

RANCHO
SAN
ANTONIO
PARK
MASTER PLAN
INITIAL STUDY

PREPARED FOR
SANTA CLARA COUNTY
PARKS AND RECREATION
DEPARTMENT



AUGUST 15, 1991

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PREPARED BY

BRADY AND ASSOCIATES
PLANNERS AND LANDSCAPE ARCHITECTS

IN ASSOCIATION WITH
THE GOODRICH TRAFFIC GROUP
PHILIP WILLIAMS AND ASSOCIATES

**RANCHO SAN ANTONIO PARK MASTER PLAN
INITIAL STUDY**

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TABLE OF CONTENTS

1.	INTRODUCTION	1
	1.1 Purpose and Approach	1
	1.2 Methodology	2
	1.3 Report Format	3
	1.4 Project Description	4
2.	FINDINGS	15
	2.1 Land Use and Public Policy	15
	2.2 Visual Resources	23
	2.3 Traffic, Circulation and Parking	35
	2.4 Hydrology and Water Quality	55
	2.5 Biology	59
	2.6 Noise	73
	2.7 Public Utilities and Services	79
	2.8 Geology and Soils	89
	2.9 Air Quality	93
	2.10 Energy	97
	2.11 Archaeology	99
3.	CONDITIONS FOR NEGATIVE DECLARATION	101
4.	ORGANIZATIONS AND PERSONS CONTACTED	109
5.	APPENDICES	
	A. Initial Study Checklist	
	B. Level of Service Definitions	
	C. List of Vascular Species	
	D. List of Wildlife Species	

List of Tables

1.	Basic Project Data	front cover
2.	Trip Generation	44
3.	Intersection Level of Service	46

List of Figures

Figure 1:	Surrounding Land Use	5
Figure 2:	Park Development	9
Figure 3:	Preliminary Master Plan	11
Figure 4:	Viewpoint Locations	27
Figure 5:	Photographs of Site	29
Figure 6:	Photographs of Site	30
Figure 7:	Photographs of Site	31
Figure 8:	Photographs of Site	32
Figure 9:	Visually Sensitive Areas	33
Figure 10:	Peak Hour Traffic Volumes	37
Figure 11:	Existing On-Site Parking Usage	38
Figure 12:	Sensitive Biological Resources	61

CHAPTER 1

Introduction

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1.1 PURPOSE AND APPROACH

This Initial Study is an expanded preliminary impact analysis to allow expansion of the existing Rancho San Antonio Park. The study has been prepared for Santa Clara County pursuant to the California Environmental Quality Act (CEQA) and related State Environmental Impact Report Guidelines (Section 15080 of the California Administrative Code).

The purpose of this Initial Study is to:

1. Provide objective consultant support in review of the project.
2. Describe the environmental setting and identify related environmental effects of the project.
3. Provide the County and the applicant with the necessary mitigation guidelines to reduce any identified adverse impacts to insignificant levels.
4. Inform governmental decision-makers and the public of the proposed action and consequences of its approval.
5. Provide a level of impact assessment adequate to guide full processing of the proposed action.

State EIR Guidelines provide that where a project is revised in response to an Initial Study so that no significant environmental effects would occur, a Negative Declaration shall be prepared instead of an EIR. A Negative Declaration is a statement written by the Lead Agency briefly describing the reasons why a proposed project will not have a significant effect on the environment and, therefore, does not require an EIR.

To provide the County and applicant with the option of a Negative Declaration, this report suggests possible project revisions and refinements to

the extent that this review indicates that there are impacts or effects that can be or need to be mitigated. The suggested measures would ensure that no significant environmental effects would occur as a result of the project. These suggestions are presented in Chapter 3 of this report in the form of suggested Conditions for Negative Declaration which the County might require as conditions for approval of the Master Plan.

1.2 METHODOLOGY

The evaluation in this report is based on two field examinations of the site and surrounding area, thorough review of the Master Plan Program Document (April 1990), and other existing environmental data: new traffic and parking data, field analysis by a professional hydrologist, and discussions with County staff, the Master Plan Task Force, and interested or affected agencies and individuals. Text from the Master Plan Program document has been used for many of the existing setting discussions.

A full range of environmental factors concerning the site is evaluated in this Initial Study including the following:

- a. **Land Use.** The character of the immediate project vicinity is described. The proposed development scheme is evaluated for compatibility with existing and planned surrounding land uses and for conformance with the County's land use objectives. Consistency with policies and regulations associated with the general plan designations and related zoning are examined.
 - b. **Circulation, Access and Parking.** The project's traffic generation and circulation system are evaluated, and the ability of the local circulation system to adequately serve the project is assessed. Proposed parking provisions and conformity with County standards are examined.
 - c. **Hydrology.** The project's impact on Permanente Creek due to changes in runoff characteristics, absorption rates, erosion and siltation, and bank stability are evaluated.
 - d. **Biology.** The project's impact on sensitive biological resources, particularly in the riparian corridor, are assessed.
 - e. **Noise.** The project's impact on existing on- and off-site sensitive noise receptors including existing and future adjacent land uses are assessed.
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- f. **Public Utilities and Services.** The effects of the project on provision of municipal services including police, fire, sewer, water, and electricity are identified and described.
 - g. **Visual and Other Design Factors.** Significant views of the project site are identified, and the extent to which the proposed project design would alter the character of existing visual experiences is examined. Project site planning and design are evaluated; potential problem areas or elements are identified and provide the basis for mitigation recommendations.
 - h. **Geology and Soils.** The project's impacts on soils and geologic conditions and the potential for substantial erosion, disruption, changes in topography, or landslide are described.
 - i. **Air Quality.** The project's impact on short-term air quality due to construction and long-term impacts associated with traffic are identified.
 - j. **Energy.** The project's impact on energy consumption both on- and off-site are evaluated.
 - k. **Archaeology.** The project's impact on archaeological resources are assessed.

1.3 REPORT FORMAT

The three chapters of this report all address potentially significant issues as required by CEQA Guidelines and enumerated in Section 15063(d) of the California Administrative Code. The chapters are: 1) this Introduction, which states the purpose and approach of the analysis and describes the project, its location, and related environmental concerns; 2) a Findings chapter, which describes in more detail the existing setting, potential impacts of the project, and project conformity to local land use policy; and 3) suggested Conditions for Negative Declaration for use in determining mitigation requirements, which would ensure that the project would not have a significant environmental effect. A copy of the Initial Study Checklist is contained in Appendix A.

1.4 PROJECT DESCRIPTION

1.4.1 Existing Setting

1.4.1.A Project Location

Rancho San Antonio County Park is located approximately three-quarters of a mile northwest of the Interstate 280/Foothill Boulevard interchange in western Santa Clara County. The Maryknoll Seminary and the Forum LifeCare development, which is currently under construction, are the principal residential communities adjacent to the park. The cities of Los Altos, Los Altos Hills and Cupertino are in close proximity to the park.

Rancho San Antonio Park is an existing regional park, comprising foothill lands, scattered oak woodlands, grassy slopes, semi-level areas, and a riparian corridor along Permanente Creek. The riparian corridor is probably the site's most valuable wildlife habitat.

The Midpeninsula Regional Open Space District's (MROSD) Rancho San Antonio Open Space Preserve abuts the Park along its northwest, west and southwest boundaries. An unoccupied building belonging to St. Joseph's Seminary, Maryknoll and the Forum development are adjacent to the east, and the Gate of Heaven Cemetery is located to the southeast. Residential development occurs to the east across Interstate 280 and to the north along the site's northern boundary.

Figure 1 shows the project vicinity and surrounding land uses.

1.4.1.B Existing Park Characteristics and Development

Rancho San Antonio is a 165-acre park located in foothill land. Permanente Creek divides the park into east and west areas. The west area is generally hilly, containing oak woodlands, coastal scrubland, non-native grassland, and a riparian woodland. The east area is relatively flat, containing primarily non-native grasslands, riparian woodlands and oak woodlands.

The east side of Permanente Creek is the more developed area in the park. This area contains a 13-acre open meadow with a 2.5 percent slope, and a 19-acre sloping, grassy area east of the flat area with a 35 percent average slope.

Figure 1

Surrounding Land Use

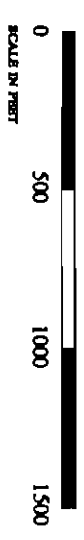


LEGEND

- 1 PARK ENTRANCE
- 2 PERMANENTE CREBK
- 3 WATER TANK
- 4 RESERVOIR
- 5 DEER HOLLOW FARM
- 6 HIGH MEADOW STABLE
- 7 RANGER OFFICE
- 8 PG&E TRANSMISSION LINE
- 9 GATE

VICINITY TRAILS (RANCHO SAN ANTONIO AND MROSD LANDS)

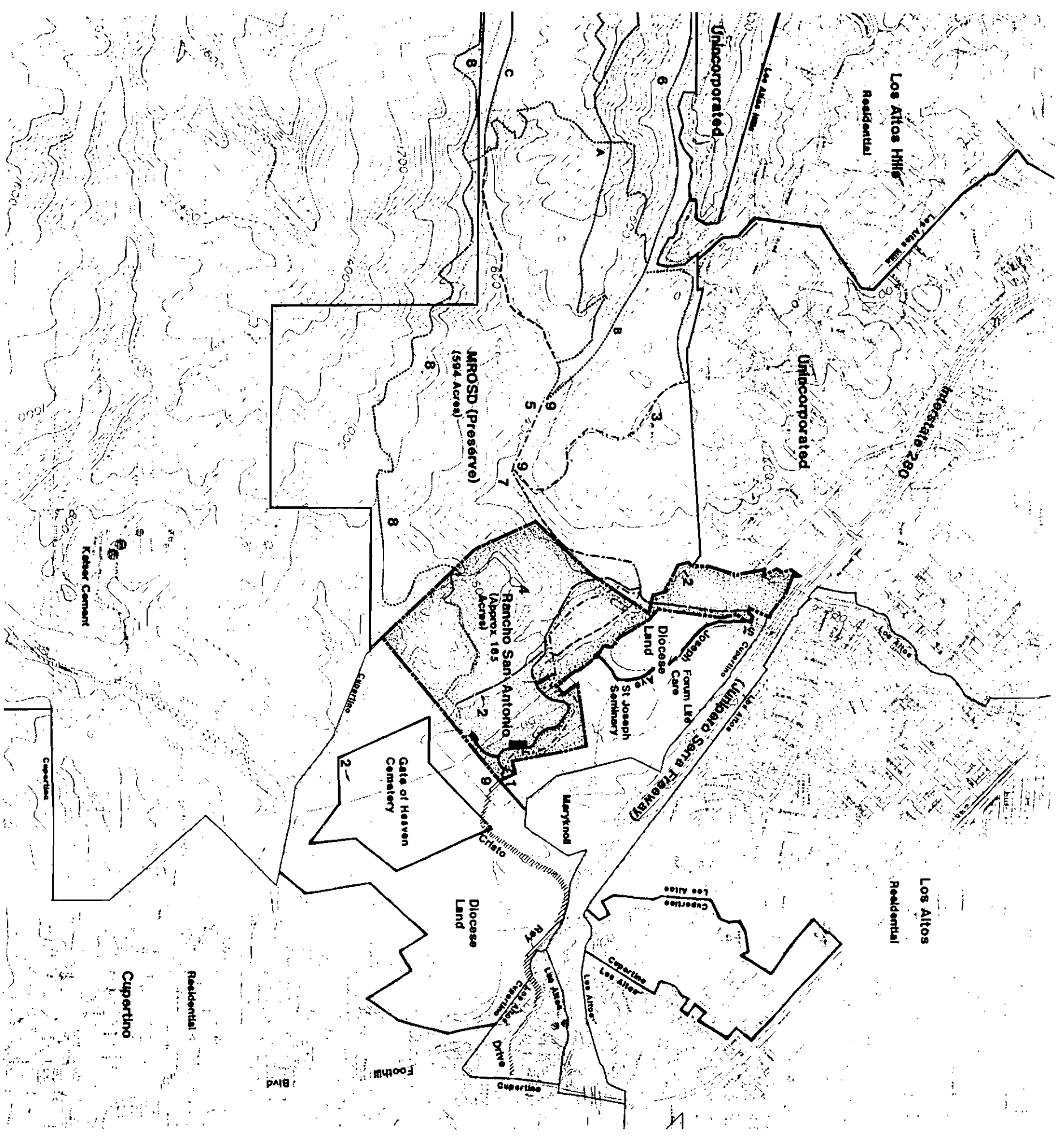
- EQUESTRIAN/HIKING TRAIL
- HIKING/BICYCLING TRAIL
- - - HIKING TRAIL
- PUBLIC ROAD AND PARKING (VEHICLES, PAVED)
- ROAD (SERVICE/HIKING, NO PUBLIC VEHICLES)
- A HIGH MEADOW
- B ROGUE VALLEY
- C UPPER WILDCAT CANYON



SOURCE: ABERGAST, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS

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The park entry gate at Cristo Rey Drive is located to the south of this sloping area. The paved entry road winds northerly and westerly to Permanente Creek where there are restrooms and parking facilities. This road continues as a service-vehicle-only road in a northerly-southerly route along the west side of Permanente Creek, turning west up the hill and terminating at the existing water tank owned by the City of Cupertino. A road also extends westerly along the south property line terminating at a flat open area where parking is located.

Park facilities include the following:

- 1 equestrian staging area
- 4 tennis courts
- 4 basketball courts
- 5 acres of playing field
- 13 acres of open turf area
- 1 family picnic area (capacity 75 persons)
- 6 picnic tables
- 2 barbecue stoves
- 2/3 mile of bicycle trails
- 1/4 mile of unpaved hiking trails
- 1/2 mile of equestrian trails
- 1 restroom building
- Roughly 100 acres of undeveloped open space
- 6 parking lots with a total of 228 spaces (both paved and unpaved)

Figure 2 shows the existing park development.

1.4.1.C Park Use

The park's greatest recreational demand is for trail access to MROSD lands. Park visitors are heavily concentrated along the hiking-only path leading to the MROSD's most popular trails. Other park facilities receive low to moderate use. Past user surveys have indicated that between 72 and 88 percent of park users were in the park to access the MROSD lands for hiking and running, and to visit the Deer Hollow Farm, which attracts school groups and families with children.¹ According to park staff, use is evenly distributed between runners and hikers.

¹1987 User Survey conducted by Santa Clara County Park and Recreation Department staff on three Saturdays in May.

Peak use occurs during the week in the early mornings and late afternoons and is characterized predominantly by runners. Sunday as the busiest weekend day and use is more evenly distributed throughout the day. User surveys have also indicated that although the park is considered a regional park by the County, it is used with high frequency by the local population, with visitation rates between 9 to 12 times per month and rapid hourly turnover.²

The park is unique in that usage is steady year-round. Although there is not a strong seasonal component to use, in general, the park's peak season occurs between late spring and early fall, with use decreasing somewhat in the mid-summer. Usage appears to have been steadily increasing over the past few years. Park staff often have to close the park's entrance gate on the weekends because parking capacity has been exceeded. On one Sunday in February 1991, park staff reported more than 100 cars parked along Cristo Rey Drive.

1.4.2 Preliminary Master Plan Improvements

The Rancho San Antonio Park Master Plan prepared by the landscape architecture firm of Arbegast, Newton and Griffith is based upon the research and findings of the Park Master Plan Program Report prepared in 1990. The program document contains guidelines which set forth decisions intended to guide the development and management of the park. These guidelines and decisions have been further refined during the Schematic Planning Phase.

The Preliminary Master Plan shown in Figure 3 intends to incorporate uses, activities and facilities which are appropriate to a regional park and which have been determined by the site's environmental opportunities and constraints and by user surveys. According to the program document, the Master Plan intends to preserve and promote the park's existing passive, unstructured character and protect the site's valuable biotic resources, including the riparian habitat. The park forms a visually inseparable link with MROSD lands creating a special use and management relationship, which has been addressed in the park's planning and requires review herein as well.

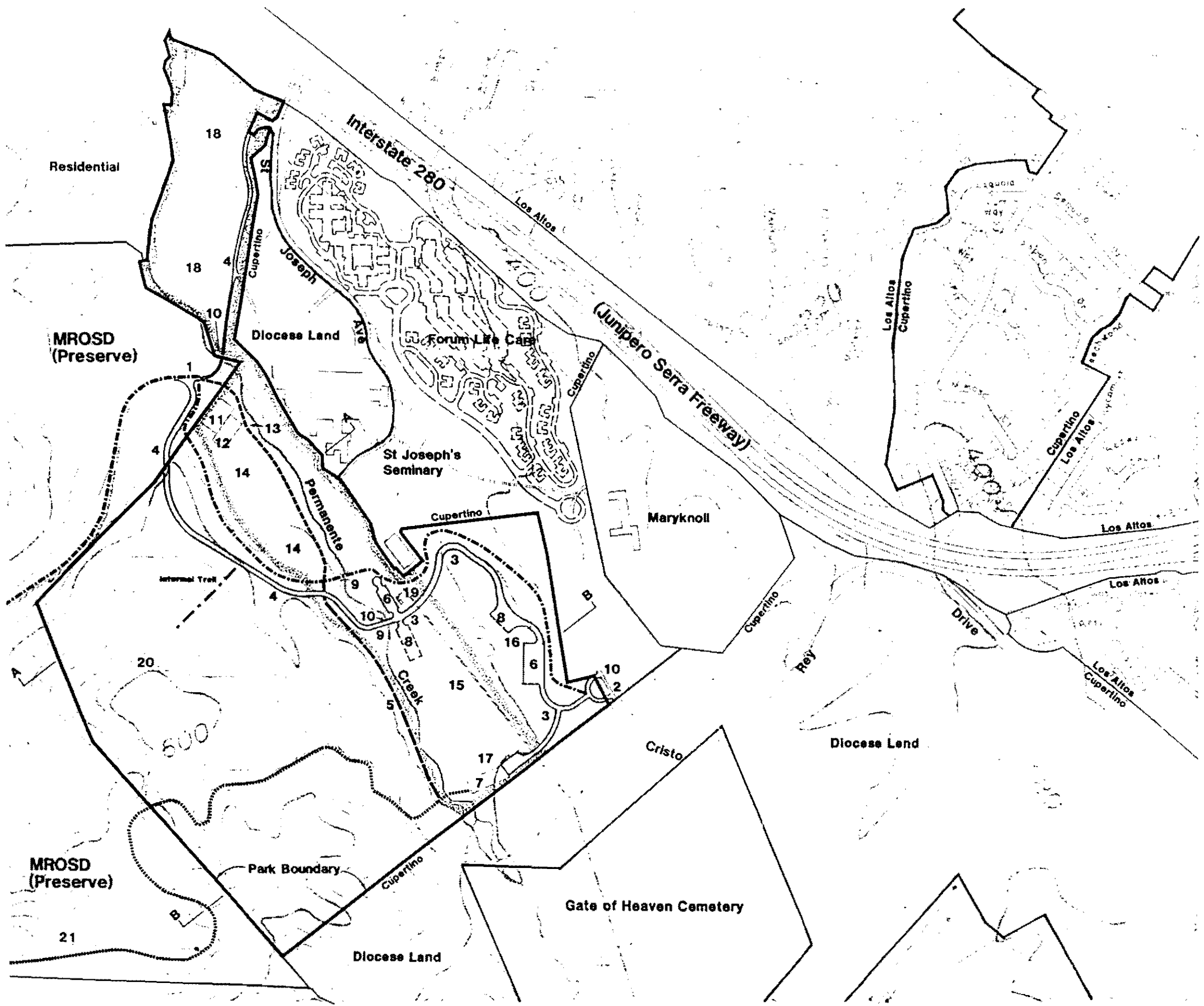
1.4.2.A Recreational Improvements

The Master Plan proposes to remove the existing handball and basketball courts due to lack of use, preserve the tennis courts and monitor their use and





²August 1989 park user survey, conducted by Brady and Associates on one Saturday.

Figure 2

Park Development



LEGEND

-  APPROX 70 ACRES, SEMI-LEVEL AREA
-  EQUESTRIAN/HIKING TRAIL
-  HIKING/BICYCLING TRAIL
-  HIKING TRAIL
- 1 TRAIL JUNCTION/ENTRANCE TO MROSD LANDS
- 2 PARK ENTRANCE
- 3 PUBLIC ROAD (PAVED)
- 4 ROAD (SERVICE/HIKING, NO PUBLIC VEHICLES)
- 5 CREEK MAINTENANCE ROAD (HIKING)
- 6 PARKING (PAVED, 78 SPACES)
- 7 PARKING (UNPAVED)
- 8 TEMPORARY PARKING (UNPAVED, 90 SPACES)
- 9 BRIDGE
- 10 GATE
- 11 TENNIS COURTS (4)
- 12 BASKETBALL COURTS
- 13 HANDBALL COURTS
- 14 BALLFIELDS, GROUP PICNIC (ROUGH NON-IRRIGATED TURF)
- 15 OPEN AREA (FREE PLAY)
- 16 MODEL AIRPLANES, KITES
- 17 EQUESTRIAN STAGING AREA
- 18 OPEN AREA (NOT DEVELOPED)
- 19 RESTROOM BUILDING DRINKING FOUNTAIN)
- 20 RESERVOIR
- 21 PG&E TRANSMISSION LINE

SOURCE: ARBEGAST, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS








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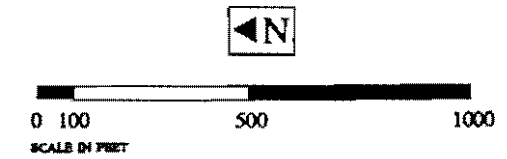
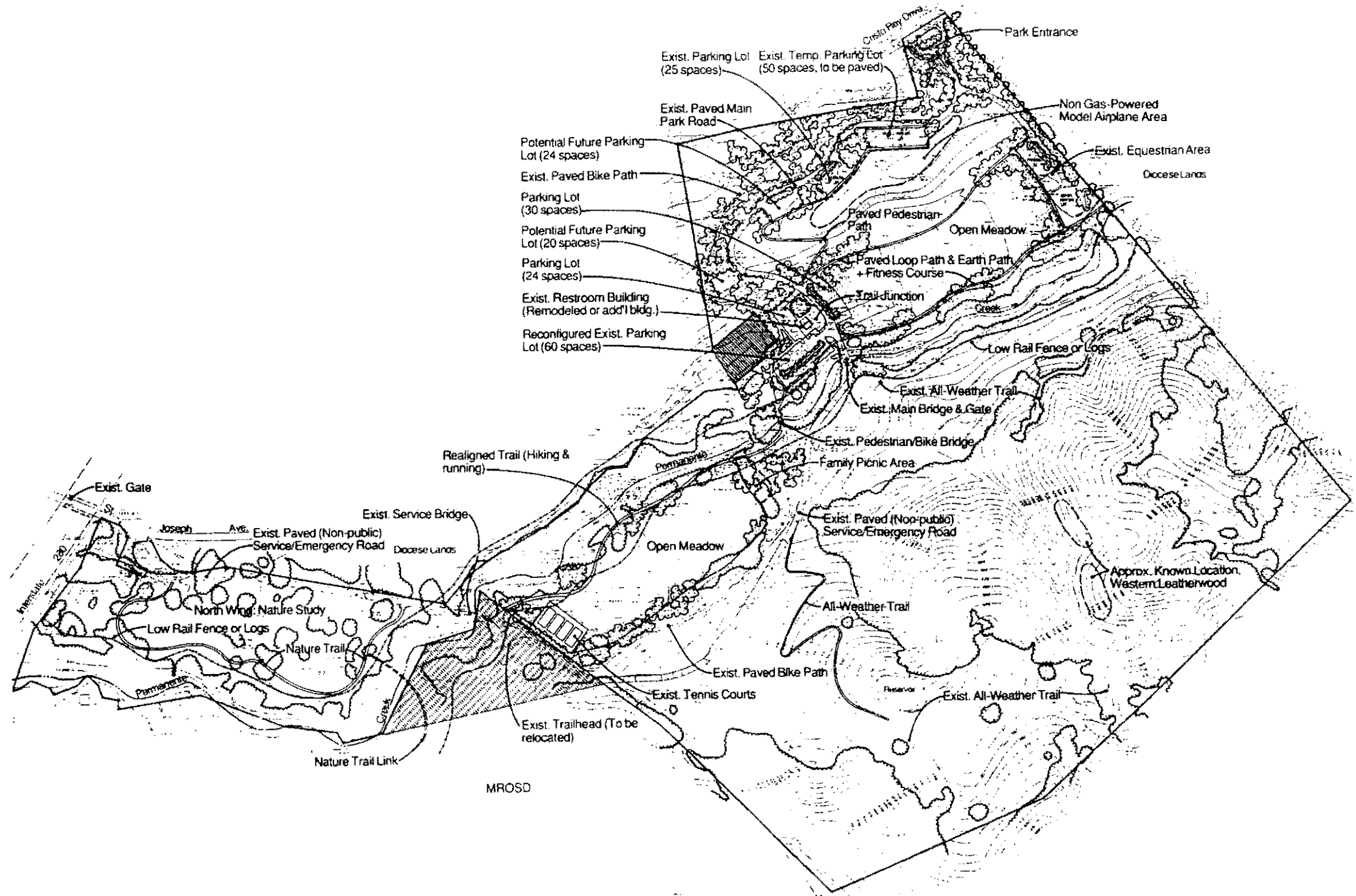
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Figure 3

Preliminary Master Plan

LEGEND

-  APPROXIMATE RIPARIAN ZONE
-  EXISTING TREES
-  PROPOSED ORNAMENTAL AND RIPARIAN TREES
-  PROPOSED IRRIGATED ROUGH TURF
-  EXISTING AND PROPOSED ROAD/PARKING
-  POTENTIAL LAND ACQUISITION
-  TRANSITIONAL CORRIDOR



SOURCE: ARBBOAST, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS

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upkeep, relocate the family picnic area to bring it closer to the restroom and parking lot, develop the open "meadow" areas as irrigated rough grass areas for informal play and picnicking, develop an 8-foot-wide paved interior loop trail around the open meadow area to promote use of the park, slightly realign and resurface the existing path approaching the MROSD trailhead, create a stub trail from the reservoir to the existing paved road and remove the volunteer trail, and develop the northern wing as a nature study area with a nature trail to provide for use of this parcel acquired after the park's earlier development. The park's model airplane activity and equestrian staging area, and the existing trails and bicycle path will remain. The Plan also identifies a potential trail connection across Permanente Creek linking the park nature trail in the north wing with the nearby proposed MROSD nature study area.

1.4.2.B Circulation and Parking Improvements

The Master Plan calls for circulation and parking improvements, including the reconfiguration of the park entrance to accommodate buses, paving of the temporary lot at the top of the bluff, removing the existing gravel lot in the southern turf area and creating a new 30-space paved parking lot at the base of the bluff and parallel to the entrance road, creating a new 24-spaced paved northeast of the restroom, reconfiguring the existing paved lot near the restroom to increase capacity from 33 to 60 spaces and strengthening the bridge over Permanente Creek. The Master Plan would result in an increase from the existing total of 228 spaces to a new total of 259 spaces, resulting in a 31-space net gain. In addition, the Master Plan provides for two potential future lots; one would contain 24 spaces and the other lot would contain 20 spaces.

1.4.2.C Landscape Improvements and Amenities

The Plan proposes irrigated tree plantings at the park's entrance gate, along the entrance road and around the parking lots, restroom facilities, open meadow areas, and family picnic area. The proposed open meadow areas located south and northwest of the restrooms would be re-graded and converted to irrigated rough turf.

The Plan also proposes additional riparian planting and reinforcement of existing planting. A 50-foot riparian buffer has been incorporated into the Plan on each side of the creek, measured outward from the edge of the riparian vegetation or top of the bank, whichever is greater. The Plan includes log barriers or wood rail fencing along trails adjacent to Permanente Creek to limit creek access.

The Plan calls for the restoration of the riparian zone and protection of other park vegetation and wildlife wherever possible by systematically removing non-native vegetation, monitoring volunteer trails causing erosion and revegetating such trails, and occasionally mowing the non-native grassland areas to encourage growth of native plants and to enhance wildlife habitat.

The Plan calls for a new trail junction at the parking lot/comfort station area. This area would include benches, bicycle parking and regulatory, directional and interpretive signage. The Plan also provides for upgrading the restroom building to better accommodate existing and future use.

1.4.2.D Potential Land Acquisition and Transitional Corridor

Just north of the restroom is a small inholding owned by the San Jose Diocese. As identified in the Plan, acquisition of this piece in the future could help provide additional parking.

The Plan also identifies a transitional corridor appropriate for joint management by the County and MROSD. This corridor, presently owned by MROSD and located between the park's main and north parcels, contains an important trailhead directing visitors to the park and MROSD trails. A County service road also passes through this area connecting the two parcels of the park. A formal joint management agreement has been proposed to allow both the County and MROSD to develop and manage this area in a mutually beneficial way.

Basic characteristics of the project are summarized in Table 1.

