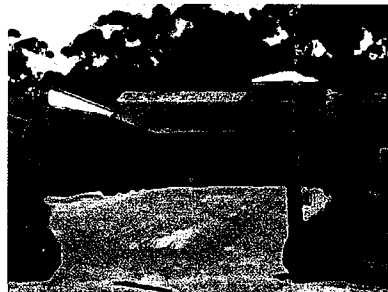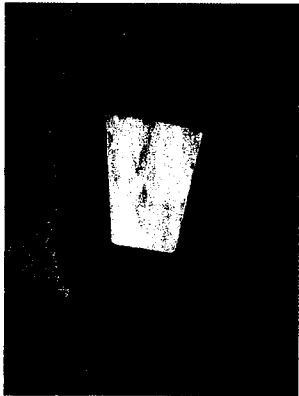# OTAY VALLEY REGIONAL PARK

DESIGN STANDARDS & GUIDELINES

OTAY VALLEY REGIONAL PARK

OTAY VALLEY REGIONAL PARK

DESIGN STANDARDS & GUIDELINES

October 27, 2005

Prepared for:
The County of San Diego
Department of Parks and Recreation

OTAY VALLEY REGIONAL PARK

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EXECUTIVE SUMMARY

This Otay Valley Regional Park (OVRP) Design Standards & Guidelines document is the result of multi-jurisdictional planning efforts by the County of San Diego, City of Chula Vista, City of San Diego, 30-member Citizens Advisory Committee, and the design consultant, RRM Design Group.

The purpose of the Otay Valley Regional Park Design Standards & Guidelines is to establish design standards for publicly owned facilities within the OVRP, and to provide guiding principles for adjacent private development that interfaces with the park. In addition, it expands upon materials and planning concepts presented in the Otay Valley Regional Park Trail Guidelines document, published in October of 2003, and the OVRP Concept Plan, adopted in 2001. The design guidelines presented in this document support the previously mentioned planning efforts by establishing a consistent architectural style within the Park that will span jurisdictional boundaries. Section 1 of the document outlines the site design standards for the park including site planning, drainage, circulation and site amenities. Section 2 addresses classification of signs and graphic standards. Section 3 addresses the architectural style for the park and architectural elements for large and small facilities, such as civic buildings, recreation centers, community and/or visitor centers, maintenance facilities, ranger headquarters, and future private development. Section 4 establishes landscape standards throughout the Park in urban areas as well as natural areas. Following the design standards for public facilities, Section 5 outlines development goals and principles to assist future private development both within and adjacent to the OVRP property boundaries. The purpose of the development principles, or guidelines, is to provide consistency in the architectural style and synergy in the Park's regional character and neighboring land uses. It also sets the stage for subsequent preparation and adoption of specific design standards and guidelines for adjacent private development.

This document establishes the look and feel of facilities that will be constructed within OVRP and provides guidelines for adjacent private development. This document does not provide detailed architectural designs or construction drawings from which structures shall be built but serves as a guiding tool to the development of park facilities.

All design standards and guidelines outlined in this document for the use of planning, design development, or construction must be performed in accordance with all applicable local, state, and federal codes, including but not limited to the American Disabilities Act (ADA) and the Clean Water Act regarding Best Management Practices.

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OTAY VALLEY REGIONAL PARK

INTRODUCTION

I-1 Project Setting

The Otay Valley Regional Park (OVRP) is located in the southwestern portion of San Diego County, a few miles north of the Mexican Border. The concept plan boundaries stretch from west to east approximately thirteen miles and comprise more than 8,500 acres within the Otay River Valley, (refer to Appendix B). The Park is within the jurisdictions of the Cities of San Diego and Chula Vista as well as the County of San Diego and is held in both public and private ownership. Agriculture, rock mining, and recreation are the current land uses within the Valley, with the recreational element providing significant open space and active/passive recreational opportunities for the surrounding communities.

OVRP connects with many adjacent trail systems, parks and preserves including, but not limited to, the California Riding and Hiking Trail, the Chula Vista Greenbelt Open Space and Trail System, Jamul/Dulzura Trail System, Bayshore Bikeway, Eastlake and Otay Ranch Community Trails, Otay Ranch Preserve, Otay Lakes County Park, and Otay Mountain Ecological Preserve.

I-2 Planning Background

In recent decades the Otay Valley has experienced an increase in urbanization and changes in land use. Changes in land uses have resulted in reduction of open space, compromising the valley's natural and cultural resources. Recognizing the importance of protecting and preserving the River Valley, a multi-jurisdictional planning effort was formed between the City of Chula Vista, City of San Diego and County of San Diego, utilizing a Joint Exercise of Powers Agreement (JEPA) for the purpose of planning and property acquisition within the OVRP Concept boundary.

Regional Map

The JEPA recognizes a three-member Policy Committee (PC), consisting of one elected official from each participating jurisdiction. To advise the PC on matters related to planning, the JEPA established a 30-member Citizens Advisory Committee (CAC) comprised of 10 individuals from each jurisdiction who represent community organizations, property owners, and special interest groups. In order to coordinate and implement the planning effort, staff members from each jurisdiction were appointed to a Joint Staff Team.
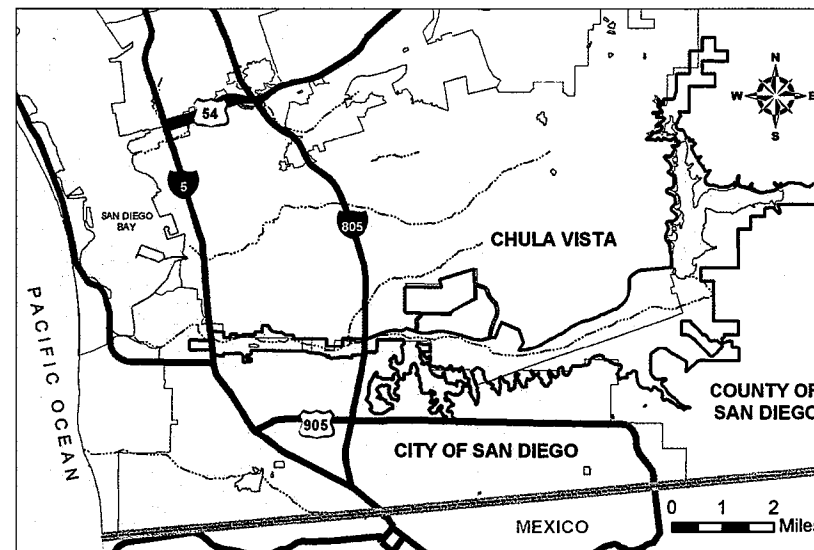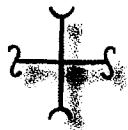
In 2001, the OVRP Concept Plan was adopted by the three jurisdictions. The Plan identifies three major goals: protect sensitive cultural and natural resources, provide a mix of active and passive recreational opportunities including trails, and provide opportunities for environmental education or interpretive programs.
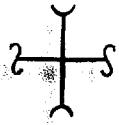
In 2003, the OVRP Trail Guidelines were approved by the three jurisdictions. The document establishes guidelines for development of a trail system within the OVRP, including trail design features.

In 2004, the County of San Diego hired RRM Design Group to assist with development of Design Standards and Guidelines for the OVRP. The RRM design team collaborated with Joint Staff and the CAC to develop three alternative design themes that would unify the character of the Park and guide the design of future construction in the OVRP. The design themes were inspired by the area's historical influences, particularly the area's historical La Punta rancho and early 'Californio' settlers. The three alternative designs were presented at various CAC and Joint Staff meetings. Option 1 was a 'Western' architectural theme with wood trusses and beams reminiscent of eastern United States influences, option 2 was the 'Californio' theme characteristic of the early Spanish influences, also known as Southwest Territorial, and option 3 was a combination of options 1 and 2 called the 'Rancho' theme. With the participation of the Joint Staff and CAC a collective decision was made to use the 'Californio' theme for the OVRP design standards.

I-3 History

The Otay Valley has been occupied by Native American cultures for more than 9,000 years. The early Native American inhabitants established settlements, hunted game and utilized the abundant resources along the river valley. The first European settlers were Spanish soldiers and missionaries sent by the King of Spain to secure San Diego Harbor and convert the Indians in Alta California. Following the establishment of the missions and the end of Spanish rule, the region was settled by Mexican cattle ranchers in the early part of the nineteenth century. San Diego's port was well known as one of the best in California, after San Francisco. For years, American merchant ships had visited these ports selling manufactured goods to the Mexican Californios. These early ranches began a prosperous cattle trade along the California coast.

Original Arguello Adobe House

One of several prominent families in the San Diego area who assisted the American forces was the Arguello Family. The Arguello family was granted Rancho Milijo from Governor Figueroa in 1833, one of the earliest of the 29 land grants in the San Diego region. The rancho covered 30 square miles north of the future international border from the Pacific Ocean to the Tijuana Mountains, including the valleys and mesas of the Otay and Tijuana Rivers. The Arguellos built a nine-room U-shaped adobe on the bluffs above La Punta in 1834, at the southern edge of San Diego Bay.

For many years this house was the only dwelling in all of southern San Diego, and the structure's prominent location on the road between San Diego and Mexico led to the Arguello lands being called Rancho La Punta.

Originally constructed of adobe, brick, and hewn timber, with subsequent additions built from wood framed walls and siding, the homestead had elements of both Spanish and American vernacular. Over the years, the adobe and surrounding lands were transferred to heirs and eventually sold. The old homestead fell into ruins but remained standing until 1951, when the new Interstate 5 freeway was constructed. Unfortunately, the building was located in the proposed freeway right-of-way and was demolished.

The combination of Spanish and American elements in the southwest spawned the territorial style, so named because this trend predominated in Arizona and New Mexico, which remained United States territories into the 20th century. This style was typical of many buildings in California as well. As the 19th century progressed, different types of building materials became more readily available due to increased efficiency in shipping and overland routes. Access to advanced building technology was evident in the use of wood millwork, double hung windows, paneled doors, and hardware.

I- 4 Purpose of the Design Standards and Guidelines

The purpose of the Otay Valley Regional Park Design Standards and Guidelines is to establish design standards for publicly owned facilities within the OVRP, and to provide guiding principles for adjacent development that interfaces with the park. In addition, it expands upon materials and planning concepts presented in the Otay Valley Regional Park Trail Guidelines document, published in October of 2003, and the OVRP Concept Plan developed in 2001. The design guidelines presented in this document support the previously mentioned planning efforts by establishing a consistent architectural style within the Park that will span jurisdictional boundaries. The development principles, or guidelines, presented in this document provide consistency in architectural style and synergy in the Park's regional character and neighboring land uses. Development guidelines also set the stage for subsequent preparation and adoption of specific design guidelines and implementation plans for adjacent private development.

These guidelines establish the look and feel of facilities that will be constructed within OVRP which intend to evoke the rustic style of the area's past. This document does not provide detailed architectural designs or construction drawings from which structures shall be built but serves as a guiding tool to the development of park facilities.

All design standards and guidelines outlined in this document for the use of planning, design development, or construction must be performed in accordance with all applicable local, state, and federal codes and criteria.

INTRODUCTION

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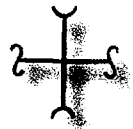
I-5 Opportunities and Constraints

The rich heritage of OVRP provides designers with several opportunities of integrating the historical and cultural information into the design of the park. These opportunities include the Kumeyaay heritage, the architectural style of the Arguello Ranch and the historical cattle brands that were used in the Valley.

The Kumeyaay were the original indigenous people to the area. Many pictures of the Kumeyaay willow structures still exist. Opportunities are available for demonstration exhibits, interpretive signs, and program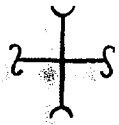s to incorporate the indigenous influences into the OVRP experience. Interpretation exhibits and programs shall continue to change with the Park to encourage interest in the area's varied cultural heritage.

