Design Guidelines

The Master Plan for Coyote Lake–Harvey Bear Ranch County Park is programmatic and conceptual in nature. More detailed design studies will be initiated as park features are scheduled for implementation. The Design Guidelines section of the Master Plan is intended to provide guidance for future design and construction, so that the long term vision of the park is maintained over time, with flexibility to adapt to future conditions.

VISION

The overall vision for the Park is to provide recreational experiences for Santa Clara County residents while maintaining the spectacular rural character of the valley and hillside setting, and enhancing the site's cultural and natural resources. The Design Guidelines strive to support this vision through careful planning and design.

ENTRANCES

Park entrances are limited to three locations: the existing Coyote Lake park entrance off of Roop Road, a new entrance to the Mendoza Area also off of Roop Road, and a new entrance to the West Flat Area from San Martin Avenue. While street-adjacent trails will be provided in some areas, these trails should direct park access to the major entrance points listed above. Other trail entrances are discouraged in order to minimize parking for trail access and park use in adjacent residential areas.
Design Guidelines

The entrances to the West Flat Area from San Martin and to the Mendoza Area from Roop Road should be designed to enhance the ranchland theme. Traditional ranch posts and beams could be placed at these entrances. (If this type of entrance feature is used, it should have sufficient clearance for large trucks required for grazing operations, fire trucks and other large vehicles.)

The entrance road from San Martin Avenue should be realigned to be at right angles with San Martin Avenue and to provide safer sight lines at the entrance intersection. Final location of the entrance intersection should be coordinated with adjacent properties and driveways to maximize safety and minimize neighborhood impact.

Consider planting an allee of trees along the San Martin Avenue entrance, selecting tree species that would enhance the ranchland character theme.

Parks Department standard kiosks may be used at the entrances, although facade enhancements should be considered (such as stone bases or wood siding) that are consistent with the ranchland theme.

ARCHITECTURE

Architectural design, particularly in the West Flat Area, should be consistent with the County’s San Martin Integrated Design Plan. Some of the relevant recommendations from the Integrated Design Plan include the following:
Design Guidelines

- Natural looking materials such as adobe, wood, stone, brick, smooth stucco, and timber shall be required. Materials such as metal sheeting and excessive use of glass are inappropriate.

- Roofing materials such as ceramic, concrete or terra cotta tiles; standing seam metal; pressure treated fire resistant wood shake; composition, or asphalt shingles shall be required.

- Colors shall generally be earth tone, or otherwise subdued. Vivid colors as accents may be acceptable.

- A more complex building shape or a cluster of smaller buildings is appropriate rather than a single large monolithic building.

- Pitched roofs, generous overhangs, wide verandas, and covered porches and walkways shall be encouraged while still meeting all other zoning and building code requirements. Flat roofs without western style parapets are inappropriate.

In the West Flat and the Mendoza Ranch Areas, architecture of new facilities should enhance the existing rustic ranchland character. In the West Flat Area, the existing barns should remain the dominant structures, with no other structure exceeding the barns in height. Appro-
Appropriate materials for the clubhouse and events pavilion include wood, stone and plaster. New structures should include arbors, porches and patios to blend indoor and outdoor spaces.

New architectural features in the Lakeside Area should blend with existing architectural styles.

**Environmental Education Center**

The design of the Environmental Education Center (proposed for the Mendoza Ranch area) will be dependent on further definition of the program, size and management structure that have not yet been determined. Generally the proposed center is envisioned as a center for school-age children and youth to attend field-oriented education programs while experiencing the park’s natural setting. The Yosemite Institute in Yosemite National Park has been sited as a model program. A similar program is also provided by the East Bay Regional Park District at Camp Arroyo Environmental Education Center and Summer Youth Camp, located at Arroyo Del Valle Regional Park in Livermoore.

Depending on the size and scope of the environmental education center, existing structures may be able to be used with little new construction. If new construction is needed, the architectural and site design can be a useful educational tool in itself of sustainable design and construction practices as noted in the description of Camp Arroyo:

*The ‘green’ camp design not only provides beautiful living and learning facilities, but also serves as a tangible example of sustainable development.* A
core goal of the site construction is to incorporate responsible building practices such as using recycled, sustainable materials; installing energy efficient lighting and climate control; preserving natural features including trees and wildlife habitats; and reusing existing infrastructure. The ecologically friendly design encourages students to visualize innovative building practices. (Source: www.ebparks.org/arroyo_main.htm)

This concept of the center’s design being an environmental learning tool should be incorporated into future design considerations for the environmental education center.