CHAPTER 2
Findings
Settings, Impacts and Mitigation Measures

■ ■ ■

2.1 LAND USE

■ ■ ■

2.1.1 Existing Setting

2.1.1.A Surrounding Uses

The 165-acre park is surrounded by publicly and privately owned lands, both developed and undeveloped. The 600-acre Rancho San Antonio Open Space Preserve, part of the Midpeninsula Regional Open Space District (MROSD) lands, abuts the park's western boundary. Land use to the southwest consists of the Gate of Heaven Cemetery and a 176-acre vacant park owned by the San Jose Diocese immediately bordering the park. One mile to the south is the Kaiser Cement Plant. To the east of the park is the Maryknoll Seminary which is a residence for retired priests and brothers, a 32-acre parcel containing an unoccupied building once part of the St. Joseph's Seminary, and the Forum Life Care development, which is currently under construction. The St. Joseph Avenue neighborhood lies to the north.

Midpeninsula Regional Open Space District Preserve. MROSD users use the park as a staging area relying upon the park's access, parking and restroom facilities. Although the park and MROSD land come under two separate jurisdictions, they represent one natural open space area in terms of use and management. The County Parks and Recreation Departments and MROSD share responsibility for park patrol, including the opening and closing of the park's entrance gate through an informal joint management agreement. MROSD maintains access rights over the road extension from St. Joseph Avenue west to Permanente Creek; however, MROSD uses the park's main entrance access to their lands.

Deer Hollow Farm, an educational program for children run by the City of Mountain View, is located on MROSD lands. Buses transport school children to the Farm during the week using the park's main access road, and they park on MROSD property.

According to the Master Plan Program Document, MROSD lands appear to be operating at recreational carrying capacity based on existing trail use conflicts and trail erosion.

Undeveloped Adjacent Land. The San Jose Diocese owns two parcels adjacent to the park's eastern and southern boundaries and located within the City of Cupertino. The parcels are shown in Figure 1. The Diocese has presented two preliminary alternative development plans to the City of Cupertino Planning Commission for these sites. One plan proposes residential development for both the 32-acre Seminary parcel and the 176-acre southern parcel near the Cemetery. This development concept would include 360 single-family detached units. The second alternative proposes development of 293 residential units on the southern parcel and continued institutional use of the Seminary site. The City of Cupertino General Plan allows for the proposed densities but would require zone changes. In addition, there is a small in-holding, less than one acre in size, which occurs on the site's northerly boundary, just north of the restrooms. This area contains an unoccupied building. The County had included possible acquisition of the in-holding in its budget for this property at one time.

Adjacent Residential Uses. The Maryknoll Seminary for retired priests is located east of the park and accessed by Cristo Rey Drive. The Seminary is located in the City of Cupertino and consists of one large building. Its driveway is located east of the park entrance. Maryknoll is adjacent to the Forum development to the north, which is currently under construction.

The Forum project, which is accessed from Cristo Rey Drive, is adjacent to the park at its northernmost and easternmost corners. The first phase will be completed in the summer of 1991 and the entire project should be completed in several years. The development consists of 275 single-family units and 400 continuing care beds.

The St. Joseph Avenue single-family residential neighborhood is north of the park's northern service road access. The neighborhood, located in the City of Los Altos, is physically separated from the park by Interstate 280. St. Joseph Avenue is gated east of the freeway to prohibit public vehicular access to the park from this street.

2.1.1.B On-site Conditions and Easements

As described in Chapter 1. Project description, Rancho San Antonio Park is a developed and functioning park which provides informal passive and active recreational opportunities and serves as a staging area for the neighboring MROSD Preserve. Parking and restroom facilities are provided on-site and electricity is extended to the restroom area. The park's level and most intensively used areas occur past Permanente Creek and the more hilly areas

occur to the west. Vegetation in the park is varied and includes both grasslands, oak woodland and riparian vegetation.

The City of Cupertino has a 15-foot water line easement from their reservoir, located on the park's east facing slope, which runs across the park to serve the Forum development. The easement also includes vehicular access rights for maintaining the line, a fire hydrant easement and two points of connection for future irrigation supply. The Santa Clara Water District also has jurisdiction over the creek itself, although they do not have a right-of way easement. They permit any development activity within 50 feet of a stream bank.

Within the park are existing gas and electric pole easements for use by PG&E.

2.1.1.C Potential Land Acquisition and Transitional Corridor Management

The Master Plan identifies the potential acquisition of an inholding which is part of the larger parcel owned by the San Jose Diocese located north of the park's restroom. This property may be acquired through exchanges, easements, purchase or lease. The Master Plan suggests that the inholding could be used as a future parking area.

The Master Plan also identifies a transitional corridor appropriate for joint management by the County and MROSD. This corridor encompasses the triangular piece within the MROSD Preserve which both connects the main portion of the park to the north wing and serves as an important gateway to the Preserve. The County uses a road passing through this land to get to the north wing.

2.1.1.D Applicable Land Use Plans and Policies

The park is located on County land and is therefore subject to land use policies set forth in the Santa Clara County General Plan (March 1982). The County also coordinates its planning efforts with the City of Los Altos because of park impacts on traffic in the city, and they coordinate with MROSD because of the park's interrelationship with the adjacent Preserve. MROSD adopted Trail Use Policies in November 1990 which aim to promote sound resource management and compatible uses. These policies are relevant to park planning because the two trail systems are linked together.

2.1.1.D.1 Santa Clara County Plans and Policies. The park site is designated "Existing Regional Park" in the General Plan and zoned "Hillside".

Policies relevant to the park are contained in several different documents adopted by the County including its General Plan, the South County Joint Area Plan, and the Trails and Pathways Master Plan. Policies in the County documents are consistent with one another. Some of the more relevant policies from the County General Plan include the following:

Policy H 3.15: Trail linkages are intended to eventually connect all County, state and regional parks to provide a wilderness trail system encircling the urban area and connecting to trails of neighboring counties.

Policy H 5.2: A countywide system of hiking, bicycling and horseback riding trails should be provided which includes trails within and between parks and other publicly owned open space lands, as well as trails providing access from the urban area to these lands.

Policy H 5.4: Trails shall be located, designed and developed with sensitivity to the resources and fire hazards of the areas they traverse, as well as their potential impacts on adjacent lands and private property.

Policy H 6.5: The countywide trail system should be linked with major trails in adjacent counties.

Policy H 6.11: All trails should be marked. Trails and appropriate markers should be established along historically significant trail routes, whenever feasible.

Policy D 13.2: Public projects shall be designed to avoid damage to the stream environments.

Policy D 13.3: Where possible, riparian woodlands, marshes and flood plains which have been altered should be allowed to return to a natural state.

Policy D 13.6: Public projects would preserve the stream environment and should provide multiple use for such purposes as parks, open space preserves, trails and flood control.

Policy D 13.7: No fences should be erected within the riparian area preventing the free movement of wildlife needing access to the stream.

Policy D 13.8: Lands near creeks and streams shall be considered to be in a buffer area consisting of the following land: a. An area extending 150

feet from top bank line landward where the creek is predominantly in its natural state (has not been converted to a concrete or rip-rap channel).

Policy D 13.9: *Within these buffer areas, the following restrictions should apply to public projects and to private non-residential development:*

- a. No building, structure (except those required for flood control maintenance, reinforcement or bridging, etc) or major parking lot shall be allowed.*
- b. No grubbing, clearing, tree cutting, grading, debris disposal or any other despoiling action shall be allowed, except for removal of dead or diseased material after investigation has established that wildlife habitat of value for particular species will be retained.*
- d. Protect wildlife and endangered plant species within the area.*
- e. Provide for trails and other compatible recreational uses when indicated in the County of city General Plans.*

City of Cupertino General Plan. The site is designated "Park" in the City of Cupertino General Plan and is zoned "Residential Hillside". Cupertino General Plan policies encourage preservation of natural areas by limiting recreation in natural areas to activities compatible with preserving natural vegetation, such as hiking, horseback riding and camping.

MROSD Trail Policies. MROSD policies specifically intend to minimize trail use conflicts and environmental impacts through such measures as trail use designations, education, physical improvements to trails and enforcement of trail use regulations. MROSD policies promote the development of an interconnecting trail system throughout the region which is compatible with other jurisdictions and land owner objectives, as well as with MROSD policies.

2.1.2 Impact Discussion

2.1.2.A Land Use Compatibility

Because the Master Plan does not recommend new land uses or significant changes in the character of the park, it will continue to be compatible with surrounding existing and future residential, open space and institutional uses. Future residential or institutional development at the park's northeastern and southern boundaries would be generally compatible with park use; however,

the proximity of development to the park could result in some noise and visual impacts. Although park users and future neighbors may each generate noise affecting one another, these impacts would not be significant enough to exceed residential or park noise standards. Additionally, future residents immediately adjacent to the park boundaries may perceive privacy issues related to sharing a boundary with public property; however, impacts could be mitigated by fences and landscaping incorporated into future development projects. These potential impacts and recommended mitigation measures, including inter-agency development review coordination, are described fully in Chapter 2.2 Visual Resources and in Chapter 2.6 Noise.

Acquisition of the two pieces of land identified in the Master Plan would be beneficial to the County Parks and Recreation Department and would not cause any land use impacts. Future use of the inholding north of the restroom for a parking lot would not conflict with existing or future surrounding land uses. Acquisition would require allocation of public funds for the purchase of these properties. As an alternative, if one or both of the properties were leased rather than acquired, administrative responsibilities would slightly increase for the County.

2.1.2.B Master Plan Relationship to Local Land Use Policies

The Master Plan would be consistent with County policy, the City of Cupertino General Plan and the MROSD Trails Policies document.

The Master Plan would not be consistent with County General Plan Policy D 13.9 which specifies that parking areas should not be permitted within creek buffer areas. Creek buffer areas are defined as those areas extending 150 feet from the top of bank. The existing paved restroom lot and the equestrian lots are in violation of this policy as well.

Because field assessment and analysis of hydrological and biological resources indicated that no significant impact would result from the proposed placement of new parking lots or trails, this policy inconsistency is considered a less than significant impact. The proposed 50-foot riparian setback from top of bank is considered adequate for protection of natural resources based on an analysis of proposed Master Plan improvements. Please see Chapter 2.5 Biological Resources and Chapter 2.4 Hydrology and Water Quality which address potential riparian impacts and appropriate mitigation measures.

2.1.3 Significant Impacts and Mitigation Measures

No significant land use impacts were identified so no mitigation measures are required.

2.2 VISUAL RESOURCES

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2.2.1 Existing Setting

Rancho San Antonio Park is characterized by its open space, natural character. The park's developed features are not visually prominent nor concentrated in one area. Manmade features occur primarily at the lower elevations of the park with the exception of a City of Cupertino water tank on the east facing slope.

The park's varied topography and vegetation physically separates the various activity centers in the park. Parking is scattered in nodes along the main access road. This road descends from an open grassy area down to a grassy meadow which is adjacent to a lush riparian area. The restroom facility, and parking lots are visually separated from the court games, ball field and family picnic areas. The north wing area is similarly visually separated from each of the above activity areas.

The vegetation is typical of the coast range foothills and contains various plant communities including grasslands and oak and riparian woodlands. The more open, less vegetated areas of the park occur east of Permanente Creek from the restroom area to the park entrance. Hillsides are variably grassy and wooded and the riparian area along the creek is densely vegetated. The level areas of the park contain the most varied vegetation. The MROSD Preserve serves as a mountainous visual backdrop beyond the park.

Views of the park are contained in Figures 5 through 8 and viewpoint locations are shown in Figure 4.

2.2.1.A Views of the Surrounding Area From the Park

Views of adjacent off-site development from within the park are available primarily from the park's southern, northern and eastern boundaries. Views of the surrounding communities of Los Altos and Cupertino are available from the upper elevations of the site in the western portion of the park.

The Forum development and Maryknoll Seminary are visible primarily from the park's eastern boundary near the park entrance, although there are partial views of these developments from the lower portions of the main access near the restroom parking lots. The Gate of Heaven Cemetery buildings are visible and partially screened, as seen from the upper eastern portions of the park and the southern boundary. Vacant open space land separates the cemetery from the park. There are no views of off-site development from the existing ball field and court game area due to intervening riparian vegetation. Partial views of the top levels of new Forum residences exist from the north wing on the paved service road, and Interstate 280 is visible from the northernmost park's boundary.

2.2.1.B Views of the Park from Surrounding Development

Views of the park from off-site are available from Cristo Rey Drive, the Maryknoll Seminary and from the Forum development (currently under construction). From these viewing points, the park entrance and access road, the two upper parking lots, and the open space hills to the west are visible. The lush hillsides to the west dominate views seen from this area. As stated, the entrance area of the park appears barren and unvegetated; the only vegetation in this area consist of short grasses. Some of the Forum units under construction near the park's northeastern boundary have views of the north wing area of the park which is partially screened by intervening vegetation. This view of the north wing is characterized by a partially wooded meadow and a lush riparian corridor. In addition, the north wing of the park is very briefly visible through a narrow viewing corridor for southbound traffic travelling on Interstate 280.

2.2.2 Impact Discussion

2.2.2.A Master Plan Visual Impacts

The Master Plan would not result in any significant adverse impacts on existing or future on- or off-site views. The only significant alteration to the park's visual character would be the introduction of landscaping at the park's main access road and around the parking lots. These improvements would alter the character of the upper eastern portion of the park as seen from the east and create a beneficial impact. The landscaping would be limited to tree species and would add greenery to this view and break up the barren, monotonous grassy character of this area. Some concern was raised at a public meeting on the Master Plan regarding the potential for landscaping to block the existing view west from the bluff area in the eastern portion of the park. Although the

trees would partially screen some of this view, the trees would not form a major obstruction because the proposed landscaping does not create a continuous row, and views would still be available under and between trees. Additionally, the trees can serve to frame views and add to the visual variety in the park.

2.2.2.B Off-Site Development Impacts

Although not an impact of the Master Plan, future off-site development along park boundaries could result in visual impacts related to structures visible from the park. This development could significantly change views of the surrounding area from the park. In addition, residents of future development could perceive privacy problems related to the proximity of their homes to the park. Future residents could perceive privacy problems if park users have views into their yards or conversations can be heard between the private residences and the park. The level of negative effect would depend upon future setbacks, building heights, fences, landscaping and personal perceptions of privacy. Sensitive viewsheds are shown in Figure 9 and indicate these sensitive areas occur at the park's northern and southern boundaries.

Proposed Master Plan landscaping at the park's southern boundary and around the equestrian parking areas will partially screen future off-site development but views could still be significantly affected by future development. Existing vegetation at the park's eastern boundary near the ballfields would screen future development seen from this viewpoint. There currently are no public policies or city ordinances addressing development guidelines or buffer recommendations at park or public open space boundaries.

2.2.3 Significant Impacts and Mitigation Measures

No adverse impacts related to the Master Plan were identified; therefore, no mitigation measures are required. However, significant visual impacts related to off-site development could effect the park. Therefore the following impact is identified and a mitigation measure recommended for consideration. This measure requires interagency coordination.

Off-Site Impacts on the Park. Future off-site development along park boundaries could result in significant visual impacts related to structures visible from the park.

Mitigation Measure. Development in the identified sensitive viewshed areas to the north-east and south of the park should be carefully reviewed by local

agencies to assess potential impacts on the park. The County Parks and Recreation Department and the City of Cupertino Planning Department could work towards creating mutually acceptable policies for development adjacent to park and open space lands. The policies could encourage private developers to create site designs sensitive to park use and atmosphere. Private development could be reviewed on a project by project basis for compliance with these policies.

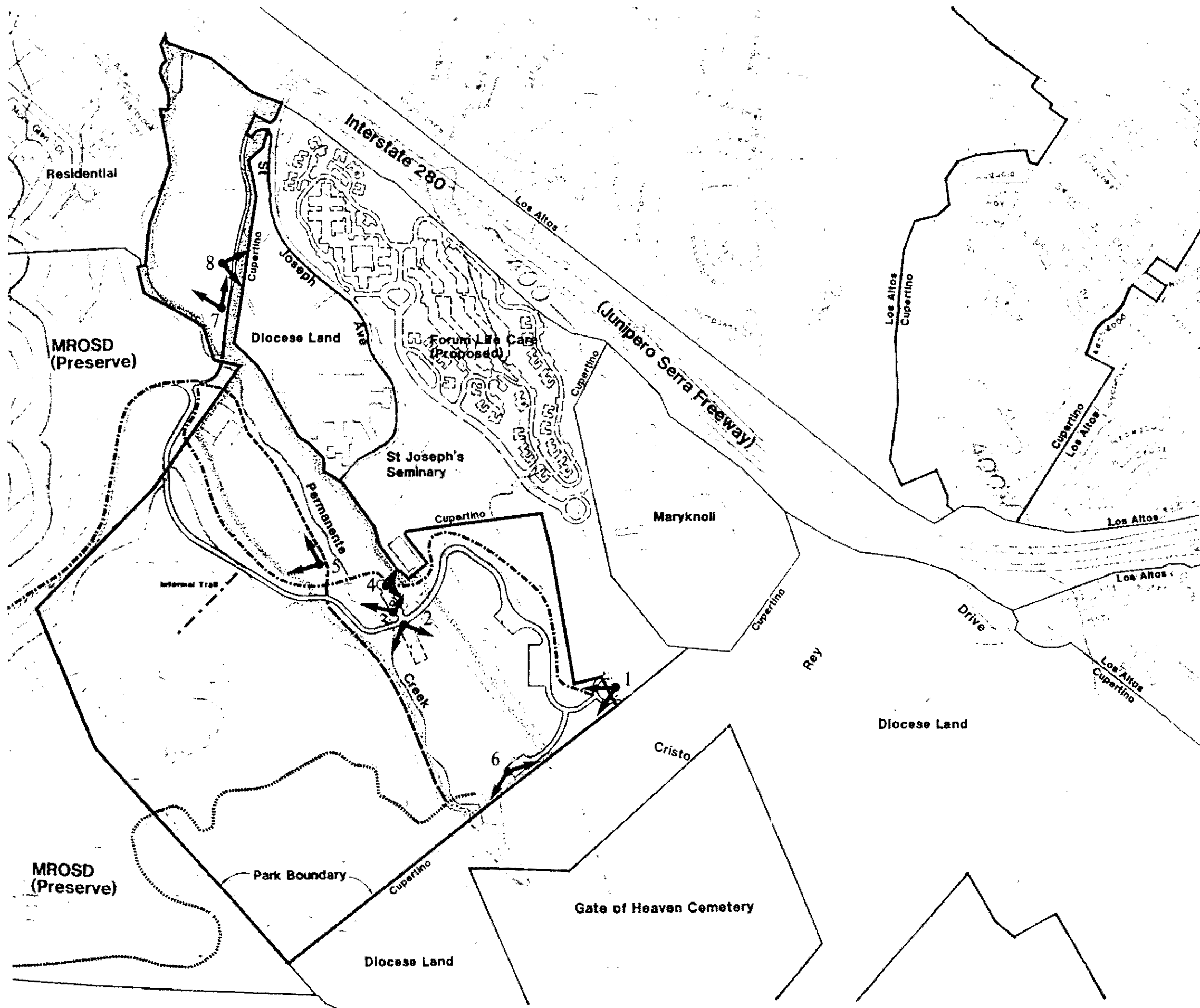
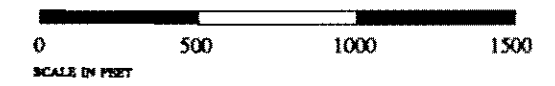


Figure 4

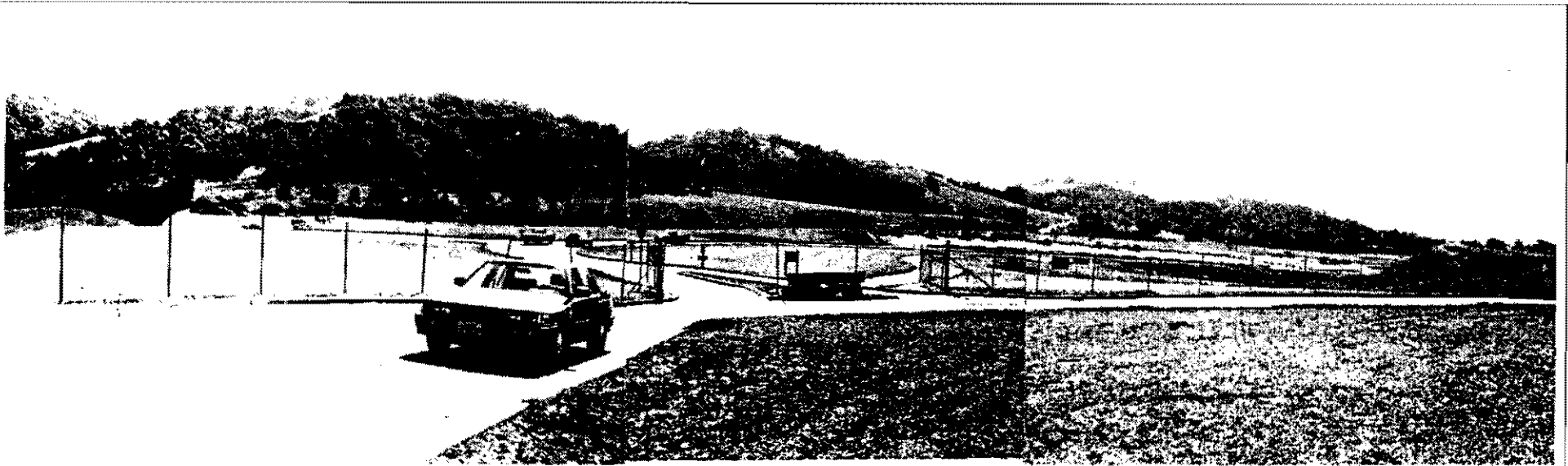
Viewpoint Locations



SOURCE: ARBEGAST, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS

RANCHO SAN ANTONIO PARK MASTER PLAN INITIAL STUDY

BRADY AND ASSOCIATES
PLANNERS AND LANDSCAPE ARCHITECTS



Viewpoint 1. View of park entrance looking west from Cristo Rey Drive.



Viewpoint 2. View of the southern turf area and parking lot looking south from the entrance road.

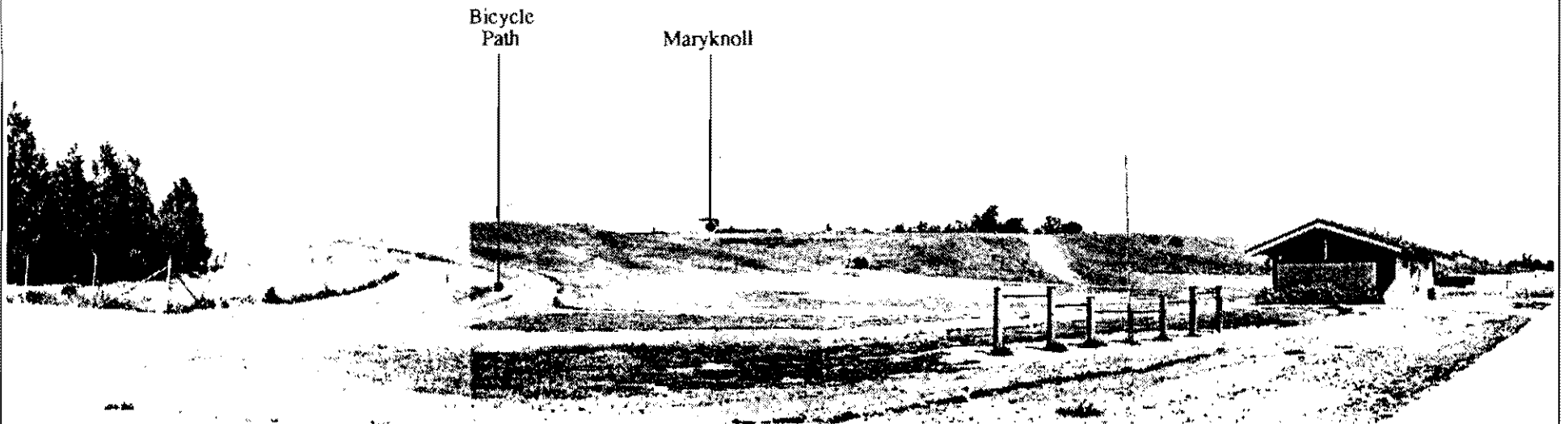
Figure 5
Photographs of Site

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Viewpoint 3. View of the lower parking lot looking north from the entrance road.

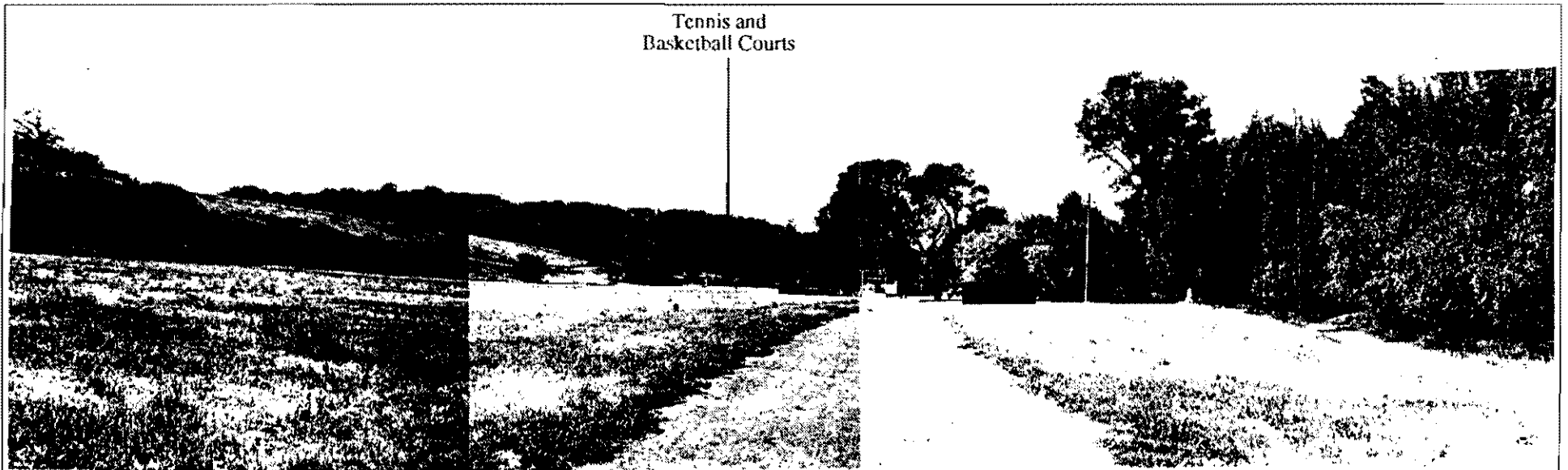


Viewpoint 4. View of the restroom and bluff area looking west from the lower parking lot.

Figure 6
Photographs of Site

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Viewpoint 5. View of the ballfield looking north from the pedestrian trail.



Viewpoint 6. View of potential future residential development area looking south from parking lots at the site's southern boundary.

Figure 7
Photographs of Site

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Viewpoint 7. View of the "north-wing" looking north from park service road.



Viewpoint 8. View of potential future residential development area (seminary site) looking north from the park's northwestern boundary.