As the Arguello Ranch was one of the first, and for a long time the only, permanent structure in the Otay area, it provides a basis for the theme of future construction within the OVRP. The recommendations illustrated in these design standards and guidelines seek to represent this simple historical style and the blending of Mexican and American cultures.

The Arguello family, along with many other early ranchers, had brands to identify their cattle and ranch boundaries. These cattle brands have been recorded in local archives. There is an opportunity to use original brands on park facilities to delineate local and regional staging areas.

There are potential constraints with regard to using authentic materials for the 'Californio' theme. The specific materials of construction mentioned in the following pages will differ slightly from those used during the 'Californio' period, for sustainability, use, vandalism resistance, expense, and maintenance concerns. Substitute material, colors, and texture used in the architectural elements may need to be applied to withstand vandalism and other environmental conditions.

I-6 Administration and Processing of Projects

The OVRP is administered through a multi-jurisdictional effort between the County of San Diego and the Cities of Chula Vista and San Diego. All proposed public projects within the OVRP are subject to the OVRP Design Standards and Guidelines and applicable documents (refer to Appendix D). Projects fall into two categories of administration and processing; minor and major.

Examples of minor projects include construction of fencing, building trails, repairing existing facilities in-kind and emergency construction. Minor projects are typically administered by staff of the jurisdiction in which the project is located. Major projects are typically capital improvement projects that are funded by each jurisdictions long range improvement plan. These types of projects can include the design and construction of regional recreation facilities, interpretive centers, regional and local staging areas or viewpoint/overlook areas. Major projects are administered through a design advisory process. The design advisory process involves the following steps:

1. Submit project to the OVRP Joint Staff for review and recommendation.

2. Present project to the OVRP Citizens Advisory Committee (CAC) as an information item. Second presentation to the CAC for a recommendation of approval.

3. Present project to the OVRP Policy Committee (PC) for approval.

After receiving approval from the PC, proposed projects will then obtain development permits and a California Environmental Quality Act (CEQA) review from the jurisdiction that the project is located in. The Design Consultant should confirm the necessary project process and submittal requirements at the beginning of each project with the Jurisdiction Project Manager.

I-7 Types of Recreation Areas

The OVRP Concept Plan provides for five types of recreation areas to be developed in the park. They include Regional Recreational Facilities, Interpretive Centers, Regional and Local Staging Areas, Viewpoint and Overlook Areas and Trail Corridors. These recreation areas are distinct in what uses and amenities are to be provided in different areas of the Park. In some cases the OVRP Concept Plan allows for these different recreational areas to occur within the same site.

I.7.1 Regional Recreation Facilities

Regional Recreational Facilities are areas that may be suitable for a variety of active and/or passive recreation uses for public and/or private development. They are intended to provide recreational facilities that are regional in scope and may also serve community and neighborhood needs. Typical amenities may include large recreational centers, passive and active turf areas, restroom buildings, hard-court play areas, children's play areas, concession stands, large parking lots, picnic areas with barbecues, pavilions, and monument signs to identify the area.

I.7.2 Interpretive Centers

Interpretive Centers are intended to provide an opportunity to present environmental education and historical interpretation of the OVRP for park users. Interpretive Centers may include a building with interpretive rooms and a theater for educational lectures or they may be as simple as a small outdoor area with interpretive panels.

I.7.3 Regional and Local Staging Areas

Staging Areas are regional or local access points to the Park and the Trail Corridors. Regional staging areas are designed to serve a large community base and typically contain an area for parking. Local staging areas are designed for a smaller community base of trail users and typically have very small parking lots or none at all. The OVRP Trail Guidelines should be referenced for types of amenities provided at staging areas.
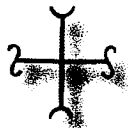
I.7.4 Viewpoint and Overlook Areas

Viewpoint and Overlook Areas are generally located at the edges of the Park Boundary and are intended to provide views into the Park. These areas are for passive use and typical amenities may include seating, interpretive signs/panels, pavilions, trash receptacles, and drinking fountains.

I.7.5 Trail Corridors

Trail Corridors are intended to provide a continuous link through the Park, connecting Recreation Facilities, Interpretive Centers, Staging Areas and in some cases Overlook Areas. The OVRP Trail Guidelines should be referenced for trail standards and development.
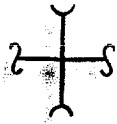
SECTION 1

SITE STANDARDS

1.1   General Site Standards

The Otay Valley Regional Park Concept Plan has four main goals; provide a mix of active and passive recreational activities, protect environmentally sensitive areas, protect cultural and scenic resources and encourage compatible agricultural uses in the park. These goals should be considered in the design of all projects and achieved through the careful planning of the site, grading and drainage, parking areas, fencing, lighting, access to trails, site furniture, bridges and board walks and graffiti prevention.

1.2   Site Planning and Design

Site planning and design involves the analysis of the site's advantages and limitations, identification of environmental issues, organization and location of buildings, overall planning of views, circulation routes for pedestrians and automobiles, and types of site furnishings required to support recreational activity. All projects should be planned to make efficient use of the land and provide a design that adds to the natural beauty of the Otay Valley Regional Park (OVRP). The following site planning objectives should be applied to all projects:

- Preserve project areas that contain outstanding scenic, natural and cultural resources.

- Protect the environmentally sensitive areas and the rural character of the site.

- Restore and enhance environmentally degraded areas of the site.

- Provide opportunities for education the public about the natural and cultural resources of the OVRP.

- Incorporate 'Green Design' concepts.

- Provide trail access points on all projects that link to the trail system.

- Maintain the floodplain in a natural state and prohibit channeling of the floodplain.

- New structures should be sited to blend with the natural landscape and take advantage of the views into the park.

- Site planning to include outdoor spaces for picnics or small seating areas that are adjacent to the park and provide scenic views.

1.3   Grading and Drainage

Grading design should be considered in the early planning stages with the following objectives:

- Preservation of the natural character of the site by minimum disturbance of existing ground forms and maintaining ground level at existing trees to be saved.

- Optimum on-site balance of cut and fill; stockpiling for reuse of existing topsoil suitable for the establishment of landscaping.

- Grading should provide for views and entrances into the OVRP.

- Avoidance of large 2:1 slopes requiring costly erosion control measures, except where these are needed in place of retaining walls.

- Tall retaining walls should be used only when no other solutions are available. If tall retaining walls are used they should be screened from the public view by trees and shrubs in front of the wall.

Drainage design must meet the requirements of the Clean Water Act, Best Management Practices and the following objectives:

- Site drainage should be designed to provide safe operation of vehicular and pedestrian traffic and to prevent damage to any buildings and adjacent property.

- Creative drainage systems that lowers the quantity of urban runoff and improves the quality of the urban runoff is encouraged.

- Three design principles to reduce urban runoff include: maximize permeable areas, maximize runoff to permeable areas and reuse storm water and reduce parking lot pollution. One of the most effective ways to reduce urban runoff is to increase the percentage of permeable surfaces and landscaped areas in a project design. This can include porous paving materials, vegetated swales or berms, retention grading, gravel beds and French drains. To maximize runoff to permeable areas rain gutters can be directed to permeable surfaces and/or drywells to collect and store for reuse. Reducing parking lot pollution can include curb less green strip filters, driveway dry wells or using crushed aggregate driveways.

- Avoid brow ditches as a drainage solution when possible. If these ditches are needed, then the concrete shall be colored to blend with the soil color.

1.4 Roads and Parking Areas

The OVRP's roads and parking areas should provide access for maintenance, emergency and security functions as well as to trailheads and recreational areas. These facilities should be conveniently sited to serve the OVRP, but without detracting from the landscape, the views and the physical space required for recreation. Where possible all OVRP roads should be designed to compliment the river valley and in a naturalistic manner. Stream crossing by vehicles should be limited to reduce water quality impacts. The use of crushed gravel and minimal signage is encouraged on all OVRP roads.

1.4.1 Basic Parking Design

- Parking spaces and circulation shall be organized in a logical and space-saving manner.

- Parking plans shall be different and customized for each site. There are various parking area layouts that provide efficient vehicle and pedestrian flow, from simple roadside parking to a full parking area. A one-way loop road with diagonal parking is one of the best layouts for circulation.

- In organizing parking spaces, non-verbal cues such as wheel stops, traffic islands, and painted lines can minimize the use of signs.

- The walk from the car to the park facilities shall be unobstructed so that users are not tempted to take a shortcut across landscaped areas.

1.4.2 Large Parking Areas

Large parking areas will be needed for the larger recreational uses. To reduce the amount of glare, heat and congestion, these large parking lots should provide landscape areas within the parking lot area. These landscape areas should be sized to accommodate trees and shrubs. As a guideline all large parking areas should provide a minimum of 5% of the parking lot as landscape area. Within the parking area one 24" (inch) box tree should be provided within 30' (feet) of each parking space. The trees should be located in a minimum of 40 square feet of unpaved landscape area. Parking areas should be screened from the OVRP by providing a high landscape screen of 30" (inches) along the entire perimeter of the parking area. Plants selected for the screen should reach a mature height of 30" (inches) in two years. Curbs or wheel stops (minimum height of 6" (inches)) are required to protect all landscape areas within parking areas. Large parking areas can be asphalt, concrete paving, stabilized decomposed granite paving or a combination of paving types. The concrete paving or granite paving should blend with the color of the surrounding soil.

1.4.3 Smaller Parking Areas

Smaller parking areas will be designed for the smaller interpretive areas, viewpoints and staging areas and serve ten cars of less. Parking should be laid out to provide pedestrians a separate travel route once they get out of the car or provide a

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route that minimizes the amount of times a pedestrian has to cross the automobile path. Trees should be provided on the perimeter of the parking area to reduce glare and heat. Ideally trees should be 30' (feet) on center and protected by fencing or curbs. These smaller parking lots will typically be stabilized decomposed granite or they can be paved or a combination of the two types. The concrete or granite paving should blend with the color of the surrounding soil. Landscape timber or railroad ties can be used for wheel stops.

1.4.4 Equestrian Parking Areas

Equestrian parking areas should be located at appropriate distances from sensitive habitats to ensure that the biological values are not impaired. The design of equestrian parking areas should feature a pull-through type parking space, to avoid backing up into parking lot circulation. Horse trailer spaces should be a minimum of 14' (feet) wide x 45' (feet) long.

1.4.5 Accessible Parking Spaces

All parking areas will provide accessible parking per the American Disabilities Act (ADA) guidelines and Title 24. Parking lots that are constructed of crushed gravel will provide the required accessible parking on a hard surface such as concrete or asphalt. Signage, ramps and wheel stops will be provided per the ADA guidelines and Title 24.

1.5 Pedestrian Pathways

Pedestrian paths in the OVRP fall into two categories: hiking trails/paths and paths within defined projects. Hiking trails/paths standards are found in the OVRP Trail Guidelines. Pedestrian paths within projects should be designed for functional and aesthetic purposes. Functionally, a pedestrian path should be provided from the public street and the parking area to the park facility. These paths should be located to provide a logical, convenient and aesthetic means of accessing the Park. Pedestrian paths should be designed to be accessible for all users and in some cases designed for emergency and maintenance vehicles. Aesthetically, paths should be designed for the user to enjoy on and off site views of the Park. Primary paths should be concrete paving with an integral earth tone color. Secondary paths can be earth tone color stabilized decomposed granite, pre-mixed by the plant at the rate recommended by the manufacturer, prior to delivery. The depth and sub-base should be based on the soil's report.