**FENCING AND GATES**

Fencing should also be consistent with the ranch character. Split rail, corral-style, and wood posts with barbed wire are all appropriate styles. Chain link fencing should not be used except in areas that are not readily visible to the public, such as maintenance areas. Pig fencing may be needed in some areas, particularly at the golf course and recreational turf areas. Typically, pig fencing is buried 12-18” in the ground to prevent burrowing under the fence. Wire fencing may be used and attached to split rail or corral style fence to blend with other fencing.

Self closing gates, operable by hikers and equestrians, should be used on trails in conjunction with fencing to control grazing as noted in the Natural Resource Management Plan.
Roads

Roads should be designed to be as narrow as possible while still meeting established safety standards. Wherever feasible, follow existing roadway alignments. Roads with regular use (such as all entrance roads and roads leading to major staging areas) should have asphalt paving, while it may be feasible to have some spur roads that remain unpaved, using compacted base material. Roads should have an unpaved shoulder where feasible, although in some areas, such as where a trail runs parallel to a road, a curb may be necessary.
All ranch roads along the ridgeline will be closed to public motorized vehicular use and will be converted to trail use or abandoned as described in the trails plan.

The roads in the West Flat Area should be designed to accommodate large trucks needed for cattle transport for grazing operations, and emergency service vehicles.

**Staging and Parking Areas**

Staging areas may be paved with asphalt or unpaved with road base material. The most heavily used parking areas should be paved. Staging areas will comply with ADA accessibility guidelines and non-point source pollution control measures adopted by the County. Overflow paving areas should be grass that can be mowed seasonally. The west flat area should be designed to accommodate a future bus stop for public transit in the event that transit lines are extended to the Park.

Staging areas at trailheads should include amenities such as drinking fountains, bicycle racks, hitching posts, benches and/or picnic tables with shade, and watering troughs. Portable restrooms may be used during initial phases, and may be appropriate for long-term use at some locations. Large staging areas should include some planting to provide visual breaks.

*Example of an unpaved area suitable for trailers.*
Design Guidelines

Example of decomposed granite, split rail fence at paved staging area.

TRAILS
The Countywide Trails Master Plan Update (1995) provides trail design guidelines for a variety of trail types and conditions, including single use and shared use trails with different gradients, and street adjacent trails. Excerpts from the Countywide Trails Master Plan are included below. Trail design and construction at the Park should be consistent with these guidelines.

Trailway Stability
Switchbacks & Stairways
(Use where severe constraints eliminate other grading options.
Optimum use on natural tread trails not paved trails.)
Design Guidelines

Trailway Stability
Switchbacks & Stairways (continued)

Creek Crossings & Water Quality

Provide a minimum 3’-0’
stair tread for shared
use trails

3’0” Minimum

Stair tread for limited use
pedestrian trails may be
reduced to 12” minimum

Consider trail stairways for short steep grades. Stair
riser material must consider user type, intensity of use
and available materials.

Locate bridge
footings outside
of high water line.

Bridge major streams and drainages.

Reinforce
downstream
spillway with rocks
or native vegetation.

Culvert crossings of small streams and drainages.
Design Guidelines

Trail Grading & Drainage

Optimum Trail Grading

For short, relatively flat slopes:
Provide for drainage by
outsloping trail with 1% cross slope. Water bars may
be required.

Trail Grading for Special Circumstances
such as Near Natural Streams or at
Switchbacks

Where required on long, steep slopes:
Provide for drainage by sloping trail
toward backslope and collecting in ditch.
Waterbars / culverts are required.

Cut Slope Ratio:
Rock 1:1 Maximum
Soil 2:1 Maximum

Fill Slope Ratio:
Rock 1:1 Maximum
Soil 2:1 Maximum

Remove embedded rock and stone that protrude more than 2"
above the trailbed and recompact to 90% relative compaction.

Shared-Use Trails

Paved Tread–Double Track Trail for Equestrians, Hikers & Bicycles

Shared-use Trail Route: a trail route designed,
developed, and managed for all types of users. Use would
be accommodated either on one Shared-use Trail, or a
combination of parallel Limited use (see Figure G-4)
and/or Single-purpose Trails (see Figure G-5).
Design Guidelines

Shared-Use Trails
Natural Tread–Double Track Trail for Equestrians, Hikers & Bicycles

- Native material or Base rock
- 2'–0" minimum vegetation clearance on each side of trail. Prune all brush over 12" in height & 1/2" in diameter that extends into trailway.
- 12'–0" vertical vegetation clearance
- Optimum width varies
- Optimum 2% Cross-slope for Drainage
Design Guidelines

Limited-Use Trails
Natural Tread—Single Track Trail

Native material or Base rock

2'-0' minimum vegetation clearance on each side of trail. Prune all brush over 12" in height & 1½" in diameter that extends into trailway.