Figure 8
Photographs of Site

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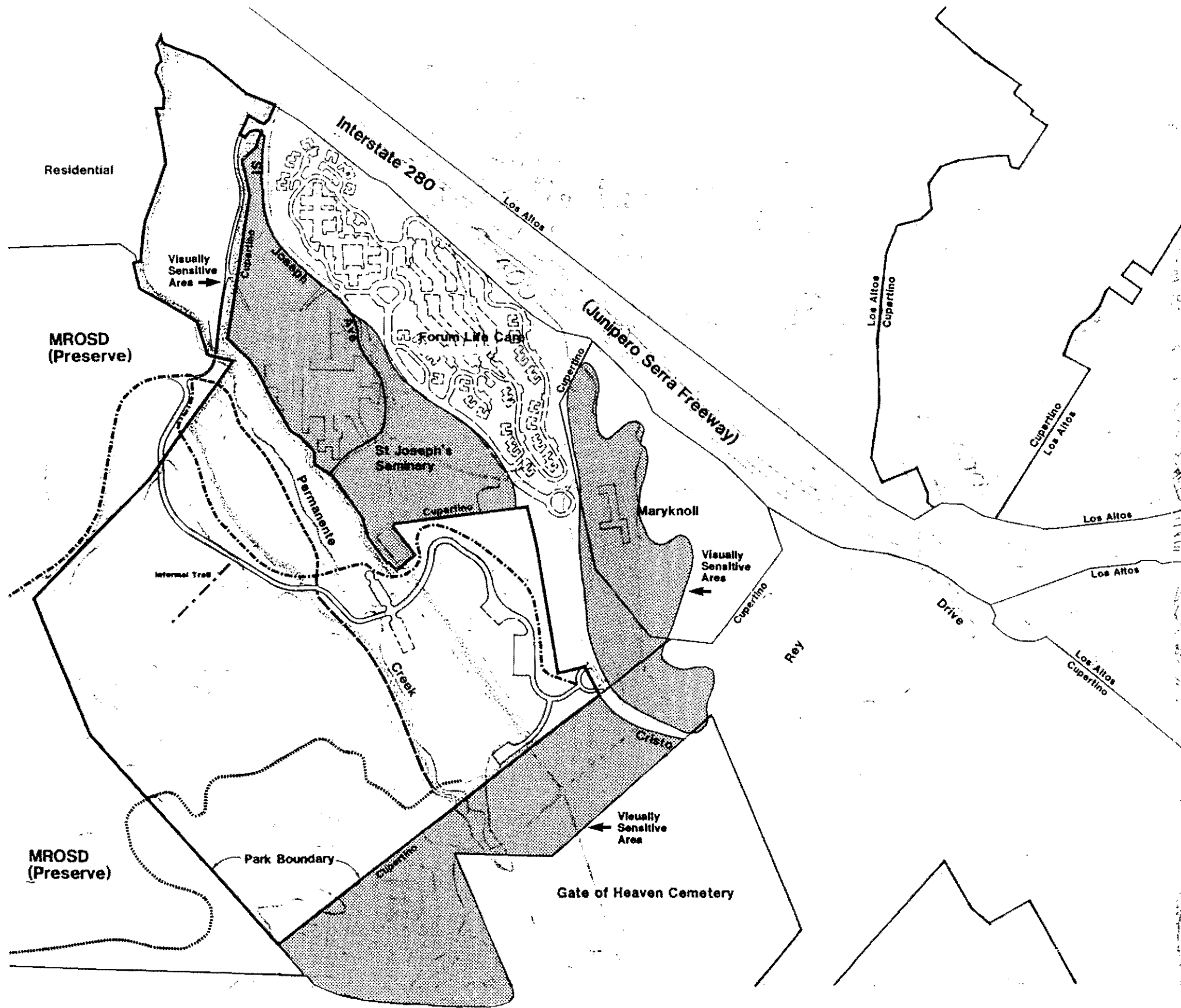


Figure 9

Visually Sensitive Areas

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SOURCE: ARBOGAST, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS

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2.3 TRAFFIC, CIRCULATION AND PARKING

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2.3.1 Existing Setting

2.3.1.A Local Roadways

Vehicular access to Rancho San Antonio Park is provided via Cristo Rey Drive. Cristo Rey Drive is a two-lane collector roadway that extends westerly of a signalized intersection with Foothill Boulevard for about a mile to the park entrance. The roadway ends just west of the park entrance at the construction site of the Forum Life Care senior housing project. Adjacent to and in the immediate area of the park Cristo Rey Drive has a 29-foot curb-to-curb width, a curb and gutter on both sides of the street and a sidewalk on the south side of the street. Centerline striping is provided. Left turn lanes are not provided along Cristo Rey Drive at the park entrance or on the approaches to other intersections. Observed vehicular speeds near the park ranged from 25 to 45 miles per hour. On-street parking is prohibited along the south (sidewalk) side of the street; signing indicates that parking is prohibited in order to maintain a fire lane. Cristo Rey Drive widens along its easterly end about a third of a mile before intersecting Foothill Boulevard. On-street parking is allowed along both sides of the roadway near this intersection.

Foothill Boulevard is a major four-lane arterial roadway in the Cities of Cupertino and Los Altos. Foothill Boulevard provides access to a full interchange with the Interstate 280 freeway less than a quarter mile north of the Foothill/Cristo Rey intersection.

2.3.1.B Volumes

Park staff¹ was interviewed to determine times of expected highest park traffic on weekdays and weekends. Based upon these discussions, it was determined that on a spring, summer or fall weekday the greatest volumes of park traffic typically occur from about 5:00 p.m. until after 6:00 p.m., while on a weekend

¹Mr. Bernie Garrison, Senior Park Ranger, personal communication, May 3, 1991.

the greatest volumes of park traffic typically occur from about 9:00 a.m. until noon. All weekdays are about equal in use; likewise, most Saturdays and Sundays are similar in use.

Based upon the above information, traffic counts were conducted at the park entrance by the Goodrich Traffic Group on Sunday, May 5, 1991 and on Thursday, May 9, 1991 during the expected peak traffic periods. The weekday peak traffic hour was determined to be 5:15 to 6:15 p.m., when there were 190 vehicle trips entering the park and 86 trips leaving the park (see Figure 10). Based upon counts during the same time period at the Foothill/Cristo Rey intersection, park traffic was determined to be 75 percent of the total traffic on Cristo Rey Drive just west of Foothill Boulevard and 11 percent of the total traffic traveling through the Cristo Rey/Foothill intersection.

On the surveyed Sunday, the peak traffic hour for park traffic was determined to be 9:30 to 10:30 a.m. when there were 155 vehicle trips entering the park and 131 trips leaving the park (see Figure 10). It should be noted that while a distinctive peak in traffic activity was noted at the park on a weekday afternoon, there was a more uniform flow of vehicles to and from the park over a longer time period throughout the surveyed Sunday morning.

During the weekday time of peak auto activity at the park, 6 bike riders and 1 pedestrian entered the park while 4 bike riders and no pedestrians exited the park. During the Sunday morning time of peak auto activity at the park, 5 bike riders and 5 pedestrians entered the park and 5 bike riders and 5 pedestrians exited the park.

2.3.1.C Parking Usage

Rancho San Antonio Park currently has three paved and three gravel parking lots. A summary of total parking spaces and current usage presented in Figure 11 shows that there are now about 228 parking spaces within the park. However, parking estimates for the three gravel lots are approximate as the total usage in these facilities is based upon variable parking patterns.

Four of the six parking lots are located adjacent to trailheads and downhill of the park entrance. Two of these four downhill lots are located adjacent to restroom facilities. The remaining two lots are located uphill adjacent to the park entrance, but away from the trailheads.

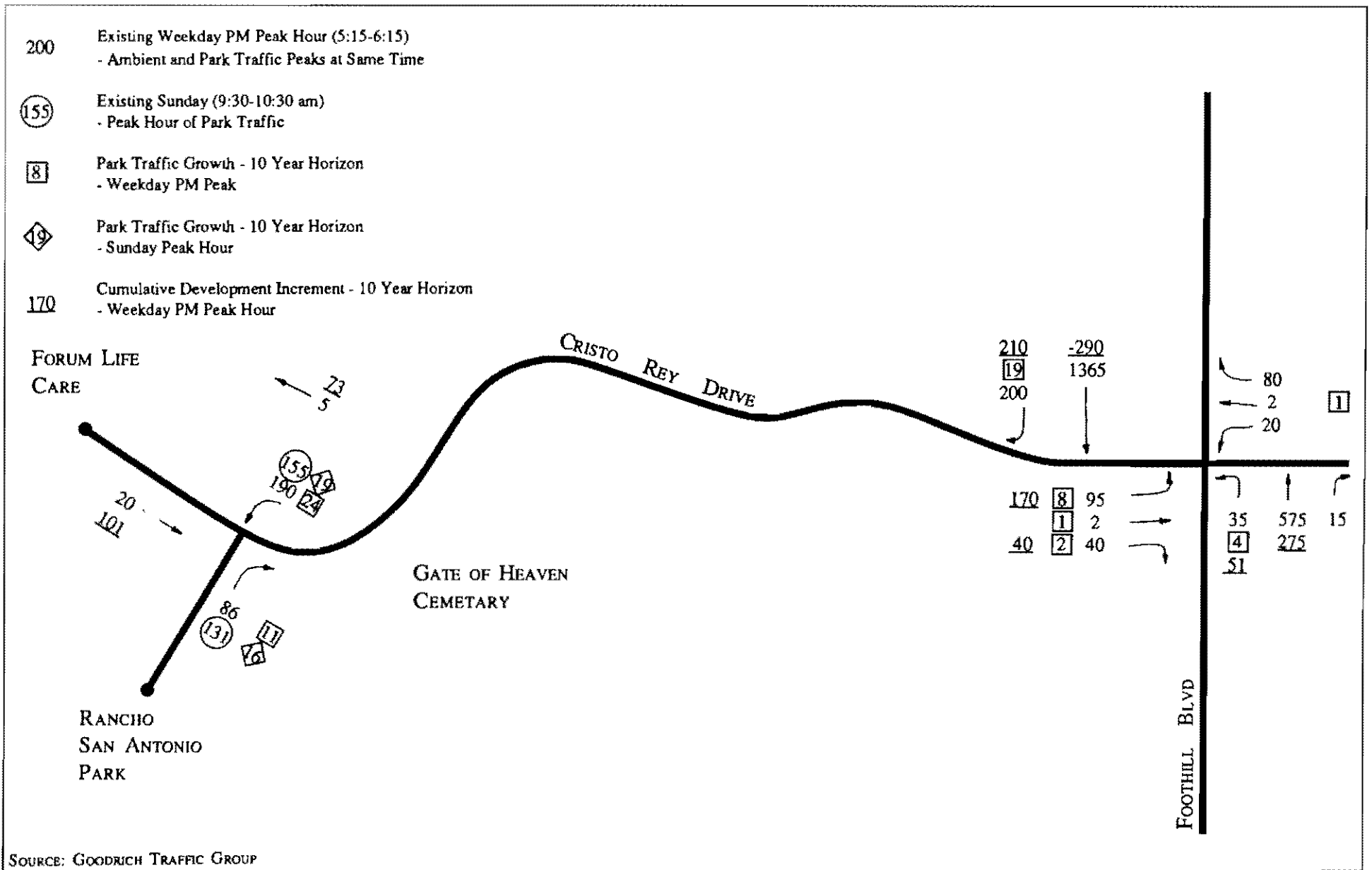
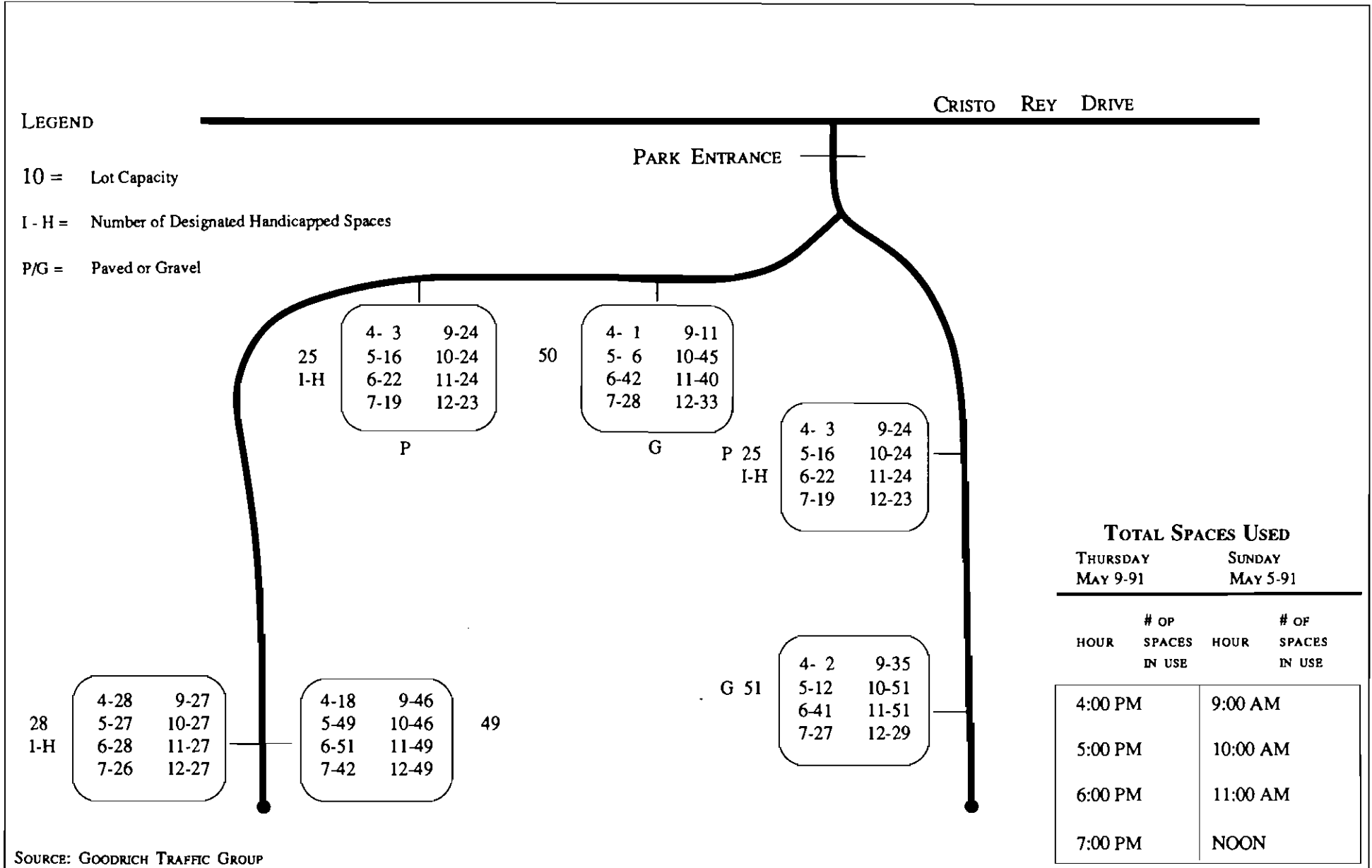


Figure 10
Peak Hour Traffic Volumes



SOURCE: GOODRICH TRAFFIC GROUP

Figure 11
Existing On-Site Parking Usage

**RANCHO SAN ANTONIO PARK MASTER PLAN
INITIAL STUDY**

BRADY AND ASSOCIATES
PLANNERS AND LANDSCAPE ARCHITECTS

On the weekday afternoon survey (May 9, 1991) the paved lot adjacent to the trailhead and restrooms was completely full from 4:00 p.m. until after 6:00 p.m., while the gravel lot in the same area was more than half empty at 4:00 p.m., but full from 5:00 p.m. until after 6:00 p.m.. The other downhill lots (combined) were less than half full at 4:00 and 5:00 p.m. but about 85 percent full at 6:00 p.m.. The two uphill lots (combined) were less than half full at 4:00 and 5:00 p.m., but about 88 percent full at 6:00 p.m.. Parking lot occupancy dropped significantly by 7:00 p.m. in all lots except those two near the trailhead and restrooms. Overall, of the 228 total on-site spaces, 55 were occupied at 4:00 p.m., 129 at 5:00 p.m., 208 at 6:00 p.m. and 162 at 7:00 p.m..

On the same weekday, surveys were also conducted of the vehicles parking along Cristo Rey Drive before the park gates opened. The signed park opening hour is 8:00 a.m., although a County Supervisor who uses park facilities often will open park gates as early as 7:00 a.m. On the survey day, park gates were open at 7:00 a.m. Between 6:00 and 7:00 a.m., there were up to 6 vehicles parked along Cristo Rey Drive at any one time (just after 6:00 a.m.). A tabulation of the in- and outbound traffic accessing the open park from 7:00 to 8:00 a.m. indicated that if the park gates had remained closed during this time period, up to 4 vehicles would have been parked along Cristo Rey Drive near the park entrance at any one time.

During the Sunday morning survey (May 5, 1991) the paved lot adjacent to the trailhead and restrooms was completely full from 9:00 a.m. until noon, while the gravel lot in the same area was more than 90 percent full at 9:00 and 10:00 a.m. and completely full at 11:00 a.m. and noon. The other downhill lots (combined) were about 75 percent full at 9:00 a.m., 100 percent full at 10:00 and 11:00 a.m., and about 65 percent full at noon. The two uphill lots (combined) were less than half full at 9:00 a.m., more than 90 percent full at 10:00 a.m., almost 90 percent full at 11:00 a.m., and about 75 percent full at noon. Overall, of the 228 total on-site spaces, 167 were occupied at 9:00 a.m., 217 were occupied at 10:00 a.m., 215 were occupied at 11:00 a.m. and 181 were occupied at noon (see Figure 11). Park gates were not closed on the survey day, although a ranger was posted at the park entrance during the peak use time in case all on-site parking was occupied.

During the Sunday morning survey, along Cristo Rey Drive adjacent to the park there were no vehicles parked at 9:00 a.m., 5 vehicles parked at 10:00 a.m. and noon, and 7 vehicles parked at 11:00 a.m. Surveys on St. Joseph Avenue at the Los Altos park access indicated minimal use of on-street parking during these time periods. As the entire neighborhood near the St.

Joseph park access is posted for "resident parking only", no encouragement is given to outsiders to park in this area.

Discussions with park rangers indicated that both survey days appeared below average for high park usage times of the year. Typically from 12 to 15 vehicles park along Cristo Rey Drive before the park opens in the morning. Weekend days, all on-site parking is usually occupied for 15 to 30 minutes on 50 percent of the weekend days each year. This results in 20 to 50 vehicles, on average, parking along Cristo Rey Drive. A good weather day during the winter time did, however, completely fill the park during a Sunday in February and result in more than 100 vehicles being parked along Cristo Rey Drive.

2.3.1.D Park Access

The single park auto access is located along Cristo Rey Drive. Two drives connect to Cristo Rey, one intended for inbound vehicles and the other for outbound vehicles. These drives connect just south of Cristo Rey, and just north of the park entry gate, allowing a turn-around area. No left turn lane is provided on the Cristo Rey approach to the park entry drive. Likewise, no signing or striping is provided on the park access drives indicating their one-way flow pattern.

2.3.1.E Observed Safety Concerns

On-Street Parking. On-street parking along Cristo Rey Drive near Rancho San Antonio Park creates significant safety concerns as westbound traffic (running adjacent to parked vehicles) is forced to straddle the roadway centerline and partially travel in the eastbound travel lane. This concern is particularly acute at the horizontal curve in the roadway to the east of the park entrance. The safety concerns surrounding this problem will be greatly magnified with completion and occupancy of the Forum senior center just west of the park. The additional traffic due to this development (including many senior drivers) will total from 50 up to more than 100 vehicles per hour on Cristo Rey Drive.

Contact with the City of Cupertino Public Works Department² (the jurisdiction controlling Cristo Rey Drive) indicated that there are no plans to shift the roadway's centerline striping in order to provide more room for westbound through traffic in combination with on-street parking along the

²Ms. Vicki Guapo, City of Cupertino, Public Works Department.

north side of the street, and that the City has already had discussions regarding complete elimination of parking along the roadway. The current 29-foot curb-to-curb width of Cristo Rey Drive near the park does not strictly meet City standards for a cul-de-sac street (30-foot curb-to-curb minimum) nor a residential street (36-foot curb-to-curb minimum).

Entrance Signage. The park entrance is not well signed or striped. Field surveys indicated that a small number of drivers use the outbound driveway as an entry lane.

2.3.2 Impact Discussion

2.3.2.A Future Park Traffic

Proposed changes in Rancho San Antonio Park activities are detailed in other sections of the report. No new activities are planned at the Deer Hollow Farm³. Since none of the changes are considered by park staff or the consultant to be new attractions, future increases in traffic to the park are expected to be primarily a function of local area population. Surveys by park staff indicate that approximately 90 percent of all park users live within 10 miles of the park.

Contact with the cities of Los Altos, Cupertino, Sunnyvale and Mountain View Planning Departments indicated expected 10-year horizon population growths of 6 percent, 8 percent, 2.5 percent and 6 percent respectively, in each City.⁴ Visual inspection of those sections of Sunnyvale and Mountain View within close proximity to the park indicated little developable area remaining.

Based upon these findings, and including a 50 percent safety factor, it is projected that park traffic from its primary service area will increase by 12 percent over the next 10 years. In addition to this increase, an additional increment of pedestrian, bicycle and possibly auto traffic will be generated from the 319 senior living units at the Forum Life Care facility just west of the park and from the 360 single-family residential units that possibly could be built immediately east and south of the park boundaries. Residences this close to Rancho San Antonio would tend to use the park as a daily neighborhood facility rather than an occasional regional park facility. Any new auto traffic

³Ms. Paula Bettencourt, City of Mountain View Recreation Department.

⁴Ms. Lisa Grote, City of Sunnyvale; Mr. Brad Eckhart, City of Mountain View; Ms. Carol Hoffman, City of Los Altos; Ms. Ciddy Wordell, City of Cupertino.

from these nearby developments would only be experienced on Cristo Rey Drive in close proximity to the park, and not on the regional roadway system.

A 12 percent increase in park traffic would add 35 new vehicles to Cristo Rey Drive and the Cristo Rey/Foothill intersection during both the weekday PM peak traffic period (5:15 to 6:15) and on a Sunday morning during the park's peak traffic hour (9:30 to 10:30). Nearby residential units potentially could add from 5 to 15 new trips during these time periods, although it would be expected that nearby residents would be the most aware of the peak park usage time periods and would not drive into the park at these times. Overall, increased traffic from future park use could easily be accommodated along Cristo Rey Drive and is not considered a significant impact.

2.3.2.B Future Parking Demand

If average future parking demand would be expected to increase in the same proportion as new traffic (12 percent on a regional basis or up to 18 percent when considering extra traffic from nearby developments), total on-site parking demand would be expected to increase by about 25 to 40 spaces during the maximum usage period on both a weekday and a weekend day. This would indicate that for an average weekday during peak use time periods, with no increase in on-site parking supply, there would be a deficit of 5 to 20 on-site spaces (with a demand of 233 to 248 spaces), and that during an average Sunday with park gates closed 15 to 30 minutes, there would be an additional demand for 25 to 40 spaces along Cristo Rey Drive. It should also be noted that during the Sunday survey time periods with below average use, although on-site spaces were available, a few park users were parking on Cristo Rey Drive. Therefore, in addition to the deficits described above, there potentially would be an additional increment of park users who would continue to park on Cristo Rey Drive rather than hunt for an internal parking space when the park is approaching capacity use.

Parking along Cristo Rey Drive before park gates open in the morning would also be expected to increase in proportion to local population increases. The average range of 12 to 15 vehicles observed by rangers could be expected to increase to an average 15 to 18 vehicles.

The Park Master Plan will only minimally increase parking demand. Increases in demand are related primarily to projected population growth in the area. These projected increases are considered significant because they will exacerbate the existing safety hazards related to overflow on-street parking. As previously stated in Section 2.3.1 E, on-street parking forces westbound traffic

on Cristo Rey Drive to straddle the roadway centerline and partially travel in the eastbound travel lane.

2.3.2.C Cumulative Traffic Impacts

In addition to the 319 senior residential units of the Forum Life Care development now under construction east of the park, an additional 67 single family units may also be built just northeast of the park and an additional 293 single family units may be built just south of the park, adjacent to the Gate of Heaven Cemetery.⁵ While a secondary access from the 293-unit development to Stevens Creek Boulevard is a possibility, it has been assumed for this conservative analysis of cumulative impacts that all three developments would rely completely on Cristo Rey Drive for their access to the regional street system.

Table 2 shows expected weekday trip generation by each of the three projects on a daily and PM peak hour basis. Weekday conditions only were selected for analysis by park staff because volumes at the Cristo Rey/Foothill Boulevard intersection have been observed to be greater during this time period than on weekends. This intersection is the only connection for park traffic to the regional roadway network.

The Forum Life Care project would be expected to add about 105 peak hour vehicles to Cristo Rey Drive. The single-family development west of the park would be expected to add about an additional 70 peak hour vehicles, for a total of 175 new PM peak hour trips passing along the park frontage. The 293-unit single family development east of the park would be expected to add about 300 new PM peak hour trips to Cristo Rey Drive. Therefore, during the PM peak traffic hour Cristo Rey Drive just west of Foothill Boulevard could expect, in addition to the 35 new park vehicles over the next 10 years, an additional 470 two-way PM peak hour trips from the other under-construction or planned developments to be served by the roadway. The existing weekday two-way PM peak hour volume at this location of about 370 vehicles per hour would be increased by 136 percent to 875 vehicles per hour. Existing weekday peak hour traffic near the park access would be increased by 70 percent from around 300 up to 510 vehicles per hour.

⁵Ms. Ciddy Wordell, Cupertino Planning Department, personal communication, May 1990.

Table 2
TRIP GENERATION
FUTURE PROJECTS TO BE SERVED BY CRISTO REY DRIVE

PROJECT	SIZE	WEEKDAY DAILY TWO-WAY TRIPS		WEEKDAY PM PEAK HOUR TRIPS			
				IN		OUT	
		Rate	Volume	Rate	Volume	Rate	Volume
Seminary Site	67 SFU	10.1	680	.64	43	.37	25
Cemetery Site	293 SFU	10.1	2960	.64	188	.37	109
Forum Life Care	319 SRU	3.0	960	.18	58	.15	48
TOTALS			4600		289		182

Trip Rate Source:

Single Family Residential -- Trip Generation, 4th edition, by the Institute of Transportation Engineers, 1987.

Forum Life Care -- Traffic Report: El Camino Hospital Continuing Care Retirement Center, by Louis H. Larson, June 1985.

SFU = Single Family Units

SRU = Senior Retirement Units

While the wider sections of Cristo Rey Drive nearer Foothill Boulevard should be able to accommodate this volume of traffic, those 29-foot-wide sections along and near the park frontage could experience significant operational and safety problems, particularly those sections with on-street parkers. Problems would also be experienced at intersections with heavy left turn movements, such as the park access, that lack left turn channelization. A second access (other than Cristo Rey Drive) to the residential development east of the park would not reduce significant impacts along the park frontage.

2.3.2.D Operation of Cristo Rey/Foothill Boulevard Intersection

The operation of the Cristo Rey/Foothill Boulevard signalized intersection during weekday PM peak hour conditions was analyzed to determine existing and future operational conditions. Future operational conditions are based upon expected increases in park traffic, traffic expected from the three cumulative residential developments to be served by Cristo Rey Drive, and projections of year 2000 traffic along Foothill Boulevard provided by the City of Cupertino Planning Department. Some traffic along Foothill Boulevard is expected to decrease by the year 2000 due to the planned extension of the Route 85 freeway.

Intersection operation is graded according to a scale called Level of Service (LOS), the LOS scale ranging from level A, indicating uncongested flow and minimal delay, down to level F, indicating significant congestions and delay. LOS D is usually the poorest tolerated in most Bay Area cities. Intersection operation is also graded according to a scale called Volume to Capacity (V/C) ratio, which is directly related to Level of Service, but provides a finer breakdown of impacts for analysis purposes. Typically, there is a 10 point change in the V/C scale for each change in the LOS scale. Appendix B provides greater detail regarding LOS methodology.

Currently, the Cristo Rey/Foothill Boulevard intersection is operating at LOS B during weekday PM peak hour conditions. The addition of new park traffic expected over the next 10 years would use 1 percent of total intersection capacity and LOS B operation would be maintained. Project-related impacts are not significant. The addition of traffic from other cumulative developments, including expected volume changes along Foothill Boulevard, would result in an acceptable LOS C operation, with 11 percent of total intersection capacity being utilized (see Table 3).

Table 3
INTERSECTION LEVEL OF SERVICE

<u>Intersection</u>	<u>Existing¹</u> LOS-V/C	<u>Existing/Park²</u> LOS-V/C	<u>Existing/ Park Growth/ Cumulative</u> LOS-V/C
Foothill/ Cristo Rey/ Starling	B - .66	B - .67	C - .78

Source: Goodrich Traffic Group

¹ Growth in Park traffic over the next 10 years.

² Other developments expected in the area over the next ten years.

2.3.2.E Proposed Park Master Plan Circulation and Parking
 Improvements

The Rancho San Antonio Park Master Plan is proposing to increase on-site parking by approximately 31 spaces (for a total of 259 spaces)⁶, all to be located near the trailheads and restrooms. The number of lots would increase from six to seven. The two existing lots near the restrooms would receive the greatest on-site parking usage. These lots in this area would be reconfigured and a new lot would be provided just north east of the restroom. All would be paved. There are two lots on the bluff, one of which is gravel. This lot would also be paved. In addition, the park entrance at Cristo Rey Drive would be reconfigured with larger signing provided. No specific design has yet been developed for improvement to these lots.

This increase in on-site parking would not be able to fully accommodate unusual peak demand days, such as those that occur on weekends (up to 100 cars). It could generally accommodate either the expected 10-year growth in demand for an average weekend day during the peak use time of the year (25-40 car increase) or the existing excess demand on average weekend days (20-50 cars), but not both. Therefore, even with the increase in on-site parking, parking along Cristo Rey Drive would be expected to continue for several

⁶These numbers reflect field counts made by the Goodrich Traffic Group on May 5th and May 9th, 1991.

hours on peak use weekend days as well as in the early morning hours before park gates open. This is considered a significant impact; however, as previously stated, this impact is principally related to existing demand and projected increases in park use associated with population growth in the area. Although the closure of park gates due to capacity parking will continue, the frequency will diminish with the added parking until the growing user population increases demand and gate closures become frequent again. This may occur in three to four years.

To accommodate the maximum observed overflow and future growth, 125 to 140 new spaces would be needed. To accommodate the average demand and the projected 10-year increase only, the proposed on-site parking lots would need to be increased by 45-90 spaces (existing average weekend overflow of 20-50 cars, plus the projected increased demand of 25-40 cars).

The park would not provide a significantly increased supply of on-site parking nor would it provide street parking for early morning park users. If the City of Cupertino eventually prohibits parking along both sides of the stretch of Cristo Rey Drive within its jurisdiction, an action which would significantly reduce traffic safety concerns given the roadway's current narrow curb-to-curb width, the following significant impacts would be likely:

1. During times when the park is open:
 - a. Illegal parking would occur in the park.
 - b. Some drivers unable to find parking would leave and go to another park.
 - c. Some on-site parking at the Forum Life Care facility would be used by park patrons.
 - d. There would be increased parking along St. Joseph Avenue in Los Altos.
 - e. Roadways within any new residential developments adjacent to the park would be used for overflow parking.
2. During times when the park is closed:
 - a. Impacts c, d and e from above would all be likely.

