be considered. Peñasquitos and Chicarita Creeks should be maintained, to the maximum extent possible, in their natural drainage condition.

The provision for the collection of sediment and control of erosion on manufactured slopes should be the responsibility of the developer as outlined in the City Code. During construction, runoff should be channeled to prevent erosion. Drainage facilities should be constructed concurrently with all grading activities, including for artificial slopes. Runoff should be directed toward planned drainage facilities and away from artificial and natural slopes, to the extent feasible. Access to drainage systems should be provided such that cleaning and maintenance are facilitated. Drainage into Peñasquitos and Chicarita Creeks should be carefully designed to minimize erosion and siltation. Drainage facilities are further detailed in **Section 8.4**.

As described in **Section 13.4**, the Plan calls for the retention of over half the planning area in natural ground cover and native plants. For planted areas, the landscaping program requires the use of native or naturalized plant stock to the extent practicable. Because indigenous species adapt to the soils, water and climate of the site, this landscaping approach should reduce both the volume of water necessary for irrigation and the requirements for fertilizers and pesticides. This would have the effect of decreasing runoff volume and pollutant concentrations.

12.6 Conservation Practices

Conservation practices should be utilized in the development of residential, commercial and industrial areas, and in public and community facilities. Conservation concerns should be taken into account, not only in design and construction, but also for long-term maintenance and usage.

A. Energy Conservation

The Plan has several energy-conserving features:

- The provision for employment opportunities within the community should contribute to shorter commuter trips.
- Transportation modes other than private vehicular travel are accommodated in the Plan (see **Section 11.3**), lowering fuel consumption.
- There is an emphasis on smaller, compact dwelling units which are less expensive to heat and cool.

Additional energy conservation guidelines are outlined below.

For energy conservation site planning should maximize opportunities to utilize active and passive solar systems. Pertinent site factors include site size, site orientation in relation to sun and breezes and solar access in regard to slopes, landscaping and building or roof orientation. All proposed projects should address solar energy issues as required by the City, in accordance with the State Subdivision Map Act, Section 66473.1.

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. Building design and equipment selection should consider life cycle costs rather than short-term capital and installation costs. Where practical, buildings or roofs ought to be oriented according to passive solar energy concepts. Energy-related equipment should be an integral part of the original design concept for a facility or project.

In addition, the role of landscaping in energy conservation should be recognized. Plant materials should be utilized to control exterior radiation and to reduce glare.

B. Water Conservation

Water conservation should be considered in the selection of mechanical equipment and plumbing fixtures. Emphasis should be placed on devices and design 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 use of automatic sprinklers with a soil moisture override. Utilization of drought-resistant plants and native and natural vegetation in landscaping is encouraged with a minimum of 50 percent native species required in creek and transition open space areas.

12.7 Noise Considerations

Noise impacts resulting from projected traffic volumes along important roadways should be mitigated to acceptable levels. Noise impacts are anticipated for development projects adjacent to busy roadways, such as I-15, Poway Road, Sabre Springs Parkway and the collector loop next to Peñasquitos Creek. Acceptable exterior noise levels according to City standards are as follows:

- 65 decibels for detached, attached and mobile home residential projects and for schools and parks.
- 70 decibels for office and churches.
- 75 decibels for retail commercial, wholesale commercial and industrial.

The accompanying Environmental Impact Report provides an analysis of noise impacts within the planning area. Possible measures to attenuate noise could include siting of buildings and buffer areas, provision of berms and walls, limiting building height, and provision of noise insulation in buildings, among others. Noise impacts should be mitigated for all projects within the planning area.