Optimum Width Varies
Optimum 2% Cross-slope for Drainage
Design Guidelines

Trail monitoring and maintenance guidelines are also found in the Countywide Trails Master Plan and should be implemented. Elements of trail maintenance include:

- Yearly inventory of trail maintenance needs
- Clearing of vegetation within the trail tread
- Corrective work for drainage and erosion problems
- Elimination of abandoned or unauthorized trails
- Monitoring of adjacent sensitive habitats
- Fuel reduction
- Trail use supervision

Information on these and other trail monitoring and maintenance tasks is found in the Countywide Trails Master Plan.

Golf Course

The proposed golf course is one of the most significant features of the West Flat Area. Careful design will be needed to assure that the golf course achieves recreational, environmental, and visual objectives, and that it complements the park’s rural ranchland character. If designed properly, the golf course can serve as both a recreational asset and a tool for site restoration.

The County’s Environmental/Design Guidelines for Golf Courses, approved by the Board of Supervisors in 1996, provides a framework for environmentally-sensitive golf course design, and provides recommendations for grading, habitat, water quality, water demand, archaeological site preservation, traffic, aesthetics and noise. Relevant examples from these guidelines are noted below:

- Potential sites should be selected which allow the golf course to be routed in such a way as to minimize the need to alter or remove existing native landscapes, trees, and vegetation, and which provide opportunities for restoration/enhancement of valuable habitat.

- Course design should provide for creation and/or restoration of native habitat.

- The site plan should identify areas for restoration, replanting, and enhancement of riparian habitat to re-establish wildlife migration corridors and linkages between fragmented...
Design Guidelines

habitat areas. Insure protection and planned restoration/enhancements for such areas during construction and ongoing operation.

• Areas between fairways should be utilized to retain and restore existing native vegetation, where possible.

• Native habitats and communities of special value to threatened/endangered species shall be preserved to the greatest extent possible, consistent with State and Federal regulations.

• The site plan should protect drainage systems that support retained vegetation.

• Structures and buildings should be located such that impacts to habitats and significant natural areas are avoided.

• A plan for removal of invasive, exotic plants should be provided.

• Development of ponds which mimic natural conditions in terms of both aesthetics and habitat, to the extent feasible, is encouraged.

• Design should create and restore riparian habitat, especially in previously degraded habitat areas, and should reduce the impact of alterations necessitated by design and construction of the course.

• Cart paths should be graded such that runoff from them generally does not flow directly into any stream.

• The design of the course and related facilities should maximize the preservation of clusters or significant stands of trees, particularly oaks, and otherwise preserve "interior" habitat areas.

• Irrigation systems should be designed to avoid impacting existing oaks or other sensitive vegetation.
Design Guidelines

• The project shall generally conform to the County’s established Architecture and Site Approval (ASA) guidelines. For example:
  – The clubhouse should not be sited on a ridge or knoll top highly prominent or visible off-site or from the Valley floor or public open space areas.
  – Buildings should not be unduly massive. Their bulk should be broken up by varying roof heights, spacing, tucking the structures into the hillside, or employing other architectural techniques to minimize the mass.
  – Building and roofing materials should be selected to blend with the surrounding environment.
  – The building design should employ non-glare glass windows.
  – Large paved areas, such as parking lots, should be broken up with landscaped strips and planters.

• The project should not provide infrastructure improvements that would be capable of serving new development other than the proposed project.

• Paved areas should be limited in order to minimize impermeable surfaces and, thereby, reduce surface runoff.

• The project should employ established best management practices pursuant to the Non-Point Source Program guidelines to control non-point source (stormwater) runoff pollution. For example:
  – impervious liners for detention/retention ponds and water hazards to protect ground and surface water quality
  – buffer strips, oil/grease separators or other recommended techniques for parking area drainage systems
  – grease traps and other recommended technologies for facilities such as golf cart maintenance or wash areas to prevent untreated runoff from entering the natural aquatic environment, berms, vegetative strips, grease traps, or other recommended technologies in parking areas for drainage controls to minimize pollution to nearby riparian areas and surface waters

• The overall drainage system should be designed to insure that there is no increase in the velocity or amount of off-site flows during major storm events.
Design Guidelines

- Monitoring programs shall be established to insure on-going protection of ground and surface water quality. A contingency plan should be provided for use in the event that monitoring shows a developing problem.