The Park Master Plan is also proposing a revised entryway along Cristo Rey Drive. This redesign, together with better signing, should allow easier identification of the park access for first time users; however the increased

traffic entering the park and the narrow width of Cristo Rey Drive could create safety hazards related to left-turn movements into the park.

2.3.3 Significant Impacts and Mitigation Measures

The following mitigation measures should be required to reduce the identified significant impacts to levels of insignificance. Mitigation measures considered but eliminated due to associated adverse effects are also described.

Impact 2.3-1. The existing on-street overflow parking is considered a significant safety hazard due to the narrow width of Cristo Rey Drive occurring within the City of Cupertino's jurisdiction. Approximately 4,255 feet of Cristo Rey Drive starting at the park's entrance is within Cupertino. This section of roadway, which is 30 feet curb-to-curb, cannot adequately accommodate on-street parking. The overflow parking condition is expected to continue because the existing average and maximum number of on-street cars observed (20 to 50 cars and 100 cars respectively) exceeds the proposed approximate net increase of 31 spaces. In addition, peak park use will increase as a result of projected population growth by 25-40 cars and early-morning park users will continue to park on the street with minor increases.

If on-street parking is not accommodated, park users will either go to other parks or park their vehicles illegally in the park, in the Forum Life Care lots, in the Gate of Heaven Cemetery, or possibly along Cristo Rey Drive.

Mitigation Measure 2.3-1.

- a. Given the width of Cristo Rey Drive and associated safety issues, the City of Cupertino should prohibit on-street parking on both sides of Cristo Rey Drive within the City's jurisdiction by installing "No Parking" signs. These signs should be posted at frequent intervals along this portion of the street starting at the Forum development.

The following measures must also be adopted to minimize illegal parking in the surrounding neighborhood caused by displaced park users:

- b. If overflow parking spills into the Gate of Heaven Cemetery and creates a significant impact, signage indicating "Cemetery Parking Only/No County Park Parking" should be placed by the County on Cristo Rey Drive outside the Cemetery gates visible to both westbound and eastbound traffic on Cristo Rey Drive. This will

dissuade peak overflow parking in the Cemetery. Cemetery management has indicated that they do not want to place additional signs within the Cemetery gates or directly in front of the entrance because they would create visual clutter;⁷ therefore, signs should be placed away from the Cemetery entrance. If significant park-related parking still occurs in the Cemetery, the County and Cemetery management should reconsider placing signs within the Cemetery gates.

- c. If overflow parking spills into the Forum development and creates a significant impact, a sign should be posted by the County on Cristo Rey Drive approaching the entrance to the Forum development, which indicates "Resident Only Parking/No County Park Parking." The Forum development has indicated that they would be amenable to such a sign if parking problems occur.⁸
- d. Rigorous patrol will be required during peak use periods, by County Park Rangers, MROSD Rangers, City of Cupertino Police Department and the County Sheriff's Department to control overflow parking. All four entities currently provide patrol. Both County Park and MROSD rangers patrol the park and open and close park gates at designated hours and when the parking lots are full. The City of Cupertino and County Sheriff's Department also share patrol of Cristo Rey Drive. In addition, the Sheriff's Department has a Park Patrol Unit.
 - 1) City of Cupertino Code Enforcement officers and the County Sheriff's Department (including its Park Patrol Unit) will need to aggressively ticket illegally parked cars on Cristo Rey Drive.

The Code Enforcement Office has indicated that they feel "No Parking" signs and enforcement during peak periods would probably be effective in controlling illegal parking on Cristo Rey Drive. They would probably not routinely patrol Cristo Rey Drive near the park, but would patrol it on a rotating basis

⁷Bob Summers and Larry Sharkey, San Jose Diocese, Gate of Heaven Cemetery, personal communication, August, 1991.

⁸Gary Kutz, Director of Support Services, Forum Development, personal communication, August 14, 1991.

(maybe two Sundays a month) and rely on requests for additional patrol when there are problems. Park and MROSD rangers can radio the Police Department dispatcher when there is illegal parking. In addition, the County Sheriff's Department Park Patrol Unit, which rotates between parks on weekends, can also issue citations.⁹

2) A formal joint management agreement defining the shared patrol relationship between the County and MROSD should be adopted to ensure commitment to a rigorous parking enforcement program.

3) County Park and MROSD rangers should aggressively cite cars illegally parked on park property.

4) County Park and MROSD rangers should man the park entrance as needed during peak periods and inform vehicles that are being turned away that parking is prohibited in the Forum development, in the Cemetery and along Cristo Rey Drive.

5) The County and MROSD should extensively patrol outside the Gate of Heaven Cemetery driveway on Cristo Rey Drive as necessary during peak periods to dissuade park users from parking in the Cemetery. The County should also consider having rangers post temporary signs during peak periods that indicate where parking is prohibited in the neighborhood.

Rangers will be able to identify potential park users as those who are travelling east on Cristo Rey Drive and turning right into the Cemetery. It would be difficult to distinguish which cars are associated with the park or the cemetery from westbound left turn movements (vehicles coming from Foothill Boulevard).

- e. The County should provide an automatic gate which would open at a designated daylight hour by timer and allow early morning park users access to park in a designated lot. Vehicular access to the majority of the park should be restricted by internal gates until normal operating hours.

⁹Gary Kornahrens, Code Enforcement Officer, City of Cupertino Police Department, July 18, 1991.

- f. In the immediate future, prohibit on-street parking on the north side of Cristo Rey Drive along the inside of the curve near the access to the Gate of Heaven Cemetery.
- g. The set-aside parking lots shown in the Master Plan (approximately 44 additional spaces) should be developed when and if increased parking demand dictates, particularly if parking enforcement requirements become over-burdened.

Impact 2.3-2. Safety hazards would result from the high number of vehicles making left turns into the park combined with the addition of Forum Life Care traffic on Cristo Rey Drive.

Mitigation Measure 2.3-2.

- a. A short left-turn lane should be provided on the Cristo Rey Drive approach to the park entrance due to the high number of vehicles making left turns into the park.
- b. Any one-way system at the entry should be clearly marked by signing and pavement striping.

2.3.4 Measures Recommended to Improve the Proposed Plan

The following mitigation measure is recommended to reduce less than significant impacts:

To reduce drive-in traffic from new adjacent developments the County should consider providing points of pedestrian access to the park within one or two zones to be identified from adjacent residential development. The County could also encourage or require future adjacent residential development to provide staging areas within the new neighborhoods.

2.3.5 Measures Considered to Mitigate Impact 2.3-1 But Eliminated

- a. To mitigate safety hazards caused by on-street parking on Cristo Rey Drive, the road could be widened by at least 6 to 8 feet to a 36-foot road width adjacent to and near the park. This would provide for adequate width parking along one side of the roadway. The City of Cupertino Department of Public Works has indicated that they would be amenable to having their section of Cristo Rey Drive widened for the

purpose of providing on-street parking; however, it is unlikely that they would assume much financial responsibility.

Approximately ½ mile of Cristo Rey Drive would need to be widened to accommodate the maximum observed on-street parking demand of 100 cars (assuming approximately 25 feet per car). Under this mitigation measure, parking would be allowed along the south side of the street, adjacent to the park and the existing sidewalk. The parking prohibition would be shifted to the north side of the street. All widening then would be conducted on the north side of the street and the centerline of the roadway would be shifted to the north. The road widening could be designed for "parking bays" rather than widening one continuous length of road. A wider road without the presence of "parking bays" could encourage higher travel speeds.

This mitigation measure would reduce the park's off-site parking impacts to a level of insignificance and is the most desirable solution to the on-street parking problem.

Potential Adverse Impacts. This mitigation measure was eliminated from consideration because it would require purchase of costly right-of-way and monies have not been allocated in the County budget for the road widening.

- b. To mitigate existing safety hazards, on-street parking could be prohibited as an alternative to widening Cristo Rey Drive. In addition, the following measures would be required to accommodate displaced on-street parking demand.
 - b.1. To mitigate displaced on-street parking before the gates open, one of the following alternatives could be adopted.

Alternative b.1.(a). The County could provide a 10- to 15-space off-street lot outside the park gate that could be accessed 24 hours per day from Cristo Rey Drive and would be utilized by park patrons arriving before park gates open in the morning. This lot would also serve as a spill-over facility on peak use weekends.

Potential Adverse Impacts. The beautification efforts of the Master Plan would be adversely effected by the placement of a lot at the park's entrance. There are several adverse impacts

associated with this alternative. Placement of a lot outside the park gates could encourage loitering after dark, thereby increasing demand for police services. This alternative is also likely to require that the County acquire land to the north or south of the park entrance because the existing area within the gated entrance is probably insufficient to accommodate the recommended lot. In addition, this cost would be the County's responsibility and monies are not allocated in the County budget for this land acquisition.

Alternative b.1.(b). The County could provide an automatic gate and card system for early morning park users.

Potential Adverse Impacts. This alternative would require additional undesirable administrative costs associated with card distribution and management.

b.2. The following measure could be adopted to mitigate displaced on-street parking when the park is open.

To accommodate the park's maximum observed on-street parking demand plus the expected growth in the park's attendance over the next ten years, an additional 125 to 140 new on-site spaces would be needed. This additional parking is based on the observed maximum of 100 cars on Cristo Rey Drive plus the projected 25-40 car peak increase. Although the observed maximum is considered unusual and the existing average overflow is 20 to 50 cars, sufficient additional parking would be required to accommodate the maximum demand to reduce all potentially significant impacts to levels of insignificance. The two lots identified in the Plan as potential future parking areas would contain 44 spaces and could be utilized for some of this added parking, as could the in-holding parcel north of the restrooms, if it were purchased.

Potential Adverse Impacts. While this measure would reduce the park's existing and projected off-site parking impacts to a level of insignificance, there are undesirable visual impacts associated with increasing the park's paved surface area. Increased parking could alter the open space character of the park and increase runoff into Permanente Creek. If any additional parking lots were added, their placement should be scattered in nodes, setback from the Creek (preferably by 100 feet) and graded to direct runoff away from the Creek.

2.4 HYDROLOGY AND WATER QUALITY

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2.4.1 Existing Setting

The main hydrologic feature at the park is Permanente Creek, which runs from southwest to northeast through the park. Permanente Creek has a drainage area of 17 square miles. It is an intermittent creek that drains the east side of the Santa Cruz Mountains and flows by the Kaiser Permanente quarry and cement plant upstream of the project area. Downstream of the project area, the creek flows through residential areas to San Francisco Bay.

In the park, Permanente Creek has gravel-sized bed material and unconsolidated sandy banks. The creek is densely vegetated along most of the park. Water flows into Permanente Creek from one small drainage on the west side of the park, and overland or from small swales from the remainder of the site. Small culverts (approximately 12-inch) direct drainage from the western hillslope under paths and roads toward Permanente Creek. Bank erosion is evident where culvert outflow from the western part of the park enters the creek.

High sediment loads in Permanente Creek have caused flood-control problems in the downstream lowland areas. Sediment loads from Permanente Creek downstream of the limestone quarry have been measured as 15 times greater than sediment loads from the West Fork of Permanente Creek. Sedimentation in the downstream reaches reduces channel capacity and increases the risk of flooding. Flooding occurs on the floodplain adjacent to Permanente Creek during the 100-year flood in the park.

Rancho San Antonio County Park has several earth and paved paths and roads for recreational use. Erosion is evident on the earth path which descends the bluff on the east side of the park. Erosion is also evident where the road crosses a tributary to the unnamed drainage leading to Permanente Creek on the west side of the park.

2.4.2 Impact Discussion

Elements of the Master Plan with the potential to have an impact on site hydrology and water quality were investigated.

The following potential impacts were evaluated:

- Impacts of enlargement and paving of parking lots on water quality, drainage, runoff, and erosion;
- Impacts of re-alignment or re-surfacing of paths and the potential construction of a pedestrian bridge across the creek on runoff, drainage, and erosion;
- Impacts of irrigation and fertilization of rough grass in the meadow areas on base flow in the creek and water quality.

The proposed Master Plan could result in some potentially significant adverse impacts on the creek if they are not mitigated in the final project design.

Paving parking lots could increase and concentrate runoff where existing unpaved parking lots allow precipitation to infiltrate into the ground. Lots of concern would be the new lots located in the southern meadow and northeast of the restroom and the expansion of the existing parking lot west of the restroom. Concentrated runoff from parking lots adjacent to the creek could cause stream bank erosion. In addition, paved parking lots would collect litter and pollutants (including oil and grease, heavy metals, and antifreeze), and runoff from these parking lots would enter the creek during rainstorms.

Creek erosion could occur if any runoff were directed to the creek from the proposed paved lots in the lower elevations of the site (the equestrian lots and those near the restrooms). Water quality could be significantly effected by elevated erosion rates.

Existing unpaved paths in the park are currently compacted due to heavy foot traffic. The addition of soft surface trails and the paved pedestrian loop path adjacent to the creek would not have a significant impact on site hydrology. The construction of a paved path on the bluff on the east side of the creek would replace an eroding earth path. This realignment could potentially concentrate overland flow on the bluff and create minor erosion impacts. The potential construction of a pedestrian bridge across the creek linking the north-wing area with MROSD lands would not result in significant impacts if normal precautions to control increased sedimentation are implemented.

Irrigation of rough grass in the two meadow areas would increase infiltration of water into areas adjacent to the creek, and could increase creek baseflow by an insignificant amount. Fertilization of this area could increase nutrient levels in the creek; however, the Master Plan's landscape consultant has indicated that fertilization would be minimal and occur primarily in the initial phases after planting. It would not be required on a long-term bases; therefore impacts would not be significant. Fertilization of other vegetation to be planted would be localized and not affect the creek. Herbicides and Pesticides would not be required by the Master Plan.

Other improvements evaluated include the removal of the handball and basketball courts. This would allow for increased infiltration of rainfall after the impermeable surfaces are removed. These activities would have a slight beneficial effect on site hydrology.

Trash could enter the creek from increased user activity in the vicinity of riparian zone. Large group gatherings are not anticipated so it is unlikely that this impact would be significant, however.

2.4.3 Significant Impacts and Mitigation Measures

The following mitigation measures should be required to reduce potentially significant impacts to levels of insignificance:

Impact 2.4-1. Concentrated runoff from new parking lots and the paving of existing gravel lots adjacent to the creek could cause stream bank erosion and carry pollutants into the stream.

Mitigation Measure 2.4-1.

- a. To mitigate concentration of runoff into the creek and potential erosion and pollution impacts, surface runoff from new paved parking areas and the paved pedestrian path should be directed away from the creek through site grading. Runoff from the lots should be directed through a grassy swale buffer area in order to filter the surface runoff before it enters the creek and paved parking areas should be cleaned regularly to remove pollutants and litter.
- b. Any culvert flow directed to Permanente Creek should be provided with energy dissipation at the discharge point/culvert to mitigate potential erosion impacts.

2.4.4 Measures Recommended to Improve the Park

The following mitigation measures are recommended to reduce less than significant impacts:

- c. Eroding channel banks on Permanente Creek should be restored by planting vegetation and by grading the bank to a stable slope if necessary.
- d. Application of fertilizers to the turf areas should be minimized, especially in the immediate vicinity of Permanente Creek.
- e. If needed, trash receptacles should be placed in parking areas to minimize trash in the creek.
- f. Irrigation of the turf areas should be restricted to non-daytime hours to minimize evaporation losses.
- g. If a pedestrian bridge is constructed across the creek, construction activity should be restricted during the rainy season, no heavy equipment should be allowed in the stream channel, and hay bales or a covering fabric should be placed on the creek bank to control added sedimentation in the creek.

2.5 BIOLOGY

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This section is largely extracted from the Master Plan Program Document (April 1990), which provides an exceedingly thorough biological resource inventory and analysis of sensitive species and habitats prepared by the Habitat Restoration Group. This section summarizes the existing conditions information contained in the program document. The complete inventory of vascular plant and wildlife species and species of special concern observed or expected to use the park are included in Appendices C and D. Figure 12 shows the sensitive biological resource areas in the park.

In addition to the recreational improvements discussed in the Project Description, the Master Plan also recommends biological resource preservation and protection measures. These recommendations are as follows:

- Systematic removal of non-native vegetation.
- Monitoring volunteer trails which cause erosion and degradation of biotic resources and closing of such trails for repair of erosion and revegetation.
- Occasional mowing of non-native grassland areas to encourage growth of native plants and to enhance wildlife habitat.
- Designation of a Riparian Zone, defined by a 50-foot wide buffer on each side of the creek measured outward from the edge of riparian vegetation or top of bank, whichever is greater.
- Restoration of the Riparian Zone where possible by providing for enhancement of wildlife, fishery, and native vegetation.
- Protection of the Riparian Zone from trespass by users through installation of low log barriers or a low split rail fence.

2.5.1 Existing Setting

2.5.1.A Vegetation

The existing flora of Rancho San Antonio County Park was surveyed by the consultant team on July 5 and 13, 1989. The California Natural Diversity Data Base (CNDDB) was assessed to obtain information on known occurrences of rare, threatened, or endangered plant species in the County park or the vicinity. Plant species observed in the park are listed in Appendix C. The date of the surveys precluded the identification of many herbaceous annual species (wildflowers), most of which were dead and/or inconspicuous by July. A spring survey would provide additional information on the park's plant species composition.

Habitats occurring in the park include coast live oak woodland, mixed riparian woodland, non-native grassland, and central coastal scrub.

2.5.1.A.1 Coast Live Oak Woodland. This habitat occurs primarily on the hillsides of the southwest portion of the park, and on the level terrain in the northern corner of the park. This habitat is continuous with extensive areas of coast live oak forest to the west and south.

The overstory is dominated by coast live oak. The most numerous and widespread species are blue oak, valley oak, California bay and California buckeye. An understory of various species of shrubs and sub-shrubs is present throughout much of the habitat. Shrub and sub-shrub species include such species as poison oak, coyote brush, blue elderberry, leatherwood and California wild rose. Annual grasses are common in parts of this habitat with ripant brome and wild oat being most common. Some of the wildflower species that would be expected to occur in this habitat include species such as blue chick and Douglas iris.

2.5.1.A.2 Mixed Riparian Woodland. Riparian habitat occurs as a distinct band of vegetation along Permanente Creek. Additional mixed riparian woodland occurs in MROSD lands along the tributary of Permanente Creek, adjacent to the park's northwest border. Riparian vegetation grows along stream courses, and in other areas where there is fertile soil with an ample water supply.




Figure 12

Sensitive Biological Resources


■ ■ ■

LEGEND

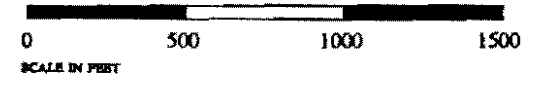
WILDLIFE

 RIPARIAN HABITAT OF PERMANENTE CREEK AND TRIBUTARY

VEGETATION

 KNOWN LOCATION OF WESTERN LEATHERWOOD (*DIRCA OCCIDENTALIS*)

 POTENTIAL AREA OF OCCURRENCE OF WESTERN LEATHERWOOD



SOURCE: ARBBIAS, NEWTON & GRIFFITH, LANDSCAPE ARCHITECTS

RANCHO SAN ANTONIO PARK MASTER PLAN INITIAL STUDY

BRADY AND ASSOCIATES
PLANNERS AND LANDSCAPE ARCHITECTS

The riparian habitat contains red willow, arroyo willow, California bay, California buckeye, blue elderberry, creekhorde dogwood and coyote brush. Common understory plants include poison oak, California blackberry, boarhound, coast live oak, while alder, California bay, and a variety of non-native ornamental trees, including blue gum. This area also includes Monterey pines and many ornamental species, such as periwinkle, English ivy and hypericum. The composition of species varies in the three distinct sections of the creek, the southern, middle and northern sections.

2.5.1.A.3 Central Coastal Scrub. This habitat occurs in two patches on the park's northeast facing slopes, and is closely associated with the coast live oak forest habitat, sharing many species with that habitat. Although a few coast live oaks are present in the central coastal scrub, canopy trees are generally lacking. Dense growths of shrubs and sub-shrubs, ranging in height from two to six feet, are the most characteristic physiographic feature of the habitat. Dominant species occurring in this habitat include California sage, poison oak, toyon, and coyote brush, sticky monkey flower and redberry.

2.5.1.A.4 Non-Native Grassland. This habitat inhabits the level terrain in the eastern portion of the park, and on the slopes in the southwestern portion of the park. Non-native grassland intergrades with the coast live oak forest habitat, with the boundary between the two often indistinct. This habitat, dominated by non-native plant species of primarily European origin, has largely replaced California's native cismontane grassland habitat.

Plant species occurring in this habitat include such species as wild oat, white-stemmed geranium, clover, vetch, mule ear and blue-eyed grass. Several individual valley, blue and coast live oaks as well as blue elderberry occur in the non-native grassland, particularly on the slopes in the western portion of the park. A variety of wildflowers are expected in the spring season which may include such species as California poppy, owl's clover and pearly everlasting.

A number of species associated with wetlands habitat occur just downslope of the water tank, apparently supported by water seeping from the tank. The species include wiregrass, dock, and gooseberry.

2.5.1.A.5 Rare and Endangered Plant Species. Two plant species of concern, western leatherwood and valley oak, have been recorded and were observed within the park (CNDDDB, 1989).

Western leatherwood was observed within the oak woodland plant community of the park. Western leatherwood is a species often associated with rocky slopes. It is distributed from Sonoma and Marin Counties south through Contra Costa and Alameda counties, to Santa Clara and San Mateo counties. Its blooming period runs from January to March. The species is designated on the California Native Plant Society (CNPS) List 4, species of limited distribution. Further categorization by CNPS states that this endemic California plant is rare, although there are a large number of individuals in a scattered distribution of occurrence. It is endangered in a portion of its range. These plants are not threatened at this time, and will be reclassified when the degree of endangerment increases (CNPS, 1988).

The valley oak is found within the riparian, oak woodland, and grassland areas of the park. While valley oak is distributed throughout much of California, it was added to the CNPS List 4 in 1988. It was included for the following reasons: "While valley oak cannot be considered rare under any concept, it is included on the watch list because it warrants monitoring. It has been drastically reduced in abundance in some areas, it is threatened with extirpation in a portion of its range, and its reproductive status is in question in many areas." (Smith and Berg, 1988).

2.5.1.B Wildlife

The existing wildlife use and habitat values of Rancho San Antonio County Park were evaluated through field surveys on July 5 and 13, 1989. Additional information was gathered from wildlife sightings made during previous visits to the park by Audubon Society members.

The CNDDDB was assessed for information on rare, threatened and endangered species occurring in the County park or nearby areas. The existing Rancho San Antonio County Park Master Plan (Michael Painter 1980) and the Environmental Impact Report prepared for that plan (Earth Metrics, Inc. 1980) were also reviewed. Relevant information on wildlife use of nearby, similar habitats is available in the Adobe Creek Restoration Plan (The Habitat Restoration Group 1989), and the nature notes for the City of Palo Alto's Foothills Park (City of Palo Alto Department of Community Services).

Appendix D lists the wildlife species observed or predicted to occur in the park, and provides information on their breeding status in the park, their habitat preferences, and their seasonal status. One hundred seventy-four species of vertebrate wildlife have been observed or predicted to occur,

including seven species of amphibians, 15 species of reptiles, 111 species of birds, and 41 species of mammals.

The habitats of the park have substantial wildlife value. The mosaic pattern of habitat distribution, and the presence of productive riparian and coast live oak woodland habitat, provide niches for a relatively diverse fauna. The high degree of habitat interspersion enhances the wildlife value of the park. Although some of the wildlife species focus their activities in a particular habitat, most frequent a variety of habitats.

2.5.1.B.1 Seasonal Patterns of Wildlife Movement. The populations of amphibians and reptiles occurring in the park are expected to be resident and largely sedentary. Some species, particularly amphibians, may make short-distance, seasonal movements to and from breeding sites. Populations of some of the mammal species are resident and relatively sedentary, but other mammal species have migratory populations, or populations which may exhibit local seasonal movements. Of the vertebrate species groups occurring in the park, birds exhibit the highest degree of seasonal movement, and the greatest variability in seasonal status.

Many of the carnivorous mammals expected to occur in the park, such as the coyote, bobcat, and mountain lion, exhibit local movement. They all occupy large territories that encompass areas greater than the size of the park. Black-trailed deer may also make extensive local movements between favored areas for fawning, sleeping, and feeding and in search of water during dry years.

2.5.1.B.2 Patterns of Wildlife Movement Between the Park and Preserve. Most wildlife species residing in areas adjacent to the border of the park and MROSD are expected to have territories including portions of both sites, or to move freely between the County park and MROSD lands. Species that forage over large areas are expected to spend time in both sites, including bats, coyotes, bobcats, aerial foraging birds. Movements of amphibian species from the MROSD tributary into the adjacent wooded habitat may contribute measurably to the park's amphibian populations. Movement from the Permanente Creek corridor into MROSD is expected to be slight.

2.5.1.B.3 Coast Live Oak Woodland and Central Coastal Scrubs. The species composition in these two habitats in the park is similar, with many individuals moving freely between the two habitat types. The coast live oak woodland, along with the mixed riparian woodland, is one of the most productive habitats in the park. Approximately 70 percent of the species observed or predicted to

occur in the park are expected to use the coast live oak woodland. This habitat's structural diversity and food resources are among the primary factors contributing to its high wildlife species diversity. A sample of species found in this plant community include deer, jays, woodpeckers, reptiles, squirrels and other small mammals.

This oak habitat also provides cover, forage area and nesting substrate which is used by a variety of bird species. The species of oaks in this community probably contribute the most to the park's habitat value. Bird species, including raptors and owls, using this habitat may include such species as the western screech owl, violet-green swallow, western bluebird, California quail, nuttall's woodpecker, western tanager, great horned owl, red-tailed hawk and Cooper's hawk. Common mammals found using this habitat include such species as the western gray squirrel, deer mouse, wild pig and black-tailed deer.

2.5.1.B.4 Mixed Riparian Woodland. Riparian habitats rank among the most valuable in California for wildlife. The presence of water, lush deciduous vegetation, and high insect populations all contribute to the productivity of this community. Of the wildlife species observed or predicted to occur in the park, approximately 75 percent are expected to use the mixed riparian woodland habitat.

All of the amphibian species predicted to occur in the park are expected to frequent this habitat. The value of the park's riparian habitat for amphibians is moderated by its restricted distribution, and by the limited number of pools in the creek. Western toad and pacific treefrog are expected to breed in the creek. The rare California tiger salamander has been reported from Permanente Creek, and may occur in this habitat in the park, along with California newt, arboreal salamander, ensatina, and California slender salamander.

It is not known whether this portion of Permanente Creek supports breeding by aquatic-breeding California tiger salamander or California newt, although potentially suitable pool habitat is present in the northern section of the creek.

The creek's habitat does not appear to be adequate for several rare amphibian species that may occur in the area, including red-legged frog and foothill yellow-legged frog.

Reptiles may also be numerous in riparian habitats, although the park's mixed riparian habitat is not suitable for many of the reptile species which are specially adapted for aquatic habitats (e.g., turtles).

Permanente Creek is an important water source for many mammals, perhaps concentrating their numbers in the vicinity of the park during the summer and fall. Food plants, such as blue elderberry, are also important habitat components for mammals using the park's riparian woodland. Common species in this habitat are ornate shrew, broad-footed mole, brush rabbit, western gray squirrel, western harvest mouse, raccoon, coyote, and black-tailed deer.

2.5.1.B.5 Non-Native Grassland. The park's non-native grassland supports a less diverse fauna than the wooded and scrub habitats, but several species occur primarily in this habitat and are scarce or absent in the other habitats. Thirty-nine percent of the wildlife species observed or predicted to occur in the park are expected to occur in the non-native grassland.

This habitat is expected to receive minimal use by the park's amphibian fauna. The xeric conditions and lack of cover make this habitat largely unsuitable. A few species, such as western toad, California tiger salamander, arboreal salamander, and California slender salamander, may occur in the grasslands during rainy-season nights, possibly using rodent burrows for shelter.

Reptiles are expected to be fairly numerous in the unmowed sections of the park's non-native grassland habitat. The mowed sections offer limited escape cover, leaving these species vulnerable to predation by raptors. Rodent burrows, particularly those of the California ground squirrel, provide important cover for reptiles. As in the park's other habitats, the western fence lizard was observed to be common in the grasslands. Other species expected to occur in this habitat include southern alligator lizard, racer, gopher snake, common kingsnake, and western rattlesnake.

The park's grasslands are used extensively by seed-eating species, certain insect-eating species, and raptors. Birds which occur in this habitat include such species as mourning dove, western bluebird, American robin, northern mockingbird, California towhee, golden-crowned sparrow, and red-winged blackbird.

Raptors spend more time foraging in the park's non-native grassland habitat than in the other habitats. These species prey on California ground squirrels, other small mammals, reptiles, small mammals, and large insects. American

kestrel, red-shouldered hawk, red-tailed hawk, great horned owl, and barn owl are expected to forage regularly in this habitat.