1.6 Fences, Gates and Walls

1.6.1 Fences

The OVRP should be designed functionally and visually as open as possible with as little fencing as possible. If needed, fences can separate parking areas from natural areas and trails. Fencing can also be used to
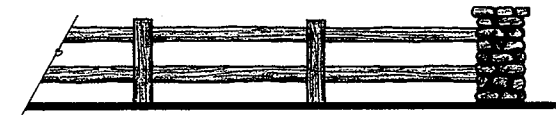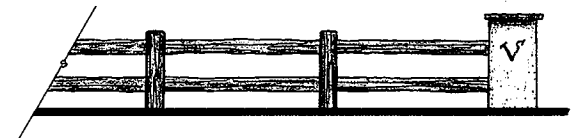
Fencing

prevent shortcutting through landscape areas or sensitive habitats. Small fence sections can also be used to draw attention to interpretive areas and trailhead. Fencing material will depend on the location. In the more urban areas of the OVRP, fencing material can be wrought iron or tubular steel maintaining the 'Californio' theme. Fencing should be powder coated paint applied electrostatically for long term maintenance. In some urban areas the fencing could also be precast concrete rail fencing with decorative columns of stucco or stone. In the natural areas of the OVRP, fencing material should be wood or concrete made to look like wood fencing. Chain link fencing is discouraged and if it is used, it should be vinyl coated and an earth tone color.

Concrete Splitrail Fencing

1.6.2 Gates

Gates should compliment the fence materials. Gate openings for pedestrians should be a minimum clear opening of 4' (feet) wide. Gate openings for vehicles should be a minimum clear opening of 12' (feet) wide. Gates used at maintenance roads should be hot dipped galvanized metal pipe.

1.6.3 Walls

Retaining or freestanding walls should be provided only when necessary and be of a similar material and color as the primary building. If a building is not present on the site then the walls should be designed in the 'Californio' theme by using adobe brick, block that looks like adobe, or block walls with a stucco finish and earth tone color. Split face block or grey concrete walls are discouraged.

1.7 Site Lighting

Projects in the OVRP should have security lighting within parking areas, along pedestrian paths and at building entrances. The minimum amount of security lighting should be 0.5 foot-candles between light fixtures. In some of the more natural areas lighting may be limited to a very few fixtures with glare shields or in some cases lighting will not be provided due to the sensitivity of the environment. All provided lighting should be energized by means of a time clock. In the urban areas of the park, lights for the parking areas, pedestrian pathways, plazas should be selected to match one another in theme, color, and materials. Light poles made of metal with an earth tone color polyester powder coat or concrete in an earth tone integral color with a light sand blast finish are preferred. The light fixture should be a lantern style to reinforce the 'Californio' theme and finished in an earth tone color. In the more natural areas of the park, light poles of concrete in an earth tone integral color with a light sand blast finish are preferred. Light fixtures should be metal with an earth tone color polyester powder coat and selected to blend with the landscape. These fixtures will need to have hoods and/or shields for glare and light spill. Bollard lights and up lights set in paving is discouraged because these lights do not reinforce the 'Californio' theme and provide difficult maintenance responsibilities.

SITE STANDARDS

SECTION 1

1.8 Non-Vehicular Trail Access and At-Grade Crossings

A non-vehicular trail access is where a trail access is accessed directly from a public street. The entrance to the trail should be easily visible with signs, vertical landscape elements, and fencing consistent with park standards. The access point shall have good sightlines along the street in either direction. If the street is curved, visibility is much better if the access point can be located on the outside of the curve. Short sections of fencing can be used to add vertical elements that draw attention to the trail access point.

At-grade crossings occur when a trail crosses a public street. The access point to the trail serves two functions when a street separates the trail connectivity. First, it serves as the terminus for the crossing. Second, it serves as a pedestrian transfer point from the street to the trail. The design of the trailhead areas on each side needs to unify the crossing. Street signs indicating the name of the trail should be visible to pedestrians using the sidewalk on either side of the street. The signs should be identical in design and symmetric in placement so that together the signs help unify the two ends of the crossing for the trail user.

1.9 Site Furniture

All projects within the OVRP should provide benches, drinking fountains, bicycle racks, trash receptacles, picnic tables, barbecues/hot coal receptacles and other site furniture as necessary. Furnishings should be reasonably consistent and compatible in style throughout the Park and forms that blend with the landscape. Types of site furniture selected should be durable, vandal resistant, and consistent with the 'Californio' theme. Selection of site furniture should also discourage overnight sleeping and skateboard use. Site furniture within a specific project site should compliment each other in color, materials and form. Site furniture should be permanently secured.

1.9.1 Benches

In the urban areas of the park, metal benches with an earth tone polyester powder coat are preferred. In the more natural areas of the park, stone or concrete benches in an earth tone integral color with a light sand blast and the park logo are preferred. Benches should be placed on concrete pads when located in lawn areas. Benches should be located to discourage skateboard activity.

1.9.2 Drinking Fountains

Each urban project site should provide at least one accessible 'High/Low' drinking fountain. Concrete drinking fountains of an earth tone color with a sand blast finish and the park logo are preferred.

1.9.3 Bicycle Racks

A bicycle rack should be provided in all urban project sites on a concrete pad and located off major pedestrian paths. In the more natural areas, a bicycle rack should be provided where possible and located in a highly visible zone as a deterrent

to theft. To blend with the landscape, bicycle racks should be simple in design, securely built and suitable for use with a U-bolt bike lock. Avoid bike racks which are likely to scratch the finish on bikes. Metal bicycle racks with a hot dipped galvanized finished are preferred.

1.9.4 Trash and Recycling Receptacles

Receptacles for trash and recycling should be provided at all project sites. In the urban areas of the park, metal receptacles with an earth tone color polyester powder coat and hood covers are preferred. In the more natural areas of the park, round concrete receptacles with hood covers in an earth tone color integral color with a light sand blast and the park logo are preferred. All receptacles should be secured to a concrete pad. At some of the more remote project sites, metal drums with animal proof lids, painted an earth tone color with the park logo may be used.

1.9.5 Picnic Tables

In the urban areas of the park, metal picnic tables with a polyester powder coat finish in an earth tone color or concrete in an earth tone integral color with a light sand blast with the park logo are preferred. In the more natural areas of the park, concrete picnic tables are preferred. All picnic tables should be placed on concrete paving or concrete pad with a 1.5% cross slope for drainage. Concrete pads for picnic tables should extend 4' (feet) beyond the table/bench dimension on all sides. Orientation of the picnic tables, adjacent to pathways, should be perpendicular to the walkway to discourage skateboard activity.

1.9.6 Barbecues/Hot Coal Receptacles

When barbecues and hot coal receptacles are provided at a site, the barbecues should be located adjacent to picnic tables and outside major circulation routes. Hot coal receptacles should be provided in a visible location and should be concrete in an earth tone integral color with a light sand blast and the park logo. Receptacles located in lawn areas should be provided on a concrete pad and the pad should extend 8" (inches) beyond the receptacle to act as a mow curb.

1.10 Graffiti Prevention

All projects within the OVRP shall be designed to discourage graffiti. All buildings walls, site walls, concrete site furniture, light poles, etc. shall be treated with a non-sacrificial anti-graffiti material. Project specifications shall include the application of two coats of anti-graffiti material to all exposed areas unless the manufacture recommends additional coats.

SITE STANDARDS

SECTION 1

1.11 Bridges and Boardwalks

Bridges should be used to span rivers, streams, or creeks with continual running water or to cross roads providing grade separation between vehicles and pedestrians. Boardwalks may be used over seasonal or perennial wet, marshy, or other sensitive lands when a pathway on grade would not be feasible and/or accessible to the general public. Boardwalks are used primarily as interpretive areas.
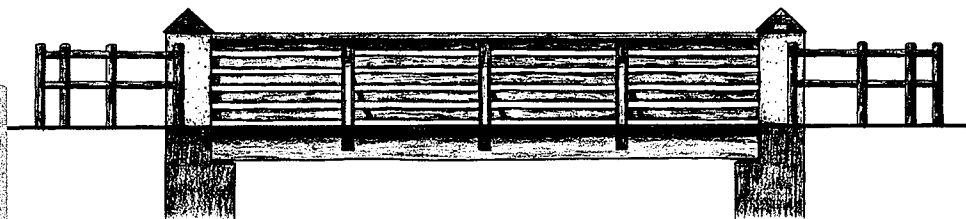

Bridge

1.11.1 Bridges

There are two main types of bridges: truss and beam. Truss bridges have a structure mostly above the deck and are capable of spanning great distances. They also have more presence in the landscape for areas that tend to be unsightly or lack visual interest. A beam bridge has a lower profile, for use in areas where the emphasis is on the beauty of the landscape. The superstructure of the bridge (wood or steel beams) is under the deck surface. The most economical means to acquiring a bridge is through a pre-fabricated bridge manufacturer. Many pre-fabricated bridges can be customized to fit the architectural preferences of the customer.

The following provides a basis for comparing bridge designs given the site and situation.

1.11.1.1 Drainage Way Characteristics

The drainage way characteristics may dictate the structural design of the bridge. When crossing a channel subject to flooding, the bridge shall be designed to be above the 100-year flood level.

When crossing channels not subject to flooding, it may still be desirable to determine whether the bridge's superstructure should be above or below the deck based on clearance underneath.

Bridge Elevation
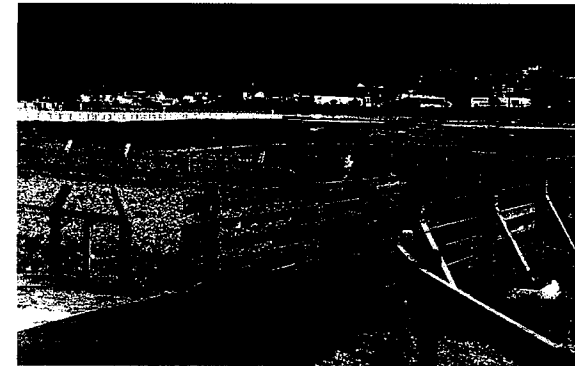
1.11.1.2 Bridge Length

Wood bridge clear spans of over 25' (feet)-30' (feet) are generally difficult without specially-fabricated structural members or mid-span piers. Steel beam bridges can span greater distances, but the beam depth will increase with proportion to the span. Steel truss bridges can span up to 130' (feet) without additional piers.

1.11.1.3 Live Load

Bridges, which will allow for small vehicles and machinery for maintenance and emergency purposes, should be designed to carry an 8 ton live load.

1.11.1.4 Bridge Aesthetics

The proposed bridge materials should reinforce the 'Californio' theme, and may include steel, wood or stone masonry.

1.11.1.5 Bridge Placement

Bridges shall be aligned along the path to avoid perpendicular or sharp turns at the bridge approach. If the bridge is at the bottom of a grade exceeding 4%, a short, flat transition area is needed to meet the bridge grade.

1.11.2 Boardwalks

Boardwalks provide a stable and creative approach to accessing shorelines and wetland features for Park users of all abilities. Boardwalks can be constructed in several different ways, depending upon the site conditions. The boardwalk structure is typically supported on piers which can be used in wet, or even submerged, areas. To minimize expense, place boardwalks in strategic locations with short segments.

Boardwalks are often used as part of a wetland exploration/education facility and are optimized for recreation and education rather than transportation. Widened observation decks should be added to the boardwalks to allow for interpretive signs. Common deck widths are 6' (feet) or 8' (feet). A width of 6' (feet) provides more intimacy with the site and creates fewer disturbances, while a width of 8' (feet) is more suitable for heavily-used boardwalks. At overlooks, intersections, interpretive signs, and other heavily-used zones, widen the deck to provide additional passing room. Boardwalks should typically be limited to pedestrians. Bicycles, rollerblades, skateboards and other recreational activities should be excluded to prevent user conflicts.

Boardwalk Setting

Design the boardwalk with widened observation decks and vary the width of the deck at intersections. Avoid creating long, straight sections with right angle turns or medium-length straight sections connected by abrupt angles. The alignment should compliment the edge of the wetland. The deck can also surround trees and other natural objects which may already be present on the site.