- To minimize the need for chemical application, turf areas should be of sufficient size to accommodate the use, but should allow for existing or enhanced vegetation to remain between fairways.

- Storage and use of pesticides, herbicides, and fertilizers will be limited to and in conformance with all established regulations, the County Hazardous Materials Storage Ordinance, and with other permitting procedures of relevant local, state, and federal government agencies.

- Integrated Pest Management systems should be employed to insure judicious use of pesticides, which will be applied by State-certified applicators.

- Advanced technology/monitoring equipment should be used to insure minimal application of pesticides, herbicides, and fertilizers.

- Use of the slow-release, less soluble, and least mobile chemical fertilizers, pesticides, and herbicides available is encouraged. These products should be used at the smallest rates of active ingredient to accomplish the desired result.

- Drought, pest, and disease resistant grass species should be selected.

- Natural buffer areas are maintained by minimizing the use of fertilizers, pesticides, and herbicides.

- Turfgrass species and landscaping around buildings should be selected which are drought-resistant or -tolerant and which are suited for any special site characteristics or soil conditions.

- State-of-the-art irrigation systems with site meteorological monitoring capability should be used to minimize water use.
Design Guidelines

- Use of non-potable water supply, with possible use of reclaimed waste water (unless the site is adjacent to a reservoir), should be maximized in conformance with state and regional regulations.

- Approved, low-flow fixtures should be used in the clubhouse and related ancillary facilities.

- On-site wells used for irrigation water supply should be metered, with usage periodically reported to appropriate agencies, if required to do so in conjunction with aquifer depletion analysis.

- If required by the responsible agency, a drought-contingency plan prepared in coordination with the SCVWD or other appropriate agencies shall be provided.

- Barriers (curbs, fencing, vegetation, etc.) should be established to discourage cart and pedestrian travel off paths located within or adjacent to sensitive habitat areas.

- In non-managed areas, some of the standing snags and downed logs should be retained for their habitat value.

Golf Course Integration with Park Design
In addition to the established County guidelines noted above, the golf course must be integrated into the park design as a whole. The master plan recommends native grassland buffer areas between the golf course and adjacent streets. In addition, the plan includes a peripheral multi-use trail along the golf course edge. This golf course, trail and buffer area should be
designed to selectively screen golf course views and provide a natural setting for trail users. An example of this approach is the public trail and boardwalk between Spanish Bay Golf Course and Asilomar State Beach in Pacific Grove/Pebble Beach. In this example, the golf course is screened by riparian and beach dune planting along the public trail, and simple split rail fencing separates the two uses.

PLANTING

With the exception of irrigated turf areas, planting should emphasize the use of regionally appropriate native plant species.

Golf course “rough” areas and other spaces between fairways, as well as the “buffer zone” along the perimeter of the golf course should strive to replicate native landscapes: a diversity of oak woodland, willow riparian and native grassland habitat.
Native trees should also be used in other portions of the Western Flat Area and in the Lakeside Area, including valley oak species, sycamores, maples, cottonwoods and native walnut. Limited non-native trees may be used that support the ranchland theme, such as fruit trees in the orchard area.

Planting in the Mendoza and Slopes and Ridge Areas should focus on restoration planting as outlined in the Resource Management Plan.

**SIGNAGE**

Signage should be consistent with Parks Department standards for directional, regulatory, interpretive and trails signs. Standard park signs and posts are acceptable. Park maps and information should be available at all trailheads.

Interpretive signs should be of durable materials with graphics and messages designed specifically for the park. Potential themes include: history of South Valley settlement from pre-history to ranching; restoration of native habitat; ranching and the conservation ethic; the role of grazing in restoration; the role of agriculture in the South County; water sources, use and conservation in Santa Clara Valley.
Design Guidelines

An interpretive sign program will be developed as a part of phased implementation consistent with the County Parks Department's Interpretive Sign Project Planning Guidelines.

Trail signs should clearly mark trail destinations and distances. Also consider a trail ranking system that indicates the difficulty of each trail.

![Typical Trailhead Sign Board](image1)

![Typical Trail Sign](image2)