California ground squirrels live in loose colonies with interconnecting burrows, and feeds primarily on seeds. In addition to housing the squirrels, the burrows provide shelter for amphibians, reptiles, small mammals, and a variety of invertebrate species. Other species occurring in this habitat include black-tailed deer, Audubon's cottontail, coyote, bobcat and, occasionally, mountain lion.

2.5.1.B.6 Aerial Habitat. Several species which occur in the park are primarily aerial in nature. These species may not be strongly associated with any particular habitat when foraging, but are discriminating in their choice of breeding habitats. These include swallows, swifts, bats, and large raptors. A number of other bird species, such as rock dove and European starling may be most often encountered in the park as they fly elsewhere.

2.5.1.B.7 Rare, Threatened and Endangered Species and Wildlife Species of Concern. The CNDDDB search of records for the U.S.G.S. Cupertino Quadrangle revealed no information on occurrences in the park of wildlife species listed as rare, threatened, or endangered, and none are predicted to occur. The California tiger salamander, a candidate species for Federal listing, has been recorded on Permanente Creek and is predicted to occur in the park. Several species listed by the California Department of Fish and Game as "species of special concern" (Remsen 1978), or by the Santa Clara County Planning Department as "locally unique" (Harvey and Stanley Associates 1979) have been predicted to occur. Species of special concern are those "whose breeding populations in California have declined severely or are otherwise so low that extirpation is a real possibility" (Remsen *ibid.*). Species of special concern predicted to occur in the park include osprey (*Pandion haliaetus*), sharp-shinned hawk, Cooper's hawk, golden eagle, merlin (*Falco columbarius*), California gull (*Larus californicus*), black swift, and yellow warbler. In addition to those species, the mountain lion is considered locally unique in the County. The status and predicted pattern of occurrence of each of these species is summarized in Appendix D.

The California tiger salamander may breed in the park in the northern section of the creek. None of the other species are expected to breed in the park, although a pair of Cooper's hawks have a breeding territory that includes part or all of the park. A pair of golden eagles, known to be resident within three miles of the park, may include all or part of the park in their territory,

although they are probably only infrequent visitors. Of the species of concern, only the California tiger salamander, sharp-shinned hawk, Cooper's hawk, and yellow warbler are expected to make significant use of the park. The details of their local occurrence and habitat requirements are discussed in Appendix D. The osprey, merlin, California gull, and black swift are all expected to occur as aerial transients, having no interaction with the park's habitats.

2.5.1.C Fisheries

At the time of the most recent survey of Permanente Creek, in September 1989, there was no surface flow from the southeast boundary of Rancho San Antonio Park downstream to approximately 800 feet from the northern park boundary, except for a trickle of irrigation runoff from the grounds of St. Joseph's Seminary. According to Managing Park Ranger, Raleigh Young, the stream conditions observed in September 1989 (at the end of three years of drought) are the driest in the past 15 years. At approximately 800 feet from the northern park boundary, streamflow began, apparently from an underground spring seeping into the streambed.

No rainbow trout exist in Permanente Creek; however, three native, non-salmonid fishes have been observed in the stream as recently as 1981: three-spine stickleback, California roach, and Sacramento sucker. In addition, two introduced species were noted at that time, rainwater killifish and mosquito fish.

Throughout most of its course through the park, the creek provides only fair to poor spawning habitat and cover for fishes. However, in several locations there were undercut banks, pools, riffles and terrestrial vegetation extending into the streambed which would provide escape cover for fish and cool pools during the summer months.

The creek within the park's boundaries contains up to five barriers within the first half of the creek's length, ranging from fallen trees to concrete blocks. The second half of the creek remains free of obstructions. The final reach of the park at the northern boundary, which contains the spring, was observed to have a series of pools, at least three of which held fish. Fish, while not abundant, relied heavily on the pools with an estimated 20-30 fish seen per 100 feet of stream. Sacramento suckers and California roach were observed.

Though native nongame fish provide no recreational opportunity, they are important as a food source to some mammals (raccoon and opossum) and birds

(kingfisher). In addition, it is important aesthetically and educationally to maintain native fish populations in streams close to urban areas.

Habitat in Permanente Creek does not appear suitable for rainbow trout. Success of trout in this stream would be severely limited by poor spawning habitat, lack of cover and low summertime water flows.

2.5.2 Impact Discussion

2.5.2.A Site Development Impacts

The addition of a paved parking lot in the southern meadow area could significantly impact water quality in the creek, thereby affecting riparian habitat species, if runoff is directed towards the creek.¹ Runoff can concentrate pollutants such as oil and grease deposited in the parking lots by vehicles.

The Plan indicates that the western leatherwood would be protected; therefore, no adverse impacts would occur.

2.5.2.B Biotic Resource Preservation and Enhancement Plans

The Plan calls for the enhancement of the riparian zone with native vegetation indigenous to the park to avoid any detrimental species competition; however, at this time, no riparian enhancement plan has been developed. If non-native species are planted in this zone, significant adverse impacts could occur.

The mowing of the grassland habitat favors the growth of annual plant species, encourages ground squirrel populations, and favors raptor foraging habitat. This activity is beneficial to these wildlife resources. The mowing reduces foraging habitat, however, for seed-eating birds and small mammals, and grazing mammals such as deer. Mowing also reduces cover for birds, reptiles, and small mammals. Prior to the biological surveys, the grasslands had been mowed up to the edge of the riparian corridor, reducing the value of the corridor's edge. A riparian/grassland interface, if left unmowed, would be expected to attract more wildlife species, as it would provide more food and cover.

¹Kathy Lyons, Biologist, Habitat Restoration Group, personal communication, May 29, 1991.

In addition, an unmowed edge of grassland along the riparian corridor would provide a buffer by reducing the amount of human trespass into the corridor. A combination of mowed and unmowed areas would seem to benefit wildlife resources. Park maintenance staff is continuing to mow the open meadow grass areas and have begun to preserve a 50-foot buffer from the top of the creek bank where mowing is prohibited.

2.5.2.C Landscaping Impacts

Although the planting plan has not been developed yet, the Master Plan Consultant has indicated that while some non-native species would be planted on-site, they will not be placed adjacent to or within the riparian zone. Therefore, the landscape plan would not have any adverse impacts on biological resources related to the introduction of non-native, invasive plant species.

2.5.2.D Recreational Impacts

New recreational use locations would not have any significant impacts on biological resources in the park. The existing recreational uses (equestrian and hiking trail) appear to be compatible with maintaining high wildlife value and minimal impact to botanical resources within the oak woodland community. With increased park use associated with projected population increases and the addition of a loop trail around the perimeter of the open space area adjacent to the creek, increased use within the riparian area could occur disrupting wildlife and causing erosion and siltation. However, as recommended in the Program Document, by a professional biologist, the Plan incorporates a 50-foot buffer zone measured outward from the existing vegetation on top-of-bank and the provision of low-log barrier or split-rail fences to dissuade high usage of the riparian area. Trails are placed outside of this buffer zone, to limit foot traffic in the sensitive riparian corridor except where trails cross the creek. The intent of the log barrier is to designate the area as a special zone; however, users will be allowed to access the creek and step over the low barriers to view the creek.

The eastern grassland area is currently used by model airplane enthusiasts (Non-Gas Powered Airplanes). This existing use does not appear to significantly impact wildlife resources of the park.

2.5.3 Significant Impacts and Mitigation Measures

The following mitigation measures should be required to reduce potentially significant impacts to levels of insignificance.

Impact 2.5-1. The addition of a paved parking lot in the southern meadow area could significantly impact water quality in the creek, thereby affecting riparian habitat species, if runoff is directed to the creek. Runoff can concentrate pollutants such as oil and grease deposited in the parking lots by vehicles.

Mitigation Measure 2.5-1. Mitigation measures required in Chapter 2.4. Hydrology and Water Quality would also mitigate potentially significant biological impacts related to concentrated runoff from parking lot development.

Impact 2.5-2. If non-native species are planted in this riparian zone, significant impacts could occur.

Mitigation Measure 2.5-2. The County Parks and Recreation Department should develop a Riparian Enhancement Plan for the park which identifies suitable riparian species to be used for riparian enhancement and outlines an action plan for an ongoing enhancement program. Suitable riparian species should be planted by park staff on a regular basis.

2.6 NOISE

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2.6.1 Existing Setting

Noise levels at the park are dominated by noise generated from Interstate 280 to the west of the park. Park uses generate very little noise because the types of recreation accommodated in the park are passive. Noise from Interstate 280 is audibly intrusive from almost all locations in the park, and varies from low to moderate in the park's core area to loud in the north wing. The northernmost section of the park, near St. Joseph Avenue, parallels the elevated freeway, and is 50 feet away at its closest point. The park's gated entrance at St. Joseph Avenue is roughly 250 feet from the freeway. A sound wall is present on the western side of the freeway in this area to attenuate noise levels in the neighborhood to the west; however, there is no sound wall on the eastern side of the freeway, so freeway noise entering the park is unmitigated.

According to noise measurements in the City of Cupertino General Plan Noise Contour Map, it appears that the northern park boundary near St. Joseph Avenue is within the 60 to 70 Ldn, which is considered acceptable for areas such as riding stables or golf courses.¹ The rest of the park is has noise levels less than 60 Ldn. The County General Plan does not set any critical noise levels for open space; however, the maximum level of noise a new land use may impose on neighboring open space should not exceed 55 Ldn, which is considered compatible for parks and open space areas.² According to the Santa Clara County General Plan Noise Element, Noise Impact Areas are defined as those with noise levels of 55 Ldn or greater. These include areas within 1,000 feet of all freeways.

Noise generated by existing park traffic contributes to existing ambient noise levels along corridors leading to the park, these primarily being Cristo Rey Drive and Foothill Boulevard. Traffic on Cristo Rey Drive itself is intermittent and does not intrude on the park's atmosphere. Park-generated noise along

¹*City of Cupertino General Plan, February 1990.*

²*Santa Clara County General Plan, March 1982.*

St. Joseph Avenue in the residential neighborhood east of the park was eliminated in October 1990 with the installation of a traffic gate at St. Joseph Avenue east of the freeway barring vehicular access from St. Joseph Avenue. Parking signs restrict on-street parking to neighborhood residents only.

The closure of St. Joseph Avenue to vehicular traffic has caused traffic levels on the park's main road to slightly increase because park and MROSD service vehicles now use the Cristo Rey Drive access through the park to access their lands.

2.6.2 Impact Discussion

2.6.2.A Master Plan Generated Noise

The proposed park improvements would encourage users to spend more time in the park. With only a few minor exceptions, park uses would remain the same, therefore, noise levels generated in the park are not anticipated to be significant.

2.6.2.A.1 Recreational Noise Impacts. The Master Plan would promote the continuation of informal, passive recreational activities in the park, which are predominantly quiet uses characterized by individuals or small groups of people.

Although noise generated from within the park is very low, intensified recreational activity is likely to incrementally contribute to increased noise generated in the park. Improvement of the little used north and south turf areas by converting them to open "meadows" through reseeding and irrigation will encourage open play and informal picnics. The addition of a loop trail around the southern meadow and the north wing study area would also intensify use in these areas, as would the improved family picnic area at the southern end of the northern meadow. Model airplane use would continue to be limited to non-powered planes which are not noisy. Removal of the handball and basketball courts could potentially reduce some on-site noise by eliminating these uses; however, use of these facilities is fairly low now and noise related to the courts insignificant.

2.6.2.A.2 Traffic Noise. Potential operational noise increases are likely to result from increased traffic associated with park use. As indicated in Section 2.3 Traffic, Circulation and Parking, traffic increases will be primarily related to the additional on-site parking spaces, park improvements and regional growth.

As proposed under the Master Plan, available parking will increase by 37 spaces with set aside lots which can accommodate 44 spaces if developed in the future. In addition, the in-holding identified for potential acquisition, could be used for parking. The additional proposed parking and the potential future parking would generate more traffic and, therefore, more traffic-related noise.

The Master Plan provides for a temporary bus parking area near the restrooms. These buses would be associated primarily with school groups visiting the Deer Hollow Farm during the week. If buses are allowed to idle they could contribute to ambient noise levels, primarily on-site. The bus parking on park property is intended to accommodate overflow when the primary bus parking area on MROSD land is full.

Noise standards would not be exceeded as a result of the increased traffic and increases would probably not be perceptible to park users.

2.6.2.B Off-site Sensitive Receptors and Noise Sources

The closest occupied residential noise receptor adjacent to the park is the Maryknoll Residence, which is located more than 300 feet east of the park, east of Cristo Rey Drive. It is unlikely that Maryknoll is affected by noise related to park usage because it is located adjacent to Interstate 280 which is the dominant noise source in the area.

The Forum Life Care development, which is currently under construction, is a residential development for seniors consisting of single-family homes and nursing facilities. The project is immediately adjacent to two locations along the park boundaries. The southernmost end of the Forum development is located at the park's eastern boundary near the bike path, and the northernmost end of the development is located near the park's gated service road off of St. Joseph Avenue.

The closest Forum residences at the park's western boundary will be approximately 500 feet from the bike path. A Forum project road separates the homes from the park boundary and no backyards face the park. At the park's northern boundary, the closest residences will be roughly 250 feet away from the park and separated by St. Joseph Avenue. It is unlikely that the park would have an adverse noise impact on Forum residents, nor would the Forum development adversely affect the park because of the more intrusive freeway noise and setbacks of homes.

The types of noises that might be heard originating in the Forum development would be noises associated with cars starting, power tools or equipment such as chain saws and lawnmowers, radios and barking dogs. Noise sources generated from the park would include voices and radios from trails, open play and picnic activities and vehicular noise associated with parking lots.

2.6.2.C Potential New Off-Site Sensitive Receptors and Noise Sources

Potential residential or institutional development along the park's northeastern and southern boundaries would create potential noise receptors sensitive to park activities, as well as potential new noise sources affecting the park. This potential future development is described in Section 2.1 and shown in Figure 1.

As described above, both park users and neighboring residences could generate intermittent noise perceived as a nuisance; however, noise levels are not likely to be significant or sustained and noise standards for residential and park uses would not be exceeded. Residents would not be affected in the early morning or night because the park would be closed. As previously stated, in the northwestern section of the park near the seminary site, freeway noise is so intrusive that any future off-site noise sources from new adjacent development are unlikely to significantly affect the park environment. Likewise, park generated noises are likely to be insignificant relative to the freeway noise.

If a sound wall were ever installed along the eastern side of the freeway in this area, noise generated from neighboring property as well as the park would probably be slightly more perceptible because the existing freeway noise would be less dominating. The proposed trails in the north wing of the park would not generate much noise; therefore, potential future residences at the park boundary would not experience adverse noise intrusion from the park. The proposed northern open meadow and picnic area could generate intermittent, noise perceived by future residents if large, informal field games or picnics occur or park users play radios at loud volumes. However, these uses are set back at least 200 feet from the park boundary and dense vegetation occurs between these activity centers and the property line. Thus, noise levels would not be significant.

Potential development to the south of the park near the Gate of Heaven Cemetery could also generate noise in the park. This development could be affected by noise from park traffic and from use of the southern meadow. In general, the level of noise intrusion will depend upon the set back of future residences. The meadow area is set back 150 feet from the property line and

the parking lots are set back roughly 50 feet. Vehicular noise in particular may be perceptible from future residences, but noise impacts would not exceed acceptable levels as defined in the City of Cupertino and Santa Clara County General Plans.

2.6.2.D Construction Period Impacts

Construction of park improvements under the Master Plan would temporarily increase sound levels on- and off-site. Construction noise would be associated with such activities as grading of meadow areas and resurfacing and development of parking lots. In addition, truck traffic on Cristo Rey Drive would increase noise levels in the vicinity.

2.6.2.E Noise Compatibility Policies

Noise generated by park use is not likely to significantly affect future land use to the northwest and south of park boundaries, nor is noise generated by potential development likely to significantly affect park use. However, noise may be perceptible across the park boundaries, and could occasionally be perceived as annoying. Currently, there are no planning mechanisms adopted by either Santa Clara County or the City of Cupertino which address the need for sensitive site design adjacent to parks to minimize noise impacts between adjacent land uses.

2.6.3 Significant Impacts and Mitigation Measures

No significant adverse impacts were identified; therefore, no mitigation measures are required.

2.6.4 Measures Recommended to Improve the Proposed Plan

The following mitigation measures are recommended to reduce less than significant impacts:

- a. Loud radios or other electronic equipment should be controlled by park rangers.
- b. Buses should not be allowed to idle for long periods of time; this should be controlled by rangers.

- c. The Santa Clara County and City of Cupertino General Plans both indicate that landscape buffering and setbacks do not work well in reducing noise. Plants and trees are typically not dense enough to prevent air flow, and setbacks must be substantial to make a difference in noise. Landscaping must be at least 100 feet in depth to achieve a 3 to 5 decibel reduction. Fences can be expensive and often need to be quite high to mitigate noise impacts.

As recommended in Chapter 2.2 Visual Resources, the County Parks and Recreation Department and the City of Cupertino Planning Department could work towards creating mutually acceptable policies for development adjacent to park and open space lands. These policies could encourage private developers to create site designs sensitive to park use. Private development could be reviewed on a project-by-project basis for compliance with these policies.

- d. The ban on noisy gas-powered model airplanes should continue.
- e. Construction activity should be limited to the daytime hours between 7 a.m. and 6 p.m. weekdays and non-holidays. This includes truck traffic going to and from the site for any purpose including the delivery and removal of equipment and material.
- f. Construction equipment and vehicles should use mufflers to minimize noise, and should be tuned to meet Department of Motor vehicles standards.
- g. The County should inform residents neighboring the site (the Forum Life Care and Maryknoll communities) and Park/MROSD users about planned construction activities and schedules, and the potential for occasional noise disturbance.

2.7 PUBLIC UTILITIES AND SERVICES

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2.7.1 Existing Setting

2.7.1.A Police Service and Park Patrol

Police service is currently provided by the Santa Clara County Sheriff's Department. The Sheriff's Department has a contract with the County Parks and Recreation Department to provide park patrol between March and September. A deputy patrols the park roughly ten hours between Friday and Monday throughout this six month period. Most incidents are handled by park and MROSD rangers, who also patrol the park. According to the Sheriff's Department, Rancho San Antonio Park has very little criminal activity because of its location and passive uses and, therefore, places very little demand on the Department's resources. Typical calls are primarily for injury-related accidents.¹

The County Parks and Recreation Department and MROSD share park patrol responsibilities through a joint management agreement. Park patrol consists of opening and closing the park gates, enforcing order and issuing citations, and assisting park users. Although rangers may help in picking up litter, park maintenance is provided by maintenance staff. MROSD patrols the park along the access road to their land and they open and close the gates.

Patrol is provided by County rangers from Stevens Creek and Sanborn Park, who patrol an average of 30 hours per month. Patrol hours per month vary seasonally and in general are greater during the spring and summer months. In fiscal year 1989, total patrol time equaled 352 staffing hours. MROSD staff provide the majority of park patrol with an average of 15 hours a week and 720 hours annually according to July 1989 patrol logs.

¹Art Kirtz, Sergeant Supervising the Park Unit, Santa Clara County Sheriff's Department, personal communication, May 17, 1991.

Recent increases in park use have resulted in parking overflows, up to as many as 100 cars on unusually busy weekends (see Chapter 2.3 Traffic, Circulation and Parking), requiring park personnel to direct traffic in and out of the park. This requires use of personnel normally assigned to other parks. According to the Park Manager, the staffing level is currently adequate.² In general, park uses are self-regulating and do not require much patrol; however, more stringent monitoring and better regulatory signs concerning bicycle use in the park and MROSD lands could alleviate problems with bicycles on restricted trails.

2.7.1.B Park Maintenance and Fire Service

Park maintenance activity includes the upkeep of roads, parking lots and restroom facilities, and the seasonal mowing of the non-native grassland in the open space area near the park's entrance. Maintenance is provided by one full-time maintenance person who averages 32 hours weekly in the park. According to the Park Manager, there are no particular maintenance deficiencies; however, the maintenance personnel do have problems keeping up with weed removal.

There are no particular fire hazards in the park, except in extreme drought years. Once each spring, a fire break is disked on park property near St. Joseph's Seminary. Fire service is provided by the Central Fire District located on Stevens Creek and Foothill Boulevards, and County and MROSD staffs respond to fires with a truck containing a 75- to 100-gallon water tank.³

The Central Fire District has primary response to fires at the park with secondary response from the Los Altos Fire Department. The Central Fire District responds to fires with one truck staffed by three fire fighters. They also provide Emergency Medical Technicians and are backed up by professional paramedics as necessary. They have an average response time of three to four minutes. Their nearest water sources for fire suppression include hydrants near the new Forum development and at Foothill Boulevard. The Fire District is capable of handling fires of certain sizes. If a major grass fire occurs, they call in resources from outside the jurisdiction, including the

²Raleigh Young, Park Manager, Rancho San Antonio County Park, personal communication, May 1991.

³Bernie Garrison, Senior Park Ranger, Rancho San Antonio Park, personal communication, May 1991.

California Department of Forestry, which has a summertime station in Stevens Canyon above Stevens Dam. The Fire District has indicated that they receive very few calls related to the park.⁴

Primary emergency vehicle access is through the main park entrance via Cristo Rey Drive. The second emergency access is through the gated, service-vehicle-only access road off of St. Joseph Avenue. This access is closed to all public vehicular access. This service road crosses a bridge over Permanente Creek and is situated on MROSD land near the main trail junction. The Los Altos Fire Department has notified the County Parks and Recreation Department of their concern about the bridge's present light load capacity; because the bridge currently does not meet heavy vehicle standards, fire trucks cannot safely cross it. The Plan indicates that this bridge will be structurally strengthened to meet heavy vehicle codes. Both the Los Altos Fire Department and the Central Fire District, require both the Cristo Rey Drive and St. Joseph Avenue accesses to the park. Until the bridge is upgraded vehicles may access the site from Cristo Rey Drive and would not have to cross the bridge.

2.7.1.C Water

The existing water well and pump system is located approximately 900 feet north of the park entrance just east of the park road. The well and pump system have a 1,000-gallon cylindrical steel reservoir tank and a separate smaller steel cylindrical pressure relief tank and all the appurtenances necessary to draw water from the well. This is the only system currently available for park use.

There is approximately 1,000 feet of 2½-inch water main from the well, which runs along the northern edge of the park road and terminates at the restroom facility. This system serves the restroom and a drinking fountain installed on the outside of the restroom wall. No fire protection facilities are connected to this system. Fire hydrants cannot be served by the well due to its limited capacity and pressure.

The existing 10-inch water main owned by the Seminary was installed between the existing reservoir on the hill west of Permanente Creek and a pump station just west of the creek and the seminary.

⁴Ron Moore, Chief, Central Fire District, personal communication, May 23, 1991.

The Master Plan proposes a new water source for the park due to occasional water shortages, the need to irrigate the open "meadow" areas and new tree plantings, and the need for fire protection on the site. The new designated water source is the recently installed 12" main water supply line which extends from the City of Cupertino reservoir in the park to Cristo Rey Drive. The line has two stubs for fire hydrants and two stubs for irrigation connections. The main irrigation connection point would occur just north of the parking lot near the restroom building.

2.7.1.D Sanitary Sewer

The restroom facility in the park has a septic tank and a leachfield system. There is no sanitary sewer service available to the park. Sanitary sewers are not used at the site because of the difficulty in conveying sewage off-site due to adverse gradients. Pumping would be required to convey sewage from the existing restroom to the proposed Cristo Rey Drive sanitary line. The restroom facility includes a drinking fountain and men's and women's rooms, each with two lavatories. The men's room has two urinals and one toilet; and the women's room has two toilets. Sewage is piped to the septic tank and leachfield system, which are adequate for the facility served according to the Park Manager.⁵

2.7.1.E Storm Drainage

Generally, surface runoff is collected by drop inlets and storm drains that discharge into Permanente Creek at several different locations. Some areas are provided with earth ditches with outfall pipes at the creek. Generally, the park slopes toward the creek and is not provided with storm collector systems as runoff is permitted to follow its own course toward and into the creek.

2.7.1.F Electricity, Gas and Telephone

Gas mains and electricity are provided by Pacific Gas and Electric Company. Electrical services are provided in the park for the water well pump and the restrooms. There is no gas connection in the park. The Plan proposes that conduit and conductors be extended either from the restroom or from the pump station to the park entrance for lighting and possible future information

⁵Raleigh Young, Park Manager, Santa Clara County Parks and Recreation Department, personal communication, May 30, 1991.

gazebo needs. Existing pay telephone service is provided by Pacific Telephone at the restroom facility on the wall adjacent to the drinking fountain.

2.7.1.G Solid Waste Disposal

There are currently no trash receptacles outside at the site. There are, however, trash cans in the restrooms. Maintenance staff pick up the trash in the restrooms once a day. The Plan calls for some additional trash cans.

2.7.2 Impact Discussion

2.7.2.A Police Service and Park Patrol Impacts

Patrol hours will increase incrementally with the increase in parking capacity, the additional trail length and increases in weekly park visits; however, it is unlikely that patrol demands will increase significantly due to the types of uses proposed under the Master Plan because uses will remain essentially the same. Group activities, which typically require more patrol resources, are not being promoted. Although the existing turf areas will be improved as open "meadow" areas, and informal play is likely to increase, these facilities are not being designed to accommodate large groups or formal gatherings.

The provision of new parking lots will decrease some of the existing overflow parking, which is currently diverting patrol personnel from duties at other parks; however, because of the park's popularity and projected growth in the area, parking demand will increase and overflow conditions will continue (see Section 2.2 Traffic, Circulation and Parking). The existing and projected high user demand will require continued traffic and parking control.

Increased park use by senior and elderly residents from the Forum development may increase accident incidents requiring park ranger attention. This potential demand increase, however, is not considered significant.

2.7.2.B Park Maintenance and Fire Service

The additional landscaping, including mowing of the meadow areas and maintenance of the riparian corridor would require greater maintenance

resources.⁶ The Master Plan Report indicates that maintenance personnel hours could increase from 32 to 50 hours per week; this may reach as high as 60 hours per week with implementation of a riparian zone management plan and grassland management program. Additional personnel would need to be added to the park's staff to meet these needs. If the land identified in the Master Plan for potential acquisition is acquired, demands on park maintenance would increase, but not significantly.⁷

Fire hazards would increase proportionally with the increase in park users, but fire service demand is so low now that this impact is not considered significant. The current absence of a secondary emergency vehicle access, due to the lack of structural strength in the bridge in the northern area of the park, creates potentially significant safety hazard; however, the Master Plan calls for bridge improvements to structurally strengthen the bridge so that it can accommodate heavy vehicles.

2.7.2.C Water Supply Impacts

At present, the small (2-1/2") water main draws its supply from the existing well and pump system, which has limited capacity, especially during droughts. The newly installed 12" water line (which provides two stub-outs for fire hydrants and two 6" points of connection for domestic and/or irrigation use (85 psi expected), will substantially improve conditions for present and future park needs. The Central Fire District believes that fire flow will be adequate to meet future demand with the new access to the fire hydrants in the forum development.⁸

2.7.2.D Sanitary Sewer Impacts

Sewage disposal is by means of septic tank and leachfield distribution, and any additional restroom facility could be limited by the existing tank and leachfield capacity. There is likely to be adequate existing leachfield capacity on-site

⁶Raleigh Young, Park Manager, Santa Clara County Parks and Recreation Department, personal communication, March 1990.

⁷*Ibid*

⁸Ron Moore, Chief, Central Fire District, personal communication, May 23, 1991.

because it is likely that the drain field was planned to accommodate expansion;⁹ however, because the size of the restroom expansion proposed in the Master Plan has not been determined yet, the potential need to expand the existing leachfield cannot be assessed. A civil engineer will need to assess leachfield capacity when the restroom plans are prepared.

If the existing leachfield needs to be expanded, County code requirements will need to be met. These codes require that drainfields be placed at least 100 feet from the top of the creek bank. Additionally, the code requires that new drain fields include a set aside drain field of equal size with a diversion valve. When the leachfield was originally installed County codes required set aside space, but no diversion valve. If there were an expansion of the drain field, a diversion valve would have to be added at a minimum.

Although proposed parking areas would be placed immediately adjacent to the existing drainfield, the park appears to have enough undeveloped land in the general vicinity which is potentially suitable for an additional drain field.¹⁰

The County Environmental Health Services Department reviews all plans involving leachfields for compliance with County standards prior to project approval.¹¹ The Department does not allow active leachfields to be paved over because paving would inhibit evapotranspiration and it would get soggy and buckle from moisture underneath. The proposed 24-space parking area northeast of the restroom would be located outside of the leachfield area; however, if the final construction drawings indicate any paving over the leachfield, the lost leachfield area must be replaced so that capacity remains the same.

In addition, water-loving plants such as willows should not be planted over leachfields because their roots can tap into and clog the pipes. The Master Plan's Suggested Plant Material list does not include willows.

⁹Andrew Niven, Engineer, Santa Clara County Parks and Recreation Department, personal communication, May 29, 1991.

¹⁰Dave Whitman, Santa Clara County Environmental Health Services Department, Sunnyvale Office, personal communication, May 23, 1991.