SITE STANDARDS

SECTION 1

1.11.2.2 Safety Railings

Railings must be provided where it is possible to fall off into deep or fast-moving water or where the deck surface is greater than 30" (inches) above the ground or water surface below. To create a sense of openness, minimize the need for and/or quantity of railings along the boardwalk.

8'-0"
6'-4 1/2"
5'-3 1/2"
9"
3 1/2"

4x4 BLOCKING

DECKING NOTCH
AROUND POSTS

TAPER DECKING TO
COVER ALL 5 JOISTS
AT CORNERS

TYPICAL FRAMING PLAN
NOT TO SCALE

5' O.C. MAX.
9" O.C.
2'-8"
3 1/2"
19"-20"
10'-12"

2x4 RAIL TOENAILED
INTO POST

NOTCHED & BOLTED W/
1/4"x6 1/2" CARRIAGE BOLT

2x6 BUMPER RAIL
2x6 DECKING SCREWED TO JOISTS
2x8 SCREWED OVER LEDGERS
2x8 JOISTS AND LEDGERS

6" DIA. x 8' POSTS

10'-0" O.C. (+ ON CORNERS)

TYPICAL ELEVATION
NOT TO SCALE

3"
2"
4"
2"
5'-6"

2x8 JOIST HANGER TYPICAL
2"
5/8"x7 1/2" CARRIAGE BOLT
3/8"x7 1/2" CARRIAGE BOLT

6'-10 1/2" O.C.

TYPICAL SECTION
NOT TO SCALE

Boardwalk Details

SECTION 2

SIGN STANDARDS
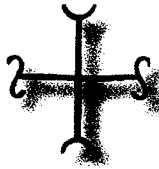
2.1 General Sign Standards

Signage for the Otay Valley Regional Park (OVRP) is an essential for place identity, interpretive information, regulatory, informational and directional information. For those reasons the Park signage should be conceived as a system of symbols that set the Park apart from other surrounding environments. To meet this goal all signs in the OVRP should reflect the 'Californio' theme and meet the standards in section 2.2 and 2.3. In addition, all signs in the OVRP must meet the codes and requirements of the jurisdiction in which the sign is located.

2.2 Classification of Signs

OVRP signs are typically of five types: Entry Monuments, Interpretive, Regulatory and Informational, and Directional signs.

2.2.1 Entry Monument Signs

There are three types of entry monument signs to be used in the OVRP. Type 1 is the largest sign and is used to identify regional recreational facilities, large interpretive centers and regional staging areas.  Type 2 is a little smaller and is used at local staging areas and overlooks. Type 3 is smaller and is used to identify major access routes and entry points to the OVRP.

These monument signs should be free standing, and placed where possible in landscape settings. The larger signs should have up lighting where possible. When planning such signs near roadways, motorist sight-lines should be kept in mind. The OVRP logo and full spelling of the park should be the focal point of the sign. Additional information can be provided on the sign in smaller text or off to the side.

2.2.2 Interpretive Signs

Interpretive signs are used to identify and educate park users about topics such as natural and cultural resources. These signs would be placed in interpretive centers and in strategic areas such as staging areas, and viewpoints and overlooks. Interpretation involves translating ideas and concepts into a format that attracts interests and inspires visitors. Quality interpretation enhances people's understanding and enjoyment of the places they visit. The cultural, historical and archaeological significance of the Park, combined with its rich wildlife and vegetation communities, supply excellent opportunities for education and interpretation (Appendix E).
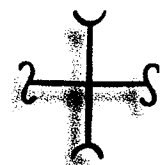
2.3.3 Other Jurisdictional Logos

Recognition of other jurisdictional open spaces or trail systems, such as the Chula Vista's adopted Greenbelt Trail System, should be provided on Park signs that are located in these overlay zones of the Park. Recognition can be provided by providing the logo of these special jurisdictional areas on the signs. Consultants and Project Managers of the Park should verify with the OVRP Joint Staff for location of overlay zones and the current logo required for each area.

SECTION 3

ARCHITECTURAL STANDARDS

3.1 Overall Intent

This section provides for architectural standards for small and large structures in the Otay Valley Regional Park (OVRP), including recreational centers, interpretive centers, ranger stations, comfort stations and picnic shelters. Location of new buildings should meet the OVRP Concept Plan by protecting the environmentally sensitive areas and protecting cultural and scenic resources. Maintenance, vandal resistance, cost, functionality, and appearance should all be taken into consideration during the design process.

3.1.1 Architectural Theme

The architectural theme for the OVRP is the vernacular of the 'Californio' ranches of the early 1800's in California. During this time period, simple adobe buildings were built by the Spanish Dons that often reflected the architecture of the old Spanish missions. With the influx of New England pioneers during this time, a new type of architecture developed from the intermingling of traditional ideas of New England with the Spanish. The architecture that resulted was often a mixture of the two cultures and their consequent adaptations with the building materials at hand. The architecture of this time was created for a direct purpose, rather than for frivolous detail, and the materials used were typically from the surrounding area.

Typical architectural features of the 'Californio' theme include:

- Symmetrical facades with a simple square or rectangular plan

- Relatively smooth stucco walls with a hand-troweled finish

- Low pitched roofs

- Deep overhanging eaves with exposed rafter tails, beams, and corbels

- Porch roofs supported by large square piers

- Recessed door and window openings
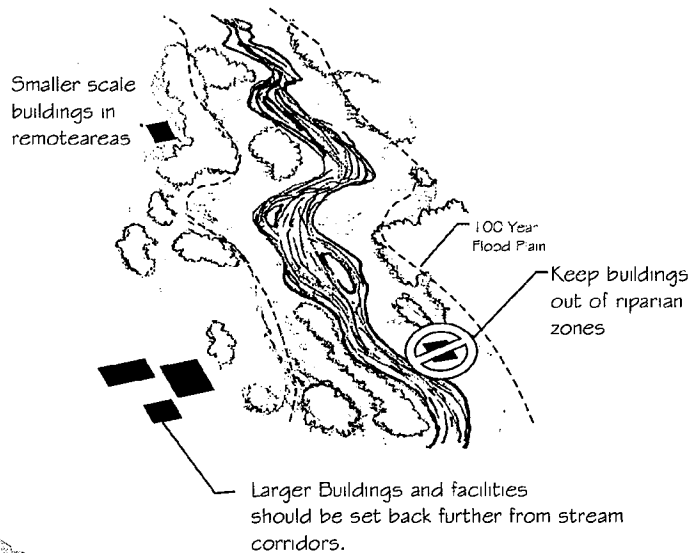
Typical Design Features

- Exterior stairs and balconies

- Multi-paned windows

- Heavy timber with dark brown finish

- Entry courtyards

3.1.2 Placement of Structures

Structures should be appropriately sited within the landscape so as to receive the most benefit from natural site factors, to blend aesthetically into their surroundings, and to minimize environmental impacts.

- Structures shall fit into the site's landscape and topography and avoid impacts to sensitive habitats.

Typical Design Features

- Structures shall be sited to provide views to the surrounding Park to encourage visitors to explore the areas via the designated trail system.

- Structures should be placed to take advantage of prevailing breezes and solar exposure.

Smaller scale buildings in remote areas

100 Year Flood Plain

Keep buildings out of riparian zones

- Courtyards should be integrated into building designs to provide shade and ventilation for year-round use.

- Building functions should be clustered around courtyards.

Larger Buildings and facilities should be set back further from stream corridors.

Siting of Structures

- Entries should be placed on south sides of structures to create opportunities for courtyards and seating areas.

Riparian Zone to be protected from development

Development Boundary

Siting of Structures

3.1.3 Architectural Massing and Scale

Building mass is expressed as the basic three-dimensional shape of a structure without regard for its details. The form and size of each mass in combination with other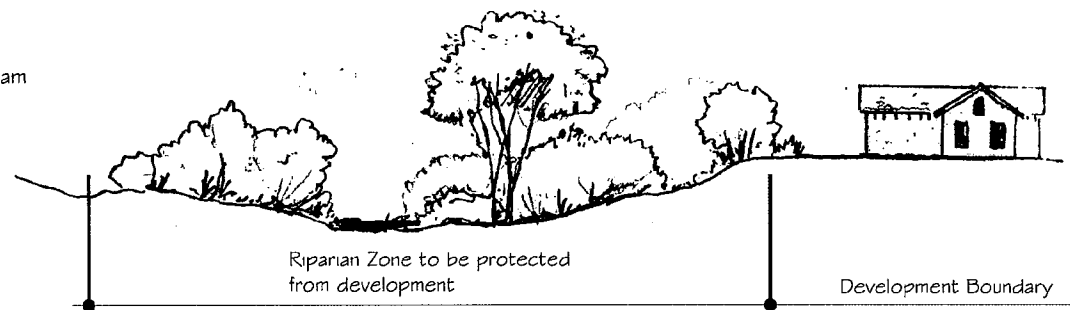s is the foundation for both the quality of experiences by its users and its visual appearance in the landscape. Voids or open spaces in the masses can alter a structure's appearance and make a building more interesting and less imposing.

- Changes in vertical planes break up a box-like appearance. Vertical elements such as pilasters help create "bays" to give the appearance of several smaller buildings.

- Architectural elements, materials, and colors can emphasize or de-emphasize a building's mass.

- Upper floors are appropriate to accommodate balconies and other architectural treatments.

Building Massing

Balcony

•The design of columns, walls, parapets, and openings shall reflect permanence by emphasizing thickness and mass.

•Projections and recesses are encouraged to add texture and differentiation between buildings.

•Architectural details that are proportional to human scale, such as arches, trellises, or awnings, should be utilized.

•Low, horizontal, and rectangular massing is most appropriate for structures.

Projection and Recess

ARCHITECTURAL STANDARDS

SECTION 3

- Terraced or stepped arrangement of masses in relation to topography is more harmonious with the landscape and more visually appealing than one single mass.

- Roofs and walls shall not be in equal proportion – <u>walls should have 2/3 proportion of story height and roofs should have a 1/3 story height.</u>

3.2 Architectural Elements, Materials and Color

Architectural elements expressive of the 'Californio' theme include roofs, walls, entries, windows, balconies, and courtyards. These architectural elements should be complimentary and work well together to create a uniform project identity through building materials and color. Each structure in the Park will contain some or all of the architectural elements depending on its function and location.

3.2.1 Roofs, Eaves and Chimneys

The roofs of the old ranches were typically wood shake or clay tile. Many of the old roofs were originally wood shake and then covered with tile. In some cases wood shake was used on the balcony roof and clay tile on the rest of the roof to relieve the cantilevered balcony from the additional weight of the tile.

Roof Forms

- Slopes of pitched roofs shall be shallow and range between 2:12 and 5:12. Steeply pitched roofs greater than a 5:12 slope are strongly discouraged.

- Gabled, hipped, and shed roofs are encouraged. Shed roofs are appropriate for porches.

- Roof parapets shall be simple and of substantial size to complement a building.
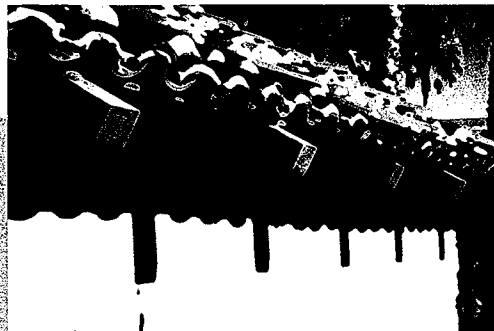
- Exposed structural elements (beams, trusses, rafter tails, etc.) are appropriate roof overhang details.
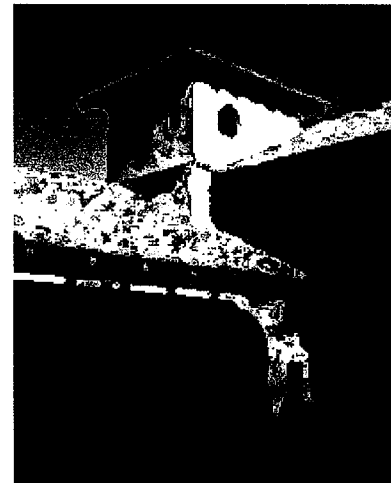
Roof Forms
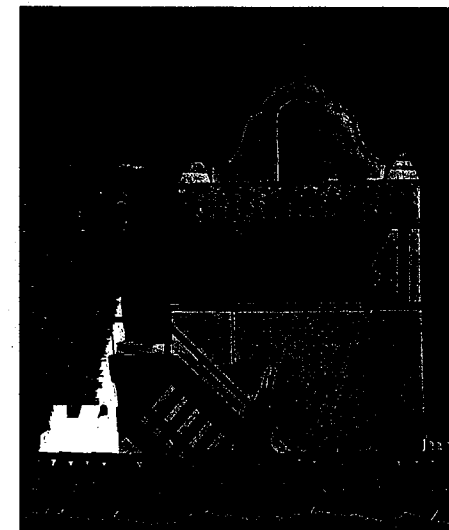
Exposed Rafter Tails

- Decorative chimney forms are encouraged. Chimneys of the old ranches were typically built of brick and located inside walls and hence the chimney came through the roof rather than being on the exterior of the building.

- Broad roof overhangs and eaves are encouraged, especially when used in plazas, verandas, patios, or where specifically used to enhance passive solar design.

- The following types of roofing materials are recommended: clay barrel roof tiles, standing seam or corrugated metal roofing that looks like clay tile or concrete or fiber-cement shingles to look like wood shake.

Decorative Chimney

Roof Overhangs
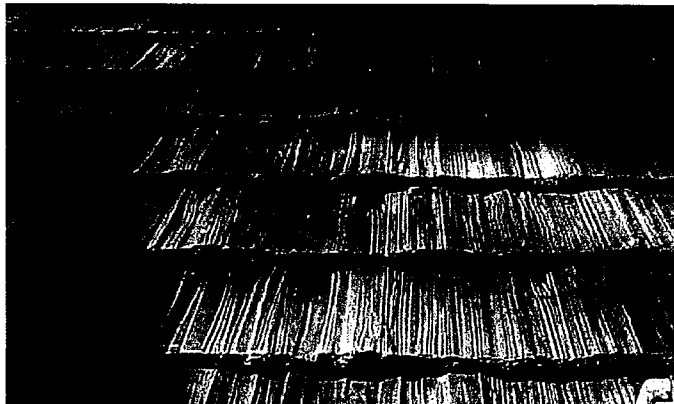
Composite Shake-like Shingles

Clay Barrel Roof Tiles

ARCHITECTURAL STANDARDS

SECTION 3

3.2.2 Walls and Facades

Structures from this period usually had two types of walls systems; adobe bricks or wood covered with mud plaster. In new construction, walls can be built to resemble adobe by using concrete block or wood frame structure, finished with a semi-smooth trowelled cement plaster. Large buildings, such as recreation centers or interpretive centers should be designed to avoid a box-like appearance with blank walls. Instead the building should allow for vertical divisions between building blocks to appear as if the building was built over time. Smaller buildings, such as ranger stations and comfort stations should be designed with pergolas and trellises to accent the walls.

- Solid walls should be moderately dominant in the building composition.

- Courtyard walls shall be extended from the building with the same materials, color, and texture.

- Large bare walls shall be articulated with varied reveal and relief patterns such as molding, texture changes, and architectural details. These measures create distinct shadow patterns resulting in the increased perception of depth and variety.

- Hand-troweled stucco surfaces or concrete block to look like adobe is the preferred wall finish.

- Building facades and walls shall have subdued medium to light colors with darker, richer colors used as accents or special features.

3.2.3 Entries and Doorways

Typical doors from this time period were solid wood with cut panels and usually in pairs with metal hardware. The doors were set into the thick walls with some kind of wood plain or decorative frame. Today, doors can be wood or metal to look like wood.

- A change in wall plane or wall articulation around the door will help accent the entry and make it clearly identifiable.

- Placement of art or decorative detailing at the entry will highlight the space.

- Extending the roof over the door opening along the entire front facade of the building is encouraged for small buildings. Two-story buildings should provide a balcony above the door entrance.

Doors

- A change in material or detailing will help accent the entry.

- Architectural elements, such as flanked columns, archways, or decorative fixtures, are encouraged.

3.2.4 Windows and Shutters

Windows from this time period were exquisitely proportioned double hung windows of wood. Panes, Colonial in scale, average 8" (inches) by 10" (inches) in size. The muntins were never over 1/2" (inch) wide and more often only 7/16" (inches) wide. Windows were usually set flush with the outside wall, the deep reveal, splayed about 10" (inches) on each side and often paneled, was on the inside, forming a sort of bay or window seat. Shutters were sometimes on the outside of the windows. Today windows can be made from wood or steel.

Doorway
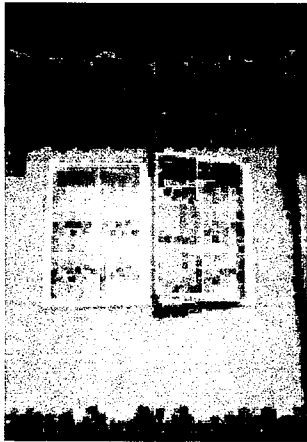
•Operable double hung or casement windows should be used. Window sashes should have true divided lights.

•Windows should be rectangular or have arched tops and should be vertically proportioned (taller rather than wider).

•Groupings of smaller windows are preferable to one large opening.

Rectangular Windows
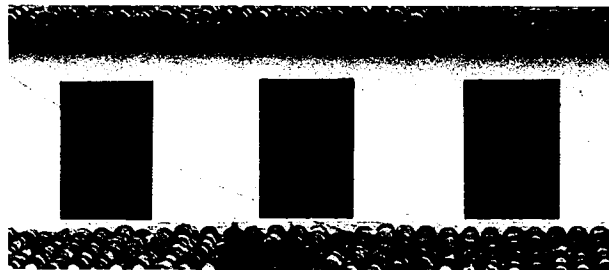
Repetition of Windows

•Openings should be articulated or accented with paint, carved wood doors, tile, or shutters.

- Window hardware, including shutters, should be of a high quality and should have a design, finish, and color that complement the 'Californio' theme.

- At the lower level, windows should reflect human scale and detail.

Operable Windows

ARCHITECTURAL STANDARDS

SECTION 3

- Heat gain can be limited by implementing awnings, recessed openings, polarized glass, or professionally-applied UV film.

- Minimize window openings that would create heat gain.

- Maximize window openings for cross ventilation.

3.2.5 Balconies, Pergolas and Trellises

Balconies are platforms projecting from the wall of a building and surrounded by a railing, balustrade or parapet. Pergolas are arbors or passageways with a roof or trelliswork on which climbing plants are grown. Trellises are frames supporting open lattice work, used for training vines and other climbing plants. Structures from the 'Californio' period featured balconies of three distinct types: the most common balcony was supported by posts from the ground to the roof, the second type was a cantilevered balcony with posts supporting the roof and the third type was the cantilevered balcony and cantilevered roof with no supporting posts. Practically all balconies had closed ends of wide vertical boarding or simple lattice work which gave more privacy and partial protection from the wind. Pergolas and Trellises were sometimes used at the entrance of a house or to connect two buildings together.

Recessed Windows

- Large building structures should feature some type of balcony on the front facade if possible. The balcony will then provide for a covered porch entrance.

- Balconies and railings should be made of wood or metal that has the same dimensions of wood.

• The use of pergolas and trellises along walls is encouraged. Trellises add shade and interesting shadow details and create an opportunity for climbing vines on bare walls.

• Pergolas and trellises should be constructed of heavy timber with a rough construction finish.

Heavy Timber Trellis
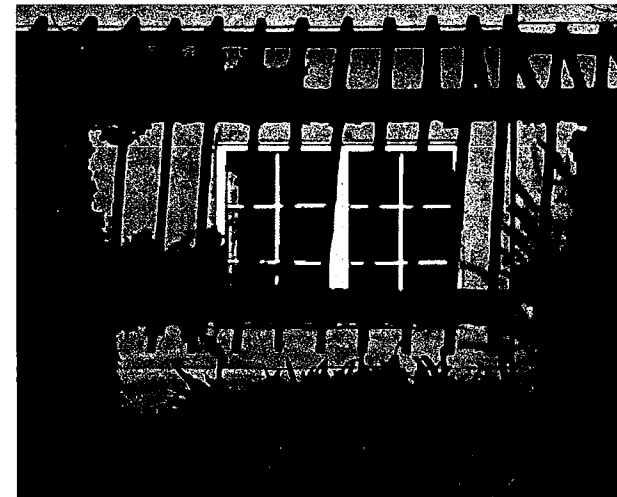
Trellis Adds Shadow Detail

3.2.6 Courtyards

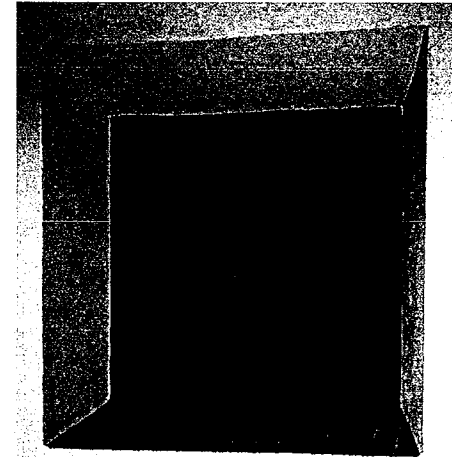Courtyards were a common feature in the more Spanish houses and provided another room for living. In some cases the well was located in the courtyard for accessibility to the house. Adobe walls or picket fences were the prominent materials used.

- Large buildings are encouraged to provide courtyards, outdoor patios, and plazas with fountains at the building entrance or in areas that will provide views into the park.

- Courtyards should be designed to accommodate large groups of people as well as the individual.

- Materials selected for the courtyard should compliment the building materials.
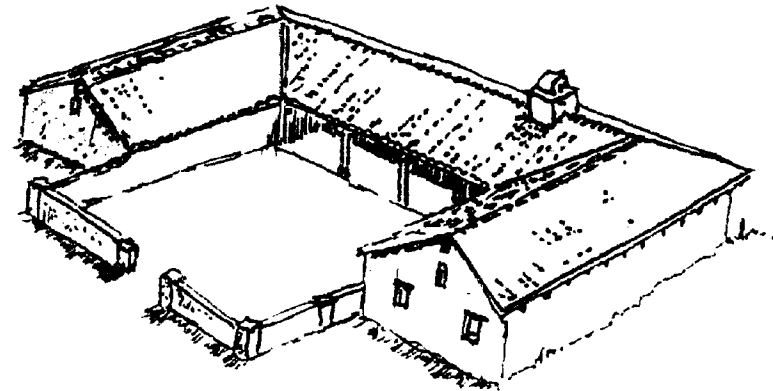
3.2.7 Architectural Details, Accents and Colors

Architectural details, accents and color are features on a building that can provide visual interest, variety, and quality in appearance.

U-Shaped Courtyard

- Architectural details and accents should be kept simple and functional.

- Hardware should be wrought iron or similar material that compliments the 'Californio' theme and painted a dark color.

- Door hardware should be wrought iron or similar material. Door pulls are encouraged because they are more traditional then door knobs.

- All railings, including stairway handrails, guardrails, and decorative railings, shall be constructed of wood or metal and shall be finished to coordinate with other building elements.