¹¹Art Kaupert, District Environmental Health Specialist, Santa Clara County Environmental Health Services Department, personal communication, May 22, 1991.

2.7.2.E Solid Waste Impacts

The installation of additional trash receptacles in the park will require additional maintenance time.

2.7.2.F Electricity, Gas and Telephone

The Master Plan would not require extensions of gas mains into the park. Additional phone service should be provided at the park entrance if a gazebo/information booth is developed. Electrical and phone service is already provided on-site, and can adequately serve park improvements according to the Program document.

2.7.3 Significant Impacts and Mitigation Measures

The following mitigation measures are required to reduce significant impacts to levels of insignificance:

Impact 2.7-1. Additional personnel would need to be added to the park's staff to meet the additional maintenance requirements associated with the proposed landscaping and maintenance of the riparian corridor.

Mitigation Measure 2.7-1. The County should commit funds for long-term operating maintenance increases at the park for upkeep of trails, tree pruning, riparian area enhancement, occasional mowing and irrigation.

Impact 2.7-2. Because the size of the restroom expansion proposed in the Master Plan has not been determined yet, the potential need to expand the existing leachfield cannot be assessed.

Mitigation Measure 2.7-2. A civil engineer should evaluate the septic system's ability to accommodate restroom expansion, and make recommendations for upgrades.

Impact 2.7-3. The County Environmental Health Services Department does not allow active leach fields to be paved over because paving would inhibit evapotranspiration and it could get soggy and buckle from moisture underneath.

Mitigation Measure 2.7-3. Paving should be prohibited over the existing and any expanded leachfield.

Impact 2.7-4. Fire hazards would increase proportionally with the increase in park users, but fire service demand is so low now that this impact is not considered significant. The current absence of a secondary emergency vehicle access, due to the lack of structural strength in the bridge in the northern area of the park, creates potentially significant safety hazard; however, the Master Plan calls for bridge improvements to structurally strengthen the bridge so that it can accommodate heavy vehicles.

Mitigation Measure 2.7-4. The northern vehicle bridge near the MROSD trailhead should be structurally strengthened to meet local fire district requirements for heavy vehicles as proposed in the Master Plan.

2.8 GEOLOGY AND SOILS

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Because general geologic conditions have remained constant, much of the discussion in this section was drawn from the *Final EIR for the Proposed Rancho San Antonio County Park* (Earthmetrics, April 17, 1980).

2.8.1 Existing Setting

The project site is situated approximately three miles northeast of Monte Bello Ridge and nine miles south of the southern portion of San Francisco Bay. Topographically, the site is located in the transition area between the valley floor and surrounding hillsides. Elevations range from 350 feet in the northern corner to 650 feet in the southern portion of the site. Slopes are relatively flat (less than 10 percent) east of Permanente Creek, although the steeper areas of the site achieve slopes in excess of 30 percent. Topography of the site is shown in Figure 2.

Seismic Activity. The most prominent geologic feature in the vicinity of the project site is the San Andreas fault zone. This fault zone and other major branches of the San Andreas fault system have caused the large amount of seismic activity experienced in Santa Clara County and throughout the San Francisco Bay region.

The mountainous and foothill areas in the project vicinity are traversed by the San Andreas fault (three miles west of the project site) and two splinter faults, the Sargent-Berrocal and the Monta Vista fault systems (City of Cupertino, 1979). The Sargent-Berrocal fault lies approximately one mile west of the site. The Monta Vista fault, however, traverses the project site in the approximate vicinity of Permanente Creek. This fault is considered potentially active, meaning that it has not moved within the past 11,000 years, although evidence of displacement within Quaternary time (during the past two million years) has been recognized. The Monta Vista fault is not presently within a designated Alquist-Priolo Special Studies Zone.

Surficial sediments at the project site include alluvial fan deposits in the eastern, flatter portions of the site with older sedimentary rocks of the Santa

Clara formation comprising the majority of the site in the steeper areas west of Permanente Creek (Helley and Brabb, 1971). The alluvial fan deposits bordering the uplands are of Quaternary age and consist mainly of coarse sand and gravel with local accumulations of vertebrate fossils. The older sedimentary rocks are of Pliocene age (two to ten million years old) and consist of poorly consolidated conglomerate, sandstone, siltstone, and claystone that have been faulted and folded by tectonic, or mountain building, forces.

Geologic mapping by the U.S. Geological Survey and California Division of Mines and Geology indicates that landslide deposits of various size and activity cover as much as 20 to 30 percent of the adjacent hillsides (City of Cupertino, 1979). A field reconnaissance of the site (November, 1978) revealed a small, active landslide and mudflow near the western boundary of the site.

The Kaiser Cement and Gypsum Corporation, located less than one mile south of the project site, extracts commercially significant deposits such as limestone, crushed rock, sand and gravel. It is the largest such operation in Santa Clara County.

2.8.2 Impact Discussion

The proposed Rancho San Antonio Park is subject to the geologic hazards of fault rupture (from the Monta Vista fault), violent ground shaking, landslides, liquefaction, and related ground failures such as seismic settlement, lateral spreading, and ground lurching. These serious geologic hazards, however, will not impair the existing or proposed park uses.

As indicated, the major geological impacts relate to the regional seismic setting of the area. In the event of a major earthquake along the San Andreas, Sargent-Berrocal, or Monta Vista fault, severe seismic shaking could be expected at the project site and in Santa Clara Valley.

Landslide potential is considered to be moderate to high in the project vicinity under seismic and non-seismic conditions where hillside slopes exceed 15 percent. Potential for ground rupture is moderate for a distance of 300 feet to the east and 600 feet to the west of the traces of the Monta Vista and Sargent-Berrocal faults (City of Cupertino, 1979).

Because the majority of proposed trails do not occur in steep areas, and are proposed to be either paved or covered with crushed rock, erosion from use should not be significant. A stub trail would be added on one of the western

facing slopes from the back of the reservoir down to the existing paved road to eliminate use of the informally developed trail down the face of the hill. This trail is currently subject to erosion. Although the new trail would have some erosion potential, it is likely to be less than that of the existing trail on the slope's face because its gradient would not be as steep.

Construction of trails and parking areas and development of the irrigated meadows will require removal of soil and vegetation, causing temporary local increase in erosion potential.

2.8.3 Significant Impacts and Mitigation Measures

No significant impacts were identified therefore, no mitigation measures are required.

2.8.4 Measures Recommended to Improve the Proposed Project

The following mitigation measures are recommended to reduce less than significant impacts.

- a. Soil disruption from construction activities (such as grading, vegetation removal, and road construction) should be minimized.
- b. Vegetative cover should be reestablished on exposed areas as soon as possible to reduce erosion.
- c. All such work should be performed prior to the onset of winter rains (May through October) to reduce erosion by storm runoff.

2.9 AIR QUALITY

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2.9.1 Existing Setting

2.9.1.A Regional Air Quality Setting

Rancho San Antonio Park is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). In concert with the Metropolitan Transportation Commission (MTC), and the Association of Bay Area Governments (ABAG), the organizations have developed an Air Quality Plan. Programs in the Plan aim at reducing the emission of pollutants by control of stationary sources; ongoing inspection, control and review of automobile emissions; and general review of transportation schemes for compliance with the plan.

The primary sources of air pollution in the Bay Area are the more than 3.6 million vehicles driven daily in the area. In the Bay Area there are two significant air pollutants: carbon monoxide (CO) and ozone (O₃), both are associated with automobiles. Occasional exceedance of the Federal Standards for these pollutants in the Bay Area has lead to a designation of the area as a non-attainment area under the provisions of the 1970 Clean Air Act, (including the 1977 amendments, the extension for compliance from 1982 to 1987, and the additional extension of 9 months to August 1988). The entire Bay Area is a non-attainment area for ozone.

2.9.1.B Local Air Quality Setting

The park is located at the perimeter of the Santa Clara Valley in the foothills of the Coast Range. The larger area experiences a Mediterranean type of climate: warm dry summers and mild, rainy winters. The usual wind flows and resulting ventilation, which becomes the principal indicator of air quality, occur as follows. In the early morning the wind is from the southeast; it reverses direction after sunrise, and by late afternoon the average wind speeds have increased and flow from the northwest. The flow corresponds to the basic geographical orientation of the local hills and flatlands, as well as the on-land flow of marine air as the morning sun heats the land areas and draws air into

the valley. In the evening, the flow reverses and air drains out of the valley as it cools by contact with the radiation-cooled land surface. This predictable air flow pattern occurs fairly regularly in the summer months; in the winter, flows are much less regular and winds and air flows are related to the random arrival and passage of storm fronts. In the fall, air parcel movement can be minimal on certain days, which leads to a local accumulation of a pollutant like carbon monoxide.

No continuous air monitoring exists for the park site. Air monitoring stations operated by BAAQMD are located in San Jose at 120 B North 4th Street, in Mountain View at 160 Questa Drive and in Los Gatos at 306 University Avenue. The San Jose area, as measured by the monitoring station, is a non-attainment area for carbon monoxide emissions, the source of which are the more than 22 million miles travelled each day by drivers in Santa Clara county (1985 Statistical Data from 1987-1988 BAAQMD Handbook).

Nitrogen dioxide (NO₂) and sulfur dioxide (SO₂) standards are rarely exceeded anywhere in the Bay Area, and as indicated in the BAAQMD data are not in the Santa Clara Valley. Although the Kaiser Permanente plant is a probable significant source of these pollutants it is unlikely that violation of the applicable standards is exceeded at the project site due to existing topography and distance (about 4,000 feet).

Because the park site is removed from the urban areas where the pollutants are measured, generalizations about air quality in the park vicinity based on these measurements can be inaccurate, particularly for CO and particulates, which are more localized pollutants.¹ CO concentration is related primarily to traffic congestion, (on busy roads and intersections) and associated with certain meteorological conditions. Because of the non-urbanized, recreational nature of the site, it is unlikely that either of these pollutants exceed pollution standards, however, there may be days when particulate matter in the form of dust migrates to the site from construction of the Forum Life Care project to the north of the park. Other dust from trails, gravel lots and parking and equestrian lots may also be raised on very windy days.

Although the Kaiser Permanente plant is a probable significant source of NO₂ and SO₂, it is unlikely that violation of the applicable standards is exceeded at the project site due to existing topography and distance (about 4,000 feet).

¹Mike Basso, Meteorologist, Bay Area Air Quality Management District, personal communication, May 1991.

Because ozone is a regional pollutant, it is reasonable to discuss ozone conditions measured at stations in the area. State ozone standards were exceeded an average of eight days per year between 1988 and 1990 at the San Jose station, six days per year at the Mountain View station, and seven days per year at the Los Gatos station. Federal standards were exceeded less than one day per year at all three stations over the past three years.

2.9.2 Impact Discussion

No significant adverse air quality impacts would result from implementation of the Master Plan; however, there are some less than significant impacts associated with both construction and park traffic.

During construction of the proposed improvements, it is expected that there will be a few episodes of raised dusts from grading and emissions of soot and odors from exhausts of diesel and gasoline-powered equipment. Grading would occur for improvements of the turf areas, construction of the new lots, paving of existing lots, reconfiguration of the entrance, removal of the handball and basketball courts and creation of new trails. These emissions are short-term nuisances; dust can be held down during excavations by watering it down and covering truck loads. Extra watering on windy days and interim street sweeping reduces particulate emissions. Although existing dust impacts related to the gravel lots are not significant, the paving of existing gravel parking lots would reduce long-term dust generation.

Peak-hour parking demand at the park may increase by 12 to 18 percent (see Chapter 2.3 Traffic, Circulation and Parking). This would not significantly increase automobile emissions, nor cause local air quality to decrease at the park. The park's new accommodation for temporary bus parking could result in temporary, localized air pollution problems if buses do not have adequate emissions control devices and are allowed to idle.

2.9.3 Significant Impacts and Mitigation Measures

No significant impacts were identified, therefore no mitigation measures are required.

2.9.4 Measures Recommended to Improve the Plan

Although no significant impacts were identified, the following mitigation measures are recommended to reduce less than significant impacts. Given the

regional concerns for the quality of Bay Area air, it is wise to encourage measures that will minimize emissions.

- a. Since motor vehicles are the major source of emissions associated with this project, efforts should be made to facilitate access to and circulation within the project. Well planned, clearly designed signage should be used to mark direction of access to all parking lots and to reduce lengths of time searching for parking spaces, and waiting with a car engine idling (which in addition to wasting fuel is generating a large amount of emissions).
- b. Exposed graded areas should be watered down at least twice daily to minimize dust generation. This should be done more frequently if dry and windy conditions necessitate.
- c. Grading and soil movement should not be undertaken during high wind conditions (greater than 10 miles per hour) to minimize dust generation.
- d. Planned revegetation and paving of exposed areas should occur as soon as possible after grading is completed to minimize dust migration.

2.10 ENERGY

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2.10.1 Existing Setting

Energy consumption on the site is primarily related to gasoline use by vehicles and lawn mowers and to electricity use by restrooms and the water well pump. Pacific Gas and Electricity Company provides the electrical services to the park. There is no natural gas consumption in the park. Only cold water is provided in the restrooms, which reduces energy consumption associated with hot water.

2.10.2 Impact Discussion

Increases in energy consumption resulting from the Master Plan would be minimal. Increases would be related to increased gasoline consumption associated with long-term traffic increases and with increases in mowing frequency required for the upkeep of the irrigated meadows. In addition, the landscape irrigation systems would be automated, and thus would require electrical service.

2.10.3 Significant Impacts and Mitigation Measures

No significant impacts were identified, therefore no mitigation measures are required.

2.11 ARCHAEOLOGY

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2.11.1 Existing Setting

A literature search and review of archives was conducted for the 1980 Rancho San Antonio Park Master Plan for the park areas. This search did not include the northern parcel, which was acquired after the Park Master Plan was prepared. No known archeological sites within the original park boundaries were identified. The report indicated, however, that several archaeological sites are known to exist in the project vicinity, and the site's geographical features indicate that it would be an archaeologically sensitive area. According to the Heritage Resource map in the City of Cupertino General Plan, there are no community landmarks or historic sites in the project area.

2.11.2 Impact Discussion

Proposed park improvements would require new site disturbance in concentrated areas, primarily adjacent to existing park development such as roads, parking lots and trails. The greatest site disturbance would be related to construction of the new parking lots just south and east of the restrooms and the reconfiguration of the lot adjacent and west of the restroom. The new trail loops in the north wing and the southerly open meadow would also cause some disturbance in previously undisturbed areas.

It is possible that some archaeological artifacts or indicators could be encountered during construction of park improvements such as the new parking lots and trails; however, because none were found when the park was originally developed in the early 1980s, nor when St. Joseph's originally developed their parcel, and because areas of new disturbance are located near existing disturbed areas, it is unlikely that any significant archaeological impacts would result from the proposed Master Plan improvements.

2.11.3 Significant Impacts and Mitigation Measures

Although there is no existing evidence of archaeological resources in the park, and it does not seem likely that any will be uncovered during construction of park improvements, the possibility cannot be precluded; therefore, the following mitigation measure is required to mitigate any potentially significant impacts to a less than significant level:

Impact 2.11-1. It is possible that some archaeological artifacts or indicators could be encountered during construction of park improvements.

Mitigation Measure 2.11-1. In the event that unidentified archaeological sites are encountered during construction activities, work in the area should cease until a professional archaeologist can be consulted to assess the find and suggest mitigation measures. Prompt evaluations could then be made in accordance with CEQA Appendix K guidelines regarding the finds, and a course of action acceptable to all concerned parties should then be adopted. If prehistoric archaeological deposits are discovered, local Native American organizations should be consulted and involved in making resource management decisions.

CHAPTER 3
Conditions for Negative Declaration

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In order to mitigate the potential impacts associated with the proposed project, the following measures are recommended as conditions for negative declaration.

Measures required to reduce significant impacts to levels of insignificance and measures recommended to reduce less than significant impacts are both listed below.

3.1 VISUAL RESOURCES

Recommended for consideration by the County and the City of Cupertino:

- a. Development in the identified sensitive viewshed areas to the north-east and south of the park should be carefully reviewed by local agencies to assess potential impacts on the park. The County Parks and Recreation Department and the City of Cupertino Planning Department could work towards creating mutually acceptable policies for development adjacent to park and open space lands. The policies could encourage private developers to create site designs sensitive to park use and atmosphere. Private development could be reviewed on a project by project basis for compliance with these policies.

3.2 TRAFFIC, CIRCULATION AND PARKING

Required to mitigate significant impacts:

- a. Given the width of Cristo Rey Drive and associated safety impacts, the City of Cupertino should prohibit on-street parking on both sides of Cristo Rey Drive within the City's jurisdiction by installing "No Parking" signs. These signs should be posted at frequent intervals along the street starting at the Forum development.

The following measures must also be adopted to minimize illegal parking in the surrounding neighborhood caused by displaced park users:

- b. If overflow parking spills into the Gate of Heaven Cemetery and creates a significant impact, signage indicating "Cemetery Parking Only/No County Park Parking" should be placed on Cristo Rey Drive by the County outside the Cemetery gates visible to both westbound and eastbound traffic on Cristo Rey Drive. This will dissuade peak overflow parking in the Cemetery. Cemetery management has indicated that they do not want to place additional signs within the Cemetery gates or directly in front of the entrance because they would create visual clutter;¹ therefore, signs should be placed away from the Cemetery entrance. If significant park-related parking still occurs in the Cemetery, the County and Cemetery management should reconsider placing signs within the Cemetery gates.
- c. If overflow parking spills into the Forum development and creates a significant impact, a sign should be posted by the County on Cristo Rey Drive approaching the entrance to the Forum development, which indicates "Resident Only Parking/No County Park Parking." The Forum development has indicated that they would be amenable to such a sign if parking problems occur.²
- d. Rigorous patrol will be required during peak use periods, by County Park Rangers, MROSD Rangers, City of Cupertino Police Department and the County Sheriff's Department to control overflow parking. All four entities currently provide patrol. Both County Park and MROSD rangers patrol the park and open and close park gates at designated hours and when the parking lots are full. The City of Cupertino and County Sheriff's Department also share patrol of Cristo Rey Drive. In addition, the Sheriff's Department has a Park Patrol Unit.
 - 1) City of Cupertino Code Enforcement officers and the County Sheriff's Department (including its Park Patrol Unit) will need to aggressively ticket illegally parked cars on Cristo Rey Drive.

¹Bob Summers and Larry Sharkey, San Jose Diocese, Gate of Heaven Cemetery, personal communication, August, 1991.

²Gary Kutz, Director of Support Services, Forum development, personal communication, August 14, 1991.

The Code Enforcement Office has indicated that they feel "No Parking" signs and enforcement during peak periods would probably be effective in controlling illegal parking on Cristo Rey Drive. They would not routinely patrol Cristo Rey Drive near the park, but would patrol it on a rotating basis (maybe two Sundays a month) and rely on requests for additional patrol when there are problems. Park and MROSD rangers can radio the Police Department dispatcher when there is illegal parking. In addition, the County Sheriff's Department Park Patrol Unit, which rotates between parks on weekends, can also issue citations.³

- 2) A formal joint management agreement defining the shared patrol relationship between the County and MROSD should be adopted to ensure commitment to a rigorous parking enforcement program.
- 3) County Park and MROSD rangers should aggressively cite cars illegally parked on park property.
- 4) County Park and MROSD rangers should man the park entrance as needed during peak periods and inform vehicles that are being turned away that parking is prohibited in the Forum development and in the Cemetery.
- 5) The County and MROSD should extensively patrol outside the Gate of Cemetery driveway on Cristo Rey Drive during peak periods to dissuade park users from parking in the Cemetery. The County should also consider having rangers post temporary signs during peak periods that indicate where parking is prohibited in the neighborhood.

Rangers will be able to identify potential park users as those who are travelling east on Cristo Rey Drive and turning right into the Cemetery. It would be difficult to distinguish which cars are associated with the park or the cemetery from westbound left turn movements (vehicles coming from Foothill Boulevard).

- e. The County should provide an automatic gate which would open at a designated daylight hour by timer and allow early morning park users access to park in a designated lot. Vehicular access to the majority of

³Gary Kornahrens, Code Enforcement Officer, City of Cupertino Police Department, July 18, 1991.

the park should be restricted by internal gates until normal operating hours.

- f. In the immediate future, prohibit on-street parking on the north side of Cristo Rey Drive along the inside of the curve near the access to the Gate of Heaven Cemetery.
- g. The set-aside parking lots shown in the Master Plan (approximately 44 additional spaces) should be developed when and if increased parking demand dictates, particularly if parking enforcement control requirements become over-burdened.
- h. A short left-turn lane should be provided on the Cristo Rey Drive approach to the park entrance due to the high number of vehicles making left turns into the park.
- i. Any one-way system at the entry should be clearly marked by signing and pavement striping.

Recommended to mitigate less than significant impacts:

To reduce drive-in traffic from new adjacent developments the County should consider providing points of pedestrian access to the park within one or two zones to be identified from adjacent residential development. The County could also encourage or require future adjacent residential development to provide staging areas within the new neighborhoods.

3.3 HYDROLOGY AND WATER QUALITY

Required to mitigate significant impacts:

- a. To mitigate concentration of runoff into the creek and potential erosion and pollution impacts, surface runoff from new paved parking areas and the paved pedestrian path should be directed away from the creek through site grading. Runoff from the lots should be directed through a grassy swale buffer area in order to filter the surface runoff before it enters the creek and paved parking areas should be cleaned regularly to remove pollutants and litter.

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- b. Any culvert flow directed to Permanente Creek should be provided with energy dissipation at the discharge point/culvert to mitigate potential erosion impacts.

Recommended to mitigate less than significant impacts:

- c. Eroding channel banks on Permanente Creek should be restored by planting vegetation and by grading the bank to a stable slope if necessary.
- d. Application of fertilizers to the turf areas should be minimized, especially in the immediate vicinity of Permanente Creek.
- e. If needed, trash receptacles should be placed in parking areas to minimize trash in the creek.
- f. Irrigation of the turf areas should be restricted to non-daytime hours to minimize evaporation losses.
- g. If a pedestrian bridge is constructed across the creek, construction activity should be restricted during the rainy season, no heavy equipment should be allowed in the stream, and hay bails or "fabric downs" should be placed on the creek bank to control added sediments in the creek.

3.4 BIOLOGY

Required to mitigate significant impacts:

Mitigation measures required under 3.4 Hydrology and Water Quality would also mitigate potentially significant biological impacts related to concentrated runoff from parking lot development. In addition, the following mitigation measure should be adopted to insure that only appropriate riparian species are used to revegetate the riparian zone and to insure that it is managed correctly:

- a. The County Parks and Recreation Department should develop a Riparian Enhancement Plan for the park which identifies suitable riparian species to be used for riparian enhancement and outlines an action plan for an ongoing enhancement program. Suitable riparian species should be planted by park staff on a regular basis.
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3.5 NOISE

Recommended to mitigate less than significant impacts:

- a. Loud radios or other electronic equipment should be controlled by park rangers.
- b. Buses should not be allowed to idle for long periods of time; this should be controlled by rangers.
- c. As recommended in Chapter 2.2 Visual Resources, the County Parks and Recreation Department and the City of Cupertino Planning Department could work towards creating mutually acceptable policies for development adjacent to park and open space lands. These policies could encourage private developers to create site designs sensitive to park use. Private development could be reviewed on a project-by-project basis for compliance with these policies.
- d. The ban on noisy gas-powered model airplanes should continue.
- e. Construction activity should be limited to the daytime hours between 7 a.m. and 6 p.m. weekdays and non-holidays. This includes truck traffic going to and from the site for any purpose including the delivery and removal of equipment and material.
- f. Construction equipment and vehicles should use mufflers to minimize noise, and should be tuned to meet Department of Motor vehicles standards.
- g. The County should inform residents neighboring the site (the Forum Life Care and Maryknoll communities) and Park/MROSD users about planned construction activities and schedules, and the potential for occasional noise disturbance.

3.6 PUBLIC UTILITIES AND SERVICES

Required to mitigate significant impacts:

- a. The County should commit funds for long-term operating maintenance increases at the park for upkeep of trails, tree pruning, riparian area enhancement, occasional mowing and irrigation.
-

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- b. A civil engineer should evaluate the septic system's ability to accommodate restroom expansion, and make recommendations for upgrades.
 - c. Paving should be prohibited over the existing and any expanded leachfield.
 - d. The northern vehicle bridge near the MROSD trailhead should be structurally strengthened to meet local fire district requirements for heavy vehicles as proposed in the Master Plan.

3.7 GEOLOGY AND SOILS

Recommended to mitigate less than significant impacts:

- a. Soil disruption from construction activities (such as grading, vegetation removal, and road construction) should be minimized.
- b. Vegetative cover should be reestablished on exposed areas as soon as possible to reduce erosion.
- c. All such work should be performed prior to the onset of winter rains (May through October) to reduce erosion by storm runoff.

3.8 AIR QUALITY

Recommended to mitigate less than significant impacts:

- a. Since motor vehicles are the major source of emissions associated with this project, efforts should be made to facilitate access to and circulation within the project. Well planned, clearly designed signage should be used to mark direction of access to all parking lots and to reduce lengths of time searching for parking spaces, and waiting with a car engine idling (which in addition to wasting fuel is generating a large amount of emissions).
- b. Exposed graded areas should be watered down at least twice daily to minimize dust generation. This should be done more frequently if dry and windy conditions necessitate.

- c. Grading and soil movement should not be undertaken during high wind conditions (greater than 10 miles per hour) to minimize dust generation.
- d. Planned revegetation and paving of exposed areas should occur as soon as possible after grading is completed to minimize dust migration.

3.9 ARCHAEOLOGY

Required to mitigate potentially significant impacts:

In the event that unidentified archaeological sites are encountered during construction activities, work in the area should cease until a professional archaeologist can be consulted to assess the find and suggest mitigation measures. Prompt evaluations could then be made in accordance with CEQA Appendix K guidelines regarding the finds, and a course of action acceptable to all concerned parties should then be adopted. If prehistoric archaeological deposits are discovered, local Native American organizations should be consulted and involved in making resource management decisions.

CHAPTER 4
List of Persons and Organizations Contacted

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4.1 SANTA CLARA COUNTY PARKS AND RECREATION DEPARTMENT

County Staff:

Ruth Shriber, Park Planner
Lisa Killough, Park Planner
Raleigh Young, Park Manager
Bernie Garrison, Senior Park Ranger
Andrew Niven, Engineer

4.2 OTHER

Mike Basso, Meteorologist, Bay Area Air Quality Management District.
Paula Bettencourt, City of Mountain View Recreation Department.
Brad Eckhart, Planner, City of Mountain View.
Lisa Gorte, Planner, City of Sunnyvale.
Dave Donahue, Traffic Engineer, City of Los Altos
Carol Hoffman, Planner, City of Los Altos.
Art Kaupert, District Environmental Health Specialist, Santa Clara County.
Art Kirtz, Sergeant Supervising the Park Unit, Santa Clara County Sheriff's
Department.
Kathy Lyons, Biologist, Habitat Restoration Group.
Ron Moore, Chief, Central Fire District.
Ciddy Wordell, Planner City of Cupertino.
Del Woods, Planner, Midpeninsula Regional Open Space District
Robert Summers, San Jose Diocese
Vicki Guapo, Public Works Department, City of Cupertino
Larry Sharkey, Gate of Heaven Cemetery
Gary Kutz, Forum Life Care Development

4.3 LIST OF PREPARERS

Brady and Associates:

Sheila Brady, Principal-in-Charge
Diane Kay, Associate Planner
Diana Murrell, Assistant Planner
Sarah Westphal, Graphic Designer

Goodrich Traffic Group:

Mark Crane, Principal-in-Charge

Philip Williams Associates:

Joan Florsheim, Hydrologist
Fred Booker, Hydrologist

LIST OF REFERENCES AND ORGANIZATIONS CONTACTED

- Earth Metrics Incorporated, 1980. Final Environmental Impact Report for the Proposed Rancho San Antonio County Park. Prepared for Michael Painter and Associates.
- Nolan, K.M., and B.R. Hill, 1989. Effects of limestone quarrying and cement plant operations on runoff and sediment yields on the upper Permanente Creek basin in Santa Clara County. USGS Water Resources Investigations Report 89-4130.
- Santa Clara Valley Non-Point Source Pollution Control Program, 1991. Santa Clara Valley Water District.
- Santa Clara Valley Water District, Permanente Creek Flood Control Planning Study, November 1977. Information Brochure.
- Santa Clara Valley Water District, 1979. Engineer's Report for the Permanente Creek Planning Study.
- Schriber, R., Project Manager, 1991. Personal Communication. County of Santa Clara, Parks and Recreation Department, 208 Garden Hill Drive, Los Gatos, CA 95030. (408) 358-3741.
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APPENDIX A

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INITIAL STUDY

Environmental Evaluation Checklist for Santa Clara County

Project Title: Rancho San Antonio Park Master Plan Date: August 15, 1991
File Number: _____ APN(s): _____
500' Map #: 79 Zoning: Hillside Gen. Plan Designation: Existing Regional Park
USA (if any): _____ Project Type: Park Master Plan
Applicant's Name & Address: Santa Clara County Parks and Recreation Department
298 Garden Hill Road, Los Gatos, CA Telephone: (408) 353-3741

Project Location (address or description):

Cristo Rey Drive, three-quarters northwest of the Interstate 280/Foothill Boulevard Interchange, in western Santa Clara County.