- Stone work should be native stone or stone selected to reflect the natural colors of the native stone.

- The colors for park structures, large and small, are earth tones ranging from terra cotta, dark brown to light sand, cream to white.

- The colors for balconies are white, soft green, or warm gray.

- The colors for exterior doors, shutters, and trim are various tones of green, warm gray or brown.

- The colors for pergolas and trellises are green, warm gray, brown or the color of the adjacent structure.

3.3 Architectural Lighting

Exterior architectural lighting is an important feature for buildings and plaza areas. Effective lighting provides visibility, security, and direction for vehicles and pedestrians while enhancing building and landscaping details.

Decorative Light Fixtures

- Building entries, walkways, porches, stairways, balconies, and other significant architectural elements on a building façade should be accented with lighting.

- Light fixtures should work in conjunction with and complement the building's materials.

- Provide adequate lighting, particularly of building facades and entrances, without excessive overlap of illuminated areas. Design lighting to provide ambiance, safety, and security without unnecessary spill over or glare onto adjacent properties.

- When possible provide solar powered lights.

- Light fixtures should be designed or selected to be architecturally compatible with the 'Californio' theme. Simple metal (wrought iron appearance) fixtures, such as lanterns, painted in colors that match the building trim or doors are preferred.

3.4 Screening of Utilities

Screening of utilities, storage, loading areas and refuse collection areas from the OVRP should be provided at all sites through the use of fencing, walls or similar materials and colors used at the primary building.

Decorative Light Fixture

- Service, utility, and loading areas should be carefully designed, located, and integrated into the site plan. These critical functional elements should not detract from public view of the park.
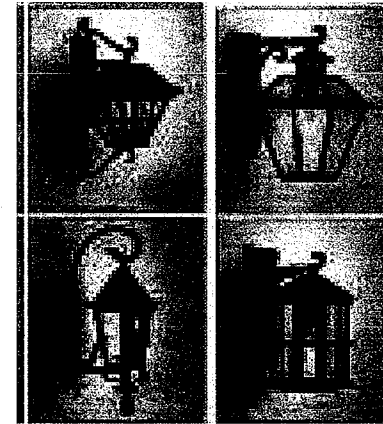
Screening of Utility Areas

- Roof mounted HVAC equipment, including ducts, vents, and active solar collectors, should be fully screened from public view. The screening structures/elements should be architecturally compatible with the overall design theme of the building by utilizing similar materials, textures, colors, and forms. Where appropriate, parapet walls or other roof structures should be designed to a height that screens equipment in such a way that secondary screening structures are not necessary.

- Paint or conceal from view bare metallic surfaces, such as pipes, vents, gutters, and flashing in a manner harmonious to the structure. Paint and finish flashing to match the adjacent building materials.

MECHANICAL EQUIPMENT
PARAPET WALL USED FOR SCREENING

- Trash enclosures should be located in areas that minimize their visibility from the OVRP.

- Trash enclosures should be architecturally compatible with the design theme of the building and should use similar durable low maintenance materials, textures, and colors.

Roof Screening

- Trellises structures can be used over trash enclosures as a screening device.

- Use materials such as heavy timber, stucco, and terra-cotta roof tiles for trash enclosures.

- Integrate recycling bins into trash enclosures when possible.
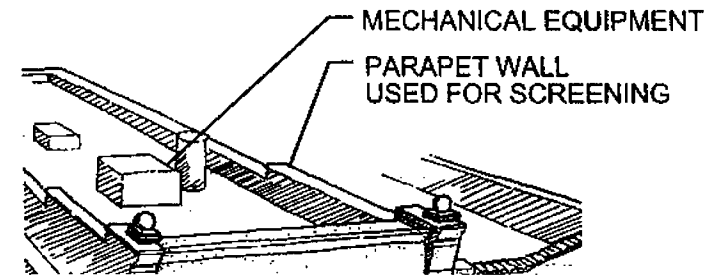
3.5 Energy Guidelines

All buildings and landscapes should incorporate energy-efficient concepts, such as natural heating/cooling, appropriate sun/wind exposure, and orientation (passive solar design and photovoltaic systems).

- Buildings and related structures should provide plenty of shade and air circulation in the hot summer months and thermal mass for natural heating in the cool winter months.

- All buildings should incorporate construction industry standards for 'state-of-the-art' energy-efficient technologies (i.e. photovoltaic solar energy collection panels) and construction systems and technologies to provide the highest possible level of energy efficiency.

- Plant evergreen and/or deciduous trees on the east, west and in some cases on the northeast sides of the building to produce shade, minimizing the impacts of summer sun exposure.

ARCHITECTURAL STANDARDS

SECTION 3

- Avoid planting evergreen trees on the south, southeast and southwest side of the building, as the year round cover of leaves will interfere with natural solar heating in the winter.

- Pay particular attention to shading windows, doors and air conditioners to provide the greatest energy-saving benefits.

- Shade patios, parking and driveways by as least 50% of the paved area adjacent to buildings where possible, because these areas absorb and radiate unwanted heat in the summer.

3.6 Sustainable Practices ("Green Design")

Sustainable practices or "Green Design", refers to design and construction practices that significantly reduce or eliminate the negative impacts of development on the environment and its inhabitants. The following list provides examples of sustainable practices that can be utilized throughout the OVRP.

- Use of on-site materials in the construction of new amenities. For example, cobble and boulders removed from Park construction sites can be reused as paving, veneer, retaining walls, or other site features.

- Reuse of demolished or removed materials in construction of new facilities. For example, recycled asphalt paving can be used in parking areas.

- Specification of recycled and/or reusable products.

- Use of reclaimed water or gray water in irrigation systems.

- Design of new structures to utilize passive heating, solar electricity, and other energy saving design practices.

- Use of permeable paving materials for ground surfaces.

- Use of cisterns or other water collecting devises equipped for water reuse.

- Evaporative and/or composting systems used to recycle waste at restroom facilities.

- Use waterless urinals and toilets.

- Use of native and/or drought tolerant plant species that are compatible with the site and encourage the attraction of native wildlife species.

SECTION 4

LANDSCAPE STANDARDS

4.1 General Landscape Standards

There are four main goals for landscaping in the Otay Valley Regional Park (OVRP). The first goal is to use landscaping to help define the OVRP as a special recreation resource, uniquely different from other City or County parks in form and character, by using the native vegetation of the River Valley. The second goal is to reduce the consumption of water for irrigating new landscapes. The third goal is to enhance the users experience of the Park by using the landscape to provide shade, frame views, enhance circulation routes, reduce glare, and tie the natural areas to the urban areas. The last goal is to provide landscape designs that can also educate users on the principles of conserving water and using native materials.

To meet these goals and to ensure that the Park's landscape efficiently accommodates the various planned recreation activities, three landscape types are recommended: landscaping in urban areas, landscaping in transition areas and landscaping in natural areas.

4.2 Landscaping in Urban Areas

The landscape in urban areas is associated with the regional recreation facilities and some interpretive centers. These types of facilities will include large turf areas for group sports, turf areas for passive picnic areas and small landscape areas that accent the buildings. To minimize the use of water, reduce the use of fertilizers and high maintenance large turf areas should be restricted to active areas of play or picnicking. Small turf areas used as a groundcover are discouraged. The smaller planters, edges, parking islands and other non-recreation areas in the Urban Areas should use non-invasive drought tolerant plants that are endemic to the Mediterranean climate. These plants are typically colorful, attractive year round, water conserving and highly appropriate in these areas. Native plants should also be used where possible. Vegetated swales should be provided in these areas to channel and collect irrigation and urban runoff to help preserve the river valley.

Deciduous and evergreen trees for the urban areas could include:

- •Cassia leptophylla (Gold Medallion Tree)

- •Eriobotrya deflexa (Bronze Loquat)

- •Lagerstromia indica (Crape Myrtle)

- •Metrosideros excelsus (New Zealand Christmas Tree)

LANDSCAPE STANDARDS

SECTION 4

DESIGN STANDARDS & GUIDELINES 33

•Platanus racemosa (California Sycamore)

•Quercus suber (Cork Oak)

Parking areas in urban areas should provide a minimum of 5% of the parking area as landscape area. These landscape areas should be provided within the parking area rather than on the perimeter. Within the parking area one 24" (inch) box tree shall be provided within 30' (feet) of each parking space. Evergreen are preferred to reduce heat and glare. Curbs or wheelstops (minimum height of 6" (inches)) are required to protect all landscape areas within parking areas.

Evergreen trees for parking areas could include:

•Agonis flexuosa (Peppermint Tree)

•Geijera parviflora (Australian Willow)

•Metrosideros excelsus (New Zealand Christmas Tree)

•Pittosporum undulatum (Victorian Box)

•Podocarpus gracilior (Fern Pine)

•Quercus suber (Cork Oak)

•Quercus ilex (Holly Oak)

•Rhus lancea (African Sumac)

•Tristania conferta (Brisbane Box)

4.3 Landscaping in Transition Areas

The landscape in Transition Areas is associated with the areas between regional recreation facilities, interpretive centers, and some regional staging areas and the OVRP. These transition zones may be within one of the recreation areas or they may be a slope area that separates the turf or non-native landscape with the existing native landscape. Landscaping for these areas should be native plants that tie into the adjacent native habitat. These areas should contain some trees to soften or frame views from the trails to the building structures. Temporary low flow or drip irrigation should be used in these areas to minimize runoff into the native area.

Deciduous and evergreen trees for transition areas could include:

- Juglans species (Walnut)

- Platanus racemosa (California Sycamore)

- Quercus agrifolia (Coast Live Oak)

- Quecus chrysolepis (Canyon Live Oak)

- Quercus engelmannii (Engleman Oak).

- Rhus laurina (Laurel Sumac)

- Sambuucus mexicana (Elderberry)

4.4 Landscaping in Natural Areas

The landscape in Natural Areas is associated with some interpretive centers, regional and local staging areas, viewpoints and overlooks, and trail corridors. These landscapes should use native plants that tie into the adjacent vegetation habitat. Placement of the plants should be naturalistic rather than linear or geometric. Native trees should be planted in natural groupings to provide shade for picnic or seating areas. Irrigation for these landscapes should be temporary irrigation to only establish the plants, using low flow irrigation heads or drip irrigation. In some cases irrigation will not be used or available and landscapes will require watering from trucks or to be planted during the rainy season.

Deciduous and evergreen trees for natural areas could include:

- Juglans species (Walnut)

- Platanus racemosa (California Sycamore)

- Populus fremontii (Black Cottonwood)

- Quercus agrifolia (Coast Live Oak)

- Quecus chrysolepis (Canyon Live Oak)

- Quercus dumosa (Southern Oak)

LANDSCAPE STANDARDS

SECTION 4

- Quercus engelmannii (Engleman Oak)

- Rhus laurina (Laurel Sumac)

- Salix lasiolepis (Arroyo Willow)

- Sambucus mexicana (Elderberry)

4.5 Habitat Restoration

Proposed construction projects may need to restore the native habitat within their site or mitigate off site for environmental impacts. Restoration can also occur in the Park where there are new park trails, trails that have been closed, disturbed areas adjacent to a trails, cut or fill slopes, eroded areas, and areas where non-native invasive plants must be removed.

Restoration may include the transplanting or seeding of native plant species typically found in the area. Criteria for selecting native plant materials include, but are not limited to, the following: Whether the species is indigenous to the area, habitat value, fire resistance, resistance to pests and diseases, aesthetic characteristics, ability to provide shade, and ease of maintenance.

Existing habitat survey and treatment of habitat restoration areas are discussed in the:

- Otay Valley Regional Park Habitat Restoration Plan,

- Western Otay Valley Regional Park - Natural Resource Management Plan,

- Otay Ranch Resource Management Plan, and

- City of San Diego Multiple Species Conservation Plan.

4.6 Landscaping Standards for All Sites

- Site disturbance in all sites should be minimized during construction. Mature native trees should be saved whenever possible.

- Parking areas should be screened and visually subordinate to the natural environment.

- Plant specimens of widely differing sizes should be used in order to increase the natural appearance of the site.

- New tree plantings shall not obstruct trail/vehicular sightlines, law enforcement views to staging areas, or important vistas and overlooks.

- All existing and manufactured slopes greater than 4:1 and with a slope height of less than 15' (feet) should be planted with rooted ground cover or hydroseed. The rooted ground cover or hydroseed shall be native material within transition or natural areas. All slopes greater than 4:1 and with a slope height of 15 or higher should be planted with rooted ground cover or hydroseed mix and trees and shrubs (minimum size 1 gallon) planted at a minimum rate of one plant per 100 square feet of slope area.

- Graded, disturbed, or eroded areas that will not be permanently paved, covered by structure, or planted for a period over 90 calendar days shall be temporarily revegetated with a non-irrigated hydroseed mix, ground cover or equivalent material. Temporary irrigation systems may be used to establish the vegetation. All revegetation and erosion control should be completed within 90 calendar days of the completion of grading or disturbance.

LANDSCAPE STANDARDS

SECTION 4
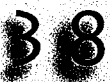
OTAY VALLEY REGIONAL PARK

SECTION 5

PRIVATE DEVELOPMENT GUIDELINES

5.1 Private Development Guidelines

The adopted Otay Valley Regional Park (OVRP) Concept Plan recognized the need "to provide more specific guidance and/or detailed plans" after its adoption, including design documents for "areas both inside and adjacent to the park." In addition to standards identified in Sections 1-4 herein, which addresses design features primarily within the public park, this section provides additional guidance for private development that will occur adjacent to or within the OVRP.
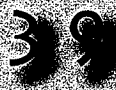
As new private development occurs adjacent to the OVRP boundary, it is important for the governing agencies to continue to encourage and influence design practices that blend new development with the natural and cultural setting of the OVRP. Therefore the following goals and principles have been developed as guidelines for private development.

5.2 Private Development Goals

The private development goals form the basis for development design guidelines within this section, as well as for subsequent guidelines or standards to be adopted by individual government agencies with land use authority over development within and adjacent to the OVRP.

- New development should **maintain and enhance public access** to the regional park by providing attractive, safe and controlled access to natural and recreation resources for the enjoyment of future generations.

- New development should **ensure compatible edge treatment and buffering adjacent to the OVRP** to enhance the visual experience for park users and to protect native resources within the park. The closer the new development is to the OVRP the highest level of sensitively should be provided in the design.

- New development should **acknowledge and complement OVRP amenities and resources** through consideration of site plan orientation, design and function.

- Individual government agencies should prepare and **adopt Implementation Plans containing private development standards and guidelines** for their adoption that are specifically tailored to the various segments of the OVRP.

DESIGN STANDARDS & GUIDELINES 39
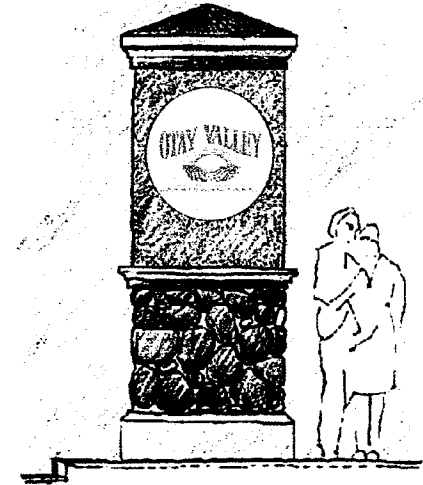
5.3 Private Development Principles

The following key elements of the above goals include principles to which new private development or redevelopment adjacent to or within the OVRP should adhere.

5.3.1 Maintain and Enhance Public Access

- Encourage public access points to the park at major business districts where they are highly visible.

- Where access points are provided to the park at major businesses districts, similar OVRP materials, colors, and signs should be used to enhance connectivity to the Park.

- Provide sufficient and safe parking for public use where direct access to OVRP trails, staging areas or overlooks can be provided.

- Private development should maintain structures, signs, fencing/walls and landscaping where public access to the OVRP occurs.

- Avoid providing access to the park where no connectivity to approved trails occurs. Non-vehicular access for brush management is allowed where trails do not occur.

Gateway Monument

- Encourage the use of street signs and light pole flags with the OVRP logo along frontage roads and major intersections adjacent to the park entry areas.

5.3.2 Ensure Compatible Edge Treatment and Buffering Adjacent to the OVRP

- Proposed private development should be designed to blend with the natural landscape of the OVRP.

- Buildings adjacent to the OVRP should be adequately set back from the park edge and should be reduced in overall height near this edge to protect natural vistas of the park.

- Structures within the 100-year floodplain should keep their low rise sections nearest the river with higher sections appearing in tiers further from the river.

Street Lights and Pole Flags

- Fencing should be attractive from both the development and open space sides; fencing should not present a blank wall to the open space. Fencing design should permit views to and from adjacent open space.

- Fences or walls should be constructed adjacent to the park where appropriate and should be treated with materials and colors that blend with elements of the park.

- When man made elements such as buildings, trash enclosures, and storage or utility areas are highly visible from the OVRP, provide vertical growing plant material to soften or screen the visual impact.

- Landscape buffers adjacent to the park should consist of native plant species (refer to Section 4).

- Manufactured slope banks should be treated with native plant species (refer to Section 4).

- Avoid constructing large retaining walls facing the park and encourage contoured naturalized slopes. If large retaining walls are necessary then they should be the type of construction that allows for plantings on the wall or a landscape buffer should be planted in front of the wall and should screen 2/3 of the height of the wall within four years.

- Exterior lights should be shielded from intrusion into the park.

- Natural materials, such as native rock or hydroseed, should be used where feasible to provide slope and soil stabilization. Masonry retaining walls or concrete rip-rap is discouraged.

Landscape Buffer

5.3.3 Acknowledge and Complement OVRP Amenities and Resources

- View corridors to the park should be emphasized along streets, alleyways, and at trailheads or other access points.

- Public views from the proposed development to the OVRP should be preserved through careful site planning.

- Minimize the alteration of natural landforms.

- Improve the appearance of the development by under-grounding utilities.

- Building elevations, including rear elevations, which face the OVRP should be designed to provide architectural interest and articulation.

- Roof mounted equipment should be avoided. If roof mounted equipment must be provided, all equipment and appurtenances shall be designed to appear to be an integral part of the overall architectural design of the building.

PRIVATE DEVELOPMENT GUIDELINES

SECTION 5

- All outdoor storage areas, refuse collection areas and loading areas should be located in interior side yards or if in the rear yard adjacent to the OVRP they should be screened with a similar material and color as the primary building.

- Encourage provision of outdoor employee seating and picnic areas that offer views of the OVRP.

- All building facades viewed from the OVRP should have three dimensional relief to provide visual interest; this may include pop-outs, offsetting planes, overhangs, and recessed or protruding doorways and windows.

- New developments should be graded to avoid draining directly into OVRP (refer to Section 1*)*.

- Outdoor people spaces within private development, where appropriate, should be primarily oriented toward the park through landscaped courtyards, paseos, plazas and arcades.

- Architectural scale, massing, color, materials, and style for private development within the park should conform to OVRP standards (refer to Section 3).

- Landscaping for private development projects within the park should consist of non invasive drought-tolerant or native plant species consistent with the OVRP standards (refer to Section 4).

Entry Sign

- Large building signs, reflective glass surfaces, materials that cause glare or lights that cause high levels of illumination should not be used on the building elevation(s) adjacent to the OVRP.

- Entry signs for new private development within the park should use the same materials and colors as outlined in the OVRP standards (refer to Section 2). Where possible, existing private development should be encouraged to replace old signs with new signs that reflect the OVRP standard materials and colors (refer to Section 2).

5.3.4 Adopt Implementation Plans Containing Private Development Standards and Guidelines

- The City of San Diego, City of Chula Vista and County of San Diego should prepare and adopt OVRP Implementation Plans containing development standards and guidelines for private developments within and adjacent to the OVRP.

- Implementation Plans for each agency should be tailored to the unique conditions along the OVRP and implement the OVRP Design Standards.

- Wherever possible, standards within the Implementation Plans should be integrated into specific plans, zoning and community plans.

- Design review for private development projects adjacent to or within the park should ensure consistency with these design goals and principles, as well as standards and guidelines contained within subsequent adopted Implementation Plans.

APPENDICES

A.   **Definitions**

B.   **OVRP Concept Plan Map**

C.   **OVRP Logo and Ranch Brands**

D.   **Applicable Plans, Studies and Overlays**

E.   **Checklist for Developing Interpretive Sign**

F.   **Sources**

OTAY VALLEY REGIONAL PARK

Appendix A

Definitions

Adopted

To accept formally and put into effect - usually done by a governing body or board of elected officials.

Aesthetics

The study or theory of beauty and the psychological responses to it, or as being sensitive to art or beauty.

Alignment

See definition for general trail alignment below.

Alternate Boundary

See definition for boundary below.

Backslope

The excavated, exposed area of the trailway above the tread surface.

Boundary

The concept Plan established a boundary for the Regional Park, which provides for both recreation and protection of sensitive resources. It includes an alternative boundary, which identifies significant opportunities for additional open space or recreation areas.

Climbing Turn

A reversal in direction that maintains the existing grade going through the turn without a constructed landing (15-20% and above). Climbing turns take skill to locate and are expensive to construct and maintain.

DEFINITIONS

APPENDIX A

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Corridor

Narrow continuous areas of favorable land that allow the movement of people, animals, and plants along them.

Earth Tone Color

Earth tones to include colors of red, brown, sand, warm gray, terra cotta, and taupe.

Easement

An interest in land owned by another that entitles its holder to a specific limited use or enjoyment.

Fencing

Barrier intended to prevent escape or intrusion or to mark a boundary; such as a barrier made of posts and wire or boards.

Fillslope

The area of the trail below (downslope from) the tread surface.

General Trail Alignment

The term "general alignment" is a planning term used to identify the location of a future trail. It is intended to describe the trail location within a designated area or buffer so that the specific alignment can be determined as the construction project proceeds. This term is especially useful in planning so that property owners and responsible parties have flexibility in determining the final and precise trail location.

Grade

The degree of inclination of a road or slope.

Multiple-Use

Multiple-use, or multi-use, trails are the most common type of non-motorized trail facility. Multi-use trails are not restricted to a single user group; there are a variety of users including pedestrians, bicyclists and equestrians.

Open Space/Preserve Area

Lands within the OVRP that are part of the Multiple Species Conservation Program (MSCP). These lands are intended to protect sensitive natural and cultural resources and include most of the Otay River floodway and floodplain as well as most of the adjacent slopes.

Pathways

Pathways are non-motorized transportation facilities located within or adjacent to existing road rights-of-way. They can range from a separated, soft-surface, single track adjacent to a rural road to a widened decomposed-granite shoulder intended for biking, hiking, and equestrian use. Pathways are intended to serve both circulation and recreation purposes.

Public Access

The existing transportation infrastructure surrounding and within the OVRP makes the Park accessible to almost everyone via a major freeway, road, trolley, bus, horse, bicycle or walkway. Access points can include local and regional staging areas; trail heads, and emergency and maintenance access points.

Public Trail

A trail to which the public has permanent legal access.

Puncheon

A wooden walkway used to cross over marshes or deep bogs, to bridge boulder fields, or to cross small streams. It can be used where uneven terrain or lack of tread materials make turnpike construction impractical. It consists of a deck or flooring made of sawn, treated timber, or native logs placed on stringers to elevate the trail across wet areas.