Project Description:

The Master Plan proposes improvements to the existing park which include additional parking, landscape improvements, new trails, restroom expansion and other amenities, upgrading of turf areas, relocation of the family picnic area, removal of the basketball and handball courts.

Environmental Setting:

Rancho San Antonio Park is an existing 165-acre park located in the western foothills of Santa Clara County. The park is bordered to the west by the MROSD Preserve, to the north by Interstate 280 and to the east and south by undeveloped land. Land use east of the park includes part of St. Joseph's Seminary (now unoccupied), Maryknoll Seminary and the Forum Life Care development (now under construction). To the south is the Gates of Heaven Cemetery and to the west, open space. The park is accessed by Cristo Rey Drive via Foothill Boulevard. Los Altos and Cupertino city limits abut the park.

The environmental factors checked below may be potentially affected by this project. See sheets attached to the Initial Study for a discussion of these environmental factors and any possible mitigation which may be proposed.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> LAND USE / GENERAL PLAN | <input checked="" type="checkbox"/> TRANSPORTATION | <input checked="" type="checkbox"/> ENERGY |
| <input checked="" type="checkbox"/> GEOLOGIC | <input type="checkbox"/> HOUSING | <input checked="" type="checkbox"/> HISTORICAL / ARCHAEOLOGICAL |
| <input type="checkbox"/> RESOURCES / PARKS | <input type="checkbox"/> SAFETY / HEALTH | <input checked="" type="checkbox"/> PUBLIC SERVICES & UTILITIES |
| <input checked="" type="checkbox"/> SEWAGE / WATER QUALITY | <input checked="" type="checkbox"/> AIR QUALITY | <input checked="" type="checkbox"/> MANDATORY FINDINGS OF SIGNIFICANCE |
| <input checked="" type="checkbox"/> DRAINAGE / FLOODING | <input checked="" type="checkbox"/> NOISE | |
| <input checked="" type="checkbox"/> FLORA AND FAUNA | <input checked="" type="checkbox"/> AESTHETIC | |

WILL THE PROJECT:	IMPACT					SOURCES
	NO	YES				
		Not Significant	Significant Unless Mitigated	Significant. No apparent Mitigation	Cumulative	
A. LAND USE / GENERAL PLAN						
1. Require a change from the land use designated in the General Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,10a
2. Involve a change of zoning?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7,9a
3. Require a change from adopted specific plans or community goals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,7,10a
4. Be in an area with special policies or of critical concern?						
a. San Martin &/or South County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,b,10a
b. Los Gatos/Lexington or Guadalupe Watershed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,10a,13,14
c. East Foothills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,10a
d. New Almaden Historical Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,7,10a
e. Stanford	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6a,15,16
f. San Jose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8,10a
5. Result in any substantial changes in the present land use, either on or off the project site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,12b
6. Disrupt or divide the physical arrangement of an established community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4
7. Conflict with established recreational, educational, religious or scientific uses in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4
B. GEOLOGIC						
1. Be located in an area designated as having a potential for major geological hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9b,10c,11a,12a,17,18
2. Be located on, or adjacent to a known earthquake fault?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9c,10c,11a
3. Be located in a Geologic Study Zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9c,11a
4. Be located in an area of soil instability (subsidence, landslide, shrink/swell potential, soil creep or severe erosion)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9c,12a,12d,20,21
5. Cause substantial erosion or siltation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
6. Cause substantial disruption, displacement, compaction or over-covering of soil either on-site or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
7. Cause substantial change in topography or in a ground surface relief feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,11c
8. Involve construction of a building, road or septic system on a slope of:						
a. 30% or greater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,10j,11c
b. 20% to 30%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,10j,11c
c. 10% to 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,10j,11c
C. RESOURCES / PARKS						
1. Increase the removal rate or result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, oil, trees, minerals or top soil)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,19

WILL THE PROJECT:	IMPACT					SOURCES
	NO	YES				
		Not Significant	Significant Unless Mitigated	Significant. No apparent Mitigation	Cumulative	
2. Result in substantial depletion of any non-renewable natural resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
3. Convert 10 or more acres of prime agricultural land (Class I to II) to non-agricultural use or impair the agricultural productivity of nearby prime land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,20,21
4. Involve lands protected by the Williamson Act (agricultural preserve) or an Open Space Easement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,9a
5. Substantially affect any existing agricultural uses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
6. Be on, within, or near a public or private park, wildlife reserve, or trail (includes those proposed for future)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,9d,10h
7. Result in loss of open space rated as high priority for acquisition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	38
D. SEWAGE / WATER QUALITY						
1. Result in a septic field being constructed on soil with severe septic drainfield limitations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12d,20,21,22
2. Result in a septic field being located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of the high water mark of a reservoir?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,4
3. Result in a septic field being located in an area where a high water table extends close to the natural land surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10e,11b,20,21,24
4. Result in extensions of a sewer trunk line with capacity to serve new development?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
5. Substantially degrade surface or ground water quality or public water supply?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,11b,21
6. Be located in an area of special water quality concern (e.g., Los Gatos or Guadalupe Watershed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,10a,13,23
7. Result in use of well water previously contaminated by nitrates, mercury, asbestos, etc. existing in the groundwater supply?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10e,23
E. DRAINAGE / FLOODING						
1. Interfere substantially with ground water recharge?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,10e,11b
2. Substantially change the direction, rate of flow or quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3
3. Change absorption rates, drainage patterns, or the rate and amount of surface runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,28
4. Involve a natural drainage channel or streambed or water course such as to alter the location, course, or flow of its waters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,11c,28
5. Be located within a floodway or floodplain area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9c,12c

WILL THE PROJECT:	IMPACT					SOURCES
	NO	YES				
		Not Significant	Significant Unless Mitigated	Significant. No apparent Mitigation	Cumulative	
F. FLORA AND FAUNA						
1. Significantly affect fish, wildlife, reptiles, or plant life, by [a] change in diversity or numbers or [b] introduction of new species or [c] restrictions to migration or movement or [d] substantially reducing habitat?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,4,10b,11d,e
2. Affect or cause changes to existing habitat, food source, nesting place, breeding place for a rare or endangered plant or animal species?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10b,11d,e
3. Involve a unique biological area, such as a fresh water marsh or salt water tide land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,10b,11d,e
4. Involve construction within 150 feet of a watercourse or riparian area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,12b,39
5. Involve cutting of unique or heritage trees or a large number of trees over 12" in diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,25
G. TRANSPORTATION						
1. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system? (Exceed LOS level 'D' in vicinity-GP policy G8.3.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,6a,26,27,28,29,44
2. Increase traffic hazards to pedestrians, bicyclists and vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,4
3. Obstruct access to nearby uses or fail to provide for future street right of way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,12e
4. Cause increases in demand for existing on or off-street parking because of inadequate project parking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,30
H. HOUSING						
1. Reduce the supply of low-income housing or displace people or businesses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,4
2. Affect the type or cost of housing in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4
3. Create a demand for additional housing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
I. SAFETY /HEALTH						
1. Involve the application, use or disposal of potentially hazardous materials, including pesticides, herbicides, toxic substances, or radioactive materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,5
2. Involve risk of explosion or release of hazardous substances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,5
3. If yes to #2, be within 1/4 mile of a school [public notice]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40
4. Be located within 200' of a 230KV or above electrical transmission line	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4
5. Create any health hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,5
6. Be located in an ALUC Safety Zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31

WILL THE PROJECT:	IMPACT					SOURCES
	NO	YES				
		Not Significant	Significant Unless Mitigated	Significant, No apparent Mitigation	Cumulative	
7. Be located in an area of extreme fire hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10g
8. In the case of cul-de-sacs over 800 ft. in length, require secondary access which will be difficult to obtain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,32,33
9. Employ technology which could adversely affect safety in case of a breakdown?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
10. Proposed site plan result in a safety hazard (i.e., parking layout, access, closed community, etc.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
11. Provide breeding grounds for vectors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
J. AIR QUALITY						
1. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5,34
2. Create objectionable odors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
K. NOISE						
1. Increase substantially the ambient noise levels for adjoining areas during and/or after construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5,6a
2. Generate unusually high noise or vibration levels at certain times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
3. Be subject to an unusually high noise level?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4
4. Be located in an ALUC noise zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31
L. AESTHETIC						
1. If subject to ASA, be generally in non-compliance with Guidelines for Architecture and Site Approval?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	35,36
2. Create an aesthetically offensive site open to public view?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,37
3. Visually intrude into an area having natural scenic qualities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,37
4. Be adjacent to a designated Scenic Highway or within a Scenic Corridor?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7,10f,37
5. Obstruct scenic views from existing residential areas, public lands, public water body or roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
6. Be located on or near a ridgeline visible from the valley floor?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,10f,11c,37
7. Adversely affect the architectural appearance of an established neighborhood?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
8. Generate new light or glare?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3
M. ENERGY						
1. Use fuel, water or energy in large quantities or in a wasteful manner?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5

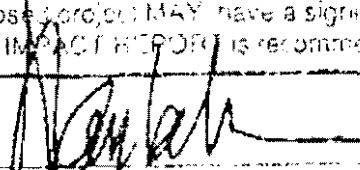
WILL THE PROJECT:	IMPACT					SOURCES
	NO	YES				
		Not Signif- cant	Signif- cant Unless Mit- gated	Signif- cant. No ap- parent Mitiga- tion	Cumu- lative	
2. Involve the removal of vegetation capable of providing summer shade to a building?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
3. Significantly affect solar access to adjacent property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
N. HISTORICAL / ARCHAEOLOGICAL						
1. Be located in an area of potential archaeological or paleontological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d,42
2. Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as a part of a scientific study?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,10d,10i,41,42,43
3. Be located in a Historic District (e.g., New Almaden Historic Area)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7,10a
4. Be within 500' of a historic landmark?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10i,43
O. PUBLIC SERVICES AND UTILITIES						
1. Produce significant amounts of solid waste or litter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
2. Induce substantial growth or concentration of population? (Growth inducing?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
3. Employ equipment which could interfere with existing communications or broadcast systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
4. Cause substantial impact or increase in the need for:						
a. Fire Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
b. Police Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
5. Cause substantial impact or increase in the need for:						
a. School facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
b. Parks or recreation facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
c. Maintenance of public facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
d. Other government services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
6. Cause substantial impact or increase in the need for:						
a. Electricity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
b. Natural gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
c. Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
d. Sewage disposal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
e. Storm water runoff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
7. Generate any demands that create the need for or cause a public facility or utility to approach, reach or exceed its capacity (i.e., sewer line, sewage plant, street, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,5

WILL THE PROJECT:	NO	YES
P. MANDATORY FINDINGS OF SIGNIFICANCE		
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION OF ENVIRONMENTAL EVALUATION

Discuss on attached sheets, all "yes" answers and any "no" answers that are potentially controversial or require clarification. (Must be TYPED). Describe any potential impacts and discuss possible mitigations. For source, refer to attached "Initial Study Source List". When a source is used that is not listed on the form or an individual is contacted, that source and/or individual should be cited in the discussion.

DETERMINATION	SELECT ONE
On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be recommended.	<input type="checkbox"/>
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures are included as part of the proposed project. A NEGATIVE DECLARATION WILL BE RECOMMENDED.	<input checked="" type="checkbox"/>
I find the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is recommended.	<input type="checkbox"/>


signature

August 15, 1991

date

PRINT NAME AND TITLE: Alan La Fleur, Deputy Director

APPENDIX B

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APPENDIX B

LEVEL OF SERVICE AND VOLUME-TO-CAPACITY RATIOS
 RANCHO SAN ANTONIO COUNTY PARK

Level of Service	Description	V/C Ratio
A	Free flow (relatively). If signalized, conditions are such that no approach phase is fully utilized by traffic and no vehicle waits through more than one red indication. Very slight or no delay.	0.00-0.60
B	Stable flow. If signalized, an occasional approach phase is fully utilized; vehicle platoons are formed. This level is suitable operation for rural design purposes. Slight delay.	0.61-0.70
C	Stable flow or operation. If signalized, drivers occasionally may have to wait through more than one red indication. This level is suitable operation for urban design purposes. Acceptable delay.	0.71-0.80
D	Approaching unstable flow or operation; queues develop, but are quickly cleared. Tolerable delay.	0.81-0.90
E	Unstable flow or operation; the intersection has reached ultimate capacity; this condition is not uncommon in peak hours. Congestion and intolerable delay.	0.91-1.00
F	Forced flow or operation. Intersection operates below capacity. Jammed.	1.00+

Source: Highway Capacity Manual, HRB Special Report 87.

APPENDIX C

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APPENDIX C

LIST OF VASCULAR PLANT SPECIES OBSERVED AND REPORTED AT
RANCHO SAN ANTONIO COUNTY PARK

The following list, arranged by family according to A California Flora (Munz and Keck, 1968), contains all plant species observed at Rancho San Antonio Park during a survey conducted in July, 1989. Most of the plants have been identified to species, but a few could only be identified to genus. A partial list of plants observed in the area was provided by Jean Sorenson (Sorenson, 1986) of the Santa Clara Valley Chapter of the California Native Plant Society. These additional plants may be found within the boundaries of the park, a spring botanical survey could confirm their presence.

The habitat or habitats where each plant species was observed is also indicated on the species list. No habitat designation could exist for those species that were provided by the California Native Plant Society.

Key to the Habitats

- A = Grassland
- B = Riparian
- C = Oak Woodland
- D = Scrub

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
ACERACEA					
<i>Acer macrophyllum</i>	Big Leaf Maple		X		
ANACARDIACEAE					
<i>Toxicodendron diversilobum</i>	Poison Oak		X	X	X
APIACEAE					
<i>Achillea millefolium</i>	Yarrow				
var. <i>californica</i>	California Angelica				
<i>Angelica tomentosa</i>	Bur Cherival		X		
<i>Anthriscus scandicina</i>	Hedge Parsley				
<i>Caucalis microcarpa</i>	Poison Hemlock	X	X	X	
<i>Conium maculatum</i>	Fennel	X			
<i>Foeniculum vulgare</i>	Cow Parsnip		X		
<i>Heracleum lanatum</i>	Sweet Cicely				
<i>Osmorhiza chilensis</i>	Kellogg's Yampah				
<i>Perideridia kelloggii</i>	Pacific Sanicle			X	
<i>Sanicula crassicaulis</i>	Venus's Comb				
<i>Scandix pecten-veneris</i>					

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
APOCYNACEAE					
<i>Nerium oleander</i>	Oleander	X			
<i>Vinca major</i>	Periwinkle		X		
ARALIACEAE					
<i>Aralia californica</i>	Spikenard				
<i>Hedera helix</i>	English Ivy		X		
ASTERACEAE					
<i>Achillea millefolium</i>	Common Yarrow			X	
<i>Anthemis cotula</i>	Dog Fennel				
<i>Artemisia douglasiana</i>	California Mugwort			X	X
<i>Artemisia californica</i>	California Sage			X	X
<i>Aster chilensis</i>	California Aster				
<i>Baccharis pilularis</i> ssp. <i>consanquinea</i>	Coyote Brush	X		X	X
<i>Carduus pycnocephalus</i>	Italian Thistle	X	X	X	
<i>Centaurea calcitrapa</i>	Purple Star Thistle				
<i>Centaurea solstitialis</i>	Yellow Star Thistle	X	X	X	
<i>Cirsium proteamun</i>	Red Thistle				
<i>Cirsium vulgare</i>	Common Thistle	X		X	
<i>Conyza canadensis</i>	Horseweed		X		
<i>Crepis vesicaria</i>	Hawk's Beard				
<i>Eriophyllum confertiflorum</i>	Yellow Yarrow				
<i>Gnaphalium beneolens</i>	Life-everlasting	X			
<i>Helenium puberulum</i>	Sneezeweed				
<i>Lactuca serriola</i>	Prickly Lettuce	X	X		
<i>Lactuca virosa</i>	Wild Lettuce	X	X		
<i>Madia sativa</i>	Tarplant	X		X	
<i>Matricaria matricarioides</i>	Pineapple Weed				
<i>Picris echioides</i>	Bristly Ox-Tongue	X	X		
<i>Senecio mikanoides</i>	German Ivy				
<i>Senecio vulgaris</i>	Common Groundsel				
<i>Silybum marianum</i>	Milk Thistle	X	X	X	
<i>Solidago californica</i>	California Goldenrod				
<i>Sonchus oleraceus</i>	Sow Thistle				
<i>Stephanomeria virgata</i>	Tall Stephanomeria				
<i>Taraxacum officinale</i>	Common Dandelion		X		
<i>Tragopogon porrifolius</i>	Salsify	X			
<i>Wyethia heleioides</i>	Mules Ears			X	
<i>Xanthium spinosum</i>	Spiny Clotbur		X		

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
BETULACEAE					
<i>Alnus rhombifolia</i>	White Alder		X		
BORAGINACEAE					
<i>Amsinkia intermedi</i>	Fiddleneck	X		X	
<i>Cynoglossum grande</i>	Western Hound's Tongue				
BRASSICACEAE					
<i>Barbarea orthoceras</i>	Winter Cress				
<i>Brassica nigra</i>	Black Mustard	X	X		
<i>Capsella bursa-pastoris</i>	Shepherd's Purse				
<i>Cardamine oligosperma</i>	Bittercress				
<i>Nasturtium officinale</i>	Water Cress		X		
<i>Raphanus sativa</i>	Wild Radish	X			
<i>Sisymbrium officinale</i>	Hedge Mustard				
CAPRIFOLIACEAE					
<i>Symphoricarpos rivularis</i>	Snowberry		X	X	
<i>Symphoricarpos mollis</i>	Creeping Snowberry				
<i>Lonicera hispidula</i>	Hairy Honeysuckle		X	X	
<i>Sambucus mexicana</i>	Blue Elderberry		X	X	X
CARYOPHYLLACEAE					
<i>Cerastium viscosum</i>	Mouse-ear Chickweed				
<i>Stellaria media</i>	Chickweed				
CHENOPODIACEAE					
<i>Chenopodium californicum</i>	California Goosefoot				
CONVALLARIACEAE					
<i>Smilacina racemosa</i>					
var. <i>amplexicaulis</i>	Western Solomon's Seal				
<i>Smilacina stellata</i>					
var. <i>sessifloia</i>	Slim Solomon's Seal				
CONVOLVULACEAE					
<i>Convolvulus occidentalis</i>	Morning Glory	X			
<i>Cuscuta californica</i>	Chapparal Dodder				

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
CORNACEAE					
<i>Cornus glabrata</i>	Smooth Dogwood		X		
<i>Cornus stolonifera</i> var. <i>californica</i>	Creek Dogwood				
CUCURBITACEAE					
<i>Marah oreganus</i>	Wild Cucumber		X		
EQUISETACEAE					
<i>Equisetum arvense</i>	Horsetail		X		
ERICACEAE					
<i>Arbutus menziesii</i>	Madrone				
EUPHORBIACEAE					
<i>Euphorbia peplus</i>	Petty Spurge		X		
FABACEAE					
<i>Lathrus vestitus</i> ssp. <i>bolanderi</i>	Bolander's Pea				
<i>Lotus corniculatus</i>	Bird's Foot Trefoil				
<i>Lotus scoparius</i>	Deerweed				
<i>Medicago polymorpha</i>	Bur Clover	X			
<i>Melilotus albus</i>	White Melilot	X			
<i>Psoralea physodes</i>	California Tea				
<i>Robinia pseudo-acacia</i>	Black Locust				
<i>Trifolium</i> sp.	Clover	X			
<i>Trifolium tridentatum</i>	Tomcat Clover				
<i>Vicia</i> sp.	Vetch	X		X	
FAGACEAE					
<i>Quercus agrifolia</i>	Coast Live Oak	X	X	X	X
<i>Quercus douglasii</i>	Blue Oak			X	
<i>Quercus lobata</i>	Valley Oak	X			
FUMARIACEAE					
<i>Eschscholzia californica</i>	California Poppy	X			
GARRYACEAE					
<i>Garrya elliptica</i>	Silk Tassel Tree				

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
GERANIACEAE					
<i>Erodium botrys</i>	Broad-leaved Filaree				
<i>Erodium cicutarium</i>	Red-stemmed Filaree				
<i>Erodium moschatum</i>	White-stemmed Filaree	X			
<i>Geranium dissectum</i>	Cut-leaved Geranium				
<i>Geranium molle</i>	Dove's Foot Geranium				
GRAMINEAE					
<i>Avena barbata</i>	Oat	X		X	
<i>Bromus mollis</i>	Soft Chess	X		X	
<i>Bromus diandrus</i>	Ripgut Grass	X	X	X	
<i>Echinochloa sp.</i>	Watergrass		X		
<i>Hordeum sp.</i>	Foxtail	X	X	X	
<i>Lolium perenne</i>	Perennial Ryegrass	X			
<i>Polypogon monseliensis</i>	Rabbitsfoot Grass		X		
<i>Phalaris sp.</i>	Canary Grass	X			
<i>Stipa pulchra</i>	Purple Stipa				
HIPPOCASTANACEAE					
<i>Aesculus californica</i>	California Buckeye		X		X
HYDROPHYLLACEAE					
<i>Nemophila heterophylla</i>	Canyon Nemophila				
<i>Pholistoma auritum</i>	Fiesta Flower				
HYPERICACEA					
<i>Hypericum calycinum</i>	Hypericum		X		
IRIDACEAE					
<i>Iris sp.</i>	Bearded Iris		X		
<i>Iris douglasiana</i>	Douglas Iris				
<i>Sisyrinchium bellum</i>	Blue-eyed Grass	X		X	
JUGLANDACEA					
<i>Juglans hindsii</i>	Black Walnut		X		
JUNCACEAE					
<i>Juncus sp.</i>	Rush			X	

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LAMINACEAE					
<i>Lamium amplexicaule</i>	Henbit				
<i>Lepechinia calycina</i>	Pitcher sage			X	
<i>Marrubium vulgare</i>	Horehound	X	X		
<i>Mentha pulegium</i>	Pennyroyal				
<i>Monardella villosa</i> var. <i>villosa</i>	Coyote Mint				
<i>Pogogyne serpylloides</i>	Thyme-leaved Pogogyne				
<i>Satureja douglasii</i>	Yerba Buena			X	
<i>Scutillaria tuberosa</i>	Skullcap				
<i>Stachys</i> sp.	Hedge Nettle			X	
<i>Stachys bullata</i>	Hedge Nettle		X		
LAURACEAE					
<i>Persia americana</i>	Avacado	X			
<i>Umbellularia californica</i>	California Bay Laurel		X	X	
LILIACEAE					
<i>Brodiaea elegans</i>	Harvest Brodiaea				
<i>Calochortus albus</i>	White Globe Lily				
<i>Calochortus venustus</i>	Mariposa Lily				
<i>Chlorogalum pomeridianum</i>	Soap Plant			X	X
<i>Dichelostemma pulchellum</i>	Blue Dicks	X		X	
<i>Disporum hookeri</i>	Hooker's Fairy Bell				
<i>Fritillaria lancoelata</i>	Checker Lily				
<i>Trillium chloropetalum</i>	Giant Wake Robin				
<i>Triteleia laxa</i>	Ithurriel's Spear			X	
<i>Zigadenus fremontii</i>	Star Lily				
MAGNOLIACEAE					
<i>Magnolia</i> sp.	Magnolia	X			
MALVACEAE					
<i>Malva parviflora</i>	Cheese Weed	X			
<i>Malva sylvestris</i>	Coast Madia				
MIMOSACEAE					
<i>Acacia decurrens</i>	Green Wattle	X			
MYRTACEAE					
<i>Eucalyptus globulus</i>	Blue Gum		X		

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ONAGRACEAE					
<i>Clarkia</i> sp.	Farewell-to-spring	X		X	
<i>Epilobium</i> sp.	Willow Herb		X		
<i>Epilobium paniculatum</i>	Willow Herb				
<i>Zauschneria californica</i>	California Fuschia				
ORCHIDACEAE					
<i>Corallorhiza striata</i>	Striped Coral Root				
PALMAE					
<i>Washingtonia</i> sp.	Fan Palm	X			
PINACEAE					
<i>Picea pungens</i>	Blue Spruce	X			
<i>Pinus halepensis</i>	Aleppo Pine	X			
<i>Pinus pinea</i>	Italian Stone Pine	X			
<i>Pinus radiata</i>	Monterey Pine	X	X		
<i>Pseudotsuga menziesii</i>	Douglas Fir				
PLANTAGINACEAE					
<i>Plantago lanceolata</i>	English Plantain				
<i>Plantago major</i>	Broadleaf Plantain				
PLATANACEAE					
<i>Platanus racemosa</i>	Western Sycamore		X		
POLEMONIACEAE					
<i>Navarretia squarrosa</i>	Skunkweed				
POLYGONACEAE					
<i>Rumex crispus</i>	Curly Dock	X	X	X	
<i>Rumex</i> sp.	Dock	X	X		
<i>Eriogonum nudum</i>	Buckwheat				
<i>Eriogonum virigatum</i>	Virigate Eriogonum				
PORTULACACEAE					
<i>Montia perfoliata</i>	Miner's Lettuce				
PRIMULACEAE					
<i>Anagallis arvensis</i>	Scarlet Pimpernel	X			
<i>Dodecatheon hendersonii</i>	Shooting Star				

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
<i>Trientalis latifolia</i>	Star Flower				
PTERIDACEAE					
<i>Adiantum jordanii</i>	Maidenhair Fern			X	
<i>Pityrogramma triangularis</i>	Gold Back Fern			X	
<i>Polypogon californicum</i>	California Polypody			X	
<i>Dryopteris arguta</i>	Wood Fern		X	X	
RANUNCULACEAE					
<i>Aquilegia formosa</i> var. <i>truncata</i>	Columbine				
<i>Ranunculus californicus</i>	California Buttercup				
<i>Ranunculus muricatus</i>	Prickle-fruited Buttercup				
<i>Delphinium</i> sp.	Larkspur			X	
<i>Aquilegia</i> sp.	Columbine				
<i>Clematis lasiantha</i>	Chapparal Clematis				X
<i>Clematis ligusticifolia</i>	Clematis		X		
RHAMNACEAE					
<i>Rhamnus californica</i>	Coffee Berry				X
<i>Rhamnus crocea</i> ssp. <i>crocea</i>	Redberry	X		X	X
<i>Ceanothus thyrsiflorus</i>	Blue Blossom		X	X	
ROSACEAE					
<i>Adenostoma fasciculatum</i>	Chamise				
<i>Cercocarpus betuloides</i>	Mountain Mahogany				
<i>Cotoneaster</i>	Cotoneaster			X	
<i>Heteromeles arbutifolia</i>	Toyon	X	X		X
<i>Holodiscus discolor</i>	Ocean Spray			X	
<i>Osmaronia cerasiformis</i>	Osoberry				
<i>Physocarpus capitatus</i>	Pacific Nine Bark				
<i>Potentilla</i> sp.	Silverweed			X	
<i>Prunus</i> sp.	Plum	X			
<i>Prunus demissa</i>	Western Choke Cherry				
<i>Prunus ilicifolia</i>	Holly-leaved Cherry				
<i>Pyracantha augustifolia</i>	Firethorn	X			
<i>Rosa californica</i>	California Rose	X		X	
<i>Rubus ursinus</i>	Blackberry	X			

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
RUBIACEAE					
<i>Galium nuttallii</i>	Bedstraw			X	
<i>Galium triflorum</i>	Sweet Scented Bedstraw				
SALICACEAE					
<i>Salix laevigata</i>	Red Willow		X		
<i>Salix lasiolepis</i>	Arroyo Willow		X		
<i>Salix hindsiana</i>	Valley Willow		X		
<i>Populus fremontii</i>	Fremont's Cottonwood		X		
SAXIFRIGACEAE					
<i>Grossularia californica</i>	California Gooseberry		X	X	
<i>Grossularia menziesii</i> ssp. <i>leptosma</i>	Canyon Gooseberry				
<i>Lithophragma affinis</i>	Woodland Star				
<i>Lithophragma heterophylla</i>	Hill Star				
<i>Philadelphus Lewisii</i> var. <i>gordonianus</i>	Mock Orange		X		
<i>Ribes malvaceum</i>	Chaparral Current				
<i>Ribes sanguineum</i> var. <i>glutinsum</i>	Red Flowering Current				
<i>Saxifraga californica</i>	California Saxifrage				
SCROPHULARIACEAE					
<i>Antirrhinum vexillo- calyculatum</i>	Wiry Snapdragon				
<i>Castilleja foliosa</i>	Wooly Paintbrush				
<i>Diplacus aurantiacus</i>	Sticky Monkey Flower			X	X
<i>Mimulus cardinalis</i>	Scarlet Monkey Flower		X		
<i>Pedicularis densiflora</i>	Indian Warrior				
<i>Scrophularia californica</i>	California Bee Plant		X	X	
<i>Veronica persica</i>	Speedwell				
SIMAROUBACEAE					
<i>Alanthus altissima</i>	Tree-of-heaven	X			
SOLONACEAE					
<i>Solanum umbelliferum</i>	Blue Witch				
TAXODIACEAE					
<i>Sequoia sempervirens</i>	Coast Redwood				

<u>Scientific Name</u>	<u>Common Name</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
THYMELAEACEAE					
<i>Dirca occidentalis</i>	Leatherwood			X	
URTICACEAE					
<i>Urtica californica</i>	Coast Nettle		X	X	
<i>Urtica urens</i>	Dwarf Nettle				
VERBENACEAE					
<i>Verbena lasiostachys</i>	Western Verbena				

APPENDIX D

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APPENDIX D

WILDLIFE SPECIES OBSERVED OR PREDICTED TO OCCUR AT RANCHO SAN ANTONIO COUNTY PARK

Key

- O Observed in the park on field surveys during July 1989.
- P Predicted to occur in the park.
- S Sign of species observed (i.e., tracks or droppings).
- n Bird species observed or predicted to nest in the park.
- n* Bird species observed or predicted to nest in the immediate vicinity of the park, with locally-breeding individuals using the park's resources.