Recreation Area

Areas suitable for a variety of active or passive use. Recreational areas are identified in the OVRP Concept Plan. These areas are located outside of environmentally sensitive areas and may be either public or private.

DEFINITIONS

APPENDIX A

Regional Trails

Trails with features that include; long linear distances; crossing of multiple communities, municipalities, or jurisdictional boundaries; the provision of a wide range of trail experiences; functioning as a prime arterial or corridor with regional significance. These trails generally have more prominence and public recognition because access is typically available to a broad distribution of users. Long-range connections or use of easements shall require dealing directly with each owner on a case-by-case basis. Shared use of easements will be pursued as an option for developing and connecting trails to be the maximum extent possible.

Trailhead

Trailheads function as starting points and an orientation point for park users. They serve as access points for people entering the park. They will usually have a sign, park map with trailhead locations, and a brief park description.
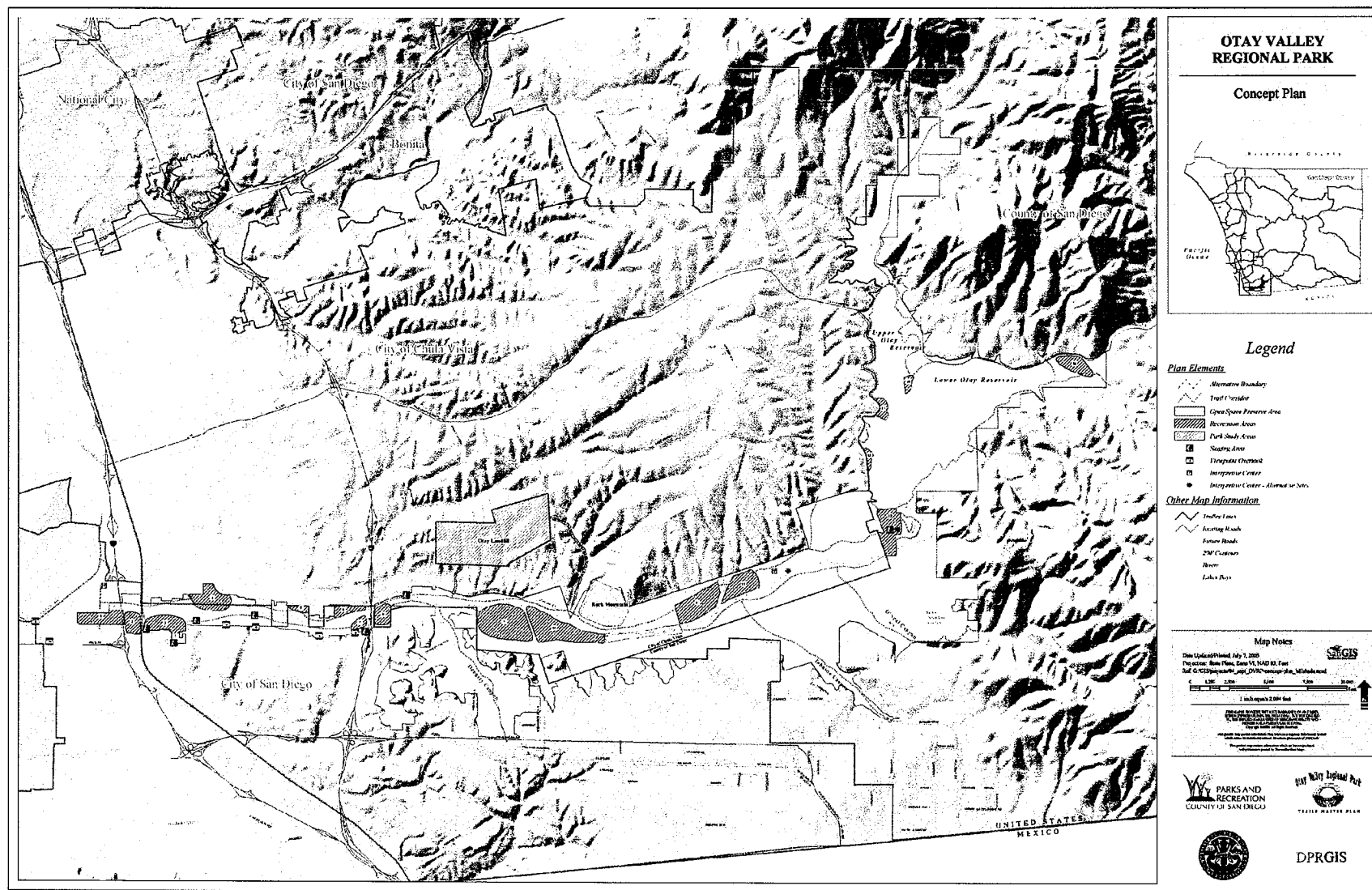
Trails

Trails are non-motorized paths, typically away from vehicular roads, that are primarily recreational in nature but can also serve as an alternative mode of transportation.

Tread

The surface of the trail (natural soil, decomposed granite, etc.).

Appendix B

OVRP Concept Plan Map

OTAY VALLEY REGIONAL PARK

Concept Plan

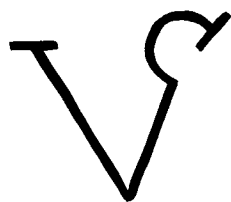**D E S I G N   S T A N D A R D S   &   G U I D E L I N E S**

OTAY VALLEY REGIONAL PARK
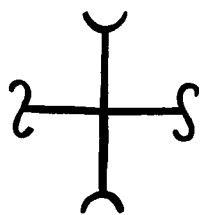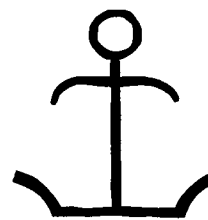
Appendix C

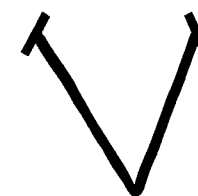**OVRP Logo and Brands**

OVRP Logo

| Santiago Arguello | Gertrude Dolores Arguello | Guadalupe Arguello | Magdalena Estudillo | Jose Antonio Estudillo |

Historical Ranch Brands

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Appendix D

Applicable Plans, Studies and Overlays

This appendix identifies other agency plans and studies that are relevant to trails planning in the OVRP. These agencies and plans were considered during the development of this report. These plans have been listed here for convenience and future reference.

Local

City of San Diego

- City General Plan
- Otay Mesa Community Plan
- Otay Mesa-Nestor Community Plans
- Multiple Species Conservation Program Subarea Plan
- Dennery Ranch Precise Plan
- California Terraces Precise Plan
- Hidden Trails Precise Plan, Robinhood Ridge Precise Plan
- Riviera Del Sol Precise Plan
- Otay Corporate Center Precise Plan
- Western Otay Valley Regional Park Resource Management Plan (WOVRP-NRMP) Draft

City of Chula Vista

- Chula Vista General Plan
- Chula Vista Parks & Recreation Master Plan
- Chula Vista Greenbelt Master Plan
- Chula Vista Multiple Species Conservation Subarea Plan
- Montgomery Specific Plan
- Otay Valley Road and Southwest Redevelopment Plans
- The Otay Ranch General Development Plan
- Phases I and II of the Otay Ranch Resource Management Plan
- Western Otay Valley Regional Park Resource Management Plan (WOVRP-RMP) Draft

APPLICABLE PLANS, STUDIES & OVERLAYS

APPENDIX D

Regional

County of San Diego

- County of San Diego General Plan
- County of San Diego Regional Trail Plan
- County of San Diego Community Trails Master Plan
- County of San Diego Trails Needs Assessment
- Otay Ranch GDP (also part of Chula Vista)
- Phases I and II of Otay Ranch Resource Management Plan (also part of Chula Vista)
- Otay River Valley Resource Enhancement Plan
- Otay River Watershed Management Plan
- Multiple Species conservation Program (MSCP)
- Multiple Habitat Planning Area (MHPA)

Unincorporated Community Trails

- Jamul Dulzura Trail System

State

State Trails

- California Riding and Hiking Trail

California Department of Fish and Game (CDFG)

- California Endangered Species Act
- CEQA
- Stream Bed Permit

California Department of Transportation (Caltrans)

- SR-125, I-5, I-805

California Coastal Commission (CCC)

- California Coastal Act of 1976

California Water Quality Control Board

- National Pollutant Discharge Elimination Permit

California Department of Parks and Recreation

- OVRP Trail Easements

Federal

U.S. Fish and Wildlife Service

- South San Diego Bay Unit of the San Diego National Wildlife Refuge
- San Diego National Wildlife Refuge

Bureau of Land Management

- Otay Wilderness Area

U.S. Army Corps of Engineers

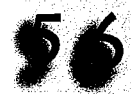- Clean Water Act – Section 404-Wetlands

National Trails

- Pacific Coast Trail

APPLICABLE PLANS, STUDIES & OVERLAYS

APPENDIX D

Appendix E

Checklist For Developing Interpretive Signs

1. Knowing your visitors

☐ Have the main visitor group/s been identified?

☐ Have visitors' likely interests and needs been documented?

☐ Have visitors' previous experiences and knowledge been considered?

2. Conducting an inventory of assets

☐ Does interpretation focus on the special/rare/different characteristics of the site or attraction?

☐ Have activities or events in the area been included in the visitor experience?

3. Developing topics and themes/messages

☐ Has the major topic/s been identified?

☐ Have core themes/messages based on the topic/s been developed?

☐ Are the themes/messages clearly stated?

☐ Are the themes/messages supported by stories and facts?

CHECKLIST FOR INTERPRETIVE SIGNS

APPENDIX E

4. Designing interpretive content

☐ Have catchy titles been used to attract visitors' attention?

☐ Is the content clearly organized into an introduction, body and conclusion?

☐ Does the introduction include clear definitions of central terms and concepts?

☐ Does the conclusion clearly reinforce the messages and concepts discussed?

☐ Have metaphors, analogies and personal stories been used to present information?

☐ Is the information presented accurate and up-to-date?

☐ Is the content interesting and thought provoking?

☐ Does the interpretation encourage visitors to solve problems and/or make decisions?

☐ Does the content engage visitors' emotions?

☐ Has humor been used where appropriate?

☐ Do signs and displays ask visitors stimulating and appropriate questions?

☐ Does the interpretation include a range of presentation techniques (e.g. flaps, models, quizzes, audio visual components)?

☐ Does the interpretation require visitors to use different senses (e.g. touch, smell, hearing)?

☐ Does the interpretation suggest ways in which new information can be integrated into visitors' daily lives?

5. Matching interpretation to visitors

☐ Is the information relevant for the target audience? In particular, does it 'connect to' their previous knowledge and experiences?

☐ Does interpretation build on experiences visitors may have had at other sites/ attractions in the area?

☐ Is the interpretation sensitive to the different social and cultural backgrounds of visitors?

☐ Does interpretation take into account the needs and limitations of 'special' groups (e.g. families and visitors with disabilities)?

6. Assessing readability and formatting

☐ Are sentences short and easy to understand?

☐ Does the level of language match the reading ability of the target audience?

☐ Are there any sentences that could have double meanings or be interpreted in a manner not intended?

☐ Are signs written in 'layers'?

☐ Is the font and size of text easy to read?

☐ Is the text well spaced?

☐ Do the colors chosen for text, illustrations and background match the sign's content and tone?

☐ Do illustrations match and enhance the sign content?

☐ Are illustrations clear and easy to see?

☐ Does the placement of text and illustrations look balanced?

CHECKLIST FOR INTERPRETIVE SIGNS

APPENDIX E

OTAY VALLEY REGIONAL PARK

Appendix F

Sources

The following reference materials were used to support the proposed design standards and guidelines. Similar design approaches and conclusions are supported in the ideas and studies outlined in the source documents.

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