Habitats Note: habitat designations shown in parentheses are included for aerial species that may associate with terrestrial habitats.

- w coast live oak forest and central coastal scrub
- g non-native grassland
- r mixed riparian woodland
- a aerial

Seasonal Status Notations showing the observed and predicted seasonal abundance of the various bird species are also provided. The columns, from left to right, are: spring, summer, fall and winter. The abundance codes are:

- c **Common**; easily found during the proper season, sometimes in large numbers; typically widespread in the park.
- f **Fairly common**; fairly easily found during the proper season, in moderate numbers, never as numerous as a "common" species; may occur in only a portion of the park.
- u **Uncommon**; present in moderate to small numbers; may require some searching to locate; may be widespread, or restricted to only a portion of the park.
- r **Rare**; present in very small numbers, but of regular occurrence; may be difficult to locate, and typically restricted to a portion of the park.
- o **Occasional**; may occur in very small numbers, typically only one or two individuals; occurrence is not regular or predictable.
- ? **Status uncertain** in the park for the season(s) indicated; probably rare if present.

Habitats

CLASS: AMPHIBIA

ORDER: CAUDATA (Salamanders)

FAMILY: AMBYSTOMATIDAE (Mole Salamanders and Relatives)
California Tiger Salamander, (Ambystoma

Habitats

<u>tigrinum californiense</u>)	P	r,w,g
FAMILY: SALAMANDRIDAE (Newts)		
California Newt, (<u>Taricha torosa</u>)	P	r,w
FAMILY: PLETHODONITDAE (lungless Salamanders)		
Arboreal Salamander (<u>Aneides lugubris</u>)	P	w,r,g
Ensatina, (<u>Ensatina eschscholtzi</u>)	P	w,r
California Slender Salamander, (<u>Batrachoseps attenuatus</u>)	P	w,r,g
ORDER: SALIENTIA (Frogs and Toads)		
FAMILY: BUFONIDAE (True Toads)		
Western Toad, (<u>Bufo boreas</u>)	P	r,w,g
FAMILY: HYLIDAE (Treefrogs and Relatives)		
Pacific Treefrog, (<u>Hyla regilla</u>)	P	r,w
CLASS: REPTILIA		
ORDER: SQUAMATA (Lizards and Snakes)		
SUBORDER: SAURIA (Lizards)		
FAMILY: IGUANIDAE (Iguanids)		
Western Fence Lizard, (<u>Sceloporus occidentalis</u>)	O	w,g,r
FAMILY: SCINCIDAE (Skinks)		
Western Skink, (<u>Eumeces skiltonianus</u>)	P	w,r
FAMILY: ANGUIDAE (Alligator Lizards and Relatives)		
Southern Alligator Lizard, (<u>Gerrhonotus multicarinatus</u>)	O	w,r
Northern Alligator Lizard, (<u>Gerrhonotus coeruleus</u>)	P	w,r
SUBORDER: SERPENTES (Snakes)		
FAMILY: BOIDAE (Boas)		
Rubber Boa, (<u>Charina bottae</u>)	P	r,w
FAMILY: COLUBRIDAE (colubrids)		
Ringneck Snake, (<u>Diadophis punctatus</u>)	P	w,r
Sharp-tailed Snake, (<u>Contia tenuis</u>)	P	w,r
Racer, (<u>Coluber constrictor</u>)	P	r,w,g
Striped Racer, (<u>Masticophis lateralis</u>)	P	w,g
Gopher Snake, (<u>Pituophis melanoleucus</u>)	P	w,g,r
Common Kingsnake, (<u>Lampropeltis getulus</u>)	P	w,g,r
Common Garter Snake, (<u>Thamnophis sirtalis</u>)	P	r,w,g
Western Terrestrial Garter Snake, (<u>Thamnophis elegans</u>)	P	r,w
Western Aquatic Garter Snake, (<u>Thamnophis couchi</u>)	P	r

Habitats

FAMILY: VIPERIDAE (Vipers)
Western Rattlesnake, (Crotalus viridis)

P w,g,r

Habitats

Status

(S S F W)

CLASS: AVES

ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)

FAMILY: CATHARTIDAE (American Vultures)

Turkey Vulture, (Cathartes aura)

O a

f f f u

FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)

Osprey, (Pandion haliaetus)

P a

o o

Sharp-shinned hawk, (Accipiter striatus)

P w,r,g

u u u

Cooper's Hawk, (Accipiter cooperii)

P w,r,g

u ? u u

	Habitats		Status			
			(S	S	F	W)
Red-shouldered Hawk, (<u>Buteo lineatus</u>)	O,n*	a(r,w,g)	r	r	r	r
Red-tailed Hawk, (<u>Buteo jamaicensis</u>)	O,n*	a(g,w,r)	u	u	u	u
Golden Eagle, (<u>Aquila chrysaetos</u>)	P	a	r	r	r	r
FAMILY: FALCONIDAE (Caracaras and Falcons)						
American Kestrel, (<u>Falco sparverius</u>)	O,n	g,r,w	u	u	u	u
Merlin, (<u>Falco columbarius</u>)	P	a(g)			o	o
ORDER: GALLIFORMES (Megapodes, Currassows, Pheasants, and Relatives)						
FAMILY: PHASIANIDAE (Quails, Pheasants, and Relatives)						
California Quail, (<u>Callipepla californica</u>)	O,n	w,r,g	c	c	c	c
ORDER: CHARADRIIFORMES (Shorebirds, Gulls, and Relatives)						
FAMILY: CHARADRIIDAE (Plovers and Relatives)						
Killdeer, (<u>Charadrius vociferus</u>)	P	g			r	r
FAMILY: SCOLOPACIDAE (Sandpipers and Relatives)						
Common Snipe, (<u>Gallinago gallinago</u>)	P	r,g	o		o	o
California Gull, (<u>Larus californicus</u>)	P	a	r		u	u
ORDER: COLUMBIFORMES (Pigeons and Doves)						
FAMILY: COLUMBIDAE (Pigeons and Doves)						
Rock Dove, (<u>Columba livia</u>)	O,n*	a	u	u	u	u
Band-tailed Pigeon, (<u>Columba fasciata</u>)	O,n?	a(w,r,g)	u	f	f	f
Mourning Dove, (<u>Zenaida macroura</u>)	O,n	g,r,w	f	f	f	f
ORDER: STRIGIFORMES (Owls)						
FAMILY: TYTONIDAE (Barn Owls)						
Barn Owl, (<u>Tyto alba</u>)	P,n	g,r,w	u	u	u	u
FAMILY: STRIGIDAE (Typical Owls)						
Western Screech-Owl, (<u>Otus kennicottii</u>)	P,n	w	r	r	r	r
Great Horned Owl, (<u>Bubo virginianus</u>)	O,n	w,g,r	u	u	u	u
Northern Pygmy-Owl (<u>Glaucidium gnoma</u>)	P	w,r			o	o
ORDER: APODIFORMES (Swifts and Hummingbirds)						
FAMILY: APODIDAE (Swifts)						
Black swift, (<u>Cypseloides niger</u>)	P	a	o			
Vaux's Swift, (<u>Chaetura vauxi</u>)	P	a	u	r		
White-throated Swift, (<u>Aeronautes saxatalis</u>)	O,n*	a	f	f	f	f
FAMILY: TROCHILIDAE (Hummingbirds)						

	Habitats		Status			
	(S)	(S)	(F)	(W)		
Anna's Hummingbird, (<u>Calypte anna</u>)	O,n	w,r	c	c	c	c
Rufous Hummingbird, (<u>Selasphorus rufus</u>)	P	a(w,r)	r	r		
Allen's Hummingbird, (<u>Selasphorus sasin</u>)	P	a(w,r)	r			
ORDER: CORACIIFORMES (Kingfishers and Relatives)						
FAMILY: ALCEDINIDAE (Kingfishers)						
Belted Kingfisher, (<u>Ceryle alcyon</u>)	O	a(r)	o	o	o	o
ORDER: PICIFORMES (Woodpeckers and Relatives)						
FAMILY: PICIDAE (Woodpeckers and Wrynecks)						
Acorn Woodpecker, (<u>Melanerpes formicivorus</u>)	O,n	w,r	u	u	u	u
Red-breasted Sapsucker, (<u>Sphyrapicus ruber</u>)	P	w,r			u	u
Nuttall's Woodpecker, (<u>Picoides nuttallii</u>)	O,n	w,r	f	f	f	f
Downy Woodpecker, (<u>Picoides pubescens</u>)	O,n	w,r	u	u	u	u
Hairy Woodpecker, (<u>Picoides villosus</u>)	P,n?	w,r	r	r	u	u
Northern Flicker, (<u>Colaptes auratus</u>)	O,n	w,g,r	u	u	f	f
ORDER: PASSERIFORMES (Perching Birds)						
FAMILY: TYRANNIDAE (Tyrant Flycatchers)						
Olive-sided Flycatcher (<u>Contopus borealis</u>)	P	w,r	r		r	
Western Wood-Pewee, (<u>Contopus sordidulus</u>)	O,n	w,r	f	f	u	
Willow Flycatcher, (<u>Empidonax traillii</u>)	P	r	o		o	
Pacific-slope Flycatcher, (<u>Empidonax difficilis</u>)	O,n	r,w	f	f	u	
Ash-throated Flycatcher, (<u>Myiarchus cinerascens</u>)	O,n	w,r	f	f	r	
Black Phoebe, (<u>Sayornis nigricans</u>)	O,n	r,g,w	u	u	u	u
Say's Phoebe, (<u>Sayornis saya</u>)	P	g			r	r
FAMILY: HIRUNDINIDAE (Swallows)						
Tree Swallow, (<u>Tachycineta bicolor</u>)	P	a	u			
Violet-green Swallow, (<u>Tachycineta thalassina</u>)	O,n	a(w,r,g)	c	c	f	
Northern Rough-winged Swallow, (<u>Stelgidopteryx serripennis</u>)	O	a(g,r)	u	u		
Cliff Swallow, (<u>Hirundo pyrrhonota</u>)	O,n*	a(g)	c	c		
Barn Swallow, (<u>Hirundo rustica</u>)	O,n?	a(g,r)	f	u	r	
FAMILY: CORVIDAE (Jays, Magpies, and Crows)						
Steller's Jay, (<u>Cyanocitta stelleri</u>)	O,n	w,r	f	f	f	f
Scrub Jay, (<u>Aphelocoma coerulescens</u>)	O,n	w,r,g	c	c	c	c
American Crow, (<u>Crovis brachyrhynchos</u>)	P	a	o		o	o
Common Raven, (<u>Corvus corax</u>)	P	a	r	r	r	r
FAMILY: PARIDAE (Titmice)						
Chestnut-backed Chickadee, (<u>Parus rufescens</u>)	O,n	w,r	c	c	c	c

	<u>Habitats</u>		<u>Status</u>			
			(S	S	F	W)
Plain Titmouse, (<u>Parus inornatus</u>)	O,n	w,r	c	c	c	c
FAMILY: AETGITHALIDAE (Bushtit)						
Bushtit, (<u>Psaltriparus minimus</u>)	O,n	w,r	c	c	c	c
FAMILY: SITTIDAE (Nuthatches)						
Red-breasted Nuthatch, (<u>Sitta canadensis</u>)	P	w	o		o	o
White-breasted Nuthatch, (<u>Sitta carolinensis</u>)	O,n	w,r	f	f	f	f
FAMILY: CERTHIDAE (Creepers)						
Brown Creeper, (<u>Certhia americana</u>)	O,n?	w,r	r	r	u	u
FAMILY: TROGLODYTIDAE (Wrens)						
Bewick's Wren, (<u>Thyromanes bewickii</u>)	O,n	w,r	c	c	c	c
House Wren, (<u>Troglodytes aedon</u>)	P,n?	w,r	?	?	r	
Winter Wren, (<u>Troglodytes troglodytes</u>)	P	r			o	o
FAMILY: MUSCIPAPIDAE (Old World Warblers, Gnatcatchers, Kinglets, Thrushes, Bluebirds, and Wrentit)						
Golden-crowned Kinglet, (<u>Regulus satrapa</u>)	P	w,r			o	o
Ruby-crowned Kinglet, (<u>Regulus calendula</u>)	P	w,r	u		f	f
Blue-gray Gnatcatcher, (<u>Poliophtila caerulea</u>)	O,n?	w,r	u	u	r	
Western Bluebird, (<u>Sialia mexicana</u>)	O,n	g,w,r	f	f	f	f
Swainson's Thrush, (<u>Catharus ustulatus</u>)	P	r	r		r	
Hermit Thrush, (<u>Catharus guttatus</u>)	P	r,w	u		f	f
American Robin, (<u>Turdus migratorius</u>)	O,n	w,r,g	u	u	c	c
Varied Thrush, (<u>Ixoreus naevius</u>)	P	w,r			u	u
Wrentit, (<u>Chamaea fasciata</u>)	O,n	w,r	c	c	c	c
FAMILY: MIMIDAE (Mockingbirds and Thrashers)						
Northern Mockingbird, (<u>Mimus polyglottos</u>)	O,n	g,r	u	u	u	u
California Thrasher, (<u>Toxostoma redivivum</u>)	O,n	w,r	u	u	u	u
FAMILY: BOMBYCILLIDAE (Waxwings)						
Cedar Waxwing, (<u>Bombycilla cedrorum</u>)	P	w,r	f		f	f
FAMILY: LANIDAE (Shrikes)						
Loggerhead Shrike, (<u>Lanius ludovicianus</u>)	P	g			o	o
FAMILY: MONTACILLADAE (Wagtails and Pipits)						
American Pipit, (<u>Anthus rubescens</u>)	P	g	r		u	u
FAMILY: STURNIDAE (Starlings)						
European Starling, (<u>Sturnus vulgaris</u>)	P,n?	w,g,r	?	?	u	u
FAMILY: VIREONIDAE (Typical Vireos)						
Solitary Vireo, (<u>Vireo solitarius</u>)	P	w,r	r		r	
Hutton's Vireo, (<u>Vireo huttoni</u>)	O,n	w,r	u	u	u	u
Warbling Vireo, (<u>Vireo gilvus</u>)	P,n?	w,r	f	u	u	

	Habitats		Status			
	(S	S	F	W)		
FAMILY: EMBERIZIDAE (Wood Warblers, Sparrows, Blackbirds, and Relatives)						
Orange-crowned Warbler, (<u>Vermivora celata</u>)	O,n	w,r	f	f	f	o
Nashville Warbler, (<u>Vermivora ruficapilla</u>)	P	r,w	o		o	
Yellow Warbler, (<u>Dendroica petechia</u>)	P	r,w	r		u	
Yellow-rumped Warbler, (<u>Dendroica coronata</u>)	P	r,w,g	f		c	c
Black-throated Gray Warbler, (<u>Dendroica nigrescens</u>)	P		w,r	r		r
Townsend's Warbler, (<u>Dendroica townsendi</u>)	P	w,r	u		f	u
Hermit Warbler, (<u>Dendroica occidentalis</u>)	P	r,w	o		o	
MacGillivray's Warbler, (<u>Oporornis tolmiei</u>)	P	r	o		o	
Common Yellowthroat, (<u>Geothlypis trichas</u>)	P	r			o	
Wilson's Warbler, (<u>Oporornis tolmiei</u>)	P	r	o		o	
Western Tanager, (<u>Piranga ludoviciana</u>)	P	r,w	r		r	
Black-headed Grosbeak, (<u>Pheucticus melanocephalus</u>)	O,n	r,w	f	u	r	
Rufous-sided Towhee, (<u>Pipilo erythrophthalmus</u>)	O,n	w,r	c	c	c	c
California Towhee, (<u>Pipilo crissalis</u>)	O,n	w,r,g	c	c	c	c
Savannah Sparrow, (<u>Passerculus sandwichensis</u>)	P	g			o	
Fox Sparrow, (<u>Passerella iliaca</u>)	P	r,w	r		u	u
Song Sparrow, (<u>Melospiza melodia</u>)	O,n	r,g	u	u	u	u
Lincoln's Sparrow (<u>Melospiza lincolni</u>)	P	r,g			r	r
White-throated Sparrow, (<u>Zonotrichia albicollis</u>)	P	r,g,w	o		o	o
Golden-crowned Sparrow, (<u>Zonotrichia atricapilla</u>)	P	g,r,w	c		c	c
White-crowned Sparrow, (<u>Zonotrichia leucophrys</u>)	P	g,r,w	c		c	c
Dark-eyed Junco, (<u>Junco hyemalis</u>)	O,n	w,r,g	u	u	c	c
Red-winged Blackbird, (<u>Agelaius phoeniceus</u>)	P	a(g,r)	?	?	r	r
Western Meadowlark, (<u>Sturnella neglecta</u>)	O,n	g	u	u	f	f
Brewer's Blackbird, (<u>Euphagus cyanocephalus</u>)	O,n	g,r,w	u	u	f	f
Brown-headed Cowbird, (<u>Molothrus ater</u>)	O,n	r,w,g	u	u	r	
Hooded Oriole, (<u>Icterus cucullatus</u>)	O,n	g,r	r	r		
Northern Oriole, (<u>Icterus galbula</u>)	P,n?	w,r	r	?	r	
FAMILY: FRINGILLIDAE (Finches)						
Purple Finch, (<u>Carpodacus purpureus</u>)	O,n	w,r	r	r	u	f
House Finch, (<u>Carpodacus mexicanus</u>)	O,n	w,r,g	c	c	c	c
Red Crossbill, (<u>Loxia curvirostra</u>)	P	a(w)			o	o
Pine Siskin, (<u>Carduelis pinus</u>)	P	w,r	r		u	u
Lesser Goldfinch, (<u>Carduelis psaltria</u>)	O,n	r,g,w	f	f	f	f
American Goldfinch, (<u>Carduelis tristis</u>)	P	r,g	r		u	u
FAMILY: PASSERIDAE (Weaver Finches)						
House Sparrow, (<u>Passer domesticus</u>)	P	g	o		o	o

Habitats

CLASS: MAMMALIA

ORDER: MARSUPIALIA (Opossums, Kangaroos, and Relatives)

FAMILY: DIDELPHIDAE (Opossums)

Virginia Opossum, (Didelphis virginiana) S w,r,g

ORDER: INSECTIVORA (Shrews and Moles)

FAMILY: SORICIDAE (Shrews)

Trowbridge's Shrew, (Sorex trowbridgei) P r,w

Ornate Shrew, (Sorex ornatus) P r

FAMILY: TALPIDAE (Moles)

Broad-footed Mole, (Scapanus latimanus) S g,w,r

ORDER: CHIROPTERA (Bats)

FAMILY: VESPERTILIONIDAE (Vespertilionid Bats)

Little Brown Myotis, (Myotis lucifugus) P a

Yuma Myotis, (Myotis yumanensis) P a

Long-eared Myotis, (Myotis evotis) P a

Fringed Myotis, (Myotis thysanodes) P a

Long-legged Myotis, (Myotis volans) P a

California Myotis, (Myotis californicus) P a

Small-footed Myotis, (Myotis leibii) P a

Western Pipistrelle, (Pipistrellus hesperus) P a

Big Brown Bat, (Eptesicus fuscus) P a

Red Bat, (Lasiurus borealis) P a

Hoary Bat, (Lasiurus cinereus) P a

Pallid Bat, (Antrozous pallidus) P a

Habitats

FAMILY: MOLOSSIDAE (Free-tailed Bat)		
Brazilian Free-tailed Bat, (<u>Tadarida brasiliensis</u>)	P	a
ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)		
FAMILY: LEPORTIDAE (Rabbits and Hares)		
Audubon's Cottontail (<u>Sylvilagus auduboni</u>)	O	w,g,r
Brush Rabbit, (<u>Sylvilagus bachmani</u>)	O	r,w,g
ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)		
FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)		
Merriam's Chipmunk, (<u>Tamias merriami</u>)	P	w,r
Western Gray Squirrel, (<u>Sciurus griseus</u>)	O	w,r
California Ground Squirrel (<u>Spermophilus beecheyi</u>)	O	g,r
FAMILY: GEOMYIDAE (Pocket Gophers)		
Botta's Pocket Gopher, (<u>Thomomys bottae</u>)	S	g,w,r
FAMILY: CRICETIDAE (Deer Mice, Voles, and Relatives)		
Western Harvest Mouse, (<u>Reithrodontomys megalotis</u>)	P	g,w,r
California Mouse, (<u>Peromyscus californicus</u>)	P	w,r
Deer Mouse, (<u>Peromyscus maniculatus</u>)	P	w,r
Dusky-footed Woodrat, (<u>Neotoma fuscipes</u>)	S	w,r
California Vole, (<u>Microtus californicus</u>)	P	g,r,w
FAMILY: MURIDAE (Old World Rats and Mice)		
Black Rat, (<u>Rattus rattus</u>)	P	g,r,w
Norway Rat, (<u>Rattus norvegicus</u>)	P	g,r
House Mouse, (<u>Mus musculus</u>)	P	g,r,w
ORDER: CARNIVORA (Carnivores)		
FAMILY: CANIDAE (Foxes, Wolves, and Relatives)		
Coyote, (<u>Canis latrans</u>)	S	g,w,r
Gray Fox, (<u>Urocyon cinereoargenteus</u>)	P	w,g,r
FAMILY: PROCYONIDAE (Raccoons and Relatives)		
Raccoon, (<u>Procyon lotor</u>)	S	w,r,g
FAMILY: MUSTELIDAE (Weasels, Badgers, and Relatives)		
Long-tailed Weasel, (<u>Mustela frenata</u>)	P	r,w
Western Spotted Skunk, (<u>Spilogale gracilis</u>)	P	w,r
Striped Skunk, (<u>Mephitis mephitis</u>)	P	w,r,g
FAMILY: FELIDAE (Cats)		
Bobcat, (<u>Lynx rufus</u>)	P	g,w,r
Mountain Lion (<u>Felis concolor</u>)	P	w,g

Habitats

ORDER: ARTIODACTYLA

FAMILY: SUIDAE (Pigs)

Wild Pig, (Sus scrofa)

P w,g

FAMILY: CERVIDAE (Deer, Elk, and Relatives)

Mule Deer, (Odocoileus hemionus)

O g,w,r

SPECIAL CONCERN AND LOCALLY UNIQUE WILDLIFE SPECIES PREDICTED TO OCCUR AT RANCHO SAN ANTONIO COUNTY PARK

<u>Species</u>	<u>Status*</u>	<u>Predicted Occurrence In Park</u>
Cal. Tiger Salamander	FC2,LU	Resident, possibly breeding on Permanente Creek.
Osprey	SSC,LU	Occasional spring and fall migrant.
Sharp-shinned Hawk	SSC	Uncommon winter visitor and spring and fall migrant.
Cooper's Hawk	SSC	Uncommon winter visitor and spring and fall migrant; possibly nests in or adjacent to the park.
Golden Eagle	SSC,LU,P	Rare year-round visitor.
Merlin	SSC	Occasional fall migrant and winter visitor.
California Gull	SSC	Uncommon to rare transient over park during fall, winter and spring.
Black Swift	SSC	Occasional spring migrant.
Yellow Warbler	SSC	Fairly common spring migrant and common fall migrant.
Mountain Lion	LU	Rare or occasional visitor.

*** KEY:**

FC2 = Candidate (List 2) for Federal Endangered listing.

SSC = Species of Special Concern in California (Remsen 1978).

LU = Locally Unique in Santa Clara County (Harvey and Stanley 1979).

P = Protected under the Bald Eagle Protection Act (Title 50, Code of Federal Regulations) and listed as Sensitive by the U.S. Fish and Wildlife Service.

1. **Resident species whose populations exhibit little or no seasonal movement.** Representative species in the park are California Quail (*Callipepla californica*), Scrub Jay (*Aphelocoma coerulescens*), Plain Titmouse (*Parus inornatus*), and Hutton's Vireo (*Vireo huttoni*).
2. **Species which are present year round, but whose populations have a complex seasonal status.** Representative species in the park are Mourning Dove (*Zenaida macroura*), Northern Flicker (*Colaptes auratus*), American Robin (*Turdus migratorius*), and Dark-eyed Junco (*Junco hyemalis*).
3. **Transient species which occur only during the spring and fall migration periods.** Representative species in the park are Vaux's Swift (*Chaetura vauxi*), Tree Swallow (*Tachycineta bicolor*), and Yellow Warbler (*Dendroica petechia*).
4. **Migratory species which breed locally, but are not present during the winter.** Representative species in the park are Pacific-slope Flycatcher (*Empidonax difficilis*), Violet-green Swallow (*Tachycineta thalassina*), Orange-crowned Warbler (*Vermivora celata*), and Black-headed Grosbeak (*Pheucticus melanocephalus*).
5. **Migratory species which over-winter locally, but are not present during the breeding season.** Representative species are Ruby-crowned Kinglet (*Regulus calendula*), Hermit Thrush (*Catharus guttatus*), Townsend's Warbler (*Dendroica townsendi*), and Golden-crowned Sparrow (*Zonotrichia atricapilla*).

WILDLIFE SPECIES OF CONCERN EXPECTED TO MAKE SIGNIFICANT USE OF RANCHO SAN ANTONIO COUNTY PARK

California Tiger Salamander. This species is rare and locally-distributed in Santa Clara County. Its distribution in the county is incompletely known, but it has been found in many different parts of the county. Its population in California has declined significantly due to habitat loss resulting from agricultural and urban development. In addition, the larval salamanders are frequently used for fishing bait.

This species requires pooled or ponded water for the completion of its life cycle. The adults are terrestrial, and use a variety habitats. They remain underground during much of the year, sheltered in holes made by burrowing mammals. In the winter they migrate to breeding pools to lay their eggs. The aquatic larva develop through the spring, leave their natal pool, and venture into adjacent areas of terrestrial habitat. Breeding pools are apparently reused by many generations of salamanders.

Suitable aquatic habitat exists for this species along the park's portion of Permanente Creek, particularly in the northern section of the Creek. A population may reside in the Park, potentially frequenting all of the Park's habitats. This species has been reported from Permanente Creek (Harvey and Stanley 1979).

Sharp-shinned Hawk. This species is an uncommon spring and fall migrant and winter visitor throughout Santa Clara County, frequenting a variety of habitats (pers. obs.). Sharp-shinned Hawks are one of the rarest breeding species in the Santa Cruz Mountains area, apparently preferring middle to high elevation locations with extensive conifer forest habitat. Only two recent breeding locations are known from the Santa Cruz Mountains (American Birds 41:1420, W. Bousman pers. comm., D. Suddjian unpubl. data). These are at Pine Mountain and Loma Preita, approximately 14 miles to the south and 20 miles to the southeast, respectively.

Small numbers of Sharp-shinned Hawks are expected to occur in the Park from September to April. They are expected to frequent in all of the habitats present. The Park does not appear to offer suitable breeding habitat for this species.

Cooper's Hawk. The pattern of occurrence of this species in the park is expected to be very similar to that of the Sharp-shinned Hawk, except this species is likely to be nesting in the surrounding area. The Cooper's Hawk is an uncommon spring and fall migrant and winter visitor throughout Santa Clara County, being rare and thinly distributed during the breeding season (Pers. obs.). Most known Cooper's Hawk nesting locations in the Santa Cruz Mountains area are in forested habitats at middle and upper elevations, although several pairs have been found in recent years at elevations similar to or lower than those of the Park (W. Bousman pers. comm.).

Small numbers of Cooper's Hawk are expected to occur in the Park from September to April, with individuals possibly visiting the Park throughout the breeding season. The Park offers suitable breeding habitat for this species. No evidence was observed during the July surveys that indicated this species nests in the Park, but they may be nesting in areas immediately adjacent.

Yellow Warbler. This species is a fairly common spring migrant and common fall migrant in Santa Clara County. It is an uncommon to locally fairly common breeding species along many of Santa Clara Valley's major creeks and rivers, preferring associations of Fremont's cottonwood, various willow species, and Western sycamore. Migrants occur in a variety of habitats. The nearest known breeding location to the Park is at Steven's Creek County Park, 2.5 miles to the south.

The Yellow Warbler is expected to occur during spring and fall migration. None were found along Permanente Creek during the July surveys, and the park's habitat does not appear to be suitable to support breeding by this species. It is expected to be uncommon during spring migration in April and May, and fairly common during fall migration, between late August and early October.